Level 1 LAYOUT APPROVAL

Programmed Letting Date September 25, 2015

Prepared By	District Preliminary Design Engineer	20__
Reviewed By	District Traffic Engineer	20__
Reviewed By	Principal Geometric Engineer	20__
Approved By	Transportation District/Division Engineer	20__
Approved By	State Design Engineer	20__

R Thomas Fiddler

DATE 8/29/2014 REG. NO. 26124

I HEREBY CERTIFY THAT THIS LAYOUT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LAYOUT No. 2 COPY No. ____

T.H. 75 VICINITY OF T.H. 94

FROM 37TH AVENUE S TO 24TH AVENUE S

Prepared AUGUST 2014 Scale: Hor. 1 inch = 50 ft.
By STANTEC

The alignment and grades shown on this map are tentative and subject to change without notice.	Staff Approval Date: June 5, 2014	The traffic volumes shown are estimated for years 2015 and 2040 Source: Metro COG 2040 Transportation Plan updated: June 2014

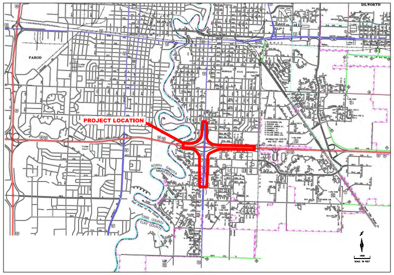
S.P. 1406-66 T.H. 75 A.J. T00000 PPMS Activity 0000
S.P. ____ T.H. __ A.J. ____ PPMS Activity ____
S.P. ____ T.H. __ A.J. ____ PPMS Activity ____
Copy To: ____ For: ____

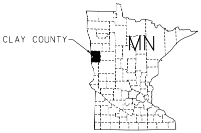
Stantec

MINNESOTA DEPARTMENT OF TRANSPORTATION

DESIGN FILE: V:\1938\active\193801516\CAD\Dwg\CD1406-66_lo1.dgn
DATE: 8/29/2014

LOCATION MAP


DILWORTH
FARGO
PROJECT LOCATION
NORTH DAKOTA
MINNESOTA
CASS COUNTY
CLAY COUNTY
MOORHEAD STATE UNIVERSITY
1500
SCALE IN FEET


CLAY COUNTY
MN

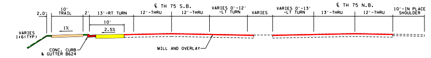
COLOR KEY

🟧	BRIDGES
🟨	ROADWAYS (INCLUDING TURN LANES)
🟥	CURBS, PAVING & MEDIANS
🟦	STORM WATER PONDS
🟦	SHOULDERS
🟪	SIDEWALKS
🟥	CONCRETE BARRIER
🟫	MULTI-USE PATH OR TRAIL
🟩	BOULEVARD
⊥⊥	RETAINING WALLS
- - -	EXISTING R/W
- · -	RAILROAD R/W
- - -	PRELIMINARY CONSTRUCTION LIMITS
⊗	PROPOSED SIGNAL
⊗	INPLACE SIGNAL
⁎	INPLACE WETLAND
▨	MILL AND OVERLAY
⊗	TREE CLEAR AND GRUB

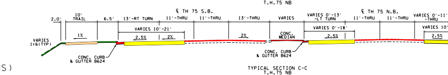
GENERAL NOTES

1. THE TRAFFIC VOLUMES SHOWN ARE ESTIMATED FOR YEARS 2015 AND 2040
   SOURCE: METRO COG 2040 TRANSPORTATION PLAN
   UPDATED: JUNE 2014
2. THE DESIGN SPEED AND POSTED SPEED LIMIT FOR TH 75 NORTH BOUND AND SOUTH BOUND LANES IS 40 MPH EXCEPT THROUGH THE INTERCHANGE (INCLUDING THE RAMP INTERSECTIONS) WHERE IT IS LOWERED TO 30 MPH.

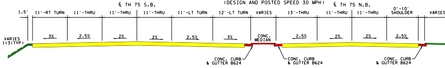
TYPICAL SECTION A-A
T.H.75 NB


℄ TH 75 S.B.
℄ TH 75 N.B.
2.0'
10' TRAIL
2'
13'-RT TURN
12'-THRU
12'-THRU
VARIES 0'-12' -LT TURN
VARIES
VARIES 0'-13' -LT TURN
13'-THRU
12'-THRU
10'-IN PLACE SHOULDER
10'
1%
2.5%
VARIES 1:6(TYP)
CONC. CURB & GUTTER B624
MILL AND OVERLAY

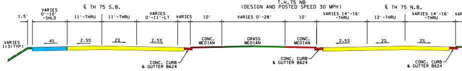
TYPICAL SECTION B-B
T.H.75 NB


℄ TH 75 S.B.
℄ TH 75 N.B.
2.0'
10' TRAIL
6.5'
13'-RT TURN
11'-THRU
11'-THRU
13'-THRU
VARIES
VARIES 0'-13' -LT TURN
11'-THRU
11'-THRU
VARIES 0'-11' -THRU
VARIES 10'-21'
VARIES 0'-18'
VARIES 10'
1%
2.5%
2%
2%
2.5%
2.5%
CONC. MEDIAN
VARIES 1:6(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

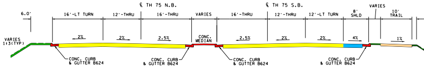
TYPICAL SECTION C-C
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 S.B.
℄ TH 75 N.B.
1.5'
11'-RT TURN
11'-THRU
11'-THRU
11'-THRU
11'-LT TURN
12'-LT TURN
VARIES
13'-THRU
11'-THRU
11'-THRU
0'-10' SHOULDER
VARIES
3%
2.5%
2%
2%
2.5%
3%
2.5%
2%
2%
2.5%
CONC. MEDIAN
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

