100 GJS

Mn/DOT Name: 100 GJS

NGS Name: 100 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	111 N	24 W	442423.00	933846.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 100 GJS 1963 1077

4.3 MILES WEST AND NORTH OF LE CENTER, 4.0 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND SOUTH CORDOVA AVENUE (COUNTY ROAD 11) IN LE CENTER, THEN 1.5 MILES NORTH ALONG COUNTY ROAD 136, 26.0 FEET NORTH AND 30.0 FEET WEST OF A CROSSROADS (COUNTY ROAD 136-COUNTY ROAD 141 AND A TOWNSHIP ROAD).

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1077.331	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.821 12B = -91.814 09 = -91.739 03 = -91.565

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 101 GJS
NGS Name: 101 GJS
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	111 N	23 W	442540.00	933844.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 101 GJS 1963 1048

5.0 MILES WEST AND NORTH OF LE CENTER, 4.0 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND SOUTH CORDOVA AVENUE (COUNTY ROAD 11) IN LE CENTER, THEN 3.0 MILES NORTH ALONG COUNTY ROAD 136, 29.0 FEET SOUTH AND 26.0 FEET EAST OF A TEE-ROAD WEST (THE JUNCTION OF COUNTY ROAD 136 AND COUNTY ROAD 125).

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.616	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.499 12B = -91.499 09 = -91.420 03 = -91.253

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:			
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/101_GJS-2-02JUN2010.jpg		Jun 2, 2010
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 102 GJS **NGS Name:** 102 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	111 N	23 W	442700.00	933733.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 102 GJS 1963 1057

2.0 MILES WEST ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND TRUNK HIGHWAY 21 IN MONTGOMERY, THEN 0.5 MILE ON COUNTY ROAD 30, 54.0 FEET NORTH AND 30.0 FEET EAST OF A TEE-ROAD EAST (THE JUNCTION OF COUNTY ROAD 30 AND TOWNSHIP ROAD).

Station Notes

THE TIES FALL IN A DITCH AND NEAR AN UNDERGROUND CABLE MARKER.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.829	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -90.994 12B = -91.007 09 = -90.922 03 = -90.761

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 107 GJS **NGS Name:** 107 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	109 N	23 W	441247.00	933329.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 107 GJS 1963 1041

IN WATERVILLE, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 13 MILEPOINT 42.6, IN THE CENTER ISLAND, 47.0 FEET NORTH OF TRUNK HIGHWAY 60, 34.4 FEET WEST OF NORTHBOUND TRUNK HIGHWAY 13, 31.0 FEET EAST OF SOUTHBOUND TRUNK HIGHWAY 13, 1.0 FOOT NORTHWEST OF A WITNESS POST.

Station Notes

THE TIES FALL UNDER NEW CONCRETE (5/20/2004).

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1040.588	.033	3				VERTICAL CONTROL SURVEY	1963	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.497 12B = -93.497 09 = -93.422 03 = -93.222

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 118 GJS **NGS Name:** 118 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	110 N	23 W	442211.00	933753.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 118 GJS 1963 1061

4.6 MILES SOUTHWEST OF MONTGOMERY, 4.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 (MONTGOMERY AVENUE SOUTHWEST) IN MONTGOMERY, THEN 1.3 MILES WEST ON COUNTY ROAD 138, AT THE EAST EDGE OF LAKE VOLNEY, 33.0 FEET SOUTH AND 68.0 FEET EAST OF TEE-ROAD EAST (COUNTY ROAD 138).

Station Notes

FOUND CIRCULAR CONCRETE ABOUT 1.0 FOOT DOWN AT THE TIE LOCATION, THE DISK IS GONE, THE TOP OF THE CONCRETE LOOKS LIKE SOMETHING HIT IT JAGGED, THE ROD IS STILL THERE AND GIVES THE SOUND FOR A METAL LOCATOR.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.245	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.241 12B = -92.234 09 = -92.152 03 = -91.965

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 119 GJS **NGS Name:** 119 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	18	110 N	23 W	442001.00	933828.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 119 GJS 1963 1107

6.65 MILES SOUTHWEST OF MONTGOMERY, 6.4 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 (MONTGOMERY AVENUE SOUTHWEST) IN MONTGOMERY, THEN 1.7 MILES WEST ON TRUNK HIGHWAY 102, THEN 0.45 MILE ON COUNTY ROAD 136, 400.0 FEET SOUTH AND 37.0 FEET EAST OF A TEE-ROAD WEST (THE JUNCTION OF COUNTY ROAD 136 AND TOWNSHIP ROAD), 1.0 FOOT SOUTH OF A FENCE LINE EAST.

Station Notes

THE TIE LOCATION FALLS IN A FIELD, THE FENCE HAS BEEN PARTIALLY REMOVED AND MAY HAVE BEEN REMOVED BY A FARMER.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1106.806	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.811 12B = -92.808 09 = -92.713 03 = -92.516

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 120 GJS **NGS Name:** 120 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	19	110 N	23 W	441844.00	933843.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 120 GJS 1963 1080

8.6 MILES SOUTH AND WEST OF MONTGOMERY, 8.4 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 (MONTGOMERY AVENUE SOUTHWEST) IN MONTGOMERY, THEN 1.95 MILES WEST ON COUNTY ROAD 2, 31.0 FEET NORTH AND 57.0 FEET WEST OF A CROSSROADS (THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 5). FALLS IN A DITCH BOTTOM, MAY BE COVERED WITH DIRT.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.483	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.107 12B = -93.107 09 = -93.008 03 = -92.802

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 121 GJS **NGS Name:** 121 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	109 N	23 W	441634.00	933806.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	NOT FOUND	Horz=NO Vert=YES	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 121 GJS 1963 1035

4.0 MILES SOUTHWEST OF KILKENNY, 1.0 MILE WEST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 55 IN KILKENNY, THEN 3.0 MILES SOUTH AND WEST ON TRUNK HIGHWAY 125 (TRUNK HIGHWAY 124), THEN 1.5 MILES SOUTH ON COUNTY ROAD 5, 162.0 FEET EAST AND 3.0 FEET NORTH OF A TEE-ROAD NORTH (THE JUNCTION OF COUNTY ROAD 5 AND TOWNSHIP ROAD).

Station Notes

COMPARING CURRENT MAP WITH QUAD MAP IT IS EVIDENT COUNTY ROAD 5 HAS BEEN MOVED, COORDINATES PUT THE LOCATION IN AN ALFALFA FIELD, 120.0 FEET NORTH OF A TOWNSHIP ROAD AND 300.0 FEET SOUTH OF A COUNTY ROAD SOUTH.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.100	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.451 12B = -93.451 09 = -93.359 03 = -93.149

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 122 GJS **NGS Name:** 122 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	109 N	24 W	441331.00	933905.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2016) **Stamping:** 122 GJS 1963 1045

1.8 MILES NORTHWEST OF ELYSIAN, 2.4 MILES NORTH AND WEST ALONG 191ST AVENUE FROM THE JUNCTION OF 191ST AVENUE AND LAKE AVENUE IN ELYSIAN, THEN 0.2 MILE ON COUNTY ROAD 14, 46.0 FEET WEST AND 35.0 FEET NORTH OF A TEE-ROAD NORTH (THE JUNCTION OF COUNTY ROAD 14 AND A TOWNSHIP ROAD).

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.506	.033	3				VERTICAL CONTROL SURVEY	1963	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.993 12B = -93.996 09 = -93.914 03 = -93.701

*** No Horizontal Positions in the Database ***

13 GAF

Mn/DOT Name: 13 GAF

NGS Name: 13 GAF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	112 N	23 W	443045.00	933737.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2010	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 13 GAF 1955

2.1 MILES SOUTH AND 2.5 MILES WEST OF NEW PRAGUE, 2.0 MILES WEST ALONG COUNTY ROAD 29 FROM THE JUNCTION OF COUNTY ROAD 29 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, THEN 1.0 MILE SOUTH ALONG COUNTY ROAD 30, 348.0 FEET SOUTH AND 31.0 FEET WEST OF COUNTY ROAD 30 AT TEE-ROAD (COUNTY ROAD 122) WEST, 1.0 FOOT NORTH AND 1.0 FOOT EAST OF A POWER POLE.

Station Notes

FOUND THE CONCRETE STRUCTURE OUT OF THE GROUND AND LAYING ON ITS SIDE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1020.933	.033	3				VERTICAL CONTROL SURVEY	1975	USGS-VERT

Geoid Separations(ft): GEOID18 = -90.266 12B = -90.259 09 = -90.200 03 = -90.059

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:			
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/13_GAF-2-25MAY2010.jpg		May 25, 2010
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

13 GAF RM 1

Mn/DOT Name: 13 GAF RM 1 **NGS Name:** 13 GAF RM 1

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	112 N	23 W	443044.00	933736.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
PILES AND POLES	SPIKE	USGS

Description: (2009) **Stamping:** R. M.

2.1 MILES SOUTH AND 2.5 MILES WEST OF NEW PRAGUE, 2.1 MILES SOUTH AND 2.5 MILES WEST OF NEW PRAGUE, 2.0 MILES WEST ALONG COUNTY ROAD 29 FROM THE JUNCTION OF COUNTY ROAD 29 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, THEN 1.0 MILE SOUTH ALONG COUNTY ROAD 30, 51.0 FEET SOUTH AND 78.0 FEET EAST OF STATION 13 GAF IN THE WEST SIDE OF A TELEPHONE POLE.

Station Notes

NO POWER POLE 51.0 FEET SOUTH AND 78.0 FEET EAST OF 13 GAF. THE POWER POLES HAVE BEEN REPLACED.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.269 12B = -90.262 09 = -90.200 03 = -90.059

Mn/DOT Name: 19 1 **NGS Name:** 19 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1773 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	112 N	26 W	443217.00	935318.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BOLT	MNDT

Description: (2009) **Stamping:**

1.2 MILES NORTHEAST FROM HENDERSON, 0.8 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON, 0.4 MILE NORTH ALONG COUNTY ROAD 51, 10.0 FEET WEST OF RAILROAD SIGNAL NUMBER 567, ON THE TOP OF A RAILROAD SIGNAL CONTROL BOX.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
746.652	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

Geoid Separations(ft): GEOID18 = -91.683 12B = -91.673 09 = -91.611 03 = -91.476

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 19 2 **NGS Name:** 19 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1774 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	112 N	26 W	443216.00	935320.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BOLT	MNDT

Description: (2009) **Stamping:**

1.2 MILES NORTHEAST FROM HENDERSON, 0.8 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON, 0.4 MILE NORTH ALONG THE CHICAGO AND NORTHWESTERN RAILROAD, SOUTHWEST BOLT IN THE BASE OF RAILROAD SIGNAL NUMBER 566.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
743.463	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

Geoid Separations(ft): GEOID18 = -91.689 12B = -91.680 09 = -91.617 03 = -91.479

*** No Horizontal Positions in the Database ***

3 RLG

Mn/DOT Name: 3 RLG

NGS Name: 3 RLG

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	109 N	26 W	441423.00	935324.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093334/
USGS Quad: MANKATO EAST

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2022	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 3 RLG 1949

4.6 MILES NORTHWEST OF MADISON LAKE, 2.3 MILES NORTH ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND 1ST STREET IN MADISON LAKE, THEN 4.0 MILES WEST ALONG COUNTY ROAD 2, 438.0 FEET WEST OF A TEE-ROAD SOUTH, 33.0 FEET NORTH OF COUNTY ROAD 2, 80.0 FEET EAST OF A DRIVEWAY.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1054.056	.033	3				VERTICAL CONTROL SURVEY	1966	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.448 12B = -93.448 09 = -93.353 03 = -93.208

*** No Horizontal Positions in the Database ***

4 RLG

Mn/DOT Name: 4 RLG **NGS Name:** 4 RLG

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	109 N	25 W	441421.90	935101.29		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2024	GOOD	Horz=NO Vert=NO	NO		PROJECTS 18 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	USGS

Description: (2022) **Stamping:** 4 RLG 1949

4.6 MILES NORTHWEST OF MADISON LAKE, 0.15 MILE NORTH ALONG COUNTY ROAD 44 FROM THE JUNCTION OF COUNTY ROAD 44 AND TRUNK HIGHWAY 60 IN MADISON LAKE, THEN 2.05 MILES NORTH AND WEST ON COUNTY ROAD 187, THEN 1.5 MILES NORTH ON COUNTY ROAD 188, THEN 0.10 MILE WEST ON COUNTY ROAD 16, 32.8 FEET NORTH OF COUNTY ROAD 16 (490TH STREET), 59.9 FEET WEST OF A DRIVEWAY, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes
A TREE IS PUSHING ON THE SURVEY MARK AND IS NOT USABLE FOR GEODETIC WORK.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.443	.033	3				VERTICAL CONTROL SURVEY	1966	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.600	.262		949.929	.197	2011	GPS - RTRN	2024	RTRN2024
1043.469	.262		949.801	.197	2011	GPS - RTRN	2022	RTRN2022

Geoid Separations(ft): GEOID18 = -93.671 12B = -93.665 09 = -93.569 03 = -93.422

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 21.89506	93 51 01.28615	312073.351	117117.879	.131	3	GPS - RTRN	2024	RTRN2024
44 14 21.89652	93 51 01.28747	312073.256	117118.028	.131	3	GPS - RTRN	2022	RTRN2022

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2663882.767	779932.913	1417641.657	16072199.751	.131	3	GPS - RTRN	2024	RTRN2024
2663882.671	779933.061	1417641.563	16072199.900	.131	3	GPS - RTRN	2022	RTRN2022

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4_RLG-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4_RLG-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4_RLG-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 A 1 **NGS Name:** 4001 A 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3929 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	109 N	23 W	441152.36	933151.02	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1969	2018	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4001 A 1 1969

1.5 MILES SOUTHEAST OF WATERVILLE, IN THE SOUTHEAST CORNER OF A TRUNK HIGHWAY 13 CATTLE PASS, 1.7 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 40.8, 55.0 FEET SOUTHEAST OF DRIVEWAY NUMBER 51821 EXTENDED, 46.0 FEET SOUTHWEST OF TRUNK HIGHWAY 13.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.987	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1048.006	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1048.029	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1048.026	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.069	.033	3				VERTICAL CONTROL SURVEY	1967	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.095	.262		954.700	.197	2011	GPS - RTRN	2018	RTRN2018
1048.003	.262		954.608	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.392 12B = -93.395 09 = -93.313 03 = -93.123

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 52.35819	93 31 51.02105	395742.126	101403.664	.131	3	GPS - RTRN	2018	RTRN2018
44 11 52.35837	93 31 51.02074	395742.148	101403.682	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2747703.524	765108.216	1501250.690	16056358.978	.131	3	GPS - RTRN	2018	RTRN2018
2747703.546	765108.235	1501250.713	16056358.996	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_A_1-DM3929-3SW-23JUL2018.jpg	SW	Jul 23, 2018
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_A_1-DM3929-2-23JUL2018.jpg		Jul 23, 2018
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_A_1-DM3929-1-23JUL2018.jpg		Jul 23, 2018

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 A 2 **NGS Name:** 4001 A 2

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	26	109 N	23 W	441306.00	933330.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2010	DESTROYED	Horz=NO Vert=NO	NO	6475		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 A 2 1965

IN WATERVILLE, 0.4 MILE NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, IN THE SOUTHWEST HEADWALL OF TRUNK HIGHWAY 13 BRIDGE NUMBER 6475 OVER THE WHITE WATER RIVER, 22.0 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 43.0.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.241	.033	3				VERTICAL CONTROL SURVEY	1958	CS4001

Geoid Separations(ft): GEOID18 = -93.455 12B = -93.451 09 = -93.376 03 = -93.176

*** No Horizontal Positions in the Database ***

4001 A 3

Mn/DOT Name: 4001 A 3 **NGS Name:** 4001 A 3

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	26	109 N	23 W	441324.00	933342.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2010	DESTROYED	Horz=NO Vert=NO	NO	5495		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 A 3 1965

IN WATERVILLE, 0.7 MILE NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, IN THE SOUTH CORNER OF THE EAST ABUTMENT OF TRUNK HIGHWAY 13 BRIDGE NUMBER 5495 OVER SAKATA LAKE, 22.0 FEET EAST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 43.3.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1009.929	.033	3				VERTICAL CONTROL SURVEY	1958	CS4001

Geoid Separations(ft): GEOID18 = -93.435 12B = -93.435 09 = -93.356 03 = -93.156

*** No Horizontal Positions in the Database ***

4001 AA

Mn/DOT Name: 4001 AA **NGS Name:** 4001 AA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	109 N	23 W	441219.00	933243.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1967	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 AA 1967

0.9 MILE SOUTH OF WATERVILLE, 0.9 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, 72.3 FEET SOUTH OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 41.7, 0.5 FOOT NORTH OF A WITNESS POST.

Station Notes

A DRIVEWAY OF NEW HOME FALLS WHERE THE MARK SHOULD BE (5/20/2004).
FOUND A BENCHMARK SIGN NORTH OF THE ROAD, DUG AROUND THE POST. FOUND NOTHING, SOMETHING COULD BE BURIED.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.747	.033	3				VERTICAL CONTROL SURVEY	1967	CS4001

Geoid Separations(ft): GEOID18 = -93.455 12B = -93.458 09 = -93.376 03 = -93.182

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4001 AB **NGS Name:** 4001 AB

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DK4205 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	109 N	23 W	441220.64	933244.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2015	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2004) **Stamping:** 4001 AB 2004

0.5 MILE SOUTHEAST OF WATERVILLE, 0.9 MILE SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 41.7, 70.1 FEET NORTH OF TRUNK HIGHWAY 13, 90.4 FEET EAST OF A POWER POLE NUMBER 2138, 17.4 FEET WEST OF THE FIELD ENTRANCE, 2.1 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.268	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1066.258	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			972.803	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			972.856	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1066.271	.131		973.046	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1066.271	.131		973.046	.066	1996	GPS - STATIC	2008	HRYCE

Geoid Separations(ft): GEOID18 = -93.455 12B = -93.455 09 = -93.376 03 = -93.182

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 20.63926	93 32 44.51142	391859.530	104286.959	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 20.63914	93 32 44.51221	391859.472	104286.948	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 20.63867	93 32 44.51166	391859.512	104286.900	.033	C	ADJUSTMENT	2008	GPS2437
44 12 20.63867	93 32 44.51166	391859.512	104286.900	.033	C	GPS - STATIC	2008	HRYCE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743791.042	767949.858	1497374.376	16059247.229	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743790.985	767949.845	1497374.318	16059247.217	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743791.025	767949.798	1497374.358	16059247.169	.033	C	ADJUSTMENT	2008	GPS2437
2743791.025	767949.798	1497374.358	16059247.169	.033	C	GPS - STATIC	2008	HRYCE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB-DK4205-3S-20APR2010.jpg	S	Apr 20, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB-DK4205-2-20APR2010.jpg		Apr 20, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB-DK4205-1-20APR2010.jpg		Apr 20, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4001 AB RESET

Mn/DOT Name: 4001 AB RESET
NGS Name: 4001 AB RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6342 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	109 N	23 W	441220.64	933244.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2015	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4001 AB RESET 2015

0.5 MILE SOUTHEAST OF WATERVILLE, 0.9 MILE SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 41.7, 70.1 FEET NORTH OF TRUNK HIGHWAY 13, 90.4 FEET EAST OF A POWER POLE NUMBER 2138, 17.4 FEET WEST OF A FIELD ENTRANCE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1065.982	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1065.999	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.097	.262		972.642	.197	2011	GPS - RTRN	2024	RTRN2024
1065.982			972.574	.024	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1065.982	.131		972.770	.066	1996	GPS - STATIC	2020	HTH13
1065.982			972.574	.024	2011	GPS - STATIC	2020	HTH13
1066.021	.262		972.567	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.455 12B = -93.455 09 = -93.376 03 = -93.182

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 20.63923	93 32 44.51125	391859.542	104286.956	.131	3	GPS - RTRN	2024	RTRN2024
44 12 20.63924	93 32 44.51175	391859.505	104286.957	.013		ADJUSTMENT	2020	GPS3368
44 12 20.63924	93 32 44.51175	391859.505	104286.957	.013	C	GPS - STATIC	2020	HTH13
44 12 20.63954	93 32 44.51127	391859.540	104286.988	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 20.63911	93 32 44.51201	391859.486	104286.944	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743791.054	767949.855	1497374.388	16059247.226	.131	3	GPS - RTRN	2024	RTRN2024
2743791.018	767949.856	1497374.352	16059247.227	.013		ADJUSTMENT	2020	GPS3368
2743791.018	767949.856	1497374.352	16059247.227	.013	C	GPS - STATIC	2020	HTH13
2743791.053	767949.886	1497374.387	16059247.257	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743790.999	767949.842	1497374.333	16059247.214	.033	C	GPS - STATIC	2020	HTH13

4001 AB RESET

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB_RESET-DQ6342-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB_RESET-DQ6342-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AB_RESET-DQ6342-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AC **NGS Name:** 4001 AC

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DK4206 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	109 N	23 W	441246.58	933330.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 45 FT)	SURVEY DISK	MNDT

Description: (2016) **Stamping:** 4001 AC 2004

IN WATERVILLE, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 132.65, 109.8 FEET WEST OF TRUNK HIGHWAY 13, 85.8 FEET NORTH OF WESTBOUND TRUNK HIGHWAY 60, 26.2 FEET WEST-NORTHWEST OF A CONCRETE CULVERT, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.227	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1034.240	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1034.276	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1034.260	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.381	.262		940.877	.197	2011	GPS - RTRN	2024	RTRN2024
1034.250	.262		940.746	.197	2011	GPS - OPUS	2021	GPSBM
1034.227			940.756	.009	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1034.434	.262		940.930	.197	2011	GPS - RTRN	2020	RTRN2020
1034.227	.131		940.995	.066	1996	GPS - STATIC	2020	HTH13
1034.227			940.756	.009	2011	GPS - STATIC	2020	HTH13
1034.233	.262		940.730	.197	2011	GPS - RTRN	2016	RTRN2016
			940.756	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			940.812	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1034.250	.131		940.995	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1034.250	.131		940.995	.066	1996	GPS - STATIC	2008	HRYCE

Geoid Separations(ft): GEOID18 = -93.504 12B = -93.504 09 = -93.425 03 = -93.228

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 46.58112	93 33 30.76806	388503.617	106931.324	.131	3	GPS - RTRN	2024	RTRN2024
44 12 46.58108	93 33 30.76873	388503.569	106931.320	.131	3	GPS - OPUS	2021	GPSBM
44 12 46.58142	93 33 30.76826	388503.603	106931.355	.007		ADJUSTMENT	2020	GPS3368
44 12 46.58114	93 33 30.76823	388503.605	106931.326	.131	3	GPS - RTRN	2020	RTRN2020
44 12 46.58142	93 33 30.76826	388503.603	106931.355	.007	C	GPS - STATIC	2020	HTH13
44 12 46.58112	93 33 30.76845	388503.589	106931.324	.131	3	GPS - RTRN	2016	RTRN2016
44 12 46.58142	93 33 30.76826	388503.603	106931.355	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 46.58131	93 33 30.76902	388503.548	106931.344	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 46.58080	93 33 30.76847	388503.587	106931.292	.033	C	GPS - STATIC	2020	HTH13
44 12 46.58080	93 33 30.76847	388503.587	106931.292	.033	C	ADJUSTMENT	2008	GPS2437
44 12 46.58080	93 33 30.76847	388503.587	106931.292	.033	C	GPS - STATIC	2008	HRYCE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740407.686	770558.192	1494024.131	16061895.815	.131	3	GPS - RTRN	2024	RTRN2024
2740407.637	770558.188	1494024.082	16061895.812	.131	3	GPS - OPUS	2021	GPSBM
2740407.671	770558.222	1494024.116	16061895.846	.007		ADJUSTMENT	2020	GPS3368
2740407.673	770558.194	1494024.118	16061895.818	.131	3	GPS - RTRN	2020	RTRN2020
2740407.671	770558.222	1494024.116	16061895.846	.007	C	GPS - STATIC	2020	HTH13
2740407.657	770558.192	1494024.102	16061895.816	.131	3	GPS - RTRN	2016	RTRN2016
2740407.671	770558.222	1494024.116	16061895.846	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740407.616	770558.211	1494024.061	16061895.835	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740407.656	770558.159	1494024.101	16061895.783	.033	C	GPS - STATIC	2020	HTH13
2740407.656	770558.159	1494024.101	16061895.783	.033	C	ADJUSTMENT	2008	GPS2437
2740407.656	770558.159	1494024.101	16061895.783	.033	C	GPS - STATIC	2008	HRYCE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AC-DK4206-3W-16APR2024.jpg	W	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AC-DK4206-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AC-DK4206-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AD **NGS Name:** 4001 AD

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3930 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	109 N	23 W	441306.67	933341.24	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=NO Vert=NO	YES	6475	FLUSH	NO MAG MATERIAL

Monument Type: BRIDGE RAILING
Disk Type: VERTICAL CONTROL DISK
Mon. Agency: MNDT

Description: (2016) **Stamping:** 4001 AD 2004

IN WATERVILLE, 0.49 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOST 43.0, 24.5 FEET WEST OF TRUNK HIGHWAY 13.

Station Notes

IN THE SOUTHWEST CORNER OF A CONCRETE GUARD RAIL.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1009.470	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1009.453	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1009.562	.262		916.081	.197	2011	GPS - RTRN	2024	RTRN2024
1009.489	.262		916.009	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.478 12B = -93.478 09 = -93.399 03 = -93.199

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 06.66642	93 33 41.24379	387751.255	108969.325	.131	3	GPS - RTRN	2024	RTRN2024
44 13 06.66719	93 33 41.24431	387751.217	108969.403	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739633.852	772587.864	1493275.346	16063934.144	.131	3	GPS - RTRN	2024	RTRN2024
2739633.814	772587.941	1493275.309	16063934.222	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AD-DM3930-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AD-DM3930-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AD-DM3930-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AE **NGS Name:** 4001 AE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3931 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	26	109 N	23 W	441323.67	933349.98	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2016	GOOD	Horz=NO Vert=NO	YES	5495	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4001 AE 2004

IN WATERVILLE, IN AN ABUTMENT IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 13 BRIDGE NUMBER 5495 OVER THE CANNON RIVER, 0.85 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 43.4, 33.0 FEET EAST OF TRUNK HIGHWAY 13.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1009.854	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1009.867	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1009.913	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1009.896	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1009.762	.262		916.307	.197	2011	GPS - RTRN	2017	RTRN2017
1009.798	.262		916.343	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.455 12B = -93.455 09 = -93.376 03 = -93.176

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 23.67258	93 33 49.98403	387123.777	110694.866	.131	3	GPS - RTRN	2017	RTRN2017
44 13 23.67269	93 33 49.98332	387123.829	110694.877	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738988.195	774306.453	1492650.895	16065659.949	.131	3	GPS - RTRN	2017	RTRN2017
2738988.247	774306.465	1492650.946	16065659.959	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AE-DM3931-3W-21APR2010.jpg	W	Apr 21, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AE-DM3931-2-21APR2010.jpg		Apr 21, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AE-DM3931-1-21APR2010.jpg		Apr 21, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AF **NGS Name:** 4001 AF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3932 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	109 N	23 W	441357.18	933439.53	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)	SURVEY DISK	MNDT

Description: (2016) **Stamping:** 4001 AF 2004

IN WATERVILLE, 1.8 MILES NORTH AND WEST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 44.35, 56.6 FEET NORTH OF TRUNK HIGHWAY 13, 97.6 FEET EAST OF DRIVEWAY NUMBER 1330, 14.1 FEET SOUTH OF A POWER POLE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1019.161	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1019.174	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1019.220	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1019.197	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1019.230	.262		925.743	.197	2011	GPS - RTRN	2024	RTRN2024
1019.220	.262		925.736	.197	2011	GPS - OPUS	2021	GPSBM
1019.214	.262		925.730	.197	2011	GPS - OPUS	2021	GPSBM
1019.161			925.720	.024	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1019.240	.262		925.756	.197	2011	GPS - RTRN	2020	RTRN2020
1019.161	.131		925.914	.066	1996	GPS - STATIC	2020	HTH13
1019.161			925.720	.024	2011	GPS - STATIC	2020	HTH13
1019.230	.262		925.746	.197	2011	GPS - RTRN	2017	RTRN2017
1019.204	.262		925.720	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.484 12B = -93.484 09 = -93.399 03 = -93.195

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 57.18278	93 34 39.53015	383534.099	114107.716	.131	3	GPS - RTRN	2024	RTRN2024
44 13 57.18302	93 34 39.53053	383534.072	114107.740	.131	3	GPS - OPUS	2021	GPSBM
44 13 57.18288	93 34 39.53042	383534.080	114107.726	.131	3	GPS - OPUS	2021	GPSBM
44 13 57.18339	93 34 39.53031	383534.088	114107.777	.016		ADJUSTMENT	2020	GPS3368
44 13 57.18328	93 34 39.52958	383534.141	114107.766	.131	3	GPS - RTRN	2020	RTRN2020
44 13 57.18339	93 34 39.53031	383534.088	114107.777	.016	C	GPS - STATIC	2020	HTH13
44 13 57.18314	93 34 39.53064	383534.064	114107.752	.131	3	GPS - RTRN	2017	RTRN2017
44 13 57.18344	93 34 39.52970	383534.133	114107.782	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 57.18326	93 34 39.53058	383534.069	114107.764	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735362.969	777680.661	1489068.205	16069077.078	.131	3	GPS - RTRN	2024	RTRN2024
2735362.941	777680.685	1489068.177	16069077.102	.131	3	GPS - OPUS	2021	GPSBM
2735362.950	777680.671	1489068.185	16069077.088	.131	3	GPS - OPUS	2021	GPSBM
2735362.957	777680.722	1489068.193	16069077.140	.016		ADJUSTMENT	2020	GPS3368
2735363.011	777680.711	1489068.247	16069077.128	.131	3	GPS - RTRN	2020	RTRN2020
2735362.957	777680.722	1489068.193	16069077.140	.016	C	GPS - STATIC	2020	HTH13
2735362.933	777680.697	1489068.169	16069077.114	.131	3	GPS - RTRN	2017	RTRN2017
2735363.002	777680.727	1489068.238	16069077.144	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735362.938	777680.709	1489068.174	16069077.127	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AF-DM3932-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AF-DM3932-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AF-DM3932-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AG **NGS Name:** 4001 AG

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6341 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	26	109 N	23 W	441317.51	933347.31	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 52 FT)
Disk Type: METAL ROD (WITH REMOVABLE ID DISK)
Mon. Agency: MNDT

Description: (2016) **Stamping:** 4001 AG 2016

IN WATERVILLE, 0.7 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 43.3, 27.5 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 13, 5.0 FEET WEST OF THE SOUTH END OF A GUARDRAIL, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.654	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1005.671	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.743	.262		912.275	.197	2011	GPS - RTRN	2024	RTRN2024
1005.654			912.223	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1005.654	.131		912.416	.066	1996	GPS - STATIC	2020	HTH13
1005.654			912.223	.023	2011	GPS - STATIC	2020	HTH13
1005.802	.262		912.334	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.468 12B = -93.464 09 = -93.386 03 = -93.186

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 17.50779	93 33 47.31288	387315.018	110069.540	.131	3	GPS - RTRN	2024	RTRN2024
44 13 17.50808	93 33 47.31224	387315.065	110069.569	.013		ADJUSTMENT	2020	GPS3368
44 13 17.50808	93 33 47.31224	387315.065	110069.569	.013	C	GPS - STATIC	2020	HTH13
44 13 17.50772	93 33 47.31139	387315.127	110069.532	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 17.50795	93 33 47.31250	387315.046	110069.556	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739186.030	773683.263	1492841.054	16065034.584	.131	3	GPS - RTRN	2024	RTRN2024
2739186.077	773683.293	1492841.101	16065034.614	.013		ADJUSTMENT	2020	GPS3368
2739186.077	773683.293	1492841.101	16065034.614	.013	C	GPS - STATIC	2020	HTH13
2739186.139	773683.256	1492841.163	16065034.577	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739186.058	773683.279	1492841.082	16065034.601	.033	C	GPS - STATIC	2020	HTH13

4001 AG

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AG-DQ6341-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AG-DQ6341-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AG-DQ6341-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 AH **NGS Name:** 4001 AH

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6343 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	109 N	23 W	441158.39	933202.10	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 4001 AH 2016

2.2 MILES SOUTH OF WATERVILLE, 1.5 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 41.0, 73.6 FEET SOUTHWEST OF TRUNK HIGHWAY 13, 31.2 FEET NORTHWEST OF 133RD LANE EXTENDED, 1.5 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.557	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1072.577	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.649	.262		979.243	.197	2011	GPS - RTRN	2024	RTRN2024
1072.557			979.204	.028	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1072.557	.131		979.394	.066	1996	GPS - STATIC	2020	HTH13
1072.557			979.204	.028	2011	GPS - STATIC	2020	HTH13
1072.636	.262		979.227	.197	2011	GPS - RTRN	2018	RTRN2018
1072.491	.262		979.083	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.405 12B = -93.409 09 = -93.327 03 = -93.136

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 58.39066	93 32 02.10452	394937.632	102018.507	.131	3	GPS - RTRN	2024	RTRN2024
44 11 58.39108	93 32 02.10516	394937.586	102018.550	.020		ADJUSTMENT	2020	GPS3368
44 11 58.39108	93 32 02.10516	394937.586	102018.550	.020	C	GPS - STATIC	2020	HTH13
44 11 58.39079	93 32 02.10498	394937.599	102018.520	.131	3	GPS - RTRN	2018	RTRN2018
44 11 58.39078	93 32 02.10411	394937.662	102018.519	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 58.39097	93 32 02.10543	394937.566	102018.539	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2746892.653	765714.426	1500447.527	16056974.840	.131	3	GPS - RTRN	2024	RTRN2024
2746892.606	765714.468	1500447.480	16056974.883	.020		ADJUSTMENT	2020	GPS3368
2746892.606	765714.468	1500447.480	16056974.883	.020	C	GPS - STATIC	2020	HTH13
2746892.619	765714.439	1500447.493	16056974.854	.131	3	GPS - RTRN	2018	RTRN2018
2746892.683	765714.438	1500447.557	16056974.852	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2746892.587	765714.457	1500447.461	16056974.872	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AH-DQ6343-3SW-16APR2024.jpg	SW	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AH-DQ6343-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_AH-DQ6343-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 B **NGS Name:** 4001 B

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	109 N	23 W	441421.00	933508.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2010	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 B 1965

0.3 MILE NORTH OF WATERVILLE, 2.5 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, 75.0 FEET EAST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 45.1 AT THE SOUTHWEST CORNER OF A CEMETERY, 125.0 FEET SOUTH OF COUNTY ROAD 12 (WEST), 1.0 FOOT WEST OF A WITNESS POST.

Station Notes

THE DEPARTMENT OF NATURAL RESOURCES (DNR) FOUND THE DISK (01-22-04), APPEARS TO BE LEANING TO THE SOUTHWEST.
THE CONCRETE BROKE APART, THE DISK WAS REMOVED.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.301	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Geoid Separations(ft): GEOID18 = -93.484 12B = -93.481 09 = -93.399 03 = -93.192

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_B-3N-22APR2010.jpg	N	Apr 22, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_B-2-22APR2010.jpg		Apr 22, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_B-1-22APR2010.jpg		Apr 22, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 BA **NGS Name:** 4001 BA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3933 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	109 N	23 W	441421.94	933508.31	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)	SURVEY DISK	MNDT

Description: (2016) **Stamping:** 4001 BA 2004

2.0 MILE NORTH OF WATERVILLE, 2.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 45.02, 54.5 FEET EAST OF TRUNK HIGHWAY 13, 55.5 FEET SOUTH OF TETONKA LAKE ROAD EXTENDED, 21.2 FEET NORTH OF THE CEMETERY ENTRANCE, AT FIRE NUMBER 1985 - VAN BLARICOM CEMETERY, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.794	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1048.810	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1048.853	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1048.830	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.955	.262		955.474	.197	2011	GPS - RTRN	2024	RTRN2024
1048.794			955.425	.028	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1048.902	.262		955.421	.197	2011	GPS - RTRN	2020	RTRN2020
1048.794	.131		955.618	.066	1996	GPS - STATIC	2020	HTH13
1048.794			955.425	.028	2011	GPS - STATIC	2020	HTH13
1048.859	.262		955.379	.197	2011	GPS - RTRN	2017	RTRN2017
1048.912	.262		955.431	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.481 12B = -93.481 09 = -93.395 03 = -93.192

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 21.94235	93 35 08.30855	381452.561	116626.584	.131	3	GPS - RTRN	2024	RTRN2024
44 14 21.94248	93 35 08.30870	381452.550	116626.597	.016		ADJUSTMENT	2020	GPS3368
44 14 21.94201	93 35 08.30814	381452.591	116626.549	.131	3	GPS - RTRN	2020	RTRN2020
44 14 21.94248	93 35 08.30870	381452.550	116626.597	.016	C	GPS - STATIC	2020	HTH13
44 14 21.94253	93 35 08.30961	381452.484	116626.602	.131	3	GPS - RTRN	2017	RTRN2017
44 14 21.94209	93 35 08.30909	381452.522	116626.558	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 21.94235	93 35 08.30896	381452.531	116626.584	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733255.096	780177.027	1486991.579	16071598.202	.131	3	GPS - RTRN	2024	RTRN2024
2733255.085	780177.040	1486991.568	16071598.215	.016		ADJUSTMENT	2020	GPS3368
2733255.126	780176.993	1486991.609	16071598.167	.131	3	GPS - RTRN	2020	RTRN2020
2733255.085	780177.040	1486991.568	16071598.215	.016	C	GPS - STATIC	2020	HTH13
2733255.018	780177.045	1486991.502	16071598.221	.131	3	GPS - RTRN	2017	RTRN2017
2733255.056	780177.001	1486991.540	16071598.176	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733255.066	780177.027	1486991.549	16071598.202	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_BA-DM3933-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_BA-DM3933-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_BA-DM3933-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 C **NGS Name:** 4001 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3934 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	109 N	23 W	441505.87	933509.44	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4001 C 1965

3.0 MILES NORTH OF WATERVILLE, 3.3 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 13 MILEPOINT 45.9, 74.1 FEET WEST OF TRUNK HIGHWAY 13, 0.5 FOOT EAST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.846	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1097.872	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1097.905	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1097.885	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.744	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.977	.262		1004.617	.197	2011	GPS - RTRN	2024	RTRN2024
1097.941	.262		1004.588	.197	2011	GPS - RTRN	2017	RTRN2017
1097.951	.262		1004.594	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.356 12B = -93.356 09 = -93.274 03 = -93.071

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 05.87124	93 35 09.44183	381394.680	121075.684	.131	3	GPS - RTRN	2024	RTRN2024
44 15 05.87096	93 35 09.44127	381394.720	121075.655	.131	3	GPS - RTRN	2017	RTRN2017
44 15 05.87098	93 35 09.44187	381394.677	121075.658	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733150.068	784624.739	1486940.840	16076045.507	.131	3	GPS - RTRN	2024	RTRN2024
2733150.109	784624.711	1486940.880	16076045.478	.131	3	GPS - RTRN	2017	RTRN2017
2733150.065	784624.713	1486940.836	16076045.480	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_C-DM3934-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_C-DM3934-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_C-DM3934-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 D **NGS Name:** 4001 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	4	109 N	23 W	441620.00	933508.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 D 1965

2.2 MILES NORTH OF WATERVILLE, 4.4 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, 75.0 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 47.0, 25.0 FEET NORTH OF A FIELD ENTRANCE, 190.0 FEET SOUTH OF AN ENTRANCE TO AN ABANDONED FARM, 0.5 FOOT SOUTH OF A WITNESS POST.

Station Notes

THE TIES FALL IN A PLOWED FIELD, FOUND PIECES OF CONCRETE BUT NO DISK.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.228	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Geoid Separations(ft): GEOID18 = -93.136 12B = -93.130 09 = -93.048 03 = -92.844

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4001 DA **NGS Name:** 4001 DA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3935 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	109 N	23 W	441602.63	933507.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4001 DA 2004

2.3 MILES NORTH OF WATERVILLE, 4.5 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 46.95, 62.5 FEET EAST OF TRUNK HIGHWAY 13, 36.0 FEET SOUTH OF A FIELD ENTRANCE, 15.4 FEET SOUTHWEST OF A POWER POLE, 1.7 FEET NORTH OF A WITNESS POST.

Station Pair: SIAN - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1090.355	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1090.392	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1090.411	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1090.392	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1090.510	.262		997.321	.197	2011	GPS - RTRN	2024	RTRN2024
1090.355			997.288	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1090.355	.131		997.478	.066	1996	GPS - STATIC	2020	HTH13
1090.355			997.288	.023	2011	GPS - STATIC	2020	HTH13
1090.401	.262		997.219	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -93.189 12B = -93.182 09 = -93.100 03 = -92.897

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 02.62738	93 35 07.76694	381548.375	126822.668	.131	3	GPS - RTRN	2024	RTRN2024
44 16 02.62777	93 35 07.76670	381548.393	126822.707	.016		ADJUSTMENT	2020	GPS3368
44 16 02.62777	93 35 07.76670	381548.393	126822.707	.016	C	GPS - STATIC	2020	HTH13
44 16 02.62765	93 35 07.76647	381548.409	126822.695	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 02.62762	93 35 07.76696	381548.374	126822.692	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733242.823	790372.349	1487103.674	16081789.810	.131	3	GPS - RTRN	2024	RTRN2024
2733242.841	790372.389	1487103.691	16081789.850	.016		ADJUSTMENT	2020	GPS3368
2733242.841	790372.389	1487103.691	16081789.850	.016	C	GPS - STATIC	2020	HTH13
2733242.857	790372.377	1487103.708	16081789.837	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733242.822	790372.374	1487103.672	16081789.835	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_DA-DM3935-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_DA-DM3935-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_DA-DM3935-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 E **NGS Name:** 4001 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3936 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	109 N	23 W	441643.02	933509.42	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 E 1965

3.0 MILES NORTH OF WATERVILLE, 5.2 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 47.8, 73.6 FEET WEST OF TRUNK HIGHWAY 13, 5.0 FEET SOUTHWEST OF A RIGHT-OF-WAY POST, 0.5 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.707	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1051.747	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1051.747	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1051.730	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.560	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.766	.262		958.699	.197	2011	GPS - RTRN	2024	RTRN2024
1051.707			958.715	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1051.707	.131		958.906	.066	1996	GPS - STATIC	2020	HTH13
1051.707			958.715	.023	2011	GPS - STATIC	2020	HTH13
1051.822	.262		958.761	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -93.067 12B = -93.061 09 = -92.979 03 = -92.775

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 43.02278	93 35 09.42285	381450.521	130914.156	.131	3	GPS - RTRN	2024	RTRN2024
44 16 43.02327	93 35 09.42249	381450.547	130914.206	.016		ADJUSTMENT	2020	GPS3368
44 16 43.02327	93 35 09.42249	381450.547	130914.206	.016	C	GPS - STATIC	2020	HTH13
44 16 43.02266	93 35 09.42146	381450.622	130914.144	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 43.02311	93 35 09.42275	381450.529	130914.190	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733101.620	794462.088	1487012.421	16085879.727	.131	3	GPS - RTRN	2024	RTRN2024
2733101.646	794462.137	1487012.447	16085879.776	.016		ADJUSTMENT	2020	GPS3368
2733101.646	794462.137	1487012.447	16085879.776	.016	C	GPS - STATIC	2020	HTH13
2733101.721	794462.076	1487012.521	16085879.714	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733101.627	794462.121	1487012.428	16085879.760	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_E-DM3936-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_E-DM3936-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_E-DM3936-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 F **NGS Name:** 4001 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3937 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	110 N	23 W	441729.56	933529.64	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 F 1965

4.0 MILES NORTH OF WATERVILLE, 6.2 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 48.8, 73.5 FEET SOUTHWEST OF TRUNK HIGHWAY 13, 130.0 FEET SOUTHEAST OF DRIVEWAY NUMBER 45398, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.687	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1081.730	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1081.730	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1081.714	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.523	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.694	.262		988.732	.197	2011	GPS - RTRN	2024	RTRN2024
1081.687			988.814	.024	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1081.687	.131		989.004	.066	1996	GPS - STATIC	2020	HTH13
1081.687			988.814	.024	2011	GPS - STATIC	2020	HTH13
1081.701	.262		988.741	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.959 12B = -92.959 09 = -92.871 03 = -92.670

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 29.56106	93 35 29.63774	380006.203	135635.262	.131	3	GPS - RTRN	2024	RTRN2024
44 17 29.56118	93 35 29.63849	380006.149	135635.274	.016		ADJUSTMENT	2020	GPS3368
44 17 29.56118	93 35 29.63849	380006.149	135635.274	.016	C	GPS - STATIC	2020	HTH13
44 17 29.56070	93 35 29.63750	380006.221	135635.225	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 29.56103	93 35 29.63876	380006.129	135635.259	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731607.514	799167.060	1485576.287	16090601.159	.131	3	GPS - RTRN	2024	RTRN2024
2731607.460	799167.072	1485576.233	16090601.172	.016		ADJUSTMENT	2020	GPS3368
2731607.460	799167.072	1485576.233	16090601.172	.016	C	GPS - STATIC	2020	HTH13
2731607.532	799167.024	1485576.304	16090601.123	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731607.440	799167.057	1485576.213	16090601.157	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_F-DM3937-3SW-17APR2024.jpg	SW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_F-DM3937-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_F-DM3937-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 G **NGS Name:** 4001 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6421 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	110 N	23 W	441809.18	933600.49	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 G 1965

4.9 MILES NORTH OF WATERVILLE, 7.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 49.6, 68.0 FEET SOUTHWEST OF TRUNK HIGHWAY 13, 45.0 FEET NORTHWEST OF AN ENTRANCE, 0.5 FOOT EAST OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1030.057	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1030.100	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1029.873	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1030.237	.262		937.337	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.874 12B = -92.874 09 = -92.782 03 = -92.588

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 09.18129	93 36 00.48808	377785.095	139660.283	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2729344.133	803167.838	1483362.577	16094628.056	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_G-DQ6421-3SW-17APR2024.jpg	SW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_G-DQ6421-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_G-DQ6421-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 H **NGS Name:** 4001 H

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3938 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	110 N	23 W	441857.18	933622.70	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 H 1965

5.8 MILES NORTH OF WATERVILLE, 8.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 50.6, 74.0 FEET WEST OF TRUNK HIGHWAY 13, 56.6 FEET NORTH OF COUNTY ROAD 136, 0.5 FOOT EAST OF A WITNESS POST.

Station Pair: DORAN - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1081.871	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1081.911	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1081.911	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1081.894	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1081.720	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1081.897	.262		989.119	.197	2011	GPS - RTRN	2024	RTRN2024
1081.871			989.158	.024	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1081.871	.131		989.348	.066	1996	GPS - STATIC	2020	HTH13
1081.871			989.158	.024	2011	GPS - STATIC	2020	HTH13
1081.956	.262		989.184	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.775 12B = -92.772 09 = -92.684 03 = -92.490

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 18 57.17835	93 36 22.69911	376197.913	144530.218	.131	3	GPS - RTRN	2024	RTRN2024
44 18 57.17893	93 36 22.69942	376197.891	144530.277	.016		ADJUSTMENT	2020	GPS3368
44 18 57.17893	93 36 22.69942	376197.891	144530.277	.016	C	GPS - STATIC	2020	HTH13
44 18 57.17851	93 36 22.69890	376197.928	144530.234	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 18 57.17878	93 36 22.69969	376197.871	144530.262	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727705.611	808020.099	1481783.886	16099498.502	.131	3	GPS - RTRN	2024	RTRN2024
2727705.588	808020.158	1481783.864	16099498.561	.016		ADJUSTMENT	2020	GPS3368
2727705.588	808020.158	1481783.864	16099498.561	.016	C	GPS - STATIC	2020	HTH13
2727705.626	808020.116	1481783.902	16099498.518	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727705.569	808020.142	1481783.844	16099498.546	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_H-DM3938-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_H-DM3938-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_H-DM3938-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 J **NGS Name:** 4001 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3939 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	110 N	23 W	441948.30	933623.69	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 J 1965

6.8 MILES NORTH OF WATERVILLE, 9.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 51.6, 73.6 FEET WEST OF TRUNK HIGHWAY 13, 74.4 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1105.503	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1105.536	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1105.536	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1105.523	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1105.323	.033	3				VERTICAL CONTROL SURVEY	1969	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1105.565	.262		1012.977	.197	2011	GPS - RTRN	2024	RTRN2024
1105.503			1013.016	.022	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1105.503	.131		1013.210	.066	1996	GPS - STATIC	2020	HTH13
1105.503			1013.016	.022	2011	GPS - STATIC	2020	HTH13
1105.542	.262		1012.954	.197	2011	GPS - OPUS	2019	GPSBM
1105.483	.262		1012.895	.197	2011	GPS - OPUS	2019	GPSBM
1105.477	.262		1012.888	.197	2011	GPS - RTRN	2019	RTRN2019
1105.608	.262		1013.023	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.588 12B = -92.585 09 = -92.500 03 = -92.310

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 48.29583	93 36 23.68507	376156.186	149707.298	.131	3	GPS - RTRN	2024	RTRN2024
44 19 48.29620	93 36 23.68504	376156.189	149707.336	.016		ADJUSTMENT	2020	GPS3368
44 19 48.29620	93 36 23.68504	376156.189	149707.336	.016	C	GPS - STATIC	2020	HTH13
44 19 48.29617	93 36 23.68541	376156.162	149707.333	.131	3	GPS - OPUS	2019	GPSBM
44 19 48.29657	93 36 23.68512	376156.183	149707.373	.131	3	GPS - OPUS	2019	GPSBM
44 19 48.29393	93 36 23.68632	376156.094	149707.106	.131	3	GPS - RTRN	2019	RTRN2019
44 19 48.29554	93 36 23.68506	376156.187	149707.269	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 48.29604	93 36 23.68529	376156.170	149707.320	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727609.019	813195.833	1481750.506	16104673.486	.131	3	GPS - RTRN	2024	RTRN2024
2727609.021	813195.870	1481750.509	16104673.523	.016		ADJUSTMENT	2020	GPS3368
2727609.021	813195.870	1481750.509	16104673.523	.016	C	GPS - STATIC	2020	HTH13
2727608.994	813195.867	1481750.482	16104673.521	.131	3	GPS - OPUS	2019	GPSBM
2727609.015	813195.908	1481750.503	16104673.561	.131	3	GPS - OPUS	2019	GPSBM
2727608.929	813195.640	1481750.414	16104673.294	.131	3	GPS - RTRN	2019	RTRN2019
2727609.020	813195.804	1481750.507	16104673.457	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727609.003	813195.854	1481750.490	16104673.507	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_J-DM3939-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_J-DM3939-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_J-DM3939-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 K **NGS Name:** 4001 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3940 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	9	110 N	23 W	442041.54	933622.78	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2017	GOOD	Horz=NO Vert=NO	YES	6355	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4001 K 1965

6.3 MILES SOUTH OF MONTGOMERY, IN THE SOUTHEAST HEADWALL OF TRUNK HIGHWAY 13 BOX CULVERT NUMBER 6355 AT THE BIG CANNON RIVER, 2.7 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 52.6, 36.0 FEET EAST OF TRUNK HIGHWAY 13, 8.2 FEET EAST OF A GUARD RAIL.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.535	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1044.591	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1044.591	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1044.581	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.535	.033	3				VERTICAL CONTROL SURVEY	1969	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.630	.262		952.249	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.385 12B = -92.378 09 = -92.296 03 = -92.106

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 41.54163	93 36 22.77889	376253.249	155099.128	.131	3	GPS - RTRN	2017	RTRN2017

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727648.917	818587.749	1481856.214	16110062.909	.131	3	GPS - RTRN	2017	RTRN2017

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_K-DM3940-3E-02MAY2017.jpg	E	May 2, 2017
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_K-DM3940-2-02MAY2017.jpg		May 2, 2017
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_K-DM3940-1-02MAY2017.jpg		May 2, 2017

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 L
NGS Name: 4001 L
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3941 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	110 N	23 W	442123.06	933623.82	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4001 L 1965

5.5 MILES SOUTH OF MONTGOMERY, 1.9 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 53.35, 75.0 FEET WEST OF TRUNK HIGHWAY 13, 38.0 FEET SOUTH OF A TRIPLE TREE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.425	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1061.471	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1061.471	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1061.461	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.231	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.609	.262		969.385	.197	2011	GPS - RTRN	2024	RTRN2024
1061.464	.262		969.247	.197	2011	GPS - RTRN	2017	RTRN2017
1061.346	.262		969.129	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.228 12B = -92.221 09 = -92.136 03 = -91.949

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 23.05767	93 36 23.81850	376202.033	159303.908	.131	3	GPS - RTRN	2024	RTRN2024
44 21 23.05947	93 36 23.81721	376202.128	159304.090	.131	3	GPS - RTRN	2017	RTRN2017
44 21 23.05840	93 36 23.81806	376202.066	159303.982	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727553.143	822791.251	1481811.799	16114266.020	.131	3	GPS - RTRN	2024	RTRN2024
2727553.236	822791.434	1481811.895	16114266.202	.131	3	GPS - RTRN	2017	RTRN2017
2727553.174	822791.326	1481811.832	16114266.094	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_L-DM3941-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_L-DM3941-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_L-DM3941-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 M
NGS Name: 4001 M
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3942 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	111 N	23 W	442217.80	933621.05	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1965	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4001 M 1965

4.5 MILES SOUTH OF MONTGOMERY, 0.9 MILE SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 54.4, 550.0 FEET NORTH OF COUNTY ROAD 138, 75.5 FEET WEST OF TRUNK HIGHWAY 13, 0.5 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.386	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1072.449	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1072.449	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1072.445	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.117	.033	3				VERTICAL CONTROL SURVEY	1965	CS4001

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.413	.262		980.418	.197	2011	GPS - RTRN	2024	RTRN2024
1072.386			980.484	.021	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1072.386	.131		980.680	.066	1996	GPS - STATIC	2020	HTH13
1072.386			980.484	.021	2011	GPS - STATIC	2020	HTH13
1072.331	.262		980.343	.197	2011	GPS - RTRN	2017	RTRN2017
1072.390	.262		980.402	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.995 12B = -91.991 09 = -91.906 03 = -91.726

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 17.79964	93 36 21.05043	376435.192	164846.493	.131	3	GPS - RTRN	2024	RTRN2024
44 22 17.80017	93 36 21.05039	376435.195	164846.547	.013		ADJUSTMENT	2020	GPS3368
44 22 17.80017	93 36 21.05039	376435.195	164846.547	.013	C	GPS - STATIC	2020	HTH13
44 22 17.79989	93 36 21.04976	376435.241	164846.518	.131	3	GPS - RTRN	2017	RTRN2017
44 22 17.80048	93 36 21.05125	376435.133	164846.579	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 17.79999	93 36 21.05074	376435.170	164846.529	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727727.515	828335.338	1482053.809	16119805.922	.131	3	GPS - RTRN	2024	RTRN2024
2727727.518	828335.392	1482053.812	16119805.975	.013		ADJUSTMENT	2020	GPS3368
2727727.518	828335.392	1482053.812	16119805.975	.013	C	GPS - STATIC	2020	HTH13
2727727.564	828335.364	1482053.858	16119805.947	.131	3	GPS - RTRN	2017	RTRN2017
2727727.455	828335.423	1482053.750	16119806.007	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727727.492	828335.374	1482053.787	16119805.957	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_M-DM3942-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_M-DM3942-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_M-DM3942-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 N **NGS Name:** 4001 N

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6423 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	110 N	23 W	442018.52	933622.24	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2017) **Stamping:** 4001 N 2017

7.3 MILES SOUTH OF MONTGOMERY, 3.15 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 52.15, 55.3 FEET EAST OF TRUNK HIGHWAY 13, 51.5 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.117	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1042.163	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.130	.262		949.657	.197	2011	GPS - RTRN	2024	RTRN2024
1042.117			949.703	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1042.117	.131		949.893	.066	1996	GPS - STATIC	2020	HTH13
1042.117			949.703	.023	2011	GPS - STATIC	2020	HTH13
1042.081	.262		949.614	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.474 12B = -92.467 09 = -92.385 03 = -92.195

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 18.51632	93 36 22.23571	376279.239	152767.122	.131	3	GPS - RTRN	2024	RTRN2024
44 20 18.51698	93 36 22.23568	376279.242	152767.188	.016		ADJUSTMENT	2020	GPS3368
44 20 18.51698	93 36 22.23568	376279.242	152767.188	.016	C	GPS - STATIC	2020	HTH13
44 20 18.51705	93 36 22.23543	376279.260	152767.195	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 18.51683	93 36 22.23594	376279.223	152767.173	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727699.619	816256.426	1481878.435	16107731.834	.131	3	GPS - RTRN	2024	RTRN2024
2727699.621	816256.492	1481878.438	16107731.901	.016		ADJUSTMENT	2020	GPS3368
2727699.621	816256.492	1481878.438	16107731.901	.016	C	GPS - STATIC	2020	HTH13
2727699.639	816256.500	1481878.456	16107731.908	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727699.602	816256.477	1481878.419	16107731.886	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_N-DQ6423-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_N-DQ6423-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_N-DQ6423-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4001 P **NGS Name:** 4001 P

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6419 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	109 N	23 W	441501.50	933509.47	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2017) **Stamping:** 4001 P 2017

2.0 MILES NORTH OF WATERVILLE, 3.3 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 45.80, 54.2 FEET WEST OF TRUNK HIGHWAY 13, 39.1 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.159	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1086.182	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.290	.262		992.918	.197	2011	GPS - RTRN	2024	RTRN2024
1086.159			992.865	.026	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1086.159	.131		993.056	.066	1996	GPS - STATIC	2020	HTH13
1086.159			992.865	.026	2011	GPS - STATIC	2020	HTH13
1086.323	.262		992.954	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -93.369 12B = -93.369 09 = -93.287 03 = -93.084

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 01.50081	93 35 09.47412	381389.880	120633.107	.131	3	GPS - RTRN	2024	RTRN2024
44 15 01.50070	93 35 09.47436	381389.862	120633.096	.016		ADJUSTMENT	2020	GPS3368
44 15 01.50070	93 35 09.47436	381389.862	120633.096	.016	C	GPS - STATIC	2020	HTH13
44 15 01.50056	93 35 09.47478	381389.831	120633.082	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 01.50057	93 35 09.47462	381389.843	120633.083	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733149.959	784182.188	1486935.333	16075603.125	.131	3	GPS - RTRN	2024	RTRN2024
2733149.942	784182.177	1486935.315	16075603.114	.016		ADJUSTMENT	2020	GPS3368
2733149.942	784182.177	1486935.315	16075603.114	.016	C	GPS - STATIC	2020	HTH13
2733149.911	784182.162	1486935.285	16075603.100	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733149.923	784182.164	1486935.296	16075603.101	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_P-DQ6419-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_P-DQ6419-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4001_P-DQ6419-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 A **NGS Name:** 4002 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9312 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	111 N	23 W	442357.61	933620.66	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4002 A 1958

2.5 MILES SOUTH OF MONTGOMERY, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 56.4, 75.0 FEET WEST OF TRUNK HIGHWAY 13, 47.5 FEET NORTH OF COUNTY ROAD 140, 14.2 FEET EAST OF ROADSIDE LANE, 0.7 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.759	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1070.828	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1070.713	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.460	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1070.378	.033	3				VERTICAL CONTROL SURVEY	1958	CS4002

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.812	.262		979.250	.197	2011	GPS - RTRN	2024	RTRN2024
1070.982	.262		979.414	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.561 12B = -91.568 09 = -91.483 03 = -91.312

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 57.60734	93 36 20.66228	376521.783	174953.940	.131	3	GPS - RTRN	2024	RTRN2024
44 23 57.60745	93 36 20.66104	376521.873	174953.951	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727706.961	838441.933	1482156.709	16129909.028	.131	3	GPS - RTRN	2024	RTRN2024
2727707.051	838441.945	1482156.799	16129909.038	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_A-AC9312-3W-22APR2024.jpg	W	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_A-AC9312-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_A-AC9312-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 B **NGS Name:** 4002 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9311 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	21	111 N	23 W	442433.05	933600.88	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4002 B 1958

1.8 MILES SOUTH OF MONTGOMERY, 1.5 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 57.1, 70.0 FEET SOUTHEAST OF TRUNK HIGHWAY 13, 1.0 FOOT NORTHEAST OF A FIBER OPTIC CABLE POST, 0.8 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.865	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1071.943	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1072.009	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.750	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1071.533	.033	3				VERTICAL CONTROL SURVEY	1958	CS4002

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.924	.262		980.562	.197	2011	GPS - RTRN	2024	RTRN2024
1071.891	.262		980.530	.197	2011	GPS - OPUS	2021	GPSBM
1071.865			980.684	.008	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1071.852	.262		980.477	.197	2011	GPS - RTRN	2020	RTRN2020
1071.865	.131		980.812	.066	1996	GPS - STATIC	2020	HTH13
1071.865			980.684	.008	2011	GPS - STATIC	2020	HTH13
1071.983	.262		980.605	.197	2011	GPS - RTRN	2016	RTRN2016
			980.684	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			980.772	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1072.078	.131		980.969	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1072.078	.131		980.969	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -91.361 12B = -91.378 09 = -91.289 03 = -91. 115

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 33.05307	93 36 00.88460	377978.242	178535.322	.131	3	GPS - RTRN	2024	RTRN2024
44 24 33.05329	93 36 00.88499	377978.214	178535.345	.131	3	GPS - OPUS	2021	GPSBM
44 24 33.05333	93 36 00.88462	377978.241	178535.349	.007		ADJUSTMENT	2020	GPS3368
44 24 33.05353	93 36 00.88471	377978.234	178535.369	.131	3	GPS - RTRN	2020	RTRN2020
44 24 33.05333	93 36 00.88462	377978.241	178535.349	.007	C	GPS - STATIC	2020	HTH13
44 24 33.05307	93 36 00.88463	377978.240	178535.322	.131	3	GPS - RTRN	2016	RTRN2016
44 24 33.05333	93 36 00.88462	377978.241	178535.349	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 33.05341	93 36 00.88542	377978.183	178535.357	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 33.05307	93 36 00.88494	377978.217	178535.323	.033	C	GPS - STATIC	2020	HTH13
44 24 33.05290	93 36 00.88540	377978.184	178535.306	.033	C	ADJUSTMENT	2005	GPS2080
44 24 33.05290	93 36 00.88540	377978.184	178535.306	.033	C	GPS - STATIC	2005	H40BJ

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2729125.206	842038.126	1483618.364	16133486.563	.131	3	GPS - RTRN	2024	RTRN2024
2729125.178	842038.148	1483618.336	16133486.586	.131	3	GPS - OPUS	2021	GPSBM
2729125.204	842038.152	1483618.363	16133486.590	.007		ADJUSTMENT	2020	GPS3368
2729125.198	842038.172	1483618.357	16133486.610	.131	3	GPS - RTRN	2020	RTRN2020
2729125.204	842038.152	1483618.363	16133486.590	.007	C	GPS - STATIC	2020	HTH13
2729125.204	842038.126	1483618.362	16133486.563	.131	3	GPS - RTRN	2016	RTRN2016
2729125.204	842038.152	1483618.363	16133486.590	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2729125.146	842038.160	1483618.305	16133486.598	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2729125.182	842038.125	1483618.340	16133486.563	.033	C	GPS - STATIC	2020	HTH13
2729125.148	842038.108	1483618.306	16133486.546	.033	C	ADJUSTMENT	2005	GPS2080
2729125.148	842038.108	1483618.306	16133486.546	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_B-AC9311-3SE-22APR2024.jpg	SE	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_B-AC9311-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_B-AC9311-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 C **NGS Name:** 4002 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9334 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	111 N	23 W	442501.91	933529.61	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4002 C 1958

1.1 MILES SOUTH OF MONTGOMERY, 0.9 MILE SOUTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 57.8, 70.0 FEET NORTHWEST OF TRUNK HIGHWAY 13, 40.4 FEET NORTHEAST OF A POWER POLE, 2.2 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1069.509	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1069.598	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1069.598	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1069.335	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1069.325	.033	3				VERTICAL CONTROL SURVEY	1958	CS4002

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1069.542	.262		978.371	.197	2011	GPS - RTRN	2024	RTRN2024
1069.509			978.371	.007	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1069.509	.131		978.663	.066	1996	GPS - STATIC	2020	HTH13
1069.509			978.371	.007	2011	GPS - STATIC	2020	HTH13
1069.584	.262		978.394	.197	2011	GPS - RTRN	2016	RTRN2016
			978.371	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			978.459	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1069.584	.131		978.663	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1069.584	.131		978.663	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -91.174 12B = -91.191 09 = -91.099 03 = -90.928

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 01.90670	93 35 29.60819	380265.066	181444.525	.131	3	GPS - RTRN	2024	RTRN2024
44 25 01.90695	93 35 29.60883	380265.019	181444.550	.007		ADJUSTMENT	2020	GPS3368
44 25 01.90695	93 35 29.60883	380265.019	181444.550	.007	C	GPS - STATIC	2020	HTH13
44 25 01.90653	93 35 29.60771	380265.100	181444.507	.131	3	GPS - RTRN	2016	RTRN2016
44 25 01.90695	93 35 29.60883	380265.019	181444.550	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 01.90706	93 35 29.60961	380264.963	181444.562	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 01.90657	93 35 29.60945	380264.974	181444.512	.033	C	GPS - STATIC	2020	HTH13
44 25 01.90657	93 35 29.60945	380264.974	181444.512	.033	C	ADJUSTMENT	2005	GPS2080
44 25 01.90657	93 35 29.60945	380264.974	181444.512	.033	C	GPS - STATIC	2005	H40BJ

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731380.794	844971.056	1485908.953	16136390.849	.131	3	GPS - RTRN	2024	RTRN2024
2731380.748	844971.081	1485908.906	16136390.874	.007		ADJUSTMENT	2020	GPS3368
2731380.748	844971.081	1485908.906	16136390.874	.007	C	GPS - STATIC	2020	HTH13
2731380.829	844971.039	1485908.987	16136390.831	.131	3	GPS - RTRN	2016	RTRN2016
2731380.748	844971.081	1485908.906	16136390.874	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731380.691	844971.092	1485908.850	16136390.886	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731380.703	844971.043	1485908.861	16136390.836	.033	C	GPS - STATIC	2020	HTH13
2731380.703	844971.043	1485908.861	16136390.836	.033	C	ADJUSTMENT	2005	GPS2080
2731380.703	844971.043	1485908.861	16136390.836	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_C-AC9334-3NW-22APR2024.jpg	NW	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_C-AC9334-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_C-AC9334-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 D **NGS Name:** 4002 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9307 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	9	111 N	23 W	442542.50	933507.50	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4002 D 1958

0.25 MILE SOUTH OF MONTGOMERY, 3.4 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99, IN THE NORTHWEST CORNER OF THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 161 WEST-TRUNK HIGHWAY 21 EAST, AT TRUNK HIGHWAY 13 MILEPOINT 58.7, 60.0 FEET WEST OF TRUNK HIGHWAY 13, 58.0 FEET NORTH OF COUNTY ROAD 161, 121.3 FEET EAST-NORTHEAST OF A POLE, 0.6 FOOT NORTHEAST OF A WITNESS POST.

Station Notes

FOUND A BROKEN CHUNK OF CONCRETE AT THE TIE LOCATION, GAS PIPELINE RUNS THROUGH THE LOCATION, AND IT APPEARS SOME ROAD CONSTRUCTION HAS BEEN DONE AS WELL.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1062.895	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1062.626	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1062.737	.033	3				VERTICAL CONTROL SURVEY	1958	CS4002

Geoid Separations(ft): GEOID18 = -90.968 12B = -90.991 09 = -90.899 03 = -90.731

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 42.49317	93 35 07.45328	381895.864	185545.826	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732967.835	849088.926	1487545.724	16140487.799	3.281		CLASSICAL SURVEY	1990	HMONT

Mn/DOT Name: 4002 E **NGS Name:** 4002 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9303 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	3	111 N	23 W	442637.57	933506.14	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4002 E 1989

IN MONTGOMERY, 1.05 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 59.8, IN THE SOUTHWEST CORNER OF A CEMETERY, 52.7 FEET NORTHWEST OF THE NORTHWEST CORNER OF A BUILDING, 30.8 FEET EAST OF TRUNK HIGHWAY 13, 23.0 FEET NORTH-NORTHWEST OF AN UNDERGROUND CABLE MARKER POST, 10.0 FEET NORTH OF THE CEMETERY ENTRANCE, 0.6 FOOT SOUTHWEST OF THE SOUTHWEST CORNER OF A BRICK PILLAR.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1057.931	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1058.013	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1058.013	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1057.751	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1057.888	.262		967.124	.197	2011	GPS - RTRN	2024	RTRN2024
1057.931			967.239	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1057.931	.131		967.432	.066	1996	GPS - STATIC	2020	HTH13
1057.931			967.239	.023	2011	GPS - STATIC	2020	HTH13
1058.170	.262		967.387	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.764 12B = -90.784 09 = -90.692 03 = -90.535

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 37.57080	93 35 06.13646	382022.236	191123.110	.131	3	GPS - RTRN	2024	RTRN2024
44 26 37.57113	93 35 06.13650	382022.233	191123.143	.013		ADJUSTMENT	2020	GPS3368
44 26 37.57113	93 35 06.13650	382022.233	191123.143	.013	C	GPS - STATIC	2020	HTH13
44 26 37.57073	93 35 06.13581	382022.283	191123.102	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 37.57094	93 35 06.13684	382022.208	191123.124	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733035.072	854666.569	1487681.103	16146062.553	.131	3	GPS - RTRN	2024	RTRN2024
2733035.069	854666.603	1487681.100	16146062.586	.013		ADJUSTMENT	2020	GPS3368
2733035.069	854666.603	1487681.100	16146062.586	.013	C	GPS - STATIC	2020	HTH13
2733035.119	854666.562	1487681.150	16146062.545	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733035.044	854666.583	1487681.075	16146062.567	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_E-AC9303-3E-22APR2024.jpg	E	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_E-AC9303-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_E-AC9303-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 F

NGS Name: 4002 F

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	111 N	23 W	442725.00	933511.00	2	

NGS ACRN: AC9302 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2010	GOOD	Horz=NO Vert=NO	YES		RECESSED 8 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4002 F 1989

1.0 MILE NORTH-NORTHWEST OF MONTGOMERY, 2.05 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 60.7, 52.5 FEET SOUTH-SOUTHWEST OF A POWER POLE, 36.3 FEET EAST-NORTHEAST OF THE EAST RAIL OF THE RAILROAD TRACKS, 28.0 FEET SOUTH OF COUNTY ROAD 142, 1.6 FEET NORTH OF A POWER POLE, 1.5 FEET WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.762	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.512	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.610 12B = -90.623 09 = -90.538 03 = -90.384

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_F-AC9302-3SE-02JUN2010.jpg	SE	Jun 2, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_F-AC9302-2-02JUN2010.jpg		Jun 2, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_F-AC9302-1-02JUN2010.jpg		Jun 2, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 G **NGS Name:** 4002 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9301 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	112 N	23 W	442755.52	933506.15	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2010	GOOD	Horz=NO Vert=NO	YES		RECESSED 2 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4002 G 1989

1.5 MILES NORTH OF MONTGOMERY, 3.65 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 61.3, 100.7 FEET EAST OF TRUNK HIGHWAY 13, 200.0 FEET SOUTH OF THE ENTRANCE TO A GIFT SHOP ENTRANCE TO THE WEST, 52.5 FEET SOUTHWEST OF A WOOD UNDERGROUND CABLE MARKER POST, 20.8 FEET WEST OF THE WEST RAIL OF THE RAILROAD TRACKS, 0.9 FOOT NORTH-NORTHEAST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1037.098	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1036.858	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			946.520	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			946.609	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1037.104	.131		946.796	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1037.104	.131		946.796	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -90.499 12B = -90.512 09 = -90.430 03 = -90.279

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 55.51739	93 35 06.15224	382064.698	199016.929	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 55.51751	93 35 06.15298	382064.645	199016.942	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 55.51703	93 35 06.15253	382064.677	199016.893	.033	C	ADJUSTMENT	2005	GPS2080
44 27 55.51703	93 35 06.15253	382064.677	199016.893	.033	C	GPS - STATIC	2005	H40BJ

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732993.859	862559.454	1487736.386	16153953.017	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732993.806	862559.466	1487736.333	16153953.030	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732993.839	862559.418	1487736.365	16153952.981	.033	C	ADJUSTMENT	2005	GPS2080
2732993.839	862559.418	1487736.365	16153952.981	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_G-AC9301-3E-02JUN2010.jpg	E	Jun 2, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_G-AC9301-2-02JUN2010.jpg		Jun 2, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_G-AC9301-1-02JUN2010.jpg		Jun 2, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 H **NGS Name:** 4002 H

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9332 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	112 N	23 W	442848.98	933458.21	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4002 H 1989

3.0 MILES NORTH OF MONTGOMERY, 4.65 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 62.3, 143.0 FEET EAST-NORTHEAST OF TRUNK HIGHWAY 13, 52.8 FEET NORTH OF DRIVEWAY NUMBER 32421, 2.2 FEET WEST-NORTHWEST OF A POWER POLE, 1.1 FEET SOUTH-SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.816	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1032.898	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1032.895	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.669	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.842	.262		942.524	.197	2011	GPS - RTRN	2024	RTRN2024
1032.698	.262		942.370	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.318 12B = -90.328 09 = -90.249 03 = -90.105

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 48.97698	93 34 58.21236	382670.288	204427.737	.131	3	GPS - RTRN	2024	RTRN2024
44 28 48.97754	93 34 58.21158	382670.345	204427.794	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733541.993	867975.732	1488350.536	16159360.586	.131	3	GPS - RTRN	2024	RTRN2024
2733542.049	867975.788	1488350.593	16159360.643	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_H-AC9332-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_H-AC9332-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_H-AC9332-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 J **NGS Name:** 4002 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9296 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	112 N	23 W	442937.64	933508.46	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4002 J 1989

3.5 MILES SOUTH OF NEW PRAGUE, 3.45 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 63.3, 127.0 FEET NORTH OF DRIVEWAY NUMBER 31498, 69.5 FEET WEST OF TRUNK HIGHWAY 13, 54.5 FEET SOUTH OF DRIVEWAY NUMBER 31462, 1.8 FEET EAST OF A TRANSFORMER POLE, 0.7 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.332	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1044.398	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1044.398	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.184	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.388	.262		954.201	.197	2011	GPS - RTRN	2024	RTRN2024
1044.227	.262		954.034	.197	2011	GPS - RTRN	2016	RTRN2016
			954.184	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			954.266	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1044.388	.131		954.398	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1044.388	.131		954.398	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -90.187 12B = -90.193 09 = -90.118 03 = -89.974

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 37.63617	93 35 08.45870	381954.638	209359.679	.131	3	GPS - RTRN	2024	RTRN2024
44 29 37.63648	93 35 08.45843	381954.658	209359.710	.131	3	GPS - RTRN	2016	RTRN2016
44 29 37.63643	93 35 08.45829	381954.668	209359.705	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 37.63639	93 35 08.45930	381954.595	209359.702	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 37.63582	93 35 08.45880	381954.631	209359.644	.033	C	ADJUSTMENT	2005	GPS2080
44 29 37.63582	93 35 08.45880	381954.631	209359.644	.033	C	GPS - STATIC	2005	H40BJ

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732774.195	872899.222	1487643.226	16164291.642	.131	3	GPS - RTRN	2024	RTRN2024
2732774.214	872899.253	1487643.246	16164291.673	.131	3	GPS - RTRN	2016	RTRN2016
2732774.224	872899.248	1487643.256	16164291.668	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732774.151	872899.244	1487643.183	16164291.664	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732774.187	872899.186	1487643.218	16164291.606	.033	C	ADJUSTMENT	2005	GPS2080
2732774.187	872899.186	1487643.218	16164291.606	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_J-AC9296-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_J-AC9296-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_J-AC9296-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 K **NGS Name:** 4002 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9295 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	112 N	23 W	443024.01	933506.98	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4002 K 1989

3.0 MILES SOUTH OF NEW PRAGUE, 2.55 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 64.15, 78.0 FEET EAST OF TRUNK HIGHWAY 13, 2.0 FEET NORTHWEST OF A POWER POLE, 56.6 FEET EAST OF A MAILBOX POST, 0.5 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1021.222	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1021.287	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1021.287	.016	2/1				VERTICAL ADJUSTMENT	2008	00000425-24
1021.287	.016	2/1				VERTICAL CONTROL SURVEY	2006	VMVEC
1021.287	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1021.090	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1021.376	.262		931.324	.197	2011	GPS - RTRN	2024	RTRN2024
1021.146	.262		931.087	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.052 12B = -90.056 09 = -89.987 03 = -89.842

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 24.01241	93 35 06.98130	382087.691	214055.742	.131	3	GPS - RTRN	2024	RTRN2024
44 30 24.01333	93 35 06.98124	382087.696	214055.836	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732857.450	877595.870	1487783.888	16168985.533	.131	3	GPS - RTRN	2024	RTRN2024
2732857.454	877595.964	1487783.893	16168985.627	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_K-AC9295-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_K-AC9295-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_K-AC9295-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 L

NGS Name: 4002 L

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9291 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	9	112 N	23 W	443139.00	933510.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO			MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4002 L 1989

THE STATION IS LOCATED ABOUT 1.25 MILES SOUTH OF THE CITY OF NEW PRAGUE, 1.15 MILES SOUTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19 AT NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 65.6, 69.5 FEET WEST OF TRUNK HIGHWAY 13, 2.0 FEET EAST OF A POWER POLE, 0.6 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.882	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.705	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -89.855 12B = -89.859 09 = -89.787 03 = -89.645

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4002 M **NGS Name:** 4002 M

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9290 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443214.00	933507.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2014	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 4002 M 1989

0.5 MILE SOUTH OF NEW PRAGUE, 0.45 MILE SOUTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 66.3, 71.5 FEET WEST-NORTHWEST OF TRUNK HIGHWAY 13, 28.5 FEET SOUTH-SOUTHWEST OF A STREET SIGNPOST (CHEVROLET DRIVE AND BEL AIR COURT), 41.3 FEET SOUTH OF A GRAVEL ENTRANCE TO A USED CAR LOT, 104.0 FEET NORTH-NORTHEAST OF A TELEPHONE CABLE POLE, 0.7 FOOT NORTHEAST OF A WITNESS POST. THE PICTURES ARE FOR ANOTHER MARK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
975.083	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
974.919	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -89.764 12B = -89.764 09 = -89.695 03 = -89.554

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_M-AC9290-3NW-27MAY2010.jpg	NW	May 27, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_M-AC9290-2-27MAY2010.jpg		May 27, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_M-AC9290-1-27MAY2010.jpg		May 27, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 N **NGS Name:** 4002 N

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9335 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442627.00	933456.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2010	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4002 N 1989

IN THE NORTHWEST PART OF MONTGOMERY, AT THE CITY WATER TANK, HALF A BLOCK WEST OF THE JUNCTION OF 1ST STREET NORTH AND FIR AVENUE NORTHWEST, 89.5 FEET EAST OF SECOND STREET, 117.0 FEET SOUTH OF FIR AVENUE NORTHWEST, 73.5 FEET EAST-SOUTHEAST OF A POWER POLE, IN THE TOP OF A FOOTING FOR THE SOUTHEAST LEG OF A WATER TANK.

Station Notes
THE WATER TANK WAS REMOVED.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.281	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.021	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.784 12B = -90.807 09 = -90.715 03 = -90.551

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4002 P **NGS Name:** 4002 P

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9336 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	111 N	23 W	442555.00	933439.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	SURVEY DISK	MNDT

Description: (1989) **Stamping:** 4002 P 1989

IN THE SOUTHEAST PART OF MONTGOMERY, IN THE NORTHEAST CORNER OF THE CONCRETE FOOTING OF THE PILLSBURY-GREEN GIANT PLANT WATER TANK.

Station Notes

OLD SENECA PLANT WORKERS SHOWED ME WHERE THE WATER TANK WAS, CONCRETE STILL THERE BUT THE DISK IS GONE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1065.093	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.817	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.873 12B = -90.895 09 = -90.804 03 = -90.636

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4002 Q **NGS Name:** 4002 Q

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP9012 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443235.20	933502.16	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 14 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4002 Q 2014

IN NEW PRAGUE, AT THE JUNCTION OF TRUNK HIGHWAYS 13 AND 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 66.65, 51.2 FEET EAST OF TRUNK HIGHWAY 13, 181.8 FEET SOUTH OF TRUNK HIGHWAY 19, 2.1 FEET WEST OF A RIGHT-OF-WAY POST, 2.1 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.314	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
981.373	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
981.346	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
981.346	.016	2/1				VERTICAL CONTROL SURVEY	2015	VJORD

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.287	.262		891.586	.197	2011	GPS - RTRN	2024	RTRN2024
981.314	.131		891.937	.066	1996	GPS - STATIC	2023	HGLRD
981.314			891.708	.017	2011	GPS - STATIC	2023	HGLRD
981.314			891.708	.017	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
981.196	.262		891.494	.197	2011	GPS - RTRN	2016	RTRN2016
981.346			891.708	.026	2011	HORIZONTAL ADJUSTMENT	2015	GPS3107
981.346	.131		891.937	.066	1996	GPS - STATIC	2015	HJORD
981.346			891.708	.026	2011	GPS - STATIC	2015	HJORD
981.235	.262		891.537	.197	2011	GPS - RTRN	2014	RTRN2014

Geoid Separations(ft): GEOID18 = -89.701 12B = -89.701 09 = -89.636 03 = -89.495

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.20240	93 35 02.16490	382509.963	227339.866	.131	3	GPS - RTRN	2024	RTRN2024
44 32 35.20202	93 35 02.16528	382509.935	227339.828	.007		ADJUSTMENT	2023	GPS3572
44 32 35.20202	93 35 02.16528	382509.935	227339.828	.007	C	GPS - STATIC	2023	HGLRD
44 32 35.20150	93 35 02.16503	382509.953	227339.775	.131	3	GPS - RTRN	2016	RTRN2016
44 32 35.20202	93 35 02.16528	382509.935	227339.828	.010		ADJUSTMENT	2015	GPS3107
44 32 35.20202	93 35 02.16528	382509.935	227339.828	.010	C	GPS - STATIC	2015	HJORD
44 32 35.20164	93 35 02.16585	382509.893	227339.790	.131	3	GPS - RTRN	2014	RTRN2014

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.20182	93 35 02.16548	382509.920	227339.808	.033	C	GPS - STATIC	2023	HGLRD
44 32 35.20182	93 35 02.16548	382509.920	227339.808	.033	C	GPS - STATIC	2015	HJORD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733138.847	890882.135	1488227.708	16182263.433	.131	3	GPS - RTRN	2024	RTRN2024
2733138.819	890882.096	1488227.680	16182263.395	.007		ADJUSTMENT	2023	GPS3572
2733138.819	890882.096	1488227.680	16182263.395	.007	C	GPS - STATIC	2023	HGLRD
2733138.838	890882.043	1488227.697	16182263.342	.131	3	GPS - RTRN	2016	RTRN2016
2733138.819	890882.096	1488227.680	16182263.395	.010		ADJUSTMENT	2015	GPS3107
2733138.819	890882.096	1488227.680	16182263.395	.010	C	GPS - STATIC	2015	HJORD
2733138.778	890882.057	1488227.638	16182263.357	.131	3	GPS - RTRN	2014	RTRN2014

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733138.805	890882.076	1488227.665	16182263.375	.033	C	GPS - STATIC	2023	HGLRD
2733138.805	890882.076	1488227.665	16182263.375	.033	C	GPS - STATIC	2015	HJORD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_Q-DP9012-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_Q-DP9012-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_Q-DP9012-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 R **NGS Name:** 4002 R

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6412 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	112 N	23 W	442726.81	933514.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4002 R 2016

IN MONTGOMERY, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 60.7, 39.3 FEET EAST OF TRUNK HIGHWAY 13, 77.5 FEET NORTH OF COUNTY ROAD 142 (340TH STREET), 37.3 FEET NORTH OF A PAVED TRAIL, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.713	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1045.792	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.798	.262		955.195	.197	2011	GPS - RTRN	2024	RTRN2024
1045.684	.262		955.064	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.607 12B = -90.623 09 = -90.538 03 = -90.384

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 26.81058	93 35 14.46094	381445.981	196113.065	.131	3	GPS - RTRN	2024	RTRN2024
44 27 26.81068	93 35 14.45988	381446.058	196113.075	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732406.029	859649.542	1487113.201	16151051.368	.131	3	GPS - RTRN	2024	RTRN2024
2732406.106	859649.552	1487113.278	16151051.378	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_R-DQ6412-3E-22APR2024.jpg	E	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_R-DQ6412-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_R-DQ6412-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 S **NGS Name:** 4002 S

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6417 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	112 N	23 W	443033.11	933509.07	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 22 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4002 S 2016

2.4 MILES SOUTH OF NEW PRAGUE, 2.35 MILES SOUTH ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 64.35, 63.4 FEET WEST OF TRUNK HIGHWAY 13, 28.8 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1022.262	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1022.321	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1022.363	.262		932.334	.197	2011	GPS - RTRN	2024	RTRN2024
1022.265	.262		932.232	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.029 12B = -90.033 09 = -89.964 03 = -89.819

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 33.11445	93 35 09.07061	381941.376	214978.371	.131	3	GPS - RTRN	2024	RTRN2024
44 30 33.11446	93 35 09.07125	381941.329	214978.372	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732701.381	878516.786	1487639.140	16169908.017	.131	3	GPS - RTRN	2024	RTRN2024
2732701.334	878516.787	1487639.094	16169908.018	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_S-DQ6417-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_S-DQ6417-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_S-DQ6417-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 T **NGS Name:** 4002 T

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6418 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	112 N	23 W	443114.43	933507.26	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4002 T 2016

1.8 MILES SOUTH OF NEW PRAGUE, 1.6 MILES SOUTH ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 65.15, 68.5 FEET EAST OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21, 57.4 FEET NORTH OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.757	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1032.806	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.846	.262		942.931	.197	2011	GPS - RTRN	2024	RTRN2024
1032.688	.262		942.770	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -89.915 12B = -89.918 09 = -89.849 03 = -89.705

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 14.42684	93 35 07.25521	382096.064	219161.479	.131	3	GPS - RTRN	2024	RTRN2024
44 31 14.42726	93 35 07.25491	382096.086	219161.522	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732811.705	882700.799	1487800.600	16174089.131	.131	3	GPS - RTRN	2024	RTRN2024
2732811.727	882700.841	1487800.622	16174089.173	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_T-DQ6418-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_T-DQ6418-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_T-DQ6418-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4002 U **NGS Name:** 4002 U

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6397 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	111 N	23 W	442354.80	933620.48	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016) **Stamping:** 4002 U 2016

3.4 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 2.4 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 56.3, 60.2 FEET WEST OF TRUNK HIGHWAY 13, 28.5 FEET SOUTH OF A FIELD ENTRANCE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.173	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1067.245	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.186	.262		975.612	.197	2011	GPS - RTRN	2024	RTRN2024
1067.173			975.674	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1067.173	.131		975.871	.066	1996	GPS - STATIC	2020	HTH13
1067.173			975.674	.023	2011	GPS - STATIC	2020	HTH13
1067.265	.262		975.684	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.571 12B = -91.581 09 = -91.496 03 = -91.322

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 54.79925	93 36 20.48201	376533.229	174669.486	.131	3	GPS - RTRN	2024	RTRN2024
44 23 54.79945	93 36 20.48259	376533.187	174669.507	.013		ADJUSTMENT	2020	GPS3368
44 23 54.79945	93 36 20.48259	376533.187	174669.507	.013	C	GPS - STATIC	2020	HTH13
44 23 54.79867	93 36 20.48293	376533.161	174669.428	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 54.79927	93 36 20.48294	376533.161	174669.489	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727721.420	838157.651	1482167.690	16129624.673	.131	3	GPS - RTRN	2024	RTRN2024
2727721.378	838157.671	1482167.648	16129624.694	.013		ADJUSTMENT	2020	GPS3368
2727721.378	838157.671	1482167.648	16129624.694	.013	C	GPS - STATIC	2020	HTH13
2727721.353	838157.592	1482167.623	16129624.615	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727721.352	838157.652	1482167.622	16129624.676	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_U-DQ6397-3W-22APR2024.jpg	W	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_U-DQ6397-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4002_U-DQ6397-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4003 A

NGS Name: 4003 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8155 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	23 W	443235.00	933312.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2009)

Stamping: 4003 A 1980

IN NEW PRAGUE, 1.55 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, 74.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 152.35, IN LINE WITH A TOWNSHIP ROAD NORTH, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
NEW CONSTRUCTION IN THE AREA, FALLS IN A ROUNDABOUT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1020.011	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1019.854	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.623 12B = -89.619 09 = -89.557 03 = -89.413

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4003 B **NGS Name:** 4003 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8153 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	112 N	23 W	443235.00	933214.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
WALL - LIGHT RETAINING	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4003 B 1980

2.0 MILES EAST OF NEW PRAGUE, 2.3 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 153.15, AT THE EAST END OF THE SOUTH HEADWALL OF A TRUNK HIGHWAY 19 BOX CULVERT AT SAND CREEK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.066	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
988.909	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.626 12B = -89.616 09 = -89.557 03 = -89.413

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_B-AC8153-3SW-27MAY2010.jpg	SW	May 27, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_B-AC8153-2-27MAY2010.jpg		May 27, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_B-AC8153-1-27MAY2010.jpg		May 27, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4003 C **NGS Name:** 4003 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8151 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	112 N	23 W	443236.36	933133.94	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4003 C 1980

2.5 MILES EAST OF NEW PRAGUE, 2.9 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAYS 19, 21 AND 13 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 153.7, 85.0 FEET WEST OF DRIVEWAY NUMBER 169 AND 175, 70.0 FEET SOUTH OF TRUNK HIGHWAY 19, 70.0 FEET EAST OF DRIVEWAY NUMBER 203, 4.0 FEET EAST OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1017.770	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1017.770	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
1017.774	.016	2/1				VERTICAL CONTROL SURVEY	2015	VJORD
1017.774	.016	2/1				VERTICAL CONTROL SURVEY	2014	VPRAG
1017.770	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1017.616	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1017.826	.262		928.190	.197	2011	GPS - RTRN	2024	RTRN2024
1017.035	.262		927.410	.197	2011	GPS - RTRN	2016	RTRN2016
1017.698	.262		928.072	.197	2011	GPS - RTRN	2014	RTRN2014

Geoid Separations(ft): GEOID18 = -89.639 12B = -89.626 09 = -89.570 03 = -89.422

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.36361	93 31 33.93914	397591.763	227379.693	.131	3	GPS - RTRN	2024	RTRN2024
44 32 36.36489	93 31 33.93857	397591.805	227379.822	.131	3	GPS - RTRN	2016	RTRN2016
44 32 36.36529	93 31 33.93916	397591.762	227379.862	.131	3	GPS - RTRN	2014	RTRN2014

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748217.572	891081.809	1503303.247	16182278.550	.131	3	GPS - RTRN	2024	RTRN2024
2748217.612	891081.939	1503303.289	16182278.679	.131	3	GPS - RTRN	2016	RTRN2016
2748217.569	891081.979	1503303.247	16182278.720	.131	3	GPS - RTRN	2014	RTRN2014

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_C-AC8151-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_C-AC8151-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4003_C-AC8151-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4003 E

Mn/DOT Name: 4003 E

NGS Name: 4003 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8157 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	112 N	23 W	443232.00	933422.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4003 E 1980

IN NEW PRAGUE, 0.55 MILE EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21, IN THE BASE OF THE NORTHEAST LEG OF THE WATER TANK.

Station Notes

THE WATER TANK NO LONGER EXISTS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.409	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.252	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.668 12B = -89.668 09 = -89.603 03 = -89.458

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4003 F

NGS Name: 4003 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8156 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	2	112 N	23 W	443235.00	933351.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
VERTICAL CONTROL DISK

Mon. Agency
MNDT

Description: (2009)

Stamping: 4003 F 1980

IN NEW PRAGUE, 1.05 MILES EAST OF THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21, 70.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 151.8, 83.0 FEET EAST OF A DRIVEWAY, 3.0 FEET NORTHWEST OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
NO POWER POLES, THE AREA NOW A STRIP MALL.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
993.492	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
993.335	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.639 12B = -89.636 09 = -89.573 03 = -89.429

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4004 A **NGS Name:** 4004 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8200 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	112 N	23 W	443237.32	933644.97	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1947	2016	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4004 A 1947

1.4 MILES WEST OF NEW PRAGUE, 1.4 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, 35.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 149.4, IN THE SOUTHEAST CORNER OF THE SOUTH ABUTMENT OF A TRUNK HIGHWAY 19 BOX CULVERT.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
980.159	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
980.195	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
980.037	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.852 12B = -89.842 09 = -89.787 03 = -89.649

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_A-AC8200-3S-26MAY2010.jpg	S	May 26, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_A-AC8200-2-26MAY2010.jpg		May 26, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_A-AC8200-1-26MAY2010.jpg		May 26, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 AA **NGS Name:** 4004 AA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8195 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	112 N	23 W	443237.05	933717.58	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4004 AA 1980

1.85 MILES WEST OF NEW PRAGUE, 1.85 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 149.0, 80.0 FEET SOUTH OF TRUNK HIGHWAY 19, 59.0 FEET EAST OF A POWER POLE, 2.0 FEET NORTH OF A GAS PIPELINE SIGN, 1.1 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.928	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1013.942	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.781	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.978	.262		924.063	.197	2011	GPS - RTRN	2024	RTRN2024
1013.928	.131		924.217	.066	1996	GPS - STATIC	2023	HGLRD
1013.928			924.034	.025	2011	GPS - STATIC	2023	HGLRD
1013.928			924.034	.025	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
1013.928	.262		924.014	.197	2011	GPS - OPUS	2021	GPSBM
1013.912	.262		923.997	.197	2011	GPS - OPUS	2021	GPSBM
1014.033	.262		924.119	.197	2011	GPS - OPUS	2021	GPSBM
1013.882	.262		923.984	.197	2011	GPS - RTRN	2020	RTRN2020
1013.951	.262		924.053	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -89.915 12B = -89.901 09 = -89.849 03 = -89.714

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.04856	93 37 17.58227	372703.192	227583.138	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.04851	93 37 17.58156	372703.243	227583.132	.010		ADJUSTMENT	2023	GPS3572
44 32 37.04851	93 37 17.58156	372703.243	227583.132	.010	C	GPS - STATIC	2023	HGLRD
44 32 37.04816	93 37 17.58151	372703.247	227583.097	.131	3	GPS - OPUS	2021	GPSBM
44 32 37.04816	93 37 17.58162	372703.239	227583.097	.131	3	GPS - OPUS	2021	GPSBM
44 32 37.04784	93 37 17.58324	372703.121	227583.065	.131	3	GPS - OPUS	2021	GPSBM
44 32 37.04831	93 37 17.58112	372703.275	227583.112	.131	3	GPS - RTRN	2020	RTRN2020
44 32 37.04758	93 37 17.58148	372703.249	227583.038	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.04830	93 37 17.58176	372703.229	227583.111	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2723331.223	891021.421	1478425.407	16182522.666	.131	3	GPS - RTRN	2024	RTRN2024
2723331.274	891021.416	1478425.458	16182522.661	.010		ADJUSTMENT	2023	GPS3572
2723331.274	891021.416	1478425.458	16182522.661	.010	C	GPS - STATIC	2023	HGLRD
2723331.278	891021.380	1478425.461	16182522.625	.131	3	GPS - OPUS	2021	GPSBM
2723331.270	891021.380	1478425.454	16182522.626	.131	3	GPS - OPUS	2021	GPSBM
2723331.153	891021.348	1478425.336	16182522.594	.131	3	GPS - OPUS	2021	GPSBM
2723331.306	891021.396	1478425.490	16182522.640	.131	3	GPS - RTRN	2020	RTRN2020
2723331.280	891021.322	1478425.463	16182522.567	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2723331.260	891021.394	1478425.443	16182522.640	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AA-AC8195-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AA-AC8195-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AA-AC8195-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4004 AB

Mn/DOT Name: 4004 AB **NGS Name:** 4004 AB

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8196 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	112 N	23 W	443234.00	933643.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
COPPER CLAD ROD (NO SLEEVE) (DEPTH 23 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4004 AB 1980

1.35 MILES WEST OF NEW PRAGUE, 1.35 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 149.45, 250.0 FEET WEST OF A DRIVEWAY, 75.0 FEET SOUTH OF TRUNK HIGHWAY 19, NEWER POWER POLES, 2.5 FEET EAST OF A WITNESS POST.