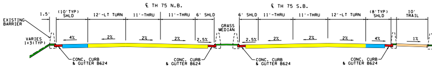
TYPICAL SECTION D-D
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 S.B.
℄ TH 75 N.B.
1.5'
VARIES 0'-10' -SHLD
11'-THRU
11'-THRU
VARIES 0'-11'-LT
VARIES
10'
VARIES 0'-28'
10'
VARIES 14'-16' -THRU
12'-THRU
VARIES 14'-16' -THRU
4%
2.5%
2%
2.5%
2.5%
2%
2%
CONC. MEDIAN
GRASS MEDIAN
CONC. MEDIAN
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

TYPICAL SECTION E-E
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 N.B.
℄ TH 75 S.B.
6.0'
16'-LT TURN
12'-THRU
16'-THRU
VARIES
16'-THRU
12'-THRU
12'-LT TURN
8' SHLD
VARIES
10' TRAIL
2%
2%
2.5%
2.5%
2%
2%
4%
1%
CONC. MEDIAN
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

TYPICAL SECTION F-F
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 N.B.
℄ TH 75 S.B.
1.5'
(10'TYP) SHLD
12'-LT TURN
11'-THRU
11'-THRU
6' SHLD
6' SHLD
11'-THRU
11'-THRU
12'-LT TURN
(8'TYP) SHLD
10' TRAIL
EXISTING BARRIER
GRASS MEDIAN
4%
2%
2%
2%
2.5%
2.5%
2%
2%
2%
4%
1%
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

LAYOUT HISTORY

IN JUNE OF 2008 A REPORT TITLED TH 75 AND 20TH STREET - CORRIDOR STUDY REPORT WAS PREPARED FOR THE FARGO-MOORHEAD METROPOLITAN COUNCIL OF GOVERNMENTS. IMPROVEMENTS TO THE US (TH) 75 & I 94 INTERCHANGE WAS ONE OF THE PRIORITIZED RECOMMENDATIONS FROM THAT REPORT. THE REPORT IDENTIFIED A PARTIALLY FOLDED DIAMOND/CLOVERLEAF (PARCLO) INTERCHANGE AS A PREFERRED ALTERNATIVE. IN 2012 MNDOT DISTRICT 4 ISSUED A REQUEST FOR PROPOSALS TO DELIVER PRELIMINARY AND DETAILED DESIGN OF THE US 75 & I 94 INTERCHANGE PROJECT. AS PART OF THEIR PROPOSAL THE STANTEC/HDR TEAM RECOMMENDED CONSIDERATION OF A DIVERGING DIAMOND INTERCHANGE (DDI). IN JUNE 2012 THE STANTEC TEAM WAS HIRED TO PROVIDE PRELIMINARY AND DETAILED DESIGN OF A DDI.

IN LATE 2012, MNDOT COMPLETED A VALUE ENGINEERING STUDY (VE STUDY) OF THE PROJECT. THE VE STUDY CALLED FOR CONCEPTUAL LEVEL CONSIDERATION OF THE FOLLOWING OPTIONS IN ADDITION TO THE DDI: PARTIAL CLOVERLEAF INTERCHANGE WITH LOOPS IN THE NE & SW QUADRANTS, DDI INTERCHANGE WITH LOOPS IN THE NE & SW QUADRANTS, AND A FULL CLOVERLEAF INTERCHANGE. ADDITIONALLY, TWO OTHER ALTERNATIVES WERE ADDED FOR EVALUATION THROUGH PROJECT MANAGEMENT TEAM (PMT) DISCUSSIONS: A MODIFIED PARTIAL CLOVERLEAF WITH A LOOP IN THE NE QUADRANT ONLY AND A PARTIAL CLOVERLEAF/FOLDED DIAMOND INTERCHANGE WITH LOOPS IN THE NE AND SE QUADRANTS. IN ADDITION TO EACH INTERCHANGE OPTION, INDIRECT LEFT TURNS (FORMERLY KNOWN AS MICHIGAN LEFTS) WERE TO BE CONSIDERED AT 30TH AVENUE.

IN CONSIDERING THE ALTERNATIVES THE FOLLOWING QUESTIONS WERE ANSWERED: HOW DOES THE CONCEPT APPEAR TO FUNCTION IN VISSIM; WILL THE EXISTING BRIDGES OVER I 94 ACCOMMODATE THE CONCEPT; WHAT IMPACTS DOES THE CONCEPT HAVE ON EXISTING DRAINAGE DITCHES; WHAT RIGHT-OF-WAY NEEDS ARE PRESENTED; AND WHAT ARE THE ESTIMATED CONSTRUCTION COSTS.

IN EARLY 2014 THOSE ALTERNATIVES WARRANTING FURTHER CONSIDERATION WERE EVALUATED THROUGH AN INTERSECTION CONTROL EVALUATION STUDY (ICE). ALTERNATIVES EVALUATED INCLUDED: NO-BUILD, DIAMOND INTERCHANGE WITH ROUNDABOUTS, DIVERGING DIAMOND INTERCHANGE, DIVERGING DIAMOND INTERCHANGE WITH INDIRECT LEFT-TURNS AT 30TH AVENUE, NORTHEAST LOOP INTERCHANGE, NORTHEAST LOOP INTERCHANGE WITH INDIRECT LEFT-TURNS AT 30TH AVENUE, PARTIAL CLOVERLEAF INTERCHANGE, AND PARTIAL CLOVERLEAF INTERCHANGE WITH INDIRECT LEFT-TURNS AT 30TH AVENUE. PRELIMINARY FINDINGS OF THE ICE WERE PRESENTED AT A PUBLIC OPEN HOUSE HELD NEAR THE PROJECT SITE ON JANUARY 23RD, 2014. ADDITIONAL MEETINGS WERE HELD WITH MNDOT D4 AND CITY OF MOORHEAD STAFF TO DISCUSS PUBLIC INPUT, ICE RESULTS AND OTHER CONSIDERATIONS.

JUNE 2014 REVISIONS FROM LAYOUT 1 TO LAYOUT 1A.

- LAYOUT REVISED IN RESPONSE TO HDR PEER REVIEW AND MNDOT D4 REVIEW COMMENTS
- VERTICAL CURVES ON T.H. 75 - INCREASE LENGTH TO MIN 120' FOR HIGHER, 40 MPH, DESIGN SPEED
- SW RAMP MODIFIED TO HAVE 4' LT SHLD EXTENDED TO THE CURB AND GUTTER SECTION AND A 6' RT SHLD THAT WRAPS AROUND ONTO SB T.H. 75
- SE RAMP DESIGN CHANGED FROM RURAL TO URBAN
- INCREASED RADIUS OF FIRST/LAST CURVE ON THE NE AND SE RAMPS TO MEET CURRENT STANDARD
- MODIFIED NE RAMP TO SHOW 4' INSIDE SHLD, 6' OUTSIDE SHLD, AND RURAL SECTION (EXISTING IS A MIX OF URBAN AND RURAL)
- MODIFY NB TH 75 AND TURN LANE TO HOLIDAY DRIVE URBAN AND MODIFY LANE WIDTH TO READ 13'
- ELIMINATED 100' NB RURAL SECTION JUST NORTH OF 30TH. TH 75 IS BEING PROPOSED TO BE URBAN TO THE NORTH AND SOUTH AND 30TH IS URBAN.
- ADDED PEDESTRIAN CROSSINGS AT EACH LEG OF TH 75/37TH AVE S.
- ADDED PEDESTRIAN CURB RAMPS AT NW, SW, AND SE QUADRANTS AT TH75/35TH AVE S.
- ADDED PEDESTRIAN CROSSINGS OF ALL FOUR LEGS AT TH 75/30TH AVE S.
- ADDED RECONSTRUCTION OF TRAIL FROM 30TH AVE S. TO 40TH AVE S. INCREASED WIDTH FROM 7' TO 10'.
- ADDED PEDESTRIAN CROSSINGS OF ALL FOUR LEGS AT TH 75/24TH AVE S.
- ADDED PEDESTRIAN UNDERPASSES OF EASTERN RAMPS
- EXTENDED CURB AND GUTTER ALONG SOUTHBOUND TH 75 STATION 1457+00 TO 1454+00 TO GET WATER INTO CB.
- EXTENDED REPLACEMENT OF CENTER RAISED MEDIAN NORTH OF 24TH AVE S. TO INCLUDE ENTIRE MEDIAN.

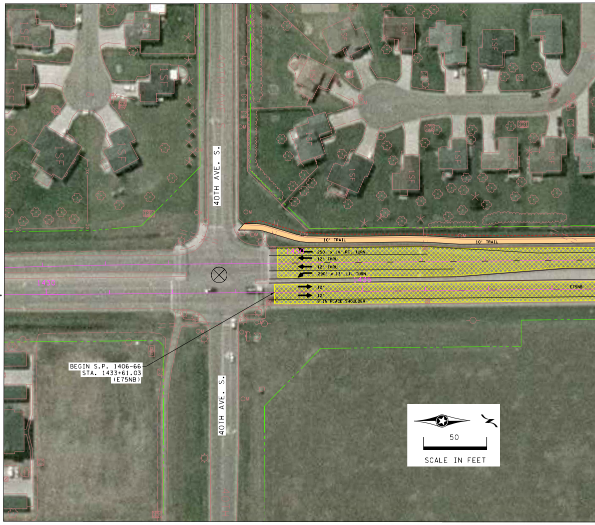
JUNE 2014 REVISIONS FROM LAYOUT 1A TO LAYOUT 1B.

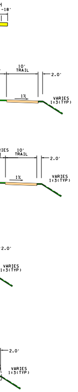
- TYPICAL SECTIONS REVISED PER HDR PEER REVIEW OF SCOPING DOCUMENT.

AUGUST 2014 REVISIONS FROM LAYOUT 1B TO LAYOUT 2

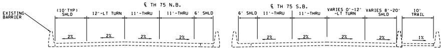
MADE THE FOLLOWING CHANGES IN RESPONSE TO COMMENTS FROM THE GEOMETRIC DESIGN SUPPORT UNIT:

- REVISED GEOMETRY OF THE NORTHWEST RAMP INCLUDING MERGE GEOMETRY AND EXTENDING THE RAMP NOSE
- PROVIDED DEDICATED RIGHT TURN LANE FROM SOUTHBOUND T.H. 75 TO 24™ AVE. S.
- REDUCED TWO LANE WIDTHS ACROSS THE BRIDGE TO 11 FT TO PROVIDE ADDITIONAL SNOW STORAGE.
- REDUCED WIDTH OF NORTHBOUND TO EASTBOUND RIGHT TURN LANE TO SOUTHEAST RAMP.
- UPDATED DESIGN VEHICLE PATHS AND UPDATED INTERSECTION CORNERS AT 24™ AVE. AND 30™ AVE.

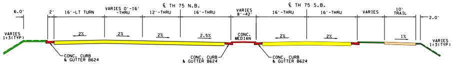

40TH AVE. S.
40TH AVE. S.
10' TRAIL
10' TRAIL
250' x 14' RT. TURN
12' THRU
12' THRU
290' x 13' LT. TURN
12'
12'
9' IN PLACE SHOULDER
1430
1435
E75NB
1SF
BEGIN S.P. 1406-66
STA. 1433+61.03
(E75NB)
50
SCALE IN FEET


18'
10'
TRAIL
2.0'
1%
VARIES
1:3(TYP)
10'
TRAIL
2.0'
1%
VARIES
1:3(TYP)
2.0'
VARIES
1:3(TYP)
2.0'
VARIES
1:3(TYP)

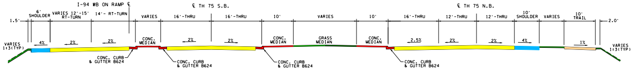
TYPICAL SECTION G-G
T.H.75 NB


℄ TH 75 N.B.
℄ TH 75 S.B.
EXISTING BARRIER
(10'TYP) SHLD
12'-LT TURN
11'-THRU
11'-THRU
6' SHLD
6' SHLD
11'-THRU
11'-THRU
VARIES 0'-12' -LT TURN
VARIES 8'-20' SHLD
10' TRAIL
2%
2%
2%
2%
2%
2%
2%
2%
1%