Station Notes

FOUND THE ROD WITH NO DISK, DOWN 20.0 INCHES FOR RESET.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
992.619	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
992.462	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.859 12B = -89.849 09 = -89.793 03 = -89.655

*** No Horizontal Positions in the Database ***

4004 AC 1

Mn/DOT Name: 4004 AC 1 **NGS Name:** 4004 AC 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4669 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	1	112 N	26 W	443146.92	935400.04	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1993	2016	GOOD	Horz=NO Vert=NO	YES	40001	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4004 AC 1 1993

IN HENDERSON, 0.3 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND TRUNK HIGHWAY 19, IN AN ABUTMENT AT THE SOUTHEAST CORNER OF TRUNK HIGHWAY 19 BRIDGE NUMBER 40001 OVER THE MINNESOTA RIVER, AT TRUNK HIGHWAY 19 MILEPOINT 134.3, 25.0 FEET SOUTH OF TRUNK HIGHWAY 19.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
740.996	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
741.045	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
741.048	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
741.048	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
741.048	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
741.048	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
741.078	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
740.943	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
740.904	.262		649.096	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.814 12B = -91.808 09 = -91.735 03 = -91.591

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 31 46.92202	93 54 00.04428	300051.793	223063.920	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2650740.497	885733.007	1405795.503	16178124.322	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AC_1-AE4669-3W-12APR2016.jpg	W	Apr 12, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AC_1-AE4669-2-12APR2016.jpg		Apr 12, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AC_1-AE4669-1-12APR2016.jpg		Apr 12, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 AF **NGS Name:** 4004 AF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ7715 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	112 N	25 W	443200.60	935309.08	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 33 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4004 AF 2016

1.2 MILES EAST OF HENDERSON, 1.15 MILES EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, AT TRUNK HIGHWAY 19 MILEPOINT 135.2, 54.0 FEET NORTHWEST OF TRUNK HIGHWAY 19, 43.6 FEET NORTHEAST OF HENDERSON STATION ROAD, 1.5 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
773.578	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
773.473	.262		681.754	.197	2011	GPS - RTRN	2024	RTRN2024
773.578	.131		682.033	.066	1996	GPS - STATIC	2023	HGLRD
773.578			681.852	.032	2011	GPS - STATIC	2023	HGLRD
773.578			681.852	.032	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
773.447	.262		681.737	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.719 12B = -91.709 09 = -91.653 03 = -91.509

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 00.60303	93 53 09.07712	303756.695	224415.107	.131	3	GPS - RTRN	2024	RTRN2024
44 32 00.60304	93 53 09.07754	303756.665	224415.108	.013		ADJUSTMENT	2023	GPS3572
44 32 00.60304	93 53 09.07754	303756.665	224415.108	.013	C	GPS - STATIC	2023	HGLRD
44 32 00.60209	93 53 09.07752	303756.665	224415.012	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 00.60284	93 53 09.07773	303756.651	224415.088	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654430.428	887123.220	1409501.209	16179468.917	.131	3	GPS - RTRN	2024	RTRN2024
2654430.398	887123.221	1409501.178	16179468.919	.013		ADJUSTMENT	2023	GPS3572
2654430.398	887123.221	1409501.178	16179468.919	.013	C	GPS - STATIC	2023	HGLRD
2654430.399	887123.125	1409501.179	16179468.822	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654430.384	887123.200	1409501.164	16179468.899	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AF-DQ7715-3NW-23APR2024.jpg	NW	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AF-DQ7715-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AF-DQ7715-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 AH **NGS Name:** 4004 AH

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ7717 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	112 N	25 W	443234.50	935150.38	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 14 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4004 AH 2016

2.5 MILES EAST-NORTHEAST OF HENDERSON, 3.0 MILES EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, AT TRUNK HIGHWAY 19 MILEPOINT 137.0, 52.5 FEET SOUTH OF TRUNK HIGHWAY 19, 48.4 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.423	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.436	.262		890.927	.197	2011	GPS - RTRN	2024	RTRN2024
982.423	.131		891.110	.066	1996	GPS - STATIC	2023	HGLRD
982.423			890.920	.027	2011	GPS - STATIC	2023	HGLRD
982.423			890.920	.027	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
982.367	.262		890.874	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.512 12B = -91.496 09 = -91.453 03 = -91.315

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.50363	93 51 50.38286	309487.767	227796.558	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.50389	93 51 50.38403	309487.682	227796.585	.013		ADJUSTMENT	2023	GPS3572
44 32 34.50389	93 51 50.38403	309487.682	227796.585	.013	C	GPS - STATIC	2023	HGLRD
44 32 34.50375	93 51 50.38460	309487.641	227796.571	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.50369	93 51 50.38421	309487.669	227796.564	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2660124.655	890564.814	1415235.629	16182839.667	.131	3	GPS - RTRN	2024	RTRN2024
2660124.570	890564.840	1415235.544	16182839.694	.013		ADJUSTMENT	2023	GPS3572
2660124.570	890564.840	1415235.544	16182839.694	.013	C	GPS - STATIC	2023	HGLRD
2660124.529	890564.826	1415235.503	16182839.680	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2660124.557	890564.820	1415235.531	16182839.674	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AH-DQ7717-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AH-DQ7717-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AH-DQ7717-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 AJ **NGS Name:** 4004 AJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ7718 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	112 N	25 W	443234.81	935011.80	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4004 AJ 2016

3.7 MILES EAST-NORTHEAST OF HENDERSON, 0.65 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169 (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), AT TRUNK HIGHWAY 19 MILEPOINT 138.4, 55.9 FEET SOUTH OF TRUNK HIGHWAY 19, 19.4 FEET EAST OF A FIELD ENTRANCE, 18.2 FEET SOUTH OF THE SOUTH END OF A GUARD RAIL, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
950.946	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
950.982	.262		859.605	.197	2011	GPS - RTRN	2024	RTRN2024
950.946	.131		859.765	.066	1996	GPS - STATIC	2023	HGLRD
950.946			859.578	.029	2011	GPS - STATIC	2023	HGLRD
950.946			859.578	.029	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
950.828	.262		859.470	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.374 12B = -91.358 09 = -91.319 03 = -91.174

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.81108	93 50 11.79892	316628.050	227765.086	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.81206	93 50 11.79962	316628.000	227765.186	.013		ADJUSTMENT	2023	GPS3572
44 32 34.81206	93 50 11.79962	316628.000	227765.186	.013	C	GPS - STATIC	2023	HGLRD
44 32 34.81243	93 50 11.79955	316628.006	227765.224	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.81187	93 50 11.79981	316627.986	227765.167	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2667264.016	890609.022	1422373.095	16182796.488	.131	3	GPS - RTRN	2024	RTRN2024
2667263.965	890609.121	1422373.045	16182796.588	.013		ADJUSTMENT	2023	GPS3572
2667263.965	890609.121	1422373.045	16182796.588	.013	C	GPS - STATIC	2023	HGLRD
2667263.970	890609.158	1422373.051	16182796.625	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2667263.952	890609.102	1422373.032	16182796.569	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AJ-DQ7718-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AJ-DQ7718-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_AJ-DQ7718-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 C **NGS Name:** 4004 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1780 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	112 N	25 W	443235.16	935011.02	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1953	2016	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4004 C 1953

3.5 MILES EAST-NORTHEAST OF HENDERSON, 0.7 MILE EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 19 MILEPOINT 138.4, 21.0 FEET SOUTH OF TRUNK HIGHWAY 19, IN THE SOUTHEAST CORNER OF THE SOUTH HEADWALL OF A TRUNK HIGHWAY 19 BOX CULVERT.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
954.001	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
954.056	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
954.056	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
954.056	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
954.056	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
954.056	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
954.056	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231
954.056	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
954.056	.016	2/1				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
953.929	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
953.929	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
953.929	.016	2				VERTICAL CONTROL SURVEY	1981	L24611
953.929	.016	2				VERTICAL CONTROL SURVEY	1974	L23222

Geoid Separations(ft): GEOID18 = -91.371 12B = -91.355 09 = -91.315 03 = -91.174

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_C-PP1780-3SW-25MAY2010.jpg	SW	May 25, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_C-PP1780-2-25MAY2010.jpg		May 25, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_C-PP1780-1-25MAY2010.jpg		May 25, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 D **NGS Name:** 4004 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1775 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	112 N	25 W	443158.44	935310.09	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1972	2024	DESTROYED	Horz=NO Vert=NO	YES	5369	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE CURB	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4004 D 1972

1.1 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, IN THE NORTHEAST CORNER OF TRUNK HIGHWAY 19 BRIDGE NUMBER 5369 OVER THE RAILROAD, AT TRUNK HIGHWAY 19 MILEPOINT 135.2, IN A SIDEWALK 6.0 INCHES FROM A RAILING.

Station Notes
NEW BRIDGE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
772.239	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
772.269	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
772.288	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
772.269	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
772.269	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
772.269	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
772.141	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
772.141	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
772.141	.016	2				VERTICAL CONTROL SURVEY	1974	L23222

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
772.174	.262		680.455	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.726 12B = -91.719 09 = -91.660 03 = -91.519

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 58.43954	93 53 10.08938	303681.353	224196.683	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654357.414	886904.037	1409425.537	16179250.701	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_D-PP1775-3N-12APR2016.jpg	N	Apr 12, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_D-PP1775-2-12APR2016.jpg		Apr 12, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_D-PP1775-1-12APR2016.jpg		Apr 12, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 F
NGS Name: 4004 F
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	112 N	25 W	443234.81	935244.36	2	

NGS ACRN: PP1778 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1972	2016	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4004 F 1972

1.8 MILES NORTHEAST OF HENDERSON, 1.5 MILES WEST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169, 0.3 MILE EAST OF A TOWNSHIP ROAD SOUTH, 40.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 136.3, IN THE SOUTHEAST CORNER OF A TRUNK HIGHWAY 19 BOX CULVERT.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
937.839	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
937.905	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
937.905	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
937.885	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
937.757	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
937.757	.016	2				VERTICAL CONTROL SURVEY	1974	L23222

Geoid Separations(ft): GEOID18 = -91.584 12B = -91.571 09 = -91.519 03 = -91.388

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_F-PP1778-3S-24MAY2010.jpg	S	May 24, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_F-PP1778-2-24MAY2010.jpg		May 24, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_F-PP1778-1-24MAY2010.jpg		May 24, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 H **NGS Name:** 4004 H

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8177 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	25 W	443234.66	934925.15	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4004 H 1980

4.5 MILES EAST-NORTHEAST OF HENDERSON, 1.2 MILES EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169 IN HENDERSON (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), AT TRUNK HIGHWAY 19 MILEPOINT 139.05, 93.0 FEET SOUTH OF TRUNK HIGHWAY 19, 35.0 FEET EAST OF DRIVEWAY NUMBER 14849, 23.0 FEET SOUTH OF A TELEPHONE PEDESTAL (AE174 461), 2.0 FEET NORTH OF A WITNESS POST AND A RIGHT-OF-WAY POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.151	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
968.203	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
968.203	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
968.203	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.072	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.075	.262		876.773	.197	2011	GPS - RTRN	2024	RTRN2024
968.151	.131		877.039	.066	1996	GPS - STATIC	2023	HGLRD
968.151			876.855	.029	2011	GPS - STATIC	2023	HGLRD
968.151			876.855	.029	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
968.108	.262		876.803	.197	2011	GPS - OPUS	2021	GPSBM
968.079	.262		876.773	.197	2011	GPS - OPUS	2021	GPSBM
968.108	.262		876.822	.197	2011	GPS - RTRN	2020	RTRN2020
968.062	.262		876.773	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.306 12B = -91.286 09 = -91.250 03 = -91.102

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.65989	93 49 25.15298	320006.290	227720.986	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.66000	93 49 25.15400	320006.216	227720.997	.013		ADJUSTMENT	2023	GPS3572
44 32 34.66000	93 49 25.15400	320006.216	227720.997	.013	C	GPS - STATIC	2023	HGLRD
44 32 34.66003	93 49 25.15418	320006.203	227721.001	.131	3	GPS - OPUS	2021	GPSBM
44 32 34.65992	93 49 25.15433	320006.192	227720.989	.131	3	GPS - OPUS	2021	GPSBM
44 32 34.66011	93 49 25.15392	320006.222	227721.008	.131	3	GPS - RTRN	2020	RTRN2020
44 32 34.65967	93 49 25.15366	320006.241	227720.964	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.65980	93 49 25.15418	320006.203	227720.977	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2670642.130	890600.732	1425749.946	16182746.860	.131	3	GPS - RTRN	2024	RTRN2024
2670642.055	890600.743	1425749.872	16182746.872	.013		ADJUSTMENT	2023	GPS3572
2670642.055	890600.743	1425749.872	16182746.872	.013	C	GPS - STATIC	2023	HGLRD
2670642.043	890600.746	1425749.859	16182746.875	.131	3	GPS - OPUS	2021	GPSBM
2670642.032	890600.735	1425749.848	16182746.864	.131	3	GPS - OPUS	2021	GPSBM
2670642.061	890600.754	1425749.878	16182746.883	.131	3	GPS - RTRN	2020	RTRN2020
2670642.080	890600.709	1425749.896	16182746.839	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2670642.043	890600.722	1425749.859	16182746.852	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_H-AC8177-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_H-AC8177-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_H-AC8177-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 S **NGS Name:** 4004 S

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8187 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	112 N	24 W	443235.85	934227.53	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4004 S 1980

6.0 MILES WEST OF NEW PRAGUE, 6.1 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 144.75, 71.0 FEET SOUTH OF TRUNK HIGHWAY 19, 39.0 FEET WEST OF A FENCE CORNER, 4.0 FEET NORTH OF A FENCE, 1.0 FOOT NORTH OF A WITNESS POST.

Station Pair: 4004 T - SCOTT, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.243	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
989.289	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.132	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.257	.262		898.715	.197	2011	GPS - RTRN	2024	RTRN2024
989.243	.131		898.955	.066	1996	GPS - STATIC	2023	HGLRD
989.243			898.761	.026	2011	GPS - STATIC	2023	HGLRD
989.243			898.761	.026	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
989.224	.262		898.699	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.541 12B = -90.525 09 = -90.482 03 = -90.344

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.84977	93 42 27.52628	350254.296	227607.583	.131	3	GPS - RTRN	2024	RTRN2024
44 32 35.85016	93 42 27.52639	350254.288	227607.623	.013		ADJUSTMENT	2023	GPS3572
44 32 35.85016	93 42 27.52639	350254.288	227607.623	.013	C	GPS - STATIC	2023	HGLRD
44 32 35.84962	93 42 27.52585	350254.327	227607.568	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.84994	93 42 27.52658	350254.274	227607.601	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2700886.017	890807.930	1455985.733	16182583.891	.131	3	GPS - RTRN	2024	RTRN2024
2700886.008	890807.970	1455985.725	16182583.931	.013		ADJUSTMENT	2023	GPS3572
2700886.008	890807.970	1455985.725	16182583.931	.013	C	GPS - STATIC	2023	HGLRD
2700886.048	890807.915	1455985.764	16182583.876	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2700885.995	890807.947	1455985.712	16182583.908	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_S-AC8187-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_S-AC8187-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_S-AC8187-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 V **NGS Name:** 4004 V

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8190 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	2	112 N	24 W	443237.06	934040.34	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4004 V 1980

4.65 MILES WEST OF NEW PRAGUE, 4.65 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 146.25, 178.0 FEET EAST OF DRIVEWAY NUMBER 7667, 69.0 FEET SOUTH OF TRUNK HIGHWAY 19, 3.0 FEET NORTH-NORTHEAST OF A POWER POLE WITH AN ANCHOR, 0.5 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
979.860	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
979.900	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
979.736	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
979.978	.262		889.641	.197	2011	GPS - RTRN	2024	RTRN2024
979.860	.131		889.746	.066	1996	GPS - STATIC	2023	HGLRD
979.860			889.555	.025	2011	GPS - STATIC	2023	HGLRD
979.860			889.555	.025	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
979.755	.262		889.444	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.341 12B = -90.311 09 = -90.272 03 = -90.141

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.06046	93 40 40.34377	358017.953	227677.083	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.06087	93 40 40.34477	358017.881	227677.125	.013		ADJUSTMENT	2023	GPS3572
44 32 37.06087	93 40 40.34477	358017.881	227677.125	.013	C	GPS - STATIC	2023	HGLRD
44 32 37.06040	93 40 40.34401	358017.936	227677.077	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.06065	93 40 40.34497	358017.866	227677.103	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2708647.571	890959.702	1463746.351	16182640.636	.131	3	GPS - RTRN	2024	RTRN2024
2708647.499	890959.744	1463746.279	16182640.678	.013		ADJUSTMENT	2023	GPS3572
2708647.499	890959.744	1463746.279	16182640.678	.013	C	GPS - STATIC	2023	HGLRD
2708647.554	890959.696	1463746.334	16182640.630	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2708647.484	890959.721	1463746.264	16182640.656	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_V-AC8190-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_V-AC8190-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_V-AC8190-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 W **NGS Name:** 4004 W

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8191 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	24 W	443237.58	934001.58	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 4 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4004 W 1980

4.1 MILES WEST OF NEW PRAGUE, 4.1 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, 77.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 146.75, 35.0 FEET WEST OF COUNTY ROAD 31(201ST AVENUE), 86.0 FEET WEST-NORTHWEST OF THE NORTHWEST CORNER OF A CHURCH, 2.2 FEET WEST OF GUY WIRE, 6.0 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
996.566	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
996.583	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
996.419	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
996.684	.262		906.429	.197	2011	GPS - RTRN	2024	RTRN2024
996.547	.262		906.320	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.259 12B = -90.229 09 = -90.190 03 = -90.059

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.58086	93 40 01.58311	360825.580	227711.275	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.58075	93 40 01.58256	360825.619	227711.263	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711454.342	891023.646	1466552.887	16182670.213	.131	3	GPS - RTRN	2024	RTRN2024
2711454.382	891023.635	1466552.927	16182670.201	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_W-AC8191-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_W-AC8191-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_W-AC8191-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 X
NGS Name: 4004 X
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8192 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	112 N	24 W	443237.51	933921.52	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4004 X 1980

3.6 MILES WEST OF NEW PRAGUE, 3.6 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, 71.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 147.25, 125.0 FEET EAST OF DRIVEWAY NUMBER 6589, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
990.133	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
990.149	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.985	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
990.310	.262		900.139	.197	2011	GPS - RTRN	2024	RTRN2024
989.880	.262		899.736	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.174 12B = -90.144 09 = -90.105 03 = -89.974

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.51463	93 39 21.52296	363726.931	227685.825	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.51500	93 39 21.52278	363726.945	227685.862	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714355.453	891028.951	1469453.010	16182640.019	.131	3	GPS - RTRN	2024	RTRN2024
2714355.466	891028.989	1469453.023	16182640.056	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_X-AC8192-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_X-AC8192-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_X-AC8192-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 Y **NGS Name:** 4004 Y

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8193 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	112 N	23 W	443237.27	933837.16	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4004 Y 1980

2.95 MILES WEST OF NEW PRAGUE, 2.95 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 147.85, 190.0 EAST OF A DRIVE TO SOUTH NUMBER 5991, 74.0 FEET SOUTH OF TRUNK HIGHWAY 19, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1015.657	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1015.674	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1015.510	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1015.680	.262		925.602	.197	2011	GPS - RTRN	2024	RTRN2024
1015.523	.262		925.471	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.079 12B = -90.052 09 = -90.013 03 = -89.878

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.26857	93 38 37.15730	366940.006	227640.609	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.26849	93 38 37.15800	366939.955	227640.601	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717568.441	891017.799	1472664.691	16182589.557	.131	3	GPS - RTRN	2024	RTRN2024
2717568.390	891017.790	1472664.640	16182589.549	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Y-AC8193-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Y-AC8193-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Y-AC8193-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4004 Z
NGS Name: 4004 Z
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC8194 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	112 N	23 W	443237.13	933752.57	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER IS STEEL ROD

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4004 Z 1980

2.35 MILES WEST OF NEW PRAGUE, 2.35 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 148.45, 115.0 FEET WEST OF A POWER POLE, 81.0 FEET WEST OF A FIELD ENTRANCE, 79.0 FEET SOUTHEAST OF THE SOUTH END OF A METAL CULVERT, 71.0 FEET SOUTH OF TRUNK HIGHWAY 19, 1.0 FOOT NORTH OF A WITNESS POST.

Station Pair: KENT II - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.201	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
989.227	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.066	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.253	.262		899.270	.197	2011	GPS - RTRN	2024	RTRN2024
989.201	.131		899.450	.066	1996	GPS - STATIC	2023	HGLRD
989.201			899.260	.023	2011	GPS - STATIC	2023	HGLRD
989.201			899.260	.023	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
989.138	.262		899.175	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -89.983 12B = -89.967 09 = -89.918 03 = -89.783

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.13123	93 37 52.57069	370169.160	227606.791	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.13112	93 37 52.57110	370169.130	227606.780	.010		ADJUSTMENT	2023	GPS3572
44 32 37.13112	93 37 52.57110	370169.130	227606.780	.010	C	GPS - STATIC	2023	HGLRD
44 32 37.13082	93 37 52.56999	370169.210	227606.749	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.13089	93 37 52.57129	370169.116	227606.757	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2720797.386	891018.212	1475892.460	16182550.461	.131	3	GPS - RTRN	2024	RTRN2024
2720797.356	891018.201	1475892.430	16182550.450	.010		ADJUSTMENT	2023	GPS3572
2720797.356	891018.201	1475892.430	16182550.450	.010	C	GPS - STATIC	2023	HGLRD
2720797.437	891018.170	1475892.510	16182550.420	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2720797.343	891018.177	1475892.416	16182550.427	.033	C	GPS - STATIC	2023	HGLRD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Z-AC8194-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Z-AC8194-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4004_Z-AC8194-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4005 A
NGS Name: 4005 A
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6401 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	11	111 N	23 W	442543.41	933241.81	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4005 A 2016

2.0 MILES EAST OF MONTGOMERY, 2.0 MILES EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 13 IN MONTGOMERY, AT TRUNK HIGHWAY 21 MILEPOINT 16.4, 163.0 FEET NORTH OF TRUNK HIGHWAY 21, 28.2 FEET WEST OF 141ST AVENUE, 45.3 FEET NORTH OF A FIELD ENTRANCE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.441	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1086.530	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.537	.262		995.743	.197	2011	GPS - RTRN	2024	RTRN2024
1086.510	.262		995.717	.197	2011	GPS - OPUS	2021	GPSBM
1086.520	.262		995.726	.197	2011	GPS - OPUS	2021	GPSBM
1086.500	.262		995.690	.197	2011	GPS - RTRN	2020	RTRN2020
1086.451	.262		995.641	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.794 12B = -90.810 09 = -90.722 03 = -90.554

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 43.41283	93 32 41.81215	392465.401	185583.146	.131	3	GPS - RTRN	2024	RTRN2024
44 25 43.41248	93 32 41.81269	392465.362	185583.111	.131	3	GPS - OPUS	2021	GPSBM
44 25 43.41227	93 32 41.81280	392465.354	185583.089	.131	3	GPS - OPUS	2021	GPSBM
44 25 43.41258	93 32 41.81276	392465.357	185583.121	.131	3	GPS - RTRN	2020	RTRN2020
44 25 43.41339	93 32 41.81351	392465.303	185583.203	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743535.126	849238.266	1498110.901	16140507.943	.131	3	GPS - RTRN	2024	RTRN2024
2743535.087	849238.230	1498110.862	16140507.908	.131	3	GPS - OPUS	2021	GPSBM
2743535.079	849238.209	1498110.854	16140507.887	.131	3	GPS - OPUS	2021	GPSBM
2743535.081	849238.240	1498110.857	16140507.918	.131	3	GPS - RTRN	2020	RTRN2020
2743535.027	849238.322	1498110.803	16140508.001	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_A-DQ6401-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_A-DQ6401-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_A-DQ6401-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4005 B **NGS Name:** 4005 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6400 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	14	111 N	23 W	442541.17	933335.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4005 B 2016

1.25 MILES EAST OF MONTGOMERY, 1.25 MILES EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 13 IN MONTGOMERY, AT TRUNK HIGHWAY 21 MILEPOINT 17.5, 65.9 FEET SOUTH OF TRUNK HIGHWAY 21, 6.6 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1058.735	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1058.827	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1058.758	.262		967.915	.197	2011	GPS - RTRN	2024	RTRN2024
1058.846	.262		967.984	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.843 12B = -90.863 09 = -90.771 03 = -90.603

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.17231	93 33 35.46218	388570.888	185376.198	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.17075	93 33 35.46120	388570.958	185376.040	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739643.489	848990.075	1494217.686	16140307.405	.131	3	GPS - RTRN	2024	RTRN2024
2739643.561	848989.918	1494217.756	16140307.246	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_B-DQ6400-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_B-DQ6400-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4005_B-DQ6400-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4006 A

Mn/DOT Name: 4006 A
NGS Name: 4006 A
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	31	109 N	24 W	441221.00	934604.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4006 A

2.0 MILES EAST OF MADISON LAKE, 2.0 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 26, AT THE WEST LE SUEUR COUNTY LINE.

Station Notes

DISTRICT 7 RETURNED THE DISK TO THE GEODETIC UNIT.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.816	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Geoid Separations(ft): GEOID18 = -94.176 12B = -94.173 09 = -94.091 03 = -93.914

*** No Horizontal Positions in the Database ***

4006 B

Mn/DOT Name: 4006 B **NGS Name:** 4006 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	109 N	24 W	441213.00	934455.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4006 B

3.0 MILES EAST OF MADISON LAKE, 3.0 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 26, AT TRUNK HIGHWAY 60 STATION 152+40, 67.0 FEET NORTH OF TRUNK HIGHWAY 60.

Station Notes

THE TIES PUT THE MARK CLOSE TO THE FIELD EDGE, MAY HAVE BEEN PULLED OUT. UNDERGROUND UTILITY ALSO CLOSE TO THE TIES.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.478	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Geoid Separations(ft): GEOID18 = -94.229 12B = -94.229 09 = -94.147 03 = -93.963

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4006 C **NGS Name:** 4006 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6323 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	109 N	24 W	441211.36	934336.54	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 C 1964

2.3 MILES WEST OF ELYSIAN, 2.55 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 123.7, 2.1 MILES EAST OF WEST COUNTY LINE, 73.0 FEET SOUTH OF TRUNK HIGHWAY 60, 34.0 FEET EAST OF 231ST AVENUE, 5.0 FEET NORTHEAST OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.719	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1034.709	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.460	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.791	.262		940.533	.197	2011	GPS - RTRN	2024	RTRN2024
1034.598	.262		940.339	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.258 12B = -94.258 09 = -94.180 03 = -93.986

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 11.35859	93 43 36.54101	344355.776	103639.263	.131	3	GPS - RTRN	2024	RTRN2024
44 12 11.35815	93 43 36.54115	344355.766	103639.219	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2696302.422	766798.785	1449889.664	16058675.405	.131	3	GPS - RTRN	2024	RTRN2024
2696302.412	766798.740	1449889.653	16058675.361	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_C-DQ6323-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_C-DQ6323-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_C-DQ6323-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Geodetic Data Sheet (Feet)
GSID Station # 17401

4006 D

04/28/2026
Sheet Help

Mn/DOT Name: 4006 D
NGS Name: 4006 D
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6325 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	109 N	24 W	441204.41	934224.08	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 D 1964

1.3 MILES WEST OF ELYSIAN, 1.5 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, 70.0 FEET SOUTH OF TRUNK HIGHWAY 60, 68.0 FEET SOUTH OF TRUNK HIGHWAY 60, 43.0 FEET EAST OF COUNTY ROAD 61, 5.0 FEET NORTH OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1055.533	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1055.526	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1055.244	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1055.611	.262		961.340	.197	2011	GPS - RTRN	2024	RTRN2024
1055.546	.262		961.271	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.271 12B = -94.275 09 = -94.199 03 = -93.999

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 04.41142	93 42 24.08378	349629.170	102898.077	.131	3	GPS - RTRN	2024	RTRN2024
44 12 04.41071	93 42 24.08372	349629.174	102898.005	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701582.753	766113.618	1455159.696	16057926.161	.131	3	GPS - RTRN	2024	RTRN2024
2701582.758	766113.546	1455159.700	16057926.089	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_D-DQ6325-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_D-DQ6325-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_D-DQ6325-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 E

NGS Name: 4006 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	34	109 N	24 W	441156.00	934119.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4006 E

0.4 MILE WEST OF ELYSIAN, 0.4 MILE WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 50 IN ELYSIAN, 75.0 FEET NORTH OF TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 60 STATION 311+00.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.156	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Geoid Separations(ft): GEOID18 = -94.268 12B = -94.275 09 = -94.199 03 = -93.996

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4006 F
NGS Name: 4006 F
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6328 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	109 N	24 W	441154.60	934007.44	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 F 1964

IN ELYSIAN, AT THE JUNCTION OF TRUNK HIGHWAY 60 AND MAIN STREET, AT TRUNK HIGHWAY 60 MILEPOINT 126.6, 48.0 FEET NORTH OF TRUNK HIGHWAY 60, 87.0 FEET WEST OF MAIN STREET, 47.0 FEET SOUTH OF THE SAKATAH SINGING HILLS STATE TRAIL, 46.0 FEET WEST OF A POWER POLE, 1.2 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.223	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1038.216	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.020	.033	3				VERTICAL CONTROL SURVEY	1987	CS4006
1039.263	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.230	.262		943.994	.197	2011	GPS - RTRN	2024	RTRN2024
1038.108	.262		943.870	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.235 12B = -94.239 09 = -94.163 03 = -93.957

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 54.59679	93 40 07.44392	359576.883	101836.679	.131	3	GPS - RTRN	2024	RTRN2024
44 11 54.59701	93 40 07.44381	359576.890	101836.701	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711539.984	765157.838	1465101.568	16056849.412	.131	3	GPS - RTRN	2024	RTRN2024
2711539.992	765157.860	1465101.576	16056849.435	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_F-DQ6328-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_F-DQ6328-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_F-DQ6328-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 G **NGS Name:** 4006 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DH3109 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	109 N	24 W	441150.56	933906.97	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 G 1964

1.0 MILE EAST OF ELYSIAN, 1.0 MILE EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND MAIN STREET IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 127.5, 69.6 FEET SOUTH OF TRUNK HIGHWAY 60, 49.5 FEET EAST OF COUNTY ROAD 3 (ELYSIAN LAKE ROAD), 48.0 FEET NORTH OF DRIVEWAY NUMBER 51925, 10.3 FEET EAST OF A TELEPHONE PEDESTAL NUMBER 6D2, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1023.564	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1023.558	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1023.338	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1023.604	.262		929.411	.197	2011	GPS - RTRN	2024	RTRN2024
1023.594	.262		929.401	.197	2011	GPS - OPUS	2019	GPSBM
1023.558	.262		929.365	.197	2011	GPS - RTRN	2019	RTRN2019
1023.545	.262		929.349	.197	2011	GPS - RTRN	2016	RTRN2016
			929.408	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			929.483	.016	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1023.554	.131		929.624	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2088
1023.554	.131		929.624	.066	1996	GPS - STATIC	2005	HWASE

Geoid Separations(ft): GEOID18 = -94.189 12B = -94.196 09 = -94.121 03 = -93.911

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 50.56403	93 39 06.96938	363980.079	101399.892	.131	3	GPS - RTRN	2024	RTRN2024
44 11 50.56379	93 39 06.96996	363980.037	101399.868	.131	3	GPS - OPUS	2019	GPSBM
44 11 50.56501	93 39 06.96624	363980.309	101399.990	.131	3	GPS - RTRN	2019	RTRN2019
44 11 50.56403	93 39 06.96887	363980.117	101399.892	.131	3	GPS - RTRN	2016	RTRN2016
44 11 50.56428	93 39 06.96985	363980.045	101399.918	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 50.56426	93 39 06.97064	363979.988	101399.916	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 50.56375	93 39 06.97011	363980.026	101399.864	.033	C	ADJUSTMENT	2005	GPS2088
44 11 50.56375	93 39 06.97011	363980.026	101399.864	.033	C	GPS - STATIC	2005	HWASE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2715947.044	764767.796	1469502.218	16056405.813	.131	3	GPS - RTRN	2024	RTRN2024
2715947.002	764767.772	1469502.175	16056405.789	.131	3	GPS - OPUS	2019	GPSBM
2715947.272	764767.896	1469502.447	16056405.910	.131	3	GPS - RTRN	2019	RTRN2019
2715947.081	764767.797	1469502.255	16056405.813	.131	3	GPS - RTRN	2016	RTRN2016
2715947.010	764767.822	1469502.184	16056405.839	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2715946.952	764767.819	1469502.126	16056405.837	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2715946.991	764767.768	1469502.164	16056405.785	.033	C	ADJUSTMENT	2005	GPS2088
2715946.991	764767.768	1469502.164	16056405.785	.033	C	GPS - STATIC	2005	HWASE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_G-DH3109-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_G-DH3109-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_G-DH3109-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 H
NGS Name: 4006 H
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6331 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	31	109 N	23 W	441147.01	933752.52	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 18 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4006 H 1964

1.9 MILES EAST OF ELYSIAN, 1.9 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 50 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 128.55, 65.0 FEET NORTH OF TRUNK HIGHWAY 60, 75.0 FEET EAST OF DRIVEWAY NUMBER 6860 EXTENDED, 55.0 FEET EAST OF A POWER POLE NUMBER 391, 2.0 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.726	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1070.723	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.897	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.887	.262		976.776	.197	2011	GPS - RTRN	2024	RTRN2024
1070.743	.262		976.629	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.114 12B = -94.114 09 = -94.045 03 = -93.835

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 47.01224	93 37 52.51906	369401.973	101006.493	.131	3	GPS - RTRN	2024	RTRN2024
44 11 47.01262	93 37 52.51894	369401.982	101006.531	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2721372.164	764431.931	1474921.194	16056003.959	.131	3	GPS - RTRN	2024	RTRN2024
2721372.173	764431.970	1474921.202	16056003.997	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_H-DQ6331-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_H-DQ6331-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_H-DQ6331-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4006 I

Mn/DOT Name: 4006 I **NGS Name:** 4006 I

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	109 N	23 W	441146.00	933638.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4006 I

2.9 MILES EAST OF ELYSIAN, 2.9 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 50 IN ELYSIAN, 63.0 FEET NORTH OF TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 60 STATION 519+63.

Station Notes

POSSIBLY BURIED OR REMOVED DURING CONSTRUCTION OF A DRIVEWAY, FALLS PRETTY CLOSE TO THE DRIVE. THE HOUSE APPEARS NEWER THAN 1964.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.458	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Geoid Separations(ft): GEOID18 = -94.009 12B = -94.009 09 = -93.940 03 = -93.730

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4006 K **NGS Name:** 4006 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6336 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	109 N	23 W	441146.74	933512.90	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 6 IN.	STEEL ROD IMBED IN MON

Monument Type
CONCRETE POST (PREFABRICATED)

Disk Type
BENCH MARK DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** 4006 K 1964

1.9 MILES EAST OF WATERVILLE, 1.9 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 130.75, 81.0 FEET SOUTH-SOUTHEAST OF TRUNK HIGHWAY 60, 84.0 FEET SOUTHWEST OF 440TH AVENUE, 1.5 FEET NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.690	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1050.693	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.592	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.884	.262		957.026	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -93.858 12B = -93.855 09 = -93.786 03 = -93.586

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.73738	93 35 12.90249	381030.920	100910.996	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733000.099	764459.707	1486545.033	16055889.990	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_K-DQ6336-3SE-16APR2024.jpg	SE	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_K-DQ6336-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_K-DQ6336-1-07JUN2016.jpg		Jun 7, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 L
NGS Name: 4006 L
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	109 N	23 W	441223.41	933436.59		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1964	2016	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 6 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4006 L 1964

IN WATERVILLE, 1.0 MILE WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60, AT TRUNK HIGHWAY 60 MILEPOINT 131.7, 315.0 NORTHEAST FROM A CREEK CROSSING, 69.0 FEET NORTHWEST OF TRUNK HIGHWAY 60, 60.0 FEET NORTHEAST OF A POWER POLE NUMBER 458, 0.5 FOOT EAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1040.841	.033	3				VERTICAL CONTROL SURVEY	1964	CS4006

Geoid Separations(ft): GEOID18 = -93.704 12B = -93.704 09 = -93.632 03 = -93.428

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_L-3E-20APR2010.jpg	E	Apr 20, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_L-2-20APR2010.jpg		Apr 20, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_L-1-20APR2010.jpg		Apr 20, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 M **NGS Name:** 4006 M

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6337 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	108 N	23 W	441202.71	933453.95	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 52 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4006 M 2016

1.6 MILES SOUTHWEST OF WATERVILLE, 1.5 MILES SOUTHWEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 131.15, 60.3 FEET SOUTHEAST OF TRUNK HIGHWAY 60, 1.5 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.731	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1067.737	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.806	.262		974.020	.197	2011	GPS - RTRN	2024	RTRN2024
1067.780	.262		973.994	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.786 12B = -93.783 09 = -93.714 03 = -93.514

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 02.70991	93 34 53.94952	382420.639	102520.899	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(2011)

Geodetic Position		Waseca County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 02.71033	93 34 53.94950	325596.503	234447.571	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2734372.513	766084.060	1487936.723	16057496.989	.131	3	GPS - RTRN	2024	RTRN2024
2734372.514	766084.102	1487936.725	16057497.031	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_M-DQ6337-3SE-16APR2024.jpg	SE	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_M-DQ6337-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_M-DQ6337-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 P **NGS Name:** 4006 P

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6330 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	109 N	23 W	441146.51	933825.88	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 42 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4006 P 2016

1.7 MILES EAST OF ELYSIAN, 1.8 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 128.05, 57.5 FEET NORTH OF TRUNK HIGHWAY 60, 170.0 FEET WEST OF DRIVEWAY NUMBER 6267, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.410	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1048.403	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.508	.262		954.355	.197	2011	GPS - RTRN	2024	RTRN2024
1048.413	.262		954.257	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.153 12B = -94.157 09 = -94.084 03 = -93.874

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.50506	93 38 25.87978	366971.115	100970.070	.131	3	GPS - RTRN	2024	RTRN2024
44 11 46.50506	93 38 25.88007	366971.094	100970.070	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718942.115	764369.750	1472491.307	16055971.417	.131	3	GPS - RTRN	2024	RTRN2024
2718942.094	764369.750	1472491.285	16055971.417	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_P-DQ6330-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_P-DQ6330-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_P-DQ6330-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 Q **NGS Name:** 4006 Q

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6329 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	109 N	24 W	441154.65	934002.22	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4006 Q 2016

IN ELYSIAN, 0.4 MILE EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 126.7, 54.2 FEET SOUTH-SOUTHEAST OF TRUNK HIGHWAY 60, 56.8 FEET WEST-SOUTHWEST OF NORTH SHORE DRIVE, 15.0 FEET NORTH-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.627	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1034.621	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.690	.262		940.457	.197	2011	GPS - RTRN	2024	RTRN2024
1034.608	.262		940.369	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.229 12B = -94.235 09 = -94.160 03 = -93.953

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 54.64863	93 40 02.21997	359957.500	101839.440	.131	3	GPS - RTRN	2024	RTRN2024
44 11 54.64850	93 40 02.22040	359957.468	101839.427	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711920.506	765164.632	1465482.030	16056851.568	.131	3	GPS - RTRN	2024	RTRN2024
2711920.475	765164.619	1465481.998	16056851.555	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_Q-DQ6329-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_Q-DQ6329-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_Q-DQ6329-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 R **NGS Name:** 4006 R

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6327 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	34	109 N	24 W	441154.14	934110.14	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 22 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4006 R 2016

0.7 MILE WEST OF ELYSIAN, 0.5 MILE WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 125.8, 45.5 FEET SOUTH OF TRUNK HIGHWAY 60, 167.2 FEET EAST OF BLUE BAY LANE EXTENDED, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.883	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1064.876	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.995	.262		970.723	.197	2011	GPS - RTRN	2024	RTRN2024
1064.936	.262		970.664	.197	2011	GPS - OPUS	2021	GPSBM
1064.883	.262		970.612	.197	2011	GPS - OPUS	2021	GPSBM
1064.981	.262		970.707	.197	2011	GPS - RTRN	2020	RTRN2020
1064.804	.262		970.530	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.268 12B = -94.275 09 = -94.199 03 = -93.996

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 54.14036	93 41 10.14221	355008.781	101820.852	.131	3	GPS - RTRN	2024	RTRN2024
44 11 54.14003	93 41 10.14252	355008.758	101820.819	.131	3	GPS - OPUS	2021	GPSBM
44 11 54.14021	93 41 10.14356	355008.682	101820.838	.131	3	GPS - OPUS	2021	GPSBM
44 11 54.14033	93 41 10.14220	355008.781	101820.850	.131	3	GPS - RTRN	2020	RTRN2020
44 11 54.14060	93 41 10.14171	355008.818	101820.876	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706972.845	765093.598	1460535.355	16056840.848	.131	3	GPS - RTRN	2024	RTRN2024
2706972.823	765093.565	1460535.332	16056840.814	.131	3	GPS - OPUS	2021	GPSBM
2706972.746	765093.582	1460535.257	16056840.833	.131	3	GPS - OPUS	2021	GPSBM
2706972.846	765093.595	1460535.356	16056840.845	.131	3	GPS - RTRN	2020	RTRN2020
2706972.881	765093.622	1460535.392	16056840.871	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_R-DQ6327-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_R-DQ6327-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_R-DQ6327-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4006 S
NGS Name: 4006 S
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6322 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	32	109 N	24 W	441211.73	934449.27	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 4006 S 2016

3.4 MILES WEST OF ELYSIAN, 3.55 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 122.7, 41.1 FEET SOUTH OF TRUNK HIGHWAY 60, 55.2 FEET EAST OF 241ST AVENUE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1063.413	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1063.407	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1063.544	.262		969.312	.197	2011	GPS - RTRN	2024	RTRN2024
1063.446	.262		969.211	.197	2011	GPS - OPUS	2021	GPSBM
1063.328	.262		969.093	.197	2011	GPS - OPUS	2021	GPSBM
1063.482	.262		969.250	.197	2011	GPS - RTRN	2020	RTRN2020
1063.354	.262		969.119	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.232 12B = -94.232 09 = -94.153 03 = -93.966

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 11.73457	93 44 49.27212	339057.794	103716.448	.131	3	GPS - RTRN	2024	RTRN2024
44 12 11.73571	93 44 49.27348	339057.695	103716.564	.131	3	GPS - OPUS	2021	GPSBM
44 12 11.73604	93 44 49.27340	339057.701	103716.598	.131	3	GPS - OPUS	2021	GPSBM
44 12 11.73587	93 44 49.27242	339057.773	103716.580	.131	3	GPS - RTRN	2020	RTRN2020
44 12 11.73552	93 44 49.27262	339057.758	103716.545	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2691004.543	766819.805	1444593.986	16058760.957	.131	3	GPS - RTRN	2024	RTRN2024
2691004.443	766819.920	1444593.888	16058761.073	.131	3	GPS - OPUS	2021	GPSBM
2691004.449	766819.954	1444593.894	16058761.106	.131	3	GPS - OPUS	2021	GPSBM
2691004.521	766819.937	1444593.965	16058761.089	.131	3	GPS - RTRN	2020	RTRN2020
2691004.506	766819.901	1444593.950	16058761.053	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_S-DQ6322-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_S-DQ6322-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4006_S-DQ6322-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4007 A **NGS Name:** 4007 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6350 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	109 N	23 W	441303.69	933152.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 30 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4007 A 2016

2.0 MILE EAST OF WATERVILLE, 1.4 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 134.0, 32.8 FEET SOUTH OF TRUNK HIGHWAY 60, 89.1 FEET EAST-SOUTHEAST OF MILEPOST 134, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1089.821	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1089.837	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1089.886	.262		996.665	.197	2011	GPS - RTRN	2024	RTRN2024
1089.840	.262		996.615	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.222 12B = -93.225 09 = -93.140 03 = -92.946

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 03.69419	93 31 52.45883	395672.531	108628.312	.131	3	GPS - RTRN	2024	RTRN2024
44 13 03.69378	93 31 52.45827	395672.572	108628.270	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2747557.364	772330.869	1501192.671	16063580.616	.131	3	GPS - RTRN	2024	RTRN2024
2747557.405	772330.828	1501192.712	16063580.574	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_A-DQ6350-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_A-DQ6350-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_A-DQ6350-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4007 B **NGS Name:** 4007 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6349 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	26	109 N	23 W	441253.32	933250.45	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4007 B 2016

1.1 MILES EAST OF WATERVILLE, 0.55 MILE EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 133.25, 61.5 FEET SOUTH-SOUTHEAST OF TRUNK HIGHWAY 60, 30.0 FEET WEST-SOUTHWEST OF A FIELD ENTRANCE, 1.5 FEET EAST-NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1132.603	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1132.619	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1132.622	.262		1039.233	.197	2011	GPS - RTRN	2024	RTRN2024
1132.639	.262		1039.250	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.389 12B = -93.389 09 = -93.310 03 = -93.113

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 53.32344	93 32 50.45377	391443.417	107599.045	.131	3	GPS - RTRN	2024	RTRN2024
44 12 53.32334	93 32 50.45389	391443.408	107599.034	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743339.896	771256.956	1496963.733	16062558.553	.131	3	GPS - RTRN	2024	RTRN2024
2743339.887	771256.946	1496963.724	16062558.542	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_B-DQ6349-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_B-DQ6349-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4007_B-DQ6349-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 A
NGS Name: 4008 A
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	110 N	26 W	441912.00	935615.00	3	

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2013	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4008 A 1955

1.0 MILE EAST OF ST. PETER, 1.0 MILE EAST ON TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 169 (NORTH-SOUTH) TRUNK HIGHWAY 22 (WEST) AND TRUNK HIGHWAY 99 (EAST), 4.8 MILES WEST ON TRUNK HIGHWAY 99 FROM MAIN STREET IN CLEVELAND, 28.0 FEET SOUTH OF TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 99 MILEPOINT 13.4, 100.0 FEET EAST OF A TOWNSHIP ROAD SOUTHEAST, IN THE SOUTHWEST CORNER OF A TRUNK HIGHWAY 99 BOX CULVERT.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
756.465	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
757.088	.033	3				VERTICAL CONTROL SURVEY	1955	CS4008

Geoid Separations(ft): GEOID18 = -92.936 12B = -92.930 09 = -92.841 03 = -92.693

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_A-3N-12APR2010.jpg	N	Apr 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_A-2-12APR2010.jpg		Apr 12, 2010
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 B **NGS Name:** 4008 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1971 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	23	110 N	26 W	441905.64	935450.38	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 5 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4008 B 1955

2.25 MILES EAST OF ST. PETER, 2.2 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 15.5, 123.0 FEET SOUTH OF TRUNK HIGHWAY 99, 119.0 FEET EAST OF COUNTY ROAD 21, 22.0 FEET SOUTH FROM THE EDGE OF TREES AND A DRIVEWAY, 11.0 FEET WEST FROM CENTERLINE TRAIL, IN LINE WITH PRIVATE DRIVE NUMBER 32357, 1.9 FEET NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1000.139	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1000.155	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1000.159	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1000.133	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1000.201	.033	3				VERTICAL CONTROL SURVEY	1955	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1000.169	.262		907.160	.197	2011	GPS - RTRN	2024	RTRN2024
1000.077	.262		907.075	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.012 12B = -93.005 09 = -92.920 03 = -92.772

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 05.64401	93 54 50.37865	295669.442	146004.891	.131	3	GPS - RTRN	2024	RTRN2024
44 19 05.64349	93 54 50.37931	295669.393	146004.839	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2647175.575	808641.038	1401290.082	16101101.652	.131	3	GPS - RTRN	2024	RTRN2024
2647175.527	808640.985	1401290.033	16101101.600	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_B-DP1971-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_B-DP1971-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_B-DP1971-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 C

Mn/DOT Name: 4008 C

NGS Name: 4008 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	110 N	26 W	441909.00	935354.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	MNDT

Description: (2016)

Stamping:

2.8 MILES WEST OF CLEVELAND, 2.8 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND MAIN STREET IN CLEVELAND, 125.0 FEET EAST OF COUNTY ROAD 106, 72.0 FEET SOUTH OF TRUNK HIGHWAY 99, AT THE SOUTHEAST CORNER OF THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 106.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1018.709	.033	3				VERTICAL CONTROL SURVEY	1955	CS4008

Geoid Separations(ft): GEOID18 = -93.058 12B = -93.048 09 = -92.966 03 = -92.815

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4008 D **NGS Name:** 4008 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1974 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	110 N	25 W	441914.06	935218.56	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2013	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 1929 ADJ 4008 D 1955

1.5 MILES WEST OF CLEVELAND, 2.15 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 17.4, 60.0 FEET SOUTH OF TRUNK HIGHWAY 99, IN THE SOUTHWEST CORNER OF TRUNK HIGHWAY 99 BOX CULVERT, 3.5 FEET EAST OF A WITNESS POST.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.435	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1001.448	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1001.445	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1001.350	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.271	.033	3				VERTICAL CONTROL SURVEY	1955	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.425	.262		908.299	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.136 12B = -93.126 09 = -93.038 03 = -92.884

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 14.06185	93 52 18.56262	306714.724	146754.811	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658210.980	809507.884	1412332.316	16101833.626	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_D-DP1974-3N-12APR2010.jpg	N	Apr 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_D-DP1974-2-12APR2010.jpg		Apr 12, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_D-DP1974-1-12APR2010.jpg		Apr 12, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 E **NGS Name:** 4008 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1978 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	21	110 N	25 W	441932.76	935026.84	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4008 E 1955

IN CLEVELAND, 0.6 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 19.15, 35.0 FEET SOUTH OF TRUNK HIGHWAY 99, IN THE SOUTHWEST CORNER OF A TRUNK HIGHWAY 99 BOX CULVERT, 3.0 FEET EAST OF A WITNESS POST.

Station Notes
THE CULVERT HAS BEEN REPLACED.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
998.489	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
998.499	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
998.492	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
998.381	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
998.381	.033	3				VERTICAL CONTROL SURVEY	1955	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
998.466	.262		905.284	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.192 12B = -93.182 09 = -93.090 03 = -92.930

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 32.76008	93 50 26.84152	314853.350	148576.525	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2666328.878	811415.533	1420470.690	16103641.605	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E-DP1978-3SW-13APR2010.jpg	SW	Apr 13, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E-DP1978-2-13APR2010.jpg		Apr 13, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E-DP1978-1-13APR2010.jpg		Apr 13, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 E 1 **NGS Name:** 4008 E 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8254 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	110 N	26 W	441910.57	935357.34	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2024	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 E 1 1999

3.0 MILES EAST OF ST. PETER, 2.95 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.25, 116.0 FEET NORTH OF TRUNK HIGHWAY 99, 70.0 FEET WEST OF COUNTY ROAD 106 (315 AVENUE), 124.0 FEET SOUTHWEST OF A CABLE MARKER, 110.0 FEET WEST-NORTHWEST OF A POWER POLE, 37.0 FEET NORTH OF A FIELD ENTRANCE, 1.4 FEET WEST OF A WITNESS POST.

Station Notes

FOUND CAP LOOSE. USE WITH CAUTION.
THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1010.300	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1010.313	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1010.313	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1010.162	.262		917.121	.197	2011	GPS - RTRN	2020	RTRN2020
1010.313			917.242	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
1010.313			917.246	.008	2011	GPS - STATIC	2013	HSUEUR
1010.313	.131		917.446	.066	1996	GPS - STATIC	2013	HSUEUR
1010.205	.262		917.160	.197	2011	GPS - RTRN	2013	RTRN2013
			917.242	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			917.331	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1010.300	.131		917.446	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1010.300	.131		917.446	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.054 12B = -93.044 09 = -92.962 03 = -92. 811

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 10.56666	93 53 57.33752	299530.390	146466.924	.131	3	GPS - RTRN	2020	RTRN2020
44 19 10.56740	93 53 57.33901	299530.282	146467.000	.010		ADJUSTMENT	2014	GPS2977
44 19 10.56744	93 53 57.33962	299530.238	146467.005	.010	C	GPS - STATIC	2013	HSUEUR
44 19 10.56749	93 53 57.33919	299530.269	146467.009	.131	3	GPS - RTRN	2013	RTRN2013
44 19 10.56740	93 53 57.33901	299530.282	146467.000	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 10.56744	93 53 57.33980	299530.225	146467.005	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 10.56686	93 53 57.33928	299530.262	146466.946	.033	C	GPS - STATIC	2013	HSUEUR
44 19 10.56686	93 53 57.33928	299530.262	146466.946	.033	C	ADJUSTMENT	2003	GPS1911
44 19 10.56686	93 53 57.33928	299530.262	146466.946	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651030.953	809143.908	1405150.291	16101557.338	.131	3	GPS - RTRN	2020	RTRN2020
2651030.844	809143.983	1405150.184	16101557.414	.010		ADJUSTMENT	2014	GPS2977
2651030.800	809143.987	1405150.140	16101557.419	.010	C	GPS - STATIC	2013	HSUEUR
2651030.831	809143.992	1405150.171	16101557.423	.131	3	GPS - RTRN	2013	RTRN2013
2651030.844	809143.983	1405150.184	16101557.414	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651030.787	809143.987	1405150.127	16101557.419	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651030.825	809143.928	1405150.164	16101557.359	.033	C	GPS - STATIC	2013	HSUEUR
2651030.825	809143.928	1405150.164	16101557.359	.033	C	ADJUSTMENT	2003	GPS1911
2651030.825	809143.928	1405150.164	16101557.359	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1-DF8254-3N-18MAY2020.jpg	N	May 18, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1-DF8254-2-18MAY2020.jpg		May 18, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1-DF8254-1-18MAY2020.jpg		May 18, 2020

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 E 1 RESET

Mn/DOT Name: 4008 E 1 RESET **NGS Name:** 4008 E 1 RESET

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	24	110 N	26 W	441910.57	935357.34		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2024	2024	GOOD	Horz=YES Vert=YES	NO		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description:

Stamping: 4008 E 1 RESET 2024

3.0 MILES EAST OF ST. PETER, 2.95 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.25, 116.0 FEET NORTH OF TRUNK HIGHWAY 99, 70.0 FEET WEST OF COUNTY ROAD 106 (315 AVENUE), 124.0 FEET SOUTHWEST OF A CABLE MARKER, 110.0 FEET WEST-NORTHWEST OF A POWER POLE, 37.0 FEET NORTH OF A FIELD ENTRANCE, 1.4 FEET WEST OF A WITNESS POST.

Station Notes

THE ROD DEPTH IS UNKNOWN.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1010.188	.262		917.137	.197	2011	GPS - RTRN	2024	RTRN2024

No Geoid Separations Available

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 10.56710	93 53 57.33830	299530.334	146466.969	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651030.896	809143.953	1405150.235	16101557.383	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1_RESET-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1_RESET-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_E_1_RESET-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 F

NGS Name: 4008 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	24	110 N	26 W	441911.00	935354.80	3	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 F

2.8 MILES EAST OF ST. PETER, 3.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 169/ TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 99 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.2, IN THE NORTHEAST QUADRANT OF THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 106, 116.0 FEET NORTH OF TRUNK HIGHWAY 99, 1.0 F00T WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1010.260	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Geoid Separations(ft): GEOID18 = -93.054 12B = -93.044 09 = -92.962 03 = -92. 811

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4008 G **NGS Name:** 4008 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1973 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	110 N	26 W	441912.95	935304.03	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 G 1991

3.8 MILES EAST OF ST. PETER, 3.8 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 169/TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 99 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.95, 1360.0 FEET WEST OF COUNTY ROAD 148, 388.0 FEET EAST OF DRIVEWAY NUMBER 30956, 54.0 FEET WEST OF A POWER POLE NUMBER 52, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes

FOUND CAP LOOSE. USE WITH CAUTION.
THE DISK WAS RETURNED TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1037.137	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1037.147	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1037.147	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1037.075	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1037.078	.262		943.991	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.097 12B = -93.087 09 = -93.002 03 = -92.851

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 12.95018	93 53 04.02713	303408.379	146672.343	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654906.087	809390.389	1409027.117	16101756.478	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G-DP1973-3NW-12APR2010.jpg	NW	Apr 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G-DP1973-2-04SEP2013.jpg		Sep 4, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G-DP1973-1-04SEP2013.jpg		Sep 4, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 G RESET

Mn/DOT Name: 4008 G RESET **NGS Name:** 4008 G RESET

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	110 N	26 W	441912.95	935304.03		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2024	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description:

Stamping: 4008 G RESET 2024

3.8 MILES EAST OF ST. PETER, 3.8 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 169/TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 99 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.95, 1360.0 FEET WEST OF COUNTY ROAD 148, 388.0 FEET EAST OF DRIVEWAY NUMBER 30956, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 54.0 FEET WEST OF A POWER POLE NUMBER 52, 1.0 FOOT SOUTH OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1036.753	.262		943.656	.197	2011	GPS - RTRN	2024	RTRN2024

No Geoid Separations Available

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 12.95021	93 53 04.02788	303408.324	146672.346	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654906.032	809390.392	1409027.063	16101756.481	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G_RESET-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G_RESET-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_G_RESET-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 H
NGS Name: 4008 H
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1976 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	110 N	25 W	441919.84	935120.10	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 H 1991

1.2 MILES WEST OF CLEVELAND, 1.35 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 18.4, 121.0 FEET EAST OF DRIVEWAY NUMBER 958, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 9.3 FEET SOUTHWEST OF A POWER POLE NUMBER 79, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1025.444	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1025.457	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1025.451	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1025.375	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1025.461	.262		932.288	.197	2011	GPS - RTRN	2024	RTRN2024
1025.408	.262		932.232	.197	2011	GPS - OPUS	2021	GPSBM
1025.421	.262		932.259	.197	2011	GPS - RTRN	2020	RTRN2020
1025.372	.262		932.206	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.176 12B = -93.166 09 = -93.074 03 = -92.920

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 19.83855	93 51 20.09692	310970.406	147301.837	.131	3	GPS - RTRN	2024	RTRN2024
44 19 19.83936	93 51 20.09830	310970.307	147301.920	.131	3	GPS - OPUS	2021	GPSBM
44 19 19.83868	93 51 20.09745	310970.368	147301.850	.131	3	GPS - RTRN	2020	RTRN2020
44 19 19.83898	93 51 20.09807	310970.323	147301.881	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2662460.122	810099.916	1416587.221	16102373.631	.131	3	GPS - RTRN	2024	RTRN2024
2662460.022	810099.998	1416587.122	16102373.714	.131	3	GPS - OPUS	2021	GPSBM
2662460.084	810099.929	1416587.183	16102373.644	.131	3	GPS - RTRN	2020	RTRN2020
2662460.039	810099.960	1416587.138	16102373.675	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_H-DP1976-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_H-DP1976-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_H-DP1976-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 J **NGS Name:** 4008 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1980 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	110 N	25 W	441945.48	934920.48	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 J 1991

0.4 MILE EAST OF CLEVELAND, 0.4 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 20.15, 75.0 FEET NORTHWEST OF TRUNK HIGHWAY 99, 18.0 FEET EAST OF A POWER POLE WITH 2 GUY WIRES, 1.2 FEET SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.381	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1044.391	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1044.384	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1044.283	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.440	.262		951.232	.197	2011	GPS - RTRN	2024	RTRN2024
1044.302	.262		951.100	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.208 12B = -93.202 09 = -93.113 03 = -92.943

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 45.47535	93 49 20.48348	319688.087	149822.983	.131	3	GPS - RTRN	2024	RTRN2024
44 19 45.47593	93 49 20.48319	319688.109	149823.042	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2671149.561	812713.013	1425305.527	16104879.829	.131	3	GPS - RTRN	2024	RTRN2024
2671149.581	812713.072	1425305.548	16104879.887	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_J-DP1980-3NW-15APR2024.jpg	NW	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_J-DP1980-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_J-DP1980-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 K **NGS Name:** 4008 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1981 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	110 N	25 W	442022.48	934839.73	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 K 1991

1.3 MILES NORTHEAST OF CLEVELAND, 1.3 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 21.05, 70.0 FEET NORTHWEST OF TRUNK HIGHWAY 99, 25.0 FEET SOUTHEAST OF A POWER POLE, 0.8 FOOT SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.296	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1044.302	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1044.299	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1044.171	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.253	.262		951.100	.197	2011	GPS - RTRN	2024	RTRN2024
1044.194	.262		951.048	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.156 12B = -93.146 09 = -93.061 03 = -92.884

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 22.48495	93 48 39.73099	322681.472	153546.127	.131	3	GPS - RTRN	2024	RTRN2024
44 20 22.48482	93 48 39.73064	322681.497	153546.114	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2674102.963	816467.231	1428303.703	16108596.704	.131	3	GPS - RTRN	2024	RTRN2024
2674102.989	816467.217	1428303.729	16108596.691	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_K-DP1981-3NW-16APR2024.jpg	NW	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_K-DP1981-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_K-DP1981-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 L **NGS Name:** 4008 L

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1982 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	11	110 N	25 W	442103.88	934756.40	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 L

2.3 MILES NORTHEAST OF CLEVELAND, 2.3 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 22.1, 100.0 FEET SOUTHWEST OF DRIVEWAY NUMBER 26600, 70.0 FEET NORTHWEST OF TRUNK HIGHWAY 99, 7.0 FEET SOUTH OF A POWER POLE, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1033.774	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1033.781	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1033.777	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1033.656	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1033.833	.262		940.749	.197	2011	GPS - RTRN	2024	RTRN2024
1033.807	.262		940.723	.197	2011	GPS - OPUS	2021	GPSBM
1033.882	.262		940.799	.197	2011	GPS - OPUS	2021	GPSBM
1033.876	.262		940.802	.197	2011	GPS - RTRN	2020	RTRN2020
1033.745	.262		940.674	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.084 12B = -93.071 09 = -92.985 03 = -92.805

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 03.87969	93 47 56.40357	325864.546	157712.247	.131	3	GPS - RTRN	2024	RTRN2024
44 21 03.87958	93 47 56.40475	325864.460	157712.236	.131	3	GPS - OPUS	2021	GPSBM
44 21 03.87940	93 47 56.40565	325864.395	157712.219	.131	3	GPS - OPUS	2021	GPSBM
44 21 03.87983	93 47 56.40447	325864.480	157712.262	.131	3	GPS - RTRN	2020	RTRN2020
44 21 03.88038	93 47 56.40444	325864.483	157712.317	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2677241.327	820666.358	1431492.211	16112756.066	.131	3	GPS - RTRN	2024	RTRN2024
2677241.242	820666.346	1431492.126	16112756.056	.131	3	GPS - OPUS	2021	GPSBM
2677241.176	820666.328	1431492.060	16112756.038	.131	3	GPS - OPUS	2021	GPSBM
2677241.262	820666.371	1431492.146	16112756.081	.131	3	GPS - RTRN	2020	RTRN2020
2677241.264	820666.427	1431492.149	16112756.137	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_L-DP1982-3NW-16APR2024.jpg	NW	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_L-DP1982-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_L-DP1982-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 M **NGS Name:** 4008 M

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1984 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	1	110 N	25 W	442137.52	934717.50	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4008 M 2004

2.5 MILES SOUTHWEST OF LE CENTER, 2.5 MILES SOUTHWEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 112 IN LE CENTER, TO TRUNK HIGHWAY 99 MILEPOINT 22.9, THEN 0.05 MILE SOUTH ALONG COUNTY ROAD 112/SILVER LAKE ROAD, 27.5 FEET EAST OF COUNTY ROAD 112/SILVER LAKE ROAD, 9.8 FEET NORTH OF A POWER POLE, 1.2 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.966	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1031.973	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1031.970	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1031.816	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.963	.262		938.952	.197	2011	GPS - RTRN	2024	RTRN2024
1031.875	.262		938.870	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.008 12B = -93.005 09 = -92.916 03 = -92.729

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 37.52220	93 47 17.49847	328718.822	161096.358	.131	3	GPS - RTRN	2024	RTRN2024
44 21 37.52299	93 47 17.49863	328718.811	161096.438	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2680059.239	824080.127	1434350.800	16116134.246	.131	3	GPS - RTRN	2024	RTRN2024
2680059.227	824080.207	1434350.789	16116134.326	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_M-DP1984-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_M-DP1984-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_M-DP1984-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 N **NGS Name:** 4008 N

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1985 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	111 N	25 W	442213.83	934631.96	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4008 N

1.8 MILES SOUTHWEST OF LE CENTER, 4.1 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 23.85, 411.0 FEET EAST OF COUNTY ROAD 110, 105.0 FEET NORTHEAST OF DRIVEWAY NUMBER 25458, 84.0 FEET NORTHWEST OF TRUNK HIGHWAY 99, 29.0 FEET NORTHWEST OF A CULVERT, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1020.306	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1020.310	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1020.306	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1020.178	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1020.362	.262		927.442	.197	2011	GPS - RTRN	2024	RTRN2024
1020.165	.262		927.246	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.916 12B = -92.916 09 = -92.825 03 = -92.634

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 13.83038	93 46 31.95513	332056.528	164747.011	.131	3	GPS - RTRN	2024	RTRN2024
44 22 13.83136	93 46 31.95471	332056.560	164747.110	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2683357.670	827765.516	1437693.058	16119778.075	.131	3	GPS - RTRN	2024	RTRN2024
2683357.700	827765.615	1437693.090	16119778.174	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_N-DP1985-3NW-17APR2024.jpg	NW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_N-DP1985-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_N-DP1985-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 P

NGS Name: 4008 P

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	111 N	24 W	442229.80	934602.20	3	

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 3 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 P 1991

1.3 MILES SOUTHWEST OF LE CENTER, 4.6 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 24.35, 173.0 FEET NORTHEAST OF COUNTY ROAD 113, 582.0 FEET SOUTHWEST OF A FARM ENTRANCE (FIRE NUMBER 657), 68.0 FEET NORTH OF TRUNK HIGHWAY 99, 1.0 FOOT SOUTHWEST OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1024.811	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

Geoid Separations(ft): GEOID18 = -92.867 12B = -92.867 09 = -92.775 03 = -92.582

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P-3N-04MAY2010.jpg	N	May 4, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P-2-03MAY2010.jpg		May 3, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P-1-03MAY2010.jpg		May 3, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 P RESET

Mn/DOT Name: 4008 P RESET **NGS Name:** 4008 P RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1987 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	111 N	24 W	442229.49	934603.30	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4008 P RESET 2013

4.7 MILES NORTHEAST OF CLEVELAND, 4.6 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 24.35, 173.0 FEET NORTHEAST OF COUNTY ROAD 113, 68.0 FEET NORTHWEST OF TRUNK HIGHWAY 99, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1024.808	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1024.811	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1024.811	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1024.732	.262		931.865	.197	2011	GPS - RTRN	2024	RTRN2024
1024.713	.262		931.842	.197	2011	GPS - RTRN	2016	RTRN2016
1024.893	.262		932.026	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.867 12B = -92.867 09 = -92.779 03 = -92.582

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 29.48751	93 46 03.30302	334150.113	166316.352	.131	3	GPS - RTRN	2024	RTRN2024
44 22 29.48720	93 46 03.30292	334150.119	166316.321	.131	3	GPS - RTRN	2016	RTRN2016
44 22 29.48774	93 46 03.30254	334150.147	166316.375	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685434.255	829356.771	1439788.338	16121343.417	.131	3	GPS - RTRN	2024	RTRN2024
2685434.263	829356.740	1439788.345	16121343.386	.131	3	GPS - RTRN	2016	RTRN2016
2685434.290	829356.795	1439788.373	16121343.440	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P_RESET-DP1987-3NW-17APR2024.jpg	NW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P_RESET-DP1987-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_P_RESET-DP1987-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 Q **NGS Name:** 4008 Q

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4689 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	111 N	24 W	442301.36	934509.54	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4008 Q 1991

1.25 MILES SOUTHWEST OF LE CENTER, AT THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99, 100.5 FEET NORTHWEST OF NORTHBOUND TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 99 MILEPOINT 14.9, 77.5 FEET SOUTH OF EASTBOUND TRUNK HIGHWAY 112, 0.8 FOOT WEST OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.199	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1046.195	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1046.015	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.012	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			953.522	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			953.604	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1046.192	.131		953.722	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1046.192	.131		953.722	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.749 12B = -92.752 09 = -92.661 03 = -92.464

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.36422	93 45 09.54433	338079.301	169514.560	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.36430	93 45 09.54510	338079.245	169514.569	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.36377	93 45 09.54464	338079.278	169514.515	.033	C	ADJUSTMENT	2004	GPS2027
44 23 01.36377	93 45 09.54464	338079.278	169514.515	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689328.860	832596.063	1443721.116	16124534.010	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689328.804	832596.071	1443721.061	16124534.019	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689328.838	832596.017	1443721.094	16124533.965	.033	C	ADJUSTMENT	2004	GPS2027
2689328.838	832596.017	1443721.094	16124533.965	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q-AE4689-3N-04MAY2010.jpg	N	May 4, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q-AE4689-2-03MAY2010.jpg		May 3, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q-AE4689-1-03MAY2010.jpg		May 3, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 Q RESET

Mn/DOT Name: 4008 Q RESET **NGS Name:** 4008 Q RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1988 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	111 N	24 W	442301.36	934509.55	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4008 Q RESET 2013

1.25 MILES SOUTHWEST OF LE CENTER, AT THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), AT TRUNK HIGHWAY 99 MILEPOINT 14.9, 100.5 FEET NORTHWEST OF NORTHBOUND TRUNK HIGHWAY 99, 77.5 FEET SOUTH OF EASTBOUND COUNTY ROAD 22, 0.8 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.028	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1046.028	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1046.028	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1046.031	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1046.031	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1046.031	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.113	.262		953.361	.197	2011	GPS - RTRN	2024	RTRN2024
1045.959	.262		953.207	.197	2011	GPS - RTRN	2016	RTRN2016
1046.067	.262		953.318	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.749 12B = -92.752 09 = -92.661 03 = -92.464

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.36251	93 45 09.54524	338079.233	169514.387	.131	3	GPS - RTRN	2024	RTRN2024
44 23 01.36279	93 45 09.54445	338079.291	169514.416	.131	3	GPS - RTRN	2016	RTRN2016
44 23 01.36273	93 45 09.54458	338079.282	169514.409	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689328.795	832595.890	1443721.049	16124533.838	.131	3	GPS - RTRN	2024	RTRN2024
2689328.852	832595.918	1443721.106	16124533.866	.131	3	GPS - RTRN	2016	RTRN2016
2689328.842	832595.912	1443721.097	16124533.859	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q_RESET-DP1988-3NW-17APR2024.jpg	NW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q_RESET-DP1988-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_Q_RESET-DP1988-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 R **NGS Name:** 4008 R

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP0989 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	110 N	26 W	441925.27	935659.79	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** 4008 R 2013

0.5 MILE EAST OF ST. PETER, 0.35 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 13.65, 55.1 FEET NORTHEAST OF TRUNK HIGHWAY 99, 10.7 FEET NORTHWEST OF CABLE BOX NUMBER 89, 38.4 FEET NORTHWEST OF THE ENTRANCE TO A PARKING LOT, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
753.945	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
753.945	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
753.945	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
753.962	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
753.962	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
753.913	.262		661.035	.197	2011	GPS - RTRN	2025	RTRN2025
753.916	.262		661.039	.197	2011	GPS - RTRN	2024	RTRN2024
753.876	.262		660.999	.197	2011	GPS - OPUS	2021	GPSBM
753.890	.262		661.016	.197	2011	GPS - RTRN	2020	RTRN2020
753.962	.262		661.088	.197	2011	GPS - RTRN	2019	RTRN2019
753.962			661.062	.013	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
753.962			661.062	.013	2011	GPS - STATIC	2013	HSUEUR
753.962	.131		661.259	.066	1996	GPS - STATIC	2013	HSUEUR
753.808	.262		660.934	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.877 12B = -92.874 09 = -92.779 03 = -92.638

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 25.26601	93 56 59.78798	286280.796	148083.840	.131	3	GPS - RTRN	2025	RTRN2025
44 19 25.26486	93 56 59.78848	286280.758	148083.724	.131	3	GPS - RTRN	2024	RTRN2024
44 19 25.26499	93 56 59.78828	286280.773	148083.737	.131	3	GPS - OPUS	2021	GPSBM
44 19 25.26516	93 56 59.78789	286280.802	148083.754	.131	3	GPS - RTRN	2020	RTRN2020
44 19 25.26571	93 56 59.78770	286280.816	148083.809	.131	3	GPS - RTRN	2019	RTRN2019
44 19 25.26551	93 56 59.78817	286280.782	148083.789	.013		ADJUSTMENT	2014	GPS2977
44 19 25.26551	93 56 59.78817	286280.782	148083.789	.013	C	GPS - STATIC	2013	HSUEUR
44 19 25.26587	93 56 59.78776	286280.812	148083.826	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 25.26499	93 56 59.78831	286280.771	148083.737	.033	C	GPS - STATIC	2013	HSUEUR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2637766.537	810620.124	1391908.314	16103194.812	.131	3	GPS - RTRN	2025	RTRN2025
2637766.501	810620.008	1391908.277	16103194.695	.131	3	GPS - RTRN	2024	RTRN2024
2637766.515	810620.021	1391908.291	16103194.709	.131	3	GPS - OPUS	2021	GPSBM
2637766.544	810620.039	1391908.320	16103194.725	.131	3	GPS - RTRN	2020	RTRN2020
2637766.558	810620.094	1391908.334	16103194.781	.131	3	GPS - RTRN	2019	RTRN2019
2637766.524	810620.074	1391908.300	16103194.761	.013		ADJUSTMENT	2014	GPS2977
2637766.524	810620.074	1391908.300	16103194.761	.013	C	GPS - STATIC	2013	HSUEUR
2637766.553	810620.110	1391908.330	16103194.797	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2637766.513	810620.021	1391908.289	16103194.709	.033	C	GPS - STATIC	2013	HSUEUR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_R-DP0989-3NE-17SEP2025.jpg	NE	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_R-DP0989-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_R-DP0989-1-17SEP2025.jpg		Sep 17, 2025

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4008 S

Mn/DOT Name: 4008 S **NGS Name:** 4008 S

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP0990 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	110 N	26 W	441911.55	935610.15	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)
Disk Type: METAL ROD (WITH REMOVABLE ID DISK)
Mon. Agency: MNDT

Description: (2013) **Stamping:** 4008 S 2013

1.0 MILE EAST OF ST. PETER, 1.05 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 14.35, 79.1 FEET NORTH OF TRUNK HIGHWAY 99, 37.5 FEET NORTHWEST OF COUNTY ROAD 23 (OTTAWA ROAD), 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
766.688	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
766.688	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
766.688	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
766.705	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
766.701	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
766.698	.262		673.758	.197	2011	GPS - RTRN	2025	RTRN2025
766.593	.262		673.654	.197	2011	GPS - RTRN	2024	RTRN2024
766.616	.262		673.683	.197	2011	GPS - RTRN	2019	RTRN2019
766.701			673.739	.013	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
766.701			673.739	.013	2011	GPS - STATIC	2013	HSUEUR
766.701	.131		673.926	.066	1996	GPS - STATIC	2013	HSUEUR
766.606	.262		673.673	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.939 12B = -92.933 09 = -92.844 03 = -92.700

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 11.54982	93 56 10.15190	289875.527	146659.113	.131	3	GPS - RTRN	2025	RTRN2025
44 19 11.54927	93 56 10.15106	289875.588	146659.056	.131	3	GPS - RTRN	2024	RTRN2024
44 19 11.54917	93 56 10.15170	289875.541	146659.047	.131	3	GPS - RTRN	2019	RTRN2019
44 19 11.54931	93 56 10.15143	289875.561	146659.061	.016		ADJUSTMENT	2014	GPS2977
44 19 11.54931	93 56 10.15143	289875.561	146659.061	.016	C	GPS - STATIC	2013	HSUEUR
44 19 11.54940	93 56 10.15185	289875.530	146659.070	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 11.54875	93 56 10.15151	289875.554	146659.004	.033	C	GPS - STATIC	2013	HSUEUR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2641375.740	809233.742	1395499.414	16101764.880	.131	3	GPS - RTRN	2025	RTRN2025
2641375.801	809233.687	1395499.474	16101764.823	.131	3	GPS - RTRN	2024	RTRN2024
2641375.754	809233.676	1395499.427	16101764.814	.131	3	GPS - RTRN	2019	RTRN2019
2641375.774	809233.691	1395499.447	16101764.828	.016		ADJUSTMENT	2014	GPS2977
2641375.774	809233.691	1395499.447	16101764.828	.016	C	GPS - STATIC	2013	HSUEUR
2641375.743	809233.700	1395499.417	16101764.837	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2641375.768	809233.634	1395499.441	16101764.771	.033	C	GPS - STATIC	2013	HSUEUR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_S-DP0990-3W-17SEP2025.jpg	W	Sep 17, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_S-DP0990-2-17SEP2025.jpg		Sep 17, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_S-DP0990-1-17SEP2025.jpg		Sep 17, 2025

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 T **NGS Name:** 4008 T

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1970 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	23	110 N	26 W	441907.69	935522.19	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** 4008 T 2013

1.8 MILES EAST OF ST. PETER, 1.75 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 15.1, 33.7 FEET NORTH OF TRUNK HIGHWAY 99, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
909.099	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
909.099	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
909.099	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
909.116	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
909.116	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
909.185	.262		816.202	.197	2011	GPS - RTRN	2024	RTRN2024
909.060	.262		816.084	.197	2011	GPS - RTRN	2019	RTRN2019
909.103	.262		816.127	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.982 12B = -92.976 09 = -92.890 03 = -92.746

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 07.68849	93 55 22.19085	293358.584	146234.136	.131	3	GPS - RTRN	2024	RTRN2024
44 19 07.68864	93 55 22.19122	293358.557	146234.152	.131	3	GPS - RTRN	2019	RTRN2019
44 19 07.68866	93 55 22.18969	293358.668	146234.153	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2644862.692	808845.753	1398980.470	16101334.501	.131	3	GPS - RTRN	2024	RTRN2024
2644862.665	808845.768	1398980.444	16101334.517	.131	3	GPS - RTRN	2019	RTRN2019
2644862.776	808845.770	1398980.555	16101334.517	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_T-DP1970-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_T-DP1970-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_T-DP1970-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 U
NGS Name: 4008 U
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1975 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	110 N	25 W	441914.10	935216.03	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 14 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** 4008 U 2013

1.6 MILES WEST OF CLEVELAND, 2.1 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 17.65, 70.9 FEET SOUTH OF TRUNK HIGHWAY 99, 30.9 FEET WEST OF A FIELD ENTRANCE, 5.0 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1015.523	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1015.536	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1015.533	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1015.497	.262		922.360	.197	2011	GPS - RTRN	2024	RTRN2024
1015.526	.262		922.387	.197	2011	GPS - OPUS	2021	GPSBM
1015.506	.262		922.380	.197	2011	GPS - RTRN	2020	RTRN2020
1015.477	.262		922.351	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.136 12B = -93.126 09 = -93.041 03 = -92.887

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 14.09924	93 52 16.02504	306899.242	146756.932	.131	3	GPS - RTRN	2024	RTRN2024
44 19 14.09894	93 52 16.02520	306899.230	146756.902	.131	3	GPS - OPUS	2021	GPSBM
44 19 14.09901	93 52 16.02502	306899.243	146756.909	.131	3	GPS - RTRN	2020	RTRN2020
44 19 14.09951	93 52 16.02515	306899.234	146756.959	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658395.444	809511.960	1412516.766	16101835.451	.131	3	GPS - RTRN	2024	RTRN2024
2658395.433	809511.930	1412516.754	16101835.421	.131	3	GPS - OPUS	2021	GPSBM
2658395.446	809511.936	1412516.767	16101835.428	.131	3	GPS - RTRN	2020	RTRN2020
2658395.436	809511.987	1412516.759	16101835.479	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_U-DP1975-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_U-DP1975-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_U-DP1975-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4008 V **NGS Name:** 4008 V

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1977 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	21	110 N	25 W	441925.38	935046.40	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** 4008 V 2013

IN CLEVELAND, 0.85 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 18.9, 58.2 FEET SOUTH OF TRUNK HIGHWAY 99, 135.2 FEET WEST OF MAIN STREET, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.292	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1038.305	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1038.298	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.302	.262		945.110	.197	2011	GPS - RTRN	2024	RTRN2024
1038.213	.262		945.034	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.192 12B = -93.182 09 = -93.090 03 = -92.933

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 25.38018	93 50 46.40061	313424.991	147841.528	.131	3	GPS - RTRN	2024	RTRN2024
44 19 25.38050	93 50 46.40203	313424.888	147841.561	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664908.559	810665.526	1419041.712	16102909.182	.131	3	GPS - RTRN	2024	RTRN2024
2664908.456	810665.559	1419041.609	16102909.216	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_V-DP1977-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_V-DP1977-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4008_V-DP1977-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 A **NGS Name:** 4009 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9328 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	111 N	24 W	442303.31	934338.91	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 20 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 A 1958

IN LE CENTER, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 26.55, 65.6 FEET SOUTH OF TRUNK HIGHWAY 99, 61.0 FEET EAST OF COUNTY ROAD 11, 0.2 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.297	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1061.297	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1061.297	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1061.297	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1061.297	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1061.297	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231
1061.294	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1061.090	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.110	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1061.110	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1061.090	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.291	.262		968.630	.197	2011	GPS - RTRN	2024	RTRN2024
1061.327	.262		968.659	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.661 12B = -92.664 09 = -92.569 03 = -92.375

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.30902	93 43 38.90606	344663.220	169662.667	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.30960	93 43 38.90647	344663.190	169662.725	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2695910.057	832813.923	1450302.631	16124671.429	.131	3	GPS - RTRN	2024	RTRN2024
2695910.027	832813.982	1450302.601	16124671.488	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_A-AC9328-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_A-AC9328-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_A-AC9328-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 B **NGS Name:** 4009 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9327 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	111 N	24 W	442303.63	934251.00	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2016	GOOD	Horz=NO Vert=NO	YES	8947	FLUSH	NO MAG MATERIAL

Monument Type: CULVERT - ANY SIZE, ANY TYPE
Disk Type: BENCH MARK DISK
Mon. Agency: MNDT

Description: (2016) **Stamping:** 4009 B 1958

1.0 MILE SOUTHEAST OF LE CENTER, IN THE SOUTHWEST CORNER OF A TRUNK HIGHWAY 99 BOX CULVERT, 0.7 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11, AT TRUNK HIGHWAY 99 MILEPOINT 27.2, 26.0 FEET SOUTH OF TRUNK HIGHWAY 99, 1.5 FEET EAST OF A WITNESS POST.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1025.930	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1025.943	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1025.943	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1025.746	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1025.703	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1025.959	.262		933.354	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.605 12B = -92.605 09 = -92.513 03 = -92.316

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.62965	93 42 51.00037	348142.513	169670.140	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2699388.662	832858.271	1453780.532	16124673.282	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_B-AC9327-3SW-03MAY2010.jpg	SW	May 3, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_B-AC9327-2-03MAY2010.jpg		May 3, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_B-AC9327-1-03MAY2010.jpg		May 3, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 C **NGS Name:** 4009 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9326 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	111 N	24 W	442303.02	934226.31	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 5 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 C 1958

1.3 MILES EAST-SOUTHEAST OF LE CENTER, 1.0 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 27.5, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 56.5 FEET EAST OF COUNTY ROAD 110, 33.5 FEET EAST-NORTHEAST OF A TELEPHONE CABLE PEDESTAL, 10.0 FEET SOUTH OF AN UNDERGROUND CABLE MARKER, 0.4 FOOT NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1054.686	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1054.703	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1054.676	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1054.476	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1054.440	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1054.699	.262		962.127	.197	2011	GPS - RTRN	2024	RTRN2024
			962.209	.015	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			962.265	.020	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1054.689	.131		962.387	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1054.689	.131		962.387	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.572 12B = -92.572 09 = -92.480 03 = -92.287

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.01814	93 42 26.30898	349935.244	169595.550	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.01757	93 42 26.30832	349935.292	169595.492	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.01769	93 42 26.30907	349935.238	169595.505	.023		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.01712	93 42 26.30863	349935.269	169595.447	.033	C	ADJUSTMENT	2004	GPS2027
44 23 03.01712	93 42 26.30863	349935.269	169595.447	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.01246	93 42 26.30772	349935.334	169594.972	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701181.870	832802.695	1455572.417	16124595.827	.131	3	GPS - RTRN	2024	RTRN2024
2701181.918	832802.637	1455572.464	16124595.769	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701181.864	832802.649	1455572.410	16124595.782	.023		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701181.896	832802.591	1455572.441	16124595.724	.033	C	ADJUSTMENT	2004	GPS2027
2701181.896	832802.591	1455572.441	16124595.724	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701181.964	832802.120	1455572.503	16124595.251	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_C-AC9326-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_C-AC9326-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_C-AC9326-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 D **NGS Name:** 4009 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9325 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	34	111 N	24 W	442302.73	934115.74	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 D 1958

1.8 MILES EAST OF LE CENTER, 2.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 28.5, 140.0 FEET WEST OF COUNTY ROAD 5, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 14.4 FEET EAST-NORTHEAST OF A TELEPHONE POLE CUT OFF AT 8.0 FEET, 4.6 FEET NORTH-NORTHWEST OF A RIGHT-OF-WAY POST, 0.8 FOOT NORTH-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.224	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1079.253	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1079.253	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.040	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1079.027	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.306	.262		986.845	.197	2011	GPS - RTRN	2024	RTRN2024
1079.273	.262		986.812	.197	2011	GPS - OPUS	2021	GPSBM
1079.263	.262		986.806	.197	2011	GPS - RTRN	2020	RTRN2020
1079.191	.262		986.734	.197	2011	GPS - RTRN	2016	RTRN2016
			986.796	.016	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			986.878	.017	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1079.263	.131		987.039	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1079.263	.131		987.039	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.457 12B = -92.457 09 = -92.372 03 = -92.178

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.73261	93 41 15.74283	355059.803	169531.275	.131	3	GPS - RTRN	2024	RTRN2024
44 23 02.73214	93 41 15.74372	355059.738	169531.228	.131	3	GPS - OPUS	2021	GPSBM
44 23 02.73259	93 41 15.74351	355059.754	169531.273	.131	3	GPS - RTRN	2020	RTRN2020
44 23 02.73194	93 41 15.74380	355059.732	169531.208	.131	3	GPS - RTRN	2016	RTRN2016
44 23 02.73246	93 41 15.74359	355059.748	169531.260	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.73250	93 41 15.74433	355059.694	169531.265	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.73190	93 41 15.74387	355059.727	169531.204	.033	C	ADJUSTMENT	2004	GPS2027
44 23 02.73190	93 41 15.74387	355059.727	169531.204	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706306.213	832792.745	1460694.790	16124523.301	.131	3	GPS - RTRN	2024	RTRN2024
2706306.149	832792.697	1460694.725	16124523.254	.131	3	GPS - OPUS	2021	GPSBM
2706306.164	832792.742	1460694.740	16124523.300	.131	3	GPS - RTRN	2020	RTRN2020
2706306.143	832792.676	1460694.718	16124523.234	.131	3	GPS - RTRN	2016	RTRN2016
2706306.158	832792.729	1460694.734	16124523.287	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706306.104	832792.733	1460694.681	16124523.291	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706306.138	832792.672	1460694.713	16124523.230	.033	C	ADJUSTMENT	2004	GPS2027
2706306.138	832792.672	1460694.713	16124523.230	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_D-AC9325-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_D-AC9325-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_D-AC9325-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 E **NGS Name:** 4009 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9324 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	35	111 N	24 W	442302.75	934002.76	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 E 1958

3.0 MILES EAST OF LE CENTER, 3.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 29.5, 155.0 FEET WEST OF COUNTY ROAD 158, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 0.2 FOOT NORTH OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.073	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1050.106	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1050.106	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.890	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1049.844	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.155	.262		957.833	.197	2011	GPS - RTRN	2024	RTRN2024
1050.165	.262		957.846	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.323 12B = -92.319 09 = -92.234 03 = -92.044

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.75098	93 40 02.75929	360360.145	169497.857	.131	3	GPS - RTRN	2024	RTRN2024
44 23 02.75119	93 40 02.76023	360360.077	169497.879	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711605.982	832815.510	1465992.912	16124481.334	.131	3	GPS - RTRN	2024	RTRN2024
2711605.913	832815.530	1465992.845	16124481.356	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_E-AC9324-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_E-AC9324-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_E-AC9324-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 F
NGS Name: 4009 F
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9323 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	30	111 N	23 W	442304.85	933843.59	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 F 1958

4.1 MILES EAST OF LE CENTER, 4.1 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 30.6, 225.0 FEET EAST OF COUNTY ROAD 136 (191ST AVENUE), 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 14.6 FEET EAST OF A POWER POLE, 0.2 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.594	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1079.634	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1079.634	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.404	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1079.352	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1079.594	.262		987.459	.197	2011	GPS - RTRN	2024	RTRN2024
1079.591	.262		987.459	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.132 12B = -92.129 09 = -92.050 03 = -91.867

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.85032	93 38 43.58823	366111.176	169673.675	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.85057	93 38 43.58709	366111.259	169673.700	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717354.143	833052.251	1471741.866	16124647.787	.131	3	GPS - RTRN	2024	RTRN2024
2717354.225	833052.276	1471741.949	16124647.811	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_F-AC9323-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_F-AC9323-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_F-AC9323-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 G **NGS Name:** 4009 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9322 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	30	111 N	23 W	442304.76	933735.54	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 G 1958

4.3 MILES SOUTHWEST OF MONTGOMERY, 1.0 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 31.45, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 175.0 FEET WEST OF COUNTY ROAD 140, 113.0 FEET EAST OF AN ENTRANCE, 83.1 FEET EAST OF A POWER POLE, 0.8 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.527	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1076.586	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1076.586	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.350	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1080.142	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.546	.262		984.572	.197	2011	GPS - RTRN	2024	RTRN2024
1076.543	.262		984.572	.197	2011	GPS - RTRN	2016	RTRN2016
			984.588	.016	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			984.667	.018	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1076.573	.131		984.837	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1076.573	.131		984.837	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -91.972 12B = -91.972 09 = -91.890 03 = -91.706

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.76310	93 37 35.53855	371053.104	169634.462	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.76397	93 37 35.53808	371053.139	169634.550	.131	3	GPS - RTRN	2016	RTRN2016
44 23 04.76388	93 37 35.53864	371053.098	169634.541	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.76393	93 37 35.53939	371053.044	169634.547	.023		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.76332	93 37 35.53903	371053.070	169634.485	.033	C	ADJUSTMENT	2004	GPS2027
44 23 04.76332	93 37 35.53903	371053.070	169634.485	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2722295.621	833065.424	1476681.691	16124600.601	.131	3	GPS - RTRN	2024	RTRN2024
2722295.655	833065.512	1476681.726	16124600.689	.131	3	GPS - RTRN	2016	RTRN2016
2722295.614	833065.503	1476681.685	16124600.681	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2722295.560	833065.508	1476681.631	16124600.686	.023		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2722295.587	833065.446	1476681.657	16124600.624	.033	C	ADJUSTMENT	2004	GPS2027
2722295.587	833065.446	1476681.657	16124600.624	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_G-AC9322-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_G-AC9322-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_G-AC9322-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 H **NGS Name:** 4009 H

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9317 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	23 W	442303.08	933620.76	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4009 H 1958

3.8 MILES SOUTH-SOUTHWEST OF MONTGOMERY, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), 80.5 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 55.3, 123.0 FEET SOUTH OF TRUNK HIGHWAY 99, 78.5 FEET NORTHWEST OF A POWER POLE, 76.7 FEET SOUTHEAST OF A POWER POLE, 0.4 FOOT NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.189	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1066.254	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1066.228	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1066.228	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY
1066.189	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1065.943	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1065.897	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.192	.262		974.394	.197	2011	GPS - RTRN	2024	RTRN2024
1066.189			974.407	.010	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1066.189	.131		974.660	.066	1996	GPS - STATIC	2020	HTH13
1066.189			974.407	.010	2011	GPS - STATIC	2020	HTH13
1066.254	.262		974.453	.197	2011	GPS - RTRN	2017	RTRN2017
1066.245	.262		974.447	.197	2011	GPS - RTRN	2016	RTRN2016
			974.407	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			974.486	.012	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1066.205	.131		974.660	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1066.205	.131		974.660	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -91.798 12B = -91.801 09 = -91.716 03 = -91.539

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.08243	93 36 20.75555	376483.108	169432.191	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.08266	93 36 20.75606	376483.071	169432.214	.010		ADJUSTMENT	2020	GPS3368
44 23 03.08266	93 36 20.75606	376483.071	169432.214	.010	C	GPS - STATIC	2020	HTH13
44 23 03.08239	93 36 20.75534	376483.123	169432.187	.131	3	GPS - RTRN	2017	RTRN2017
44 23 03.08294	93 36 20.75661	376483.031	169432.243	.131	3	GPS - RTRN	2016	RTRN2016
44 23 03.08266	93 36 20.75606	376483.071	169432.214	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.08271	93 36 20.75680	376483.017	169432.220	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.08216	93 36 20.75679	376483.017	169432.164	.033	C	GPS - STATIC	2020	HTH13
44 23 03.08216	93 36 20.75679	376483.017	169432.164	.033	C	ADJUSTMENT	2004	GPS2027
44 23 03.08216	93 36 20.75679	376483.017	169432.164	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727726.818	832920.741	1482109.116	16124389.635	.131	3	GPS - RTRN	2024	RTRN2024
2727726.781	832920.764	1482109.079	16124389.658	.010		ADJUSTMENT	2020	GPS3368
2727726.781	832920.764	1482109.079	16124389.658	.010	C	GPS - STATIC	2020	HTH13
2727726.833	832920.737	1482109.131	16124389.630	.131	3	GPS - RTRN	2017	RTRN2017
2727726.741	832920.792	1482109.039	16124389.687	.131	3	GPS - RTRN	2016	RTRN2016
2727726.781	832920.764	1482109.079	16124389.658	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727726.727	832920.769	1482109.025	16124389.664	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727726.728	832920.713	1482109.026	16124389.608	.033	C	GPS - STATIC	2020	HTH13
2727726.728	832920.713	1482109.026	16124389.608	.033	C	ADJUSTMENT	2004	GPS2027
2727726.728	832920.713	1482109.026	16124389.608	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_H-AC9317-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_H-AC9317-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_H-AC9317-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 J **NGS Name:** 4009 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4671 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	24 W	442302.79	934414.41	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 2 IN.	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)
Disk Type: VERTICAL CONTROL DISK
Mon. Agency: MNDT

Description: (2016) **Stamping:** 4009 J 1991

IN LE CENTER, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 114 IN LE CENTER, 83.5 FEET SOUTH OF TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 99 MILEPOINT 26.05, 119.0 FEET EAST OF COUNTY ROAD 114, 79.6 FEET EAST-SOUTHEAST OF THE SOUTHEAST CORNER OF A JUNCTION BOX, 1.2 FEET WEST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.730	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1050.730	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1050.730	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1050.730	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1050.730	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1050.730	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1050.730	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1050.726	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1050.533	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.543	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.739	.262		958.043	.197	2011	GPS - RTRN	2024	RTRN2024
1050.759	.262		958.056	.197	2011	GPS - RTRN	2016	RTRN2016
1050.953	.262		958.249	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.700 12B = -92.703 09 = -92.608 03 = -92.411

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.79499	93 44 14.40697	342084.649	169629.500	.131	3	GPS - RTRN	2024	RTRN2024
44 23 02.79558	93 44 14.40480	342084.807	169629.558	.131	3	GPS - RTRN	2016	RTRN2016
44 23 02.79538	93 44 14.40593	342084.725	169629.539	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2693332.289	832753.433	1447725.044	16124642.439	.131	3	GPS - RTRN	2024	RTRN2024
2693332.447	832753.494	1447725.202	16124642.497	.131	3	GPS - RTRN	2016	RTRN2016
2693332.365	832753.473	1447725.120	16124642.478	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_J-AE4671-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_J-AE4671-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_J-AE4671-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4009 K **NGS Name:** 4009 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6394 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	35	111 N	24 W	442302.80	934015.21	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 48 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4009 K 2016

2.8 MILE EAST OF LE CENTER, 2.8 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 29.3, 62.3 FEET SOUTH OF TRUNK HIGHWAY 99, 239.0 FEET EAST OF DRIVEWAY NUMBER 20343, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.875	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1042.905	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.908	.262		950.562	.197	2011	GPS - RTRN	2024	RTRN2024
1042.882	.262		950.539	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.346 12B = -92.346 09 = -92.260 03 = -92.070

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.79868	93 40 15.21167	359455.839	169508.614	.131	3	GPS - RTRN	2024	RTRN2024
44 23 02.79845	93 40 15.21076	359455.905	169508.590	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2710701.720	832816.680	1465088.994	16124493.548	.131	3	GPS - RTRN	2024	RTRN2024
2710701.787	832816.657	1465089.060	16124493.524	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_K-DQ6394-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_K-DQ6394-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4009_K-DQ6394-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4010 B **NGS Name:** 4010 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6390 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	35	111 N	23 W	442305.97	933355.62	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 11 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4010 B 1989

6.0 MILES SOUTHEAST OF MONTGOMERY, 2.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 34.6, 90.0 FEET WEST OF COUNTY ROAD 3, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 0.5 FOOT WEST OF A WITNESS POST.

Station Notes

THE ROD DEPTH IS UNKNOWN.
THE DISK WAS RETURNED TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1116.586	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1116.658	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1116.520	.262		1025.037	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.473 12B = -91.483 09 = -91.394 03 = -91.220

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.97432	93 33 55.62006	387024.977	169666.755	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738264.356	833266.999	1492646.963	16124607.050	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B-DQ6390-3N-01JUN2016.jpg	N	Jun 1, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B-DQ6390-2-01JUN2016.jpg		Jun 1, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B-DQ6390-1-01JUN2016.jpg		Jun 1, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4010 B RESET

Mn/DOT Name: 4010 B RESET **NGS Name:** 4010 B RESET

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	35	111 N	23 W	442305.97	933355.62		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2024	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 11 FT)
Disk Type: METAL ROD (WITH REMOVABLE ID DISK)
Mon. Agency: MNDT

Description:

Stamping: 4010 B RESET 2024

6.0 MILES SOUTHEAST OF MONTGOMERY, 2.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 34.6, 90.0 FEET WEST OF COUNTY ROAD 3, 70.0 FEET NORTH OF TRUNK HIGHWAY 99, 1.0 FOOT WEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1116.244	.262		1024.772	.197	2011	GPS - RTRN	2024	RTRN2024

No Geoid Separations Available

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.97282	93 33 55.61961	387025.008	169666.603	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738264.389	833266.847	1492646.995	16124606.898	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B_RESET-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B_RESET-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_B_RESET-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4010 C **NGS Name:** 4010 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6389 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	111 N	23 W	442304.83	933235.59	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 5 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 11 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4010 C 1989

7.0 MILES SOUTHEAST OF MONTGOMERY, 3.1 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 35.7, 440.0 FEET EAST OF 141ST AVENUE, 57.0 FEET SOUTH OF TRUNK HIGHWAY 99, 6.0 FEET WEST-NORTHWEST OF A POWER POLE, 0.8 FOOT NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.166	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1097.239	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.275	.262		1005.917	.197	2011	GPS - RTRN	2024	RTRN2024
1097.239	.262		1005.871	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.358 12B = -91.368 09 = -91.276 03 = -91.102

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.82632	93 32 35.59053	392836.391	169520.571	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.82490	93 32 35.58960	392836.458	169520.427	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2744076.303	833182.437	1498455.699	16124451.524	.131	3	GPS - RTRN	2024	RTRN2024
2744076.371	833182.294	1498455.766	16124451.380	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_C-DQ6389-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_C-DQ6389-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_C-DQ6389-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4010 D **NGS Name:** 4010 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8221 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	111 N	23 W	442303.97	933129.21	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4010 D 1999

3.5 MILES SOUTH-SOUTHEAST OF MONTGOMERY, 4.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 36.6, 100.0 FEET SOUTH OF TRUNK HIGHWAY 99, 42.5 FEET SOUTH OF A POWER POLE, 39.0 FEET WEST OF COUNTY ROAD 137 (LE SUEUR AVENUE), 11.5 FEET NORTH OF A POWER POLE, 0.5 FOOT NORTH OF A WITNESS POST.