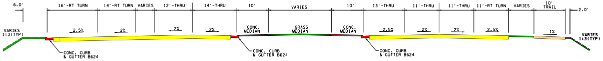
TYPICAL SECTION H-H
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 N.B.
℄ TH 75 S.B.
6.0'
2'
16'-LT TURN
VARIES 0'-16' -THRU
12'-THRU
16'-THRU
VARIES 8'-42'
16'-THRU
16'-THRU
VARIES
10' TRAIL
2.0'
VARIES 1:3(TYP)
2%
2%
2%
2.5%
CONC. MEDIAN
2%
2%
1%
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

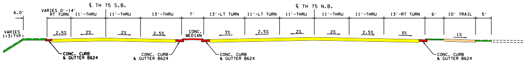
TYPICAL SECTION I-I
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


I-94 WB ON RAMP ℄
℄ TH 75 S.B.
℄ TH 75 N.B.
1.5'
6' SHOULDER
VARIES 12'-15' RT-TURN
14'- RT-TURN
VARIES
16'-THRU
16'-THRU
10'
VARIES
10'
16'-THRU
12'-THRU
12'-THRU
10' SHOULDER
VARIES
10' TRAIL
2.0'
VARIES 1:3(TYP)
4%
2%
2%
CONC. MEDIAN
2%
2%
CONC. MEDIAN
GRASS MEDIAN
CONC. MEDIAN
2.5%
2%
2%
4%
1%
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

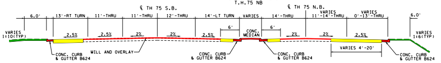
TYPICAL SECTION J-J
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 S.B.
℄ TH 75 N.B.
6.0'
16'-RT TURN
14'-RT TURN
VARIES
12'-THRU
14'-THRU
10'
VARIES
10'
13'-THRU
11'-THRU
11'-THRU
11'-RT TURN
VARIES
10' TRAIL
2.0'
VARIES 1:3(TYP)
2.5%
2%
2%
2%
CONC. MEDIAN
GRASS MEDIAN
CONC. MEDIAN
2.5%
2%
2%
2.5%
1%
VARIES 1:3(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

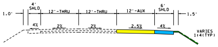
TYPICAL SECTION K-K
T.H.75 NB
(DESIGN AND POSTED SPEED 30 MPH)


℄ TH 75 S.B.
℄ TH 75 N.B.
6.0'
VARIES 0'-14' RT TURN
11'-THRU
11'-THRU
13'-THRU
7'
13'-LT TURN
11'-LT TURN
11'-THRU
11'-THRU
11'-THRU
13'-RT TURN
6'
10' TRAIL
5'
VARIES 1:3(TYP)
2.5%
2%
2%
2.5%
CONC. MEDIAN
3%
2.5%
2%
2%
2.5%
3%
1%
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

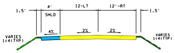
TYPICAL SECTION L-L
T.H.75 NB


℄ TH 75 S.B.
℄ TH 75 N.B.
6.0'
13'-RT TURN
11'-THRU
11'-THRU
12'-THRU
14'-LT TURN
VARIES
14'-THRU
VARIES 11'-14'-THRU
VARIES 0'-13'-THRU
6.0'
VARIES 1:10(TYP)
2.5%
2.5%
2%
2%
2.5%
6'
CONC. MEDIAN
6'
2%
2%
2.5%
VARIES 1:6(TYP)
VARIES 4'-20'
CONC. CURB & GUTTER B624
MILL AND OVERLAY
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

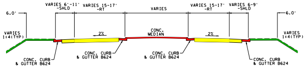
TYPICAL SECTION X-X
I 94 WB


1.0'
4' SHLD
12'-THRU
12'-THRU
12'-AUX
6' SHLD
1.5'
4%
2%
2%
2.5%
4%
VARIES 1:4(TYP)

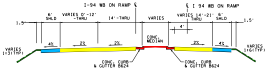
TYPICAL SECTION T-T
I 94 WB OFF RAMP


1.5'
4' SHLD
12-LT
12'-RT
1.5'
4%
2%
2%
VARIES 1:4(TYP)
VARIES 1:4(TYP)

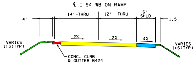
TYPICAL SECTION O-O
I 94 WB OFF RAMP


6.0'
VARIES 6'-11' -SHLD
VARIES 15-17' -RT
VARIES
VARIES 15-17' -RT
VARIES 6-9' -SHLD
6.0'
VARIES 1:4(TYP)
2%
CONC. MEDIAN
2%
VARIES 1:4(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

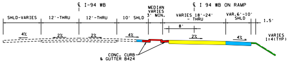
TYPICAL SECTION N-N
I 94 WB ON RAMP


I-94 WB ON RAMP ℄
℄ I 94 WB ON RAMP
1.5'
6' SHLD
VARIES 0'-12' -THRU
14'-THRU
VARIES
VARIES 14'-21' THRU
6' SHLD
1.5'
4'
VARIES 1:3(TYP)
4%
2%
2%
CONC. MEDIAN
2%
4%
VARIES 1:6(TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

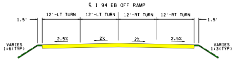
TYPICAL SECTION R-R
I 94 WB ON RAMP


℄ I 94 WB ON RAMP
4'
14'-THRU
12'- THRU
6' SHLD
1.5'
VARIES 1:3(TYP)
2%
2%
4%
VARIES 1:6(TYP)
CONC. CURB & GUTTER B424

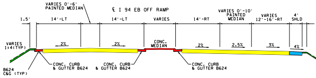
TYPICAL SECTION P-P
I 94 WB


℄ I-94 WB
℄ I 94 WB ON RAMP
SHLD-VARIES
12'-THRU
12'-THRU
10' SHLD
MEDIAN VARIES 3' MIN.
VARIES 18'-24' - THRU
VAR.6'-10' SHLD
1.5'
8'
4%
2%
2%
4%
2%
4%
VARIES 1:4(TYP)
CONC. CURB & GUTTER B424

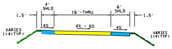
TYPICAL SECTION Q-Q
I 94 EB OFF RAMP


℄ I 94 EB OFF RAMP
1.5'
12'-LT TURN
12'-LT TURN
12'-RT TURN
12'-RT TURN
1.5'
2.5%
2%
2%
2.5%
VARIES 1:6(TYP)
VARIES 1:3(TYP)

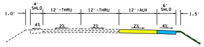
TYPICAL SECTION M-M
I 94 EB OFF RAMP

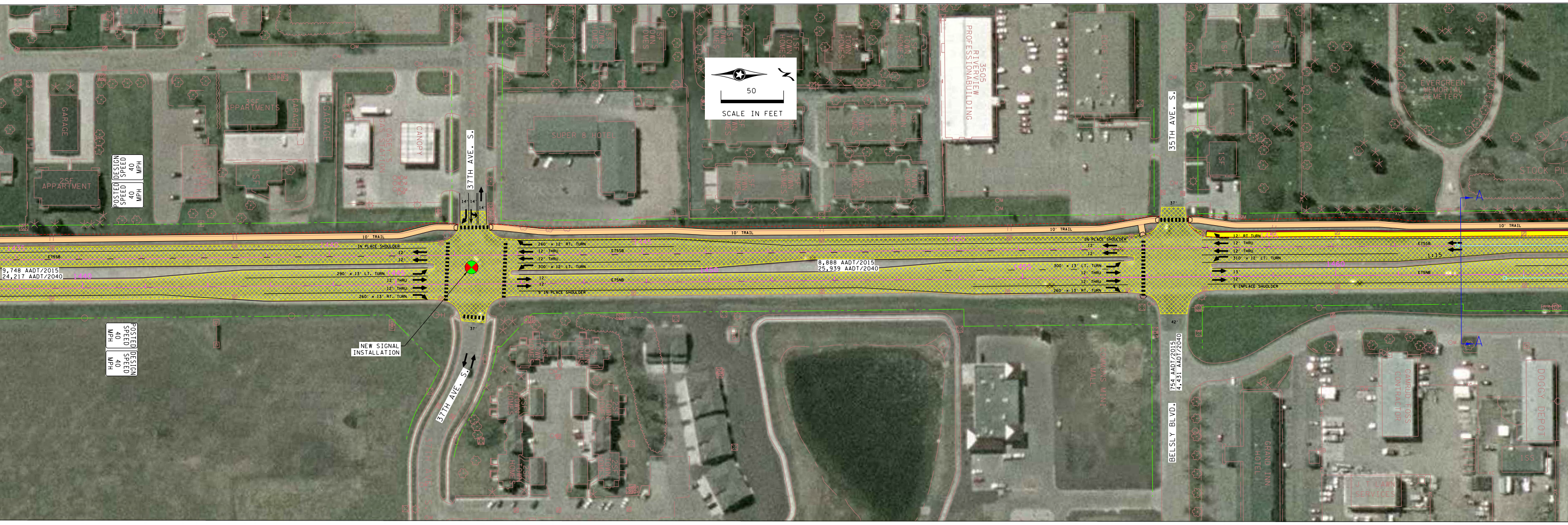

VARIES 0'-6' PAINTED MEDIAN
℄ I 94 EB OFF RAMP
1.5'
14'-LT
14'-LT
VARIES
14'-RT
VARIES 0'-10' PAINTED MEDIAN
VARIES 12'-16'-RT
4' SHLD
VARIES 1:4(TYP)
2%
2%
CONC. MEDIAN
2%
2.5%
3%
4%
B624 C&G (TYP)
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624
CONC. CURB & GUTTER B624