Station Pair: NJOES - LE SUEUR, MN

Station Notes
THE ROD DEPTH IS UNKNOWN.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1136.658	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1136.727	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1136.766	.262		1045.470	.197	2011	GPS - RTRN	2024	RTRN2024
1136.760	.262		1045.464	.197	2011	GPS - OPUS	2019	GPSBM
1136.717	.262		1045.421	.197	2011	GPS - RTRN	2019	RTRN2019
1136.809	.262		1045.503	.197	2011	GPS - RTRN	2016	RTRN2016
			1045.408	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1045.500	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1136.710	.131		1045.657	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1136.710	.131		1045.657	.066	1996	GPS - STATIC	2008	HRYCE
			1045.500	.021	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1136.743	.131		1045.657	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1136.743	.131		1045.657	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.296 12B = -91.306 09 = -91.220 03 = -91.043

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.97004	93 31 29.20823	397656.901	169410.232	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.96971	93 31 29.20915	397656.834	169410.199	.131	3	GPS - OPUS	2019	GPSBM
44 23 03.96893	93 31 29.20543	397657.104	169410.119	.131	3	GPS - RTRN	2019	RTRN2019
44 23 03.96940	93 31 29.20853	397656.879	169410.167	.131	3	GPS - RTRN	2016	RTRN2016
44 23 03.97003	93 31 29.20895	397656.849	169410.231	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.96994	93 31 29.20980	397656.787	169410.223	.033	C	ADJUSTMENT	2009	GPS2437-B
44 23 03.96993	93 31 29.20982	397656.786	169410.222	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.96933	93 31 29.20936	397656.819	169410.161	.033	C	ADJUSTMENT	2008	GPS2437
44 23 03.96933	93 31 29.20936	397656.819	169410.161	.033	C	GPS - STATIC	2008	HRYCE
44 23 03.96933	93 31 29.20936	397656.819	169410.161	.033	C	ADJUSTMENT	2003	GPS1911
44 23 03.96933	93 31 29.20936	397656.819	169410.161	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748897.138	833123.212	1503273.996	16124333.429	.131	3	GPS - RTRN	2024	RTRN2024
2748897.072	833123.178	1503273.929	16124333.396	.131	3	GPS - OPUS	2019	GPSBM
2748897.342	833123.100	1503274.198	16124333.316	.131	3	GPS - RTRN	2019	RTRN2019
2748897.117	833123.147	1503273.974	16124333.364	.131	3	GPS - RTRN	2016	RTRN2016
2748897.086	833123.210	1503273.944	16124333.428	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748897.025	833123.201	1503273.882	16124333.420	.033	C	ADJUSTMENT	2009	GPS2437-B
2748897.023	833123.200	1503273.881	16124333.419	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748897.057	833123.139	1503273.913	16124333.358	.033	C	ADJUSTMENT	2008	GPS2437
2748897.057	833123.139	1503273.913	16124333.358	.033	C	GPS - STATIC	2008	HRYCE
2748897.057	833123.139	1503273.913	16124333.358	.033	C	ADJUSTMENT	2003	GPS1911
2748897.057	833123.139	1503273.913	16124333.358	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_D-DF8221-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_D-DF8221-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_D-DF8221-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4010 E **NGS Name:** 4010 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6391 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	111 N	23 W	442305.75	933441.97	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4010 E 2016

4.1 MILES SOUTH OF MONTGOMERY, 1.35 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILE SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 33.9, 54.7 FEET NORTH OF TRUNK HIGHWAY 99, 37.1 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.120	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1056.189	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.179	.262		964.614	.197	2011	GPS - RTRN	2024	RTRN2024
1056.166	.262		964.601	.197	2011	GPS - OPUS	2021	GPSBM
1056.120	.262		964.555	.197	2011	GPS - OPUS	2021	GPSBM
1056.156	.262		964.585	.197	2011	GPS - RTRN	2020	RTRN2020
1056.028	.262		964.457	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.565 12B = -91.571 09 = -91.486 03 = -91.309

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.74737	93 34 41.96792	383658.927	169661.824	.131	3	GPS - RTRN	2024	RTRN2024
44 23 05.74793	93 34 41.96824	383658.904	169661.881	.131	3	GPS - OPUS	2021	GPSBM
44 23 05.74825	93 34 41.96910	383658.842	169661.914	.131	3	GPS - OPUS	2021	GPSBM
44 23 05.74844	93 34 41.96804	383658.919	169661.933	.131	3	GPS - RTRN	2020	RTRN2020
44 23 05.74858	93 34 41.96790	383658.929	169661.947	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2734898.948	833226.392	1489282.315	16124607.567	.131	3	GPS - RTRN	2024	RTRN2024
2734898.924	833226.448	1489282.292	16124607.624	.131	3	GPS - OPUS	2021	GPSBM
2734898.862	833226.480	1489282.230	16124607.657	.131	3	GPS - OPUS	2021	GPSBM
2734898.938	833226.500	1489282.307	16124607.675	.131	3	GPS - RTRN	2020	RTRN2020
2734898.948	833226.514	1489282.317	16124607.689	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_E-DQ6391-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_E-DQ6391-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4010_E-DQ6391-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 C **NGS Name:** 4011 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4673 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	111 N	25 W	442305.75	934606.43	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** 4011 C 1991

2.0 MILES WEST OF LE CENTER, 0.8 MILE WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), 300.0 FEET NORTH OF COUNTY ROAD 22, 28.5 FEET WEST OF COUNTY ROAD 113 (251ST AVENUE), 3.0 FEET SOUTHEAST OF A POWER POLE, 2.2 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.880	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
999.880	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
999.880	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
999.880	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
999.880	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
999.880	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
999.877	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.699	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.929	.262		907.154	.197	2011	GPS - RTRN	2024	RTRN2024
999.890	.262		907.114	.197	2011	GPS - OPUS	2021	GPSBM
999.913	.262		907.141	.197	2011	GPS - RTRN	2020	RTRN2020
999.860	.262		907.085	.197	2011	GPS - RTRN	2016	RTRN2016
999.837	.262		907.062	.197	2011	GPS - RTRN	2013	RTRN2013
			907.131	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			907.216	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
999.867	.131		907.334	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
999.867	.131		907.334	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.772 12B = -92.775 09 = -92.687 03 = -92.490

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.74700	93 46 06.42502	333951.869	169990.089	.131	3	GPS - RTRN	2024	RTRN2024
44 23 05.74656	93 46 06.42601	333951.797	169990.045	.131	3	GPS - OPUS	2021	GPSBM
44 23 05.74668	93 46 06.42527	333951.851	169990.057	.131	3	GPS - RTRN	2020	RTRN2020
44 23 05.74732	93 46 06.42633	333951.774	169990.122	.131	3	GPS - RTRN	2016	RTRN2016
44 23 05.74679	93 46 06.42512	333951.862	169990.068	.131	3	GPS - RTRN	2013	RTRN2013
44 23 05.74694	93 46 06.42570	333951.820	169990.083	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.74702	93 46 06.42646	333951.765	169990.092	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.74648	93 46 06.42599	333951.798	169990.037	.033	C	ADJUSTMENT	2004	GPS2027
44 23 05.74648	93 46 06.42599	333951.798	169990.037	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685197.111	833027.764	1439596.099	16125016.010	.131	3	GPS - RTRN	2024	RTRN2024
2685197.039	833027.719	1439596.027	16125015.966	.131	3	GPS - OPUS	2021	GPSBM
2685197.093	833027.732	1439596.081	16125015.978	.131	3	GPS - RTRN	2020	RTRN2020
2685197.016	833027.796	1439596.005	16125016.044	.131	3	GPS - RTRN	2016	RTRN2016
2685197.104	833027.743	1439596.092	16125015.989	.131	3	GPS - RTRN	2013	RTRN2013
2685197.062	833027.758	1439596.050	16125016.004	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685197.006	833027.766	1439595.995	16125016.013	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685197.041	833027.711	1439596.029	16125015.958	.033	C	ADJUSTMENT	2004	GPS2027
2685197.041	833027.711	1439596.029	16125015.958	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_C-AE4673-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_C-AE4673-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_C-AE4673-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 D **NGS Name:** 4011 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4674 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	111 N	25 W	442305.15	934641.27	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	VERTICAL CONTROL DISK	MNDT

Description: (1991) **Stamping:** 4011 D 1991

2.35 MILES WEST OF LE CENTER, 1.25 MILES WEST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 112 MILEPOINT 13.65, 230.0 FEET NORTH OF TRUNK HIGHWAY 112, 26.5 FEET EAST OF A FARM DRIVE (NUMBER 25586), 2.2 FEET SOUTH OF A POWER POLE, 1.0 FOOT SOUTH OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.262	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1007.258	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.081	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			914.509	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			914.595	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1007.281	.131		914.709	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1007.249	.131		914.709	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.792 12B = -92.792 09 = -92.703 03 = -92.510

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.14638	93 46 41.27055	331420.838	169949.070	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.14646	93 46 41.27131	331420.783	169949.078	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.14592	93 46 41.27084	331420.816	169949.024	.033	C	ADJUSTMENT	2004	GPS2027
44 23 05.14592	93 46 41.27084	331420.816	169949.024	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682666.957	832959.928	1437066.009	16124979.092	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682666.902	832959.935	1437065.954	16124979.101	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682666.937	832959.881	1437065.987	16124979.046	.033	C	ADJUSTMENT	2004	GPS2027
2682666.937	832959.881	1437065.987	16124979.046	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D-AE4674-3N-17MAY2010.jpg	N	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D-AE4674-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D-AE4674-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4011 D RESET

Mn/DOT Name: 4011 D RESET **NGS Name:** 4011 D RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1989 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	111 N	25 W	442305.15	934641.27	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2013	GOOD	Horz=NO Vert=NO	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2016)

Stamping: 4011 D RESET 2013

2.35 MILES WEST OF LE CENTER, 1.25 MILES WEST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99 IN LE CENTER, AT TRUNK HIGHWAY 112 MILEPOINT 13.65, 230.0 FEET NORTH OF TRUNK HIGHWAY 112, 26.5 FEET EAST OF DRIVEWAY NUMBER 25586, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1007.190	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1007.196	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1007.196	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1007.131	.262		914.335	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.792 12B = -92.792 09 = -92.703 03 = -92.510

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 23 05.14662	93 46 41.27092	331420.811	169949.094	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2682666.931	832959.952	1437065.982	16124979.116	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D_RESET-DP1989-3E-03SEP2013.jpg	E	Sep 3, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D_RESET-DP1989-2-03SEP2013.jpg		Sep 3, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_D_RESET-DP1989-1-03SEP2013.jpg		Sep 3, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 E
NGS Name: 4011 E
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4676 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	25 W	442304.05	934805.71	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	GOOD	Horz=NO Vert=NO	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 E 1991

3.5 MILES WEST OF LE CENTER, 2.45 MILES WEST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 112 MILEPOINT 12.45, 145.0 FEET NORTH OF TRUNK HIGHWAY 112, 45.6 FEET WEST-SOUTHWEST OF THE SOUTHWEST CORNER OF A SHED, 26.0 FEET EAST OF A FIELD ENTRANCE, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.609	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1016.619	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1016.619	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1016.619	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1016.615	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.442	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.530	.262		923.719	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.815 12B = -92.815 09 = -92.729 03 = -92.539

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.05447	93 48 05.70667	325288.009	169887.727	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2676535.852	832833.598	1430935.506	16124927.668	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_E-AE4676-3NE-17MAY2010.jpg	NE	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_E-AE4676-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_E-AE4676-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 F **NGS Name:** 4011 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4677 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	27	111 N	25 W	442308.00	934850.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2010	NOT FOUND	Horz=NO Vert=NO	NO		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4011 F 1991

4.5 MILES WEST OF LE CENTER, 3.15 MILES WEST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 112 MILEPOINT 11.75, 136.5 FEET NORTH OF TRUNK HIGHWAY 112, 2.6 FEET SOUTH-SOUTHWEST OF THE SOUTHEAST POLE ON A POWER LINE, 1.2 FEET SOUTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.963	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1005.959	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.785	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -92.811 12B = -92.808 09 = -92.726 03 = -92.536

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4011 G **NGS Name:** 4011 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4679 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	111 N	25 W	442305.91	935034.34	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2010	GOOD	Horz=NO Vert=NO	YES		RECESSED 5 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 55 FT)	VERTICAL CONTROL DISK	MNDT

Description: (1991) **Stamping:** 4011 G 1991

5.6 MILES WEST OF LE CENTER, 4.5 MILES WEST ON TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99 IN LE CENTER, AT TRUNK HIGHWAY 112 MILEPOINT 10.45, 285.0 FEET NORTH OF TRUNK HIGHWAY 112, 19.5 FEET EAST OF A FARM DRIVE (NUMBER 28788), 13.7 FEET SOUTH OF A POWER POLE, 0.6 FOOT SOUTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
952.518	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
952.518	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
952.350	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			859.752	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			859.838	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
952.524	.131		859.943	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
952.524	.131		859.943	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.805 12B = -92.798 09 = -92.723 03 = -92.542

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.90626	93 50 34.33973	314495.574	170166.197	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.90634	93 50 34.34049	314495.519	170166.206	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.90576	93 50 34.34007	314495.549	170166.147	.033	C	ADJUSTMENT	2004	GPS2027
44 23 05.90576	93 50 34.34007	314495.549	170166.147	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2665742.355	832997.638	1420147.746	16125223.433	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2665742.300	832997.646	1420147.691	16125223.442	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2665742.331	832997.588	1420147.721	16125223.383	.033	C	ADJUSTMENT	2004	GPS2027
2665742.331	832997.588	1420147.721	16125223.383	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_G-AE4679-3N-12MAY2010.jpg	N	May 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_G-AE4679-2-12MAY2010.jpg		May 12, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_G-AE4679-1-12MAY2010.jpg		May 12, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Geodetic Data Sheet (Feet)
GSID Station # 17430

4011 H

04/28/2026
Sheet Help

Mn/DOT Name: 4011 H
NGS Name: 4011 H
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4680 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	25 W	442302.78	935130.78	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 H 1991

6.4 MILES WEST OF LE CENTER, 5.3 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), 61.0 FEET SOUTH OF COUNTY ROAD 22, 17.0 FEET EAST OF A FIELD ENTRANCE EXTENDED, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
985.730	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
985.730	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
985.566	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
985.710	.262		892.912	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.798 12B = -92.792 09 = -92.713 03 = -92.536

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.78125	93 51 30.77855	310394.104	169885.691	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661644.576	832673.714	1416047.414	16124949.648	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_H-AE4680-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_H-AE4680-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_H-AE4680-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 J **NGS Name:** 4011 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4681 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	111 N	26 W	442301.42	935320.26	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 J 1991

8.0 MILES WEST OF LE CENTER, 7.6 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 IN LE CENTER, 210.0 FEET SOUTH OF COUNTY ROAD 22, 30.0 FEET WEST OF 311TH AVENUE, 3.2 FEET NORTH OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
961.612	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
961.612	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
961.612	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
961.616	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
961.458	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
961.596	.262		868.830	.197	2011	GPS - RTRN	2024	RTRN2024
961.635	.262		868.870	.197	2011	GPS - OPUS	2021	GPSBM
961.589	.262		868.834	.197	2011	GPS - RTRN	2020	RTRN2020
			868.850	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			868.939	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
961.612	.131		869.060	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
961.612	.131		869.060	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.766 12B = -92.759 09 = -92.680 03 = -92.510

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.41931	93 53 20.26097	302441.970	169819.767	.131	3	GPS - RTRN	2024	RTRN2024
44 23 01.41911	93 53 20.26115	302441.957	169819.747	.131	3	GPS - OPUS	2021	GPSBM
44 23 01.41875	93 53 20.26088	302441.976	169819.711	.131	3	GPS - RTRN	2020	RTRN2020
44 23 01.41963	93 53 20.26057	302441.999	169819.799	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.41972	93 53 20.26136	302441.942	169819.809	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 01.41910	93 53 20.26099	302441.968	169819.746	.033	C	ADJUSTMENT	2004	GPS2027
44 23 01.41910	93 53 20.26099	302441.968	169819.746	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653694.532	832523.525	1408098.233	16124896.564	.131	3	GPS - RTRN	2024	RTRN2024
2653694.519	832523.505	1408098.220	16124896.544	.131	3	GPS - OPUS	2021	GPSBM
2653694.538	832523.468	1408098.239	16124896.508	.131	3	GPS - RTRN	2020	RTRN2020
2653694.561	832523.557	1408098.263	16124896.597	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653694.504	832523.566	1408098.205	16124896.606	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653694.531	832523.504	1408098.231	16124896.543	.033	C	ADJUSTMENT	2004	GPS2027
2653694.531	832523.504	1408098.231	16124896.543	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_J-AE4681-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_J-AE4681-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_J-AE4681-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 K **NGS Name:** 4011 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4683 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	111 N	26 W	442343.68	935433.48	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 54 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2004) **Stamping:** 4011 K 1991

4.8 MILES SOUTH OF LE SUEUR, 4.3 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 26, AT TRUNK HIGHWAY 112 MILEPOINT 6.45, 32.0 FEET WEST OF TRUNK HIGHWAY 112, 10.0 FEET NORTH OF A FIELD ENTRANCE, 1.7 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
907.334	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
907.344	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
907.190	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			814.647	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			814.736	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
907.347	.131		814.854	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
907.347	.131		814.854	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.687 12B = -92.684 09 = -92.605 03 = -92.434

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 43.68010	93 54 33.47570	297165.547	174149.232	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 43.68018	93 54 33.47650	297165.489	174149.241	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 43.67961	93 54 33.47609	297165.518	174149.183	.033	C	ADJUSTMENT	2004	GPS2027
44 23 43.67961	93 54 33.47609	297165.518	174149.183	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648373.149	836796.312	1402830.800	16129232.885	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648373.091	836796.320	1402830.742	16129232.894	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648373.121	836796.263	1402830.771	16129232.836	.033	C	ADJUSTMENT	2004	GPS2027
2648373.121	836796.263	1402830.771	16129232.836	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K-AE4683-3S-12MAY2010.jpg	S	May 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K-AE4683-2-12MAY2010.jpg		May 12, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K-AE4683-1-14MAY2004.jpg		May 14, 2004

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4011 K RESET

Mn/DOT Name: 4011 K RESET
NGS Name: 4011 K RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3253 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	111 N	26 W	442343.68	935433.48	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 54 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2019)

Stamping: 4011 K RESET 2019

4.8 MILES SOUTH OF LE SUEUR, 4.3 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 26, AT TRUNK HIGHWAY 112 MILEPOINT 6.45, 32.0 FEET WEST OF TRUNK HIGHWAY 112, 10.0 FEET NORTH OF A FIELD ENTRANCE, 1.7 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
907.269	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
907.269	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Geoid Separations(ft): GEOID18 = -92.687 12B = -92.684 09 = -92.605 03 = -92.434

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K_RESET-DR3253-3W-16AUG2019.jpg	W	Aug 16, 2019
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K_RESET-DR3253-2-16AUG2019.jpg		Aug 16, 2019
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_K_RESET-DR3253-1-16AUG2019.jpg		Aug 16, 2019

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 L **NGS Name:** 4011 L

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4684 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	111 N	26 W	442422.65	935434.62	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 L 1991

4.0 MILES SOUTH OF LE SUEUR, 3.5 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 26 IN LE SUEUR, AT TRUNK HIGHWAY 112 MILEPOINT 5.65, 127.0 FEET WEST OF TRUNK HIGHWAY 112, 1.0 FOOT NORTH OF A FENCE LINE, 1.1 FEET EAST OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
911.265	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
911.274	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
911.124	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
			818.614	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			818.699	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
911.251	.131		818.821	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
911.251	.131		818.821	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.641 12B = -92.641 09 = -92.562 03 = -92.388

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 24 22.64761	93 54 34.61743	297120.113	178096.188	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 24 22.64769	93 54 34.61823	297120.055	178096.197	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 24 22.64714	93 54 34.61780	297120.085	178096.141	.033	C	ADJUSTMENT	2004	GPS2027
44 24 22.64714	93 54 34.61780	297120.085	178096.141	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648285.894	840742.096	1402791.754	16133178.418	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648285.836	840742.104	1402791.696	16133178.427	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648285.867	840742.048	1402791.727	16133178.371	.033	C	ADJUSTMENT	2004	GPS2027
2648285.867	840742.048	1402791.727	16133178.371	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L-AE4684-3W-17MAY2010.jpg	W	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L-AE4684-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L-AE4684-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4011 L RESET

Mn/DOT Name: 4011 L RESET **NGS Name:** 4011 L RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3252 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	111 N	26 W	442422.65	935434.62	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2019	GOOD	Horz=NO Vert=NO	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013) **Stamping:** 4011 L RESET 2013

4.0 MILES SOUTH OF LE SUEUR, 3.5 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 26 IN LE SUEUR, AT TRUNK HIGHWAY 112 MILEPOINT 5.65, 127.0 FEET WEST OF TRUNK HIGHWAY 112, 1.1 FEET EAST OF A WITNESS POST.

Station Notes

THE MARK APPEARS WEST OF THE ROAD, BETWEEN NORTH-SOUTH CROP FIELDS AND A POSSIBLE DITCH, ABOUT 1/3 OF THE WAY TOWARD THE FIRST TREE. THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
911.061	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
911.061	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
910.976	.262		818.338	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.641 12B = -92.641 09 = -92.562 03 = -92.388

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 22.64712	93 54 34.61812	297120.062	178096.139	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648285.844	840742.047	1402791.704	16133178.369	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L_RESET-DR3252-3W-03SEP2013.jpg	W	Sep 3, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L_RESET-DR3252-2-03SEP2013.jpg		Sep 3, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_L_RESET-DR3252-1-03SEP2013.jpg		Sep 3, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 M
NGS Name: 4011 M
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4685 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	111 N	26 W	442448.84	935436.59	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	VERTICAL CONTROL DISK	MNDT

Description: (1991) **Stamping:** 4011 M 1991

3.5 MILES SOUTH OF LE SUEUR, 3.0 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND COUNTY ROAD 26 IN LE SUEUR, 250.0 FEET WEST OF COUNTY ROAD 22T, 29.5 FEET NORTH OF 370TH STREET, 3.3 FEET SOUTHEAST OF A POWER POLE, 0.7 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
859.381	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
859.381	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
859.381	.016	2/1				VERTICAL ADJUSTMENT	2010	00000661
859.381	.016	2/1				VERTICAL CONTROL SURVEY	2004	VSUEU
859.381	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
859.391	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
859.240	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
859.352	.262		766.741	.197	2011	GPS - RTRN	2024	RTRN2024
859.250	.262		766.639	.197	2011	GPS - OPUS	2021	GPSBM
859.290	.262		766.682	.197	2011	GPS - RTRN	2020	RTRN2020
			766.796	.012	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			766.882	.013	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
859.381	.131		767.000	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
859.381	.131		767.000	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.608 12B = -92.608 09 = -92.529 03 = -92.355

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.84309	93 54 36.59377	297001.844	180750.323	.131	3	GPS - RTRN	2024	RTRN2024
44 24 48.84383	93 54 36.59364	297001.854	180750.398	.131	3	GPS - OPUS	2021	GPSBM
44 24 48.84331	93 54 36.59228	297001.953	180750.345	.131	3	GPS - RTRN	2020	RTRN2020
44 24 48.84360	93 54 36.59256	297001.933	180750.374	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.84368	93 54 36.59337	297001.874	180750.383	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.84312	93 54 36.59289	297001.908	180750.326	.033	C	ADJUSTMENT	2004	GPS2027
44 24 48.84312	93 54 36.59289	297001.908	180750.326	.033	C	GPS - STATIC	2004	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648139.518	843394.513	1402677.819	16135831.738	.131	3	GPS - RTRN	2024	RTRN2024
2648139.527	843394.588	1402677.830	16135831.813	.131	3	GPS - OPUS	2021	GPSBM
2648139.626	843394.535	1402677.928	16135831.759	.131	3	GPS - RTRN	2020	RTRN2020
2648139.606	843394.565	1402677.908	16135831.789	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648139.547	843394.573	1402677.849	16135831.797	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648139.582	843394.516	1402677.883	16135831.740	.033	C	ADJUSTMENT	2004	GPS2027
2648139.582	843394.516	1402677.883	16135831.740	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_M-AE4685-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_M-AE4685-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_M-AE4685-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 N **NGS Name:** 4011 N

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4686 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	14	111 N	26 W	442527.46	935436.02	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 N 1991

2.5 MILES SOUTH OF LE SUEUR, 2.25 MILES SOUTH ON TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 26, AT TRUNK HIGHWAY 112 MILEPOINT 4.4, 210.0 FEET WEST OF TRUNK HIGHWAY 112, 10.0 FEET NORTH OF A FARM DRIVE NUMBER 36256, 2.0 FEET EAST OF A POWER POLE, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE. THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
854.145	.016	2/1				VERTICAL ADJUSTMENT	2010	00000661
854.145	.016	2/1				VERTICAL CONTROL SURVEY	2004	VSUEU
854.149	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
854.155	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
854.007	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			761.609	.026	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			761.744	.050	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
854.132	.131		761.869	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
854.132	.131		761.869	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.562 12B = -92.562 09 = -92.483 03 = -92.310

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 27.46185	93 54 36.01855	297080.745	184660.789	.026		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 27.46194	93 54 36.01933	297080.688	184660.799	.036		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 27.46140	93 54 36.01882	297080.725	184660.744	.033	C	ADJUSTMENT	2004	GPS2027
44 25 27.46140	93 54 36.01882	297080.725	184660.744	.033	C	GPS - STATIC	2004	HLESU

4011 N

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648176.962	847305.130	1402763.016	16139740.595	.026		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648176.905	847305.139	1402762.960	16139740.605	.036		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648176.942	847305.085	1402762.996	16139740.550	.033	C	ADJUSTMENT	2004	GPS2027
2648176.942	847305.085	1402762.996	16139740.550	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_N-AE4686-3W-17MAY2010.jpg	W	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_N-AE4686-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_N-AE4686-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 P

NGS Name: 4011 P

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4690 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	36	112 N	26 W	442733.00	935426.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 4011 P 1991

IN LE SUEUR, 0.4 MILE SOUTHEAST ON TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93, 158.0 FEET EAST OF SIXTH STREET EXTENDED, 30.5 FEET NORTH OF BRIDGE STREET EXTENDED, 92.3 FEET SOUTH-SOUTHWEST OF A LIGHT POLE WITH A TRANSFORMER, 56.5 FEET WEST-SOUTHWEST OF THE SOUTHWEST CORNER OF A FENCE AROUND A SWIMMING POOL, 3.1 FEET SOUTHEAST OF A WITNESS POST.

Station Notes

TIE LOCATION SEEMS TO PUT THE MONUMENT IN A PARKING LOT. THE LATITUDE AND LONGITUDE DON'T MATCH THE TIE AREA.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
835.366	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
835.376	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
835.231	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -92.382 12B = -92.378 09 = -92.313 03 = -92.136

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4011 Q
NGS Name: 4011 Q
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4692 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	25	112 N	26 W	442825.90	935420.10	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2010	GOOD	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MAT FOUNDATION (NON-PAVEMENT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 Q 1991

IN LE SUEUR, 0.5 MILE SOUTH-SOUTHWEST ON TRUNK HIGHWAY 112 FROM A TRUNK HIGHWAY 112 BRIDGE OVER LE SUEUR CREEK, 200.0 FEET SOUTH-SOUTHWEST OF A RAILROAD CROSSING, 45.0 FEET WEST-NORTHWEST OF TRUNK HIGHWAY 112, 11.5 FEET EAST-SOUTHEAST OF A RAILROAD TRACKS, IN THE NORTHEAST CORNER OF SIGNAL BASE 615.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
758.584	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
758.584	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1
758.584	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
758.591	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
758.450	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -92.290 12B = -92.287 09 = -92.218 03 = -92.044

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_Q-AE4692-3NE-18MAY2010.jpg	NE	May 18, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_Q-AE4692-2-18MAY2010.jpg		May 18, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_Q-AE4692-1-09APR2007.jpg		Apr 9, 2007

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 R **NGS Name:** 4011 R

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4693 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	25	112 N	26 W	442849.03	935356.57	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	GOOD	Horz=NO Vert=NO	YES	9296	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	VERTICAL CONTROL DISK	MNDT

Description: (2010) **Stamping:** 4011 R 1991

IN THE NORTH END OF LE SUEUR, 0.1 MILE SOUTHWEST ALONG TRUNK HIGHWAY 112 FROM TRUNK HIGHWAY 169 BRIDGE NUMBER 9297 OVER COUNTY ROAD 22, 21.0 FEET SOUTHEAST OF COUNTY ROAD 22, IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 112 BRIDGE NUMBER 9296.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
747.997	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
747.997	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
747.997	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
748.037	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
748.037	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
748.037	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
748.056	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1
748.056	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
748.063	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
747.925	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -92.234 12B = -92.231 09 = -92.165 03 = -91.991

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_R-AE4693-3N-18MAY2010.jpg	N	May 18, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_R-AE4693-2-18MAY2010.jpg		May 18, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_R-AE4693-1-18MAY2010.jpg		May 18, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 S
NGS Name: 4011 S
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4653 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	112 N	26 W	442742.56	935500.78	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1993	2019	GOOD	Horz=NO Vert=NO	YES	72007	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4011 S 1993

IN LE SUEUR, 0.8 MILE EAST-SOUTHEAST ALONG TRUNK HIGHWAY 93 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 93 SOUTH, IN AN ABUTMENT AT THE SOUTHEAST CORNER OF TRUNK HIGHWAY 93 BRIDGE NUMBER 72007 OVER THE MINNESOTA RIVER, AT TRUNK HIGHWAY 93 MILEPOINT 0.1, 24.5 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 93.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
747.315	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
747.367	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
747.364	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
747.364	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
747.374	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
747.233	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -92.375 12B = -92.372 09 = -92.300 03 = -92.126

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_S-AE4653-3SW-17MAY2010.jpg	SW	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_S-AE4653-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_S-AE4653-1-09APR2007.jpg		Apr 9, 2007

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 T **NGS Name:** 4011 T

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3251 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	12	111 N	26 W	442553.60	935432.14	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 49 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4011 T 2019

2.0 MILES SOUTH OF LE SUEUR, 3.9 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22 IN LE SUEUR, AT TRUNK HIGHWAY 112 MILEPOINT 3.9, 65.4 FEET EAST OF TRUNK HIGHWAY 112, 29.6 NORTH OF DRIVEWAY NUMBER 35757, 4.3 FEET SOUTHEAST OF A SOUTHWEST FENCE CORNER, 4.4 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
856.760	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
856.760	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
856.701	.262		764.175	.197	2011	GPS - RTRN	2024	RTRN2024
856.721	.262		764.191	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.529 12B = -92.526 09 = -92.451 03 = -92.277

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 53.59661	93 54 32.14410	297387.027	187304.752	.131	3	GPS - RTRN	2024	RTRN2024
44 25 53.59698	93 54 32.14485	297386.972	187304.790	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648455.170	849951.875	1403073.464	16142383.060	.131	3	GPS - RTRN	2024	RTRN2024
2648455.115	849951.912	1403073.410	16142383.098	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_T-DR3251-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_T-DR3251-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_T-DR3251-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 U
NGS Name: 4011 U
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3254 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	111 N	25 W	442303.79	935048.15	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4011 U 2019

5.8 MILES WEST OF LE CENTER, 4.7 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 22TRUNK HIGHWAY 112 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), 59.0 FEET NORTH OF COUNTY ROAD 22, 1.0 FOOT WEST OF THE EAST DRIVEWAY OF DRIVEWAY NUMBER 29008. NO WITNESS POST WAS SET.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.866	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
968.866	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.827	.262		876.019	.197	2011	GPS - RTRN	2024	RTRN2024
968.791	.262		875.982	.197	2011	GPS - OPUS	2021	GPSBM
968.791	.262		875.982	.197	2011	GPS - OPUS	2021	GPSBM
968.797	.262		875.996	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.808 12B = -92.802 09 = -92.723 03 = -92.542

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.79437	93 50 48.14772	313490.953	169961.054	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.79500	93 50 48.14801	313490.932	169961.118	.131	3	GPS - OPUS	2021	GPSBM
44 23 03.79493	93 50 48.14779	313490.948	169961.111	.131	3	GPS - OPUS	2021	GPSBM
44 23 03.79571	93 50 48.14765	313490.959	169961.189	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664740.084	832781.884	1419143.185	16125019.989	.131	3	GPS - RTRN	2024	RTRN2024
2664740.063	832781.948	1419143.164	16125020.053	.131	3	GPS - OPUS	2021	GPSBM
2664740.079	832781.940	1419143.180	16125020.046	.131	3	GPS - OPUS	2021	GPSBM
2664740.088	832782.019	1419143.191	16125020.125	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_U-DR3254-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_U-DR3254-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_U-DR3254-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 V **NGS Name:** 4011 V

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3256 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	27	111 N	25 W	442303.34	934839.82	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4011 V 2019

4.1 MILES WEST OF LE CENTER, 2.9 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 22 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), 57.6 FEET NORTH OF COUNTY ROAD 22, 158.0 FEET EAST OF A FIELD ENTRANCE EXTENDED, 98.4 FEET EAST-NORTHEAST OF A POWER POLE, 1.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.343	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1001.343	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.409	.262		908.587	.197	2011	GPS - RTRN	2024	RTRN2024
1001.307	.262		908.492	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.821 12B = -92.815 09 = -92.736 03 = -92.546

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.33568	93 48 39.81502	322810.377	169835.324	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.33603	93 48 39.81346	322810.491	169835.358	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2674059.210	832754.945	1428458.765	16124879.281	.131	3	GPS - RTRN	2024	RTRN2024
2674059.323	832754.980	1428458.879	16124879.315	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_V-DR3256-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_V-DR3256-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_V-DR3256-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4011 W **NGS Name:** 4011 W

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3248 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	112 N	26 W	442804.01	935432.10	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 17 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4011 W 2019

IN LE SUEUR, 0.55 MILE NORTHEAST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22 IN LE SUEUR, THEN 85.0 FEET SOUTHEAST ALONG CATHCART STREET, THEN 325.0 FEET SOUTHWEST ON COMMERCE STREET, 32.2 FEET SOUTHEAST OF COMMERCE STREET, 5.0 FEET EAST OF A SIDEWALK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
780.507	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
780.507	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
780.504	.262		688.171	.197	2011	GPS - RTRN	2024	RTRN2024
780.481	.262		688.152	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.332 12B = -92.329 09 = -92.260 03 = -92.086

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 04.01023	93 54 32.10189	297515.361	200511.578	.131	3	GPS - RTRN	2024	RTRN2024
44 28 04.01087	93 54 32.10304	297515.278	200511.644	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648443.518	863157.745	1403223.195	16155584.677	.131	3	GPS - RTRN	2024	RTRN2024
2648443.434	863157.810	1403223.113	16155584.743	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_W-DR3248-3SE-22APR2024.jpg	SE	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_W-DR3248-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4011_W-DR3248-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 A **NGS Name:** 4012 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3307 Get Map
NGS Quad / Sta Num : 44093334/
USGS Quad: MANKATO EAST

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	109 N	26 W	441437.85	935732.23	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4012 A 1990

3.5 MILES NORTH-NORTHEAST OF MANKATO, 4.4 MILES NORTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND THE TRUNK HIGHWAY 14 BY-PASS, 42.0 FEET EAST OF TRUNK HIGHWAY 22, AT TRUNK HIGHWAY 22 MILEPOINT 59.1, 10.0 FEET SOUTH OF A FIELD ENTRANCE, 64.5 FEET NORTH-NORTHEAST OF THE CENTER OF A BOX CULVERT, 5.4 FEET NORTH OF A WITNESS POST.

Station Notes

THE ROD WIGGLES A BIT, BUT THE DISK IS TIGHT. DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
971.661	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
971.665	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
971.707	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
971.701	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
971.550	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
971.688	.262		878.647	.197	2011	GPS - RTRN	2024	RTRN2024
971.616	.262		878.565	.197	2011	GPS - RTRN	2019	RTRN2019
			878.686	.012	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			878.774	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
971.717	.131		878.863	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1860
971.717	.131		878.863	.066	1996	GPS - STATIC	2002	HPETE

Geoid Separations(ft): GEOID18 = -93.044 12B = -93.051 09 = -92.959 03 = -92.828

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.84758	93 57 32.23204	283628.340	119001.802	.131	3	GPS - RTRN	2024	RTRN2024
44 14 37.84721	93 57 32.23154	283628.376	119001.764	.131	3	GPS - RTRN	2019	RTRN2019
44 14 37.84820	93 57 32.23457	283628.156	119001.867	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.84826	93 57 32.23528	283628.105	119001.873	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.84769	93 57 32.23491	283628.131	119001.815	.033	C	ADJUSTMENT	2003	GPS1860
44 14 37.84769	93 57 32.23491	283628.131	119001.815	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.84387	93 57 32.23353	283628.229	119001.425	.033	C	GPS - STATIC	1991	HPETE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635422.747	781515.051	1389210.646	16074127.968	.131	3	GPS - RTRN	2024	RTRN2024
2635422.783	781515.013	1389210.682	16074127.930	.131	3	GPS - RTRN	2019	RTRN2019
2635422.562	781515.113	1389210.463	16074128.033	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635422.511	781515.119	1389210.411	16074128.040	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635422.538	781515.062	1389210.437	16074127.982	.033	C	ADJUSTMENT	2003	GPS1860
2635422.538	781515.062	1389210.437	16074127.982	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635422.638	781514.675	1389210.534	16074127.594	.033	C	GPS - STATIC	1991	HPETE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_A-AI3307-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_A-AI3307-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_A-AI3307-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 B **NGS Name:** 4012 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3308 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	109 N	26 W	441514.80	935737.83	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4012 B 1990

4.5 MILES SOUTH OF ST. PETER, 4.3 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169, THEN 370.0 FEET WEST ON COUNTY ROAD 101, 30.5 FEET SOUTH OF COUNTY ROAD 101, 17.0 FEET EAST OF A FIELD ENTRANCE, 3.3 FEET EAST OF A POWER POLE, 1.7 FEET NORTH OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE AND TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.801	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
999.811	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
999.811	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
999.804	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.647	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
999.781	.262		906.767	.197	2011	GPS - RTRN	2024	RTRN2024
999.742	.262		906.721	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -93.018 12B = -93.021 09 = -92.930 03 = -92.798

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.79552	93 57 37.83376	283258.412	122747.479	.131	3	GPS - RTRN	2024	RTRN2024
44 15 14.79456	93 57 37.83349	283258.431	122747.382	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635013.188	785256.155	1388846.783	16077872.811	.131	3	GPS - RTRN	2024	RTRN2024
2635013.208	785256.057	1388846.801	16077872.714	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_B-AI3308-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_B-AI3308-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_B-AI3308-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 C
NGS Name: 4012 C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3309 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	109 N	26 W	441546.90	935733.74	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4012 C 1990

4.0 MILES SOUTH OF ST. PETER, 3.65 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 60.40, 48.0 FEET WEST OF TRUNK HIGHWAY 22, 34.4 FEET NORTH-NORTHWEST OF A POWER POLE, 2.1 FEET EAST OF A CORNER FENCE POST, 2.1 FEET EAST OF A FENCE, 2.9 FEET NORTH-NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
976.350	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
976.360	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
976.360	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
976.353	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
976.189	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
976.396	.262		883.391	.197	2011	GPS - RTRN	2024	RTRN2024
976.415	.262		883.407	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -93.005 12B = -93.008 09 = -92.916 03 = -92.785

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 46.90442	93 57 33.73660	283589.462	125995.996	.131	3	GPS - RTRN	2024	RTRN2024
44 15 46.90446	93 57 33.73710	283589.426	125996.000	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635309.754	788507.613	1389182.852	16081119.575	.131	3	GPS - RTRN	2024	RTRN2024
2635309.717	788507.618	1389182.816	16081119.579	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_C-AI3309-3W-15APR2024.jpg	W	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_C-AI3309-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_C-AI3309-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 D **NGS Name:** 4012 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3311 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	109 N	26 W	441653.86	935725.74	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2015	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4012 D 1990

2.5 MILES SOUTH OF ST. PETER, 2.4 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 61.65, 178.0 FEET NORTH OF A POWER POLE, 151.0 FEET SOUTH OF A POWER POLE, 44.0 FEET WEST OF TRUNK HIGHWAY 22, 12.0 FEET NORTH OF AN ENTRANCE, 3.5 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
899.283	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
899.276	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
899.103	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
899.283			806.311	.016	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
899.283			806.304	.016	2011	GPS - STATIC	2013	HSUEUR
899.283	.131		806.491	.066	1996	GPS - STATIC	2013	HSUEUR
899.253	.262		806.281	.197	2011	GPS - RTRN	2013	RTRN2013
			806.311	.021	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			806.399	.019	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
899.276	.131		806.491	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1860
899.276	.131		806.491	.066	1996	GPS - STATIC	2002	HPETE

Geoid Separations(ft): GEOID18 = -92.972 12B = -92.969 09 = -92.880 03 = -92.749

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 53.85677	93 57 25.73773	284239.862	132770.114	.010		ADJUSTMENT	2014	GPS2977
44 16 53.85683	93 57 25.73768	284239.866	132770.120	.010	C	GPS - STATIC	2013	HSUEUR
44 16 53.85655	93 57 25.73804	284239.839	132770.092	.131	3	GPS - RTRN	2013	RTRN2013
44 16 53.85677	93 57 25.73773	284239.862	132770.114	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 53.85682	93 57 25.73846	284239.809	132770.120	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 53.85628	93 57 25.73797	284239.844	132770.065	.033	C	GPS - STATIC	2013	HSUEUR
44 16 53.85628	93 57 25.73797	284239.844	132770.065	.033	C	ADJUSTMENT	2003	GPS1860
44 16 53.85628	93 57 25.73797	284239.844	132770.065	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 53.85293	93 57 25.73795	284239.842	132769.725	.033	C	GPS - STATIC	1991	HPETE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635888.250	795287.443	1389843.753	16087890.104	.010		ADJUSTMENT	2014	GPS2977
2635888.253	795287.449	1389843.757	16087890.110	.010	C	GPS - STATIC	2013	HSUEUR
2635888.227	795287.421	1389843.731	16087890.082	.131	3	GPS - RTRN	2013	RTRN2013
2635888.250	795287.443	1389843.753	16087890.104	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635888.197	795287.448	1389843.701	16087890.110	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635888.232	795287.393	1389843.735	16087890.054	.033	C	GPS - STATIC	2013	HSUEUR
2635888.232	795287.393	1389843.735	16087890.054	.033	C	ADJUSTMENT	2003	GPS1860
2635888.232	795287.393	1389843.735	16087890.054	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635888.234	795287.054	1389843.733	16087889.715	.033	C	GPS - STATIC	1991	HPETE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_D-AI3311-3W-27AUG2013.jpg	W	Aug 27, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_D-AI3311-2-27AUG2013.jpg		Aug 27, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_D-AI3311-1-27AUG2013.jpg		Aug 27, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 E
NGS Name: 4012 E
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3313 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	28	110 N	26 W	441822.72	935732.26	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=NO Vert=NO	YES	40003	FLUSH	NO MAG MATERIAL

Monument Type: BRIDGE ABUTMENT
Disk Type: HORIZONTAL CONTROL DISK
Mon. Agency: MNDT

Description: (2009)
Stamping: 4012 E 1990

0.6 MILE SOUTH OF ST. PETER, IN A BRIDGE ABUTMENT IN THE SOUTHEAST CORNER OF RABBIT ROAD BRIDGE NUMBER 40003 OVER TRUNK HIGHWAY 22, 0.6 MILE SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 63.4, 0.2 MILE NORTH OF THE INTERSECTION OF 446TH AND RABBIT ROAD, 19.5 FEET SOUTH OF THE CENTER OF THE BRIDGE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
790.740	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
790.740	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
790.546	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
790.684	.262		697.787	.197	2011	GPS - RTRN	2024	RTRN2024
790.612	.262		697.718	.197	2011	GPS - RTRN	2019	RTRN2019
790.710	.262		697.817	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.897 12B = -92.894 09 = -92.798 03 = -92.667

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 22.71713	93 57 32.25957	283856.271	141773.445	.131	3	GPS - RTRN	2024	RTRN2024
44 18 22.71820	93 57 32.25905	283856.310	141773.553	.131	3	GPS - RTRN	2019	RTRN2019
44 18 22.71797	93 57 32.25990	283856.248	141773.530	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635409.311	804285.137	1389474.631	16096890.657	.131	3	GPS - RTRN	2024	RTRN2024
2635409.349	804285.246	1389474.670	16096890.765	.131	3	GPS - RTRN	2019	RTRN2019
2635409.287	804285.223	1389474.608	16096890.742	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_E-AI3313-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_E-AI3313-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_E-AI3313-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 F **NGS Name:** 4012 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3314 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	28	110 N	26 W	441827.00	935738.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	1998	DESTROYED	Horz=NO Vert=NO	NO	4770	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MAT FOUNDATION (NON-PAVEMENT)	VERTICAL CONTROL DISK	MNDT

Description: (1990) **Stamping:** 4012 F 1990

0.5 MILE SOUTH OF ST. PETER, IN THE SIDEWALK AT THE NORTHWEST CORNER OF TRUNK HIGHWAY 22 BRIDGE NUMBER 4770 OVER THE MINNESOTA RIVER, 0.5 MILE SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 22 MILEPOINT 63.55, 19.5 FEET WEST OF TRUNK HIGHWAY 22, 0.8 FOOT SOUTH OF THE NORTHWEST CORNER OF THE BRIDGE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
761.957	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
761.957	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
761.767	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Geoid Separations(ft): GEOID18 = -92.887 12B = -92.884 09 = -92.789 03 = -92.657

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4012 J **NGS Name:** 4012 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3244 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	109 N	26 W	441504.50	935732.16	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4012 J 2019

2.9 MILES SOUTH OF KASOTA, 4.5 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 22 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 59.6, 50.1 FEET EAST OF TRUNK HIGHWAY 22, 15.0 FEET SOUTH OF A FIELD ENTRANCE, 2.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
993.167	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
993.177	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
993.220	.262		900.192	.197	2011	GPS - RTRN	2024	RTRN2024
993.085	.262		900.051	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -93.031 12B = -93.035 09 = -92.943 03 = -92. 811

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 04.49933	93 57 32.15693	283661.059	121700.653	.131	3	GPS - RTRN	2024	RTRN2024
44 15 04.49943	93 57 32.15726	283661.035	121700.663	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635426.858	784213.778	1389247.620	16076825.744	.131	3	GPS - RTRN	2024	RTRN2024
2635426.834	784213.788	1389247.596	16076825.754	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_J-DR3244-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_J-DR3244-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_J-DR3244-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4012 K **NGS Name:** 4012 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3241 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	28	110 N	26 W	441814.18	935726.21	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 26 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** 4012 K 2019

1.5 MILES SOUTHEAST OF ST. PETER, 0.85 MILE SOUTHEAST ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 63.3, 61.5 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 22, 51.8 FEET NORTH OF COUNTY ROAD 45 (446TH STREET), 14.3 FEET WEST-SOUTHWEST OF A SIDEWALK, 3.5 FEET EAST-NORTHEAST OF A WITNESS POST.

Station Notes
THE ROAD WAS CLOSED FOR CONSTRUCTION 9/22/2025

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
800.389	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
800.389	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
800.304	.262		707.394	.197	2011	GPS - RTRN	2024	RTRN2024
800.399	.262		707.495	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.910 12B = -92.907 09 = -92.815 03 = -92.680

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 14.18050	93 57 26.21005	284287.468	140904.535	.131	3	GPS - RTRN	2024	RTRN2024
44 18 14.18111	93 57 26.20980	284287.487	140904.596	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635849.641	803420.949	1389904.282	16096021.386	.131	3	GPS - RTRN	2024	RTRN2024
2635849.659	803421.011	1389904.301	16096021.448	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_K-DR3241-3W-15APR2024.jpg	W	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_K-DR3241-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4012_K-DR3241-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 A

NGS Name: 4013 A

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	25	112 N	26 W	442851.00	935408.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	NO	9295	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 4013 A 1963

IN THE NORTH EDGE OF LE SUEUR, IN THE SOUTH END OF THE EAST ABUTMENT OF TRUNK HIGHWAY 169 BRIDGE NUMBER 9295 OVER THE MINNESOTA RIVER, AT TRUNK HIGHWAY 169 MILEPOINT 78.9.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
765.146	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Geoid Separations(ft): GEOID18 = -92.237 12B = -92.234 09 = -92.165 03 = -91.995

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4013 B **NGS Name:** 4013 B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4694 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	25	112 N	26 W	442850.00	935401.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	NO	9297		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE CURB	BENCH MARK DISK	MNDT

Description: (2010) **Stamping:** 4013 B 1963

IN THE NORTHEAST EDGE OF LE SUEUR, AT THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, IN THE SOUTH CURB OF TRUNK HIGHWAY 169 BRIDGE NUMBER 9297 OVER A RAILROAD AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 78.9.

Station Notes

THE BRIDGE WAS REPLACED.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
775.812	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
775.819	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
775.681	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
775.678	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Geoid Separations(ft): GEOID18 = -92.234 12B = -92.231 09 = -92.165 03 = -91.991

*** No Horizontal Positions in the Database ***

4013 C

Mn/DOT Name: 4013 C **NGS Name:** 4013 C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442844.00	935356.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	DESTROYED	Horz=NO Vert=NO	NO	9296		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2010) **Stamping:** 4013 C 1963

IN THE NORTH EDGE OF LE SUEUR, AT THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
748.148	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Geoid Separations(ft): GEOID18 = -92.244 12B = -92.241 09 = -92.175 03 = -92.001

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4013 D **NGS Name:** 4013 D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4695 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442858.15	935325.68	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type: CONCRETE POST (PREFABRICATED)
Disk Type: BENCH MARK DISK
Mon. Agency: MNDT

Description: (2009) **Stamping:** 4013 D 1963

1.25 MILES NORTHEAST OF LE SUEUR, 0.35 MILE NORTHEAST ON TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 120.0 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 79.25, 0.4 FOOT NORTHWEST OF A WITNESS POST.

Station Notes

THE CONCRETE MONUMENT IS STARTING TO CRUMBLE. DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
826.193	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
826.189	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
826.183	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
826.235	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
826.235	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
826.235	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
826.258	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1
826.235	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
826.239	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
826.101	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
826.304	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
826.216	.262		734.024	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.195 12B = -92.188 09 = -92.132 03 = -91.958

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.15056	93 53 25.68164	302382.820	205949.205	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653252.495	868646.003	1408097.663	16161012.310	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_D-AE4695-3SE-24APR2024.jpg	SE	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_D-AE4695-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_D-AE4695-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 E **NGS Name:** 4013 E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4696 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	19	112 N	25 W	442910.33	935255.43	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=NO	YES		PROJECTS 9 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4013 E 1963

1.5 MILES NORTHEAST OF LE SUEUR, 0.95 MILE NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 146.0 FEET NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 79.75, 1.0 FOOT SOUTHEAST OF A WITNESS POST.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
933.128	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
933.125	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
933.082	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
933.141	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
933.141	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
933.141	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
933.141	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
933.164	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
933.164	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1
933.164	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
933.171	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
933.033	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
933.023	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
933.197	.262		841.058	.197	2011	GPS - RTRN	2024	RTRN2024
933.062	.262		840.924	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.139 12B = -92.136 09 = -92.083 03 = -91.909

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.32951	93 52 55.43212	304587.201	207162.372	.131	3	GPS - RTRN	2024	RTRN2024
44 29 10.33078	93 52 55.43174	304587.230	207162.500	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2655443.632	869882.318	1410303.180	16162221.419	.131	3	GPS - RTRN	2024	RTRN2024
2655443.659	869882.447	1410303.209	16162221.547	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_E-AE4696-3NW-23APR2024.jpg	NW	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_E-AE4696-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_E-AE4696-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 F **NGS Name:** 4013 F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4697 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	112 N	25 W	442921.55	935239.46	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 1 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4013 F 1963

1.75 MILES NORTHEAST OF LE SUEUR, 1.2 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 95.0 FEET NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 80.1, 52.2 FEET SOUTH-SOUTHWEST OF THE SOUTH LEG OF A WOOD SIGN, 1.1 FEET EAST-SOUTHEAST OF A WITNESS POST.

Station Notes

DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
977.222	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
977.216	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
977.216	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
977.278	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
977.255	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
977.278	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
977.255	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
977.255	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
977.255	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
977.121	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
977.068	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
977.124	.262		885.021	.197	2011	GPS - RTRN	2024	RTRN2024
977.052	.262		884.956	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.100 12B = -92.096 09 = -92.047 03 = -91.873

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 21.54696	93 52 39.46461	305755.118	208287.794	.131	3	GPS - RTRN	2024	RTRN2024
44 29 21.54857	93 52 39.46514	305755.082	208287.958	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2656599.417	871019.921	1411472.486	16163344.506	.131	3	GPS - RTRN	2024	RTRN2024
2656599.378	871020.084	1411472.450	16163344.669	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_F-AE4697-3NW-23APR2024.jpg	NW	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_F-AE4697-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_F-AE4697-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 G **NGS Name:** 4013 G

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4698 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	19	112 N	25 W	442939.59	935220.56	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4013 G 1963

2.0 MILES NORTHEAST OF LE SUEUR, 1.6 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22 IN LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 80.5, 100.0 FEET NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169, 48.0 FEET SOUTH OF DRIVEWAY NUMBER 31284, 29.0 FEET SOUTHWEST OF A FIRE HYDRANT, 4.9 FEET SOUTH-SOUTHWEST OF A POWER POLE, 1.0 FOOT EAST OF A WITNESS POST.

Station Pair: 4013 Q - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.120	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
981.120	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
981.120	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
981.179	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
981.179	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
981.179	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
981.179	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.045	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
981.009	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.166	.262		889.126	.197	2011	GPS - RTRN	2024	RTRN2024
981.061	.262		889.027	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.037 12B = -92.034 09 = -91.988 03 = -91.817

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 39.58904	93 52 20.55759	307142.239	210102.486	.131	3	GPS - RTRN	2024	RTRN2024
44 29 39.59017	93 52 20.55775	307142.229	210102.601	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2657967.062	872848.995	1412862.037	16165156.238	.131	3	GPS - RTRN	2024	RTRN2024
2657967.050	872849.109	1412862.027	16165156.353	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_G-AE4698-3NW-23APR2024.jpg	NW	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_G-AE4698-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_G-AE4698-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 H **NGS Name:** 4013 H

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4699 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	112 N	25 W	443009.00	935140.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2013	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 3 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 4013 H 1963

2.5 MILES NORTHEAST OF LE SUEUR, 2.2 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 121.0 FEET EAST-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 81.1, 138.4 FEET WEST-SOUTHWEST OF A POWER POLE WITH 2 GUY WIRES, 1.2 FEET WEST OF A WITNESS POST.

Station Notes

THE REFERENCE LATITUDE AND LONGITUDE LOCATION DOESN'T MATCH THE TIE LOCATION. SEARCHED BOTH AREAS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.279	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
978.282	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.148	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
978.098	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Geoid Separations(ft): GEOID18 = -91.926 12B = -91.916 09 = -91.873 03 = -91.706

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 4013 I **NGS Name:** 4013 I

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4701 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	9	112 N	25 W	443055.99	935055.45	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (1991) **Stamping:** 4013 I 1963

3.75 MILES NORTHEAST OF LE SUEUR, 3.5 MILES NORTHEAST ON TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22, AT TRUNK HIGHWAY 169 MILEPOINT 82.4, 100.0 FEET EAST-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 125.0 FEET SOUTH OF THE SOUTH END OF A FRONTAGE ROAD, 3.5 FEET NORTHWEST OF A FENCE LINE, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.391	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
989.440	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
989.440	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
989.440	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
989.440	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
989.440	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
989.440	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.309	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
989.234	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.411	.262		897.662	.197	2011	GPS - RTRN	2024	RTRN2024
989.276	.262		897.538	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -91.749 12B = -91.735 09 = -91.693 03 = -91.532

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 55.99025	93 50 55.45148	313378.922	217784.820	.131	3	GPS - RTRN	2024	RTRN2024
44 30 55.98975	93 50 55.45153	313378.919	217784.769	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664121.232	880596.075	1419108.873	16172825.418	.131	3	GPS - RTRN	2024	RTRN2024
2664121.228	880596.024	1419108.869	16172825.368	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_I-AE4701-3E-24APR2024.jpg	E	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_I-AE4701-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_I-AE4701-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 J **NGS Name:** 4013 J

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4702 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	112 N	25 W	443144.86	935047.38	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4013 J 1963

4.75 MILES NORTHEAST OF LE SUEUR, 4.5 MILES NORTHEAST ON TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 100.0 FEET EAST-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 83.35, 133.0 FEET NORTH OF COUNTY ROAD 118 (290TH STREET), 1.7 FEET WEST-SOUTHWEST OF A FENCE CORNER, 0.5 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
956.547	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
956.606	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
956.606	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
956.589	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
956.573	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
956.376	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
956.379	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
956.248	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
956.074	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
956.921	.262		865.333	.197	2011	GPS - RTRN	2024	RTRN2024
956.478	.262		864.903	.197	2011	GPS - RTRN	2016	RTRN2016
956.458	.262		864.883	.197	2011	GPS - RTRN	2013	RTRN2013
			864.988	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			865.077	.012	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
956.560	.131		865.261	.066	1996	HORIZONTAL ADJUSTMENT	2002	GPS1728
956.560	.131		865.261	.066	1996	GPS - STATIC	2002	HD7BR

Geoid Separations(ft): GEOID18 = -91.591 12B = -91.578 09 = -91.532 03 = -91.378

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.86034	93 50 47.37739	314007.134	222728.831	.131	3	GPS - RTRN	2024	RTRN2024
44 31 44.86030	93 50 47.37729	314007.141	222728.827	.131	3	GPS - RTRN	2016	RTRN2016
44 31 44.86034	93 50 47.37744	314007.130	222728.831	.131	3	GPS - RTRN	2013	RTRN2013
44 31 44.86067	93 50 47.37800	314007.090	222728.865	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.86075	93 50 47.37887	314007.027	222728.874	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.86020	93 50 47.37810	314007.082	222728.818	.033	C	ADJUSTMENT	2002	GPS1728
44 31 44.86020	93 50 47.37810	314007.082	222728.816	.033	C	GPS - STATIC	2002	HD7BR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664696.936	885545.875	1419744.937	16177766.486	.131	3	GPS - RTRN	2024	RTRN2024
2664696.943	885545.871	1419744.944	16177766.482	.131	3	GPS - RTRN	2016	RTRN2016
2664696.932	885545.875	1419744.933	16177766.486	.131	3	GPS - RTRN	2013	RTRN2013
2664696.891	885545.909	1419744.893	16177766.520	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664696.828	885545.917	1419744.830	16177766.529	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664696.884	885545.861	1419744.886	16177766.473	.033	C	ADJUSTMENT	2002	GPS1728
2664696.884	885545.861	1419744.886	16177766.472	.033	C	GPS - STATIC	2002	HD7BR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_J-AE4702-3E-24APR2024.jpg	E	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_J-AE4702-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_J-AE4702-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 K **NGS Name:** 4013 K

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4703 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	112 N	25 W	443205.20	935049.09	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	MNDT

Description: (2016) **Stamping:** 4013 K 1963

5.25 MILES NORTHEAST OF LE SUEUR, 4.85 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22, 65.0 FEET EAST-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 83.75, 50.0 FEET SOUTH-SOUTHEAST OF THE EAST END OF A CULVERT UNDER NORTHBOUND TRUNK HIGHWAY 169, 1.0 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
967.006	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
967.065	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
967.065	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
967.065	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
967.045	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
967.065	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
967.068	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
966.937	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
966.829	.033	3				VERTICAL CONTROL SURVEY	1963	CS4013

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
967.006	.262		875.481	.197	2011	GPS - RTRN	2024	RTRN2024
967.006	.131		875.756	.066	1996	GPS - STATIC	2023	HGLRD
967.006			875.484	.010	2011	GPS - STATIC	2023	HGLRD
967.006			875.484	.010	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
966.911	.262		875.399	.197	2011	GPS - RTRN	2016	RTRN2016
967.065			875.484	.011	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
967.065	.131		875.756	.066	1996	GPS - STATIC	2014	HBLOOM
967.065			875.471	.011	2011	GPS - STATIC	2014	HBLOOM
966.848	.262		875.333	.197	2011	GPS - RTRN	2013	RTRN2013
			875.484	.015	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			875.566	.016	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
967.058	.131		875.756	.066	1996	HORIZONTAL ADJUSTMENT	2002	GPS1728
967.058	.131		875.756	.066	1996	GPS - STATIC	2002	HD7BR

Geoid Separations(ft): GEOID18 = -91.525 12B = -91.512 09 = -91.470 03 = -91.319

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 05.20415	93 50 49.09238	313900.876	224790.157	.131	3	GPS - RTRN	2024	RTRN2024
44 32 05.20420	93 50 49.09257	313900.863	224790.162	.010		ADJUSTMENT	2023	GPS3572
44 32 05.20420	93 50 49.09257	313900.863	224790.162	.010	C	GPS - STATIC	2023	HGLRD
44 32 05.20343	93 50 49.09202	313900.902	224790.084	.131	3	GPS - RTRN	2016	RTRN2016
44 32 05.20420	93 50 49.09257	313900.863	224790.162	.013		ADJUSTMENT	2014	GPS3006
44 32 05.20417	93 50 49.09262	313900.859	224790.159	.013	C	GPS - STATIC	2014	HBLOOM
44 32 05.20407	93 50 49.09254	313900.865	224790.149	.131	3	GPS - RTRN	2013	RTRN2013
44 32 05.20420	93 50 49.09257	313900.863	224790.162	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 05.20426	93 50 49.09347	313900.797	224790.169	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 05.20370	93 50 49.09266	313900.855	224790.111	.033	C	GPS - STATIC	2023	HGLRD
44 32 05.20370	93 50 49.09266	313900.855	224790.111	.033	C	GPS - STATIC	2014	HBLOOM
44 32 05.20370	93 50 49.09266	313900.855	224790.111	.033	C	ADJUSTMENT	2002	GPS1728
44 32 05.20370	93 50 49.09266	313900.855	224790.111	.033	C	GPS - STATIC	2002	HD7BR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664568.851	887605.712	1419642.100	16179827.187	.131	3	GPS - RTRN	2024	RTRN2024
2664568.837	887605.717	1419642.086	16179827.192	.010		ADJUSTMENT	2023	GPS3572
2664568.837	887605.717	1419642.086	16179827.192	.010	C	GPS - STATIC	2023	HGLRD
2664568.877	887605.639	1419642.125	16179827.114	.131	3	GPS - RTRN	2016	RTRN2016
2664568.837	887605.717	1419642.086	16179827.192	.013		ADJUSTMENT	2014	GPS3006
2664568.833	887605.714	1419642.083	16179827.189	.013	C	GPS - STATIC	2014	HBLOOM
2664568.839	887605.704	1419642.088	16179827.179	.131	3	GPS - RTRN	2013	RTRN2013
2664568.837	887605.717	1419642.086	16179827.192	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664568.772	887605.723	1419642.021	16179827.199	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664568.831	887605.666	1419642.079	16179827.142	.033	C	GPS - STATIC	2023	HGLRD
2664568.831	887605.666	1419642.079	16179827.142	.033	C	GPS - STATIC	2014	HBLOOM
2664568.831	887605.666	1419642.079	16179827.142	.033	C	ADJUSTMENT	2002	GPS1728
2664568.831	887605.667	1419642.079	16179827.142	.033	C	GPS - STATIC	2002	HD7BR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_K-AE4703-3E-24APR2024.jpg	E	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_K-AE4703-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_K-AE4703-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 L **NGS Name:** 4013 L

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DI9216 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442856.65	935338.19	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2007	2013	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2009) **Stamping:** 4013 L 2007

1.3 MILES NORTHEAST OF LE SUEUR, 0.25 MILE EAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112 NORTH EDGE OF LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 79.1, 29.9 FEET SOUTH OF NORTHBOUND TRUNK HIGHWAY 169, 22.0 FEET NORTH-NORTHWEST OF AN ACCESS RAMP, 2.0 FEET NORTH-NORTHWEST OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
794.319	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
794.339	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			702.121	.005	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
794.355	.131		702.338	.066	1996	HORIZONTAL ADJUSTMENT	2007	GPS2351
794.323	.131		702.338	.066	1996	GPS - STATIC	2007	HHOJO

Geoid Separations(ft): GEOID18 = -92.208 12B = -92.201 09 = -92.142 03 = -91.968

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 56.65211	93 53 38.19475	301474.210	205805.877	.003		ADJUSTMENT	2012	GPS2800

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 56.65160	93 53 38.19484	301474.203	205805.826	.033	C	ADJUSTMENT	2007	GPS2351
44 28 56.65160	93 53 38.19484	301474.203	205805.826	.033	C	GPS - STATIC	2007	HHOJO

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652345.564	868493.070	1407189.165	16160870.518	.003		ADJUSTMENT	2012	GPS2800

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652345.557	868493.019	1407189.158	16160870.466	.033	C	ADJUSTMENT	2007	GPS2351
2652345.557	868493.019	1407189.158	16160870.466	.033	C	GPS - STATIC	2007	HHOJO

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L-DI9216-3SE-19MAY2010.jpg	SE	May 19, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L-DI9216-2-19MAY2010.jpg		May 19, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L-DI9216-1-19MAY2010.jpg		May 19, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

4013 L RESET

Mn/DOT Name: 4013 L RESET **NGS Name:** 4013 L RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP0991 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442856.65	935338.19	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4013 L RESET 2013

1.3 MILES NORTHEAST OF LE SUEUR, 0.25 MILE EAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112 AT THE NORTH EDGE OF LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 79.1, 29.9 FEET SOUTH OF NORTHBOUND TRUNK HIGHWAY 169, 22.0 FEET NORTH-NORTHWEST OF AN ENTRANCE RAMP FROM TRUNK HIGHWAY 112 TO TRUNK HIGHWAY 169, 2.0 FEET NORTH-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
794.211	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
794.211	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
794.211	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
794.254	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
794.254	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
794.178	.262		701.970	.197	2011	GPS - RTRN	2024	RTRN2024
794.254			702.049	.014	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
794.254			702.049	.014	2011	GPS - STATIC	2013	HSUEUR
794.254	.131		702.253	.066	1996	GPS - STATIC	2013	HSUEUR
794.103	.262		701.898	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.208 12B = -92.201 09 = -92.142 03 = -91.968

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 56.65148	93 53 38.19413	301474.255	205805.813	.131	3	GPS - RTRN	2024	RTRN2024
44 28 56.65167	93 53 38.19503	301474.190	205805.833	.010		ADJUSTMENT	2014	GPS2977
44 28 56.65167	93 53 38.19503	301474.190	205805.833	.010	C	GPS - STATIC	2013	HSUEUR
44 28 56.65171	93 53 38.19375	301474.283	205805.836	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 56.65149	93 53 38.19525	301474.174	205805.815	.033	C	GPS - STATIC	2013	HSUEUR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652345.609	868493.007	1407189.209	16160870.454	.131	3	GPS - RTRN	2024	RTRN2024
2652345.543	868493.026	1407189.144	16160870.474	.010		ADJUSTMENT	2014	GPS2977
2652345.543	868493.026	1407189.144	16160870.474	.010	C	GPS - STATIC	2013	HSUEUR
2652345.636	868493.030	1407189.237	16160870.477	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652345.528	868493.008	1407189.128	16160870.456	.033	C	GPS - STATIC	2013	HSUEUR

4013 L RESET

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L_RESET-DP0991-3S-24APR2024.jpg	S	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L_RESET-DP0991-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_L_RESET-DP0991-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 M **NGS Name:** 4013 M

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM4729 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442854.74	935355.96	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1985	2019	GOOD	Horz=NO Vert=NO	YES	40008	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4013 M 2007

1.4 MILES NORTH OF LE SUEUR, IN A BRIDGE RAILING IN THE NORTHWEST CORNER OF NORTHBOUND TRUNK HIGHWAY 169 BRIDGE NUMBER 40008 OVER TRUNK HIGHWAY 112 AND THE RAILROAD TRACKS, AT THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 78.85, 22.0 FEET NORTH-NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169, 10.0 FEET EAST-NORTHEAST OF THE WEST END OF A BRIDGE RAILING.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
777.731	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
777.754	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
777.751	.262		685.533	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.224 12B = -92.218 09 = -92.152 03 = -91.981

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 54.74071	93 53 55.96217	300184.255	205624.332	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651057.758	868297.886	1405899.404	16160691.144	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_M-DM4729-3E-19MAY2010.jpg	E	May 19, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_M-DM4729-2-19MAY2010.jpg		May 19, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_M-DM4729-1-19MAY2010.jpg		May 19, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 N **NGS Name:** 4013 N

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM4730 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442854.10	935353.62	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1985	2019	GOOD	Horz=NO Vert=NO	YES	40008	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	VERTICAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** 4013 N 2007

1.4 MILES NORTH-NORTHEAST OF LE SUEUR, IN THE BRIDGE RAILING IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 169 BRIDGE NUMBER 40008 OVER TRUNK HIGHWAY 112 AND THE RAILROAD TRACKS, AT THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 78.85, 32.0 FEET SOUTH-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 31.2 FEET WEST-SOUTHWEST OF THE WEST END OF A BRIDGE RAILING.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
779.113	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
779.136	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
779.109	.262		686.888	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.224 12B = -92.218 09 = -92.155 03 = -91.981

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 54.10476	93 53 53.61969	300353.484	205558.340	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651227.658	868233.700	1406068.461	16160624.902	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_N-DM4730-3W-19MAY2010.jpg	W	May 19, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_N-DM4730-2-19MAY2010.jpg		May 19, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_N-DM4730-1-19MAY2010.jpg		May 19, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 P **NGS Name:** 4013 P

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	25	112 N	26 W	442852.66	935408.08		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2007	2019	GOOD	Horz=NO Vert=NO	YES	72013	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	VERTICAL CONTROL DISK	MNDT

Description: (2013) **Stamping:** 4013 P 2007

1.5 MILES NORTH OF LE SUEUR, IN A BRIDGE RAILING IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 169 BRIDGE NUMBER 72013 OVER THE MINNESOTA RIVER, 0.2 MILE WEST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22 IN LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 78.65, 22.5 FEET NORTH OF SOUTHBOUND TRUNK HIGHWAY 169.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
766.668	.262		674.441	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.234 12B = -92.231 09 = -92.162 03 = -91.991

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 52.66134	93 54 08.08239	299303.547	205422.000	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2650179.350	868086.256	1405018.701	16160490.325	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_P-3N-09SEP2013.jpg	N	Sep 9, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_P-2-09SEP2013.jpg		Sep 9, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_P-1-09SEP2013.jpg		Sep 9, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 Q **NGS Name:** 4013 Q

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP2006 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	112 N	25 W	442923.39	935233.33	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 14 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** 4013 Q 2013

2.75 MILES NORTHEAST OF LE SUEUR, 1.2 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112 IN LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 80.15, 73.2 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 1.5 FEET NORTHWEST OF A WITNESS POST.

Station Pair: 4013 G - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
983.889	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
983.889	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
983.889	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
983.951	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
983.951	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
983.951	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
983.951	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
983.899	.262		891.806	.197	2011	GPS - RTRN	2024	RTRN2024
983.843	.262		891.753	.197	2011	GPS - OPUS	2021	GPSBM
983.932	.262		891.849	.197	2011	GPS - RTRN	2020	RTRN2020
983.951			891.839	.009	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
983.951	.131		892.045	.066	1996	GPS - STATIC	2014	HBLOOM
983.951			891.839	.009	2011	GPS - STATIC	2014	HBLOOM
983.755	.262		891.668	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.090 12B = -92.086 09 = -92.037 03 = -91.863

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 23.38702	93 52 33.33059	306201.478	208470.095	.131	3	GPS - RTRN	2024	RTRN2024
44 29 23.38724	93 52 33.33155	306201.408	208470.118	.131	3	GPS - OPUS	2021	GPSBM
44 29 23.38622	93 52 33.33088	306201.456	208470.014	.131	3	GPS - RTRN	2020	RTRN2020
44 29 23.38720	93 52 33.33100	306201.448	208470.113	.010		ADJUSTMENT	2014	GPS3006
44 29 23.38720	93 52 33.33100	306201.448	208470.113	.010	C	GPS - STATIC	2014	HBLOOM
44 29 23.38712	93 52 33.33041	306201.491	208470.104	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 23.38698	93 52 33.33136	306201.422	208470.091	.033	C	GPS - STATIC	2014	HBLOOM

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2657043.766	871206.919	1411918.972	16163526.008	.131	3	GPS - RTRN	2024	RTRN2024
2657043.696	871206.941	1411918.903	16163526.031	.131	3	GPS - OPUS	2021	GPSBM
2657043.745	871206.838	1411918.950	16163525.927	.131	3	GPS - RTRN	2020	RTRN2020
2657043.736	871206.937	1411918.943	16163526.026	.010		ADJUSTMENT	2014	GPS3006
2657043.736	871206.937	1411918.943	16163526.026	.010	C	GPS - STATIC	2014	HBLOOM
2657043.779	871206.929	1411918.985	16163526.018	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2657043.710	871206.915	1411918.916	16163526.004	.033	C	GPS - STATIC	2014	HBLOOM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_Q-DP2006-3SE-24APR2024.jpg	SE	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_Q-DP2006-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_Q-DP2006-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 R **NGS Name:** 4013 R

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP2377 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	112 N	25 W	442958.14	935156.38	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 27 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2013)

Stamping: 4013 R 2013

0.5 MILE NORTHEAST OF LE SUEUR, AT THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 28 (0.5 MILE NORTHEAST OF LE SUEUR), AT TRUNK HIGHWAY 169 MILEPOINT 81.0, 95.0 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 82.0 FEET SOUTHWEST OF COUNTY ROAD 28, 1.5 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.455	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
982.511	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
982.511	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.478	.262		890.507	.197	2011	GPS - RTRN	2024	RTRN2024
982.514			890.523	.010	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
982.524	.131		890.740	.066	1996	GPS - STATIC	2014	HBLOOM
982.514			890.523	.010	2011	GPS - STATIC	2014	HBLOOM
982.406	.262		890.444	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -91.972 12B = -91.962 09 = -91.916 03 = -91.749

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 58.13578	93 51 56.38406	308911.299	211964.955	.131	3	GPS - RTRN	2024	RTRN2024
44 29 58.13633	93 51 56.38475	308911.249	211965.011	.013		ADJUSTMENT	2014	GPS3006
44 29 58.13633	93 51 56.38475	308911.249	211965.011	.013	C	GPS - STATIC	2014	HBLOOM
44 29 58.13546	93 51 56.38451	308911.266	211964.923	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 58.13594	93 51 56.38501	308911.230	211964.972	.033	C	GPS - STATIC	2014	HBLOOM

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2659716.072	874729.884	1414633.458	16167015.103	.131	3	GPS - RTRN	2024	RTRN2024
2659716.022	874729.940	1414633.409	16167015.159	.013		ADJUSTMENT	2014	GPS3006
2659716.022	874729.940	1414633.409	16167015.159	.013	C	GPS - STATIC	2014	HBLOOM
2659716.039	874729.852	1414633.425	16167015.070	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2659716.003	874729.900	1414633.389	16167015.120	.033	C	GPS - STATIC	2014	HBLOOM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_R-DP2377-3SE-24APR2024.jpg	SE	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_R-DP2377-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_R-DP2377-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 S **NGS Name:** 4013 S

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP2378 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	112 N	25 W	443142.96	935050.71	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** 4013 S 2013

2.0 MILES NORTHEAST OF LE SUEUR, 2.3 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 28 (THE JUNCTION IS 0.5 MILE NORTHEAST OF LE SUEUR), AT TRUNK HIGHWAY 169 MILEPOINT 83.30, 73.0 FEET WEST OF SOUTHBOUND TRUNK HIGHWAY 169, 59.0 FEET SOUTH OF COUNTY ROAD 118 (290TH STREET), 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
960.057	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
960.113	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
960.113	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
960.060	.262		868.463	.197	2011	GPS - RTRN	2024	RTRN2024
960.011	.262		868.414	.197	2011	GPS - OPUS	2019	GPSBM
959.992	.262		868.391	.197	2011	GPS - RTRN	2019	RTRN2019
959.988	.262		868.404	.197	2011	GPS - RTRN	2016	RTRN2016
960.139			868.479	.013	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
960.129	.131		868.738	.066	1996	GPS - STATIC	2014	HBLOOM
960.139			868.479	.013	2011	GPS - STATIC	2014	HBLOOM
960.014	.262		868.427	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -91.601 12B = -91.588 09 = -91.542 03 = -91.388

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 42.95682	93 50 50.71238	313763.854	222538.168	.131	3	GPS - RTRN	2024	RTRN2024
44 31 42.95636	93 50 50.71261	313763.837	222538.122	.131	3	GPS - OPUS	2019	GPSBM
44 31 42.95391	93 50 50.71276	313763.824	222537.874	.131	3	GPS - RTRN	2019	RTRN2019
44 31 42.95603	93 50 50.71196	313763.884	222538.088	.131	3	GPS - RTRN	2016	RTRN2016
44 31 42.95648	93 50 50.71224	313763.864	222538.134	.016		ADJUSTMENT	2014	GPS3006
44 31 42.95648	93 50 50.71224	313763.864	222538.134	.016	C	GPS - STATIC	2014	HBLOOM
44 31 42.95608	93 50 50.71183	313763.893	222538.093	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 42.95602	93 50 50.71235	313763.856	222538.087	.033	C	GPS - STATIC	2014	HBLOOM

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664455.720	885352.668	1419501.439	16177576.296	.131	3	GPS - RTRN	2024	RTRN2024
2664455.703	885352.621	1419501.422	16177576.249	.131	3	GPS - OPUS	2019	GPSBM
2664455.692	885352.373	1419501.409	16177576.001	.131	3	GPS - RTRN	2019	RTRN2019
2664455.750	885352.588	1419501.469	16177576.216	.131	3	GPS - RTRN	2016	RTRN2016
2664455.730	885352.633	1419501.449	16177576.261	.016		ADJUSTMENT	2014	GPS3006
2664455.730	885352.633	1419501.449	16177576.261	.016	C	GPS - STATIC	2014	HBLOOM
2664455.759	885352.593	1419501.478	16177576.221	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2664455.722	885352.587	1419501.441	16177576.215	.033	C	GPS - STATIC	2014	HBLOOM

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_S-DP2378-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_S-DP2378-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_S-DP2378-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 4013 T

NGS Name: 4013 T

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	4	112 N	25 W	443234.74	935056.66		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2013	GOOD	Horz=NO Vert=NO	YES	BR40007	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE RAILING	SURVEY DISK	MNDT

Description: (2013)

Stamping: 4013 T 2002

3.5 MILES NORTH OF LE SUEUR, IN A BRIDGE RAILING IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 19 BRIDGE NUMBER BR40007 OVER TRUNK HIGHWAY 169, 3.35 MILES NORTH ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 28, AT TRUNK HIGHWAY 169 MILEPOINT 84.35, 0.5 MILE NORTHEAST OF LE SUEUR, 21.0 FEET SOUTH OF TRUNK HIGHWAY 19.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.440 12B = -91.424 09 = -91.381 03 = -91.240

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_T-3S-24SEP2013.jpg	S	Sep 24, 2013
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_T-2-24SEP2013.jpg		Sep 24, 2013
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/4013_T-1-24SEP2013.jpg		Sep 24, 2013

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

5 RLG

Mn/DOT Name: 5 RLG

NGS Name: 5 RLG

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	109 N	25 W	441422.00	934838.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2008	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 5 RLG 1949

5.0 MILES NORTH AND 9.0 MILES EAST OF MANKATO, 29.0 FEET SOUTH AND 657.0 FEET WEST OF THE CROSSROADS.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.934	.033	3				VERTICAL CONTROL SURVEY	1966	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.848 12B = -93.838 09 = -93.750 03 = -93.592

*** No Horizontal Positions in the Database ***

7 RLG

Mn/DOT Name: 7 RLG

NGS Name: 7 RLG

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	109 N	25 W	441236.00	934604.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2005	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2009) **Stamping:** 7 RLG 1949

2.4 MILES EAST OF MADISON LAKE, 0.3 MILE NORTH ALONG COUNTY ROAD 129 FROM THE JUNCTION OF COUNTY ROAD 129 (631ST AVENUE) AND TRUNK HIGHWAY 60 IN MADISON LAKE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.601	.033	3				VERTICAL CONTROL SURVEY	1963	USGS-VERT

Geoid Separations(ft): GEOID18 = -94.153 12B = -94.150 09 = -94.065 03 = -93.888

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 7213 A **NGS Name:** 7213 A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4691 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	112 N	26 W	442742.50	935500.16	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2019	GOOD	Horz=NO Vert=NO	YES	4629	FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE CURB	BENCH MARK DISK	MNDT

Description: (2009) **Stamping:** 7213 A 1963

AT THE SOUTH EDGE OF LE SUEUR, IN THE LOWER STEP OF RAILROAD BRIDGE NUMBER 4629 OVER TRUNK HIGHWAY 93, ON THE WEST SIDE OF A RAILROAD, 350.0 FEET NORTHWEST OF THE JUNCTION OF TRUNK HIGHWAY 93 (BRIDGE STREET) AND TRUNK HIGHWAY 112 (MAIN STREET), 43.8 FEET SOUTH-SOUTHEAST OF THE SOUTHWEST CORNER OF A TRUNK HIGHWAY 93 BRIDGE OVER THE MINNESOTA RIVER, 15.0 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 93.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
749.588	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
749.588	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
749.588	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
749.638	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
749.638	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
749.634	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
749.644	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
749.506	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
749.523	.033	3				VERTICAL CONTROL SURVEY	1963	CS7213

Geoid Separations(ft): GEOID18 = -92.375 12B = -92.372 09 = -92.300 03 = -92.126

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/7213_A-AE4691-3E-17MAY2010.jpg	E	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/7213_A-AE4691-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/7213_A-AE4691-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 741 **NGS Name:** 741

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1771 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	7	112 N	25 W	443124.00	935300.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1941	2010	GOOD	Horz=NO Vert=NO	YES	RR	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	CHISELED CROSS	USGS

Description: (2009) **Stamping:**

1.2 MILES EAST OF HENDERSON, 1.1 MILES EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, THEN 0.5 MILE SOUTH ON COUNTY ROAD 34, 600.0 FEET SOUTH OF HENDERSON STATION, IN THE NORTHWEST CORNER OF RAILROAD BRIDGE NUMBER 290.

Station Notes

THE MARK IS A CHISELED CROSS,
SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE .

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
740.609	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
740.478	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
740.478	.007	1				VERTICAL CONTROL SURVEY	1974	L23222
740.478	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -91.808 12B = -91.801 09 = -91.745 03 = -91.594

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/741-PP1771-3S-24MAY2010.jpg	S	May 24, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/741-PP1771-2-24MAY2010.jpg		May 24, 2010
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 85 GJS **NGS Name:** 85 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1972 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	24	110 N	26 W	441908.81	935355.86	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 85 GJS 1963

3.0 MILES EAST OF ST. PETER, 2.95 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.25, 70.0 FEET OF TRUNK HIGHWAY 99, 37.0 FEET EAST OF COUNTY ROAD 106 (315TH AVENUE), 4.0 FEET NORTHEAST OF A POWER POLE, 2.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.629	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1016.642	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1016.642	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.451	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1016.665	.262		923.607	.197	2011	GPS - RTRN	2024	RTRN2024
1016.514	.262		923.466	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.058 12B = -93.048 09 = -92.966 03 = -92.815

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 08.80642	93 53 55.85789	299636.293	146287.662	.131	3	GPS - RTRN	2024	RTRN2024
44 19 08.80634	93 53 55.85832	299636.262	146287.655	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651138.737	808965.800	1405255.868	16101377.975	.131	3	GPS - RTRN	2024	RTRN2024
2651138.706	808965.792	1405255.836	16101377.968	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/85_GJS-DP1972-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/85_GJS-DP1972-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/85_GJS-DP1972-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 86 GJS

NGS Name: 86 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	110 N	25 W	442044.00	935317.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 86 GJS 1963 1006

2.5 MILES NORTHWEST OF CLEVELAND, 2.6 MILES WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND MAIN STREET IN CLEVELAND, THEN 2.3 MILES NORTH AND WEST ALONG COUNTY ROAD 106, 480.0 FEET NORTH AND 30.0 FEET EAST OF A ROAD (COUNTY ROAD 106) AT A DRIVE EAST, 3.0 FEET NORTH OF A POWER POLE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1005.680	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.956 12B = -92.946 09 = -92.867 03 = -92.710

*** No Horizontal Positions in the Database ***

87 ES RESET

Mn/DOT Name: 87 ES RESET
NGS Name: 87 ES RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4700 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	112 N	25 W	443022.00	935126.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1960	2013	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	USGS

Description: (2009)
Stamping: 87 ES RESET 1960

2.5 MILES SOUTHEAST OF HENDERSON, 318.0 FEET SOUTHWEST OF THE JUNCTION OF TRUNK HIGHWAY 169 AND THE GRAVEL CROSSROAD, 101.0 FEET EAST-SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, AT TRUNK HIGHWAY 169 MILEPOINT 81.6, 12.5 FEET NORTH-NORTHEAST OF A FARM DRIVE, 59.5 FEET SOUTHWEST OF THE NORTHWEST LEG OF A BRICK HOUSE SIGN, 1.5 FEET SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
984.063	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
984.063	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
983.932	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
983.906	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.880 12B = -91.867 09 = -91.824 03 = -91.660

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 87 GJS **NGS Name:** 87 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	31	111 N	25 W	442211.80	935209.23		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 7 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 87 GJS 1963 998

4.3 MILES NORTH OF CLEVELAND, 3.0 MILES NORTH ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND TRUNK HIGHWAY 99 IN CLEVELAND, THEN 2.0 MILES WEST ON COUNTY ROAD 110, 36.0 FEET NORTH OF COUNTY ROAD 110 (400TH STREET), 23.0 FEET WEST OF 301ST AVENUE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
997.662	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
997.846	.262		904.982	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.864 12B = -92.854 09 = -92.772 03 = -92.605

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 11.79572	93 52 09.22528	307555.544	164747.420	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658860.968	827506.258	1413201.676	16119817.932	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/87_GJS-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/87_GJS-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/87_GJS-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 88 ES **NGS Name:** 88 ES

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	23	112 N	25 W	443000.34	934830.25		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	USGS

Description: (2009) **Stamping:** 88 ES 1955

5.2 MILES NORTH OF HENDERSON, 3.0 MILES EAST ALONG COUNTY ROAD 19 FROM THE JUNCTION OF COUNTY ROAD 19 AND TRUNK HIGHWAY 169 (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), THEN 3.0 MILES SOUTH ON COUNTY ROAD 119, THEN 1.0 MILE WEST ON COUNTY ROAD 28, 47.0 FEET NORTH OF COUNTY ROAD 28, 108.0 FEET EAST OF 271ST AVENUE EXTENDED, 19.0 FEET WEST OF DRIVEWAY NUMBER 27073.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
957.780	.033	3				VERTICAL CONTROL SURVEY	1959	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
957.908	.262		866.163	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -91.745 12B = -91.732 09 = -91.683 03 = -91.512

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 00.34220	93 48 30.25369	323853.399	212059.823	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2674654.542	874983.095	1429569.910	16167085.528	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/88_ES-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/88_ES-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/88_ES-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

88 GJS

Mn/DOT Name: 88 GJS **NGS Name:** 88 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	111 N	25 W	442500.00	935133.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 88 GJS 1963 912

3.5 MILES SOUTHEAST OF LE SUEUR, 0.4 MILE EAST ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 35 IN LE SUEUR, THEN 2.7 MILES SOUTH ALONG COUNTY ROAD 152, THEN 1.5 MILES EAST ALONG TOWNSHIP ROAD 62, 40.0 FEET SOUTH AND 34.0 FEET EAST OF THE CROSSROADS.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
912.036	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.608 12B = -92.602 09 = -92.526 03 = -92.342

*** No Horizontal Positions in the Database ***

Geodetic Data Sheet (Feet)
GSID Station # 73589

89 GJS

04/28/2026
Sheet Help

Mn/DOT Name: 89 GJS
NGS Name: 89 GJS
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	111 N	25 W	442656.47	935114.73		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 12 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 89 GJS 1963 948

2.3 MILES EAST OF LE SUEUR, 2.6 MILES EAST ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 35 IN LE SUEUR, THEN 0.3 MILE SOUTH THEN WEST ALONG 293RD AVENUE, 81.0 FEET SOUTH OF 293RD AVENUE, 32.5 FEET EAST OF 293RD AVENUE, 3.0 FEET NORTH OF A POWER POLE, 0.5 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
947.964	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
948.121	.262		855.743	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.378 12B = -92.372 09 = -92.306 03 = -92.123

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 56.46770	93 51 14.73387	311767.911	193540.599	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2662767.446	856339.037	1417458.963	16148593.194	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/89_GJS-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/89_GJS-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/89_GJS-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 90 GJS **NGS Name:** 90 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	112 N	25 W	442803.08	935021.07		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	GOOD	Horz=NO Vert=NO	YES		RECESSED 4 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 90 GJS 1963 955

3.0 MILES EAST OF LE SUEUR, 2.6 MILES EAST ALONG COUNTY ROAD 26/TOWNSHIP ROAD 46 FROM THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 35 IN LE SUEUR, THEN 1.0 MILE NORTH ALONG COUNTY ROAD 116, THEN 0.4 MILE EAST ALONG TOWNSHIP ROAD 37, 44.0 FEET NORTH AND 35.0 FEET EAST OF A TEE-ROAD WEST, 5.5 FEET EAST OF A BARBED WIRE FENCE, 0.3 FOOT WEST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
954.618	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.191 12B = -92.185 09 = -92.126 03 = -91.945

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/90_GJS-3E-18MAY2010.jpg	E	May 18, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/90_GJS-2-18MAY2010.jpg		May 18, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/90_GJS-1-18MAY2010.jpg		May 18, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 91 GJS

NGS Name: 91 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	22	112 N	25 W	442907.00	934906.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2016) **Stamping:** 91 GJS 1963 980

4.4 MILES EAST OF LE SUEUR, 2.6 MILES EAST ALONG COUNTY ROAD 26/TOWNSHIP ROAD 46 FROM THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 35 IN LE SUEUR, THEN 1.0 MILE NORTH ALONG COUNTY ROAD 116, THEN 0.4 MILE EAST ALONG TOWNSHIP ROAD 37, THEN 2.2 MILES NORTH AND WEST ON COUNTY ROAD 155, 138.0 FEET EAST AND 24.0 FEET SOUTH OF A CROSSROADS, 3.0 FEET WEST OF A POWER POLE.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.952 12B = -91.942 09 = -91.886 03 = -91.709

Mn/DOT Name: 92 GJS **NGS Name:** 92 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	111 N	24 W	442356.00	934415.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 92 GJS 1963 1036

0.3 MILE WEST OF THE NORTH END OF LE CENTER, 1.0 MILE NORTH ON COUNTY ROAD 114 FROM THE JUNCTION OF COUNTY ROAD 114 AND TRUNK HIGHWAY 99 IN LE CENTER, 8.0 FEET SOUTH AND 38.0 FEET EAST OF COUNTY ROAD 114 AT A TEE -ROAD (TOWNSHIP ROAD) WEST.

Station Notes

SEARCHED THE GEODETIC AREA AND DUG DOWN 1.5 FEET FOUND NOTHING AND NO SIGNIFICANT SOUND FROM THE LOCATOR, MAY BE BURIED DEEP.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1036.166	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.539 12B = -92.542 09 = -92.451 03 = -92.254

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 93 GJS **NGS Name:** 93 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	8	111 N	24 W	442540.60	934416.97		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 6 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 93 GJS 1963 1032

1.9 MILES NORTH OF LE CENTER, 3.0 MILES NORTH ON COUNTY ROAD 114 FROM THE JUNCTION OF TRUNK HIGHWAY 99 IN LE CENTER, 39.0 FEET NORTH OF COUNTY ROAD 11, 31.0 FEET WEST OF COUNTY ROAD 114 EXTENDED, 18.0 FEET WEST OF DRIVEWAY NUMBER 23624, 2.0 FEET SOUTH OF A POWER POLE, 0.8 FOOT SOUTH OF A WITNESS POST.

Station Notes

DUE TO THE PROXIMITY TO A POWER POLE, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.422	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.501	.262		940.290	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.211 12B = -92.211 09 = -92.126 03 = -91.936

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 40.59976	93 44 16.96724	342016.901	185611.775	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2693095.164	848732.191	1447683.179	16140618.410	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/93_GJS-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/93_GJS-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/93_GJS-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 94 GJS

NGS Name: 94 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	111 N	24 W	442723.00	934520.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 94 GJS 1963 996

6.5 MILES WEST OF HEIDELBERG, 6.5 MILES WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 30 IN HEIDELBERG, THEN 2.0 MILES SOUTH ALONG COUNTY ROAD 11, 117.0 FEET EAST AND 59.0 FEET SOUTH OF COUNTY ROAD 11, AT THE EAST-WEST GRAVEL CROSSROADS.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
995.835	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.975 12B = -91.968 09 = -91.893 03 = -91.712

*** No Horizontal Positions in the Database ***

95 GJS

Mn/DOT Name: 95 GJS **NGS Name:** 95 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	19	112 N	24 W	442908.37	934529.90		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 95 GJS 1963 1007

6.5 MILES WEST OF HEIDELBERG, 6.5 MILES WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 30 IN HEIDELBERG, 60 FEET NORTH OF COUNTY ROAD (320TH STREET), 37 FEET WEST OF COUNTY ROAD (245TH AVENUE), 4.0 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF AN ELECTRIC SUBSTATION, 0.5 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.108	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.081	.262		915.444	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -91.637 12B = -91.627 09 = -91.568 03 = -91.397

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 08.36812	93 45 29.89760	336885.248	206692.420	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2687740.988	869754.750	1442587.851	16161698.980	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/95_GJS-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/95_GJS-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/95_GJS-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

96 GJS

Mn/DOT Name: 96 GJS

NGS Name: 96 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	110 N	24 W	441844.00	934451.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 96 GJS 1963 1048

4.0 MILES EAST-SOUTHEAST OF CLEVELAND, 3.75 MILES EAST ALONG DODD ROAD FROM THE JUNCTION OF DODD ROAD AND COUNTY ROAD 15 IN CLEVELAND, THEN 2.2 MILES SOUTH AND EAST ON COUNTY 9, 72.0 FEET NORTH AND 26.0 FEET WEST OF COUNTY ROAD 9 AT A TEE-ROAD WEST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.518	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.435 12B = -93.432 09 = -93.333 03 = -93.143

*** No Horizontal Positions in the Database ***

Geodetic Data Sheet (Feet)
GSID Station # 17465

97 GJS

04/28/2026
Sheet Help

Mn/DOT Name: 97 GJS
NGS Name: 97 GJS
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	110 N	24 W	441658.38	934312.66		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2012) **Stamping:** 97 GJS 1963 1047

6.0 MILES SOUTHEAST OF CLEVELAND, 0.7 MILE SOUTH ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND COUNTY ROAD 47 IN CLEVELAND, THEN 4.8 MILES SOUTHEAST ALONG SCOTCH LAKE ROAD/ COUNTY ROAD 13, THEN 1.25 MILES EAST ALONG COUNTY ROAD 12, 255.0 FEET WEST OF COUNTY ROAD 11 (BLUE GRASS ROAD) EXTENDED, 76.0 FEET SOUTH OF COUNTY ROAD 12 (GERMAN LAKE ROAD).

Station Notes
NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.911	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.304	.262		953.617	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -93.684 12B = -93.684 09 = -93.586 03 = -93.389

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.38158	93 43 12.65754	346304.236	132692.988	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2697942.613	795868.097	1451883.586	16087714.100	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/97_GJS-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/97_GJS-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/97_GJS-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: 98 GJS **NGS Name:** 98 GJS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	8	109 N	24 W	441553.00	934441.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 98 GJS 1963 1028

5.7 MILES SOUTHEAST OF CLEVELAND, 0.7 MILE SOUTH ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND COUNTY ROAD 47 IN CLEVELAND, THEN 6.0 MILES SOUTHEAST ON SCOTCH LAKE ROAD/ COUNTY ROAD 13, 55.0 FEET SOUTH AND 25.0 FEET WEST OF COUNTY ROAD 13 (NORTH AND EAST) AT A TEE-ROAD WEST.