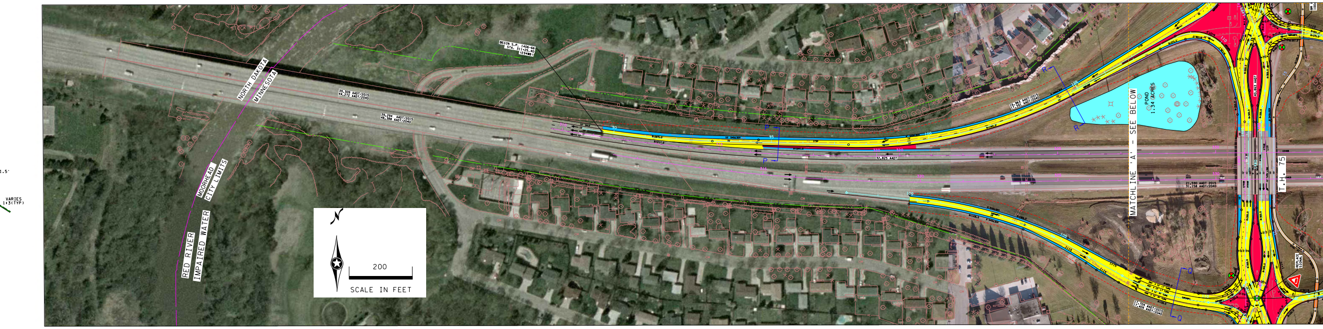
TYPICAL SECTION S-S
I 94 EB ON RAMP

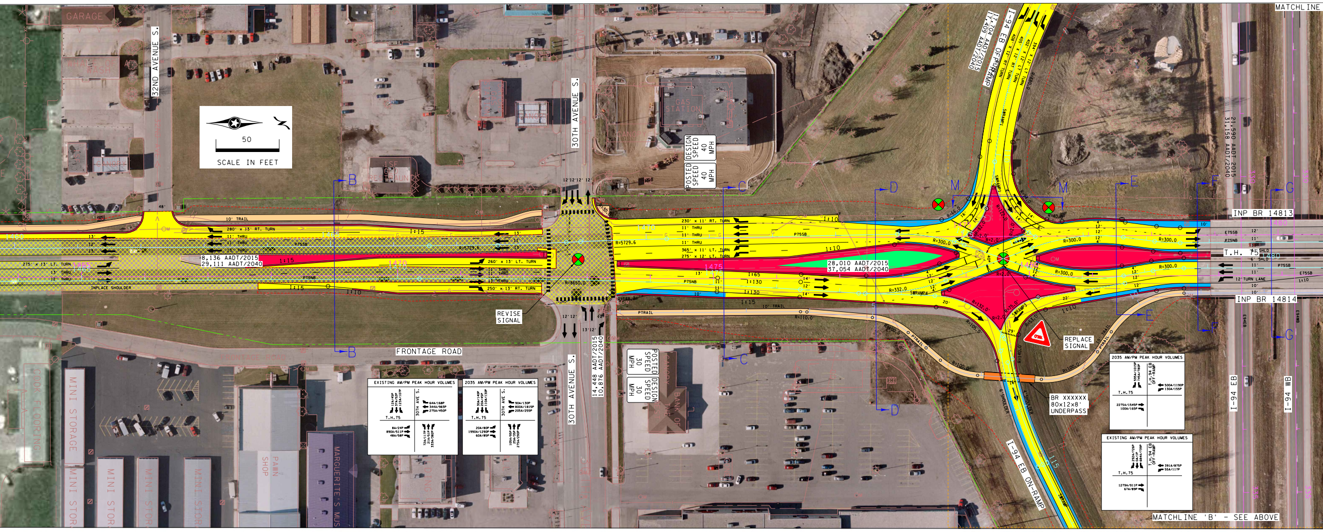

1.5'
4' SHLD
16'-THRU
6' SHLD
1.5'
4%
4% - 6%
4%
VARIES 1:4(TYP)
VARIES 1:4(TYP)

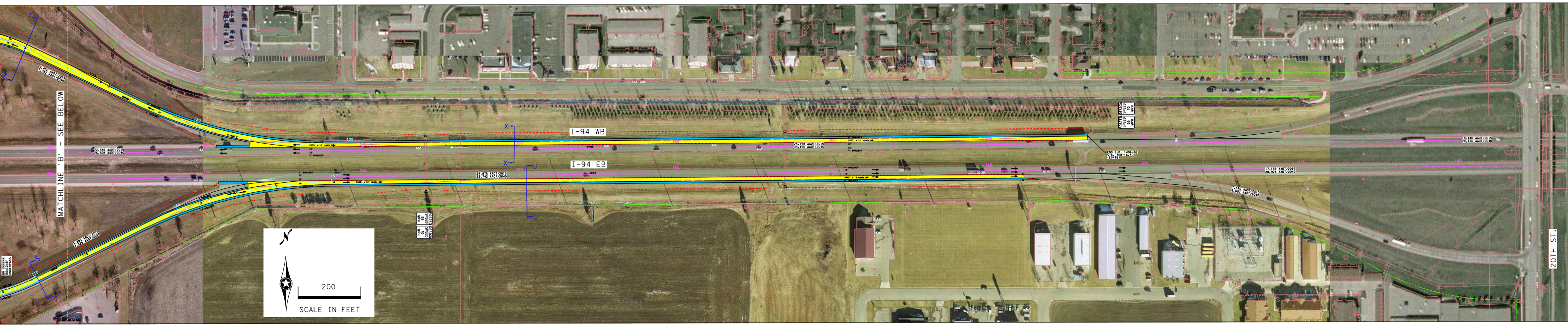
TYPICAL SECTION U-U
I 94 EB

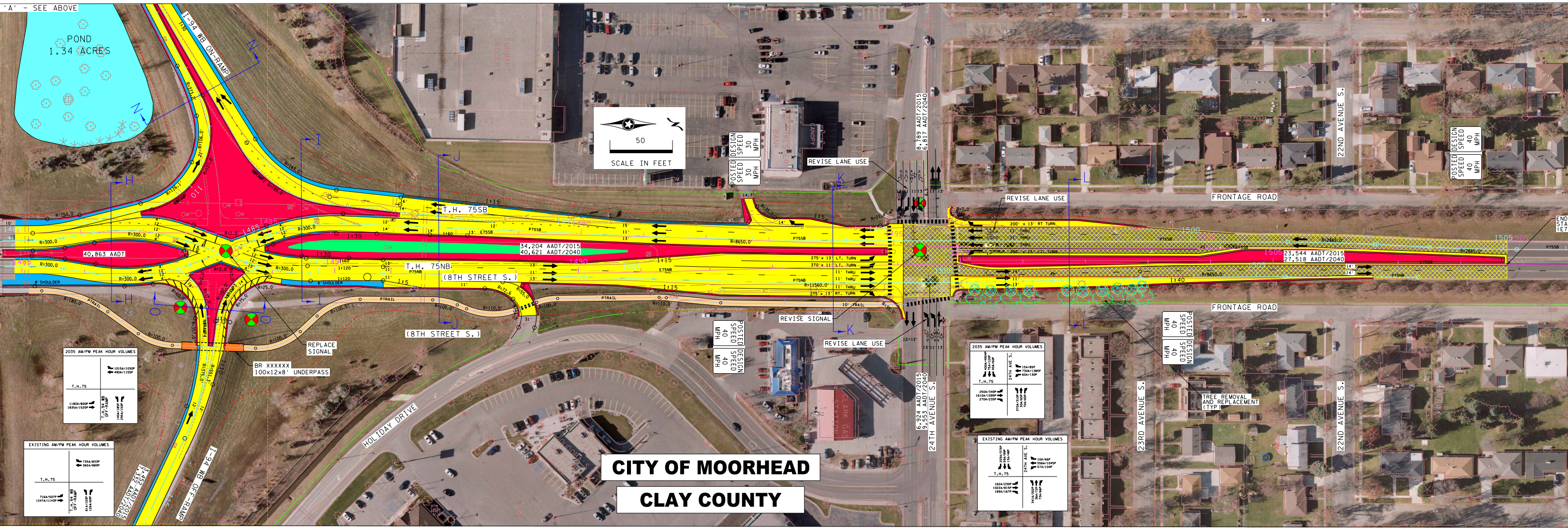

1.0'
4' SHLD
12'-THRU
12'-THRU
12'-AUX
6' SHLD
1.5'
4%
2%
2%
2%
4%


50
SCALE IN FEET
2SF APPARTMENT
2SF APPARTMENTS
GARAGE
CANOPY
SUPER 8 HOTEL
3505 RIVERVIEW PROFESSIONAL BUILDING
EVERGREEN MEMORIAL CEMETERY
STOCK PIL
DESIGN SPEED 40 MPH
POSTED SPEED 40 MPH
37TH AVE. S.
35TH AVE. S.
BELSLY BLVD.
14'
14'
14'
37'
37'
42'
10' TRAIL
IN PLACE SHOULDER
E75SB
E75NB
12'
290' × 13' LT. TURN
12' THRU
260' × 13' RT. TURN
260' × 12' RT. TURN
300' × 12' LT. TURN
9' IN PLACE SHOULDER
300' × 13' LT. TURN
12' RT. TURN
310' × 12' LT. TURN
13'
9' INPLACE SHOULDER
1:15
1440
1445
1450
1455
1460
9,748 AADT/2015
24,217 AADT/2040
8,888 AADT/2015
25,939 AADT/2040
754 AADT/2015
4,431 AADT/2040
NEW SIGNAL INSTALLATION
A
A


3.5'
VARIES
1:3(TYP)
NORTH DAKOTA
MINNESOTA
MOORHEAD
CITY LIMITS
RED RIVER
IMPAIRED WATER
STOCK PILE
BEGIN S.P. 1406-66
STA. 311+25.40
(E94WB)
39,309 AADT/2015
44,272 AADT/2040
39,294 AADT/2015
48,388 AADT/2040
200
SCALE IN FEET
16,963 AADT/2015
17,391 AADT/2040
32,825 AADT
POND
1.34 ACRES
MATCHLINE 'A' - SEE BELOW
21,590 AADT 2015
31,158 AADT/2040
T.H. 75
17,704 AADT/2015
17,409 AADT/2040
40,863 AADT
REPLACE SIGNAL
R
Q

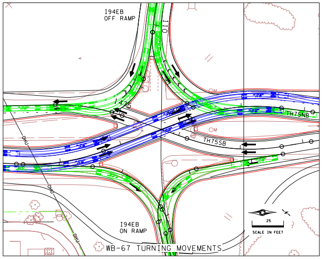

GARAGE
32ND AVENUE S.
50
SCALE IN FEET
30TH AVENUE S.
POSTED SPEED 40 MPH
DESIGN SPEED 40 MPH
I-94 EB OFF-RAMP
17,704 AADT/2015
17,409 AADT/2040
408' x 12' RT TURN
405' x 12' RT TURN
402' x 12' LT TURN
394' x 12' LT TURN
R=680.0
SWRAMP1
21,590 AADT 2015
31,158 AADT/2040
MATCHLINE
48'
10' TRAIL
280' x 13' RT. TURN
11' THRU
11' THRU
13' THRU
P75SB
1:15
275' x 13' LT. TURN
13' THRU
12' THRU
INPLACE SHOULDER
8,136 AADT/2015
29,111 AADT/2040
P75NB
260' x 13' LT. TURN
250' x 13' RT. TURN
1:10
R=5729.6
R=8650.0
12'12'12' 12'
REVISE SIGNAL
FRONTAGE ROAD
B
C
D
M
E
F
G
230' x 11' RT. TURN
11' THRU
11' THRU
11' THRU
365' x 11' LT. TURN
275' x 12' LT. TURN
28,010 AADT/2015
37,054 AADT/2040
1:65
1:130
1:130
R=300.0
R=332.0
SWRAMP4
SWRAMP3
R=110.0'
R=100.0'
R=105.0'
R=132.0'
R=75.0'
R=53.0'
R=140.0'
PTRAIL
10' TRAIL
INP BR 14813
INP BR 14814
T.H. 75
E75SB
P75NB
12' TURN LANE
REPLACE SIGNAL
BR XXXXXX
80x12x8'
UNDERPASS
POSTED SPEED 30 MPH
DESIGN SPEED 30 MPH
14,448 AADT/2015
10,876 AADT/2040
30TH AVENUE S.
I-94 EB ON-RAMP
I-94 EB
I-94 WB
MINI STORAGE
MINI STOR
PAWN SHOP
MARGUERITE'S MUS
EXISTING AM/PM PEAK HOUR VOLUMES
T.H.75
30TH AVE S.
12A/45P
37A/52P
123A/101P
64A/168P
344A/983P
275A/450P
8A/24P
890A/511P
48A/58P
72A/117P
21A/51P
333A/382P
2035 AM/PM PEAK HOUR VOLUMES
T.H.75
30TH AVE S.
30A/140P
20A/45P
110A/130P
90A/130P
800A/1815P
205A/255P
20A/80P
1990A/1290P
60A/85P
105A/95P
25A/35P
275A/290P
2035 AM/PM PEAK HOUR VOLUMES
T.H.75
T.H. 94 EB OFF-RAMP
595A/1015P
745A/780P
500A/1190P
130A/155P
2275A/1545P
100A/165P
EXISTING AM/PM PEAK HOUR VOLUMES
T.H.75
T.H. 94 EB OFF-RAMP
292A/726P
0A/1P
684A/739P
391A/875P
55A/117P
1279A/911P
67A/89P
MATCHLINE 'B' - SEE ABOVE


MATCHLINE 'B' - SEE BELOW
I-94 WB
I-94 EB
200
SCALE IN FEET
20TH ST.