Station Notes

SEARCHED THE WHOLE AREA, MAY HAVE BEEN TAKEN OUT BY ROAD CONSTRUCTION.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1028.492	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.838 12B = -93.832 09 = -93.737 03 = -93.560

*** No Horizontal Positions in the Database ***

Mn/DOT Name: 99 GJS **NGS Name:** 99 GJS

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	19	109 N	24 W	441416.00	934604.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	NO		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** 99 GJS 1963 1138

3.1 MILES NORTHEAST OF MADISON LAKE, 2.0 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND 1ST STREET IN MADISON LAKE, THEN 1.2 MILES NORTH ON COUNTY ROAD 29, 70.0 FEET SOUTH AND 29.0 FEET EAST OF THE CROSSROADS (COUNTY ROAD 16 EAST-WEST AND A TOWNSHIP ROAD NORTH-SOUTH).

Station Notes

THE TIES FALL IN A CORNFIELD.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1138.000	.033	3				VERTICAL CONTROL SURVEY	1966	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.983 12B = -93.973 09 = -93.891 03 = -93.720

*** No Horizontal Positions in the Database ***

Mn/DOT Name: A 116 **NGS Name:** A 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1734 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	30	110 N	25 W	441755.00	935210.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO	RR		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** A 116 1934

2.0 MILES SOUTHWEST OF CLEVELAND, 1.7 MILES SOUTH ALONG COUNTY ROAD 104 FROM THE JUNCTION OF COUNTY ROAD 104 AND WALNUT STREET IN CLEVELAND, THEN 1.0 MILE WEST ON COUNTY ROAD 18, 189.0 FEET NORTHEAST OF A ROAD CROSSING, 297.0 FEET NORTHEAST OF RAILROAD MILEPOST 46, IN THE SOUTHWEST END OF THE SOUTHEAST HEADWALL OF A RAILROAD CATTLE PASS, 12.0 FEET SOUTHEAST OF A RAILROAD TRACK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1021.553	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1021.386	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.268 12B = -93.261 09 = -93.166 03 = -93.015

*** No Horizontal Positions in the Database ***

Mn/DOT Name: ALCO
NGS Name: ALCO
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP9016 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443236.46	933351.65	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2014) **Stamping:** ALCO 2014

IN NEW PRAGUE, 1.0 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 151.85, 40.3 FEET SOUTH OF TRUNK HIGHWAY 19, 171.5 FEET EAST OF 7TH AVENUE SOUTHEAST, 1.5 FOOT NORTH OF A WITNESS POST.

Station Pair: ASTERIA - SCOTT, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
995.821	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
995.844	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
995.841	.016	2/1				VERTICAL CONTROL SURVEY	2015	VJORD

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
995.858	.262		906.219	.197	2011	GPS - RTRN	2024	RTRN2024
995.821	.131		906.481	.066	1996	GPS - STATIC	2023	HGLRD
995.821			906.248	.017	2011	GPS - STATIC	2023	HGLRD
995.821			906.248	.017	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
995.861	.262		906.229	.197	2011	GPS - RTRN	2016	RTRN2016
995.841			906.248	.024	2011	HORIZONTAL ADJUSTMENT	2015	GPS3107
995.841	.131		906.481	.066	1996	GPS - STATIC	2015	HJORD
995.841			906.248	.024	2011	GPS - STATIC	2015	HJORD
995.782	.262		906.150	.197	2011	GPS - RTRN	2014	RTRN2014

Geoid Separations(ft): GEOID18 = -89.636 12B = -89.632 09 = -89.570 03 = -89.426

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.46301	93 33 51.65322	387617.602	227440.002	.131	3	GPS - RTRN	2024	RTRN2024
44 32 36.46372	93 33 51.65457	387617.504	227440.074	.007		ADJUSTMENT	2023	GPS3572
44 32 36.46372	93 33 51.65457	387617.504	227440.074	.007	C	GPS - STATIC	2023	HGLRD
44 32 36.46354	93 33 51.65478	387617.489	227440.056	.131	3	GPS - RTRN	2016	RTRN2016
44 32 36.46372	93 33 51.65457	387617.504	227440.074	.010		ADJUSTMENT	2015	GPS3107
44 32 36.46372	93 33 51.65457	387617.504	227440.074	.010	C	GPS - STATIC	2015	HJORD
44 32 36.46325	93 33 51.65423	387617.529	227440.026	.131	3	GPS - RTRN	2014	RTRN2014

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.46352	93 33 51.65478	387617.489	227440.054	.033	C	GPS - STATIC	2023	HGLRD
44 32 36.46352	93 33 51.65478	387617.489	227440.054	.033	C	GPS - STATIC	2015	HJORD

ALCO

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738244.526	891036.389	1493333.377	16182355.163	.131	3	GPS - RTRN	2024	RTRN2024
2738244.428	891036.460	1493333.280	16182355.236	.007		ADJUSTMENT	2023	GPS3572
2738244.428	891036.460	1493333.280	16182355.236	.007	C	GPS - STATIC	2023	HGLRD
2738244.413	891036.442	1493333.264	16182355.217	.131	3	GPS - RTRN	2016	RTRN2016
2738244.428	891036.460	1493333.280	16182355.236	.010		ADJUSTMENT	2015	GPS3107
2738244.428	891036.460	1493333.280	16182355.236	.010	C	GPS - STATIC	2015	HJORD
2738244.453	891036.413	1493333.304	16182355.188	.131	3	GPS - RTRN	2014	RTRN2014

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738244.413	891036.440	1493333.264	16182355.215	.033	C	GPS - STATIC	2023	HGLRD
2738244.413	891036.440	1493333.264	16182355.215	.033	C	GPS - STATIC	2015	HJORD

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALCO-DP9016-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALCO-DP9016-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALCO-DP9016-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: ALFERD **NGS Name:** ALFERD

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6339 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	34	109 N	23 W	441219.94	933414.56	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 47 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** ALFERD 2016

0.8 MILE SOUTH OF WATERVILLE, 0.65 MILE SOUTHWEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE TO TRUNK HIGHWAY 60 MILEPOINT 131.95, THEN 0.3 MILE SOUTH ON COUNTY ROAD 3 (153RD AVENUE), 27.0 FEET EAST OF COUNTY ROAD 3, 13.0 FEET SOUTH OF DRIVEWAY NUMBER 51324 EXTENDED, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: GROSE - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.445	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1067.455	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1067.478	.262		973.810	.197	2011	GPS - RTRN	2024	RTRN2024
1067.340	.262		973.676	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.665 12B = -93.665 09 = -93.592 03 = -93.392

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 19.93966	93 34 14.56422	385299.240	104250.197	.131	3	GPS - RTRN	2024	RTRN2024
44 12 19.93989	93 34 14.56527	385299.164	104250.221	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737232.284	767843.568	1490816.848	16059220.954	.131	3	GPS - RTRN	2024	RTRN2024
2737232.207	767843.591	1490816.772	16059220.978	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALFERD-DQ6339-3E-16APR2024.jpg	E	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALFERD-DQ6339-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ALFERD-DQ6339-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

AMBLE

Mn/DOT Name: AMBLE **NGS Name:** AMBLE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6399 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	111 N	23 W	442542.54	933505.79	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** AMBLE 2016

IN MONTGOMERY, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 58.7, 60.7 FEET EAST OF TRUNK HIGHWAY 13, 58.8 FEET NORTH OF TRUNK HIGHWAY 21, 4.2 FEET NORTH OF A CABLE BOX, 2.4 FEET WEST OF A RIGHT-OF-WAY POST, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: MONTY MNDT RM 1 - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1063.951	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1064.040	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height Height	Acc	Order (/Class)	Ellipsoid (NAD83) Height	Acc	Adj	Determination Method	Project Info Year	Reference
1064.020	.262		973.056	.197	2011	GPS - RTRN	2024	RTRN2024
1063.951			973.079	.023	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1063.951	.131		973.276	.066	1996	GPS - STATIC	2020	HTH13
1063.951			973.079	.023	2011	GPS - STATIC	2020	HTH13
1064.037	.262		973.053	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.964 12B = -90.987 09 = -90.895 03 = -90.728

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 25 42.53692	93 35 05.78981	382016.603	185549.592	.131	3	GPS - RTRN	2024	RTRN2024
44 25 42.53730	93 35 05.79002	382016.588	185549.631	.013		ADJUSTMENT	2020	GPS3368
44 25 42.53730	93 35 05.79002	382016.588	185549.631	.013	C	GPS - STATIC	2020	HTH13
44 25 42.53713	93 35 05.78933	382016.639	185549.613	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 25 42.53712	93 35 05.79036	382016.564	185549.613	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2733088.515	849093.969	1487666.421	16140491.365	.131	3	GPS - RTRN	2024	RTRN2024
2733088.500	849094.008	1487666.406	16140491.404	.013		ADJUSTMENT	2020	GPS3368
2733088.500	849094.008	1487666.406	16140491.404	.013	C	GPS - STATIC	2020	HTH13
2733088.550	849093.991	1487666.456	16140491.387	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2733088.475	849093.989	1487666.381	16140491.386	.033	C	GPS - STATIC	2020	HTH13

AMBLE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/AMBLE-DQ6399-3E-22APR2024.jpg	E	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/AMBLE-DQ6399-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/AMBLE-DQ6399-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: B 116 **NGS Name:** B 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1735 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	110 N	25 W	441922.00	935006.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
STRUCTURE (MASSIVE)	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** B-116 1934

IN CLEVELAND, HALF A BLOCK SOUTH ALONG 6TH STREET FROM THE JUNCTION OF 6TH STREET AND WASHINGTON AVENUE, AT THE CENTER OF THE SOUTH ENTRANCE TO THE CLEVELAND HIGH SCHOOL.

Station Notes

APPEARS TO BE NEW CONSTRUCTION.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.011	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.834	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.225 12B = -93.215 09 = -93.126 03 = -92.962

*** No Horizontal Positions in the Database ***

Mn/DOT Name: B 3 **NGS Name:** B 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1772 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	112 N	25 W	443042.00	935312.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	GOOD	Horz=NO Vert=NO	YES	RR		NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** 748.630 B 3 1930

1.5 MILES SOUTHEAST OF HENDERSON, 0.8 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON, THEN 0.6 MILE NORTH ON COUNTY ROAD 34, 1.1 MILES EAST AND 1.4 MILES SOUTH OF THE POST OFFICE, 1.0 MILE SOUTH OF THE HENDERSON RAILROAD STATION, IN THE NORTHWEST CORNER OF A RAILROAD BRIDGE.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
748.762	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
748.630	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
748.630	.007	1				VERTICAL CONTROL SURVEY	1974	L23222
748.630	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -91.936 12B = -91.929 09 = -91.873 03 = -91.712

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/B_3-PP1772-3S-24MAY2010.jpg	S	May 24, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/B_3-PP1772-2-24MAY2010.jpg		May 24, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/B_3-PP1772-1-24MAY2010.jpg		May 24, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

BR 40002 SE

Mn/DOT Name: BR 40002 SE **NGS Name:** BR 40002 SE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3240 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	28	110 N	26 W	441825.09	935734.60	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
BRIDGE WALKWAY	VERTICAL CONTROL DISK	MNDT

Description: (1999) **Stamping:** BR 40002 SE 1999

IN THE SIDEWALK IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 22 BRIDGE NUMBER 40002 OVER THE MINNESOTA RIVER, 0.65 MILE SOUTHEAST ALONG TRUNK HIGHWAY 22 FROM THE TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY MILEPOINT 63.55, 26.7 FEET SOUTHWEST OF TRUNK HIGHWAY 22, 25.8 FEET NORTHWEST OF THE END OF A CONCRETE BRIDGE RAILING.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
767.023	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
767.023	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
766.951	.262		674.057	.197	2011	GPS - RTRN	2024	RTRN2024
767.000	.262		674.110	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.894 12B = -92.890 09 = -92.795 03 = -92.661

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 25.09032	93 57 34.59983	283688.521	142015.488	.131	3	GPS - RTRN	2024	RTRN2024
44 18 25.09146	93 57 34.60039	283688.481	142015.604	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635239.025	804525.361	1389307.330	16097132.877	.131	3	GPS - RTRN	2024	RTRN2024
2635238.984	804525.476	1389307.290	16097132.993	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_40002_SE-DR3240-3SW-15APR2024.jpg	SW	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_40002_SE-DR3240-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_40002_SE-DR3240-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: BR 5467 SE
NGS Name: BR 5467 SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6340 Get Map
NGS Quad / Sta Num : 43091231/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	34	109 N	23 W	441239.29	933402.75	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1983	2016	GOOD	Horz=NO Vert=NO	YES	5467	FLUSH	NO MAG MATERIAL

Monument Type: BRIDGE ABUTMENT
Disk Type: VERTICAL CONTROL DISK
Mon. Agency: MNDT

Description: (2016)
Stamping: BR 5467 SE 1942

IN AN ABUTMENT IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 60 BRIDGE NUMBER 5467 OVER A LOW AREA, 0.5 MILE WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 132.15, 26.0 FEET SOUTH OF TRUNK HIGHWAY 60. THE BRIDGE WAS BUILT IN 1942 THEN REMODELED IN 1983 WHEN THE DISK SET, THE DISK WAS STAMPED INCORRECTLY 1942, SHOULD BE STAMPED 1983.

Station Notes

THE SURVEY MARK HAS BEEN DEEMED UNSAFE DUE TO FALL RISK AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1040.808	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1040.818	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1040.930	.262		947.337	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.596 12B = -93.596 09 = -93.517 03 = -93.317

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 39.28692	93 34 02.74923	386170.309	106204.888	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738082.483	769807.151	1491690.663	16061173.417	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_5467_SE-DQ6340-3S-07JUN2016.jpg	S	Jun 7, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_5467_SE-DQ6340-2-07JUN2016.jpg		Jun 7, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/BR_5467_SE-DQ6340-1-07JUN2016.jpg		Jun 7, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

C 116

Mn/DOT Name: C 116 **NGS Name:** C 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1736 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	110 N	25 W	441932.00	934942.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** C-116 1934

IN CLEVELAND, ABOUT 250.0 FEET NORTHEAST OF THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 15 IN CLEVELAND, IN THE CLEVELAND RAILROAD STATION, IN THE SOUTHWEST CORNER OF A RAILROAD SEMAPHORE BASE, 15.0 FEET NORTHEAST OF THE MAIN RAILROAD TRACK.

Station Notes

THE RAILROAD TRACKS WERE REMOVED. THE SEMAPHORE IS GONE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.949	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1050.772	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.222 12B = -93.212 09 = -93.123 03 = -92.959

*** No Horizontal Positions in the Database ***

Mn/DOT Name: C 3 **NGS Name:** C 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1703 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	25	112 N	26 W	442828.00	935418.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** C 3 1930 756.422

IN LE SUEUR, ALONG THE RAILROAD AT THE JUNCTION OF DIVISION STREET AND NORTH MAIN STREET IN LE SUEUR, 0.5 MILE NORTH ALONG THE RAILROAD FROM THE RAILROAD STATION, 0.3 MILE NORTH OF THE CANNING FACTORY, 40.0 FEET SOUTH OF A ROAD CROSSING, 15.0 FEET WEST OF A RAILROAD.

Station Notes

IT APPEARS THAT SOME RECONSTRUCTION MAY HAVE BEEN DONE IN THE AREA.
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
756.554	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
756.422	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
756.422	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.283 12B = -92.283 09 = -92.214 03 = -92.040

*** No Horizontal Positions in the Database ***

CABE MNDT

Mn/DOT Name: CABE MNDT **NGS Name:** CABE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7028 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	111 N	25 W	442329.38	934944.62		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (2009)

Stamping: CABE 1991

5.0 MILES WEST-NORTHWEST OF LE CENTER, 3.85 MILES WEST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 0.5 MILE NORTH ON COUNTY ROAD 15, 98.5 FEET SOUTHEAST OF THE EAST LEG OF A NO PASSING ZONE SIGN, 83.4 FEET EAST-SOUTHEAST OF A POWER POLE, 30.5 FEET EAST OF COUNTY ROAD 15, 6.5 FEET NORTH OF A FIELD ENTRANCE, 8.9 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			914.693	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			914.778	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1007.445	.131		914.880	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1007.445	.131		914.880	.066	1996	GPS - STATIC	2004	HLESU

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.216						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.766 12B = -92.762 09 = -92.684 03 = -92.500

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.38221	93 49 44.61527	318126.866	172512.550	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.38230	93 49 44.61604	318126.810	172512.560	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.38169	93 49 44.61564	318126.839	172512.498	.033	C	ADJUSTMENT	2004	GPS2027
44 23 29.38169	93 49 44.61564	318126.839	172512.498	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.37905	93 49 44.61619	318126.798	172512.230	.033	C	GPS - STATIC	1991	HLESU

CABE MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669348.144	835382.066	1423781.408	16127563.015	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669348.088	835382.075	1423781.352	16127563.025	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669348.118	835382.013	1423781.380	16127562.963	.033	C	ADJUSTMENT	2004	GPS2027
2669348.118	835382.013	1423781.380	16127562.963	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669348.078	835381.746	1423781.338	16127562.696	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE-DG7028-3S-17MAY2010.jpg	S	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE-DG7028-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE-DG7028-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CABE MNDT RESET

Mn/DOT Name: CABE MNDT RESET
NGS Name: CABE RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3255 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	111 N	25 W	442329.38	934944.62	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** CABE 1991 2019

5.0 MILES WEST-NORTHWEST OF LE CENTER, 3.85 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 0.5 MILE NORTH ON COUNTY ROAD 15, 98.5 FEET SOUTHEAST OF THE EAST LEG OF A NO PASSING ZONE SIGN, 83.4 FEET EAST-SOUTHEAST OF A POWER POLE, 30.5 FEET EAST OF COUNTY ROAD 15 (281ST AVENUE), 6.5 FEET NORTH OF A FIELD ENTRANCE, 8.9 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

Station Pair: MARI MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.272	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1007.275	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.232	.262		914.467	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.766 12B = -92.762 09 = -92.684 03 = -92.500

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.38214	93 49 44.61590	318126.820	172512.544	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669348.099	835382.059	1423781.362	16127563.008	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE_RESET-DR3255-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE_RESET-DR3255-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CABE_RESET-DR3255-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: CAMBRIA **NGS Name:** CAMBRIA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP2393 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	112 N	25 W	443028.03	935125.56	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)
Disk Type: METAL ROD (WITH REMOVABLE ID DISK)
Mon. Agency: MNDT

Description: (2013) **Stamping:** CAMBRIA 2013

1.0 MILE NORTHEAST OF LE SUEUR, 0.7 MILE NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 28 (THE JUNCTION IS 0.5 MILE NORTHEAST OF LE SUEUR), AT TRUNK HIGHWAY 169 MILEPOINT 81.70, 57.0 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 139.2 FEET NORTHEAST OF THE HENDERSON STATION ROAD, 1.5 FEET NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.892	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
982.941	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
982.941	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.872	.262		891.009	.197	2011	GPS - RTRN	2024	RTRN2024
982.944			891.048	.010	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
982.948	.131		891.278	.066	1996	GPS - STATIC	2014	HBLOOM
982.944			891.048	.010	2011	GPS - STATIC	2014	HBLOOM
982.833	.262		890.982	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -91.860 12B = -91.850 09 = -91.804 03 = -91.644

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 28.03426	93 51 25.55910	311172.276	214972.896	.131	3	GPS - RTRN	2024	RTRN2024
44 30 28.03463	93 51 25.55963	311172.238	214972.935	.013		ADJUSTMENT	2014	GPS3006
44 30 28.03463	93 51 25.55963	311172.238	214972.935	.013	C	GPS - STATIC	2014	HBLOOM
44 30 28.03365	93 51 25.55889	311172.291	214972.835	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 28.03420	93 51 25.55968	311172.234	214972.891	.033	C	GPS - STATIC	2014	HBLOOM

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661944.774	877761.260	1416898.480	16170018.191	.131	3	GPS - RTRN	2024	RTRN2024
2661944.735	877761.297	1416898.442	16170018.229	.013		ADJUSTMENT	2014	GPS3006
2661944.735	877761.297	1416898.442	16170018.229	.013	C	GPS - STATIC	2014	HBLOOM
2661944.789	877761.198	1416898.495	16170018.129	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661944.732	877761.254	1416898.438	16170018.185	.033	C	GPS - STATIC	2014	HBLOOM

CAMBRIA

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CAMBRIA-DP2393-3SE-24APR2024.jpg	SE	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CAMBRIA-DP2393-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CAMBRIA-DP2393-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: CHAN
NGS Name: CHAN
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3243 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	110 N	26 W	441658.87	935700.36	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2025	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** CHAN 2019

1.0 MILE SOUTHEAST OF KASOTA, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 22 IN ST. PETER TO TRUNK HIGHWAY 22 MILEPOINT 61.8, THEN 0.3 MILE EAST ON COUNTY ROAD 102 (460TH STREET), 30.0 FEET NORTH OF COUNTY ROAD 102 (460TH STREET), 230.0 FEET WEST OF 341ST LANE, 4.2 FEET SOUTH OF A WITNESS POST.

Station Pair: KASKA - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.230	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
968.230	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
968.207	.262		875.212	.197	2011	GPS - RTRN	2025	RTRN2025
968.184	.262		875.189	.197	2011	GPS - RTRN	2024	RTRN2024
968.184	.262		875.189	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.995 12B = -92.995 09 = -92.903 03 = -92.772

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.87352	93 57 00.36114	286091.045	133259.620	.131	3	GPS - RTRN	2025	RTRN2025
44 16 58.87358	93 57 00.36100	286091.056	133259.626	.131	3	GPS - RTRN	2024	RTRN2024
44 16 58.87420	93 57 00.36113	286091.047	133259.689	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2637733.923	795796.482	1391695.015	16088376.484	.131	3	GPS - RTRN	2025	RTRN2025
2637733.933	795796.488	1391695.026	16088376.490	.131	3	GPS - RTRN	2024	RTRN2024
2637733.923	795796.551	1391695.017	16088376.553	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CHAN-DR3243-3N-22SEP2025.jpg	N	Sep 22, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CHAN-DR3243-2-22SEP2025.jpg		Sep 22, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CHAN-DR3243-1-22SEP2025.jpg		Sep 22, 2025

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CLEVELAND C

Mn/DOT Name: CLEVELAND C
NGS Name: CLEVELAND C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8222 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	110 N	25 W	442000.49	934943.18	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** CLEVELAND C 2002

0.5 MILE NORTH OF CLEVELAND, 0.5 MILE NORTH ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND TRUNK HIGHWAY 99 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 19.75, 42.0 FEET EAST OF COUNTY ROAD 15 (10TH STREET NORTH), 22.0 FEET NORTH OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1028.289	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1028.298	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1028.292	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1028.269	.262		935.100	.197	2011	GPS - RTRN	2024	RTRN2024
1028.338	.262		935.172	.197	2011	GPS - OPUS	2019	GPSBM
1028.285	.262		935.116	.197	2011	GPS - RTRN	2019	RTRN2019
1028.207	.262		935.047	.197	2011	GPS - RTRN	2013	RTRN2013
			935.241	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			935.329	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1028.377	.131		935.444	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1028.377	.131		935.444	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.169 12B = -93.159 09 = -93.067 03 = -92.903

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 00.48541	93 49 43.17700	318051.410	151356.988	.131	3	GPS - RTRN	2024	RTRN2024
44 20 00.48512	93 49 43.17798	318051.338	151356.959	.131	3	GPS - OPUS	2019	GPSBM
44 20 00.48463	93 49 43.18095	318051.122	151356.912	.131	3	GPS - RTRN	2019	RTRN2019
44 20 00.48499	93 49 43.17756	318051.368	151356.946	.131	3	GPS - RTRN	2013	RTRN2013
44 20 00.48510	93 49 43.17856	318051.296	151356.958	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 00.48516	93 49 43.17935	318051.239	151356.964	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 00.48458	93 49 43.17885	318051.275	151356.905	.033	C	ADJUSTMENT	2003	GPS1911
44 20 00.48458	93 49 43.17885	318051.275	151356.905	.033	C	GPS - STATIC	2003	HSUEU

CLEVELAND C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669496.911	814229.404	1423671.952	16106415.854	.131	3	GPS - RTRN	2024	RTRN2024
2669496.840	814229.375	1423671.880	16106415.825	.131	3	GPS - OPUS	2019	GPSBM
2669496.625	814229.325	1423671.664	16106415.778	.131	3	GPS - RTRN	2019	RTRN2019
2669496.871	814229.362	1423671.911	16106415.812	.131	3	GPS - RTRN	2013	RTRN2013
2669496.798	814229.373	1423671.838	16106415.824	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669496.741	814229.379	1423671.781	16106415.830	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669496.777	814229.320	1423671.816	16106415.771	.033	C	ADJUSTMENT	2003	GPS1911
2669496.777	814229.320	1423671.816	16106415.771	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_C-DF8222-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_C-DF8222-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_C-DF8222-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CLEVELAND NE

Mn/DOT Name: CLEVELAND NE
NGS Name: CLEVELAND NE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8223 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	110 N	25 W	442210.47	934616.47	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** CLEVELAND NE 2002

2.2 MILES SOUTHWEST OF LE CENTER, 2.8 MILES WEST-SOUTHWEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, TO TRUNK HIGHWAY 99 MILEPOINT 23.8, THEN 0.3 MILE EAST ON COUNTY ROAD 110, 65.0 FEET SOUTH OF A POWER POLE, 30.5 FEET SOUTH OF COUNTY ROAD 110, 10.0 FEET EAST OF A FIELD ENTRANCE, 5.0 FEET WEST OF A WITNESS POST. THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

Station Pair: HIAG MNDT RESET - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.424	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1039.430	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1039.427	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.424	.262		946.501	.197	2011	GPS - RTRN	2024	RTRN2024
1039.443	.262		946.520	.197	2011	GPS - OPUS	2019	GPSBM
1039.443	.262		946.524	.197	2011	GPS - RTRN	2019	RTRN2019
1039.279	.262		946.356	.197	2011	GPS - RTRN	2013	RTRN2013
			946.547	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			946.632	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1039.434	.131		946.744	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1039.434	.131		946.744	.066	1996	GPS - STATIC	2004	HLESU
1039.434	.131		946.744	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1039.434	.131		946.744	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.920 12B = -92.920 09 = -92.828 03 = -92.638

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 10.47120	93 46 16.46691	333178.936	164398.023	.131	3	GPS - RTRN	2024	RTRN2024
44 22 10.47162	93 46 16.46681	333178.944	164398.065	.131	3	GPS - OPUS	2019	GPSBM
44 22 10.47346	93 46 16.46649	333178.968	164398.251	.131	3	GPS - RTRN	2019	RTRN2019
44 22 10.47132	93 46 16.46689	333178.938	164398.035	.131	3	GPS - RTRN	2013	RTRN2013
44 22 10.47099	93 46 16.46691	333178.936	164398.002	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 10.47107	93 46 16.46767	333178.881	164398.010	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 10.47054	93 46 16.46708	333178.923	164397.956	.033	C	ADJUSTMENT	2004	GPS2027
44 22 10.47054	93 46 16.46708	333178.923	164397.956	.033	C	GPS - STATIC	2004	HLESU
44 22 10.47054	93 46 16.46708	333178.923	164397.956	.033	C	ADJUSTMENT	2003	GPS1911
44 22 10.47054	93 46 16.46708	333178.923	164397.956	.033	C	GPS - STATIC	2003	HSUEU

CLEVELAND NE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684483.580	827428.485	1438814.457	16119427.417	.131	3	GPS - RTRN	2024	RTRN2024
2684483.587	827428.527	1438814.465	16119427.460	.131	3	GPS - OPUS	2019	GPSBM
2684483.610	827428.714	1438814.490	16119427.646	.131	3	GPS - RTRN	2019	RTRN2019
2684483.582	827428.497	1438814.459	16119427.429	.131	3	GPS - RTRN	2013	RTRN2013
2684483.580	827428.463	1438814.457	16119427.396	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684483.525	827428.471	1438814.402	16119427.405	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684483.568	827428.418	1438814.445	16119427.351	.033	C	ADJUSTMENT	2004	GPS2027
2684483.568	827428.418	1438814.445	16119427.351	.033	C	GPS - STATIC	2004	HLESU
2684483.568	827428.418	1438814.445	16119427.351	.033	C	ADJUSTMENT	2003	GPS1911
2684483.568	827428.418	1438814.445	16119427.351	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_NE-DF8223-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_NE-DF8223-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_NE-DF8223-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CLEVELAND SE

Mn/DOT Name: CLEVELAND SE
NGS Name: CLEVELAND SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8224 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	110 N	25 W	441658.63	934641.52		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** CLEVLAND-SE 2002

3.5 MILES SOUTHEAST OF CLEVELAND, 3.5 MILES SOUTH-SOUTHEAST ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND TRUNK HIGHWAY 99 IN CLEVELAND, TO TRUNK HIGHWAY 99 MILEPOINT 19.75, THEN 2.0 MILES EAST ALONG COUNTY ROAD 18, 48.0 FEET NORTH OF COUNTY ROAD 18, 13.0 FEET EAST OF A FIELD ENTRANCE, 12.0 FEET SOUTHWEST OF A CAPE HORN STREET SIGN, 9.0 FEET SOUTHWEST OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1060.828	.262		967.177	.197	2011	GPS - RTRN	2024	RTRN2024
1060.749	.262		967.095	.197	2011	GPS - OPUS	2021	GPSBM
1060.857	.262		967.216	.197	2011	GPS - RTRN	2020	RTRN2020
			967.173	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			967.259	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1060.792	.131		967.377	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1060.792	.131		967.377	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.651 12B = -93.642 09 = -93.553 03 = -93.382

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.63184	93 46 41.51610	331110.283	132832.771	.131	3	GPS - RTRN	2024	RTRN2024
44 16 58.63195	93 46 41.51705	331110.214	132832.782	.131	3	GPS - OPUS	2021	GPSBM
44 16 58.63206	93 46 41.51694	331110.222	132832.793	.131	3	GPS - RTRN	2020	RTRN2020
44 16 58.63247	93 46 41.51710	331110.211	132832.835	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.63244	93 46 41.51789	331110.154	132832.832	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.63186	93 46 41.51734	331110.193	132832.773	.033	C	ADJUSTMENT	2003	GPS1911
44 16 58.63186	93 46 41.51734	331110.193	132832.773	.033	C	GPS - STATIC	2003	HSUEU

CLEVELAND SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682749.830	795846.823	1436696.008	16087878.099	.131	3	GPS - RTRN	2024	RTRN2024
2682749.761	795846.834	1436695.939	16087878.111	.131	3	GPS - OPUS	2021	GPSBM
2682749.769	795846.845	1436695.947	16087878.122	.131	3	GPS - RTRN	2020	RTRN2020
2682749.757	795846.886	1436695.936	16087878.163	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682749.699	795846.883	1436695.879	16087878.161	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682749.739	795846.825	1436695.918	16087878.102	.033	C	ADJUSTMENT	2003	GPS1911
2682749.739	795846.825	1436695.918	16087878.102	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SE-DF8224-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SE-DF8224-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SE-DF8224-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CLEVELAND SW

Mn/DOT Name: CLEVELAND SW
NGS Name: CLEVELAND SW
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8225 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	110 N	25 W	441746.83	935128.02		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** CLEVELAND - SW 2002

2.7 MILES SOUTHWEST OF CLEVELAND, 2.7 MILES SOUTH ALONG COUNTY ROAD 15 FROM THE JUNCTION OF COUNTY ROAD 15 AND TRUNK HIGHWAY 99 IN CLEVELAND, THEN 1.7 MILES NORTHWEST ON COUNTY ROAD 18, 0.4 MILE WEST ALONG COUNTY ROAD 18, 106.0 FEET NORTH OF A POWER POLE, 49.0 FEET NORTH OF COUNTY ROAD 18, 25.0 FEET SOUTH OF A DITCH, 12.0 FEET EAST OF A FIELD ENTRANCE, 3.0 FEET SOUTHWEST OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1024.335	.262		931.015	.197	2011	GPS - RTRN	2024	RTRN2024
1024.322	.262		931.002	.197	2011	GPS - OPUS	2021	GPSBM
1024.398	.262		931.084	.197	2011	GPS - RTRN	2020	RTRN2020
			931.058	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			931.143	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1024.342	.131		931.258	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1024.342	.131		931.258	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.320 12B = -93.313 09 = -93.222 03 = -93.067

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 46.82566	93 51 28.01898	310311.026	137887.748	.131	3	GPS - RTRN	2024	RTRN2024
44 17 46.82522	93 51 28.01941	310310.995	137887.703	.131	3	GPS - OPUS	2021	GPSBM
44 17 46.82545	93 51 28.01896	310311.028	137887.726	.131	3	GPS - RTRN	2020	RTRN2020
44 17 46.82569	93 51 28.01940	310310.996	137887.751	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 46.82571	93 51 28.02020	310310.938	137887.753	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 46.82517	93 51 28.01966	310310.976	137887.698	.033	C	ADJUSTMENT	2003	GPS1911
44 17 46.82517	93 51 28.01966	310310.976	137887.698	.033	C	GPS - STATIC	2003	HSUEU

CLEVELAND SW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661900.629	800680.482	1415913.055	16092964.266	.131	3	GPS - RTRN	2024	RTRN2024
2661900.597	800680.438	1415913.023	16092964.222	.131	3	GPS - OPUS	2021	GPSBM
2661900.630	800680.461	1415913.057	16092964.245	.131	3	GPS - RTRN	2020	RTRN2020
2661900.598	800680.485	1415913.025	16092964.269	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661900.540	800680.487	1415912.967	16092964.272	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2661900.579	800680.432	1415913.005	16092964.217	.033	C	ADJUSTMENT	2003	GPS1911
2661900.579	800680.432	1415913.005	16092964.217	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SW-DF8225-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SW-DF8225-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CLEVELAND_SW-DF8225-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CORDOVA C

Mn/DOT Name: CORDOVA C
NGS Name: CORDOVA C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8226 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	15	110 N	24 W	442027.09	934225.30		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2010	DESTROYED	Horz=NO Vert=NO	YES			MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MN-079

Description: (2009) **Stamping:** CORDOVA C 2002

4.0 MILES SOUTH OF LE CENTER, 3.9 MILES SOUTH AND EAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND TRUNK HIGHWAY 99 IN LE CENTER TO COUNTY ROAD 2, THEN 0.10 MILE EAST ON COUNTY ROAD 2 (DODD ROAD), 45.0 FEET SOUTH OF COUNTY ROAD 2, 35.0 FEET EAST OF 221ST AVENUE, 10.0 FEET WEST OF A POWER POLE, 5.0 FEET WEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			968.932	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			969.017	.012	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1061.940	.131		969.135	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1061.940	.131		969.135	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.071 12B = -93.074 09 = -92.969 03 = -92.769

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 27.08589	93 42 25.29818	349897.859	153803.822	.023		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 27.08590	93 42 25.29896	349897.802	153803.823	.026		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 27.08534	93 42 25.29845	349897.839	153803.766	.033	C	ADJUSTMENT	2003	GPS1911
44 20 27.08534	93 42 25.29845	349897.839	153803.766	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701311.862	817013.332	1455509.597	16108810.570	.023		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701311.805	817013.333	1455509.540	16108810.571	.026		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701311.843	817013.276	1455509.576	16108810.514	.033	C	ADJUSTMENT	2003	GPS1911
2701311.843	817013.276	1455509.576	16108810.514	.033	C	GPS - STATIC	2003	HSUEU

CORDOVA C

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C-DF8226-3E-10JUN2010.jpg	E	Jun 10, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C-DF8226-2-10JUN2010.jpg		Jun 10, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C-DF8226-1-10JUN2010.jpg		Jun 10, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

CORDOVA C RESET

Mn/DOT Name: CORDOVA C RESET **NGS Name:** CORDOVA C RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	15	110 N	24 W	442027.10	934225.31		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2010	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2010) **Stamping:** CORDOVA C 2002 2010

4.0 MILES SOUTH OF LE CENTER, 3.9 MILES SOUTH AND EAST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 0.10 MILE EAST ALONG COUNTY ROAD 2 (DODD ROAD), 45.0 FEET SOUTH OF COUNTY ROAD 2, 34.0 FEET EAST OF 221ST AVENUE, 12.0 FEET SOUTHEAST OF A STOP SIGN, 7.0 FEET WEST-NORTHWEST OF A POWER POLE, 5.5 FEET WEST-NORTHWEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1062.058	.262		968.988	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -93.071 12B = -93.074 09 = -92.972 03 = -92.769

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 27.10403	93 42 25.30652	349897.265	153805.663	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701311.250	817015.167	1455509.006	16108812.411	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C_RESET-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C_RESET-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/CORDOVA_C_RESET-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: D 116 **NGS Name:** D 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1738 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	2	110 N	25 W	442136.00	934718.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** D 116 1934

3.1 MILES NORTHEAST OF CLEVELAND, 3.1 MILES NORTH ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, 3.1 MILES NORTHEAST ALONG THE RAILROAD FROM THE CLEVELAND RAILROAD STATION, 57.75 FEET NORTHEAST OF RAILROAD MILEPOST 40, 165.0 FEET SOUTHWEST OF A ROAD CROSSING, 48.0 FEET SOUTHEAST OF A RAILROAD.

Station Notes

NO VISIBLE EVIDENCE OF A RAILROAD, THE TIES PUT THE MARK IN AN ALFALFA FIELD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.296	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1034.119	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.015 12B = -93.008 09 = -92.920 03 = -92.733

*** No Horizontal Positions in the Database ***

Mn/DOT Name: D 3 **NGS Name:** D 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1704 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	2	111 N	26 W	442650.00	935530.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	GOOD	Horz=NO Vert=NO	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2016) **Stamping:** 753.397 D 3 1930

0.8 MILE SOUTH OF LE SUEUR, 0.8 MILE SOUTH ALONG SOUTH 3RD STREET FROM THE JUNCTION OF SOUTH 3RD STREET AND MAAG STREET IN LE SUEUR, CONTINUE ONTO COUNTY ROAD 36 FROM SOUTH 3RD STREET, 1.8 MILES SOUTH ALONG A RAILROAD FROM THE RAILROAD STATION, 300.0 FEET NORTH OF A RAILROAD BRIDGE, 115.0 FEET SOUTHEAST OF RAILROAD SIGNAL 637, 39.0 FEET EAST OF THE EAST RAIL OF A RAILROAD, 0.7 FOOT WEST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
753.529	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
753.397	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
753.397	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.467 12B = -92.467 09 = -92.388 03 = -92.214

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/D_3-PP1704-3NW-17MAY2010.jpg	NW	May 17, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/D_3-PP1704-2-17MAY2010.jpg		May 17, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/D_3-PP1704-1-17MAY2010.jpg		May 17, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DERRYNANE C

Mn/DOT Name: DERRYNANE C
NGS Name: DERRYNANE C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8227 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	22	112 N	24 W	443001.52	934126.36		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** DERRYNANE- C 2002

5.2 MILES SOUTHWEST OF NEW PRAGUE, 5.0 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE TO TRUNK HIGHWAY 19 MILEPOINT 145.7, THEN 3.15 MILES SOUTH ALONG COUNTY ROAD 121, 190.0 FEET SOUTHEAST OF A POWER POLE, 131.0 FEET WEST-SOUTHWEST OF A POWER POLE, 36.0 FEET SOUTH OF COUNTY ROAD 121 (211TH AVENUE), 20.0 FEET EAST OF A FIELD ENTRANCE, 4.0 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.385	.262		944.437	.197	2011	GPS - RTRN	2024	RTRN2024
1035.356	.262		944.408	.197	2011	GPS - OPUS	2021	GPSBM
1035.372	.262		944.437	.197	2011	GPS - RTRN	2020	RTRN2020
			944.490	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			944.578	.015	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1035.464	.131		944.703	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1035.464	.131		944.703	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -90.948 12B = -90.935 09 = -90.876 03 = -90.728

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 01.51890	93 41 26.35749	354577.998	211947.457	.131	3	GPS - RTRN	2024	RTRN2024
44 30 01.51981	93 41 26.35822	354577.946	211947.549	.131	3	GPS - OPUS	2021	GPSBM
44 30 01.51975	93 41 26.35787	354577.971	211947.543	.131	3	GPS - RTRN	2020	RTRN2020
44 30 01.51967	93 41 26.35831	354577.939	211947.535	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 01.51980	93 41 26.35917	354577.877	211947.549	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 01.51924	93 41 26.35871	354577.910	211947.492	.033	C	ADJUSTMENT	2003	GPS1911
44 30 01.51924	93 41 26.35871	354577.910	211947.492	.033	C	GPS - STATIC	2003	HSUEU

DERRYNANE C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2705374.935	875196.382	1460282.064	16166923.035	.131	3	GPS - RTRN	2024	RTRN2024
2705374.882	875196.474	1460282.012	16166923.127	.131	3	GPS - OPUS	2021	GPSBM
2705374.907	875196.468	1460282.037	16166923.121	.131	3	GPS - RTRN	2020	RTRN2020
2705374.876	875196.460	1460282.005	16166923.113	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2705374.813	875196.473	1460281.943	16166923.127	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2705374.847	875196.416	1460281.975	16166923.070	.033	C	ADJUSTMENT	2003	GPS1911
2705374.847	875196.416	1460281.975	16166923.070	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DERRYNANE_C-DF8227-3E-22APR2024.jpg	E	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DERRYNANE_C-DF8227-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DERRYNANE_C-DF8227-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DEUNK MNDT

Mn/DOT Name: DEUNK MNDT **NGS Name:** DEUNK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF6581 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	111 N	26 W	442448.71	935500.89	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 8 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** DEUNK 1991

3.5 MILES SOUTH-SOUTHWEST OF LE SUEUR, 3.6 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22 IN LE SUEUR, THEN 0.4 MILE WEST ON COUNTY ROAD 61 (370TH STREET), 169.1 FEET EAST OF A POWER POLE, 30.6 FEET WEST OF A POWER POLE, 29.5 FEET NORTH OF COUNTY ROAD 61 (370TH STREET), 2.6 FEET SOUTH OF A WITNESS POST.

Station Pair: SHAR MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
865.123	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
865.123	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
865.107	.262		772.502	.197	2011	GPS - RTRN	2024	RTRN2024
			772.518	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			772.603	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
865.123	.131		772.708	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
865.123	.131		772.708	.066	1996	GPS - STATIC	2004	HLESU
865.123	.131		772.708	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1882
865.123	.131		772.708	.066	1996	GPS - STATIC	2002	HNICO

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
864.893						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.605 12B = -92.605 09 = -92.526 03 = -92.352

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71091	93 55 00.88763	295238.336	180753.763	.131	3	GPS - RTRN	2024	RTRN2024
44 24 48.71122	93 55 00.88678	295238.398	180753.794	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71130	93 55 00.88758	295238.340	180753.803	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71084	93 55 00.88692	295238.387	180753.756	.033	C	ADJUSTMENT	2004	GPS2027
44 24 48.71084	93 55 00.88691	295238.388	180753.756	.033	C	GPS - STATIC	2004	HLESU
44 24 48.71084	93 55 00.88691	295238.388	180753.756	.033	C	ADJUSTMENT	2003	GPS1882
44 24 48.71084	93 55 00.88691	295238.389	180753.756	.033	C	GPS - STATIC	2002	HNICO

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.70895	93 55 00.88802	295238.304	180753.566	.033	C	GPS - STATIC	1991	HLESU

DEUNK MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646376.282	843379.263	1400914.984	16135838.028	.131	3	GPS - RTRN	2024	RTRN2024
2646376.343	843379.295	1400915.046	16135838.059	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646376.285	843379.303	1400914.988	16135838.067	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646376.333	843379.256	1400915.035	16135838.020	.033	C	ADJUSTMENT	2004	GPS2027
2646376.334	843379.256	1400915.036	16135838.020	.033	C	GPS - STATIC	2004	HLESU
2646376.334	843379.256	1400915.036	16135838.020	.033	C	ADJUSTMENT	2003	GPS1882
2646376.334	843379.256	1400915.036	16135838.020	.033	C	GPS - STATIC	2002	HNICO

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646376.253	843379.065	1400914.953	16135837.830	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DEUNK-DF6581-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DEUNK-DF6581-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DEUNK-DF6581-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DIETZ MNDT

Mn/DOT Name: DIETZ MNDT
NGS Name: DIETZ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9299 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	112 N	23 W	442818.30	933430.09	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** DIETZ 1989

2.5 MILES NORTH OF MONTGOMERY, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST IN MONTGOMERY, THEN 0.4 MILE EAST ON 330TH STREET, 37.5 FEET SOUTHEAST OF 330TH STREET, 22.7 FEET SOUTH-SOUTHWEST OF DIETZ MNDT RM 1, 20.3 FEET SOUTHEAST OF DIETZ MNDT RM 2 RESET, 11.2 FEET WEST OF A FENCE, 3.6 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.573	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1056.645	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1056.645	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.412	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.609	.262		966.228	.197	2011	GPS - RTRN	2024	RTRN2024
1056.648	.262		966.258	.197	2011	GPS - RTRN	2016	RTRN2016
			966.199	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			966.287	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1056.658	.131		966.455	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1056.658	.131		966.455	.066	1996	GPS - STATIC	2005	H40BJ
1056.658	.131		966.455	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1056.658	.131		966.455	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -90.377 12B = -90.387 09 = -90.311 03 = -90.161

DIETZ MNDT

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.29592	93 34 30.08729	384692.714	201309.477	.131	3	GPS - RTRN	2024	RTRN2024
44 28 18.29652	93 34 30.08869	384692.612	201309.538	.131	3	GPS - RTRN	2016	RTRN2016
44 28 18.29593	93 34 30.08709	384692.728	201309.478	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.29606	93 34 30.08783	384692.675	201309.491	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.29558	93 34 30.08738	384692.707	201309.442	.033	C	ADJUSTMENT	2005	GPS2080
44 28 18.29558	93 34 30.08737	384692.708	201309.442	.033	C	GPS - STATIC	2005	H40BJ
44 28 18.29558	93 34 30.08737	384692.708	201309.442	.033	C	ADJUSTMENT	2004	GPS1939
44 28 18.29558	93 34 30.08737	384692.708	201309.442	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.28997	93 34 30.08316	384693.010	201308.872	.033	C	GPS - STATIC	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735597.114	864879.454	1490367.039	16156240.330	.131	3	GPS - RTRN	2024	RTRN2024
2735597.012	864879.514	1490366.938	16156240.392	.131	3	GPS - RTRN	2016	RTRN2016
2735597.129	864879.455	1490367.053	16156240.331	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735597.075	864879.468	1490367.000	16156240.345	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735597.108	864879.420	1490367.032	16156240.296	.033	C	ADJUSTMENT	2005	GPS2080
2735597.109	864879.420	1490367.033	16156240.296	.033	C	GPS - STATIC	2005	H40BJ
2735597.109	864879.420	1490367.033	16156240.296	.033	C	ADJUSTMENT	2004	GPS1939
2735597.109	864879.420	1490367.033	16156240.296	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735597.417	864878.853	1490367.334	16156239.726	.033	C	GPS - STATIC	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ-AC9299-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ-AC9299-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ-AC9299-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DIETZ MNDT RM 1

Mn/DOT Name: DIETZ MNDT RM 1 **NGS Name:** DIETZ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9298 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	112 N	23 W	442818.50	933429.95	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** DIETZ NO 1 1989

2.5 MILES NORTH OF MONTGOMERY, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST IN MONTGOMERY, THEN 0.4 MILE EAST ON 330TH STREET, 34.5 FEET EAST-SOUTHEAST OF 330TH STREET, 22.7 FEET NORTH-NORTHEAST OF STATION DIETZ MNDT, 26.6 FEET EAST-NORTHEAST OF DIETZ MNDT RM 2 RESET, 2.0 FEET WEST OF A FENCE, 2.7 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.727	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1056.802	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1056.799	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.569	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.773	.262		966.392	.197	2011	GPS - RTRN	2024	RTRN2024
1056.812	.262		966.425	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.377 12B = -90.387 09 = -90.311 03 = -90.161

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.49581	93 34 29.94633	384703.045	201329.665	.131	3	GPS - RTRN	2024	RTRN2024
44 28 18.49690	93 34 29.94745	384702.964	201329.775	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735607.230	864899.748	1490377.398	16156260.493	.131	3	GPS - RTRN	2024	RTRN2024
2735607.148	864899.858	1490377.318	16156260.604	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_1-AC9298-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_1-AC9298-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_1-AC9298-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DIETZ MNDT RM 2

Mn/DOT Name: DIETZ MNDT RM 2 **NGS Name:** DIETZ RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9300 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	112 N	23 W	442818.42	933430.30	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2016	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type
UNKNOWN

Disk Type
REFERENCE MARK DISK

Mon. Agency
MNDT

Description: (2009) **Stamping:** DIETZ NO 2 1989

2.5 MILES NORTH OF MONTGOMERY, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST, THEN 0.4 MILE EAST ON A GRAVEL ROAD (330TH STREET), 17.5 FEET SOUTHEAST OF A GRAVEL ROAD, 27.1 FEET WEST OF A FENCE, 20.3 FEET NORTHWEST OF STATION DIETZ MNDT, 26.6 FEET WEST OF DIETZ MNDT 1, 23.3 FEET WEST-NORTHWEST OF A WITNESS POST, 28.3 FEET WEST-SOUTHWEST OF A WITNESS POST.

Station Notes

10-06-2004 - THE MARK WAS HIT BY A PLOW. ROD AND THE DISK BENT TO THE SOUTHWEST. BENT AT 60 DEGREES. THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.599	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.363	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.377 12B = -90.387 09 = -90.311 03 = -90.161

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2-AC9300-3E-01JUN2010.jpg	E	Jun 1, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2-AC9300-2-07APR2017.jpg		Apr 7, 2017
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2-AC9300-1-01JUN2010.jpg		Jun 1, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DIETZ MNDT RM 2 RESET

Mn/DOT Name: DIETZ MNDT RM 2 RESET **NGS Name:** DIETZ RM 2 RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6414 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	112 N	23 W	442818.43	933430.30	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** DIETZ NO 2 1989 2016

2.5 MILES NORTH OF MONTGOMERY, 2.0 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST, THEN 0.4 MILE EAST ON A GRAVEL ROAD (330TH STREET), 17.5 FEET SOUTHEAST OF A GRAVEL ROAD, 20.3 FEET NORTHWEST OF STATION DIETZ MNDT, 26.6 FEET WEST OF DIETZ MNDT RM 1, 23.3 FEET WEST-NORTHWEST OF A WITNESS POST, 28.3 FEET WEST-SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.297	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1056.373	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1056.291	.262		965.913	.197	2011	GPS - RTRN	2024	RTRN2024
1056.343	.262		965.953	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.377 12B = -90.387 09 = -90.311 03 = -90.161

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 18.42532	93 34 30.29759	384677.534	201322.664	.131	3	GPS - RTRN	2024	RTRN2024
44 28 18.42541	93 34 30.29771	384677.526	201322.673	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735581.798	864892.478	1490351.887	16156253.537	.131	3	GPS - RTRN	2024	RTRN2024
2735581.789	864892.487	1490351.879	16156253.546	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2_RESET-DQ6414-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2_RESET-DQ6414-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_2_RESET-DQ6414-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DIETZ MNDT RM 3

Mn/DOT Name: DIETZ MNDT RM 3 **NGS Name:** DIETZ RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9333 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	112 N	23 W	442822.33	933459.74	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** DIETZ NO 3 1989

2.5 MILES NORTH OF MONTGOMERY, 2.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST, 76.5 FEET WEST OF TRUNK HIGHWAY 13, 67.5 FEET NORTH OF A GRAVEL ROAD EAST, 38.2 FEET NORTH OF A CABLE MARKER, 2.7 FEET EAST OF A WITNESS POST.

Station Notes

THE CABLE MARKER AND THE WITNESS POST ARE GONE. THE POWER POLE IS NOW 70.0 FEET SOUTH OF THE AREA.
LOOKS LIKE NEW GRADING ON THE SLOPE.
PULLED THE TIES, NO READING WITH THE LOCATOR.
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.909	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.676	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.633	.262		953.230	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -90.403 12B = -90.413 09 = -90.334 03 = -90.187

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 22.32756	93 34 59.74053	382544.637	201729.494	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 22.32213	93 34 59.73332	382545.157	201728.940	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733444.964	865276.630	1488220.542	16156663.671	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733445.489	865276.083	1488221.061	16156663.118	3.281		CLASSICAL SURVEY	1990	HMONT

DIETZ MNDT RM 3 RESET

Mn/DOT Name: DIETZ MNDT RM 3 RESET
NGS Name: DIETZ RM 3 RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6413 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	112 N	23 W	442822.33	933459.74	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** DIETZ NO 3 1989 2016

2.5 MILES NORTH OF MONTGOMERY, 2.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 61.80, 76.5 FEET WEST OF TRUNK HIGHWAY 13, 67.5 FEET NORTH OF PEPIN LANE, 38.2 FEET NORTH OF A CABLE BOX, 1.3 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.653	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1043.728	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.643	.262		953.240	.197	2011	GPS - OPUS	2021	GPSBM
1043.718	.262		953.315	.197	2011	GPS - OPUS	2021	GPSBM
1043.725	.262		953.312	.197	2011	GPS - RTRN	2020	RTRN2020
1043.745	.262		953.331	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.403 12B = -90.413 09 = -90.334 03 = -90.187

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 22.32736	93 34 59.74115	382544.593	201729.474	.131	3	GPS - OPUS	2021	GPSBM
44 28 22.32746	93 34 59.74097	382544.606	201729.484	.131	3	GPS - OPUS	2021	GPSBM
44 28 22.32726	93 34 59.74023	382544.659	201729.464	.131	3	GPS - RTRN	2020	RTRN2020
44 28 22.32711	93 34 59.74119	382544.590	201729.449	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733444.919	865276.610	1488220.497	16156663.652	.131	3	GPS - OPUS	2021	GPSBM
2733444.932	865276.620	1488220.510	16156663.661	.131	3	GPS - OPUS	2021	GPSBM
2733444.986	865276.600	1488220.564	16156663.641	.131	3	GPS - RTRN	2020	RTRN2020
2733444.916	865276.584	1488220.494	16156663.626	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_3_RESET-DQ6413-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_3_RESET-DQ6413-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DIETZ_RM_3_RESET-DQ6413-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

DORAN

Mn/DOT Name: DORAN
NGS Name: DORAN
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6422 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	110 N	23 W	441838.04	933621.29	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2017) **Stamping:** DORAN 2017

9.3 MILES SOUTH OF MONTGOMERY, 5.1 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 50.2, 60.0 FEET WEST-SOUTHWEST OF TRUNK HIGHWAY 13, 30.0 FEET SOUTH-SOUTHEAST OF A FIELD ENTRANCE, 1.5 FEET EAST-NORTHEAST OF A WITNESS POST.

Station Pair: 4001 H - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1069.847	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1069.890	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.044	.262		977.203	.197	2011	GPS - RTRN	2024	RTRN2024
1069.890	.262		977.049	.197	2011	GPS - OPUS	2021	GPSBM
1069.791	.262		976.950	.197	2011	GPS - OPUS	2021	GPSBM
1069.847			977.108	.024	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1069.847	.131		977.298	.066	1996	GPS - STATIC	2020	HTH13
1069.847			977.108	.024	2011	GPS - STATIC	2020	HTH13
1069.972	.262		977.131	.197	2011	GPS - RTRN	2020	RTRN2020
1069.857	.262		977.019	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.841 12B = -92.838 09 = -92.749 03 = -92.552

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 38.03552	93 36 21.28819	376289.295	142591.033	.131	3	GPS - RTRN	2024	RTRN2024
44 18 38.03533	93 36 21.28853	376289.270	142591.014	.131	3	GPS - OPUS	2021	GPSBM
44 18 38.03594	93 36 21.28892	376289.242	142591.076	.131	3	GPS - OPUS	2021	GPSBM
44 18 38.03565	93 36 21.28866	376289.261	142591.047	.016		ADJUSTMENT	2020	GPS3368
44 18 38.03565	93 36 21.28866	376289.261	142591.047	.016	C	GPS - STATIC	2020	HTH13
44 18 38.03533	93 36 21.28786	376289.319	142591.014	.131	3	GPS - RTRN	2020	RTRN2020
44 18 38.03577	93 36 21.28879	376289.251	142591.059	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 38.03550	93 36 21.28892	376289.242	142591.032	.033	C	GPS - STATIC	2020	HTH13

DORAN

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727817.530	806082.222	1481872.112	16097559.982	.131	3	GPS - RTRN	2024	RTRN2024
2727817.506	806082.202	1481872.087	16097559.963	.131	3	GPS - OPUS	2021	GPSBM
2727817.477	806082.264	1481872.060	16097560.025	.131	3	GPS - OPUS	2021	GPSBM
2727817.496	806082.235	1481872.078	16097559.995	.016		ADJUSTMENT	2020	GPS3368
2727817.496	806082.235	1481872.078	16097559.995	.016	C	GPS - STATIC	2020	HTH13
2727817.554	806082.203	1481872.136	16097559.962	.131	3	GPS - RTRN	2020	RTRN2020
2727817.487	806082.247	1481872.069	16097560.008	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727817.477	806082.220	1481872.059	16097559.980	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DORAN-DQ6422-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DORAN-DQ6422-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DORAN-DQ6422-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: DOVA **NGS Name:** DOVA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6425 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	4	110 N	23 W	442127.60	933622.05	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2017) **Stamping:** DOVA 2017

5.8 MILES SOUTH OF MONTGOMERY, 1.8 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 53.5, 45.5 FEET EAST OF TRUNK HIGHWAY 13, 93.0 FEET SOUTH OF MABEL LAKE LANE EXTENDED, 22.5 FEET NORTH OF AN ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: MABEL - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.477	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1045.523	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.451	.262		953.249	.197	2011	GPS - RTRN	2024	RTRN2024
1045.441	.262		953.236	.197	2011	GPS - OPUS	2021	GPSBM
1045.369	.262		953.164	.197	2011	GPS - OPUS	2021	GPSBM
1045.477			953.384	.021	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1045.477	.131		953.577	.066	1996	GPS - STATIC	2020	HTH13
1045.477			953.384	.021	2011	GPS - STATIC	2020	HTH13
1045.493	.262		953.295	.197	2011	GPS - RTRN	2020	RTRN2020
1045.592	.262		953.394	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.205 12B = -92.198 09 = -92.113 03 = -91.929

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 27.60478	93 36 22.05140	376333.090	159763.654	.131	3	GPS - RTRN	2024	RTRN2024
44 21 27.60509	93 36 22.05266	376332.999	159763.685	.131	3	GPS - OPUS	2021	GPSBM
44 21 27.60530	93 36 22.05241	376333.017	159763.706	.131	3	GPS - OPUS	2021	GPSBM
44 21 27.60474	93 36 22.05176	376333.064	159763.650	.013		ADJUSTMENT	2020	GPS3368
44 21 27.60474	93 36 22.05176	376333.064	159763.650	.013	C	GPS - STATIC	2020	HTH13
44 21 27.60493	93 36 22.05149	376333.084	159763.669	.131	3	GPS - RTRN	2020	RTRN2020
44 21 27.60486	93 36 22.05220	376333.032	159763.662	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 27.60456	93 36 22.05210	376333.039	159763.632	.033	C	GPS - STATIC	2020	HTH13

DOVA

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727679.304	823252.305	1481943.544	16114725.362	.131	3	GPS - RTRN	2024	RTRN2024
2727679.213	823252.336	1481943.452	16114725.394	.131	3	GPS - OPUS	2021	GPSBM
2727679.231	823252.357	1481943.471	16114725.415	.131	3	GPS - OPUS	2021	GPSBM
2727679.278	823252.301	1481943.518	16114725.358	.013		ADJUSTMENT	2020	GPS3368
2727679.278	823252.301	1481943.518	16114725.358	.013	C	GPS - STATIC	2020	HTH13
2727679.298	823252.320	1481943.537	16114725.377	.131	3	GPS - RTRN	2020	RTRN2020
2727679.246	823252.313	1481943.486	16114725.371	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727679.254	823252.283	1481943.493	16114725.340	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DOVA-DQ6425-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DOVA-DQ6425-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/DOVA-DQ6425-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: E 116 **NGS Name:** E 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1739 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	111 N	24 W	442226.00	934602.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2013	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** E-116 1934

1.6 MILES SOUTHWEST OF LE CENTER, 2.0 MILES SOUTHWEST ALONG THE RAILROAD FROM THE LE CENTER RAILROAD STATION, 57.75 FEET SOUTHWEST OF RAILROAD MILEPOST 38, 36.0 FEET NORTHEAST OF A ROAD CROSSING, 28.0 FEET SOUTHEAST OF A RAILROAD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.977	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.800	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.877 12B = -92.877 09 = -92.785 03 = -92.592

*** No Horizontal Positions in the Database ***

Mn/DOT Name: E 3 **NGS Name:** E 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1705 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	22	111 N	26 W	442356.00	935639.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	POOR	Horz=NO Vert=YES	YES		PROJECTS 4 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** 796.964 E 3 1930

1.8 MILES NORTH OF OTTAWA, 1.8 MILES NORTH ALONG A RAILROAD FROM THE RAILROAD STATION, 0.3 MILE SOUTH OF RAILROAD MILEPOST 67, AT A ROAD CROSSING, 49.5 FEET NORTH OF A CENTERLINE OF 380TH STREET, 38.5 FEET EAST OF THE CENTER OF THE RAILROAD TRACKS, 1.6 FEET WEST OF A WOVEN WIRE FENCE, AT A FENCE LINE, 1.5 FEET WEST OF A WITNESS POST.

Station Notes

THE MONUMENT IS TILTED, AND THE ELEVATION MAY BE ABOUT 0.09 FEET HIGHER THAN THE PUBLISHED ELEVATION.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
797.095	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
796.964	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.631 12B = -92.628 09 = -92.542 03 = -92.382

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/E_3-PP1705-3E-18MAY2010.jpg	E	May 18, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/E_3-PP1705-2-18MAY2010.jpg		May 18, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/E_3-PP1705-1-18MAY2010.jpg		May 18, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ELYSIAN C

Mn/DOT Name: ELYSIAN C
NGS Name: ELYSIAN C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8228 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	109 N	24 W	441402.11	934224.91		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** ELYSIAN-C 2002

2.5 MILES NORTHWEST OF ELYSIAN, 1.9 MILES NORTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND TRUNK HIGHWAY 60 IN ELYSIAN, THEN 1.2 MILES WEST ALONG COUNTY ROAD 13, THEN 0.25 MILE NORTH ON 221ST AVENUE, 1073.0 FEET NORTH OF COUNTY ROAD 13, 596.0 FEET NORTH OF 496TH STREET, 26.0 FEET WEST OF 221ST AVENUE, 5.0 FEET SOUTH OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1100.119	.262		1006.058	.197	2011	GPS - RTRN	2024	RTRN2024
1100.096	.262		1006.035	.197	2011	GPS - OPUS	2021	GPSBM
1100.083	.262		1006.022	.197	2011	GPS - OPUS	2021	GPSBM
1100.149	.262		1006.087	.197	2011	GPS - RTRN	2020	RTRN2020
			1006.058	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1006.136	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1100.096	.131		1006.264	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2088
1100.096	.131		1006.264	.066	1996	GPS - STATIC	2005	HWASE
1100.063	.131		1006.264	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1100.063	.131		1006.264	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -94.061 12B = -94.061 09 = -93.976 03 = -93.776

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 02.10595	93 42 24.90880	349652.675	114817.186	.131	3	GPS - RTRN	2024	RTRN2024
44 14 02.10606	93 42 24.90930	349652.638	114817.198	.131	3	GPS - OPUS	2021	GPSBM
44 14 02.10602	93 42 24.90865	349652.686	114817.194	.131	3	GPS - OPUS	2021	GPSBM
44 14 02.10576	93 42 24.90808	349652.727	114817.167	.131	3	GPS - RTRN	2020	RTRN2020
44 14 02.10609	93 42 24.90861	349652.688	114817.200	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 02.10606	93 42 24.90940	349652.631	114817.198	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 02.10538	93 42 24.90892	349652.666	114817.129	.033	C	ADJUSTMENT	2005	GPS2088
44 14 02.10538	93 42 24.90892	349652.666	114817.129	.033	C	GPS - STATIC	2005	HWASE
44 14 02.10538	93 42 24.90892	349652.666	114817.129	.033	C	ADJUSTMENT	2003	GPS1911
44 14 02.10538	93 42 24.90892	349652.666	114817.129	.033	C	GPS - STATIC	2003	HSUEU

ELYSIAN C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701479.927	778030.901	1455202.134	16069840.296	.131	3	GPS - RTRN	2024	RTRN2024
2701479.891	778030.912	1455202.097	16069840.307	.131	3	GPS - OPUS	2021	GPSBM
2701479.938	778030.909	1455202.145	16069840.303	.131	3	GPS - OPUS	2021	GPSBM
2701479.980	778030.882	1455202.186	16069840.276	.131	3	GPS - RTRN	2020	RTRN2020
2701479.941	778030.916	1455202.148	16069840.310	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701479.883	778030.912	1455202.090	16069840.307	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701479.919	778030.844	1455202.125	16069840.238	.033	C	ADJUSTMENT	2005	GPS2088
2701479.919	778030.844	1455202.125	16069840.238	.033	C	GPS - STATIC	2005	HWASE
2701479.919	778030.844	1455202.125	16069840.238	.033	C	ADJUSTMENT	2003	GPS1911
2701479.919	778030.844	1455202.125	16069840.238	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_C-DF8228-3W-16APR2024.jpg	W	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_C-DF8228-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_C-DF8228-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ELYSIAN SW

Mn/DOT Name: ELYSIAN SW
NGS Name: ELYSIAN SW
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8229 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	31	109 N	24 W	441227.87	934604.36	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** ELYSIAN-SW 2002

3.75 MILES WEST OF ELYSIAN, 4.8 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN TO TRUNK HIGHWAY 60 MILEPOINT 121.6, THEN 0.1 MILE NORTH ALONG COUNTY ROAD 189 (251ST AVENUE), 22.0 FEET EAST OF COUNTY ROAD 189, 2280.0 FEET SOUTH OF THE SAKATA STATE TRAIL, 2.0 FEET WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.541	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1043.535	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.617	.262		949.450	.197	2011	GPS - RTRN	2024	RTRN2024
1043.627	.262		949.460	.197	2011	GPS - RTRN	2022	RTRN2022
1043.567	.262		949.401	.197	2011	GPS - OPUS	2019	GPSBM
1043.531	.262		949.368	.197	2011	GPS - RTRN	2019	RTRN2019
1043.528	.262		949.365	.197	2011	GPS - RTRN	2016	RTRN2016
			949.401	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			949.483	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1043.567	.131		949.618	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1043.567	.131		949.618	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -94.166 12B = -94.163 09 = -94.078 03 = -93.901

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 27.86784	93 46 04.36005	333600.536	105391.972	.131	3	GPS - RTRN	2024	RTRN2024
44 12 27.86779	93 46 04.36018	333600.526	105391.967	.131	3	GPS - RTRN	2022	RTRN2022
44 12 27.86778	93 46 04.36048	333600.504	105391.966	.131	3	GPS - OPUS	2019	GPSBM
44 12 27.86724	93 46 04.35685	333600.768	105391.909	.131	3	GPS - RTRN	2019	RTRN2019
44 12 27.86746	93 46 04.35993	333600.544	105391.934	.131	3	GPS - RTRN	2016	RTRN2016
44 12 27.86818	93 46 04.36059	333600.497	105392.007	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 27.86815	93 46 04.36138	333600.439	105392.004	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 27.86764	93 46 04.36062	333600.494	105391.952	.033	C	ADJUSTMENT	2003	GPS1911
44 12 27.86764	93 46 04.36062	333600.494	105391.952	.033	C	GPS - STATIC	2003	HSUEU

ELYSIAN SW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685530.477	768437.199	1439141.617	16060444.441	.131	3	GPS - RTRN	2024	RTRN2024
2685530.467	768437.194	1439141.607	16060444.436	.131	3	GPS - RTRN	2022	RTRN2022
2685530.446	768437.193	1439141.585	16060444.435	.131	3	GPS - OPUS	2019	GPSBM
2685530.710	768437.139	1439141.849	16060444.378	.131	3	GPS - RTRN	2019	RTRN2019
2685530.486	768437.160	1439141.625	16060444.403	.131	3	GPS - RTRN	2016	RTRN2016
2685530.437	768437.233	1439141.578	16060444.476	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685530.380	768437.230	1439141.520	16060444.474	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685530.435	768437.178	1439141.575	16060444.421	.033	C	ADJUSTMENT	2003	GPS1911
2685530.435	768437.178	1439141.575	16060444.421	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_SW-DF8229-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_SW-DF8229-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ELYSIAN_SW-DF8229-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 3 EDJ USGS

Mn/DOT Name: ET 3 EDJ USGS **NGS Name:** ET 3 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2930 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	111 N	25 W	442337.23	935207.14		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	TRAVERSE STATION DISK	USGS

Description: (2009) **Stamping:** ET 3 EDJ 1963 982

4.0 MILES EAST AND 0.5 MILE NORTH OF OTTAWA, 0.5 MILE NORTH ALONG A TOWNSHIP ROAD FROM THE JUNCTION OF A TOWNSHIP ROAD AND TRUNK HIGHWAY 112, 43.0 FEET SOUTHWEST OF THE NORTHWEST CORNER OF A LARGE QUONSET BUILDING, 43.0 FEET NORTHWEST OF THE SOUTHWEST CORNER OF A BUILDING, 29.0 FEET SOUTH OF THE SOUTHWEST CORNER OF A GARAGE, 6.2 FEET WEST OF A WITNESS POST.

Station Notes

THE BUILDING STILL EXISTS, BUT THE TIE LOCATION IS PAVED OVER FOR A BASKETBALL COURT. THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.275	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.610	.197		890.271	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
982.905						RECIPROCAL VERTICAL ANGLE	1981	HORZ

Geoid Separations(ft): GEOID18 = -92.736 12B = -92.733 09 = -92.651 03 = -92.477

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 37.23207	93 52 07.13752	307785.005	173398.056	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 37.22750	93 52 07.13317	307785.317	173397.590	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 37.34501	93 52 06.28159			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658998.709	836157.812	1413444.986	16128464.865	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658999.025	836157.350	1413445.297	16128464.399	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2034395.169	508080.637			.100	2	CLASSICAL SURVEY	1982	16778

ET 3 EDJ USGS AZ MK

Mn/DOT Name: ET 3 EDJ USGS AZ MK
NGS Name: ET 3 EDJ AZ MK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2932 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	29	111 N	25 W	442304.01	935209.64	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	AZIMUTH MARK DISK	USGS

Description: (2009) **Stamping:** ET 3 EDJ AZ 1963 993

7.0 MILES WEST OF LE CENTER, 6.6 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER),44.0 FEET NORTH OF COUNTY ROAD 22, 34.0 FEET EAST OF 301ST AVENUE, 49.0 FEET WEST OF A POWER POLE, 1.9 FEET NORTH OF A WITNESS POST.

Station Pair: SARA MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
992.839	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
992.839	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
992.839	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
992.839	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
992.675	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
992.613	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
992.767	.262		899.982	.197	2011	GPS - RTRN	2024	RTRN2024
			900.041	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			900.129	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
992.846	.131		900.238	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
992.846	.131		900.238	.066	1996	GPS - STATIC	2004	HLESU
992.846	.197		900.451	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.785 12B = -92.779 09 = -92.700 03 = -92.526

ET 3 EDJ USGS AZ MK

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.00702	93 52 09.64327	307572.775	170035.042	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.00797	93 52 09.63999	307573.014	170035.137	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.00806	93 52 09.64076	307572.958	170035.146	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.00744	93 52 09.64038	307572.985	170035.083	.033	C	ADJUSTMENT	2004	GPS2027
44 23 04.00744	93 52 09.64038	307572.985	170035.083	.033	C	GPS - STATIC	2004	HLESU
44 23 04.01124	93 52 09.64669	307572.531	170035.472	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.00675	93 52 09.64227	307572.846	170035.014	.033	C	GPS - STATIC	1991	HLESU
44 23 04.00675	93 52 09.64227	307572.847	170035.015	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.12413	93 52 08.79206			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658822.157	832793.139	1413227.415	16125103.489	.131	3	GPS - RTRN	2024	RTRN2024
2658822.396	832793.235	1413227.654	16125103.583	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658822.339	832793.244	1413227.598	16125103.592	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658822.367	832793.181	1413227.625	16125103.529	.033	C	ADJUSTMENT	2004	GPS2027
2658822.367	832793.181	1413227.625	16125103.529	.033	C	GPS - STATIC	2004	HLESU
2658821.908	832793.565	1413227.171	16125103.919	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658822.230	832793.111	1413227.487	16125103.461	.033	C	GPS - STATIC	1991	HLESU
2658822.230	832793.111	1413227.487	16125103.461	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2034218.277	504716.414			.100	2	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_AZ_MK-PP2932-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_AZ_MK-PP2932-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_AZ_MK-PP2932-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 3 EDJ USGS RM 1

Mn/DOT Name: ET 3 EDJ USGS RM 1 **NGS Name:** ET 3 EDJ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4070 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	111 N	25 W	442338.77	935210.34		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=NO	YES		RECESSED 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	USGS

Description: (2009) **Stamping:** RM NO 1 1963 ET 3 EDJ 977

7.4 MILES WEST OF LE CENTER, 6.6 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), THEN 0.70 MILE NORTH ON 301ST AVENUE, 51.5 FEET EAST OF 301ST AVENUE, 18.9 FEET NORTH OF DRIVEWAY NUMBER 38331.

Station Notes

THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
976.550	.033	3				VERTICAL CONTROL SURVEY	1984	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
976.789	.262		884.053	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.736 12B = -92.733 09 = -92.651 03 = -92.477

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 38.76517	93 52 10.33799	307554.015	173555.402	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658766.092	836312.683	1413214.340	16128622.523	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_1-CJ4070-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_1-CJ4070-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_1-CJ4070-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 3 EDJ USGS RM 2

Mn/DOT Name: ET 3 EDJ USGS RM 2 **NGS Name:** ET 3 EDJ RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2933 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	111 N	25 W	442334.43	935210.54	2	2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	USGS

Description: (2009) **Stamping:** ET 3 EDJ 1963 NO 2 1981

7.4 MILES WEST OF LE CENTER, 6.6 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), THEN 0.60 MILE NORTH ON 301ST AVENUE, 25.5 FEET EAST OF 301ST AVENUE.

Station Notes

NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
980.306	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
980.306	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
980.238	.262		887.495	.197	2011	GPS - RTRN	2024	RTRN2024
980.641	.197		888.299	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
980.707						GPS - STATIC	1981	HORZ

Geoid Separations(ft): GEOID18 = -92.739 12B = -92.736 09 = -92.654 03 = -92.480

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 34.43093	93 52 10.54247	307535.216	173116.613	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 34.43289	93 52 10.55007	307534.666	173116.817	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 34.42833	93 52 10.54571	307534.979	173116.353	.033	C	GPS - STATIC	1991	HLESU
44 23 34.42833	93 52 10.54571	307534.978	173116.352	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 34.54588	93 52 09.69417			.100	2	CLASSICAL SURVEY	1982	16778

ET 3 EDJ USGS RM 2

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658751.946	835873.772	1413194.839	16128183.934	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658751.394	835873.969	1413194.290	16128184.138	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658751.711	835873.508	1413194.601	16128183.673	.033	C	GPS - STATIC	1991	HLESU
2658751.711	835873.508	1413194.601	16128183.673	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2034147.845	507796.804			.100	2	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_2-PP2933-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_2-PP2933-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_3_EDJ_RM_2-PP2933-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 4 EDJ USGS

Mn/DOT Name: ET 4 EDJ USGS **NGS Name:** ET 4 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2945 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442910.39	935322.31		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	USGS

Description: (2009) **Stamping:** ET 4 EDJ 1963

1.5 MILES NORTH OF LE SUEUR, 1.25 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22 TO TRUNK HIGHWAY 169 MILEPOINT 80.3, THEN 0.80 MILE SOUTHWEST ALONG DOPPY LANE, THEN 150.0 FEET NORTH ON WOOD DRIVE, THEN 200.0 FEET WEST ACROSS A RADIO TOWER SITE, 76.0 FEET WEST-SOUTHWEST OF THE SOUTHWEST CORNER OF A CHAIN LINK FENCE AROUND THE RADIO TOWER, AT THE WEST EDGE OF A HILL, 45.28 FEET SOUTH OF ET 4 EDJ USGS 2, 48.0 FEET WEST OF ET 4 EDJ USGS 3, 1.7 FEET EAST OF A WITNESS POST.

Station Notes

DID NOT LOOK FOR ET 4 EDJ USGS RM 1, ET 4 EDJ USGS RM 2, AND ET 4 EDJ USGS RM 3 AT THIS TIME. DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.384	.262		886.222	.197	2011	GPS - RTRN	2024	RTRN2024
			886.412	.006	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
978.574	.131		886.632	.066	1996	HORIZONTAL ADJUSTMENT	2007	GPS2351
978.574	.131		886.632	.066	1996	GPS - STATIC	2007	HHOJO
			886.484	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
978.574	.131		886.632	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
978.574	.131		886.632	.066	1996	GPS - STATIC	2004	HLESU
978.344	.197		886.550	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.312						GPS - STATIC	1981	HORZ

Geoid Separations(ft): GEOID18 = -92.165 12B = -92.159 09 = -92.103 03 = -91.929

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.38927	93 53 22.31175	302638.599	207186.356	.131	3	GPS - RTRN	2024	RTRN2024
44 29 10.39009	93 53 22.31259	302638.539	207186.440	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.39024	93 53 22.31318	302638.497	207186.455	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.38959	93 53 22.31256	302638.541	207186.389	.033	C	ADJUSTMENT	2007	GPS2351
44 29 10.38959	93 53 22.31256	302638.541	207186.389	.033	C	GPS - STATIC	2007	HHOJO
44 29 10.38959	93 53 22.31256	302638.541	207186.389	.033	C	ADJUSTMENT	2004	GPS2027
44 29 10.38959	93 53 22.31256	302638.541	207186.389	.033	C	GPS - STATIC	2004	HLESU
44 29 10.39212	93 53 22.31515	302638.356	207186.647	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.38742	93 53 22.31187	302638.588	207186.170	.033	C	GPS - STATIC	1991	HLESU
44 29 10.38742	93 53 22.31187	302638.589	207186.169	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.51332	93 53 21.44340			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653495.118	869885.647	1408355.361	16162248.572	.131	3	GPS - RTRN	2024	RTRN2024
2653495.057	869885.730	1408355.301	16162248.656	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653495.015	869885.745	1408355.259	16162248.672	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653495.059	869885.680	1408355.303	16162248.605	.033	C	ADJUSTMENT	2007	GPS2351
2653495.059	869885.680	1408355.303	16162248.605	.033	C	GPS - STATIC	2007	HHOJO
2653495.059	869885.680	1408355.303	16162248.605	.033	C	ADJUSTMENT	2004	GPS2027
2653495.059	869885.680	1408355.303	16162248.605	.033	C	GPS - STATIC	2004	HLESU
2653494.871	869885.935	1408355.118	16162248.863	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653495.110	869885.460	1408355.351	16162248.385	.033	C	GPS - STATIC	1991	HLESU
2653495.110	869885.460	1408355.351	16162248.385	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2028892.224	541809.275			.100	2	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ-PP2945-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ-PP2945-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ-PP2945-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 4 EDJ USGS RM 1

Mn/DOT Name: ET 4 EDJ USGS RM 1

NGS Name: ET 4 EDJ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4071 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442910.00	935322.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	USGS

Description: (2009) **Stamping:** ET 4 EDJ RM 1 1963

1.5 MILES NORTH OF LE SUEUR, 1.25 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, TO TRUNK HIGHWAY 169 MILEPOINT 80.3, THEN 0.8 MILE SOUTHWEST ALONG DOPPY LANE, 61.0 FEET SOUTHWEST OF THE CENTER OF A ROAD, 26.0 FEET NORTHWEST OF THE CENTER OF A ROAD, 30.0 FEET SOUTH OF A POWER POLE.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.165 12B = -92.159 09 = -92.103 03 = -91.929

ET 4 EDJ USGS RM 2

Mn/DOT Name: ET 4 EDJ USGS RM 2

NGS Name: ET 4 EDJ RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4072 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442910.01	935322.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	USGS

Description: (2009) **Stamping:** ET 4 EDJ 1963 NO 2 1981

1.5 MILES NORTH OF LE SUEUR, 1.25 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, TO TRUNK HIGHWAY 169 MILEPOINT 80.3, THEN 0.8 MILE SOUTHWEST ALONG DOPPY LANE, 109.9 FEET WEST-SOUTHWEST OF THE NORTHWEST CORNER OF THE RADIO MAST BUILDING, 70.3 FEET NORTHWEST OF A 24.0 INCH DIAMETER OAK TREE, 24.0 FEET SOUTHWEST OF THE BASE OF THE WEST ANCHOR CABLES, 45.8 FEET NORTH OF A STEEL WITNESS POST.

Station Notes
NEW TOWER BUILT.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.165 12B = -92.159 09 = -92.103 03 = -91.929

ET 4 EDJ USGS RM 3

Mn/DOT Name: ET 4 EDJ USGS RM 3 **NGS Name:** ET 4 EDJ RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4073 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442910.44	935321.65		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** ET 4 EDJ 1963 NO 3 1981

1.5 MILES NORTH OF LE SUEUR, 1.25 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22 TO TRUNK HIGHWAY 169 MILEPOINT 80.3, THEN 0.8 MILE SOUTHWEST ALONG DOPPY LANE, THEN 0.10 MILE NORTH ON WOOD DRIVE, THEN WALK 100 FEET WEST TO THE SURVEY MARK, 89.2 FEET SOUTHWEST OF THE NORTHWEST CORNER OF THE RADIO MAST BUILDING, 5.7 FEET WEST OF A 24.0 INCH DIAMETER OAK TREE, 49.4 FEET EAST OF A STEEL A WITNESS POST.

Station Notes

THE TREE HAS BEEN CUT DOWN, ONLY ABOUT 4.0 INCHES OF THE STUMP REMAINS 40.0 FEET SOUTH OF THE MOST SOUTHERLY CORNER OF A CHAIN LINK FENCE AROUND A RADIO MAST, 0.6 FOOT EAST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
977.514	.262		885.353	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.162 12B = -92.159 09 = -92.103 03 = -91.929

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 10.43771	93 53 21.65257	302686.433	207190.820	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653542.896	869890.617	1408403.184	16162252.956	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ_RM_3-CJ4073-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ_RM_3-CJ4073-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_4_EDJ_RM_3-CJ4073-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 5 EDJ RM 1

Mn/DOT Name: ET 5 EDJ RM 1 **NGS Name:** ET 5 EDJ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4074 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	111 N	24 W	442303.43	933850.17	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 18 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	REFERENCE MARK DISK	USGS

Description: (2016) **Stamping:** 1080 RM 1 ET 5 EDJ 1963

4.0 MILES EAST OF LE CENTER, 4.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 30.55, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 189.75 FEET WEST OF STATION 5 EDJ, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.405	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1080.444	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.136	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.336	.262		988.180	.197	2011	GPS - RTRN	2024	RTRN2024
1080.460	.262		988.308	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.155 12B = -92.152 09 = -92.070 03 = -91.886

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.42901	93 38 50.17029	365632.262	169532.737	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.42923	93 38 50.16994	365632.287	169532.759	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2716876.806	832906.262	1471262.921	16124507.681	.131	3	GPS - RTRN	2024	RTRN2024
2716876.831	832906.284	1471262.947	16124507.703	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ_RM_1-CJ4074-3S-01JUN2016.jpg	S	Jun 1, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ_RM_1-CJ4074-2-01JUN2016.jpg		Jun 1, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ_RM_1-CJ4074-1-01JUN2016.jpg		Jun 1, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 5 EDJ USGS

Mn/DOT Name: ET 5 EDJ USGS
NGS Name: ET 5 EDJ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2883 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	111 N	24 W	442303.46	933847.56	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2016) **Stamping:** ET 5 EDJ 1963 1081

4.0 MILES EAST OF LE CENTER, 4.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 30.55, 69.0 FEET SOUTH OF TRUNK HIGHWAY 99, 67.0 FEET WEST OF COUNTY ROAD 136, 189.75 FEET EAST OF ET 5 EDJ USGS RM 1, 1.1 FEET WEST OF A WITNESS POST.

Station Pair: MAREK MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.668	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1081.707	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.461	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.602	.262		989.450	.197	2011	GPS - RTRN	2024	RTRN2024
1081.691	.262		989.549	.197	2011	GPS - RTRN	2016	RTRN2016
			989.552	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			989.631	.015	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1081.724	.131		989.804	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1081.724	.131		989.804	.066	1996	GPS - STATIC	2004	HLESU
1082.675	.262		990.940	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.149 12B = -92.145 09 = -92.063 03 = -91.880

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.46215	93 38 47.56034	365821.827	169534.903	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.46212	93 38 47.56037	365821.825	169534.900	.131	3	GPS - RTRN	2016	RTRN2016
44 23 03.46278	93 38 47.56051	365821.815	169534.967	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.46282	93 38 47.56126	365821.760	169534.971	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.46221	93 38 47.56085	365821.790	169534.909	.033	C	ADJUSTMENT	2004	GPS2027
44 23 03.46221	93 38 47.56085	365821.790	169534.909	.033	C	GPS - STATIC	2004	HLESU
44 23 03.46118	93 38 47.54040	365823.274	169534.796	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.45614	93 38 47.53554	365823.624	169534.283	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.60184	93 38 46.74302			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717066.315	832910.436	1471452.411	16124509.539	.131	3	GPS - RTRN	2024	RTRN2024
2717066.313	832910.433	1471452.409	16124509.536	.131	3	GPS - RTRN	2016	RTRN2016
2717066.302	832910.500	1471452.400	16124509.603	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717066.248	832910.504	1471452.345	16124509.608	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717066.278	832910.442	1471452.374	16124509.546	.033	C	ADJUSTMENT	2004	GPS2027
2717066.278	832910.442	1471452.374	16124509.546	.033	C	GPS - STATIC	2004	HLESU
2717067.763	832910.344	1471453.858	16124509.430	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2717068.118	832909.835	1471454.207	16124508.917	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2092461.629	504836.164			.100	3	CLASSICAL SURVEY	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ-PP2883-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ-PP2883-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_5_EDJ-PP2883-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 6 EDJ USGS

Mn/DOT Name: ET 6 EDJ USGS
NGS Name: ET 6 EDJ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2878 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	23 W	442305.83	933341.60	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 4 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	SURVEY DISK	USGS

Description: (2016) **Stamping:** ET 6 EDJ 1963

4.0 MILES SOUTH-SOUTHEAST OF MONTGOMERY, 2.15 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), 54.0 FEET NORTH OF TRUNK HIGHWAY 99, 306.0 FEET WEST OF DRIVEWAY NUMBER 14866, 1.5 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1127.905	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1127.977	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1128.026	.262		1036.576	.197	2011	GPS - RTRN	2024	RTRN2024
1127.973	.262		1036.514	.197	2011	GPS - RTRN	2016	RTRN2016
1101.048	.262		1009.982	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1101.015						RECIPROCAL VERTICAL ANGLE	1963	HORZ

Geoid Separations(ft): GEOID18 = -91.450 12B = -91.460 09 = -91.368 03 = -91.194

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.83457	93 33 41.60363	388042.819	169647.247	.131	3	GPS - RTRN	2024	RTRN2024
44 23 05.83404	93 33 41.60357	388042.823	169647.194	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.83102	93 33 41.59929	388043.133	169646.886	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.82583	93 33 41.59399	388043.515	169646.359	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.97331	93 33 40.81189			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739282.227	833258.283	1493664.347	16124585.904	.131	3	GPS - RTRN	2024	RTRN2024
2739282.232	833258.229	1493664.351	16124585.850	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739282.544	833257.925	1493664.660	16124585.542	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2739282.932	833257.402	1493665.041	16124585.014	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2114676.316	505183.967			.100	3	CLASSICAL SURVEY	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_6_EDJ-PP2878-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_6_EDJ-PP2878-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_6_EDJ-PP2878-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 6 EDJ USGS RM 1

Mn/DOT Name: ET 6 EDJ USGS RM 1

NGS Name: ET 6 EDJ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4075 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	23 W	442305.00	933341.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 4 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	USGS

Description: (2009)

Stamping: RM NO 1 ET 6 EDJ 1963

3.0 MILES SOUTH AND 1.25 MILES EAST OF MONTGOMERY, 2.25 MILES EAST ON TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13, 109.0 FEET WEST OF A FIELD ROAD NORTH, 56.0 FEET NORTH OF HIGHWAY 99.

Station Notes

MEASURED FROM THE CENTER LINE OF THE ROAD AND A FIELD ENTRANCE AND FOUND NOTHING, THE FIELD ENTRANCE MAY HAVE MOVED.
THE TIES FROM THE CENTER LINE PUTS THE MARK ON THE VERY EDGE OF A PLOWED FIELD.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.453 12B = -91.460 09 = -91.371 03 = -91.197

ET 7 EDJ USGS

Mn/DOT Name: ET 7 EDJ USGS
NGS Name: ET 7 EDJ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2881 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	109 N	23 W	441537.02	933810.51		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	USGS

Description: (2009) **Stamping:** 1117 ET 7 EDJ 1963

2.75 MILES NORTH AND 3.0 MILES WEST OF WATERVILLE, 55.0 FEET WEST OF A NORTH-SOUTH ROAD, 44.64 FEET SOUTHWEST OF ET 7 EDJ USGS RM 1, 14.5 FEET EAST OF A WINDMILL, 9.0 FEET NORTHEAST OF A WELL, 19.0 FEET WEST-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1117.019	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1117.271	.262		1023.656	.197	2011	GPS - RTRN	2024	RTRN2024
1118.764	.262		1025.625	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -93.619 12B = -93.622 09 = -93.530 03 = -93.320

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 37.02084	93 38 10.51167	368234.361	124307.181	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 37.02160	93 38 10.50508	368234.841	124307.255	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 37.01655	93 38 10.50181	368235.076	124306.742	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 37.16031	93 38 09.70367			.100	3	CLASSICAL SURVEY	1982	16847

ET 7 EDJ USGS

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2719957.792	787716.185	1473791.235	16079296.696	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2719958.271	787716.264	1473791.715	16079296.769	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2719958.512	787715.754	1473791.949	16079296.256	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2095352.628	459642.318			.100	3	CLASSICAL SURVEY	1982	16847

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_7_EDJ-PP2881-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_7_EDJ-PP2881-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ET_7_EDJ-PP2881-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ET 7 EDJ USGS RM 1

Mn/DOT Name: ET 7 EDJ USGS RM 1

NGS Name: ET 7 EDJ RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4076 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	109 N	23 W	441537.00	933810.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	USGS

Description: (2009)

Stamping: ET 7 EDJ 1963 RM 1

2.75 MILES NORTH AND 3.0 MILES WEST OF WATERVILLE, 3.0 MILES WEST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 12, THEN 0.7 MILE ON TOWNSHIP ROAD 18, THEN 0.5 MILE EAST AND NORTH ON TOWNSHIP ROAD 147, 55.0 FEET WEST OF A NORTH-SOUTH ROAD, 44.64 FEET NORTHEAST OF STATION ET 7 EDJ USGS.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.619 12B = -93.622 09 = -93.530 03 = -93.317

EVAN COVENANT CH OF AMERICA

Mn/DOT Name: EVAN COVENANT CH OF AMERICA
NGS Name: EVAN COVENANT CH OF AMERICA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4080 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442910.51	935321.44		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	CHURCH SPIRE	UNK

Description:

2.0 MILES NORTHEAST OF LE SUEUR.

Stamping:

Station Notes

THE REFERENCE LOCATION IS NEAR AMERICAN TOWER SITE NUMBER LESUEUR 9297, NO CHURCHES IN THE AREA.
THERE IS A CEMETERY FURTHER SOUTH OF THE LOCATION, BUT NO CHURCH. NO CHURCH IN THE AREA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.165 12B = -92.159 09 = -92.103 03 = -91.929

Mn/DOT Name: F 116 **NGS Name:** F 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1740 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	111 N	24 W	442302.00	934458.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2013	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 1 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** F-116 1934

1.3 MILES SOUTHWEST ALONG A RAILROAD FROM THE RAILROAD STATION IN LE CENTER, 132.0 FEET SOUTHWEST OF RAILROAD MILEPOST 37, 105.0 FEET SOUTHWEST OF A ROAD CROSSING, 39.0 FEET SOUTHEAST OF A RAILROAD, 7.0 FEET NORTHWEST OF A RIGHT-OF-WAY FENCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1053.295	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1053.111	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.739 12B = -92.743 09 = -92.647 03 = -92.451

*** No Horizontal Positions in the Database ***

Mn/DOT Name: F 3 **NGS Name:** F 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1706 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	34	111 N	26 W	442212.00	935638.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2010) **Stamping:** F 3-1930

0.5 MILE SOUTH ALONG A RAILROAD FROM THE RAILROAD STATION IN OTTAWA, 0.2 MILE SOUTH OF RAILROAD MILEPOST 69, 45.0 FEET WEST OF A RAILROAD, 36.0 FEET NORTH OF A ROAD, AT A FENCE CORNER.

Station Notes

THE FENCE HAS BEEN REMOVED, THE REFERENCE LATITUDES AND LONGITUDES DO NOT FIT THE TIES. THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
782.590	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
782.462	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
782.462	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.726 12B = -92.723 09 = -92.638 03 = -92.487

*** No Horizontal Positions in the Database ***

Geodetic Data Sheet (Feet)
GSID Station # 109629

FERRY

04/28/2026
Sheet Help

Mn/DOT Name: FERRY
NGS Name: FERRY
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3250 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	36	112 N	26 W	442724.96	935356.87	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 64 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** FERRY 2019

IN LE SUEUR, 0.45 MILE EAST ALONG FERRY STREET FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND FERRY STREET IN LE SUEUR, 28.8 FEET NORTH OF COUNTY ROAD 26 (FERRY STREET), 34.1 FEET WEST OF KINGSWAY DRIVE, 13.8 FEET SOUTHEAST OF A WITNESS POST.

Station Pair: PARK - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
869.270	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
869.273	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
869.273	.262		776.888	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.385 12B = -92.385 09 = -92.319 03 = -92.142

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 24.95898	93 53 56.87007	300033.277	196532.803	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2651003.158	859206.353	1405733.685	16151603.316	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/FERRY-DR3250-3N-16JUN2019.jpg	N	Jun 16, 2019
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/FERRY-DR3250-2-16JUN2019.jpg		Jun 16, 2019
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/FERRY-DR3250-1-16JUN2019.jpg		Jun 16, 2019

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: G 116 **NGS Name:** G 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1741 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	111 N	24 W	442319.39	934354.83	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
STEP	BENCH MARK DISK	NGS

Description: (2016) **Stamping:** G 116 1934 1066.455

IN LE CENTER, 0.3 MILE NORTH ALONG PARK AVENUE FROM THE JUNCTION OF PARK AVENUE AND TRUNK HIGHWAY 99 IN LE CENTER, AT THE NORTH LEDGE OF A STONE RAILING AT THE EAST ENTRANCE TO THE COURTHOUSE, 98.5 FEET WEST OF PARK AVENUE, 25.7 FEET NORTHWEST OF THE WEST FLAGPOLE, 12.4 FEET WEST-NORTHWEST OF THE WEST LIGHT STANDARD, 1.0 FOOT SOUTH OF THE NORTH EDGE OF A STONE BANISTER AT THE COURTHOUSE EAST ENTRANCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.651	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1066.651	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1066.651	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1066.638	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1066.638	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1066.635	.016	2/0				VERTICAL ADJUSTMENT	1997	00000231
1066.638	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1066.635	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025
1066.455	.033	3				VERTICAL CONTROL SURVEY	1991	CS4008

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.455	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1066.455	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
1066.455	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1066.455	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1065.802	.262		973.171	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.628 12B = -92.631 09 = -92.539 03 = -92.342

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 19.39502	93 43 54.80328	343520.639	171300.113	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2694750.321	834438.974	1449163.154	16126310.062	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/G_116-PP1741-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/G_116-PP1741-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/G_116-PP1741-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: G 3 **NGS Name:** G 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1707 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	110 N	26 W	442027.00	935556.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	GOOD	Horz=NO Vert=NO	NO	RR		SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** 754.546 G 3 1930

1.5 MILES NORTH OF ST. PETER, 1.5 MILES NORTH ALONG A RAILROAD FROM TRUNK HIGHWAY 99, IN THE EAST END OF THE NORTH ABUTMENT OF A RAILROAD BRIDGE.

Station Notes

THE MARK MAY BE ABOUT 0.27 FOOT LOWER THAN THE PUBLISHED ELEVATION. THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
754.670	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
754.546	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
754.546	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.880 12B = -92.880 09 = -92.772 03 = -92.631

*** No Horizontal Positions in the Database ***

GIANT MNDT

Mn/DOT Name: GIANT MNDT **NGS Name:** GIANT

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF5243 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442858.11	935336.14		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2000	2010	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)
Disk Type: SURVEY DISK
Mon. Agency: MNDT

Description: (2009) **Stamping:** GIANT 2000

1.0 MILE NORTHEAST OF LE SUEUR, 0.25 MILE EAST ON TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, 45.0 FEET NORTH-NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169 AT MILEPOINT 79.1, 34.0 FEET SOUTH-SOUTHWEST OF THE EXIT RAMP, 19.6 FEET NORTHWEST OF A LIGHT POLE, 2.6 FEET WEST-SOUTHWEST OF A WITNESS POST.