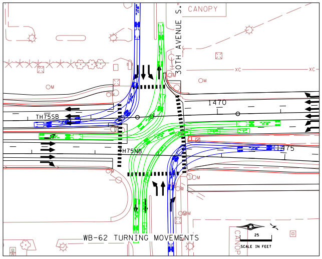

'A' - SEE ABOVE
POND
1.34 ACRES
I-94 WB ON-RAMP
40,863 AADT
T.H. 75SB
T.H. 75NB
(8TH STREET S.)
(8TH STREET S.)
34,204 AADT/2015
40,621 AADT/2040
50
SCALE IN FEET
POSTED SPEED 30 MPH
DESIGN SPEED 30 MPH
REVISE LANE USE
REVISE SIGNAL
REVISE LANE USE
REVISE LANE USE
REPLACE SIGNAL
BR XXXXXX
100x12x8' UNDERPASS
8,789 AADT/2015
6,817 AADT/2040
6,924 AADT/2015
9,553 AADT/2040
24TH AVENUE S.
23RD AVENUE S.
22ND AVENUE S.
22ND AVENUE S.
FRONTAGE ROAD
FRONTAGE ROAD
23,544 AADT/2015
27,518 AADT/2040
POSTED SPEED 40 MPH
DESIGN SPEED 40 MPH
TREE REMOVAL AND REPLACEMENT (TYP)
HOLIDAY DRIVE
I-94 WB OFF-RAMP
3,452 AADT/2015
7,332 AADT/2040
275' x 13' LT. TURN
370' x 11' LT. TURN
11' THRU
11' THRU
13' THRU
275' x 13' RT. TURN
200' x 13' RT TURN
2035 AM/PM PEAK HOUR VOLUMES
1015A/1030P
490A/1155P
T.H.75
1180A/800P
1835A/1525P
T.H.94 WB OFF-RAMP
140A/185P
295A/150P
EXISTING AM/PM PEAK HOUR VOLUMES
735A/833P
365A/889P
T.H.75
716A/507P
1247A/1143P
T.H.94 WB OFF-RAMP
81A/103P
126A/69P
2035 AM/PM PEAK HOUR VOLUMES
400A/490P
75A/120P
40A/60P
24TH AVE S.
15A/85P
730A/1385P
60A/130P
T.H.75
250A/340P
1610A/1095P
270A/235P
370A/310P
50A/65P
70A/65P
EXISTING AM/PM PEAK HOUR VOLUMES
203A/375P
59A/99P
13A/48P
24TH AVE S.
10A/66P
556A/1045P
57A/104P
T.H.75
162A/230P
1022A/815P
189A/167P
341A/302P
36A/72P
73A/66P

CITY OF MOORHEAD

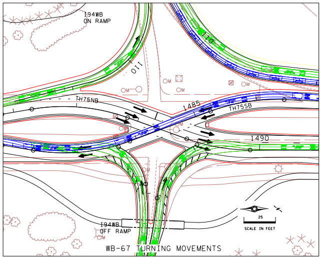
CLAY COUNTY


I94EB
OFF RAMP
110
TH75NB
TH75SB
OHU
I94EB
ON RAMP
25
SCALE IN FEET

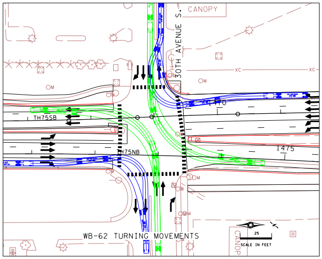
WB-67 TURNING MOVEMENTS


CANOPY
30TH AVENUE S.
1470
TH75SB
TH75NB
1475
CANOPY
25
SCALE IN FEET

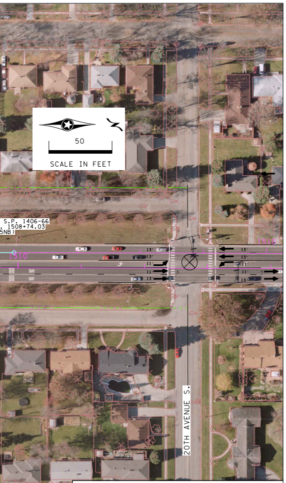
WB-62 TURNING MOVEMENTS

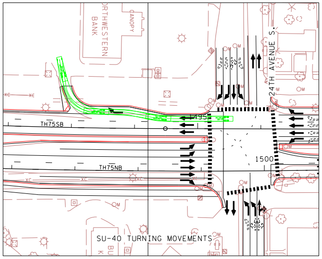

I94WB
ON RAMP
110
TH75NB
1485
TH75SB
1490
I94WB
OFF RAMP
25
SCALE IN FEET

WB-67 TURNING MOVEMENTS

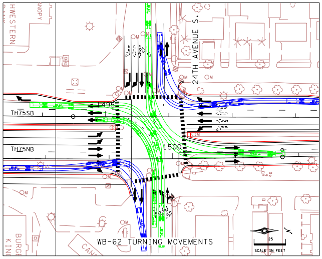

CANOPY
30TH AVENUE S.
1470
TH75SB
TH75NB
1475
CANOPY
25
SCALE IN FEET

WB-62 TURNING MOVEMENTS

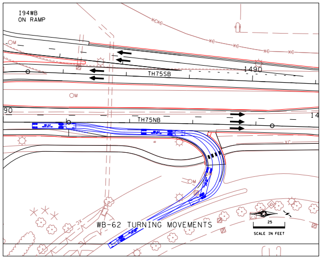

50
SCALE IN FEET
S.P. 1406-66
. 1508+74.03
5NB)
1510
20TH AVENUE S.


NORTHWESTERN
BANK
CANOPY
24TH AVENUE S.
1495
TH75SB
TH75NB
1500

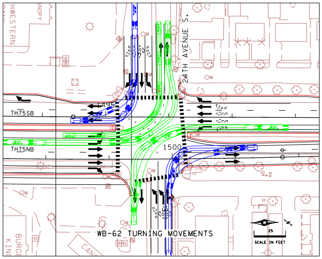
SU-40 TURNING MOVEMENTS


NORTHWESTERN
CANOPY
24TH AVENUE S.
1495
TH75SB
TH75NB
1500
BURGER
KING
25
SCALE IN FEET

WB-62 TURNING MOVEMENTS


I94WB
ON RAMP
TH75SB
1490
90
TH75NB
14
25
SCALE IN FEET

WB-62 TURNING MOVEMENTS


NORTHWESTERN
CANOPY
24TH AVENUE S.
1495
TH75SB
TH75NB
1500
BURGER
KING
25
SCALE IN FEET

WB-62 TURNING MOVEMENTS

MINNESOTA DEPARTMENT OF TRANSPORTATION

Stantec