Station Notes
THE CAP WAS LOOSE, SO FILED DOWN THE MUSHROOMED ROD AND POUNDED ON A NEW CAP. SEE GIANT MNDT RESET.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			706.990	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			707.085	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
799.244	.131		707.233	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1832
799.244	.131		707.233	.066	1996	GPS - STATIC	2002	HLESR

Geoid Separations(ft): GEOID18 = -92.201 12B = -92.198 09 = -92.139 03 = -91.965

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.11389	93 53 36.14461	301624.222	205952.529	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.11400	93 53 36.14542	301624.164	205952.541	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.11345	93 53 36.14477	301624.210	205952.485	.033	C	ADJUSTMENT	2003	GPS1832
44 28 58.11345	93 53 36.14477	301624.210	205952.485	.033	C	GPS - STATIC	2002	HLESR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652493.995	868641.287	1407339.359	16161016.870	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652493.936	868641.297	1407339.300	16161016.881	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652493.983	868641.242	1407339.347	16161016.825	.033	C	ADJUSTMENT	2003	GPS1832
2652493.984	868641.242	1407339.347	16161016.825	.033	C	GPS - STATIC	2002	HLESR

GIANT MNDT RESET

Mn/DOT Name: GIANT MNDT RESET
NGS Name: GIANT RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DI9218 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	26 W	442858.11	935336.14	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2007	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	SURVEY DISK	MNDT

Description: (2009) **Stamping:** GIANT 2000 RESET 2007

1.0 MILE NORTHEAST OF LE SUEUR, 0.25 MILE EAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 79.1, 45.0 FEET NORTH-NORTHWEST OF SOUTHBOUND TRUNK HIGHWAY 169, 34.0 FEET SOUTH-SOUTHWEST OF THE EXIT RAMP TO COUNTY ROAD 22, 19.6 FEET NORTHWEST OF A LIGHT POLE, 2.6 FEET WEST-SOUTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
799.116	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
799.116	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
799.116	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
799.162	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
799.162	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
799.162	.016	2/1				VERTICAL ADJUSTMENT	2011	00000681
799.181	.016	2/1				VERTICAL CONTROL SURVEY	2007	VHOJO1

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
799.099	.262		706.898	.197	2011	GPS - RTRN	2024	RTRN2024
799.162			706.961	.005	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
799.162	.131		707.180	.066	1996	GPS - STATIC	2014	HBLOOM
799.162			706.961	.005	2011	GPS - STATIC	2014	HBLOOM
799.034	.262		706.836	.197	2011	GPS - RTRN	2013	RTRN2013
			706.961	.005	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
799.178	.131		707.180	.066	1996	HORIZONTAL ADJUSTMENT	2007	GPS2351
799.178	.131		707.180	.066	1996	GPS - STATIC	2007	HHOJO

Geoid Separations(ft): GEOID18 = -92.201 12B = -92.198 09 = -92.139 03 = -91.965

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.11365	93 53 36.14489	301624.202	205952.505	.131	3	GPS - RTRN	2024	RTRN2024
44 28 58.11381	93 53 36.14461	301624.222	205952.521	.003		ADJUSTMENT	2014	GPS3006
44 28 58.11382	93 53 36.14461	301624.222	205952.522	.003	C	GPS - STATIC	2014	HBLOOM
44 28 58.11405	93 53 36.14335	301624.314	205952.545	.131	3	GPS - RTRN	2013	RTRN2013
44 28 58.11381	93 53 36.14461	301624.222	205952.521	.003		ADJUSTMENT	2012	GPS2800

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 58.11330	93 53 36.14472	301624.214	205952.470	.033	C	GPS - STATIC	2014	HBLOOM
44 28 58.11330	93 53 36.14472	301624.214	205952.470	.033	C	ADJUSTMENT	2007	GPS2351
44 28 58.11330	93 53 36.14472	301624.214	205952.470	.033	C	GPS - STATIC	2007	HHOJO

GIANT MNDT RESET

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652493.975	868641.262	1407339.338	16161016.846	.131	3	GPS - RTRN	2024	RTRN2024
2652493.995	868641.278	1407339.359	16161016.861	.003		ADJUSTMENT	2014	GPS3006
2652493.995	868641.279	1407339.359	16161016.862	.003	C	GPS - STATIC	2014	HBLOOM
2652494.086	868641.303	1407339.450	16161016.885	.131	3	GPS - RTRN	2013	RTRN2013
2652493.995	868641.278	1407339.359	16161016.861	.003		ADJUSTMENT	2012	GPS2800

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2652493.987	868641.227	1407339.350	16161016.810	.033	C	GPS - STATIC	2014	HBLOOM
2652493.987	868641.227	1407339.350	16161016.810	.033	C	ADJUSTMENT	2007	GPS2351
2652493.987	868641.227	1407339.350	16161016.810	.033	C	GPS - STATIC	2007	HHOJO

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GIANT_RESET-DI9218-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GIANT_RESET-DI9218-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GIANT_RESET-DI9218-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREE MNDT

Mn/DOT Name: GREE MNDT **NGS Name:** GREE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9315 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	111 N	23 W	442356.77	933643.32	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** GREE 1989

2.5 MILES SOUTHWEST MONTGOMERY, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY TO TRUNK HIGHWAY 13 MILEPOINT 56.25, THEN 0.3 MILE WEST ON COUNTY ROAD 140, 28.0 FEET SOUTH OF COUNTY ROAD 140, IN AN ENTRANCE, 6.0 FEET EAST OF THE CENTER OF AN ENTRANCE, 47.8 FEET EAST-NORTHEAST OF A POWER POLE, 45.5 FEET SOUTH OF GREE MNDT RM 1 RESET, 45.3 FEET EAST OF GREE MNDT RM 2, 45.6 FEET EAST-NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.072	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1093.138	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1093.138	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.882	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.141	.262		1001.520	.197	2011	GPS - RTRN	2024	RTRN2024
1093.187	.262		1001.566	.197	2011	GPS - OPUS	2019	GPSBM
1093.111	.262		1001.491	.197	2011	GPS - RTRN	2019	RTRN2019
1093.197	.262		1001.570	.197	2011	GPS - RTRN	2016	RTRN2016
			1001.497	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1001.586	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1093.141	.131		1001.789	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1093.141	.131		1001.789	.066	1996	GPS - STATIC	2005	H40BJ
1093.141	.131		1001.789	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1093.141	.131		1001.789	.066	1996	GPS - STATIC	2004	HLESU
1093.141	.131		1001.789	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1093.141	.131		1001.789	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -91.621 12B = -91.627 09 = -91.542 03 = -91.368

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.76706	93 36 43.31931	374876.268	174878.411	.131	3	GPS - RTRN	2024	RTRN2024
44 23 56.76810	93 36 43.32028	374876.198	174878.517	.131	3	GPS - OPUS	2019	GPSBM
44 23 56.76778	93 36 43.31648	374876.474	174878.483	.131	3	GPS - RTRN	2019	RTRN2019
44 23 56.76722	93 36 43.31859	374876.320	174878.427	.131	3	GPS - RTRN	2016	RTRN2016
44 23 56.76740	93 36 43.31967	374876.242	174878.446	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.76746	93 36 43.32050	374876.182	174878.452	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	ADJUSTMENT	2005	GPS2080
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	GPS - STATIC	2005	H40BJ
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	ADJUSTMENT	2004	GPS2027
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	GPS - STATIC	2004	HLESU
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	ADJUSTMENT	2004	GPS1939
44 23 56.76682	93 36 43.32064	374876.171	174878.387	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.75685	93 36 43.31669	374876.452	174877.377	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726062.535	838348.977	1480511.755	16129836.194	.131	3	GPS - RTRN	2024	RTRN2024
2726062.464	838349.082	1480511.685	16129836.300	.131	3	GPS - OPUS	2019	GPSBM
2726062.740	838349.051	1480511.961	16129836.266	.131	3	GPS - RTRN	2019	RTRN2019
2726062.587	838348.993	1480511.807	16129836.210	.131	3	GPS - RTRN	2016	RTRN2016
2726062.508	838349.011	1480511.729	16129836.229	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726062.448	838349.017	1480511.669	16129836.235	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726062.439	838348.952	1480511.658	16129836.170	.033	C	ADJUSTMENT	2005	GPS2080
2726062.439	838348.952	1480511.658	16129836.170	.033	C	GPS - STATIC	2005	H40BJ
2726062.439	838348.952	1480511.658	16129836.170	.033	C	ADJUSTMENT	2004	GPS2027
2726062.439	838348.952	1480511.658	16129836.170	.033	C	GPS - STATIC	2004	HLESU
2726062.439	838348.952	1480511.658	16129836.170	.033	C	ADJUSTMENT	2004	GPS1939
2726062.439	838348.952	1480511.658	16129836.170	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726062.730	838347.944	1480511.937	16129835.159	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE-AC9315-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE-AC9315-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE-AC9315-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREE MNDT RM 1

Mn/DOT Name: GREE MNDT RM 1 **NGS Name:** GREE RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9314 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	111 N	23 W	442356.00	933643.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2016	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** GREE NO 1 1989

2.5 MILES SOUTHWEST MONTGOMERY, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY TO TRUNK HIGHWAY 13 MILEPOINT 56.25, THEN 0.3 MILE WEST ON COUNTY ROAD 140, 4.0 FEET EAST OF AN ENTRANCE EXTENDED, 68.5 FEET NORTHEAST OF A POWER POLE, 45.5 FEET NORTH OF STATION GREE MNDT, 66.7 FEET NORTHEAST OF GREE MNDT RM 2, 67.7 FEET NORTHEAST OF A WITNESS POST.

Station Notes

ONLY 3/4 OF THE DISK REMAINS, BENT AT ABOUT 45 DEGREES.
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.659	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.403	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -91.621 12B = -91.630 09 = -91.542 03 = -91.371

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1-AC9314-3N-17MAY2004.jpg	N	May 17, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1-AC9314-2-17MAY2004.jpg		May 17, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1-AC9314-1-28APR2010.jpg		Apr 28, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREE MNDT RM 1 RESET

Mn/DOT Name: GREE MNDT RM 1 RESET
NGS Name: GREE RM 1 RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6398 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	20	111 N	23 W	442357.22	933643.32	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** GREE NO 1 1989 2016

2.5 MILES SOUTHWEST MONTGOMERY, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY TO TRUNK HIGHWAY 13 MILEPOINT 56.25, THEN 0.3 MILE WEST ON COUNTY ROAD 140, 17.0 FEET NORTH OF COUNTY ROAD 40, 45.5 FEET NORTH OF STATION GREE MNDT, 66.7 FEET NORTHEAST OF GREE MNDT RM 2, 4.0 FEET EAST OF AN ENTRANCE EXTENDED, 5.0 FEET SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.350	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1092.416	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.426	.262		1000.808	.197	2011	GPS - RTRN	2024	RTRN2024
1092.435	.262		1000.808	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.617 12B = -91.624 09 = -91.539 03 = -91.368

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 57.21706	93 36 43.32277	374876.283	174923.985	.131	3	GPS - RTRN	2024	RTRN2024
44 23 57.21735	93 36 43.32216	374876.328	174924.014	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726062.068	838394.542	1480511.844	16129881.749	.131	3	GPS - RTRN	2024	RTRN2024
2726062.112	838394.572	1480511.889	16129881.778	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1_RESET-DQ6398-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1_RESET-DQ6398-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_1_RESET-DQ6398-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREE MNDT RM 2

Mn/DOT Name: GREE MNDT RM 2 **NGS Name:** GREE RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9316 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	29	111 N	23 W	442356.73	933643.94	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** GREE NO 2 1989

2.5 MILES SOUTHWEST OF MONTGOMERY, 2.3 MILE SOUTH ALONG TRUNK HIGHWAY 12 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21 IN MONTGOMERY TO TRUNK HIGHWAY 12 MILEPOINT 56.25, THEN 66.7 FEET SOUTHWEST OF GREE MNDT RM 1 RESET, 45.3 FEET WEST OF STATION GREE MNDT, 40.0 FEET WEST OF AN ENTRANCE, 32.0 FEET SOUTH OF COUNTY ROAD 140, 2.5 FEET EAST OF A POWER POLE, 1.2 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.957	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1093.026	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1093.023	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1092.770	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.059	.262		1001.435	.197	2011	GPS - RTRN	2024	RTRN2024
1093.059	.262		1001.432	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.621 12B = -91.627 09 = -91.542 03 = -91.371

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.73046	93 36 43.94210	374831.028	174874.969	.131	3	GPS - RTRN	2024	RTRN2024
44 23 56.73081	93 36 43.94164	374831.062	174875.005	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2726017.340	838345.056	1480466.528	16129832.827	.131	3	GPS - RTRN	2024	RTRN2024
2726017.373	838345.092	1480466.562	16129832.862	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_2-AC9316-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_2-AC9316-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_2-AC9316-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREE MNDT RM 3

Mn/DOT Name: GREE MNDT RM 3 **NGS Name:** GREE RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9313 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	28	111 N	23 W	442356.95	933616.45	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** GREE NO 3 1989

2.5 MILES SOUTHWEST OF MONTGOMERY, 3.3 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 EAST IN MONTGOMERY, AT TRUNK HIGHWAY 13 MILEPOINT 56.25, NEAR THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 140, 235.0 FEET EAST OF TRUNK HIGHWAY 13, 21.0 FEET SOUTH OF COUNTY ROAD 140, IN A FIELD ENTRANCE, 7.0 FEET WEST OF AN ENTRANCE, 7.7 FEET EAST-NORTHEAST OF A WITNESS POST.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.657	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.404	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			973.079	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			973.164	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1064.663	.131		973.338	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1064.663	.131		973.338	.066	1996	GPS - STATIC	2005	H40BJ
1064.663	.131		973.338	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1064.663	.131		973.338	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -91.555 12B = -91.561 09 = -91.476 03 = -91.302

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.95374	93 36 16.44900	376827.307	174885.984	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.95382	93 36 16.44981	376827.248	174885.993	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.95336	93 36 16.44997	376827.237	174885.946	.033	C	ADJUSTMENT	2005	GPS2080
44 23 56.95336	93 36 16.44998	376827.236	174885.946	.033	C	GPS - STATIC	2005	H40BJ
44 23 56.95336	93 36 16.44998	376827.236	174885.946	.033	C	ADJUSTMENT	2004	GPS2027
44 23 56.95336	93 36 16.44998	376827.236	174885.946	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 56.94388	93 36 16.44584	376827.530	174884.985	.033	C	GPS - STATIC	1990	HMONT

GREE MNDT RM 3

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728013.152	838377.227	1482461.997	16129840.605	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728013.094	838377.235	1482461.938	16129840.614	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728013.082	838377.189	1482461.926	16129840.567	.033	C	ADJUSTMENT	2005	GPS2080
2728013.081	838377.189	1482461.925	16129840.567	.033	C	GPS - STATIC	2005	H40BJ
2728013.081	838377.189	1482461.925	16129840.567	.033	C	ADJUSTMENT	2004	GPS2027
2728013.081	838377.189	1482461.925	16129840.567	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728013.386	838376.230	1482462.218	16129839.605	.033	C	GPS - STATIC	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_3-AC9313-3W-22APR2010.jpg	W	Apr 22, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_3-AC9313-2-22APR2010.jpg		Apr 22, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GREE_RM_3-AC9313-1-22APR2010.jpg		Apr 22, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GREEN GIANT RADIO TOWER

Mn/DOT Name: GREEN GIANT RADIO TOWER
NGS Name: GREEN GIANT RADIO TOWER
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	23 W	442305.85	933341.63		

NGS ACRN: CJ3534 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	RADIO/TV TOWER	UNK

Description:

Stamping:

NO INFORMATION FOUND ON THIS MARK.

Station Notes

NO RADIO TOWERS OR ANY TALL OBJECTS IN THE AREA EXCEPT POWER POLES.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.453 12B = -91.460 09 = -91.371 03 = -91.197

GROSE

Mn/DOT Name: GROSE **NGS Name:** GROSE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6338 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	34	109 N	23 W	441235.37	933414.19	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 40 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** GROSE 2016

0.5 MILE SOUTH OF WATERVILLE, 0.65 MILE SOUTHWEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 131.95, 64.2 FEET SOUTH-SOUTHEAST OF TRUNK HIGHWAY 60, 72.6 FEET EAST OF COUNTY ROAD 3 (153RD AVENUE), 50.7 FEET NORTHEAST OF A POWER POLE, 1.5 FEET NORTH-NORTHWEST OF A WITNESS POST.

Station Pair: ALFERD - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.856	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1032.862	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.961	.262		939.329	.197	2011	GPS - RTRN	2024	RTRN2024
1032.849	.262		939.221	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.628 12B = -93.628 09 = -93.553 03 = -93.353

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 35.36813	93 34 14.18726	385335.055	105812.475	.131	3	GPS - RTRN	2024	RTRN2024
44 12 35.36875	93 34 14.18669	385335.097	105812.538	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737251.534	769405.953	1490855.141	16060782.505	.131	3	GPS - RTRN	2024	RTRN2024
2737251.575	769406.016	1490855.183	16060782.568	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GROSE-DQ6338-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GROSE-DQ6338-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/GROSE-DQ6338-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

GUE MNDT TEMP

Mn/DOT Name: GUE MNDT TEMP
NGS Name: GUE TEMP
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3031 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	2	112 N	23 W	443236.66	933345.55		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
PIPE (<10 FT)	UNMONUMENTED	MNDT

Description: (2010) **Stamping:** GUE 1980

IN THE EAST EDGE OF NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 151.9, 250.0 FEET WEST OF THE JUNCTION OF TRUNK HIGHWAY 19 AND COUNTY ROAD 37, 22.5 FEET SOUTH OF TRUNK HIGHWAY 19, 13.0 FEET WEST OF A FIELD ENTRANCE, 11.9 FEET NORTH-NORTHEAST OF A WITNESS POST, 91.82 FEET SOUTH-SOUTHEAST OF A SURVEY REFERENCE POINT.

Station Notes
TRAFFIC LANE WIDENING.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
995.405	.197		906.058	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
995.405						RECIPROCAL VERTICAL ANGLE	1981	HORZ

Geoid Separations(ft): GEOID18 = -89.629 12B = -89.629 09 = -89.567 03 = -89.422

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.66378	93 33 45.55216	388059.589	227458.010	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.65780	93 33 45.55149	388059.635	227457.404	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.78948	93 33 44.71737			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738686.245	891059.079	1493775.209	16182372.440	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738686.297	891058.473	1493775.253	16182371.834	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2114083.295	562982.937			.100	2	CLASSICAL SURVEY	1982	16778

Mn/DOT Name: H 116 **NGS Name:** H 116

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	111 N	24 W	442328.00	934356.00	2	

NGS ACRN: PP1742 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 8 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE FOUNDATION	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** H 116 1934

IN LE CENTER, AT THE BASE OF THE SOUTHEAST LEG OF A WATER TANK, AT THE NORTHWEST CORNER OF TYRONE STREET AND PARK AVENUE, 83.5 FEET NORTH OF TYRONE STREET, 55.2 FEET EAST OF AN ALLEY, 35.4 FEET NORTHEAST OF THE NORTHEAST CORNER OF A PUMP HOUSE, 14.6 FEET WEST OF THE WEST WALL OF CITY HALL.

Station Notes

THE WATER TANK HAS BEEN REMOVED AND REPLACED WITH SOME OTHER CONCRETE THING. THE AREA HAS BECOME A PARKING LOT AND THE TIES PUT THE MARK IN THE LOT. THE PUMP HOUSE AND CITY HALL STILL EXIST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1063.958	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1063.958	.016	2/0				VERTICAL ADJUSTMENT	1997	00000231
1063.958	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1063.958	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1063.777	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES
1063.777	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1063.777	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.605 12B = -92.608 09 = -92.513 03 = -92.319

*** No Horizontal Positions in the Database ***

Mn/DOT Name: H 3 **NGS Name:** H 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1710 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	28	110 N	26 W	441812.00	935732.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** H 3 1930

1.6 MILES SOUTHEAST OF ST. PETER, 1.5 MILES SOUTH ALONG THE CHICAGO AND NORTHWESTERN RAILWAY 1.0 MILE SOUTH OF ST. PETER, 0.8 MILE SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169, THEN 0.2 MILE WEST ON COUNTY ROAD 102, 26.5 FEET WEST OF COUNTY ROAD 102, 17.0 FEET SOUTH-SOUTHWEST OF A TELEPHONE POLE, 1.0 FOOT EAST-NORTHEAST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
788.837	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
788.837	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE
788.837	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
788.712	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
788.647	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE
788.712	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.907 12B = -92.903 09 = -92.808 03 = -92.677

*** No Horizontal Positions in the Database ***

HANK MNDT

Mn/DOT Name: HANK MNDT
NGS Name: HANK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7029 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	35	111 N	26 W	442242.48	935433.52	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	POOR	Horz=NO Vert=NO	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 10 FT)
Disk Type: SURVEY DISK
Mon. Agency: MNDT

Description: (2009) **Stamping:** HANK 2003

6.0 MILES SOUTH OF LE SUEUR, 5.6 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR TO TRUNK HIGHWAY 112 MILEPOINT 7.1, THEN 0.45 MILE SOUTH ON COUNTY ROAD 109, 40.0 FEET WEST OF COUNTY ROAD 109, 15.6 FEET NORTH-NORTHWEST OF A POWER POLE, 14.2 FEET NORTH-NORTHWEST OF A WITNESS POST.

Station Pair: OTTA MNDT - LE SUEUR, MN

Station Notes
THE CAP WAS FOUND LOOSE AND HOLDS NO VALUE TO MNDOT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
944.293	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
944.293	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
944.230	.262		851.475	.197	2011	GPS - RTRN	2024	RTRN2024
944.188	.262		851.435	.197	2011	GPS - OPUS	2021	GPSBM
944.250	.262		851.501	.197	2011	GPS - RTRN	2020	RTRN2020
			851.527	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			851.616	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
944.289	.131		851.737	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
944.289	.131		851.737	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.752 12B = -92.749 09 = -92.670 03 = -92.506

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 42.48215	93 54 33.52095	297103.447	167951.869	.131	3	GPS - RTRN	2024	RTRN2024
44 22 42.48217	93 54 33.52205	297103.367	167951.872	.131	3	GPS - OPUS	2021	GPSBM
44 22 42.48218	93 54 33.52164	297103.397	167951.873	.131	3	GPS - RTRN	2020	RTRN2020
44 22 42.48220	93 54 33.52139	297103.415	167951.875	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 42.48229	93 54 33.52217	297103.359	167951.885	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 42.48166	93 54 33.52174	297103.389	167951.821	.033	C	ADJUSTMENT	2004	GPS2027
44 22 42.48166	93 54 33.52174	297103.389	167951.821	.033	C	GPS - STATIC	2004	HLESU

HANK MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648376.739	830599.377	1402758.737	16123037.976	.131	3	GPS - RTRN	2024	RTRN2024
2648376.659	830599.379	1402758.657	16123037.979	.131	3	GPS - OPUS	2021	GPSBM
2648376.689	830599.380	1402758.687	16123037.980	.131	3	GPS - RTRN	2020	RTRN2020
2648376.707	830599.382	1402758.705	16123037.982	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648376.650	830599.391	1402758.649	16123037.991	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648376.682	830599.327	1402758.679	16123037.927	.033	C	ADJUSTMENT	2004	GPS2027
2648376.682	830599.327	1402758.679	16123037.927	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HANK-DG7029-3S-27APR2020.jpg	S	Apr 27, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HANK-DG7029-2-27APR2020.jpg		Apr 27, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HANK-DG7029-1-27APR2020.jpg		Apr 27, 2020

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

HEID MNDT

Mn/DOT Name: HEID MNDT **NGS Name:** HEID

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9293 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	15	112 N	23 W	443054.26	933507.22	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** HEID 1989

2.0 MILES SOUTH OF NEW PRAGUE, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 145, 91.1 FEET EAST OF TRUNK HIGHWAY 13, 32.5 FEET SOUTH OF COUNTY ROAD 145, 12.5 FEET EAST-NORTHEAST OF A POWER POLE, 60.2 FEET SOUTH-SOUTHEAST OF A POWER POLE, 30.9 FEET WEST-NORTHWEST OF HEID MNDT RM 1, 58.2 FEET SOUTH-SOUTHEAST OF HEID MNDT RM 2, 7.3 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1045.165	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1044.975	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			955.198	.046	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			955.297	.040	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1045.175	.131		955.428	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1045.175	.131		955.428	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -89.967 12B = -89.974 09 = -89.905 03 = -89.760

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.26196	93 35 07.22456	382086.996	217119.305	.023		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.26211	93 35 07.22539	382086.936	217119.320	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.26165	93 35 07.22488	382086.973	217119.274	.033	C	ADJUSTMENT	2004	GPS1939
44 30 54.26165	93 35 07.22488	382086.973	217119.274	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.25751	93 35 07.22060	382087.280	217118.851	.033	C	GPS - STATIC	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732824.284	880658.887	1487788.198	16172047.822	.023		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732824.224	880658.902	1487788.138	16172047.837	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732824.261	880658.855	1487788.175	16172047.790	.033	C	ADJUSTMENT	2004	GPS1939
2732824.261	880658.855	1487788.175	16172047.790	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732824.573	880658.438	1487788.481	16172047.369	.033	C	GPS - STATIC	1990	HMONT

HEID MNDT RM 1

Mn/DOT Name: HEID MNDT RM 1 **NGS Name:** HEID RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9294 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	15	112 N	23 W	443053.00	933505.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** HEID NO 1 1989

2.0 MILES SOUTH OF NEW PRAGUE, 2.0 MILES SOUTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13, AT THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 145, 119.0 FEET EAST OF TRUNK HIGHWAY 13, 20.0 FEET SOUTH OF COUNTY ROAD 145, 43.5 FEET EAST-NORTHEAST OF A POWER POLE, 65.4 FEET SOUTHEAST OF A POWER POLE, 30.9 FEET EAST-SOUTHEAST OF STATION HEID MNDT, 64.0 FEET SOUTH OF HEID MNDT RM 2, 39.7 FEET EAST-NORTHEAST OF A WITNESS POST, 64.9 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.548	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.357	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -89.970 12B = -89.974 09 = -89.905 03 = -89.760

*** No Horizontal Positions in the Database ***

HEID MNDT RM 2

Mn/DOT Name: HEID MNDT RM 2 **NGS Name:** HEID RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9292 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	112 N	23 W	443054.80	933507.51	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** HEID NO 2 1989

2.0 MILES SOUTH OF NEW PRAGUE, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, AT THE JUNCTION OF TRUNK HIGHWAY 13 MILEPOINT 64.75 AND COUNTY ROAD 145, 70.0 FEET EAST OF TRUNK HIGHWAY 13, 22.0 FEET NORTH OF COUNTY ROAD 145 (300TH STREET), 60.4 FEET NORTH-NORTHWEST OF A POWER POLE, 2.2 FEET SOUTH-SOUTHEAST OF A POWER POLE, 0.3 FOOT WEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.321	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1042.373	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1042.373	.016	2/1				VERTICAL ADJUSTMENT	2008	00000425-24
1042.370	.016	2/1				VERTICAL CONTROL SURVEY	2006	VMVEC
1042.370	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.180	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1042.409	.262		952.439	.197	2011	GPS - RTRN	2024	RTRN2024
1042.183	.262		952.209	.197	2011	GPS - RTRN	2016	RTRN2016
			952.393	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			952.482	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1042.354	.131		952.613	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1042.386	.131		952.613	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -89.967 12B = -89.970 09 = -89.901 03 = -89.760

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.79934	93 35 07.51223	382066.452	217173.842	.131	3	GPS - RTRN	2024	RTRN2024
44 30 54.80001	93 35 07.51178	382066.485	217173.910	.131	3	GPS - RTRN	2016	RTRN2016
44 30 54.79904	93 35 07.51160	382066.497	217173.812	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.79911	93 35 07.51244	382066.437	217173.819	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 54.79855	93 35 07.51200	382066.468	217173.762	.033	C	ADJUSTMENT	2005	GPS2080
44 30 54.79855	93 35 07.51200	382066.468	217173.762	.033	C	GPS - STATIC	2005	H40BJ

HEID MNDT RM 2

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732803.165	880713.197	1487767.751	16172102.370	.131	3	GPS - RTRN	2024	RTRN2024
2732803.197	880713.265	1487767.785	16172102.438	.131	3	GPS - RTRN	2016	RTRN2016
2732803.211	880713.167	1487767.797	16172102.339	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732803.150	880713.174	1487767.736	16172102.347	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732803.182	880713.117	1487767.768	16172102.290	.033	C	ADJUSTMENT	2005	GPS2080
2732803.182	880713.117	1487767.768	16172102.290	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HEID_RM_2-AC9292-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HEID_RM_2-AC9292-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HEID_RM_2-AC9292-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

HEID MNDT RM 3

Mn/DOT Name: HEID MNDT RM 3 **NGS Name:** HEID RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC5045 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	112 N	23 W	443002.70	933457.76	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** HEID NO 3 1989

3.0 MILES SOUTH OF NEW PRAGUE, 3.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 19, THEN 0.15 MILE EAST ON COUNTY ROAD 145, 0.15 MILE EAST OF TRUNK HIGHWAY 13, 27.6 FEET NORTH OF COUNTY ROAD 145, 37.8 FEET EAST OF A POWER POLE, 35.8 FEET EAST OF A WITNESS POST.

Station Notes

08-13-2004
FOUND THE ROD SLIGHTLY BENT TO THE SOUTHEAST WITH THE DISK MISSING DUE TO FARMING ENCROACHMENT. THE MARK IS ABOUT 1.0 FOOT INTO A CORN FIELD. COULD PUT A NEW DISK ON THE ROD AND OCCUPY WHEN THE CORN IS GONE.
RECENT DITCH WORK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.697	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.494	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			941.579	.028	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			941.684	.023	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1031.691	.131		941.809	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1031.691	.131		941.809	.066	1996	GPS - STATIC	2003	HMONT
1031.730	.131		941.809	.066	1996	GPS - STATIC	1997	GPS805-C

Geoid Separations(ft): GEOID18 = -90.102 12B = -90.108 09 = -90.033 03 = -89.888

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 02.69610	93 34 57.75798	382744.263	211893.292	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 02.69624	93 34 57.75889	382744.197	211893.307	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 02.69573	93 34 57.75850	382744.225	211893.255	.033	C	ADJUSTMENT	2004	GPS1939
44 30 02.69573	93 34 57.75850	382744.225	211893.255	.033	C	GPS - STATIC	2003	HMONT
44 30 02.69573	93 34 57.75850	382744.225	211893.255	.033	C	GPS - STATIC	1997	GPS805-C

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 02.69226	93 34 57.75209	382744.687	211892.900	.033	C	GPS - STATIC	1990	HMONT

HEID MNDT RM 3

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733536.826	875440.759	1488436.656	16166822.912	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733536.760	875440.773	1488436.590	16166822.926	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733536.788	875440.722	1488436.618	16166822.875	.033	C	ADJUSTMENT	2004	GPS1939
2733536.788	875440.722	1488436.618	16166822.875	.033	C	GPS - STATIC	2003	HMONT
2733536.788	875440.722	1488436.618	16166822.875	.033	C	GPS - STATIC	1997	GPS805-C

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733537.255	875440.373	1488437.080	16166822.520	.033	C	GPS - STATIC	1990	HMONT

HEIDELBERG CATH CH CROSS

Mn/DOT Name: HEIDELBERG CATH CH CROSS
NGS Name: HEIDELBERG CATH CH CROSS
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	20	112 N	23 W	442935.00	933732.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	MNDT

Description: (2009)
Stamping:

IN THE NORTH PART OF HEIDELBERG, AT THE JUNCTION OF MAIN STREET AND COUNTY ROAD 30, 50.0 FEET EAST OF COUNTY ROAD 30 IN HEIDELBERG.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -90.462 12B = -90.462 09 = -90.397 03 = -90.249

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HEIDELBERG_CATH_CH_CROSS-3NE-22APR2024.jpg	NE	Apr 22, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

HENDERSON MNDT AZ MK

Mn/DOT Name: HENDERSON MNDT AZ MK
NGS Name: HENDERSON AZ MK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3060 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	113 N	25 W	443234.80	935309.99	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=NO Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	AZIMUTH MARK DISK	MNDT

Description: (2016) **Stamping:** HENDERSON 1980

1.0 MILE NORTHEAST OF HENDERSON, 1.8 MILES NORTHEAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, AT TRUNK HIGHWAY 169 MILEPOINT 135.9, 1.8 MILES WEST OF TRUNK HIGHWAY 169, 50.0 FEET NORTHWEST OF TRUNK HIGHWAY 19, 62.5 FEET SOUTH-SOUTHEAST OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.535	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
978.584	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
978.584	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
978.584	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
978.564	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
978.584	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
978.584	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.456	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
978.535	.262		886.918	.197	2011	GPS - RTRN	2024	RTRN2024
978.489	.262		886.881	.197	2011	GPS - RTRN	2016	RTRN2016
978.262	.262		886.655	.197	2011	GPS - RTRN	2013	RTRN2013
			886.904	.012	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			886.973	.012	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
978.574	.131		887.147	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1861
978.574	.131		887.147	.066	1996	GPS - STATIC	2002	HHEND
978.574	.197		887.298	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
977.885						GPS - STATIC	1993	HORZ
978.509						RECIPROCAL VERTICAL ANGLE	1981	HORZ

Geoid Separations(ft): GEOID18 = -91.621 12B = -91.607 09 = -91.548 03 = -91.417

HENDERSON MNDT AZ MK

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.80338	93 53 09.98934	303722.503	227879.214	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.80229	93 53 09.99062	303722.409	227879.104	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(2011)

Geodetic Position		Scott County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.80413	93 53 09.98924	351523.539	126425.687	.131	3	GPS - RTRN	2013	RTRN2013
44 32 34.80298	93 53 09.99056	351523.443	126425.571	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Scott County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.80306	93 53 09.99141	351523.381	126425.580	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Scott County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.80270	93 53 09.99052	351523.445	126425.543	.033	C	ADJUSTMENT	2003	GPS1861
44 32 34.80270	93 53 09.99052	351523.444	126425.544	.033	C	GPS - STATIC	2002	HHEND
44 32 34.80421	93 53 09.99186	351523.349	126425.696	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Scott County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.79951	93 53 09.98873	351523.573	126425.219	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.92915	93 53 09.11488			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654359.530	890586.355	1409472.714	16182931.756	.131	3	GPS - RTRN	2024	RTRN2024
2654359.437	890586.245	1409472.620	16182931.647	.131	3	GPS - RTRN	2016	RTRN2016
2654359.537	890586.431	1409472.722	16182931.832	.131	3	GPS - RTRN	2013	RTRN2013
2654359.441	890586.315	1409472.625	16182931.716	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654359.380	890586.323	1409472.564	16182931.725	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654359.444	890586.286	1409472.628	16182931.688	.033	C	ADJUSTMENT	2003	GPS1861
2654359.444	890586.286	1409472.628	16182931.688	.033	C	GPS - STATIC	2002	HHEND
2654359.347	890586.439	1409472.532	16182931.842	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654359.574	890585.964	1409472.754	16182931.364	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2029757.041	562509.982			.100	2	CLASSICAL SURVEY	1982	16778

HENDERSON MNDT AZ MK

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HENDERSON_AZ_MK-PP3060-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HENDERSON_AZ_MK-PP3060-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HENDERSON_AZ_MK-PP3060-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

HIAG MNDT

Mn/DOT Name: HIAG MNDT **NGS Name:** HIAG

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7030 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	111 N	25 W	442218.89	934620.12		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2013	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** HIAG 1991

2.4 MILES SOUTHWEST OF LE CENTER, 1.2 MILES SOUTHWEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99 IN LE CENTER, 36.0 FEET SOUTHEAST OF TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 99 MILEPOINT 24.05, 6.5 FEET NORTHEAST OF A FIELD ENTRANCE, 171.2 FEET NORTHEAST OF MILEPOST 24, 13.0 FEET SOUTHWEST OF A WITNESS POST. THE STATION WAS RESET.

Station Notes
THE DISK WAS TURNED IN TO THE OFFICE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			939.709	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			939.791	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1032.577	.131		939.913	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1032.577	.131		939.913	.066	1996	GPS - STATIC	2004	HLESU

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.413						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.900 12B = -92.900 09 = -92.808 03 = -92.618

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 18.89210	93 46 20.11724	332920.436	165252.871	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 18.89218	93 46 20.11799	332920.382	165252.879	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 18.89163	93 46 20.11751	332920.416	165252.824	.033	C	ADJUSTMENT	2004	GPS2027
44 22 18.89163	93 46 20.11751	332920.416	165252.824	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 18.88424	93 46 20.11610	332920.512	165252.074	.033	C	GPS - STATIC	1991	HLESU

HIAG MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684216.065	828280.444	1438557.438	16120282.342	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684216.011	828280.452	1438557.383	16120282.351	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684216.046	828280.396	1438557.417	16120282.294	.033	C	ADJUSTMENT	2004	GPS2027
2684216.046	828280.396	1438557.417	16120282.294	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684216.150	828279.648	1438557.513	16120281.545	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG-DG7030-3E-04MAY2010.jpg	E	May 4, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG-DG7030-2-04MAY2010.jpg		May 4, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG-DG7030-1-12MAY2004.jpg		May 12, 2004

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

HIAG MNDT RESET

Mn/DOT Name: HIAG MNDT RESET
NGS Name: HIAG RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1986 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	111 N	25 W	442218.89	934620.12	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 8 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 8 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** HIAG 1991 2013

2.4 MILES SOUTHWEST OF LE CENTER, 1.2 MILES SOUTHWEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 112 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 24.05, 36.0 FEET SOUTHEAST OF TRUNK HIGHWAY 99, 6.5 FEET NORTHEAST OF A FIELD ENTRANCE, 171.2 FEET NORTHEAST OF MILEPOST 24, 13.0 FEET SOUTHWEST OF A WITNESS POST.

Station Pair: CLEVELAND NE - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.445	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1032.449	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1032.445	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1032.393	.262		939.490	.197	2011	GPS - RTRN	2024	RTRN2024
1032.413	.262		939.513	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.900 12B = -92.900 09 = -92.808 03 = -92.618

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 18.88924	93 46 20.11617	332920.512	165252.581	.131	3	GPS - RTRN	2024	RTRN2024
44 22 18.88919	93 46 20.11663	332920.478	165252.576	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684216.144	828280.154	1438557.513	16120282.052	.131	3	GPS - RTRN	2024	RTRN2024
2684216.111	828280.149	1438557.479	16120282.047	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG_RESET-DP1986-3SE-17APR2024.jpg	SE	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG_RESET-DP1986-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/HIAG_RESET-DP1986-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: J 116 **NGS Name:** J 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1743 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	111 N	24 W	442317.00	934344.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** J-116 1934

IN LE CENTER, NEAR THE JUNCTION OF SOUTH MONTGOMERY AVENUE AND EAST OTTAWA STREET, ALONG A RAILROAD, 60.0 FEET WEST OF A RAILROAD STATION, 1 POLE WEST OF RAILROAD MILEPOST 36, AT A STREET CROSSING, 21.0 FEET EAST OF A STREET, IN THE NORTH END OF THE EAST HEADWALL OF A RAILROAD CULVERT, 9.0 FEET SOUTH OF A RAILROAD.

Station Notes

THE RAILROAD HAS BEEN REMOVED AND ONLY REMAINS IS AN OLD BUILDING IN THE NORTHEAST QUADRANT OF SOUTH MONTGOMERY AVENUE AND EAST OTTAWA STREET. THE CULVERT HAS BEEN REMOVED. THE AREA HAS BEEN DEVELOPED.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1052.170	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1051.986	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.624 12B = -92.628 09 = -92.533 03 = -92.339

*** No Horizontal Positions in the Database ***

Mn/DOT Name: J 3 **NGS Name:** J 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1713 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	5	109 N	26 W	441656.00	935829.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	BENCH MARK DISK	NGS

Description: (1990) **Stamping:** J 3 1930 808.742

AT KASOTA, ALONG A RAILROAD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
808.866	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
808.742	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.897 12B = -92.900 09 = -92.808 03 = -92.677

*** No Horizontal Positions in the Database ***

JOLLY MNDT

Mn/DOT Name: JOLLY MNDT **NGS Name:** JOLLY

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3057 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	112 N	25 W	443047.81	935104.66	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** JOLLY 1981

5.0 MILES NORTHEAST OF LE SUEUR, 3.3 MILES NORTH ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND COUNTY ROAD 22 IN LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 82.2, 59.5 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, IN A DITCH BOTTOM, 1.5 FEET WEST-NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.673	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
989.719	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
989.719	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA
989.719	.016	2/1				VERTICAL ADJUSTMENT	2011	00000679
989.719	.016	2/1				VERTICAL CONTROL SURVEY	2002	VD7BR
989.719	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
989.719	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.585	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.676	.262		897.895	.197	2011	GPS - RTRN	2024	RTRN2024
989.719			897.882	.010	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
989.719	.131		898.122	.066	1996	GPS - STATIC	2014	HBLOOM
989.719			897.898	.010	2011	GPS - STATIC	2014	HBLOOM
989.549	.262		897.777	.197	2011	GPS - RTRN	2013	RTRN2013
			897.882	.013	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			897.951	.013	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
989.729	.131		898.122	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1861
989.729	.131		898.122	.066	1996	GPS - STATIC	2002	HHEND
989.729	.197		898.286	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -91.781 12B = -91.771 09 = -91.726 03 = -91.565

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 47.81043	93 51 04.66291	312704.192	216962.293	.131	3	GPS - RTRN	2024	RTRN2024
44 30 47.81087	93 51 04.66452	312704.076	216962.339	.013		ADJUSTMENT	2014	GPS3006
44 30 47.81095	93 51 04.66445	312704.081	216962.347	.013	C	GPS - STATIC	2014	HBLOOM
44 30 47.81053	93 51 04.66367	312704.137	216962.304	.131	3	GPS - RTRN	2013	RTRN2013
44 30 47.81087	93 51 04.66452	312704.076	216962.339	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 47.81093	93 51 04.66535	312704.016	216962.345	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 47.81051	93 51 04.66450	312704.077	216962.302	.033	C	GPS - STATIC	2014	HBLOOM
44 30 47.81051	93 51 04.66450	312704.077	216962.302	.033	C	ADJUSTMENT	2003	GPS1861
44 30 47.81051	93 51 04.66450	312704.076	216962.302	.033	C	GPS - STATIC	2002	HHEND
44 30 47.81302	93 51 04.66728	312703.878	216962.558	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 47.80832	93 51 04.66441	312704.081	216962.080	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 47.93553	93 51 03.79604			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2663455.337	879766.542	1418433.058	16172004.313	.131	3	GPS - RTRN	2024	RTRN2024
2663455.220	879766.586	1418432.942	16172004.359	.013		ADJUSTMENT	2014	GPS3006
2663455.226	879766.594	1418432.947	16172004.367	.013	C	GPS - STATIC	2014	HBLOOM
2663455.282	879766.552	1418433.003	16172004.324	.131	3	GPS - RTRN	2013	RTRN2013
2663455.220	879766.586	1418432.942	16172004.359	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2663455.160	879766.592	1418432.882	16172004.366	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2663455.222	879766.550	1418432.943	16172004.323	.033	C	GPS - STATIC	2014	HBLOOM
2663455.222	879766.550	1418432.943	16172004.323	.033	C	ADJUSTMENT	2003	GPS1861
2663455.222	879766.550	1418432.943	16172004.323	.033	C	GPS - STATIC	2002	HHEND
2663455.020	879766.804	1418432.744	16172004.579	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2663455.229	879766.328	1418432.947	16172004.101	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2038852.595	551690.216			.100	2	CLASSICAL SURVEY	1982	16778

JOLLY MNDT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/JOLLY-PP3057-3SE-24APR2024.jpg	SE	Apr 24, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/JOLLY-PP3057-2-24APR2024.jpg		Apr 24, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/JOLLY-PP3057-1-24APR2024.jpg		Apr 24, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

JOLLY MNDT RM 1

Mn/DOT Name: JOLLY MNDT RM 1 **NGS Name:** JOLLY RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4265 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	112 N	25 W	443047.84	935104.02	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2013	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** JOLLY NO 1 1981

5.0 MILES NORTHEAST OF LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 82.2, 2.1 MILES SOUTH ON TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 19, SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, ON THE EDGE OF A FIELD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.693	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
989.693	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.558	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Geoid Separations(ft): GEOID18 = -91.785 12B = -91.771 09 = -91.729 03 = -91.568

*** No Horizontal Positions in the Database ***

JOLLY MNDT RM 2

Mn/DOT Name: JOLLY MNDT RM 2 **NGS Name:** JOLLY RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ8091 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	112 N	25 W	443047.00	935104.01		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2013	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (1981) **Stamping:** JOLLY NO 2 1981

5.0 MILES NORTHEAST OF LE SUEUR, 2.1 MILES SOUTH ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 169 MILEPOINT 82.2, SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 95.5 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 48.6 FEET SOUTH OF A STEEL WITNESS POST.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.785 12B = -91.771 09 = -91.729 03 = -91.568

Mn/DOT Name: K 116 **NGS Name:** K 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1744 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	27	111 N	24 W	442323.00	934116.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2009) **Stamping:** K-116 1934

2.0 MILES EAST OF LE CENTER, 2.0 MILES EAST ALONG A RAILROAD FROM THE RAILROAD STATION AT LE CENTER, 1 POLE EAST OF A RAILROAD MILEPOST 34, 246.0 FEET WEST OF A ROAD CROSSING, 42.0 FEET NORTH OF RAILROAD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.273	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.102	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.388 12B = -92.385 09 = -92.296 03 = -92.109

*** No Horizontal Positions in the Database ***

Mn/DOT Name: K 3 **NGS Name:** K 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1714 Get Map
NGS Quad / Sta Num : 44093334/
USGS Quad: MANKATO EAST

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	109 N	26 W	441425.00	935851.00	1	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (1934) **Stamping:** K 3 1930

2.0 MILES SOUTH OF KASOTA, 0.8 MILE NORTH ALONG 574TH AVENUE FROM THE JUNCTION OF 574TH AVENUE AND COUNTY ROAD 5 IN KASOTA, ALONG A RAILROAD, 500.0 FEET SOUTH OF A YARD LIMIT SIGN, AT A PRIVATE ROAD CROSSING, 249.0 FEET NORTHERLY OF A PRIVATE ROAD CROSSING, 45.0 FEET EAST OF A RAILROAD, 5.0 FEET SOUTH OF A ROAD, AT A FENCE LINE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
834.352	.007	1/2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
834.224	.007	1/2				UNKNOWN/APPROXIMATE	1992	UNCHECKD
834.224	.007	1				VERTICAL CONTROL SURVEY	1930	L68 MINN

Geoid Separations(ft): GEOID18 = -92.953 12B = -92.956 09 = -92.864 03 = -92.736

*** No Horizontal Positions in the Database ***

Mn/DOT Name: KASKA **NGS Name:** KASKA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3242 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	109 N	26 W	441658.24	935725.42	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** KASKA 2019

0.6 MILE SOUTHEAST OF KASOTA, 2.3 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 22 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 61.8, 86.4 FEET WEST OF TRUNK HIGHWAY 22, 37.5 FEET SOUTH OF COUNTY ROAD 298 (EAST KENYON STREET), 22.0 FEET WEST-NORTHWEST OF A WITNESS POST.

Station Pair: CHAN - LE SUEUR, MN

Station Notes
THE ROAD WAS CLOSED FOR CONSTRUCTION 9/22/2025

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
894.319	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
894.316	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
894.273	.262		801.304	.197	2011	GPS - RTRN	2024	RTRN2024
894.267	.262		801.298	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.969 12B = -92.966 09 = -92.877 03 = -92.749

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 58.23923	93 57 25.42075	284267.393	133213.676	.131	3	GPS - RTRN	2024	RTRN2024
44 16 58.23988	93 57 25.42030	284267.426	133213.741	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635911.075	795731.219	1389871.978	16088333.455	.131	3	GPS - RTRN	2024	RTRN2024
2635911.108	795731.285	1389872.012	16088333.520	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASKA-DR3242-3W-15APR2024.jpg	W	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASKA-DR3242-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASKA-DR3242-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KASOTA

Mn/DOT Name: KASOTA
NGS Name: KASOTA
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1711 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	110 N	26 W	441700.00	935828.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1964	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	CHISELED CROSS	NGS

Description: (2009)

Stamping:

IN KASOTA, AT THE EAST ENTRANCE TO THE WOMEN'S WAITING ROOM OF CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA RAILWAY STATION ON A SEMICIRCULAR STONE STEP, NEAR THE END OF WEST WATKIN STREET.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
809.720	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

Geoid Separations(ft): GEOID18 = -92.897 12B = -92.897 09 = -92.805 03 = -92.677

*** No Horizontal Positions in the Database ***

KASOTA CITY

Mn/DOT Name: KASOTA CITY
NGS Name: KASOTA CITY
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8231 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	110 N	26 W	441716.43	935803.76	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2025	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2002) **Stamping:** KASOTA CITY 2002

0.35 MILE SOUTH OF KASOTA, 1.0 MILE WEST AND SOUTH ALONG COUNTY ROAD 21 SOUTH FROM THE JUNCTION OF COUNTY ROAD 21 AND TRUNK HIGHWAY 22 TO THE BALLPARK (WEST SIDE OF THE TOWN), 51.5 FEET SOUTH OF ALLEN STREET, 36.0 FEET EAST OF COUNTY ROAD 21 (RIDGELY STREET), 25.0 FEET SOUTH-SOUTHWEST OF THE BALLPARK FENCE CORNER, 25.0 FEET WEST OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
811.639	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
811.639	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
811.681	.262		718.768	.197	2011	GPS - RTRN	2025	RTRN2025
811.613	.262		718.699	.197	2011	GPS - RTRN	2024	RTRN2024
811.560	.262		718.647	.197	2011	GPS - RTRN	2019	RTRN2019
811.524	.262		718.611	.197	2011	GPS - RTRN	2013	RTRN2013
			718.772	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			718.860	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
811.711	.131		718.968	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
811.711	.131		718.968	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.913 12B = -92.913 09 = -92.821 03 = -92.693

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 16.42596	93 58 03.76369	281496.856	135083.654	.131	3	GPS - RTRN	2025	RTRN2025
44 17 16.42645	93 58 03.76520	281496.747	135083.705	.131	3	GPS - RTRN	2024	RTRN2024
44 17 16.42686	93 58 03.76458	281496.793	135083.746	.131	3	GPS - RTRN	2019	RTRN2019
44 17 16.42637	93 58 03.76459	281496.791	135083.696	.131	3	GPS - RTRN	2013	RTRN2013
44 17 16.42680	93 58 03.76513	281496.753	135083.740	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 16.42682	93 58 03.76593	281496.694	135083.743	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 16.42632	93 58 03.76538	281496.734	135083.692	.033	C	ADJUSTMENT	2003	GPS1911
44 17 16.42632	93 58 03.76538	281496.734	135083.692	.033	C	GPS - STATIC	2003	HSUEU

KASOTA CITY

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2633121.205	797571.510	1387105.456	16090207.132	.131	3	GPS - RTRN	2025	RTRN2025
2633121.095	797571.559	1387105.347	16090207.183	.131	3	GPS - RTRN	2024	RTRN2024
2633121.140	797571.601	1387105.392	16090207.224	.131	3	GPS - RTRN	2019	RTRN2019
2633121.139	797571.551	1387105.391	16090207.174	.131	3	GPS - RTRN	2013	RTRN2013
2633121.100	797571.595	1387105.352	16090207.218	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2633121.041	797571.597	1387105.294	16090207.221	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2633121.082	797571.546	1387105.333	16090207.170	.033	C	ADJUSTMENT	2003	GPS1911
2633121.082	797571.546	1387105.333	16090207.170	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_CITY-DF8231-3E-22SEP2025.jpg	E	Sep 22, 2025
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_CITY-DF8231-2-22SEP2025.jpg		Sep 22, 2025
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_CITY-DF8231-1-22SEP2025.jpg		Sep 22, 2025

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KASOTA MNDT

Mn/DOT Name: KASOTA MNDT
NGS Name: KASOTA
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3312 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	33	110 N	26 W	441744.03	935714.11	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2013	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** KASOTA 1990

1.5 MILES SOUTH OF ST. PETER, 1.45 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, THEN 0.5 MILE EAST ON COUNTY ROAD 21, 143.0 FEET EAST-NORTHEAST OF A DRIVEWAY, 130.0 FEET SOUTHEAST OF A POWER POLE, 69.4 FEET NORTH-NORTHWEST OF A POWER POLE, 15.5 FEET NORTH-NORTHWEST OF COUNTY ROAD 21.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
884.559	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
884.555	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
884.368	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			791.619	.021	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			791.708	.019	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
884.545	.131		791.813	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1860
884.545	.131		791.813	.066	1996	GPS - STATIC	2002	HPETE

Geoid Separations(ft): GEOID18 = -92.946 12B = -92.939 09 = -92.851 03 = -92.720

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 44.03323	93 57 14.11268	285136.560	137842.786	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 44.03328	93 57 14.11341	285136.507	137842.792	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 44.03274	93 57 14.11288	285136.545	137842.737	.033	C	ADJUSTMENT	2003	GPS1860
44 17 44.03274	93 57 14.11288	285136.545	137842.737	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 44.02951	93 57 14.11339	285136.506	137842.411	.033	C	GPS - STATIC	1991	HPETE

KASOTA MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2636731.033	800368.733	1390748.179	16092959.438	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2636730.980	800368.738	1390748.126	16092959.444	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2636731.019	800368.683	1390748.164	16092959.388	.033	C	ADJUSTMENT	2003	GPS1860
2636731.019	800368.683	1390748.164	16092959.388	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2636730.981	800368.356	1390748.123	16092959.062	.033	C	GPS - STATIC	1991	HPETE

KASOTA SE

Mn/DOT Name: KASOTA SE **NGS Name:** KASOTA SE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8232 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	13	109 N	26 W	441514.65	935415.50		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** KASOTA - SE 2002

3.5 MILES SOUTHEAST OF KASOTA, 2.8 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND COUNTY ROAD 21 IN KASOTA TO TRUNK HIGHWAY 22 MILEPOINT 59.8, THEN 2.7 MILES EAST ON COUNTY ROAD 101, 35.0 FEET SOUTH OF COUNTY ROAD 101, 10.0 FEET WEST OF A FIELD ENTRANCE, 5.0 FEET EAST-NORTHEAST OF A POWER POLE, 5.0 FEET EAST-NORTHEAST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1041.671	.262		948.361	.197	2011	GPS - OPUS	2021	GPSBM
1041.740	.262		948.423	.197	2011	GPS - RTRN	2020	RTRN2020
			948.427	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			948.515	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1041.730	.131		948.633	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1041.730	.131		948.633	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.310 12B = -93.313 09 = -93.215 03 = -93.074

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.65402	93 54 15.49559	297985.006	122589.231	.131	3	GPS - OPUS	2021	GPSBM
44 15 14.65318	93 54 15.49485	297985.059	122589.145	.131	3	GPS - RTRN	2020	RTRN2020
44 15 14.65366	93 54 15.49510	297985.041	122589.194	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.65366	93 54 15.49590	297984.983	122589.195	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.65319	93 54 15.49527	297985.028	122589.147	.033	C	ADJUSTMENT	2003	GPS1911
44 15 14.65319	93 54 15.49527	297985.028	122589.147	.033	C	GPS - STATIC	2003	HSUEU

KASOTA SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649738.891	785254.003	1403567.492	16077691.297	.131	3	GPS - OPUS	2021	GPSBM
2649738.945	785253.918	1403567.545	16077691.212	.131	3	GPS - RTRN	2020	RTRN2020
2649738.927	785253.967	1403567.528	16077691.261	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649738.869	785253.967	1403567.469	16077691.261	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649738.915	785253.919	1403567.514	16077691.213	.033	C	ADJUSTMENT	2003	GPS1911
2649738.915	785253.919	1403567.514	16077691.213	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SE-DF8232-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SE-DF8232-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SE-DF8232-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KASOTA SW

Mn/DOT Name: KASOTA SW
NGS Name: KASOTA SW
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8233 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	18	109 N	26 W	441514.50	935939.94		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** KASOTA SW 2002

2.0 MILES SOUTHWEST OF KASOTA, 3.5 MILES SOUTH ALONG COUNTY ROAD 21 FROM THE JUNCTION OF COUNTY ROAD 21 AND TRUNK HIGHWAY 22 IN KASOTA, THEN 0.85 MILE WEST ALONG 480TH STREET, 70.0 FEET WEST OF A TELEPHONE PEDESTAL NUMBER 27 DA 10, 43.0 FEET EAST OF A POWER POLE, 28.0 FEET SOUTH OF 480TH STREET, 8.0 FEET NORTH-NORTHEAST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
829.099			736.212	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
829.099			736.212	.008	2011	GPS - STATIC	2013	HSUEUR
829.093	.131		736.413	.066	1996	GPS - STATIC	2013	HSUEUR
829.076	.262		736.206	.197	2011	GPS - RTRN	2013	RTRN2013
			736.212	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			736.301	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
829.099	.131		736.413	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
829.099	.131		736.413	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.867 12B = -92.871 09 = -92.779 03 = -92.654

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.49969	93 59 39.93663	274371.164	122809.268	.013		ADJUSTMENT	2014	GPS2977
44 15 14.49960	93 59 39.93667	274371.161	122809.259	.013	C	GPS - STATIC	2013	HSUEUR
44 15 14.49936	93 59 39.93591	274371.215	122809.235	.131	3	GPS - RTRN	2013	RTRN2013
44 15 14.49969	93 59 39.93663	274371.164	122809.268	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.49970	93 59 39.93744	274371.104	122809.270	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 14.49919	93 59 39.93692	274371.142	122809.218	.033	C	GPS - STATIC	2013	HSUEUR
44 15 14.49919	93 59 39.93692	274371.142	122809.218	.033	C	ADJUSTMENT	2003	GPS1911
44 15 14.49919	93 59 39.93692	274371.142	122809.218	.033	C	GPS - STATIC	2003	HSUEU

KASOTA SW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2626126.833	785223.750	1379962.971	16077948.635	.013		ADJUSTMENT	2014	GPS2977
2626126.830	785223.741	1379962.968	16077948.626	.013	C	GPS - STATIC	2013	HSUEUR
2626126.886	785223.716	1379963.024	16077948.601	.131	3	GPS - RTRN	2013	RTRN2013
2626126.833	785223.750	1379962.971	16077948.635	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2626126.774	785223.751	1379962.913	16077948.637	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2626126.812	785223.699	1379962.950	16077948.585	.033	C	GPS - STATIC	2013	HSUEUR
2626126.812	785223.699	1379962.950	16077948.585	.033	C	ADJUSTMENT	2003	GPS1911
2626126.812	785223.699	1379962.950	16077948.585	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SW-DF8233-3SW-07APR2010.jpg	SW	Apr 7, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SW-DF8233-2-07APR2010.jpg		Apr 7, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_SW-DF8233-1-07APR2010.jpg		Apr 7, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KASOTA WATER TANK

Mn/DOT Name: KASOTA WATER TANK
NGS Name: KASOTA WATER TANK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ8102 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	110 N	26 W	441711.09	935749.60		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2024	GOOD	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	MNDT

Description: (2009)

Stamping:

IN THE SOUTH PART OF KASOTA, 570.0 FEET SOUTH ALONG SOUTH MILL STREET FROM THE JUNCTION OF SOUTH MILL STREET AND ALLEN STREET IN KASOTA.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
885.589	.262		792.653	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.933 12B = -92.933 09 = -92.841 03 = -92.713

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.09266	93 57 49.59682	282521.878	134533.081	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 10.90366	93 57 49.59563	282521.771	134513.940	.066	2	CLASSICAL SURVEY	1991	HPETE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2634151.882	797031.896	1388129.217	16089655.137	.131	3	GPS - RTRN	2024	RTRN2024

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2634151.977	797012.758	1388129.079	16089636.004	.066	2	CLASSICAL SURVEY	1991	HPETE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_WATER_TANK-CJ8102-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_WATER_TANK-CJ8102-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KASOTA_WATER_TANK-CJ8102-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KENNY MNDT

Mn/DOT Name: KENNY MNDT
NGS Name: KENNY
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC4901 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	110 N	23 W	441753.59	933546.05	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1995	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 5 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
STEEL ROD (NO SLEEVE) (DEPTH 36 FT)	METAL ROD	MNDT

Description: (2009) **Stamping:** KENNY 1995

6.5 MILES NORTH OF WATERVILLE, 6.6 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 49.25, 74.0 FEET EAST-NORTHEAST OF TRUNK HIGHWAY 13, 44.0 FEET NORTHWEST OF TOWNSHIP ROAD 125, 53.4 FEET NORTHEAST OF A STOP SIGN POST, 2.7 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.229	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1068.272	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1068.272	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1068.256	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.226	.262		975.310	.197	2011	GPS - RTRN	2024	RTRN2024
1068.229			975.375	.007	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1068.229	.131		975.605	.066	1996	GPS - STATIC	2020	HTH13
1068.229			975.375	.007	2011	GPS - STATIC	2020	HTH13
1068.272			975.375	.007	2011	HORIZONTAL ADJUSTMENT	2018	GPS3119
1068.272	.131		975.605	.066	1996	GPS - STATIC	2017	HMNCORS07
1068.272			975.375	.007	2011	GPS - STATIC	2017	HMNPH
1068.308	.262		975.395	.197	2011	GPS - RTRN	2017	RTRN2017
1068.269	.262		975.356	.197	2011	GPS - RTRN	2015	RTRN2015
			975.375	.006	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			975.451	.049	2007	HORIZONTAL ADJUSTMENT	2009	GPS2259-B
			975.451	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1068.239	.131		975.605	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1068.272	.131		975.605	.066	1996	GPS - STATIC	2008	HRYCE
			975.451	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1068.239	.098		975.605	.049	1996	HORIZONTAL ADJUSTMENT	2006	GPS2259
1068.272	.098		975.605	.049	1996	HORIZONTAL ADJUSTMENT	2006	GPS2243
1068.239	.098		975.605	.049	1996	GPS - STATIC	2006	HJADA
1068.272	.098		975.605	.049	1996	GPS - STATIC	2005	GPS2036
1068.272	.131		975.605	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1068.272	.131		975.605	.066	1996	GPS - STATIC	2003	HSUEU
1068.203	.098		975.605	.049	1996	GPS - STATIC	1997	GPS805-B

Geoid Separations(ft): GEOID18 = -92.916 12B = -92.913 09 = -92.825 03 = -92.628

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 53.58533	93 35 46.04976	378826.184	138074.915	.131	3	GPS - RTRN	2024	RTRN2024
44 17 53.58586	93 35 46.05004	378826.164	138074.969	.007		ADJUSTMENT	2020	GPS3368
44 17 53.58586	93 35 46.05004	378826.164	138074.969	.007	C	GPS - STATIC	2020	HTH13
44 17 53.58586	93 35 46.05004	378826.164	138074.969	.007		ADJUSTMENT	2018	GPS3119
44 17 53.58586	93 35 46.05004	378826.164	138074.969	.007	C	GPS - STATIC	2017	HMNPH
44 17 53.58574	93 35 46.04955	378826.200	138074.957	.131	3	GPS - RTRN	2017	RTRN2017
44 17 53.58534	93 35 46.04981	378826.180	138074.916	.131	3	GPS - RTRN	2015	RTRN2015
44 17 53.58586	93 35 46.05004	378826.164	138074.969	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 53.58585	93 35 46.05082	378826.107	138074.968	.016	B	ADJUSTMENT	2009	GPS2259-B
44 17 53.58581	93 35 46.05081	378826.108	138074.964	.033	C	ADJUSTMENT	2009	GPS2437-B
44 17 53.58582	93 35 46.05086	378826.104	138074.965	.007		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	GPS - STATIC	2020	HTH13
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	GPS - STATIC	2017	HMNCORS07
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	ADJUSTMENT	2008	GPS2437
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	GPS - STATIC	2008	HRYCE
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.016	B	ADJUSTMENT	2006	GPS2259
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.016	B	ADJUSTMENT	2006	GPS2243
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.016	B	GPS - STATIC	2006	HJADA
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.016	B	GPS - STATIC	2005	GPS2036
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	ADJUSTMENT	2003	GPS1911
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.033	C	GPS - STATIC	2003	HSUEU
44 17 53.58513	93 35 46.05030	378826.145	138074.895	.016	B	GPS - STATIC	1997	GPS805-B

KENNY MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730401.843	801593.781	1484400.682	16093041.682	.131	3	GPS - RTRN	2024	RTRN2024
2730401.823	801593.834	1484400.662	16093041.735	.007		ADJUSTMENT	2020	GPS3368
2730401.823	801593.834	1484400.662	16093041.735	.007	C	GPS - STATIC	2020	HTH13
2730401.823	801593.834	1484400.662	16093041.735	.007		ADJUSTMENT	2018	GPS3119
2730401.823	801593.834	1484400.662	16093041.735	.007	C	GPS - STATIC	2017	HMNPH
2730401.858	801593.823	1484400.697	16093041.723	.131	3	GPS - RTRN	2017	RTRN2017
2730401.839	801593.782	1484400.678	16093041.683	.131	3	GPS - RTRN	2015	RTRN2015
2730401.823	801593.834	1484400.662	16093041.735	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730401.766	801593.833	1484400.605	16093041.735	.016	B	ADJUSTMENT	2009	GPS2259-B
2730401.767	801593.829	1484400.606	16093041.731	.033	C	ADJUSTMENT	2009	GPS2437-B
2730401.763	801593.830	1484400.602	16093041.732	.007		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730401.804	801593.761	1484400.642	16093041.662	.033	C	GPS - STATIC	2020	HTH13
2730401.804	801593.761	1484400.642	16093041.662	.033	C	GPS - STATIC	2017	HMNCORS07
2730401.804	801593.761	1484400.642	16093041.662	.033	C	ADJUSTMENT	2008	GPS2437
2730401.804	801593.761	1484400.642	16093041.662	.033	C	GPS - STATIC	2008	HRYCE
2730401.804	801593.761	1484400.642	16093041.662	.016	B	ADJUSTMENT	2006	GPS2259
2730401.804	801593.761	1484400.642	16093041.662	.016	B	ADJUSTMENT	2006	GPS2243
2730401.804	801593.761	1484400.642	16093041.662	.016	B	GPS - STATIC	2006	HJADA
2730401.804	801593.761	1484400.642	16093041.662	.016	B	GPS - STATIC	2005	GPS2036
2730401.804	801593.761	1484400.642	16093041.662	.033	C	ADJUSTMENT	2003	GPS1911
2730401.804	801593.761	1484400.642	16093041.662	.033	C	GPS - STATIC	2003	HSUEU
2730401.804	801593.761	1484400.642	16093041.662	.016	B	GPS - STATIC	1997	GPS805-B

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENNY-AC4901-3NE-17APR2024.jpg	NE	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENNY-AC4901-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENNY-AC4901-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KENT II

Mn/DOT Name: KENT II **NGS Name:** KENT II

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ7720 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	112 N	23 W	443237.40	933813.07	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 29 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** KENT II 2016

3.0 MILES WEST OF NEW PRAGUE, 2.6 MILES WEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19, TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 148.15, 52.5 FEET SOUTH OF TRUNK HIGHWAY 19, 25.2 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: 4004 Z - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.285	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.285	.262		912.259	.197	2011	GPS - RTRN	2024	RTRN2024
1002.285	.131		912.492	.066	1996	GPS - STATIC	2023	HGLRD
1002.285			912.298	.027	2011	GPS - STATIC	2023	HGLRD
1002.285			912.298	.027	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
1002.199	.262		912.193	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.026 12B = -90.003 09 = -89.960 03 = -89.826

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.39518	93 38 13.07127	368684.544	227642.616	.131	3	GPS - RTRN	2024	RTRN2024
44 32 37.39510	93 38 13.07078	368684.579	227642.607	.013		ADJUSTMENT	2023	GPS3572
44 32 37.39510	93 38 13.07078	368684.579	227642.607	.013	C	GPS - STATIC	2023	HGLRD
44 32 37.39461	93 38 13.07079	368684.578	227642.558	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.39487	93 38 13.07097	368684.565	227642.584	.033	C	GPS - STATIC	2023	HGLRD

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2719312.651	891038.295	1474408.514	16182588.704	.131	3	GPS - RTRN	2024	RTRN2024
2719312.687	891038.287	1474408.550	16182588.695	.013		ADJUSTMENT	2023	GPS3572
2719312.687	891038.287	1474408.550	16182588.695	.013	C	GPS - STATIC	2023	HGLRD
2719312.686	891038.237	1474408.549	16182588.646	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2719312.673	891038.264	1474408.536	16182588.672	.033	C	GPS - STATIC	2023	HGLRD

KENT II

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENT_II-DQ7720-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENT_II-DQ7720-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KENT_II-DQ7720-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT

Mn/DOT Name: KILK MNDT **NGS Name:** KILK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9319 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	111 N	23 W	442303.80	933609.32	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** KILK 1989

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.15 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 32.75, 70.5 FEET SOUTH OF TRUNK HIGHWAY 99, 66.0 FEET EAST OF A POWER POLE, 63.0 FEET EAST OF KILK MNDT RM 2 RESET, 23.8 FEET SOUTH OF KILK MNDT RM 1, 3.5 FEET WEST OF A WITNESS POST.

Station Pair: OSWALD - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1085.933	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1085.998	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1086.005	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1086.005	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY
1086.005	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1085.762	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1085.841	.262		994.073	.197	2011	GPS - RTRN	2024	RTRN2024
1085.864	.262		994.092	.197	2011	GPS - RTRN	2016	RTRN2016
			994.214	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			994.293	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1086.021	.131		994.460	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1085.989	.131		994.460	.066	1996	GPS - STATIC	2008	HRYCE
			994.293	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1086.021	.131		994.460	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1085.989	.131		994.460	.066	1996	GPS - STATIC	2004	HLESU
1086.021	.131		994.460	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1086.021	.131		994.460	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1085.989	.131		994.460	.066	1996	GPS - STATIC	2003	HMONT
1086.021	.131		994.460	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.768 12B = -91.771 09 = -91.686 03 = -91.509

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.79655	93 36 09.31923	377314.073	169499.728	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.79658	93 36 09.31992	377314.023	169499.731	.131	3	GPS - RTRN	2016	RTRN2016
44 23 03.79632	93 36 09.31950	377314.053	169499.705	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.79634	93 36 09.32016	377314.005	169499.707	.033	C	ADJUSTMENT	2009	GPS2437-B
44 23 03.79635	93 36 09.32018	377314.004	169499.708	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	ADJUSTMENT	2008	GPS2437
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	GPS - STATIC	2008	HRYCE
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	ADJUSTMENT	2004	GPS2027
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	GPS - STATIC	2004	HLESU
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	ADJUSTMENT	2004	GPS1939
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	ADJUSTMENT	2003	GPS1911
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	GPS - STATIC	2003	HMONT
44 23 03.79577	93 36 09.32009	377314.010	169499.649	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.78589	93 36 09.31571	377314.321	169498.647	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728556.922	832997.074	1482939.845	16124455.800	.131	3	GPS - RTRN	2024	RTRN2024
2728556.872	832997.076	1482939.795	16124455.803	.131	3	GPS - RTRN	2016	RTRN2016
2728556.903	832997.050	1482939.825	16124455.777	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728556.855	832997.052	1482939.777	16124455.779	.033	C	ADJUSTMENT	2009	GPS2437-B
2728556.853	832997.053	1482939.776	16124455.780	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728556.860	832996.994	1482939.782	16124455.721	.033	C	ADJUSTMENT	2008	GPS2437
2728556.860	832996.994	1482939.782	16124455.721	.033	C	GPS - STATIC	2008	HRYCE
2728556.860	832996.994	1482939.782	16124455.721	.033	C	ADJUSTMENT	2004	GPS2027
2728556.860	832996.994	1482939.782	16124455.721	.033	C	GPS - STATIC	2004	HLESU
2728556.860	832996.994	1482939.782	16124455.721	.033	C	ADJUSTMENT	2004	GPS1939
2728556.860	832996.994	1482939.782	16124455.721	.033	C	ADJUSTMENT	2003	GPS1911
2728556.860	832996.994	1482939.782	16124455.721	.033	C	GPS - STATIC	2003	HMONT
2728556.860	832996.994	1482939.782	16124455.721	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728557.183	832995.995	1482940.093	16124454.719	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK-AC9319-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK-AC9319-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK-AC9319-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT RM 1

Mn/DOT Name: KILK MNDT RM 1 **NGS Name:** KILK RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9320 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	111 N	23 W	442304.03	933609.35	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 10 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** KILK NO 1 1989

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.15 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 32.75, 46.5 FEET SOUTH OF TRUNK HIGHWAY 99, 69.0 FEET NORTHEAST OF A POWER POLE, 65.9 FEET EAST-NORTHEAST OF STATION KILK MNDT RM 2 RESET, 23.8 FEET NORTH OF STATION KILK MNDT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1085.063	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1085.129	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1085.142	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1085.142	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY
1085.142	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1084.899	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1085.057	.262		993.292	.197	2011	GPS - RTRN	2024	RTRN2024
1085.027	.262		993.256	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.765 12B = -91.768 09 = -91.683 03 = -91.506

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.03114	93 36 09.34777	377312.137	169523.497	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.03083	93 36 09.34765	377312.145	169523.465	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728554.734	833020.818	1482937.948	16124479.562	.131	3	GPS - RTRN	2024	RTRN2024
2728554.743	833020.786	1482937.956	16124479.531	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_1-AC9320-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_1-AC9320-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_1-AC9320-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT RM 2

Mn/DOT Name: KILK MNDT RM 2 **NGS Name:** KILK RM 2

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	111 N	23 W	442303.00	933607.00	2	

NGS ACRN: AC9318 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2016	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	REFERENCE MARK DISK	MNDT

Description: (1989) **Stamping:** KILK NO 2 1989

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.15 MILE EAST ON TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99(THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 32.75, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 3.0 FEET EAST OF A POWER POLE, 63.0 FEET WEST OF STATION KILK MNDT, 65.9 FEET WEST-SOUTHWEST OF KILK MNDT RM 1, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes
THE DISK HAD POPPED OFF OF THE ROD AND WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1084.128	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1083.886	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -91.765 12B = -91.768 09 = -91.683 03 = -91.506

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2-AC9318-3S-17MAY2004.jpg	S	May 17, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2-AC9318-2-17MAY2004.jpg		May 17, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2-AC9318-1-17MAY2004.jpg		May 17, 2004

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT RM 2 RESET

Mn/DOT Name: KILK MNDT RM 2 RESET **NGS Name:** KILK RM 2 RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6393 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	111 N	23 W	442303.78	933610.19	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** KILK NO 2 1989 2016

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.15 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99, AT TRUNK HIGHWAY 99 MILEPOINT 32.75, 70.0 FEET SOUTH OF TRUNK HIGHWAY 99, 63.0 FEET WEST OF STATION KILK MNDT, 65.9 FEET WEST-SOUTHWEST OF KILK MNDT RM 1, 3.0 FEET EAST OF A POWER POLE, 1.0 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1083.886	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1083.951	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1083.863	.262		992.094	.197	2011	GPS - RTRN	2024	RTRN2024
1083.856	.262		992.085	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.768 12B = -91.771 09 = -91.686 03 = -91.509

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.77964	93 36 10.18590	377251.122	169498.377	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.77984	93 36 10.18719	377251.029	169498.397	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2728493.997	832995.055	1482876.918	16124454.551	.131	3	GPS - RTRN	2024	RTRN2024
2728493.903	832995.075	1482876.825	16124454.572	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2_RESET-DQ6393-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2_RESET-DQ6393-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_2_RESET-DQ6393-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT RM 3

Mn/DOT Name: KILK MNDT RM 3 **NGS Name:** KILK RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9321 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	23 W	442303.60	933645.28	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	REFERENCE MARK DISK	MNDT

Description: (2004) **Stamping:** KILK NO 3 1989

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13, 73.5 FEET SOUTH OF TRUNK HIGHWAY 99, 2.3 FEET NORTH OF A FENCE, 14.0 FEET EAST OF AN ENTRANCE, 14.7 FEET EAST-NORTHEAST OF THE EAST GATE POST, 2.0 FEET NORTH OF A WITNESS POST.

Station Notes

THE DISKS WERE RETURNED TO THE GEODETIC UNIT IN 2002, THE ROD WAS FOUND BENT TOWARD THE EAST, IN DECEMBER 2002 THE GEODETIC UNIT BENT THE ROD AND DISK BACK AND RESET THE DISK, RESTAMPED DISK KILK NO 3 1989 2002. SEE KILK MNDT RM 3 RESET.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.074	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.834	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -91.853 12B = -91.853 09 = -91.771 03 = -91.591

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.60245	93 36 45.28044	374702.321	169495.219	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725945.677	832964.883	1480329.173	16124455.516	3.281		CLASSICAL SURVEY	1990	HMONT

KILK MNDT RM 3 RESET

Mn/DOT Name: KILK MNDT RM 3 RESET
NGS Name: KILK RM 3 RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7031 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	23 W	442303.61	933645.28	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)
Disk Type: SURVEY DISK
Mon. Agency: MNDT

Description: (2016)
Stamping: KILK NO 3 1989 2002

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 32.20, 73.5 FEET SOUTH OF TRUNK HIGHWAY 99, 14.7 FEET EAST-NORTHEAST OF THE EAST GATE POST, 14.0 FEET EAST OF AN ENTRANCE, 2.3 FEET NORTH OF A FENCE, 1.9 FEET NORTH OF A WITNESS POST.

Station Notes
THE DISK WAS RETURNED TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.018	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1071.084	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1071.044	.262		979.191	.197	2011	GPS - RTRN	2016	RTRN2016
			979.214	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			979.296	.015	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1071.094	.131		979.460	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1071.094	.131		979.460	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -91.853 12B = -91.853 09 = -91.771 03 = -91.591

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.61262	93 36 45.28464	374702.024	169496.250	.131	3	GPS - RTRN	2016	RTRN2016
44 23 03.61300	93 36 45.28557	374701.957	169496.289	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.61305	93 36 45.28633	374701.902	169496.295	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.61250	93 36 45.28627	374701.906	169496.239	.033	C	ADJUSTMENT	2004	GPS2027
44 23 03.61250	93 36 45.28627	374701.906	169496.239	.033	C	GPS - STATIC	2004	HLESU

KILK MNDT RM 3 RESET

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725945.368	832965.911	1480328.876	16124456.547	.131	3	GPS - RTRN	2016	RTRN2016
2725945.300	832965.949	1480328.809	16124456.586	.020		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725945.245	832965.954	1480328.754	16124456.592	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725945.249	832965.898	1480328.758	16124456.536	.033	C	ADJUSTMENT	2004	GPS2027
2725945.249	832965.898	1480328.758	16124456.536	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET-DG7031-3S-01JUN2016.jpg	S	Jun 1, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET-DG7031-2-01JUN2016.jpg		Jun 1, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET-DG7031-1-01JUN2016.jpg		Jun 1, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILK MNDT RM 3 RESET 2

Mn/DOT Name: KILK MNDT RM 3 RESET 2 **NGS Name:** KILK RM 3 RESET 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	32	111 N	23 W	442303.61	933645.28		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2024	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 10 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description:

Stamping: KILK NO 3 2002 2024

3.5 MILES SOUTH-SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 32.20, 73.5 FEET SOUTH OF TRUNK HIGHWAY 99, 14.0 FEET EAST OF AN ENTRANCE, 2.9 FEET EAST-NORTHEAST OF THE EAST GATE POST, 2.0 FEET NORTH OF A FENCE, 1.3 FEET NORTH OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.205	.262		978.348	.197	2011	GPS - RTRN	2024	RTRN2024

No Geoid Separations Available

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.61340	93 36 45.28232	374702.193	169496.328	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725945.536	832965.991	1480329.045	16124456.625	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET_2-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET_2-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILK_RM_3_RESET_2-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILKENNY C

Mn/DOT Name: KILKENNY C
NGS Name: KILKENNY C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8234 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	110 N	23 W	441937.46	933433.00		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2009) **Stamping:** KILKENNY - C 2002

0.75 MILE NORTH OF KILKENNY, 0.95 MILE NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND COUNTY ROAD 2 IN KILKENNY, 35.0 FEET EAST OF COUNTY ROAD 3, 18.9 FEET SOUTH-SOUTHWEST OF A POWER POLE, 10.0 FEET NORTH OF A FIELD ENTRANCE, 14.9FEET SOUTHWEST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT. THE DISK IS SLIGHTLY TILTED BUT STABLE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.388	.262		972.019	.197	2011	GPS - RTRN	2024	RTRN2024
1064.450	.262		972.081	.197	2011	GPS - OPUS	2021	GPSBM
1064.273	.262		971.904	.197	2011	GPS - OPUS	2021	GPSBM
1064.483	.262		972.114	.197	2011	GPS - RTRN	2020	RTRN2020
			972.095	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			972.173	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1064.466	.131		972.327	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1064.466	.131		972.327	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.369 12B = -92.372 09 = -92.277 03 = -92.090

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 37.46087	93 34 33.00483	384195.705	148564.987	.131	3	GPS - RTRN	2024	RTRN2024
44 19 37.46086	93 34 33.00521	384195.677	148564.987	.131	3	GPS - OPUS	2021	GPSBM
44 19 37.46118	93 34 33.00578	384195.636	148565.019	.131	3	GPS - OPUS	2021	GPSBM
44 19 37.46116	93 34 33.00532	384195.670	148565.017	.131	3	GPS - RTRN	2020	RTRN2020
44 19 37.46121	93 34 33.00535	384195.667	148565.022	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 37.46116	93 34 33.00612	384195.612	148565.017	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 37.46052	93 34 33.00561	384195.648	148564.952	.033	C	ADJUSTMENT	2003	GPS1911
44 19 37.46052	93 34 33.00561	384195.648	148564.952	.033	C	GPS - STATIC	2003	HSUEU

KILKENNY C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735659.241	812138.933	1489784.816	16103518.709	.131	3	GPS - RTRN	2024	RTRN2024
2735659.213	812138.932	1489784.789	16103518.708	.131	3	GPS - OPUS	2021	GPSBM
2735659.171	812138.964	1489784.748	16103518.741	.131	3	GPS - OPUS	2021	GPSBM
2735659.205	812138.963	1489784.781	16103518.738	.131	3	GPS - RTRN	2020	RTRN2020
2735659.203	812138.968	1489784.779	16103518.744	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735659.147	812138.962	1489784.723	16103518.739	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735659.184	812138.898	1489784.760	16103518.674	.033	C	ADJUSTMENT	2003	GPS1911
2735659.184	812138.898	1489784.760	16103518.674	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_C-DF8234-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_C-DF8234-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_C-DF8234-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILKENNY NE

Mn/DOT Name: KILKENNY NE
NGS Name: KILKENNY NE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8235 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	110 N	23 W	442213.22	933237.27		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2012	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MN-079

Description: (2009) **Stamping:** KILKENNY NE 2002

3.4 MILES NORTHEAST OF KILKENNY, 4.25 MILES NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND COUNTY ROAD 2 IN KILKENNY, THEN 1.05 MILES EAST ALONG COUNTY ROAD 138/ 400 STREET, 32.0 FEET SOUTH OF COUNTY ROAD 138, 4.0 FEET WEST OF A POWER POLE, 4.0 FEET WEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			1064.696	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1064.775	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1156.264	.131		1064.932	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1156.264	.131		1064.932	.066	1996	GPS - STATIC	2008	HRYCE
			1064.771	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1156.264	.131		1064.932	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1156.264	.131		1064.932	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.548 12B = -91.558 09 = -91.470 03 = -91.292

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 13.22077	93 32 37.26871	392688.289	164295.030	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 13.22077	93 32 37.26937	392688.241	164295.030	.033	C	ADJUSTMENT	2009	GPS2437-B
44 22 13.22080	93 32 37.26939	392688.239	164295.033	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 13.22018	93 32 37.26895	392688.271	164294.970	.033	C	ADJUSTMENT	2008	GPS2437
44 22 13.22018	93 32 37.26895	392688.271	164294.970	.033	C	GPS - STATIC	2008	HRYCE
44 22 13.22018	93 32 37.26895	392688.271	164294.970	.033	C	ADJUSTMENT	2003	GPS1911
44 22 13.22018	93 32 37.26895	392688.271	164294.970	.033	C	GPS - STATIC	2003	HSUEU

KILKENNY NE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743983.613	827956.241	1498299.206	16119228.425	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743983.565	827956.240	1498299.159	16119228.425	.033	C	ADJUSTMENT	2009	GPS2437-B
2743983.564	827956.243	1498299.157	16119228.428	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743983.596	827956.181	1498299.188	16119228.365	.033	C	ADJUSTMENT	2008	GPS2437
2743983.596	827956.181	1498299.188	16119228.365	.033	C	GPS - STATIC	2008	HRYCE
2743983.596	827956.181	1498299.188	16119228.365	.033	C	ADJUSTMENT	2003	GPS1911
2743983.596	827956.181	1498299.188	16119228.365	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE-DF8235-3NE-22APR2010.jpg	NE	Apr 22, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE-DF8235-2-22APR2010.jpg		Apr 22, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE-DF8235-1-22APR2010.jpg		Apr 22, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILKENNY NE RESET

Mn/DOT Name: KILKENNY NE RESET **NGS Name:** KILKENNY NE RESET

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	110 N	23 W	442213.23	933237.25		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2012	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** KILKENNY NE 2002 2012

3.4 MILES NORTHEAST OF KILKENNY, 4.25 MILES NORTH ALONG COUNTY ROAD 3 FROM THE JUNCTION OF COUNTY ROAD 3 AND COUNTY ROAD 2 IN KILKENNY, THEN 1.05 MILES EAST ALONG COUNTY ROAD 138 (400TH STREET), 32.0 FEET SOUTH OF COUNTY ROAD 138, 4.0 FEET WEST OF A POWER POLE, 2.5 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1155.929	.262		1064.378	.197	2011	GPS - RTRN	2024	RTRN2024
1155.920	.262		1064.361	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.548 12B = -91.558 09 = -91.470 03 = -91.292

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 13.22528	93 32 37.25221	392689.490	164295.481	.131	3	GPS - RTRN	2024	RTRN2024
44 22 13.22523	93 32 37.25166	392689.530	164295.476	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743984.809	827956.704	1498300.408	16119228.873	.131	3	GPS - RTRN	2024	RTRN2024
2743984.849	827956.699	1498300.447	16119228.868	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE_RESET-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE_RESET-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_NE_RESET-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILKENNY SE

Mn/DOT Name: KILKENNY SE
NGS Name: KILKENNY SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8236 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	110 N	23 W	441711.42	933140.41		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2002) **Stamping:** KILKENNY - SE 2002

2.3 MILES SOUTHEAST OF KILKENNY, 2.5 MILES EAST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 3 IN KILKENNY, THEN 1.5 MILES SOUTH ALONG RICE COUNTY ROAD 12, THEN 0.1 MILE WEST ON 458TH LANE, 709.0 FEET WEST OF COUNTY ROAD 12, 25.0 FEET NORTH OF 458TH LANE, 5.0 FEET WEST OF A POWER POLE NUMBER 4-35, 5.0 FEET WEST OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.682	.262		1001.209	.197	2011	GPS - RTRN	2024	RTRN2024
1093.558	.262		1001.084	.197	2011	GPS - OPUS	2021	GPSBM
1093.558	.262		1001.084	.197	2011	GPS - OPUS	2021	GPSBM
1093.623	.262		1001.140	.197	2011	GPS - RTRN	2020	RTRN2020
			1001.127	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1001.196	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1093.600	.131		1001.340	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1093.600	.131		1001.340	.066	1996	GPS - STATIC	2008	HRYCE
			1001.196	.021	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1093.567	.131		1001.340	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1093.567	.131		1001.340	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.474 12B = -92.483 09 = -92.388 03 = -92.195

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.42209	93 31 40.41452	396670.778	133711.380	.131	3	GPS - RTRN	2024	RTRN2024
44 17 11.42142	93 31 40.41451	396670.779	133711.312	.131	3	GPS - OPUS	2021	GPSBM
44 17 11.42146	93 31 40.41480	396670.758	133711.316	.131	3	GPS - OPUS	2021	GPSBM
44 17 11.42186	93 31 40.41449	396670.780	133711.357	.131	3	GPS - RTRN	2020	RTRN2020
44 17 11.42189	93 31 40.41423	396670.799	133711.360	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.42147	93 31 40.41469	396670.766	133711.317	.033	C	ADJUSTMENT	2009	GPS2437-B
44 17 11.42139	93 31 40.41461	396670.771	133711.309	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.42081	93 31 40.41401	396670.815	133711.250	.033	C	ADJUSTMENT	2008	GPS2437
44 17 11.42081	93 31 40.41401	396670.815	133711.250	.033	C	GPS - STATIC	2008	HRYCE
44 17 11.42081	93 31 40.41401	396670.815	133711.250	.033	C	ADJUSTMENT	2003	GPS1911
44 17 11.42081	93 31 40.41401	396670.815	133711.250	.033	C	GPS - STATIC	2003	HSUEU

KILKENNY SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748289.573	797420.146	1502230.707	16088651.324	.131	3	GPS - RTRN	2024	RTRN2024
2748289.574	797420.078	1502230.707	16088651.256	.131	3	GPS - OPUS	2021	GPSBM
2748289.553	797420.082	1502230.686	16088651.260	.131	3	GPS - OPUS	2021	GPSBM
2748289.575	797420.123	1502230.709	16088651.301	.131	3	GPS - RTRN	2020	RTRN2020
2748289.594	797420.126	1502230.728	16088651.304	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748289.561	797420.083	1502230.694	16088651.261	.033	C	ADJUSTMENT	2009	GPS2437-B
2748289.567	797420.075	1502230.700	16088651.253	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748289.611	797420.017	1502230.743	16088651.194	.033	C	ADJUSTMENT	2008	GPS2437
2748289.611	797420.017	1502230.743	16088651.194	.033	C	GPS - STATIC	2008	HRYCE
2748289.611	797420.017	1502230.743	16088651.194	.033	C	ADJUSTMENT	2003	GPS1911
2748289.611	797420.017	1502230.743	16088651.194	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SE-DF8236-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SE-DF8236-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SE-DF8236-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KILKENNY SW

Mn/DOT Name: KILKENNY SW **NGS Name:** KILKENNY SW

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8237 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	110 N	23 W	441711.90	933834.29		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2014	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MN-079

Description: (2009) **Stamping:** KILKENNY SW 2002

3.25 MILES SOUTHWEST OF KILKENNY, 3.6 MILES WEST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 3 IN KILKENNY, 1.9 MILES SOUTH ALONG COUNTY ROAD 5 (CANNON RIVER ROAD), THEN 0.30 MILE WEST ON 460TH STREET, 1700.0 FEET WEST OF COUNTY ROAD 5, 30.0 FEET NORTH OF 460TH STREET, 16.0 FEET WEST OF A POWER POLE, 16.0 FEET WEST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.
THE DISK WAS REPORTED DISTURBED BY DON HANKS OF DON HANKS CONSTRUCTION & EXCAVATING DURING A DITCH CLEANING OPERATION ON 9-16-2014. GEOFF BITNER SPOKE WITH HIM AND WAS INFORMED THAT THE EXCAVATOR BUMPED THE MONUMENT WAS AS ABLE TO PUSH IT BACK INTO POSITION. AS A RESULT OF THE DITCH CLEANING THE CONCRETE IS PROJECTING ABOUT 6.0 INCHES ABOVE THE DITCH GRADE. THIS MONUMENT SHOULD NOT BE CONSTRAINED IN ANY GPS PROJECTS.
G. BITNER 9-17-2014

THE DISK WAS TURNED IN TO THE OFFICE BY MNDOT GEODETIC EMPLOYEE KENT SWANSON.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			947.764	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			947.843	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1041.107	.131		948.003	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1041.107	.131		948.003	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.386 12B = -93.386 09 = -93.290 03 = -93.081

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.89695	93 38 34.28785	366563.868	133925.912	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.89693	93 38 34.28863	366563.811	133925.910	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 17 11.89628	93 38 34.28813	366563.847	133925.844	.033	C	ADJUSTMENT	2003	GPS1911
44 17 11.89628	93 38 34.28813	366563.847	133925.844	.033	C	GPS - STATIC	2003	HSUEU

KILKENNY SW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718185.643	797315.533	1472136.838	16088914.086	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718185.586	797315.531	1472136.781	16088914.085	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718185.622	797315.465	1472136.817	16088914.018	.033	C	ADJUSTMENT	2003	GPS1911
2718185.622	797315.465	1472136.817	16088914.018	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SW-DF8237-3W-14APR2010.jpg	W	Apr 14, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SW-DF8237-2-14APR2010.jpg		Apr 14, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KILKENNY_SW-DF8237-1-14APR2010.jpg		Apr 14, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KOKOMO MNDT

Mn/DOT Name: KOKOMO MNDT **NGS Name:** KOKOMO

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8238 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	110 N	25 W	441935.97	934946.22		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1999	2013	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 4 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SURVEY DISK	MNDT

Description: (2009) **Stamping:** KOKOMO 1999

IN THE NORTHEAST PART OF CLEVELAND, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 19.75, 73.0 FEET NORTH OF TRUNK HIGHWAY 99, 69.0 FEET WEST OF COUNTY ROAD 15, 16.3 FEET WEST-NORTHWEST OF A POWER POLE, 0.8 FOOT SOUTH OF A WITNESS POST. THE STATION WAS RESET.

Station Notes

THE DISK WAS TURNED IN TO THE OFFICE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			954.322	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			954.411	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1047.504	.131		954.522	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1047.504	.131		954.522	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.212 12B = -93.202 09 = -93.113 03 = -92.949

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 35.97278	93 49 46.21715	317809.300	148876.521	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 35.97283	93 49 46.21794	317809.243	148876.527	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 35.97226	93 49 46.21742	317809.280	148876.469	.033	C	ADJUSTMENT	2003	GPS1911
44 19 35.97226	93 49 46.21742	317809.280	148876.469	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669281.133	811746.805	1423425.962	16103936.749	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669281.075	811746.810	1423425.905	16103936.755	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669281.114	811746.752	1423425.942	16103936.697	.033	C	ADJUSTMENT	2003	GPS1911
2669281.114	811746.752	1423425.942	16103936.697	.033	C	GPS - STATIC	2003	HSUEU

KOKOMO MNDT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO-DF8238-3NW-13APR2010.jpg	NW	Apr 13, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO-DF8238-2-13APR2010.jpg		Apr 13, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO-DF8238-1-13APR2010.jpg		Apr 13, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

KOKOMO MNDT RESET

Mn/DOT Name: KOKOMO MNDT RESET **NGS Name:** KOKOMO RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1979 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	16	110 N	25 W	441935.97	934946.22	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** KOKOMO 1999 2013

IN CLEVELAND, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15/10TH STREET, AT TRUNK HIGHWAY 99 MILEPOINT 19.75, 73.0 FEET NORTH OF TRUNK HIGHWAY 99, 69.0 FEET WEST OF COUNTY ROAD 15/10TH STREET, 16.3 FEET WEST-NORTHWEST OF A POWER POLE WITH 2 GUY WIRES, 0.8 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.304	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1047.314	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1047.308	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1047.317	.262		954.102	.197	2011	GPS - RTRN	2024	RTRN2024
1047.170	.262		953.968	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.212 12B = -93.202 09 = -93.113 03 = -92.949

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 35.97230	93 49 46.21727	317809.292	148876.473	.131	3	GPS - RTRN	2024	RTRN2024
44 19 35.97258	93 49 46.21725	317809.293	148876.501	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669281.124	811746.756	1423425.953	16103936.701	.131	3	GPS - RTRN	2024	RTRN2024
2669281.126	811746.785	1423425.955	16103936.729	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO_RESET-DP1979-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO_RESET-DP1979-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/KOKOMO_RESET-DP1979-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: L 116 **NGS Name:** L 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1745 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	111 N	24 W	442337.00	934000.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (1934) **Stamping:** L-116 1934

3.0 MILES EAST OF LE CENTER, 3.1 MILES EAST ALONG A RAILROAD FROM THE RAILROAD STATION AT LE CENTER, 24.75 FEET EAST OF RAILROAD MILEPOST 33, AT A ROAD CROSSING, 30.0 FEET WEST OF A ROAD, 43.0 FEET NORTH OF A RAILROAD, 3.0 FEET SOUTH OF A RIGHT-OF-WAY FENCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1059.037	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1058.873	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.185 12B = -92.178 09 = -92.096 03 = -91.913

*** No Horizontal Positions in the Database ***

LAND

Mn/DOT Name: LAND **NGS Name:** LAND

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1009 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	24	110 N	26 W	441908.00	935410.71	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** LAND 2013

2.75 MILES EAST OF ST. PETER, 2.7 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 16.05, 71.2 FEET SOUTH OF TRUNK HIGHWAY 99, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1030.621	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1030.634	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1030.638	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1030.651	.262		937.606	.197	2011	GPS - RTRN	2024	RTRN2024
1030.638	.262		937.603	.197	2011	GPS - RTRN	2020	RTRN2020
1030.638			937.590	.009	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
1030.638			937.590	.009	2011	GPS - STATIC	2013	HSUEUR
1030.638	.131		937.800	.066	1996	GPS - STATIC	2013	HSUEUR
1030.520	.262		937.485	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.044 12B = -93.035 09 = -92.953 03 = -92.802

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 07.99973	93 54 10.70822	298555.868	146216.106	.131	3	GPS - RTRN	2024	RTRN2024
44 19 07.99994	93 54 10.70892	298555.817	146216.128	.131	3	GPS - RTRN	2020	RTRN2020
44 19 07.99949	93 54 10.70946	298555.778	146216.083	.010		ADJUSTMENT	2014	GPS2977
44 19 07.99949	93 54 10.70946	298555.778	146216.083	.010	C	GPS - STATIC	2013	HSUEUR
44 19 07.99995	93 54 10.70905	298555.808	146216.129	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 07.99917	93 54 10.70944	298555.779	146216.050	.033	C	GPS - STATIC	2013	HSUEUR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2650059.259	808882.806	1404175.742	16101308.174	.131	3	GPS - RTRN	2024	RTRN2024
2650059.208	808882.827	1404175.691	16101308.196	.131	3	GPS - RTRN	2020	RTRN2020
2650059.169	808882.782	1404175.652	16101308.150	.010		ADJUSTMENT	2014	GPS2977
2650059.169	808882.782	1404175.652	16101308.150	.010	C	GPS - STATIC	2013	HSUEUR
2650059.199	808882.828	1404175.682	16101308.197	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2650059.170	808882.749	1404175.653	16101308.118	.033	C	GPS - STATIC	2013	HSUEUR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LAND-DP1009-3S-15APR2024.jpg	S	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LAND-DP1009-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LAND-DP1009-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LANESBURGH NE

Mn/DOT Name: LANESBURGH NE
NGS Name: LANESBURGH NE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8239 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	23 W	443230.49	933240.60	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** LANESBURGH NE 2002

1.0 MILE EAST OF NEW PRAGUE, 2.0 MILES EAST ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 21 IN NEW PRAGUE TO TRUNK HIGHWAY 13/TRUNK HIGHWAY 19 MILEPOINT 152.86, THEN 0.1 MILE SOUTH ALONG COUNTY ROAD 3 (WEST 280TH STREET), 32.0 FEET WEST OF COUNTY ROAD 3/WEST 280TH STREET, 15.0 FEET SOUTH OF A FIELD ENTRANCE.

Station Notes
NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.299	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1014.309	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
1014.309	.016	2/1				VERTICAL CONTROL SURVEY	2015	VJORD
1014.309	.016	2/1				VERTICAL CONTROL SURVEY	2014	VPRAG

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.384	.262		924.752	.197	2011	GPS - RTRN	2024	RTRN2024
1014.270	.262		924.644	.197	2011	GPS - RTRN	2016	RTRN2016
1014.309			924.703	.008	2011	HORIZONTAL ADJUSTMENT	2015	GPS3107
1014.309	.131		924.900	.066	1996	GPS - STATIC	2015	HJORD
1014.309			924.706	.008	2011	GPS - STATIC	2015	HJORD
1014.184	.262		924.559	.197	2011	GPS - RTRN	2014	RTRN2014
1014.335			924.703	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS3001
1014.332	.131		924.900	.066	1996	GPS - STATIC	2014	HPRAG
1014.335			924.703	.008	2011	GPS - STATIC	2014	HPRAG
1014.260	.262		924.637	.197	2011	GPS - RTRN	2013	RTRN2013
			924.703	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			924.782	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1014.335	.131		924.900	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1014.335	.131		924.900	.066	1996	GPS - STATIC	2008	HRYCE
			924.782	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1014.401	.131		924.900	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1014.401	.131		924.900	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -89.632 12B = -89.626 09 = -89.567 03 = -89.419

LANESBURGH NE

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 30.49466	93 32 40.59966	392760.751	226809.058	.131	3	GPS - RTRN	2024	RTRN2024
44 32 30.49497	93 32 40.60026	392760.707	226809.090	.131	3	GPS - RTRN	2016	RTRN2016
44 32 30.49504	93 32 40.59965	392760.752	226809.097	.007		ADJUSTMENT	2015	GPS3107
44 32 30.49507	93 32 40.59967	392760.750	226809.100	.007	C	GPS - STATIC	2015	HJORD
44 32 30.49497	93 32 40.59979	392760.741	226809.089	.131	3	GPS - RTRN	2014	RTRN2014
44 32 30.49504	93 32 40.59965	392760.752	226809.097	.007		ADJUSTMENT	2014	GPS3001
44 32 30.49506	93 32 40.59966	392760.751	226809.099	.007	C	GPS - STATIC	2014	HPRAG
44 32 30.49457	93 32 40.59999	392760.727	226809.049	.131	3	GPS - RTRN	2013	RTRN2013
44 32 30.49504	93 32 40.59965	392760.752	226809.097	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 30.49523	93 32 40.60061	392760.682	226809.116	.033	C	ADJUSTMENT	2009	GPS2437-B
44 32 30.49528	93 32 40.60083	392760.666	226809.121	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	GPS - STATIC	2015	HJORD
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	GPS - STATIC	2014	HPRAG
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	ADJUSTMENT	2008	GPS2437
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	GPS - STATIC	2008	HRYCE
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	ADJUSTMENT	2003	GPS1911
44 32 30.49479	93 32 40.60030	392760.704	226809.071	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743393.458	890460.070	1498473.335	16181716.064	.131	3	GPS - RTRN	2024	RTRN2024
2743393.414	890460.101	1498473.292	16181716.095	.131	3	GPS - RTRN	2016	RTRN2016
2743393.458	890460.108	1498473.336	16181716.102	.007		ADJUSTMENT	2015	GPS3107
2743393.457	890460.111	1498473.335	16181716.105	.007	C	GPS - STATIC	2015	HJORD
2743393.448	890460.101	1498473.326	16181716.095	.131	3	GPS - RTRN	2014	RTRN2014
2743393.458	890460.108	1498473.336	16181716.102	.007		ADJUSTMENT	2014	GPS3001
2743393.458	890460.110	1498473.335	16181716.104	.007	C	GPS - STATIC	2014	HPRAG
2743393.434	890460.061	1498473.311	16181716.055	.131	3	GPS - RTRN	2013	RTRN2013
2743393.458	890460.108	1498473.336	16181716.102	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743393.389	890460.127	1498473.267	16181716.122	.033	C	ADJUSTMENT	2009	GPS2437-B
2743393.373	890460.132	1498473.251	16181716.127	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743393.411	890460.083	1498473.289	16181716.077	.033	C	GPS - STATIC	2015	HJORD
2743393.411	890460.083	1498473.289	16181716.077	.033	C	GPS - STATIC	2014	HPRAG
2743393.411	890460.083	1498473.289	16181716.077	.033	C	ADJUSTMENT	2008	GPS2437
2743393.411	890460.083	1498473.289	16181716.077	.033	C	GPS - STATIC	2008	HRYCE
2743393.411	890460.083	1498473.289	16181716.077	.033	C	ADJUSTMENT	2003	GPS1911
2743393.411	890460.083	1498473.289	16181716.077	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_NE-DF8239-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_NE-DF8239-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_NE-DF8239-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LANESBURGH SE

Mn/DOT Name: LANESBURGH SE
NGS Name: LANESBURGH SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8240 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	36	112 N	23 W	442738.59	933213.87		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2010	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** LANESBURH SE 2002

2.5 MILES NORTHEAST OF MONTGOMERY, 1.0 MILE NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST IN MONTGOMERY, TO TRUNK HIGHWAY 13 MILEPOINT 60.60, THEN 2.5 MILES EAST ON COUNTY ROAD 142 (340TH STREET), THEN 0.3 MILE NORTH ON 137TH LANE TO THE TOP OF A HILL, 30.0 FEET WEST OF 137TH LANE, 5.0 FEET SOUTH OF A POWER POLE, 5.0 FEET SOUTH OF A WITNESS POST.

Station Notes

LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT, THE MARK IS MISSPELLED ON THE STAMPING.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			1004.273	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1004.358	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1094.716	.131		1004.506	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1094.716	.131		1004.506	.066	1996	GPS - STATIC	2008	HRYCE
			1004.358	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1094.748	.131		1004.506	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1094.748	.131		1004.506	.066	1996	GPS - STATIC	2005	H40BJ
1094.781	.131		1004.506	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1094.781	.131		1004.506	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -90.426 12B = -90.439 09 = -90.361 03 = -90.200

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 38.59320	93 32 13.86955	394550.781	197237.607	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 38.59329	93 32 13.87029	394550.727	197237.616	.033	C	ADJUSTMENT	2009	GPS2437-B
44 27 38.59329	93 32 13.87034	394550.723	197237.616	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	ADJUSTMENT	2008	GPS2437
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	GPS - STATIC	2008	HRYCE
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	ADJUSTMENT	2005	GPS2080
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	GPS - STATIC	2005	H40BJ
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	ADJUSTMENT	2003	GPS1911
44 27 38.59275	93 32 13.86984	394550.759	197237.562	.033	C	GPS - STATIC	2003	HSUEU

LANESBURGH SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745496.610	860912.787	1500214.349	16152154.117	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745496.557	860912.796	1500214.295	16152154.126	.033	C	ADJUSTMENT	2009	GPS2437-B
2745496.553	860912.796	1500214.291	16152154.127	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745496.589	860912.741	1500214.327	16152154.072	.033	C	ADJUSTMENT	2008	GPS2437
2745496.589	860912.741	1500214.327	16152154.072	.033	C	GPS - STATIC	2008	HRYCE
2745496.589	860912.741	1500214.327	16152154.072	.033	C	ADJUSTMENT	2005	GPS2080
2745496.589	860912.741	1500214.327	16152154.072	.033	C	GPS - STATIC	2005	H40BJ
2745496.589	860912.741	1500214.327	16152154.072	.033	C	ADJUSTMENT	2003	GPS1911
2745496.589	860912.741	1500214.327	16152154.072	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SE-DF8240-3N-02JUN2010.jpg	N	Jun 2, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SE-DF8240-2-02JUN2010.jpg		Jun 2, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SE-DF8240-1-02JUN2010.jpg		Jun 2, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LANESBURGH SW

Mn/DOT Name: LANESBURGH SW
NGS Name: LANESBURGH SW
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8241 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	112 N	23 W	442725.32	933829.70		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2010	DESTROYED	Horz=NO Vert=NO	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** LANESBURGH SW 2002

2.75 MILES NORTHWEST OF MONTGOMERY, 3.4 MILES WEST AND NORTH ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 WEST AND TRUNK HIGHWAY 13 IN MONTGOMERY, TO TRUNK HIGHWAY 13 MILEPOINT 59.60, THEN 0.65 MILE NORTH ALONG COUNTY ROAD 123, 1228.0 FEET EAST OF COUNTY ROAD 123, THEN 0.25 MILE EAST ALONG 336TH STREET, 55.0 FEET NORTH OF 336TH STREET, 41.0 FEET WEST OF 336TH STREET, AT A 90 DEGREE BEND IN THE ROAD, 5.0 FEET SOUTH-SOUTHWEST OF A POWER POLE, 5.0 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			978.410	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			978.502	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1069.486	.131		978.633	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1069.486	.131		978.633	.066	1996	GPS - STATIC	2005	H40BJ
1069.486	.131		978.633	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1069.486	.131		978.633	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.043 12B = -91.053 09 = -90.971 03 = -90.807

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 25.32445	93 38 29.70048	367283.710	196045.889	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 25.32454	93 38 29.70127	367283.653	196045.899	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 25.32409	93 38 29.70112	367283.663	196045.853	.033	C	ADJUSTMENT	2005	GPS2080
44 27 25.32409	93 38 29.70112	367283.663	196045.853	.033	C	GPS - STATIC	2005	H40BJ
44 27 25.32409	93 38 29.70112	367283.663	196045.853	.033	C	ADJUSTMENT	2003	GPS1911
44 27 25.32409	93 38 29.70112	367283.663	196045.853	.033	C	GPS - STATIC	2003	HSUEU

LANESBURGH SW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718246.955	859432.272	1472956.676	16151007.256	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718246.897	859432.281	1472956.619	16151007.266	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718246.908	859432.235	1472956.630	16151007.220	.033	C	ADJUSTMENT	2005	GPS2080
2718246.908	859432.235	1472956.630	16151007.220	.033	C	GPS - STATIC	2005	H40BJ
2718246.908	859432.235	1472956.630	16151007.220	.033	C	ADJUSTMENT	2003	GPS1911
2718246.908	859432.235	1472956.630	16151007.220	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW-DF8241-3N-10JUN2010.jpg	N	Jun 10, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW-DF8241-2-10JUN2010.jpg		Jun 10, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW-DF8241-1-10JUN2010.jpg		Jun 10, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LANESBURGH SW RESET

Mn/DOT Name: LANESBURGH SW RESET **NGS Name:** LANESBURGH SW RESET

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	31	112 N	23 W	442725.31	933829.72		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2010	2024	GOOD	Horz=YES Vert=YES	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2010) **Stamping:** LANESBURGH SW 2002 2010

2.75 MILES NORTHWEST OF MONTGOMERY, 3.4 MILES WEST AND NORTH ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 WEST AND TRUNK HIGHWAY 13 IN MONTGOMERY, THEN 0.6 MILE NORTH ALONG COUNTY ROAD 123/191ST AVENUE, THEN 0.2 MILE EAST ALONG 340TH STREET, 55.0 FEET NORTH OF 340TH STREET, 45.0 FEET WEST OF 336TH STREET, AT A 90 DEGREE BEND IN THE ROAD, 6.5 FEET NORTHEAST OF A FIBER OPTIC CABLE MARKER POST, 5.5 FEET SOUTH-SOUTHWEST OF A POWER POLE, 5.5 FEET SOUTH-SOUTHWEST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1069.335	.262		978.292	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -91.043 12B = -91.053 09 = -90.971 03 = -90.807

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 25.31298	93 38 29.72275	367282.088	196044.738	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2718245.345	859431.103	1472955.053	16151006.108	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW_RESET-3NE-22APR2024.jpg	NE	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW_RESET-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LANESBURGH_SW_RESET-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LE SUEUR MNDT

Mn/DOT Name: LE SUEUR MNDT **NGS Name:** LE SUEUR

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2934 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	112 N	25 W	442927.57	935228.84		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2005	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** LESUEUR 1981

3.0 MILES NORTHEAST OF LE SUEUR, 1.4 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112 IN LE SUEUR, AT TRUNK HIGHWAY 169 MILEPOINT 80.25, 78.5 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 33.0 FEET NORTHEAST OF AN ENTRANCE, NEAR THE TELEPHONE CABLE BOXES, 32.5 FEET WEST OF A WITNESS POST, 29.38 FEET WEST-NORTHWEST OF LE SUEUR MNDT RM 1, 35.45 FEET NORTH-NORTHEAST OF LE SUEUR MNDT RM 2. THE TIES FALL IN A DITCH.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
987.531	.197		895.815	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
988.843						LEVELING	1981	HORZ

Geoid Separations(ft): GEOID18 = -92.077 12B = -92.070 09 = -92.024 03 = -91.850

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 27.57238	93 52 28.83535	306531.186	208890.989	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 27.56772	93 52 28.83224	306531.408	208890.515	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 27.69370	93 52 27.96358			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2657368.956	871631.234	1412249.241	16163946.203	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2657369.182	871630.763	1412249.462	16163945.729	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2032766.415	543554.584			.100	2	CLASSICAL SURVEY	1982	16778

LE SUEUR MNDT RM 1

Mn/DOT Name: LE SUEUR MNDT RM 1 **NGS Name:** LE SUEUR RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ3676 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	112 N	25 W	442927.59	935228.43		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2013	DESTROYED	Horz=NO Vert=NO	NO		RECESSED 1 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** LESUEUR NO 1 1981

3.0 MILES NORTHEAST OF LE SUEUR, 1.4 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 80.25, 100.5 FEET SOUTHEAST OF NORTHBOUND LANE OF TRUNK HIGHWAY 169, 9.5 FEET SOUTH-SOUTHWEST OF A CABLE BOX POLE, 3.1 FEET WEST OF A STEEL WITNESS POST.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.077 12B = -92.070 09 = -92.024 03 = -91.853

LE SUEUR MNDT RM 2

Mn/DOT Name: LE SUEUR MNDT RM 2 **NGS Name:** LE SUEUR RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ3677 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	19	112 N	25 W	442927.22	935228.81		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2013	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 1 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	REFERENCE MARK DISK	MNDT

Description: (2009) **Stamping:** LESUEUR NO 2 1981

3.0 MILES NORTHEAST OF LE SUEUR, 1.4 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 169 MILEPOINT 80.25, 101.0 FEET SOUTHEAST OF NORTHBOUND TRUNK HIGHWAY 169, 55.9 FEET SOUTH-SOUTHWEST OF A CABLE BOX POLE, 10.5 FEET NORTHEAST OF A FIELD ENTRANCE EXTENDED, 48.2 FEET SOUTH-SOUTHWEST OF A STEEL WITNESS POST.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.077 12B = -92.070 09 = -92.024 03 = -91.853

LECE MNDT

Mn/DOT Name: LECE MNDT **NGS Name:** LECE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4672 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	111 N	24 W	442256.75	934511.55	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** LECE 1991

1.0 MILE WEST OF LE CENTER, 0.15 MILE SOUTHWEST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 112 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), AT TRUNK HIGHWAY 99 MILEPOINT 25.25, 134.2 FEET SOUTHEAST OF TRUNK HIGHWAY 99, 70.4 FEET WEST-SOUTHWEST OF A POWER POLE, 0.9 FOOT NORTHWEST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.875	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1046.875	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1046.875	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1046.878	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1046.878	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1046.878	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1046.878	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1046.871	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.691	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1046.884	.262		954.119	.197	2011	GPS - RTRN	2024	RTRN2024
1046.901	.262		954.135	.197	2011	GPS - OPUS	2021	GPSBM
1046.940	.262		954.175	.197	2011	GPS - RTRN	2020	RTRN2020
1046.861	.262		954.096	.197	2011	GPS - RTRN	2016	RTRN2016
1046.861	.262		954.096	.197	2011	GPS - RTRN	2013	RTRN2013
			954.155	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			954.240	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1046.881	.131		954.355	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1046.881	.131		954.355	.066	1996	GPS - STATIC	2004	HLESU
1046.881	.131		954.355	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1046.881	.131		954.355	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.762 12B = -92.766 09 = -92.674 03 = -92.477

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 56.74917	93 45 11.54523	337930.445	169048.297	.131	3	GPS - RTRN	2024	RTRN2024
44 22 56.74922	93 45 11.54603	337930.387	169048.303	.131	3	GPS - OPUS	2021	GPSBM
44 22 56.74933	93 45 11.54535	337930.437	169048.313	.131	3	GPS - RTRN	2020	RTRN2020
44 22 56.74941	93 45 11.54564	337930.416	169048.322	.131	3	GPS - RTRN	2016	RTRN2016
44 22 56.74941	93 45 11.54502	337930.461	169048.321	.131	3	GPS - RTRN	2013	RTRN2013
44 22 56.74979	93 45 11.54577	337930.406	169048.360	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 56.74986	93 45 11.54653	337930.351	169048.368	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 56.74935	93 45 11.54605	337930.386	169048.316	.033	C	ADJUSTMENT	2004	GPS2027
44 22 56.74935	93 45 11.54605	337930.386	169048.316	.033	C	GPS - STATIC	2004	HLESU
44 22 56.74935	93 45 11.54605	337930.386	169048.316	.033	C	ADJUSTMENT	2003	GPS1911
44 22 56.74935	93 45 11.54605	337930.386	169048.316	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 56.74453	93 45 11.54544	337930.426	169047.828	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689184.972	832128.304	1443571.568	16124068.174	.131	3	GPS - RTRN	2024	RTRN2024
2689184.914	832128.309	1443571.510	16124068.180	.131	3	GPS - OPUS	2021	GPSBM
2689184.963	832128.320	1443571.559	16124068.190	.131	3	GPS - RTRN	2020	RTRN2020
2689184.942	832128.328	1443571.538	16124068.199	.131	3	GPS - RTRN	2016	RTRN2016
2689184.987	832128.328	1443571.583	16124068.198	.131	3	GPS - RTRN	2013	RTRN2013
2689184.933	832128.366	1443571.529	16124068.237	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689184.878	832128.373	1443571.474	16124068.245	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689184.913	832128.322	1443571.509	16124068.193	.033	C	ADJUSTMENT	2004	GPS2027
2689184.913	832128.322	1443571.509	16124068.193	.033	C	GPS - STATIC	2004	HLESU
2689184.913	832128.322	1443571.509	16124068.193	.033	C	ADJUSTMENT	2003	GPS1911
2689184.913	832128.322	1443571.509	16124068.193	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2689184.958	832127.834	1443571.548	16124067.704	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LECE-AE4672-3SE-17APR2024.jpg	SE	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LECE-AE4672-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LECE-AE4672-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LESU MNDT

Mn/DOT Name: LESU MNDT **NGS Name:** LESU

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4687 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	12	111 N	26 W	442606.56	935431.05	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 38 FT)
Disk Type: HORIZONTAL CONTROL DISK
Mon. Agency: MNDT

Description: (2004) **Stamping:** LESU 1991

2.0 MILES SOUTH-SOUTHEAST OF LE SUEUR, 2.05 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22 IN LE SUEUR, 140.4 FEET EAST OF COUNTY ROAD 22, 94.5 FEET WEST-SOUTHWEST OF A POWER POLE, 94.0 FEET EAST-SOUTHEAST OF A POWER POLE, 17.2 FEET SOUTH OF COUNTY ROAD 115 (356TH STREET).

Station Notes

THE FIELD CREW NOTED THAT THE MARK HAS BEEN HIT AND LEANS TO THE EAST. 5-14-2004. DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS. NO WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
853.702	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
853.702	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
853.702	.016	2/1				VERTICAL ADJUSTMENT	2010	00000661
853.702	.016	2/1				VERTICAL CONTROL SURVEY	2004	VSUEU
853.811	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
853.820	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
853.673	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
853.693	.262		761.183	.197	2011	GPS - RTRN	2024	RTRN2024
			761.196	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			761.281	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
853.706	.131		761.409	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
853.706	.131		761.409	.066	1996	GPS - STATIC	2004	HLESU
853.804	.131		761.495	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1882
853.804	.131		761.495	.066	1996	GPS - STATIC	2002	HNICO

Geoid Separations(ft): GEOID18 = -92.510 12B = -92.510 09 = -92.434 03 = -92.260

LESU MNDT

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 06.56414	93 54 31.05481	297478.521	188617.207	.131	3	GPS - RTRN	2024	RTRN2024
44 26 06.56461	93 54 31.05393	297478.585	188617.254	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 06.56466	93 54 31.05480	297478.522	188617.260	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 06.56414	93 54 31.05423	297478.563	188617.207	.033	C	ADJUSTMENT	2004	GPS2027
44 26 06.56414	93 54 31.05423	297478.563	188617.207	.033	C	GPS - STATIC	2004	HLESU
44 26 06.56356	93 54 31.06100	297478.071	188617.153	.033	C	ADJUSTMENT	2003	GPS1882
44 26 06.56356	93 54 31.06100	297478.070	188617.152	.033	C	GPS - STATIC	2002	HNICO

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 06.56168	93 54 31.06160	297478.024	188616.962	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648532.738	851265.070	1403167.050	16143694.870	.131	3	GPS - RTRN	2024	RTRN2024
2648532.802	851265.118	1403167.114	16143694.917	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648532.739	851265.123	1403167.051	16143694.923	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648532.780	851265.070	1403167.092	16143694.869	.033	C	ADJUSTMENT	2004	GPS2027
2648532.780	851265.070	1403167.092	16143694.870	.033	C	GPS - STATIC	2004	HLESU
2648532.289	851265.011	1403166.600	16143694.816	.033	C	ADJUSTMENT	2003	GPS1882
2648532.289	851265.011	1403166.600	16143694.816	.033	C	GPS - STATIC	2002	HNICO

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648532.246	851264.820	1403166.555	16143694.626	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESU-AE4687-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESU-AE4687-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESU-AE4687-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: LESUE
NGS Name: LESUE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DM3718 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442627.48	935424.36	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 35 FT)	SURVEY DISK	MNDT

Description: (2003) **Stamping:** LESUE 2003

IN LE SUEUR, 1.75 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 93 IN LE SUEUR, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, 80.7 FEET SOUTHEAST OF THE SOUTHWEST CORNER OF A BUILDING, 68.4 FEET SOUTH-SOUTHWEST OF THE SOUTHEAST CORNER OF A BUILDING, 2.4 FEET NORTH OF A WITNESS POST.

Station Notes
THE MARK IS AT THE MAINTENANCE SHOP IN LE SUEUR.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
849.910	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
849.910	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
849.910	.016	2/1				VERTICAL ADJUSTMENT	2010	00000661
849.910	.016	2/1				VERTICAL CONTROL SURVEY	2004	VSUEU

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
849.883	.262		757.400	.197	2011	GPS - RTRN	2024	RTRN2024
849.854	.262		757.374	.197	2011	GPS - OPUS	2021	GPSBM
849.729	.262		757.249	.197	2011	GPS - OPUS	2021	GPSBM
849.867	.262		757.387	.197	2011	GPS - RTRN	2020	RTRN2020

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.480 09 = -92.408 03 = -92.231

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 27.48473	93 54 24.36048	297984.292	190731.211	.131	3	GPS - RTRN	2024	RTRN2024
44 26 27.48487	93 54 24.36059	297984.285	190731.225	.131	3	GPS - OPUS	2021	GPSBM
44 26 27.48516	93 54 24.36073	297984.275	190731.254	.131	3	GPS - OPUS	2021	GPSBM
44 26 27.48481	93 54 24.35962	297984.355	190731.218	.131	3	GPS - RTRN	2020	RTRN2020

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649016.018	853384.063	1403676.058	16145807.252	.131	3	GPS - RTRN	2024	RTRN2024
2649016.010	853384.077	1403676.051	16145807.266	.131	3	GPS - OPUS	2021	GPSBM
2649016.000	853384.107	1403676.041	16145807.296	.131	3	GPS - OPUS	2021	GPSBM
2649016.080	853384.071	1403676.121	16145807.260	.131	3	GPS - RTRN	2020	RTRN2020

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUE-DM3718-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUE-DM3718-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUE-DM3718-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LESUEUR CENTER MUNICIPAL TANK

Mn/DOT Name: LESUEUR CENTER MUNICIPAL TANK
NGS Name: LESUEUR CENTER MUNICIPAL TANK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2882 Get Map
NGS Quad / Sta Num : 44093314/1001
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	111 N	24 W	442327.73	934355.31		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1935	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	UNK

Description: (1981)

Stamping:

IN THE NORTH PART OF LE CENTER, AT THE JUNCTION OF EAST TYRONE STREET AND NORTH PARK AVENUE, 100.0 FEET NORTH OF TYRONE STREET, 200.0 FEET WEST OF PARK AVENUE. THE POINT OBSERVED WAS THE FINIAL OF THE MUNICIPAL WATER TANK IN TOWN.

Station Notes

THE WATER TANK HAS BEEN REMOVED.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.605 12B = -92.608 09 = -92.513 03 = -92.319

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 27.72508	93 43 55.31395	343489.732	172143.969	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 27.72077	93 43 55.31387	343489.735	172143.532	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 27.83400	93 43 54.47500			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2694710.476	835282.354	1449133.623	16127153.628	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2694710.484	835281.917	1449133.625	16127153.191	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2070106.729	507204.884			.100	4	CLASSICAL SURVEY	1939	03760

LESUEUR KRBI RADIO MAST

Mn/DOT Name: LESUEUR KRBI RADIO MAST
NGS Name: LESUEUR KRBI RADIO MAST
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2949 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	24	112 N	26 W	442911.07	935320.98		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	RADIO/TV TOWER	MNDT

Description: (1981)

Stamping:

1.0 MILE NORTH-NORTHEAST OF LE SUEUR, 0.6 MILE NORTHEAST ALONG COMMERCE STREET FROM THE JUNCTION OF COMMERCE STREET AND COUNTY ROAD 28 IN LE SUEUR, THEN 0.4 MILE NORTHEAST ALONG DOPPY LANE.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.162 12B = -92.155 09 = -92.100 03 = -91.926

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 11.07359	93 53 20.97560	302736.105	207254.762	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 11.06855	93 53 20.97300	302736.289	207254.250	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 11.19459	93 53 20.10380			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653591.882	869955.074	1408452.942	16162316.792	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653592.071	869954.564	1408453.124	16162316.280	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2028989.241	541878.396			.100	4	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_KRBI_RADIO_MAST-PP2949-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LESUEUR MUN WATER TANK

Mn/DOT Name: LESUEUR MUN WATER TANK
NGS Name: LESUEUR MUN WATER TANK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2950 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	112 N	26 W	442803.06	935413.99		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	MNDT

Description: (1981)

Stamping:

IN LE SUEUR, 0.2 MILE SOUTHEAST ALONG CATHCART STREET FROM THE JUNCTION OF CATHCART STREET AND COMMERCE STREET IN LE SUEUR, 0.6 MILE NORTH OF TRUNK HIGHWAY 93, 0.15 MILE EAST OF TRUNK HIGHWAY 112. THE POINT OBSERVED IS THE LIGHT IN THE CENTER OF THE TOP OF THE MUNICIPAL WATER TANK.

Station Notes

THE WATER TANK HAS BEEN REPLACED.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.326 12B = -92.326 09 = -92.260 03 = -92.083

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 03.05683	93 54 13.99196	298827.753	200402.611	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 03.05218	93 54 13.98814	298828.026	200402.138	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 28 03.17476	93 54 13.12191			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649756.835	863062.706	1404534.913	16155473.615	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649757.112	863062.235	1404535.184	16155473.141	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2025153.978	534985.770			.100	4	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_MUN_WATER_TANK-PP2950-3E-18MAY2010.jpg	E	May 18, 2010
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LESUEUR ST ANNES CATH CH SPIRE

Mn/DOT Name: LESUEUR ST ANNES CATH CH SPIRE **NGS Name:** LESUEUR ST ANNES CATH CH SPIRE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2951 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	35	112 N	26 W	442743.29	935437.43		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	CHURCH SPIRE	MNDT

Description: (1981)

Stamping:

IN LE SUEUR, 0.30 MILE SOUTHEAST ALONG COUNTY ROAD 37 FROM THE JUNCTION OF COUNTY ROAD 37 AND TRUNK HIGHWAY 93 IN LE SUEUR, THEN 0.20 MILE NORTHEAST ON NORTH FOURTH STREET, 75.0 FEET NORTHWEST OF NORTH FOURTH STREET, 50.0 FEET SOUTHWEST OF OAK STREET.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.369 12B = -92.365 09 = -92.296 03 = -92.123

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 43.29220	93 54 37.42868	297109.132	198417.147	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 43.26651	93 54 37.44299	297108.069	198414.555	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 43.25856	93 54 36.69049			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648059.556	861059.376	1402813.712	16153491.699	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648058.521	861056.774	1402812.646	16153489.110	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2023447.110	532967.095			.100	4	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_ST_ANNES_CATH_CH_SPIRE-PP2951-3SW-22APR2024.jpg	SW	Apr 22, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LESUEUR TELE MAST

Mn/DOT Name: LESUEUR TELE MAST
NGS Name: LESUEUR TELE MAST
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2931 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	111 N	25 W	442721.38	935016.48		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	MICROWAVE MAST	MNDT

Description: (1981)

Stamping:

3.5 MILES EAST OF LE SUEUR, 3.5 MILES EAST ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND OUTLET DRIVE IN LE SUEUR, THEN 0.3 MILE NORTH ON TOWNSHIP ROAD A, IN THE NORTHEAST QUARTER OF SECTION 4.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.293 12B = -92.283 09 = -92.218 03 = -92.034

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 21.38437	93 50 16.47945	316015.551	196027.073	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 21.38070	93 50 16.47719	316015.711	196026.700	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 21.50596	93 50 15.61198			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2666987.989	858870.092	1421708.997	16151071.804	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2666988.153	858869.721	1421709.157	16151071.431	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2042385.447	530793.617			.100	4	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_TELE_MAST-PP2931-3NW-22APR2024.jpg	NW	Apr 22, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: LEVE
NGS Name: LEVE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1010 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	23	110 N	26 W	441907.96	935434.59	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 12 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** LEVE 2013

2.35 MILES EAST OF ST. PETER, 2.35 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE NORTH JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 99 MILEPOINT 15.7, 54.2 FEET NORTH OF TRUNK HIGHWAY 99, 29.8 FEET SOUTHEAST OF A POWER POLE, 19.6 FEET WEST OF A FIELD ENTRANCE, 1.5 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.203	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1013.216	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1013.220	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.210	.262		920.188	.197	2011	GPS - RTRN	2024	RTRN2024
1013.220			920.185	.009	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
1013.220			920.185	.009	2011	GPS - STATIC	2013	HSUEUR
1013.220	.131		920.389	.066	1996	GPS - STATIC	2013	HSUEUR
1013.108	.262		920.093	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.021 12B = -93.015 09 = -92.933 03 = -92.782

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 07.96244	93 54 34.58935	296819.608	146228.743	.131	3	GPS - RTRN	2024	RTRN2024
44 19 07.96258	93 54 34.59038	296819.534	146228.758	.010		ADJUSTMENT	2014	GPS2977
44 19 07.96258	93 54 34.59038	296819.534	146228.758	.010	C	GPS - STATIC	2013	HSUEUR
44 19 07.96260	93 54 34.58934	296819.609	146228.759	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 07.96223	93 54 34.59027	296819.541	146228.722	.033	C	GPS - STATIC	2013	HSUEUR

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648323.169	808877.040	1402440.167	16101323.580	.131	3	GPS - RTRN	2024	RTRN2024
2648323.094	808877.054	1402440.092	16101323.595	.010		ADJUSTMENT	2014	GPS2977
2648323.094	808877.054	1402440.092	16101323.595	.010	C	GPS - STATIC	2013	HSUEUR
2648323.169	808877.056	1402440.168	16101323.596	.131	3	GPS - RTRN	2013	RTRN2013

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648323.102	808877.018	1402440.100	16101323.560	.033	C	GPS - STATIC	2013	HSUEUR

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEVE-DP1010-3N-15APR2024.jpg	N	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEVE-DP1010-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEVE-DP1010-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LEXINGTON C

Mn/DOT Name: LEXINGTON C
NGS Name: LEXINGTON C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8242 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	111 N	24 W	442451.01	934225.58		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** LEXINGTON C 2002

2.0 MILES NORTHWEST OF LE CENTER, 1.5 MILES NORTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 1.0 MILE EAST ON COUNTY ROAD 126, THEN 0.55 MILE NORTH ON 221ST AVENUE, 31.9 FEET EAST OF 221ST AVENUE, 250.0 FEET NORTH OF 370TH LANE, 6.0 FEET NORTH OF A FIELD ENTRANCE, 1.0 FOOT SOUTHWEST OF A WITNESS POST.

Station Notes
LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1053.531	.262		961.330	.197	2011	GPS - RTRN	2024	RTRN2024
1053.535	.262		961.337	.197	2011	GPS - OPUS	2019	GPSBM
1053.535	.262		961.337	.197	2011	GPS - OPUS	2019	GPSBM
1053.548	.262		961.347	.197	2011	GPS - RTRN	2019	RTRN2019
			961.360	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			961.445	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1053.541	.131		961.566	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1053.541	.131		961.566	.066	1996	GPS - STATIC	2004	HLESU
1053.541	.131		961.566	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1053.541	.131		961.566	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.198 12B = -92.198 09 = -92.109 03 = -91.922

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 51.00999	93 42 25.58343	350064.678	180531.541	.131	3	GPS - RTRN	2024	RTRN2024
44 24 51.01078	93 42 25.58383	350064.650	180531.621	.131	3	GPS - OPUS	2019	GPSBM
44 24 51.01009	93 42 25.58390	350064.644	180531.551	.131	3	GPS - OPUS	2019	GPSBM
44 24 51.01055	93 42 25.58057	350064.886	180531.596	.131	3	GPS - RTRN	2019	RTRN2019
44 24 51.01005	93 42 25.58360	350064.666	180531.547	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 51.01013	93 42 25.58438	350064.609	180531.556	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 51.00964	93 42 25.58413	350064.627	180531.506	.033	C	ADJUSTMENT	2004	GPS2027
44 24 51.00964	93 42 25.58413	350064.627	180531.506	.033	C	GPS - STATIC	2004	HLESU
44 24 51.00964	93 42 25.58413	350064.627	180531.506	.033	C	ADJUSTMENT	2003	GPS1911
44 24 51.00964	93 42 25.58413	350064.627	180531.506	.033	C	GPS - STATIC	2003	HSUEU

LEXINGTON C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701195.375	843738.142	1455719.484	16135527.181	.131	3	GPS - RTRN	2024	RTRN2024
2701195.345	843738.222	1455719.455	16135527.261	.131	3	GPS - OPUS	2019	GPSBM
2701195.340	843738.152	1455719.450	16135527.191	.131	3	GPS - OPUS	2019	GPSBM
2701195.582	843738.200	1455719.692	16135527.236	.131	3	GPS - RTRN	2019	RTRN2019
2701195.362	843738.148	1455719.471	16135527.188	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701195.306	843738.156	1455719.415	16135527.196	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2701195.324	843738.107	1455719.433	16135527.146	.033	C	ADJUSTMENT	2004	GPS2027
2701195.324	843738.107	1455719.433	16135527.146	.033	C	GPS - STATIC	2004	HLESU
2701195.324	843738.107	1455719.433	16135527.146	.033	C	ADJUSTMENT	2003	GPS1911
2701195.324	843738.107	1455719.433	16135527.146	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_C-DF8242-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_C-DF8242-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_C-DF8242-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

LEXINGTON SE

Mn/DOT Name: LEXINGTON SE
NGS Name: LEXINGTON SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8243 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	111 N	24 W	442211.16	933923.62		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** LEXINGTON - SE 2002

3.0 MILES SOUTHEAST OF LE CENTER, 3.3 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER TO TRUNK HIGHWAY 99 MILEPOINT 29.8, THEN 1.0 MILE SOUTH ON 199TH AVENUE, THEN 0.30 MILE EAST ON 400TH STREET, 76.0 FEET EAST OF A POWER POLE, 41.0 FEET EAST OF GORMAN LAKE ROAD EXTENDED, 24.0 FEET NORTH OF 400TH STREET, 3.5 FEET SOUTH OF A WITNESS POST.

Station Notes

THE LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1070.041	.262		977.600	.197	2011	GPS - RTRN	2024	RTRN2024
1070.090	.262		977.652	.197	2011	GPS - OPUS	2021	GPSBM
1070.063	.262		977.626	.197	2011	GPS - OPUS	2021	GPSBM
1070.119	.262		977.685	.197	2011	GPS - RTRN	2016	RTRN2016
			977.669	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			977.747	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1070.077	.131		977.915	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1070.077	.131		977.915	.066	1996	GPS - STATIC	2004	HLESU
1070.109	.131		977.915	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1070.109	.131		977.915	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.437 12B = -92.434 09 = -92.346 03 = -92.155

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 11.15999	93 39 23.62091	363169.088	164254.843	.131	3	GPS - RTRN	2024	RTRN2024
44 22 11.16048	93 39 23.62010	363169.147	164254.893	.131	3	GPS - OPUS	2021	GPSBM
44 22 11.16041	93 39 23.62039	363169.126	164254.886	.131	3	GPS - OPUS	2021	GPSBM
44 22 11.16034	93 39 23.61942	363169.196	164254.878	.131	3	GPS - RTRN	2016	RTRN2016
44 22 11.16056	93 39 23.61985	363169.165	164254.900	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 11.16060	93 39 23.62058	363169.112	164254.905	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 11.15996	93 39 23.62003	363169.152	164254.840	.033	C	ADJUSTMENT	2004	GPS2027
44 22 11.15996	93 39 23.62003	363169.152	164254.840	.033	C	GPS - STATIC	2004	HLESU
44 22 11.15996	93 39 23.62003	363169.152	164254.840	.033	C	ADJUSTMENT	2003	GPS1911
44 22 11.15996	93 39 23.62003	363169.152	164254.840	.033	C	GPS - STATIC	2003	HSUEU

LEXINGTON SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714470.003	827603.185	1468792.236	16119235.936	.131	3	GPS - RTRN	2024	RTRN2024
2714470.061	827603.235	1468792.295	16119235.985	.131	3	GPS - OPUS	2021	GPSBM
2714470.040	827603.227	1468792.274	16119235.978	.131	3	GPS - OPUS	2021	GPSBM
2714470.111	827603.220	1468792.345	16119235.970	.131	3	GPS - RTRN	2016	RTRN2016
2714470.080	827603.243	1468792.314	16119235.993	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714470.026	827603.246	1468792.261	16119235.998	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714470.067	827603.182	1468792.300	16119235.932	.033	C	ADJUSTMENT	2004	GPS2027
2714470.067	827603.182	1468792.300	16119235.932	.033	C	GPS - STATIC	2004	HLESU
2714470.067	827603.182	1468792.300	16119235.932	.033	C	ADJUSTMENT	2003	GPS1911
2714470.067	827603.182	1468792.300	16119235.932	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_SE-DF8243-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_SE-DF8243-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LEXINGTON_SE-DF8243-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: M 116 **NGS Name:** M 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1746 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	19	111 N	23 W	442422.00	933811.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (1934) **Stamping:** M 116 1934

3.7 MILES SOUTHWEST ALONG A RAILROAD FROM THE STATION AT MONTGOMERY, 115.5 FEET SOUTHWEST OF RAILROAD MILEPOST 31, AT A ROAD CROSSING, 36.0 FEET NORTHEAST OF A ROAD, 24.0 FEET NORTHWEST OF A RAILROAD, 24.0 FEET SOUTHEAST OF A RIGHT-OF-WAY FENCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.746	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1080.598	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -91.735 12B = -91.735 09 = -91.653 03 = -91.483

*** No Horizontal Positions in the Database ***

Mn/DOT Name: MABEL
NGS Name: MABEL
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6424 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	110 N	23 W	442111.06	933622.40	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2017) **Stamping:** MABEL 2017

6.3 MILES SOUTH OF MONTGOMERY, 2.2 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 13 MILEPOINT 53.1, 54.4 FEET EAST OF TRUNK HIGHWAY 13, 59.4 FEET NORTH OF DRIVEWAY NUMBER 41149 EXTENDED, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: DOVA - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1089.394	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1089.443	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1089.479	.262		997.213	.197	2011	GPS - RTRN	2024	RTRN2024
1089.276	.262		997.006	.197	2011	GPS - OPUS	2021	GPSBM
1089.443	.262		997.173	.197	2011	GPS - OPUS	2021	GPSBM
1089.394			997.173	.022	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1089.394	.131		997.370	.066	1996	GPS - STATIC	2020	HTH13
1089.394			997.173	.022	2011	GPS - STATIC	2020	HTH13
1089.430	.262		997.167	.197	2011	GPS - RTRN	2020	RTRN2020
1089.443	.262		997.180	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -92.270 12B = -92.264 09 = -92.182 03 = -91.995

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 11.05581	93 36 22.39933	376298.118	158087.879	.131	3	GPS - RTRN	2024	RTRN2024
44 21 11.05618	93 36 22.39981	376298.084	158087.916	.131	3	GPS - OPUS	2021	GPSBM
44 21 11.05553	93 36 22.39913	376298.133	158087.850	.131	3	GPS - OPUS	2021	GPSBM
44 21 11.05638	93 36 22.39947	376298.109	158087.936	.013		ADJUSTMENT	2020	GPS3368
44 21 11.05638	93 36 22.39947	376298.109	158087.936	.013	C	GPS - STATIC	2020	HTH13
44 21 11.05628	93 36 22.39900	376298.143	158087.926	.131	3	GPS - RTRN	2020	RTRN2020
44 21 11.05610	93 36 22.39932	376298.119	158087.908	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 11.05620	93 36 22.39982	376298.083	158087.918	.033	C	GPS - STATIC	2020	HTH13

MABEL

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727662.100	821576.453	1481905.883	16113050.342	.131	3	GPS - RTRN	2024	RTRN2024
2727662.065	821576.490	1481905.849	16113050.380	.131	3	GPS - OPUS	2021	GPSBM
2727662.115	821576.424	1481905.897	16113050.314	.131	3	GPS - OPUS	2021	GPSBM
2727662.090	821576.510	1481905.873	16113050.400	.013		ADJUSTMENT	2020	GPS3368
2727662.090	821576.510	1481905.873	16113050.400	.013	C	GPS - STATIC	2020	HTH13
2727662.124	821576.501	1481905.908	16113050.389	.131	3	GPS - RTRN	2020	RTRN2020
2727662.101	821576.482	1481905.884	16113050.371	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2727662.064	821576.492	1481905.848	16113050.382	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MABEL-DQ6424-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MABEL-DQ6424-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MABEL-DQ6424-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MAREK MNDT

Mn/DOT Name: MAREK MNDT **NGS Name:** MAREK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7032 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	111 N	24 W	442304.48	933922.71	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	SURVEY DISK	MNDT

Description: (2016) **Stamping:** MAREK 2003

3.5 MILES EAST OF LE CENTER, 3.55 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 30.05, 67.0 FEET NORTH OF TRUNK HIGHWAY 99, 17.0 FEET EAST OF AN ENTRANCE, 30.9 FEET WEST-SOUTHWEST OF A POWER POLE, 6.1 FEET SOUTHWEST OF A FIBER OPTIC CABLE POST, 3.3 FEET WEST OF A WITNESS POST.

Station Pair: ET 5 EDJ USGS - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.379	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1066.415	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.396	.262		974.168	.197	2011	GPS - RTRN	2024	RTRN2024
1066.418	.262		974.191	.197	2011	GPS - OPUS	2021	GPSBM
1066.409	.262		974.188	.197	2011	GPS - RTRN	2020	RTRN2020
1066.396	.262		974.175	.197	2011	GPS - RTRN	2016	RTRN2016
			974.184	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			974.266	.015	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1066.402	.131		974.437	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1066.435	.131		974.437	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.228 12B = -92.224 09 = -92.142 03 = -91.955

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.47949	93 39 22.71082	363269.734	169654.104	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.47958	93 39 22.71218	363269.635	169654.114	.131	3	GPS - OPUS	2021	GPSBM
44 23 04.48018	93 39 22.71186	363269.659	169654.174	.131	3	GPS - RTRN	2020	RTRN2020
44 23 04.47960	93 39 22.71161	363269.676	169654.115	.131	3	GPS - RTRN	2016	RTRN2016
44 23 04.47998	93 39 22.71176	363269.666	169654.154	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.48003	93 39 22.71250	363269.612	169654.159	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.47942	93 39 22.71209	363269.642	169654.097	.033	C	ADJUSTMENT	2004	GPS2027
44 23 04.47942	93 39 22.71209	363269.642	169654.097	.033	C	GPS - STATIC	2004	HLESU

MAREK MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714513.405	833002.567	1468901.560	16124632.816	.131	3	GPS - RTRN	2024	RTRN2024
2714513.306	833002.576	1468901.462	16124632.826	.131	3	GPS - OPUS	2021	GPSBM
2714513.329	833002.637	1468901.485	16124632.886	.131	3	GPS - RTRN	2020	RTRN2020
2714513.348	833002.578	1468901.503	16124632.827	.131	3	GPS - RTRN	2016	RTRN2016
2714513.336	833002.616	1468901.492	16124632.866	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714513.283	833002.621	1468901.439	16124632.871	.020		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714513.313	833002.560	1468901.468	16124632.809	.033	C	ADJUSTMENT	2004	GPS2027
2714513.313	833002.560	1468901.468	16124632.809	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MAREK-DG7032-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MAREK-DG7032-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MAREK-DG7032-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MARI MNDT

Mn/DOT Name: MARI MNDT **NGS Name:** MARI

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4678 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	28	111 N	25 W	442306.91	934945.74	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 10 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2002) **Stamping:** MARI 1991

5.0 MILES WEST OF LE CENTER, 3.85 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 0.1 MILE NORTH ON COUNTY ROAD 15, 74.2 FEET SOUTH OF A POWER POLE, 53.5 FEET WEST OF COUNTY ROAD 15 (281ST AVENUE), 49.0 FEET NORTH-NORTHEAST OF A GAS PIPELINE VALVE, 1.0 FOOT SOUTH OF A WITNESS POST.

Station Pair: CABE MNDT RESET - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.901	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1001.901	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1001.901	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1001.898	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.730	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.845	.262		909.034	.197	2011	GPS - RTRN	2024	RTRN2024
1001.907	.262		909.096	.197	2011	GPS - OPUS	2021	GPSBM
1001.832	.262		909.030	.197	2011	GPS - RTRN	2020	RTRN2020
			909.122	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			909.204	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1001.901	.131		909.319	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1001.901	.131		909.319	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.808 12B = -92.805 09 = -92.726 03 = -92.542

MARI MNDT

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.90616	93 49 45.74328	318025.582	170237.123	.131	3	GPS - RTRN	2024	RTRN2024
44 23 06.90608	93 49 45.74449	318025.494	170237.115	.131	3	GPS - OPUS	2021	GPSBM
44 23 06.90678	93 49 45.74426	318025.511	170237.186	.131	3	GPS - RTRN	2020	RTRN2020
44 23 06.90658	93 49 45.74314	318025.593	170237.165	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.90666	93 49 45.74390	318025.538	170237.174	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.90609	93 49 45.74346	318025.569	170237.116	.033	C	ADJUSTMENT	2004	GPS2027
44 23 06.90609	93 49 45.74346	318025.569	170237.116	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.90331	93 49 45.74350	318025.565	170236.835	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669270.993	833105.963	1423676.493	16125288.639	.131	3	GPS - RTRN	2024	RTRN2024
2669270.906	833105.955	1423676.405	16125288.632	.131	3	GPS - OPUS	2021	GPSBM
2669270.922	833106.026	1423676.422	16125288.702	.131	3	GPS - RTRN	2020	RTRN2020
2669271.003	833106.006	1423676.503	16125288.681	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669270.948	833106.014	1423676.448	16125288.690	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669270.980	833105.956	1423676.479	16125288.632	.033	C	ADJUSTMENT	2004	GPS2027
2669270.980	833105.956	1423676.479	16125288.632	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669270.978	833105.674	1423676.474	16125288.350	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MARI-AE4678-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MARI-AE4678-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MARI-AE4678-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Geodetic Data Sheet (Feet)
GSID Station # 105768

MEHL

04/28/2026
Sheet Help

Mn/DOT Name: MEHL
NGS Name: MEHL
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6402 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	12	111 N	23 W	442542.40	933133.11	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 22 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** MEHL 2016

2.95 MILES EAST OF MONTGOMERY, 2.95 MILES EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 13 IN MONTGOMERY, AT TRUNK HIGHWAY 21 MILEPOINT 15.4, 62.7 FEET NORTH OF TRUNK HIGHWAY 21, 25.3 FEET EAST OF A FIELD ENTRANCE, 112.2 FEET WEST-SOUTHWEST OF A POWER POLE, 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: GAARD - RICE, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1113.695	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1113.784	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1113.672	.262		1022.895	.197	2011	GPS - RTRN	2024	RTRN2024
1113.705	.262		1022.915	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.777 12B = -90.791 09 = -90.712 03 = -90.541

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 42.39700	93 31 33.10624	397450.832	185455.754	.131	3	GPS - RTRN	2024	RTRN2024
44 25 42.39652	93 31 33.10727	397450.758	185455.706	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748521.033	849163.739	1503094.028	16140372.511	.131	3	GPS - RTRN	2024	RTRN2024
2748520.959	849163.689	1503093.952	16140372.462	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MEHL-DQ6402-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MEHL-DQ6402-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MEHL-DQ6402-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MNCORS LESU LESUEUR ARP

Mn/DOT Name: MNCORS LESU LESUEUR ARP
NGS Name: LESUEUR CORS ARP
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8980 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442628.14	935424.62	3	A

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2016	GOOD	Horz=YES Vert=YES	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SEE DESCRIPTION	MNDT

Description: (2016)

Stamping:

0.75 MILE SOUTH OF LE SUEUR, 1.75 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR, TO TRUNK HIGHWAY 112 MILEPOINT 3.35, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, AT THE MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE SHOP, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING. ANTENNA REFERENCE POINT (ARP) IS THE BOTTOM OF THE GPS ANTENNA.

Station Notes

HEIGHT MOD STATION (268.060)

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
879.545	.033	3				NON-RECIPROCAL VERTICAL ANGLE	2004	VTRIG1

MNCORS LESU LESUEUR ARP

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
879.460			787.042	.006	2011	HORIZONTAL ADJUSTMENT	2026	GPS3887
879.460			787.042	.006	2011	GPS - STATIC	2026	HVICT
879.460			787.115	.008	2011	HORIZONTAL ADJUSTMENT	2025	GPS3843
879.460			787.115	.008	2011	GPS - STATIC	2025	HMNARP9
879.460			787.115	.009	2011	HORIZONTAL ADJUSTMENT	2025	GPS3808
879.460			787.115	.008	2011	HORIZONTAL ADJUSTMENT	2025	GPS3800
879.460			787.115	.009	2011	GPS - STATIC	2025	H23BLUE2
879.460			787.115	.008	2011	HORIZONTAL ADJUSTMENT	2024	GPS3772
879.460			787.115	.008	2011	GPS - STATIC	2024	HMNARP5
879.460			787.115	.010	2011	HORIZONTAL ADJUSTMENT	2024	GPS3750
879.460			787.115	.010	2011	GPS - STATIC	2024	HMNARP3
879.460			787.115	.011	2011	HORIZONTAL ADJUSTMENT	2024	GPS3722
879.460			786.980	.009	2011	HORIZONTAL ADJUSTMENT	2024	GPS3723
879.457	.131		787.164	.066	1996	GPS - STATIC	2024	H23MART
879.460			786.980	.009	2011	GPS - STATIC	2024	H23MART
879.460			787.115	.009	2011	HORIZONTAL ADJUSTMENT	2024	GPS3718
879.519	.131		787.164	.066	1996	GPS - STATIC	2024	HWHIT2
879.460			787.115	.011	2011	GPS - STATIC	2024	HWHIT2
879.460			787.115	.009	2011	GPS - STATIC	2024	H23FARI1
879.473	.131		787.164	.066	1996	GPS - STATIC	2024	H23FARI1
			787.115	.010	2011	HORIZONTAL ADJUSTMENT	2024	GPS3701
879.473	.131		787.164	.066	1996	GPS - STATIC	2024	HELLE
879.460			787.115	.010	2011	GPS - STATIC	2024	HELLE
879.460			787.115	.016	2011	HORIZONTAL ADJUSTMENT	2023	GPS3585
879.470	.131		787.164	.066	1996	GPS - STATIC	2023	HNORWD
879.460			787.115	.016	2011	GPS - STATIC	2023	HNORWD
879.460			787.019	.009	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
879.404	.131		787.164	.066	1996	GPS - STATIC	2020	HTH13
879.460			787.019	.009	2011	GPS - STATIC	2020	HTH13
			787.019	.010	2011	HORIZONTAL ADJUSTMENT	2019	CORS-MYCS2
879.431			787.003	.013	2011	GPS - STATIC	2019	HBAGO
879.444	.131		787.164	.066	1996	GPS - STATIC	2019	HBAGO
879.460			787.019	.007	2011	GPS - STATIC	2018	HTH212
879.460			787.019	.007	2011	HORIZONTAL ADJUSTMENT	2018	GPS3374
879.437	.131		787.164	.066	1996	GPS - STATIC	2018	HABOY
879.460			787.000	.005	2011	HORIZONTAL ADJUSTMENT	2018	GPS3119
879.460			787.000	.014	2011	GPS - STATIC	2018	HABOY
879.414	.131		787.164	.066	1996	GPS - STATIC	2017	HMNCORS07
879.460			787.000	.005	2011	GPS - STATIC	2017	HMNPH
			787.003	.013	2011	HORIZONTAL ADJUSTMENT	2017	GPS3320
879.460			787.000	.014	2011	HORIZONTAL ADJUSTMENT	2017	GPS3226
879.460			787.000	.009	2011	HORIZONTAL ADJUSTMENT	2016	GPS3141
879.460			787.000	.012	2011	HORIZONTAL ADJUSTMENT	2016	GPS3139
879.460			787.000	.012	2011	GPS - STATIC	2016	HNORS
879.444	.131		787.164	.066	1996	GPS - STATIC	2016	HNORS
879.457	.131		787.164	.066	1996	GPS - STATIC	2016	HKLOS
879.460			787.000	.009	2011	GPS - STATIC	2016	HKLOS
			786.977	.002	2011	GPS - STATIC	2015	HMNCORS15
879.460			787.000	.009	2011	HORIZONTAL ADJUSTMENT	2015	GPS3054
879.460			787.000	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS3046
879.431	.131		787.164	.066	1996	GPS - STATIC	2014	HBUCK
879.460			786.960	.009	2011	GPS - STATIC	2014	HBUCK
879.447	.131		787.164	.066	1996	GPS - STATIC	2014	HFREB
879.460			787.000	.014	2011	HORIZONTAL ADJUSTMENT	2014	GPS3043
879.460			786.911	.008	2011	GPS - STATIC	2014	HFREB
879.460			787.000	.007	2011	HORIZONTAL ADJUSTMENT	2014	GPS3033
879.437	.131		787.164	.066	1996	GPS - STATIC	2014	HNEW14
879.460			786.983	.014	2011	GPS - STATIC	2014	HNEW14

		787.000	.032	2011	HORIZONTAL ADJUSTMENT	2014	GPS3030
879.395	.131	787.164	.066	1996	GPS - STATIC	2014	HMADE
879.460		786.931	.007	2011	GPS - STATIC	2014	HMADE
879.440		787.006	.032	2011	GPS - STATIC	2014	HMORG
879.460		787.000	.036	2011	HORIZONTAL ADJUSTMENT	2014	GPS3022
879.460		786.990	.036	2011	GPS - STATIC	2014	HHECT
879.460	.131	787.134	.066	1996	GPS - STATIC	2014	HHECT
879.460		787.000	.044	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
		787.164	.066	1996	GPS - STATIC	2014	HMNCORS06
879.460		787.000	.030	2011	HORIZONTAL ADJUSTMENT	2014	GPS3001
879.460		787.000	.032	2011	HORIZONTAL ADJUSTMENT	2014	GPS2997
879.395	.131	787.134	.066	1996	GPS - STATIC	2014	HBLOOM
879.460		787.006	.044	2011	GPS - STATIC	2014	HBLOOM
879.467	.131	787.134	.066	1996	GPS - STATIC	2014	HPRAG
879.460		786.960	.030	2011	GPS - STATIC	2014	HPRAG
879.460		787.000	.031	2011	HORIZONTAL ADJUSTMENT	2014	GPS2993
879.460		787.019	.032	2011	GPS - STATIC	2014	HGWYN
879.490	.131	787.197	.066	1996	GPS - STATIC	2014	HGWYN
879.460	.131	787.134	.066	1996	GPS - STATIC	2014	HWACO
879.460		786.944	.031	2011	GPS - STATIC	2014	HWACO
879.460		787.000	.027	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
879.460		787.036	.027	2011	GPS - STATIC	2013	HSUEUR
879.460	.131	787.249	.066	1996	GPS - STATIC	2013	HSUEUR
879.460		787.000	.049	2011	HORIZONTAL ADJUSTMENT	2013	GPS2966
879.460		787.000	.014	2011	HORIZONTAL ADJUSTMENT	2013	GPS2964
879.480	.131	787.249	.066	1996	GPS - STATIC	2013	HMKTO2
879.460		787.013	.049	2011	GPS - STATIC	2013	HMKTO2
879.460		787.019	.014	2011	GPS - STATIC	2013	HNMAN
879.460		787.000	.025	2011	HORIZONTAL ADJUSTMENT	2013	GPS2918
879.460		787.029	.015	2011	GPS - STATIC	2013	HSHAK3
879.493	.098	787.000	.049	2011	GPS - STATIC	2012	HMNCORS05
		787.000	.000	2011	HORIZONTAL ADJUSTMENT	2012	CORS-MYCS
		787.098	.033	2007	HORIZONTAL ADJUSTMENT	2011	GPS2829
		787.000	.000	2011	HORIZONTAL ADJUSTMENT	2011	CORS2979
		787.436	.066	2007	HORIZONTAL ADJUSTMENT	2011	GPS2760
879.723	.131	787.436	.066	2007	GPS - STATIC	2010	HCOLN
		787.029	.066	2007	HORIZONTAL ADJUSTMENT	2010	GPS2231-B
		787.033	.049	2007	HORIZONTAL ADJUSTMENT	2009	GPS2259-B
		787.029	.000	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
879.493	.098	787.265	.049	1996	HORIZONTAL ADJUSTMENT	2006	GPS2259
879.559	.098	787.134	.049	1996	GPS - STATIC	2006	HMNCORS02
879.526	.098	787.298	.049	1996	HORIZONTAL ADJUSTMENT	2006	GPS2243
879.493	.098	787.265	.049	1996	GPS - STATIC	2006	HJADA
		787.351	.066	1996	HORIZONTAL ADJUSTMENT	2006	GPS2233
879.559	.131	787.285	.066	1996	HORIZONTAL ADJUSTMENT	2006	GPS2231
879.460	.131	787.351	.066	1996	GPS - STATIC	2006	HBELL
879.559	.131	787.285	.066	1996	GPS - STATIC	2006	HMAR1
879.460	.098	787.029	.049	1996	GPS - STATIC	2005	GPS2036
879.493	.098	787.262	.049	1996	GPS - STATIC	2005	HMNCORS01
		787.029	.033	1996	HORIZONTAL ADJUSTMENT	2004	GPS1526-22
		787.029	.000	2007	HORIZONTAL ADJUSTMENT	2003	CORS2023

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.477 09 = -92.405 03 = -92.231

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13666	93 54 24.61949	297966.126	190797.409	.003		ADJUSTMENT	2026	GPS3887
44 26 28.13666	93 54 24.61949	297966.126	190797.409	.003	C	GPS - STATIC	2026	HVICT
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003		ADJUSTMENT	2025	GPS3843
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003	C	GPS - STATIC	2025	HMNARP9
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003		ADJUSTMENT	2025	GPS3808
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003		ADJUSTMENT	2025	GPS3800
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003	C	GPS - STATIC	2025	H23BLUE2
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003	C	GPS - STATIC	2024	H23BLUE1
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003		ADJUSTMENT	2024	GPS3772
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.003	C	GPS - STATIC	2024	HMNARP5
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007		ADJUSTMENT	2024	GPS3750
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007	C	GPS - STATIC	2024	HMNARP3
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007		ADJUSTMENT	2024	GPS3722
44 26 28.13668	93 54 24.61943	297966.130	190797.411	.007		ADJUSTMENT	2024	GPS3723
44 26 28.13668	93 54 24.61943	297966.130	190797.411	.007	C	GPS - STATIC	2024	H23MART
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007		ADJUSTMENT	2024	GPS3718
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007	C	GPS - STATIC	2024	HWHIT2
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007	C	GPS - STATIC	2024	H23FARI1
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007		ADJUSTMENT	2024	GPS3701
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007	C	GPS - STATIC	2024	HELLE
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007		ADJUSTMENT	2023	GPS3585
44 26 28.13633	93 54 24.61951	297966.124	190797.375	.007	C	GPS - STATIC	2023	HNORWD
44 26 28.13632	93 54 24.61953	297966.122	190797.374	.003		ADJUSTMENT	2020	GPS3368
44 26 28.13632	93 54 24.61953	297966.122	190797.374	.003	C	GPS - STATIC	2020	HTH13
44 26 28.13630	93 54 24.61954	297966.122	190797.372	.003		ADJUSTMENT	2019	CORS-MYCS2
44 26 28.13659	93 54 24.61951	297966.124	190797.402	.007	C	GPS - STATIC	2019	HBAGO
44 26 28.13632	93 54 24.61953	297966.122	190797.374	.003		ADJUSTMENT	2018	GPS3374
44 26 28.13632	93 54 24.61953	297966.122	190797.374	.003	C	GPS - STATIC	2018	HTH212
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003		ADJUSTMENT	2018	GPS3119
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007	C	GPS - STATIC	2018	HABOY
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003	C	GPS - STATIC	2017	HMNPH
44 26 28.13659	93 54 24.61951	297966.124	190797.402	.007		ADJUSTMENT	2017	GPS3320
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007		ADJUSTMENT	2017	GPS3226
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003		ADJUSTMENT	2016	GPS3141
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007		ADJUSTMENT	2016	GPS3139
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007	C	GPS - STATIC	2016	HNORS
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003	C	GPS - STATIC	2016	HKLOS
44 26 28.13642	93 54 24.61948	297966.126	190797.384	.003	A	GPS - STATIC	2015	HMNCORS15
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007		ADJUSTMENT	2015	GPS3054
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003		ADJUSTMENT	2014	GPS3046
44 26 28.13634	93 54 24.61975	297966.106	190797.377	.007	C	GPS - STATIC	2014	HBUCK
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.007		ADJUSTMENT	2014	GPS3043
44 26 28.13637	93 54 24.61979	297966.104	190797.380	.003	C	GPS - STATIC	2014	HFREB
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003		ADJUSTMENT	2014	GPS3033
44 26 28.13648	93 54 24.61965	297966.114	190797.391	.007	C	GPS - STATIC	2014	HNEW14
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.026		ADJUSTMENT	2014	GPS3030
44 26 28.13637	93 54 24.61962	297966.116	190797.380	.003	C	GPS - STATIC	2014	HMADE
44 26 28.13659	93 54 24.61963	297966.115	190797.402	.026	C	GPS - STATIC	2014	HMORG
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.033		ADJUSTMENT	2014	GPS3022
44 26 28.13648	93 54 24.61938	297966.133	190797.390	.033	C	GPS - STATIC	2014	HHECT
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.023		ADJUSTMENT	2014	GPS3006
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.016		ADJUSTMENT	2014	GPS3001
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.026		ADJUSTMENT	2014	GPS2997
44 26 28.13662	93 54 24.61959	297966.118	190797.405	.023	C	GPS - STATIC	2014	HBLOOM
44 26 28.13655	93 54 24.61931	297966.139	190797.398	.016	C	GPS - STATIC	2014	HPRAG
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.020		ADJUSTMENT	2014	GPS2993
44 26 28.13663	93 54 24.61934	297966.136	190797.405	.026	C	GPS - STATIC	2014	HGWYN
44 26 28.13666	93 54 24.61937	297966.134	190797.409	.020	C	GPS - STATIC	2014	HWACO

44 26 28.13659	93 54 24.61949	297966.126	190797.402	.016		ADJUSTMENT	2014	GPS2977
44 26 28.13627	93 54 24.61992	297966.094	190797.369	.016	C	GPS - STATIC	2013	HSUEUR
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.020		ADJUSTMENT	2013	GPS2966
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.010		ADJUSTMENT	2013	GPS2964
44 26 28.13697	93 54 24.61977	297966.106	190797.440	.020	C	GPS - STATIC	2013	HMKTO2
44 26 28.13661	93 54 24.61972	297966.109	190797.404	.010	C	GPS - STATIC	2013	HNMAN
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.013		ADJUSTMENT	2013	GPS2918
44 26 28.13695	93 54 24.61981	297966.103	190797.438	.007	C	GPS - STATIC	2013	HSHAK3
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.016	B	GPS - STATIC	2012	HMNCORS05
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003		ADJUSTMENT	2012	CORS-MYCS
44 26 28.13659	93 54 24.61949	297966.126	190797.402	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.003	A	ADJUSTMENT	2011	GPS2829
44 26 28.13676	93 54 24.62016	297966.077	190797.419	.033	C	ADJUSTMENT	2011	GPS2760
44 26 28.13676	93 54 24.62016	297966.077	190797.419	.033	C	GPS - STATIC	2010	HCOLN
44 26 28.13676	93 54 24.62016	297966.077	190797.419	.033	C	ADJUSTMENT	2010	GPS2231-B
44 26 28.13665	93 54 24.62033	297966.064	190797.408	.016	B	ADJUSTMENT	2009	GPS2259-B
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.000		ADJUSTMENT	2007	GPS2300
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.003	A	ADJUSTMENT	2003	CORS2023

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13618	93 54 24.61973	297966.108	190797.360	.066		NCAT	2026	HVICT
44 26 28.13585	93 54 24.61975	297966.106	190797.327	.066		NCAT	2025	H23BLUE2
44 26 28.13585	93 54 24.61975	297966.106	190797.327	.066		NCAT	2024	H23BLUE1
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2024	H23MART
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2024	HWHIT2
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2024	H23FARI1
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2024	HELLE
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2023	HNORWD
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2020	HTH13
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2019	HBAGO
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2018	HABOY
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2017	HMNCORS07
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2016	HKLOS
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2016	HNORS
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2014	HBUCK
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2014	HFREB
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2014	HNEW14
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2014	HMADE
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.033	C	GPS - STATIC	2014	HHECT
44 26 28.13635	93 54 24.61964	297966.114	190797.377	.033	C	GPS - STATIC	2014	HMNCORS06
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.033	C	GPS - STATIC	2014	HBLOOM
44 26 28.13695	93 54 24.61994	297966.093	190797.438	.033	C	GPS - STATIC	2014	HPRAG
44 26 28.13599	93 54 24.61918	297966.148	190797.341	.033	C	GPS - STATIC	2014	HGWYN
44 26 28.13695	93 54 24.61994	297966.093	190797.438	.033	C	GPS - STATIC	2014	HWACO
44 26 28.13695	93 54 24.61994	297966.093	190797.438	.033	C	GPS - STATIC	2013	HSUEUR
44 26 28.13595	93 54 24.61994	297966.092	190797.337	.033	C	GPS - STATIC	2013	HMKTO2
44 26 28.13595	93 54 24.61994	297966.092	190797.337	.016	B	ADJUSTMENT	2006	GPS2259
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.016	B	GPS - STATIC	2006	HMNCORS02
44 26 28.13633	93 54 24.61988	297966.097	190797.376	.016	B	ADJUSTMENT	2006	GPS2243
44 26 28.13595	93 54 24.61994	297966.092	190797.337	.016	B	GPS - STATIC	2006	HJADA
44 26 28.13633	93 54 24.61981	297966.102	190797.376	.033	C	ADJUSTMENT	2006	GPS2233
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.033	C	ADJUSTMENT	2006	GPS2231
44 26 28.13633	93 54 24.61981	297966.102	190797.376	.033	C	GPS - STATIC	2006	HBELL
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.033	C	GPS - STATIC	2006	HMAR1
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.016	B	GPS - STATIC	2005	GPS2036
44 26 28.13675	93 54 24.62011	297966.081	190797.418	.016	B	GPS - STATIC	2005	HMNCORS01
44 26 28.13675	93 54 24.62012	297966.080	190797.418	.003	A	ADJUSTMENT	2004	GPS1526-22

MNCORS LESU LESUEUR ARP

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.152	853450.057	1403658.006	16145873.455	.003		ADJUSTMENT	2026	GPS3887
2648997.152	853450.057	1403658.006	16145873.455	.003	C	GPS - STATIC	2026	HVICT
2648997.151	853450.023	1403658.004	16145873.421	.003		ADJUSTMENT	2025	GPS3843
2648997.151	853450.023	1403658.004	16145873.421	.003	C	GPS - STATIC	2025	HMNARP9
2648997.151	853450.023	1403658.004	16145873.421	.003		ADJUSTMENT	2025	GPS3808
2648997.151	853450.023	1403658.004	16145873.421	.003		ADJUSTMENT	2025	GPS3800
2648997.151	853450.023	1403658.004	16145873.421	.003	C	GPS - STATIC	2025	H23BLUE2
2648997.151	853450.023	1403658.004	16145873.421	.003	C	GPS - STATIC	2024	H23BLUE1
2648997.151	853450.023	1403658.004	16145873.421	.003		ADJUSTMENT	2024	GPS3772
2648997.151	853450.023	1403658.004	16145873.421	.003	C	GPS - STATIC	2024	HMNARP5
2648997.151	853450.023	1403658.004	16145873.421	.007		ADJUSTMENT	2024	GPS3750
2648997.151	853450.023	1403658.004	16145873.421	.007	C	GPS - STATIC	2024	HMNARP3
2648997.151	853450.023	1403658.004	16145873.421	.007		ADJUSTMENT	2024	GPS3722
2648997.157	853450.059	1403658.010	16145873.457	.007		ADJUSTMENT	2024	GPS3723
2648997.157	853450.059	1403658.010	16145873.457	.007	C	GPS - STATIC	2024	H23MART
2648997.151	853450.023	1403658.004	16145873.421	.007		ADJUSTMENT	2024	GPS3718
2648997.151	853450.023	1403658.004	16145873.421	.007	C	GPS - STATIC	2024	HWHIT2
2648997.151	853450.023	1403658.004	16145873.421	.007	C	GPS - STATIC	2024	H23FARI1
2648997.151	853450.023	1403658.004	16145873.421	.007		ADJUSTMENT	2024	GPS3701
2648997.151	853450.023	1403658.004	16145873.421	.007	C	GPS - STATIC	2024	HELLE
2648997.151	853450.023	1403658.004	16145873.421	.007		ADJUSTMENT	2023	GPS3585
2648997.151	853450.023	1403658.004	16145873.421	.007	C	GPS - STATIC	2023	HNORWD
2648997.150	853450.022	1403658.002	16145873.420	.003		ADJUSTMENT	2020	GPS3368
2648997.150	853450.022	1403658.002	16145873.420	.003	C	GPS - STATIC	2020	HTH13
2648997.149	853450.020	1403658.002	16145873.418	.003		ADJUSTMENT	2019	CORS-MYCS2
2648997.151	853450.050	1403658.004	16145873.447	.007	C	GPS - STATIC	2019	HBAGO
2648997.150	853450.022	1403658.002	16145873.420	.003		ADJUSTMENT	2018	GPS3374
2648997.150	853450.022	1403658.002	16145873.420	.003	C	GPS - STATIC	2018	HTH212
2648997.152	853450.050	1403658.006	16145873.447	.003		ADJUSTMENT	2018	GPS3119
2648997.152	853450.050	1403658.006	16145873.447	.007	C	GPS - STATIC	2018	HABOY
2648997.152	853450.050	1403658.006	16145873.447	.003	C	GPS - STATIC	2017	HMNPH
2648997.151	853450.050	1403658.004	16145873.447	.007		ADJUSTMENT	2017	GPS3320
2648997.152	853450.050	1403658.006	16145873.447	.007		ADJUSTMENT	2017	GPS3226
2648997.152	853450.050	1403658.006	16145873.447	.003		ADJUSTMENT	2016	GPS3141
2648997.152	853450.050	1403658.006	16145873.447	.007		ADJUSTMENT	2016	GPS3139
2648997.152	853450.050	1403658.006	16145873.447	.007	C	GPS - STATIC	2016	HNORS
2648997.152	853450.050	1403658.006	16145873.447	.003	C	GPS - STATIC	2016	HKLOS
2648997.153	853450.033	1403658.006	16145873.430	.003	A	GPS - STATIC	2015	HMNCORS15
2648997.152	853450.050	1403658.006	16145873.447	.007		ADJUSTMENT	2015	GPS3054
2648997.152	853450.050	1403658.006	16145873.447	.003		ADJUSTMENT	2014	GPS3046
2648997.134	853450.024	1403657.986	16145873.422	.007	C	GPS - STATIC	2014	HBUCK
2648997.152	853450.050	1403658.006	16145873.447	.007		ADJUSTMENT	2014	GPS3043
2648997.131	853450.027	1403657.984	16145873.425	.003	C	GPS - STATIC	2014	HFREB
2648997.152	853450.050	1403658.006	16145873.447	.003		ADJUSTMENT	2014	GPS3033
2648997.141	853450.039	1403657.994	16145873.436	.007	C	GPS - STATIC	2014	HNEW14
2648997.152	853450.050	1403658.006	16145873.447	.026		ADJUSTMENT	2014	GPS3030
2648997.143	853450.027	1403657.996	16145873.425	.003	C	GPS - STATIC	2014	HMADE
2648997.142	853450.050	1403657.995	16145873.447	.026	C	GPS - STATIC	2014	HMORG
2648997.152	853450.050	1403658.006	16145873.447	.033		ADJUSTMENT	2014	GPS3022
2648997.161	853450.039	1403658.014	16145873.436	.033	C	GPS - STATIC	2014	HHECT
2648997.152	853450.050	1403658.006	16145873.447	.023		ADJUSTMENT	2014	GPS3006
2648997.152	853450.050	1403658.006	16145873.447	.016		ADJUSTMENT	2014	GPS3001
2648997.152	853450.050	1403658.006	16145873.447	.026		ADJUSTMENT	2014	GPS2997
2648997.145	853450.053	1403657.998	16145873.450	.023	C	GPS - STATIC	2014	HBLOOM
2648997.166	853450.046	1403658.018	16145873.443	.016	C	GPS - STATIC	2014	HPRAG
2648997.152	853450.050	1403658.006	16145873.447	.020		ADJUSTMENT	2014	GPS2993
2648997.163	853450.054	1403658.016	16145873.451	.026	C	GPS - STATIC	2014	HGWYN

2648997.161	853450.057	1403658.014	16145873.454	.020	C	GPS - STATIC	2014	HWACO
2648997.152	853450.050	1403658.006	16145873.447	.016		ADJUSTMENT	2014	GPS2977
2648997.121	853450.017	1403657.974	16145873.415	.016	C	GPS - STATIC	2013	HSUEUR
2648997.152	853450.050	1403658.006	16145873.447	.020		ADJUSTMENT	2013	GPS2966
2648997.152	853450.050	1403658.006	16145873.447	.010		ADJUSTMENT	2013	GPS2964
2648997.132	853450.088	1403657.986	16145873.486	.020	C	GPS - STATIC	2013	HMKTO2
2648997.136	853450.052	1403657.989	16145873.450	.010	C	GPS - STATIC	2013	HNMAN
2648997.152	853450.050	1403658.006	16145873.447	.013		ADJUSTMENT	2013	GPS2918
2648997.129	853450.086	1403657.983	16145873.484	.007	C	GPS - STATIC	2013	HSHAK3
2648997.152	853450.050	1403658.006	16145873.447	.016	B	GPS - STATIC	2012	HMNCORS05
2648997.152	853450.050	1403658.006	16145873.447	.003		ADJUSTMENT	2012	CORS-MYCS
2648997.152	853450.050	1403658.006	16145873.447	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.108	853450.066	1403657.961	16145873.464	.003	A	ADJUSTMENT	2011	GPS2829
2648997.104	853450.067	1403657.957	16145873.465	.033	C	ADJUSTMENT	2011	GPS2760
2648997.104	853450.067	1403657.957	16145873.465	.033	C	GPS - STATIC	2010	HCOLN
2648997.104	853450.067	1403657.957	16145873.465	.033	C	ADJUSTMENT	2010	GPS2231-B
2648997.091	853450.056	1403657.945	16145873.454	.016	B	ADJUSTMENT	2009	GPS2259-B
2648997.108	853450.066	1403657.961	16145873.464	.000		ADJUSTMENT	2007	GPS2300
2648997.108	853450.066	1403657.961	16145873.464	.003	A	ADJUSTMENT	2003	CORS2023

MNCORS LESU LESUEUR ARP

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.135	853450.008	1403657.988	16145873.406	.066		NCAT	2026	HVICT
2648997.134	853449.975	1403657.986	16145873.373	.066		NCAT	2025	H23BLUE2
2648997.134	853449.975	1403657.986	16145873.373	.066		NCAT	2024	H23BLUE1
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2024	H23MART
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2024	HWHIT2
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2024	H23FARI1
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2024	HELLE
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2023	HNORWD
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2020	HTH13
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2019	HBAGO
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2018	HABOY
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2017	HMNCORS07
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2016	HKLOS
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2016	HNORS
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2014	HBUCK
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2014	HFREB
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2014	HNEW14
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2014	HMADE
2648997.108	853450.066	1403657.961	16145873.464	.033	C	GPS - STATIC	2014	HHECT
2648997.142	853450.025	1403657.995	16145873.423	.033	C	GPS - STATIC	2014	HMNCORS06
2648997.108	853450.066	1403657.961	16145873.464	.033	C	GPS - STATIC	2014	HBLOOM
2648997.120	853450.086	1403657.973	16145873.484	.033	C	GPS - STATIC	2014	HPRAG
2648997.175	853449.989	1403658.027	16145873.386	.033	C	GPS - STATIC	2014	HGWYN
2648997.120	853450.086	1403657.973	16145873.484	.033	C	GPS - STATIC	2014	HWACO
2648997.120	853450.086	1403657.973	16145873.484	.033	C	GPS - STATIC	2013	HSUEUR
2648997.120	853449.985	1403657.972	16145873.383	.033	C	GPS - STATIC	2013	HMKTO2
2648997.120	853449.985	1403657.972	16145873.383	.016	B	ADJUSTMENT	2006	GPS2259
2648997.108	853450.066	1403657.961	16145873.464	.016	B	GPS - STATIC	2006	HMNCORS02
2648997.124	853450.023	1403657.977	16145873.421	.016	B	ADJUSTMENT	2006	GPS2243
2648997.120	853449.985	1403657.972	16145873.383	.016	B	GPS - STATIC	2006	HJADA
2648997.129	853450.023	1403657.982	16145873.421	.033	C	ADJUSTMENT	2006	GPS2233
2648997.108	853450.066	1403657.961	16145873.464	.033	C	ADJUSTMENT	2006	GPS2231
2648997.129	853450.023	1403657.982	16145873.421	.033	C	GPS - STATIC	2006	HBELL
2648997.108	853450.066	1403657.961	16145873.464	.033	C	GPS - STATIC	2006	HMAR1
2648997.108	853450.066	1403657.961	16145873.464	.016	B	GPS - STATIC	2005	GPS2036
2648997.108	853450.066	1403657.961	16145873.464	.016	B	GPS - STATIC	2005	HMNCORS01
2648997.107	853450.066	1403657.960	16145873.464	.003	A	ADJUSTMENT	2004	GPS1526-22

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_ARP-DF8980-3N-15AUG2006.jpg	N	Aug 15, 2006
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_ARP-DF8980-2-11OCT2006.jpg		Oct 11, 2006
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_ARP-DF8980-1-15AUG2006.jpg		Aug 15, 2006

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MNCORS LESU LESUEUR L1PC1

Mn/DOT Name: MNCORS LESU LESUEUR L1PC1 **NGS Name:** LESUEUR CORS L1 PHASE CENTER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8981 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442628.14	935424.62		A

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2010	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SEE DESCRIPTION	MNDT

Description: (2012)

Stamping:

0.75 MILE SOUTH OF LE SUEUR, 1.75 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR, TO TRUNK HIGHWAY 112 MILEPOINT 3.35, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, AT THE MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE SHOP, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING. THE STATION IS IN A COMPACT L/1 L/2 W/GP ANTENNA SERIAL NUMBER 220081366.

Station Notes

THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNLS.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			787.220	.000	2011	HORIZONTAL ADJUSTMENT	2011	CORS2979
			787.246	.000	2007	HORIZONTAL ADJUSTMENT	2003	CORS2023

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.477 09 = -92.405 03 = -92.231

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13663	93 54 24.61950	297966.125	190797.406	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13679	93 54 24.62012	297966.080	190797.422	.003	A	ADJUSTMENT	2003	CORS2023

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.152	853450.054	1403658.005	16145873.451	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.107	853450.070	1403657.960	16145873.468	.003	A	ADJUSTMENT	2003	CORS2023

MNCORS LESU LESUEUR L1PC2

Mn/DOT Name: MNCORS LESU LESUEUR L1PC2 **NGS Name:** LESUEUR CORS L1 PHASE CENTER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DH5960 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442628.14	935424.62		A

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2004	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
SEE DESCRIPTIVE TEXT

Disk Type
SEE DESCRIPTION

Mon. Agency
MNDT

Description: (2012)

Stamping:

0.75 MILE SOUTH OF LE SUEUR, 1.75 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR, TO TRUNK HIGHWAY 112 MILEPOINT 3.35, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, AT THE MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE SHOP, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING. THE STATION IS IN THE ZEPHYR GEODETIC ANTENNA SERIAL NUMBER 12635780.

Station Notes
THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNLS.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			787.220	.000	2011	HORIZONTAL ADJUSTMENT	2011	CORS2979
			787.246	.000	2007	HORIZONTAL ADJUSTMENT	2003	CORS2023

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.477 09 = -92.405 03 = -92.231

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13663	93 54 24.61950	297966.125	190797.406	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13679	93 54 24.62012	297966.080	190797.422	.003	A	ADJUSTMENT	2003	CORS2023

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.152	853450.054	1403658.005	16145873.451	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.107	853450.070	1403657.960	16145873.468	.003	A	ADJUSTMENT	2003	CORS2023

MNCORS LESU LESUEUR L1PC3

Mn/DOT Name: MNCORS LESU LESUEUR L1PC3 **NGS Name:** LESUEUR CORS L1 PHASE CENTER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DI2139 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442628.14	935424.62		A

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2006	2010	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SEE DESCRIPTION	MNDT

Description: (2012) **Stamping:**

0.75 MILE SOUTH OF LE SUEUR, 1.75 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR, TO TRUNK HIGHWAY 112 MILEPOINT 3.35, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, AT THE MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE SHOP, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING. THE STATION IS IN THE ZEPHYR GEODETIC ANTENNA MODEL 2 SERIAL NUMBER 30255799.

Station Notes

THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNLS.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			787.220	.000	2011	HORIZONTAL ADJUSTMENT	2011	CORS2979
			787.246	.000	2007	HORIZONTAL ADJUSTMENT	2003	CORS2023

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.477 09 = -92.405 03 = -92.231

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13663	93 54 24.61950	297966.125	190797.406	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 28.13679	93 54 24.62012	297966.080	190797.422	.003	A	ADJUSTMENT	2003	CORS2023

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.152	853450.054	1403658.005	16145873.451	.003	A	ADJUSTMENT	2011	CORS2979

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648997.107	853450.070	1403657.960	16145873.468	.003	A	ADJUSTMENT	2003	CORS2023

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-DI2139-3W-15AUG2006.jpg	W	Aug 15, 2006
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-DI2139-2-15AUG2006.jpg		Aug 15, 2006
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-DI2139-1-05OCT2006.jpg		Oct 5, 2006

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MNCORS LESU LESUEUR L1PC4

Mn/DOT Name: MNCORS LESU LESUEUR L1PC4 **NGS Name:** LESUEUR CORS L1 PHASE CENTER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: !95616 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	12	111 N	26 W	442628.14	935424.62		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2007	2007	GOOD	Horz=YES Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SEE DESCRIPTION	MNDT

Description: (2012) **Stamping:**

0.75 MILE SOUTH OF LE SUEUR, 1.75 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93 IN LE SUEUR, TO TRUNK HIGHWAY 112 MILEPOINT 3.35, THEN 0.1 MILE EAST ON MINNESOTA AVENUE, AT MINNESOTA DEPARTMENT OF TRANSPORTATION MAINTENANCE SHOP, ATTACHED TO THE ROOF ON THE SOUTH SIDE OF THE BUILDING. STATION MNCORS LESU LESUEUR L1PC4 IS IN THE ZEPHYR GEODETIC ANTENNA MODEL 2 SERIAL NUMBER 30473584.

Station Notes

THE NATIONAL GEODETIC SURVEY (NGS) SITE ID IS MNLS.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.480 12B = -92.477 09 = -92.405 03 = -92.231

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-!95616-3N-15AUG2006.jpg	N	Aug 15, 2006
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-!95616-2-20OCT2007.jpg		Oct 20, 2007
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/LESUEUR_CORS_L1_PHASE_CENTER-!95616-1-20OCT2007.jpg		Oct 20, 2007

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Geodetic Data Sheet (Feet)
GSID Station # 105769

MONSON

04/28/2026
Sheet Help

Mn/DOT Name: MONSON
NGS Name: MONSON
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6396 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	111 N	24 W	442303.00	934210.52	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** MONSON 2016

1.3 MILES EAST OF LE CENTER, 1.2 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 27.75, 62.8 FEET SOUTH OF TRUNK HIGHWAY 99, 83.0 FEET WEST OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: SUNNO - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.333	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1066.353	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.350	.262		973.801	.197	2011	GPS - RTRN	2024	RTRN2024
1066.310	.262		973.761	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.549 12B = -92.549 09 = -92.457 03 = -92.264

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.00453	93 42 10.51503	351082.245	169586.151	.131	3	GPS - RTRN	2024	RTRN2024
44 23 03.00410	93 42 10.51435	351082.294	169586.107	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2702328.770	832805.454	1456718.937	16124584.580	.131	3	GPS - RTRN	2024	RTRN2024
2702328.819	832805.411	1456718.986	16124584.536	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONSON-DQ6396-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONSON-DQ6396-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONSON-DQ6396-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MONTGOMERY

Mn/DOT Name: MONTGOMERY
NGS Name: MONTGOMERY 1
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1750 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442616.00	933457.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	SURVEY DISK	NGS

Description: (2016) **Stamping:** MONTGOMERY NO. 1 1934

IN MONTGOMERY. AT THE JUNCTION OF ASH AVENUE SOUTHWEST AND 2ND STREET NORTHWEST, SET IN THE CONCRETE FLOOR INSIDE OF THE CITY HALL, JUST INSIDE OF THE DOOR OF THE FRONT (SOUTH) ENTRANCE.

Station Notes

NEW BUILDING IN 1970'S.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1064.801	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

Geoid Separations(ft): GEOID18 = -90.827 12B = -90.846 09 = -90.754 03 = -90.590

*** No Horizontal Positions in the Database ***

MONTGOMERY 2

Mn/DOT Name: MONTGOMERY 2 **NGS Name:** MONTGOMERY 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1751 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	111 N	23 W	442602.31	933434.77	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2024	GOOD	Horz=NO Vert=YES	YES		PROJECTS 4 IN.	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2016) **Stamping:** MONTGOMERY NO 2 1934

IN MONTGOMERY, 0.5 MILE EAST ALONG TRUNK HIGHWAY FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 13 IN MONTGOMERY TO TRUNK HIGHWAY 21 MILEPOINT 18.1, THEN 0.4 MILE NORTH ON COUNTY ROAD 3 (5TH STREET), THEN 0.05 MILE WEST ON PARK LANE, IN A CITY PARK, 65.0 FEET SOUTHEAST OF A FLAGPOLE, 10.0 FEET NORTH OF THE PIONEER MONUMENT, 11.2 FEET WEST OF A STAGE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.653	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1068.735	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1068.735	.016	2/0				VERTICAL ADJUSTMENT	1997	00000231
1068.587	.016	2				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.462	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
1068.462	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1068.462	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.617	.262		977.774	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -90.840 12B = -90.863 09 = -90.771 03 = -90.603

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 02.31180	93 34 34.76675	384278.771	187539.913	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735329.190	851107.919	1489930.876	16142477.184	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_2-PP1751-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_2-PP1751-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_2-PP1751-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MONTGOMERY CANNING COMPANY TK

Mn/DOT Name: MONTGOMERY CANNING COMPANY TK **NGS Name:** MONTGOMERY CANNING COMPANY TK

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	10	111 N	23 W	442554.51	933438.52		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SURVEY DISK	MNDT

Description: (2009)

Stamping:

IN THE SOUTHEAST PART OF MONTGOMERY, WEST OF THE JUNCTION OF 5TH STREET SOUTHEAST AND COUNTY ROAD 3, AT THE GREEN GIANT CANNING COMPANY.

Station Notes

GREEN GIANT IS NOW SENECA.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -90.876 12B = -90.899 09 = -90.804 03 = -90.636

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 54.51374	93 34 38.52385	384001.857	186751.670	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735060.681	850316.877	1489652.800	16141689.718	3.281		CLASSICAL SURVEY	1990	HMONT

MONTGOMERY CATH CH SPIRE

Mn/DOT Name: MONTGOMERY CATH CH SPIRE
NGS Name: MONTGOMERY CATH CH SPIRE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442619.06	933500.94		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	GOOD	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	CHURCH SPIRE	MNDT

Description: (1990)

Stamping:

IN MONTGOMERY, AT THE SOUTHEAST CORNER OF THE JUNCTION OF VINE AVENUE WEST AND THIRD STREET NORTHWEST IN MONTGOMERY.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -90.820 12B = -90.843 09 = -90.751 03 = -90.587

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 19.06081	93 35 00.94272	382388.720	189246.492	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733421.383	852794.164	1488044.386	16144186.119	3.281		CLASSICAL SURVEY	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_CATH_CH_SPIRE-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_CATH_CH_SPIRE-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTGOMERY_CATH_CH_SPIRE-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MONTGOMERY CITY WATER TANK

Mn/DOT Name: MONTGOMERY CITY WATER TANK
NGS Name: MONTGOMERY CITY WATER TANK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2874 Get Map
NGS Quad / Sta Num : 44093311/1002
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442625.48	933455.81		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	UNK

Description: (1927)
Stamping:

IN MONTGOMERY, AT THE JUNCTION OF 2ND STREET NORTHWEST AND FIR AVENUE NORTHWEST. THE POINT OBSERVED WAS THE FINIAL OF THE MOST WESTERLY OF TWO TANKS, APPROXIMATELY 120.0 FEET HIGH.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.791 12B = -90.810 09 = -90.718 03 = -90.558

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 25.48158	93 34 55.80946	382764.742	189894.686	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 25.47292	93 34 55.81276	382764.498	189893.810	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 25.60100	93 34 54.98700			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733790.468	853446.231	1488421.303	16144833.434	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733790.233	853445.352	1488421.058	16144832.559	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2109186.588	525369.770			.100	4	CLASSICAL SURVEY	1939	03760

MONTGOMERY COMMANDER MILL TK

Mn/DOT Name: MONTGOMERY COMMANDER MILL TK **NGS Name:** MONTGOMERY COMMANDER MILL TK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2876 Get Map
NGS Quad / Sta Num : 44093311/1003
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	3	111 N	23 W	442635.13	933450.53		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type
UNKNOWN

Disk Type
ELEVATED TANK

Mon. Agency
UNK

Description: (1927)

Stamping:

IN MONTGOMERY, AT THE JUNCTION OF 1ST STREET NORTHEAST AND MILL AVENUE NORTHEAST IN MONTGOMERY.

Station Notes
NO ELEVATED TANK.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.748 12B = -90.768 09 = -90.676 03 = -90.515

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 35.12648	93 34 50.53092	383153.067	190869.344	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 35.11796	93 34 50.53418	383152.826	190868.483	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 35.24800	93 34 49.69600			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2734168.395	854424.834	1488811.050	16145807.055	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2734168.163	854423.970	1488810.808	16145806.195	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2109565.426	526348.583			.100	4	CLASSICAL SURVEY	1939	03760

MONTGOMERY TALLEST BRICK STACK

Mn/DOT Name: MONTGOMERY TALLEST BRICK STACK **NGS Name:** MONTGOMERY TALLEST BRICK STACK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2875 Get Map
NGS Quad / Sta Num : 44093311/1004
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	3	111 N	23 W	442635.63	933452.77		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1935	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	UNK

Description: (2009)

Stamping:

IN MONTGOMERY, AT THE JUNCTION OF 1ST STREET NORTHEAST AND MILL AVENUE NORTHEAST IN MONTGOMERY.
THE POINT OBSERVED WAS THE CENTER OF THE TALLEST BRICK STACK IN THE CENTER OF TOWN.

Station Notes

SEVERAL LARGE TANKS, NO STACK.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.748 12B = -90.768 09 = -90.679 03 = -90.518

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position Latitude	Geodetic Position Longitude	Le Sueur County X	Le Sueur County Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 26 35.63410	93 34 52.77416	382990.599	190921.643	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position Latitude	Geodetic Position Longitude	Le Sueur County X	Le Sueur County Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 26 35.62580	93 34 52.77752	382990.351	190920.804	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position Latitude	Geodetic Position Longitude	X	Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 26 35.76000	93 34 51.94500			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone X	MN State Plane - South Zone Y	UTM - Zone 15 X	UTM - Zone 15 Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2734005.401	854475.402	1488648.735	16145859.596	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone X	MN State Plane - South Zone Y	UTM - Zone 15 X	UTM - Zone 15 Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2734005.162	854474.560	1488648.486	16145858.758	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone X	MN State Plane - South Zone Y	X	Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2109402.008	526399.591			.100	4	CLASSICAL SURVEY	1939	03760

MONTGOMERY WATER TANK

Mn/DOT Name: MONTGOMERY WATER TANK
NGS Name: MONTGOMERY WATER TANK
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442626.40	933455.71		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	TANK	MNDT

Description: (1990)

Stamping:

IN THE NORTH PART OF MONTGOMERY, AT THE SOUTHEAST CORNER OF FIR AVENUE NORTHWEST AND 2ND STREET NORTHWEST.

Station Notes

THE WATER TANK WAS REMOVED. SAME AS THE MONTGOMERY CITY WATER TANK.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -90.787 12B = -90.807 09 = -90.715 03 = -90.554

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 26.39728	93 34 55.71034	382772.443	189987.382	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733797.185	853538.991	1488429.151	16144926.078	3.281		CLASSICAL SURVEY	1990	HMONT

MONTY MNDT

Mn/DOT Name: MONTY MNDT **NGS Name:** MONTY

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9308 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	9	111 N	23 W	442541.98	933532.29	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** MONTY 1989

1.0 MILE SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG COUNTY ROAD 161 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND COUNTY ROAD 161 IN MONTGOMERY, ON THE TOP OF A HILL, 45.3 FEET EAST OF A POWER POLE, 45.3 FEET NORTH OF MONTY MNDT RM 1, 41.8 FEET EAST OF MONTY MNDT RM 2, 23.2 FEET NORTH OF COUNTY ROAD 161, 14.5 FEET EAST OF AN ENTRANCE, 0.8 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.355	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1095.437	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1095.437	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.168	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.418	.262		1004.398	.197	2011	GPS - RTRN	2024	RTRN2024
1095.329	.262		1004.309	.197	2011	GPS - OPUS	2021	GPSBM
1095.434	.262		1004.394	.197	2011	GPS - RTRN	2020	RTRN2020
1095.382	.262		1004.342	.197	2011	GPS - RTRN	2016	RTRN2016
			1004.352	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1004.440	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1095.437	.131		1004.683	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1095.437	.131		1004.683	.066	1996	GPS - STATIC	2005	H40BJ
1095.437	.131		1004.683	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1095.437	.131		1004.683	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -91.017 12B = -91.040 09 = -90.948 03 = -90.781

MONTY MNDT

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.97745	93 35 32.28760	380093.363	185503.641	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.97760	93 35 32.28788	380093.343	185503.656	.131	3	GPS - OPUS	2021	GPSBM
44 25 41.97691	93 35 32.28823	380093.318	185503.586	.131	3	GPS - RTRN	2020	RTRN2020
44 25 41.97675	93 35 32.28707	380093.402	185503.570	.131	3	GPS - RTRN	2016	RTRN2016
44 25 41.97727	93 35 32.28768	380093.358	185503.622	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.97740	93 35 32.28842	380093.304	185503.636	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.97680	93 35 32.28817	380093.322	185503.575	.033	C	ADJUSTMENT	2005	GPS2080
44 25 41.97680	93 35 32.28817	380093.322	185503.575	.033	C	GPS - STATIC	2005	H40BJ
44 25 41.97680	93 35 32.28817	380093.322	185503.575	.033	C	ADJUSTMENT	2004	GPS1939
44 25 41.97680	93 35 32.28817	380093.322	185503.575	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.96818	93 35 32.28430	380093.597	185502.700	.033	C	GPS - STATIC	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731166.099	849027.641	1485743.907	16140448.555	.131	3	GPS - RTRN	2024	RTRN2024
2731166.079	849027.656	1485743.887	16140448.570	.131	3	GPS - OPUS	2021	GPSBM
2731166.054	849027.586	1485743.861	16140448.500	.131	3	GPS - RTRN	2020	RTRN2020
2731166.138	849027.570	1485743.945	16140448.483	.131	3	GPS - RTRN	2016	RTRN2016
2731166.093	849027.623	1485743.901	16140448.536	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731166.040	849027.636	1485743.847	16140448.550	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731166.058	849027.575	1485743.865	16140448.489	.033	C	ADJUSTMENT	2005	GPS2080
2731166.058	849027.575	1485743.865	16140448.489	.033	C	GPS - STATIC	2005	H40BJ
2731166.058	849027.575	1485743.865	16140448.489	.033	C	ADJUSTMENT	2004	GPS1939
2731166.058	849027.575	1485743.865	16140448.489	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731166.343	849026.704	1485744.140	16140447.614	.033	C	GPS - STATIC	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY-AC9308-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY-AC9308-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY-AC9308-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MONTY MNDT RM 1

Mn/DOT Name: MONTY MNDT RM 1 **NGS Name:** MONTY RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9309 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	16	111 N	23 W	442541.53	933532.26	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 10 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** MONTY NO 1 1989

1.0 MILE SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG COUNTY ROAD 161 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND COUNTY ROAD 161 IN MONTGOMERY, ON THE TOP OF A HILL, 22.0 FEET SOUTH OF COUNTY ROAD 161, 55.5 FEET EAST OF A FIELD ENTRANCE, 67.3 FEET SOUTHEAST OF A POWER POLE, 45.3 FEET SOUTH OF STATION MONTY MNDT, 64.4 FEET SOUTHEAST OF MONTY MNDT RM 2, 1.0 FOOT NORTH OF A WITNESS POST.

Station Pair: AMBLE - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1096.038	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1096.120	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1096.126	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.857	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.936	.262		1004.913	.197	2011	GPS - RTRN	2024	RTRN2024
1096.153	.262		1005.110	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.020 12B = -91.040 09 = -90.948 03 = -90.784

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.53035	93 35 32.26464	380094.776	185458.353	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.53053	93 35 32.26458	380094.780	185458.371	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731167.991	848982.376	1485745.245	16140403.283	.131	3	GPS - RTRN	2024	RTRN2024
2731167.995	848982.395	1485745.249	16140403.301	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_1-AC9309-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_1-AC9309-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_1-AC9309-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MONTY MNDT RM 2

Mn/DOT Name: MONTY MNDT RM 2 **NGS Name:** MONTY RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9310 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	9	111 N	23 W	442542.00	933532.86	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** MONTY NO 2 1989

1.0 MILE SOUTHWEST OF MONTGOMERY, 0.35 MILE WEST ALONG COUNTY ROAD 161 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND COUNTY ROAD 161 IN MONTGOMERY, ON THE TOP OF A HILL, 64.4 FEET NORTHWEST OF MONTY MNDT RM 1, 41.8 FEET WEST OF STATION MONTY MNDT, 28.0 FEET WEST OF A FIELD ENTRANCE, 26.5 FEET NORTH OF COUNTY ROAD 161, 3.5 FEET EAST OF A POWER POLE, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.938	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1094.023	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1094.023	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1093.754	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1094.017	.262		1002.997	.197	2011	GPS - RTRN	2024	RTRN2024
1094.037	.262		1002.997	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.020 12B = -91.040 09 = -90.948 03 = -90.784

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.99938	93 35 32.86262	380051.647	185506.096	.131	3	GPS - RTRN	2024	RTRN2024
44 25 42.00020	93 35 32.86281	380051.634	185506.179	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731124.364	849029.654	1485702.212	16140451.076	.131	3	GPS - RTRN	2024	RTRN2024
2731124.350	849029.737	1485702.199	16140451.159	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_2-AC9310-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_2-AC9310-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MONTY_RM_2-AC9310-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MURKER

Mn/DOT Name: MURKER **NGS Name:** MURKER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6321 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	31	109 N	24 W	441221.86	934603.86	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2022	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** MURKER 2016

2.5 MILES EAST OF MADISON LAKE, 2.05 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 26 IN MADISON LAKE, AT TRUNK HIGHWAY 60 MILEPOINT 121.65, 68.3 FEET NORTH OF TRUNK HIGHWAY 60, 177.0 FEET EAST OF COUNTY ROAD 129 (251ST AVENUE), 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: BARR - BLUE EARTH, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1027.970	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1027.964	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1027.977	.262		933.804	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.176 12B = -94.173 09 = -94.088 03 = -93.911

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 21.85908	93 46 03.85906	333632.307	104783.198	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685568.695	767828.867	1439172.411	16059835.865	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER-DQ6321-3N-27JUN2016.jpg	N	Jun 27, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER-DQ6321-2-27JUN2016.jpg		Jun 27, 2016
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER-DQ6321-1-27JUN2016.jpg		Jun 27, 2016

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MURKER RESET

Mn/DOT Name: MURKER RESET
NGS Name: MURKER RESET
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	31	109 N	24 W	441221.86	934603.86		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2022	2024	GOOD	Horz=YES Vert=YES	NO		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2022) **Stamping:** MURKER 2016 2022

2.5 MILES EAST OF MADISON LAKE, 2.05 MILES EAST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 26 IN MADISON LAKE, AT TRUNK HIGHWAY 60 MILEPOINT 121.65, 68.3 FEET NORTH OF TRUNK HIGHWAY 60, 177.0 FEET EAST OF COUNTY ROAD 129 (251ST AVENUE), 1.0 FOOT SOUTH OF A WITNESS POST.

Station Pair: BARR - BLUE EARTH, MN

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1027.875	.262		933.699	.197	2011	GPS - RTRN	2024	RTRN2024
1027.865	.262		933.692	.197	2011	GPS - RTRN	2022	RTRN2022

No Geoid Separations Available

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 21.85914	93 46 03.85846	333632.351	104783.203	.131	3	GPS - RTRN	2024	RTRN2024
44 12 21.85877	93 46 03.85888	333632.320	104783.166	.131	3	GPS - RTRN	2022	RTRN2022

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2685568.739	767828.873	1439172.455	16059835.871	.131	3	GPS - RTRN	2024	RTRN2024
2685568.708	767828.836	1439172.424	16059835.834	.131	3	GPS - RTRN	2022	RTRN2022

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER_RESET-3NE-15APR2024.jpg	NE	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER_RESET-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MURKER_RESET-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

MVEC MNDT

Mn/DOT Name: MVEC MNDT
NGS Name: MVEC
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC4903 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	9	112 N	23 W	443144.65	933508.64	2	B

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1994	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 7 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
STEEL ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD	MNDT

Description: (2016) **Stamping:** MVEC 1994

1.0 MILE SOUTH OF NEW PRAGUE, 1.0 MILE SOUTH ALONG TRUNK HIGHWAY 13/ TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 65.7, 64.0 FEET WEST OF TRUNK HIGHWAY 13, 109.0 FEET SOUTH OF A DRIVEWAY TO A TRANSFORMER STATION, 63.8 FEET SOUTH-SOUTHEAST OF THE SOUTHEAST CORNER OF A CHAIN LINK FENCE, 61.0 FEET EAST-SOUTHEAST OF A POWER POLE, 30.4 FEET SOUTH-SOUTHEAST OF A POWER POLE, 2.7 FEET EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.270	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1039.319	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1039.319	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
1039.319	.016	2/1				VERTICAL CONTROL SURVEY	2015	VJORD
1039.319	.016	2/1				VERTICAL ADJUSTMENT	2008	00000425-24
1039.322	.016	2/1				VERTICAL CONTROL SURVEY	2006	VMVEC

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.325	.262		949.486	.197	2011	GPS - RTRN	2024	RTRN2024
1039.270	.131		949.677	.066	1996	GPS - STATIC	2023	HGLRD
1039.270			949.460	.009	2011	GPS - STATIC	2023	HGLRD
1039.270			949.460	.009	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
1039.319			949.460	.009	2011	HORIZONTAL ADJUSTMENT	2018	GPS3119
1039.319	.131		949.677	.066	1996	GPS - STATIC	2017	HMNCORS07
1039.319			949.460	.009	2011	GPS - STATIC	2017	HMNPH
1039.256	.262		949.414	.197	2011	GPS - RTRN	2016	RTRN2016
1039.083	.262		949.244	.197	2011	GPS - RTRN	2016	RTRN2016
1039.319			949.460	.008	2011	HORIZONTAL ADJUSTMENT	2015	GPS3107
1039.319	.131		949.677	.066	1996	GPS - STATIC	2015	HJORD
1039.319			949.460	.008	2011	GPS - STATIC	2015	HJORD
1039.338	.262		949.496	.197	2011	GPS - RTRN	2015	RTRN2015
1039.194	.262		949.352	.197	2011	GPS - RTRN	2014	RTRN2014
1039.319			949.460	.008	2011	HORIZONTAL ADJUSTMENT	2014	GPS3001
1039.319	.131		949.677	.066	1996	GPS - STATIC	2014	HPRAG
1039.319			949.460	.008	2011	GPS - STATIC	2014	HPRAG
1039.211	.262		949.368	.197	2011	GPS - RTRN	2013	RTRN2013
			949.460	.006	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
1039.335	.098		949.549	.049	2007	HORIZONTAL ADJUSTMENT	2010	GPS2697
1039.302	.098		949.549	.049	2007	GPS - STATIC	2010	HBMN2
			949.549	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1039.335	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1039.335	.131		949.677	.066	1996	GPS - STATIC	2008	HRYCE
			949.549	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1039.401	.098		949.677	.049	1996	GPS - STATIC	2005	GPS2036
1039.335	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1039.335	.131		949.677	.066	1996	GPS - STATIC	2005	H40BJ
1039.368	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1039.302	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1895
1039.368	.131		949.677	.066	1996	GPS - STATIC	2003	HSUEU
1039.434	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1832
1039.302	.131		949.677	.066	1996	GPS - STATIC	2003	HSCOT
1039.434	.131		949.677	.066	1996	GPS - STATIC	2002	HLESR
1039.368	.131		949.677	.066	1996	HORIZONTAL ADJUSTMENT	2002	GPS1728
1039.368	.131		949.677	.066	1996	GPS - STATIC	2002	HD7BR
1039.345	.098		949.677	.049	1996	GPS - STATIC	1997	GPS805-B
1039.345	.131		949.677	.066	1996	GPS - STATIC	1997	GPS805-C

Geoid Separations(ft): GEOID18 = -89.839 12B = -89.842 09 = -89.770 03 = -89.629

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.65130	93 35 08.63815	382012.799	222222.965	.131	3	GPS - RTRN	2024	RTRN2024
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007		ADJUSTMENT	2023	GPS3572
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007	C	GPS - STATIC	2023	HGLRD
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007		ADJUSTMENT	2018	GPS3119
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007	C	GPS - STATIC	2017	HMNPH
44 31 44.65098	93 35 08.63717	382012.870	222222.933	.131	3	GPS - RTRN	2016	RTRN2016
44 31 44.65071	93 35 08.63837	382012.783	222222.906	.131	3	GPS - RTRN	2016	RTRN2016
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007		ADJUSTMENT	2015	GPS3107
44 31 44.65089	93 35 08.63859	382012.766	222222.924	.007	C	GPS - STATIC	2015	HJORD
44 31 44.65113	93 35 08.63830	382012.788	222222.948	.131	3	GPS - RTRN	2015	RTRN2015
44 31 44.64986	93 35 08.63918	382012.723	222222.820	.131	3	GPS - RTRN	2014	RTRN2014
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.007		ADJUSTMENT	2014	GPS3001
44 31 44.65089	93 35 08.63858	382012.767	222222.924	.007	C	GPS - STATIC	2014	HPRAG
44 31 44.65023	93 35 08.63822	382012.793	222222.857	.131	3	GPS - RTRN	2013	RTRN2013
44 31 44.65088	93 35 08.63859	382012.766	222222.923	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.65098	93 35 08.63941	382012.707	222222.934	.016	B	ADJUSTMENT	2010	GPS2697
44 31 44.65098	93 35 08.63941	382012.707	222222.934	.016	B	GPS - STATIC	2010	HBMN2
44 31 44.65097	93 35 08.63939	382012.709	222222.933	.033	C	ADJUSTMENT	2009	GPS2437-B
44 31 44.65098	93 35 08.63941	382012.707	222222.934	.007		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2023	HGLRD
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2017	HMNCORS07
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2015	HJORD
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2014	HPRAG
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	ADJUSTMENT	2008	GPS2437
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2008	HRYCE
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.016	B	GPS - STATIC	2005	GPS2036
44 31 44.65036	93 35 08.63876	382012.754	222222.871	.033	C	ADJUSTMENT	2005	GPS2080
44 31 44.65036	93 35 08.63875	382012.755	222222.870	.033	C	GPS - STATIC	2005	H40BJ
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	ADJUSTMENT	2003	GPS1911
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	ADJUSTMENT	2003	GPS1895
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2003	HSUEU
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	ADJUSTMENT	2003	GPS1832
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2003	HSCOT
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2002	HLESR
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	ADJUSTMENT	2002	GPS1728
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	2002	HD7BR
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.016	B	GPS - STATIC	1997	GPS805-B
44 31 44.65036	93 35 08.63875	382012.755	222222.871	.033	C	GPS - STATIC	1997	GPS805-C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732696.005	885760.864	1487722.376	16177149.478	.131	3	GPS - RTRN	2024	RTRN2024
2732695.974	885760.821	1487722.343	16177149.436	.007		ADJUSTMENT	2023	GPS3572
2732695.974	885760.821	1487722.343	16177149.436	.007	C	GPS - STATIC	2023	HGLRD
2732695.974	885760.821	1487722.343	16177149.436	.007		ADJUSTMENT	2018	GPS3119
2732695.974	885760.821	1487722.343	16177149.436	.007	C	GPS - STATIC	2017	HMNPH
2732696.076	885760.832	1487722.446	16177149.445	.131	3	GPS - RTRN	2016	RTRN2016
2732695.989	885760.804	1487722.360	16177149.419	.131	3	GPS - RTRN	2016	RTRN2016
2732695.974	885760.821	1487722.343	16177149.436	.007		ADJUSTMENT	2015	GPS3107
2732695.974	885760.822	1487722.343	16177149.437	.007	C	GPS - STATIC	2015	HJORD
2732695.994	885760.847	1487722.365	16177149.461	.131	3	GPS - RTRN	2015	RTRN2015
2732695.931	885760.718	1487722.300	16177149.333	.131	3	GPS - RTRN	2014	RTRN2014
2732695.974	885760.821	1487722.343	16177149.436	.007		ADJUSTMENT	2014	GPS3001
2732695.974	885760.822	1487722.344	16177149.437	.007	C	GPS - STATIC	2014	HPRAG
2732696.000	885760.756	1487722.370	16177149.370	.131	3	GPS - RTRN	2013	RTRN2013
2732695.974	885760.821	1487722.343	16177149.436	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732695.914	885760.831	1487722.284	16177149.446	.016	B	ADJUSTMENT	2010	GPS2697
2732695.914	885760.831	1487722.284	16177149.446	.016	B	GPS - STATIC	2010	HBMN2
2732695.916	885760.830	1487722.286	16177149.446	.033	C	ADJUSTMENT	2009	GPS2437-B
2732695.914	885760.831	1487722.284	16177149.446	.007		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2023	HGLRD
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2017	HMNCORS07
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2015	HJORD
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2014	HPRAG
2732695.962	885760.769	1487722.332	16177149.383	.033	C	ADJUSTMENT	2008	GPS2437
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2008	HRYCE
2732695.962	885760.769	1487722.332	16177149.383	.016	B	GPS - STATIC	2005	GPS2036
2732695.961	885760.769	1487722.331	16177149.383	.033	C	ADJUSTMENT	2005	GPS2080
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2005	H40BJ
2732695.962	885760.769	1487722.332	16177149.383	.033	C	ADJUSTMENT	2003	GPS1911
2732695.962	885760.769	1487722.332	16177149.383	.033	C	ADJUSTMENT	2003	GPS1895
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2003	HSUEU
2732695.962	885760.769	1487722.332	16177149.383	.033	C	ADJUSTMENT	2003	GPS1832
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2003	HSCOT
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2002	HLESR
2732695.962	885760.769	1487722.332	16177149.383	.033	C	ADJUSTMENT	2002	GPS1728
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	2002	HD7BR
2732695.962	885760.769	1487722.332	16177149.383	.016	B	GPS - STATIC	1997	GPS805-B
2732695.962	885760.769	1487722.332	16177149.383	.033	C	GPS - STATIC	1997	GPS805-C

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MVEC-AC4903-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MVEC-AC4903-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MVEC-AC4903-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: MYERS **NGS Name:** MYERS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6416 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	21	112 N	23 W	442944.61	933508.36	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** MYERS 2016

3.4 MILES SOUTH OF NEW PRAGUE, 3.3 MILES SOUTH ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 63.4, 61.1 FEET WEST OF TRUNK HIGHWAY 13, 34.0 FEET NORTH OF A FIELD ENTRANCE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: URNESS - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.082	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1038.148	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1038.056	.262		947.889	.197	2011	GPS - RTRN	2024	RTRN2024
1038.039	.262		947.866	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.167 12B = -90.174 09 = -90.098 03 = -89.954

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 44.61450	93 35 08.35553	381966.026	210066.353	.131	3	GPS - RTRN	2024	RTRN2024
44 29 44.61471	93 35 08.35678	381965.936	210066.374	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732778.090	873605.892	1487655.762	16164998.003	.131	3	GPS - RTRN	2024	RTRN2024
2732778.000	873605.913	1487655.672	16164998.025	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MYERS-DQ6416-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MYERS-DQ6416-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/MYERS-DQ6416-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: N 116 **NGS Name:** N 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1747 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	17	111 N	23 W	442522.00	933642.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	GOOD	Horz=NO Vert=NO	YES		PROJECTS 14 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (1934) **Stamping:** N 116 1934

1.5 MILES SOUTHWEST OF MONTGOMERY, 2.0 MILES SOUTHWEST OF THE MONTGOMERY CITY HALL ALONG A RAILROAD, 568.0 FEET SOUTH OF THE CENTERLINE OF COUNTY ROAD 163 IN A FIELD, 264.0 FEET SOUTHWEST OF RAILROAD MILEPOST 29, 1.0 FOOT NORTH OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1073.416	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1073.285	.016	2/0				UNKNOWN/APPROXIMATE	1992	UNCHECKD
1073.285	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -91.253 12B = -91.270 09 = -91.181 03 = -91.017

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/N_116-PP1747-3S-02JUN2010.jpg	S	Jun 2, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/N_116-PP1747-2-02JUN2010.jpg		Jun 2, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/N_116-PP1747-1-02JUN2010.jpg		Jun 2, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

NEW PRAGUE INTL MILLING CO MST

Mn/DOT Name: NEW PRAGUE INTL MILLING CO MST
NGS Name: NEW PRAGUE INTL MILLING CO MST
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3020 Get Map
NGS Quad / Sta Num : 44093422/1032
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443234.07	933456.31		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1927	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BLANK	RADIO/TV MAST	UNK

Description: (1927)

Stamping:

IN NEW PRAGUE, AT THE JUNCTION OF 2ND AVENUE NORTHWEST AND MAIN STREET WEST IN NEW PRAGUE. THE POINT OBSERVED WAS THE TIP OF THE WIRELESS MAST ATOP INTERNATIONAL MILLING COMPANY ELEVATOR IN THE CENTER OF TOWN.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -89.701 12B = -89.698 09 = -89.632 03 = -89.491

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.06611	93 34 56.30762	382933.557	227222.456	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.05892	93 34 56.30621	382933.655	227221.728	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.19000	93 34 55.46600			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733563.611	890769.235	1488650.933	16182145.379	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733563.717	890768.508	1488651.030	16182144.650	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2108961.013	562692.898			.100	4	CLASSICAL SURVEY	1939	03760

NEW PRAGUE INTL MILLING CO STK

Mn/DOT Name: NEW PRAGUE INTL MILLING CO STK **NGS Name:** NEW PRAGUE INTL MILLING CO STK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3017 Get Map
NGS Quad / Sta Num : 44093422/1033
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443234.81	933453.21		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1935	2024	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	STACK	NGS

Description: (1935) **Stamping:**

IN NEW PRAGUE, 0.15 MILE EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, 215 FEET SOUTH OF TRUNK HIGHWAY 19. THE POINT OBSERVED WAS THE CENTER OF THE STACK.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -89.695 12B = -89.691 09 = -89.626 03 = -89.485

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 32 34.80665	93 34 53.21074	383158.268	227296.223	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position Latitude	Longitude	Le Sueur County X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 32 34.79911	93 34 53.20710	383158.527	227295.458	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position Latitude	Longitude	X	Y	Acc	Order	Determination Method	Project Info Year	Reference
44 32 34.93100	93 34 52.37100			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2733787.501	890845.371	1488875.671	16182218.747	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone X	Y	UTM - Zone 15 X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2733787.768	890844.608	1488875.929	16182217.982	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone X	Y	X	Y	Acc	Order	Determination Method	Project Info Year	Reference
2109184.772	562769.079			.100	4	CLASSICAL SURVEY	1939	03760

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NEW_PRAGUE_INTL_MILLING_CO_STK-PP3017-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

NEW PRAGUE INTL MILLING CO TK

Mn/DOT Name: NEW PRAGUE INTL MILLING CO TK **NGS Name:** NEW PRAGUE INTL MILLING CO TK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3018 Get Map
NGS Quad / Sta Num : 44093422/1034
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	112 N	23 W	443235.07	933452.70		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1935	2010	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	UNK

Description: (1935)

Stamping:

IN NEW PRAGUE, AT THE JUNCTION OF 2ND AVENUE NORTHWEST AND MAIN STREET WEST IN NEW PRAGUE. THE POINT OBSERVED WAS THE FINIAL OF THE BLACK WATER TANK APPROXIMATELY 120.0 FEET HIGH.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -89.691 12B = -89.691 09 = -89.626 03 = -89.485

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.07430	93 34 52.70116	383195.324	227323.127	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.06692	93 34 52.69975	383195.422	227322.379	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.19800	93 34 51.85700			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733824.265	890872.662	1488912.755	16182245.578	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733824.371	890871.915	1488912.852	16182244.831	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2109221.858	562796.306			.100	4	CLASSICAL SURVEY	1939	03760

NEW PRAGUE MNDT

Mn/DOT Name: NEW PRAGUE MNDT
NGS Name: NEW PRAGUE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3030 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	2	112 N	23 W	443236.40	933317.41	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2002) **Stamping:** NEW PRAGUE 1980

1.45 MILES EAST ON TRUNK HIGHWAY 19 FROM THE WEST JUNCTION OF TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 AT THE WEST EDGE OF NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 152.27, 121.0 FEET SOUTH-SOUTHWEST OF A POWER POLE, 49.0 FEET SOUTH OF TRUNK HIGHWAY 19, 44.27 FEET NORTHWEST OF NEW PRAGUE MNDT RM 1, 38.0 FEET NORTHEAST OF A WITNESS POST, 36.24 FEET NORTHEAST OF NEW PRAGUE MNDT RM 2, 30.6 FEET NORTH-NORTHWEST OF A TELEPHONE CABLE MARKER, 7.0 FEET WEST OF A FIELD ENTRANCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.180	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1013.023	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			923.610	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			923.696	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1013.187	.131		923.804	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1013.318	.131		923.804	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1013.187	.131		923.804	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1895
1013.187	.131		923.804	.066	1996	GPS - STATIC	2003	HMONT
1013.318	.131		923.804	.066	1996	GPS - STATIC	2003	HSUEU
1013.187	.131		923.804	.066	1996	GPS - STATIC	2003	HSCOT
1013.187	.197		923.843	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -89.619 12B = -89.616 09 = -89.557 03 = -89.413

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.40472	93 33 17.40695	390097.922	227421.169	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.40489	93 33 17.40779	390097.861	227421.186	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.40451	93 33 17.40732	390097.895	227421.147	.033	C	ADJUSTMENT	2004	GPS1939
44 32 36.40451	93 33 17.40732	390097.895	227421.147	.033	C	ADJUSTMENT	2003	GPS1911
44 32 36.40451	93 33 17.40732	390097.895	227421.147	.033	C	ADJUSTMENT	2003	GPS1895
44 32 36.40451	93 33 17.40732	390097.895	227421.147	.033	C	GPS - STATIC	2003	HMONT
44 32 36.40451	93 33 17.40732	390097.895	227421.147	.033	C	GPS - STATIC	2003	HSUEU
44 32 36.40451	93 33 17.40732	390097.894	227421.146	.033	C	GPS - STATIC	2003	HSCOT
44 32 36.40759	93 33 17.40638	390097.965	227421.459	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.40157	93 33 17.40591	390097.995	227420.849	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 34 39.42035	93 30 18.78169			.100	2	CLASSICAL SURVEY	1982	16778
44 32 36.53348	93 33 16.57373			.100	C	CLASSICAL SURVEY	1950	UNK

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740724.609	891043.848	1495812.626	16182332.276	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740724.549	891043.866	1495812.566	16182332.294	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740724.583	891043.827	1495812.600	16182332.255	.033	C	ADJUSTMENT	2004	GPS1939
2740724.583	891043.827	1495812.600	16182332.255	.033	C	ADJUSTMENT	2003	GPS1911
2740724.583	891043.827	1495812.600	16182332.255	.033	C	ADJUSTMENT	2003	GPS1895
2740724.583	891043.827	1495812.600	16182332.255	.033	C	GPS - STATIC	2003	HMONT
2740724.583	891043.827	1495812.600	16182332.255	.033	C	GPS - STATIC	2003	HSUEU
2740724.583	891043.827	1495812.600	16182332.255	.033	C	GPS - STATIC	2003	HSCOT
2740724.649	891044.139	1495812.670	16182332.567	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2740724.687	891043.530	1495812.700	16182331.957	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2116121.607	562968.022			.100	2	CLASSICAL SURVEY	1982	16778
2116121.605	562968.020			.100	C	CLASSICAL SURVEY	1950	UNK

NEW PRAGUE MNDT RM 1

Mn/DOT Name: NEW PRAGUE MNDT RM 1 **NGS Name:** NEW PRAGUE RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC7606 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	23 W	443236.22	933316.85	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** NEW PRAGUE NO 1 1980

1.45 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, 0.1 MILE WEST OF TOWNSHIP ROAD 5, 67.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 152.25, 44.5 FEET SOUTHEAST OF STATION NEW PRAGUE MNDT, 23.0 FEET EAST-NORTHEAST OF A FENCE CORNER, 72.0 FEET EAST OF NEW PRAGUE MNDT RM 2.

Station Notes

NEW CONSTRUCTION FALLS IN A ROUNDABOUT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.440	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.283	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.626 12B = -89.623 09 = -89.560 03 = -89.416

*** No Horizontal Positions in the Database ***

NEW PRAGUE MNDT RM 2

Mn/DOT Name: NEW PRAGUE MNDT RM 2 **NGS Name:** NEW PRAGUE RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC7607 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	23 W	443236.24	933317.85	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2010) **Stamping:** NEW PRAGUE NO 2 1980

1.45 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, 0.1 MILE WEST OF TOWNSHIP ROAD 5, 65.0 FEET SOUTH OF TRUNK HIGHWAY 19, AT TRUNK HIGHWAY 19 MILEPOINT 152.25, 54.0 FEET WEST-NORTHWEST OF A FENCE CORNER, 36.5 FEET SOUTHWEST OF STATION NEW PRAGUE MNDT, 72.0 FEET WEST OF NEW PRAGUE MNDT RM 1.

Station Notes

NEW CONSTRUCTION FALLS IN A ROUNDABOUT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.736	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.578	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Geoid Separations(ft): GEOID18 = -89.626 12B = -89.623 09 = -89.560 03 = -89.416

*** No Horizontal Positions in the Database ***

NEW PRAGUE MUNICIPAL TANK

Mn/DOT Name: NEW PRAGUE MUNICIPAL TANK **NGS Name:** NEW PRAGUE MUNICIPAL TANK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3019 Get Map
NGS Quad / Sta Num : 44093422/1035
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	112 N	23 W	443236.39	933423.07		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1935	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	NGS

Description: (2009)

Stamping:

IN THE EAST PART OF NEW PRAGUE, AT THE JUNCTION OF COLUMBUS AVENUE SOUTH AND TRUNK HIGHWAY 19/TRUNK HIGHWAY 13 IN NEW PRAGUE. THE POINT OBSERVED WAS THE FINIAL ON THE MUNICIPAL WATER TANK.

Station Notes

THE TANK WAS REMOVED.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -89.659 12B = -89.655 09 = -89.593 03 = -89.449

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.39088	93 34 23.06917	385342.205	227444.812	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.38354	93 34 23.06802	385342.284	227444.068	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.51500	93 34 22.22800			.100	4	CLASSICAL SURVEY	1939	03760

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735969.479	891017.081	1491058.939	16182363.697	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2735969.566	891016.338	1491059.018	16182362.953	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2111366.916	562940.772			.100	4	CLASSICAL SURVEY	1939	03760

NEW PRAGUE WATER TANK

Mn/DOT Name: NEW PRAGUE WATER TANK
NGS Name: NEW PRAGUE WATER TANK
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	3	112 N	23 W	443234.84	933422.11		4

NGS ACRN: PP3032 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	ELEVATED TANK	MNDT

Description: (1983)

Stamping:

IN NEW PRAGUE, AT THE NORTHEAST CORNER OF 1ST STREET SOUTHEAST AND COLUMBUS AVENUE SOUTH IN NEW PRAGUE. THE TOP CENTER OF THE TANK.

Station Notes

THE WATER TANK HAS BEEN TAKEN DOWN.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -89.662 12B = -89.659 09 = -89.596 03 = -89.452

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.83521	93 34 22.10828	385410.952	227286.889	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.81932	93 34 22.11133	385410.722	227285.280	3.281		CLASSICAL SURVEY	1990	HMONT
44 32 34.82937	93 34 22.10851	385410.933	227286.298	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.96102	93 34 21.27758			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2736039.888	890859.915	1491127.400	16182205.728	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2736039.675	890858.305	1491127.168	16182204.121	3.281		CLASSICAL SURVEY	1990	HMONT
2736039.874	890859.324	1491127.379	16182205.137	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2111436.567	562783.772			.100	4	CLASSICAL SURVEY	1982	16778

Mn/DOT Name: NJOES **NGS Name:** NJOES

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6388 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	36	111 N	23 W	442246.99	933129.16	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** NJOES 2016

4.8 MILES SOUTHEAST OF MONTGOMERY, 4.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY) TO TRUNK HIGHWAY 99 MILEPOINT 36.6, THEN 0.35 MILE SOUTH ON COUNTY ROAD 137 (LE SUEUR AVENUE), 34.8 FEET WEST OF COUNTY ROAD 137, 58.9 FEET SOUTH OF A WOODEN POST FOR UNDER A GROUND TELEPHONE CABLE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: 4010 D - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1101.340	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1101.405	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1101.441	.262		1010.087	.197	2011	GPS - RTRN	2024	RTRN2024
1101.382	.262		1010.031	.197	2011	GPS - OPUS	2021	GPSBM
1101.313	.262		1009.962	.197	2011	GPS - OPUS	2021	GPSBM
1101.323	.262		1009.962	.197	2011	GPS - RTRN	2020	RTRN2020
1101.395	.262		1010.034	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.355 12B = -91.361 09 = -91.276 03 = -91.099

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 46.99373	93 31 29.16417	397651.871	167691.004	.131	3	GPS - RTRN	2024	RTRN2024
44 22 46.99369	93 31 29.16552	397651.773	167691.000	.131	3	GPS - OPUS	2021	GPSBM
44 22 46.99420	93 31 29.16505	397651.807	167691.051	.131	3	GPS - OPUS	2021	GPSBM
44 22 46.99349	93 31 29.16464	397651.837	167690.980	.131	3	GPS - RTRN	2020	RTRN2020
44 22 46.99323	93 31 29.16487	397651.820	167690.953	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748910.332	831404.231	1503266.185	16122614.936	.131	3	GPS - RTRN	2024	RTRN2024
2748910.234	831404.226	1503266.087	16122614.932	.131	3	GPS - OPUS	2021	GPSBM
2748910.268	831404.278	1503266.122	16122614.984	.131	3	GPS - OPUS	2021	GPSBM
2748910.298	831404.206	1503266.151	16122614.912	.131	3	GPS - RTRN	2020	RTRN2020
2748910.281	831404.180	1503266.134	16122614.885	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NJOES-DQ6388-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NJOES-DQ6388-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NJOES-DQ6388-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

NUSBAUM MN131

Mn/DOT Name: NUSBAUM MN131 **NGS Name:** NUSBAUM

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DK4236 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	109 N	23 W	441437.40	933130.45		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 6 FT)	SURVEY DISK	MN-131

Description: (2016) **Stamping:** NUSBAUM

4.5 MILES NORTHWEST OF MORRISTOWN, 3.65 MILES NORTHWEST ALONG COUNTY ROAD 99 (JACKSON AVENUE), FROM THE JUNCTION OF COUNTY ROAD 99 AND TRUNK HIGHWAY 60, 1.0 MILE WEST OF MORRISTOWN, AT COUNTY ROAD 99 MILEPOINT 137.55, THEN 0.5 MILE NORTH ON LE SUEUR AVENUE, 40.5 FEET SOUTH OF A POWER POLE, 15.0 FEET WEST OF LE SUEUR AVENUE, 8.0 FEET NORTH OF A FIELD ENTRANCE, 10.1 FEET SOUTHEAST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1111.907	.262		1018.987	.197	2011	GPS - RTRN	2024	RTRN2024
1111.865	.262		1018.945	.197	2011	GPS - OPUS	2021	GPSBM
1111.799	.262		1018.879	.197	2011	GPS - OPUS	2021	GPSBM
1111.907	.262		1018.984	.197	2011	GPS - RTRN	2020	RTRN2020
			1018.925	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1018.981	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1111.842	.131		1019.165	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1111.842	.131		1019.165	.066	1996	GPS - STATIC	2008	HRYCE

Geoid Separations(ft): GEOID18 = -92.920 12B = -92.926 09 = -92.838 03 = -92.644

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.39781	93 31 30.44502	397321.275	118109.883	.131	3	GPS - RTRN	2024	RTRN2024
44 14 37.39765	93 31 30.44568	397321.227	118109.867	.131	3	GPS - OPUS	2021	GPSBM
44 14 37.39787	93 31 30.44528	397321.256	118109.889	.131	3	GPS - OPUS	2021	GPSBM
44 14 37.39795	93 31 30.44473	397321.296	118109.897	.131	3	GPS - RTRN	2020	RTRN2020
44 14 37.39781	93 31 30.44523	397321.259	118109.883	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.39769	93 31 30.44598	397321.205	118109.871	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 37.39717	93 31 30.44544	397321.244	118109.819	.033	C	ADJUSTMENT	2008	GPS2437
44 14 37.39717	93 31 30.44544	397321.244	118109.819	.033	C	GPS - STATIC	2008	HRYCE

NUSBAUM MN131

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2749105.322	781828.265	1502855.885	16073055.465	.131	3	GPS - RTRN	2024	RTRN2024
2749105.274	781828.248	1502855.836	16073055.449	.131	3	GPS - OPUS	2021	GPSBM
2749105.303	781828.271	1502855.866	16073055.471	.131	3	GPS - OPUS	2021	GPSBM
2749105.343	781828.279	1502855.906	16073055.479	.131	3	GPS - RTRN	2020	RTRN2020
2749105.307	781828.265	1502855.869	16073055.465	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2749105.252	781828.252	1502855.815	16073055.454	.033	C	ADJUSTMENT	2009	GPS2437-B

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2749105.292	781828.200	1502855.854	16073055.400	.033	C	ADJUSTMENT	2008	GPS2437
2749105.292	781828.200	1502855.854	16073055.400	.033	C	GPS - STATIC	2008	HRYCE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NUSBAUM-DK4236-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NUSBAUM-DK4236-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/NUSBAUM-DK4236-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

NW COR HDWL

Mn/DOT Name: NW COR HDWL
NGS Name: NW COR HDWL
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	26	111 N	24 W	442304.00	934024.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1958	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CULVERT - ANY SIZE, ANY TYPE	SURVEY DISK	MNDT

Description: (1958)

Stamping:

2.4 MILES EAST OF LE CENTER, 2.4 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, IN THE NORTHWEST CORNER OF A TRUNK HIGHWAY 99 BOX CULVERT, AT TRUNK HIGHWAY 99 STATION 1018+00.

Station Notes

THE BOX CULVERT HAS BEEN REMOVED AND REPLACED WITH A ROUND CONCRETE CULVERT ABOUT 4.0 FEET IN DIAMETER, THE HEADWALL IS NO LONGER IN PLACE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1043.384	.033	3				VERTICAL CONTROL SURVEY	1958	CS4009

Geoid Separations(ft): GEOID18 = -92.359 12B = -92.359 09 = -92.270 03 = -92.080

*** No Horizontal Positions in the Database ***

Mn/DOT Name: OSWALD **NGS Name:** OSWALD

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6392 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	111 N	23 W	442305.61	933543.98	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** OSWALD 2016

4.0 MILES SOUTH OF MONTGOMERY, 0.5 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 13 (THE JUNCTION IS 4.0 MILES SOUTH OF MONTGOMERY), AT TRUNK HIGHWAY 99 MILEPOINT 33.1, 54.5 FEET NORTH OF TRUNK HIGHWAY 99, 52.0 FEET WEST OF 165TH AVENUE, 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: KILK MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1073.439	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1073.505	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1073.469	.262		981.770	.197	2011	GPS - RTRN	2024	RTRN2024
1073.334	.262		981.629	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.699 12B = -91.706 09 = -91.617 03 = -91.443

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.60670	93 35 43.97693	379155.561	169672.560	.131	3	GPS - RTRN	2024	RTRN2024
44 23 05.60705	93 35 43.97684	379155.567	169672.596	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730396.256	833189.394	1484780.846	16124625.583	.131	3	GPS - RTRN	2024	RTRN2024
2730396.262	833189.429	1484780.853	16124625.618	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OSWALD-DQ6392-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OSWALD-DQ6392-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OSWALD-DQ6392-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTA MNDT

Mn/DOT Name: OTTA MNDT **NGS Name:** OTTA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4682 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	26	111 N	26 W	442305.76	935433.78	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2019	GOOD	Horz=NO Vert=NO	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 33 FT)
Disk Type: HORIZONTAL CONTROL DISK
Mon. Agency: MNDT

Description: (2016) **Stamping:** OTTA 1991

5.5 MILES SOUTH OF LE SUEUR, 5.6 MILES SOUTH ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND TRUNK HIGHWAY 112, AT THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 109 AND COUNTY ROAD 23, 74.0 FEET WEST OF TRUNK HIGHWAY 112, AT TRUNK HIGHWAY 112 MILEPOINT 7.1, 107.5 FEET NORTH OF COUNTY ROAD 23, 2.5 FEET EAST-SOUTHEAST OF A FENCE, 64.3 FEET SOUTH-SOUTHWEST OF A POWER POLE, 3.2 FEET NORTH-NORTHEAST OF A WITNESS POST.

Station Pair: HANK MNDT - LE SUEUR, MN

Station Notes

THE SURVEY MARK IS ON PRIVATE PROPERTY, THE LANDOWNER HAS GIVEN PERMISSION TO USE AND MAINTAIN THE SURVEY MARK.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
947.127	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
947.127	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
947.127	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
947.131	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
946.976	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			854.388	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			854.477	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
947.111	.131		854.601	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
947.111	.131		854.601	.066	1996	GPS - STATIC	2004	HLESU
947.111	.131		854.601	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
947.111	.131		854.601	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.729 12B = -92.723 09 = -92.644 03 = -92.480

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.75973	93 54 33.77653	297107.257	170309.318	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.75982	93 54 33.77732	297107.200	170309.327	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.75924	93 54 33.77701	297107.222	170309.268	.033	C	ADJUSTMENT	2004	GPS2027
44 23 05.75924	93 54 33.77702	297107.221	170309.268	.033	C	GPS - STATIC	2004	HLESU
44 23 05.75924	93 54 33.77702	297107.221	170309.268	.033	C	ADJUSTMENT	2003	GPS1911
44 23 05.75924	93 54 33.77702	297107.221	170309.268	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.75771	93 54 33.77858	297107.106	170309.115	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648355.565	832956.453	1402766.343	16125394.523	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648355.507	832956.462	1402766.285	16125394.533	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648355.530	832956.403	1402766.307	16125394.474	.033	C	ADJUSTMENT	2004	GPS2027
2648355.529	832956.403	1402766.306	16125394.474	.033	C	GPS - STATIC	2004	HLESU
2648355.529	832956.403	1402766.307	16125394.474	.033	C	ADJUSTMENT	2003	GPS1911
2648355.529	832956.403	1402766.307	16125394.474	.033	C	GPS - STATIC	2003	HSUEU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648355.416	832956.248	1402766.192	16125394.320	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTA-AE4682-3N-12MAY2010.jpg	N	May 12, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTA-AE4682-2-12MAY2010.jpg		May 12, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTA-AE4682-1-12MAY2004.jpg		May 12, 2004

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTAWA METH CH SPIRE

Mn/DOT Name: OTTAWA METH CH SPIRE
NGS Name: OTTAWA METH CH SPIRE
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	111 N	26 W	442259.21	935642.39		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	SURVEY DISK	MNDT

Description: (2016)

Stamping:

IN OTTAWA, 425.0 FEET NORTH OF THE JUNCTION OF SUMNER STREET AND COUNTY ROAD 23 IN OTTAWA. THE CHURCH IS FENCED OFF AND THE GATE IS LOCKED, WESTERLY 415.0 FEET ALONG LIBERTY STREET FROM ITS INTERSECTION WITH COUNTY ROAD 23 IN OTTAWA.

Station Notes

THE BUILDING HAS BEEN REMOVED.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.680 12B = -92.677 09 = -92.592 03 = -92.434

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_METH_CH_SPIRE-3W-10MAY2010.jpg	W	May 10, 2010
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTAWA MNDT

Mn/DOT Name: OTTAWA MNDT **NGS Name:** OTTAWA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2944 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	110 N	26 W	441944.08	935459.51		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2009) **Stamping:** OTTAWA 1981

1.0 MILE EAST OF ST. PETER, 1.3 MILES NORTHEAST ON COUNTY ROAD 23 FROM THE JUNCTION OF COUNTY ROAD 23 AND TRUNK HIGHWAY 99, 21.0 FEET NORTHWEST OF COUNTY ROAD 23, 63.0 FEET EAST-NORTHEAST OF A POWER POLE, 7.7 FEET SOUTH-SOUTHEAST OF A WITNESS POST, 75.38 FEET NORTHWEST OF OTTAWA MNDT RM 1, 47.84 FEET NORTHEAST OF OTTAWA MNDT RM 2, THE MONUMENT IS TIPPED ON ITS SIDE, THE DISK WAS RETURN TO THE GEODETIC UNIT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			706.278	.038	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			706.370	.033	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
799.211	.131		706.465	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1860
799.211	.131		706.465	.066	1996	GPS - STATIC	2002	HPETE
798.883	.197		706.295	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
798.916						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.969 12B = -92.962 09 = -92.867 03 = -92.723

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 44.07633	93 54 59.51187	295042.704	149903.168	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 44.07638	93 54 59.51260	295042.650	149903.174	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 44.07583	93 54 59.51211	295042.686	149903.118	.033	C	ADJUSTMENT	2003	GPS1860
44 19 44.07583	93 54 59.51211	295042.686	149903.118	.033	C	GPS - STATIC	2002	HPETE
44 19 44.07907	93 54 59.51785	295042.271	149903.450	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 44.07461	93 54 59.51328	295042.599	149902.994	.033	C	GPS - STATIC	1991	HPETE
44 19 44.07461	93 54 59.51328	295042.599	149902.995	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 44.19161	93 54 58.67531			.100	2	CLASSICAL SURVEY	1982	16778

OTTAWA MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646507.633	812531.992	1400669.814	16104999.445	.016		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646507.580	812531.997	1400669.762	16104999.450	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646507.616	812531.941	1400669.796	16104999.394	.033	C	ADJUSTMENT	2003	GPS1860
2646507.616	812531.941	1400669.796	16104999.394	.033	C	GPS - STATIC	2002	HPETE
2646507.198	812532.269	1400669.383	16104999.727	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646507.531	812531.818	1400669.710	16104999.272	.033	C	GPS - STATIC	1991	HPETE
2646507.531	812531.818	1400669.710	16104999.272	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2021902.397	484455.234			.100	2	CLASSICAL SURVEY	1982	16778

OTTAWA MNDT RM 1

Mn/DOT Name: OTTAWA MNDT RM 1
NGS Name: OTTAWA RM 1
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4543 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	110 N	26 W	441943.62	935458.70		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 13 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2003) **Stamping:** OTTAWA N01 1981

1.0 MILE EAST OF ST. PETER, 1.05 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 168 IN ST. PETER, THEN 1.3 MILES NORTHEAST ON COUNTY ROAD 23 (OTTAWA ROAD), 46.1 FEET EAST OF COUNTY ROAD 23, 110.6 FEET SOUTH OF A POWER POLE, 82.1 FEET EAST OF OTTAWA RM 2, 2.4 FEET NORTH OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
800.018	.262		707.046	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.969 12B = -92.962 09 = -92.867 03 = -92.723

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 43.61646	93 54 58.69553	295101.597	149856.030	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646567.017	812485.486	1400728.611	16104952.230	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_1-CJ4543-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_1-CJ4543-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_1-CJ4543-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTAWA MNDT RM 2

Mn/DOT Name: OTTAWA MNDT RM 2 **NGS Name:** OTTAWA RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4544 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	14	110 N	26 W	441943.66	935459.82		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=YES Vert=YES	NO		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (1981) **Stamping:** OTTAWA N0 2 1981

1.0 MILE EAST OF ST. PETER, 1.05 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER THEN 1.3 NORTHEAST ON COUNTY ROAD 23 (OTTAWA ROAD), 35.3 FEET WEST OF COUNTY ROAD 23 (OTTAWA ROAD), 82.1 FEET WEST OF OTTAWA RM 1, 1.0 FOOT EAST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
796.868	.262		703.900	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -92.969 12B = -92.962 09 = -92.867 03 = -92.723

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 19 43.66000	93 54 59.82470	295019.560	149861.226	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2646484.938	812489.811	1400646.613	16104957.555	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_2-CJ4544-3W-15APR2024.jpg	W	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_2-CJ4544-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_RM_2-CJ4544-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTAWA NE

Mn/DOT Name: OTTAWA NE
NGS Name: OTTAWA NE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8244 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	111 N	26 W	442722.52	935320.43		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2002) **Stamping:** OTTAWA - NE 2002

0.75 MILE EAST OF LE SUEUR, 1.1 MILES EAST ALONG COUNTY ROAD 26 FROM THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 22 IN LE SUEUR, 130.0 FEET SOUTH OF COUNTY ROAD 26, 65.0 FEET SOUTH-SOUTHWEST OF A POWER POLE, 40.0 FEET WEST OF COUNTY ROAD 152/ 311TH AVENUE, 25.0 FEET NORTH OF A FIELD ENTRANCE.

Station Notes

THE LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT, THE TOP OF THE DISK HAS BEEN SCRAPED BY FARM EQUIPMENT, SO THE STAMPING IS HARD TO READ, THE DISK IS STABLE. NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
872.219	.262		779.834	.197	2011	GPS - RTRN	2024	RTRN2024
872.275	.262		779.893	.197	2011	GPS - OPUS	2021	GPSBM
872.150	.262		779.769	.197	2011	GPS - OPUS	2021	GPSBM
872.223	.262		779.848	.197	2011	GPS - RTRN	2020	RTRN2020
872.295			779.916	.006	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
872.295			779.916	.006	2011	GPS - STATIC	2013	HSUEUR
872.292	.131		780.140	.066	1996	GPS - STATIC	2013	HSUEUR
872.137	.262		779.762	.197	2011	GPS - RTRN	2013	RTRN2013
			779.916	.005	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
872.308	.131		780.140	.066	1996	HORIZONTAL ADJUSTMENT	2007	GPS2351
872.308	.131		780.140	.066	1996	GPS - STATIC	2007	HHOJO
			779.998	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
872.308	.131		780.140	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
872.308	.131		780.140	.066	1996	GPS - STATIC	2004	HLESU
872.275	.131		780.140	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
872.275	.131		780.140	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.382 12B = -92.378 09 = -92.313 03 = -92.136

OTTAWA NE

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 22.52476	93 53 20.43416	302673.764	196261.704	.131	3	GPS - RTRN	2024	RTRN2024
44 27 22.52466	93 53 20.43449	302673.740	196261.694	.131	3	GPS - OPUS	2021	GPSBM
44 27 22.52506	93 53 20.43470	302673.725	196261.734	.131	3	GPS - OPUS	2021	GPSBM
44 27 22.52522	93 53 20.43417	302673.764	196261.750	.131	3	GPS - RTRN	2020	RTRN2020
44 27 22.52482	93 53 20.43438	302673.748	196261.710	.003		ADJUSTMENT	2014	GPS2977
44 27 22.52482	93 53 20.43439	302673.747	196261.710	.003	C	GPS - STATIC	2013	HSUEUR
44 27 22.52429	93 53 20.43371	302673.796	196261.656	.131	3	GPS - RTRN	2013	RTRN2013
44 27 22.52482	93 53 20.43438	302673.748	196261.710	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 22.52495	93 53 20.43503	302673.701	196261.723	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	GPS - STATIC	2013	HSUEUR
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	ADJUSTMENT	2007	GPS2351
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	GPS - STATIC	2007	HHOJO
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	ADJUSTMENT	2004	GPS2027
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	GPS - STATIC	2004	HLESU
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	ADJUSTMENT	2003	GPS1911
44 27 22.52426	93 53 20.43444	302673.743	196261.653	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653646.055	858963.284	1408372.727	16151328.028	.131	3	GPS - RTRN	2024	RTRN2024
2653646.032	858963.274	1408372.703	16151328.018	.131	3	GPS - OPUS	2021	GPSBM
2653646.016	858963.315	1408372.688	16151328.059	.131	3	GPS - OPUS	2021	GPSBM
2653646.055	858963.331	1408372.726	16151328.075	.131	3	GPS - RTRN	2020	RTRN2020
2653646.039	858963.291	1408372.710	16151328.034	.003		ADJUSTMENT	2014	GPS2977
2653646.039	858963.291	1408372.710	16151328.034	.003	C	GPS - STATIC	2013	HSUEUR
2653646.088	858963.237	1408372.759	16151327.980	.131	3	GPS - RTRN	2013	RTRN2013
2653646.039	858963.291	1408372.710	16151328.034	.003		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653645.992	858963.303	1408372.664	16151328.048	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2653646.035	858963.234	1408372.706	16151327.978	.033	C	GPS - STATIC	2013	HSUEUR
2653646.035	858963.234	1408372.706	16151327.978	.033	C	ADJUSTMENT	2007	GPS2351
2653646.035	858963.234	1408372.706	16151327.978	.033	C	GPS - STATIC	2007	HHOJO
2653646.035	858963.234	1408372.706	16151327.978	.033	C	ADJUSTMENT	2004	GPS2027
2653646.035	858963.234	1408372.706	16151327.978	.033	C	GPS - STATIC	2004	HLESU
2653646.035	858963.234	1408372.706	16151327.978	.033	C	ADJUSTMENT	2003	GPS1911
2653646.035	858963.234	1408372.706	16151327.978	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_NE-DF8244-3W-22APR2024.jpg	W	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_NE-DF8244-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_NE-DF8244-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

OTTAWA SW

Mn/DOT Name: OTTAWA SW
NGS Name: OTTAWA SW
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8245 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	111 N	26 W	442310.00	935626.12		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MN-079

Description: (2002) **Stamping:** OTTAWA - SW 2002

5.0 MILES SOUTHWEST OF LE SUEUR, 5.5 MILES SOUTH ALONG COUNTY ROAD 36 FROM THE JUNCTION OF COUNTY ROAD 36 AND TRUNK HIGHWAY 93 IN LE SUEUR, 45.0 FEET WEST OF COUNTY ROAD 36, 25.0 FEET SOUTH OF A FIELD ENTRANCE, 8.0 FEET NORTHEAST OF A WITNESS POST.

Station Notes

THE LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
820.343	.262		727.666	.197	2011	GPS - RTRN	2024	RTRN2024
820.313	.262		727.636	.197	2011	GPS - OPUS	2021	GPSBM
820.271	.262		727.594	.197	2011	GPS - OPUS	2021	GPSBM
820.336	.262		727.663	.197	2011	GPS - RTRN	2020	RTRN2020
820.425			727.702	.007	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
820.425			727.712	.007	2011	GPS - STATIC	2013	HSUEUR
820.438	.131		727.909	.066	1996	GPS - STATIC	2013	HSUEUR
820.303	.262		727.630	.197	2011	GPS - RTRN	2013	RTRN2013
			727.702	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			727.791	.008	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
820.405	.131		727.909	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
820.405	.131		727.909	.066	1996	GPS - STATIC	2004	HLESU
820.372	.131		727.909	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
820.372	.131		727.909	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.677 12B = -92.674 09 = -92.592 03 = -92.431

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 09.99640	93 56 26.12477	288952.674	170817.348	.131	3	GPS - RTRN	2024	RTRN2024
44 23 09.99697	93 56 26.12537	288952.631	170817.406	.131	3	GPS - OPUS	2021	GPSBM
44 23 09.99654	93 56 26.12501	288952.657	170817.362	.131	3	GPS - OPUS	2021	GPSBM
44 23 09.99691	93 56 26.12482	288952.671	170817.400	.131	3	GPS - RTRN	2020	RTRN2020
44 23 09.99714	93 56 26.12451	288952.694	170817.422	.010		ADJUSTMENT	2014	GPS2977
44 23 09.99721	93 56 26.12463	288952.685	170817.430	.010	C	GPS - STATIC	2013	HSUEUR
44 23 09.99737	93 56 26.12493	288952.664	170817.446	.131	3	GPS - RTRN	2013	RTRN2013
44 23 09.99714	93 56 26.12451	288952.694	170817.422	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 09.99723	93 56 26.12529	288952.637	170817.432	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 09.99648	93 56 26.12459	288952.688	170817.356	.033	C	GPS - STATIC	2013	HSUEUR
44 23 09.99648	93 56 26.12460	288952.687	170817.356	.033	C	ADJUSTMENT	2004	GPS2027
44 23 09.99648	93 56 26.12459	288952.688	170817.356	.033	C	GPS - STATIC	2004	HLESU
44 23 09.99648	93 56 26.12459	288952.688	170817.356	.033	C	ADJUSTMENT	2003	GPS1911
44 23 09.99648	93 56 26.12459	288952.688	170817.356	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2640197.025	833377.973	1394615.656	16125915.496	.131	3	GPS - RTRN	2024	RTRN2024
2640196.981	833378.031	1394615.613	16125915.555	.131	3	GPS - OPUS	2021	GPSBM
2640197.008	833377.987	1394615.639	16125915.511	.131	3	GPS - OPUS	2021	GPSBM
2640197.021	833378.025	1394615.653	16125915.548	.131	3	GPS - RTRN	2020	RTRN2020
2640197.044	833378.048	1394615.676	16125915.571	.010		ADJUSTMENT	2014	GPS2977
2640197.035	833378.055	1394615.667	16125915.578	.010	C	GPS - STATIC	2013	HSUEUR
2640197.013	833378.071	1394615.645	16125915.595	.131	3	GPS - RTRN	2013	RTRN2013
2640197.044	833378.048	1394615.676	16125915.571	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2640196.987	833378.057	1394615.619	16125915.581	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2640197.038	833377.981	1394615.669	16125915.505	.033	C	GPS - STATIC	2013	HSUEUR
2640197.038	833377.981	1394615.668	16125915.505	.033	C	ADJUSTMENT	2004	GPS2027
2640197.038	833377.981	1394615.669	16125915.504	.033	C	GPS - STATIC	2004	HLESU
2640197.038	833377.981	1394615.669	16125915.505	.033	C	ADJUSTMENT	2003	GPS1911
2640197.038	833377.981	1394615.669	16125915.505	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_SW-DF8245-3NW-17APR2024.jpg	NW	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_SW-DF8245-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/OTTAWA_SW-DF8245-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: P 116 **NGS Name:** P 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1748 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	9	111 N	23 W	442559.00	933507.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (1989) **Stamping:** P 116 1934

IN THE SOUTHWEST PART OF MONTGOMERY, 0.35 MILE NORTH OF THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 21, 105.5 FEET WEST OF TRUNK HIGHWAY 13, AT TRUNK HIGHWAY 13 MILEPOINT 59.05, 0.4 FOOT NORTH OF A WALL, 9.8 FEET WEST-NORTHWEST OF THE SOUTHEAST CORNER OF A WALL, 71.3 FEET WEST-SOUTHWEST OF A POWER POLE WITH A TRANSFORMER, ON THE SOUTH SIDE OF THE BASE FOR A GAS STORAGE TANK.

Station Notes
THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.701	.016	2/0				VERTICAL ADJUSTMENT	1997	00000231
1061.697	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.428	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT
1061.576	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -90.905 12B = -90.928 09 = -90.836 03 = -90.669

*** No Horizontal Positions in the Database ***

Geodetic Data Sheet (Feet)
GSID Station # 109630

PARK

04/28/2026
Sheet Help

Mn/DOT Name: PARK
NGS Name: PARK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3249 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	111 N	26 W	442724.18	935423.94	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 42 FT)

Disk Type
METAL ROD (WITH REMOVABLE ID DISK)

Mon. Agency
MNDT

Description: (2019)
Stamping: PARK 2019

IN LE SUEUR, 0.1 MILE EAST ALONG FERRY STREET FROM THE JUNCTION OF FERRY STREET AND COUNTY ROAD 22 IN LE SUEUR, THEN 0.1 MILE EAST ON COUNTY ROAD 26, 33.9 FEET SOUTH OF COUNTY ROAD 26 (FERRY STREET), 82.2 FEET WEST OF SOUTH PARK LANE, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: FERRY - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
823.781	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
823.781	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
823.801	.262		731.406	.197	2011	GPS - RTRN	2024	RTRN2024
823.745	.262		731.354	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.395 12B = -92.392 09 = -92.326 03 = -92.149

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 24.17858	93 54 23.94150	298068.989	196472.253	.131	3	GPS - RTRN	2024	RTRN2024
44 27 24.17946	93 54 23.94133	298069.003	196472.342	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649039.857	859124.996	1403770.045	16151545.981	.131	3	GPS - RTRN	2024	RTRN2024
2649039.870	859125.085	1403770.058	16151546.070	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PARK-DR3249-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PARK-DR3249-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PARK-DR3249-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

PEPIN MNDT

Mn/DOT Name: PEPIN MNDT **NGS Name:** PEPIN

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9330 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	112 N	23 W	442909.54	933501.85	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 12 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** PEPIN 1989

3.5 MILES NORTH OF MONTGOMERY, 3.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST IN MONTGOMERY TO TRUNK HIGHWAY 13 MILEPOINT 62.75, THEN 0.1 MILE EAST ON COUNTY ROAD 28, 152.0 FEET WEST OF A POWER POLE, 92.7 FEET EAST-SOUTHEAST OF A POWER POLE, 55.0 FEET SOUTH OF COUNTY ROAD 28 (320TH STREET), 0.6 FOOT NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.525	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1068.587	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1068.587	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.367	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1068.502	.262		978.243	.197	2011	GPS - RTRN	2024	RTRN2024
1068.584	.262		978.325	.197	2011	GPS - OPUS	2019	GPSBM
1068.476	.262		978.213	.197	2011	GPS - RTRN	2019	RTRN2019
1068.407	.262		978.138	.197	2011	GPS - RTRN	2016	RTRN2016
			978.266	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			978.361	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1068.600	.131		978.509	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1068.600	.131		978.509	.066	1996	GPS - STATIC	2005	H40BJ
1068.600	.131		978.509	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1068.600	.131		978.509	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -90.259 12B = -90.269 09 = -90.193 03 = -90.046

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.53725	93 35 01.84910	382418.078	206511.380	.131	3	GPS - RTRN	2024	RTRN2024
44 29 09.53732	93 35 01.84913	382418.076	206511.388	.131	3	GPS - OPUS	2019	GPSBM
44 29 09.53784	93 35 01.85185	382417.879	206511.441	.131	3	GPS - RTRN	2019	RTRN2019
44 29 09.53662	93 35 01.84831	382418.135	206511.316	.131	3	GPS - RTRN	2016	RTRN2016
44 29 09.53622	93 35 01.84769	382418.180	206511.276	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.53634	93 35 01.84854	382418.118	206511.288	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.53578	93 35 01.84857	382418.116	206511.231	.033	C	ADJUSTMENT	2005	GPS2080
44 29 09.53578	93 35 01.84860	382418.114	206511.231	.033	C	GPS - STATIC	2005	H40BJ
44 29 09.53578	93 35 01.84860	382418.114	206511.231	.033	C	ADJUSTMENT	2004	GPS1939
44 29 09.53578	93 35 01.84860	382418.114	206511.231	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.53136	93 35 01.84435	382418.418	206510.781	.033	C	GPS - STATIC	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733267.742	870056.335	1488101.828	16161443.773	.131	3	GPS - RTRN	2024	RTRN2024
2733267.740	870056.342	1488101.826	16161443.780	.131	3	GPS - OPUS	2019	GPSBM
2733267.543	870056.394	1488101.629	16161443.834	.131	3	GPS - RTRN	2019	RTRN2019
2733267.800	870056.272	1488101.884	16161443.709	.131	3	GPS - RTRN	2016	RTRN2016
2733267.845	870056.231	1488101.929	16161443.668	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733267.783	870056.243	1488101.868	16161443.680	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733267.782	870056.187	1488101.865	16161443.624	.033	C	ADJUSTMENT	2005	GPS2080
2733267.780	870056.186	1488101.863	16161443.624	.033	C	GPS - STATIC	2005	H40BJ
2733267.780	870056.187	1488101.863	16161443.624	.033	C	ADJUSTMENT	2004	GPS1939
2733267.780	870056.187	1488101.863	16161443.624	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733268.090	870055.741	1488102.167	16161443.174	.033	C	GPS - STATIC	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PEPIN-AC9330-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PEPIN-AC9330-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/PEPIN-AC9330-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

PEPIN MNDT RM 1

Mn/DOT Name: PEPIN MNDT RM 1 **NGS Name:** PEPIN RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9331 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	112 N	23 W	442908.00	933500.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** PEPIN NO 1 1989

3.5 MILES NORTH OF MONTGOMERY, 3.1 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST, THEN 430.0 FEET EAST ON COUNTY ROAD 28, 41.0 FEET SOUTH OF COUNTY ROAD 28, 136.8 FEET WEST-NORTHWEST OF A POWER POLE, 108.4 FEET EAST-NORTHEAST OF A POWER POLE, 21.0 FEET NORTHEAST OF STATION PEPIN MNDT, 32.6 FEET EAST OF PEPIN MNDT RM 2, 19.0 FEET NORTHEAST OF A WITNESS POST.

Station Notes

08-13-2004

FOUND THE ROD BENT AND THE DISK MISSING.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.756	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.537	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.262 12B = -90.272 09 = -90.193 03 = -90.049

*** No Horizontal Positions in the Database ***

PEPIN MNDT RM 2

Mn/DOT Name: PEPIN MNDT RM 2 **NGS Name:** PEPIN RM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9297 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	27	112 N	23 W	442910.00	933502.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	REFERENCE MARK DISK	MNDT

Description: (2008) **Stamping:** PEPIN NO 2 1989

3.5 MILES NORTH OF MONTGOMERY, 3.1 MILES NORTH ON TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST THEN 430.0 FEET EAST ON COUNTY ROAD 28, 40.6 FEET SOUTH OF COUNTY ROAD 28, 169.3 FEET WEST-NORTHWEST OF A POWER POLE, 75.9 FEET EAST-NORTHEAST OF A POWER POLE, 22.1 FEET NORTHWEST OF STATION PEPIN MNDT, 32.6 FEET WEST OF PEPIN MNDT RM 1, 24.6 FEET NORTHWEST OF A WITNESS POST.

Station Notes

PULLED THE TIES AND PROBED FOR THE MARK. FOUND THE PVC PIPE AND WITNESS POST NEAR THE STATION MARK BUT NO SIGN OF THE PEPIN MNDT RM 2 OR THE ROD. 08-13-2004.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.215	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1065.995	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.256 12B = -90.266 09 = -90.190 03 = -90.046

*** No Horizontal Positions in the Database ***

PEPIN MNDT RM 3

Mn/DOT Name: PEPIN MNDT RM 3 **NGS Name:** PEPIN RM 3

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9329 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	28	112 N	23 W	442910.00	933525.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** PEPIN NO 3 1989

3.5 MILES NORTH OF MONTGOMERY, 3.1 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND COUNTY ROAD 26 WEST, THEN 0.25 MILE WEST ON COUNTY ROAD 28, 21.3 FEET SOUTH OF COUNTY ROAD 28, 8.5 FEET EAST OF AN ENTRANCE, 41.2 FEET EAST-NORTHEAST OF A POWER POLE, 14.2 FEET NORTH-NORTHWEST OF A WITNESS POST.

Station Notes

08-13-2004.
THE DRIVEWAY WAS WIDENED, NEW CULVERT AND HOUSE. FOUND THE WITNESS POST BUT NOT AS DESCRIBED IN THE TEXT. THE POWER POLE IS GONE. THE TIES WOULD PUT THE MARK IN A NEW DRIVEWAY.
PULLED 41.2 FEET EAST-NORTHEAST OF THE POWER POLE, IT APPEARS THE ENTRANCE HAS BEEN MOVED EAST BECAUSE THE TIES FALL WEST OF IT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.424	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1039.204	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Geoid Separations(ft): GEOID18 = -90.298 12B = -90.308 09 = -90.229 03 = -90.085

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.80380	93 35 26.99637	380595.105	206548.498	3.281		CLASSICAL SURVEY	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731444.695	870074.124	1486279.672	16161483.846	3.281		CLASSICAL SURVEY	1990	HMONT

Mn/DOT Name: Q 116 **NGS Name:** Q 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1752 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	11	111 N	23 W	442633.68	933347.77	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2016	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 14 IN.	STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
UNKNOWN	BENCH MARK DISK	NGS

Description: (2004) **Stamping:** Q 116 1934

0.15 MILE EAST OF THE JUNCTION OF COUNTY ROAD 26 AND COUNTY ROAD 144 EAST IN MONTGOMERY, 27.0 FEET SOUTH OF COUNTY ROAD 26, 119.5 FEET WEST OF THE NORTH 1 OF 2 POWER POLES, 60.4 FEET EAST OF THE FENCE CORNER, 0.6 MILE EAST OF 5TH STREET NORTHEAST, 69.4 FEET SOUTH-SOUTHEAST OF A POWER POLE, 17.0 FEET NORTHWEST OF AN OLD RAILROAD GRADE, 0.9 FOOT NORTH OF A WITNESS POST.

Station Notes

USE A 1.5 METER FIXED HEIGHT TRIPOD. THE MONUMENT LEANS SOUTHEAST.
THE MARK WAS REPORTED DISTURBED BY THE LE SUEUR COUNTY HIGHWAY DEPARTMENT, 5/13/2013. APPEARS TO HAVE BEEN HIT BY A MOWER AND LEANING SEVERELY.
THE DISK WAS TURNED IN TO THE OFFICE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1052.354	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1052.229	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			962.045	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			962.137	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1052.754	.131		962.334	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1052.754	.131		962.334	.066	1996	GPS - STATIC	2008	HRYCE
			962.137	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1052.787	.131		962.334	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1052.787	.131		962.334	.066	1996	GPS - STATIC	2005	H40BJ

Geoid Separations(ft): GEOID18 = -90.672 12B = -90.692 09 = -90.603 03 = -90.439

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 33.68499	93 33 47.77176	387705.547	190698.936	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 33.68509	93 33 47.77253	387705.492	190698.946	.033	C	ADJUSTMENT	2009	GPS2437-B
44 26 33.68511	93 33 47.77247	387705.496	190698.948	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 33.68464	93 33 47.77203	387705.528	190698.900	.033	C	ADJUSTMENT	2008	GPS2437
44 26 33.68464	93 33 47.77203	387705.528	190698.900	.033	C	GPS - STATIC	2008	HRYCE
44 26 33.68464	93 33 47.77203	387705.528	190698.900	.033	C	ADJUSTMENT	2005	GPS2080
44 26 33.68464	93 33 47.77203	387705.528	190698.900	.033	C	GPS - STATIC	2005	H40BJ

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738721.883	854302.708	1493361.353	16145629.320	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738721.827	854302.718	1493361.297	16145629.330	.033	C	ADJUSTMENT	2009	GPS2437-B
2738721.831	854302.720	1493361.301	16145629.332	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2738721.863	854302.672	1493361.333	16145629.284	.033	C	ADJUSTMENT	2008	GPS2437
2738721.863	854302.672	1493361.333	16145629.284	.033	C	GPS - STATIC	2008	HRYCE
2738721.863	854302.672	1493361.333	16145629.284	.033	C	ADJUSTMENT	2005	GPS2080
2738721.863	854302.672	1493361.333	16145629.284	.033	C	GPS - STATIC	2005	H40BJ

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/Q_116-PP1752-3W-02JUN2010.jpg	W	Jun 2, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/Q_116-PP1752-2-02JUN2010.jpg		Jun 2, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/Q_116-PP1752-1-02JUN2010.jpg		Jun 2, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

R 116

Mn/DOT Name: R 116 **NGS Name:** R 116

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1753 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	36	112 N	23 W	442740.00	933222.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (1934) **Stamping:** R-116

3.3 MILES NORTHEAST ALONG THE RAILROAD TRACKS FROM THE MONTGOMERY CITY HALL, 148.5 FEET NORTHEAST OF RAILROAD MILEPOST 25, 42.0 FEET SOUTHWEST OF THE NORTH-SOUTH TOWNSHIP ROAD, 39.0 FEET SOUTHEAST OF THE RAILROAD TRACKS, 8.0 FEET NORTHWEST OF A FENCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.483	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1049.365	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -90.423 12B = -90.436 09 = -90.354 03 = -90.197

*** No Horizontal Positions in the Database ***

SARA MNDT

Mn/DOT Name: SARA MNDT **NGS Name:** SARA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7033 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	29	111 N	25 W	442329.31	935210.50	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2003	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 25 FT)	SURVEY DISK	MNDT

Description: (2003) **Stamping:** SARA 2003

7.2 MILES WEST OF LE CENTER, 6.6 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 (THE JUNCTION IS 1.0 MILE WEST OF LE CENTER), THEN 0.5 MILE NORTH ON 301ST AVENUE, 18.1 FEET EAST 301ST AVENUE, 21.7 FEET SOUTHWEST OF A POWER POLE, 5.5 FEET WEST OF A WITNESS POST.

Station Pair: ET 3 EDJ USGS AZ MK - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
986.323	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
986.327	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
986.264	.262		893.519	.197	2011	GPS - RTRN	2024	RTRN2024
			893.574	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			893.663	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
986.317	.131		893.765	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
986.317	.131		893.765	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.749 12B = -92.743 09 = -92.664 03 = -92.490

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.30875	93 52 10.49576	307533.937	172597.867	.131	3	GPS - RTRN	2024	RTRN2024
44 23 29.30884	93 52 10.49612	307533.911	172597.877	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.30893	93 52 10.49689	307533.855	172597.886	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 29.30835	93 52 10.49650	307533.883	172597.827	.033	C	ADJUSTMENT	2004	GPS2027
44 23 29.30835	93 52 10.49650	307533.883	172597.827	.033	C	GPS - STATIC	2004	HLESU

SARA MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658756.165	835355.103	1413192.724	16127665.389	.131	3	GPS - RTRN	2024	RTRN2024
2658756.139	835355.112	1413192.698	16127665.398	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658756.083	835355.121	1413192.642	16127665.408	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2658756.112	835355.062	1413192.670	16127665.349	.033	C	ADJUSTMENT	2004	GPS2027
2658756.112	835355.062	1413192.670	16127665.349	.033	C	GPS - STATIC	2004	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SARA-DG7033-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SARA-DG7033-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SARA-DG7033-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

SE COR S HDWL

Mn/DOT Name: SE COR S HDWL
NGS Name: SE COR S HDWL
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	24 W	443238.00	934032.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1953	2010	DESTROYED	Horz=NO Vert=NO	NO	8742	FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
BRIDGE ABUTMENT	SURVEY DISK	MNDT

Description: (2010)

Stamping:

4.4 MILES WEST OF NEW PRAGUE, 4.4 MILES WEST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 13 IN NEW PRAGUE, 0.3 MILE WEST OF UNION HILL, 0.3 MILE WEST OF COUNTY ROAD 31, 35.0 FEET SOUTH OF TRUNK HIGHWAY 19, IN THE SOUTHEAST CORNER OF TRUNK HIGHWAY 19 BRIDGE NUMBER 8742 OVER THE WEST BRANCH OF RAVEN STREAM.

Station Notes

THE BRIDGE HAS BEEN REPLACED WITH A BOX CULVERT.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
967.551	.033	3				VERTICAL CONTROL SURVEY	1953	CS4004

Geoid Separations(ft): GEOID18 = -90.321 12B = -90.292 09 = -90.252 03 = -90.121

*** No Horizontal Positions in the Database ***

SHAN MNDT

Mn/DOT Name: SHAN MNDT **NGS Name:** SHAN

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AI3310 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	9	109 N	26 W	441607.03	935734.98	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1990	2024	POOR	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (1990) **Stamping:** SHAN 1990

3.0 MILES SOUTH OF ST. PETER, 3.3 MILES SOUTH ALONG TRUNK HIGHWAY 22 FROM THE JUNCTION OF TRUNK HIGHWAY 22 AND TRUNK HIGHWAY 169 IN ST. PETER, AT TRUNK HIGHWAY 22 MILEPOINT 60.75, AT THE JUNCTION OF TRUNK HIGHWAY 22 AND A GRAVEL ROAD, 126.0 FEET WEST OF TRUNK HIGHWAY 22, 95.3 FEET SOUTHWEST OF A POWER POLE, 51.5 FEET SOUTH-SOUTHEAST OF A WESTERLY POLE, 50.0 FEET SOUTH-SOUTHWEST OF A CABLE MARKER POST, 17.0 FEET SOUTH OF 470TH STREET, 10.0 FEET NORTH OF A WITNESS POST.

Station Notes
THE SURVEY MARK NEEDS TO BE RESET AT A LATER DATE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
937.262	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
937.262	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
937.262	.016	2/1				VERTICAL ADJUSTMENT	2000	00000360
937.255	.016	2/1				VERTICAL CONTROL SURVEY	1996	VPETE

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
937.088	.016	2/1				VERTICAL CONTROL SURVEY	1991	VPETE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
937.252	.262		844.260	.197	2011	GPS - OPUS	2021	GPSBM
937.282	.262		844.286	.197	2011	GPS - RTRN	2020	RTRN2020
937.305	.262		844.313	.197	2011	GPS - RTRN	2019	RTRN2019
			844.273	.018	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			844.362	.016	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
937.268	.131		844.447	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1860
937.268	.131		844.447	.066	1996	GPS - STATIC	2002	HPETE

Geoid Separations(ft): GEOID18 = -92.992 12B = -92.995 09 = -92.903 03 = -92.769

SHAN MNDT

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 07.03351	93 57 34.97666	283519.823	128035.296	.131	3	GPS - OPUS	2021	GPSBM
44 16 07.03339	93 57 34.97663	283519.825	128035.284	.131	3	GPS - RTRN	2020	RTRN2020
44 16 07.03408	93 57 34.97611	283519.863	128035.354	.131	3	GPS - RTRN	2019	RTRN2019
44 16 07.03390	93 57 34.97635	283519.846	128035.335	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 07.03395	93 57 34.97707	283519.794	128035.341	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 07.03340	93 57 34.97663	283519.825	128035.285	.033	C	ADJUSTMENT	2003	GPS1860
44 16 07.03340	93 57 34.97663	283519.825	128035.285	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 16 07.02990	93 57 34.97591	283519.873	128034.931	.033	C	GPS - STATIC	1991	HPETE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635218.514	790545.820	1389116.471	16083158.216	.131	3	GPS - OPUS	2021	GPSBM
2635218.516	790545.808	1389116.473	16083158.203	.131	3	GPS - RTRN	2020	RTRN2020
2635218.554	790545.878	1389116.512	16083158.273	.131	3	GPS - RTRN	2019	RTRN2019
2635218.537	790545.860	1389116.494	16083158.255	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635218.484	790545.865	1389116.442	16083158.260	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635218.516	790545.809	1389116.473	16083158.204	.033	C	ADJUSTMENT	2003	GPS1860
2635218.516	790545.809	1389116.473	16083158.204	.033	C	GPS - STATIC	2002	HPETE

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2635218.569	790545.455	1389116.521	16083157.850	.033	C	GPS - STATIC	1991	HPETE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAN-AI3310-3S-18MAY2020.jpg	S	May 18, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAN-AI3310-2-18MAY2020.jpg		May 18, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAN-AI3310-1-18MAY2020.jpg		May 18, 2020

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

SHAR MNDT

Mn/DOT Name: SHAR MNDT **NGS Name:** SHAR

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7034 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	13	111 N	26 W	442448.71	935423.87	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 6 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 23 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2004) **Stamping:** SHAR 1991

3.5 MILES SOUTH OF LE SUEUR, 3.6 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22, THEN 0.15 MILE EAST ON 370TH STREET, 73.9 FEET WEST-SOUTHWEST OF A POWER POLE, 19.8 FEET SOUTH-SOUTHWEST OF A CORNER FENCE POST, 13.0 FEET NORTH OF 470TH STREET, 10.9 FEET SOUTH OF A WITNESS POST.

Station Pair: DEUNK MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
891.219	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
891.219	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
891.202	.262		798.588	.197	2011	GPS - RTRN	2024	RTRN2024
			798.601	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			798.689	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
891.206	.131		798.811	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
891.206	.131		798.811	.066	1996	GPS - STATIC	2004	HLESU

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
890.910						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.611 12B = -92.611 09 = -92.533 03 = -92.359

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71407	93 54 23.87471	297924.940	180728.506	.131	3	GPS - RTRN	2024	RTRN2024
44 24 48.71426	93 54 23.87407	297924.986	180728.525	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71433	93 54 23.87489	297924.927	180728.533	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71377	93 54 23.87444	297924.959	180728.476	.033	C	ADJUSTMENT	2004	GPS2027
44 24 48.71377	93 54 23.87444	297924.959	180728.476	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 48.71146	93 54 23.87523	297924.900	180728.241	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649062.683	843382.483	1403600.529	16135808.437	.131	3	GPS - RTRN	2024	RTRN2024
2649062.729	843382.502	1403600.576	16135808.456	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649062.670	843382.509	1403600.517	16135808.464	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649062.702	843382.452	1403600.549	16135808.406	.033	C	ADJUSTMENT	2004	GPS2027
2649062.702	843382.452	1403600.549	16135808.406	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2649062.645	843382.218	1403600.489	16135808.173	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAR-DG7034-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAR-DG7034-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHAR-DG7034-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

SHARON C

Mn/DOT Name: SHARON C
NGS Name: SHARON C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8246 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	111 N	25 W	442425.70	934944.99		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2002) **Stamping:** SHARON C 2002

4.3 MILES NORTHWEST OF LE CENTER, 1.5 MILES NORTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 5.1 MILES WEST ALONG COUNTY ROAD 24, THEN 0.1 MILE NORTH ON COUNTY ROAD 15, 39.0 FEET EAST OF COUNTY ROAD 15 (281ST AVENUE), 11.0 FEET NORTH OF A FIELD ENTRANCE, 8.4 FEET SOUTH OF A WITNESS POST.

Station Notes

THE LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1007.829	.262		915.175	.197	2011	GPS - RTRN	2024	RTRN2024
			915.248	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			915.336	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1007.872	.131		915.431	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1007.872	.131		915.431	.066	1996	GPS - STATIC	2004	HLESU
1007.806	.131		915.431	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1007.806	.131		915.431	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.654 12B = -92.651 09 = -92.572 03 = -92.385

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 25.69645	93 49 44.98650	318148.441	178215.670	.131	3	GPS - RTRN	2024	RTRN2024
44 24 25.69722	93 49 44.98740	318148.376	178215.749	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 25.69732	93 49 44.98818	318148.320	178215.760	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 24 25.69670	93 49 44.98785	318148.343	178215.697	.033	C	ADJUSTMENT	2004	GPS2027
44 24 25.69670	93 49 44.98785	318148.343	178215.697	.033	C	GPS - STATIC	2004	HLESU
44 24 25.69670	93 49 44.98785	318148.343	178215.697	.033	C	ADJUSTMENT	2003	GPS1911
44 24 25.69670	93 49 44.98785	318148.343	178215.697	.033	C	GPS - STATIC	2003	HSUEU

SHARON C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669309.273	841084.416	1423812.186	16133263.874	.131	3	GPS - RTRN	2024	RTRN2024
2669309.207	841084.494	1423812.121	16133263.953	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669309.151	841084.504	1423812.065	16133263.964	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669309.174	841084.441	1423812.088	16133263.901	.033	C	ADJUSTMENT	2004	GPS2027
2669309.174	841084.441	1423812.088	16133263.901	.033	C	GPS - STATIC	2004	HLESU
2669309.174	841084.441	1423812.088	16133263.901	.033	C	ADJUSTMENT	2003	GPS1911
2669309.174	841084.441	1423812.088	16133263.901	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHARON_C-DF8246-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHARON_C-DF8246-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SHARON_C-DF8246-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: SIAN **NGS Name:** SIAN

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6420 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	9	109 N	23 W	441547.97	933509.11	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2017	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2017) **Stamping:** SIAN 2017

2.9 MILES NORTH OF WATERVILLE, 4.15 MILES NORTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, AT TRUNK HIGHWAY 13 MILEPOINT 46.7, 60.2 FEET WEST OF TRUNK HIGHWAY 13, 18.4 FEET NORTH OF A FIELD ENTRANCE, 14.0 FEET EAST OF A CABLE BOX, 1.5 FEET EAST OF A WITNESS POST.

Station Pair: 4001 DA - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1075.628	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1075.661	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1075.680	.262		982.446	.197	2011	GPS - RTRN	2024	RTRN2024
1075.628			982.508	.027	2011	HORIZONTAL ADJUSTMENT	2020	GPS3368
1075.628	.131		982.698	.066	1996	GPS - STATIC	2020	HTH13
1075.628			982.508	.027	2011	GPS - STATIC	2020	HTH13
1075.723	.262		982.491	.197	2011	GPS - RTRN	2017	RTRN2017

Geoid Separations(ft): GEOID18 = -93.235 12B = -93.231 09 = -93.149 03 = -92.946

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 47.96931	93 35 09.10925	381442.482	125338.794	.131	3	GPS - RTRN	2024	RTRN2024
44 15 47.96926	93 35 09.10979	381442.442	125338.789	.016		ADJUSTMENT	2020	GPS3368
44 15 47.96926	93 35 09.10979	381442.442	125338.789	.016	C	GPS - STATIC	2020	HTH13
44 15 47.96873	93 35 09.10848	381442.538	125338.735	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 47.96911	93 35 09.11005	381442.423	125338.774	.033	C	GPS - STATIC	2020	HTH13

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733152.676	788887.612	1486995.448	16080306.734	.131	3	GPS - RTRN	2024	RTRN2024
2733152.637	788887.607	1486995.408	16080306.729	.016		ADJUSTMENT	2020	GPS3368
2733152.637	788887.607	1486995.408	16080306.729	.016	C	GPS - STATIC	2020	HTH13
2733152.733	788887.553	1486995.503	16080306.675	.131	3	GPS - RTRN	2017	RTRN2017

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2733152.618	788887.592	1486995.389	16080306.714	.033	C	GPS - STATIC	2020	HTH13

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SIAN-DQ6420-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SIAN-DQ6420-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SIAN-DQ6420-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

SICK MNDT

Mn/DOT Name: SICK MNDT **NGS Name:** SICK

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	35	111 N	26 W	442242.47	935433.48		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)

Disk Type
SURVEY DISK

Mon. Agency
MNDT

Description: (1991) **Stamping:** SICK 1991

6.0 MILES SOUTH OF LE SUEUR, 5.6 MILES SOUTH ON TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 93, THEN 0.4 MILE SOUTH ON COUNTY ROAD 109, 35.0 FEET WEST OF COUNTY ROAD 109, 14.9 FEET NORTH OF A POWER POLE, 3.5 FEET SOUTH-SOUTHEAST OF A WITNESS POST.

Station Notes
NOW STATION HANK MNDT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Geoid Separations(ft): GEOID18 = -92.752 12B = -92.749 09 = -92.670 03 = -92.506

Lat/Lon and County Coordinates (Feet)

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 42.47885	93 54 33.48754	297105.869	167951.511	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648379.166	830599.045	1402761.159	16123037.615	.033	C	GPS - STATIC	1991	HLESU

SILVER

Mn/DOT Name: SILVER **NGS Name:** SILVER

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP1983 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	2	110 N	25 W	442125.39	934732.10	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2013) **Stamping:** SILVER 2013

3.1 MILES NORTHEAST OF CLEVELAND, 2.8 MILES NORTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 15 IN CLEVELAND, AT TRUNK HIGHWAY 99 MILEPOINT 22.6, 30.0 FEET SOUTHEAST OF TRUNK HIGHWAY 99, 15.0 FEET NORTHEAST OF A FIELD ENTRANCE, 6.0 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.267	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1035.274	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1035.270	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.274	.262		942.232	.197	2011	GPS - RTRN	2024	RTRN2024
1035.251	.262		942.223	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -93.038 12B = -93.031 09 = -92.943 03 = -92.759

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 25.38971	93 47 32.10088	327648.024	159876.237	.131	3	GPS - RTRN	2024	RTRN2024
44 21 25.38952	93 47 32.10096	327648.018	159876.218	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679001.559	822848.871	1433278.463	16114916.332	.131	3	GPS - RTRN	2024	RTRN2024
2679001.553	822848.852	1433278.457	16114916.313	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SILVER-DP1983-3SE-16APR2024.jpg	SE	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SILVER-DP1983-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SILVER-DP1983-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ST PETER TV MAST

Mn/DOT Name: ST PETER TV MAST
NGS Name: ST PETER TV MAST
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2935 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	27	110 N	26 W	441830.77	935553.03		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1978	2024	DESTROYED	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	RADIO/TV MAST	MNDT

Description: (1978)

Stamping:

2.0 MILES EAST OF ST. PETER, 1.0 MILE SOUTHEAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND TRUNK HIGHWAY 169 IN ST. PETER, THEN 0.7 MILE SOUTHEAST ALONG TOWNSHIP ROAD 110, THEN 0.6 MILE SOUTHEAST ALONG COUNTY ROAD 107, AT THE WEST END OF LAKE EMILY.

Station Notes

THE CONCRETE FOOTING HAS BEEN DAMAGED.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.989 12B = -92.979 09 = -92.900 03 = -92.752

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position Latitude	Geodetic Position Longitude	Le Sueur County X	Le Sueur County Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 18 30.76737	93 55 53.02626	291080.274	142517.019	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position Latitude	Geodetic Position Longitude	Le Sueur County X	Le Sueur County Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 18 30.76273	93 55 53.02205	291080.576	142516.546	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position Latitude	Geodetic Position Longitude	X	Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
44 18 30.88023	93 55 52.18145			.100	4	CLASSICAL SURVEY	1980	16297

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone X	MN State Plane - South Zone Y	UTM - Zone 15 X	UTM - Zone 15 Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2642624.173	805105.139	1396697.093	16097622.433	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone X	MN State Plane - South Zone Y	UTM - Zone 15 X	UTM - Zone 15 Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2642624.480	805104.670	1396697.394	16097621.959	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone X	MN State Plane - South Zone Y	X	Y	Acc	Order	Determination Method	Project Info Year	Project Info Reference
2018019.447	477028.196			.100	4	CLASSICAL SURVEY	1980	16297

Station Photos

Type	File Name	Dir	Date
Location:			
Monument:			
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ST_PETER_TV_MAST-PP2935-1-12APR2010.jpg		Apr 12, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: STA 14 EDJ **NGS Name:** STA 14 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2929 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	31	111 N	25 W	442303.39	935203.78		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2019	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

4.4 MILES SOUTHEAST OF LE SUEUR, 6.0 MILES SOUTH THEN EAST ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND MINNESOTA AVENUE IN LE SUEUR, 3.9 MILES WEST OF ST. HENRY, AT THE JUNCTION OF TRUNK HIGHWAY 112 AND TOWNSHIP ROAD 76.

Stamping:

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1000.326	.262		907.935	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.789 12B = -92.782 09 = -92.700 03 = -92.529

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.38988	93 52 03.77905	307998.084	169968.716	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.38474	93 52 03.77530	307998.352	169968.194	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.52684	93 52 02.95588			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2659248.095	832731.332	1413652.454	16125036.503	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2659248.369	832730.812	1413652.720	16125035.980	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2034642.190	504656.618			.100	3	CLASSICAL SURVEY	1982	16847

STA 15 EDJ

Mn/DOT Name: STA 15 EDJ **NGS Name:** STA 15 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2928 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	25 W	442302.43	934820.80		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2019	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

0.9 MILE WEST OF ST. HENRY, 0.9 ALONG TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND COUNTY ROAD 112 IN ST. HENRY.

Stamping:

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.106	.262		921.704	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.821 12B = -92.818 09 = -92.736 03 = -92.546

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.43345	93 48 20.80088	324190.482	169732.555	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.42840	93 48 20.79683	324190.771	169732.041	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.57123	93 48 19.98494			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2675440.161	832666.821	1429838.161	16124774.327	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2675440.457	832666.310	1429838.450	16124773.813	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2050834.192	504592.236			.100	3	CLASSICAL SURVEY	1982	16847

STA 16 EDJ

Mn/DOT Name: STA 16 EDJ
NGS Name: STA 16 EDJ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2885 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	29	111 N	24 W	442304.07	934351.99		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

IN THE SOUTH PART OF LE CENTER, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND SOUTH PARK AVENUE IN LE CENTER, ALONG TRUNK HIGHWAY 99.

Stamping:

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.226	.262		955.986	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.674 12B = -92.677 09 = -92.582 03 = -92.385

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.07357	93 43 51.99037	343713.562	169747.018	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.06858	93 43 51.98595	343713.879	169746.510	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.21258	93 43 51.18318			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2694959.672	832888.195	1449353.492	16124757.280	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2694959.994	832887.691	1449353.808	16124756.772	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2070353.622	504813.787			.100	3	CLASSICAL SURVEY	1982	16847

Mn/DOT Name: STA 17 EDJ **NGS Name:** STA 17 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2884 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	26	111 N	24 W	442303.64	934113.05		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

2.0 MILES EAST OF LE CENTER, 2.0 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11.

Stamping:

Station Notes

COUNTY ROAD 5 - STA 16 IS AT THE INTERSECTION OF COUNTY ROAD 11.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.176	.262		980.152	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.451 12B = -92.451 09 = -92.362 03 = -92.168

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.63582	93 41 13.04781	355256.144	169621.417	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.63083	93 41 13.04317	355256.478	169620.909	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 03.77565	93 41 12.24574			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706501.565	832884.952	1460891.196	16124613.090	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2706501.904	832884.448	1460891.529	16124612.582	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2081895.471	504810.659			.100	3	CLASSICAL SURVEY	1982	16847

STA 20 EDJ

Mn/DOT Name: STA 20 EDJ **NGS Name:** STA 20 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2877 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	25	111 N	23 W	442305.42	933128.48		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	USGS

Description: (2009)

Stamping:

3.9 MILES SOUTHEAST OF MONTGOMERY, 2.48 MILES EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND COUNTY ROAD 3 IN MONTGOMERY, THEN 3.0 MILES SOUTH ALONG COUNTY ROAD 137.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1081.035	.262		990.116	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -91.292 12B = -91.299 09 = -91.214 03 = -91.040

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.42499	93 31 28.47819	397710.625	169557.323	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.41969	93 31 28.47271	397711.020	169556.785	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 05.56803	93 31 27.69508			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748949.293	833270.846	1503327.935	16124480.371	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748949.694	833270.312	1503328.329	16124479.832	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2124343.028	505196.990			.100	3	CLASSICAL SURVEY	1982	16847

STA 23 EDJ

Mn/DOT Name: STA 23 EDJ
NGS Name: STA 23 EDJ
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2879 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	12	110 N	23 W	442103.09	933129.26		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	SEE DESCRIPTION	USGS

Description: (2009)

Stamping:

3.48 MILES NORTHEAST OF KILKENNY, 2.34 MILES EAST-SOUTHEAST ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND OAK STREET IN KILKENNY, THEN 3.0 MILES NORTH ON COUNTY ROAD 37.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1083.003	.262		991.697	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -91.706 12B = -91.716 09 = -91.621 03 = -91.440

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 03.09063	93 31 29.26198	397594.392	157168.659	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 03.08516	93 31 29.25684	397594.763	157168.103	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 03.23311	93 31 28.47746			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748964.393	820883.117	1503191.721	16112097.139	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748964.769	820882.566	1503192.091	16112096.583	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2124358.261	492809.319			.100	3	CLASSICAL SURVEY	1982	16847

Mn/DOT Name: STA 24 EDJ **NGS Name:** STA 24 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2880 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	26	110 N	23 W	441826.48	933301.15		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

1.15 MILES EAST-SOUTHEAST OF KILKENNY, 1.15 MILES ALONG COUNTY ROAD 2 FROM THE JUNCTION OF COUNTY ROAD 2 AND OAK STREET IN KILKENNY.

Stamping:

Station Notes

THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1095.142	.262		1003.164	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -92.405 12B = -92.415 09 = -92.313 03 = -92.123

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 26.48232	93 33 01.14741	390836.611	141341.875	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 26.47681	93 33 01.14295	390836.933	141341.316	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 18 26.62356	93 33 00.35807			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2742375.546	804987.471	1496411.292	16096287.956	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2742375.874	804986.915	1496411.612	16096287.397	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2117769.617	476913.679			.100	3	CLASSICAL SURVEY	1982	16847

STA 29 EDJ

Mn/DOT Name: STA 29 EDJ **NGS Name:** STA 29 EDJ

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP2909 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	109 N	24 W	441337.64	934234.14		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1963	2010	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	USGS

Description:

2.39 MILES NORTHWEST OF ELYSIAN, 1.3 MILES NORTH-NORTHWEST ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND FRANK AVENUE NORTHEAST IN ELYSIAN, THEN 1.4 MILES NORTHWEST ALONG COUNTY ROAD 13.

Stamping:

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1117.452	.262		1023.807	.197	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -94.107 12B = -94.111 09 = -94.029 03 = -93.829

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 37.64335	93 42 34.14138	348963.000	112344.632	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 37.63882	93 42 34.13907	348963.165	112344.172	.131	3	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 13 37.78012	93 42 33.32997			.100	3	CLASSICAL SURVEY	1982	16847

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2700816.579	775551.468	1454508.810	16067369.860	.131	3	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2700816.748	775551.010	1454508.974	16067369.400	.131	3	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2076211.153	447477.387			.100	3	CLASSICAL SURVEY	1982	16847

STHEN MNDT

Mn/DOT Name: STHEN MNDT **NGS Name:** STHEN

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4675 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	26	111 N	25 W	442306.74	934719.15	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 20 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** STHEN 1991

3.0 MILES WEST OF LE CENTER, IN ST. HENRY, 1.8 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99, THEN 0.1 MILE NORTH ALONG COUNTY ROAD 112, 24.0 FEET WEST OF COUNTY ROAD 112 (261ST AVENUE), 8.0 FEET SOUTH OF A FIELD ENTRANCE, 82.8 FEET NORTH-NORTHEAST OF A POWER POLE, 44.6 FEET SOUTH-SOUTHEAST OF THE END OF A STEEL FENCE POST, 9.6 FEET NORTH OF A WITNESS POST.

Station Pair: TRAX MNDT RESET - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1018.505	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1018.505	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1018.505	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1018.518	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1018.518	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR
1018.518	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
1018.512	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1018.338	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1018.466	.262		925.664	.197	2011	GPS - RTRN	2024	RTRN2024
1018.541	.262		925.740	.197	2011	GPS - OPUS	2019	GPSBM
1018.525	.262		925.723	.197	2011	GPS - RTRN	2019	RTRN2019
1018.440	.262		925.638	.197	2011	GPS - RTRN	2013	RTRN2013
			925.759	.009	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			925.845	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1018.502	.131		925.959	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1018.502	.131		925.959	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.802 12B = -92.802 09 = -92.713 03 = -92.519

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.73608	93 47 19.15116	328671.158	170131.928	.131	3	GPS - RTRN	2024	RTRN2024
44 23 06.73577	93 47 19.15195	328671.101	170131.897	.131	3	GPS - OPUS	2019	GPSBM
44 23 06.73441	93 47 19.14876	328671.331	170131.758	.131	3	GPS - RTRN	2019	RTRN2019
44 23 06.73609	93 47 19.15087	328671.179	170131.929	.131	3	GPS - RTRN	2013	RTRN2013
44 23 06.73568	93 47 19.15112	328671.161	170131.888	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.73575	93 47 19.15189	328671.105	170131.895	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.73522	93 47 19.15143	328671.138	170131.841	.033	C	ADJUSTMENT	2004	GPS2027
44 23 06.73522	93 47 19.15143	328671.138	170131.841	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 06.73140	93 47 19.15109	328671.160	170131.454	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679915.821	833113.612	1434317.714	16125166.314	.131	3	GPS - RTRN	2024	RTRN2024
2679915.764	833113.580	1434317.656	16125166.283	.131	3	GPS - OPUS	2019	GPSBM
2679915.996	833113.443	1434317.886	16125166.144	.131	3	GPS - RTRN	2019	RTRN2019
2679915.842	833113.613	1434317.735	16125166.315	.131	3	GPS - RTRN	2013	RTRN2013
2679915.824	833113.571	1434317.716	16125166.274	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679915.768	833113.578	1434317.660	16125166.281	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679915.802	833113.524	1434317.693	16125166.228	.033	C	ADJUSTMENT	2004	GPS2027
2679915.802	833113.524	1434317.693	16125166.228	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679915.827	833113.138	1434317.714	16125165.841	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/STHEN-AE4675-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/STHEN-AE4675-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/STHEN-AE4675-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Geodetic Data Sheet (Feet)
GSID Station # 105777

SUNNO

04/28/2026
Sheet Help

Mn/DOT Name: SUNNO
NGS Name: SUNNO
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6395 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	34	111 N	24 W	442302.91	934146.62	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 24 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** SUNNO 2016

1.8 MILES EAST OF LE CENTER, 1.55 MILES EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 28.1, 63.5 FEET SOUTH OF TRUNK HIGHWAY 99, 88.9 FEET WEST-NORTHWEST OF A CABLE BOX, 1.5 FEET NORTH OF A WITNESS POST.

Station Pair: MONSON - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.901	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1072.924	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1072.921	.262		980.408	.197	2011	GPS - RTRN	2024	RTRN2024
1072.931	.262		980.421	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -92.510 12B = -92.510 09 = -92.421 03 = -92.228

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 02.91258	93 41 46.61805	352817.661	169564.820	.131	3	GPS - RTRN	2024	RTRN2024
44 23 02.91214	93 41 46.61669	352817.759	169564.775	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2704064.108	832802.520	1458453.614	16124560.455	.131	3	GPS - RTRN	2024	RTRN2024
2704064.207	832802.476	1458453.712	16124560.410	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SUNNO-DQ6395-3S-17APR2024.jpg	S	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SUNNO-DQ6395-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/SUNNO-DQ6395-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TBM 1 L3473

Mn/DOT Name: TBM 1 L3473 **NGS Name:** TBM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1737 Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	10	110 N	25 W	442030.00	934828.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
STRUCTURE (MASSIVE)	SPIKE	NGS

Description: (1934) **Stamping:** TBM 1

1.5 MILES NORTHEAST FROM CLEVELAND, 1.5 MILES NORTHEAST ALONG THE CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD FROM THE STATION AT CLEVELAND, 148.5 FEET NORTHEAST OF A STATION ONE MILE SIGN, 370.0 FEET NORTHEAST OF SECTION POST NUMBER 1053, 260.0 FEET NORTHEAST OF A ROAD CROSSING, IN AN OAK TIE, IN THE MIDDLE OF THE TRACK, A TRACK SPIKE, MARKED BY THE CHISELED LETTERS TBM1.

Station Notes

THE RAILROAD TRACKS HAVE BEEN REMOVED, NO VISIBLE EVIDENCE REMAINS.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.143 12B = -93.136 09 = -93.048 03 = -92.871

TBM 1 VGLRD

Mn/DOT Name: TBM 1 VGLRD
NGS Name: TBM 1 VGLRD
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ7733 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	112 N	25 W	443159.44	935308.60	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=NO Vert=NO	YES		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (<10 FT) (DEPTH 5 FT)	METAL ROD	MNDT

Description: (2016)

Stamping:

1.3 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, AT TRUNK HIGHWAY 19 MILEPOINT 135.4, 25.0 FEET EAST OF TRUNK HIGHWAY 19, 122.5 FEET SOUTHEAST OF STATION 4004 AF.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
778.292	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
778.365	.262		686.646	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -91.722 12B = -91.712 09 = -91.657 03 = -91.512

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 31 59.44139	93 53 08.60459	303789.842	224297.151	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654464.819	887005.637	1409534.149	16179350.953	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_1_VGLRD-DQ7733-3SE-23APR2024.jpg	SE	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_1_VGLRD-DQ7733-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_1_VGLRD-DQ7733-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TBM 2 L3473

Mn/DOT Name: TBM 2 L3473 **NGS Name:** TBM 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1749 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	10	111 N	23 W	442616.00	933458.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
CONCRETE FOOTING - SMALL	CHISELED SQUARE	NGS

Description: (1934) **Stamping:**

IN MONTGOMERY, AT THE JUNCTION OF ASH AVENUE SOUTHWEST AND 2ND STREET NORTHWEST, ON THE SIDEWALK IN FRONT OF THE CITY HALL, 15.0 FEET SOUTHEAST OF STATION MONTGOMERY, A CHISELED SQUARE, MARKED T B M 2.

Station Notes

NEW BUILDING IN THE 1970'S.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.827 12B = -90.850 09 = -90.758 03 = -90.594

TBM 2 VBPLA

Mn/DOT Name: TBM 2 VBPLA
NGS Name: TBM 2 VBPLA
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DP5455 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	112 N	25 W	443204.09	935308.75	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2014	2024	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 12 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
PILES AND POLES	NAIL	MNDT

Description: (2014)

Stamping:

1.4 MILES EAST-NORTHEAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON, AT TRUNK HIGHWAY 19 MILEPOINT 135.5. THE TBM IS A NAIL IN THE SIDE OF A GUARD RAIL POST.

Station Notes

THE GUARD RAIL HAS BEEN REMOVED.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
830.582	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
830.618	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
830.635	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA

Geoid Separations(ft): GEOID18 = -91.709 12B = -91.699 09 = -91.640 03 = -91.502

*** No Horizontal Positions in the Database ***

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_2_VBPLA-DP5455-3SE-02MAY2014.jpg	SE	May 2, 2014
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_2_VBPLA-DP5455-2-02MAY2014.jpg		May 2, 2014
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TBM_2_VBPLA-DP5455-1-02MAY2014.jpg		May 2, 2014

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TBM 56 L144-1

Mn/DOT Name: TBM 56 L144-1

NGS Name: TBM 56

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5459 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	112 N	25 W	443211.00	935315.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

0.8 MILE NORTHEAST OF HENDERSON, 1.1 MILES WEST-NORTHWEST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON, 0.7 MILE NORTH ALONG A RAILROAD FROM THE HENDERSON STATION.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.696 12B = -91.686 09 = -91.627 03 = -91.489

TBM 57 L144-1

Mn/DOT Name: TBM 57 L144-1 **NGS Name:** TBM 57

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5460 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	112 N	25 W	443051.00	935308.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.25 MILES SOUTHEAST OF HENDERSON, 0.7 MILE SOUTH ALONG A RAILROAD FROM THE HENDERSON STATION.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.909 12B = -91.903 09 = -91.844 03 = -91.686

TBM 58 L144-1

Mn/DOT Name: TBM 58 L144-1 **NGS Name:** TBM 58

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5461 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	13	112 N	26 W	443008.00	935327.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.8 MILES SOUTHEAST OF HENDERSON, 1.6 MILES SOUTH ALONG A RAILROAD FROM THE HENDERSON STATION.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.034 12B = -92.027 09 = -91.972 03 = -91.804

TBM 60 L144-1

Mn/DOT Name: TBM 60 L144-1 **NGS Name:** TBM 60

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	25	112 N	26 W	442902.00	935401.00		

NGS ACRN: BU5463 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

IN LE SUEUR, 0.7 MILE NORTH ALONG A RAILROAD FROM DIVISION STREET.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.211 12B = -92.208 09 = -92.139 03 = -91.968

TBM 61 L144-1

Mn/DOT Name: TBM 61 L144-1 **NGS Name:** TBM 61

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5464 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	35	112 N	26 W	442755.00	935441.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

IN LE SUEUR, AT THE JUNCTION OF NORTH MAIN STREET AND GROVE STREET IN LE SUEUR.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.349 12B = -92.349 09 = -92.277 03 = -92.103

TBM 62 L144-1

Mn/DOT Name: TBM 62 L144-1 **NGS Name:** TBM 62

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5465 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	111 N	26 W	442724.00	935502.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

IN LE SUEUR, AT THE JUNCTION OF SOUTH 2ND STREET AND DAVIS STREET IN LE SUEUR.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.401 12B = -92.401 09 = -92.329 03 = -92.155

TBM 63 L144-1

Mn/DOT Name: TBM 63 L144-1 **NGS Name:** TBM 63

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5466 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	2	111 N	26 W	442651.00	935524.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

IN LE SUEUR, 0.3 MILE SOUTHWEST ALONG COUNTY ROAD 36 FROM THE JUNCTION OF COUNTY ROAD 36 AND SOUTH 3RD STREET IN LE SUEUR.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.454 12B = -92.454 09 = -92.375 03 = -92.201

TBM 64 L144-1

Mn/DOT Name: TBM 64 L144-1

NGS Name: TBM 64

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5467 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	10	111 N	26 W	442605.00	935546.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2016)

Stamping:

1.3 MILES SOUTH OF LE SUEUR, 1.3 MILES SOUTH ALONG COUNTY ROAD 36 FROM THE JUNCTION OF COUNTY ROAD 36 AND SOUTH 3RD STREET, THEN 0.1 MILE WEST ON 356TH LANE.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.513 12B = -92.513 09 = -92.428 03 = -92.257

TBM 65 L144-1

Mn/DOT Name: TBM 65 L144-1

NGS Name: TBM 65

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5468 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	111 N	26 W	442531.00	935600.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

2.0 MILES SOUTH OF LE SUEUR, 2.7 MILES SOUTH ALONG A RAILROAD FROM BRIDGE STREET IN LE SUEUR.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.546 12B = -92.549 09 = -92.464 03 = -92.296

TBM 66 L144-1

Mn/DOT Name: TBM 66 L144-1 **NGS Name:** TBM 66

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5469 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	111 N	26 W	442515.00	935606.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

2.3 MILES SOUTH OF LE SUEUR, 3.0 MILES SOUTH ALONG A RAILROAD FROM BRIDGE STREET IN LE SUEUR.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.562 12B = -92.562 09 = -92.480 03 = -92.313

TBM 67 L144-1

Mn/DOT Name: TBM 67 L144-1 **NGS Name:** TBM 67

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5470 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	111 N	26 W	442500.00	935612.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

2.3 MILES NORTH OF OTTAWA, 2.3 MILES NORTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.575 12B = -92.575 09 = -92.493 03 = -92.326

TBM 68 L144-1

Mn/DOT Name: TBM 68 L144-1 **NGS Name:** TBM 68

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5471 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	111 N	26 W	442427.00	935626.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.6 MILES NORTH OF OTTAWA, 1.6 MILES NORTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.608 12B = -92.605 09 = -92.519 03 = -92.359

TBM 69 L144-1

Mn/DOT Name: TBM 69 L144-1

NGS Name: TBM 69

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5472 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	27	111 N	26 W	442316.00	935639.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

0.3 MILE NORTH OF OTTAWA, 0.3 MILE NORTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.667 12B = -92.664 09 = -92.579 03 = -92.421

TBM 70 L144-1

Mn/DOT Name: TBM 70 L144-1 **NGS Name:** TBM 70

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5473 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	34	111 N	26 W	442246.00	935639.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

0.3 MILE SOUTH OF OTTAWA, 0.3 MILE SOUTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.693 12B = -92.690 09 = -92.605 03 = -92.451

TBM 71 L144-1

Mn/DOT Name: TBM 71 L144-1 **NGS Name:** TBM 71

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5474 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	3	110 N	26 W	442159.00	935634.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.22 MILES SOUTH OF OTTAWA, 1.22 MILES SOUTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.743 12B = -92.739 09 = -92.654 03 = -92.500

TBM 72 L144-1

Mn/DOT Name: TBM 72 L144-1 **NGS Name:** TBM 72

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5475 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	3	110 N	26 W	442128.00	935621.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.86 MILES SOUTH OF OTTAWA, 1.86 MILES SOUTH ALONG A RAILROAD FROM COUNTY ROAD 23 IN OTTAWA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.785 12B = -92.785 09 = -92.693 03 = -92.542

TBM 74 L144-1

Mn/DOT Name: TBM 74 L144-1 **NGS Name:** TBM 74

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5477 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	110 N	26 W	442017.00	935604.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

0.2 MILE EAST OF ST. PETER, 1.27 MILES NORTHEAST ALONG A RAILROAD FROM TRUNK HIGHWAY 99 IN ST. PETER.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.887 12B = -92.884 09 = -92.775 03 = -92.638

TBM 75 L144-1

Mn/DOT Name: TBM 75 L144-1

NGS Name: TBM 75

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5478 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	110 N	26 W	441947.00	935625.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

0.2 MILE EAST OF ST. PETER, 0.5 MILE NORTHEAST ALONG A RAILROAD FROM TRUNK HIGHWAY 99 IN ST. PETER.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.897 12B = -92.890 09 = -92.792 03 = -92.651

TBM 76 L144-1

Mn/DOT Name: TBM 76 L144-1 **NGS Name:** TBM 76

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5479 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	22	110 N	26 W	441919.00	935646.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2011	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2010) **Stamping:**

0.1 MILE SOUTHEAST OF ST. PETER, ALONG A RAILROAD AT TRUNK HIGHWAY 99 IN ST. PETER.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.900 12B = -92.894 09 = -92.802 03 = -92.657

TBM 77 L144-1

Mn/DOT Name: TBM 77 L144-1 **NGS Name:** TBM 77

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5480 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	21	110 N	26 W	441847.00	935708.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	2011	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

0.2 MILE EAST OF ST. PETER, 0.7 MILE SOUTH-SOUTHWEST ALONG A RAILROAD FROM TRUNK HIGHWAY 99 IN ST. PETER.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.903 12B = -92.897 09 = -92.805 03 = -92.667

TBM 78 L144-1

Mn/DOT Name: TBM 78 L144-1 **NGS Name:** TBM 78

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5481 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	33	110 N	26 W	441740.00	935757.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

IN KASOTA, 0.2 MILE SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.907 12B = -92.903 09 = -92.808 03 = -92.680

TBM 79 L144-1

Mn/DOT Name: TBM 79 L144-1

NGS Name: TBM 79

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5482 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	110 N	26 W	441708.00	935820.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

IN KASOTA, 0.8 MILE SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.900 12B = -92.900 09 = -92.808 03 = -92.680

TBM 80 L144-1

Mn/DOT Name: TBM 80 L144-1 **NGS Name:** TBM 80

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5483 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	5	109 N	26 W	441623.00	935834.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.0 MILE SOUTH OF KASOTA, 1.8 MILES SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.913 12B = -92.916 09 = -92.821 03 = -92.693

TBM 81 L144-1

Mn/DOT Name: TBM 81 L144-1 **NGS Name:** TBM 81

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5484 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	8	109 N	26 W	441548.00	935839.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

1.5 MILES SOUTH OF KASOTA, 2.4 MILES SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.926 12B = -92.930 09 = -92.838 03 = -92.707

TBM 82 L144-1

Mn/DOT Name: TBM 82 L144-1 **NGS Name:** TBM 82

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5485 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	8	109 N	26 W	441520.00	935844.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009) **Stamping:**

2.0 MILES SOUTH OF KASOTA, 3.0 MILES SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.933 12B = -92.939 09 = -92.848 03 = -92.716

TBM 83 L144-1

Mn/DOT Name: TBM 83 L144-1

NGS Name: TBM 83

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: BU5486 Get Map
NGS Quad / Sta Num : 44093334/
USGS Quad: MANKATO EAST

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	17	109 N	26 W	441445.00	935849.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1930	1930	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	NGS

Description: (2009)

Stamping:

2.6 MILES SOUTH OF KASOTA, 3.65 MILES SOUTHWEST ALONG A RAILROAD FROM WEST ELM STREET IN KASOTA.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -92.943 12B = -92.949 09 = -92.857 03 = -92.729

TBM A L23222

Mn/DOT Name: TBM A L23222 **NGS Name:** TBM A

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4023 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	112 N	25 W	443110.00	935306.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	MNDT

Description: (2009) **Stamping:**

1.1 MILES SOUTHEAST OF HENDERSON, 0.35 MILE SOUTH OF HENDERSON STATION.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.857 12B = -91.850 09 = -91.791 03 = -91.640

TBM B L23222

Mn/DOT Name: TBM B L23222 **NGS Name:** TBM B

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4024 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	6	112 N	25 W	443155.00	935312.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	MNDT

Description: (2009) **Stamping:**

0.7 MILE EAST OF HENDERSON, 0.4 MILE NORTH OF HENDERSON STATION.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.739 12B = -91.729 09 = -91.673 03 = -91.529

TBM C L23222

Mn/DOT Name: TBM C L23222 **NGS Name:** TBM C

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4025 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	112 N	25 W	443219.00	935307.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	MNDT

Description: (2009)

Stamping:

1.1 MILES NORTHEAST OF HENDERSON, 1.3 MILES EAST AND NORTH ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.663 12B = -91.653 09 = -91.594 03 = -91.457

TBM D L23222

Mn/DOT Name: TBM D L23222 **NGS Name:** TBM D

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4026 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	6	112 N	25 W	443234.00	935228.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
UNKNOWN	UNMONUMENTED	MNDT

Description: (2009) **Stamping:**

1.7 MILES NORTHEAST OF HENDERSON, 2.2 MILES EAST AND NORTH ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND NORTH 2ND STREET IN HENDERSON.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.561 12B = -91.548 09 = -91.502 03 = -91.368

TBM E L23222

Mn/DOT Name: TBM E L23222 **NGS Name:** TBM E

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4027 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	112 N	25 W	443235.00	935150.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
IRON ROD	UNMONUMENTED	MNDT

Description: (2008) **Stamping:**

7.4 MILES SOUTHWEST OF BELLE PLAINE, 0.7 MILE WEST ALONG TRUNK HIGHWAY 19 FROM THE INTERSECTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.509 12B = -91.493 09 = -91.453 03 = -91.315

TBM F L23222

Mn/DOT Name: TBM F L23222 **NGS Name:** TBM F

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AM4028 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	112 N	25 W	443235.00	935122.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1973	1973	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	UNMONUMENTED	MNDT

Description: (2008)

Stamping:

7.2 MILES SOUTHWEST OF BELLE PLAINE, 0.4 MILE WEST ALONG TRUNK HIGHWAY 19 FROM THE INTERSECTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -91.473 12B = -91.457 09 = -91.414 03 = -91.276

TERY MNDT TEMP

Mn/DOT Name: TERY MNDT TEMP
NGS Name: TERY TEMP
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3035 Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	4	112 N	23 W	443236.94	933526.29		2

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
PIPE (<10 FT)	UNMONUMENTED	MNDT

Description: (2010) **Stamping:** TERY 1980

IN THE WEST EDGE OF NEW PRAGUE, AT TRUNK HIGHWAY 19 MILEPOINT 150.5, 16.4 FEET SOUTH OF TRUNK HIGHWAY 19, 87.84 FEET SOUTH OF STATION 4004 AD, OPPOSITE THE SOUTHWEST CORNER OF A CEMETERY, 18.0 FEET WEST OF THE NORTH LEG OF A SPEED SIGN.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.762	.197		925.320	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.795						RECIPROCAL VERTICAL ANGLE	1981	HORZ

Geoid Separations(ft): GEOID18 = -89.731 12B = -89.724 09 = -89.662 03 = -89.521

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.94350	93 35 26.29091	380763.570	227525.895	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 36.93755	93 35 26.28991	380763.639	227525.292	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.06848	93 35 25.45153			.100	2	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731390.790	891049.620	1486482.347	16182452.244	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2731390.865	891049.018	1486482.415	16182451.641	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2106787.968	562973.385			.100	2	CLASSICAL SURVEY	1982	16778

TRAX MNDT

Mn/DOT Name: TRAX MNDT **NGS Name:** TRAX

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7035 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	111 N	25 W	442243.15	934718.33		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2010	DESTROYED	Horz=NO Vert=NO	YES		RECESSED 1 IN.	MARKER W/BAR MAGNET

Monument Type
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 10 FT)

Disk Type
HORIZONTAL CONTROL DISK

Mon. Agency
MNDT

Description: (2016) **Stamping:** TRAX 1991

3.0 MILES WEST-SOUTHWEST OF LE CENTER, 1.8 MILES WEST ON TRUNK HIGHWAY 112 FROM THE JUNCTION OF TRUNK HIGHWAY 112 AND TRUNK HIGHWAY 99, THEN 0.4 MILE SOUTH ON COUNTY ROAD 112, 26.5 FEET EAST OF COUNTY ROAD 112/261ST AVENUE, 26.3 FEET SOUTH OF A POWER POLE, 180.1 FEET NORTH OF A POWER POLE WITH A TRANSFORMER.

Station Notes
THE ROD IS BENT OVER NORTHEASTERLY. THE DISK WAS REMOVED.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			922.239	.008	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			922.324	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1015.057	.131		922.442	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1015.057	.131		922.442	.066	1996	GPS - STATIC	2004	HLESU

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.795						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.857 12B = -92.854 09 = -92.766 03 = -92.575

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 43.14565	93 47 18.33099	328711.580	167742.466	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 43.14572	93 47 18.33175	328711.525	167742.474	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 43.14517	93 47 18.33129	328711.558	167742.418	.033	C	ADJUSTMENT	2004	GPS2027
44 22 43.14517	93 47 18.33129	328711.558	167742.418	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 43.14104	93 47 18.33030	328711.626	167742.000	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679981.561	830724.996	1434354.266	16122777.733	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679981.505	830725.003	1434354.211	16122777.741	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679981.539	830724.948	1434354.244	16122777.685	.033	C	ADJUSTMENT	2004	GPS2027
2679981.539	830724.948	1434354.244	16122777.685	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679981.612	830724.530	1434354.312	16122777.266	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX-DG7035-3E-12MAY2004.jpg	E	May 12, 2004
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX-DG7035-2-12MAY2004.jpg		May 12, 2004
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX-DG7035-1-04MAY2010.jpg		May 4, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TRAX MNDT RESET

Mn/DOT Name: TRAX MNDT RESET
NGS Name: TRAX RESET
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	111 N	25 W	442243.15	934718.33	2	3

NGS ACRN: DP1990 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2013	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 10 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** TRAX 1991 2013

3.0 MILES WEST-SOUTHWEST OF LE CENTER, 1.8 MILES WEST ALONG COUNTY ROAD 22 FROM THE JUNCTION OF COUNTY ROAD 22 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 0.4 MILE SOUTH ALONG COUNTY ROAD 112, 26.5 FEET EAST OF COUNTY ROAD 112 (261ST AVENUE), 180.1 FEET NORTH OF A POWER POLE WITH A TRANSFORMER, 26.3 FEET SOUTH OF A POWER POLE, 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: STHEN MNDT - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.355	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1014.355	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1014.355	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1014.365	.016	2/1				VERTICAL ADJUSTMENT	2014	00000825
1014.361	.016	2/1				VERTICAL CONTROL SURVEY	2013	VSUEUR

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1014.365	.262		921.507	.197	2011	GPS - RTRN	2024	RTRN2024
1014.293	.262		921.435	.197	2011	GPS - RTRN	2013	RTRN2013

Geoid Separations(ft): GEOID18 = -92.857 12B = -92.854 09 = -92.766 03 = -92.575

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 22 43.14607	93 47 18.33332	328711.411	167742.510	.131	3	GPS - RTRN	2024	RTRN2024
44 22 43.14623	93 47 18.33298	328711.436	167742.526	.131	3	GPS - RTRN	2013	RTRN2013

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2679981.391	830725.038	1434354.097	16122777.777	.131	3	GPS - RTRN	2024	RTRN2024
2679981.416	830725.055	1434354.122	16122777.793	.131	3	GPS - RTRN	2013	RTRN2013

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX_RESET-DP1990-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX_RESET-DP1990-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TRAX_RESET-DP1990-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TT 14 GAF

Mn/DOT Name: TT 14 GAF **NGS Name:** TT 14 GAF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	20	112 N	23 W	443002.00	933624.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2010	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (2016) **Stamping:** 14 GAF 1955 1053

3.4 MILES SOUTH-SOUTHWEST OF NEW PRAGUE, 1.0 MILE WEST OF TRUNK HIGHWAY 13, 280.0 FEET WEST OF A NORTH-SOUTH TOWNSHIP ROAD, 13.5 FEET WEST-SOUTHWEST OF AN 8.0 INCH DIAMETER ELM TREE, AT THE INTERSECTION OF COUNTY ROAD 143 AND 310TH STREET, 0.75 FOOT EAST-SOUTHEAST OF A WITNESS POST.

Station Notes

THE SURVEY MARK IS ON RAILROAD PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1052.583	.033	3				VERTICAL CONTROL SURVEY	1975	USGS-VERT

Geoid Separations(ft): GEOID18 = -90.239 12B = -90.243 09 = -90.174 03 = -90.033

*** No Horizontal Positions in the Database ***

TT 15 GAF

Mn/DOT Name: TT 15 GAF **NGS Name:** TT 15 GAF

County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	13	112 N	23 W	443002.73	933236.09		3

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	USGS

Description: (1955) **Stamping:** TT 15 GAF 1955 1036

3.0 MILES SOUTH AND 1.5 MILES EAST OF NEW PRAGUE, 31.0 FEET NORTH AND 368.0 FEET EAST OF THE CROSSROADS OF COUNTY ROAD 145-COUNTY ROAD 165 AND A TOWNSHIP ROAD, 368.0 FEET EAST OF THE INTERSECTION OF COUNTY ROAD 164 AND 310TH STREET, 79.0 FEET WEST OF A CORNER, 31.0 FEET NORTH OF A ROAD, 0.5 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.910	.033	3				VERTICAL CONTROL SURVEY	1975	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1036.097	.262		946.084	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -90.013 12B = -90.016 09 = -89.947 03 = -89.796

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 02.73381	93 32 36.09211	393012.190	211843.152	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2743803.481	875499.460	1498700.207	16166756.034	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_15_GAF-3N-23APR2024.jpg	N	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_15_GAF-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_15_GAF-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TT 19 GAF

Mn/DOT Name: TT 19 GAF

NGS Name: TT 19 GAF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	20	112 N	24 W	442957.00	934451.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1955) **Stamping:** 19 GAF 1955 1001

6.0 MILES WEST OF HEIDELBERG, 6.0 MILES EAST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 30 IN HEIDELBERG, THEN 0.9 MILE NORTH ALONG COUNTY ROAD 118, 360.0 FEET SOUTH AND 54.0 FEET EAST OF COUNTY ROAD 118 AT THE JUNCTION OF COUNTY ROAD 118 AND COUNTY ROAD 120 EAST, 5.0 FEET NORTH AND 3.0 FEET EAST OF A 24.0 INCH DIAMETER ELM TREE.

Station Notes

THE TIES PUT THE MARK ABOUT 15.0 FEET INTO A PLOWED FIELD, FOUND A LONG SQUARE CONCRETE WITH A ROD IN A DITCH AMONG THE ROCKS. IT APPEARS TO HAVE BEEN PULLED OUT. DID NOT FIND THE DISK.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.077	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.394 12B = -91.384 09 = -91.332 03 = -91.168

*** No Horizontal Positions in the Database ***

TT 20 GAF

Mn/DOT Name: TT 20 GAF
NGS Name: TT 20 GAF
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	15	112 N	24 W	443002.00	934126.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1955) **Stamping:** 20 GAF 1955 1036

3.0 MILES WEST AND 0.7 MILE NORTH OF HEIDELBERG, 3.0 MILES WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 30 IN HEIDELBERG, THEN 1.1 MILES NORTH THEN WEST ON COUNTY ROAD 121, 34.0 FEET NORTH AND 220.0 FEET EAST OF COUNTY ROAD 121 AT A PRIVATE ROAD WEST AND A CURVE, 1.0 FOOT NORTH AND 1.0 FOOT WEST OF A POWER POLE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1035.956	.033	3				VERTICAL CONTROL SURVEY	1975	USGS-VERT

Geoid Separations(ft): GEOID18 = -90.945 12B = -90.932 09 = -90.876 03 = -90.725

*** No Horizontal Positions in the Database ***

TT 21 GAF

Mn/DOT Name: TT 21 GAF **NGS Name:** TT 21 GAF

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	25	112 N	24 W	442909.09	933919.30		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 8 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE POST (PREFABRICATED)	BENCH MARK DISK	USGS

Description: (1955) **Stamping:** TT 21 GAF 1955 1031.1

1.5 MILES WEST OF HEIDELBERG, 1.5 MILES WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 30 IN HEIDELBERG, 40.0 FEET EAST OF A FIELD ENTRANCE, 33.0 FEET SOUTH OF THE CENTERLINE OF COUNTY ROAD 28 (320TH STREET), 15.0 FEET NORTH OF A POWER POLE.

Station Notes

NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.018	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1031.090	.262		940.284	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -90.807 12B = -90.804 09 = -90.738 03 = -90.584

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 09.08639	93 39 19.29774	363753.336	206576.717	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2714605.585	869923.833	1469444.899	16161539.514	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_21_GAF-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_21_GAF-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_21_GAF-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: TT 22 ES **NGS Name:** TT 22 ES

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093422/
USGS Quad: NEW PRAGUE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	12	112 N	23 W	443055.49	933128.97		3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	GOOD	Horz=NO Vert=NO	YES		PROJECTS 9 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	USGS

Description: (1955) **Stamping:** TT 22 ES 1955

2.0 MILES SOUTH AND 2.2 MILES EAST OF NEW PRAGUE, 1.8 MILES EAST ALONG TRUNK HIGHWAY 19/TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND COUNTY ROAD 37 IN NEW PRAGUE, THEN 1.92 MILES SOUTH ON COUNTY ROAD 29, 103.0 FEET WEST OF COUNTY ROAD 29, 100.0 FEET NORTH OF COUNTY ROAD 145, 0.3 FOOT EAST OF A WITNESS POST.

Station Notes
THE SURVEY MARK IS ON PRIVATE PROPERTY AND HAS BEEN ABANDONED FOR MNDOT GEODETIC USE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1086.973	.033	3				VERTICAL CONTROL SURVEY	1975	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1087.203	.262		997.308	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -89.895 12B = -89.895 09 = -89.829 03 = -89.678

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 55.49124	93 31 28.96658	397903.014	217162.236	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2748637.066	880869.448	1503597.658	16172064.893	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_22_ES-3W-23APR2024.jpg	W	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_22_ES-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TT_22_ES-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TT 37 MT

Mn/DOT Name: TT 37 MT

NGS Name: TT 37 MT

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	8	109 N	24 W	441602.00	934438.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2024	NOT FOUND	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1964) **Stamping:** TT 37 MT 1949

5.7 MILES NORTHWEST OF ELYSIAN, 1.6 MILES NORTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND LAKE AVENUE IN ELYSIAN, THEN 5.14 MILES NORTH AND WEST ALONG COUNTY ROAD 13, 878.0 FEET NORTH ALONG A ROAD (COUNTY ROAD 13) FROM A TEE-ROAD WEST, 218.0 FEET NORTH OF A FENCE CORNER, 18.0 FEET EAST OF THE CENTER OF THE ROAD, 2.0 FEET EAST OF A PASTURE FENCE.

Station Notes

THERE IS A VERY OLD FENCE CORNER, BUT THE ROAD HAS BEEN WIDENED/BLACK TOPPED, PERHAPS EVEN MOVED AND A SEWER ADDED.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.819 12B = -93.812 09 = -93.720 03 = -93.540

TT 38 MT

Mn/DOT Name: TT 38 MT

NGS Name: TT 38 MT

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	4	109 N	24 W	441659.00	934314.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2024	NOT FOUND	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (1963) **Stamping:** TT 38 MT 1949

6.0 MILES NORTH AND 2.0 MILES WEST OF ELYSIAN, 7.1 MILES NORTH AND WEST ALONG COUNTY ROAD 11/COUNTY ROAD 12 FROM THE JUNCTION OF COUNTY ROAD 11 AND LAKE AVENUE IN ELYSIAN, 420.0 FEET WEST OF A TEE-ROAD NORTH (COUNTY ROAD 11), 152.0 FEET WEST FROM THE NORTHEAST CORNER OF A CEMETERY, 1.0 FOOT NORTH OF A CEMETERY FENCE.

Station Notes

MAY HAVE BEEN REMOVED DURING FENCE REMOVAL.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.684 12B = -93.684 09 = -93.586 03 = -93.392

TT 39 MT

Mn/DOT Name: TT 39 MT

NGS Name: TT 39 MT

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	29	110 N	24 W	441830.00	934444.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2009) **Stamping:** TT 39 MT 1949

5.5 MILES SOUTH AND 0.3 MILE WEST OF LE CENTER, 2.17 MILES SOUTH ALONG COUNTY ROAD 114 FROM THE JUNCTION OF COUNTY ROAD 114 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 1.2 MILES SOUTH ON COUNTY ROAD 150, THEN 0.3 MILE SOUTHWEST ON COUNTY ROAD 2, THEN 2.54 MILES SOUTH ALONG COUNTY ROAD 9, 495.0 FEET SOUTHEAST ALONG A ROAD FROM THE EXTENDED CENTER OF A Y ROAD NORTH, 25.0 FEET NORTHEAST OF THE CENTER OF A ROAD.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.471 12B = -93.468 09 = -93.369 03 = -93.179

TT 40 MT USGS

Mn/DOT Name: TT 40 MT USGS
NGS Name: TT 40 MT
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093342/
USGS Quad: CLEVELAND

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	18	110 N	24 W	442013.72	934528.75		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2024	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1949) **Stamping:** TT 40 MT 1949

4.0 MILES SOUTH AND 1.0 MILE WEST OF LE CENTER, 5.5 MILES SOUTH AND 0.3 MILE WEST OF LE CENTER, 2.17 MILES SOUTH ALONG COUNTY ROAD 114 FROM THE JUNCTION OF COUNTY ROAD 114 AND TRUNK HIGHWAY 99 IN LE CENTER, THEN 1.2 MILES SOUTH ON COUNTY ROAD 150, THEN 0.3 MILE SOUTHWEST ON COUNTY ROAD 2, 0.1 MILE NORTH OF A ROAD FORKS AND A CEMETERY, AT THE JUNCTION OF COUNTY ROAD 2 AND COUNTY ROAD 9, 12.0 FEET NORTH OF A FIELD ENTRANCE WEST, 27.0 FEET WEST OF COUNTY ROAD 2, 1.0 FOOT EAST OF A FENCE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.369	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -93.208 12B = -93.205 09 = -93.110 03 = -92.920

Lat/Lon and County Coordinates (Feet)

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 20 13.84000	93 45 27.91000			.100		CLASSICAL SURVEY	1950	UNK

State Plane and UTM Coordinates (Feet)

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2063380.653	487540.098			.100		CLASSICAL SURVEY	1950	UNK

TT 41 MT USGS

Mn/DOT Name: TT 41 MT USGS
NGS Name: TT 41 MT
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	5	110 N	24 W	442154.72	934423.06		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1949	2016	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	USGS

Description: (1949) **Stamping:** TT 41 MT 1949

2.0 MILES SOUTH AND 0.5 MILE WEST OF LE CENTER, 0.2 MILE NORTHEAST ON COUNTY ROAD 114 FROM THE JUNCTION OF COUNTY ROAD 114 AND COUNTY ROAD 151 (TEE-ROAD SOUTH), 40.0 FEET NORTHEAST OF A DRIVEWAY, 30.0 FEET NORTHWEST OF COUNTY ROAD 114.

Station Notes

THE FENCE HAS BEEN REMOVED AND NO EVIDENCE OF A MARK, MAY BE BURIED OR WAS REMOVED DURING ROAD CONSTRUCTION, THE TIES PUT THE MARK CLOSE TO A ROAD, IN A DITCH.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1060.657	.033	3				VERTICAL CONTROL SURVEY	1957	USGS-VERT

Geoid Separations(ft): GEOID18 = -92.910 12B = -92.907 09 = -92.811 03 = -92.615

Lat/Lon and County Coordinates (Feet)

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 21 54.84000	93 44 22.22000			.100		CLASSICAL SURVEY	1950	UNK

State Plane and UTM Coordinates (Feet)

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2068122.181	497781.895			.100		CLASSICAL SURVEY	1950	UNK

TT 87 ES

Mn/DOT Name: TT 87 ES **NGS Name:** TT 87 ES

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	17	112 N	25 W	443024.00	935127.00		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1955	2024	DESTROYED	Horz=NO Vert=NO	NO			STEEL SPIKE ADJ TO MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	USGS

Description: (2016) **Stamping:** 87 ES 1955

2.67 MILES NORTHEAST OF LE SUEUR, 2.8 MILES NORTHEAST ALONG TRUNK HIGHWAY 169 FROM THE JUNCTION OF TRUNK HIGHWAY 169 AND TRUNK HIGHWAY 112 IN LE SUEUR, 318.0 FEET SOUTHWEST ALONG A HIGHWAY AND 58.0 FEET EAST OF THE CENTERLINE TRUNK HIGHWAY 169 AT THE GRAVEL ROADS NORTHWEST AND SOUTHEAST, 10.0 FEET NORTH AND 58.0 FEET EAST OF THE CENTERLINE OF A HIGHWAY AT A PRIVATE DRIVE EAST TO A FARMHOUSE, 1.0 FOOT NORTH OF A FENCE.

Leveling-Derived Orthometric Heights (Feet)

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.786	.033	3				VERTICAL CONTROL SURVEY	1959	USGS-VERT

Geoid Separations(ft): GEOID18 = -91.873 12B = -91.863 09 = -91.817 03 = -91.653

*** No Horizontal Positions in the Database ***

Mn/DOT Name: TUMA **NGS Name:** TUMA

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6324 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	33	109 N	24 W	441208.62	934244.44	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 45 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** TUMA 2016

1.9 MILES WEST OF ELYSIAN, 1.9 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 124.4, 55.0 FEET SOUTH OF TRUNK HIGHWAY 60, 28.0 FEET EAST OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: WILMES - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.412	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1066.405	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1066.520	.262		972.255	.197	2011	GPS - RTRN	2024	RTRN2024
1066.464	.262		972.199	.197	2011	GPS - OPUS	2021	GPSBM
1066.455	.262		972.190	.197	2011	GPS - OPUS	2021	GPSBM
1066.422	.262		972.154	.197	2011	GPS - RTRN	2020	RTRN2020
1066.415	.262		972.147	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.268 12B = -94.268 09 = -94.193 03 = -93.993

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 08.62485	93 42 44.44263	348149.051	103335.213	.131	3	GPS - RTRN	2024	RTRN2024
44 12 08.62513	93 42 44.44258	348149.055	103335.241	.131	3	GPS - OPUS	2021	GPSBM
44 12 08.62495	93 42 44.44247	348149.063	103335.223	.131	3	GPS - OPUS	2021	GPSBM
44 12 08.62521	93 42 44.44224	348149.079	103335.249	.131	3	GPS - RTRN	2020	RTRN2020
44 12 08.62483	93 42 44.44225	348149.078	103335.210	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2700098.258	766534.991	1453680.885	16058365.464	.131	3	GPS - RTRN	2024	RTRN2024
2700098.262	766535.019	1453680.889	16058365.492	.131	3	GPS - OPUS	2021	GPSBM
2700098.270	766535.001	1453680.897	16058365.474	.131	3	GPS - OPUS	2021	GPSBM
2700098.287	766535.027	1453680.914	16058365.500	.131	3	GPS - RTRN	2020	RTRN2020
2700098.286	766534.989	1453680.913	16058365.462	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TUMA-DQ6324-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TUMA-DQ6324-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TUMA-DQ6324-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE C

Mn/DOT Name: TYRONE C
NGS Name: TYRONE C
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	15	112 N	25 W	443003.67	934944.17		C

NGS ACRN: DF8247 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** TYRONE - C 2002

4.0 MILES WEST OF ST. THOMAS, 3.8 MILES WEST ALONG COUNTY ROAD 28 FROM THE JUNCTION OF COUNTY ROAD 28 AND COUNTY ROAD 11 IN ST. THOMAS, THEN 0.1 MILE NORTH ON 281ST AVENUE, 20.0 FEET EAST OF 281ST AVENUE, 4.0 FEET SOUTH OF A POWER POLE, 4.0 FEET SOUTH OF A WITNESS POST.

Station Notes

THE LE SUEUR COUNTY CONTROL MARK DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
989.430	.262		897.603	.197	2011	GPS - RTRN	2024	RTRN2024
989.434	.262		897.610	.197	2011	GPS - OPUS	2021	GPSBM
989.440	.262		897.616	.197	2011	GPS - OPUS	2021	GPSBM
989.362	.262		897.551	.197	2011	GPS - RTRN	2020	RTRN2020
989.401			897.590	.014	2011	HORIZONTAL ADJUSTMENT	2014	GPS3006
989.444	.131		897.813	.066	1996	GPS - STATIC	2014	HBLOOM
989.401			897.590	.014	2011	GPS - STATIC	2014	HBLOOM
989.414			897.590	.016	2011	HORIZONTAL ADJUSTMENT	2014	GPS2977
989.414			897.590	.016	2011	GPS - STATIC	2013	HSUEUR
989.427	.131		897.813	.066	1996	GPS - STATIC	2013	HSUEUR
989.335	.262		897.521	.197	2011	GPS - RTRN	2013	RTRN2013
			897.590	.015	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			897.688	.016	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
989.401	.131		897.813	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
989.401	.131		897.813	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.824 12B = -91.814 09 = -91.765 03 = -91.598

TYRONE C

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 03.66638	93 49 44.17452	318498.553	212441.371	.131	3	GPS - RTRN	2024	RTRN2024
44 30 03.66606	93 49 44.17468	318498.541	212441.339	.131	3	GPS - OPUS	2021	GPSBM
44 30 03.66638	93 49 44.17493	318498.523	212441.371	.131	3	GPS - OPUS	2021	GPSBM
44 30 03.66632	93 49 44.17445	318498.558	212441.365	.131	3	GPS - RTRN	2020	RTRN2020
44 30 03.66674	93 49 44.17491	318498.525	212441.408	.013		ADJUSTMENT	2014	GPS3006
44 30 03.66669	93 49 44.17496	318498.521	212441.403	.013	C	GPS - STATIC	2014	HBLOOM
44 30 03.66674	93 49 44.17491	318498.525	212441.408	.013		ADJUSTMENT	2014	GPS2977
44 30 03.66666	93 49 44.17492	318498.524	212441.400	.013	C	GPS - STATIC	2013	HSUEUR
44 30 03.66639	93 49 44.17433	318498.567	212441.372	.131	3	GPS - RTRN	2013	RTRN2013
44 30 03.66674	93 49 44.17491	318498.525	212441.408	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 03.66686	93 49 44.17569	318498.469	212441.421	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 30 03.66628	93 49 44.17523	318498.502	212441.362	.033	C	GPS - STATIC	2014	HBLOOM
44 30 03.66628	93 49 44.17523	318498.502	212441.362	.033	C	GPS - STATIC	2013	HSUEUR
44 30 03.66628	93 49 44.17523	318498.502	212441.362	.033	C	ADJUSTMENT	2003	GPS1911
44 30 03.66628	93 49 44.17523	318498.502	212441.362	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669296.593	875307.824	1424217.780	16167475.674	.131	3	GPS - RTRN	2024	RTRN2024
2669296.582	875307.791	1424217.768	16167475.642	.131	3	GPS - OPUS	2021	GPSBM
2669296.564	875307.824	1424217.751	16167475.674	.131	3	GPS - OPUS	2021	GPSBM
2669296.599	875307.818	1424217.785	16167475.668	.131	3	GPS - RTRN	2020	RTRN2020
2669296.565	875307.860	1424217.752	16167475.711	.013		ADJUSTMENT	2014	GPS3006
2669296.562	875307.855	1424217.749	16167475.706	.013	C	GPS - STATIC	2014	HBLOOM
2669296.565	875307.860	1424217.752	16167475.711	.013		ADJUSTMENT	2014	GPS2977
2669296.565	875307.852	1424217.752	16167475.703	.013	C	GPS - STATIC	2013	HSUEUR
2669296.607	875307.825	1424217.794	16167475.675	.131	3	GPS - RTRN	2013	RTRN2013
2669296.565	875307.860	1424217.752	16167475.711	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669296.509	875307.872	1424217.696	16167475.724	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669296.542	875307.814	1424217.729	16167475.665	.033	C	GPS - STATIC	2014	HBLOOM
2669296.542	875307.814	1424217.729	16167475.665	.033	C	GPS - STATIC	2013	HSUEUR
2669296.542	875307.814	1424217.729	16167475.665	.033	C	ADJUSTMENT	2003	GPS1911
2669296.542	875307.814	1424217.729	16167475.665	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_C-DF8247-3N-22APR2024.jpg	N	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_C-DF8247-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_C-DF8247-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE MNDT

Mn/DOT Name: TYRONE MNDT
NGS Name: TYRONE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3053 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	1	112 N	25 W	443235.35	934642.34	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 4 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** TYRONE 1980

6.5 MILES EAST OF HENDERSON, 3.6 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169 (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), AT TRUNK HIGHWAY 19 MILEPOINT 141.25, 112.0 FEET SOUTH-SOUTHWEST OF A POWER POLE, 59.95 FEET NORTHWEST OF TYRONE MNDT RM 1, 54.52 FEET NORTHEAST OF TYRONE MNDT RM 2, 33.2 FEET SOUTH OF TRUNK HIGHWAY 19, 12.0 FEET WEST OF THE FIELD ENTRANCE (NAVAHO AVENUE EXTENSION), 8.6 FEET EAST-NORTHEAST OF A WITNESS POST.

Station Pair: 4004 L - SCOTT, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.472	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1002.570	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.429	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.455	.262		911.452	.197	2011	GPS - RTRN	2024	RTRN2024
1002.472	.131		911.625	.066	1996	GPS - STATIC	2023	HGLRD
1002.472			911.432	.026	2011	GPS - STATIC	2023	HGLRD
1002.472			911.432	.026	2011	HORIZONTAL ADJUSTMENT	2023	GPS3572
1002.367	.262		911.363	.197	2011	GPS - RTRN	2016	RTRN2016
1002.557	.197		911.881	.131	1996	HORIZONTAL ADJUSTMENT	1999	17648

Geoid Separations(ft): GEOID18 = -91.004 12B = -91.004 09 = -90.958 03 = -90.804

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.34723	93 46 42.34491	331798.387	227694.305	.131	3	GPS - RTRN	2024	RTRN2024
44 32 35.34736	93 46 42.34467	331798.404	227694.318	.013		ADJUSTMENT	2023	GPS3572
44 32 35.34736	93 46 42.34467	331798.404	227694.318	.013	C	GPS - STATIC	2023	HGLRD
44 32 35.34753	93 46 42.34478	331798.396	227694.335	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.34716	93 46 42.34486	331798.390	227694.298	.033	C	GPS - STATIC	2023	HGLRD
44 32 35.34861	93 46 42.34653	331798.270	227694.445	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.34341	93 46 42.34409	331798.443	227693.917	.066	2	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 35.47368	93 46 41.48196			.100	2	CLASSICAL SURVEY	1982	16778

TYRONE MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682432.435	890699.031	1437537.358	16182700.843	.131	3	GPS - RTRN	2024	RTRN2024
2682432.452	890699.045	1437537.375	16182700.856	.013		ADJUSTMENT	2023	GPS3572
2682432.452	890699.045	1437537.375	16182700.856	.013	C	GPS - STATIC	2023	HGLRD
2682432.444	890699.062	1437537.367	16182700.873	.131	3	GPS - RTRN	2016	RTRN2016

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682432.438	890699.024	1437537.361	16182700.836	.033	C	GPS - STATIC	2023	HGLRD
2682432.317	890699.171	1437537.242	16182700.984	.066	2	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682432.495	890698.645	1437537.413	16182700.456	.066	2	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2057829.914	562622.806			.100	2	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE-PP3053-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE-PP3053-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE-PP3053-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE MNDT RM 1

Mn/DOT Name: TYRONE MNDT RM 1
NGS Name: TYRONE RM 1
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC7610 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	112 N	25 W	443234.96	934641.72	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** TYRONE NO 1 1980

6.5 MILES EAST OF HENDERSON, 3.6 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169 (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), AT TRUNK HIGHWAY 19 MILEPOINT 141.25, 37.0 FEET EAST OF A FIELD ENTRANCE, 72.0 FEET SOUTH OF TRUNK HIGHWAY 19, 143.0 FEET SOUTH OF A POWER POLE, 38.5 FEET SOUTH-SOUTHEAST OF A CULVERT UNDER A FIELD ENTRANCE, 60.0 FEET SOUTHEAST OF STATION TYRONE MNDT, 83.3 FEET EAST OF TYRONE MNDT RM 2, 2.0 FEET SOUTH OF A WITNESS POST.

Station Notes
NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.042	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1002.127	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.983	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1002.003	.262		910.999	.197	2011	GPS - RTRN	2024	RTRN2024
1001.944	.262		910.940	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.004 12B = -91.004 09 = -90.958 03 = -90.804

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.96201	93 46 41.71661	331843.584	227654.934	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.96105	93 46 41.71716	331843.544	227654.837	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682478.042	890660.146	1437582.473	16182661.413	.131	3	GPS - RTRN	2024	RTRN2024
2682478.002	890660.049	1437582.432	16182661.317	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_1-AC7610-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_1-AC7610-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_1-AC7610-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE MNDT RM 2

Mn/DOT Name: TYRONE MNDT RM 2
NGS Name: TYRONE RM 2
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC7611 Get Map
NGS Quad / Sta Num : 44093432/
USGS Quad: BELLE PLAINE SOUTH

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	1	112 N	25 W	443234.96	934642.87	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1980	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** TYRONE NO 2 1980

6.5 MILES EAST OF HENDERSON, 3.6 MILES EAST ON TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 169 (THE JUNCTION IS 3.0 MILES EAST OF HENDERSON), AT TRUNK HIGHWAY 19 MILEPOINT 141.25, 163.0 FEET SOUTHWEST OF A POWER POLE, 83.3 FEET WEST OF TYRONE MNDT RM 1, 73.0 FEET SOUTH OF TRUNK HIGHWAY 19, 54.3 FEET SOUTHWEST OF STATION TYRONE MNDT, 48.0 FEET WEST OF A FIELD ENTRANCE, 45.5 FEET SOUTHWEST OF A CULVERT UNDER A FIELD ENTRANCE, 2.0 FEET SOUTH OF A WITNESS POST.

Station Pair: 4004 L - SCOTT, MN

Station Notes
NO WITNESS POST, THE SURVEY MARK IS IN A MOWED AREA.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.507	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1001.599	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.458	.016	2				VERTICAL CONTROL SURVEY	1981	L24611

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1001.363	.262		910.356	.197	2011	GPS - RTRN	2024	RTRN2024
1001.386	.262		910.379	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -91.007 12B = -91.007 09 = -90.961 03 = -90.807

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 34.96142	93 46 42.86634	331760.313	227655.531	.131	3	GPS - RTRN	2024	RTRN2024
44 32 34.96073	93 46 42.86681	331760.279	227655.461	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2682394.779	890659.861	1437499.236	16182662.147	.131	3	GPS - RTRN	2024	RTRN2024
2682394.745	890659.791	1437499.201	16182662.078	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_2-AC7611-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_2-AC7611-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_RM_2-AC7611-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE NW

Mn/DOT Name: TYRONE NW **NGS Name:** TYRONE NW

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8248 Get Map
NGS Quad / Sta Num : 44093433/
USGS Quad: HENDERSON

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	6	112 N	25 W	443222.57	935303.86	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		PROJECTS 1 IN.	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** TYRONE NW 2002

2.0 MILES SOUTHEAST OF HENDERSON, 1.9 MILES EAST ALONG TRUNK HIGHWAY 19 FROM THE JUNCTION OF TRUNK HIGHWAY 19 AND TRUNK HIGHWAY 93 IN HENDERSON TO TRUNK HIGHWAY 19 MILEPOINT 136, THEN 0.25 MILE SOUTH ON NATURE CENTER LANE, 1280.0 FEET SOUTH OF TRUNK HIGHWAY 19, 70.0 FEET NORTH OF A POWER POLE, 20.0 FEET EAST OF NATURE CENTER LANE, 14.6 FEET WEST OF THE NEY NATURE SIGNPOST.

Station Notes
THE TOP OF THE DISK IS SCRAPED, LOOKS LIKE A LAWN MOWER HIT IT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.675	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
981.734	.016	2/1				VERTICAL ADJUSTMENT	2016	00000879
981.734	.016	2/1				VERTICAL CONTROL SURVEY	2014	VBPLA

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.675	.262		890.028	.197	2011	GPS - RTRN	2024	RTRN2024
981.586	.262		889.949	.197	2011	GPS - RTRN	2016	RTRN2016
			890.077	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			890.185	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
981.757	.131		890.349	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
981.757	.131		890.349	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -91.647 12B = -91.637 09 = -91.581 03 = -91.443

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 22.57425	93 53 03.85897	304155.121	226636.675	.131	3	GPS - RTRN	2024	RTRN2024
44 32 22.57372	93 53 03.85862	304155.146	226636.621	.131	3	GPS - RTRN	2016	RTRN2016
44 32 22.57406	93 53 03.85878	304155.135	226636.656	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 22.57422	93 53 03.85956	304155.079	226636.673	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 22.57363	93 53 03.85895	304155.122	226636.612	.033	C	ADJUSTMENT	2003	GPS1911
44 32 22.57363	93 53 03.85895	304155.122	226636.612	.033	C	GPS - STATIC	2003	HSUEU

TYRONE NW

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654805.240	889348.620	1409903.127	16181688.983	.131	3	GPS - RTRN	2024	RTRN2024
2654805.266	889348.567	1409903.152	16181688.929	.131	3	GPS - RTRN	2016	RTRN2016
2654805.254	889348.601	1409903.140	16181688.963	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654805.198	889348.617	1409903.084	16181688.980	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2654805.242	889348.558	1409903.128	16181688.920	.033	C	ADJUSTMENT	2003	GPS1911
2654805.242	889348.558	1409903.128	16181688.920	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_NW-DF8248-3E-23APR2024.jpg	E	Apr 23, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_NW-DF8248-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_NW-DF8248-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

TYRONE SE

Mn/DOT Name: TYRONE SE
NGS Name: TYRONE SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8249 Get Map
NGS Quad / Sta Num : 44093341/
USGS Quad: ST THOMAS

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	112 N	25 W	442723.58	934615.04		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MN-079

Description: (2010) **Stamping:** TYRONE - SE 2002

2.25 MILES SOUTH OF ST. THOMAS, 2.9 MILES SOUTH ALONG COUNTY ROAD 11 FROM THE JUNCTION OF COUNTY ROAD 11 AND COUNTY ROAD 120 IN ST. THOMAS, THEN 0.7 MILE WEST ON 340TH STREET, 85.0 FEET EAST-SOUTHEAST OF A POWER POLE, 25.0 FEET NORTH OF 340TH STREET, 16.0 FEET WEST OF A FIELD ENTRANCE, 5.0 FEET EAST OF A WITNESS POST.

Station Notes
THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1018.485	.262		926.438	.197	2011	GPS - RTRN	2024	RTRN2024
1018.538	.262		926.488	.197	2011	GPS - OPUS	2021	GPSBM
1018.508	.262		926.458	.197	2011	GPS - OPUS	2021	GPSBM
1018.610	.262		926.560	.197	2011	GPS - RTRN	2020	RTRN2020
			926.534	.014	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			926.629	.015	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1018.535	.131		926.760	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1018.535	.131		926.760	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -92.050 12B = -92.047 09 = -91.972 03 = -91.788

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 23.58143	93 46 15.04173	333529.684	196105.851	.131	3	GPS - RTRN	2024	RTRN2024
44 27 23.58112	93 46 15.04326	333529.573	196105.820	.131	3	GPS - OPUS	2021	GPSBM
44 27 23.58112	93 46 15.04322	333529.576	196105.820	.131	3	GPS - OPUS	2021	GPSBM
44 27 23.58061	93 46 15.04279	333529.606	196105.769	.131	3	GPS - RTRN	2020	RTRN2020
44 27 23.58155	93 46 15.04306	333529.588	196105.864	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 23.58167	93 46 15.04387	333529.529	196105.876	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 27 23.58110	93 46 15.04341	333529.562	196105.818	.033	C	ADJUSTMENT	2003	GPS1911
44 27 23.58110	93 46 15.04341	333529.562	196105.818	.033	C	GPS - STATIC	2003	HSUEU

TYRONE SE

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684498.214	859134.475	1439216.384	16151122.081	.131	3	GPS - RTRN	2024	RTRN2024
2684498.103	859134.443	1439216.272	16151122.050	.131	3	GPS - OPUS	2021	GPSBM
2684498.106	859134.443	1439216.275	16151122.050	.131	3	GPS - OPUS	2021	GPSBM
2684498.138	859134.392	1439216.306	16151121.998	.131	3	GPS - RTRN	2020	RTRN2020
2684498.118	859134.487	1439216.287	16151122.094	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684498.059	859134.499	1439216.229	16151122.106	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2684498.093	859134.442	1439216.262	16151122.048	.033	C	ADJUSTMENT	2003	GPS1911
2684498.093	859134.442	1439216.262	16151122.048	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_SE-DF8249-3W-22APR2024.jpg	W	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_SE-DF8249-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/TYRONE_SE-DF8249-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

UNION HILL LUTH CH SPIRE

Mn/DOT Name: UNION HILL LUTH CH SPIRE
NGS Name: UNION HILL LUTH CH SPIRE
County: LE SUEUR, MN (Sheet 1)

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	5	112 N	23 W	443147.00	933733.00		

NGS ACRN: Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=NO Vert=NO	NO			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	CHURCH SPIRE	MNDT

Description: (1981)

Stamping:

2.2 MILES SOUTHEAST OF NEW PRAGUE, 0.9 MILE SOUTH ALONG TRUNK HIGHWAY 21/TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, THEN 2.0 MILES WEST ALONG COUNTY ROAD 9 (290TH STREET), 60.0 FEET EAST OF COUNTY ROAD 30 (181ST AVENUE), 50 FEET NORTH OF COUNTY ROAD 9 (290TH STREET).

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.082 12B = -90.072 09 = -90.020 03 = -89.878

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/UNION_HILL_LUTH_CH_SPIRE-3NE-22APR2024.jpg	NE	Apr 22, 2024
Monument:			
Disk:			Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

UNION HILL ST JOHNS CH SPIRE

Mn/DOT Name: UNION HILL ST JOHNS CH SPIRE
NGS Name: UNION HILL ST JOHNS CH SPIRE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP3038 Get Map
NGS Quad / Sta Num : 44093423/
USGS Quad: UNION HILL

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	2	112 N	24 W	443237.16	934000.44		4

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1981	2024	GOOD	Horz=NO Vert=NO	YES			NO MAG MATERIAL

Monument Type	Disk Type	Mon. Agency
UNKNOWN	CHURCH SPIRE	MNDT

Description: (1981)
Stamping:

IN UNION HILL, AT THE JUNCTION OF TRUNK HIGHWAY 19 AND COUNTY ROAD 31, 75.0 FEET EAST OF COUNTY ROAD 31.

*** No Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -90.259 12B = -90.226 09 = -90.190 03 = -90.059

Lat/Lon and County Coordinates (Feet)

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.15842	93 40 00.43677	360908.325	227667.951	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.15244	93 40 00.43479	360908.465	227667.345	.328	4	ADJUSTMENT	1986	17289

NAD27

Geodetic Position							Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 32 37.28276	93 39 59.56431			.100	4	CLASSICAL SURVEY	1982	16778

State Plane and UTM Coordinates (Feet)

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711537.532	890981.207	1466635.528	16182626.771	.328	4	ADJUSTMENT	1999	17648

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2711537.678	890980.602	1466635.667	16182626.165	.328	4	ADJUSTMENT	1986	17289

NAD27

MN State Plane - South Zone							Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2086936.537	562904.859			.100	4	CLASSICAL SURVEY	1982	16778

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/UNION_HILL_ST_JOHNS_CH_SPIRE-PP3038-3S-23APR2024.jpg	S	Apr 23, 2024
Monument:			
Disk:			

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: URNESS **NGS Name:** URNESS

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6415 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	22	112 N	23 W	442918.75	933506.57	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** URNESS 2016

3.8 MILES SOUTH OF NEW PRAGUE, 3.8 MILES SOUTH ALONG TRUNK HIGHWAY 13/TRUNK HIGHWAY 21 FROM THE JUNCTION OF HIGHWAY 13/TRUNK HIGHWAY 21 AND TRUNK HIGHWAY 19 IN NEW PRAGUE, AT TRUNK HIGHWAY 13 MILEPOINT 62.9, 70.6 FEET EAST OF TRUNK HIGHWAY 13, 39.5 FEET NORTH OF A FIELD ENTRANCE, 1.5 FEET WEST OF A WITNESS POST.

Station Pair: MYERS - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1053.138	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1053.200	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1053.161	.262		962.921	.197	2011	GPS - RTRN	2024	RTRN2024

Geoid Separations(ft): GEOID18 = -90.239 12B = -90.249 09 = -90.170 03 = -90.026

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 29 18.74941	93 35 06.57377	382080.705	207446.210	.131	3	GPS - RTRN	2024	RTRN2024

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2732920.520	870987.425	1487766.119	16162378.763	.131	3	GPS - RTRN	2024	RTRN2024

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/URNESS-DQ6415-3E-28JUN2016.jpg	E	Jun 28, 2016
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/URNESS-DQ6415-2-23APR2024.jpg		Apr 23, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/URNESS-DQ6415-1-23APR2024.jpg		Apr 23, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WASHINGTON C

Mn/DOT Name: WASHINGTON C
NGS Name: WASHINGTON C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8250 Get Map
NGS Quad / Sta Num : 44093331/
USGS Quad: MADISON LAKE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	15	109 N	25 W	441447.77	934942.01		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** WASHINGTON - C 2002

7.5 MILES NORTHWEST OF ELYSIAN, 4.8 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, THEN 2.4 MILES NORTH ON 251ST AVENUE, THEN 3.0 MILES WEST ON COUNTY ROAD 16, THEN 0.50 MILE NORTH ON COUNTY ROAD 104, 0.5 MILE NORTH OF COUNTY ROAD 16, 90.0 FEET SOUTH OF A POWER POLE, 38.0 FEET EAST OF COUNTY ROAD 104, 25.0 FEET NORTH OF A FIELD ENTRANCE, 2.3 FEET SOUTH OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.033	.262		954.299	.197	2011	GPS - RTRN	2024	RTRN2024
1047.869	.262		954.135	.197	2011	GPS - OPUS	2021	GPSBM
1048.075	.262		954.348	.197	2011	GPS - RTRN	2020	RTRN2020
			954.227	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			954.312	.010	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1047.931	.131		954.431	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1047.931	.131		954.431	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.733 12B = -93.724 09 = -93.632 03 = -93.481

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 47.76791	93 49 42.00902	317867.132	119688.113	.131	3	GPS - RTRN	2024	RTRN2024
44 14 47.76810	93 49 42.00906	317867.129	119688.133	.131	3	GPS - OPUS	2021	GPSBM
44 14 47.76750	93 49 42.00939	317867.105	119688.072	.131	3	GPS - RTRN	2020	RTRN2020
44 14 47.76802	93 49 42.00940	317867.104	119688.124	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 47.76800	93 49 42.01020	317867.046	119688.123	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 14 47.76752	93 49 42.00948	317867.098	119688.074	.033	C	ADJUSTMENT	2003	GPS1911
44 14 47.76752	93 49 42.00948	317867.098	119688.074	.033	C	GPS - STATIC	2003	HSUEU

WASHINGTON C

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669648.298	782564.103	1423437.220	16074759.775	.131	3	GPS - RTRN	2024	RTRN2024
2669648.296	782564.122	1423437.217	16074759.795	.131	3	GPS - OPUS	2021	GPSBM
2669648.272	782564.061	1423437.193	16074759.734	.131	3	GPS - RTRN	2020	RTRN2020
2669648.271	782564.114	1423437.192	16074759.787	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669648.213	782564.112	1423437.134	16074759.785	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2669648.265	782564.063	1423437.186	16074759.736	.033	C	ADJUSTMENT	2003	GPS1911
2669648.265	782564.063	1423437.186	16074759.736	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WASHINGTON_C-DF8250-3E-15APR2024.jpg	E	Apr 15, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WASHINGTON_C-DF8250-2-15APR2024.jpg		Apr 15, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WASHINGTON_C-DF8250-1-15APR2024.jpg		Apr 15, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WATERVILLE C

Mn/DOT Name: WATERVILLE C
NGS Name: WATERVILLE C
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8252 Get Map
NGS Quad / Sta Num : 44093312/
USGS Quad: KILKENNY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	16	109 N	23 W	441501.98	933551.68	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2016) **Stamping:** WATERVILLE C 2002

2.3 MILES NORTHEAST OF WATERVILLE, 2.6 MILES NORTHWEST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE TO TRUNK HIGHWAY 13 MILEPOINT 45.1, THEN 0.35 MILE WEST ON COUNTY ROAD 12, THEN 0.8 MILE NORTH ON COUNTY ROAD 165, 30.0 FEET EAST OF COUNTY ROAD 165 (CANNON RIVER ROAD), 22.0 FEET SOUTH OF A STREET SIGN, 15.0 FEET SOUTH OF A FIELD ENTRANCE, 0.8 FOOT WEST OF A WITNESS POST.

Station Notes

THE DISK IS SET IN AN 18.0 INCH DIAMETER BY 10.0 FEET DEEP CONCRETE MONUMENT.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1088.925	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1088.945	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1089.000	.016	2/1				VERTICAL ADJUSTMENT	2011	00000689
1088.961	.016	2/1				VERTICAL CONTROL SURVEY	2004	VKENY

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1089.082	.262		995.621	.197	2011	GPS - RTRN	2024	RTRN2024
1088.912	.262		995.451	.197	2011	GPS - OPUS	2019	GPSBM
1088.938	.262		995.477	.197	2011	GPS - RTRN	2019	RTRN2019
1088.948	.262		995.490	.197	2011	GPS - RTRN	2017	RTRN2017
			995.556	.011	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			995.631	.012	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1088.941	.131		995.756	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2088
1088.941	.131		995.756	.066	1996	GPS - STATIC	2005	HWASE
1088.974	.131		995.756	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1088.974	.131		995.756	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.461 12B = -93.458 09 = -93.379 03 = -93.169

WATERVILLE C

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 01.98396	93 35 51.68350	378317.751	120699.263	.131	3	GPS - RTRN	2024	RTRN2024
44 15 01.98410	93 35 51.68324	378317.770	120699.277	.131	3	GPS - OPUS	2019	GPSBM
44 15 01.98604	93 35 51.68233	378317.838	120699.473	.131	3	GPS - RTRN	2019	RTRN2019
44 15 01.98358	93 35 51.68411	378317.707	120699.225	.131	3	GPS - RTRN	2017	RTRN2017
44 15 01.98400	93 35 51.68373	378317.735	120699.267	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 01.98396	93 35 51.68452	378317.677	120699.263	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 15 01.98334	93 35 51.68393	378317.720	120699.200	.033	C	ADJUSTMENT	2005	GPS2088
44 15 01.98334	93 35 51.68393	378317.720	120699.200	.033	C	GPS - STATIC	2005	HWASE
44 15 01.98334	93 35 51.68393	378317.720	120699.200	.033	C	ADJUSTMENT	2003	GPS1911
44 15 01.98334	93 35 51.68393	378317.720	120699.200	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730077.665	784215.770	1483864.612	16075674.168	.131	3	GPS - RTRN	2024	RTRN2024
2730077.684	784215.785	1483864.631	16075674.182	.131	3	GPS - OPUS	2019	GPSBM
2730077.749	784215.981	1483864.698	16075674.378	.131	3	GPS - RTRN	2019	RTRN2019
2730077.621	784215.732	1483864.567	16075674.130	.131	3	GPS - RTRN	2017	RTRN2017
2730077.648	784215.774	1483864.595	16075674.172	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730077.591	784215.770	1483864.538	16075674.169	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2730077.634	784215.707	1483864.580	16075674.106	.033	C	ADJUSTMENT	2005	GPS2088
2730077.634	784215.707	1483864.580	16075674.106	.033	C	GPS - STATIC	2005	HWASE
2730077.634	784215.707	1483864.580	16075674.106	.033	C	ADJUSTMENT	2003	GPS1911
2730077.634	784215.707	1483864.580	16075674.106	.033	C	GPS - STATIC	2003	HSUEU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_C-DF8252-3E-17APR2024.jpg	E	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_C-DF8252-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_C-DF8252-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WATERVILLE SE

Mn/DOT Name: WATERVILLE SE
NGS Name: WATERVILLE SE
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DF8253 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	109 N	23 W	441146.55	933216.41		C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2002	2010	DESTROYED	Horz=NO Vert=NO	YES		PROJECTS 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	HORIZONTAL CONTROL DISK	MN-079

Description: (2016) **Stamping:** WATERVILLE SE 2002

2.3 MILES SOUTHEAST OF WATERVILLE, 2.0 MILES SOUTHEAST ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE TO TRUNK HIGHWAY 13 MILEPOINT 40.55, THEN 200.0 FEET SOUTH ON COUNTY ROAD 73, THEN 0.55 MILE WEST ON 440TH AVENUE, 25.0 FEET NORTH OF 440TH AVENUE, 15.0 FEET WEST OF A FIELD ENTRANCE, 5.0 FEET EAST OF A WITNESS POST.

*** No Leveling-Derived Orthometric Heights in the Database ***

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
			994.860	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			994.936	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1088.318	.131		995.087	.066	1996	HORIZONTAL ADJUSTMENT	2003	GPS1911
1088.318	.131		995.087	.066	1996	GPS - STATIC	2003	HSUEU

Geoid Separations(ft): GEOID18 = -93.468 12B = -93.471 09 = -93.392 03 = -93.199

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.55475	93 32 16.40928	393889.559	100825.026	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.55471	93 32 16.41006	393889.502	100825.022	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.55417	93 32 16.40940	393889.549	100824.968	.033	C	ADJUSTMENT	2003	GPS1911
44 11 46.55417	93 32 16.40940	393889.549	100824.968	.033	C	GPS - STATIC	2003	HSUEU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745857.412	764510.044	1499398.001	16055783.549	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745857.355	764510.040	1499397.944	16055783.546	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745857.404	764509.985	1499397.992	16055783.491	.033	C	ADJUSTMENT	2003	GPS1911
2745857.404	764509.985	1499397.992	16055783.491	.033	C	GPS - STATIC	2003	HSUEU

WATERVILLE SE

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE-DF8253-3N-10JUN2010.jpg	N	Jun 10, 2010
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE-DF8253-2-10JUN2010.jpg		Jun 10, 2010
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE-DF8253-1-10JUN2010.jpg		Jun 10, 2010

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WATERVILLE SE 2

Mn/DOT Name: WATERVILLE SE 2 **NGS Name:** WATERVILLE SE 2

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6345 Get Map
NGS Quad / Sta Num : 44093321/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	36	109 N	23 W	441146.55	933221.81	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2010	2024	GOOD	Horz=YES Vert=YES	YES		FLUSH	STEEL ROD IMBED IN MON

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SURVEY DISK	MN-079

Description: (2010) **Stamping:** WATERVILLE SE 2 2010

2.0 MILES SOUTHEAST OF WATERVILLE, 2.0 MILES SOUTH ALONG TRUNK HIGHWAY 13 FROM THE JUNCTION OF TRUNK HIGHWAY 13 AND TRUNK HIGHWAY 60 IN WATERVILLE, THEN 200.0 FEET SOUTH ALONG COUNTY ROAD 73, THEN 0.6 MILE WEST ALONG 440TH AVENUE, 30.0 FEET NORTH OF 440TH AVENUE, 29.0 FEET EAST OF A FIELD ENTRANCE, 1.0 FOOT SOUTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.015	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1076.031	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1076.100	.262		982.619	.197	2011	GPS - RTRN	2024	RTRN2024
1075.972	.262		982.488	.197	2011	GPS - RTRN	2018	RTRN2018
1076.041	.262		982.560	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -93.481 12B = -93.484 09 = -93.405 03 = -93.212

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.54885	93 32 21.80713	393496.285	100826.378	.131	3	GPS - RTRN	2024	RTRN2024
44 11 46.54984	93 32 21.80731	393496.272	100826.478	.131	3	GPS - RTRN	2018	RTRN2018
44 11 46.54902	93 32 21.80730	393496.272	100826.395	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2745464.192	764507.227	1499004.899	16055785.528	.131	3	GPS - RTRN	2024	RTRN2024
2745464.178	764507.327	1499004.886	16055785.629	.131	3	GPS - RTRN	2018	RTRN2018
2745464.180	764507.244	1499004.887	16055785.546	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE_2-DQ6345-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE_2-DQ6345-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_SE_2-DQ6345-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WATERVILLE W TOWER FINAL

Mn/DOT Name: WATERVILLE W TOWER FINAL
NGS Name: WATERVILLE W TOWER FINAL
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: CJ4815 Get Map
NGS Quad / Sta Num : 44093313/
USGS Quad: CORDOVA

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	7	109 N	23 W	441537.16	933809.70		

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
	2024	GOOD	Horz=NO Vert=NO	YES			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
SEE DESCRIPTIVE TEXT	TANK	UNK

Description:

Stamping:

NO INFORMATION FOUND ON THIS MARK. PHOTOGRAPH IS OF AN OLD CLASSIC STEEL FARM WINDMILL.

Station Notes

THE WINDMILL IS THE ONLY THING IN THE VICINITY.

*** No Horizontal or Vertical Positions in the Database ***

Geoid Separations(ft): GEOID18 = -93.619 12B = -93.622 09 = -93.530 03 = -93.317

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_W_TOWER_FINAL-CJ4815-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_W_TOWER_FINAL-CJ4815-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WATERVILLE_W_TOWER_FINAL-CJ4815-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

WETZEE

Mn/DOT Name: WETZEE **NGS Name:** WETZEE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DR3257 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	111 N	24 W	442304.53	934339.23	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2019	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 1 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 19 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2019) **Stamping:** WETZEE 2019

IN LE CENTER, AT THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11 IN LE CENTER, AT TRUNK HIGHWAY 99 MILEPOINT 26.55, 58.6 FEET NORTH OF TRUNK HIGHWAY 99, 39.1 FEET EAST OF COUNTY ROAD 11 (SOUTH CORDOVA AVENUE), 101.0 FEET SOUTH OF CASEY'S NORTH ENTRANCE, 20.4 FEET SOUTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.058	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1061.058	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1061.133	.262		968.476	.197	2011	GPS - RTRN	2024	RTRN2024
1061.048	.262		968.387	.197	2011	GPS - RTRN	2019	RTRN2019

Geoid Separations(ft): GEOID18 = -92.657 12B = -92.661 09 = -92.565 03 = -92.372

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.52905	93 43 39.23067	344640.543	169786.390	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.53044	93 43 39.22975	344640.611	169786.530	.131	3	GPS - RTRN	2019	RTRN2019

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2695886.073	832937.385	1450280.163	16124795.139	.131	3	GPS - RTRN	2024	RTRN2024
2695886.140	832937.526	1450280.231	16124795.280	.131	3	GPS - RTRN	2019	RTRN2019

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WETZEE-DR3257-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WETZEE-DR3257-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WETZEE-DR3257-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: WILMES **NGS Name:** WILMES

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6326 Get Map
NGS Quad / Sta Num : 44093324/
USGS Quad: ELYSIAN

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	34	109 N	24 W	441202.20	934213.24	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type: ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 28 FT)
Disk Type: METAL ROD (WITH REMOVABLE ID DISK)
Mon. Agency: MNDT

Description: (2016) **Stamping:** WILMES 2016

1.2 MILES WEST OF ELYSIAN, 1.4 MILES WEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND COUNTY ROAD 11 IN ELYSIAN, AT TRUNK HIGHWAY 60 MILEPOINT 124.85, 71.2 FEET SOUTH-SOUTHWEST OF TRUNK HIGHWAY 60, 60.0 FEET EAST-SOUTHEAST OF AN ENTRANCE TO A STORAGE SHED, 7.0 NORTH-NORTHEAST OF A WITNESS POST.

Station Pair: TUMA - LE SUEUR, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.164	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1048.154	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1048.252	.262		953.978	.197	2011	GPS - RTRN	2024	RTRN2024
1048.111	.262		953.833	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.275 12B = -94.278 09 = -94.203 03 = -93.999

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 12 02.20163	93 42 13.24033	350417.554	102668.772	.131	3	GPS - RTRN	2024	RTRN2024
44 12 02.20195	93 42 13.24048	350417.543	102668.804	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2702373.430	765892.708	1455947.388	16057695.700	.131	3	GPS - RTRN	2024	RTRN2024
2702373.419	765892.741	1455947.378	16057695.733	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WILMES-DQ6326-3S-16APR2024.jpg	S	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WILMES-DQ6326-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WILMES-DQ6326-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: WINCO MNDT **NGS Name:** WINCO

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DG7036 Get Map
NGS Quad / Sta Num : 44093314/
USGS Quad: LE CENTER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	28	111 N	24 W	442304.71	934318.76	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 10 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** WINCO 1991

0.5 MILE SOUTHEAST OF LE CENTER, 0.3 MILE EAST ALONG TRUNK HIGHWAY 99 FROM THE JUNCTION OF TRUNK HIGHWAY 99 AND COUNTY ROAD 11, AT TRUNK HIGHWAY 99 MILEPOINT 26.75, 69.5 FEET NORTH OF TRUNK HIGHWAY 99, 173.1 FEET EAST OF A POWER POLE, 24.0 FEET WEST OF A POWER POLE, 1.0 FOOT EAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1060.070	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
1060.070	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
1060.070	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1060.077	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1060.063	.262		967.426	.197	2011	GPS - RTRN	2024	RTRN2024
1060.090	.262		967.455	.197	2011	GPS - RTRN	2016	RTRN2016
			967.482	.012	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			967.567	.014	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1060.103	.131		967.711	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
1060.103	.131		967.711	.066	1996	GPS - STATIC	2004	HLESU

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1059.906						GPS - STATIC	1991	HORZ

Geoid Separations(ft): GEOID18 = -92.634 12B = -92.638 09 = -92.542 03 = -92.346

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.70901	93 43 18.76164	346127.191	169793.863	.131	3	GPS - RTRN	2024	RTRN2024
44 23 04.70876	93 43 18.76196	346127.168	169793.838	.131	3	GPS - RTRN	2016	RTRN2016
44 23 04.70864	93 43 18.76234	346127.140	169793.826	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.70868	93 43 18.76309	346127.086	169793.831	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.70813	93 43 18.76278	346127.108	169793.775	.033	C	ADJUSTMENT	2004	GPS2027
44 23 04.70813	93 43 18.76278	346127.108	169793.775	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 23 04.70280	93 43 18.76140	346127.205	169793.233	.033	C	GPS - STATIC	1991	HLESU

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2697372.382	832960.613	1451766.224	16124800.209	.131	3	GPS - RTRN	2024	RTRN2024
2697372.359	832960.588	1451766.200	16124800.184	.131	3	GPS - RTRN	2016	RTRN2016
2697372.331	832960.575	1451766.173	16124800.172	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2697372.277	832960.579	1451766.118	16124800.177	.016		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2697372.299	832960.524	1451766.140	16124800.121	.033	C	ADJUSTMENT	2004	GPS2027
2697372.299	832960.524	1451766.140	16124800.121	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2697372.401	832959.984	1451766.236	16124799.581	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WINCO-DG7036-3N-17APR2024.jpg	N	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WINCO-DG7036-2-17APR2024.jpg		Apr 17, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WINCO-DG7036-1-17APR2024.jpg		Apr 17, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

Mn/DOT Name: WRASE **NGS Name:** WRASE

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: DQ6333 Get Map
NGS Quad / Sta Num : 43091231/
USGS Quad: WATERVILLE

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	32	109 N	23 W	441146.80	933658.14	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
2016	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	BAR MAG IN DRILL HOLE

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 34 FT)	METAL ROD (WITH REMOVABLE ID DISK)	MNDT

Description: (2016) **Stamping:** WRASE 2016

2.6 MILES SOUTHWEST OF WATERVILLE, 3.35 MILES SOUTHWEST ALONG TRUNK HIGHWAY 60 FROM THE JUNCTION OF TRUNK HIGHWAY 60 AND TRUNK HIGHWAY 13 IN WATERVILLE, AT TRUNK HIGHWAY 60 MILEPOINT 129.3, 92.5 FEET NORTH OF TRUNK HIGHWAY 60, 40.6 FEET EAST OF COUNTY ROAD 6 (175TH AVENUE), 28.6 FEET NORTHWEST OF A POWER POLE, 1.5 FEET SOUTH OF A WITNESS POST.

Station Pair: CHAMBERS - WASECA, MN

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1059.821	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1059.817	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1059.890	.262		965.851	.197	2011	GPS - RTRN	2024	RTRN2024
1059.834	.262		965.795	.197	2011	GPS - RTRN	2018	RTRN2018
1059.847	.262		965.808	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -94.039 12B = -94.042 09 = -93.970 03 = -93.760

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 11 46.79784	93 36 58.14402	373363.415	100961.023	.131	3	GPS - RTRN	2024	RTRN2024
44 11 46.79863	93 36 58.14309	373363.483	100961.102	.131	3	GPS - RTRN	2018	RTRN2018
44 11 46.79715	93 36 58.14380	373363.430	100960.953	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2725333.398	764428.457	1478880.880	16055952.205	.131	3	GPS - RTRN	2024	RTRN2024
2725333.465	764428.537	1478880.948	16055952.285	.131	3	GPS - RTRN	2018	RTRN2018
2725333.414	764428.387	1478880.896	16055952.135	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WRASE-DQ6333-3N-16APR2024.jpg	N	Apr 16, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WRASE-DQ6333-2-16APR2024.jpg		Apr 16, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/WRASE-DQ6333-1-16APR2024.jpg		Apr 16, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

X 115

Mn/DOT Name: X 115 **NGS Name:** X 115

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1731 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SW	33	110 N	26 W	441708.00	935749.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		PROJECTS 2 IN.	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2008) **Stamping:** X 115 1934

AT KASOTA, 90.0 FEET NORTHEAST OF A RAILROAD STATION, 12.0 FEET SOUTHWEST OF A ROAD, 12.0 FEET NORTHWEST OF A RAILROAD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
883.902	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
883.774	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -92.936 12B = -92.936 09 = -92.844 03 = -92.716

*** No Horizontal Positions in the Database ***

Mn/DOT Name: Y 115 **NGS Name:** Y 115

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1732 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	35	110 N	26 W	441728.00	935544.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO		FLUSH	SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	BENCH MARK DISK	NGS

Description: (2008) **Stamping:** Y 115 1934

1.8 MILES NORTHEAST ALONG A RAILROAD FROM THE KASOTA RAILROAD STATION, 49.5 FEET EAST OF RAILROAD MILEPOST 49, 33.0 FEET EAST OF A ROAD, 45.0 FEET NORTH OF A RAILROAD.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
944.043	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
943.902	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.061 12B = -93.054 09 = -92.969 03 = -92.828

*** No Horizontal Positions in the Database ***

Z 115

Mn/DOT Name: Z 115 **NGS Name:** Z 115

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: PP1733 Get Map
NGS Quad / Sta Num : 44093343/
USGS Quad: ST PETER

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NW	36	110 N	26 W	441725.00	935406.00	2	

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1934	2010	DESTROYED	Horz=NO Vert=NO	NO			SEE DESCRIPTION

Monument Type	Disk Type	Mon. Agency
CONCRETE MONUMENT (CAST-IN-PLACE)	SEE DESCRIPTION	NGS

Description: (2008) **Stamping:** Z 115 1934

3.3 MILES EAST OF KASOTA, 3.3 MILES NORTHEAST ALONG A RAILROAD FROM THE KASOTA RAILROAD STATION, 132.0 FEET SOUTHWEST OF RAILROAD MILEPOST 47, 63.0 FEET NORTHEAST OF A ROAD, 25.0 FEET NORTHWEST OF A RAILROAD, 25.0 FEET SOUTHEAST OF A FENCE.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.927	.016	2/0				VERTICAL ADJUSTMENT	1991	00000025

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
981.770	.007	1				VERTICAL CONTROL SURVEY	1941	L57 MINN

Geoid Separations(ft): GEOID18 = -93.179 12B = -93.179 09 = -93.084 03 = -92.936

*** No Horizontal Positions in the Database ***

ZIEB MNDT

Mn/DOT Name: ZIEB MNDT
NGS Name: ZIEB
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AE4688 Get Map
NGS Quad / Sta Num : 44093344/
USGS Quad: LE SUEUR

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
SE	2	111 N	26 W	442650.59	935433.02	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1991	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 33 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (1991) **Stamping:** ZIEB 1991

AT THE SOUTH EDGE OF LE SUEUR, AT THE SOUTHEAST CORNER OF THE MOUND CEMETERY, 1.2 MILES SOUTH ALONG COUNTY ROAD 22 FROM THE JUNCTION OF TRUNK HIGHWAY 93 AND COUNTY ROAD 22, 32.5 FEET WEST OF TRUNK HIGHWAY 112, 76.2 FEET WEST-NORTHWEST OF A POWER POLE WITH A GUY WIRE, 42.0 FEET SOUTH OF THE SOUTH CEMETERY ENTRANCE, 34.4 FEET EAST-SOUTHEAST OF THE NORTHEAST CORNER OF THE ZIEBARTH HEADSTONE, 1.0 FOOT WEST OF A WITNESS POST.

Station Notes
DUE TO TREE COVER, THIS SURVEY MARK HAS BEEN ABANDONED FOR MNDOT GEODETIC HORIZONTAL SURVEYS.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
868.932	.016	2/1				VERTICAL ADJUSTMENT	2020	00000949
868.932	.016	2/1				VERTICAL CONTROL SURVEY	2019	VLECE
868.958	.016	2/1				VERTICAL ADJUSTMENT	1998	00000251
868.968	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
868.824	.016	2/1				VERTICAL CONTROL SURVEY	1996	VHENLES

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
868.939	.262		776.488	.197	2011	GPS - RTRN	2024	RTRN2024
			776.495	.010	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			776.577	.011	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
868.962	.131		776.711	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS2027
868.962	.131		776.711	.066	1996	GPS - STATIC	2004	HLESU

Geoid Separations(ft): GEOID18 = -92.447 12B = -92.447 09 = -92.375 03 = -92.198

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 50.58776	93 54 33.01991	297378.237	193076.781	.131	3	GPS - RTRN	2024	RTRN2024
44 26 50.58894	93 54 33.01949	297378.269	193076.900	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 50.58904	93 54 33.02018	297378.219	193076.911	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 50.58846	93 54 33.01955	297378.264	193076.852	.033	C	ADJUSTMENT	2004	GPS2027
44 26 50.58846	93 54 33.01955	297378.264	193076.852	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 26 50.58588	93 54 33.02108	297378.149	193076.592	.033	C	GPS - STATIC	1991	HLESU

ZIEB MNDT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648385.210	855722.799	1403074.039	16148152.917	.131	3	GPS - RTRN	2024	RTRN2024
2648385.241	855722.918	1403074.070	16148153.036	.010		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648385.191	855722.929	1403074.020	16148153.047	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648385.237	855722.870	1403074.066	16148152.988	.033	C	ADJUSTMENT	2004	GPS2027
2648385.237	855722.870	1403074.066	16148152.988	.033	C	GPS - STATIC	2004	HLESU

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2648385.126	855722.609	1403073.952	16148152.728	.033	C	GPS - STATIC	1991	HLESU

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZIEB-AE4688-3W-17APR2024.jpg	W	Apr 17, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZIEB-AE4688-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZIEB-AE4688-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ZOUBEK MNDT

Mn/DOT Name: ZOUBEK MNDT
NGS Name: ZOUBEK
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9304 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	111 N	23 W	442541.24	933411.72	2	C

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 15 FT)	HORIZONTAL CONTROL DISK	MNDT

Description: (2016) **Stamping:** ZOUBEK 1989

1.0 MILE EAST-SOUTHEAST OF MONTGOMERY, 0.75 MILE EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF COUNTY ROAD 161 (TRUNK HIGHWAY 13) AND TRUNK HIGHWAY 21, ON THE TOP OF A HILL, AT TRUNK HIGHWAY 21 MILEPOINT 17.6, 62.0 FEET SOUTH OF TRUNK HIGHWAY 21, 100.0 FEET WEST OF ENTRANCE NUMBER 764, 26.6 FEET NORTH-NORTHEAST OF A POWER POLE, 30.8 FEET WEST OF ZOUBEK MNDT RM 1, 24.2 FEET NORTH-NORTHEAST OF ZOUBEK MNDT RM 2, 25.7 FEET NORTH-NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.265	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1097.353	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1097.353	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.068	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.334	.262		1006.448	.197	2011	GPS - RTRN	2024	RTRN2024
1097.298	.262		1006.412	.197	2011	GPS - OPUS	2021	GPSBM
1097.344	.262		1006.435	.197	2011	GPS - RTRN	2020	RTRN2020
1097.262	.262		1006.353	.197	2011	GPS - RTRN	2016	RTRN2016
			1006.419	.007	2011	HORIZONTAL ADJUSTMENT	2012	GPS2800
			1006.510	.066	2007	HORIZONTAL ADJUSTMENT	2009	GPS2437-B
1097.340	.131		1006.720	.066	1996	HORIZONTAL ADJUSTMENT	2008	GPS2437
1097.340	.131		1006.720	.066	1996	GPS - STATIC	2008	HRYCE
			1006.510	.009	2007	HORIZONTAL ADJUSTMENT	2007	GPS2300
1097.340	.131		1006.720	.066	1996	HORIZONTAL ADJUSTMENT	2005	GPS2080
1097.340	.131		1006.720	.066	1996	GPS - STATIC	2005	H40BJ
1097.340	.131		1006.720	.066	1996	HORIZONTAL ADJUSTMENT	2004	GPS1939
1097.340	.131		1006.720	.066	1996	GPS - STATIC	2003	HMONT

Geoid Separations(ft): GEOID18 = -90.886 12B = -90.909 09 = -90.813 03 = -90.646

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.23892	93 34 11.72088	385939.640	185396.831	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.23891	93 34 11.72089	385939.640	185396.830	.131	3	GPS - OPUS	2021	GPSBM
44 25 41.23894	93 34 11.72083	385939.644	185396.833	.131	3	GPS - RTRN	2020	RTRN2020
44 25 41.23895	93 34 11.72051	385939.667	185396.834	.131	3	GPS - RTRN	2016	RTRN2016
44 25 41.23899	93 34 11.72056	385939.663	185396.838	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.23911	93 34 11.72130	385939.610	185396.850	.033	C	ADJUSTMENT	2009	GPS2437-B
44 25 41.23911	93 34 11.72131	385939.609	185396.850	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.23865	93 34 11.72075	385939.650	185396.803	.033	C	ADJUSTMENT	2008	GPS2437
44 25 41.23865	93 34 11.72075	385939.650	185396.803	.033	C	GPS - STATIC	2008	HRYCE
44 25 41.23865	93 34 11.72077	385939.648	185396.803	.033	C	ADJUSTMENT	2005	GPS2080
44 25 41.23865	93 34 11.72075	385939.649	185396.803	.033	C	GPS - STATIC	2005	H40BJ
44 25 41.23865	93 34 11.72075	385939.650	185396.803	.033	C	ADJUSTMENT	2004	GPS1939
44 25 41.23865	93 34 11.72075	385939.650	185396.803	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.23024	93 34 11.71761	385939.874	185395.951	.033	C	GPS - STATIC	1990	HMONT

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737012.483	848982.815	1491587.573	16140332.300	.131	3	GPS - RTRN	2024	RTRN2024
2737012.483	848982.814	1491587.572	16140332.299	.131	3	GPS - OPUS	2021	GPSBM
2737012.487	848982.818	1491587.577	16140332.302	.131	3	GPS - RTRN	2020	RTRN2020
2737012.510	848982.819	1491587.599	16140332.303	.131	3	GPS - RTRN	2016	RTRN2016
2737012.507	848982.823	1491587.596	16140332.307	.007		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737012.453	848982.835	1491587.542	16140332.320	.033	C	ADJUSTMENT	2009	GPS2437-B
2737012.452	848982.835	1491587.542	16140332.320	.010		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737012.493	848982.788	1491587.582	16140332.273	.033	C	ADJUSTMENT	2008	GPS2437
2737012.493	848982.788	1491587.582	16140332.273	.033	C	GPS - STATIC	2008	HRYCE
2737012.492	848982.788	1491587.580	16140332.273	.033	C	ADJUSTMENT	2005	GPS2080
2737012.493	848982.788	1491587.582	16140332.273	.033	C	GPS - STATIC	2005	H40BJ
2737012.493	848982.788	1491587.582	16140332.273	.033	C	ADJUSTMENT	2004	GPS1939
2737012.493	848982.788	1491587.582	16140332.273	.033	C	GPS - STATIC	2003	HMONT

NAD83(1986)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737012.725	848981.938	1491587.804	16140331.420	.033	C	GPS - STATIC	1990	HMONT

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK-AC9304-3S-14MAY2020.jpg	S	May 14, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK-AC9304-2-14MAY2020.jpg		May 14, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK-AC9304-1-14MAY2020.jpg		May 14, 2020

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ZOUBEK MNDT RM 1

Mn/DOT Name: ZOUBEK MNDT RM 1 **NGS Name:** ZOUBEK RM 1

County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9306 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	111 N	23 W	442541.26	933411.30	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=YES Vert=YES	YES		RECESSED 3 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** ZOUBEK NO 1 1989

1.0 MILE EAST-SOUTHEAST OF MONTGOMERY, 0.75 MILE EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF COUNTY ROAD 161 (TRUNK HIGHWAY 13) AND TRUNK HIGHWAY 21, ON THE TOP OF A HILL, 68.0 FEET WEST OF DRIVEWAY NUMBER 764, 59.3 FEET SOUTH OF TRUNK HIGHWAY 21, 51.4 FEET NORTHEAST OF A POWER POLE, 49.9 FEET NORTHEAST OF ZOUBEK MNDT RM 2, 30.8 FEET EAST OF STATION ZOUBEK MNDT, 50.6 FEET NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1098.072	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1098.164	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1098.164	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1097.878	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1098.144	.262		1007.258	.197	2011	GPS - RTRN	2024	RTRN2024
1098.111	.262		1007.203	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.886 12B = -90.909 09 = -90.813 03 = -90.646

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.26393	93 34 11.29689	385970.423	185399.199	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.26361	93 34 11.29653	385970.449	185399.167	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2737043.235	848985.510	1491618.346	16140334.618	.131	3	GPS - RTRN	2024	RTRN2024
2737043.261	848985.478	1491618.372	16140334.585	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_1-AC9306-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_1-AC9306-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_1-AC9306-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **

ZOUBEK MNDT RM 2

Mn/DOT Name: ZOUBEK MNDT RM 2
NGS Name: ZOUBEK RM 2
County: LE SUEUR, MN (Sheet 1)

NGS ACRN: AC9305 Get Map
NGS Quad / Sta Num : 44093311/
USGS Quad: MONTGOMERY

1/4	Sec	Twp	Rng	Reference Latitude	Reference Longitude	Vert Order	Horz Order
NE	15	111 N	23 W	442541.04	933411.91	2	3

Year Set	Last Recovery	Condition	Geodetic Usability	Photos	Bridge Num	F/P/R	Magnetic Properties
1989	2024	GOOD	Horz=NO Vert=YES	YES		RECESSED 2 IN.	MARKER W/BAR MAGNET

Monument Type	Disk Type	Mon. Agency
ALUMINUM ALLOY ROD (NO SLEEVE) (DEPTH 18 FT)	REFERENCE MARK DISK	MNDT

Description: (2016) **Stamping:** ZOUBEK NO 2 1989

1.0 MILE EAST-SOUTHEAST OF MONTGOMERY, 0.75 MILE EAST ALONG TRUNK HIGHWAY 21 FROM THE JUNCTION OF COUNTY ROAD 161(TRUNK HIGHWAY 13) AND TRUNK HIGHWAY 21, ON THE TOP OF A HILL, 114.0 FEET WEST OF DRIVEWAY NUMBER 764, 82.0 FEET SOUTH OF TRUNK HIGHWAY 21, 49.9 FEET SOUTHWEST OF ZOUBEK MNDT RM 1, 24.2 FEET SOUTH-SOUTHWEST OF STATION ZOUBEK MNDT, 2.6 FEET NORTH OF A POWER POLE, 1.8 FEET NORTH OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1096.710	.016	2/1				VERTICAL ADJUSTMENT	2019	00000938
1096.802	.016	2/1				VERTICAL CONTROL SURVEY	2017	VMGOM
1096.802	.016	2/1				VERTICAL ADJUSTMENT	1997	00000231

NGVD29

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1096.517	.016	2/1				VERTICAL CONTROL SURVEY	1989	VMONT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

NAVD88

Orthometric Height			Ellipsoid (NAD83)				Project Info	
Height	Acc	Order (/Class)	Height	Acc	Adj	Determination Method	Year	Reference
1096.802	.262		1005.917	.197	2011	GPS - RTRN	2024	RTRN2024
1096.786	.262		1005.877	.197	2011	GPS - RTRN	2016	RTRN2016

Geoid Separations(ft): GEOID18 = -90.886 12B = -90.909 09 = -90.813 03 = -90.646

Lat/Lon and County Coordinates (Feet)

NAD83(2011)

Geodetic Position		Le Sueur County					Project Info	
Latitude	Longitude	X	Y	Acc	Order	Determination Method	Year	Reference
44 25 41.04268	93 34 11.91218	385925.652	185377.031	.131	3	GPS - RTRN	2024	RTRN2024
44 25 41.04407	93 34 11.91065	385925.763	185377.172	.131	3	GPS - RTRN	2016	RTRN2016

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - South Zone		UTM - Zone 15					Project Info	
X	Y	X	Y	Acc	Order	Determination Method	Year	Reference
2736998.707	848962.871	1491573.558	16140312.532	.131	3	GPS - RTRN	2024	RTRN2024
2736998.817	848963.013	1491573.670	16140312.672	.131	3	GPS - RTRN	2016	RTRN2016

Station Photos

Type	File Name	Dir	Date
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_2-AC9305-3S-22APR2024.jpg	S	Apr 22, 2024
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_2-AC9305-2-22APR2024.jpg		Apr 22, 2024
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/le_sueur/ZOUBEK_RM_2-AC9305-1-22APR2024.jpg		Apr 22, 2024

** All station images can be viewed at: ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos **