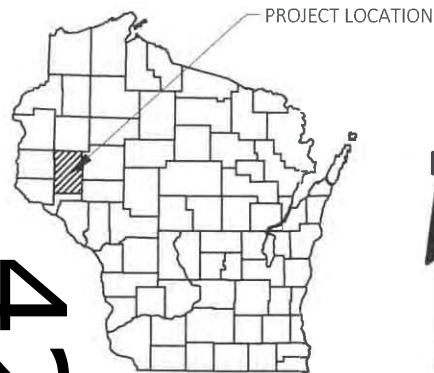


ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 184



42

DESIGN DESIGNATION

	MAIN ST	13TH ST
A.A.D.T. (2018)	= 2290	660
A.A.D.T. (2038)	= 2530	730
D.H.V.	= -	-
D.D.	= 50/50	50/50
T.	= 3.3%	3.3%
DESIGN SPEED	= 30 MPH	30 MPH
ESALS	= 180,000	52,000

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

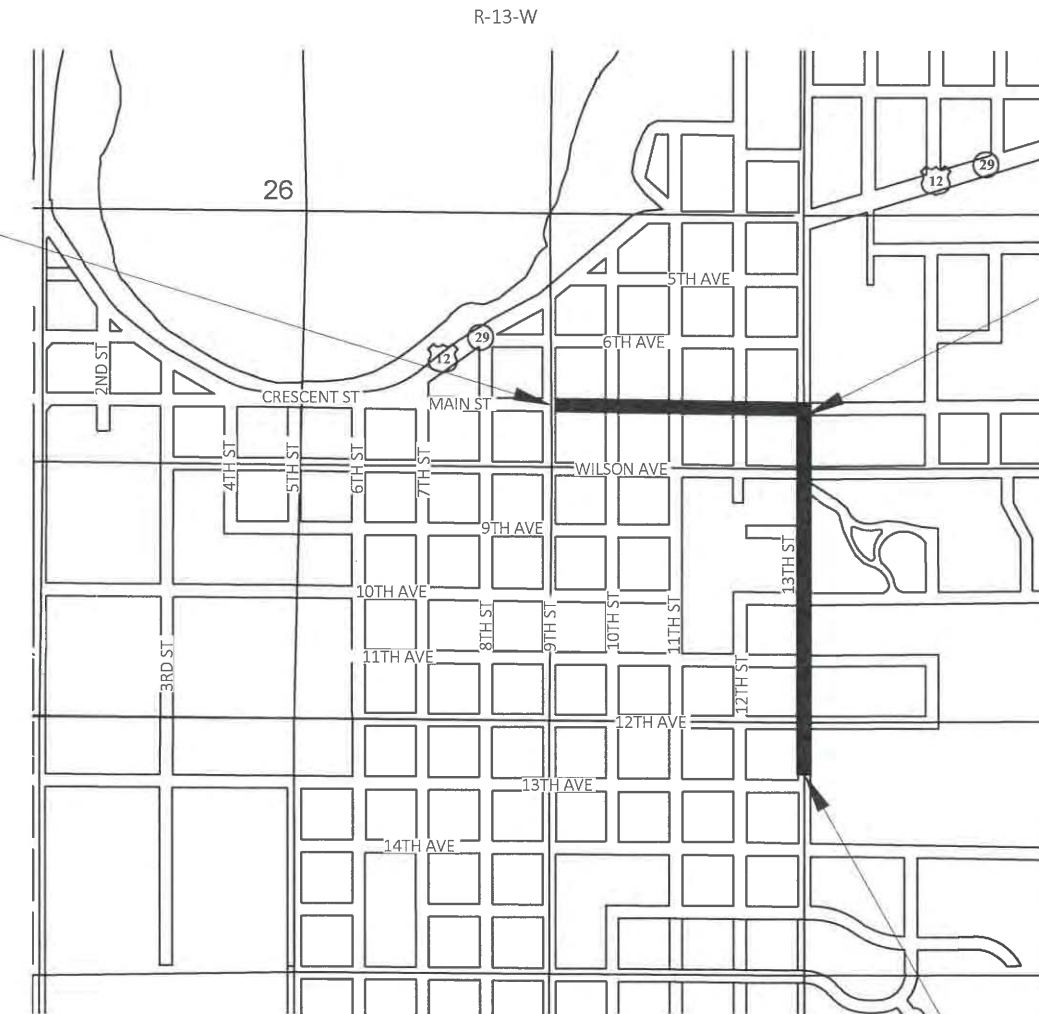
PROFILE

GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

BEGIN PROJECT
 STA 101+37.34
 Y=170675.580
 X=163532.665

END PROJECT
 STA 220+54.30

STATE PROJECT NUMBER
 7996-00-09



LAYOUT
 SCALE 0 1000 FT

TOTAL NET LENGTH OF CENTERLINE = 0.259 MI (MAIN STREET)
 0.366 MI (13TH STREET)

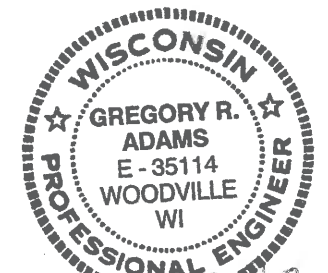
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DUNN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

BEGIN CONSTRUCTION
 STA 201+23.45
 Y=168723.713
 X=164822.661

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT
 C MENOMONIE, MAIN STREET/13TH STREET
 13TH STREET/13TH AVENUE TO 9TH STREET/MAIN STREET
 LOCAL STREET
 DUNN COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7996-00-09	WISC 2018262	1

ACCEPTED FOR CITY OF MENOMONIE
 24 Jan 18
 DATE
 ORIGINAL PLANS PREPARED BY
 Cedar corporation
 CEDARBURG - GREEN BAY - MADISON - MENOMONIE
 www.cedarcorp.com
 800-472-7372



Gregory R. Adams
 1/22/18

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

PREPARED BY
 Surveyor CEDAR CORPORATION
 Designer CEDAR CORPORATION
 Management Consultant KNIGHT E/A INC

APPROVED FOR THE DEPARTMENT
 DATE: 1/25/18 *Ryan B. Miller*
 (Management Consultant Signature)

E

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

THE 4.5" HMA PAVEMENT ON MAIN STREET SHALL BE CONSTRUCTED WITH A 2.5" LOWER LAYER OF 3 LT 58-28 S AND A 2.0" UPPER LAYER OF 4 LT 58-34 S. THE 4.0' HMA PAVEMENT ON 13TH STREET SHALL BE CONSTRUCTED WITH A 2.25" LOWER LAYER OF 3 LT 58-28 S AND A 1.75" UPPER LAYER OF 4 LT 58-34 S.

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DUNN COUNTY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER. USE SEED MIX NO. 40 AND FERTILIZER TYPE B.

WHEN THE QUANTITY OF THE ITEM OF BASE LAYER OR SURFACE LAYER IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

BENCHMARKS REFERENCED TO THE NORTH AMERICAN DATUM 1983 (2011).

STANDARD ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like ABUT, AGG, ET AL, AADT, BF, BM, C/L OR Δ, Δ, CLR, CONC, CONST, COR, CMP, CTH, CR, CFS, CULV, D, DHV, DIA, E, EL, EST, FPS, FE, FT, FTG, FDN, FF, IP, LT, LHF, L, LF, MAX, MI, MIN, NC, N, NE, NW, NO.

DNR LIAISON

DNR WEST CENTRAL REGION HO
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
(715) 836-6571
AMY LESIK
Amy.Lesik@Wisconsin.gov

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DIRECTOR OF PUBLIC WORKS
800 WILSON AVE
MENOMONIE, WI 54751
(715) 232-2207
RANDY EIDE
reide@menomonie-wi.gov

DESIGN CONSULTANT

CEDAR CORPORATION
2820 WALTER COMMONS WEST
SUITE 142
MADISON, WI 53718
(608) 237-5842
JOSH WEISS, P.E.
josh.weiss@cedarcorp.com

UTILITIES

AT&T
304 SOUTH DEWEY ST
EAU CLAIRE, WI 54701
(715) 839-5565
RICK PODOLAK
rp4514@att.com

CHIPPEWA VALLEY INTERNETWORKING CONSORTIUM (CINC)

105 GARFIELD AVE
EAU CLAIRE, WI 54701
(715) 232-2671
MIKE DODOR
Dodorm@uwstout.edu

CHARTER COMMUNICATIONS

1201 McCANN DR
ALTOONA, WI 54720
(715) 831-8940 EX. 51113
SHANE YODER
shane.yoder@chartercom.com

CITY OF MENOMONIE - SANITARY

604 WILSON AVE
MENOMONIE, WI 54751
(715) 235-9081
GREG ADAMS
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CITY OF MENOMONIE - WATER

604 WILSON AVE
MENOMONIE, WI 54751
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GREG ADAMS
greg.adams@cedarcorp.com

WEST WISCONSIN TELCOM CO-OP

PO BOX 115
DOWNSVILLE, WI 54735
(715) 231-0504
BRAD SCHMIDTKNECHT
brads@wwt.coop

XCEL ENERGY - ELECTRIC

320 HELLER RD
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XCEL ENERGY - GAS
320 HELLER ROAD
MENOMONIE, WI 54751
(715) 232-7415
MIKE JOHNSEN
michael.a.johnsen@xcelenergy.com

RUNOFF COEFFICIENT TABLE

Table with columns: LAND USE, HYDROLOGIC SOIL GROUP (A, B, C, D), and SLOPE RANGE (PERCENT). Includes rows for LAND USE, ROW CROPS, MEDIAN STRIP-TURF, SIDE SLOPE-TURF, PAVEMENT (ASPHALT, CONCRETE, BRICK, DRIVES, WALKS, ROOFS, GRAVEL ROADS, SHOULDERS).

ORDER OF SECTION 2 SHEETS

- GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
RETAINING WALL DETAILS
WATERMAIN
EROSION CONTROL
STORM SEWER
PAVEMENT MARKING & SIGNING

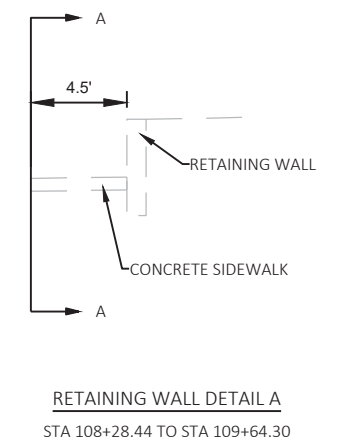
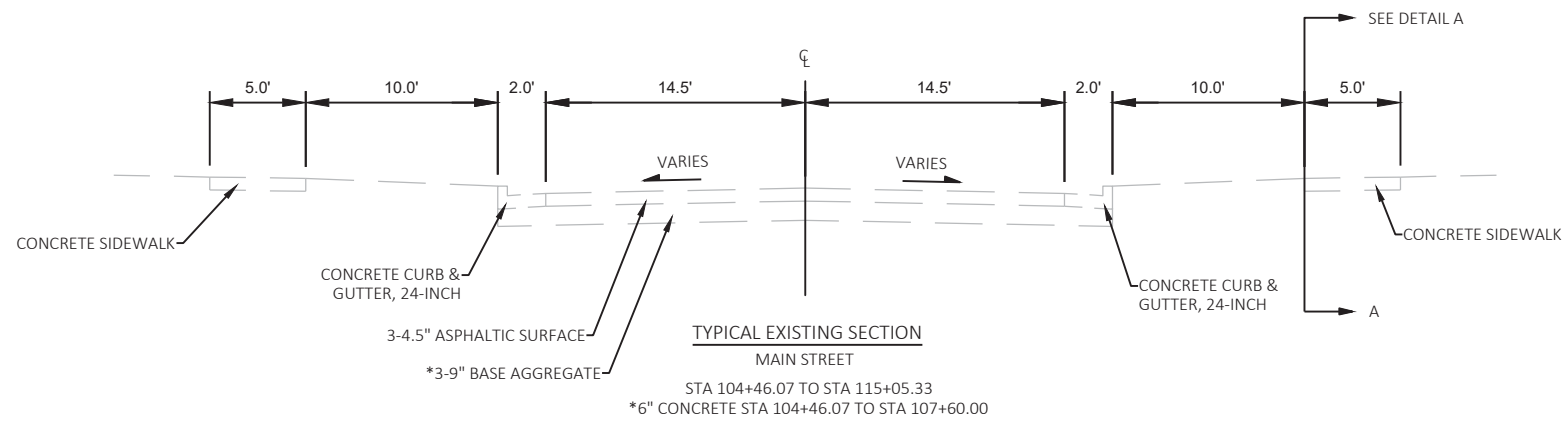
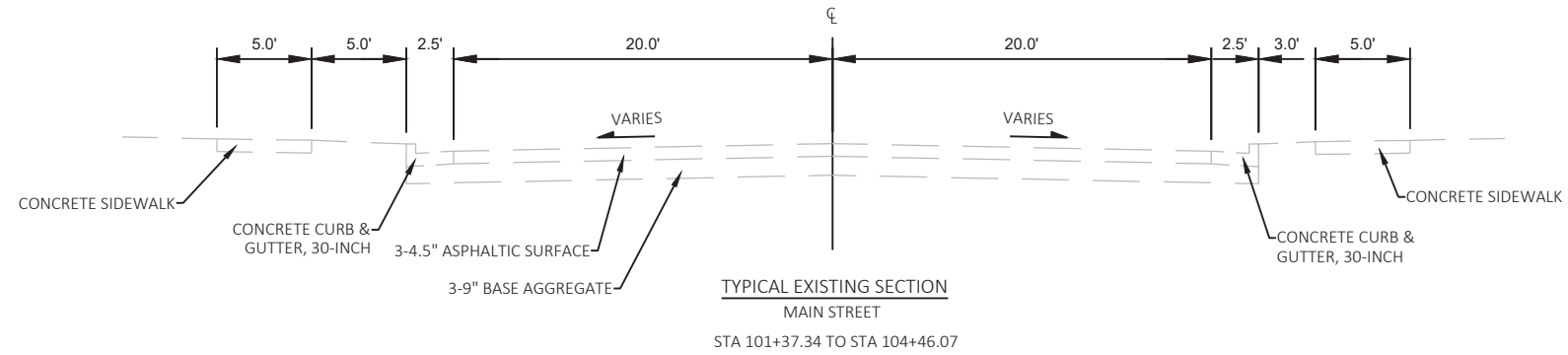


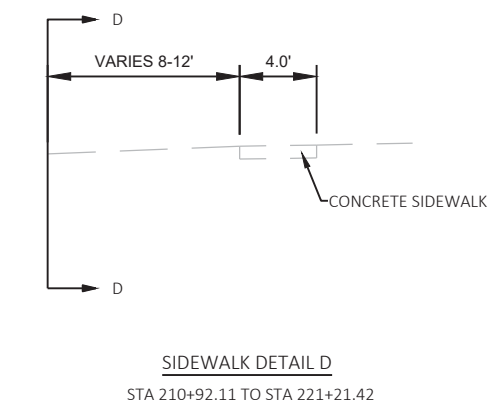
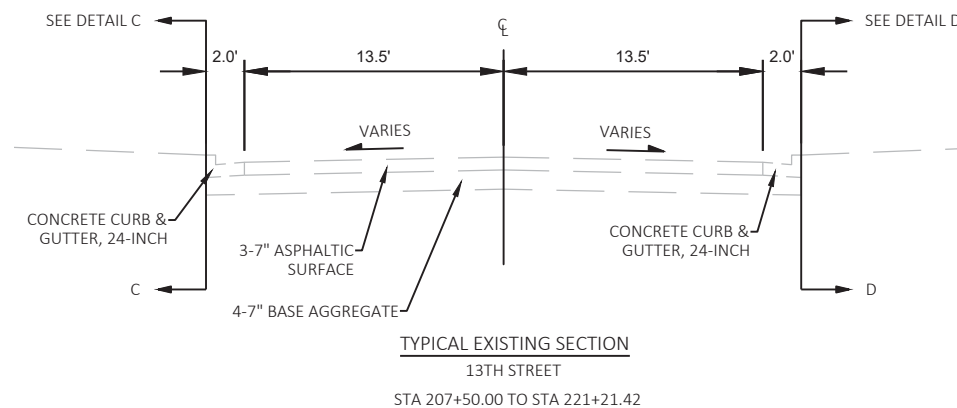
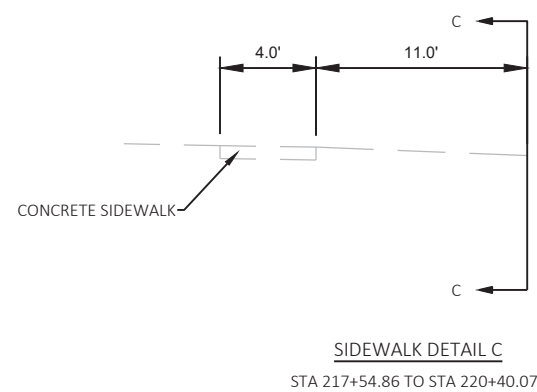
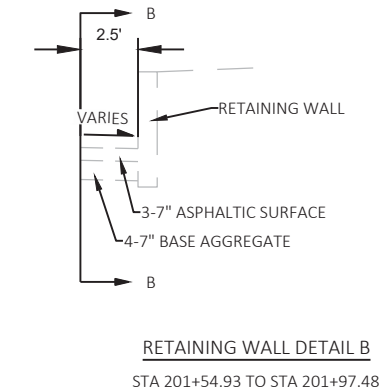
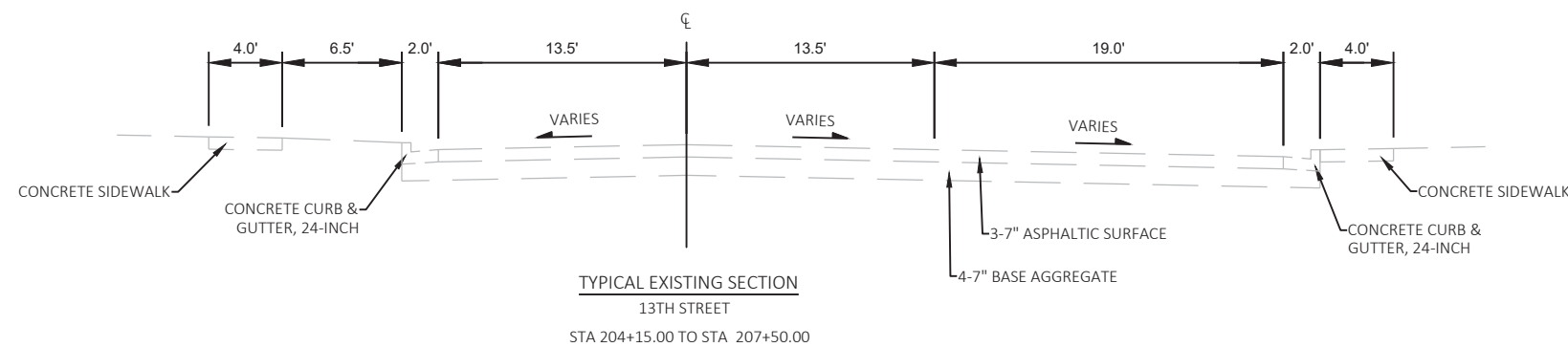
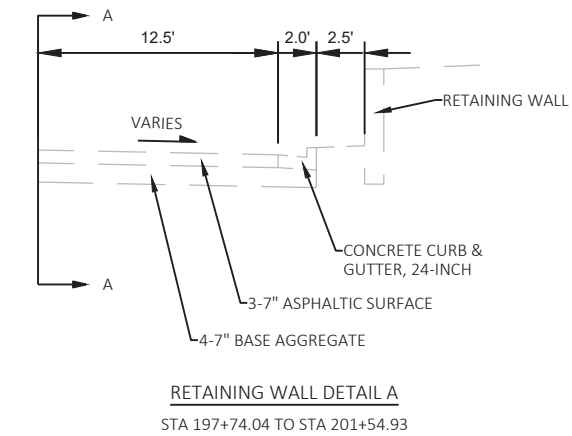
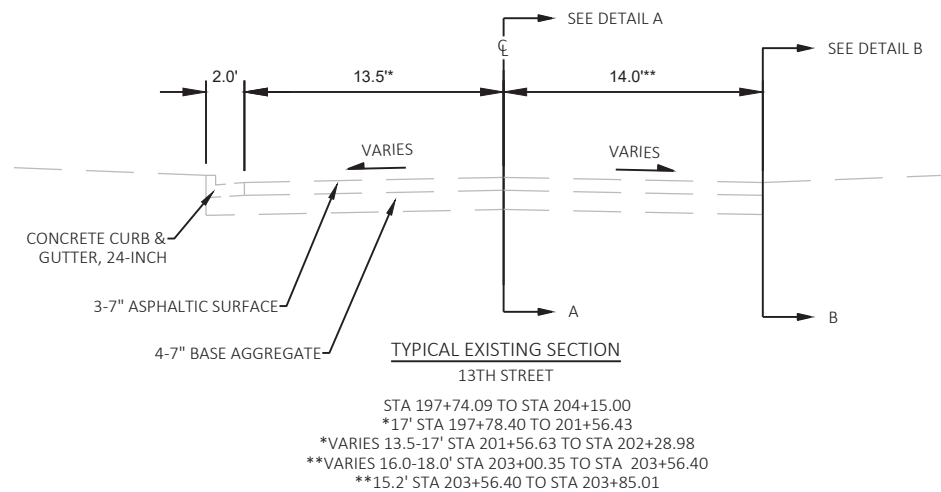
Dial 811 or (800)242-8511

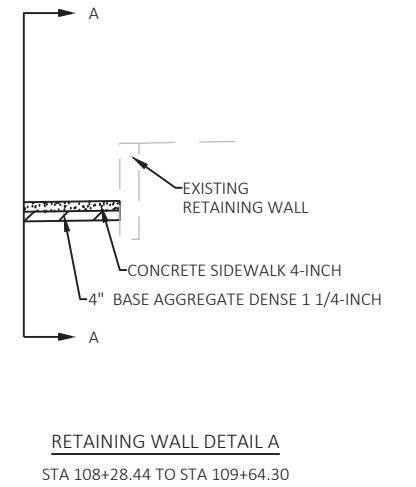
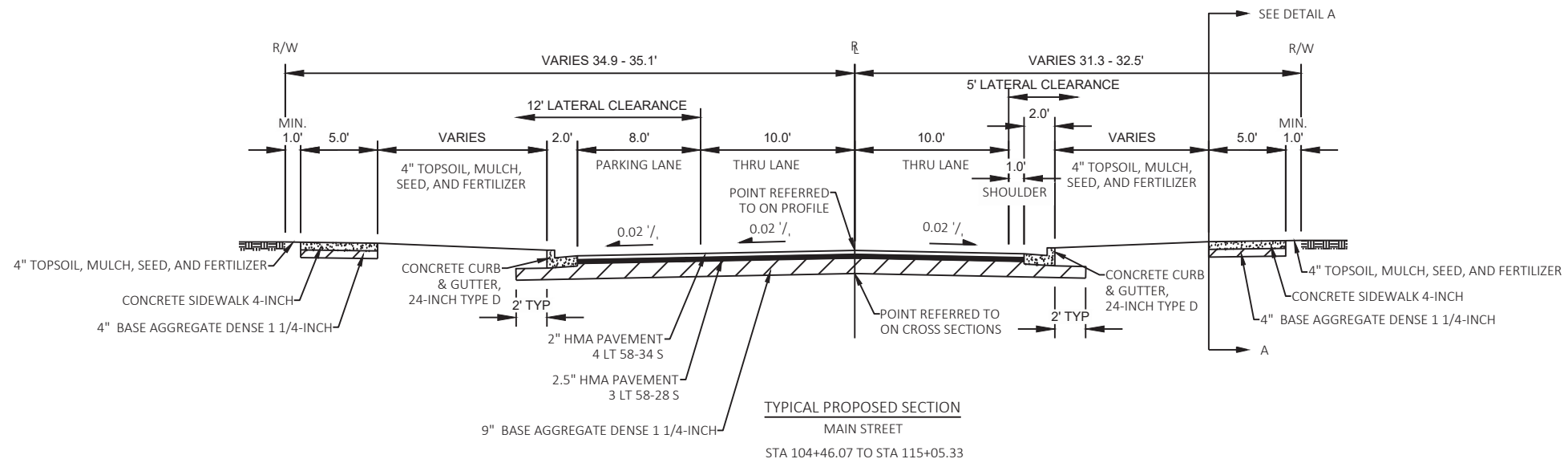
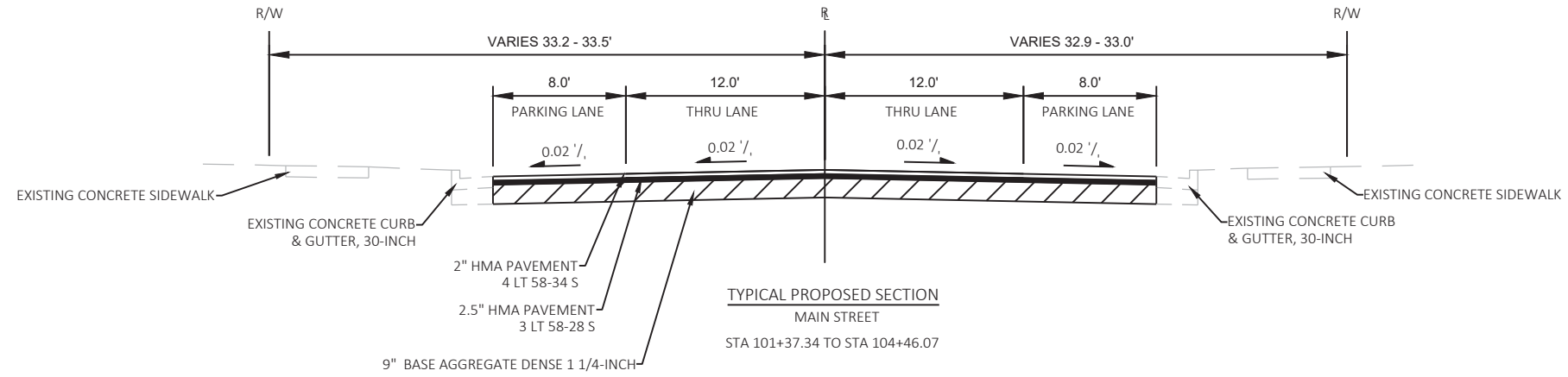
www.DiggersHotline.com

**DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS.

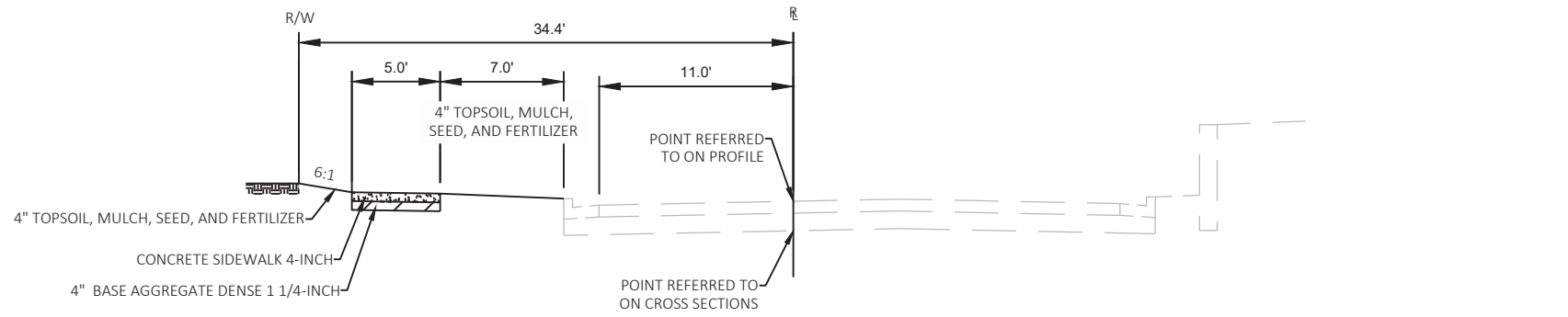
TOTAL PROJECT AREA = 5.43 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.43 ACRES



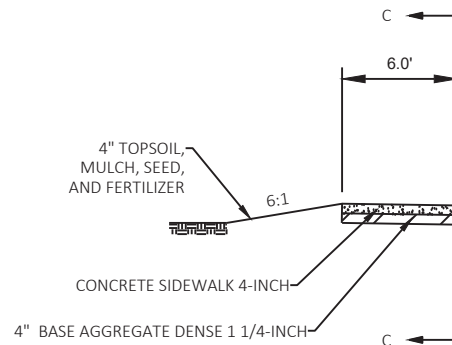




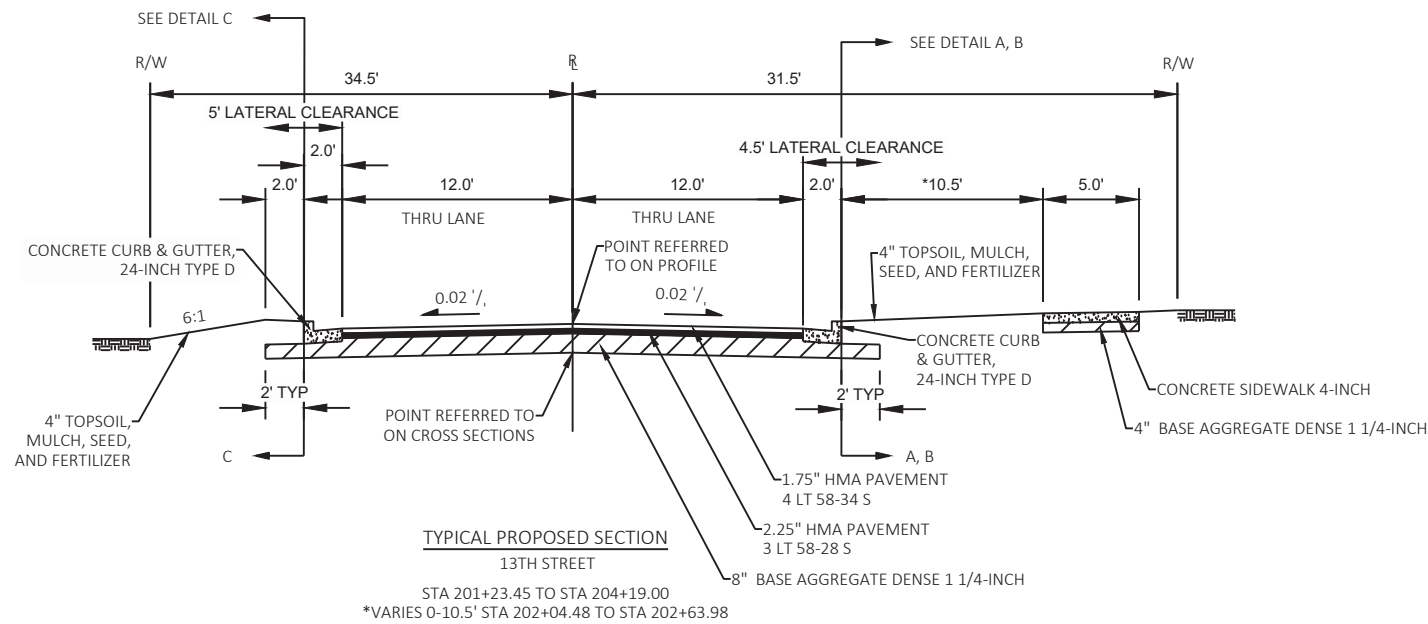
SUPERELEVATION TABLE			
STATION	CROSS SLOPE		
	LT LANE	RT LANE	RT PARKING LANE
201+23.45	-0.02	-0.02	--
203+86.00	-0.02	-0.02	--
204+50.00	-0.02	-0.02	-0.02
212+92.00	-0.02	-0.02	-0.02



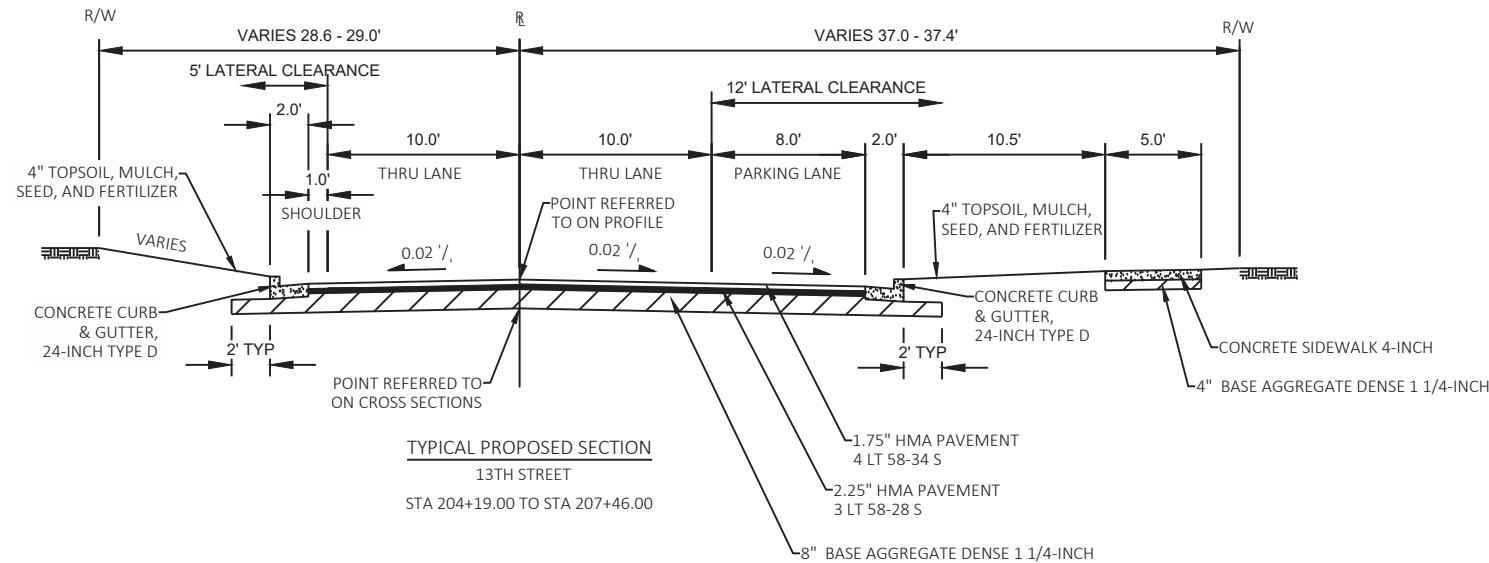
TYPICAL PROPOSED SECTION
13TH STREET
STA 197+74.09 TO STA 201+23.45



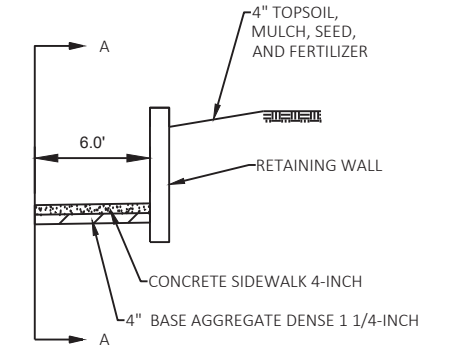
SIDEWALK DETAIL C
STA 201+05.95 TO STA 201+42.45



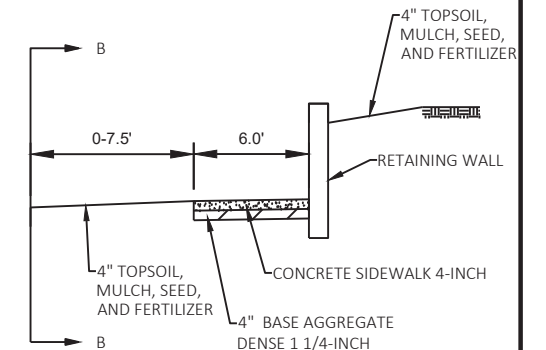
TYPICAL PROPOSED SECTION
13TH STREET
STA 201+23.45 TO STA 204+19.00
*VARIES 0-10.5' STA 202+04.48 TO STA 202+63.98



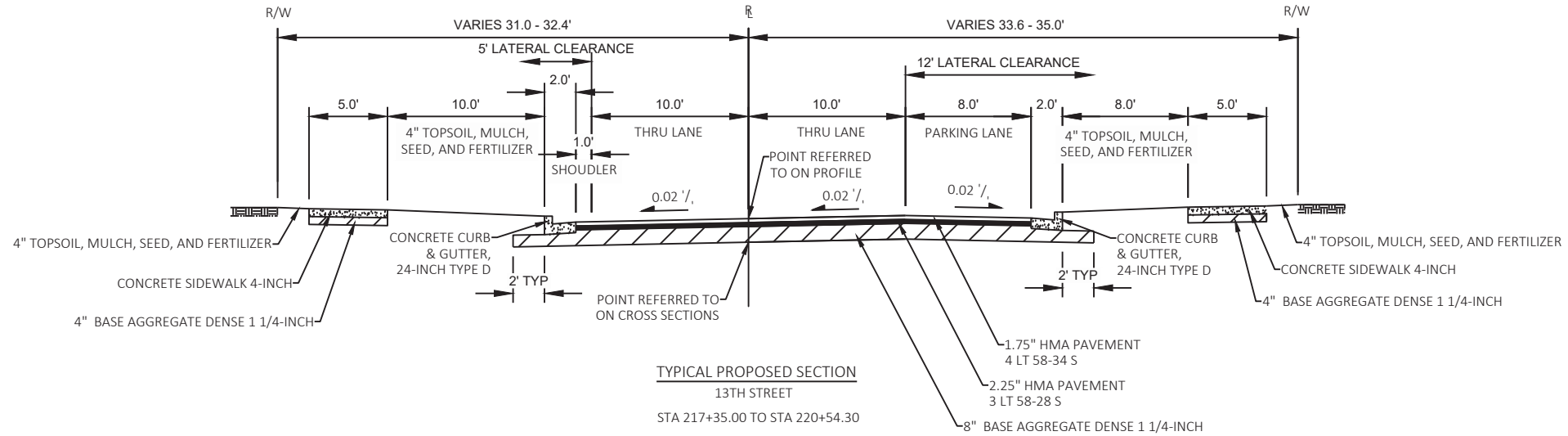
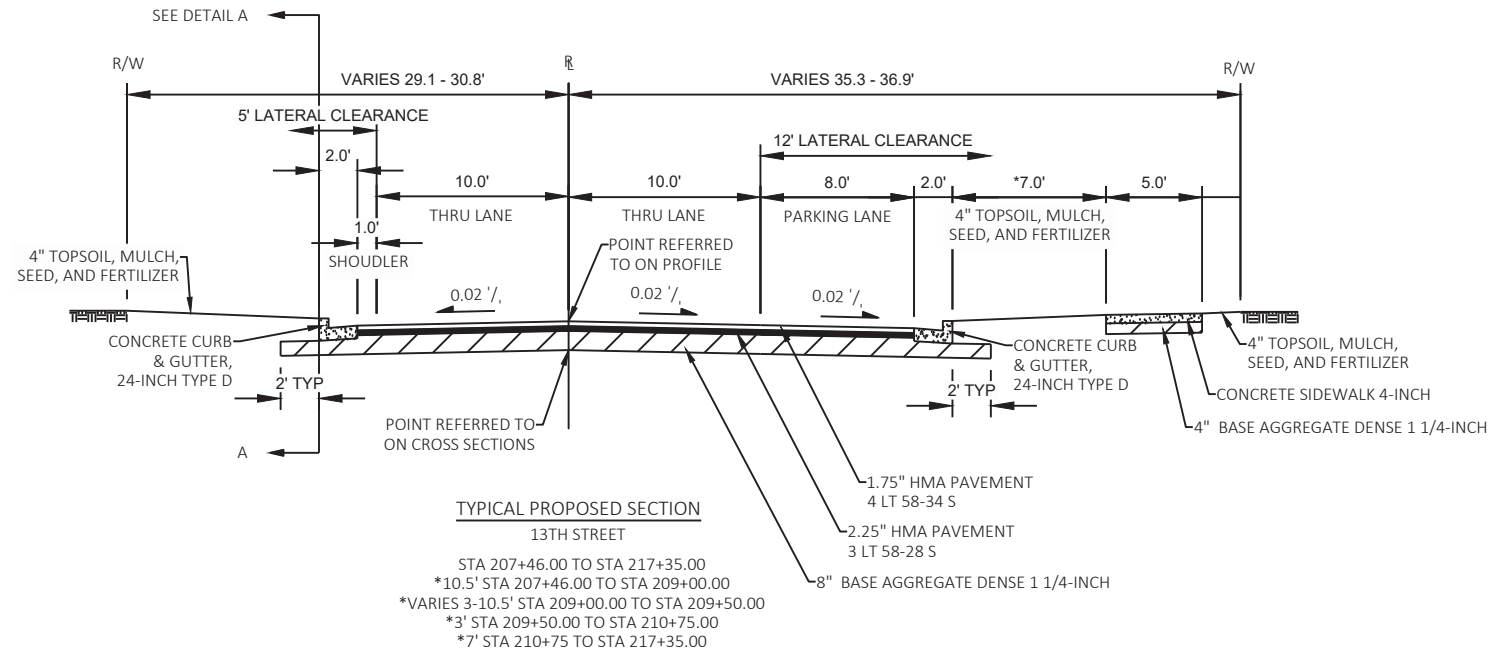
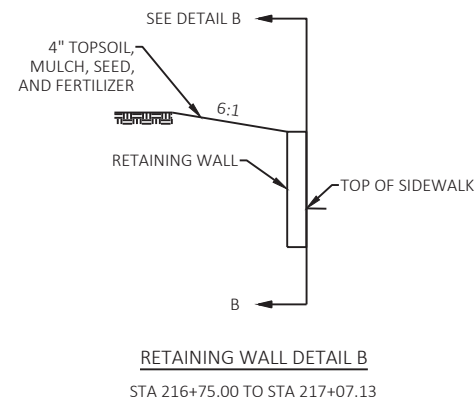
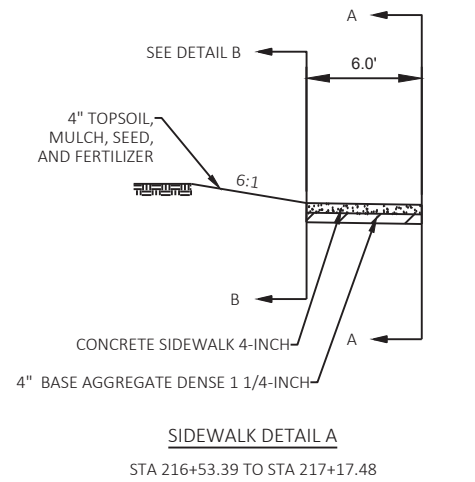
TYPICAL PROPOSED SECTION
13TH STREET
STA 204+19.00 TO STA 207+46.00



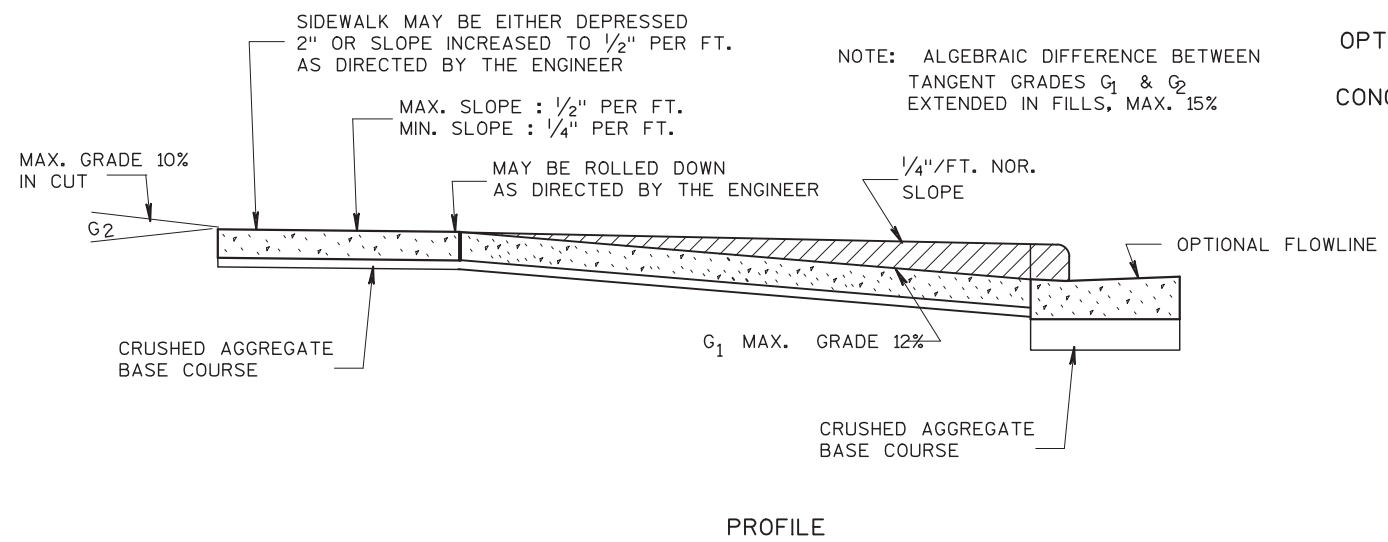
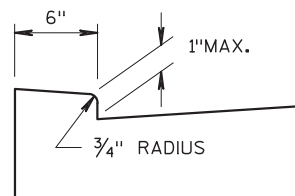
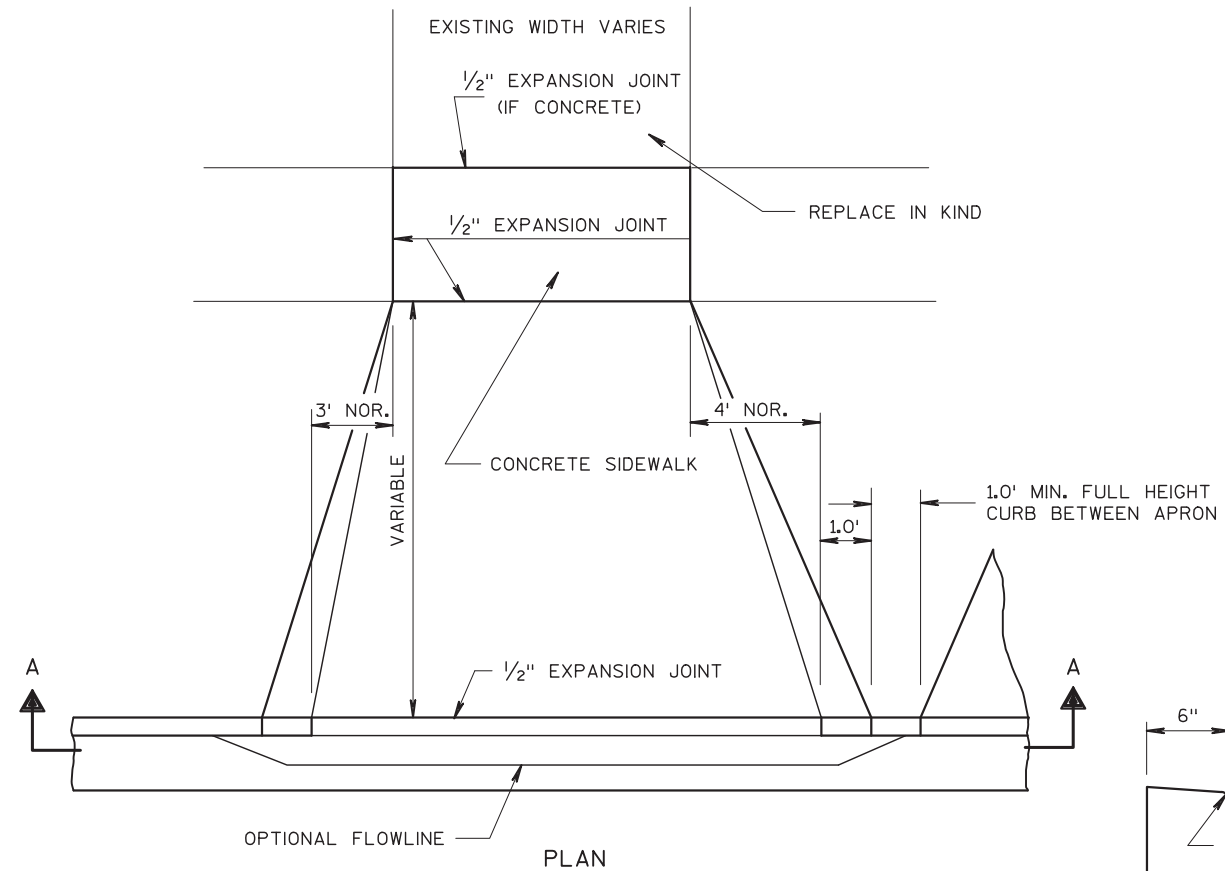
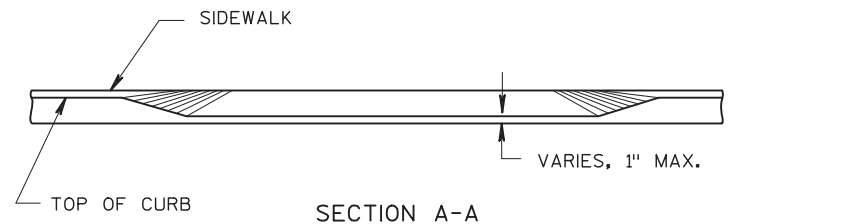
RETAINING WALL DETAIL A
STA 201+23.45 TO STA 202+04.48



RETAINING WALL DETAIL B
STA 202+04.48 TO STA 202+50.00



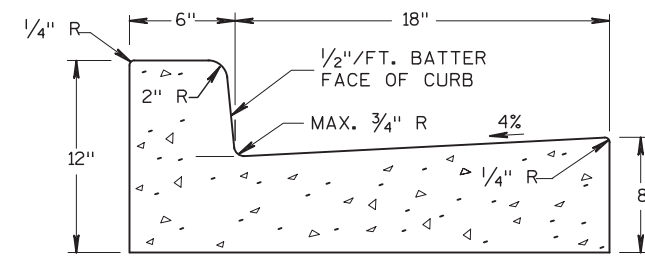
STATION	SUPERELEVATION TABLE		
	CROSS SLOPE		
	LT LANE	RT LANE	RT PARKING LANE
212+92.00	-0.02	-0.02	-0.02
213+28.00	0.0	-0.02	-0.02
213+64.00	0.02	-0.02	-0.04
214+41.00	0.02	-0.02	-0.04
214+77.00	0.0	-0.02	-0.04
215+13.00	-0.02	-0.02	-0.04
215+32.00	-0.02	-0.02	-0.04
215+68.00	-0.02	-0.02	-0.02
216+04.00	-0.02	-0.02	-0.02
216+40.00	-0.02	0.0	-0.02
216+76.00	-0.02	0.02	-0.02
217+73.00	-0.02	0.02	-0.02
218+09.00	-0.02	0.0	-0.02
218+45.00	-0.02	-0.02	-0.02
218+55.00	-0.02	-0.02	-0.02
218+91.00	-0.02	0.0	-0.02
219+27.00	-0.02	0.02	-0.02
220+54.30	-0.02	0.02	-0.02



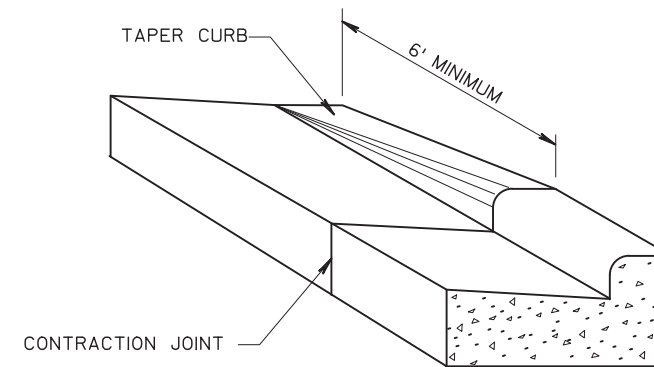
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G_1 & G_2 EXTENDED IN FILLS, MAX. 15%

OPTIONAL METHOD FOR CONCRETE GUTTER

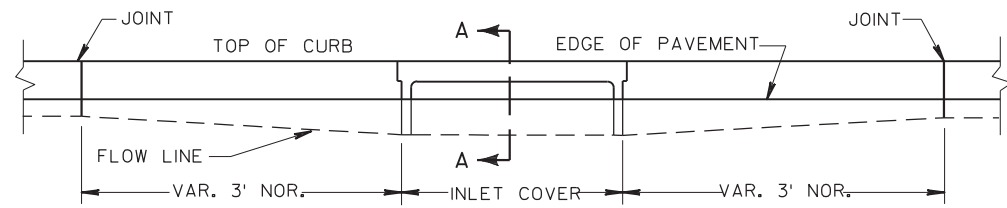
PROFILE
URBAN DRIVEWAY DETAIL



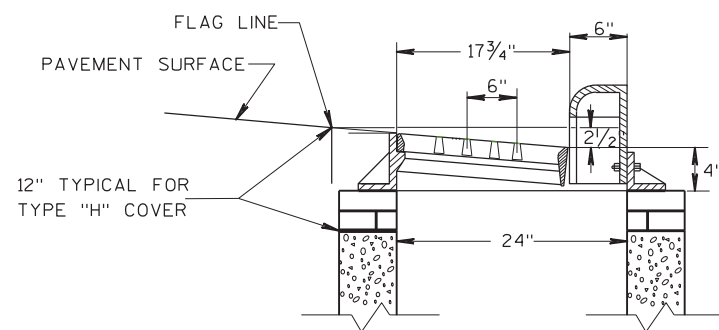
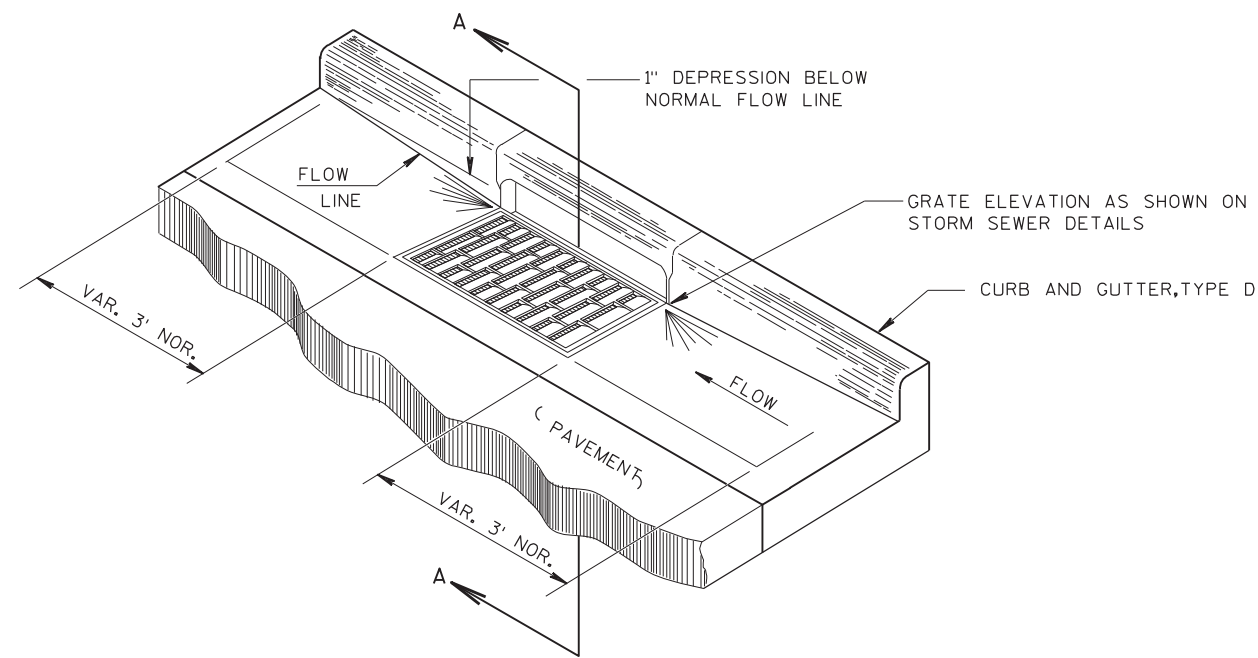
CONCRETE CURB AND GUTTER 24-INCH



DETAIL OF CURB & GUTTER TERMINI

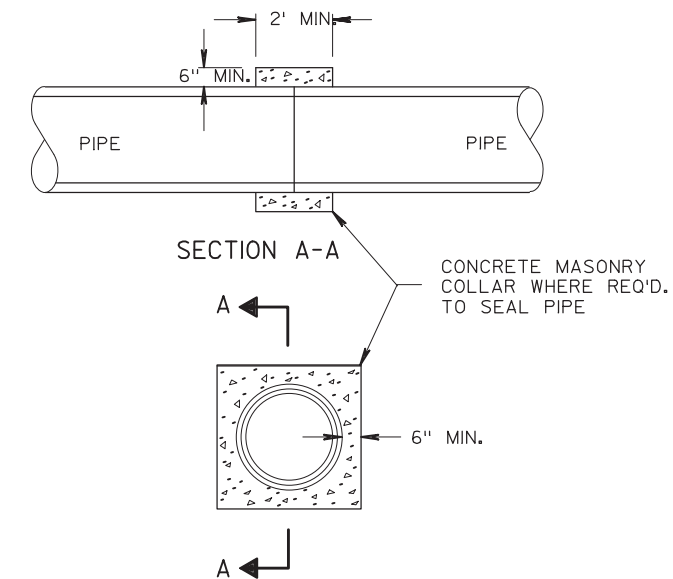


ELEVATION

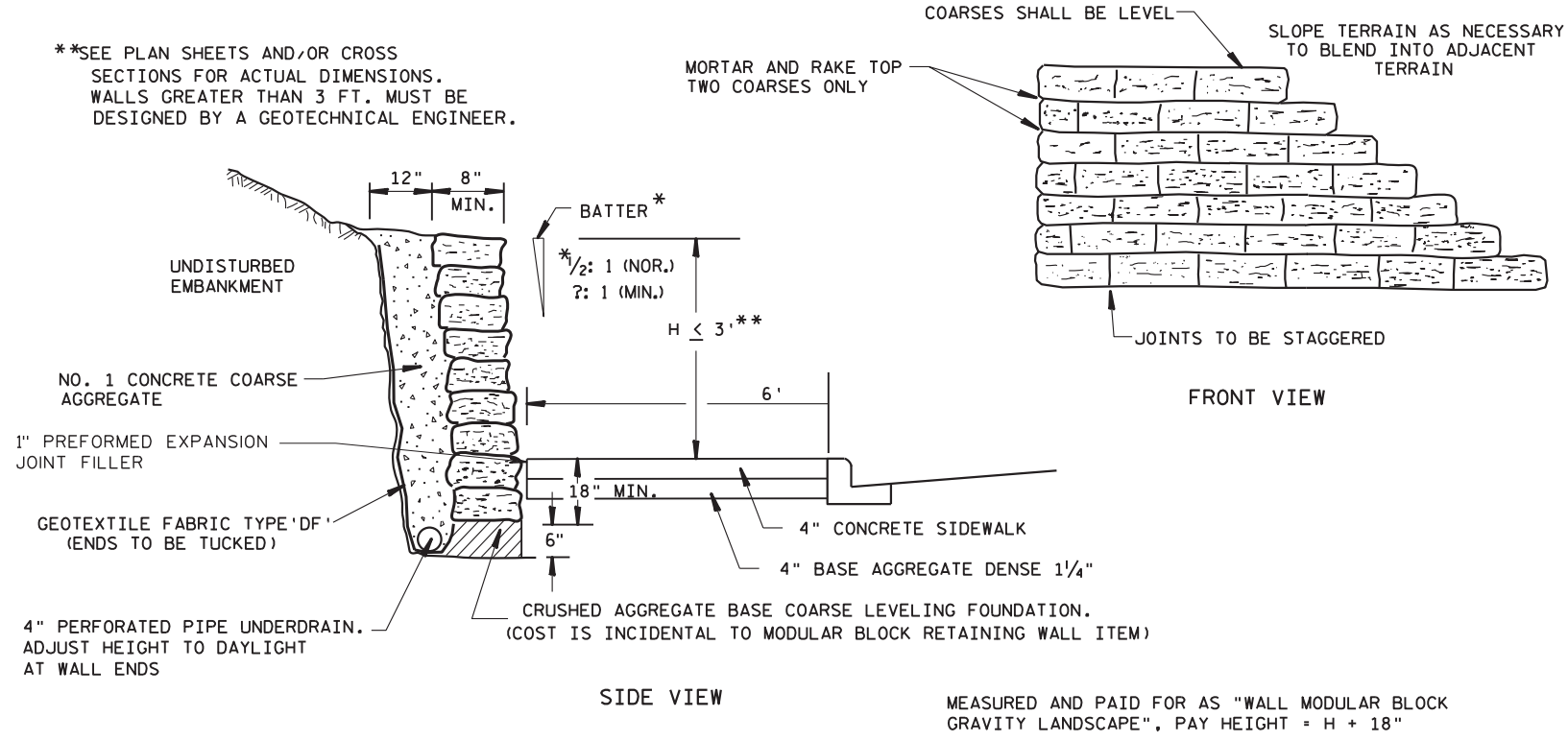


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3-H INLET SHOWN)

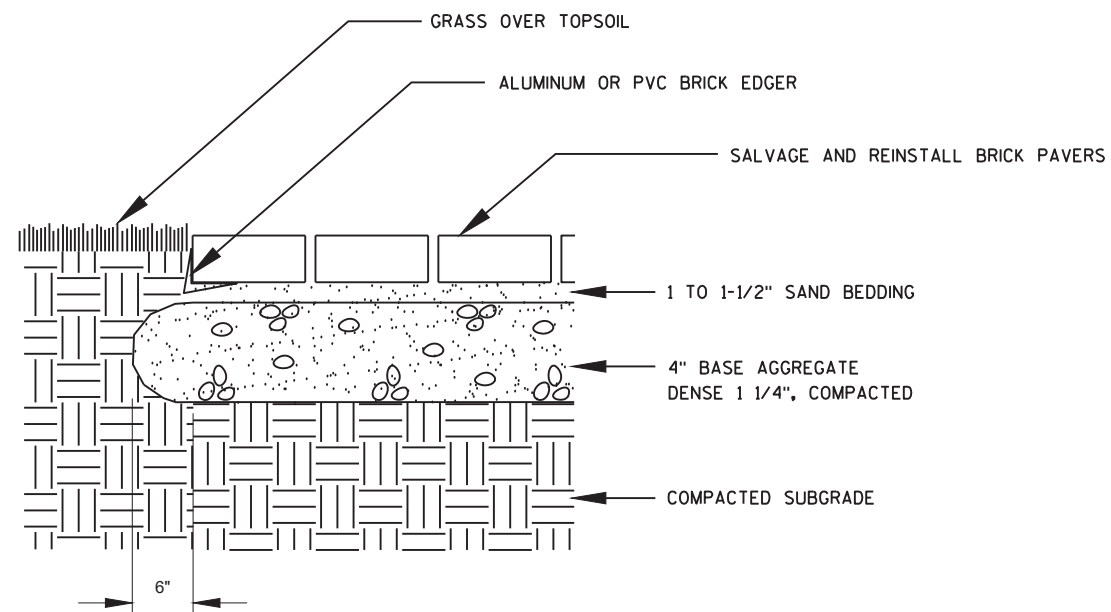


CONCRETE COLLAR DETAIL

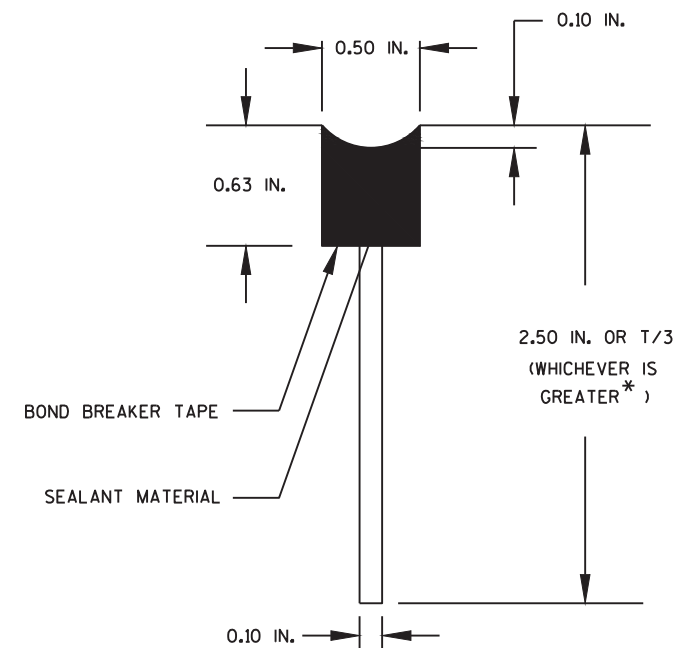


DETAIL FOR WALL MODULAR BLOCK GRAVITY LANDSCAPE

PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CONSTRUCTION DETAILS	SHEET	E
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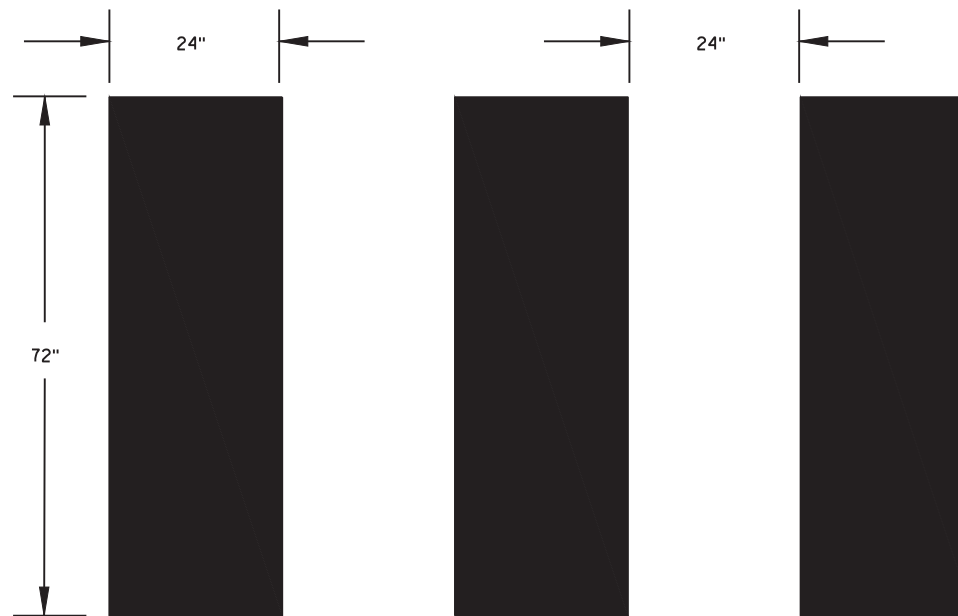


BRICK PAVER DETAIL



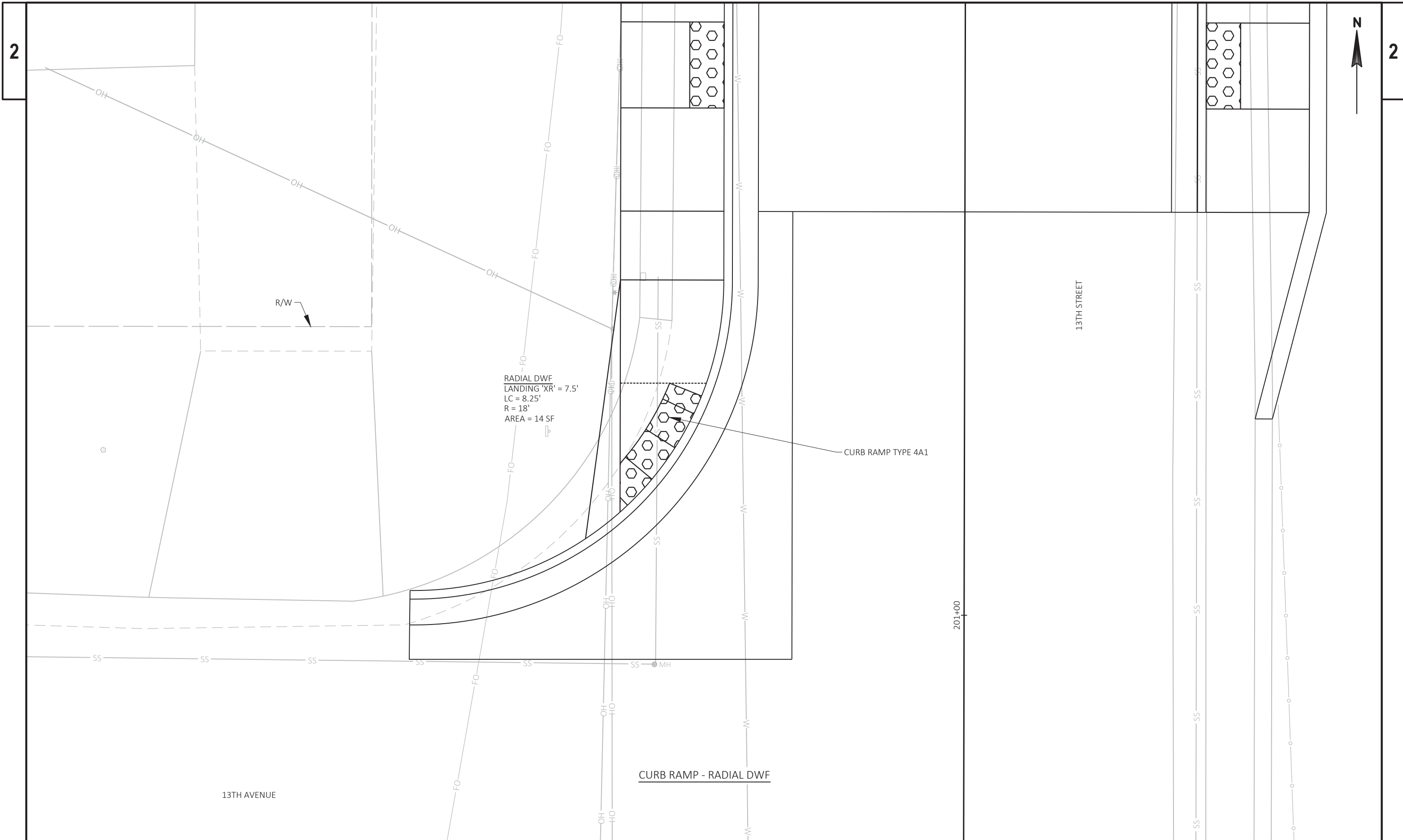
* WHERE T = TOTAL THICKNESS OF THE OVERLAY OR NEW BITUMINOUS SURFACE

HMA JOINT SAWING AND SEALING



MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH

2' x 6' BARS



PROJECT NO: 7996-00-09

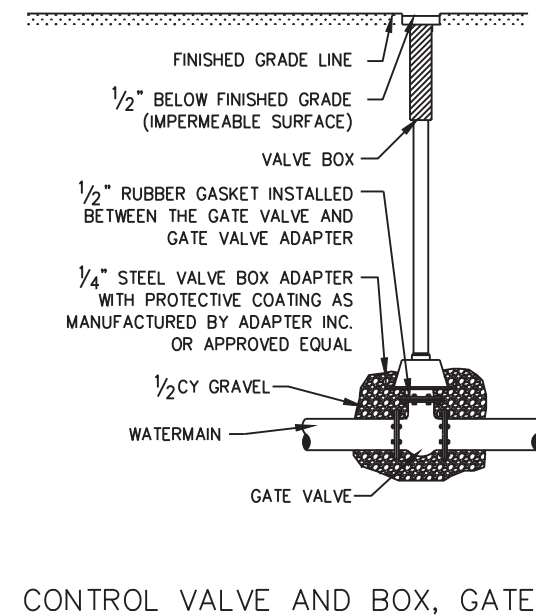
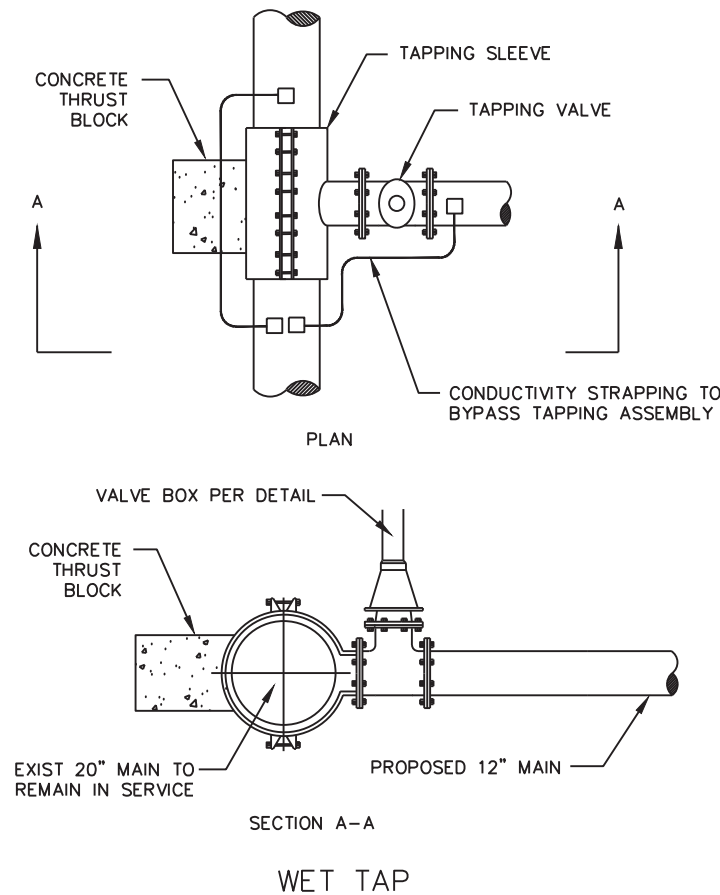
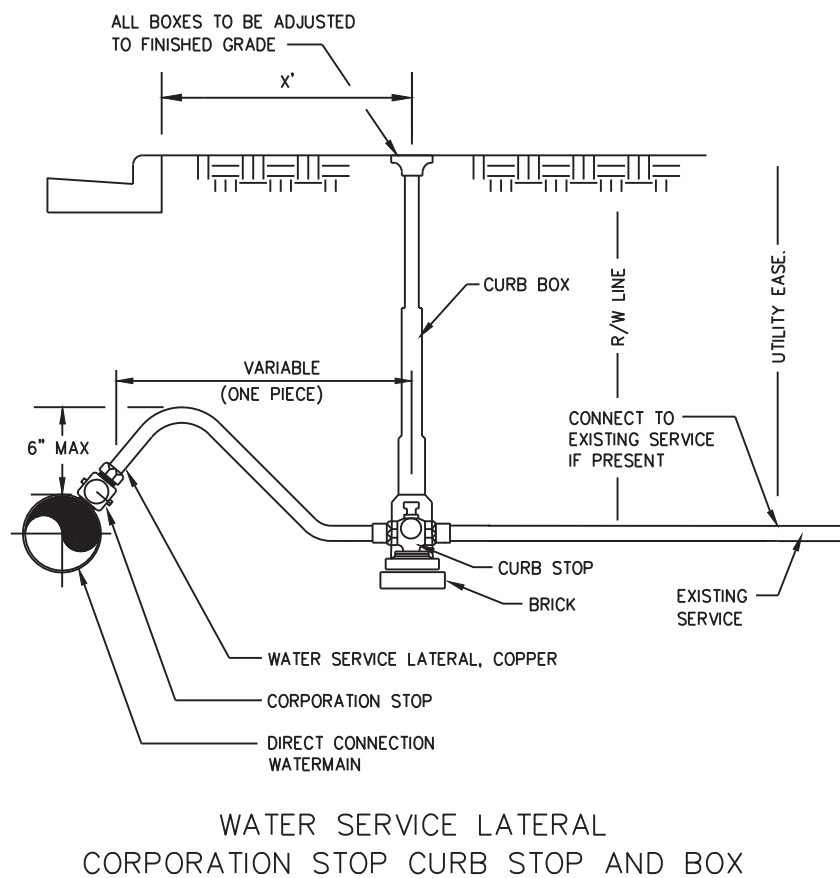
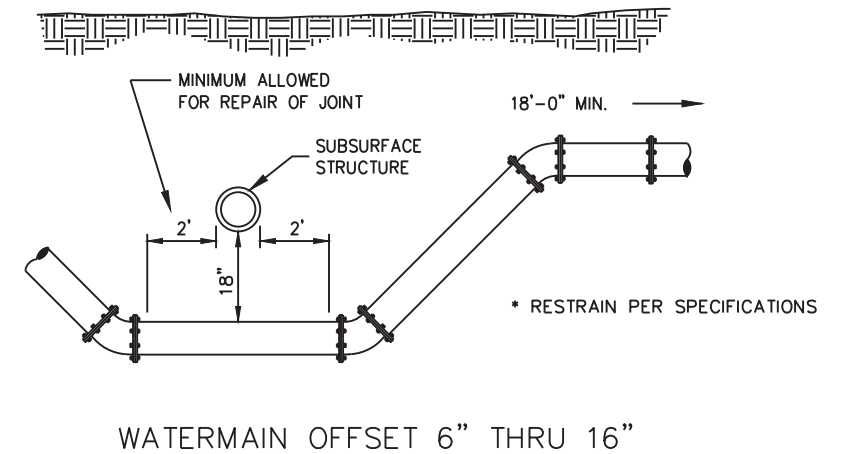
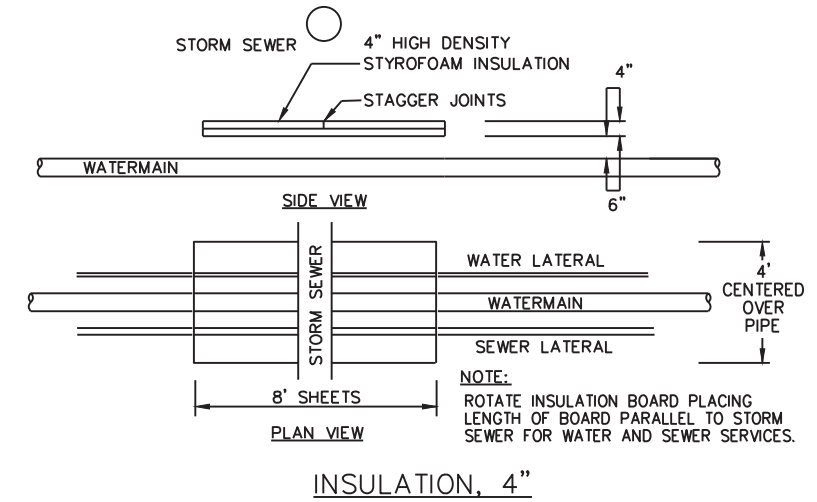
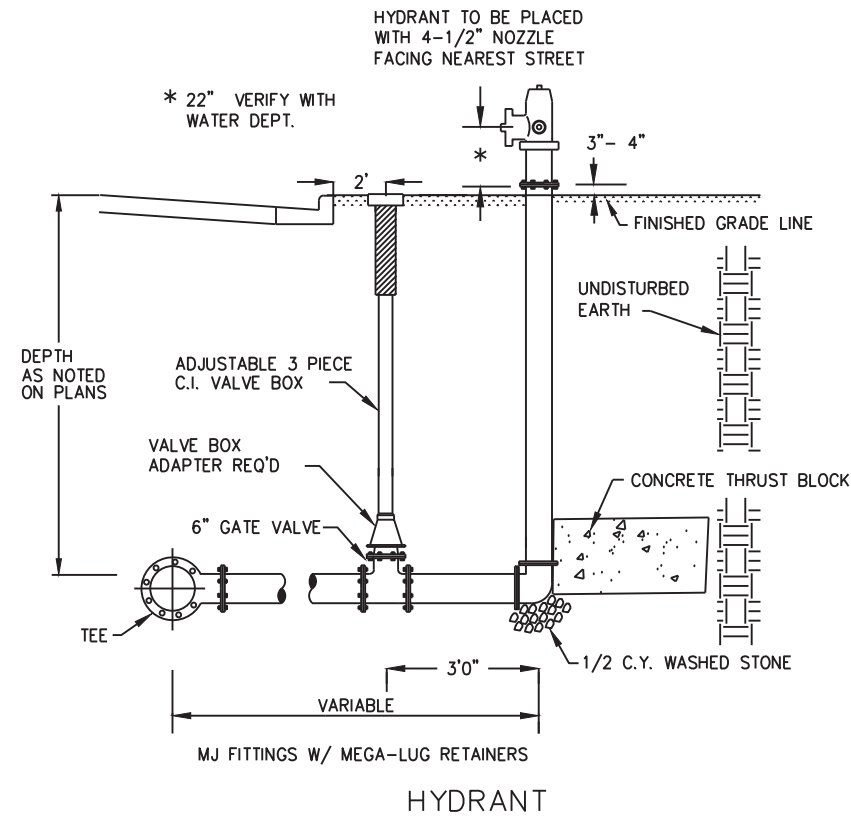
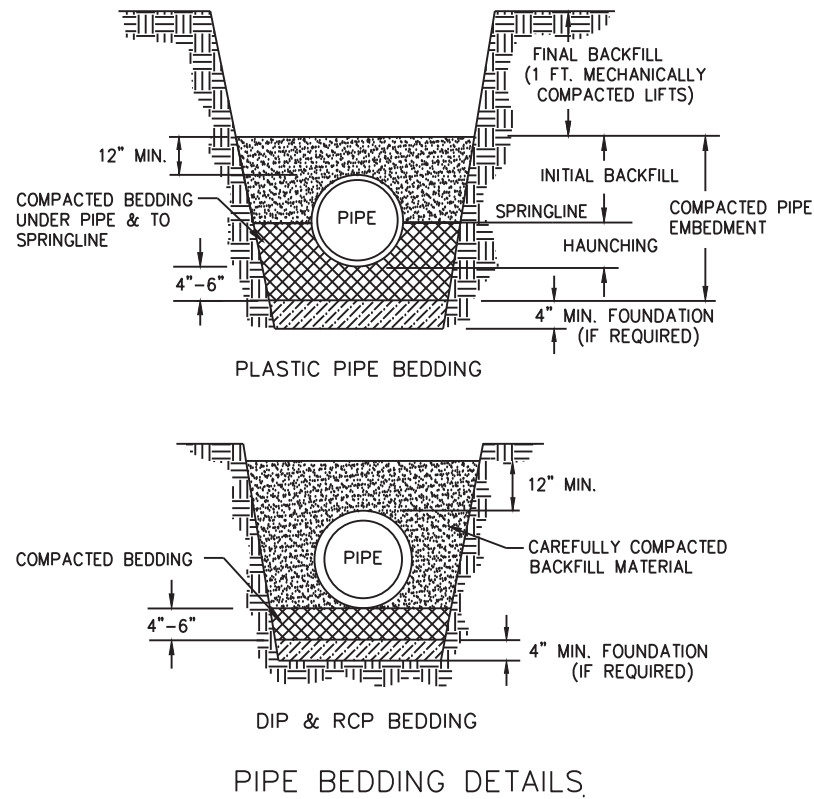
HWY: LOCAL STREET

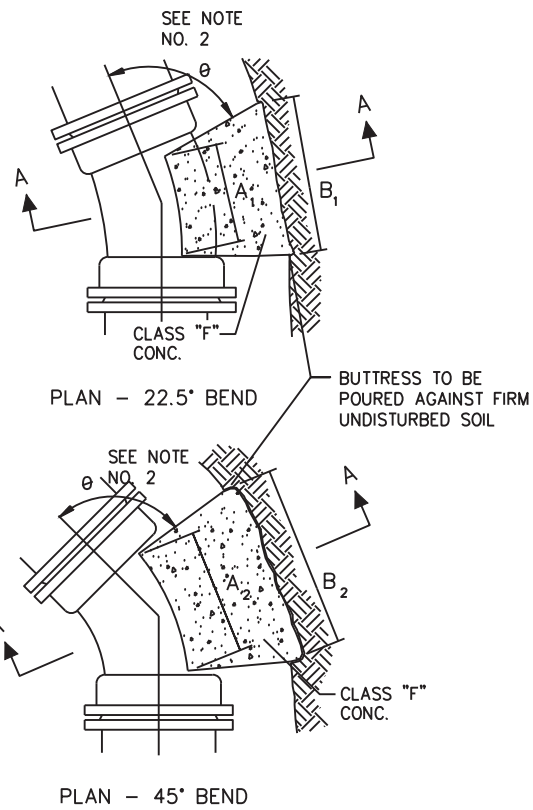
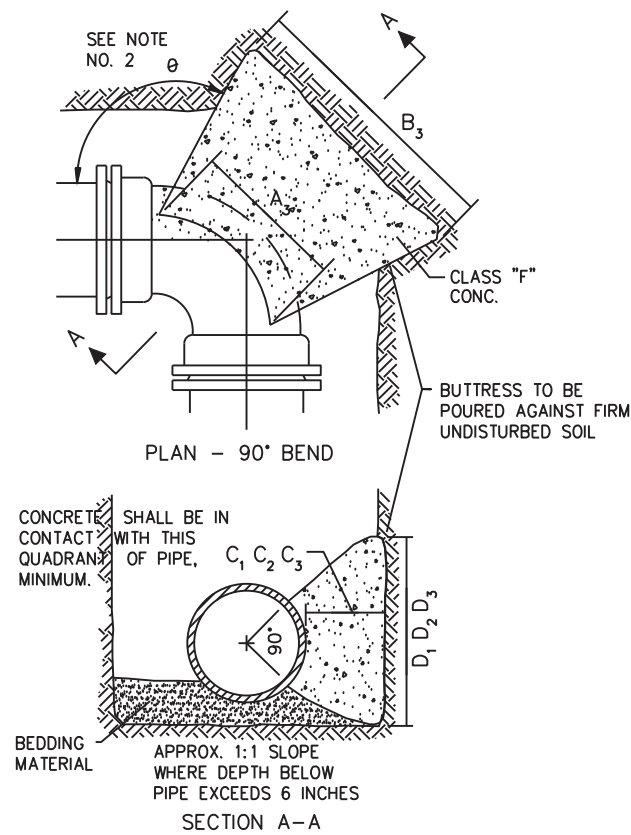
COUNTY: DUNN

CONSTRUCTION DETAILS

SHEET

E



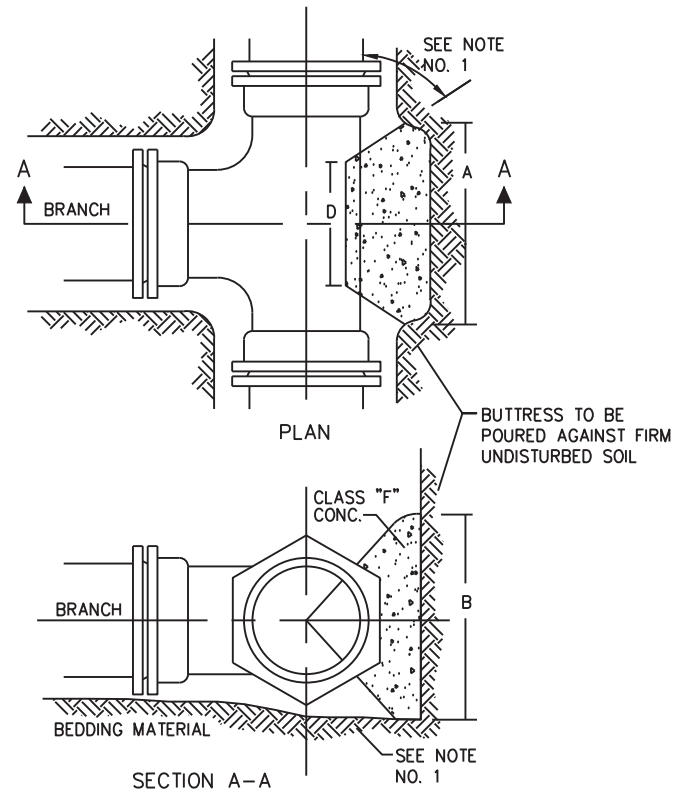


- NOTES:
1. A WATER PRESSURE OF 150 PSI AND AN EARTH RESISTANCE OF 2 TONS/SQ FT
 2. DIMENSIONS C₁ C₂ C₃ SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.
 3. DIMENSIONS A₁ A₂ A₃ SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MJ BOLTS.
 4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM, UNDISTURBED EARTH.
 5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

DETAIL FROM:
"STANDARD SPECIFICATIONS FOR SEWER AND WATER
CONSTRUCTION IN WISCONSIN, FILE NO. 44"

BUTTRESS FOR BENDS

PIPE SIZE	22.5° BENDS		45° BENDS		90° BENDS	
	B ₁	D ₁	B ₂	D ₂	B ₃	D ₃
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

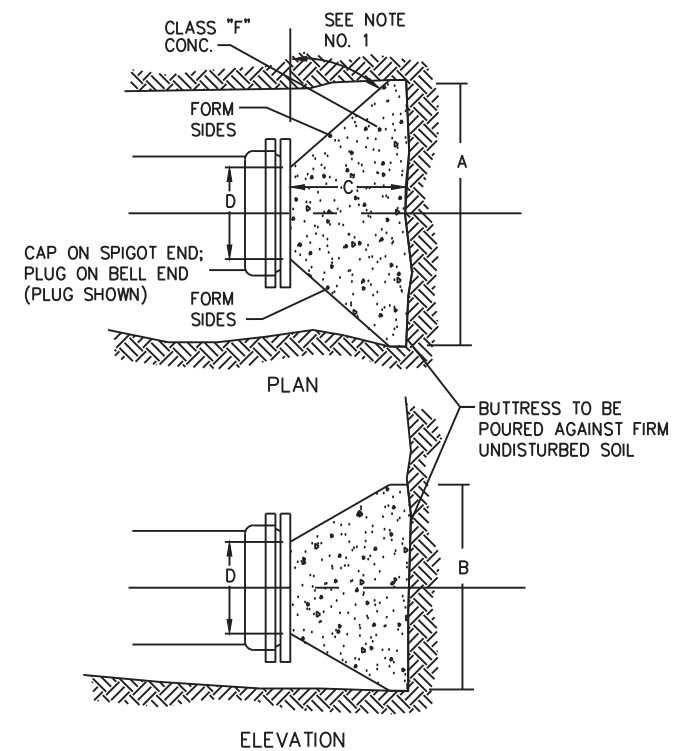


- NOTES:
1. BUTTRESS SIZE IS CONTROLLED BY THE BRANCH PIPE DIAMETER.
 2. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45 DEGREES.
 3. CONCRETE SHOULD BEAR ON THIS QUADRANT OF PIPE AS A MINIMUM.
 4. DIMENSION "D" SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHOULD NOT INTERFERE WITH MECHANICAL JOINTS.
 5. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ FT AND A WATER PRESSURE OF 150 PSI
 6. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

BD	A	B	C	D
4"	0"-10"	1'-6"	SEE NOTE NO. 2	SEE NOTE NO. 4
6"	1'-6"	1'-8"		
8"	1'-9"	2'-4"		
10"	1'-9"	2'-4"		
12"	2'-3"	2'-7"		
16"	3'-8"	2'-10"		
20"	5'-0"	3'-10"		
24"	5'-4"	4'-8"		

BD = BRANCH DIAMETER

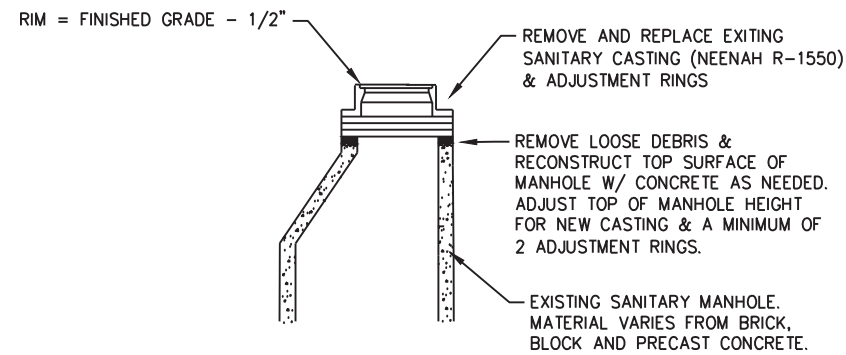
BUTTRESS FOR TEES



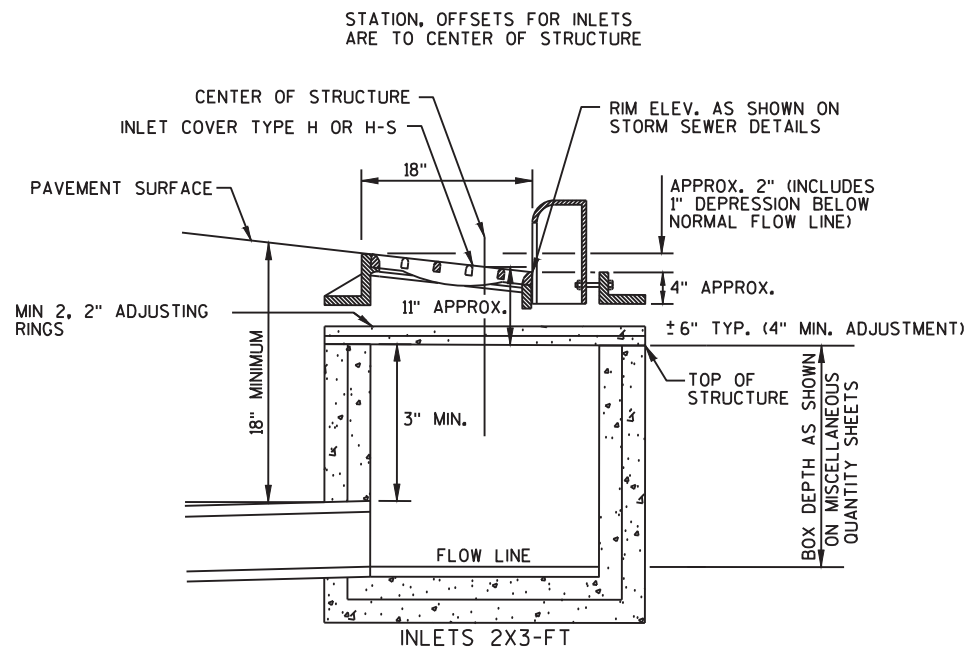
- NOTES:
1. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45 DEGREES.
 2. DIMENSION "D" EQUALS APPROX. I.D. OF PIPE LESS 2". AN EFFORT SHOULD BE MADE TO PREVENT THE CONCRETE FROM COVERING THE MJ BOLTS.
 3. WHERE BUTTRESSES ARE NOT POSSIBLE BECAUSE OF POOR SOIL CONDITIONS OR LACK OF ROOM, STRAPPING SHALL BE PERMITTED.
 4. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ FT. AND A WATER PRESSURE OF 150 PSI.

DIA.	A	B	C	D
4"	1'-5"	1'-0"	SEE NOTE NO. 1	SEE NOTE NO. 2
6"	1'-7"	1'-9"		
8"	2'-4"	2'-0"		
10"	2'-4"	2'-0"		
12"	2'-8"	2'-6"		
16"	3'-4"	3'-6"		
20"	3'-10"	4'-9"		
24"	4'-8"	5'-6"		

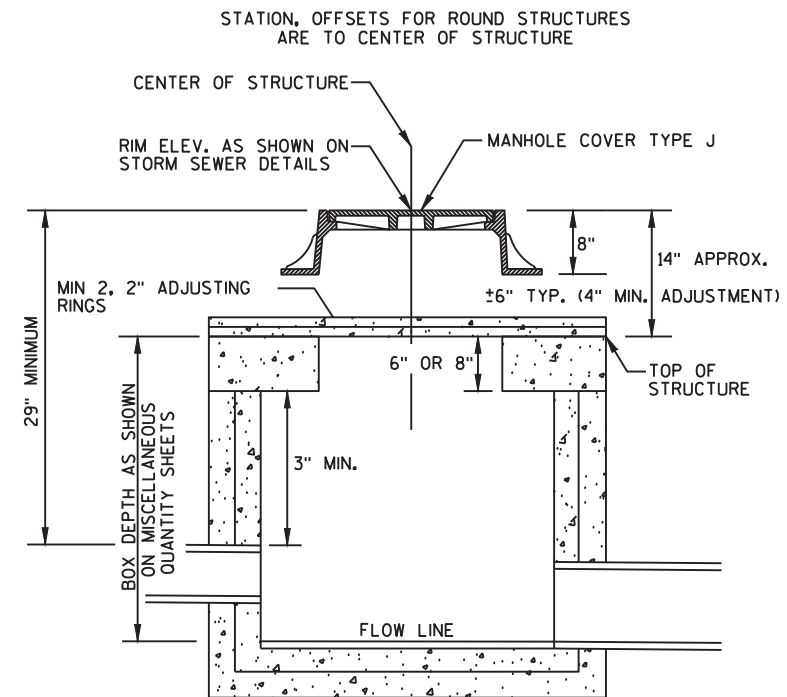
BUTTRESS FOR DEAD ENDS



REMOVE & REPLACE
SANITARY MANHOLE
CASTING & ADJUSTMENT RINGS



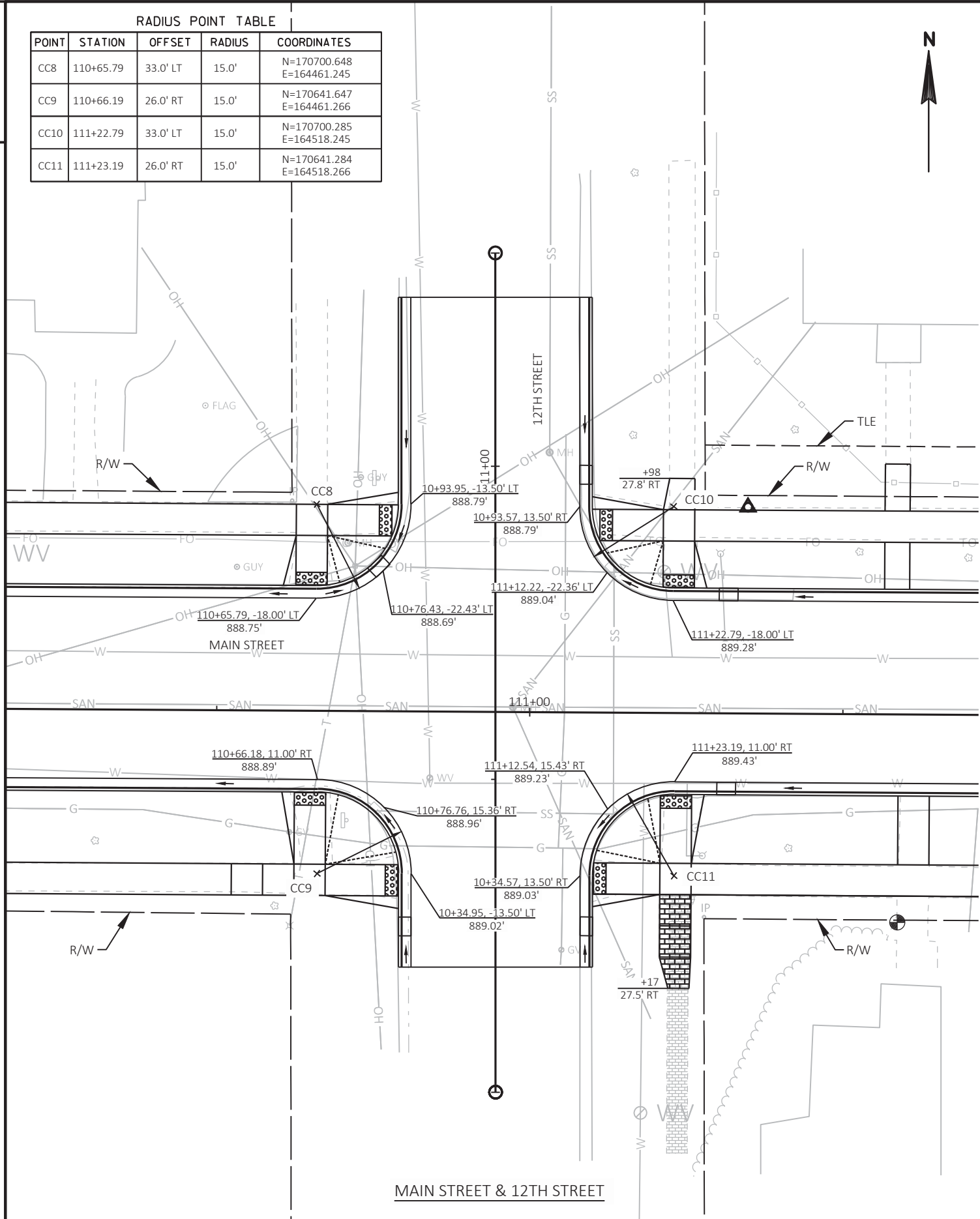
DETAIL FOR COMPUTING INLET ELEVATIONS



DETAIL FOR COMPUTING ROUND STRUCTURE ELEVATIONS

RADIUS POINT TABLE

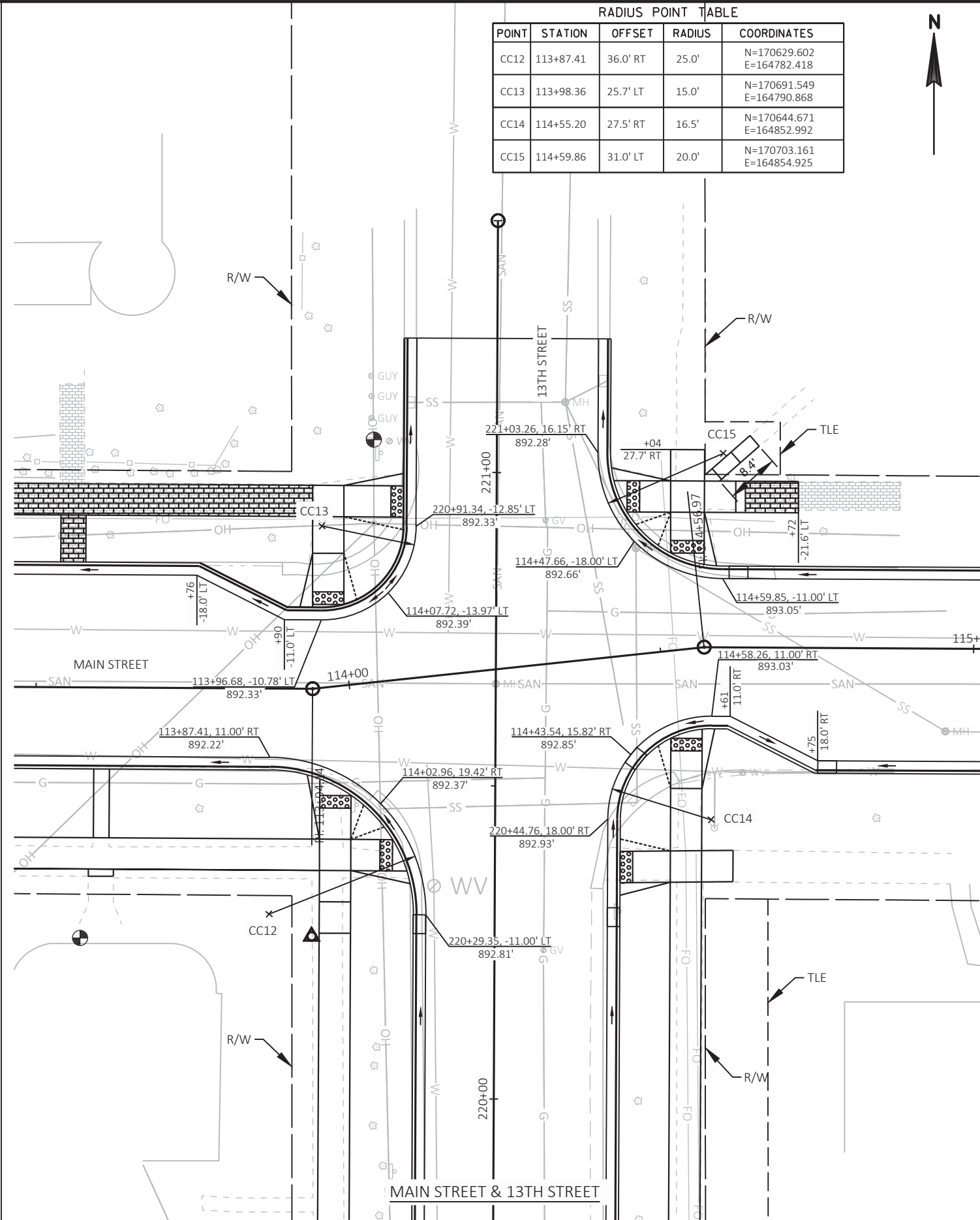
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC8	110+65.79	33.0' LT	15.0'	N=170700.648 E=164461.245
CC9	110+66.19	26.0' RT	15.0'	N=170641.647 E=164461.266
CC10	111+22.79	33.0' LT	15.0'	N=170700.285 E=164518.245
CC11	111+23.19	26.0' RT	15.0'	N=170641.284 E=164518.266



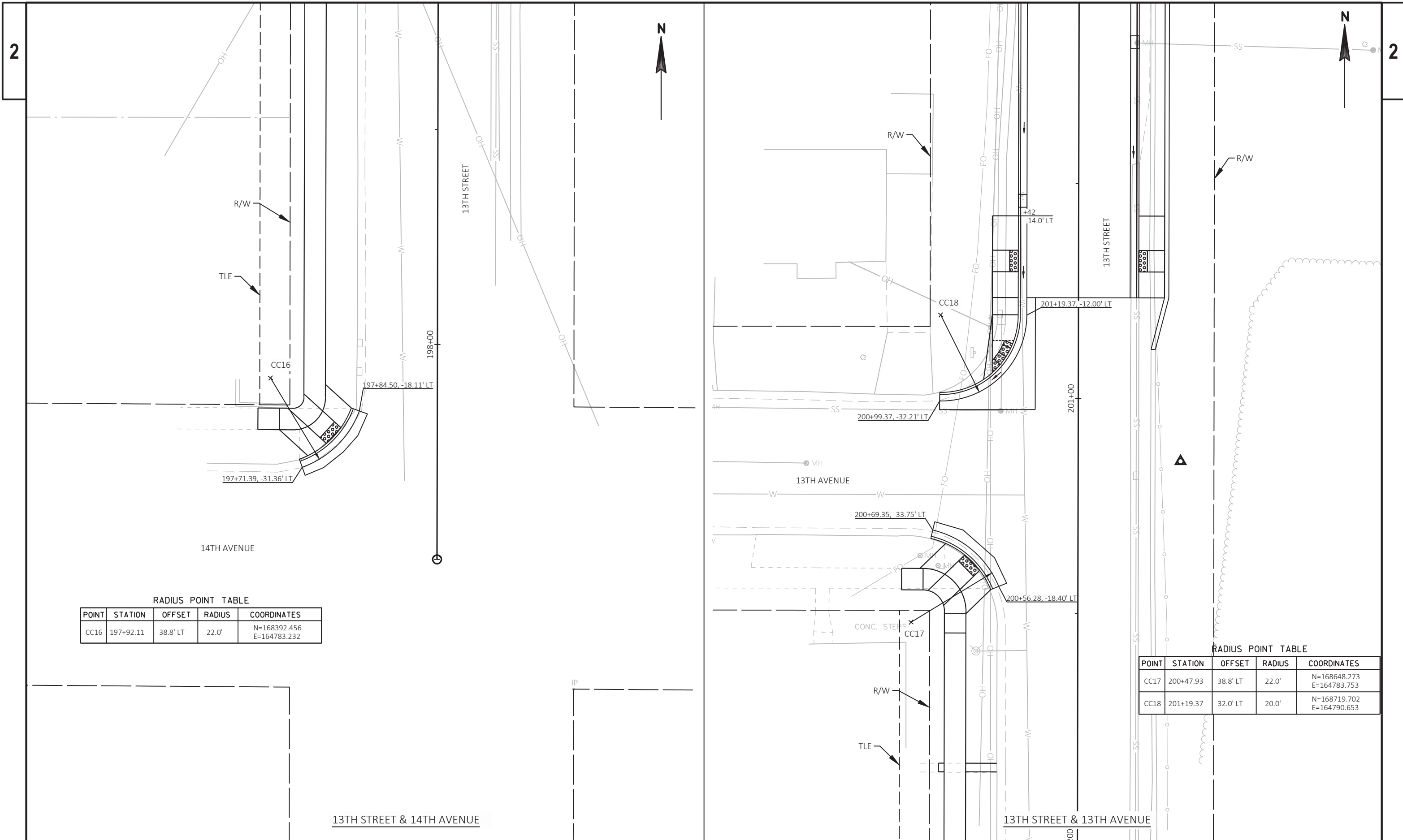
MAIN STREET & 12TH STREET

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC12	113+87.41	36.0' RT	25.0'	N=170629.602 E=164782.418
CC13	113+98.36	25.7' LT	15.0'	N=170691.549 E=164790.868
CC14	114+55.20	27.5' RT	16.5'	N=170644.671 E=164852.992
CC15	114+59.86	31.0' LT	20.0'	N=170703.161 E=164854.925



MAIN STREET & 13TH STREET



RADIUS POINT TABLE

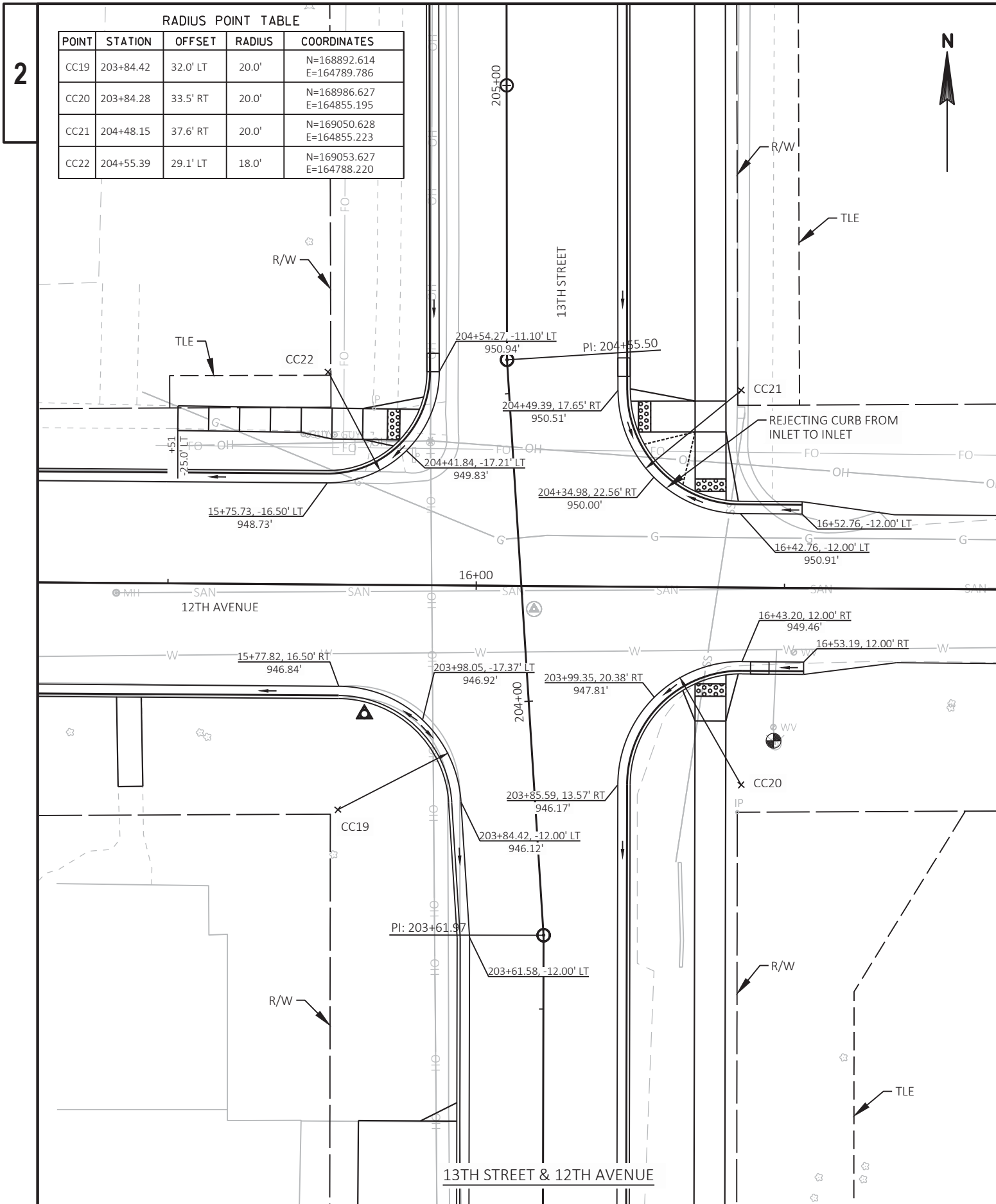
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC16	197+92.11	38.8' LT	22.0'	N=168392.456 E=164783.232

RADIUS POINT TABLE

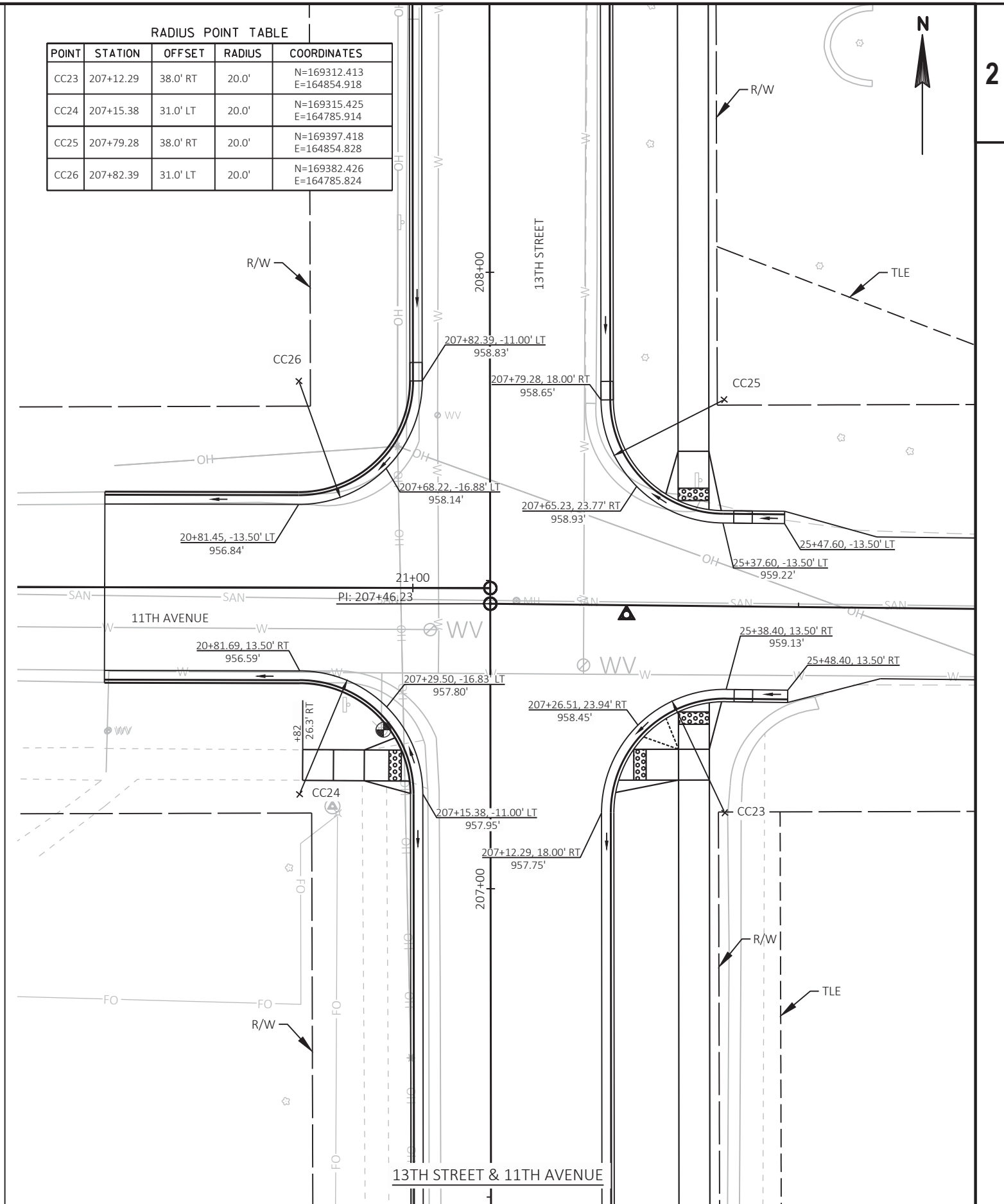
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC17	200+47.93	38.8' LT	22.0'	N=168648.273 E=164783.753
CC18	201+19.37	32.0' LT	20.0'	N=168719.702 E=164790.653

13TH STREET & 14TH AVENUE

13TH STREET & 13TH AVENUE



RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC19	203+84.42	32.0' LT	20.0'	N=168892.614 E=164789.786
CC20	203+84.28	33.5' RT	20.0'	N=168986.627 E=164855.195
CC21	204+48.15	37.6' RT	20.0'	N=169050.628 E=164855.223
CC22	204+55.39	29.1' LT	18.0'	N=169053.627 E=164788.220



RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC23	207+12.29	38.0' RT	20.0'	N=169312.413 E=164854.918
CC24	207+15.38	31.0' LT	20.0'	N=169315.425 E=164785.914
CC25	207+79.28	38.0' RT	20.0'	N=169397.418 E=164854.828
CC26	207+82.39	31.0' LT	20.0'	N=169382.426 E=164785.824

PROJECT NO: 7996-00-09

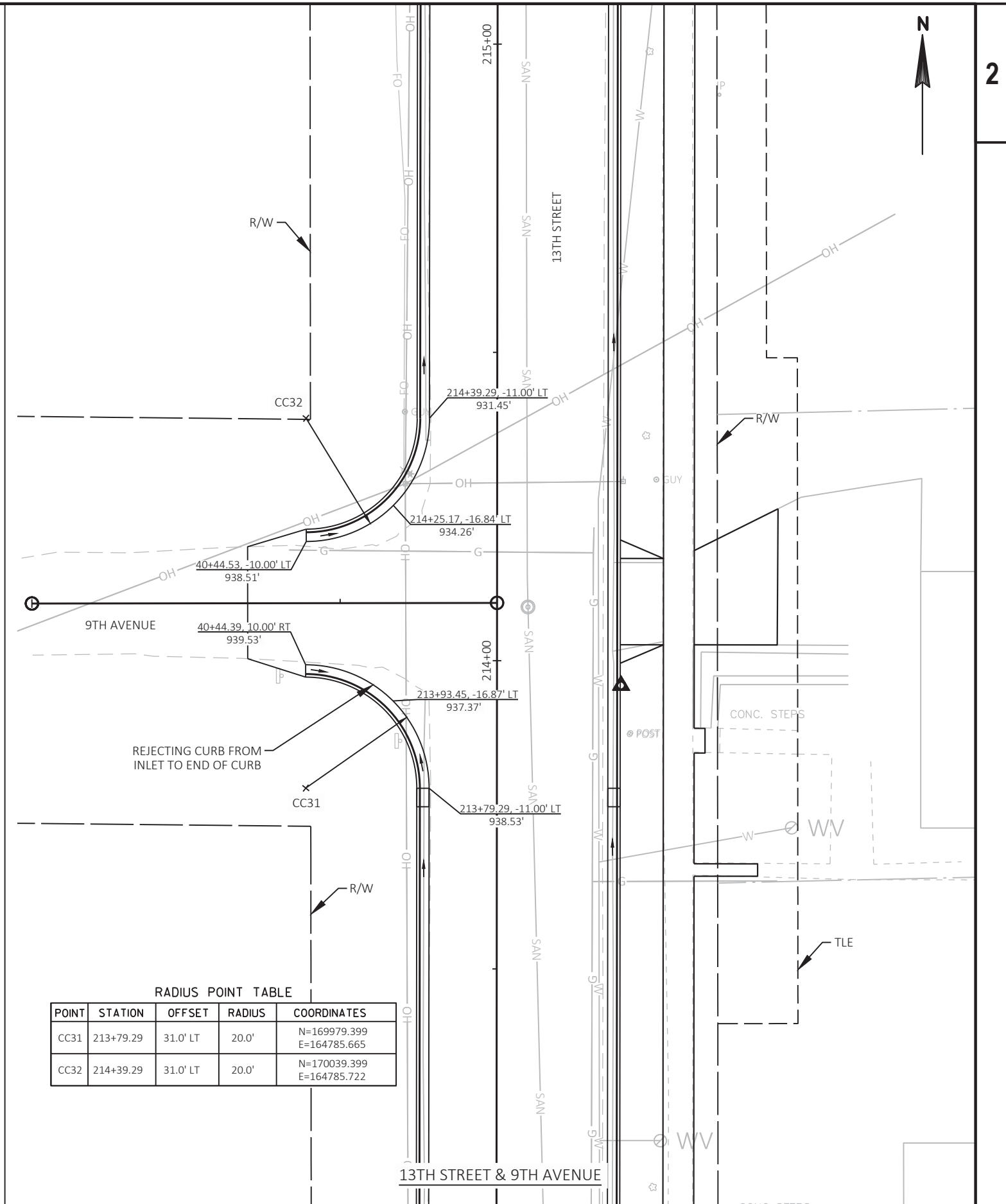
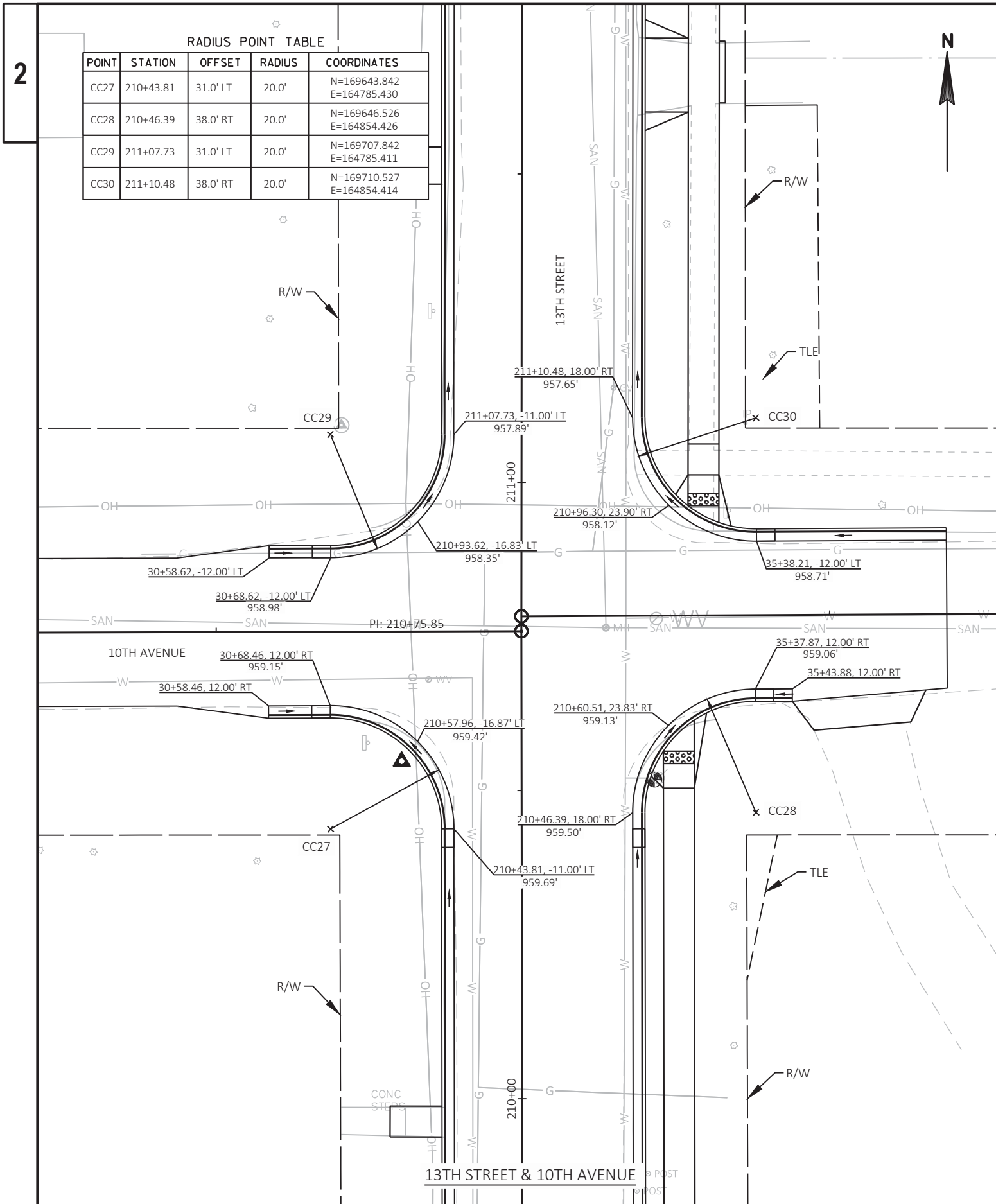
HWY: LOCAL STREET

COUNTY: DUNN

INTERSECTION DETAIL

SHEET

E



RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC27	210+43.81	31.0' LT	20.0'	N=169643.842 E=164785.430
CC28	210+46.39	38.0' RT	20.0'	N=169646.526 E=164854.426
CC29	211+07.73	31.0' LT	20.0'	N=169707.842 E=164785.411
CC30	211+10.48	38.0' RT	20.0'	N=169710.527 E=164854.414

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC31	213+79.29	31.0' LT	20.0'	N=169979.399 E=164785.665
CC32	214+39.29	31.0' LT	20.0'	N=170039.399 E=164785.722

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

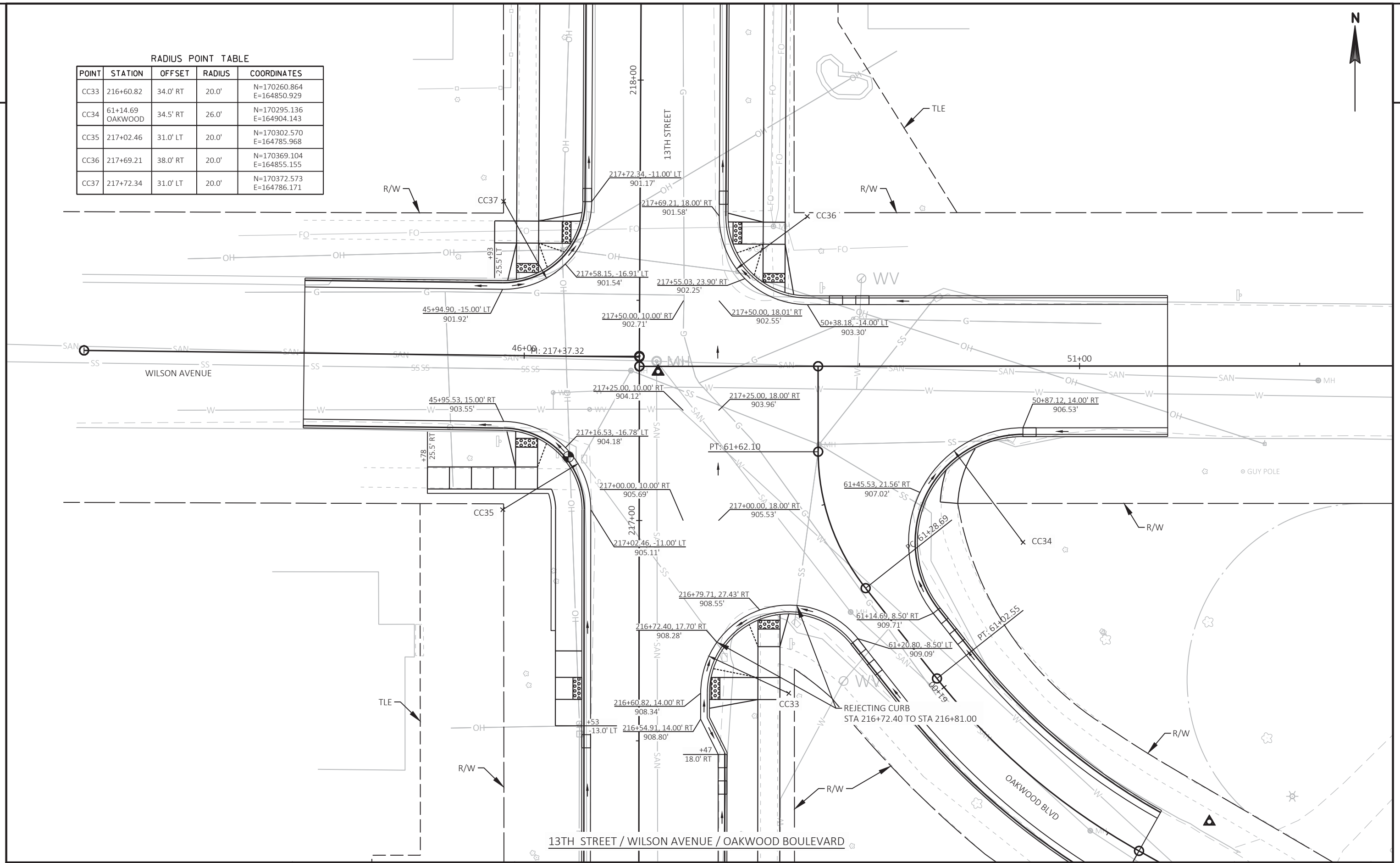
INTERSECTION DETAIL

SHEET

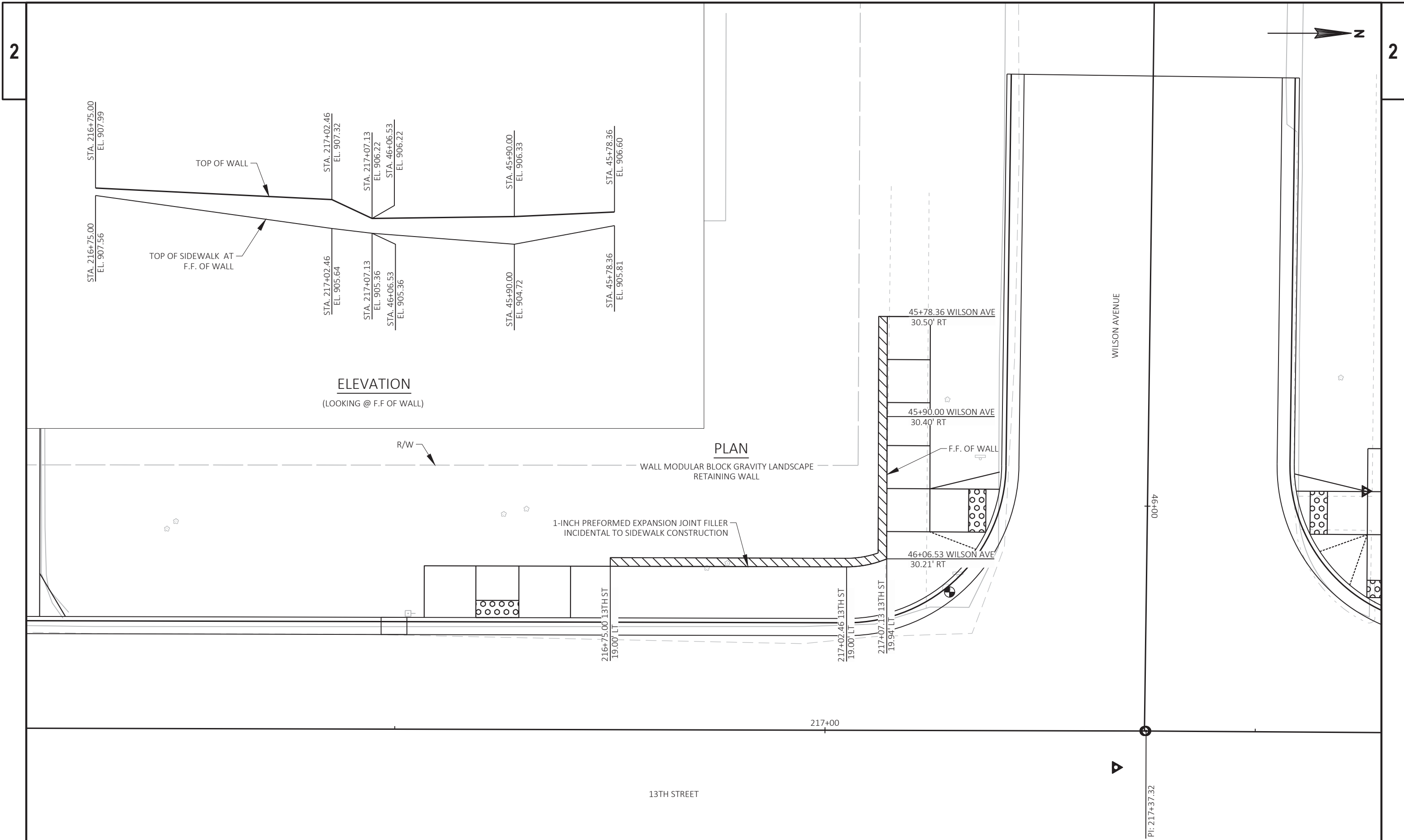
E

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC33	216+60.82	34.0' RT	20.0'	N=170260.864 E=164850.929
CC34	61+14.69 OAKWOOD	34.5' RT	26.0'	N=170295.136 E=164904.143
CC35	217+02.46	31.0' LT	20.0'	N=170302.570 E=164785.968
CC36	217+69.21	38.0' RT	20.0'	N=170369.104 E=164855.155
CC37	217+72.34	31.0' LT	20.0'	N=170372.573 E=164786.171



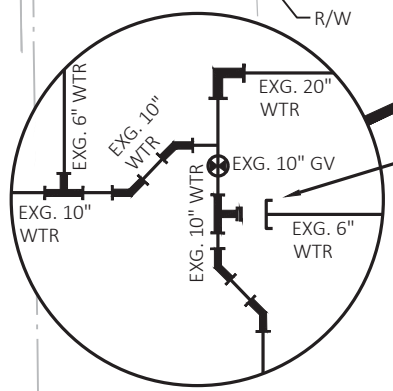
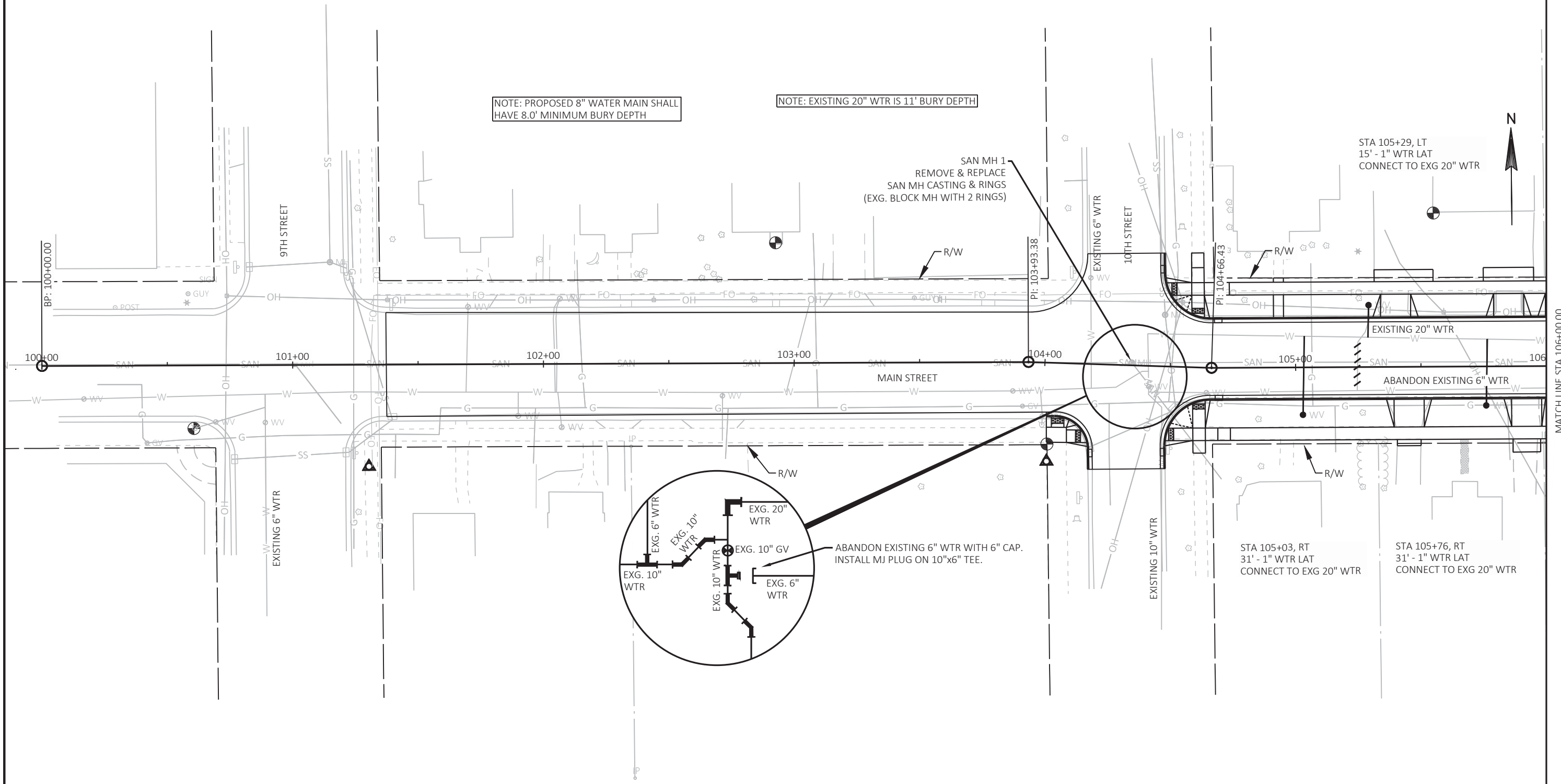
13TH STREET / WILSON AVENUE / OAKWOOD BOULEVARD

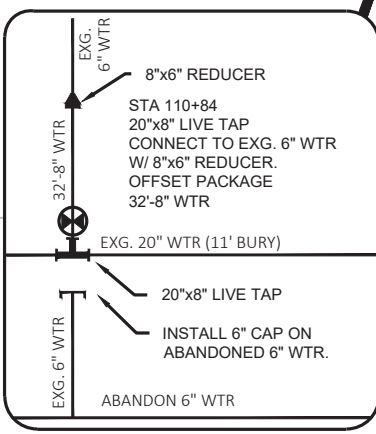
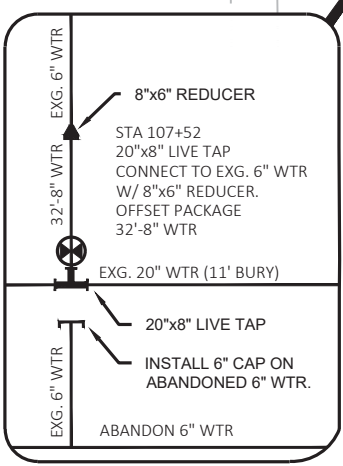
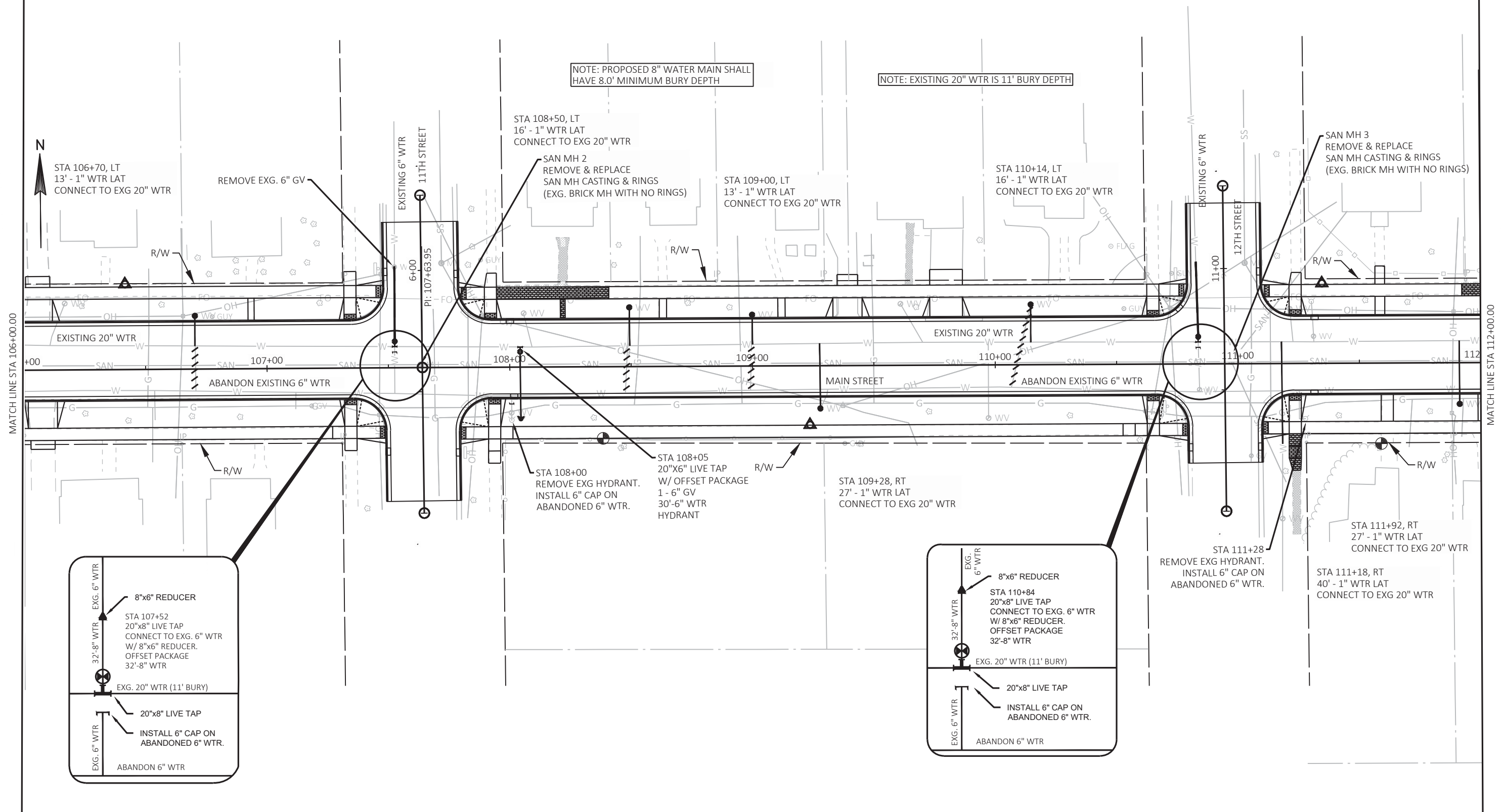


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	RETAINING WALL DETAIL	SHEET	E
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NOTE: PROPOSED 8" WATER MAIN SHALL HAVE 8.0' MINIMUM BURY DEPTH

NOTE: EXISTING 20" WTR IS 11' BURY DEPTH

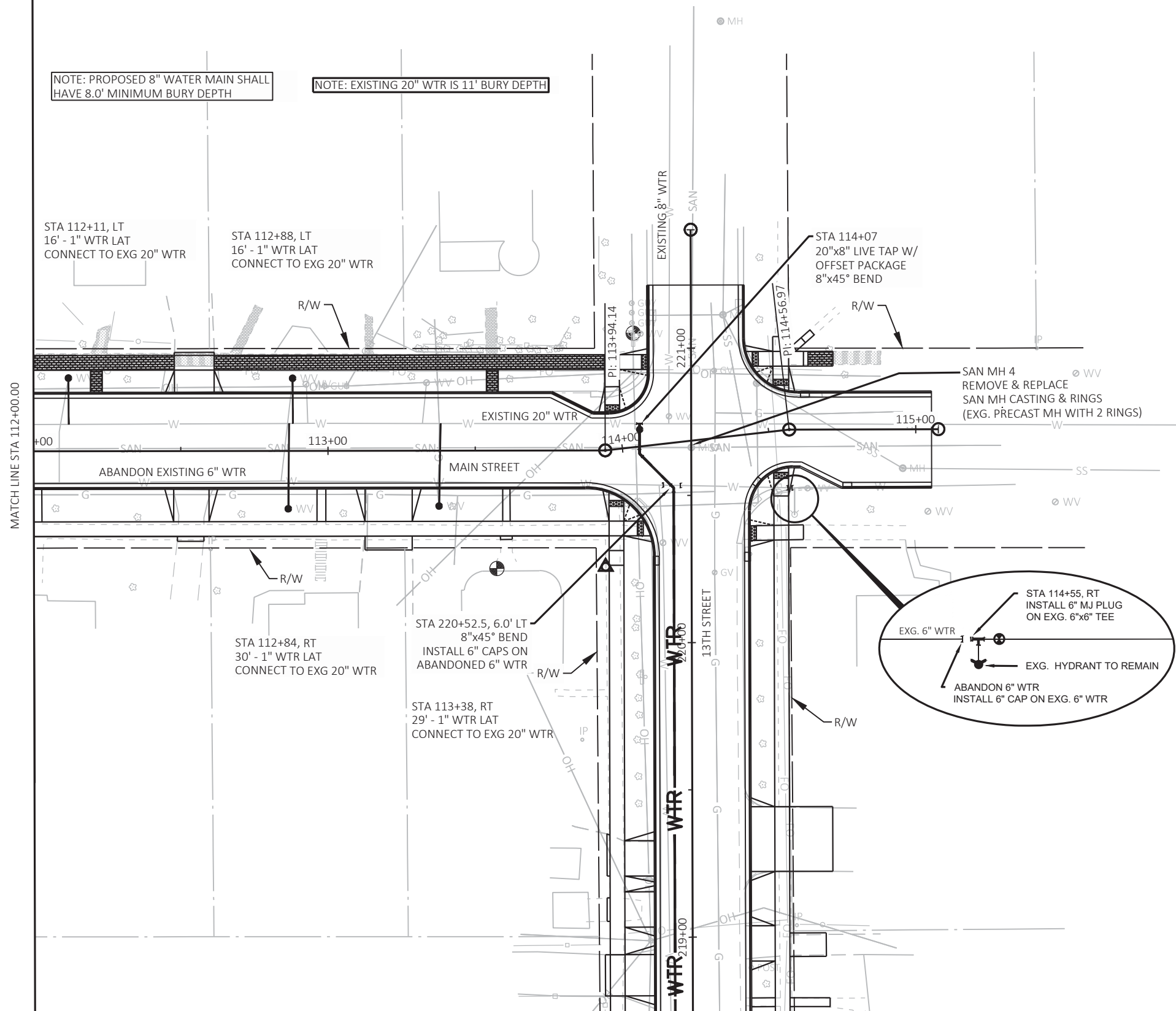




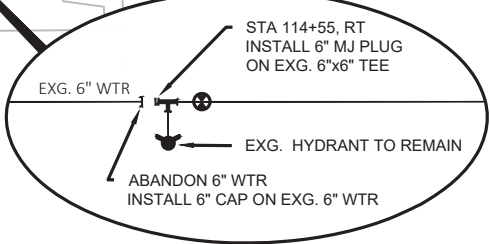


NOTE: PROPOSED 8" WATER MAIN SHALL HAVE 8.0' MINIMUM BURY DEPTH

NOTE: EXISTING 20" WTR IS 11' BURY DEPTH

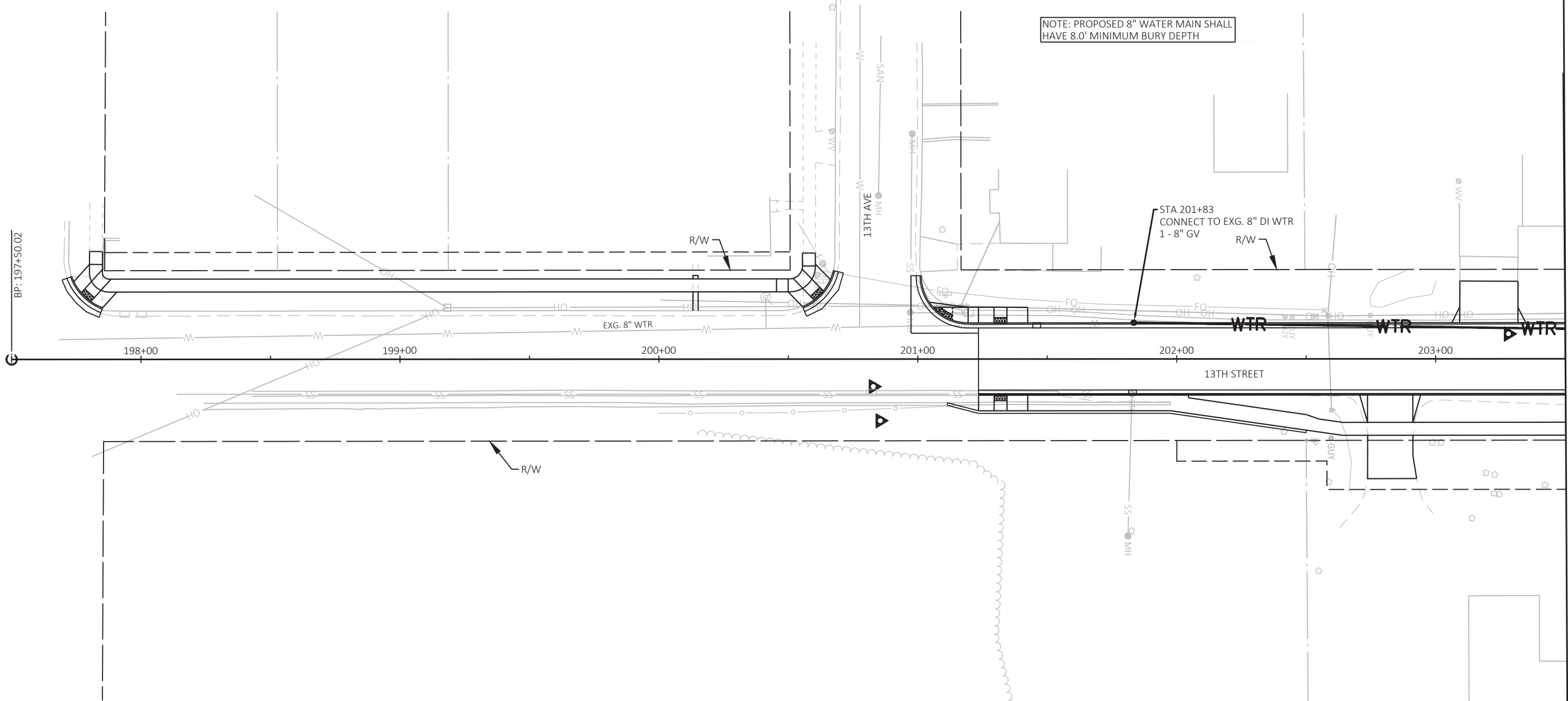


MATCH LINE STA 112+00.00





NOTE: PROPOSED 8" WATER MAIN SHALL HAVE 8.0' MINIMUM BURY DEPTH



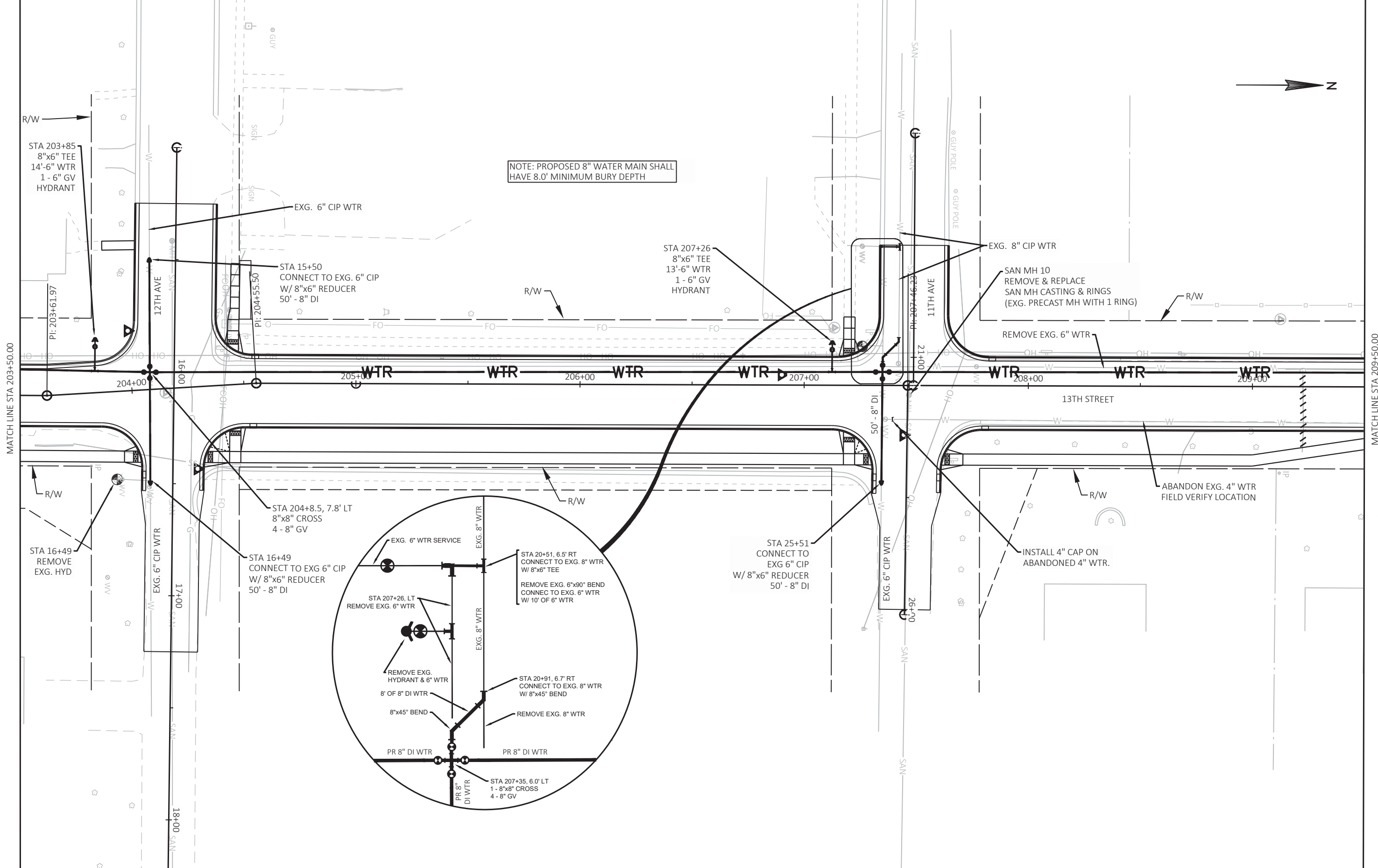
BP: 197+50.02

MATCH LINE STA 203+50.00

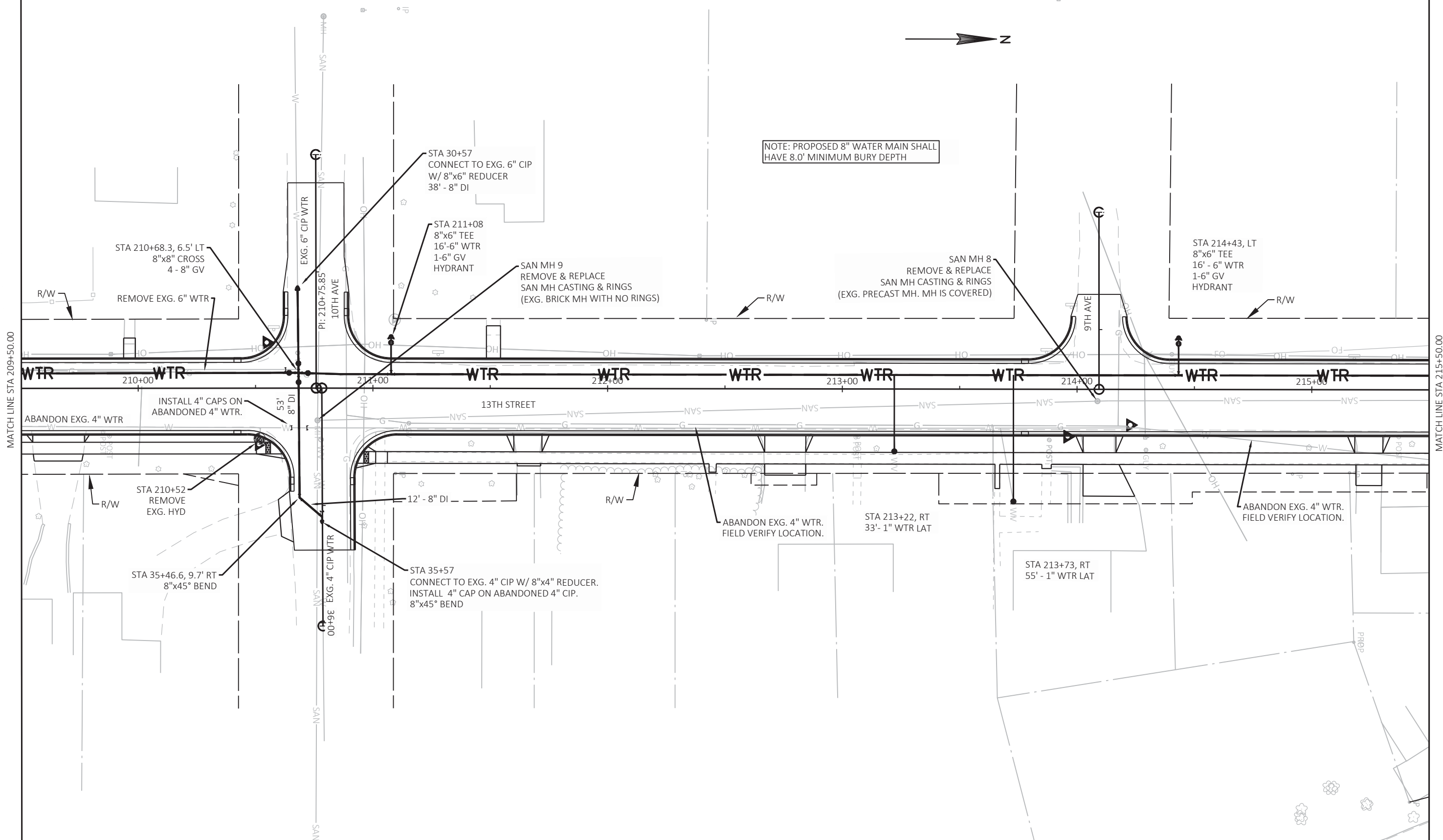
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	WATERMAIN - 13TH ST	SHEET	E
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NOTE: PROPOSED 8" WATER MAIN SHALL HAVE 8.0' MINIMUM BURY DEPTH



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	WATERMAIN - 13TH ST	SHEET	E
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NOTE: PROPOSED 8" WATER MAIN SHALL HAVE 8.0' MINIMUM BURY DEPTH

STA 30+57
CONNECT TO EXG. 6" CIP
W/ 8"x6" REDUCER
38' - 8" DI

STA 211+08
8"x6" TEE
16'-6" WTR
1-6" GV
HYDRANT

SAN MH 9
REMOVE & REPLACE
SAN MH CASTING & RINGS
(EXG. BRICK MH WITH NO RINGS)

SAN MH 8
REMOVE & REPLACE
SAN MH CASTING & RINGS
(EXG. PRECAST MH. MH IS COVERED)

STA 214+43, LT
8"x6" TEE
16' - 6" WTR
1-6" GV
HYDRANT

STA 210+68.3, 6.5' LT
8"x8" CROSS
4 - 8" GV

REMOVE EXG. 6" WTR

INSTALL 4" CAPS ON
ABANDONED 4" WTR.

STA 210+52
REMOVE
EXG. HYD

STA 35+46.6, 9.7' RT
8"x45° BEND

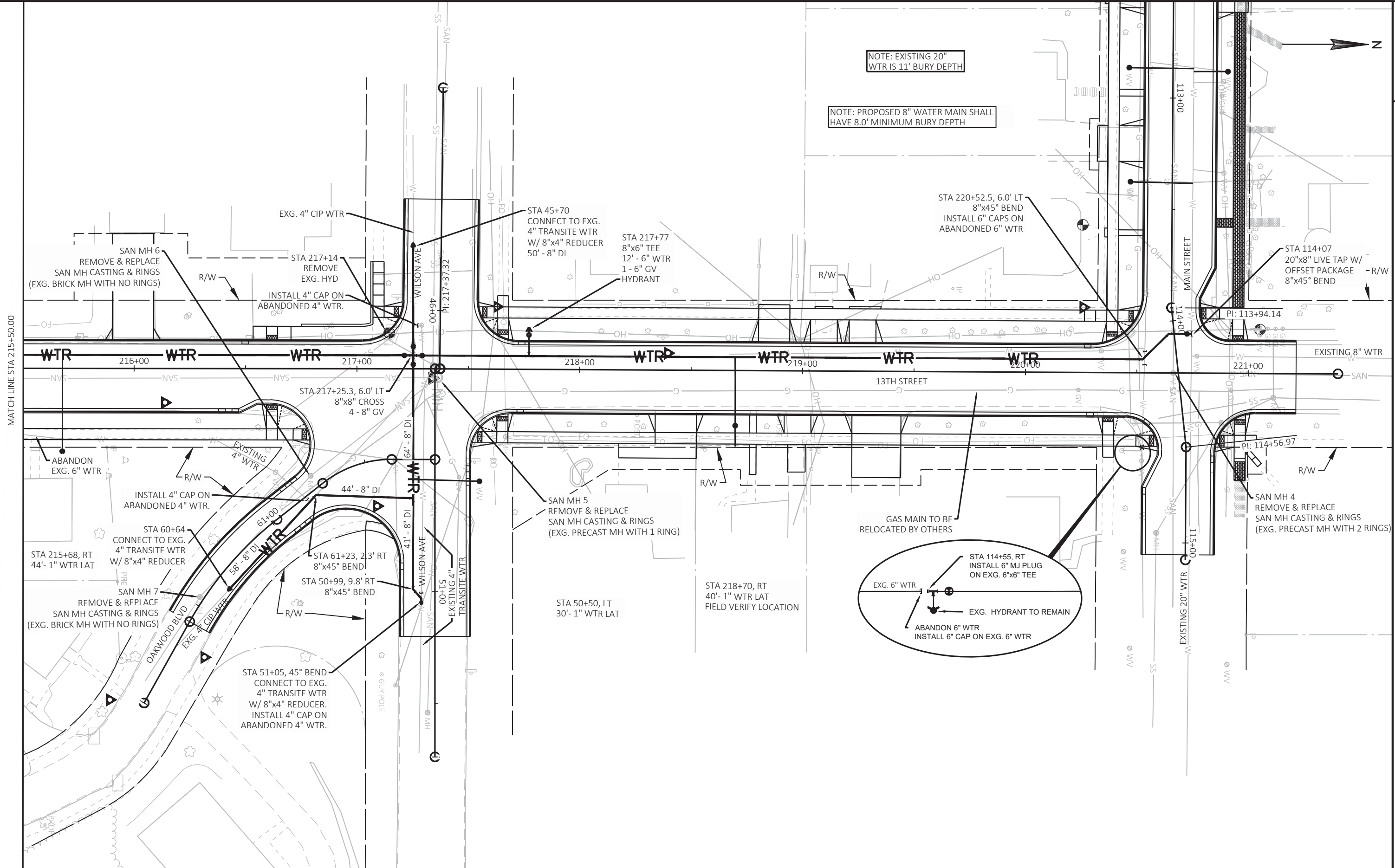
STA 35+57
CONNECT TO EXG. 4" CIP W/ 8"x4" REDUCER.
INSTALL 4" CAP ON ABANDONED 4" CIP.
8"x45° BEND

ABANDON EXG. 4" WTR.
FIELD VERIFY LOCATION.

STA 213+22, RT
33' - 1" WTR LAT

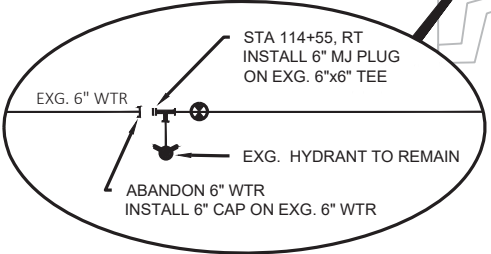
STA 213+73, RT
55' - 1" WTR LAT

ABANDON EXG. 4" WTR.
FIELD VERIFY LOCATION.

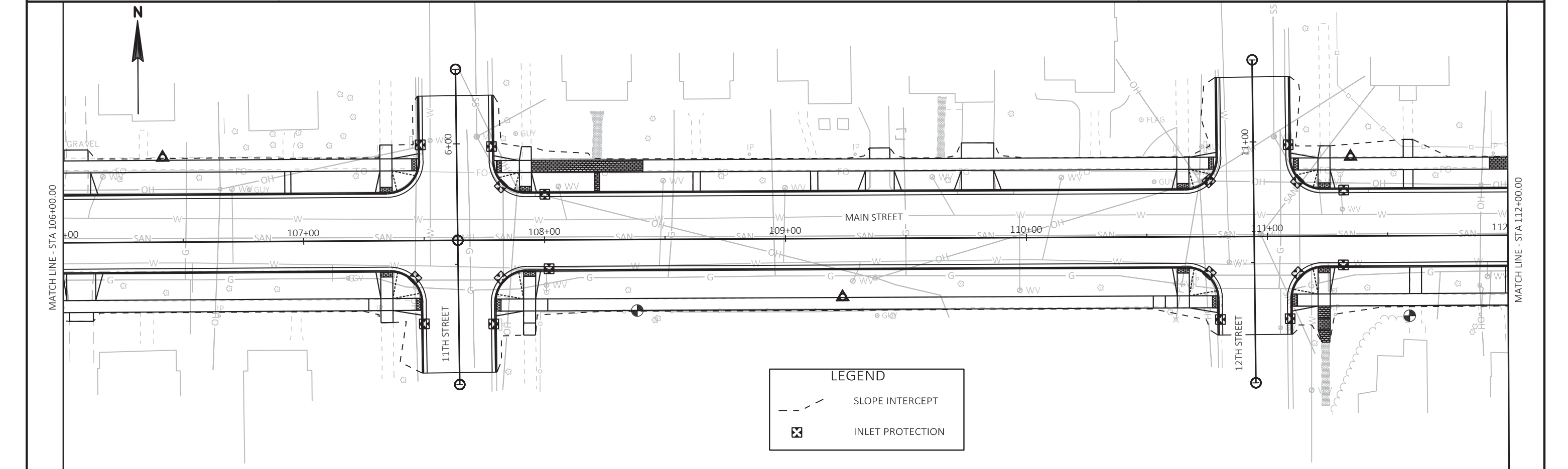
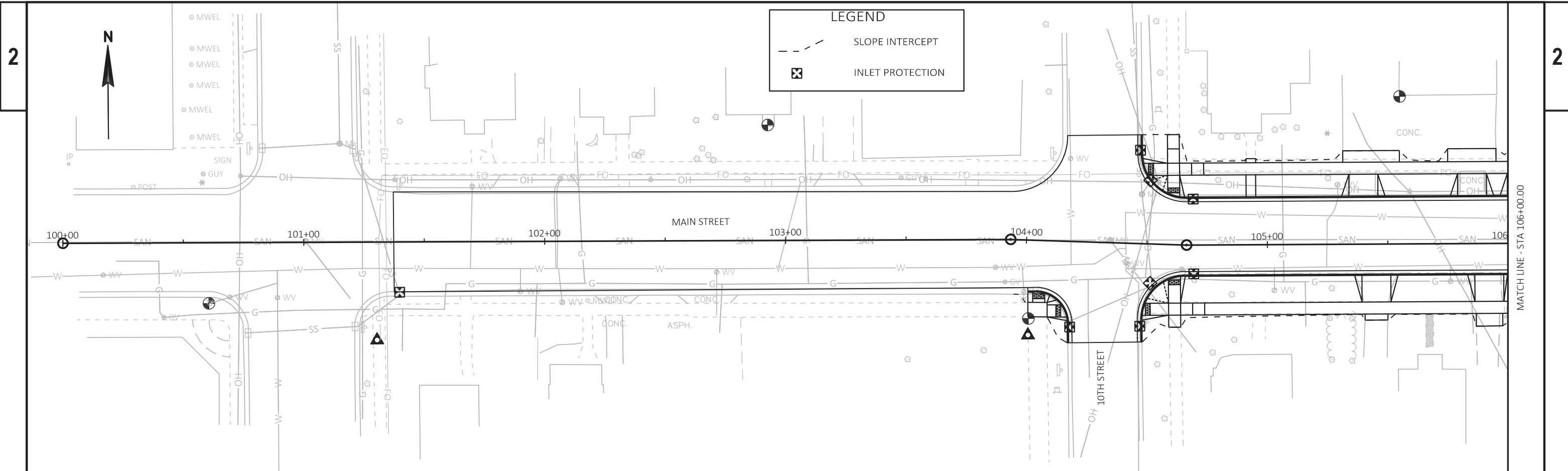


NOTE: EXISTING 20\"/>

NOTE: PROPOSED 8\"/>



MATCH LINE STA 215+50.00



PROJECT NO: 7996-00-09

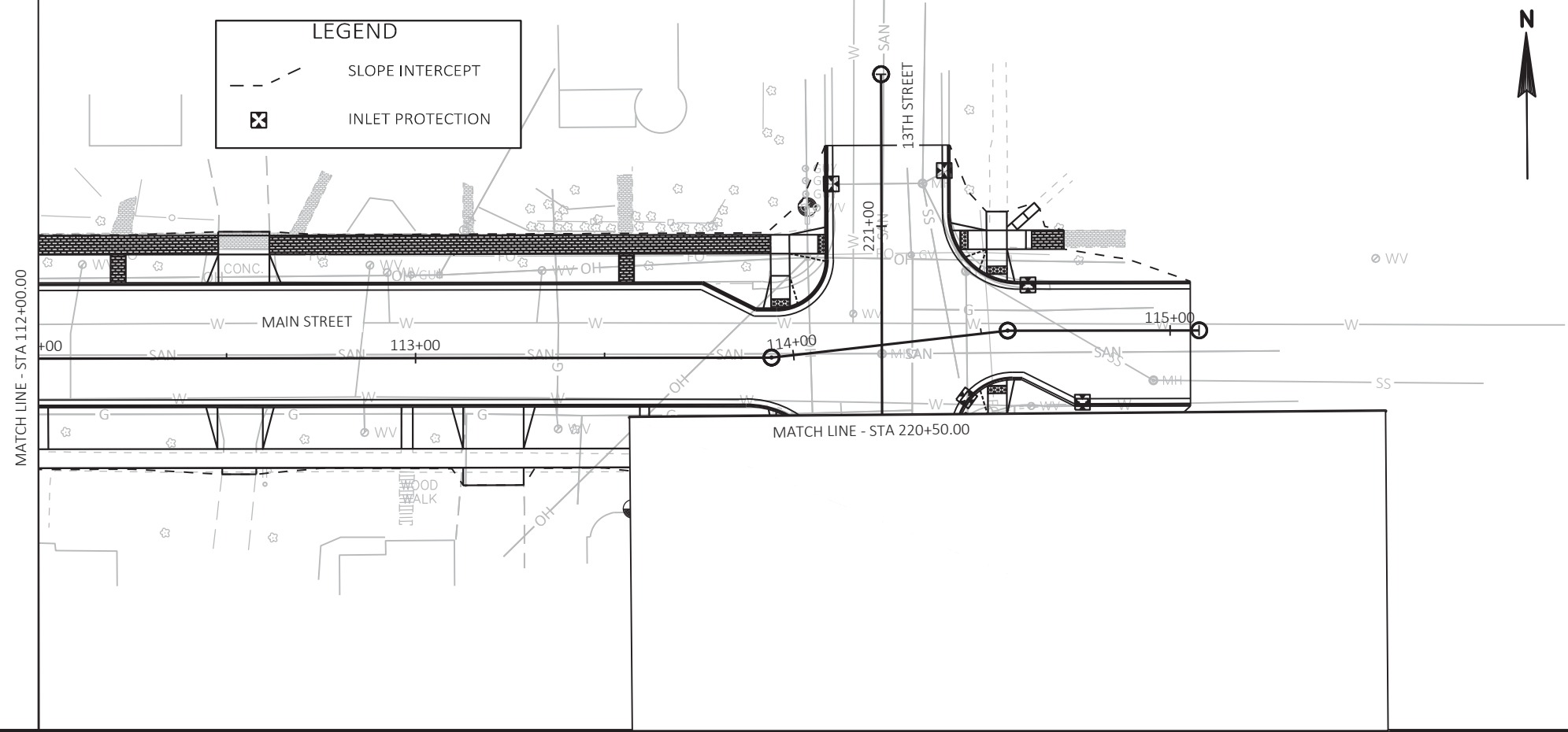
HWY: LOCAL STREET

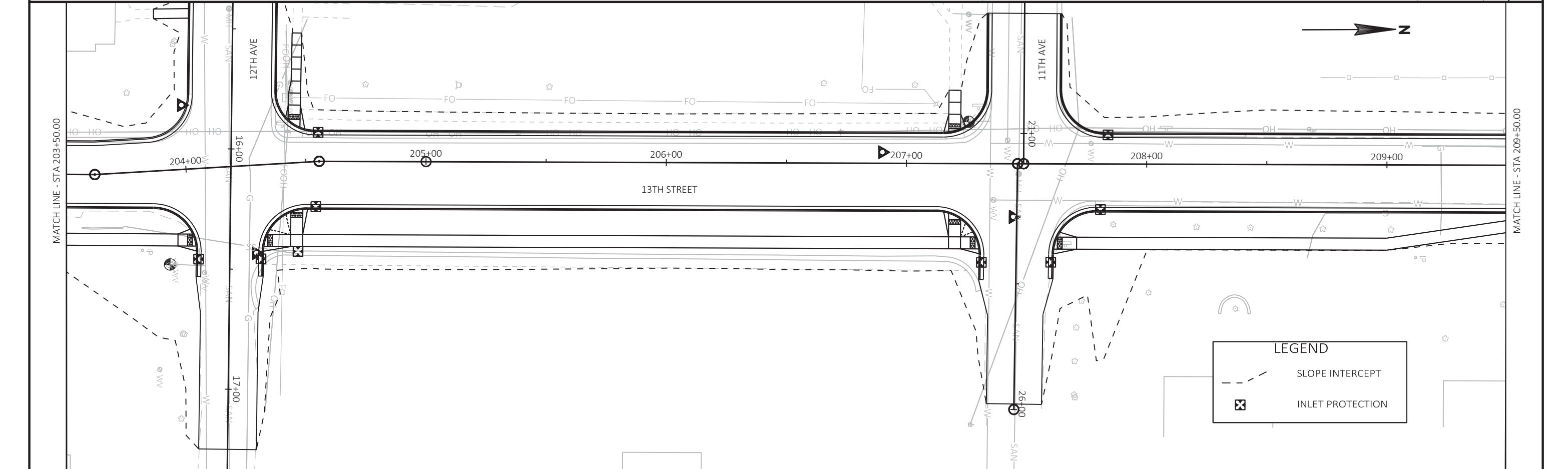
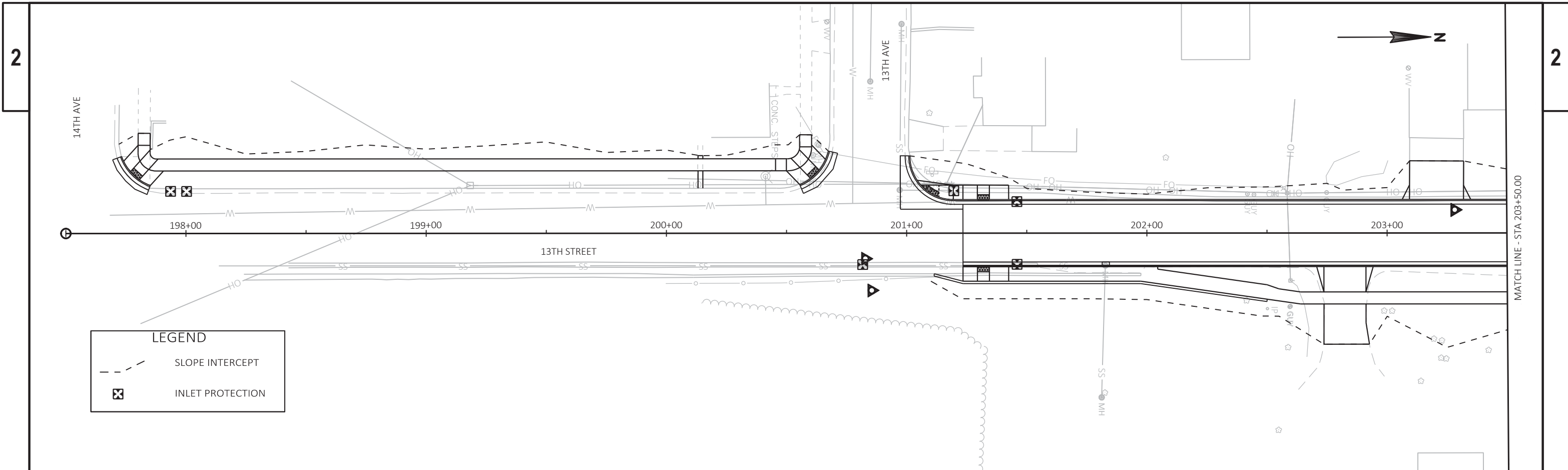
COUNTY: DUNN

EROSION CONTROL

SHEET

E





PROJECT NO: 7996-00-09

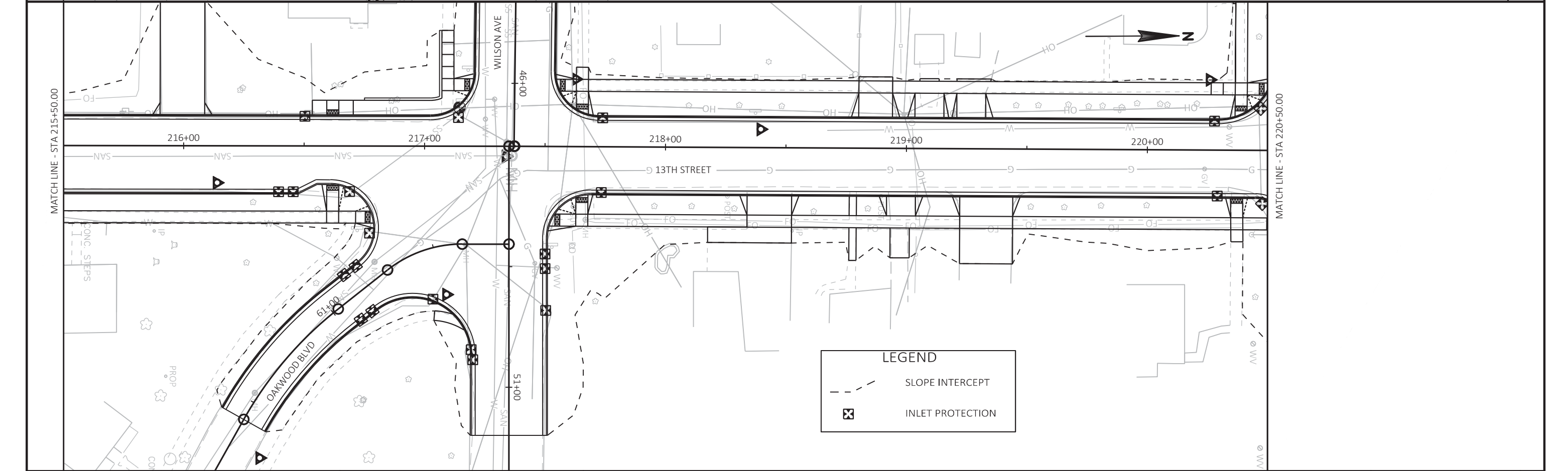
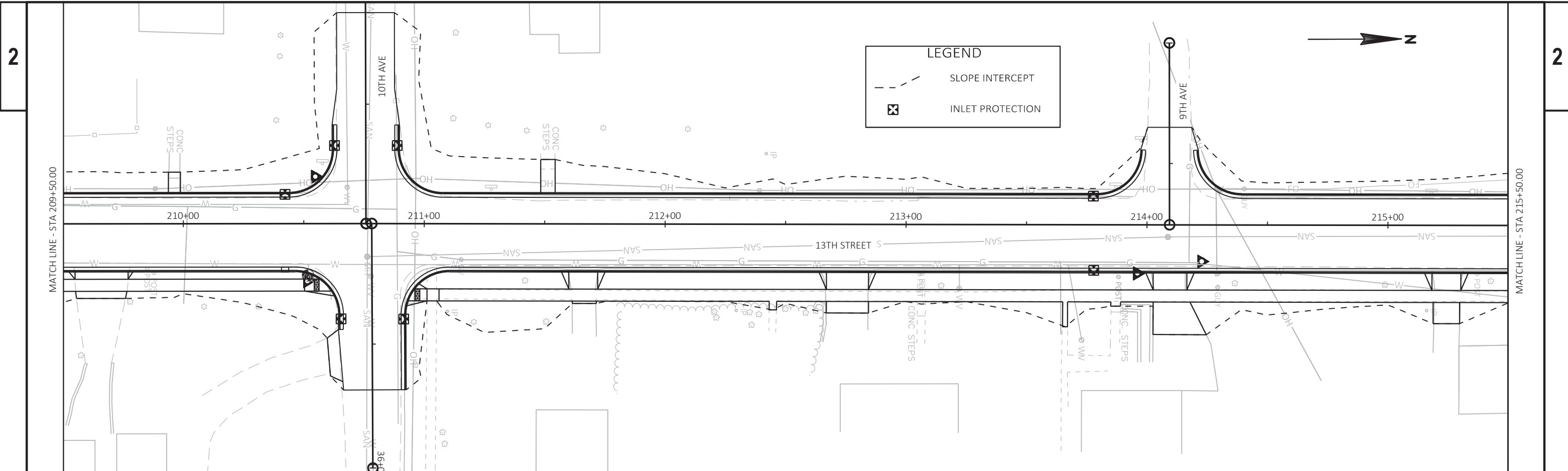
HWY: LOCAL STREET

COUNTY: DUNN

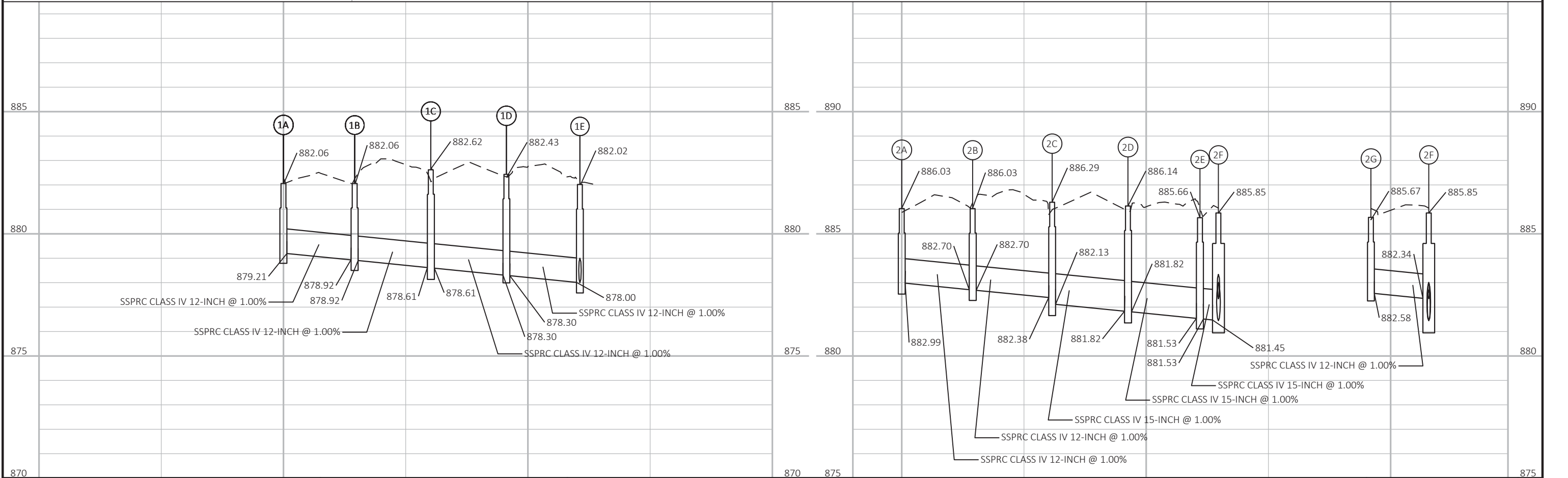
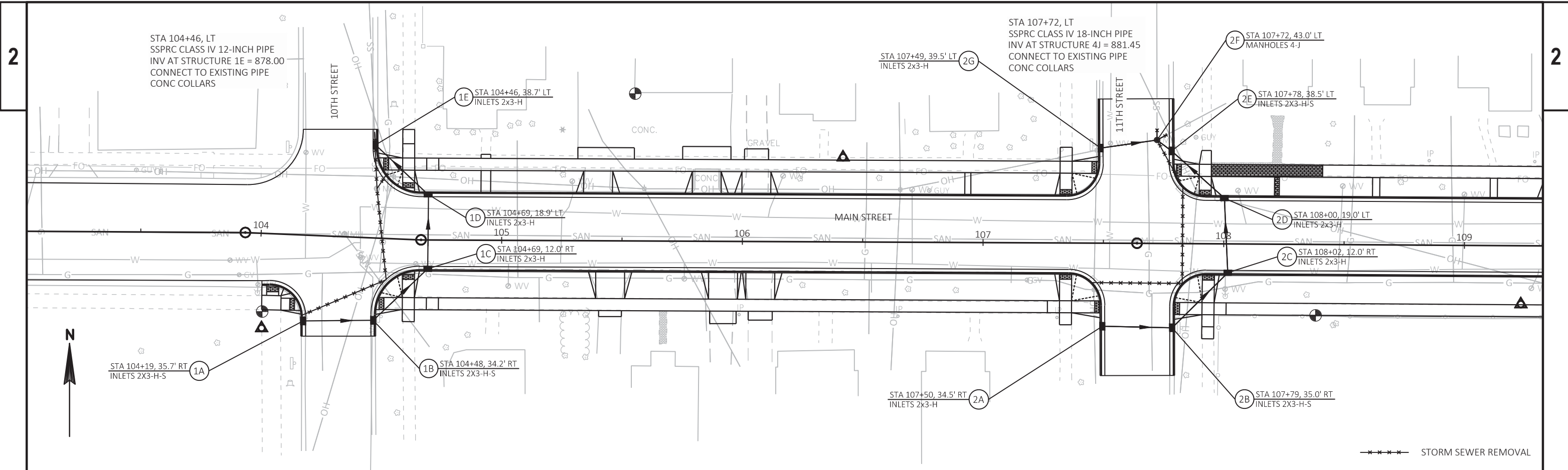
EROSION CONTROL

SHEET

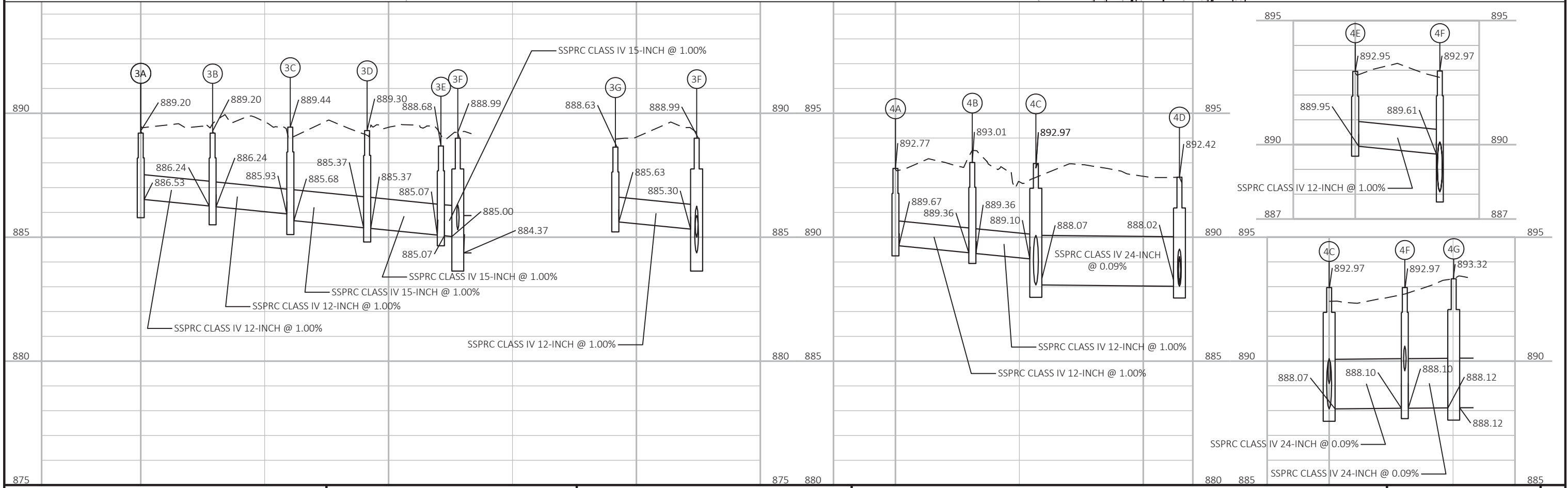
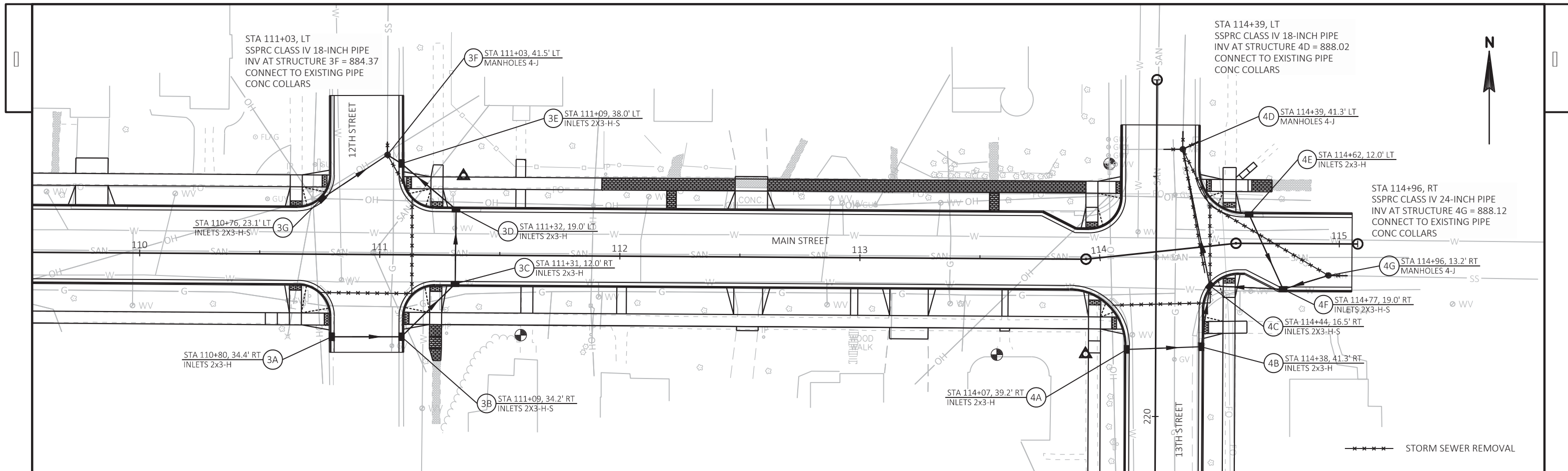
E



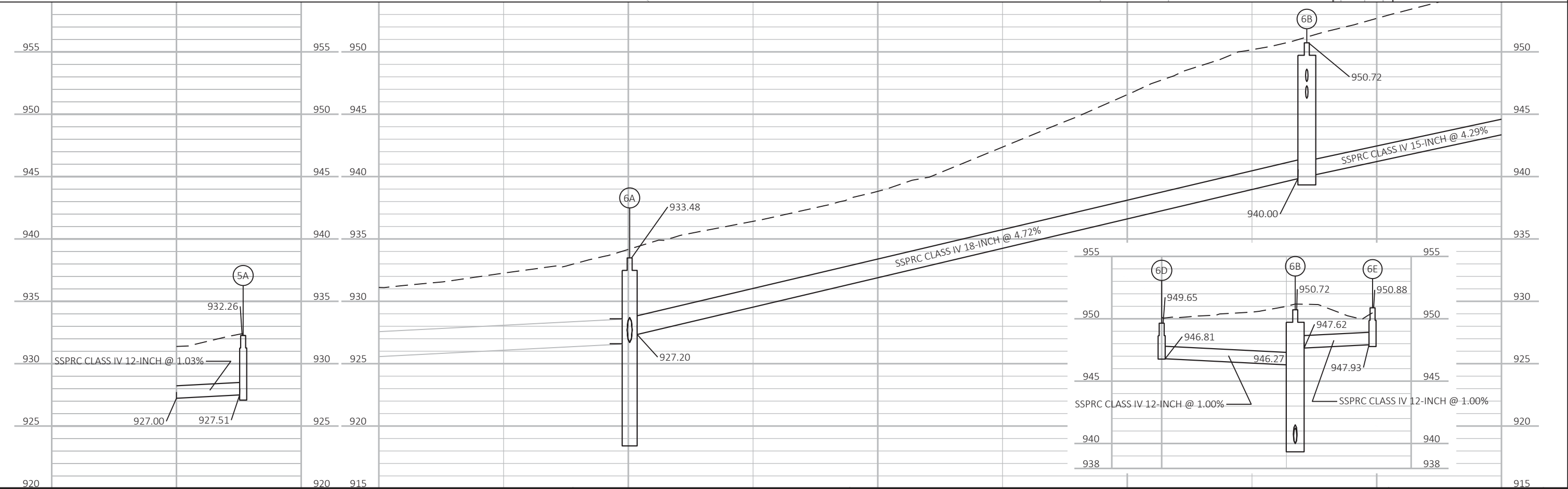
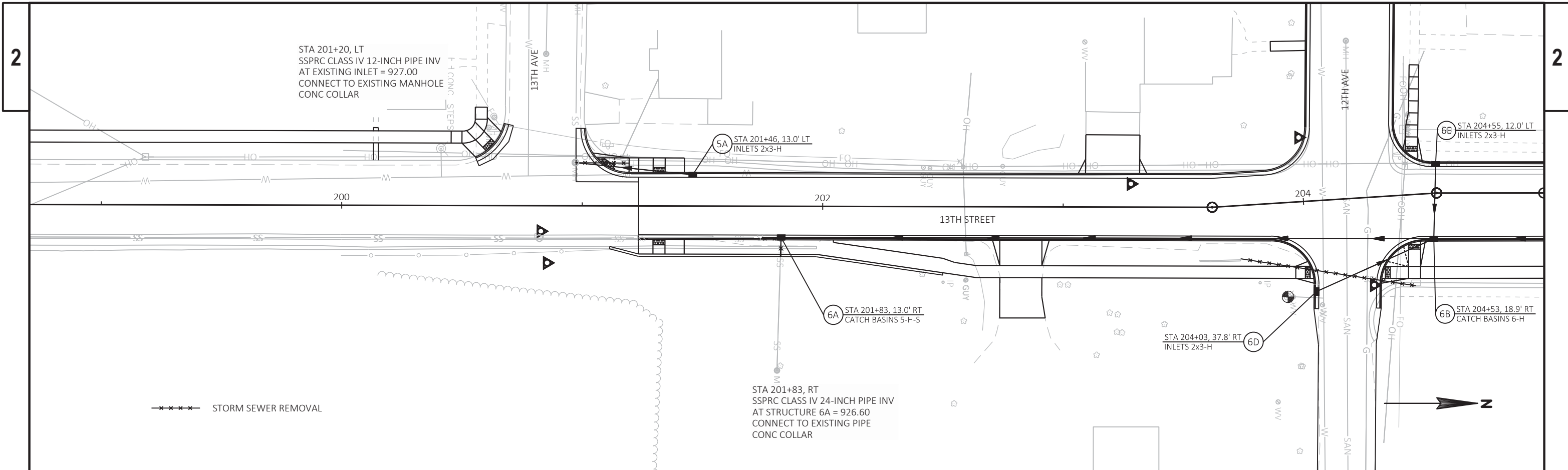
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	EROSION CONTROL	SHEET	E
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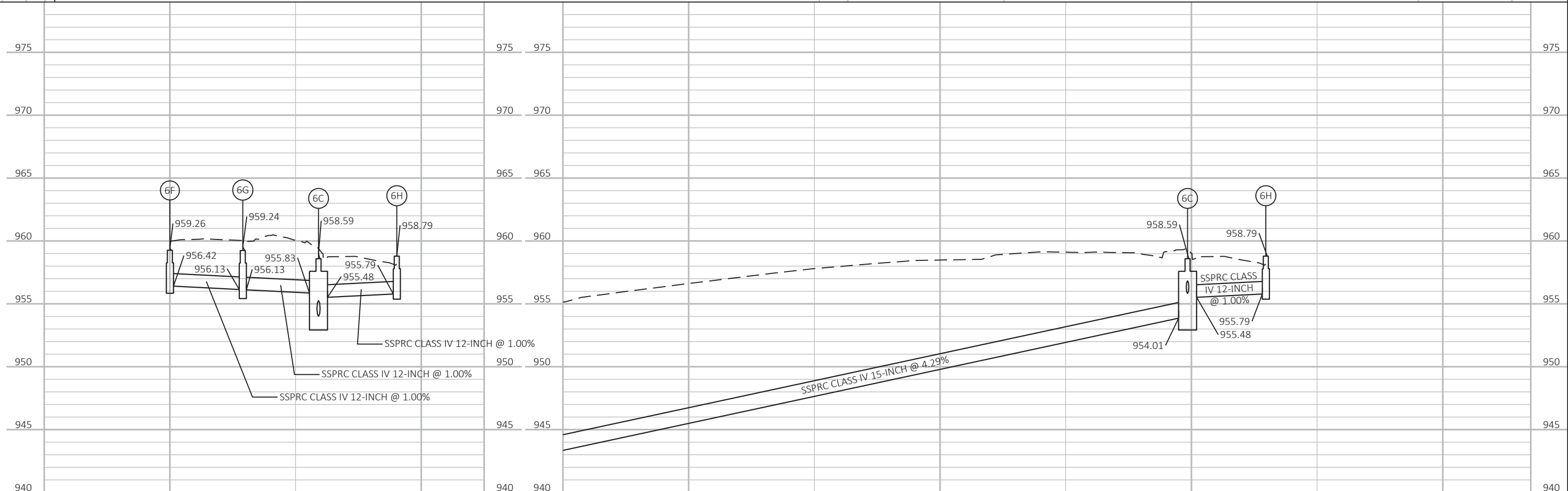
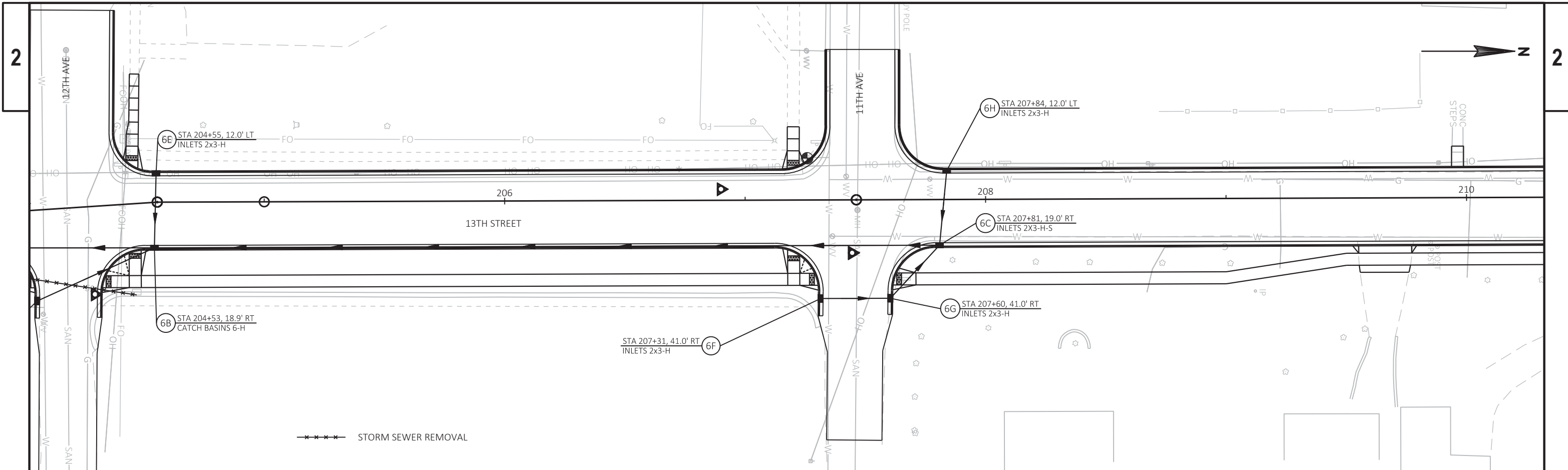
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN STORM SEWER - MAIN ST SHEET E



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN STORM SEWER - MAIN ST SHEET E

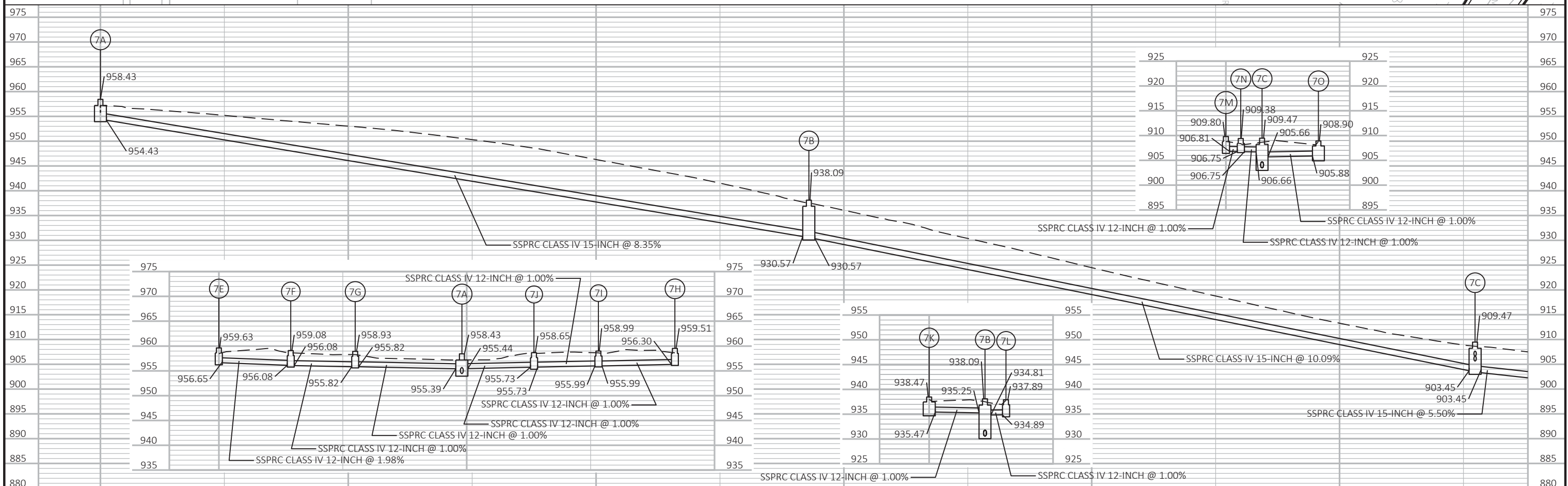
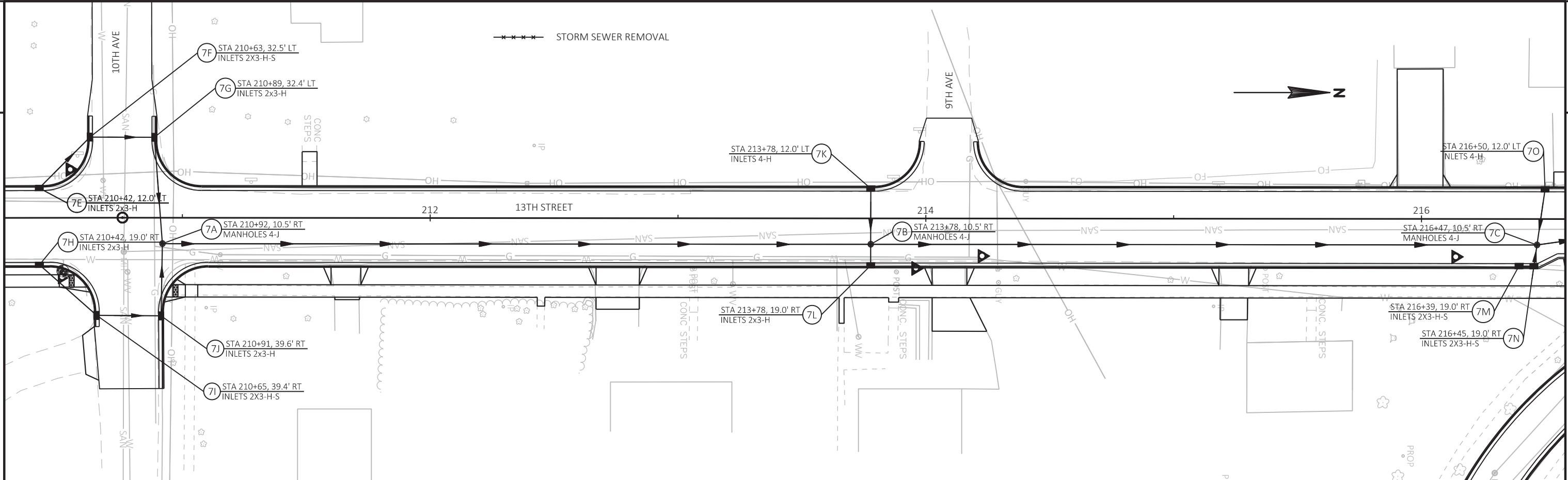


PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN STORM SEWER - 13TH STREET SHEET E

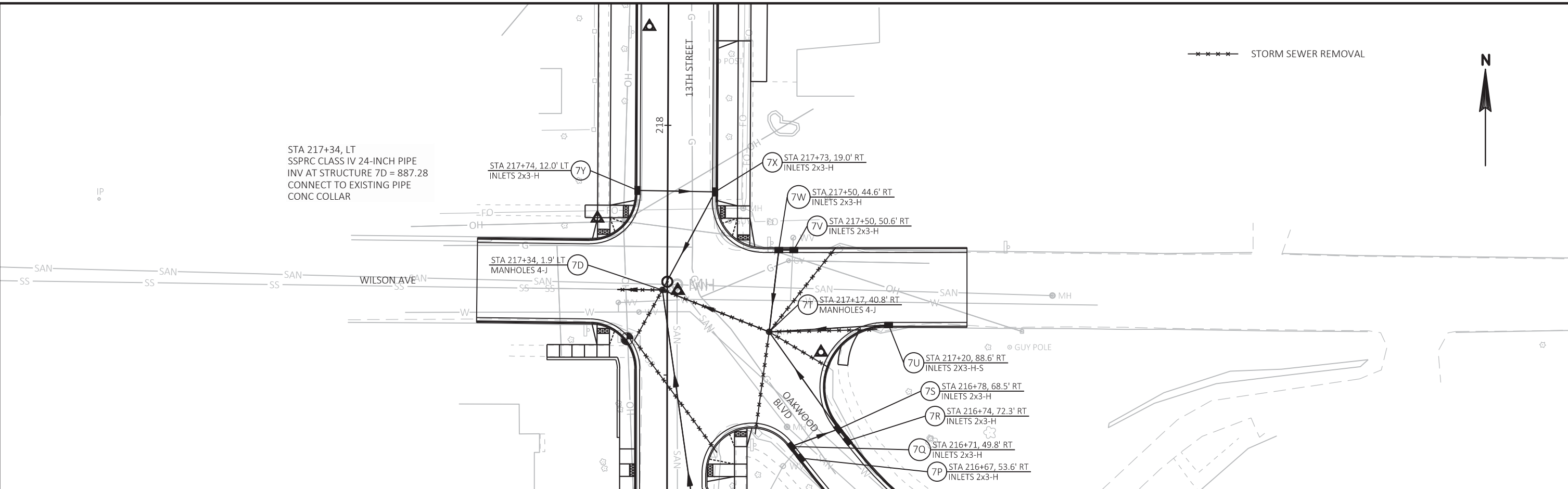


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	STORM SEWER - 13TH STREET	SHEET	E
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----- STORM SEWER REMOVAL

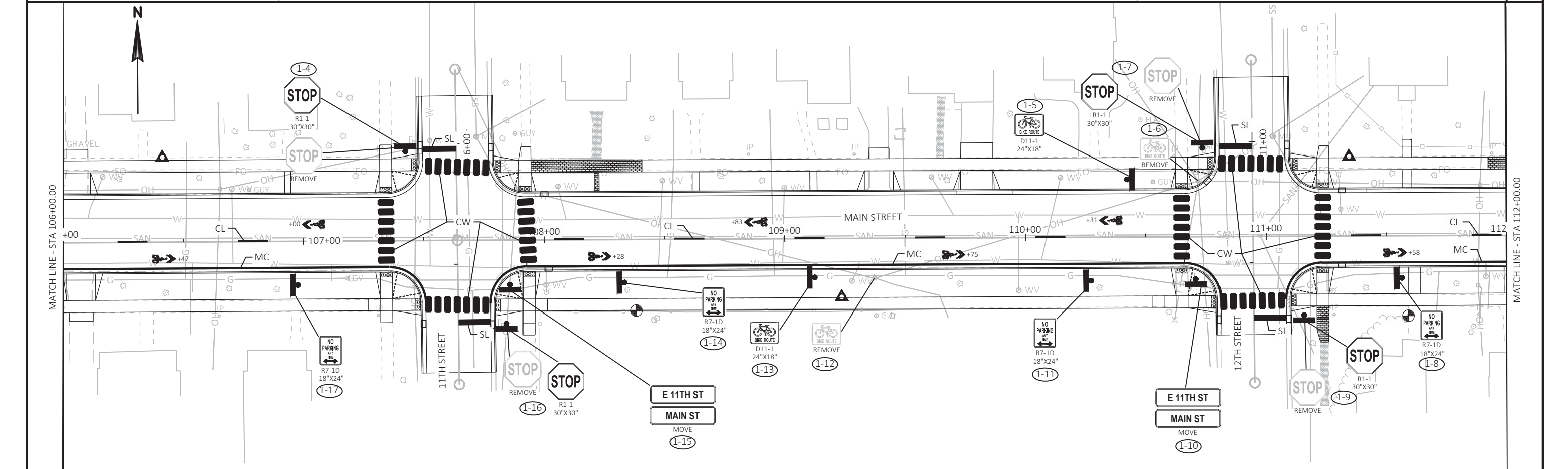
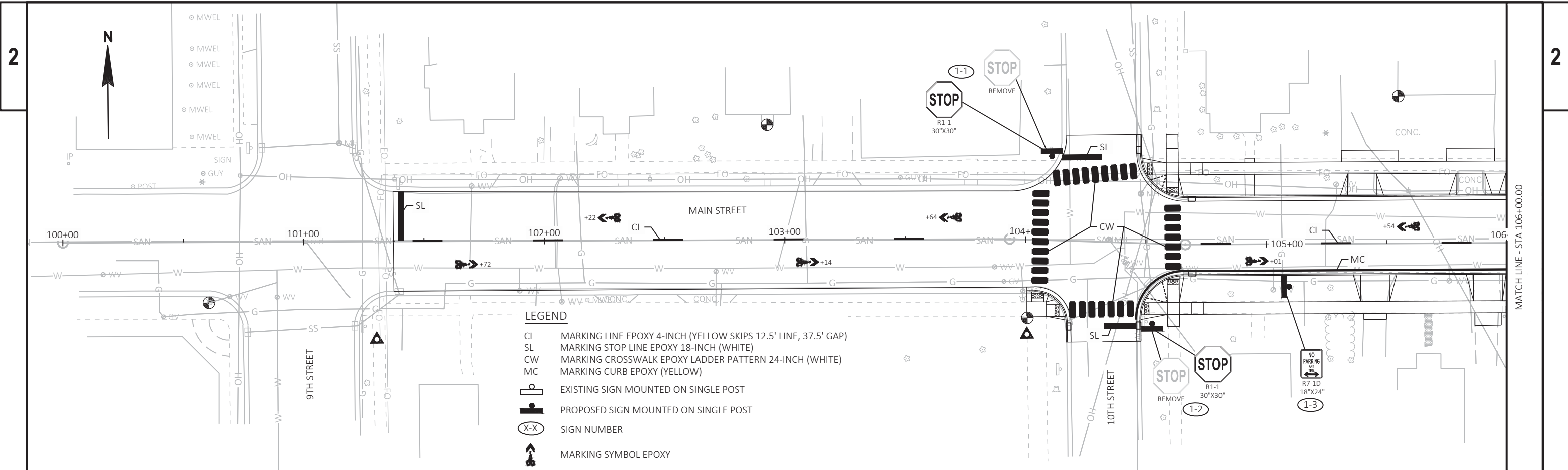


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	STORM SEWER - 13TH STREET	SHEET	E
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865			865	865			865	870				870	870			870	895
860			860	860			860	865				865	865			865	890
855			855	855			855	860				860	860			860	885

PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN STORM SEWER - 13TH STREET SHEET E



PROJECT NO: 7996-00-09

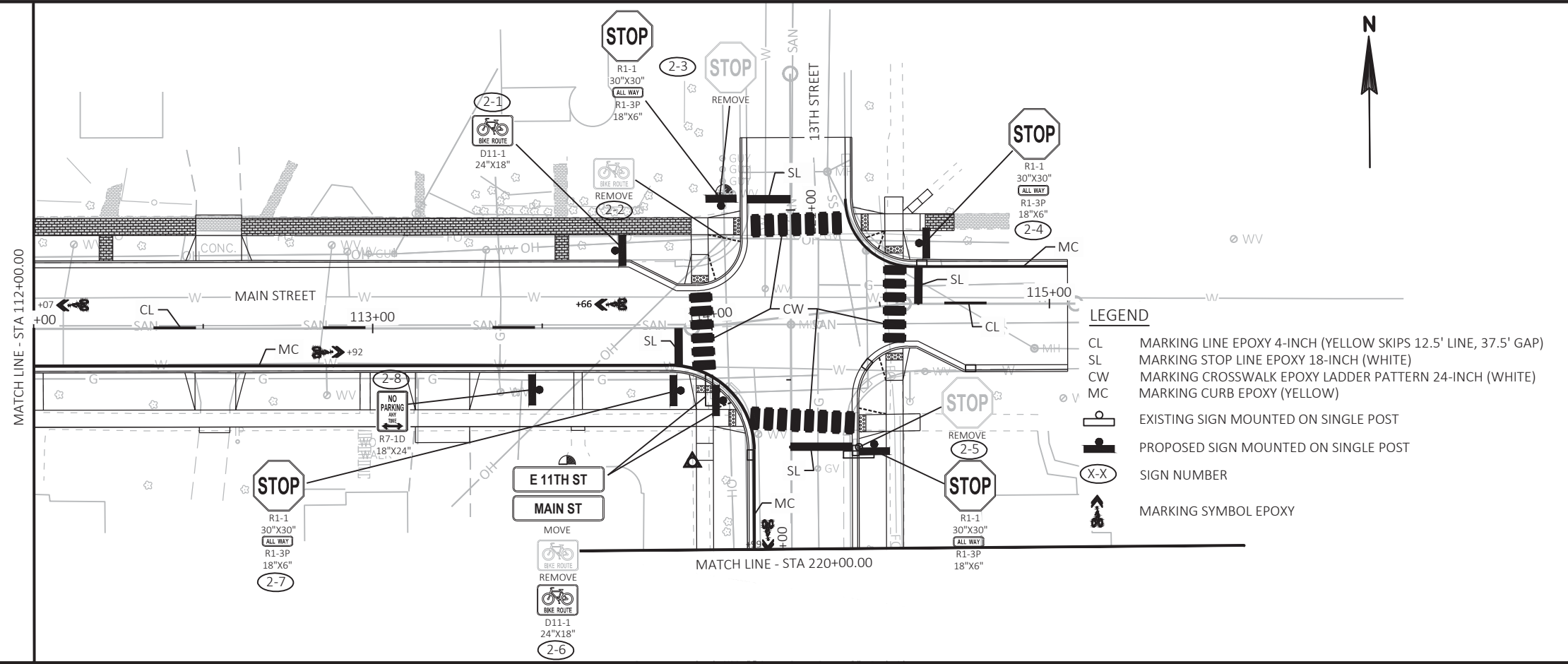
HWY: LOCAL STREET

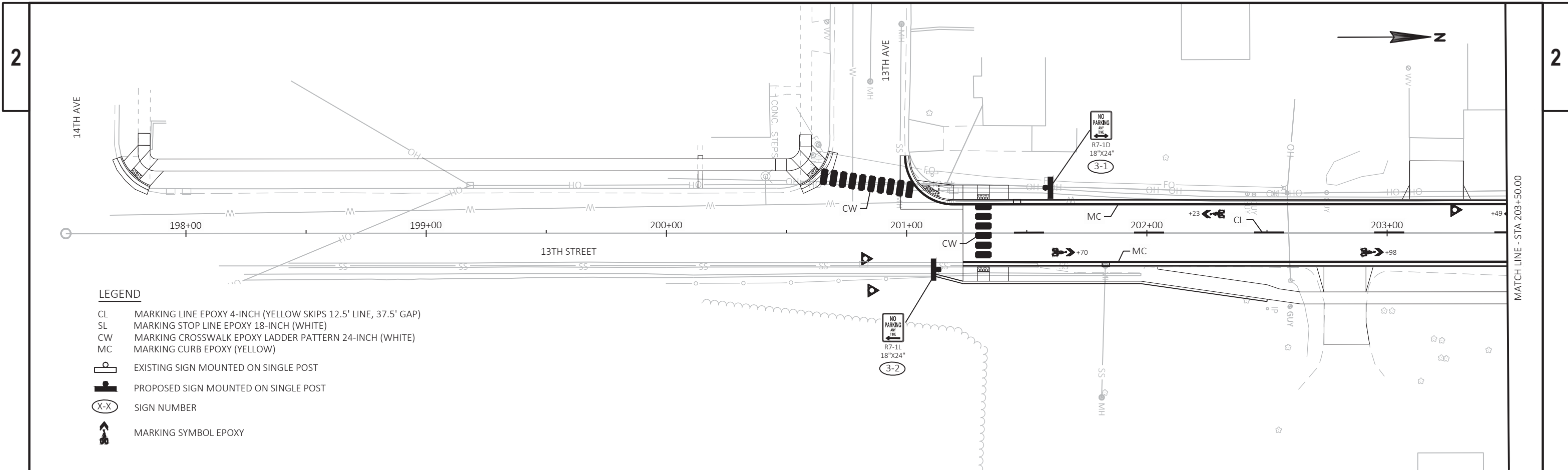
COUNTY: DUNN

PAVEMENT MARKING & SIGNING

SHEET

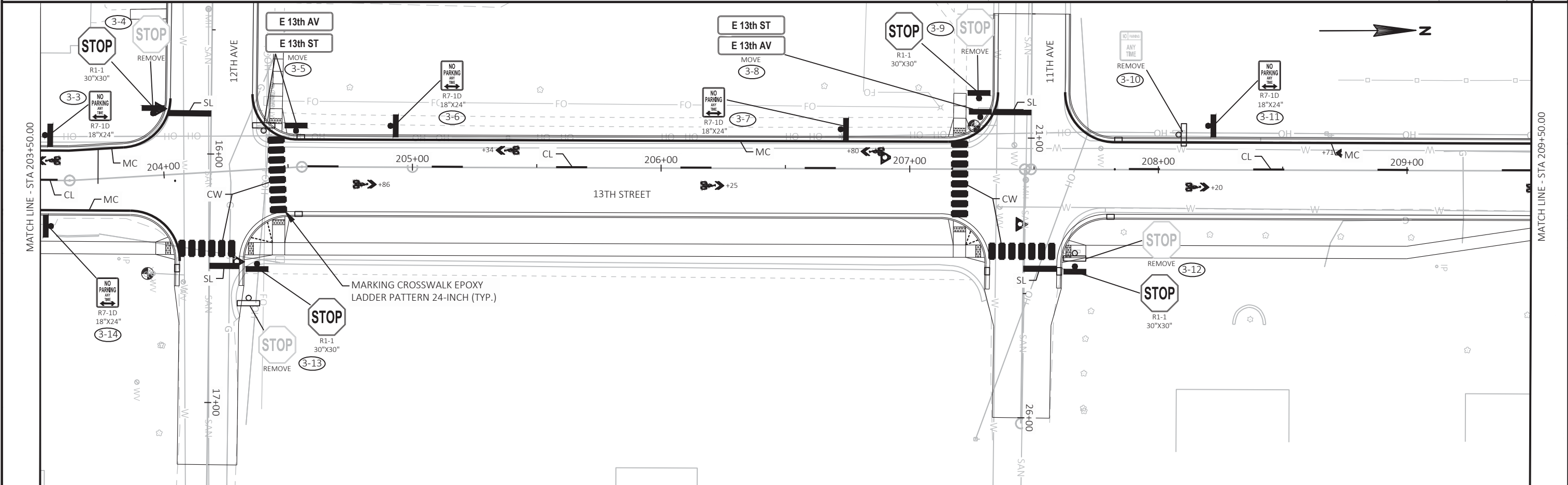
E



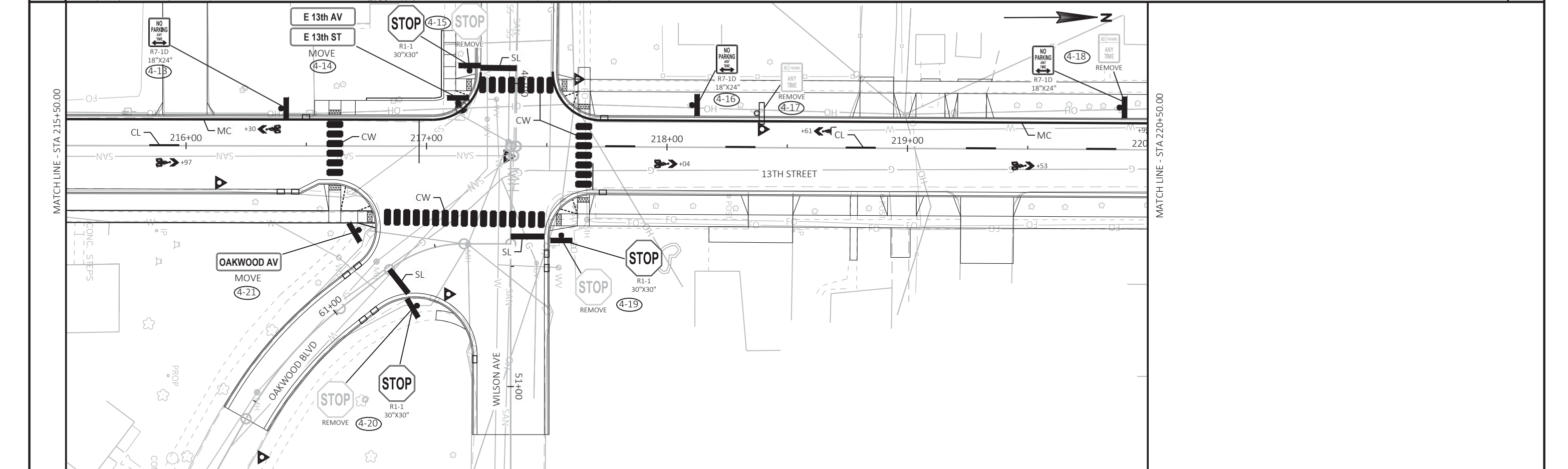
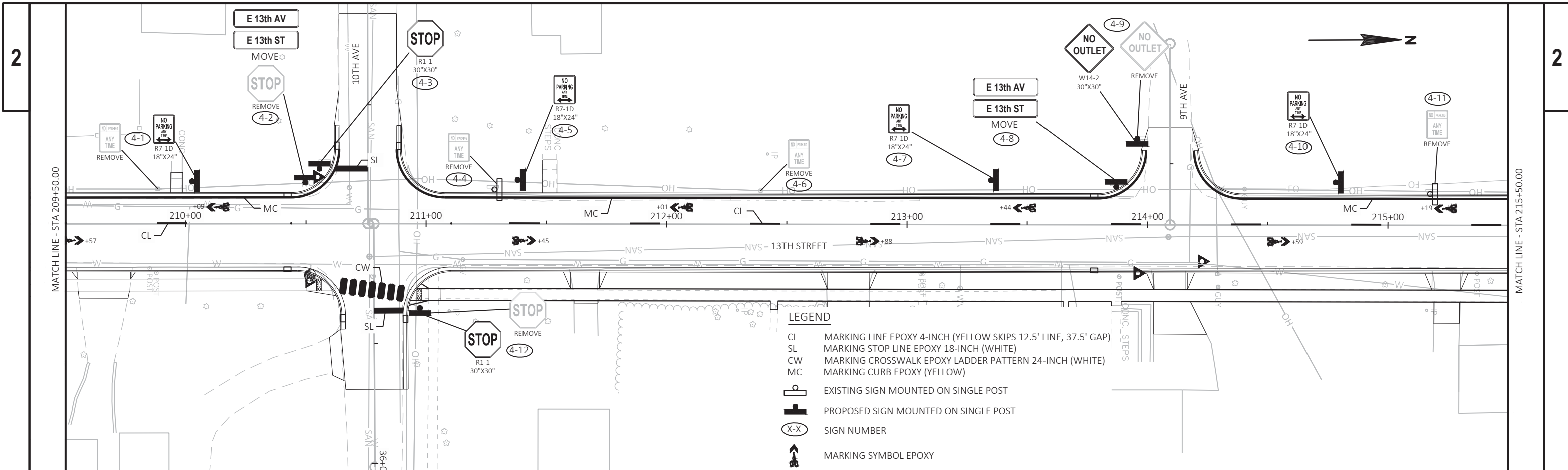


LEGEND

- CL MARKING LINE EPOXY 4-INCH (YELLOW SKIPS 12.5' LINE, 37.5' GAP)
- SL MARKING STOP LINE EPOXY 18-INCH (WHITE)
- CW MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH (WHITE)
- MC MARKING CURB EPOXY (YELLOW)
- EXISTING SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON SINGLE POST
- SIGN NUMBER
- MARKING SYMBOL EPOXY



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	PAVEMENT MARKING & SIGNING
SHEET			E



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PAVEMENT MARKING & SIGNING SHEET E

Estimate Of Quantities

7996-00-09

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	252.000	252.000
0004	201.0220	Grubbing	ID	252.000	252.000
0006	204.0100	Removing Pavement	SY	1,283.000	1,283.000
0008	204.0110	Removing Asphaltic Surface	SY	14,701.000	14,701.000
0010	204.0150	Removing Curb & Gutter	LF	6,433.000	6,433.000
0012	204.0155	Removing Concrete Sidewalk	SY	1,943.000	1,943.000
0014	204.0210	Removing Manholes	EACH	9.000	9.000
0016	204.0220	Removing Inlets	EACH	18.000	18.000
0018	204.0245	Removing Storm Sewer (size) 01. 8-Inch	LF	8.000	8.000
0020	204.0245	Removing Storm Sewer (size) 02. 10-Inch	LF	43.000	43.000
0022	204.0245	Removing Storm Sewer (size) 03. 12-Inch	LF	605.000	605.000
0024	204.0245	Removing Storm Sewer (size) 04. 15-Inch	LF	130.000	130.000
0026	204.0245	Removing Storm Sewer (size) 05. 18-Inch	LF	46.000	46.000
0028	204.0245	Removing Storm Sewer (size) 06. 24-Inch	LF	143.000	143.000
0030	205.0100	Excavation Common	CY	4,547.000	4,547.000
0032	213.0100	Finishing Roadway (project) 01. 7996-00-09	EACH	1.000	1.000
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	9,226.000	9,226.000
0036	416.0160	Concrete Driveway 6-Inch	SY	664.000	664.000
0038	455.0605	Tack Coat	GAL	708.000	708.000
0040	460.2000	Incentive Density HMA Pavement	DOL	2,090.000	2,090.000
0042	460.5223	HMA Pavement 3 LT 58-28 S	TON	1,826.000	1,826.000
0044	460.5244	HMA Pavement 4 LT 58-34 S	TON	1,437.000	1,437.000
0046	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	7.500	7.500
0048	520.8000	Concrete Collars for Pipe	EACH	12.000	12.000
0050	602.0405	Concrete Sidewalk 4-Inch	SF	18,434.000	18,434.000
0052	602.0415	Concrete Sidewalk 6-Inch	SF	6,237.000	6,237.000
0054	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	520.000	520.000
0056	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	14.000	14.000
0058	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	1,068.000	1,068.000
0060	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	1,154.000	1,154.000
0062	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	357.000	357.000
0064	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	140.000	140.000
0066	611.0530	Manhole Covers Type J	EACH	10.000	10.000
0068	611.0624	Inlet Covers Type H	EACH	35.000	35.000
0070	611.0639	Inlet Covers Type H-S	EACH	16.000	16.000
0072	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0074	611.1006	Catch Basins 6-FT Diameter	EACH	1.000	1.000

Estimate Of Quantities

7996-00-09

Line	Item	Item Description	Unit	Total	Qty
0076	611.2004	Manholes 4-FT Diameter	EACH	12.000	12.000
0078	611.3004	Inlets 4-FT Diameter	EACH	2.000	2.000
0080	611.3230	Inlets 2x3-FT	EACH	45.000	45.000
0082	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7996-00-09	EACH	1.000	1.000
0084	619.1000	Mobilization	EACH	1.000	1.000
0086	624.0100	Water	MGAL	163.000	163.000
0088	625.0100	Topsoil	SY	7,604.000	7,604.000
0090	627.0200	Mulching	SY	7,604.000	7,604.000
0092	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0094	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0096	628.7015	Inlet Protection Type C	EACH	74.000	74.000
0098	629.0210	Fertilizer Type B	CWT	4.900	4.900
0100	630.0140	Seeding Mixture No. 40	LB	139.300	139.300
0102	630.0200	Seeding Temporary	LB	206.500	206.500
0104	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	44.000	44.000
0106	637.2210	Signs Type II Reflective H	SF	177.700	177.700
0108	637.2230	Signs Type II Reflective F	SF	6.250	6.250
0110	638.2102	Moving Signs Type II	EACH	9.000	9.000
0112	638.2602	Removing Signs Type II	EACH	29.000	29.000
0114	638.3000	Removing Small Sign Supports	EACH	22.000	22.000
0116	638.4000	Moving Small Sign Supports	EACH	9.000	9.000
0118	642.5001	Field Office Type B	EACH	1.000	1.000
0120	643.0410	Traffic Control Barricades Type II	DAY	960.000	960.000
0122	643.0420	Traffic Control Barricades Type III	DAY	8,640.000	8,640.000
0124	643.0705	Traffic Control Warning Lights Type A	DAY	13,824.000	13,824.000
0126	643.0900	Traffic Control Signs	DAY	9,312.000	9,312.000
0128	643.5000	Traffic Control	EACH	1.000	1.000
0130	646.1020	Marking Line Epoxy 4-Inch	LF	642.000	642.000
0132	646.5220	Marking Symbol Epoxy	EACH	40.000	40.000
0134	646.6120	Marking Stop Line Epoxy 18-Inch	LF	285.000	285.000
0136	646.7520	Marking Crosswalk Epoxy Ladder Pattern 24-Inch	LF	1,260.000	1,260.000
0138	646.8120	Marking Curb Epoxy	LF	3,191.000	3,191.000
0140	650.4500	Construction Staking Subgrade	LF	3,628.000	3,628.000
0142	650.5000	Construction Staking Base	LF	3,628.000	3,628.000
0144	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	6,161.000	6,161.000
0146	650.6500	Construction Staking Structure Layout (structure) 01. R- 17-9	LS	1.000	1.000
0148	650.9000	Construction Staking Curb Ramps	EACH	53.000	53.000
0150	650.9910	Construction Staking Supplemental Control (project) 01.	LS	1.000	1.000

Estimate Of Quantities

7996-00-09

Line	Item	Item Description	Unit	Total	Qty
		7996-00-09			
0152	650.9920	Construction Staking Slope Stakes	LF	3,648.000	3,648.000
0154	690.0150	Sawing Asphalt	LF	713.000	713.000
0156	690.0250	Sawing Concrete	LF	462.000	462.000
0158	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0160	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0162	SPV.0060	Special 01. Remove Hydrant	EACH	6.000	6.000
0164	SPV.0060	Special 02. Remove Gate Valve	EACH	1.000	1.000
0166	SPV.0060	Special 03. Corporation Stop, 1.0"	EACH	19.000	19.000
0168	SPV.0060	Special 04. Curb Stop and Box, 1.0"	EACH	18.000	18.000
0170	SPV.0060	Special 05. Hydrant	EACH	6.000	6.000
0172	SPV.0060	Special 06. Control Valve and Box, Gate, 6"	EACH	6.000	6.000
0174	SPV.0060	Special 07. Control Valve and Box, Gate, 8"	EACH	17.000	17.000
0176	SPV.0060	Special 08. Connect to existing Watermain (Cut In)	EACH	14.000	14.000
0178	SPV.0060	Special 09. Conect to Existing Watermain, Wet Tap, 20"x6"	EACH	1.000	1.000
0180	SPV.0060	Special 10. Conect to Existing Watermain, Wet Tap, 20"x8"	EACH	3.000	3.000
0182	SPV.0060	Special 11. Watermain Offset Package	EACH	4.000	4.000
0184	SPV.0060	Special 12. Remove & Replace Sanitary Manhole Casting/Rings	EACH	10.000	10.000
0186	SPV.0090	Special 01. Concrete Curb and Gutter 24-Inch Type D	LF	6,161.000	6,161.000
0188	SPV.0090	Special 02. Remove Existing Watermain	LF	401.000	401.000
0190	SPV.0090	Special 03. Watermain, Ductile Iron, 6"	LF	111.000	111.000
0192	SPV.0090	Special 04. Watermain, Ductile Iron, 8"	LF	2,500.000	2,500.000
0194	SPV.0090	Special 05. Water Service Lateral, Copper, 1.0"	LF	522.000	522.000
0196	SPV.0105	Special 01. Abandon Existing Watermain	LS	1.000	1.000
0198	SPV.0105	Special 02. Maintain Water Service	LS	1.000	1.000
0200	SPV.0165	Special 01. Wall Modular Block Mechanically Stabilized Earth R-17-9	SF	222.000	222.000
0202	SPV.0165	Special 02. Wall Modular Block Gravity Landscape STA 216+75	SF	165.000	165.000
0204	SPV.0165	Special 03. Salvage and Reset Wall Modular Block Mechanically Stabilized Earth R-17-9	SF	523.000	523.000
0206	SPV.0165	Special 04. Salvage and Reinstall Brick Pavers	SF	1,361.000	1,361.000
0208	SPV.0165	Special 05. Insulation	SF	1,344.000	1,344.000

CLEARING & GRUBBING

STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
MAIN STREET			
105+23	LT	6	6
113+40	RT	18	18
13TH STREET			
202+42	RT	12	12
211+21	RT	24	24
211+42	RT	4	4
211+51	RT	24	24
213+15	RT	14	14
216+86	LT	18	18
216+89	LT	16	16
218+62	RT	18	18
218+84	RT	14	14
219+52	RT	12	12
219+66	RT	8	8
219+81	RT	10	10
220+00	RT	18	18
12TH AVE			
16+77	RT	24	24
WILSON AVE WEST			
45+88	RT	12	12
ITEM TOTALS		252	252

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF
MAIN STREET		
104+01 - 104+20	RT	33
104+47 - 107+49	RT	330
104+47 - 107+48	LT	326
107+79 - 110+79	RT	322
107+79 - 110+79	LT	317
111+10 - 114+07	RT	322
111+10 - 114+13	LT	338
114+36 - 115+05	RT	76
114+45 - 115+05	LT	92
11TH STREET		
5+05 - 5+31	RT/LT	51
5+94 - 6+20	RT/LT	52
12TH STREET		
10+20 - 10+32	RT/LT	24
10+94 - 11+27	RT/LT	66
13TH STREET		
197+70 - 197+84	LT	18
200+56 - 200+68	LT	20
201+01 - 204+03	LT	318
201+23 - 201+55	RT	32
204+26 - 207+30	RT	324
204+39 - 207+34	LT	324
207+63 - 210+62	RT	318
207+64 - 210+62	LT	317
210+92 - 213+94	LT	308
210+92 - 216+79	RT	616
214+36 - 217+21	LT	293
217+50 - 220+34	RT	290
217+54 - 220+34	LT	288
WILSON AVENUE WEST		
45+50 - 46+00	RT/LT	100
WILSON AVENUE EAST		
50+31 - 51+20	LT	90
50+66 - 51+20	RT	66
OAKWOOD BLVD		
60+42 - 61+29	RT/LT	179
10TH AVENUE EAST		
35+31 - 35+69	LT	36
11TH AVENUE WEST		
20+50 - 20+84	RT/LT	39
12TH AVENUE		
15+25 - 15+78	RT/LT	108
ITEM TOTAL		6433

REMOVING ASPHALTIC SURFACE

STATION - STATION	LOCATION	204.0110 SY	REMARKS
MAIN STREET			
101+37 - 115+05		5207	
106+03 - 106+13	RT	4	DRWY
112+48 - 112+61	LT	1	DRWY
112+49 - 112+58	RT	2	DRWY
11TH STREET			
5+05 - 5+48		139	
5+78 - 6+20		137	
12TH STREET			
10+20 - 10+50		96	
10+79 - 11+27		157	
13TH STREET			
197+70 - 197+84	LT	5	CURB RAMP
200+56 - 200+71	LT	7	CURB RAMP
200+97 - 220+34		6633	
202+71 - 202+92	RT	68	DRWY
209+55 - 209+78	RT	31	DRWY
WILSON AVENUE WEST			
45+50 - 46+14		225	
WILSON AVENUE EAST			
50+18 - 51+20		312	
OAKWOOD BLVD			
60+42 - 61+68		380	
9TH AVENUE			
40+35 - 40+63		63	
10TH AVENUE WEST			
30+12 - 30+88		230	
10TH AVENUE EAST			
35+16 - 35+69		161	
35+47 - 35+63		9	DRWY
11TH AVENUE WEST			
20+50 - 21+02		167	
11TH AVENUE EAST			
25+39 - 26+00		181	
12TH AVENUE			
15+25 - 15+97		272	
16+42 - 17+25		214	
ITEM TOTAL		14701	

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY	REMARKS
MAIN STREET			
104+46 - 107+60		773	6" CONC
105+39	LT	18	DRWY
105+45	RT	20	DRWY
105+85	LT	21	DRWY
109+40	LT	12	DRWY
109+80	LT	22	DRWY
112+53	LT	18	DRWY
112+54	RT	14	DRWY
13TH STREET			
203+20	LT	37	DRWY
211+66	RT	13	DRWY
212+75	RT	29	DRWY
214+08	RT	37	DRWY
215+24	RT	22	DRWY
216+00	LT	103	DRWY
218+44	RT	45	DRWY
218+87	LT	24	DRWY
219+10	LT	9	DRWY
219+32	RT	66	DRWY
ITEM TOTAL		1283	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

MISCELLANEOUS QUANTITIES

SHEET

E

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY	REMARKS
MAIN STREET			
104+01 - 104+18	RT	14	
104+48 - 107+49	RT	182	
104+49 - 107+48	LT	192	
107+80 - 110+79	RT	175	
107+79 - 107+95	LT	15	
108+41 - 110+79	LT	139	
111+10 - 114+06	RT	196	
111+10 - 111+92	LT	59	
113+97 - 114+12	LT	17	
114+37 - 114+62	RT	16	
114+46 - 114+63	LT	23	
13TH STREET			
197+70 - 197+84	LT	16	CURB RAMP
200+13 - 200+15	LT	3	
200+56 - 200+66	LT	12	
204+30 - 207+25	RT	122	
204+38 - 207+27	LT	149	
209+94 - 209+99	LT	5	CARRIAGE WALK
210+93 - 216+79	RT	284	
211+49 - 211+54	LT	10	CARRIAGE WALK
217+51 - 220+35	RT	140	
217+55 - 220+35	LT	145	
12TH AVE			
15+42 - 15+46	RT	7	CARRIAGE WALK
WILSON AVE WEST			
45+78 - 46+12	RT	18	
OAKWOOD BLVD			
61+38 - 61+63	RT	4	
ITEM TOTAL		1943	

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
MAIN STREET		
104+19	RT	1
104+50	LT	1
104+52	RT	1
107+45	RT	1
107+83	RT/LT	2
110+75	RT	1
111+13	RT/LT	2
13TH STREET		
201+20	LT	1
204+45	RT	1
216+69	RT	1
217+14	LT	1
220+46	LT	1
220+47	RT	1
WILSON AVE EAST		
50+64	RT	1
50+68	LT	1
50+84	RT	1
ITEM TOTAL		18

REMOVING MANHOLES

STATION	LOCATION	204.0210 EACH
MAIN STREET		
104+47	LT	1
107+72	LT	1
111+03	LT	1
114+96	RT	1
13TH STREET		
201+83	RT	1
217+17	RT	1
217+34	LT	1
220+88	RT	1
221+11	RT	1
ITEM TOTAL		9

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

REMOVING STORM SEWER

STATION - STATION	LOCATION	204.0245.01	204.0245.02	204.0245.03	204.0245.04	204.0245.05	204.0245.06	REMARKS
		8-INCH LF	10-INCH LF	12-INCH LF	15-INCH LF	18-INCH LF	24-INCH LF	
MAIN STREET								
104+19 - 104+52	RT	--	--	38	--	--	--	
104+45 - 104+47	LT	--	--	8	--	--	--	
104+47 - 104+52	RT/LT	--	--	38	--	--	--	
104+47 - 104+51	LT	--	--	24	--	--	--	
107+45 - 107+83	RT	--	--	37	--	--	--	
107+72	LT	--	--	--	--	8	--	
107+72 - 107+79	LT	8	--	--	--	--	--	
107+72 - 107+83	LT	--	--	--	--	22	--	
107+83	RT/LT	--	--	39	--	--	--	
110+75 - 111+13	RT	--	--	38	--	--	--	
111+03	LT	--	--	--	--	8	--	
111+03 - 111+13	LT	--	--	--	20	--	--	
111+13	RT/LT	--	--	39	--	--	--	
114+48 - 115+04	RT/LT	--	--	--	--	--	65	
13TH STREET								
200+97 - 201+20	LT	--	--	22	--	--	--	
201+75 - 201+83	RT	--	--	--	--	--	8	
203+72 - 204+45	RT	--	--	73	--	--	--	
216+69 - 217+14	RT/LT	--	--	55	--	--	--	
216+76 - 217+17	RT	--	--	41	--	--	--	
217+14 - 217+34	LT	--	--	23	--	--	--	
217+17 - 217+34	RT	--	--	--	45	--	--	
217+34	LT	--	--	--	--	--	18	
220+46 - 220+47	RT/LT	--	--	40	--	--	--	
220+47 - 220+88	RT	--	--	--	40	--	--	
220+60 - 221+11	RT	--	--	--	--	--	52	
220+88 - 221+11	RT	--	--	--	25	--	--	
221+11	RT	--	--	8	--	--	--	
221+11 - 221+15	RT	--	--	12	--	--	--	
221+11 - 221+19	RT	--	--	--	--	8	--	
WILSON AVE EAST								
50+41 - 50+65	RT	--	--	27	--	--	--	
50+41 - 50+68	RT/LT	--	43	--	--	--	--	
50+41 - 50+84	RT	--	--	43	--	--	--	
ITEM TOTAL		8	43	605	130	46	143	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

DIVISION	STATIONING	LOCATION	205.0100 COMMON EXCAVATION (CY)	SALVAGED / UNUSABLE PAVEMENT MATERIAL (1)	AVAILABLE MATERIAL (CY) (2)	UNEXPANDED FILL	EXPANDED FILL	MASS ORDINATE +/- (3)
			CUT				FACTOR 1.30	
1	101+37 - 115+05	MAIN STREET	1825	0	1825	35	46	1779
DIVISION 1 SUBTOTAL			1825	0	1825	35	46	1779
2	197+75 - 220+54	13TH STREET	2046	0	2046	268	349	1697
DIVISION 2 SUBTOTAL			2046	0	2046	268	349	1697
3	15+25 - 15+97	12TH AVENUE	42	0	42	5	6	36
	16+42 - 17+25		113	0	113	0	0	113
DIVISION 3 SUBTOTAL			155	0	155	5	6	149
4	20+50 - 21+02	11TH AVENUE WEST	38	0	38	2	2	36
	25+39 - 26+00	11TH AVENUE EAST	91	0	91	0	0	91
DIVISION 4 SUBTOTAL			129	0	129	2	2	127
5	30+12 - 30+88	10TH AVENUE WEST	57	0	57	7	9	48
	35+16 - 35+69	10TH AVENUE EAST	44	0	44	2	2	42
DIVISION 5 SUBTOTAL			101	0	101	8	11	90
6	40+35 - 40+63	9TH AVENUE	15	0	15	0	0	15
DIVISION 6 SUBTOTAL			15	0	15	0	0	15
7	45+50 - 46+14	WILSON AVENUE WEST	86	0	86	0	0	86
	50+18 - 51+20	WILSON AVENUE EAST	57		57	20	26	31
DIVISION 7 SUBTOTAL			143	0	143	20	26	117
8	60+42 - 61+68	OAKWOOD BLVD	133	0	133	1	1	132
DIVISION 8 SUBTOTAL			133	0	133	1	1	132
GRAND TOTAL			4547	0	4547	339	441	4106
TOTAL COMMON EXCAVATION =			4547					

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS **NOT** INCLUDED IN CUT.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS ORDINATE = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0120 1 1/4-INCH TON
MAIN STREET		
101+37 - 115+05		3265
11TH STREET		
5+05 - 5+49		90
5+78 - 6+20		88
12TH STREET		
10+20 - 10+50		63
10+79 - 11+27		98
13TH STREET		
197+70 - 200+71		54
200+97 - 220+58		4122
12TH AVE		
15+25 - 15+96		172
16+23 - 17+25		162
11TH AVE WEST		
20+50 - 21+02		112
11TH AVE EAST		
25+18 - 26+00		139
10TH AVE WEST		
30+12 - 30+89		128
10TH AVE EAST		
35+18 - 35+69		100
9TH AVE		
40+35 - 40+65		54
WILSON AVE WEST		
45+50 - 46+15		146
WILSON AVE EAST		
50+17 - 51+20		192
OAKWOOD BLVD		
60+42 - 61+68		241
ITEM TOTAL		9226

FINISHING ROADWAY

PROJECT	LOCATION	213.0100 EACH
7996-00-09	MAIN ST/13TH ST	1
ITEM TOTAL		1

3

CONCRETE DRIVEWAY

STATION - STATION	LOCATION	416.0160 6 INCH SY	*602.0415 CONCRETE SIDEWALK 6-INCH SF	REMARKS
MAIN STREET				
105+34 - 105+46	LT	27	60	
105+39 - 105+51	RT	21	60	
105+79 - 105+91	LT	27	60	
105+86 - 105+98	RT	17	60	
106+00 - 106+12	LT	15	60	
106+02 - 106+14	RT	17	78	
109+33 - 109+45	LT	18	60	
109+73 - 109+87	LT	24	68	
112+48 - 112+60	RT	18	60	
112+48 - 112+61	LT	14	68	
113+13 - 113+29	RT	23	80	
13TH SREET				
202+74 - 202+91	RT	24	88	
203+09 - 203+32	LT	42	--	
209+55 - 209+77	RT	8	110	
211+60 - 211+72	RT	13	60	
212+67 - 212+85	RT	25	88	
214+03 - 214+17	RT	41	77	
215+18 - 215+30	RT	22	60	
215+90 - 216+09	LT	99	--	
218+34 - 218+53	RT	44	93	
218+80 - 218+94	LT	21	70	
218+92 - 219+04	RT	13	60	
219+03 - 219+16	LT	17	60	
219+21 - 219+33	LT	16	70	
219+22 - 219+44	RT	58	110	
ITEM TOTALS		664	1660	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

ASPHALTIC PAVEMENT ITEMS

STATION -STATION	455.0605* TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5244 HMA PAVEMENT 4 LT 58-34 S TON
MAIN STREET			
101+37 - 115+05	253	696	557
11TH STREET			
5+05 - 5+49	7	20	16
5+78 - 6+20	7	19	15
12TH STREET			
10+20 - 10+50	5	14	11
10+79 - 11+27	8	21	17
13TH STREET			
197+70 - 197+84	1	1	1
200+56 - 200+71	1	1	1
200+97 - 220+58	305	754	586
WILSON AVE WEST			
45+50 - 46+15	12	29	23
WILSON AVE EAST			
50+17 - 51+20	17	41	32
OAKWOOD BLVD			
60+42 - 61+68	19	48	37
9TH AVE			
40+35 - 40+65	4	11	8
10TH AVE WEST			
30+12 - 30+89	11	28	22
10TH AVE EAST			
35+18 - 35+69	8	20	15
11TH AVE WEST			
20+50 - 21+02	9	22	17
11TH AVE EAST			
25+18 - 26+00	12	31	24
12TH AVE			
15+25 - 15+96	14	34	27
16+23 - 17+25	15	36	28
ITEM TOTALS	708	1826	1437

*APPLICATION RATE = 0.050 GAL/SY

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION - STATION	LOCATION	465.0120 TON
MAIN STREET		
106+02 - 106+14	RT	0.5
112+48 - 112+60	RT	0.5
112+48 - 112+60	LT	0.5
13TH STREET		
202+74 - 202+91	RT	4
209+55 - 209+77	RT	1
10TH AVE EAST		
35+47 - 35+63	RT	1
ITEM TOTAL		7.5

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

CONCRETE SIDEWALK

STATION - STATION	LOCATION	602.0405 4-INCH SF	*602.0415 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	**602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EA
MAIN STREET						
104+01 - 104+18	RT	--	135	20	--	2
104+48 - 105+39	RT	427	185	20	--	2
104+49 - 105+34	LT	478	139	20	--	2
105+46 - 105+79	LT	166	--	--	--	--
105+51 - 105+86	RT	175	--	--	--	--
105+91 - 106+00	LT	44	--	--	--	--
106+12 - 107+48	LT	677	181	20	--	2
106+14 - 107+49	RT	642	231	20	--	2
107+79 - 107+95	LT	51	159	20	--	2
107+80 - 110+79	RT	1432	472	40	--	4
108+41 - 109+33	LT	510	--	--	--	--
109+45 - 109+73	LT	140	--	--	--	--
109+87 - 110+79	LT	405	170	20	--	2
111+10 - 112+48	RT	732	213	20	--	2
111+10 - 111+92	LT	438	162	20	--	2
112+60 - 113+13	RT	298	--	--	--	--
113+29 - 114+06	RT	392	127	20	--	2
113+98 - 114+12	LT	55	210	20	--	2
114+45 - 114+63	LT	108	126	20	--	2
13TH STREET						
197+74 - 200+66	LT	1496	201	20	--	2
201+04 - 201+43	LT	--	208	10	14	2
201+23 - 202+74	RT	766	114	10	--	1
202+91 - 204+02	RT	528	48	10	--	1
204+30 - 207+30	RT	1394	301	40	--	4
207+61 - 209+55	RT	921	62	10	--	1
209+77 - 210+63	RT	367	62	10	--	1
209+94 - 209+99	LT	42	--	--	--	--

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
 **SEE CURB RAMP - RADIAL DWF DETAIL

CONCRETE SIDEWALK CONT'D

STATION - STATION	LOCATION	602.0405 4-INCH SF	*602.0415 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	**602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EA
210+93 - 211+60	RT	295	46	10	--	1
211+48 - 211+54	LT	82	--	--	--	--
211+72 - 212+67	RT	485	--	--	--	--
212+85 - 214+03	RT	617	--	--	--	--
213+85 - 213+89	RT	--	--	--	--	--
214+18 - 215+18	RT	502	--	--	--	--
215+30 - 216+79	RT	705	200	20	--	2
216+53 - 217+20	LT	326	239	20	--	2
217+51 - 218+34	RT	356	142	20	--	2
217+54 - 218+80	LT	612	128	20	--	2
218+52 - 218+92	RT	262	--	--	--	--
218+94 - 219+04	LT	47	--	--	--	--
219+04 - 219+22	RT	92	--	--	--	--
219+16 - 219+21	LT	27	--	--	--	--
219+35 - 220+36	LT	508	--	--	--	--
219+44 - 220+59	RT	553	217	20	--	2
12TH AVE						
15+42 - 15+46	RT	60	--	--	--	--
15+52 - 15+91	LT	128	51	10	--	1
11TH AVE WEST						
20+82 - 21+00	RT	50	48	10	--	1
OAKWOOD BLVD						
61+38 - 61+63	RT	43	--	--	--	--
ITEM TOTAL		18434	4577	520	14	53

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
 **SEE CURB RAMP - RADIAL DWF DETAIL

NOTE: TABLE QUANTITIES ARE
 CATEGORY 0010 UNLESS
 OTHERWISE NOTED.

STORM SEWER PIPE

PIPE NUMBER	STATION - STATION	PIPE			608.0412	608.0415	608.0418	608.0424	520.8000	REMARKS
		INLET ELEV	OUTLET ELEV	SLOPE %	REINFORCED CONCRETE CLASS IV 12-INCH LF	REINFORCED CONCRETE CLASS IV 15-INCH LF	REINFORCED CONCRETE CLASS IV 18-INCH LF	REINFORCED CONCRETE CLASS IV 24-INCH LF	CONCRETE COLLARS FOR PIPE EACH	
MAIN STREET										
1AB	104+19 - 104+48	879.21	878.92	1.00	29	--	--	--	--	
1E	104+46	MATCH EXISTING	MATCH EXISTING		8	--	--	--	1	CONNECT TO EXISTING PIPE
1BC	104+48 - 104+69	878.92	878.61	1.00	31	--	--	--	--	
1DE	104+69 - 104+46	878.30	878.00	1.00	30	--	--	--	--	
1CD	104+69	878.61	878.30	1.00	31	--	--	--	--	
2FG	107+49 - 107+72	882.58	882.34	1.00	24	--	--	--	--	
2AB	107+50 - 107+79	882.99	882.70	1.00	29	--	--	--	--	
2F	107+72	MATCH EXISTING	MATCH EXISTING		--	--	8	--	2	CONNECT TO EXISTING PIPE
2EF	107+78 - 107+72	881.53	881.45	1.00	--	8	--	--	--	
2DE	108+00 - 107+78	881.82	881.53	1.00	--	29	--	--	--	
2BC	107+79 - 108+02	882.70	882.38	1.00	33	--	--	--	--	
2CD	108+02 - 108+00	882.13	881.82	1.00	--	31	--	--	--	
3FG	110+76 - 111+03	885.63	885.30	1.00	33	--	--	--	--	
3AB	110+80 - 111+09	886.53	886.24	1.00	29	--	--	--	--	
3F	111+03	MATCH EXISTING	MATCH EXISTING	1.00	--	--	8	--	1	CONNECT TO EXISTING PIPE
3EF	111+09 - 111+03	885.07	885.00	1.00	--	7	--	--	--	
3BC	111+09 - 111+31	886.24	885.93	1.00	31	--	--	--	--	
3DE	111+32 - 111+09	885.37	885.07	1.00	--	30	--	--	--	
3CD	111+31 - 111+32	885.68	885.37	1.00	--	31	--	--	--	
4AB	114+07 - 114+38	889.67	889.36	1.00	31	--	--	--	--	
4BC	114+38 - 114+44	889.36	889.10	1.00	26	--	--	--	--	
4D	114+39	MATCH EXISTING	MATCH EXISTING		--	--	8	--	1	CONNECT TO EXISTING PIPE
4D.1	114+39	MATCH EXISTING	MATCH EXISTING		--	--	8	--	1	CONNECT TO EXISTING PIPE
4D.2	114+39	MATCH EXISTING	MATCH EXISTING		--	--	8	--	1	CONNECT TO EXISTING PIPE
4CD	114+44 - 114+39	888.60	888.02	1.00	--	--	--	58	--	
4CF	114+77 - 114+44	889.61	889.30	1.00	--	--	--	31	--	
4EF	114+62 - 114+77	889.95	889.61	1.00	34	--	--	--	--	
4FG	114+77 - 114+96	888.12	888.10	0.09	--	--	--	20	--	
4G	114+96	MATCH EXISTING	MATCH EXISTING		--	--	--	8	1	CONNECT TO EXISTING PIPE

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

STORM SEWER PIPE CONT'D

PIPE NUMBER	STATION - STATION	PIPE			608.0412	608.0415	608.0418	608.0424	520.8000	REMARKS
		INLET ELEV	OUTLET ELEV	SLOPE %	REINFORCED CONCRETE CLASS IV 12-INCH LF	REINFORCED CONCRETE CLASS IV 15-INCH LF	REINFORCED CONCRETE CLASS IV 18-INCH LF	REINFORCED CONCRETE CLASS IV 24-INCH LF	CONCRETE COLLARS FOR PIPE EACH	
13TH STREET										
5A	201+46 - 201+20	927.51	927.00	1.00	49	--	--	--	1	CONNECT TO EXISTING STRUCTURE
6AB	204+53 - 201+83	940.00	927.20	4.72	--	--	271	--	--	
6A.1	201+83	MATCH EXISTING	MATCH EXISTING	1.00	--	--	--	8	1	CONNECT TO EXISTING STRUCTURE
6A.2	201+83	MATCH EXISTING	MATCH EXISTING	1.00	--	--	--	8	1	CONNECT TO EXISTING STRUCTURE
6BD	204+53 - 204+03	946.81	946.27	1.00	54	--	--	--	--	
6BE	204+55 - 204+53	947.93	947.62	1.00	31	--	--	--	--	
6BC	207+81 - 204+53	954.01	940.00	4.29	--	327	--	--	--	
6FG	207+60 - 207+31	956.42	956.13	1.00	29	--	--	--	--	
6CG	207+81 - 207+60	956.13	955.83	1.00	30	--	--	--	--	
6CH	207+84 - 207+81	955.79	955.48	1.00	31	--	--	--	--	
7EF	210+42 - 210+63	956.65	956.08	1.98	29	--	--	--	--	
7HI	210+42 - 210+65	956.30	955.99	1.00	31	--	--	--	--	
7FG	210+63 - 210+89	956.08	955.82	1.00	26	--	--	--	--	
7IJ	210+65 - 210+91	955.99	955.73	1.00	26	--	--	--	--	
7AG	210+89 - 210+92	955.82	955.39	1.00	43	--	--	--	--	
7AJ	210+91 - 210+92	955.73	955.44	1.00	29	--	--	--	--	
7AB	210+92 - 213+78	954.43	930.57	8.35	--	286	--	--	--	
7BK	213+78	935.47	935.25	1.00	23	--	--	--	--	
7BL	213+78	934.89	934.81	1.00	9	--	--	--	--	
7BC	213+78 - 216+47	930.57	903.45	10.09	--	270	--	--	--	
7MN	216+39 - 216+45	906.81	906.75	1.00	6	--	--	--	--	
7CN	216+45 - 216+47	906.75	906.66	1.00	9	--	--	--	--	
7CO	216+50 - 216+47	905.88	905.66	1.00	23	--	--	--	--	
7CD	216+47 - 217+34	903.45	898.60	5.50	--	88	--	--	--	
7PQ	216+67 - 216+71	906.24	906.18	1.00	6	--	--	--	--	
7SQ	216+71 - 216+78	906.18	905.98	1.00	20	--	--	--	--	
7RS	216+74 - 216+78	906.04	905.98	1.00	6	--	--	--	--	
7ST	216+78 - 217+17	905.98	902.16	1.00	--	48	--	--	--	
7TU	217+20 - 217+17	900.83	900.35	1.00	48	--	--	--	--	
7DT	217+17 - 217+34	900.35	899.89	1.00	--	--	46	--	--	
7TW	217+50 - 217+17	900.68	900.35	1.00	33	--	--	--	--	
7VW	217+50	900.74	900.68	1.00	6	--	--	--	--	
7D	217+34	MATCH EXISTING	MATCH EXISTING	1.00	--	--	--	8	1	CONNECT TO EXISTING PIPE
7DX	217+73 - 217+34	897.73	897.28	1.00	45	--	--	--	--	
7XY	217+74 - 217+73	898.04	897.73	1.00	31	--	--	--	--	
ITEM TOTAL					1068	1154	357	140	12	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

STORM SEWER STRUCTURE ITEMS

STRUCTURE NUMBER	STATION	OFFSET	TOP STRUCTURE ELEV	CASTING ELEV	BOTTOM STRUCTURE ELEV	DEPTH	611.1005	611.1006	611.2004	611.3004	611.3230	611.0530	611.0624 611.0639		REMARKS
							CATCH BASINS 5-FT DIAMETER EACH	CATCH BASINS 6-FT DIAMETER EACH	MANHOLES 4-FT DIAMETER EACH	INLET 4-FT DIAMETER EACH	INLET 2x3-FT EACH	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE H TYPE H-S EACH EACH		
MAIN STREET															
1A	104+19	35.7' RT	881.68	882.06	879.21	2.85	--	--	--	--	1	--	--	1	
1B	104+48	34.2' RT	881.68	882.06	878.92	3.14	--	--	--	--	1	--	--	1	
1E	104+46	38.7' LT	881.64	882.02	878.00	4.02	--	--	--	--	1	--	1	--	
1C	104+69	12.0' RT	882.24	882.62	878.61	4.01	--	--	--	--	1	--	1	--	
1D	104+69	18.9' LT	882.05	882.43	878.30	4.13	--	--	--	--	1	--	1	--	
2G	107+49	39.5' LT	885.29	885.67	882.58	3.09	--	--	--	--	1	--	1	--	
2A	107+50	34.5' RT	885.65	886.03	882.95	3.08	--	--	--	--	1	--	1	--	
2F	107+72	43.0' LT	885.18	885.85	881.45	4.40	--	--	1	--	--	1	--	--	
2E	107+78	38.5' LT	886.28	886.66	882.53	4.13	--	--	--	--	1	--	--	1	
2B	107+79	35.0' RT	885.65	886.03	882.66	3.37	--	--	--	--	1	--	--	1	
2D	108+00	19.0' LT	885.76	886.14	881.82	4.32	--	--	--	--	1	--	1	--	
2C	108+02	12.0' RT	885.91	886.29	882.13	4.16	--	--	--	--	1	--	1	--	
3G	110+76	23.2' LT	888.25	888.63	885.63	3.00	--	--	--	--	1	--	1	--	
3A	110+80	34.4' RT	888.82	889.20	886.28	2.92	--	--	--	--	1	--	1	--	
3F	111+03	41.5' LT	888.32	888.99	884.37	4.62	--	--	1	--	--	1	--	1	
3B	111+09	34.2' RT	888.82	889.20	885.99	3.21	--	--	--	--	1	--	--	1	
3E	111+09	38.0' LT	888.30	888.68	885.07	3.61	--	--	--	--	1	--	--	1	
3C	111+31	12.0' RT	889.06	889.44	885.68	3.76	--	--	--	--	1	--	1	--	
3D	111+32	19.0' LT	888.92	889.30	885.37	3.93	--	--	--	--	1	--	1	--	
4A	114+07	39.2' RT	892.39	892.77	889.67	3.10	--	--	--	--	1	--	1	--	
4B	114+38	41.3' RT	892.63	893.01	889.36	3.65	--	--	--	--	1	--	1	--	
4D	114+39	41.3' LT	891.75	892.42	888.02	4.40	--	--	1	--	--	1	--	--	
4C	114+44	16.5' RT	892.59	892.97	888.07	4.90	--	--	1	--	--	--	--	1	
4E	114+62	12.0' LT	892.57	892.95	889.95	3.00	--	--	--	--	1	--	1	--	
4F	114+77	19.0' RT	892.59	892.97	888.10	4.87	--	--	1	--	--	--	--	1	
4G	114+96	13.2' RT	892.94	893.32	888.12	5.20	--	--	1	--	--	1	--	--	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

STORM SEWER STRUCTURE ITEMS CONT'D

STRUCTURE NUMBER	STATION	OFFSET	TOP STRUCTURE ELEV	CASTING ELEV	BOTTOM STRUCTURE ELEV	DEPTH	611.1005	611.1006	611.2004	611.3004	611.3230	611.0530	611.0624	611.0639	REMARKS	
							CATCH BASINS 5-FT DIAMETER EACH	CATCH BASINS 6-FT DIAMETER EACH	MANHOLES 4-FT DIAMETER EACH	INLET 4-FT DIAMETER EACH	INLET 2x3-FT EACH	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE H-S EACH		
13TH STREET																
5A	201+46	13.0' LT	931.88	932.26	927.51	4.75	--	--	--	--	1	--	1	--		
6A	201+83	13.0' RT	933.10	933.48	926.60	6.88	1	--	--	--	--	--	--	1		
6D	204+03	37.8' RT	949.27	949.65	946.81	2.84	--	--	--	--	1	--	1	--		
6B	204+53	18.9' RT	950.34	950.72	940.00	10.72	--	1	1	--	--	1	--	--		
6E	204+56	12.0' LT	950.50	950.88	947.93	2.95	--	--	--	--	1	--	1	--		
6F	207+31	41.0' RT	958.88	959.26	956.42	2.84	--	--	--	--	1	--	1	--		
6G	207+60	41.0' RT	958.86	959.24	956.13	3.11	--	--	--	--	1	--	1	--		
6C	207+81	19.0' RT	958.21	958.59	954.01	4.58	--	--	--	--	1	--	--	1		
6H	207+84	12.0' LT	958.41	958.79	955.79	3.00	--	--	--	--	1	--	1	--		
7E	210+42	12.0' LT	959.25	959.63	956.65	2.98	--	--	--	--	1	--	1	--		
7H	210+42	19.0' RT	959.13	959.51	956.51	3.00	--	--	--	--	1	--	1	--		
7F	210+63	32.5' LT	958.70	959.08	956.16	2.92	--	--	--	--	1	--	--	1		
7I	210+65	39.4' RT	958.61	958.99	956.20	2.79	--	--	--	--	1	--	--	1		
7G	210+89	32.4' LT	958.55	958.93	956.01	2.92	--	--	--	--	1	--	1	--		
7J	210+91	39.6' RT	958.27	958.65	955.80	2.85	--	--	--	--	1	--	1	--		
7A	210+92	10.5' RT	957.76	958.43	954.43	4.00	--	--	1	--	--	1	--	--		
7B	213+78	10.5' RT	937.42	938.09	930.57	7.52	--	--	1	--	--	1	--	--		
7K	213+78	12.0' LT	938.09	938.47	935.47	3.00	--	--	--	1	--	--	1	--		
7L	213+78	19.0' RT	937.51	937.89	934.89	3.00	--	--	--	--	1	--	1	--		
7M	216+39	19.0' RT	909.42	909.80	906.81	2.99	--	--	--	--	1	--	--	1		
7N	216+45	19.0' RT	909.00	909.38	906.92	2.46	--	--	--	--	1	--	--	1		
7C	216+47	10.5' RT	908.80	909.47	905.45	4.02	--	--	1	--	--	1	--	--		
7O	216+50	12.0' LT	908.52	908.90	905.38	3.52	--	--	--	1	--	--	1	--		
7P	216+67	53.6' RT	909.40	909.78	906.24	3.54	--	--	--	--	1	--	1	--		
7Q	216+71	49.8' RT	908.65	909.03	906.18	2.85	--	--	--	--	1	--	1	--		
7R	216+74	72.3' RT	910.10	910.48	906.04	4.44	--	--	--	--	1	--	1	--		
7S	216+78	68.5' RT	909.28	909.66	905.98	3.68	--	--	--	--	1	--	1	--		
7T	217+17	40.8' RT	904.30	904.97	900.35	4.62	--	--	1	--	--	1	--	--		
7U	217+20	88.6' RT	906.09	906.47	900.83	5.64	--	--	--	--	1	--	--	1		
7D	217+34	1.9' LT	902.68	903.35	897.28	6.07	--	--	1	--	--	1	--	--		
7V	217+50	50.6' RT	903.52	903.90	900.74	3.16	--	--	--	--	1	--	1	--		
7W	217+50	44.6' RT	903.25	903.63	900.68	2.95	--	--	--	--	1	--	1	--		
7X	217+73	19.0' RT	900.94	901.32	897.73	3.59	--	--	--	--	1	--	1	--		
7Y	217+74	12.0' LT	900.73	901.11	898.04	3.07	--	--	--	--	1	--	1	--		
ITEM TOTAL								1	1	12	2	45	10	35	16	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

WATER

STATION -STATION	LOCATION	624.0100 MGAL	REMARKS
101+37 - 115+05	MAIN STREET	65	BASE COMPACTION &
200+97 - 220+58	13TH STREET	98	DUST CONTROL
ITEM TOTALS		163	

TOPSOIL, MULCHING, FERTILIZER, AND SEEDING

STATION - STATION	LOCATION	625.0100 TOPSOIL **P** SY	627.0200 MULCHING **P** SY	629.0210 FERTILIZER TYPE B **P** CWT	630.0140 SEEDING MIXTURE NO. 40 **P** LB	630.0200 TEMPORARY SEEDING **P** LB
MAIN STREET						
104+48 - 107+49	RT/LT	495	495	0.3	8.9	13.4
107+79 - 110+79	RT/LT	626	626	0.4	11.3	16.9
111+10 - 114+13	RT/LT	565	565	0.4	10.2	15.3
114+46 - 115+05	RT/LT	107	107	0.1	1.9	2.9
13TH STREET						
197+72 - 200+67	LT	356	356	0.2	6.4	9.6
201+01 - 204+03	RT/LT	806	806	0.5	14.5	21.8
204+26 - 207+34	RT/LT	983	983	0.6	17.7	26.5
207+57 - 210+67	RT/LT	779	779	0.5	14.0	21.0
210+88 - 217+21	RT/LT	1370	1370	0.9	24.7	37.0
217+52 - 220+36	RT/LT	817	817	0.5	14.7	22.1
UNDISTRIBUTED		700	700	0.5	15	20
ITEM TOTALS		7604	7604	4.9	139.3	206.5

P Pay Plan Quantity

MOBILIZATIONS

PROJECT	619.1000 MOBILIZATION EACH	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EROSION CONTROL EACH
7996-00-09	1	2	2
ITEM TOTALS	1	2	2

INLET PROTECTION

STATION	LOCATION	628.7015 TYPE C EACH	REMARKS
MAIN STREET			
101+39	RT	1	
104+19	RT	1	
104+46	LT	1	
104+48	RT	1	
104+50	RT/LT	2	EX INLETS
104+69	RT/LT	2	
107+46	RT	1	EX INLET
107+82	RT/LT	2	EX INLETS
108+00	LT	1	
108+02	RT	1	
110+76	LT	1	
110+76	RT	1	EX INLET
111+13	RT/LT	2	EX INLETS
111+31	RT	1	
111+32	LT	1	
114+44	RT	1	
114+62	LT	1	
114+77	RT	1	
11TH STREET			
5+25	RT/LT	2	
5+98	RT	1	
6+00	LT	1	
12TH STREET			
10+27	RT/LT	2	
10+99	RT	1	
13TH STREET			
197+94	LT	1	EX INLET
198+00	LT	1	EX INLET
200+82	RT	1	EX INLET
201+20	LT	1	
201+46	RT/LT	2	
204+45	RT	1	EX INLET
204+53	RT	1	
204+56	LT	1	
207+81	RT	1	
207+84	LT	1	
210+42	LT	1	
213+78	RT/LT	2	
216+39	RT	1	
216+46	RT	1	
216+50	LT	1	
216+69	RT	1	EX INLET
217+14	LT	1	EX INLET
217+73	RT	1	
217+74	LT	1	
220+28	LT	1	

INLET PROTECTION CONT'D

STATION	LOCATION	628.7015 TYPE C EACH	REMARKS
220+29	RT	1	
220+47	LT	1	EX INLET
220+48	RT	1	EX INLET
221+11	LT	1	EX INLET
221+15	RT	1	EX INLET
12TH AVE			
16+46	RT/LT	2	
11TH AVE EAST			
25+41	RT/LT	2	
10TH AVE WEST			
30+67	RT/LT	2	
10TH AVE EAST			
35+40	RT/LT	2	
WILSON AVE EAST			
50+45	LT	1	
50+51	LT	1	
50+68	LT	1	EX INLET
50+85	RT	1	EX INLET
50+89	RT	1	
OAKWOOD BLVD			
61+07	RT	1	
61+13	RT	1	
61+13	LT	1	
61+19	LT	1	
61+41	RT	1	EX INLET
ITEM TOTALS		74	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

MISCELLANEOUS QUANTITIES

SHEET

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PERMANENT SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W	X	H	634.0814	637.2210	637.2230	
							POSTS TUBULAR STEEL 2X2-INCH X 14-FT EACH	TYPE II REFLECTIVE H SF	TYPE II REFLECTIVE F SF	
1-1	104+09	LT	R1-1	30	X	30	1	5.18	--	
1-2	104+52	RT	R1-1	30	X	30	1	5.18	--	
1-3	105+09	RT	R7-1D	18	X	24	1	3.00	--	
1-4	107+45	LT	R1-1	30	X	30	1	5.18	--	
1-5	110+43	LT	D11-1	24	X	18	1	3.00	--	
1-7	110+76	LT	R1-1	30	X	30	1	5.18	--	
1-8	111+55	RT	R7-1D	18	X	24	1	3.00	--	
1-9	111+14	RT	R1-1	30	X	30	1	5.18	--	
1-11	110+26	RT	R7-1D	18	X	24	1	3.00	--	
1-13	109+11	RT	D11-1	24	X	18	1	3.00	--	
1-14	108+32	RT	R7-1D	18	X	24	1	3.00	--	
1-16	107+84	RT	R1-1	30	X	30	1	5.18	--	
1-17	106+95	RT	R7-1D	18	X	24	1	3.00	--	
2-1	113+73	LT	D11-1	24	X	18	1	3.00	--	
2-3	114+07	LT	R1-1, R1-3P	30	X	30, 18	X	6	7.00	--
2-4	114+63	LT	R1-1, R1-3P	30	X	30, 18	X	6	7.00	--
2-5	114+44	RT	R1-1, R1-3P	30	X	30, 18	X	6	7.00	--
2-6	114+00	RT	D11-1	24	X	18	1	3.00	--	
2-7	113+90	RT	R1-1, R1-3P	30	X	30, 18	X	6	7.00	--
2-8	113+48	RT	R7-1D	18	X	24	1	3.00	--	
3-1	201+59	LT	R7-1D	18	X	24	1	3.00	--	
3-2	201+12	RT	R7-1L	18	X	24	1	3.00	--	
3-3	203+53	LT	R7-1D	18	X	24	1	3.00	--	
3-4	203+97	LT	R1-1	30	X	30	1	5.18	--	
3-6	204+92	LT	R7-1D	18	X	24	1	3.00	--	
3-7	206+73	LT	R7-1D	18	X	24	1	3.00	--	
3-9	207+28	LT	R1-1	30	X	30	1	5.18	--	
3-11	208+21	LT	R7-1D	18	X	24	1	3.00	--	
3-12	207+67	RT	R1-1	30	X	30	1	5.18	--	
3-13	204+35	RT	R1-1	30	X	30	1	5.18	--	
3-14	203+55	RT	R7-1D	18	X	24	1	3.00	--	
4-1	210+04	LT	R7-1D	18	X	24	1	3.00	--	
4-3	210+56	LT	R1-1	30	X	30	1	5.18	--	
4-5	211+39	LT	R7-1D	18	X	30	1	3.00	--	
4-7	213+36	LT	R7-1D	18	X	24	1	3.00	--	
4-9	213+96	LT	W14-2	30	X	30	1	--	6.25	
4-10	214+79	LT	R7-1D	18	X	24	1	3.00	--	
4-12	210+98	RT	R1-1	30	X	30	1	5.18	--	
4-13	216+41	LT	R7-1D	18	X	24	1	3.00	--	
4-15	217+18	LT	R1-1	30	X	30	1	5.18	--	
4-16	218+11	LT	R7-1D	18	X	24	1	3.00	--	
4-18	219+89	LT	R7-1D	18	X	24	1	3.00	--	
4-19	217+56	RT	R1-1	30	X	30	1	5.18	--	
4-20	61+27	RT	R1-1	30	X	30	1	5.18	--	
ITEM TOTALS							44	177.70	6.25	

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

SIGNS

SIGN NO.	STATION	LOCATION	MESSAGE	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-1	104+09	LT	STOP	--	--	1	1	
1-2	104+52	RT	STOP	--	--	1	1	
1-4	107+45	LT	STOP	--	--	1	1	
1-6	110+72	LT	BIKE ROUTE	--	--	1	--	ON POWER POLE
1-7	110+76	LT	STOP	--	--	1	1	
1-9	111+14	RT	STOP	--	--	1	1	
1-10	110+73	RT	12TH ST, MAIN ST	1	1	--	--	
1-12	109+37	RT	BIKE ROUTE	--	--	1	--	ON POWER POLE
1-15	107+86	RT	E 11TH ST, MAIN ST	1	1	--	--	
1-16	107+84	RT	STOP	--	--	1	1	
2-2	114+07	LT	BIKE ROUTE	--	--	1	--	ON POWER POLE
2-3	114+07	LT	STOP	--	--	1	1	
2-5	114+39	RT	STOP	--	--	1	1	
2-6	114+00	RT	12TH ST, MAIN ST, BIKE ROUTE	1	1	1	--	REMOVE BIKE SIGN
3-4	203+97	LT	STOP	--	--	1	1	
3-5	204+41	LT	E 12th AV, E 13th ST	1	1	--	--	
3-8	207+28	LT	E 13th ST, E 11th AV	1	1	--	--	
3-9	207+28	LT	STOP	--	--	1	1	
3-10	208+08	LT	NO PARKING	--	--	1	1	
3-12	207+67	RT	STOP	--	--	1	1	
3-13	204+31	RT	STOP	--	--	1	1	
4-1	209+88	LT	NO PARKING	--	--	1	--	ON POWER POLE
4-2	210+56	LT	E 10th AV, E 13th ST, STOP	1	1	1	--	REMOVE STOP SIGN
4-4	211+28	LT	NO PARKING	--	--	1	1	
4-6	212+39	LT	NO PARKING	--	--	1	--	ON POWER POLE
4-8	213+86	LT	E 9th AV, E 13th ST	1	1	--	--	
4-9	213+96	LT	NO OUTLET	--	--	1	1	
4-11	215+17	LT	NO PARKING	--	--	1	1	
4-12	210+98	RT	STOP	--	--	1	1	
4-14	217+13	LT	13TH ST, Wilson AV	1	1	--	--	
4-15	217+18	LT	STOP	--	--	1	1	
4-17	218+37	LT	NO PARKING	--	--	1	1	
4-18	219+89	LT	NO PARKING	--	--	1	1	
4-19	217+56	RT	STOP	--	--	1	1	
4-20	61+27	RT	STOP	--	--	1	1	
4-21	216+71	RT	OAKWOOD AV	1	1	--	--	
ITEM TOTALS				9	9	29	22	

FIELD OFFICE

PROJECT	642.5001 TYPE B EACH
7996-00-09	1
ITEM TOTAL	1

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

PAVEMENT MARKING

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7520* MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH LF	646.8120 MARKING CURB EPOXY LF	REMARKS
MAIN STREET							
101+37 - 104+03	CENTERLINE	63	4	21	--	--	YELLOW SKIPS
104+03 - 104+64	RT/LT	--	--	30	198	--	
104+47 - 107+51	RT	--	--	--	--	325	YELLOW
104+64 - 107+31	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
107+31 - 107+96	RT/LT	--	--	27	168	--	
107+78 - 110-81	RT	--	--	--	--	321	YELLOW
107+96 - 110+62	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
110+62 - 111+27	RT/LT	--	--	27	168	--	
111+08 - 114+08	RT	--	--	--	--	327	YELLOW
111+27 - 113+90	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
113+90 - 114+61	RT/LT	--	--	53	162	--	
114+61 - 115+05	CENTERLINE	13	--	--	--	--	YELLOW SKIPS
13TH AVE							
200+65 - 201+03		--	--	--	60	--	
200+99- 204+04	RT/LT	--	--	--	60	621	YELLOW
201+23 - 204+04	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
204+04 - 204+49	RT/LT	--	--	30	84	--	
204+37 - 207+35	LT	--	--	--	--	322	YELLOW
204+49 - 207+17	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
207+17 - 207+59	RT/LT	--	--	29	90	--	
207+62 - 210+64	LT	--	--	--	--	325	YELLOW
207+82 - 210+44	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
210+62 - 210+91	RT/LT	--	--	26	42	--	
210+88 - 213+99	LT	--	--	--	--	335	YELLOW
211+10 - 216+59	CENTERLINE	125	8	--	--	--	YELLOW SKIPS
214+19 - 217+22	LT	--	--	--	--	326	YELLOW
216+59 - 217+68	RT/LT	--	--	29	228	--	
217+52 - 220+29	LT	--	--	--	--	289	YELLOW
217+68 - 220+30	CENTERLINE	63	4	--	--	--	YELLOW SKIPS
OAKWOOD BLVD							
61+29		--	--	13	--	--	
ITEM TOTALS		642	40	285	1,260	3,191	

*CATEGORY 0020

NOTE: TABLE QUANTITIES ARE
CATEGORY 0010 UNLESS
OTHERWISE NOTED.

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TRAFFIC CONTROL

LOCATION	643.5000 TRAFFIC CONTROL EACH	643.0420 BARRICADES TYPE III DAYS	643.0410 BARRICADES TYPE II DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS DAYS
PROJECT 7996-00-09	1	--	--	--	--
MAIN STREET	--	1152	192	2112	1344
10TH STREET	--	1152	288	1824	1056
11TH STREET	--	1152	288	1824	1248
12TH STREET	--	768	192	1344	1248
13TH STREET	--	1152	--	1920	960
WILSON AVE	--	768	--	768	768
OAKWOOD BLVD	--	576	--	768	480
9TH AVE	--	192	--	384	192
10TH AVE	--	576	--	960	672
11TH AVE	--	576	--	960	672
12TH AVE	--	576	--	960	672
ITEM TOTALS	1	8640	960	13824	9312

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.6500 STRUCTURE LAYOUT (R-17-9) LS	650.9910 SUPPLEMENTAL CONTROL (7996-00-09) LS	650.9920 SLOPE STAKES LF
MAIN STREET						
101+37 - 115+05		1368	1368	--	--	1368
13TH STREET						
201+23 - 220+54		1931	1931	1	--	2280
12TH AVE						
16+23 - 17+25		102	102	--	--	--
WILSON AVE EAST						
50+18 - 51+20		102	102	--	--	--
OAKWOOD BLVD						
60+42 - 61+67		125	125	--	--	--
PROJECT 7996-00-09		--	--	--	1	--
ITEM TOTALS		3628	3628	1	1	3648

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

SAWING

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
MAIN STREET			
101+37		40	--
104+01 - 104+20	RT	--	18
104+17 - 104+46	LT	29	2
104+19 - 104+46	RT	27	2
104+59 - 104+64	RT	--	5
104+59 - 104+64	LT	--	5
105+31 - 105+55	LT	--	28
105+40 - 105+50	RT	--	10
105+75 - 105+95	LT	--	24
106+03 - 106+13	RT	10	--
107+32 - 107+37	RT	--	5
107+32 - 107+37	LT	--	5
107+91 - 107+96	RT	--	5
107+91 - 107+95	LT	--	4
109+35 - 109+43	LT	--	8
109+73 - 109+87	LT	--	14
110+63 - 110+68	LT	--	5
111+22 - 111+26	LT	--	4
111+57 - 111+61	LT	--	4
112+48 - 112+61	LT	13	--
112+49 - 112+58	RT	9	--
114+13 - 114+46	LT	29	4
114+55 - 114+66	LT	--	7
115+05		29	4
11TH STREET			
5+05		27	4
6+20		27	4
12TH STREET			
10+20		27	4
11+27		27	4
13TH STREET			
197+70 - 197+85	LT	25	9
200+13 - 200+15	LT	--	2
200+55 - 200+71	LT	27	9
200+97 - 201+23		64	4
202+73 - 202+92	RT	19	--
203+09 - 203+32	LT	--	22
209+56 - 209+76	RT	20	--
211+01 - 211+05	RT	--	4
211+62 - 211+72	RT	--	10
212+43 - 212+46	RT	--	4
212+67 - 212+85	RT	--	18
213+65 - 213+67	RT	--	2
213+85 - 213+89	RT	--	4
214+03 - 214+25	RT	--	22
215+18 - 215+29	RT	--	11

CONT'D

3

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

MISCELLANEOUS QUANTITIES

SHEET

E

3

SAWING CONT'D

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
215+90 -216+09	LT	--	19
218+18 - 218+53	RT	--	46
218+76 - 218+79	RT	--	3
218+80 - 218+94	LT	--	14
219+05 - 219+13	LT	--	8
219+22 - 219+44	RT	--	22
220+35 - 220+40	RT	--	5
12TH AVE			
15+25		33	4
15+52	LT	--	4
17+25		24	--
11TH AVE WEST			
20+50		27	--
20+82	RT	--	5
11TH AVE EAST			
26+00		23	--
10TH AVE WEST			
30+12		24	--
10TH AVE EAST			
35+47 - 35+63	RT	16	--
35+69		24	2
9TH AVE			
40+35		18	--
WILSON AVE WEST			
45+50		30	4
45+78		--	5
45+93		--	5
WISLON AVE EAST			
51+20		28	4
OAKWOOD BLVD			
60+42		17	4
61+28	LT	--	4
61+38	RT	--	4
ITEM TOTAL		713	462

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	SPV.0090.01 24-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB & GUTTER
MAIN STREET			
104+01 - 104+20	RT	33	33
104+47 - 107+36	RT	308	308
104+48 - 107+35	LT	305	305
107+92 - 110+66	LT	274	274
107+93 - 110+66	RT	274	274
111+23 - 113+87	RT	264	264
111+23 - 114+13	LT	326	326
114+45 - 115+05	LT	93	93
114+58 - 115+05	RT	63	63
11TH STREET			
5+05 - 5+47	RT/LT	100	100
5+79 - 6+20	RT/LT	97	97
12TH STREET			
10+20 - 10+48	RT/LT	72	72
10+80 - 11+27	RT/LT	110	110
13TH STREET			
197+73 - 197+85	LT	18	18
200+56 - 200+68	LT	20	20
201+01 - 203+84	LT	294	294
201+23 - 203+85	RT	263	263
204+49 - 207+12	RT	262	262
204+54 - 207+15	LT	262	262
207+79 - 210+46	RT	267	267
207+82 - 210+44	LT	262	262
211+08 - 213+79	LT	272	272
211+11 - 216+61	RT	552	552
214+39 - 217+03	LT	263	263
217+69 - 220+60	RT	299	299
217+72 - 220+53	LT	294	294
12TH AVE			
15+25 - 15+96	RT/LT	158	158
16+25 - 16+53	RT/LT	78	78
11TH AVE WEST			
20+50 - 21+00	RT/LT	122	122
11TH AVE EAST			
25+19 - 25+48	RT/LT	78	78
10TH AVE WEST			
30+58 - 30+87	RT/LT	78	78

CONCRETE CURB & GUTTER CONT'D

STATION - STATION	LOCATION	SPV.0090.01 24-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB & GUTTER
10TH AVE EAST			
35+19 - 35+44	RT	35	35
35+19 - 35+69	LT	60	60
9TH STREET			
40+44 - 40+63	RT/LT	58	58
WILSON AVE WEST			
45+50 - 46+13	RT/LT	148	148
WILSON AVE EAST			
50+20 - 51+20	LT	111	111
50+87 - 51+20	RT	33	33
OAKWOOD BLVD			
60+42 - 61+34	LT	129	129
60+42 - 61+66	RT	124	124
ITEM TOTAL		6161	6161

3

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

MISCELLANEOUS QUANTITIES

SHEET

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WATER REMOVALS

STATION	OFFSET DIST.	OFFSET DIR.	STREET	SPV.0060.01 REMOVE EXG. HYDRANT EACH	SPV.0060.02 REMOVE EXG. GATE VALVE EACH	SPV.0090.02 REMOVE EXG. WATER MAIN LF	SPV.0105.01 ABANDON EXG. WATER MAIN LS	REMARKS
CATEGORY 0020								
--	--	--	--	--	--	--	1	PROJECT-WIDE ITEMS
6+03	10.9	LT	11TH ST	--	1	--	--	
16+49	25.3	RT	12TH AVE	1	--	--	--	
20+95	23.1	RT	11TH AVE	1	--	--	--	
20+95	23.1	RT	11TH AVE	--	--	9	--	HYD LEAD
21+00 - 20+51	13.9	RT	11TH AVE	--	--	49	--	
20+93 - 21+04	6.8	RT	11TH AVE	--	--	11	--	
108+00	21.8	RT	MAIN ST	1	--	--	--	
111+28	22.8	RT	MAIN ST	1	--	--	--	
207+36 - 210+68	8.4	LT	13TH ST	--	--	332	--	
210+52	22.2	RT	13TH ST	1	--	--	--	
217+14	16.6	LT	13TH ST	1	--	--	--	
ITEM TOTAL				6	1	401	1	

WATER SERVICE SUMMARY

STATION	OFFSET DIRECTION.	STREET	SPV.0060.03 CORP. STOP 1.0" EACH	SPV.0060.04 CURB STOP & BOX, 1.0" EACH	SPV.0090.05 WTR SERVICE LATERAL 1" COPPER LF	REMARKS
CATEGORY 0020						
50+50	LT	WILSON AVE.	1	1	30	
105+03	RT	MAIN ST	1	1	31	
105+29	LT	MAIN ST	1	1	15	
105+76	RT	MAIN ST	1	1	31	
106+70	LT	MAIN ST	1	1	13	
108+50	LT	MAIN ST	1	1	16	
109+00	LT	MAIN ST	1	1	13	
109+28	RT	MAIN ST	1	1	27	
110+14	LT	MAIN ST	1	1	16	
111+18	RT	MAIN ST	1	--	40	CURB STOP BEYOND LOCATION OF TIE
111+92	RT	MAIN ST	1	1	27	
112+11	LT	MAIN ST	1	1	16	
112+84	RT	MAIN ST	1	1	30	
112+88	LT	MAIN ST	1	1	16	
113+38	RT	MAIN ST	1	1	29	
213+22	RT	13TH ST	1	1	33	
213+73	RT	13TH ST	1	1	55	
215+68	RT	13TH ST	1	1	44	
218+70	RT	13TH ST	1	1	40	
ITEM TOTAL			19	18	522	

SANITARY SEWER ITEMS

STRUCTURE NUMBER	STATION	OFFSET	CASTING ELEV	SPV.0060.12 REMOVE & REPLACE SAN MH CASTINGS & RINGS EACH
CATEGORY 0020				
MAIN STREET				
1	104+35	1.0' LT	882.48	1
2	107+63	1.2' LT	886.17	1
3	110+97	0.8' LT	889.35	1
4	114+23	2.3' RT	892.70	1
13TH STREET				
10	207+47	4.2' RT	958.62	1
9	210+76	13.7' RT	958.80	1
8	214+09	5.0' RT	934.65	1
5	217+36	3.9' RT	903.31	1
OAKWOOD BLVD				
7	60+54	1.9' LT	916.04	1
6	61+27	6.0' LT	908.53	1
ITEM TOTAL				10

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

WATER APPERTENANCES SUMMARY

STATION	OFFSET DIST.	OFFSET DIR.	STREET	SPV.0060.05 HYDRANT EACH	SPV.0060.06 CONTROL VALVE & BOX, GATE, 6" EACH	SPV.0060.07 CONTROL VALVE & BOX, GATE, 8" EACH	SPV.0060.08 CONNECT TO EXG. (CUT IN) EACH	SPV.0060.09 CONNECT TO EXG. 20"x6" WET TAP EACH	SPV.0060.10 CONNECT TO EXG. 20"x8" WET TAP EACH	SPV.0060.11 WATERMAIN OFFSET PACKAGE EACH	SPV.0105.02 MAINTAIN WATER SERVICE LS	SPV.0165.05 INSULATION SF	REMARKS
CATEGORY 0020													
--	--	--	--	--	--	--	--	--	--	--	1	--	PROJECT 7996-00-09
6+00	11.0	LT	11TH ST	--	--	--	--	--	--	--	--	64	
6+03	10.9	LT	11TH ST	--	--	--	1	--	--	--	--	--	
10+89	11.2	LT	12TH ST	--	--	--	--	--	--	--	--	64	
15+50	11.7	RT	12TH AVE	--	--	--	1	--	--	--	--	--	
16+24	10.4	RT	12TH AVE	--	--	--	--	--	--	--	--	64	
16+44	10.1	RT	12TH AVE	--	--	--	--	--	--	--	--	64	
16+49	9.9	RT	12TH AVE	--	--	--	1	--	--	--	--	--	
20+51	6.5	RT	11TH AVE	--	--	--	1	--	--	--	--	--	
20+51	15.5	RT	11TH AVE	--	--	--	1	--	--	--	--	--	
20+91	6.7	RT	11TH AVE	--	--	--	1	--	--	--	--	--	
25+19	11.2	RT	11TH AVE	--	--	--	--	--	--	--	--	64	
25+41	11.2	RT	11TH AVE	--	--	--	--	--	--	--	--	64	
25+44	11.1	RT	11TH AVE	--	--	--	1	--	--	--	--	--	
30+56	7.8	RT	10TH AVE	--	--	--	1	--	--	--	--	--	
30+67	7.7	RT	10TH AVE	--	--	--	--	--	--	--	--	64	
35+40	9.7	RT	10TH AVE	--	--	--	--	--	--	--	--	64	
35+57	0.2	RT	10TH AVE	--	--	--	1	--	--	--	--	--	
45+70	12.6	RT	WILSON AVE	--	--	--	1	--	--	--	--	--	
50+21	9.7	RT	WILSON AVE	--	--	--	--	--	--	--	--	64	
50+41	9.8	RT	WILSON AVE	--	--	--	--	--	--	--	--	64	
51+06	6.1	RT	WILSON AVE	--	--	--	1	--	--	--	--	--	
60+64	6.8	RT	OAKWOOD BLVD	--	--	--	1	--	--	--	--	--	
61+15	3.5	RT	OAKWOOD BLVD	--	--	--	--	--	--	--	--	64	
61+65	17.2	RT	OAKWOOD BLVD	--	--	--	--	--	--	--	--	64	
107+52	8.7	LT	MAIN ST	--	--	--	--	--	1	1	--	--	
108+05	8.2	LT	MAIN ST	--	1	--	--	1	--	1	--	--	
108+05	21.4	RT	MAIN ST	1	--	--	--	--	--	--	--	--	
108+05	21.0	RT	MAIN ST	--	--	--	--	--	--	--	--	64	
110+85	9.1	LT	MAIN ST	--	--	--	--	--	1	1	--	--	
110+85	42.8	LT	MAIN ST	--	--	--	1	--	--	--	--	--	
114+07	7.6	LT	MAIN ST	--	--	--	--	--	1	1	--	--	
201+83	14.0	LT	13TH ST	--	--	1	1	--	--	--	--	--	
203+85	23.8	LT	13TH ST	1	1	--	--	--	--	--	--	--	
204+08	7.7	LT	13TH ST	--	--	4	--	--	--	--	--	--	8"x8" CROSS
204+55	5.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
207+26	19.1	LT	13TH ST	1	1	--	--	--	--	--	--	--	
207+35	6.0	LT	13TH ST	--	--	4	--	--	--	--	--	--	8"x8" CROSS
207+83	6.1	LT	13TH ST	--	--	--	--	--	--	--	--	64	
210+68	6.5	LT	13TH ST	--	--	4	--	--	--	--	--	--	8"x8" CROSS
210+91	6.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
211+08	22.0	LT	13TH ST	1	1	--	--	--	--	--	--	--	
214+43	22.0	LT	13TH ST	1	1	--	--	--	--	--	--	--	
216+49	6.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
217+25	6.0	LT	13TH ST	--	--	4	--	--	--	--	--	--	8"x8" CROSS
217+25	0.9	LT	13TH ST	--	--	--	--	--	--	--	--	64	
217+34	6.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
217+74	6.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
217+77	18.0	LT	13TH ST	1	1	--	--	--	--	--	--	--	
220+28	6.0	LT	13TH ST	--	--	--	--	--	--	--	--	64	
ITEM TOTAL				6	6	17	14	1	3	4	1	1344	

NOTE: TABLE QUANTITIES ARE
CATEGORY 0010 UNLESS
OTHERWISE NOTED.

PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	MISCELLANEOUS QUANTITIES	SHEET	E
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WATER MAIN PIPE SUMMARY

STATION	OFFSET		OFFSET		STREET	SPV.0090.03	SPV.0090.04	REMARKS	
	DIST.	DIR.	DIST.	DIR.		6" DUCT. IRON	8" DUCT. IRON		
TO STATION	TO STATION	TO STATION	TO STATION	TO STATION	TO STATION	TO STATION	TO STATION	TO STATION	
CATEGORY 0020									
20+51	6.5	RT	20+51	15.5	RT	11TH AVE	10	--	
46+20	11.9	RT	50+58	9.7	RT	WILSON AVE	--	64	
50+58	9.7	RT	51+06	6.1	RT	WILSON AVE	--	49	
60+64	6.8	RT	61+23	2.3	RT	OAKWOOD AVE	--	58	
61+23	2.3	RT	61+72	17.4	RT	OAKWOOD AVE	--	44	
107+52	8.7	LT	107+52	42.5	LT	MAIN ST	--	32	
108+05	8.2	LT	108+05	21.3	RT	MAIN ST	30	--	
110+84	9.1	LT	110+84	42.8	LT	MAIN ST	--	32	
201+83	14.0	LT	203+84	9.7	LT	13TH ST	--	200	
203+84	9.7	LT	203+84	23.8	LT	13TH ST	14	--	
203+84	9.7	LT	204+09	7.7	LT	13TH ST	--	25	
204+09	--	LT	--	--	--	13TH ST	--	51	
204+09	--	RT	--	--	--	13TH ST	--	50	
204+09	7.7	LT	207+12	5.9	LT	13TH ST	--	304	
207+12	5.9	LT	207+12	19.1	LT	13TH ST	13	--	
207+12	5.9	LT	207+35	6.0	LT	13TH ST	--	23	
207+35	--	LT	--	--	--	13TH ST	--	19	
207+35	--	RT	--	--	--	13TH ST	--	50	
207+35	6.0	LT	210+68	6.5	LT	13TH ST	--	334	
210+68	--	LT	--	--	--	13TH ST	--	37	
210+68	--	RT	--	--	--	13TH ST	--	68	
210+68	6.5	LT	211+08	6.0	LT	13TH ST	--	39	
211+08	6.0	LT	211+08	22.0	LT	13TH ST	16	--	
211+08	6.0	LT	214+43	6.0	LT	13TH ST	--	335	
214+43	6.0	LT	214+43	22.0	LT	13TH ST	16	--	
214+43	6.0	LT	217+25	6.0	LT	13TH ST	--	282	
217+25	--	LT	--	--	--	13TH ST	--	50	
217+25	6.0	LT	217+77	6.0	LT	13TH ST	--	52	
217+77	6.0	LT	217+77	18.0	LT	13TH ST	12	--	
217+77	6.0	LT	220+74	17.5	LT	13TH ST	--	302	
ITEM TOTAL							111	2500	

WALL MODULAR BLOCK GRAVITY LANDSCAPE STA 216+75

STATION - STATION	LOCATION	SPV.0165.02 SF	REMARKS
216+75 - 217+07	LT	165	SEE DETAIL
ITEM TOTAL		165	

SALVAGE AND REINSTALL BRICK PAVERS

STATION - STATION	LOCATION	SPV.0165.04 SF
MAIN STREET		
107+95 - 108+41	LT	247
111+92 - 113+97	LT	1001
114+64 - 114+72	LT	42
12TH STREET		
10+17 - 10+32	RT	71
ITEM TOTAL		1361

NOTE: TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED.

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

MISCELLANEOUS QUANTITIES

SHEET

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CONVENTIONAL SYMBOLS	
FOUND IRON PIPE/PIN	IP (1" UNLESS NOTED)
R/W MONUMENT	○ (SET)
R/W STANDARD SIGN	△ (SET)
SECTION CORNER MONUMENT	SIGN
SECTION CORNER SYMBOL	⊙
FEE (HATCH VARIES)	▨
TEMPORARY LIMITED EASEMENT	▨
PERMANENT LIMITED EASEMENT	▨
R/W BOUNDARY POINT	RWB20
PARCEL NUMBER	102
UTILITY INTEREST	40
SIGN NUMBER (OFF PREMISE)	21-1
BUILDING	⌂
PROPOSED R/W LINE	—
EXISTING H.E. LINE	- - -
PROPERTY LINE	— · —
LOT & TIE LINES	- - - - -
SLOPE INTERCEPTS	— / —
CORPORATE LIMITS	▨
NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	⬮
ACCESS RESTRICTED (BY ACQUISITION)	▨
NO ACCESS (BY STATUTORY AUTHORITY)	⬮
SECTION LINE	— · —
QUARTER LINE	— · —
SIXTEENTH LINE	— · —
EXISTING CENTERLINE	— · —
PROPOSED REFERENCE LINE	— · —
PARALLEL OFFSET	— · —

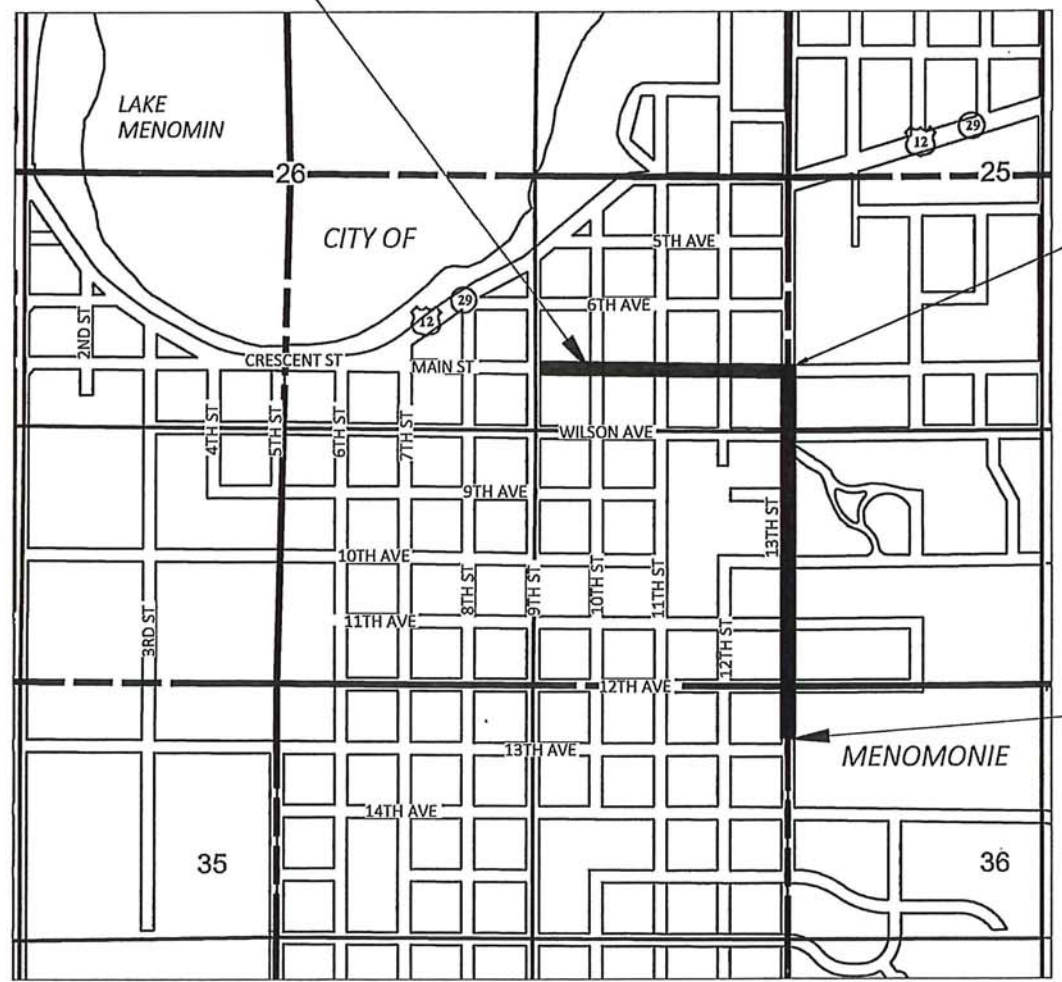
CONVENTIONAL UTILITY SYMBOLS	
WATER	— W —
GAS	— G —
TELEPHONE	— T —
OVERHEAD	— OH —
TRANSMISSION LINES	— E —
ELECTRIC	— E —
CABLE TELEVISION	— TV —
FIBER OPTIC	— FO —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
NON COMPENSABLE	⊕
COMPENSABLE	⊕
POWER POLE	⊕
TELEPHONE POLE	⊕
TELEPHONE PEDESTAL	⊕
ELECTRIC TOWER	⊕

R/W PROJECT NUMBER 7996-00-08	SHEET NUMBER 4.01	TOTAL SHEETS 9
CONSTRUCTION PROJECT NUMBER 7996-00-09		
PLAT OF RIGHT OF WAY REQUIRED FOR CITY OF MENOMONIE, MAIN STREET/13TH STREET 13TH STREET/13TH AVENUE TO 9TH STREET/MAIN STREET LOCAL STREET DUNN COUNTY		

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

CONVENTIONAL ABBREVIATIONS	
ACCESS POINT/ DRIVEWAY CONNECTION	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
CORNER	COR.
DOCUMENT	DOC.
EASEMENT	EASE.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PERMANENT LIMITED EASEMENT	PLE
PROPERTY LINE	PL
RECORDED AS	(100')
REFERENCE LINE	R/L
RELEASE OF RIGHTS	ROR
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SECTION LINE	S/L
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.
CURVE DATA	
LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

END RELOCATION ORDER
STA 611+00
4258.51' EAST AND 993.29' SOUTH OF
WEST CORNER SEC. 26, T28N, R13W
Y = 170,674.222
X = 163,794.846



STATION EQUATION:
600+75.79 = 523+13.86

BEGIN RELOCATION ORDER
STA 500+00.00
1.98' WEST AND 1954.39' NORTH OF
EAST CORNER SEC. 35, T28N, R13W
Y = 168,353.165
X = 164,820.668

ACCEPTED FOR
CITY of MENOMONIE
12 Feb 18
(Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
Cedar corporation
CEDARBURG - GREEN BAY - MADISON - MENOMONIE
www.cedarcorp.com
800-472-7372
WISCONSIN LAND SURVEYOR
ERIC E LINDAAS
S-2919
McFARLAND WI

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83 2011 IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

LAYOUT SCALE 0 1000 FT
TOTAL NET LENGTH OF CENTERLINE = 0.632 MI

REVISION DATE

THIS SURVEY IS PREPARED AT THE REQUEST OF THE CITY. THE FIELD SURVEY WAS PERFORMED IN OCTOBER 2017. THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
02/07/18
(Date) (Signature) ERIC E. LINDAAS

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY OF MENOMONIE		
PARCEL NUMBER	SHEET NO.	OWNER(S) NAME	INTEREST REQUIRED	TLE SQUARE FEET
				ALL AREAS SHOWN IN SQUARE FEET
2	4.04	DANIEL E SEMBACH	TLE	929.9
3	4.04	CHAD GROFF	TLE	924.4
4	4.04	HOUSING AUTHORITY	TLE	136.4
5	4.04	THE OAKS OF DUNN COUNTY	TLE	399.8
6	4.04	CARPENTRY SERVICES, LLC	TLE	2682.5
7	4.05	MICHAEL FAIRCHILD	TLE	2643.3
8	4.05	TIMOTHY T TILLESON	TLE	860.7
9	4.05	JUAN J & ALISHA M RAMIREZ	TLE	58.4
10	4.05	LEAH R & NICHOLAS D DUNBAR & ULRICH	TLE	620.9
11	4.06	TOMMY A & KENT & MARLENE MATHISON	TLE	3044.5
12	4.06	DOUGLAS M & THERESA M HENDERSON	TLE	440.3
13	4.06	ERIK A & ANNA L CHRISTENSON	TLE	1640.2
14	4.06	CAROL L VANDEBERG	TLE	263.5
16	4.07	LUKE WELCH	TLE	1403.7
17	4.07	MDSND INVESTMENTS LLC	TLE	708.6
18	4.07	LEVI C BENSON	TLE	1659.0
19	4.07	TAMI L DENT-JACKSON	TLE	101.1
20	4.08	KARLIE FRITZ	TLE	358.7
21	4.08	JAMIE S LAWRENCE-OLSON	TLE	227.0
22	4.08	CAROL GODSAVE	TLE	146.2
23	4.08	SANDRA BACHOO-RAMSAROOP	TLE	27.9
24	4.08	MKS PROPERTIES, LLC	TLE	70.9
25	4.09	MENOMONIE STUDENT HOUSING, LLC	TLE	106.8
26	4.09	ST. JOSEPH'S CATHOLIC CHURCH	TLE	502.2
27	4.09	CHRISTINE M NESS	TLE	121.3
28	4.09	SCHLOUG RENTAL PROPERTIES, LLC	TLE	182.7

REVISION DATE 02-07-18	DATE 12/19/17	SCALE, FEET 0 _____ NTS	HWY: LOCAL STREET	R/W PROJECT NUMBER 7996-00-08	PLAT SHEET 4.02
	GRID FACTOR _____		COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER 7996-00-09	



35

26

NE - NE

T-28-N
R-13-W

SE - SE

END RELOCATION ORDER
STA. 611+00.00

9TH STREET

10TH STREET

11TH STREET

12TH STREET

NE - SE

CITY OF

14TH AVENUE

13TH AVENUE

12TH AVENUE

11TH AVENUE

10TH AVENUE

9TH AVENUE

WILSON AVENUE

MAIN STREET

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BEGIN RELOCATION ORDER
STA. 500+00.00

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⑱

NW - NW

T-28-N
R-13-W

MS - MS

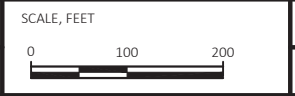
MENOMONIE

25

NW - SW

STATION EQUATION:
600+75.79 = 523+13.86

REVISION DATE	_____	_____	_____	_____
DATE	12/19/17			
GRID FACTOR	_____			



HWY:	LOCAL STREET
COUNTY:	DUNN

R/W PROJECT NUMBER	7996-00-08
CONSTRUCTION PROJECT NUMBER	7996-00-09

PLAT SHEET	4.03
------------	------



35

26

NE - NE

T-28-N
R-13-W

SE - SE

END RELOCATION ORDER
STA. 611+00.00

9TH STREET

10TH STREET

11TH STREET

12TH STREET

NE - SE

CITY OF

14TH AVENUE

13TH AVENUE

12TH AVENUE

11TH AVENUE

10TH AVENUE

9TH AVENUE

WILSON AVENUE

MAIN STREET

2

3

4

11

24

23

26

28

27

25

22

21

20

STATION EQUATION:
600+75.79 = 523+13.86

BEGIN RELOCATION ORDER
STA. 500+00.00

5

6

7

8

9

10

12

13

14

16

17

18

19

36

T-28-N
R-13-W

MS - MS

MENOMONIE

25

NW - SW

REVISION DATE	_____	_____	_____	_____
DATE	12/19/17			
GRID FACTOR	_____			



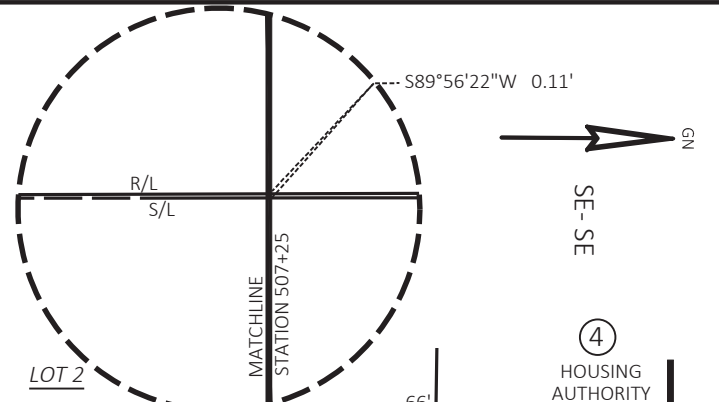
HWY:	LOCAL STREET
COUNTY:	DUNN

R/W PROJECT NUMBER	7996-00-08
CONSTRUCTION PROJECT NUMBER	7996-00-09

PLAT SHEET	4.03
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CITY OF

NE - NE



M H WILSON 2ND ADDITION BLOCK 12

M H WILSON 2ND ADDITION BLOCK 9

14TH AVENUE

13TH AVENUE

12TH AVENUE

LOT 3

LOT 2

LOT 3

LOT 2

② DANIEL E SEMBACH

③ CHAD GROFF

JUSTIN WOLBERT

ORAN C & CIECLY A BERTRAM

④ HOUSING AUTHORITY

BEGIN RELOCATION ORDER

STA. 500+00.00
 Y = 168,353.165
 X = 164,820.668
 1.98 FEET WEST AND
 1954.39 FEET NORTH OF
 EAST QUARTER CORNER
 SEC. 35, T28N, R13W

⑤ THE OAKS OF DUNN COUNTY
 CSM 1899 LOT 1

⑥ CARPENTRY SERVICES, LLC
 CSM 1699 LOTS 1 & 2

⑦ MICHAEL FAIRCHILD

MENOMONIE

BASIS OF EXISTING R/W
 - CITY OF MENOMONIE ORIGINAL PLAT, DOC.
 NO. 10003, VOL 1, PG 5
 - CSM 1899, DOC. NO. 439858, VOL 8, PG 49
 - CSM 1699, DOC. NO. 428893, VOL 7, PG 49

COMPUTED LOCATION FROM TIES -
 NO MONUMENT
 Y=171,648.474
 X=164,818.824

1" O.D. IRON PIPE
 Y=166,398.776
 X=164,825.706

ALUMINUM MONUMENT
 Y=169,015.143
 X=164,821.607

REVISION DATE 02/07/18	DATE 12/19/17	SCALE, FEET 0 25 50	HWY: LOCAL STREET	R/W PROJECT NUMBER 7996-00-08	PLAT SHEET 4.04
	GRID FACTOR		COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER 7996-00-09	REVISED 02-7-18

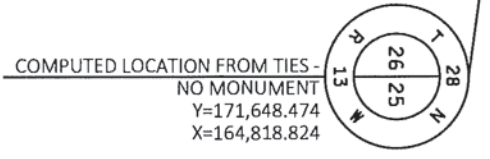
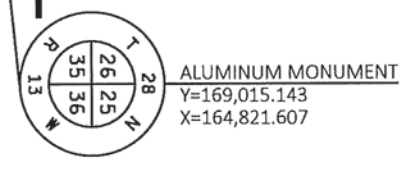
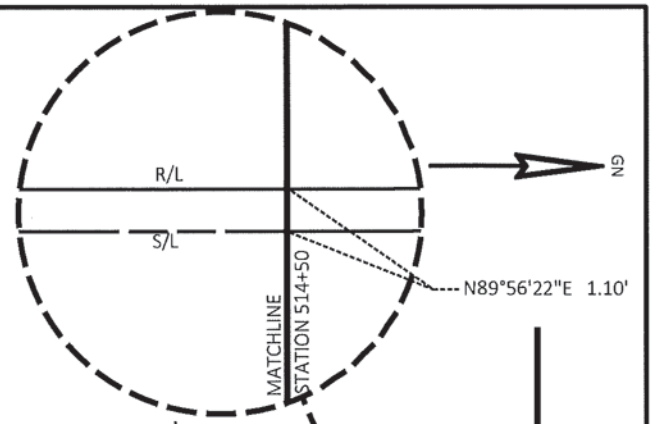
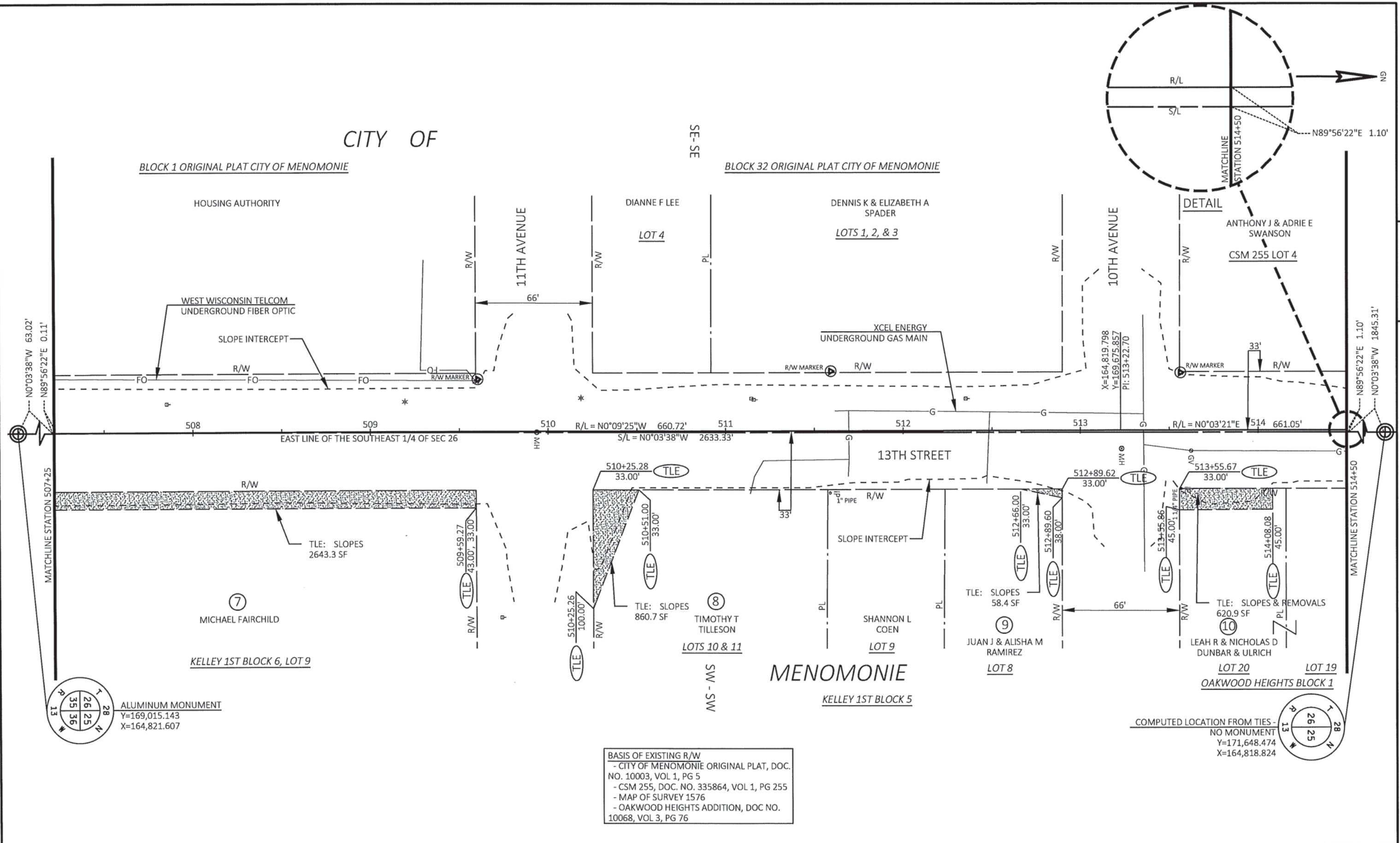
CITY OF

BLOCK 1 ORIGINAL PLAT CITY OF MENOMONIE

BLOCK 32 ORIGINAL PLAT CITY OF MENOMONIE

4

4



BASIS OF EXISTING R/W
 - CITY OF MENOMONIE ORIGINAL PLAT, DOC. NO. 10003, VOL 1, PG 5
 - CSM 255, DOC. NO. 335864, VOL 1, PG 255
 - MAP OF SURVEY 1576
 - OAKWOOD HEIGHTS ADDITION, DOC NO. 10068, VOL 3, PG 76

REVISION DATE	DATE 12/19/17	SCALE, FEET	HWY: LOCAL STREET	R/W PROJECT NUMBER	7996-00-08	PLAT SHEET	4.05
	GRID FACTOR	0 25 50	COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER	7996-00-09		



4

4

BLOCK 64 ORIGINAL PLAT CITY OF MENOMONIE

CITY OF

CSM 255 LOT 3
TIMOTHY ENYEART

PART LOTS 3, 5, 6
ALL LOT 4

ADAM D & JULIE A
BESTON

PART LOTS 1 & 3 ALL LOT 2

11
TOMMY A & KENT &
MARLENE MATHISON

TLE: SLOPES
& DRIVEWAY
3044.5 SF

AT&T
UNDERGROUND FIBER OPTIC

SLOPE INTERCEPT

1 1/4" PIPE

EAST LINE OF THE SOUTHEAST 1/4 OF SEC 26

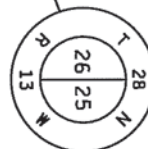
S/L = N0°03'38"W 2633.33'

13TH STREET

X=164,819.155
Y=170,336.906
PI: 519+83.75

N89°56'22"E 1.04'

N0°03'38"W 1295.31'



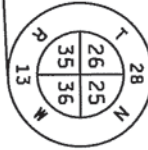
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X=164,818.824

MATCHLINE STATION 514+50

MATCHLINE STATION 520+00

MS - MN

DETAIL



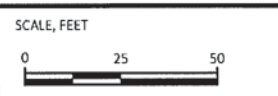
ALUMINUM MONUMENT
Y=169,015.143
X=164,821.607

OAKWOOD HEIGHTS BLOCK 1

MENOMONIE

BASIS OF EXISTING R/W
- CITY OF MENOMONIE ORIGINAL PLAT, DOC.
NO. 10003, VOL 1, PG 5
- CSM 255, DOC. NO. 335864, VOL 1, PG 255
- MAP OF SURVEY 1216
- OAKWOOD HEIGHTS ADDITION, DOC. NO.
10068, VOL 3, PG 76

REVISION DATE	DATE 12/19/17
	GRID FACTOR



HWY: LOCAL STREET
COUNTY: DUNN

R/W PROJECT NUMBER 7996-00-08
CONSTRUCTION PROJECT NUMBER 7996-00-09

PLAT SHEET 4.06



BLOCK 65 ORIGINAL PLAT CITY OF MENOMONIE

CITY OF

LOT 3

GARY & SANDRA BORGMEYER

SANDRA BACHOO-RAMSAAROP
E 1/2 LOTS 1 & 2

BLOCK 93 ORIGINAL PLAT CITY OF MENOMONIE

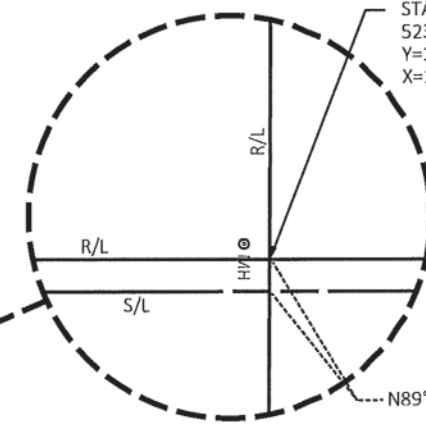
MAIN STREET

CHIPPEWA VALLEY INTERNETWORKING CONSORTIUM
UNDERGROUND FIBER OPTIC

E 1/2 LOTS 3 & 4

TIM S & JENNIFER ENGEL
STATION EQUATION:
523+13.86 = 600+75.79
Y=170,667.023
X=164,819.030

STATION EQUATION:
523+13.86 = 600+75.79
Y=170,667.023
X=164,819.030



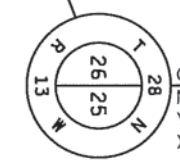
DETAIL

N89°35'50"W 0.83'

X=164,818.998
Y=170,750.270
PI: 523+97.11

N89°56'22"E 0.77'

COMPUTED LOCATION FROM TIES -
NO MONUMENT
Y=171,648.474
X=164,818.824



N0°03'38"W
1338.02'

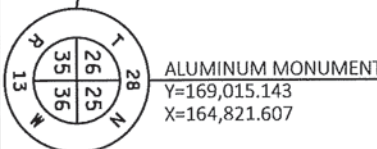
N89°56'22"E 1.04'

MATCHLINE STATION 520+00

EAST LINE OF THE SOUTHEAST 1/4 OF SEC 26
S/L = N0°03'38"W 2633.33'

13TH STREET

N0°03'38"W 898.20'



ALUMINUM MONUMENT
Y=169,015.143
X=164,821.607

TLE: SLOPES & DRIVEWAY
1403.7 SF

LUKE WELCH
PART OF LOT 39

MDSND INVESTMENTS LLC
LOT 38

TLE: SLOPES & DRIVEWAY
708.6 SF

LEVI C BENSON
LOT 37

MS - MN

TLE: SLOPES
101.1 SF

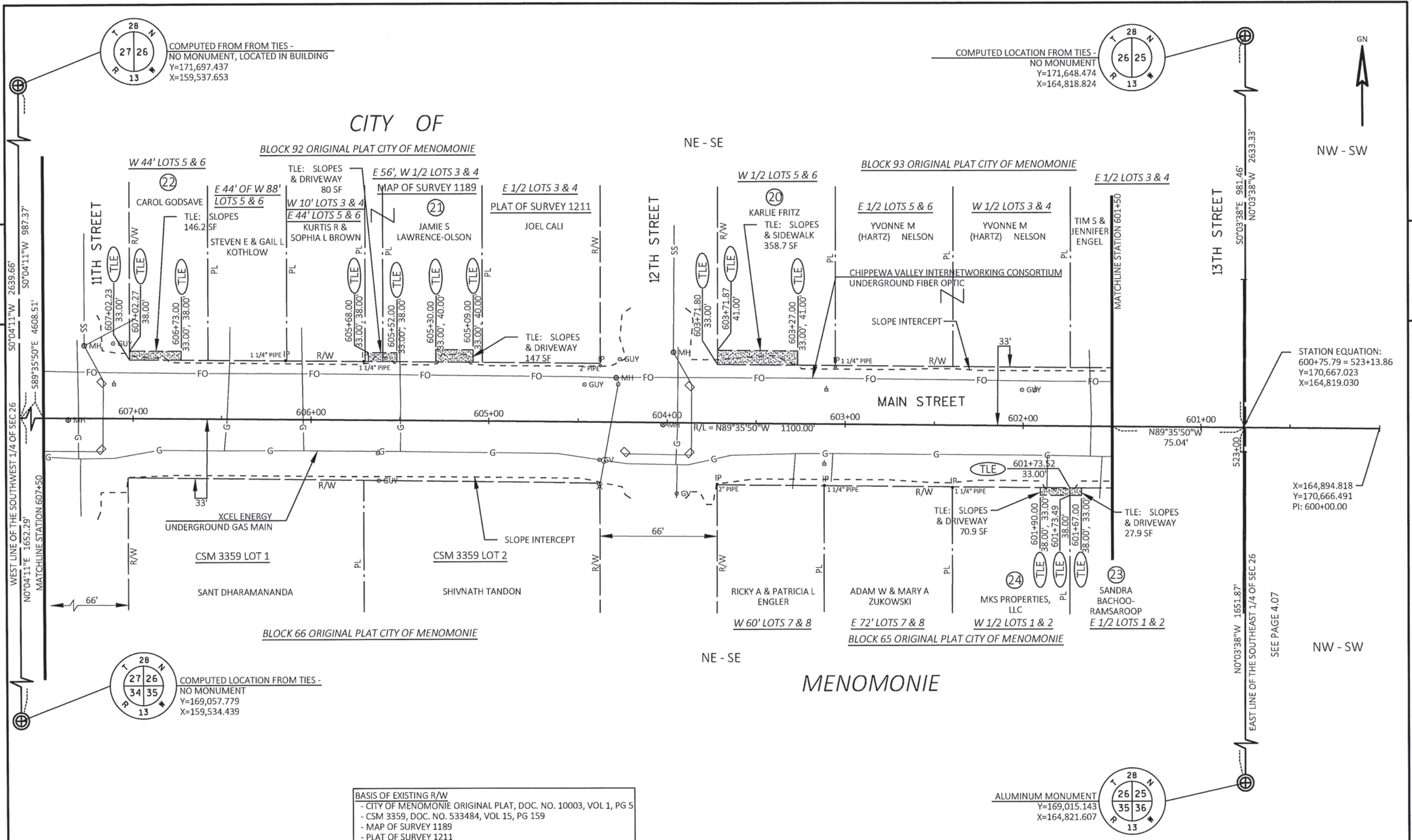
TAMI L DENT-JACKSON
PART OF LOT 15

ASSESSMENT PLAT BLOCK E

MENOMONIE

BASIS OF EXISTING R/W
- CITY OF MENOMONIE ORIGINAL PLAT, DOC. NO. 10003, VOL 1, PG 5
- ASSESSMENT PLAT BLOCK E, DOC. NO. 180324, VOL 4, PG 15

REVISION DATE	DATE 12/19/17	SCALE, FEET 0 25 50	HWY: LOCAL STREET	R/W PROJECT NUMBER 7996-00-08	PLAT SHEET 4.07
	GRID FACTOR		COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER 7996-00-09	



COMPUTED FROM TIES -
NO MONUMENT, LOCATED IN BUILDING
Y=171,697.437
X=159,537.653

COMPUTED LOCATION FROM TIES -
NO MONUMENT
Y=171,648.474
X=164,818.824

COMPUTED LOCATION FROM TIES -
NO MONUMENT
Y=169,057.779
X=159,534.439

ALUMINUM MONUMENT
Y=169,015.143
X=164,821.607

BASIS OF EXISTING R/W
- CITY OF MENOMONIE ORIGINAL PLAT, DOC. NO. 10003, VOL 1, PG 5
- CSM 3359, DOC. NO. 533484, VOL 15, PG 159
- MAP OF SURVEY 1189
- PLAT OF SURVEY 1211

STATION EQUATION:
600+75.79 = 523+13.86
Y=170,667.023
X=164,819.030

X=164,894.818
Y=170,666.491
PI: 600+00.00

SEE PAGE 4.07

REVISION DATE	DATE 12/19/17
	GRID FACTOR

SCALE, FEET	HWY: LOCAL STREET
0 25 50	COUNTY: DUNN

R/W PROJECT NUMBER	7996-00-08
CONSTRUCTION PROJECT NUMBER	7996-00-09

PLAT SHEET	4.08
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CITY OF

NE - SE

BLOCK 91 ORIGINAL PLAT CITY OF MENOMONIE

BLOCK 90 ORIGINAL PLAT CITY OF MENOMONIE

BLOCK 68 ORIGINAL PLAT CITY OF MENOMONIE

BLOCK 67 ORIGINAL PLAT CITY OF MENOMONIE

CHIPPEWA VALLEY INTERNETWORKING CONSORTIUM
UNDERGROUND FIBER OPTIC

WEST WISCONSIN TELCOM
UNDERGROUND FIBER OPTIC

XCEL ENERGY
UNDERGROUND GAS MAIN

END RELOCATION ORDER
STA. 611+00
Y = 170,674.222
X = 163,794.846
4258.51 FEET EAST AND
993.29 FEET SOUTH OF
WEST QUARTER CORNER
SEC. 26, T28N, R13W

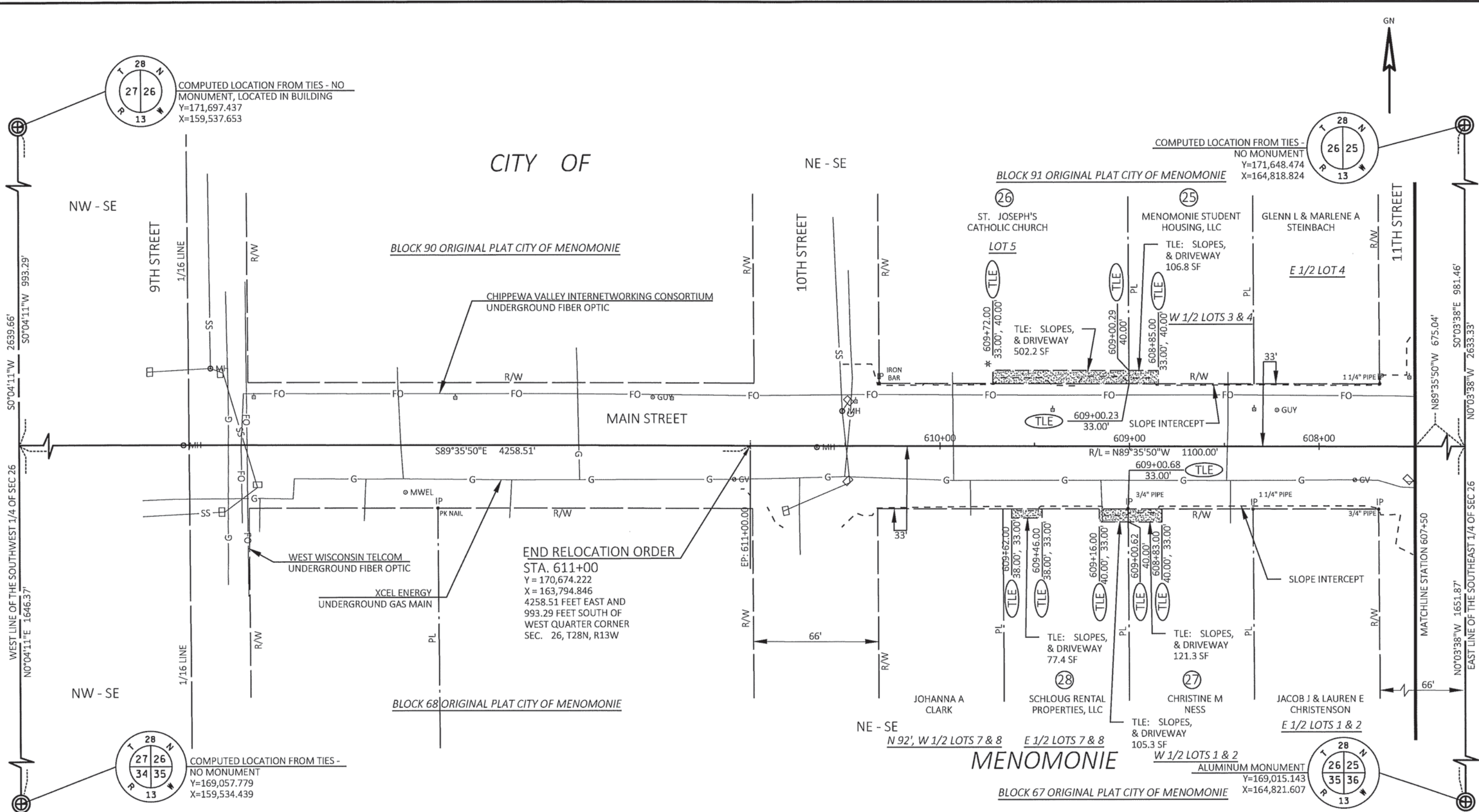
BASIS OF EXISTING R/W
- CITY OF MENOMONIE ORIGINAL PLAT,
DOC. NO. 10003, VOL 1, PG 5

COMPUTED LOCATION FROM TIES - NO
MONUMENT, LOCATED IN BUILDING
Y=171,697.437
X=159,537.653

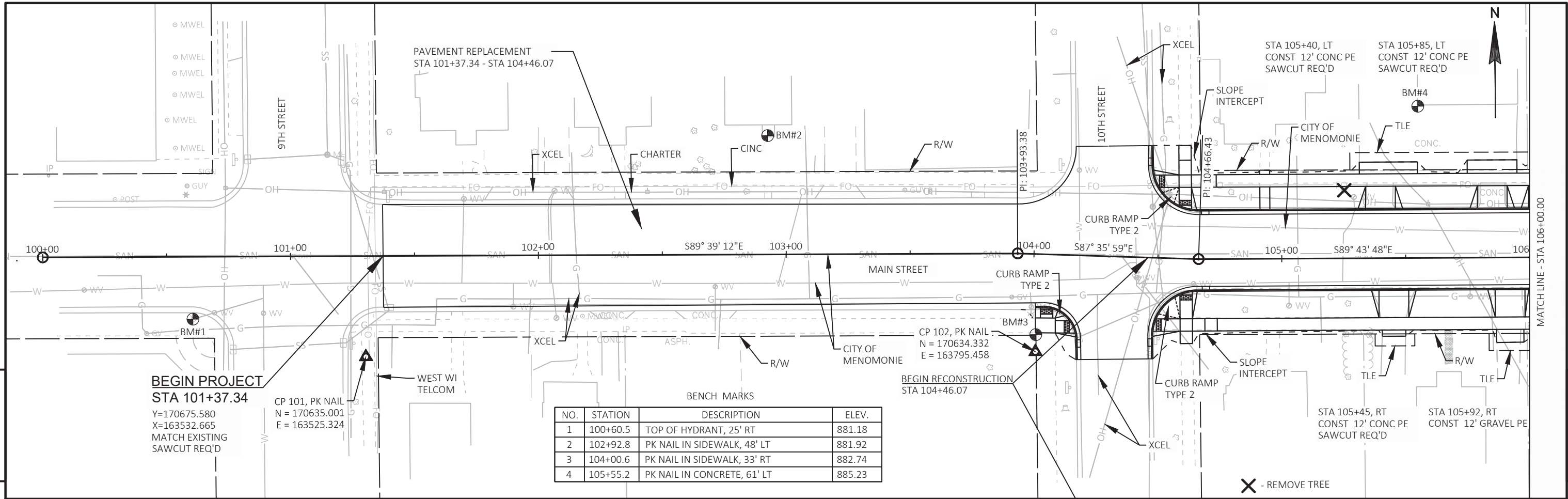
COMPUTED LOCATION FROM TIES -
NO MONUMENT
Y=171,648.474
X=164,818.824

COMPUTED LOCATION FROM TIES -
NO MONUMENT
Y=169,057.779
X=159,534.439

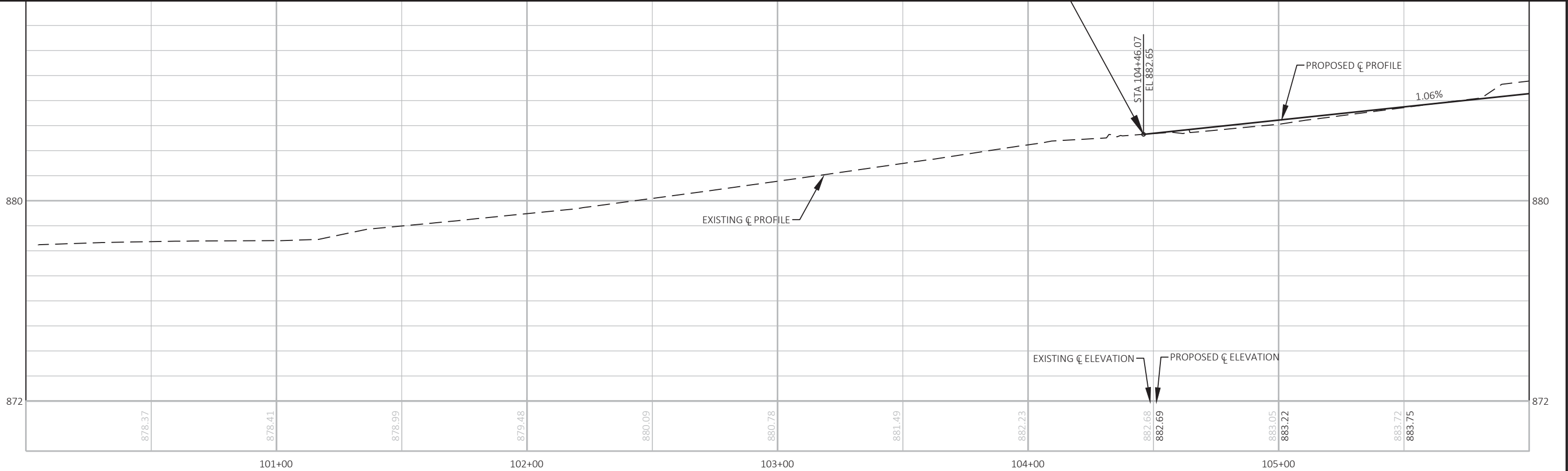
ALUMINUM MONUMENT
Y=169,015.143
X=164,821.607

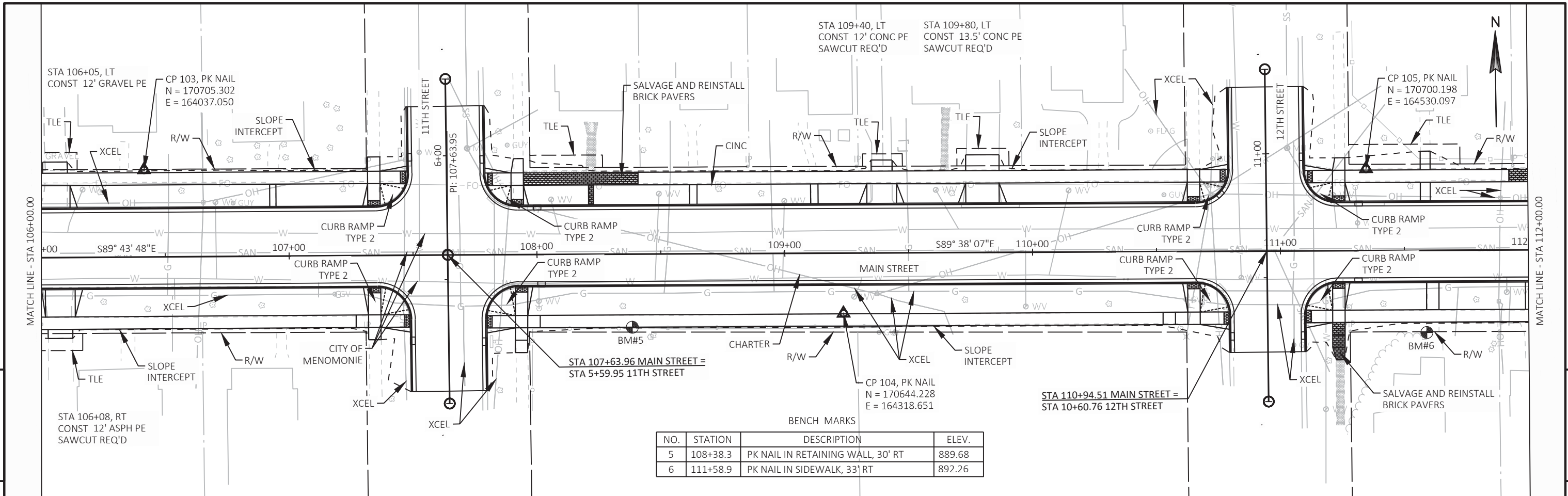


REVISION DATE	DATE 12/19/17	SCALE, FEET 0 25 50	HWY: LOCAL STREET	R/W PROJECT NUMBER 7996-00-08	PLAT SHEET 4.09
	GRID FACTOR		COUNTY: DUNN	CONSTRUCTION PROJECT NUMBER 7996-00-09	

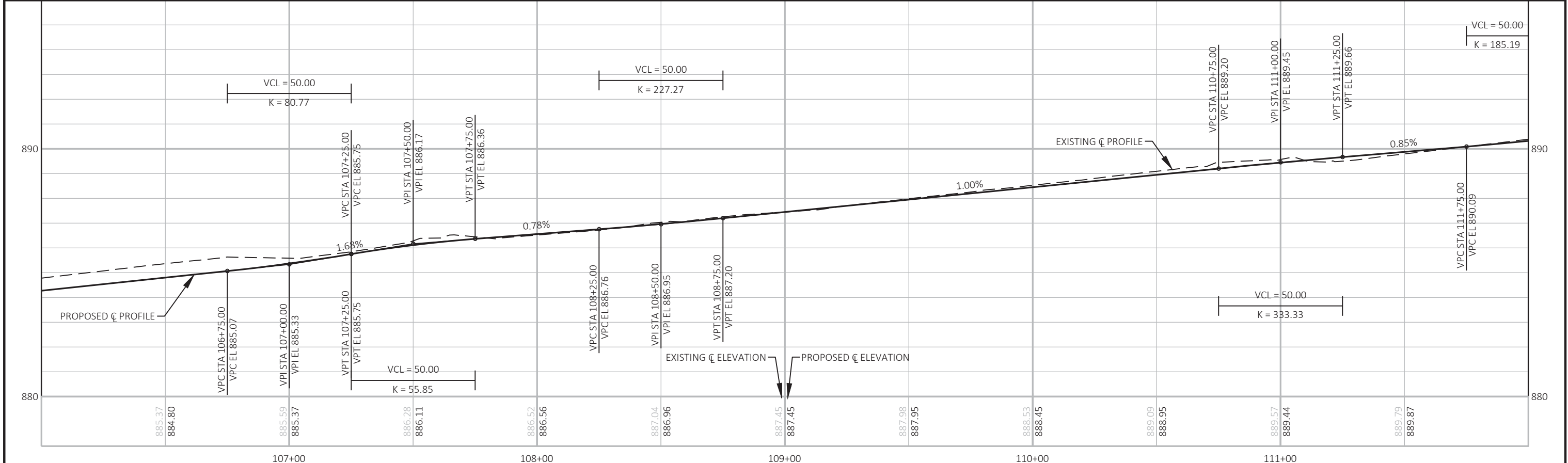


NO.	STATION	DESCRIPTION	ELEV.
1	100+60.5	TOP OF HYDRANT, 25' RT	881.18
2	102+92.8	PK NAIL IN SIDEWALK, 48' LT	881.92
3	104+00.6	PK NAIL IN SIDEWALK, 33' RT	882.74
4	105+55.2	PK NAIL IN CONCRETE, 61' LT	885.23

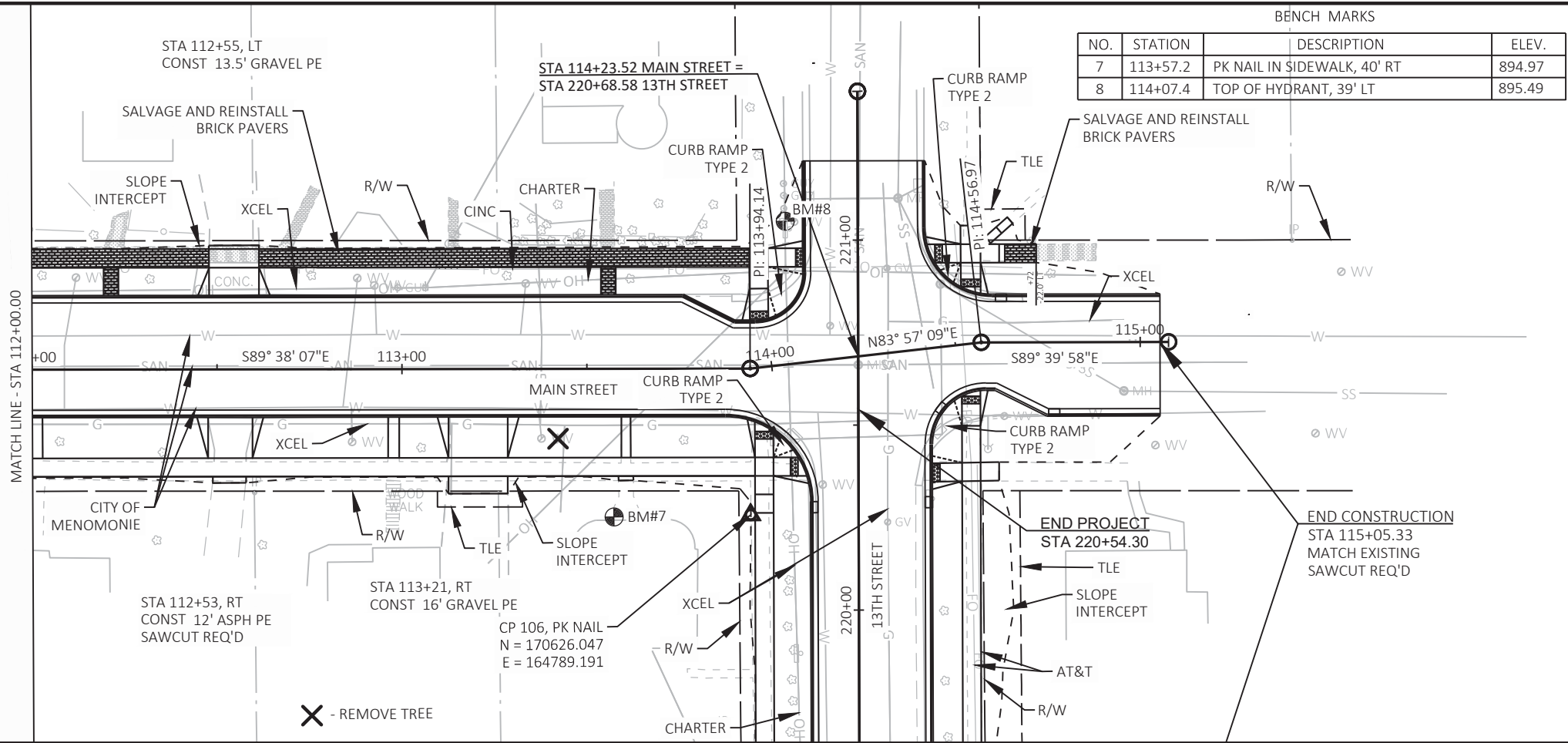




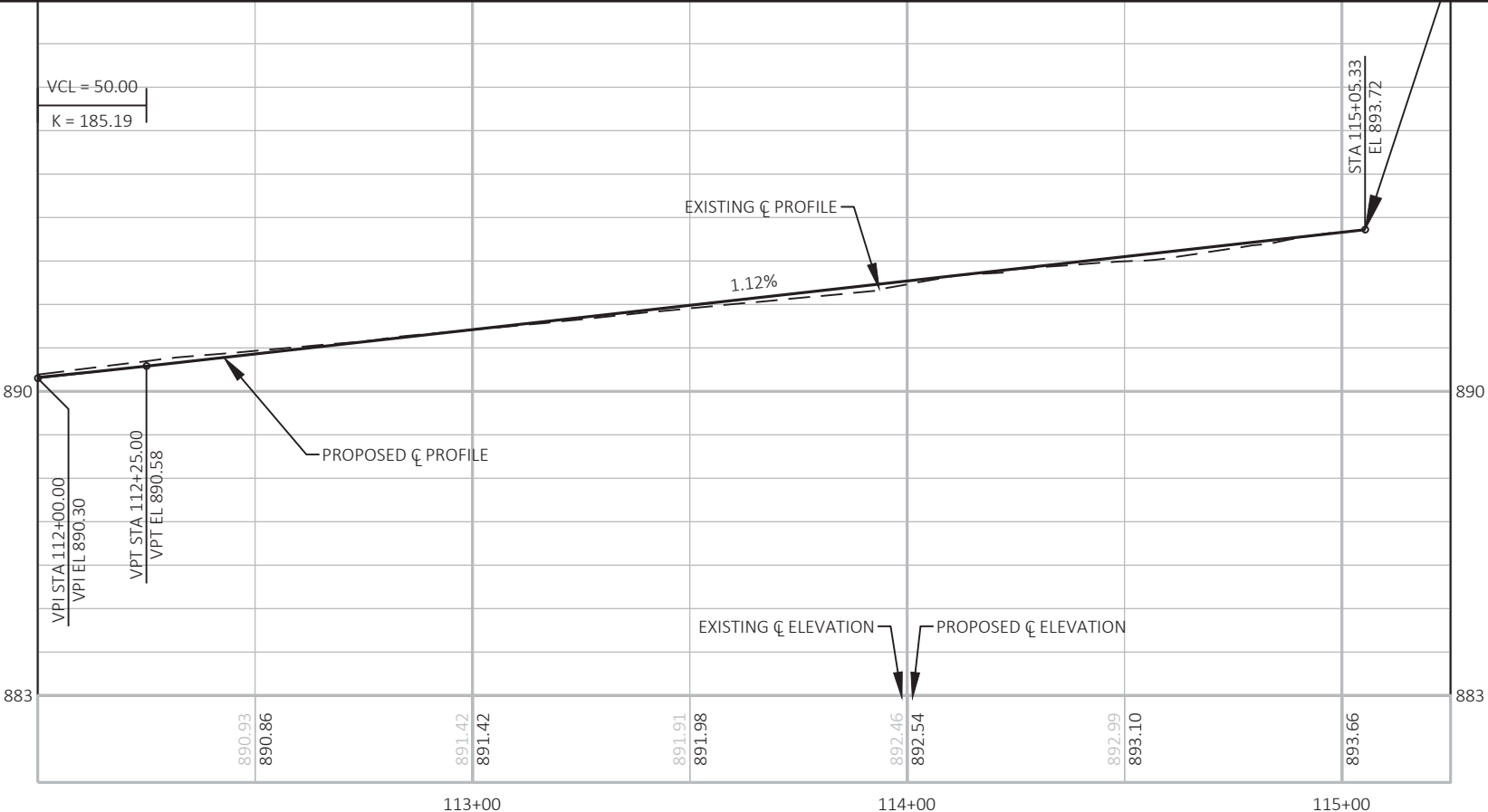
NO.	STATION	DESCRIPTION	ELEV.
5	108+38.3	PK NAIL IN RETAINING WALL, 30' RT	889.68
6	111+58.9	PK NAIL IN SIDEWALK, 33' RT	892.26



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PLAN AND PROFILE: MAIN ST SHEET: 5

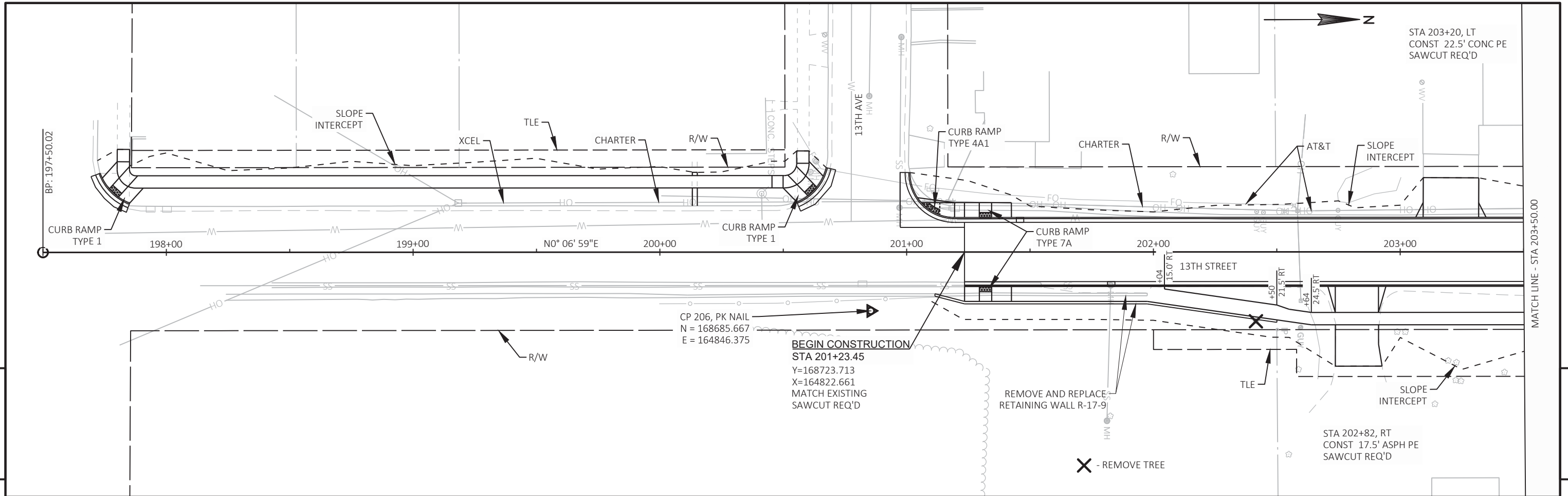


BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
7	113+57.2	PK NAIL IN SIDEWALK, 40' RT	894.97
8	114+07.4	TOP OF HYDRANT, 39' LT	895.49



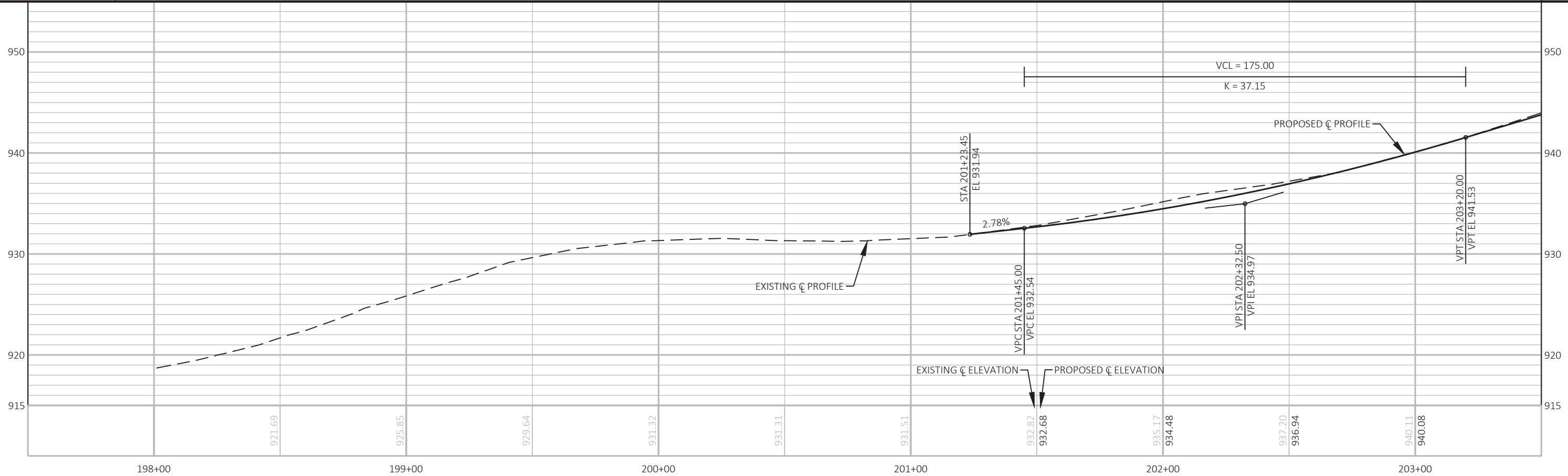
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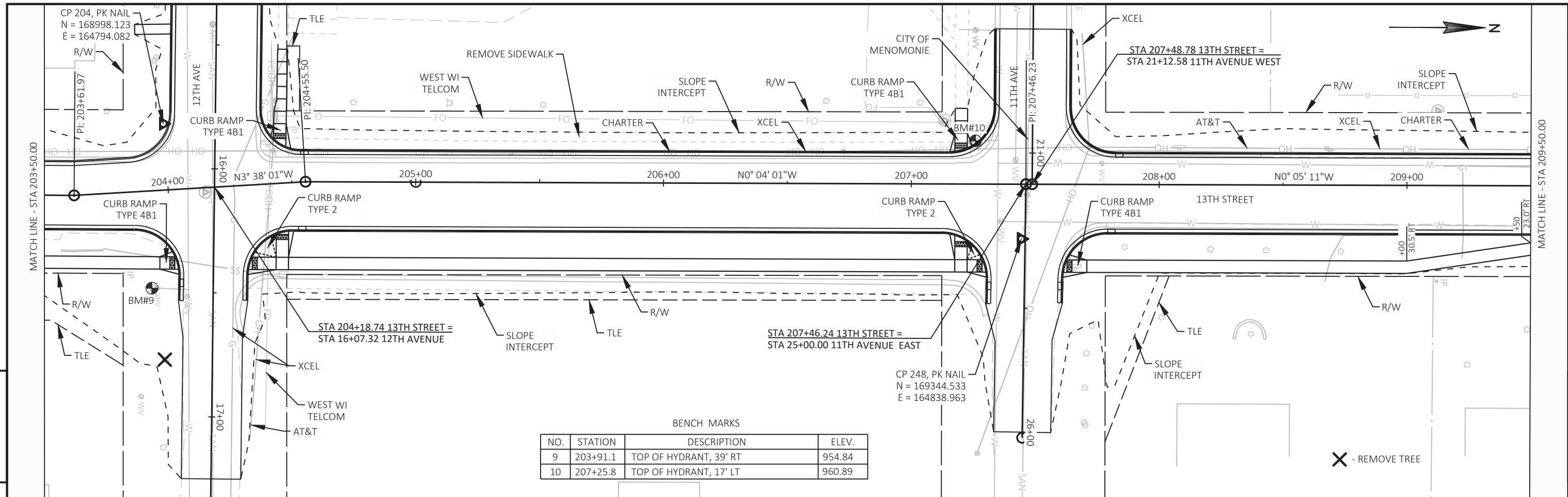


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5

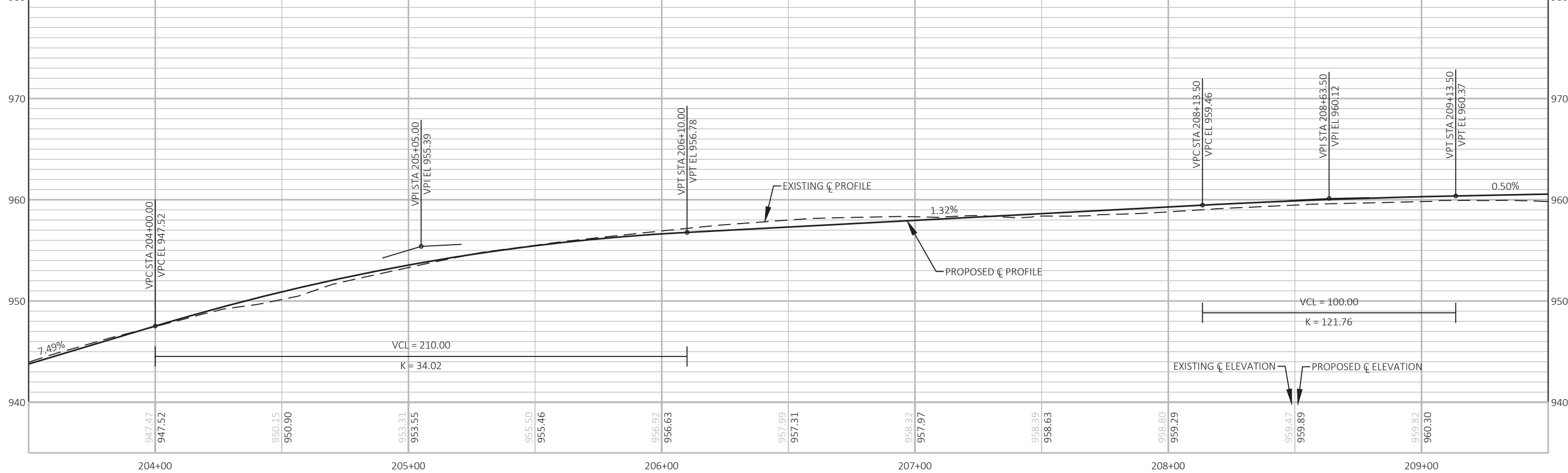


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	PLAN AND PROFILE: 13TH ST	SHEET	E
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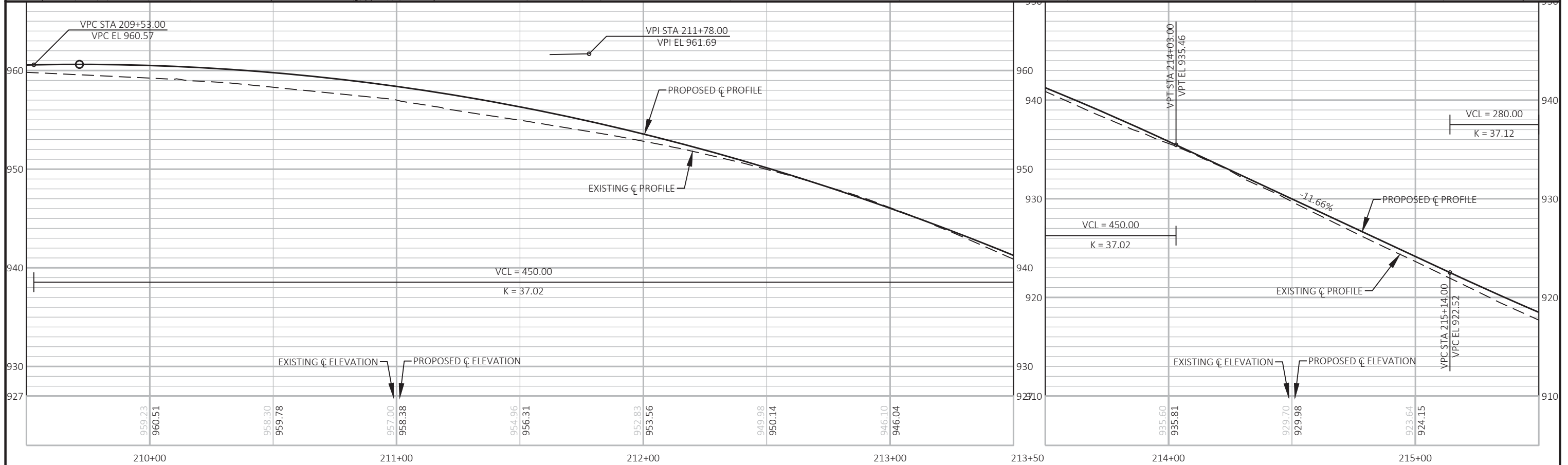
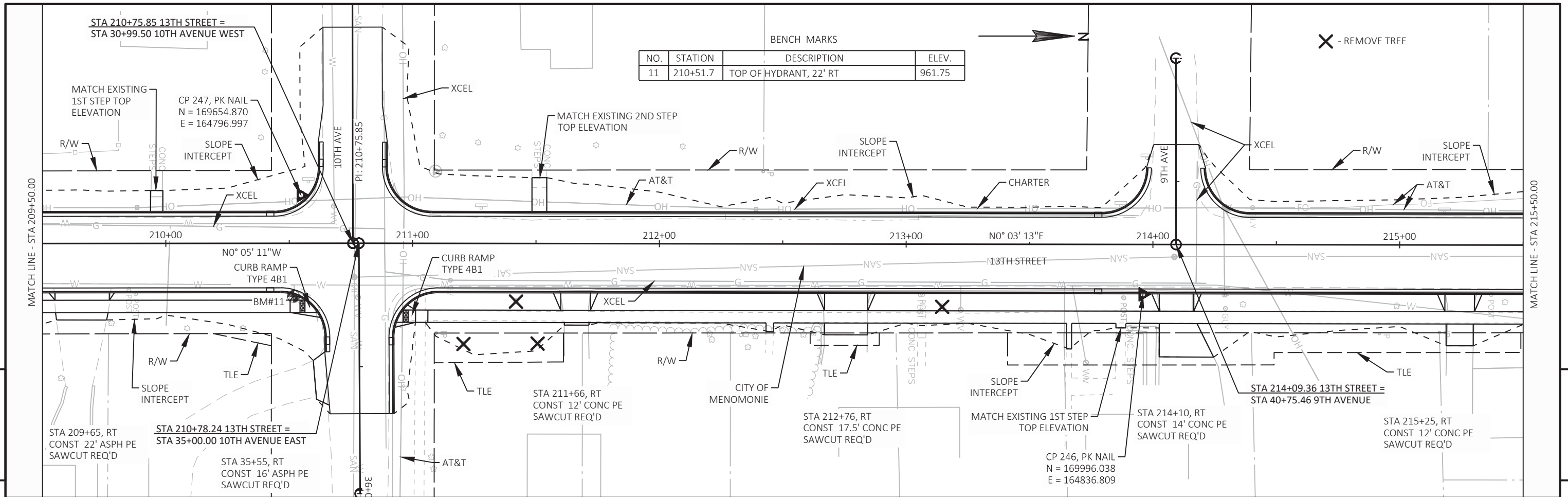


BENCH MARKS

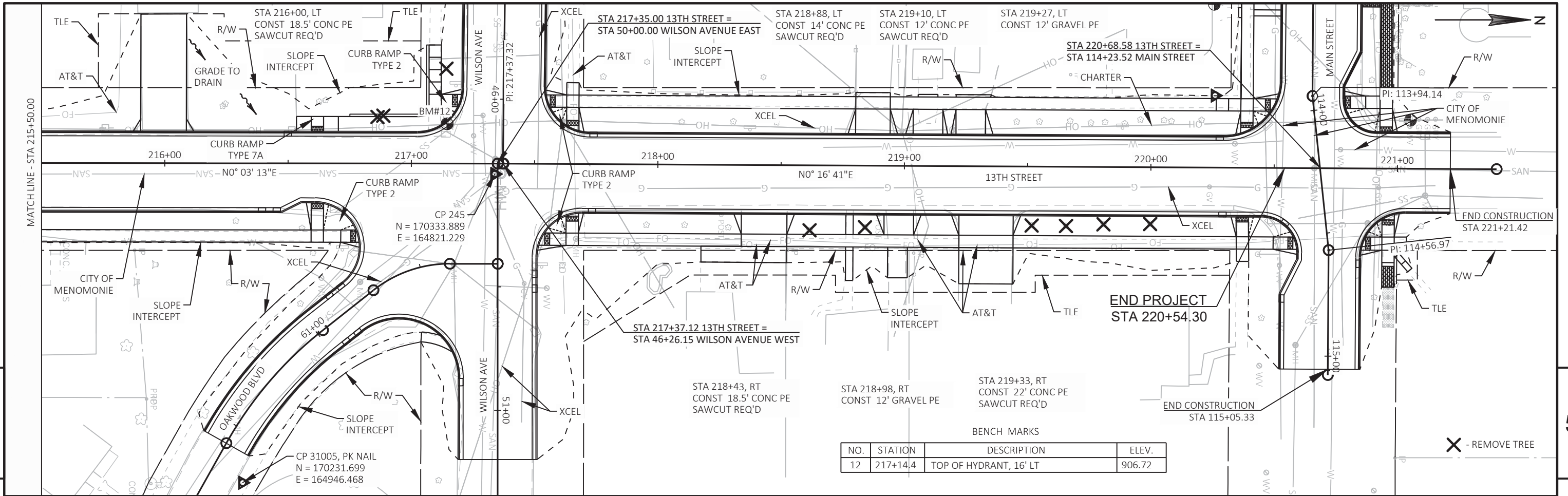
NO.	STATION	DESCRIPTION	ELEV.
9	203+91.1	TOP OF HYDRANT, 39' RT	954.84
10	207+25.8	TOP OF HYDRANT, 17' LT	960.89



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	PLAN AND PROFILE: 13TH ST	SHEET E
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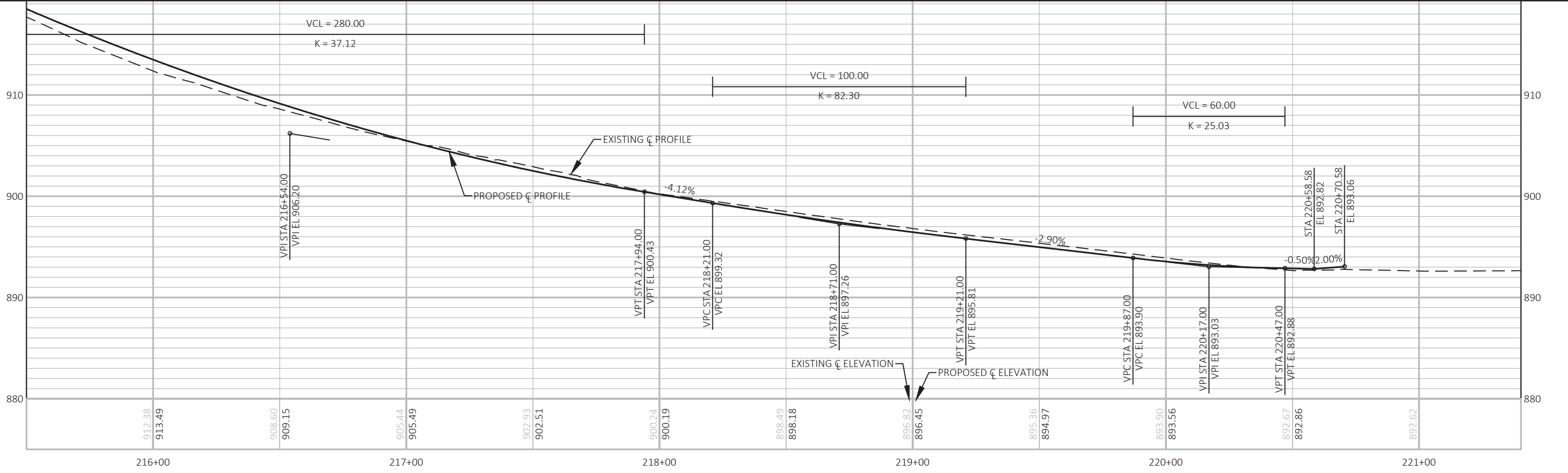


PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PLAN AND PROFILE: 13TH ST SHEET: E

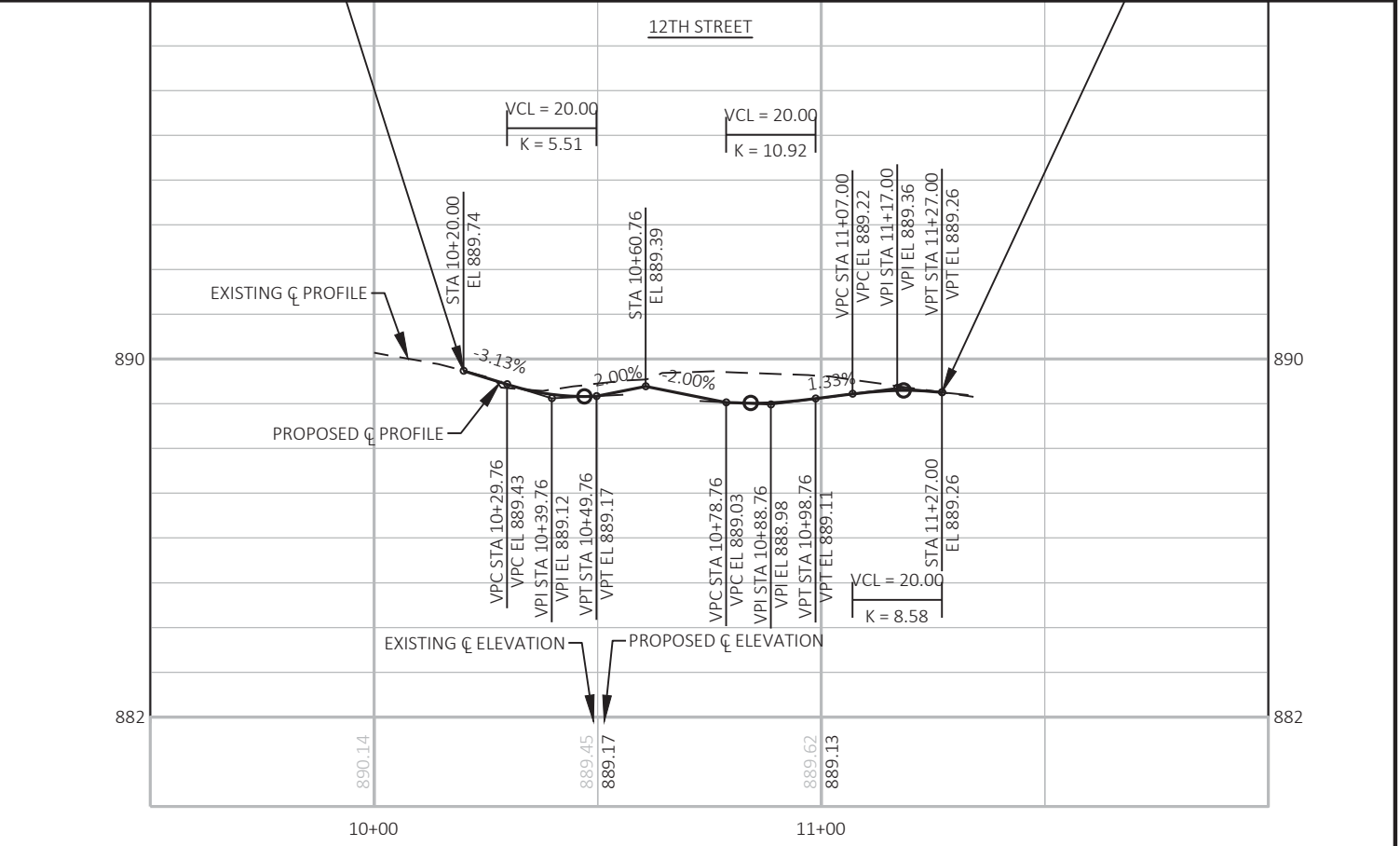
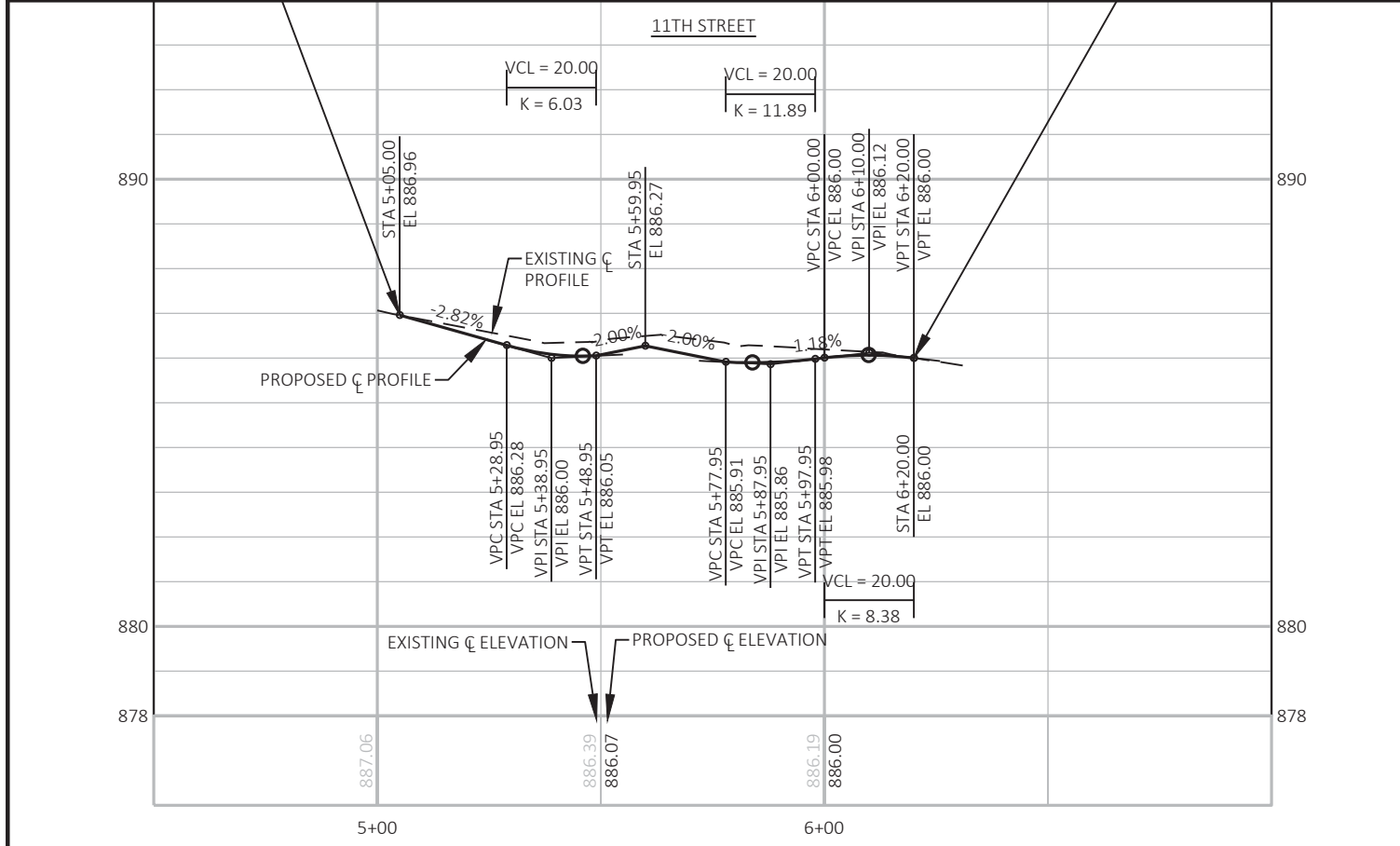
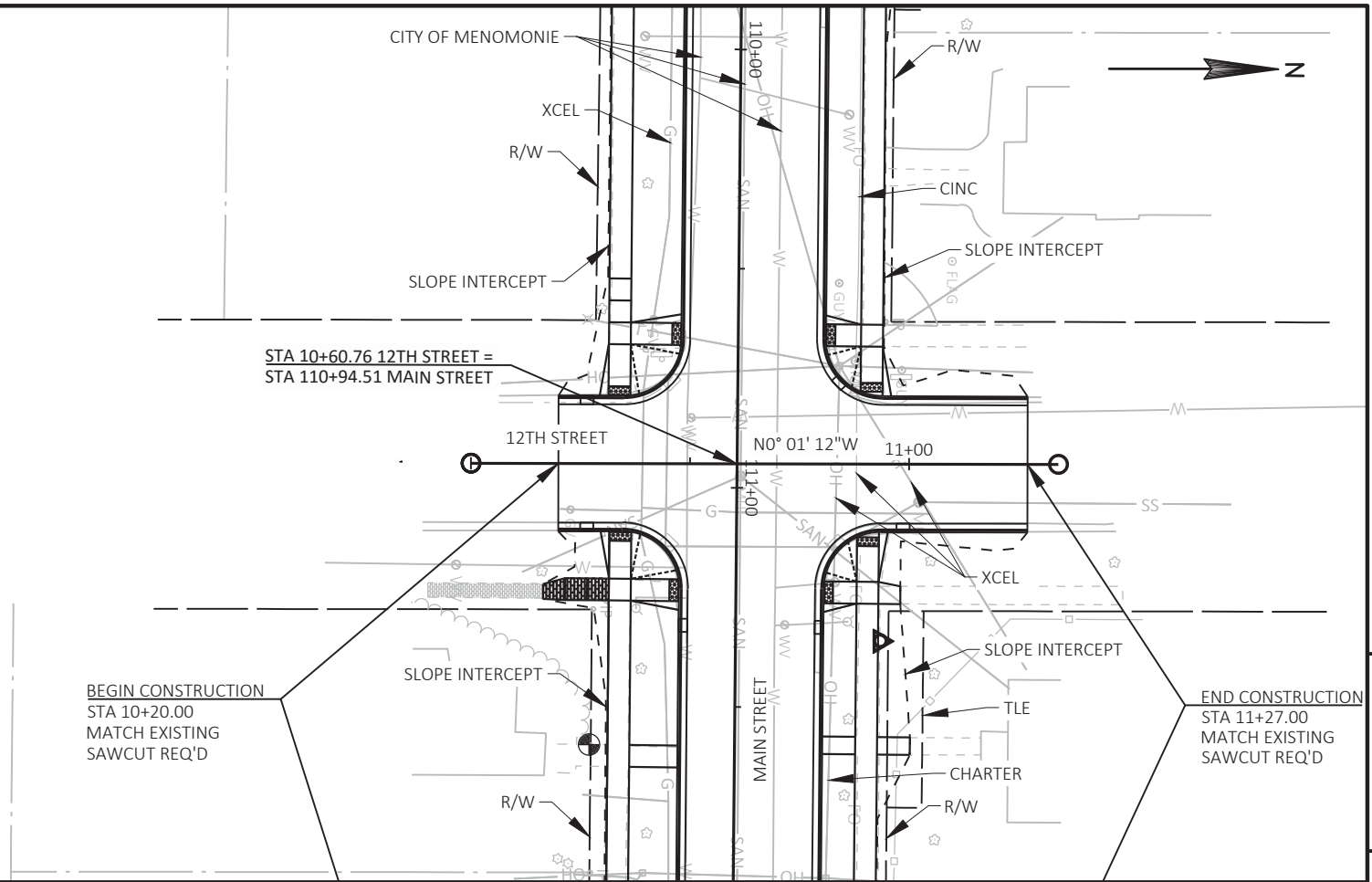
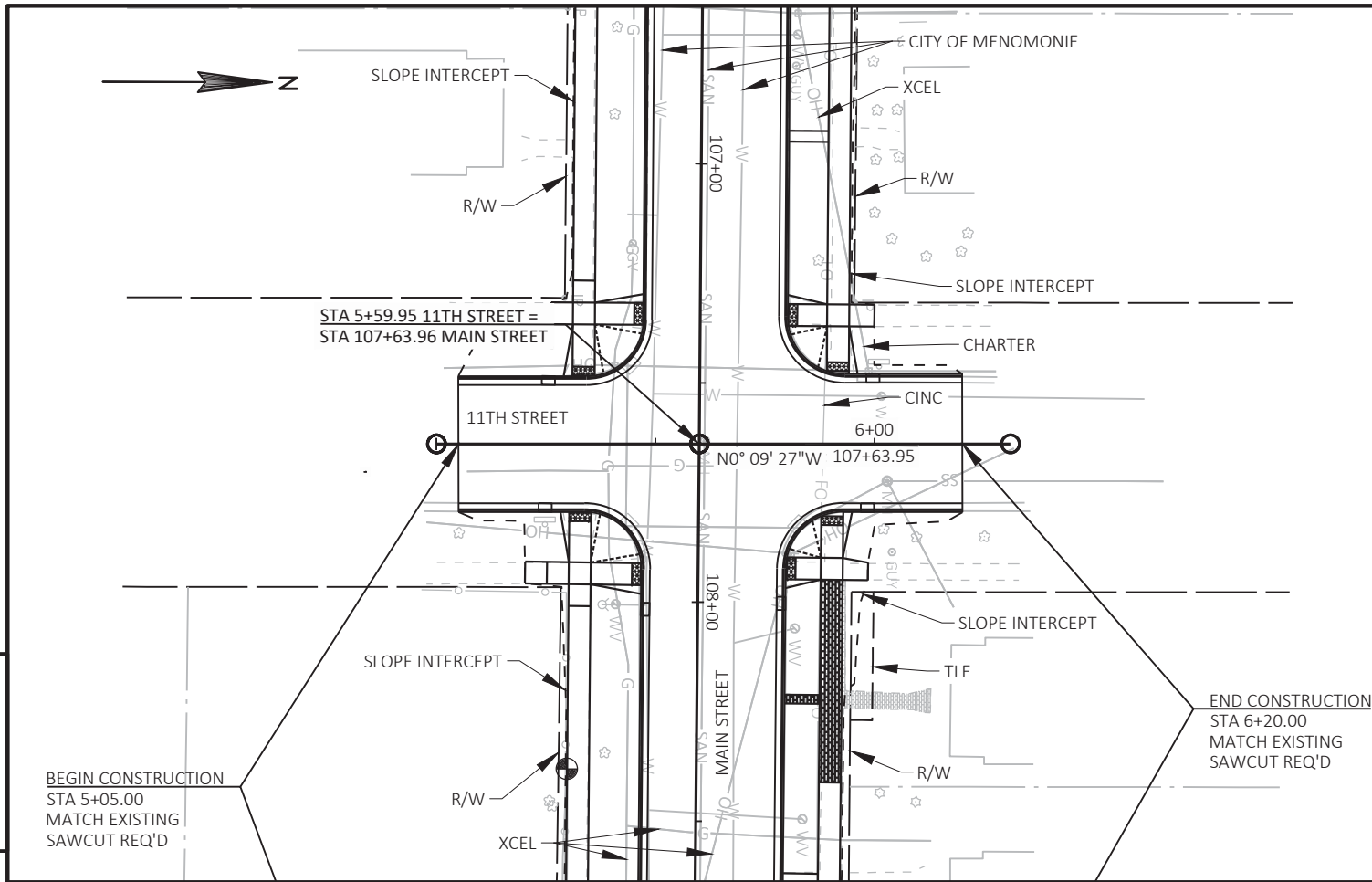


BENCH MARKS

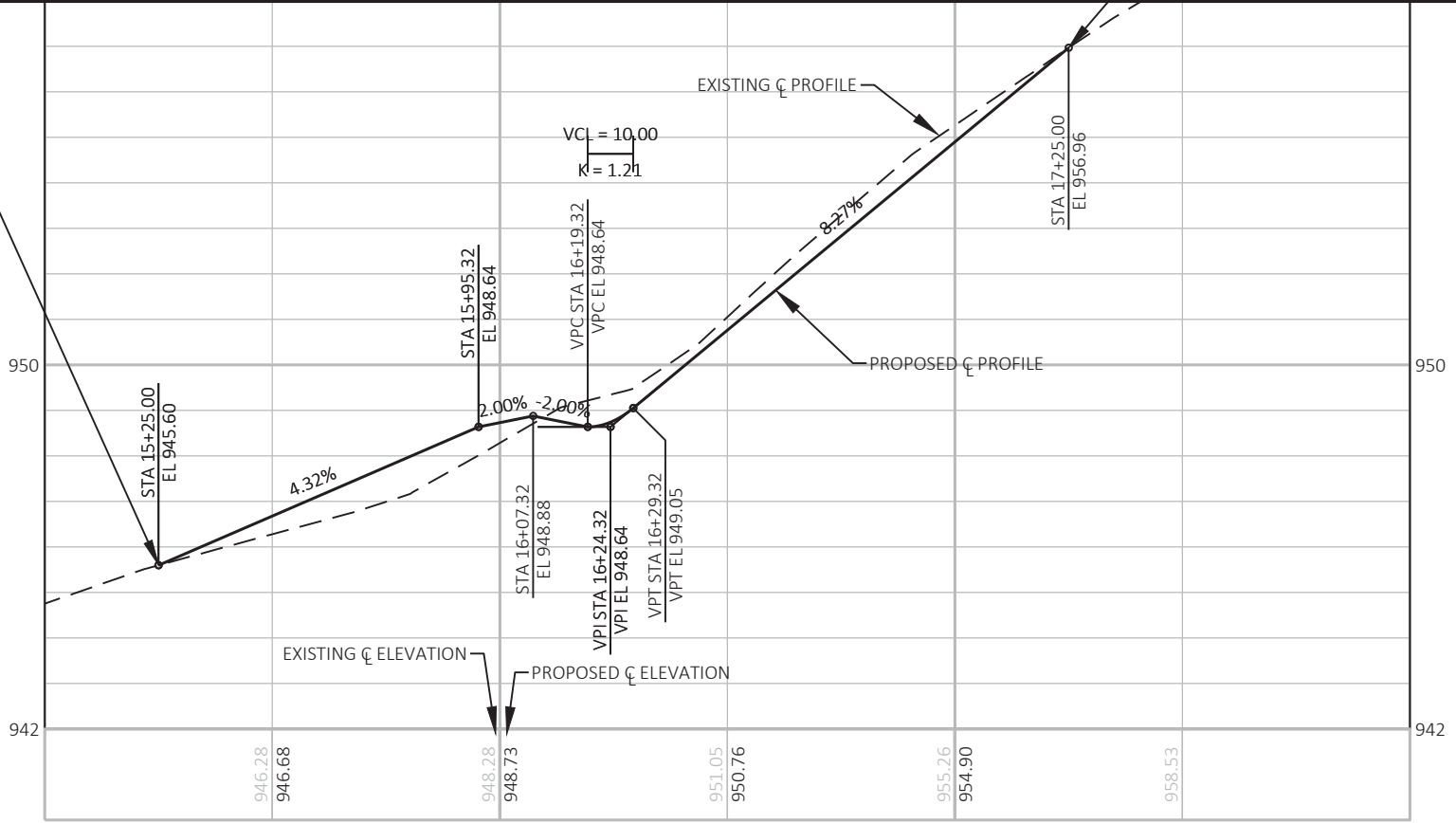
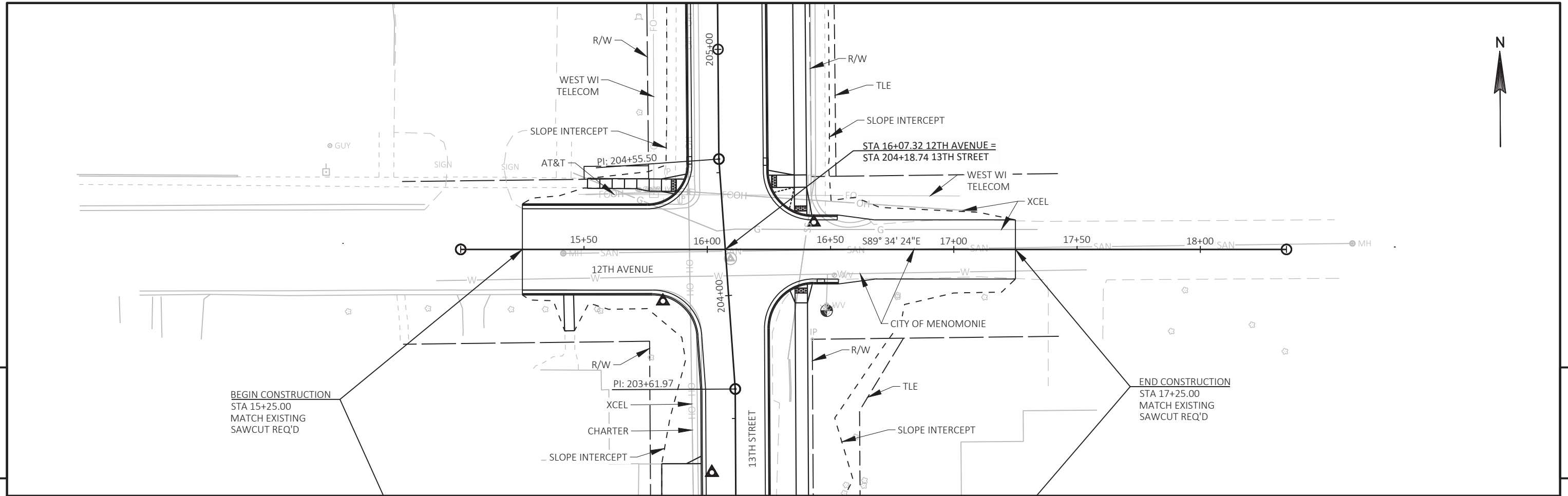
NO.	STATION	DESCRIPTION	ELEV.
12	217+14.4	TOP OF HYDRANT, 16' LT	906.72



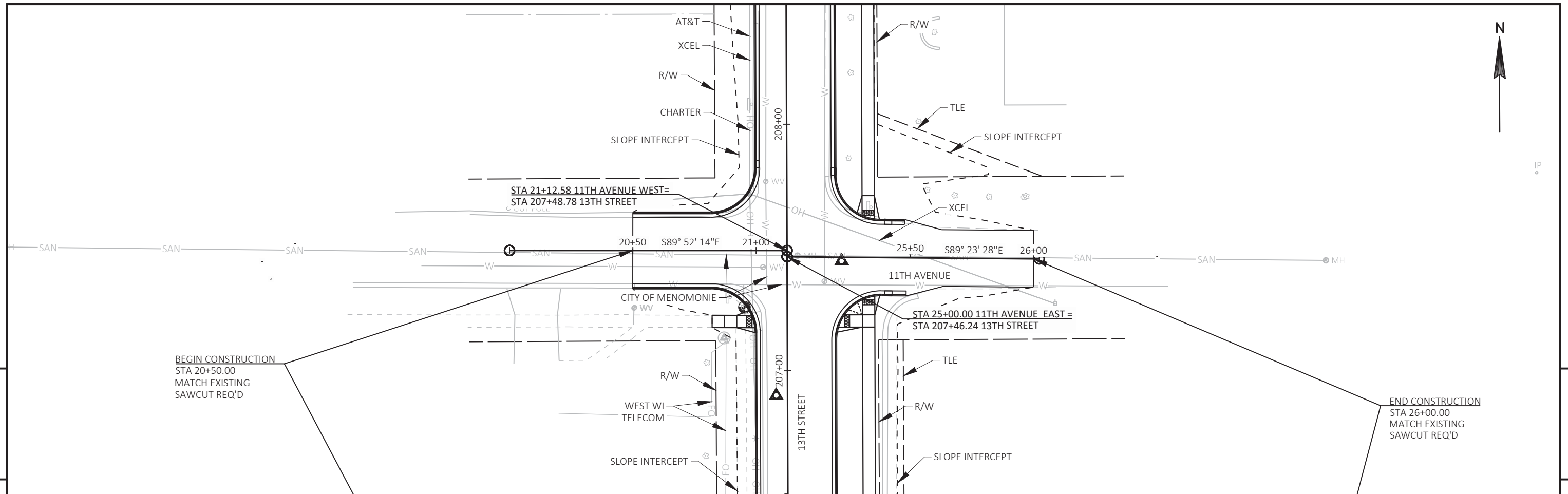
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PLAN AND PROFILE: 13TH ST SHEET: E



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PLAN AND PROFILE: 11TH STREET & 12TH STREET SHEET: 5

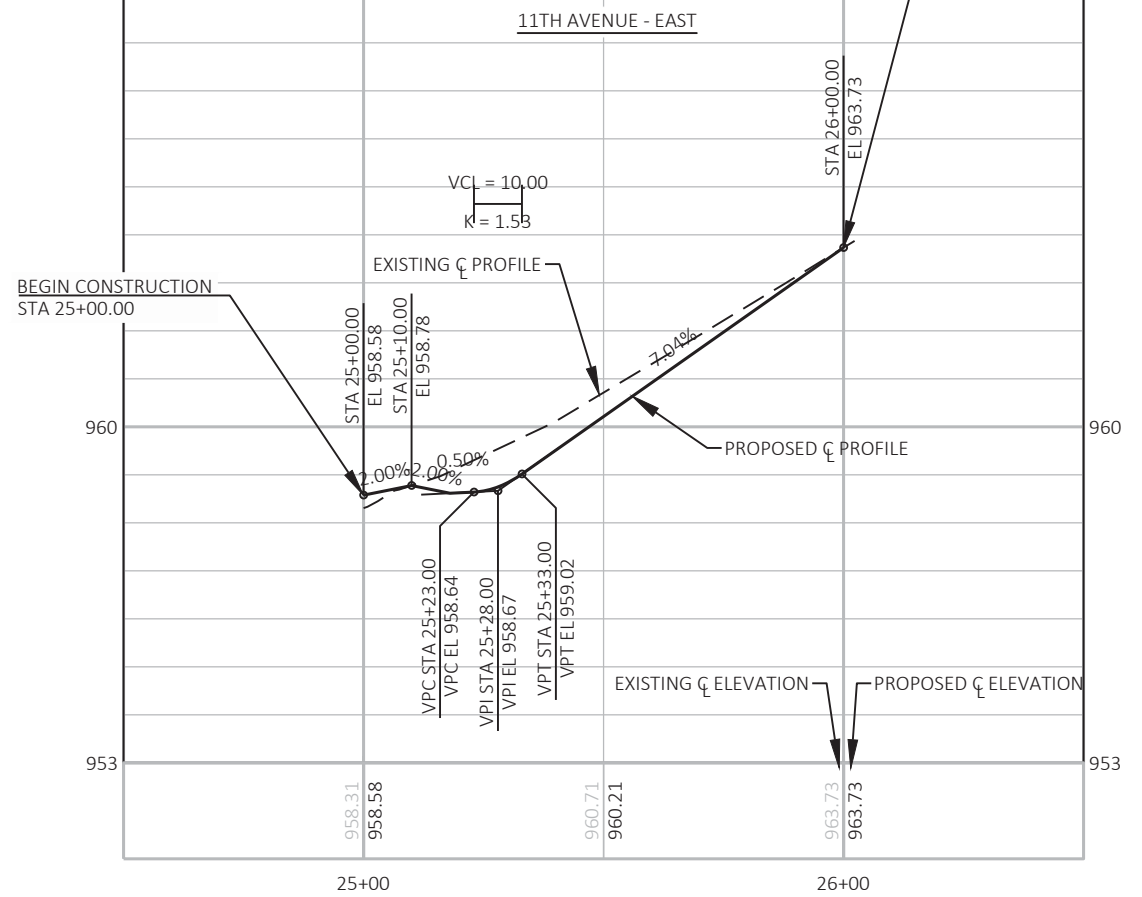
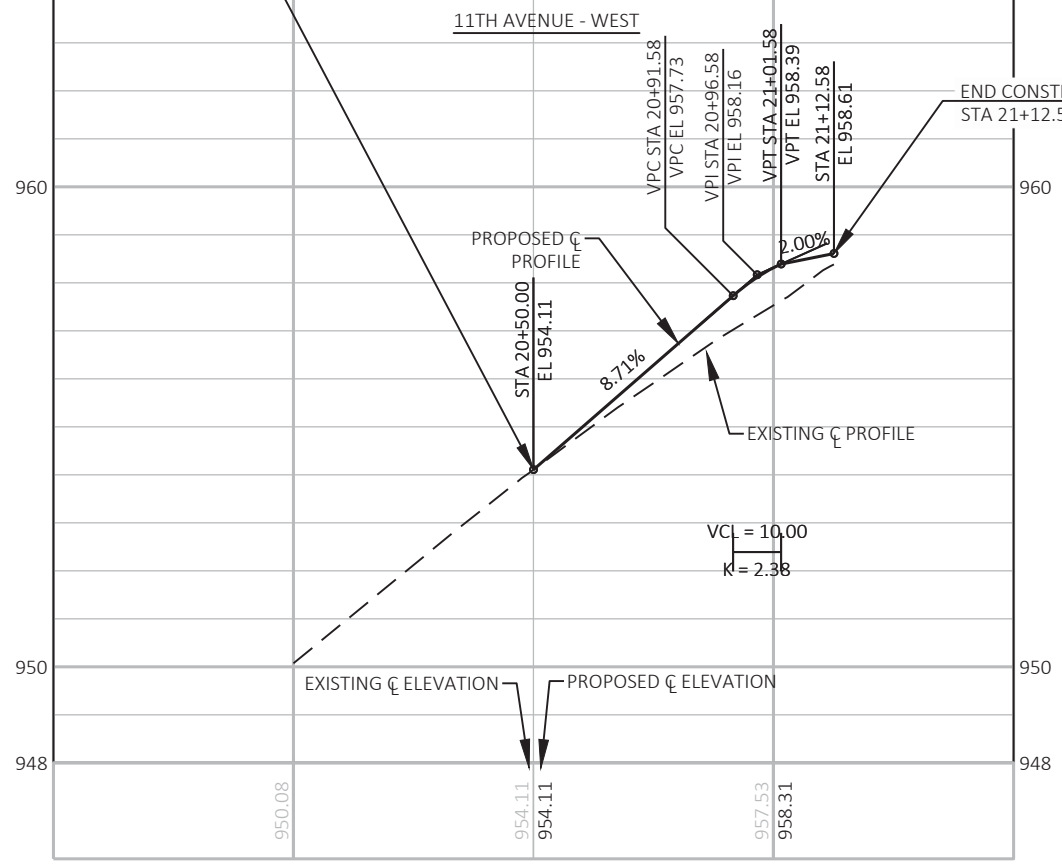


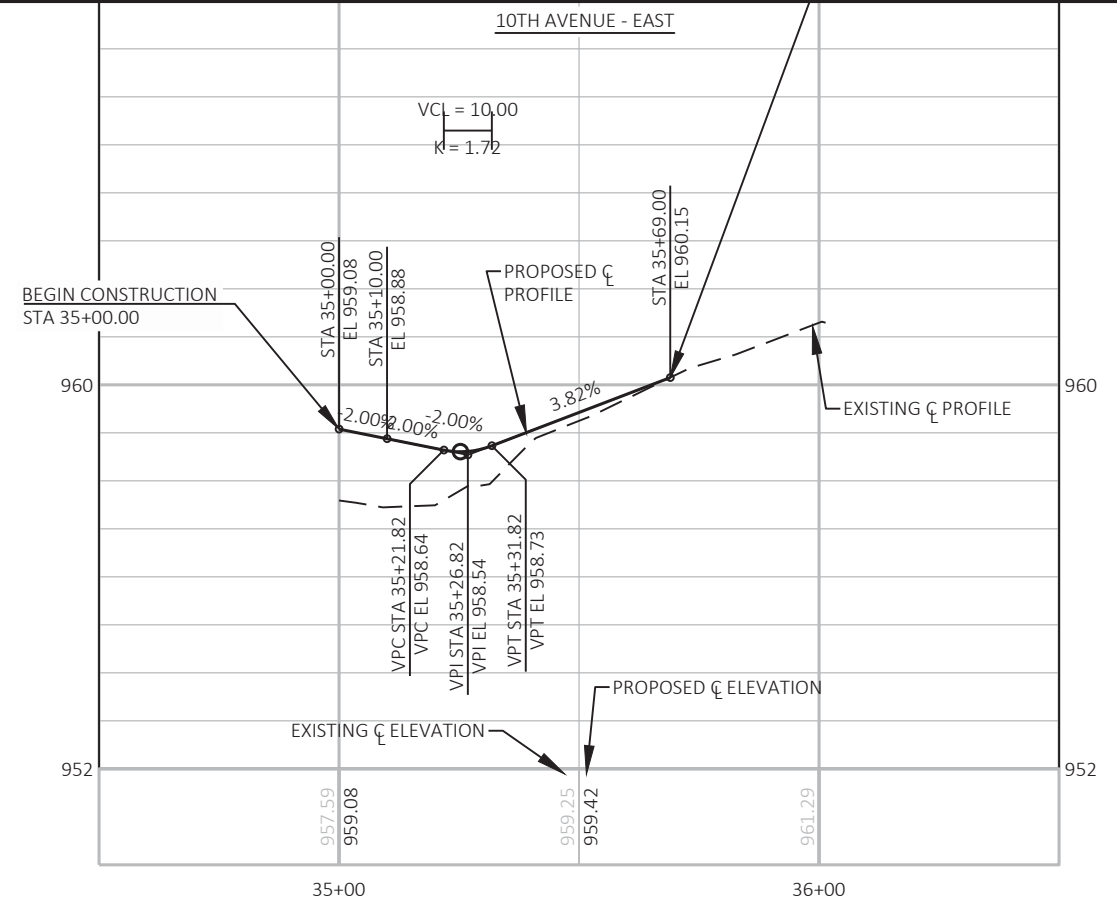
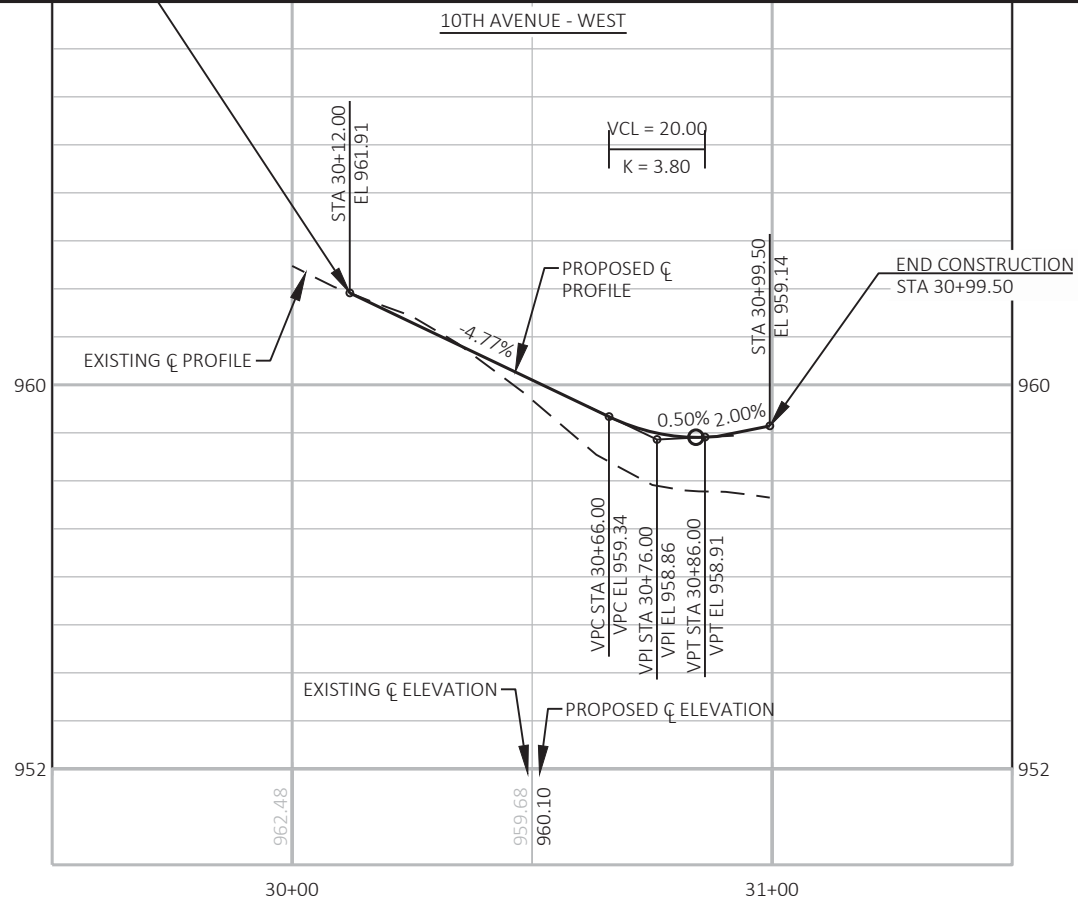
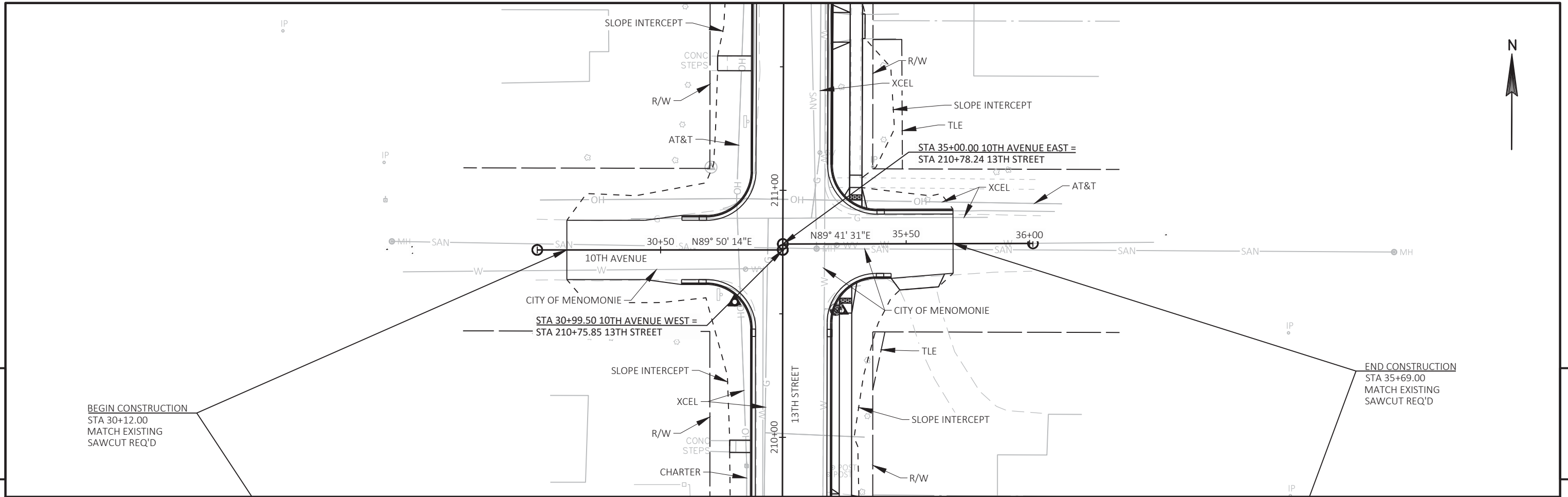
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	PLAN AND PROFILE: 12TH AVENUE	SHEET	E
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BEGIN CONSTRUCTION
 STA 20+50.00
 MATCH EXISTING
 SAWCUT REQ'D

END CONSTRUCTION
 STA 26+00.00
 MATCH EXISTING
 SAWCUT REQ'D

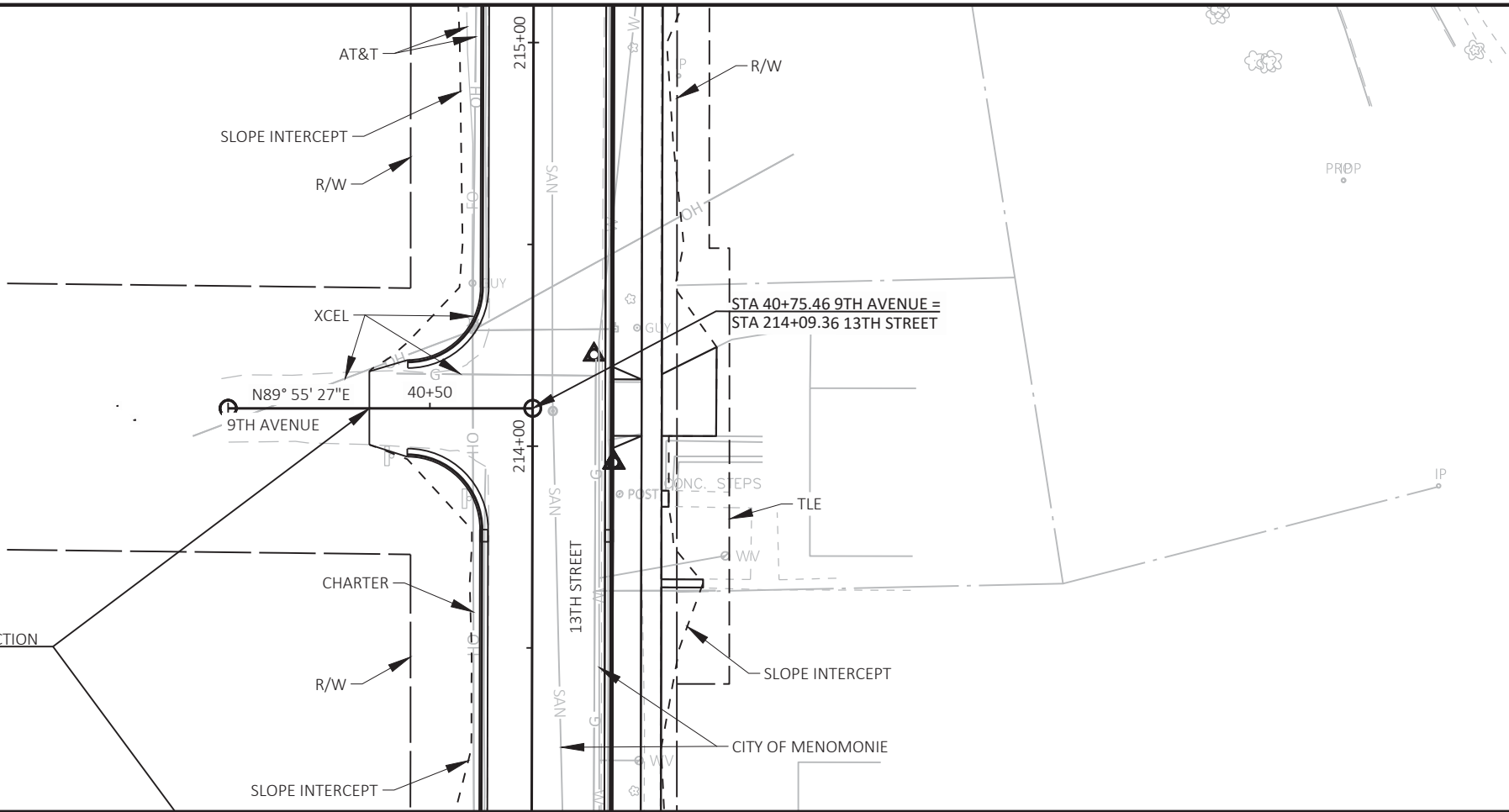




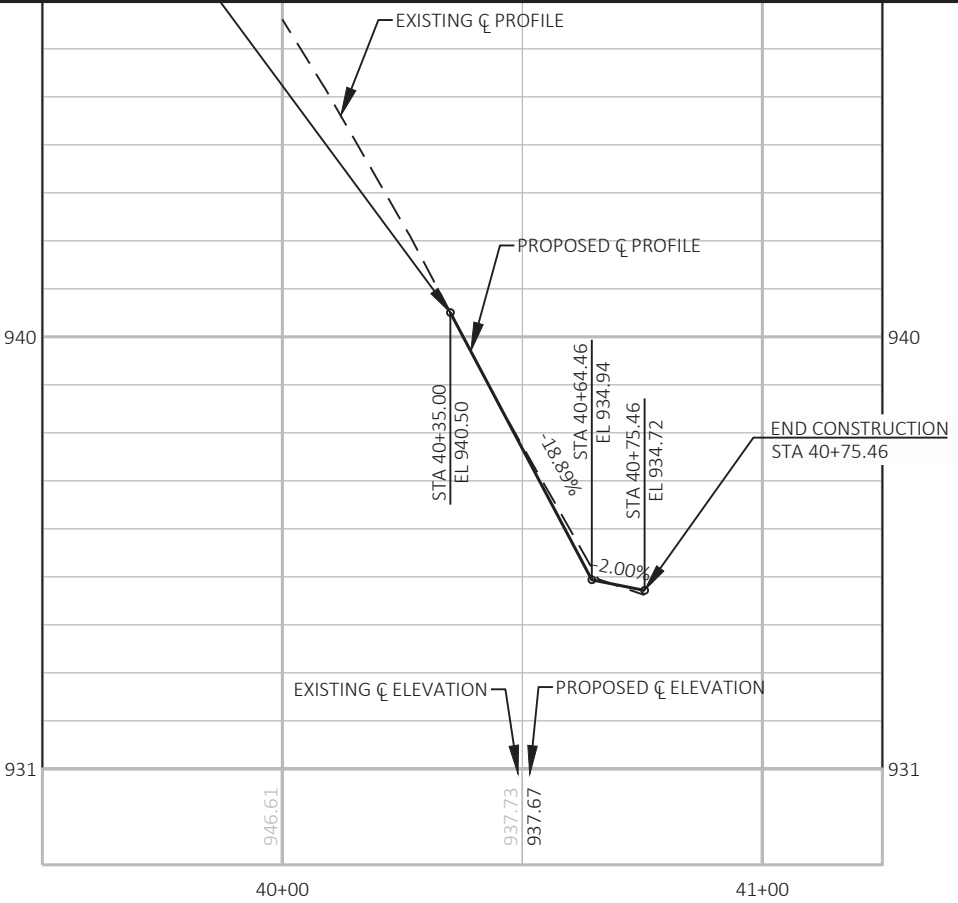
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN PLAN AND PROFILE: 10TH AVENUE SHEET E

5

5



BEGIN CONSTRUCTION
STA 40+35.00
MATCH EXISTING
SAWCUT REQ'D



PROJECT NO: 7996-00-09

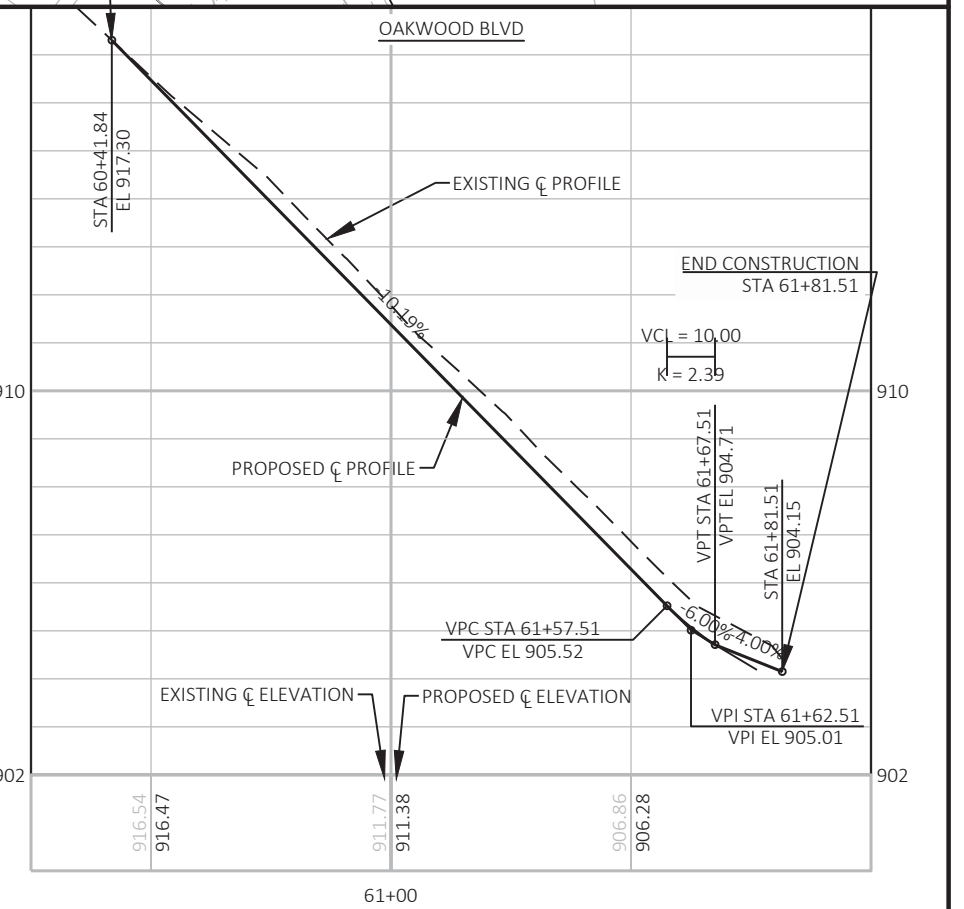
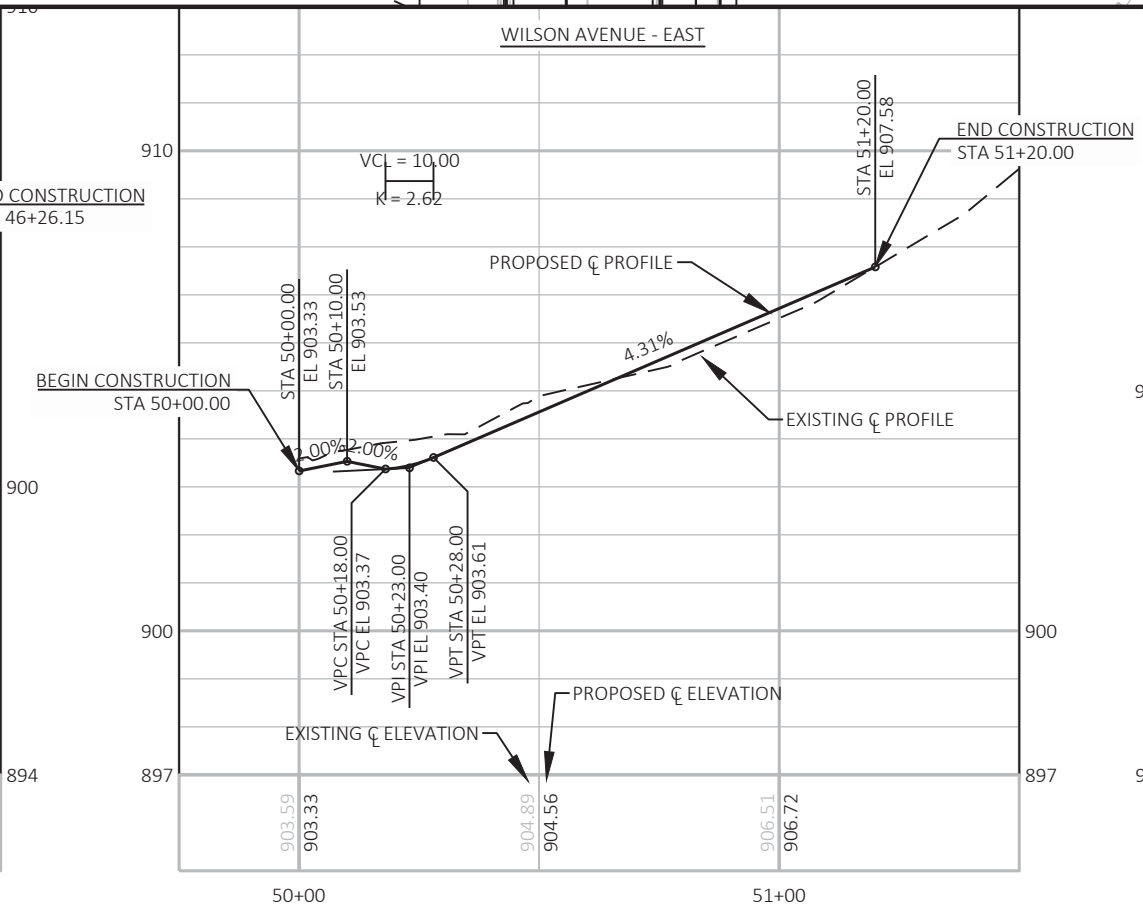
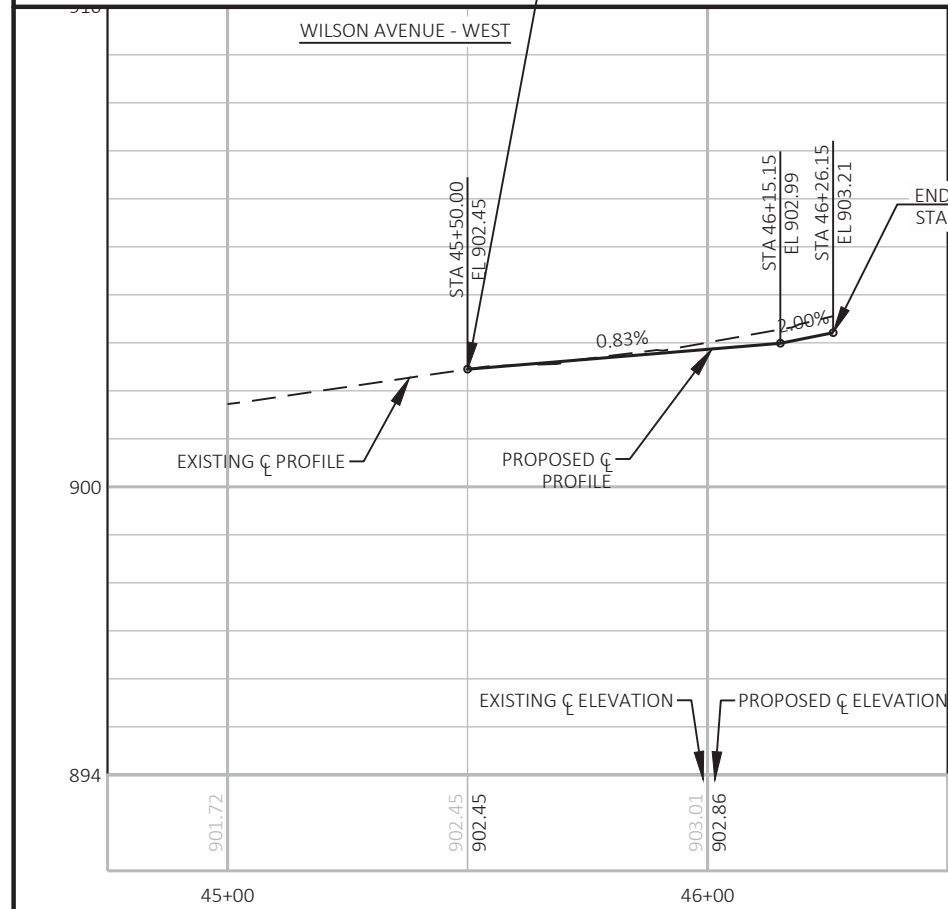
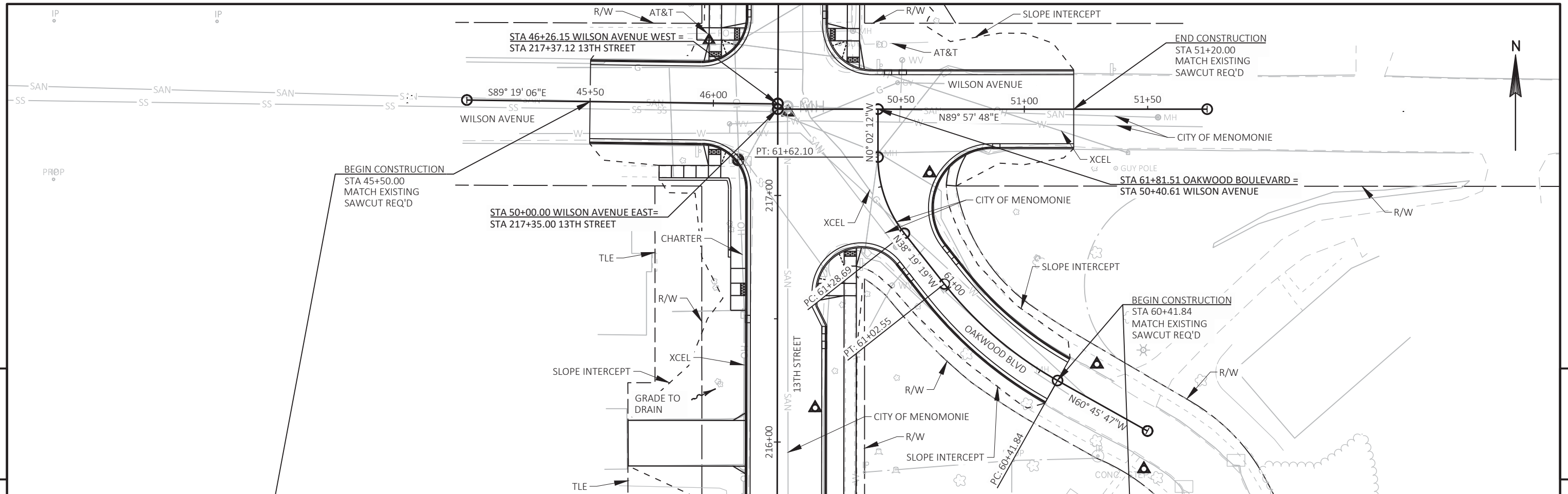
HWY: LOCAL STREET

COUNTY: DUNN

PLAN AND PROFILE: 9TH AVENUE

SHEET

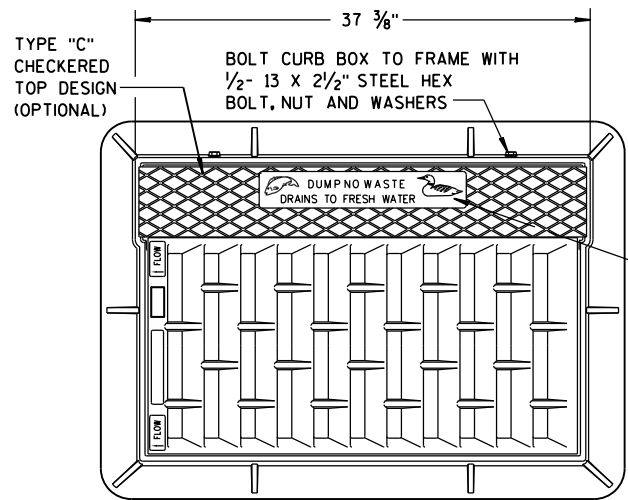
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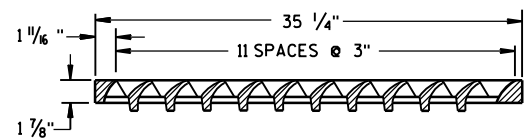
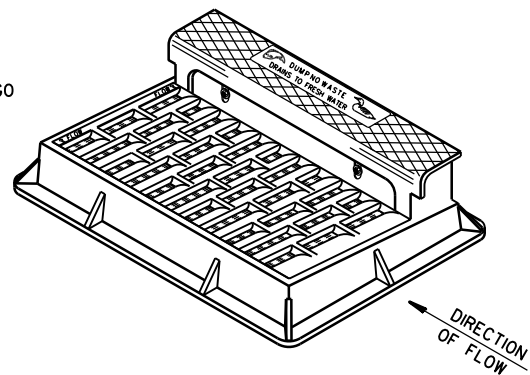
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	PLAN AND PROFILE: WILSON AVENUE & OAKWOOD BLVD	SHEET E
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Standard Detail Drawing List

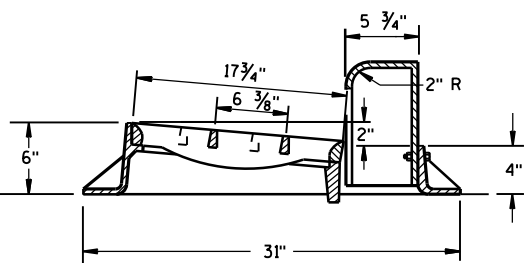
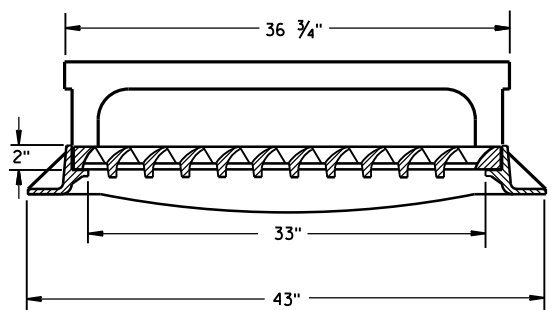
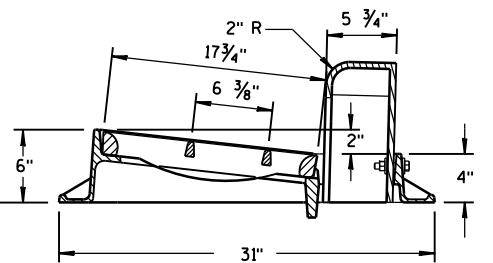
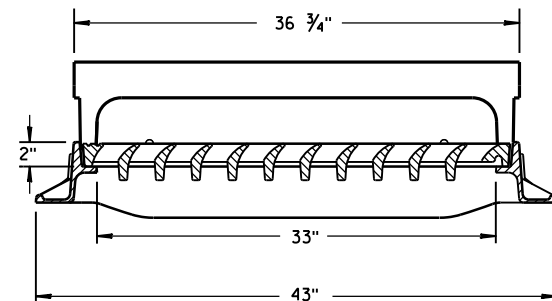
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-02	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-02	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-04	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C29-05B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



**NOTE:
GRATE IS REVERSIBLE.**

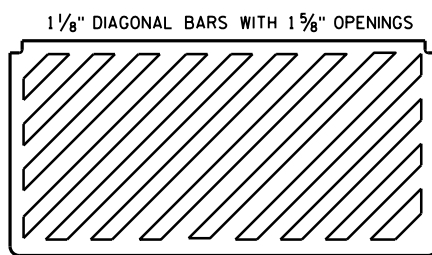


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

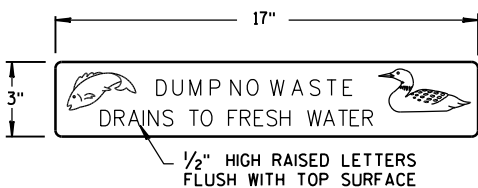


TYPE "H"

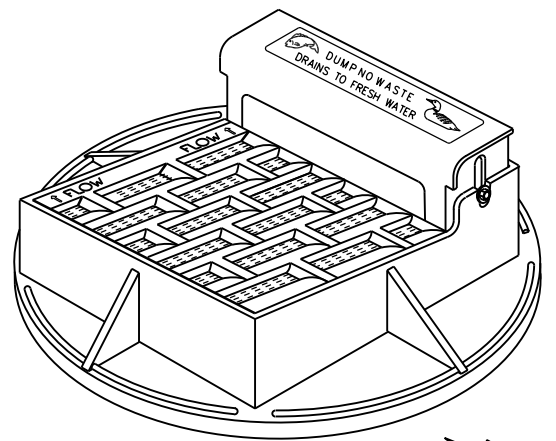
NOTE: EITHER CASTING IS ACCEPTABLE



**SPECIAL GRATE FOR
TYPE "H" COVER**
(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

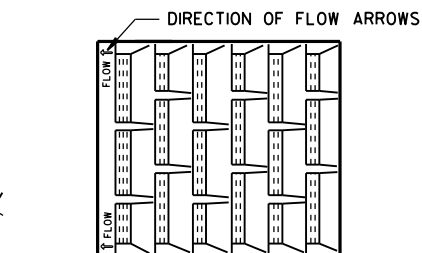
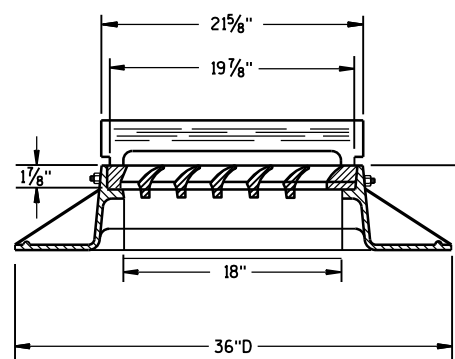


LOGO DETAIL

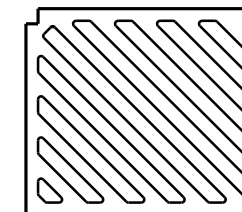


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

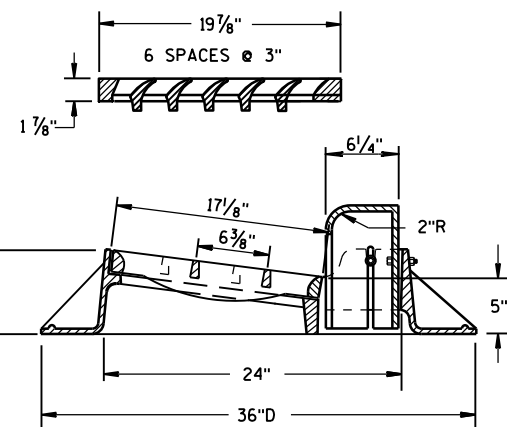
**NOTE:
GRATE IS REVERSIBLE.**



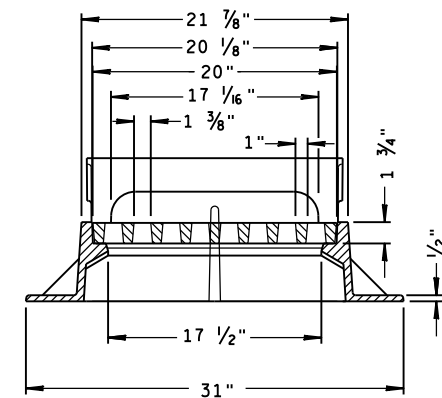
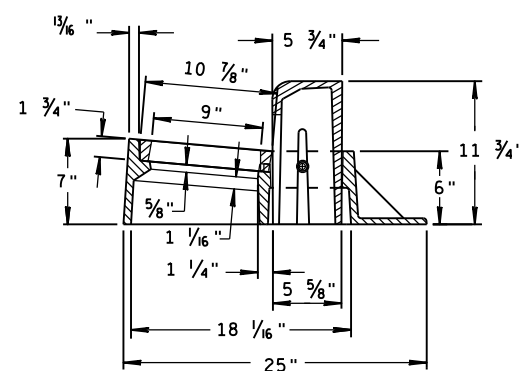
**1" DIAGONAL BARS
WITH 1 1/2" OPENINGS**



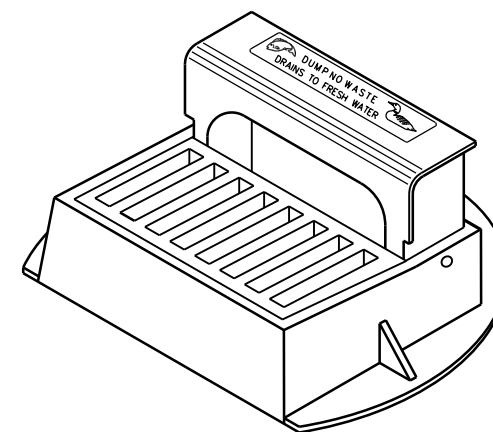
**SPECIAL GRATE FOR
TYPE "A" COVER**
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



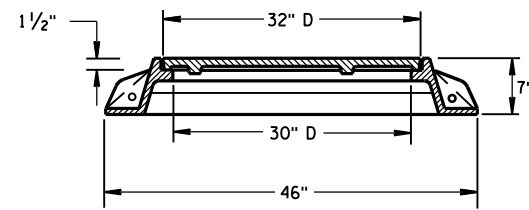
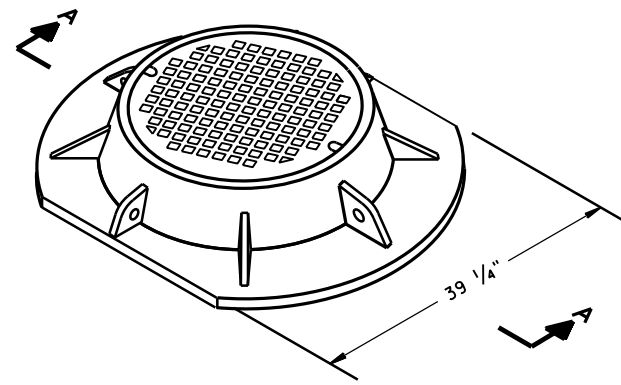
TYPE "Z"



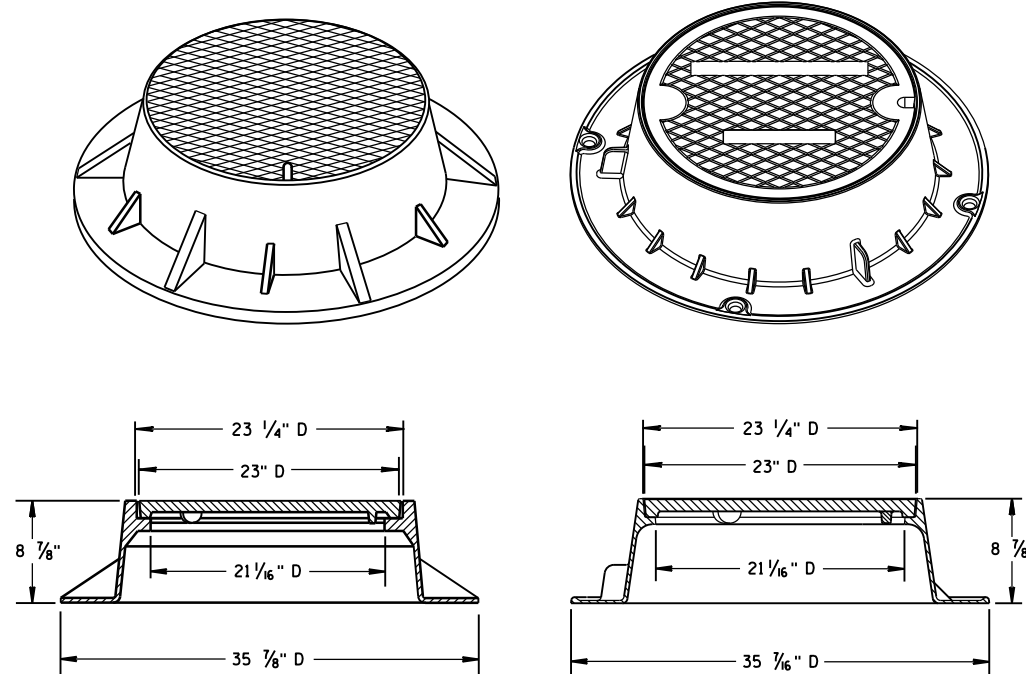
**INLET COVERS
TYPE A, H, A-S, H-S & Z**

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
11-27-13
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

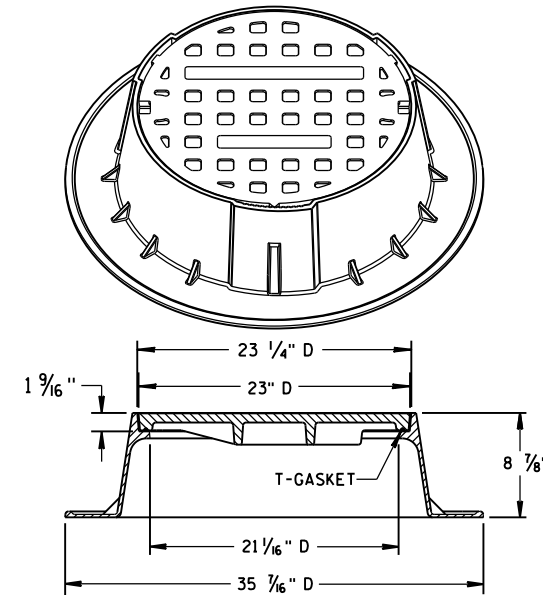


SECTION A-A
TYPE "K"



TYPE "J"

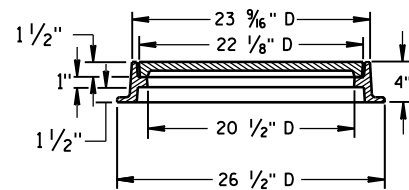
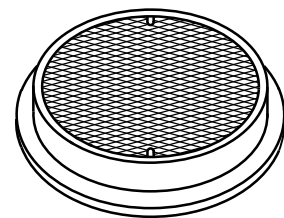
NOTE: EITHER CASTING IS ACCEPTABLE



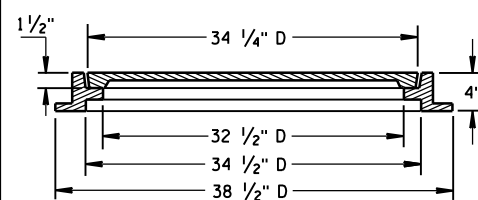
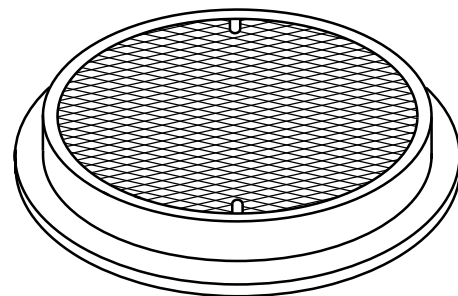
TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

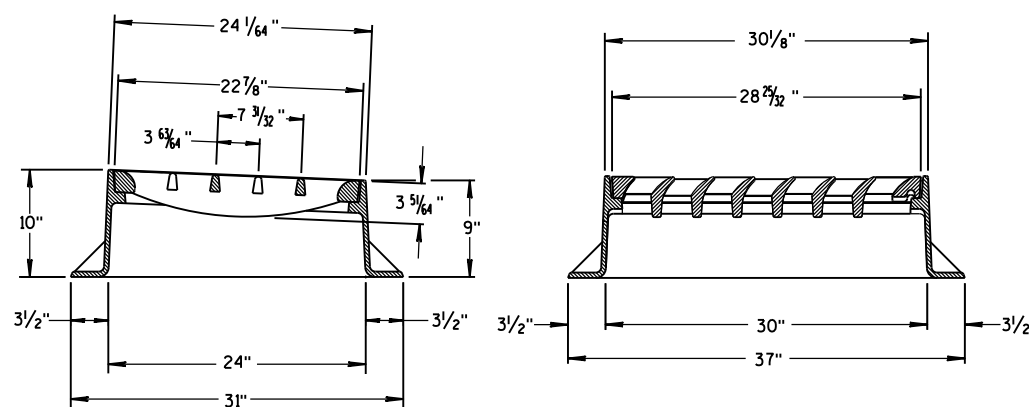
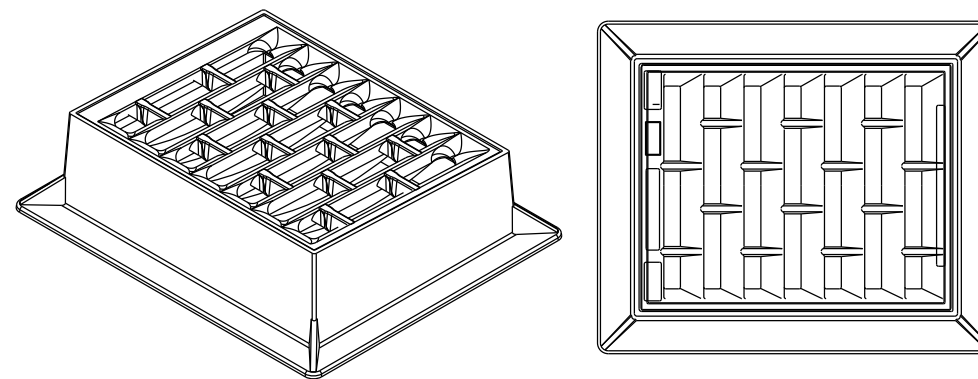
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

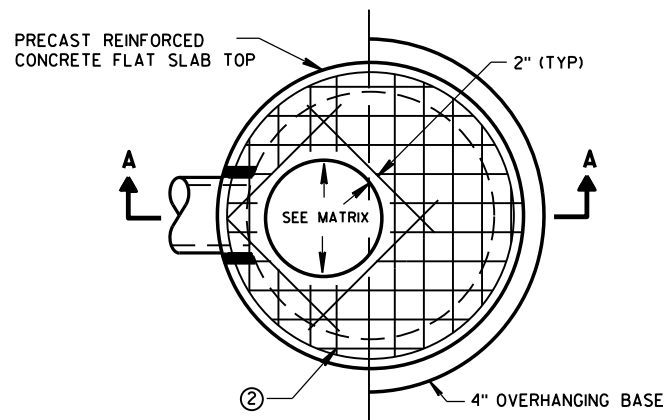
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

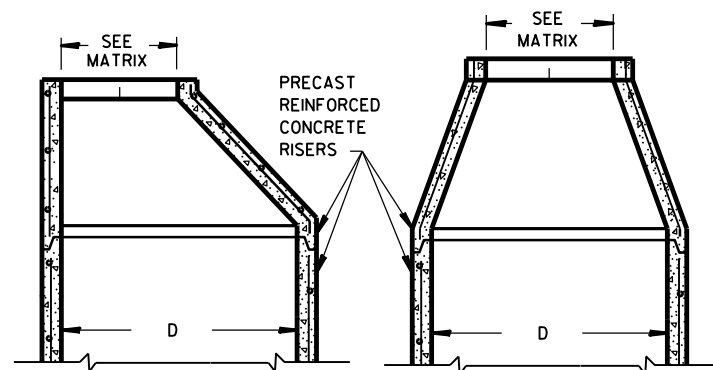
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

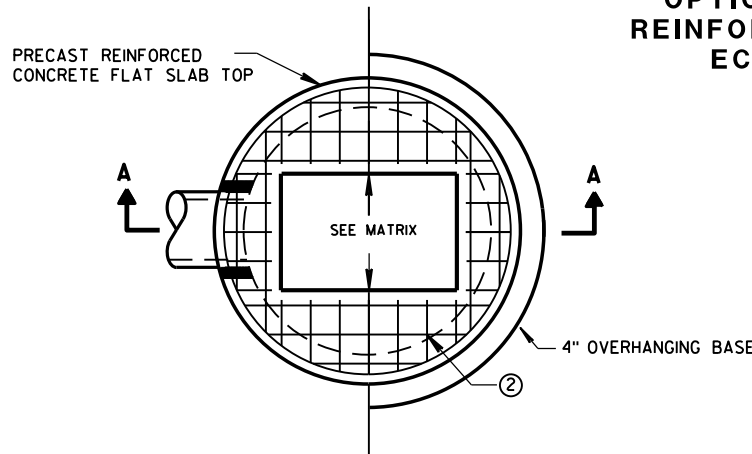


PLAN VIEW CIRCULAR OPENING

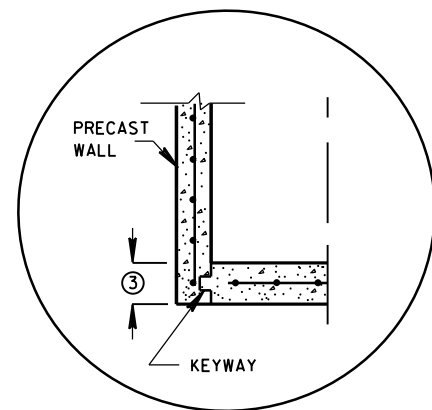


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

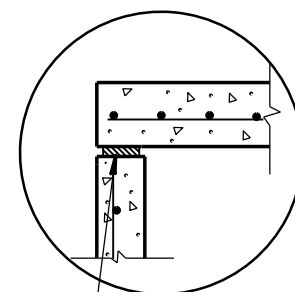


PLAN VIEW RECTANGULAR OPENING

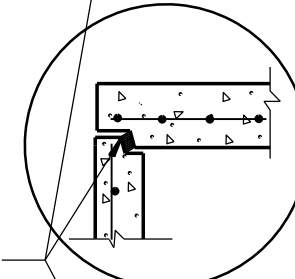


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

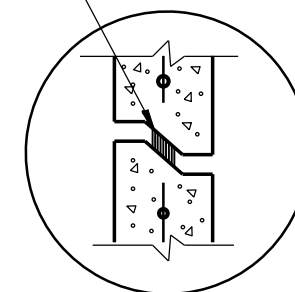
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



TOP WITH PLAIN END JOINT

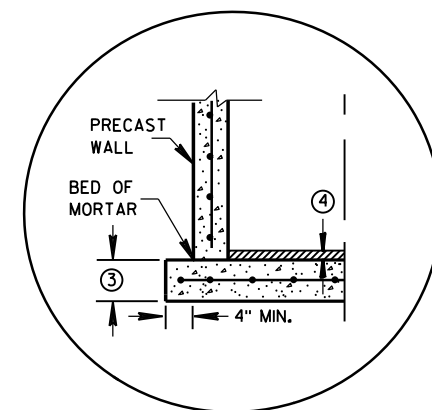


TOP WITH TONGUE AND GROOVE JOINT



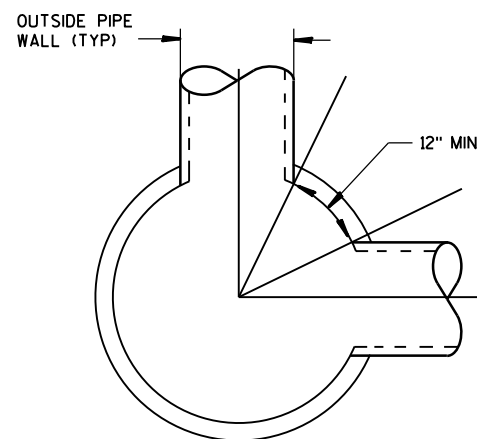
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

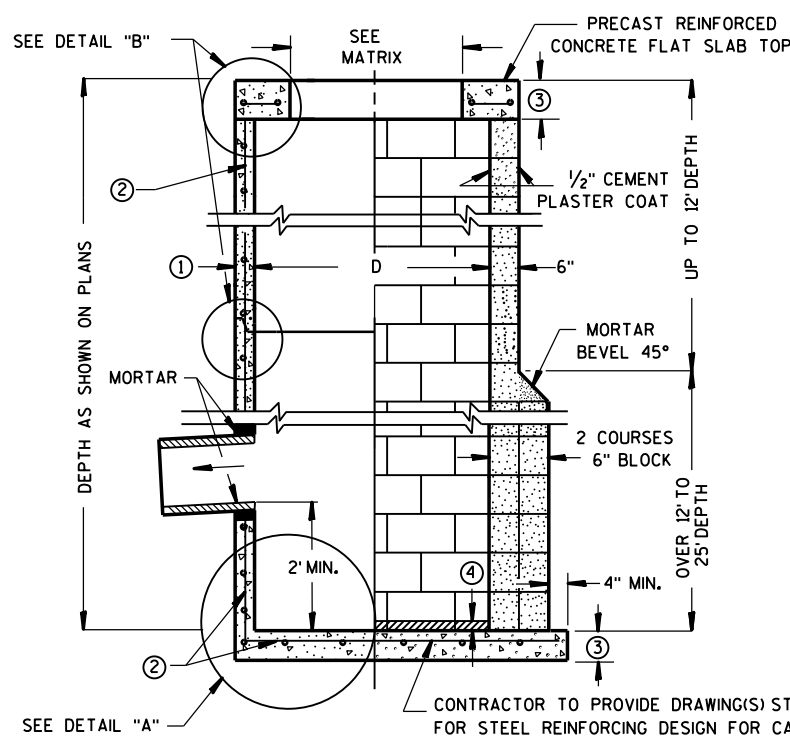


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".
- ④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2" SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE OPENING SIZE (FT)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2X2	X	X					X		X		
	2 DIA.				X					X		X
4-FT- 6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3											

PIPE MATRIX

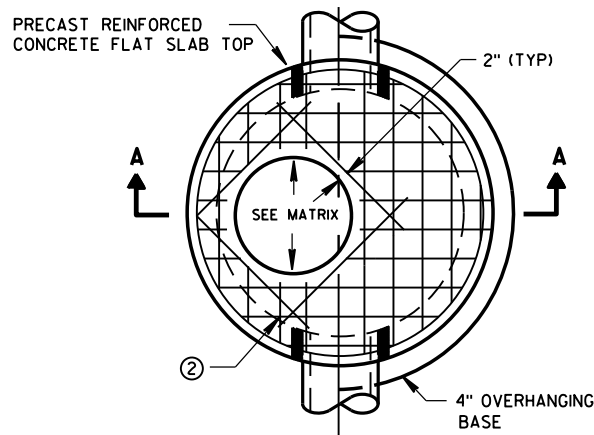
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

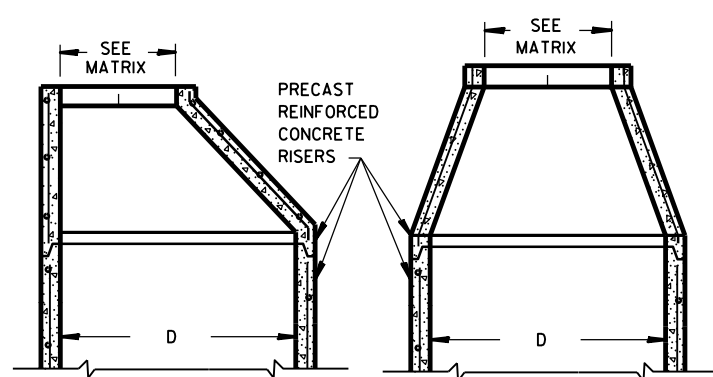
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sep 1, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

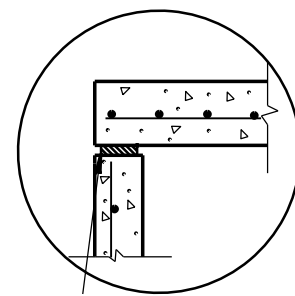


PLAN VIEW CIRCULAR OPENING

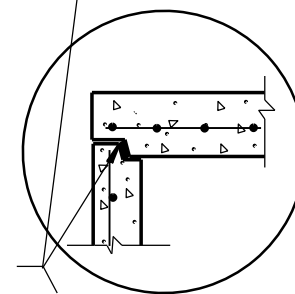


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

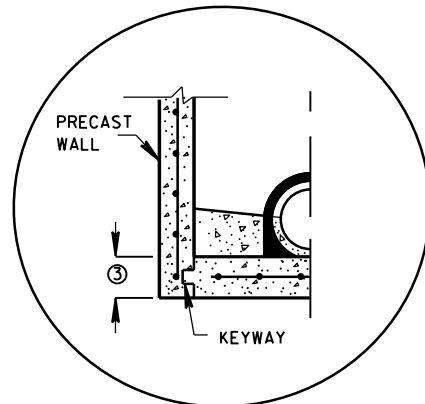
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

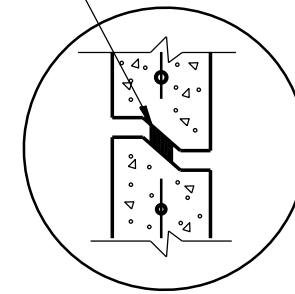


TOP WITH TONGUE AND GROOVE JOINT



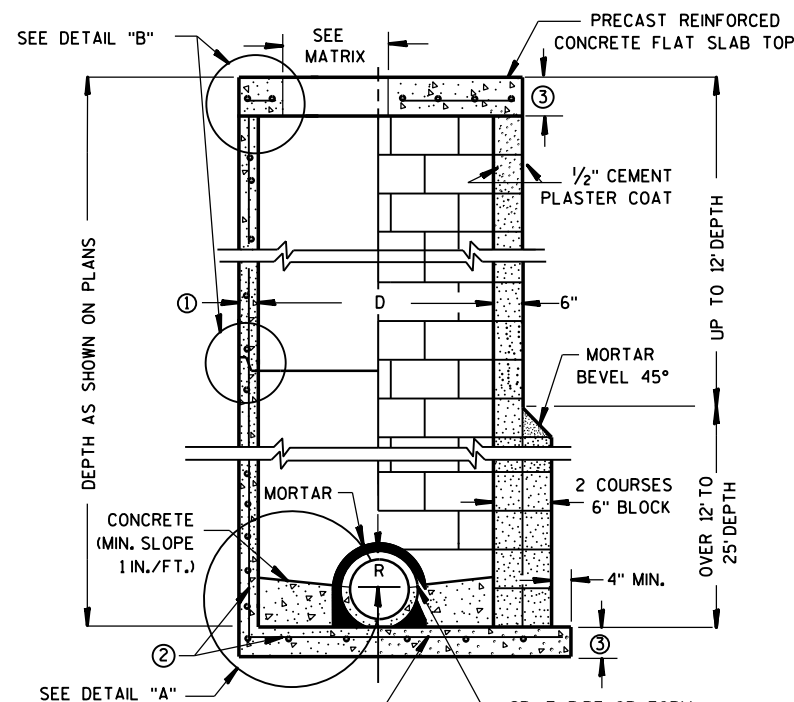
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



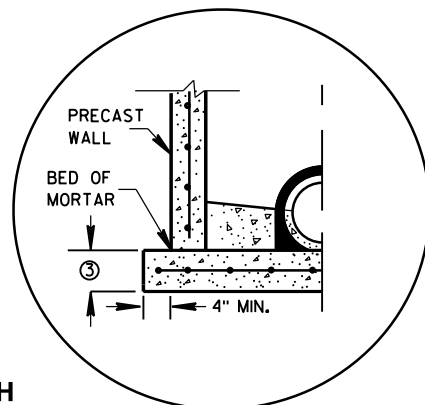
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



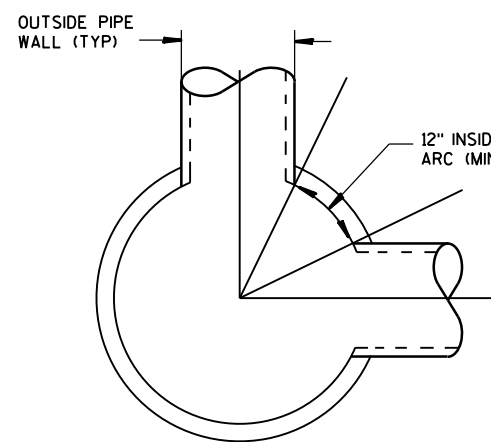
CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CONCRETE WITH MONOLITHIC BASE OR CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED. CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

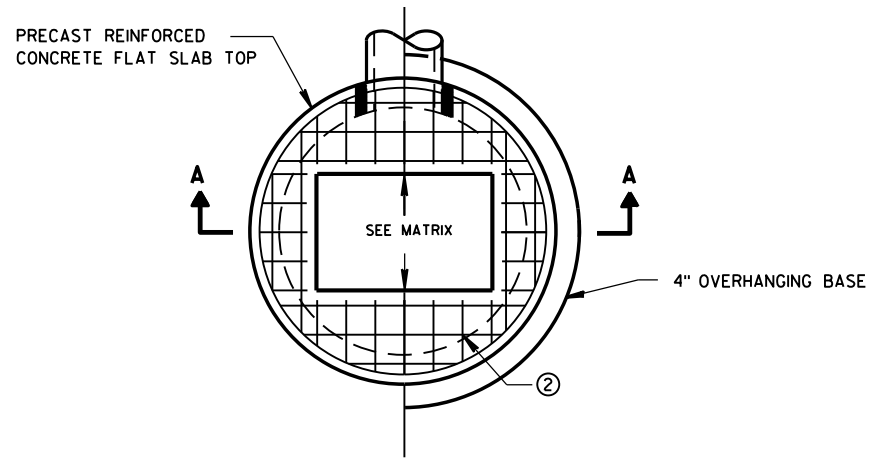
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

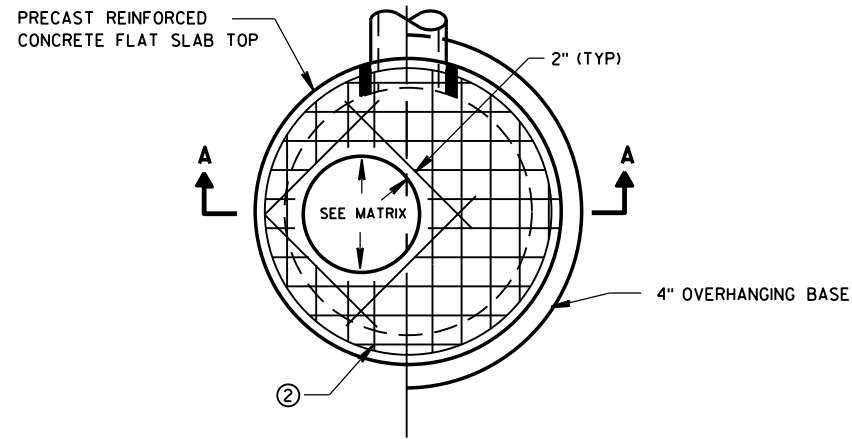
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DATE: Sept., 2016 /S/ Rodney Taylor
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FHWA

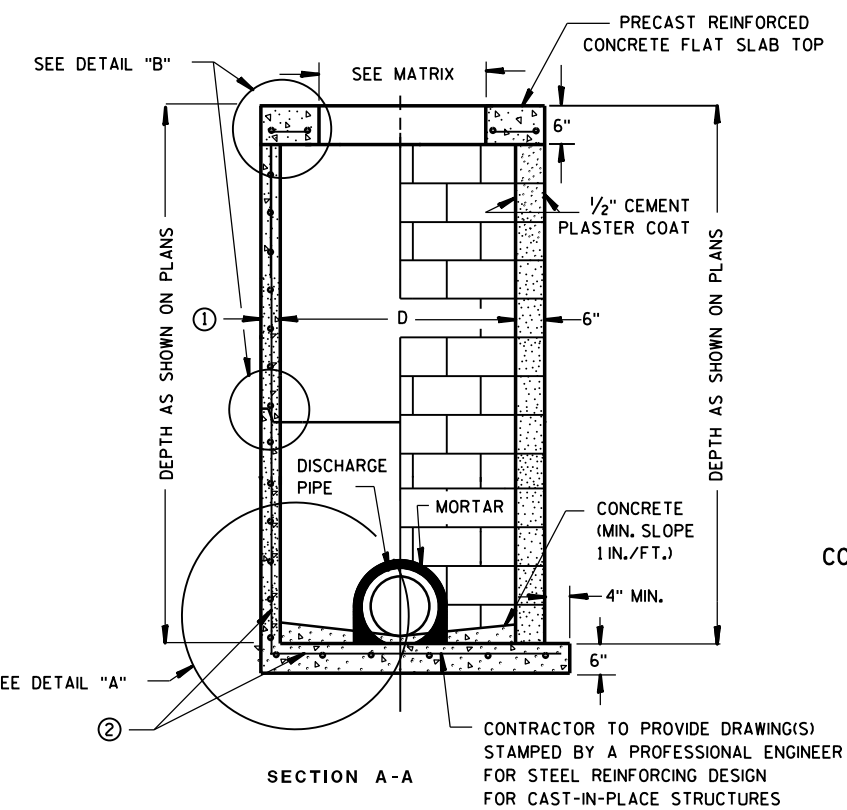
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



PLAN VIEW RECTANGULAR OPENING



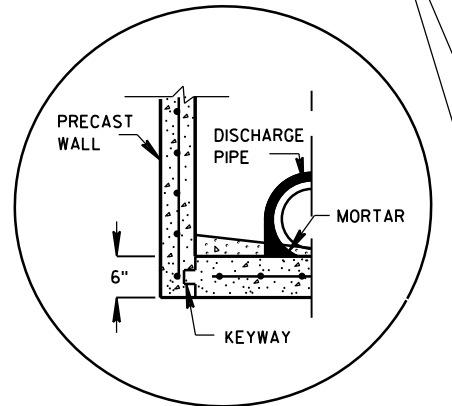
PLAN VIEW CIRCULAR OPENING



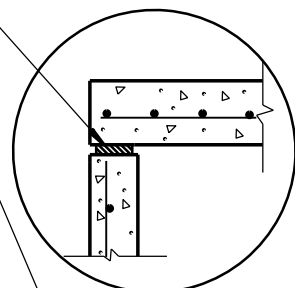
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE **CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE** ②

CIRCULAR INLETS W/ FLAT TOP

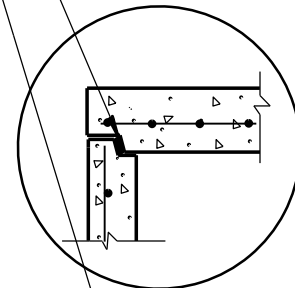
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



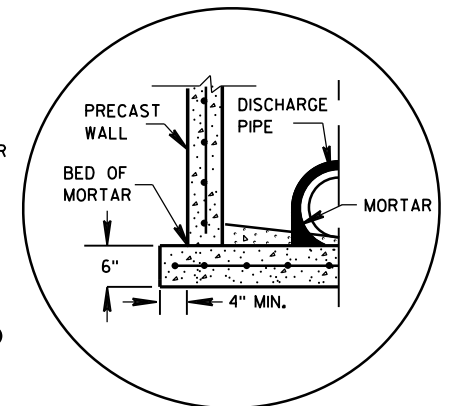
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



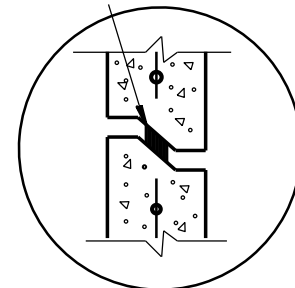
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

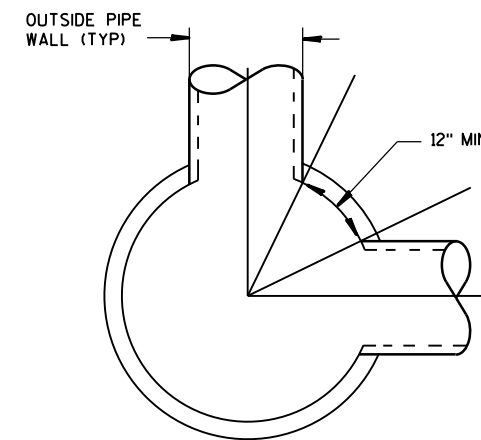
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X	X	
	2X2.5			X								
	2X3						X					
	2.5X3					X						



DETAIL "C"

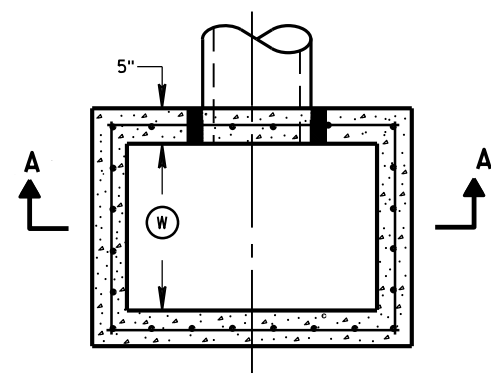
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

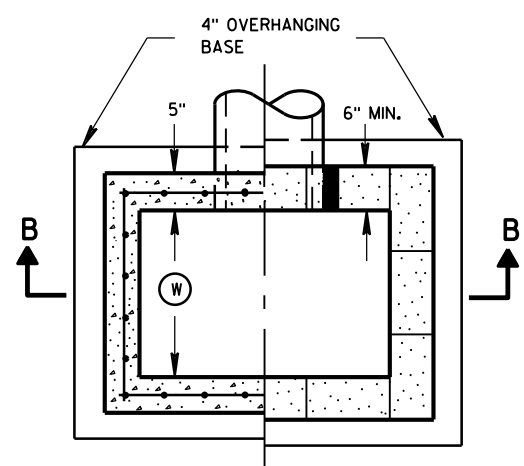
INLETS 3-FT AND 4-FT DIAMETER

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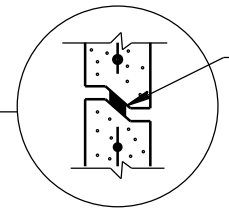
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 Sept., 2016 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
 FHWA



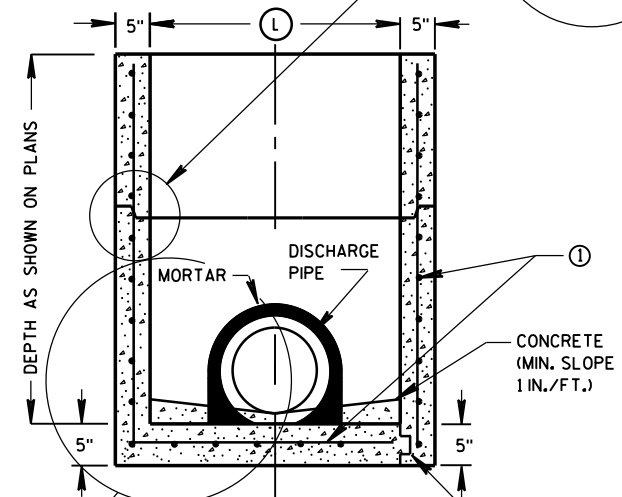
PLAN VIEW



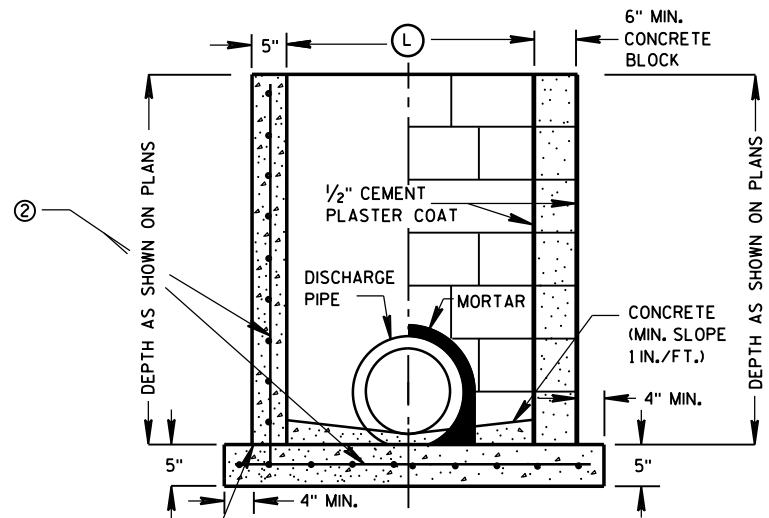
PLAN VIEW



RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



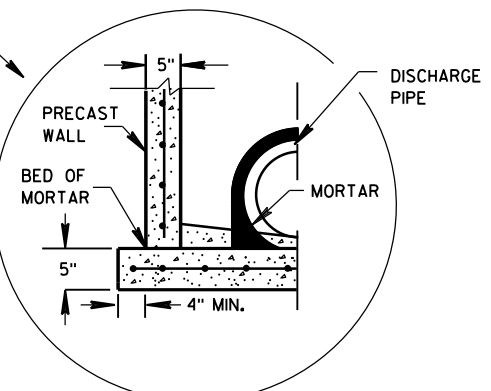
SECTION A-A



SECTION B-B

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE
 PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE
 KEYWAY

CONSTRUCTION JOINT
 CAST-IN-PLACE REINFORCED CONCRETE
 CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ①



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

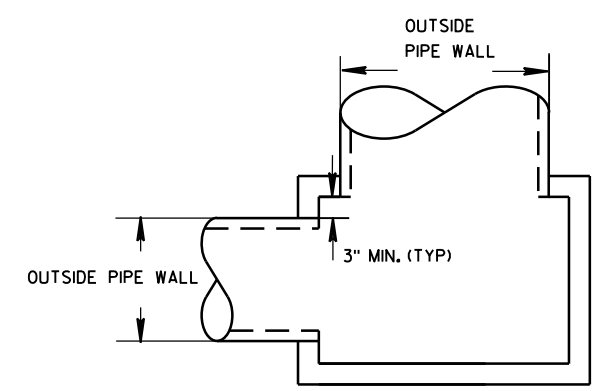
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE	INLET COVER TYPE		ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3				X					
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



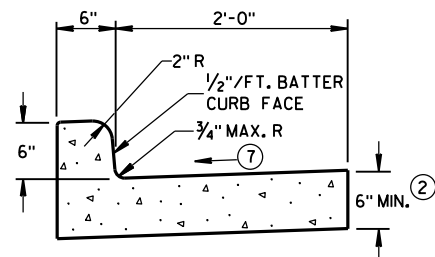
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

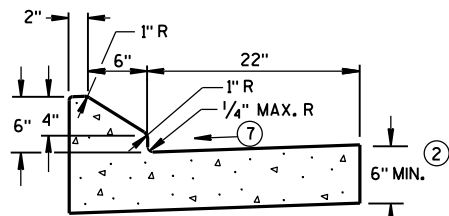
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

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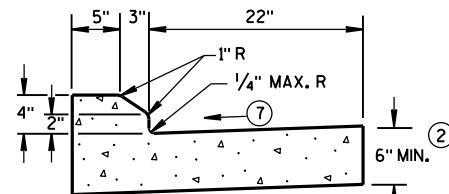
APPROVED
 Sept., 2016 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT
 FHWA UNIT SUPERVISOR



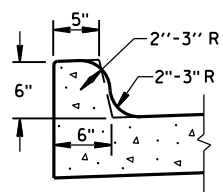
TYPES A^① & D



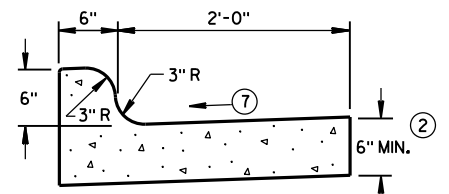
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

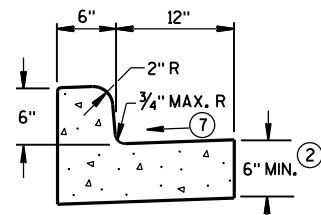


TYPES K^① & L
(OPTIONAL CURB SHAPE)



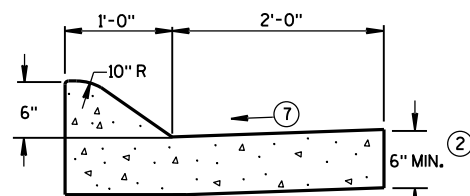
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

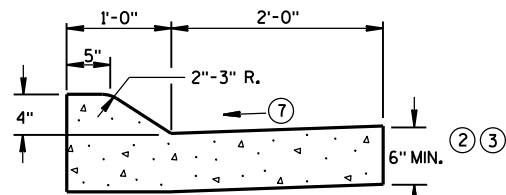


TYPES A^① & D

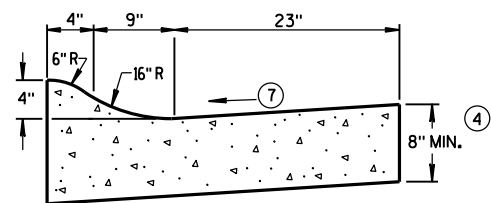
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

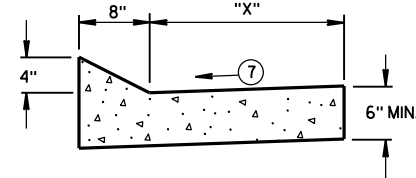


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

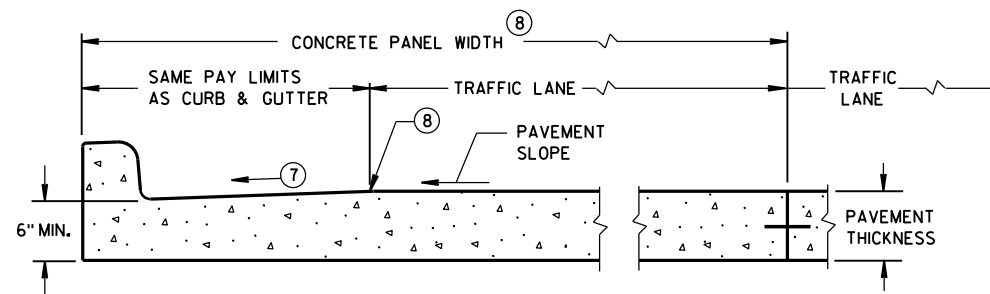
CONCRETE CURB & GUTTER 36"



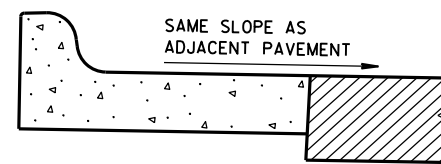
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

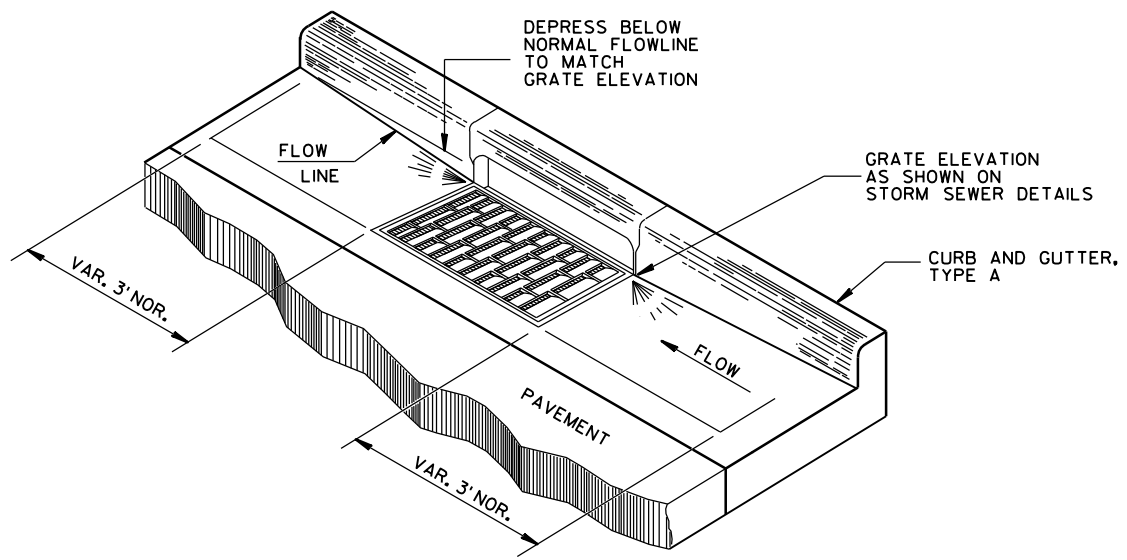
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

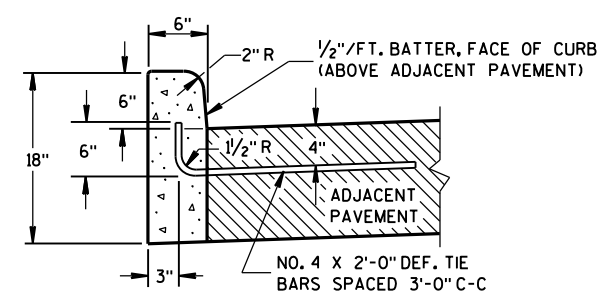
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

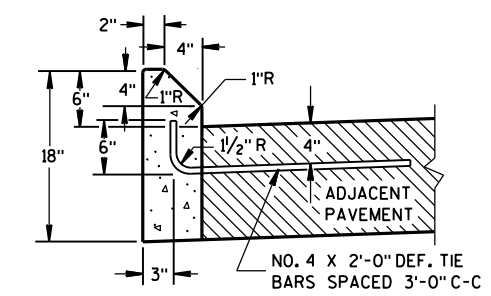
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DETAIL OF CURB AND GUTTER AT INLETS
(TYPE H INLET COVER SHOWN)



TYPES A^① & D

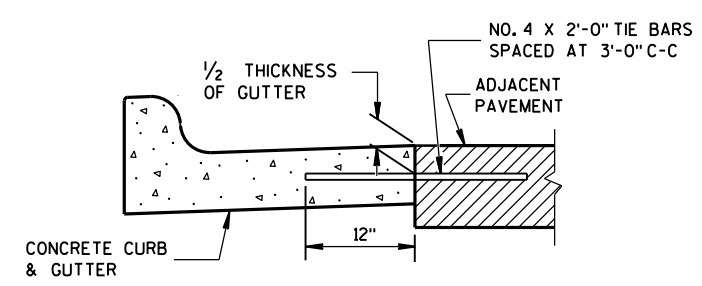


TYPES G^① & J

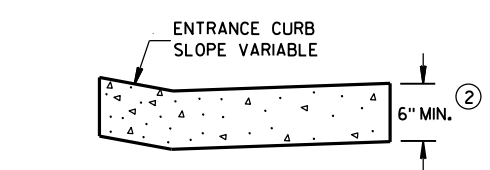
GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
 - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ③ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

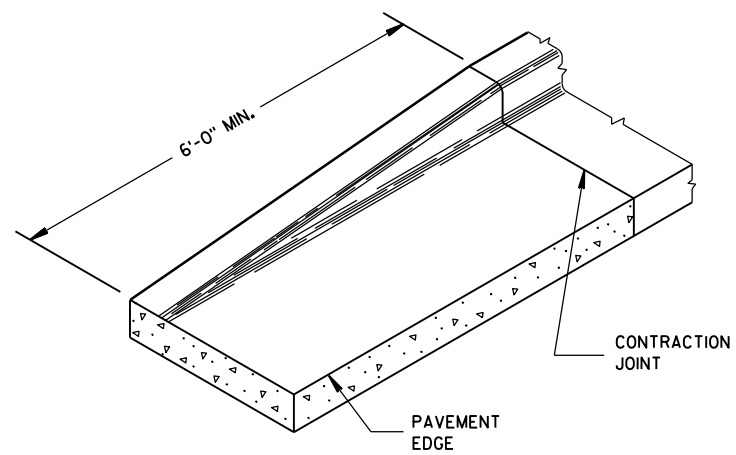
CONCRETE CURB



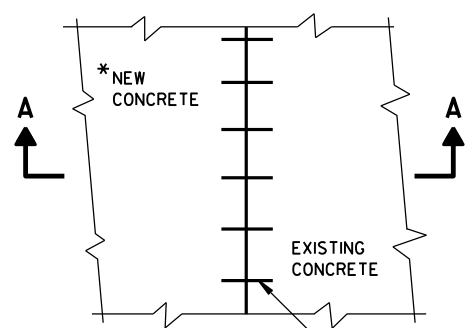
TYPICAL TIE BAR LOCATION^①



DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

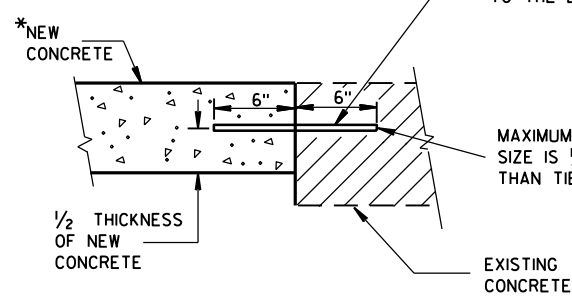


END SECTION CURB & GUTTER



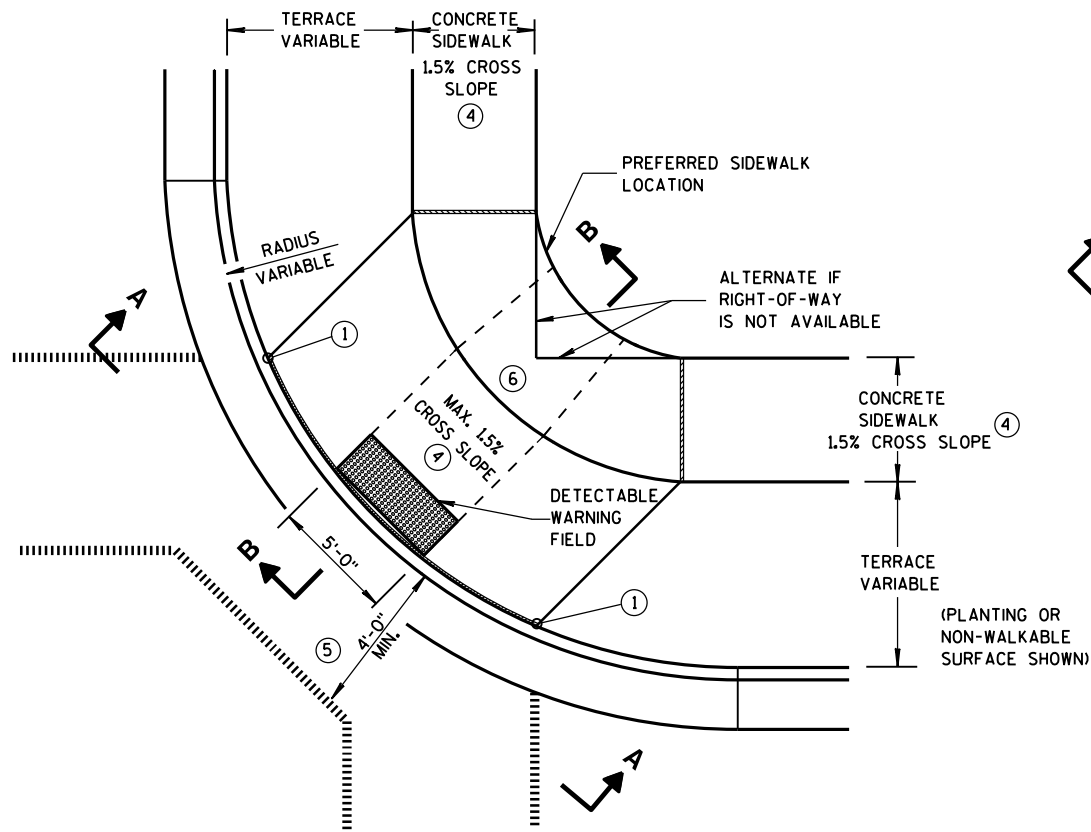
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

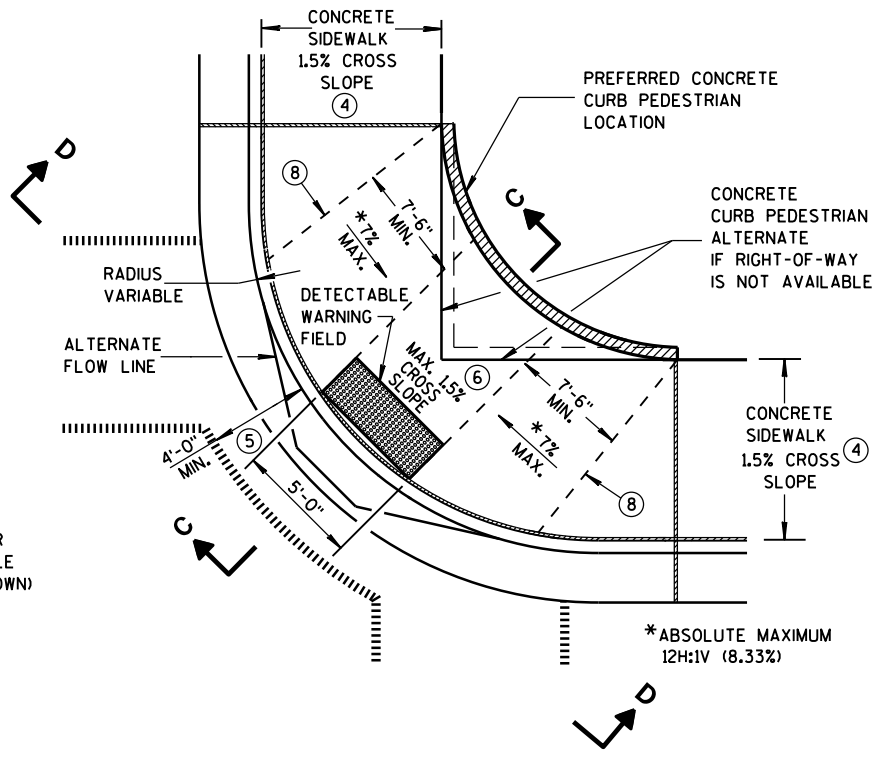


SECTION A-A
TIE BARS DRILLED INTO EXISTING PAVEMENT

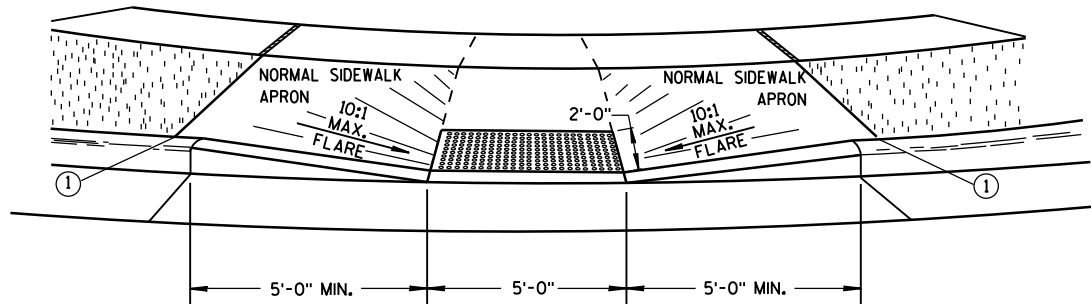
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2017 DATE	/s/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	



**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)

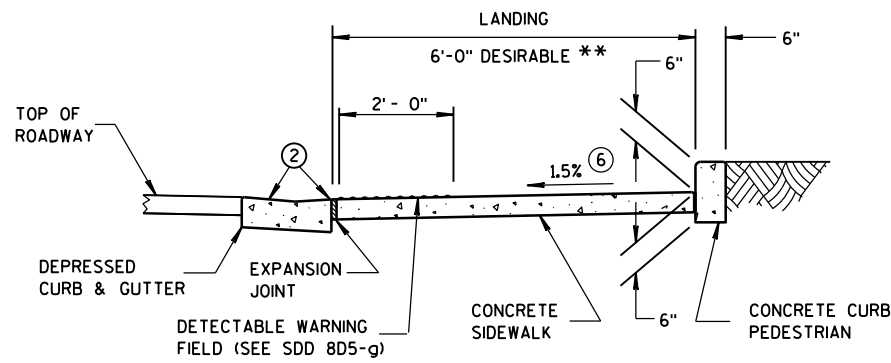


**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)

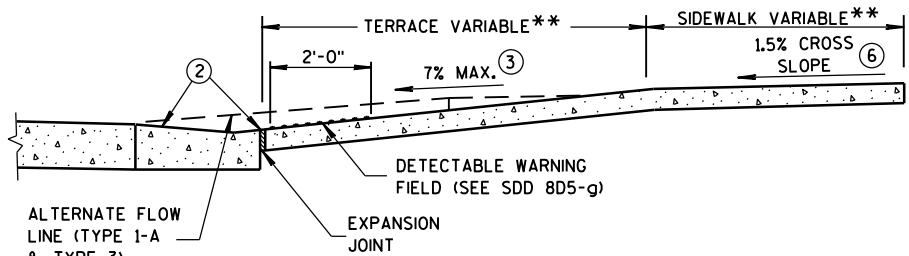


VIEW A-A

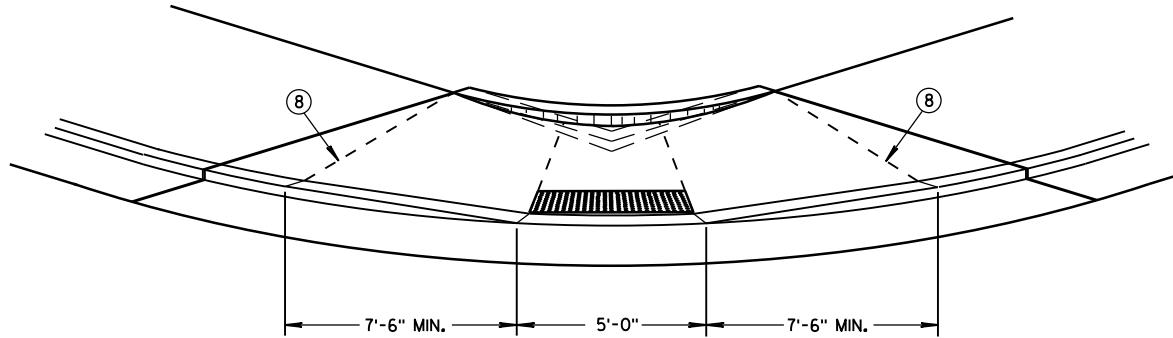
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION C-C



SECTION B-B



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

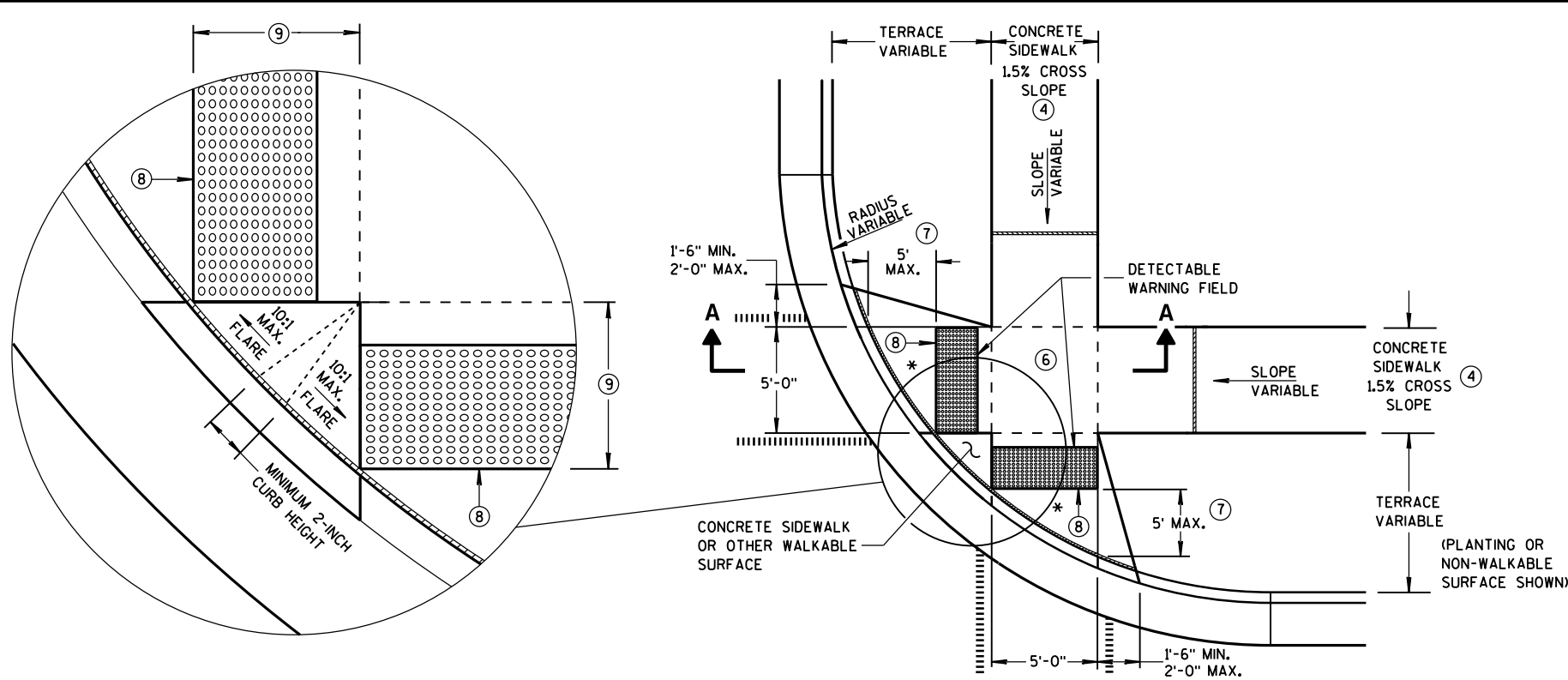
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

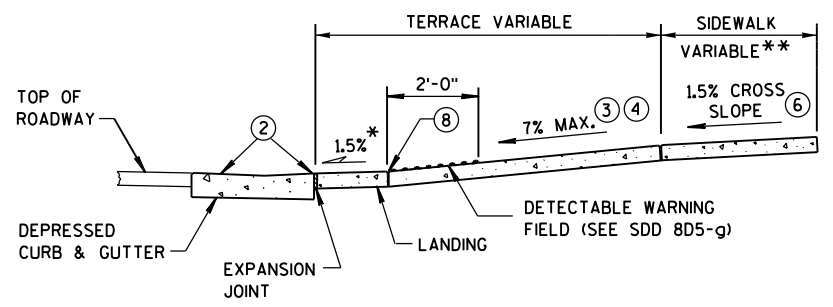
**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



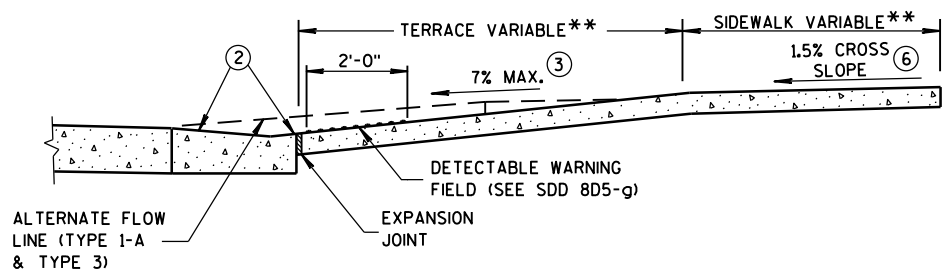
**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE BREAK

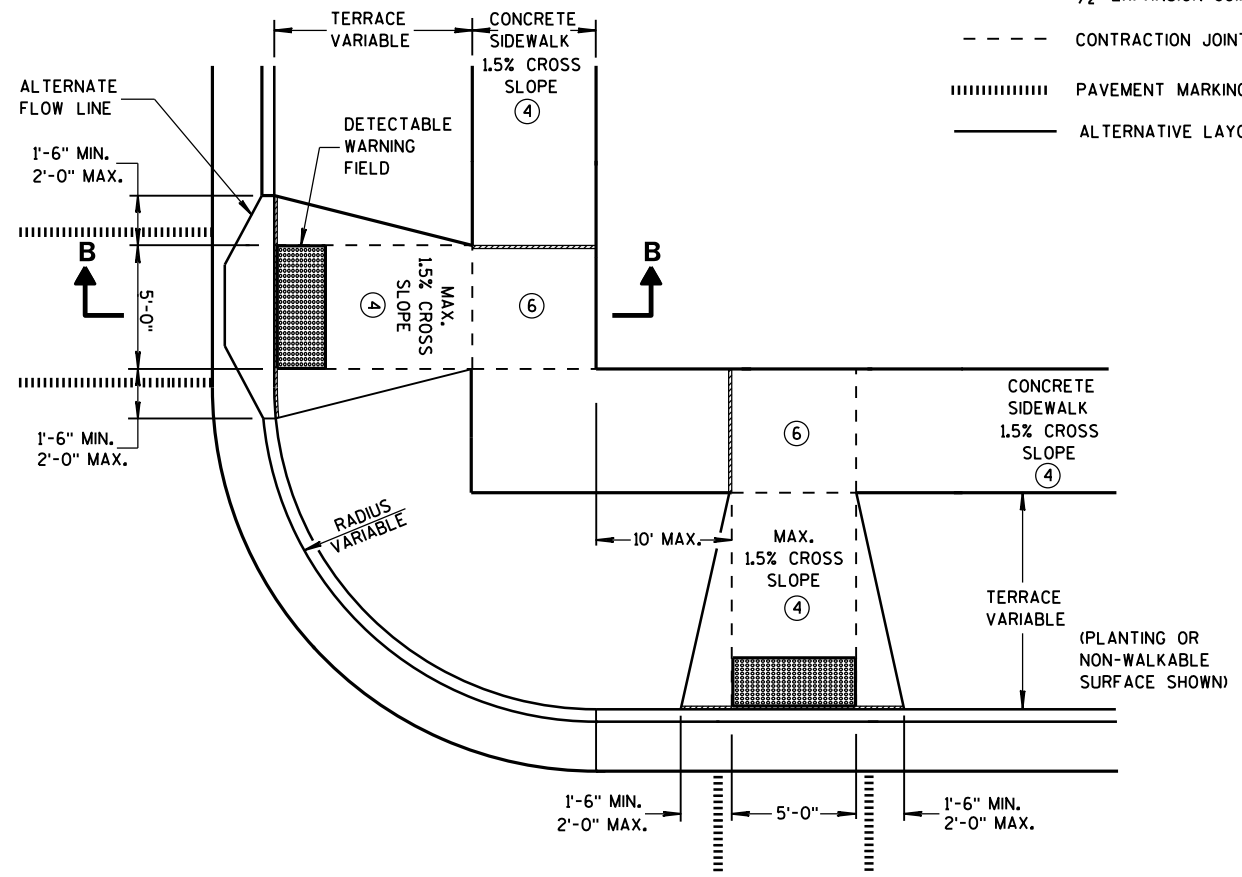


SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B



**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

LEGEND

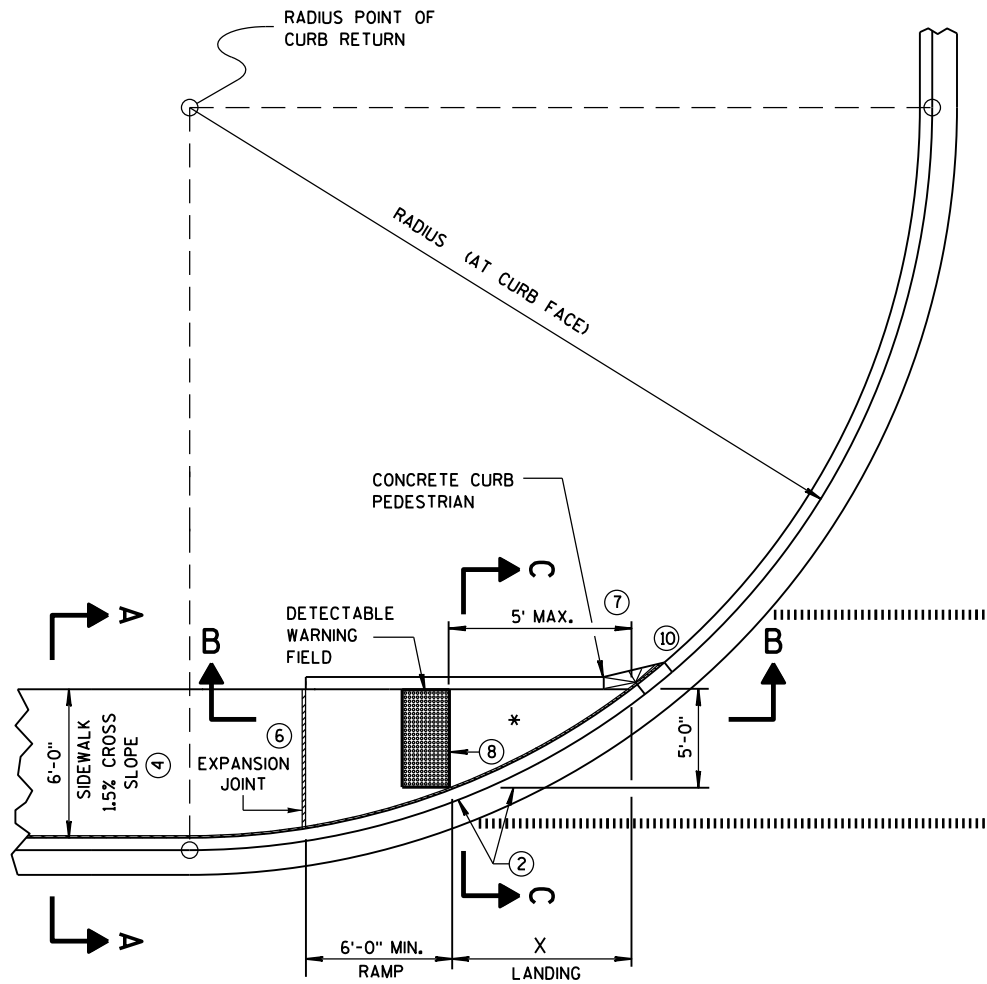
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

GENERAL NOTES

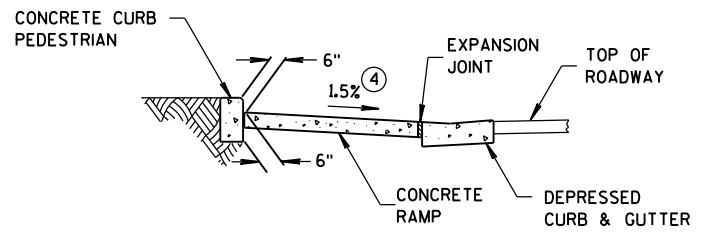
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

**CURB RAMPS
TYPES 2 AND 3**

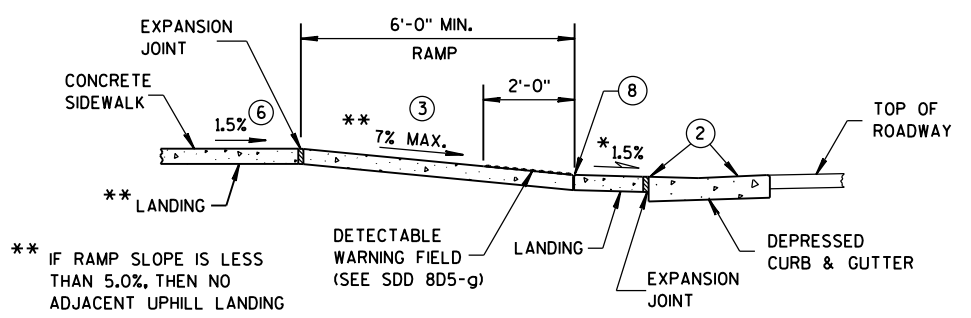
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4A
PLAN VIEW**



SECTION C-C FOR TYPE 4A

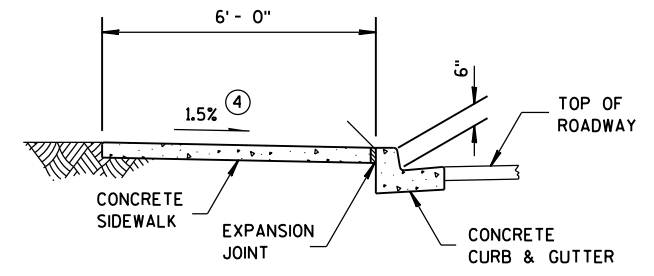


SECTION B-B FOR TYPE 4A

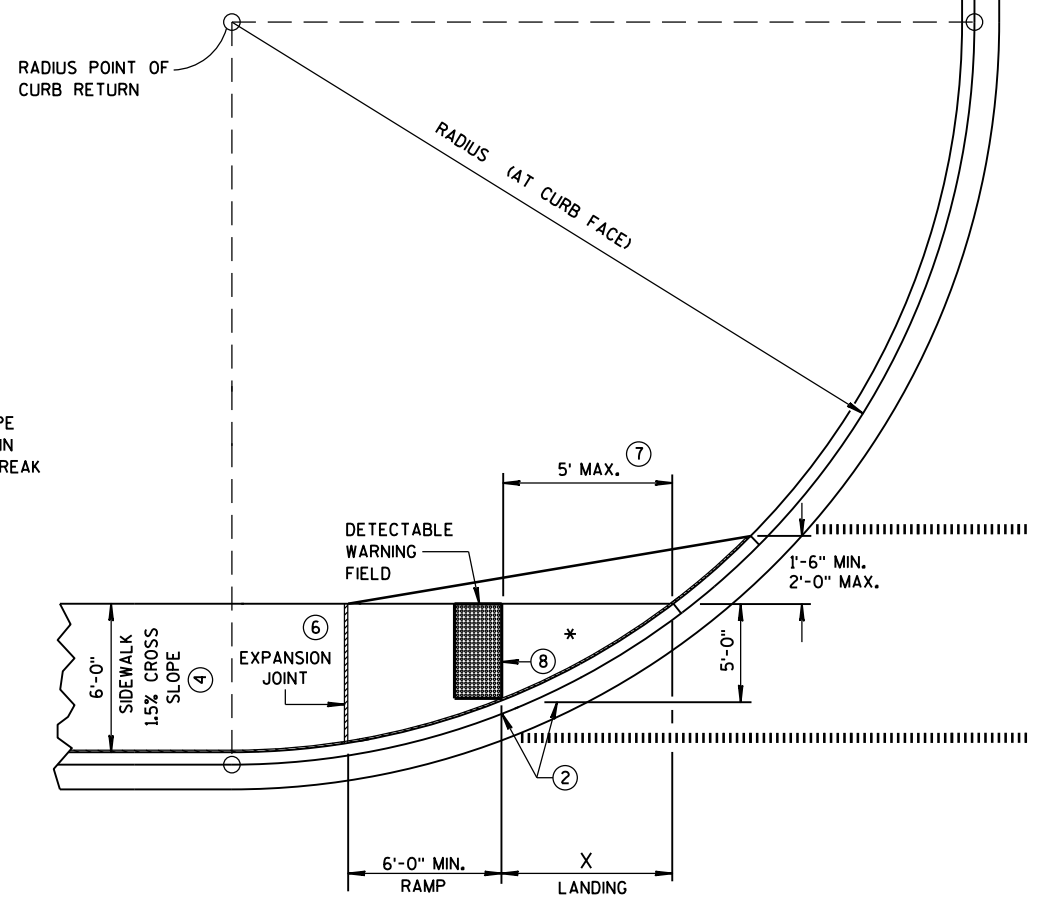
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

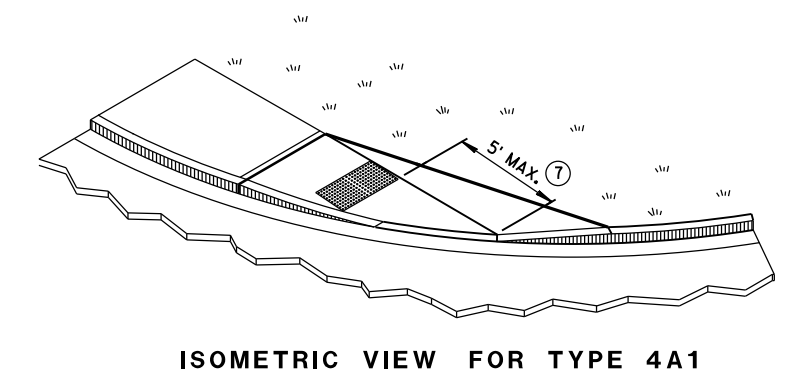
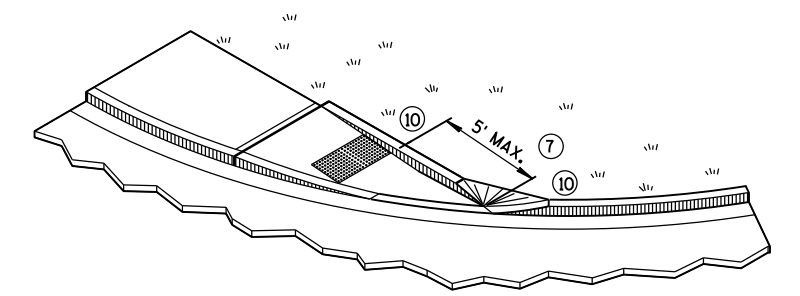


**CURB RAMP TYPE 4A1
PLAN VIEW**

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



LEGEND

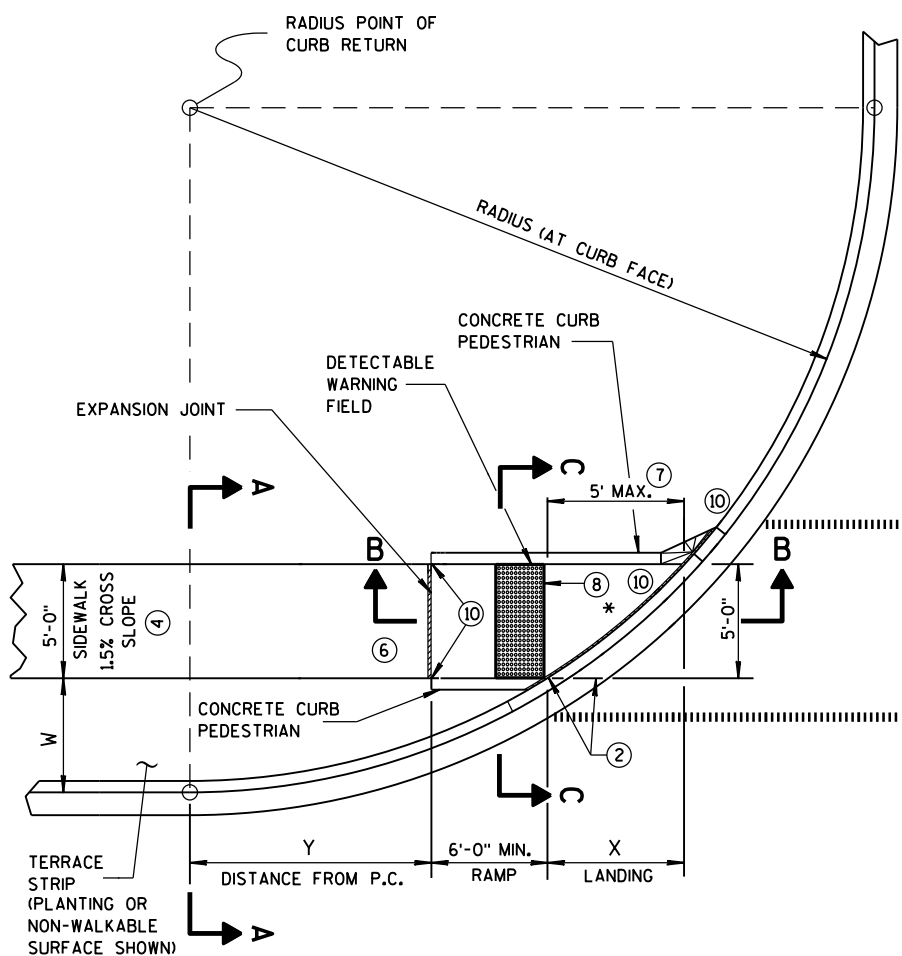
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPES 4A AND 4A1**

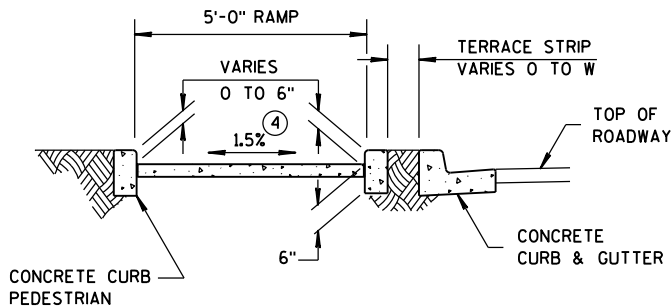
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10 1/4"	0'-5"	2'-1"	1'-4 1/2"	1'-5"	2'-1"	0'-10"	2'-7 1/2"	0'-3 1/4"	3'-0 1/4"						
15 FEET	4'-6 3/4"	2'-1 3/4"	3'-9"	3'-5 1/4"	3'-1 1/4"	4'-6"	2'-6 3/4"	5'-4 1/2"	2'-1"	6'-1"	1'-8"	6'-8 1/2"	1'-3 1/4"	7'-2 1/2"	0'-10 3/4"	7'-7 1/4"
20 FEET	5'-9 3/4"	3'-6 1/2"	4'-11 1/2"	5'-1 3/4"	4'-3 1/4"	6'-5 1/2"	3'-8 3/4"	7'-7"	3'-3"	8'-6 1/2"	2'-10"	9'-4 1/2"	2'-5 1/2"	10'-1 1/4"	2'-1 1/4"	10'-9"
30 FEET			6'-9 1/4"	7'-11 1/4"	6'-0 1/4"	9'-8"	5'-5"	11'-1 3/4"	4'-10 3/4"	12'-5 3/4"	4'-5 1/2"	13'-7 3/4"	4'-0 3/4"	14'-8 1/2"	3'-8 1/2"	15'-8 1/4"
40 FEET									6'-1 3/4"	15'-8 1/2"	5'-8"	17'-2"	5'-3"	18'-5 3/4"	4'-10 3/4"	19'-8 1/4"
50 FEET															5'-10 1/4"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
 DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
 DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



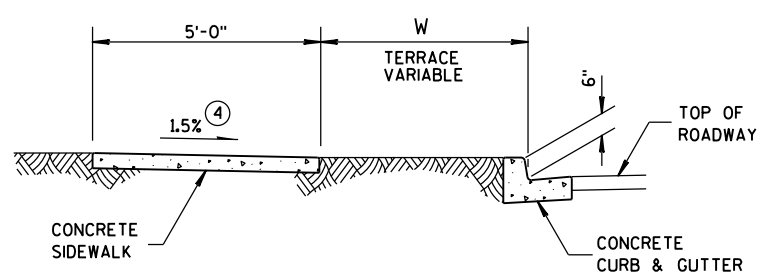
**CURB RAMP TYPE 4B
PLAN VIEW**



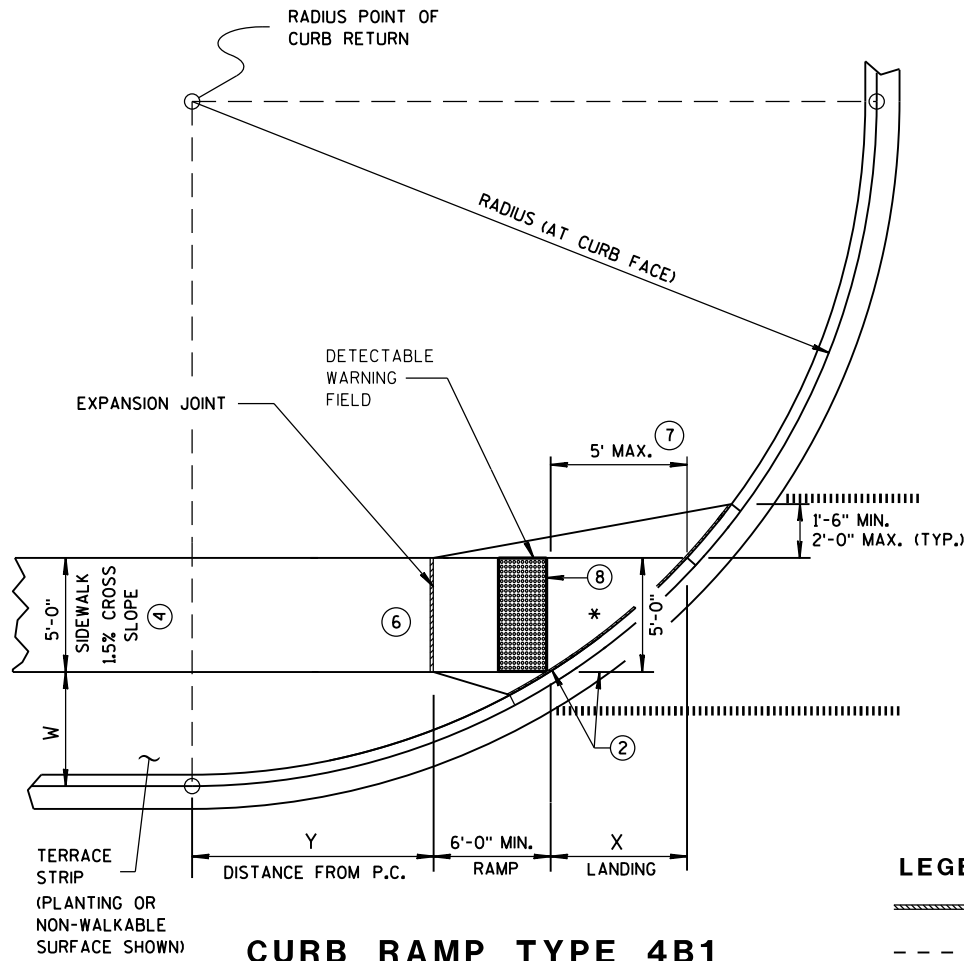
SECTION C-C FOR TYPE 4B

GENERAL NOTES

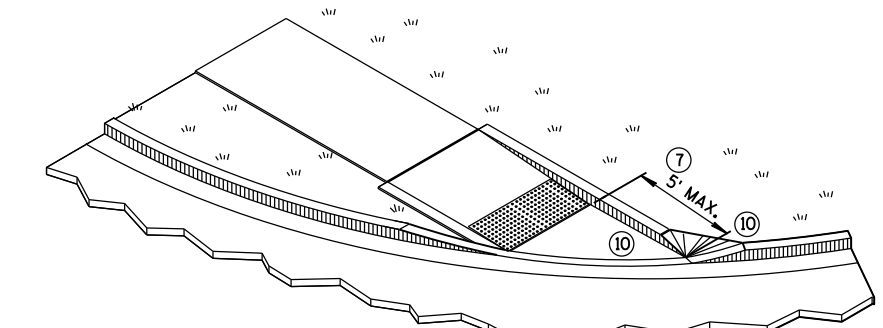
- 1. AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- 2. GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3. ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4. ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 6. PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- 7. WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- 8. PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- 10. INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



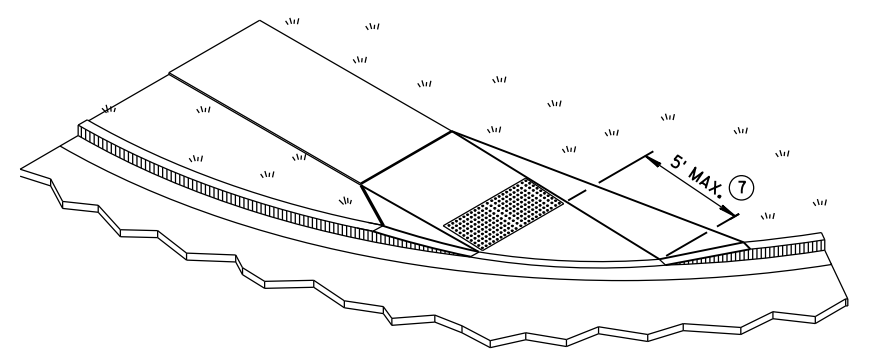
SECTION A-A FOR TYPE 4B



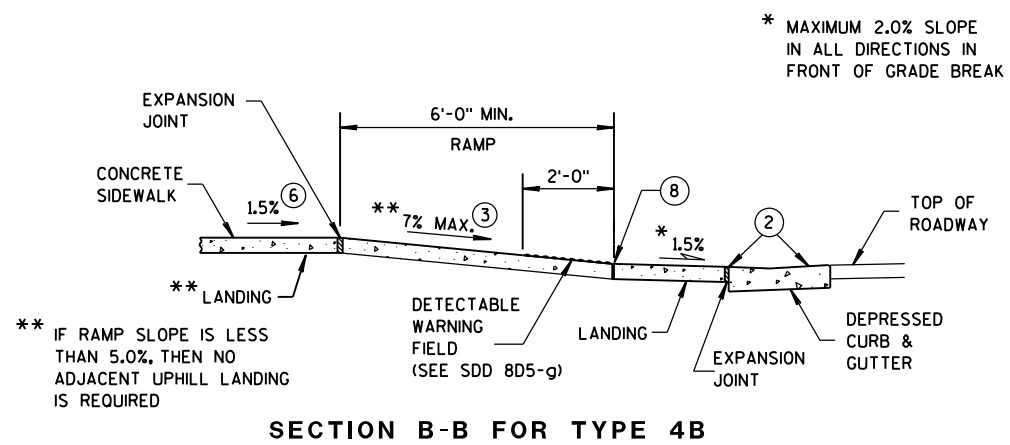
**CURB RAMP TYPE 4B1
PLAN VIEW**



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

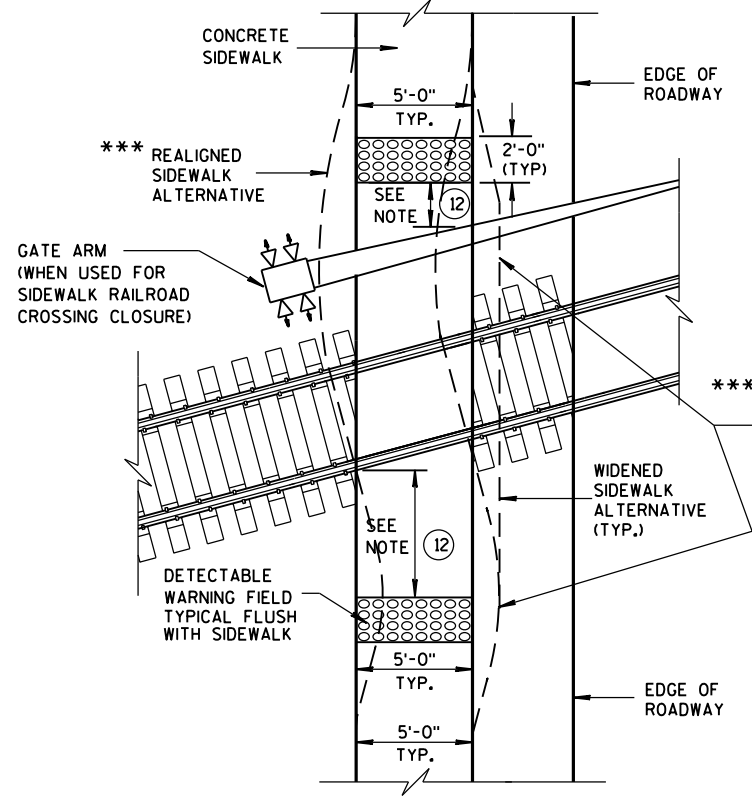


SECTION B-B FOR TYPE 4B

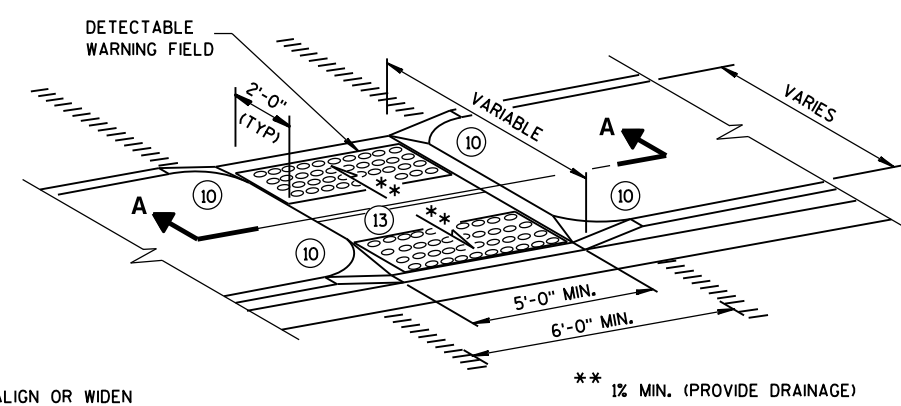
- LEGEND**
- ===== 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPE 4B AND 4B1**

STATE OF WISCONSIN
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**TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING**



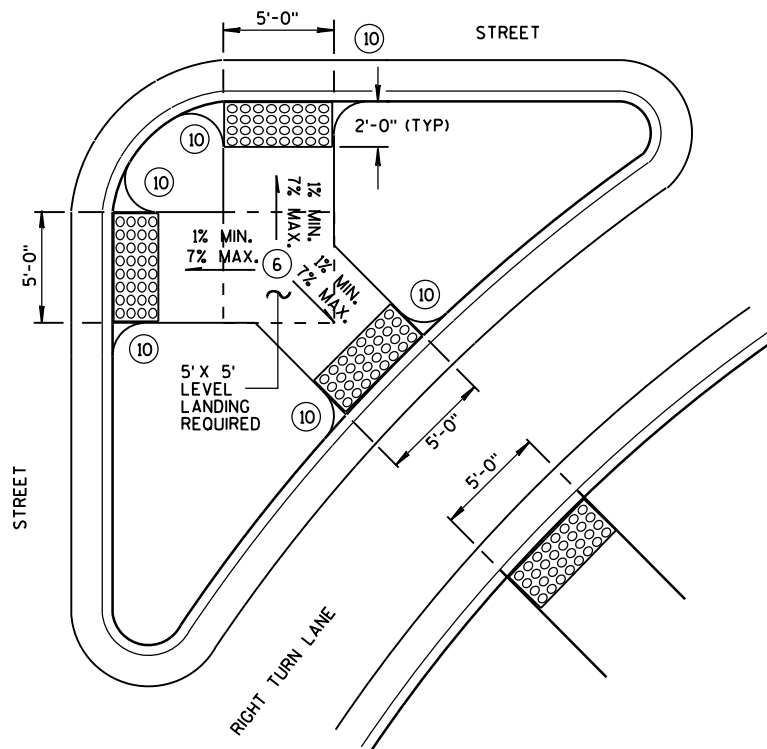
**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5**

*** DETAILS TO BE DETERMINED BY DESIGNER

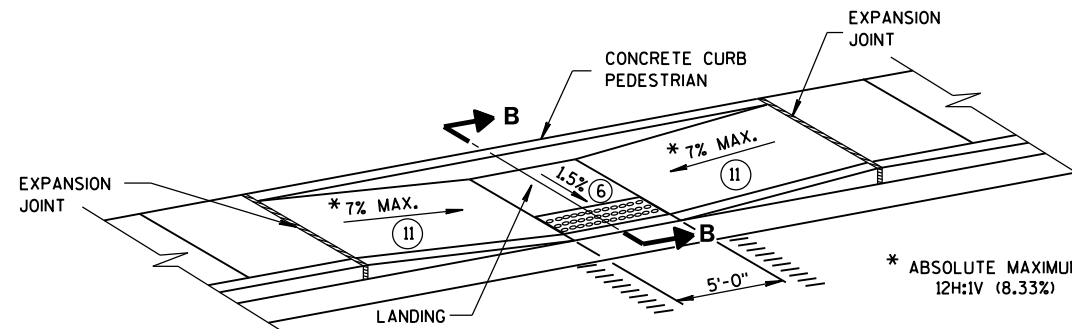
GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 15 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

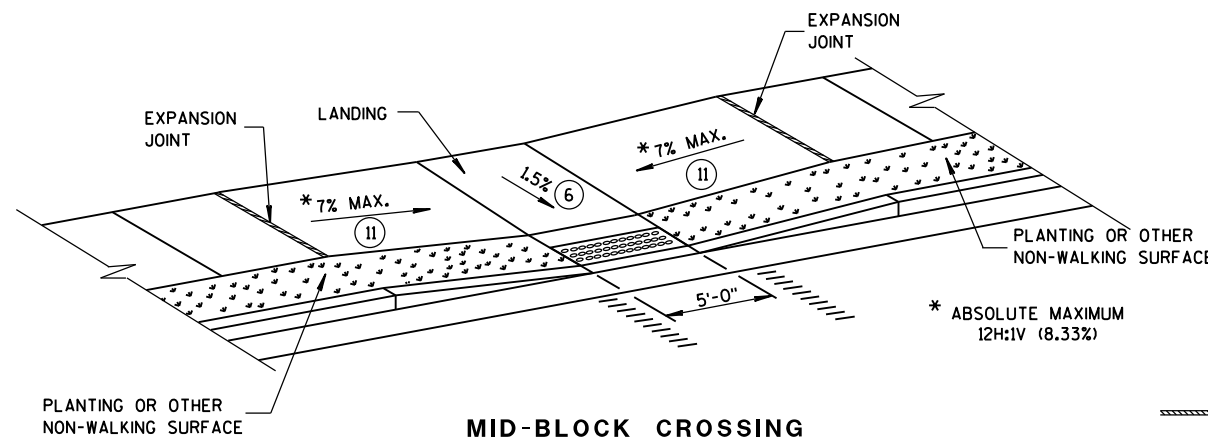
REFER TO GENERAL NOTES ② AND ③ FOR ALL ISLAND CURB RAMPS



**TYPE 6
DETECTABLE WARNING AT ISLANDS**

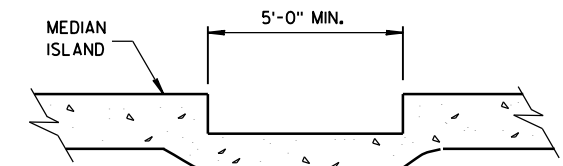


**MID-BLOCK CROSSING
TYPE 7A**

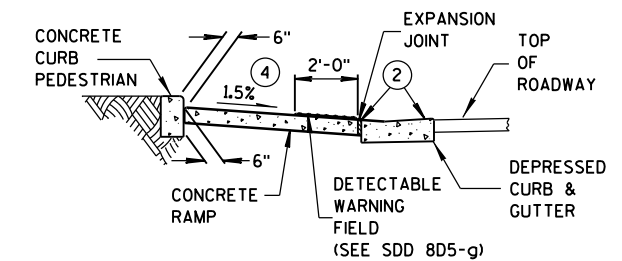


**MID-BLOCK CROSSING
TYPE 7B**

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION A-A



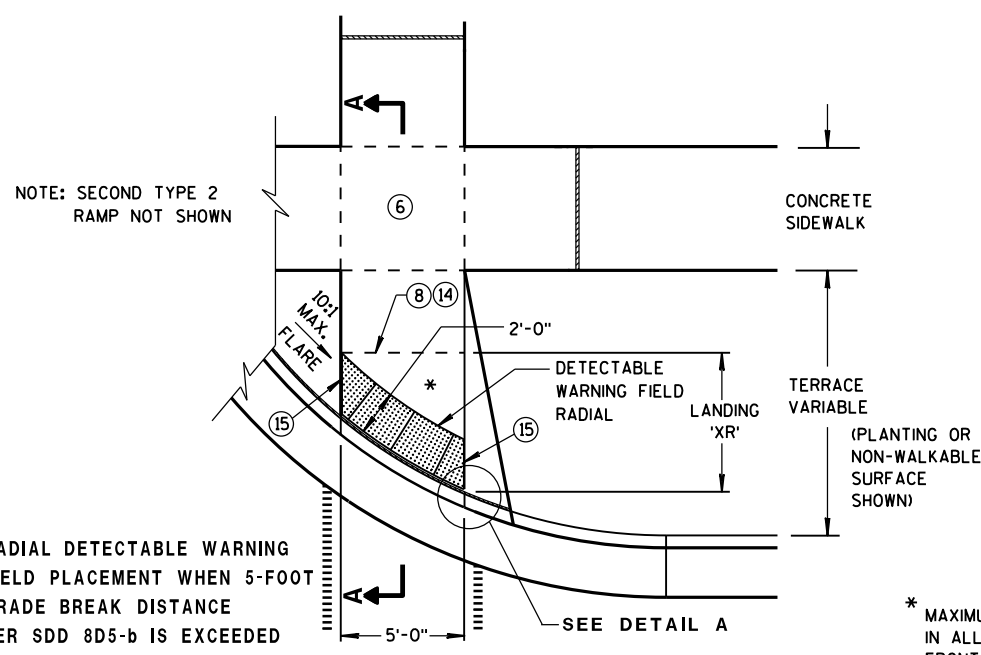
SECTION B-B

LEGEND

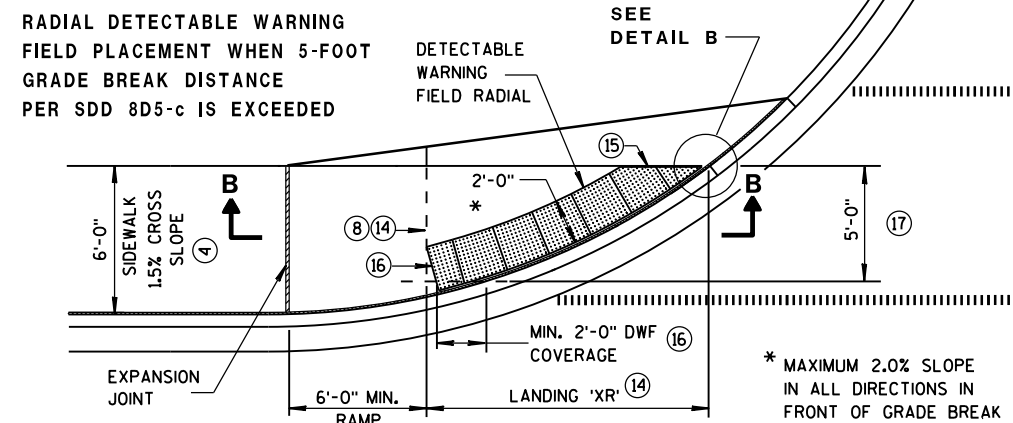
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPES 5, 6, 7A, 7B & 8**

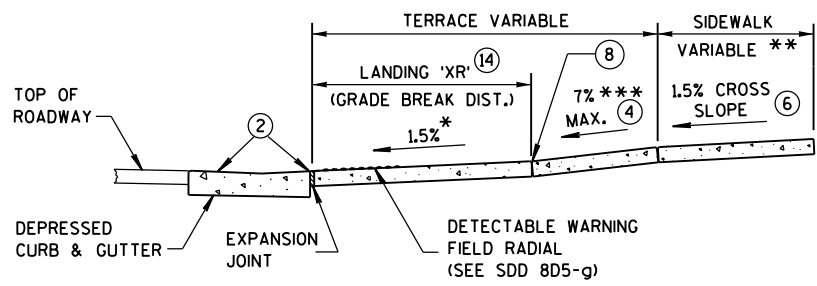
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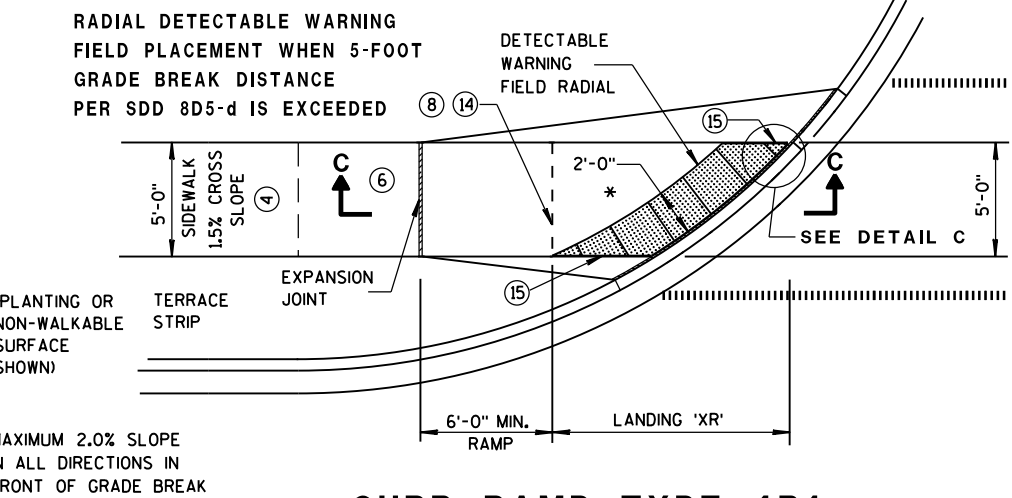
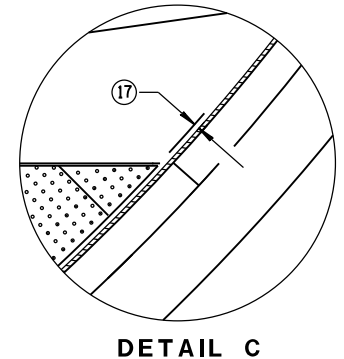
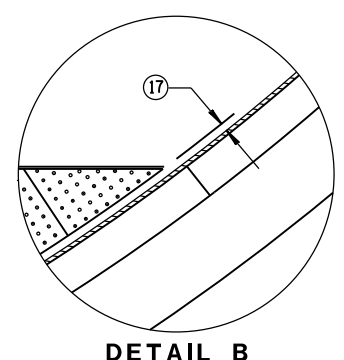
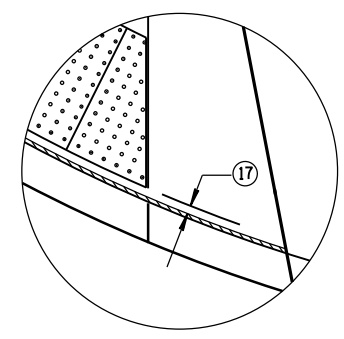
TYPE 2 RAMP
PLAN VIEW
 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)
 (ON LINE WITH SIDEWALK)



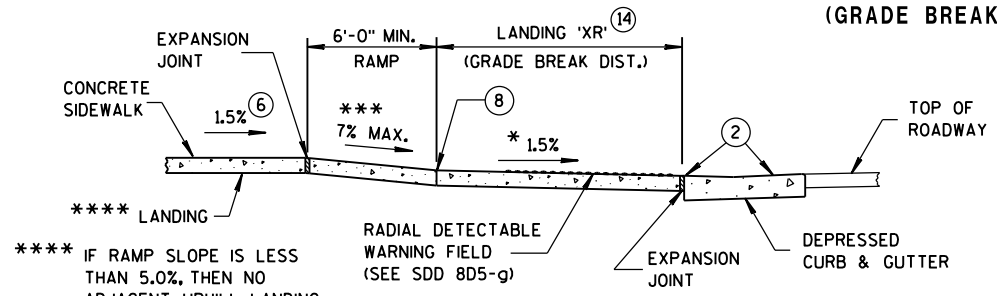
CURB RAMP TYPE 4A1
PLAN VIEW
 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)



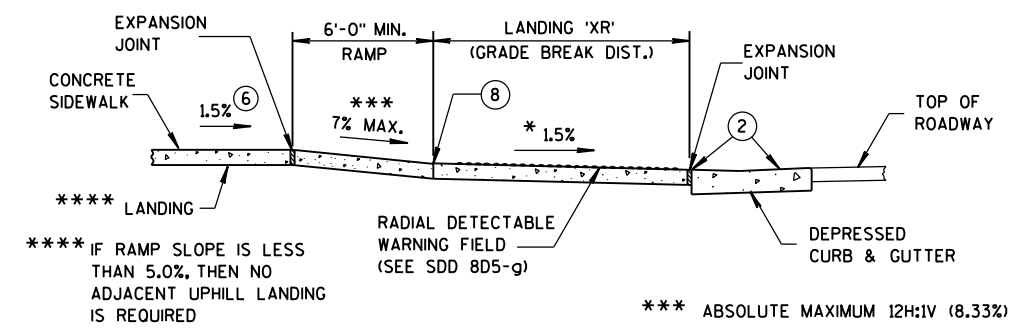
SECTION A-A



CURB RAMP TYPE 4B1
PLAN VIEW
 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION C-C FOR TYPE 4B1



SECTION B-B FOR TYPE 4A1

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - - - - - CONTRACTION JOINT FIELD LOCATED
 - ||||| PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

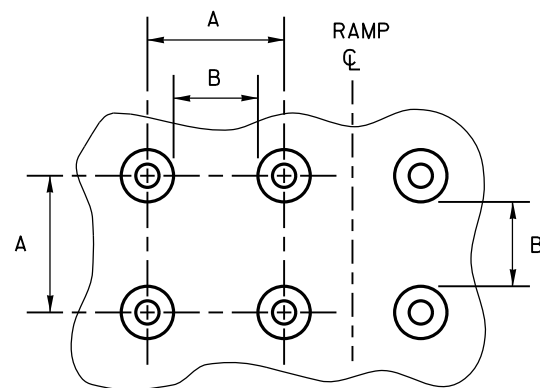
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.
- REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
- FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.
- DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- 14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- 15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- 16 USE 1' X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- 17 A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS

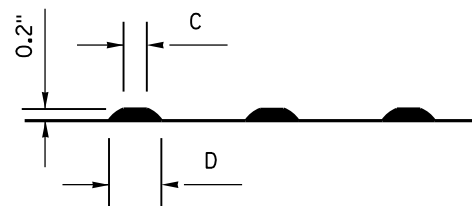
STATE OF WISCONSIN
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	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

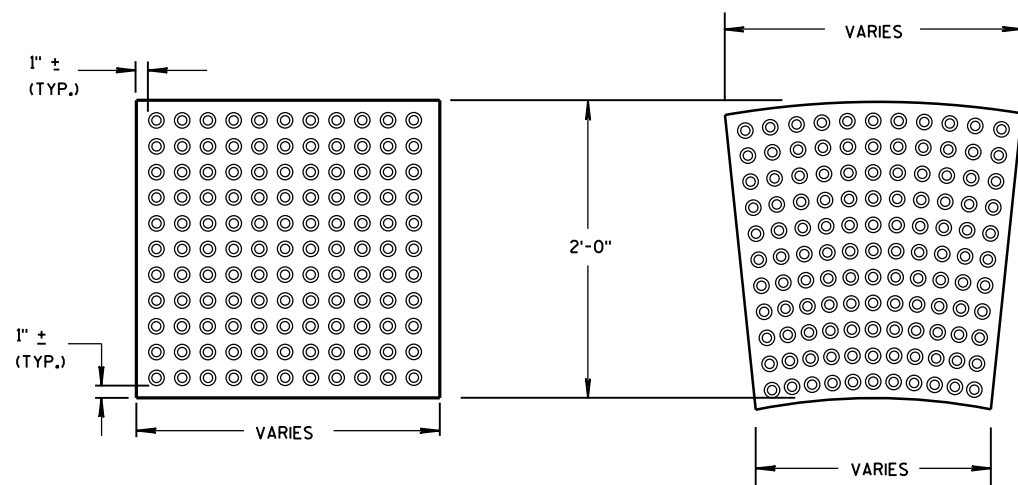


PLAN VIEW



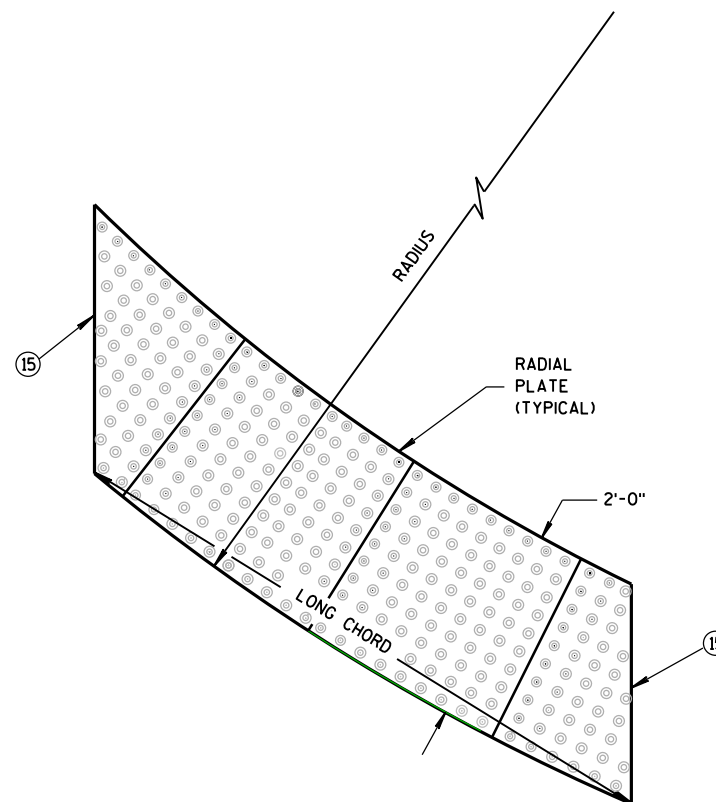
ELEVATION VIEW

**TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL**



**RECTANGULAR PLATES
DETECTABLE WARNING FIELDS (TYPICAL)**

PLAN VIEW



**RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES**

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR FHWA

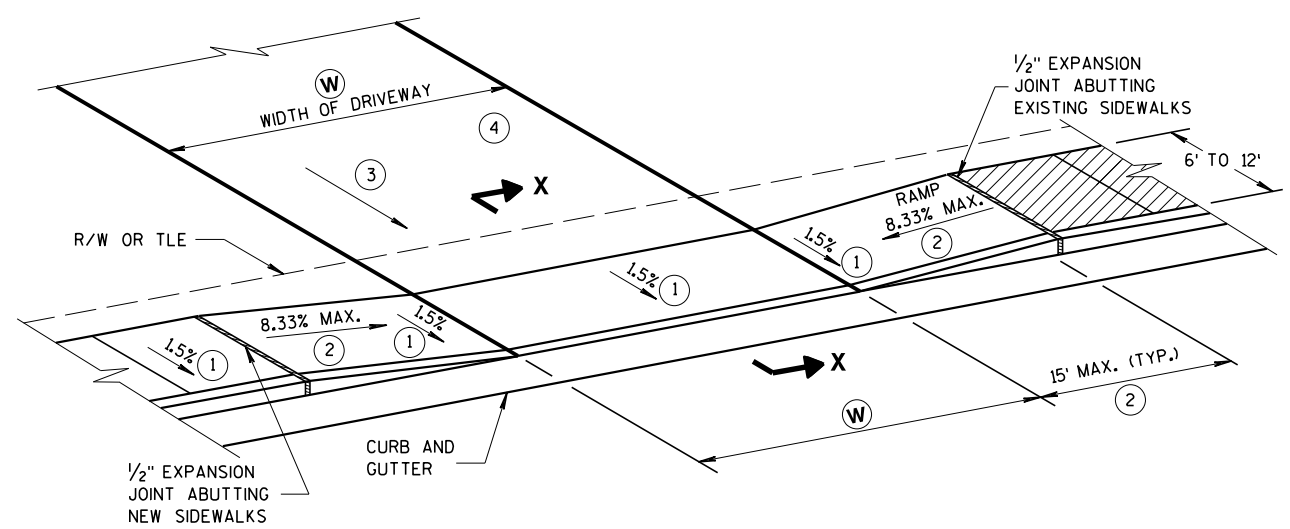
GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

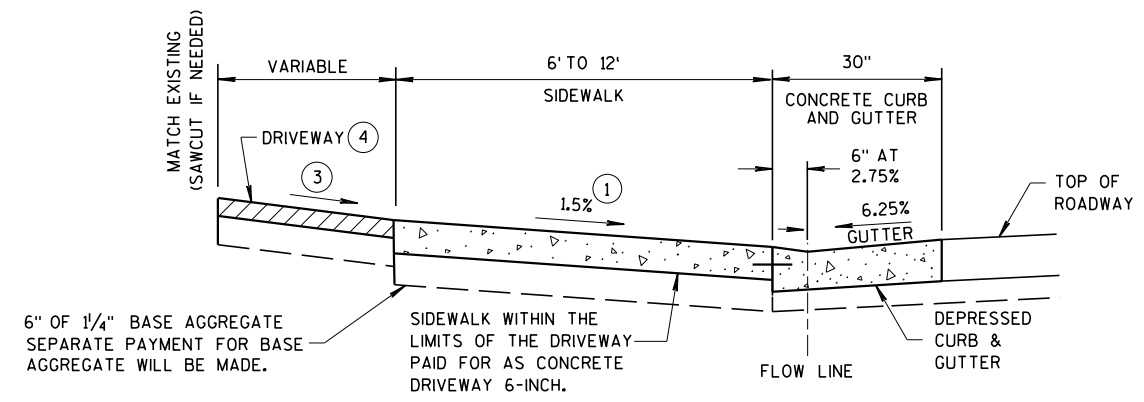
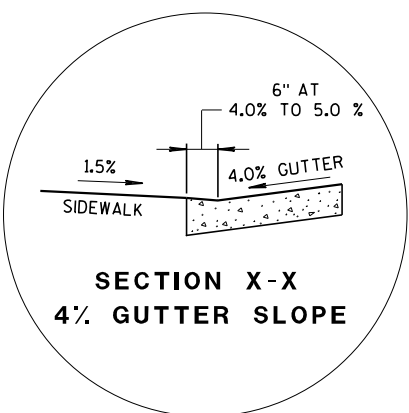
(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

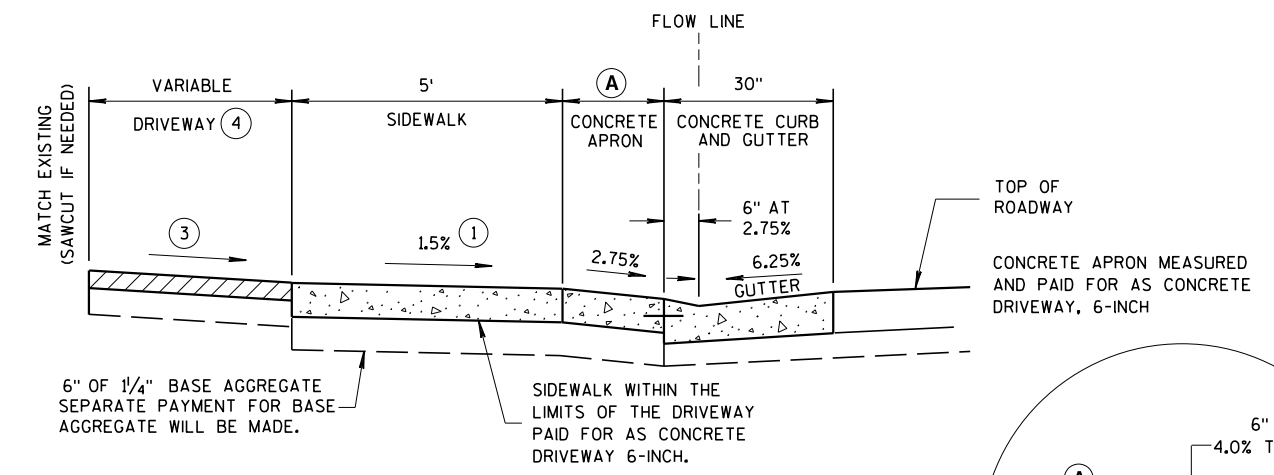
- ① CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
 10.5% UP AWAY FROM SIDEWALK (SAG)
 8.5% DOWN AWAY FROM SIDEWALK (CREST)
 ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- ④ DRIVEWAY TYPES
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET

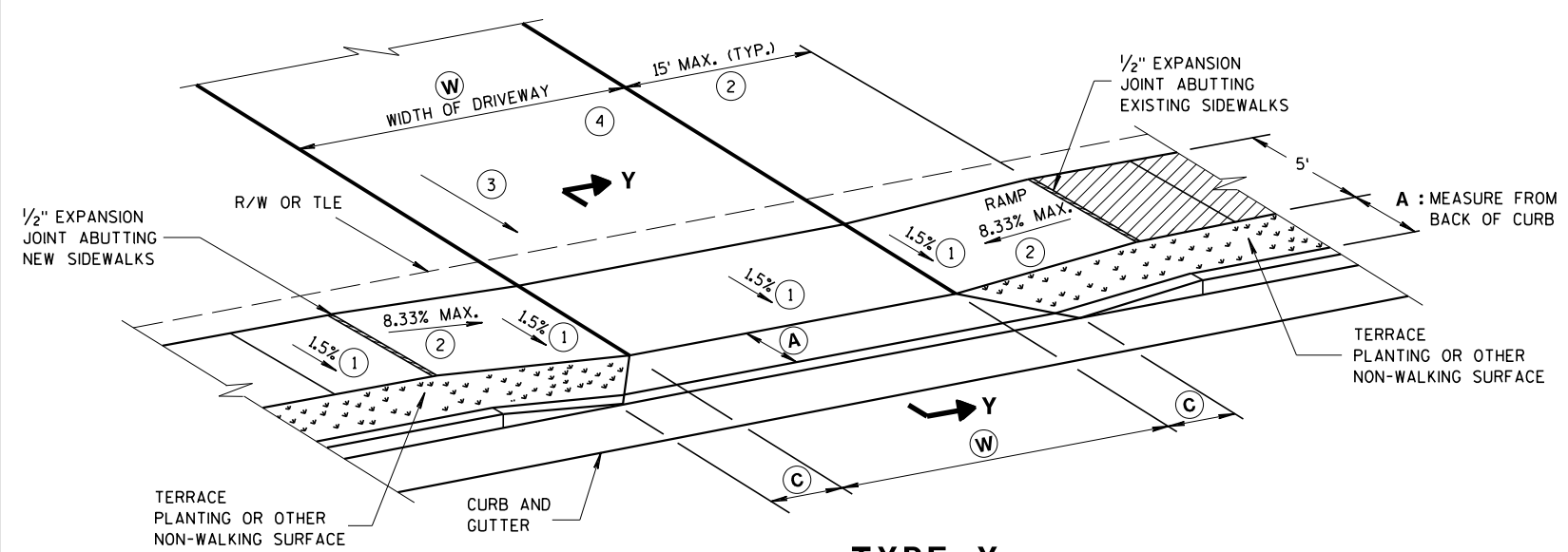
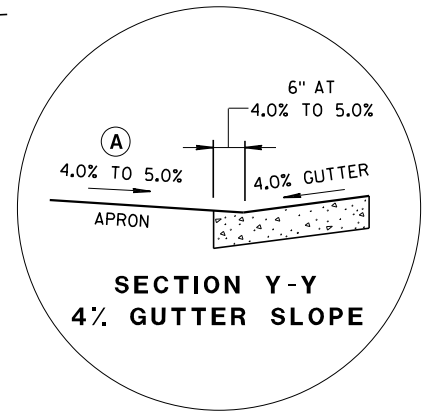


SECTION X-X



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y
DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

TABLE Y

(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 March 2018 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT
 FHWA UNIT SUPERVISOR

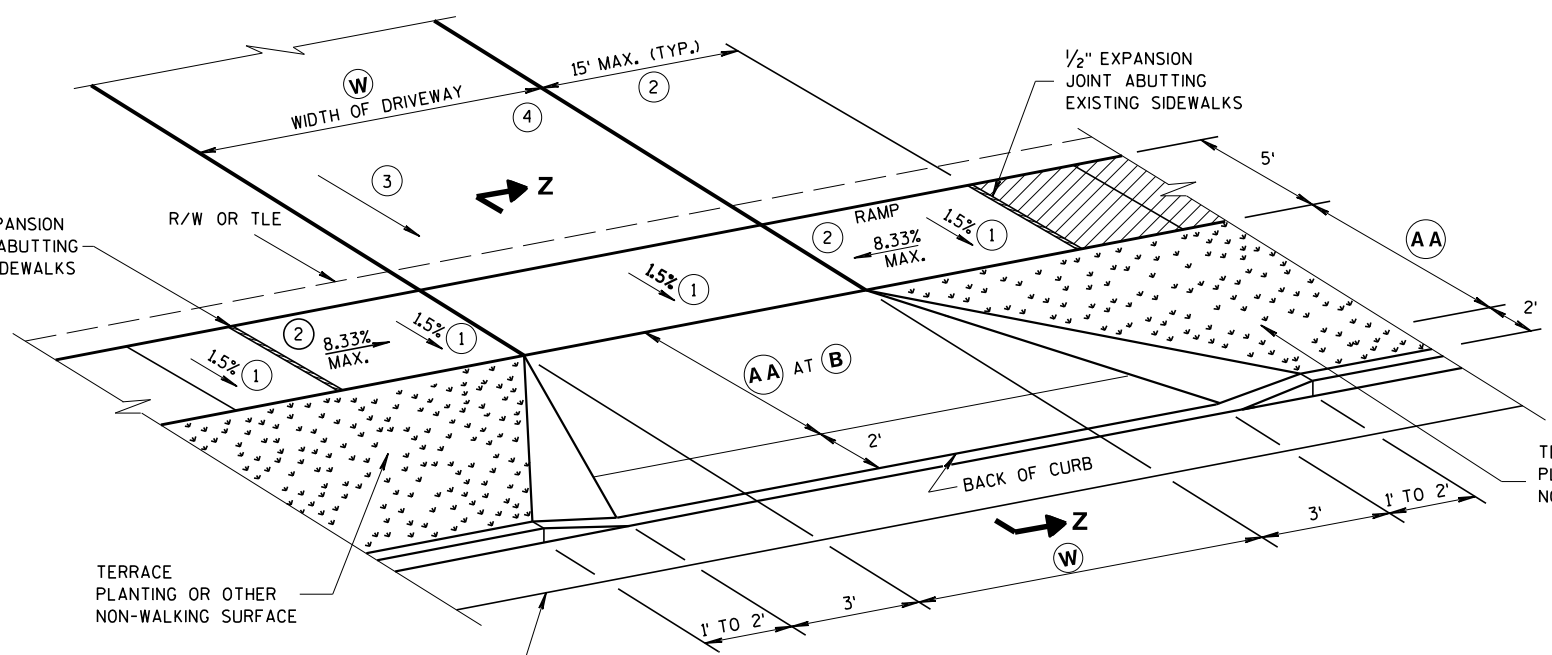


TABLE Z

(AA) FEET	(B) %	(B) %
4.5'	6.25% GUTTER	4% GUTTER
5.5'	11.5%	9% TO 11.5%
6.5'	9% TO 11.5%	8% TO 11.5%
7.5'	8% TO 11.5%	6% TO 11.5%
8.5'	7% TO 11.5%	6% TO 11.5%
9.5'	6% TO 11.5%	5% TO 11.5%
	5% TO 11.5%	4% TO 11.5%

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

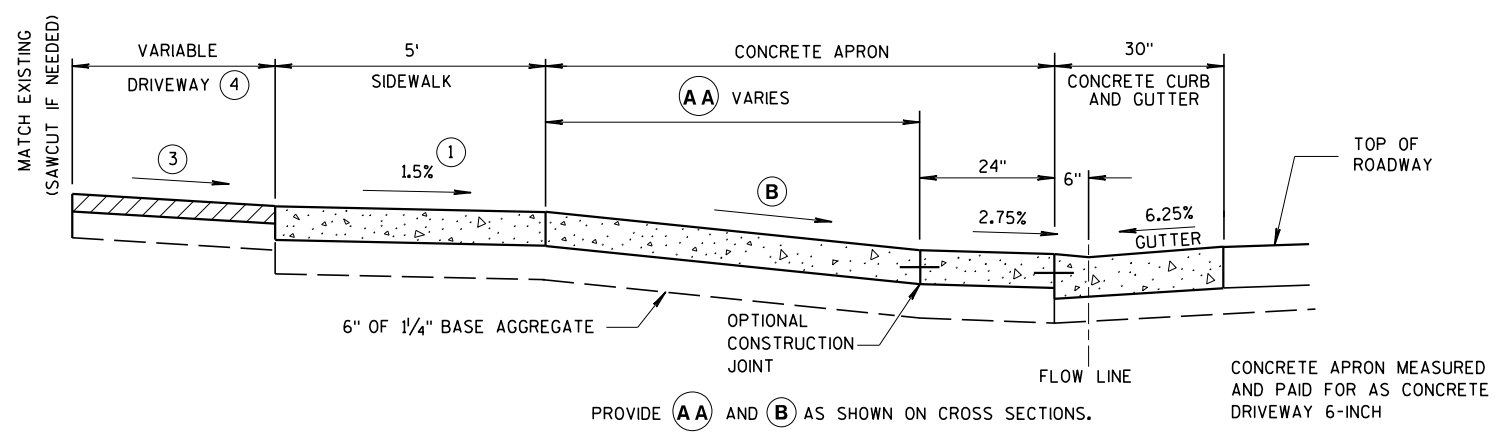
(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
 10.5% UP AWAY FROM SIDEWALK (SAG)
 8.5% DOWN AWAY FROM SIDEWALK (CREST)
 ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES

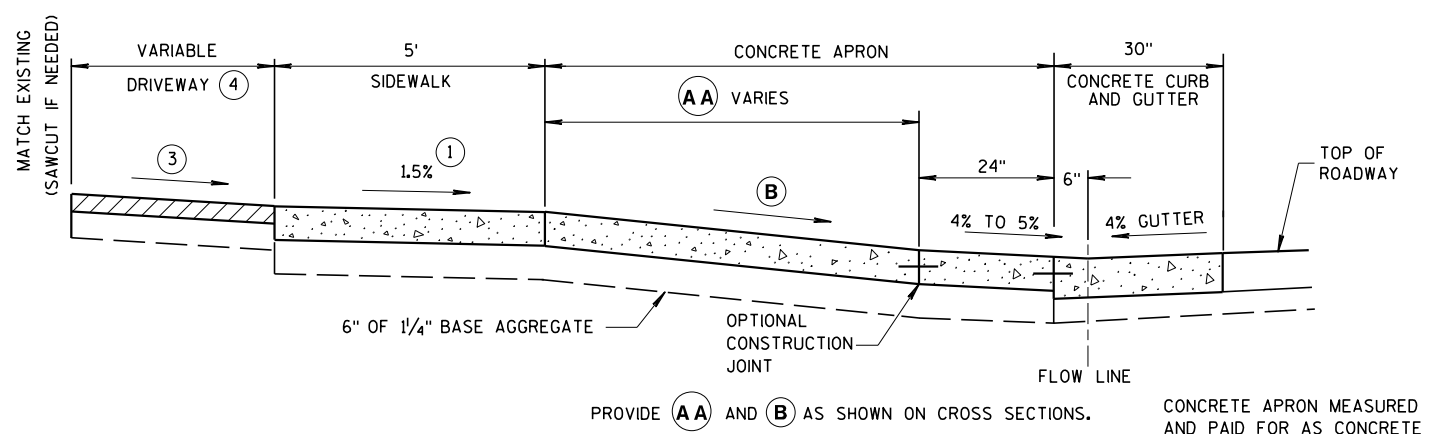
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)

**TYPE Z
 SIDEWALK WITH WIDER TERRACE
 TERRACE VARIES 7 TO 12 FEET**

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
 16' MIN. - 35' MAX. COMMERCIAL (CE)



6.25% GUTTER SLOPE



4% GUTTER SLOPE

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR B VALUES NOT SHOWN IN TABLE Z.
 SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.
 SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

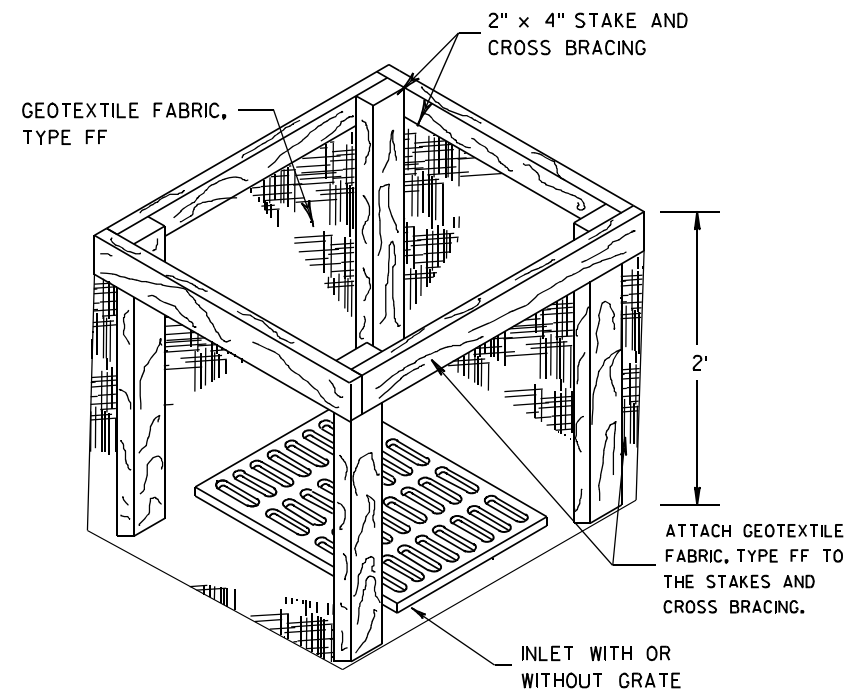
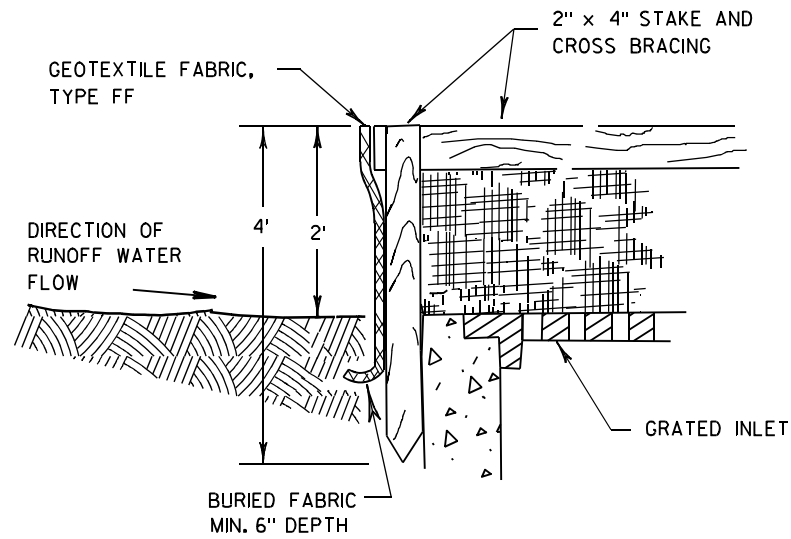
**SECTION Z-Z
 DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER
 (URBAN AND SUBURBAN)**

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMP TYPE Z

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 March 2018 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
 FHWA



INLET PROTECTION, TYPE A

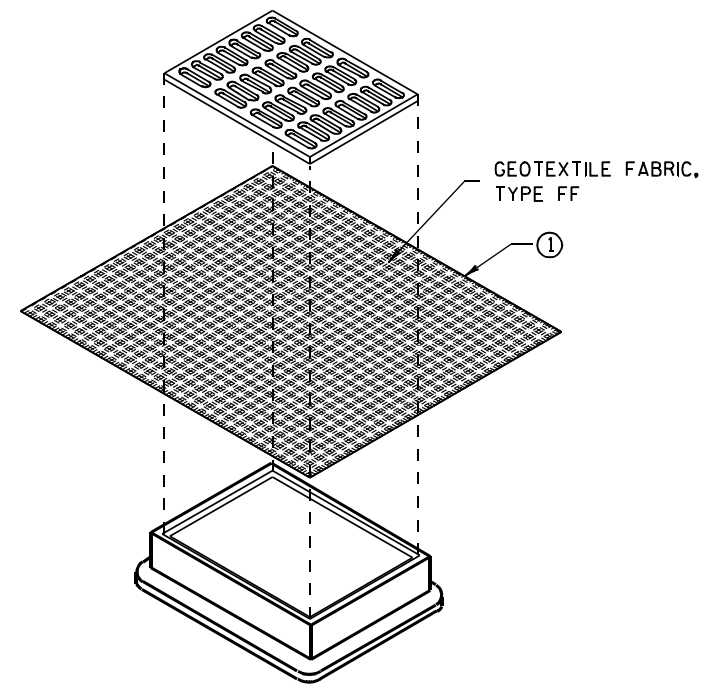
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

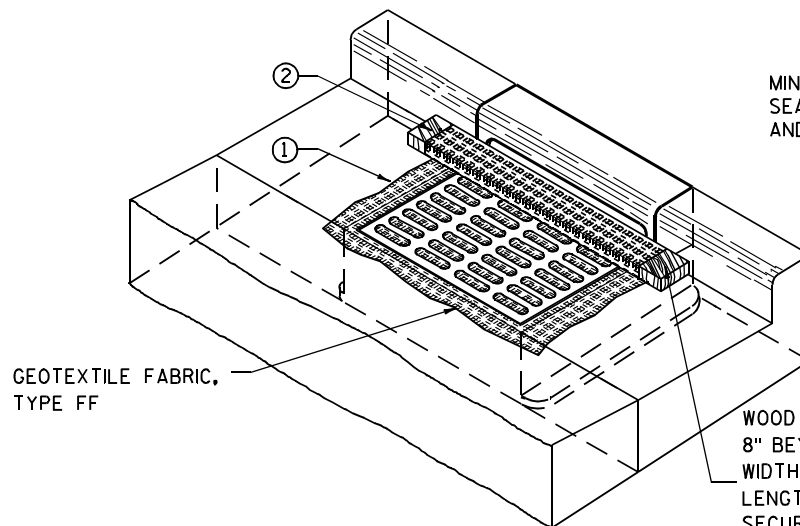
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

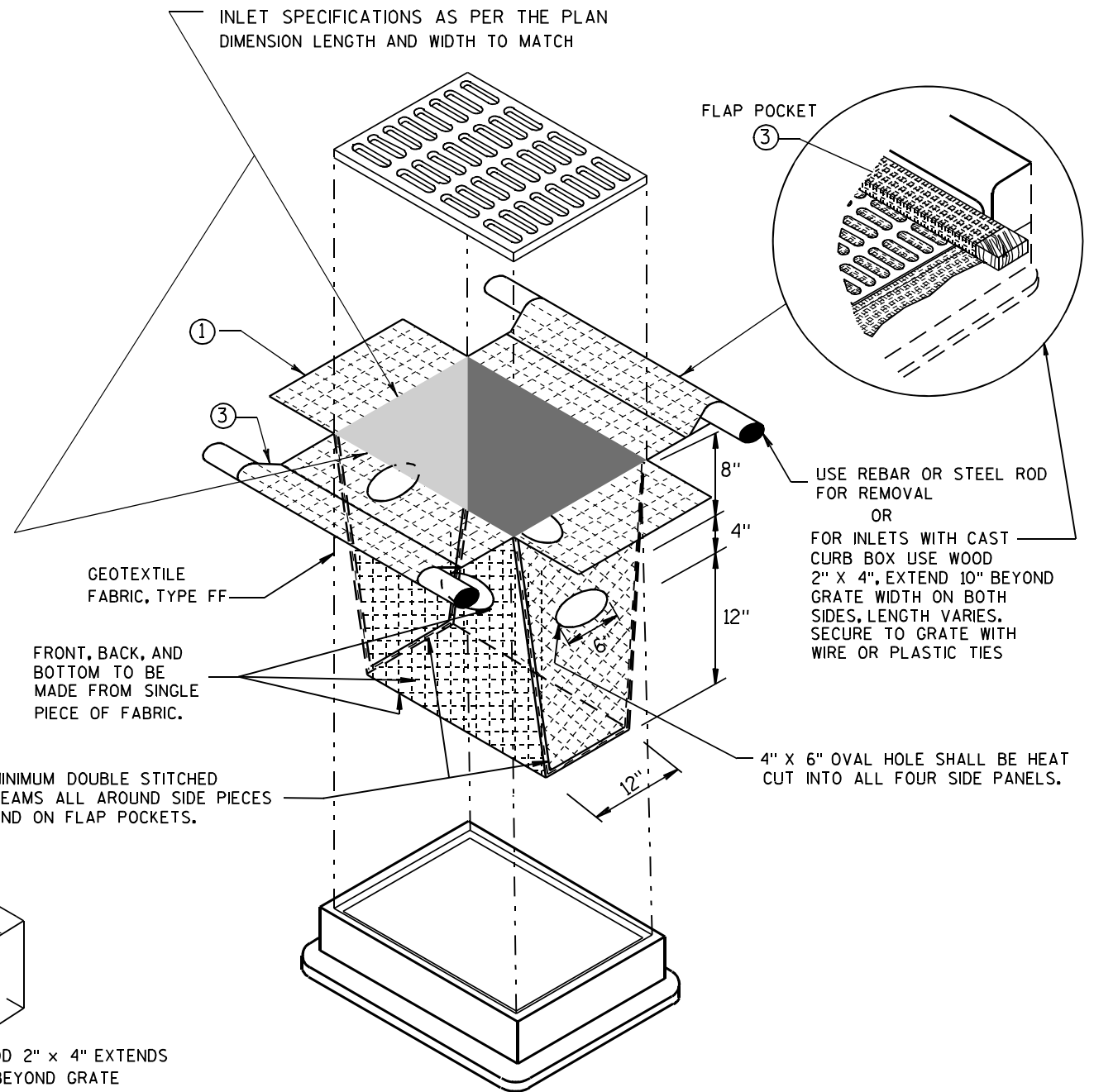


**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

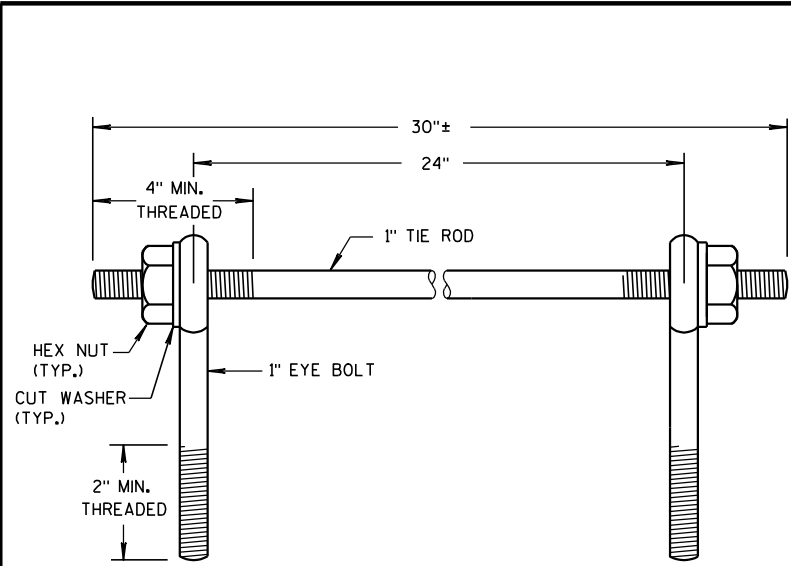
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

**INLET PROTECTION
TYPE A, B, C, AND D**

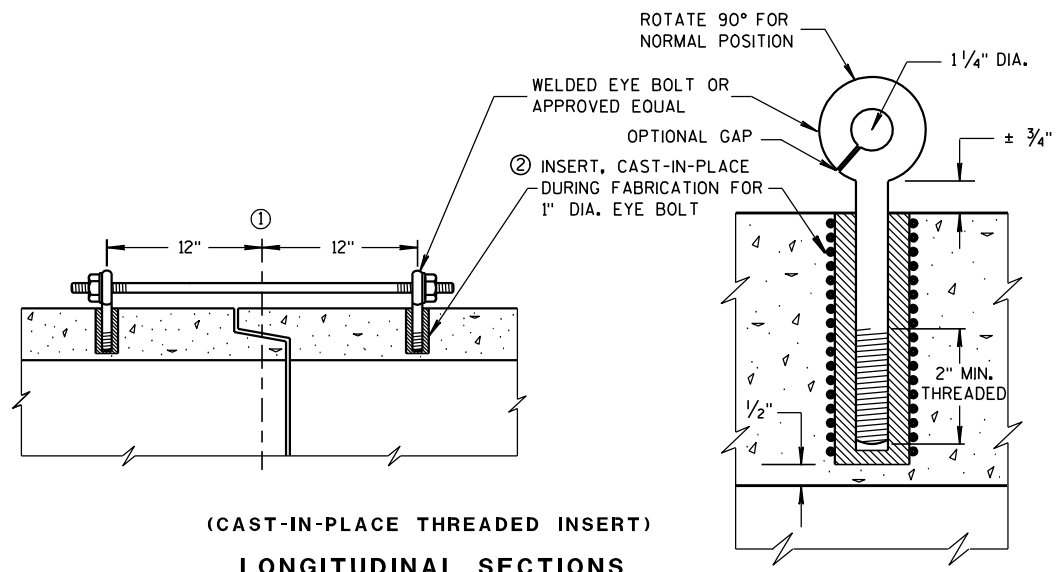
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Conestra
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST-IN-PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

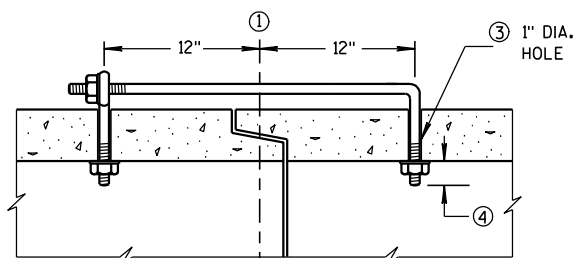
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

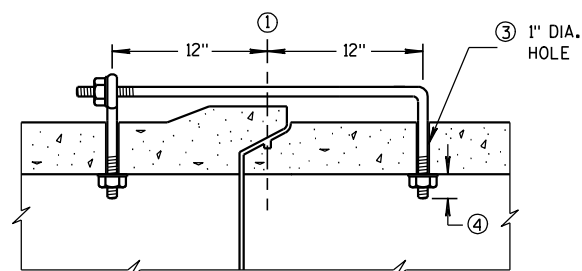
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- ① ϕ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- ② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- ③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ϕ OF TONGUE AND GROOVE.
- ④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- ⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN $\frac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)
LONGITUDINAL SECTION

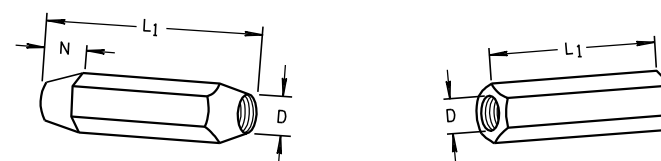
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

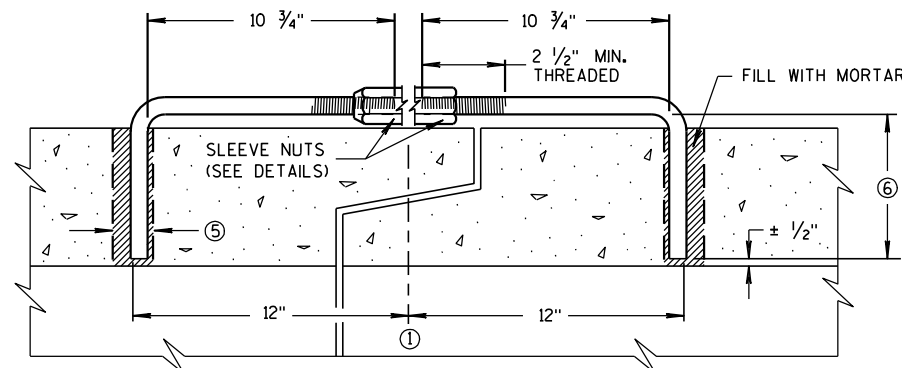
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/6

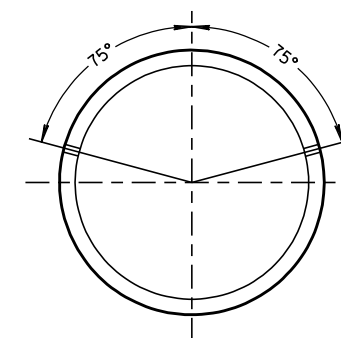
DIMENSIONS SHOWN ARE IN INCHES



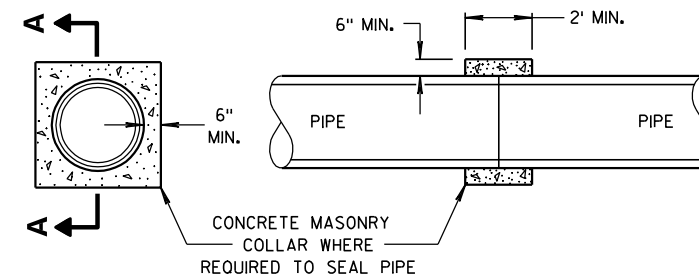
TAPERED PLAIN
RIGHT AND LEFT THREADS
SLEEVE NUTS



(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)
LONGITUDINAL SECTION
ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE
INSERTS OR HOLES DURING FABRICATION
FOR PIPE SECTIONS REQUIRING TIE RODS
TRANSVERSE SECTION



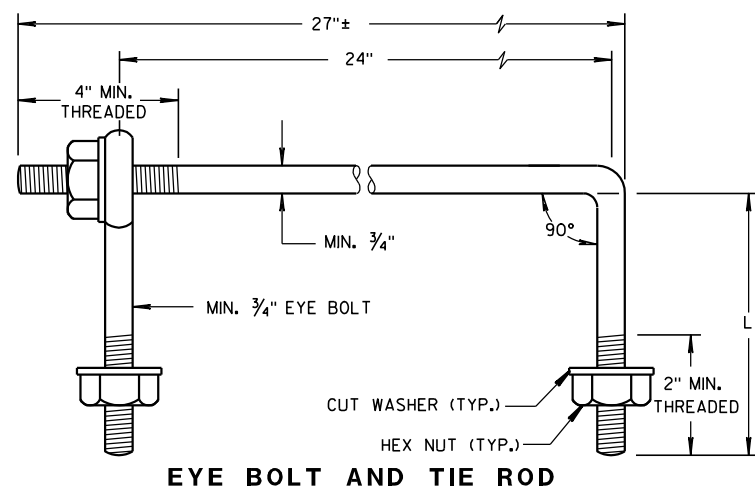
SECTION A-A
CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE
PIPE AND CONCRETE
COLLAR DETAIL

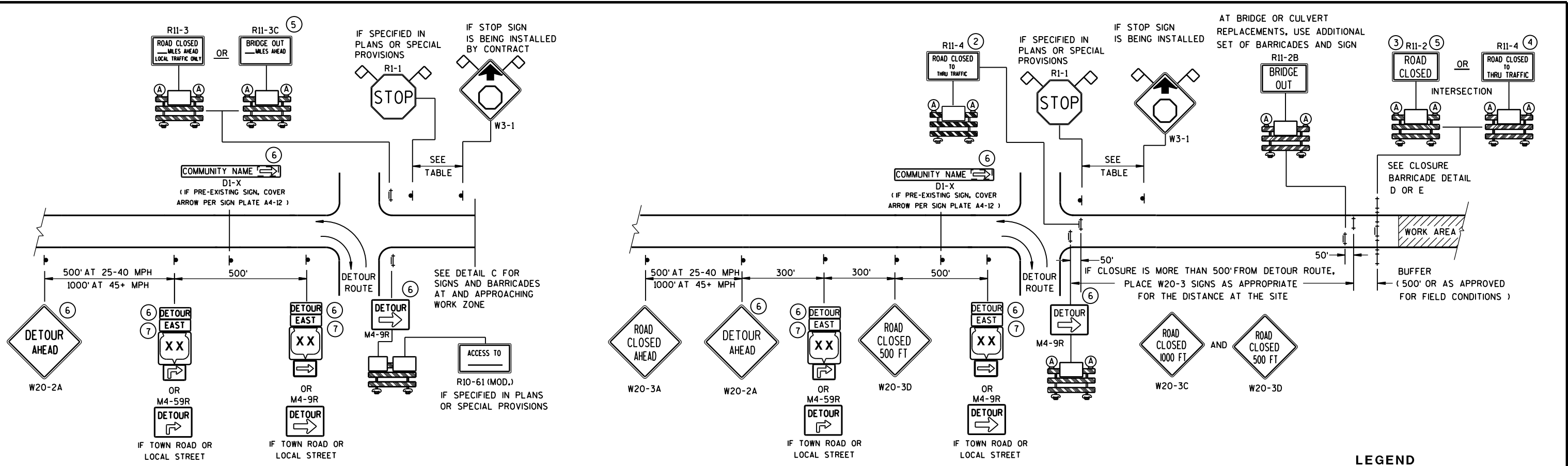
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)
EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

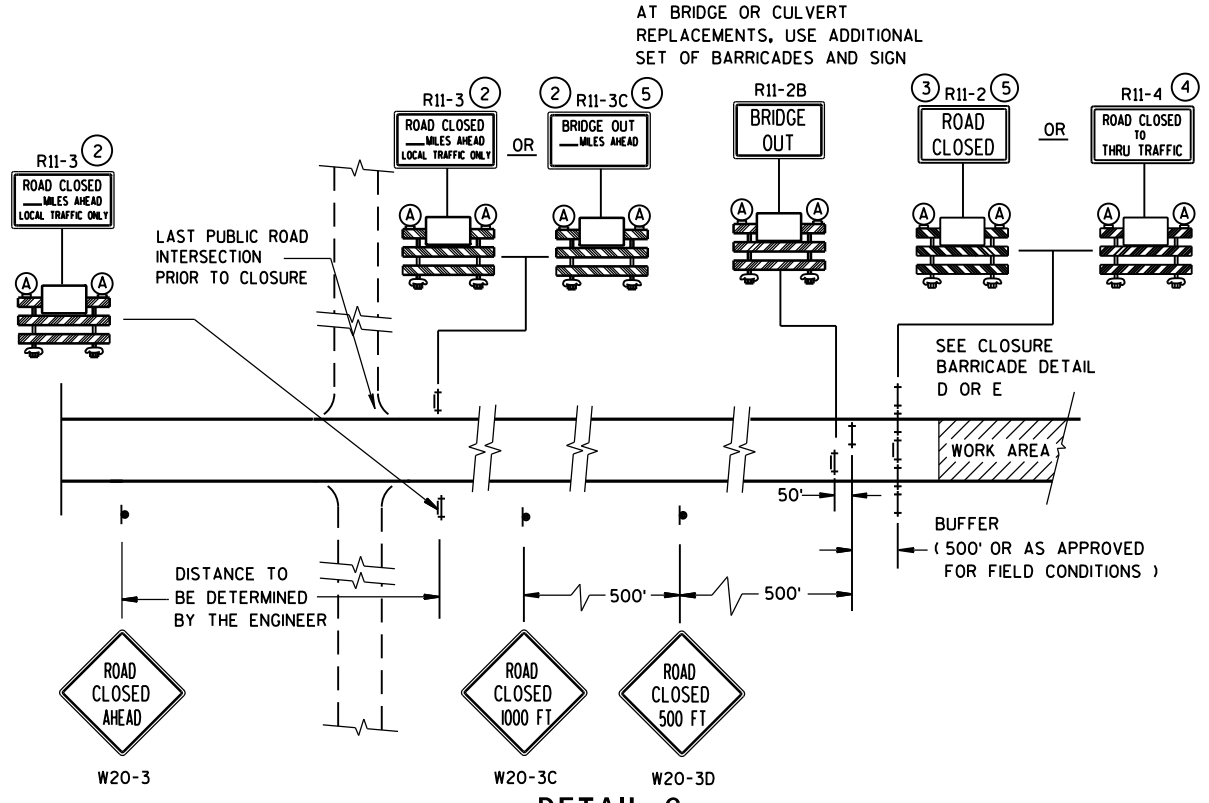


EYE BOLT AND TIE ROD



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
 WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
 WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

- LEGEND**
- ⊙ SIGN ON PERMANENT SUPPORT
 - ⊥ TYPE III BARRICADE
 - ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
 - Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
 - ▨ WORK AREA

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

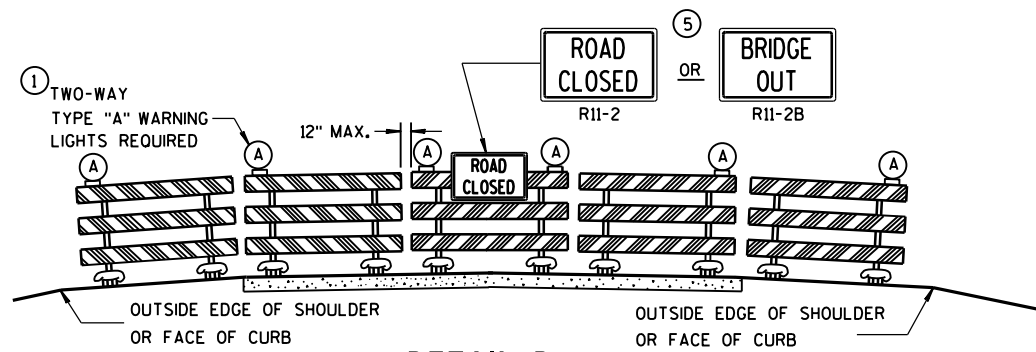
- DETOUR EAST M4-8 M3-X
- XX OR COUNTY XX OR XX M1-4 M1-5A M1-6
- M05-1 OR M06-1
- ◇ ◇ FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "b"
 FOR GENERAL NOTES
 AND FOOTNOTES ① THROUGH ⑦

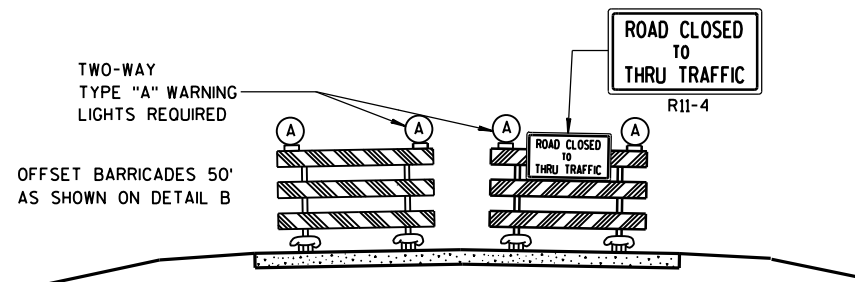
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amakobe Atepe
 DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
 FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

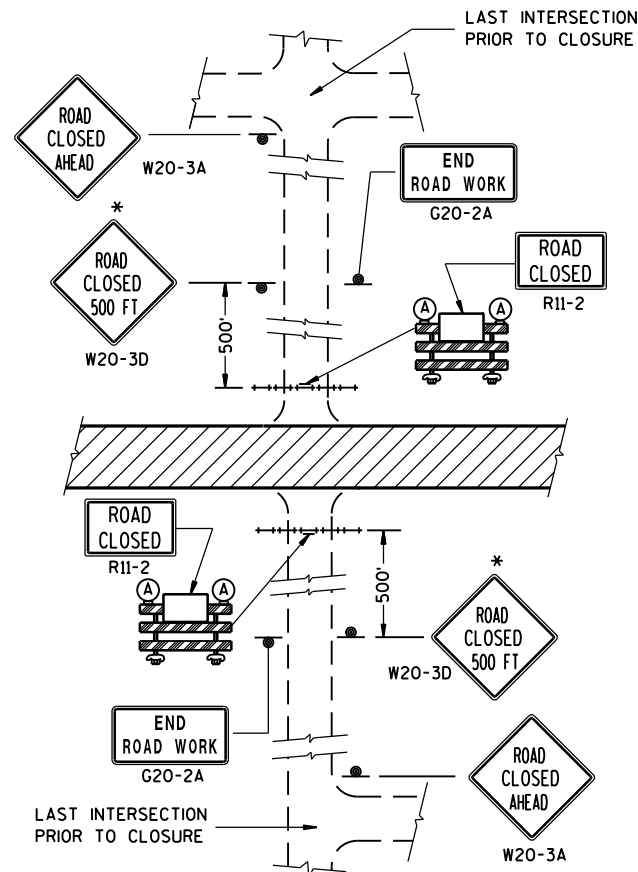
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

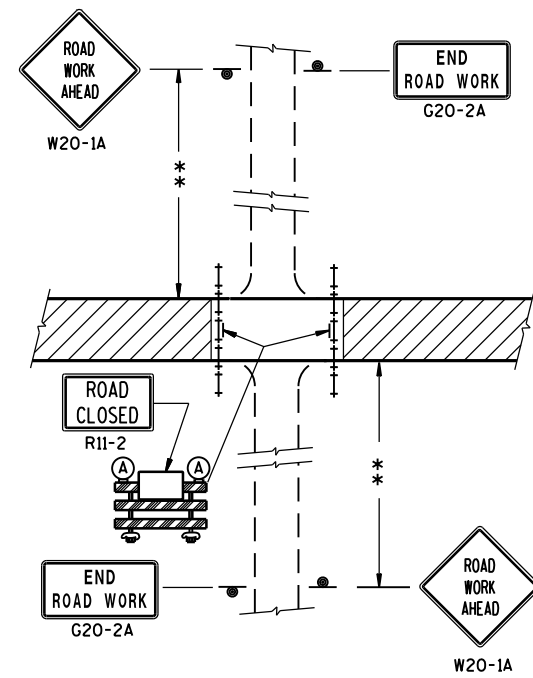
R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

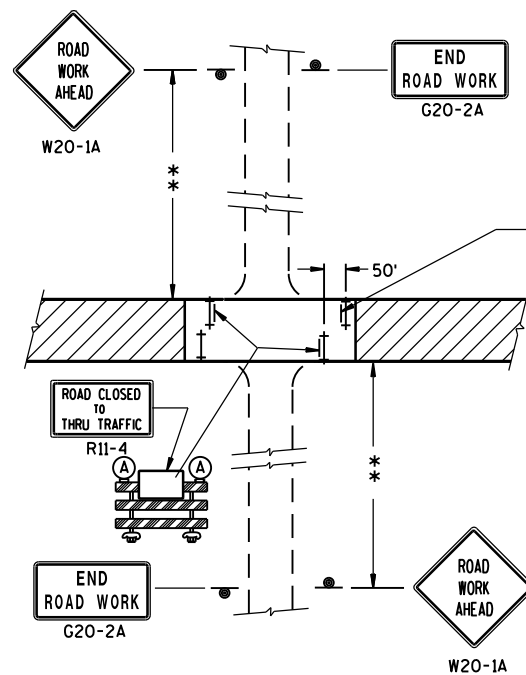
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

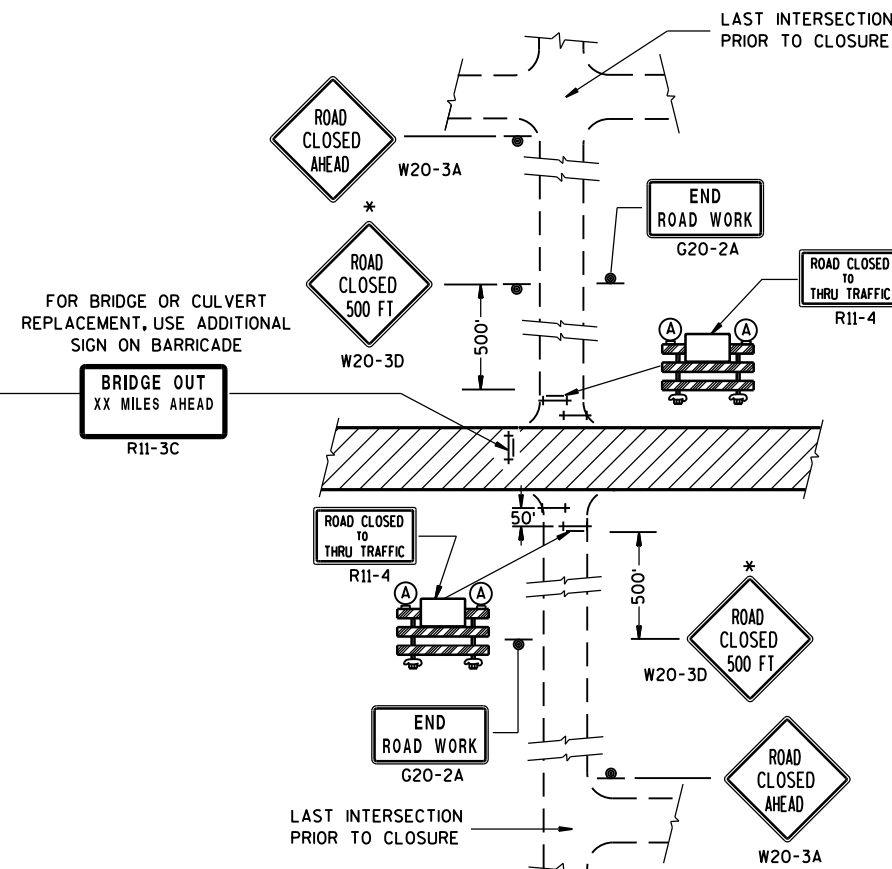
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

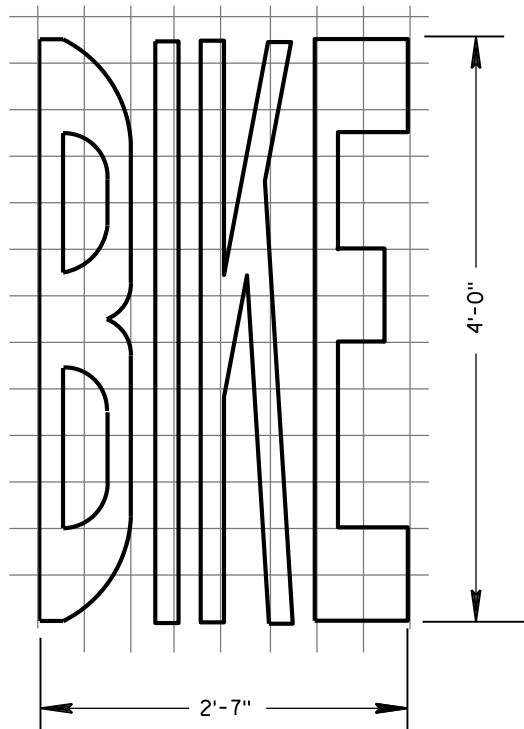
LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

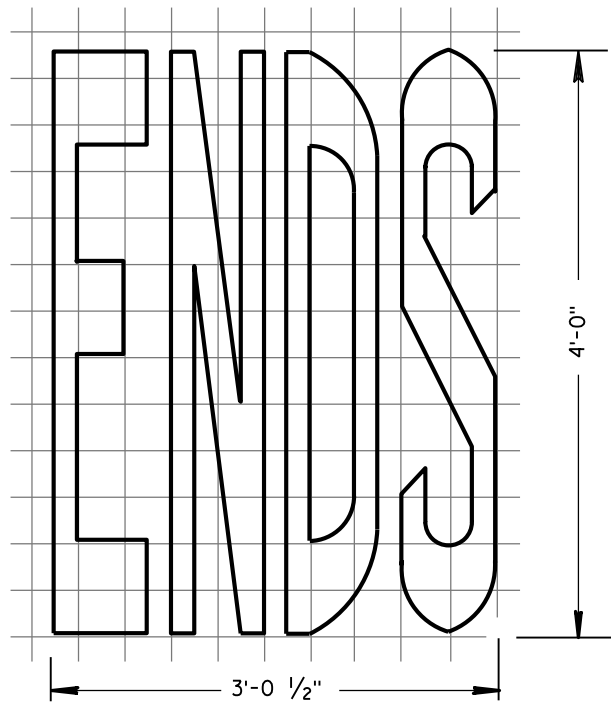
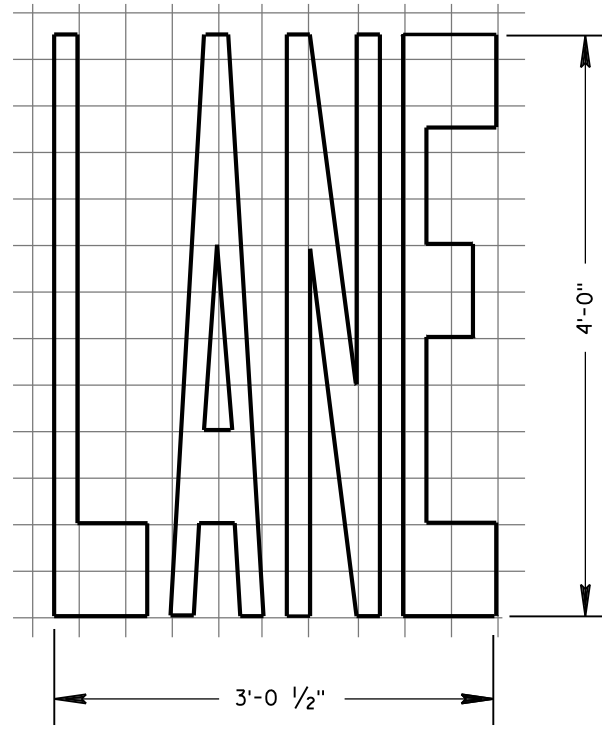
**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

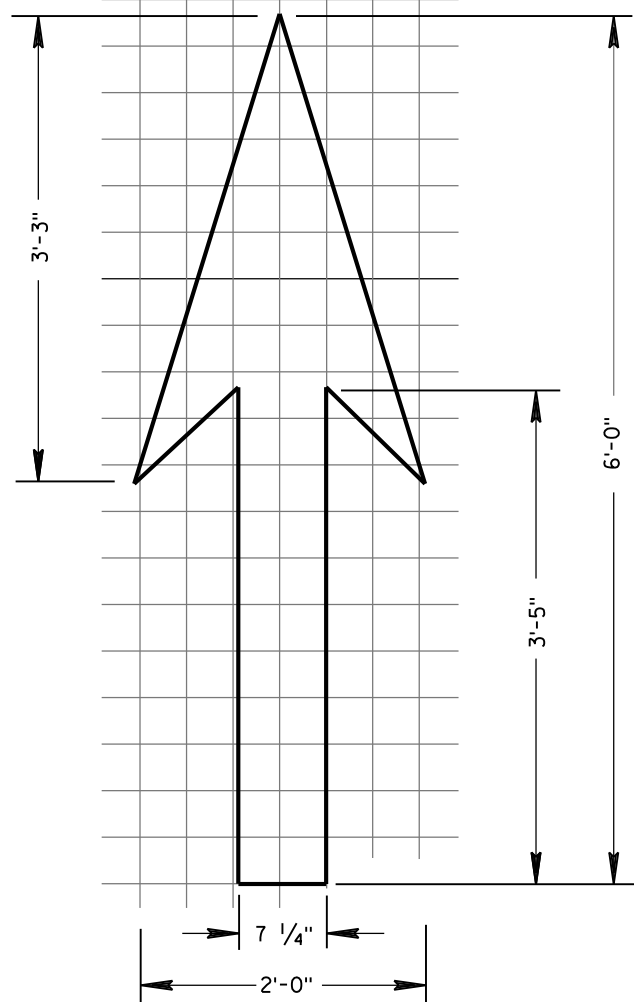
APPROVED
Sept. 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



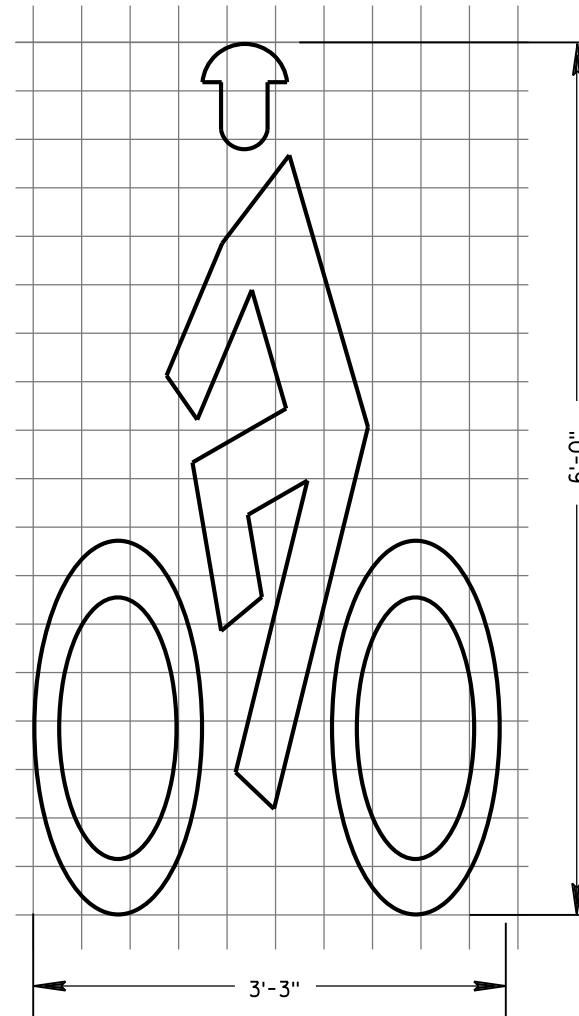
BIKE LANE WORDS



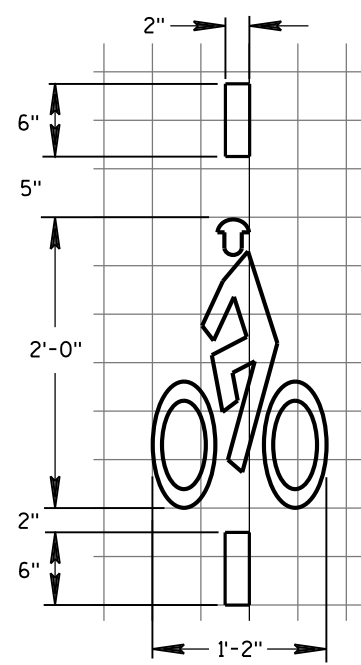
BIKE LANE WORDS



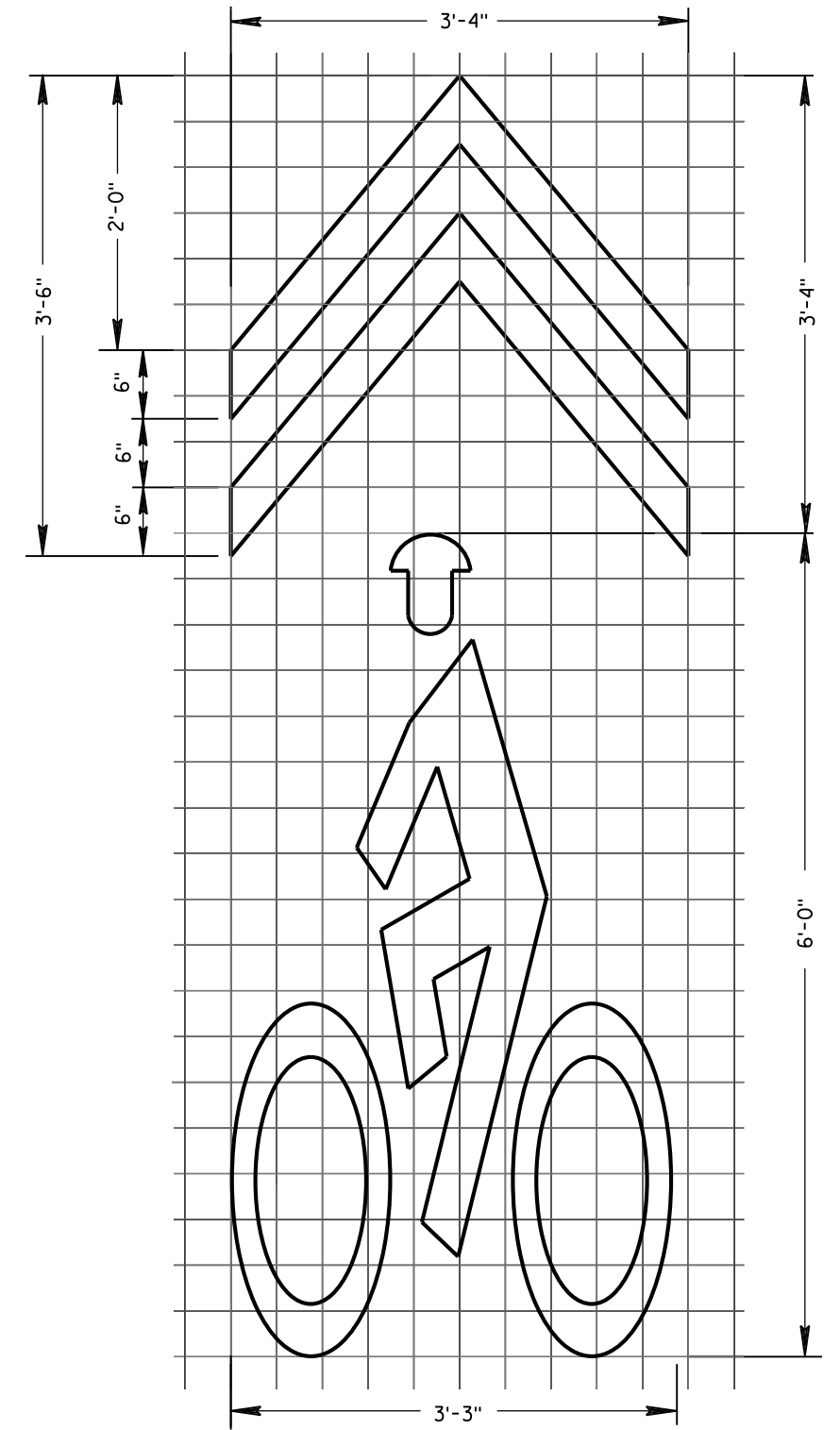
BIKE LANE ARROW



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING



BIKE SYMBOL FOR SHARED LANE

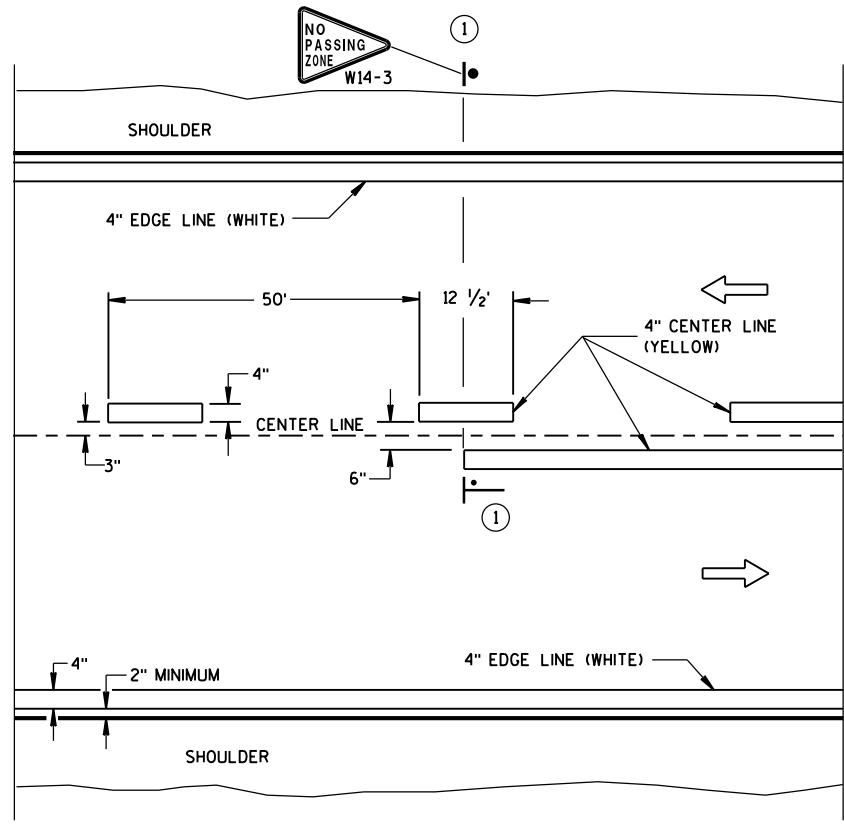
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

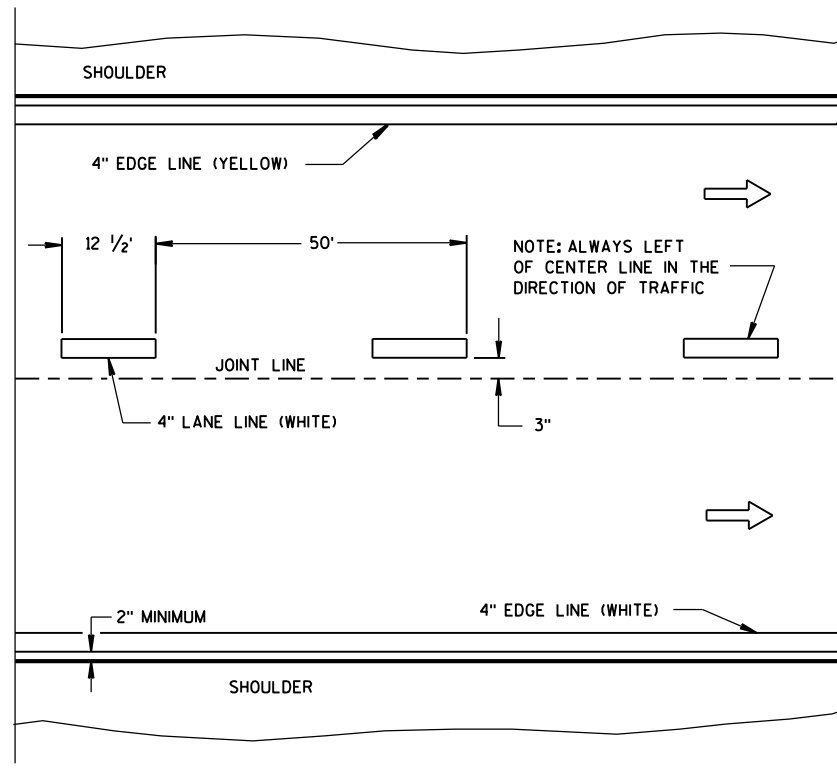
PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

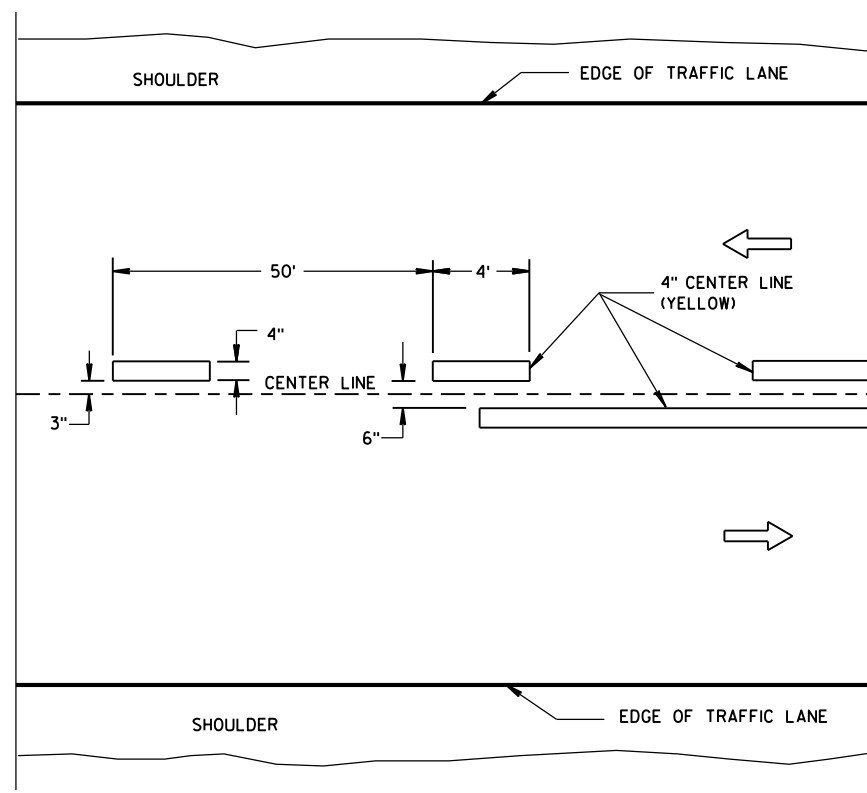
① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

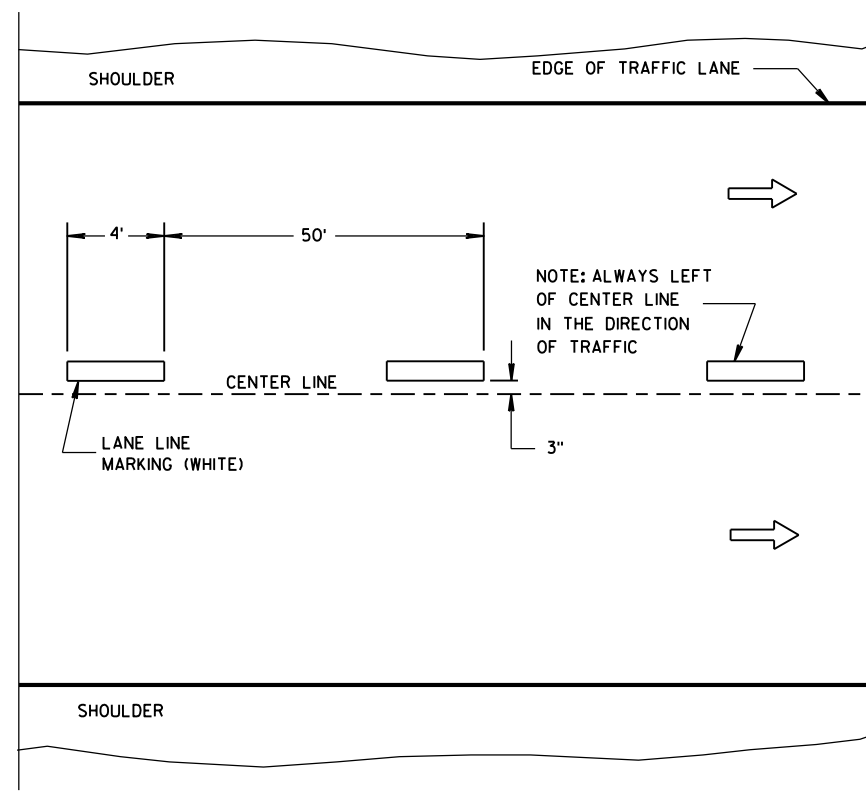
ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

- "T" MARKING
- POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

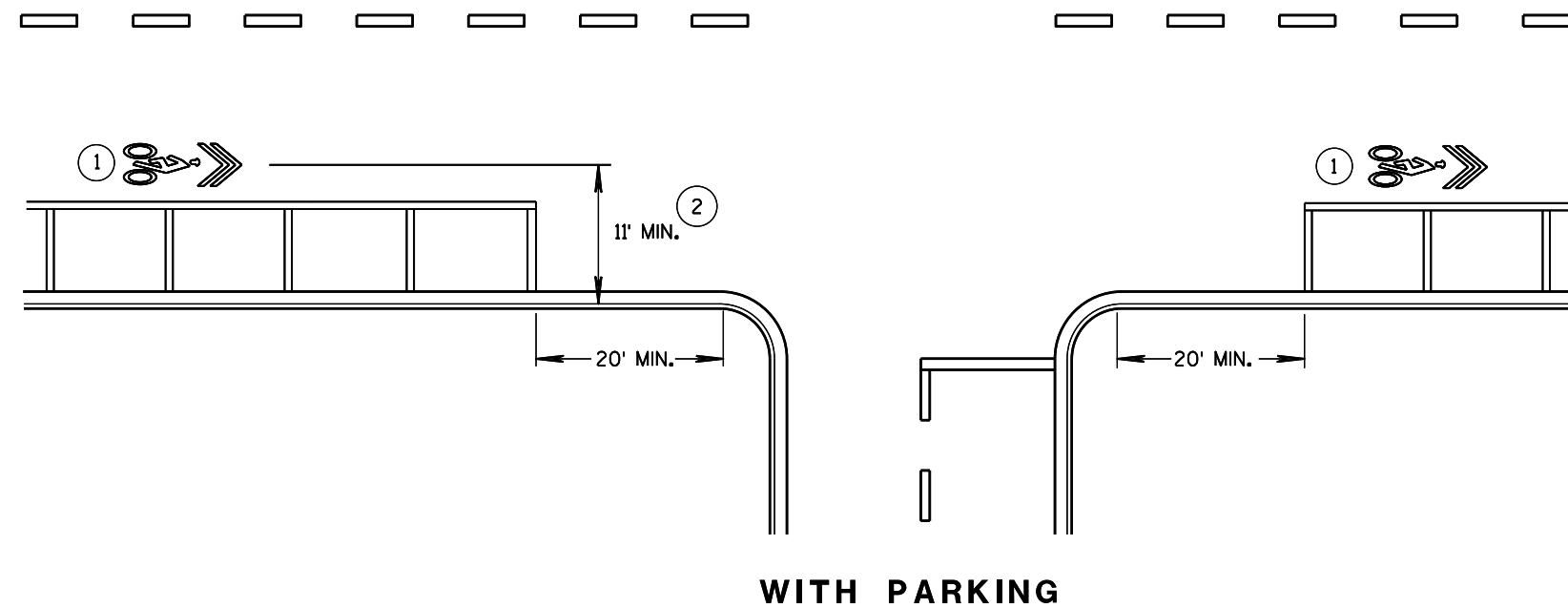
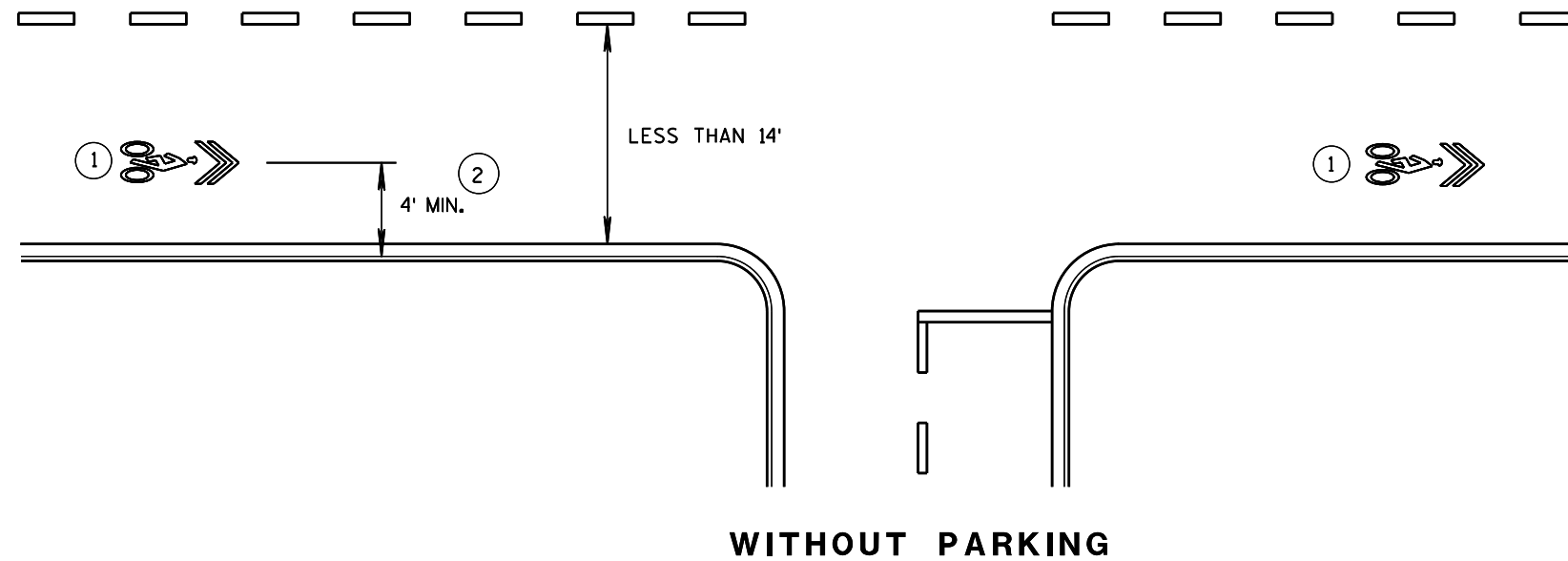
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

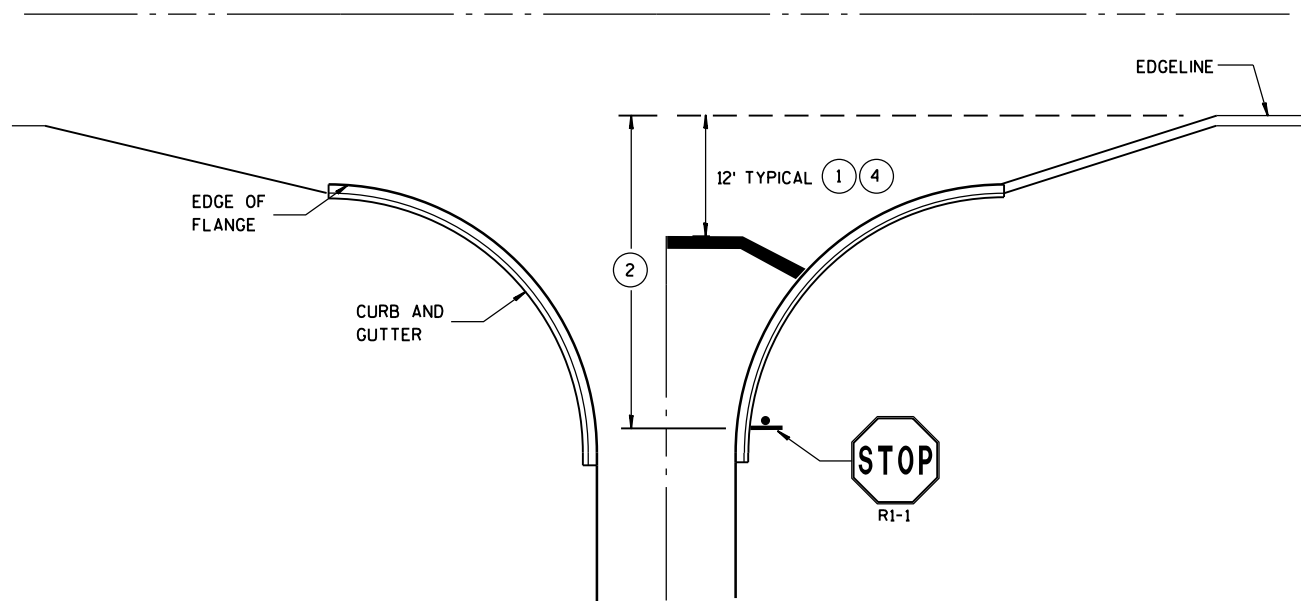
APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

GENERAL NOTES

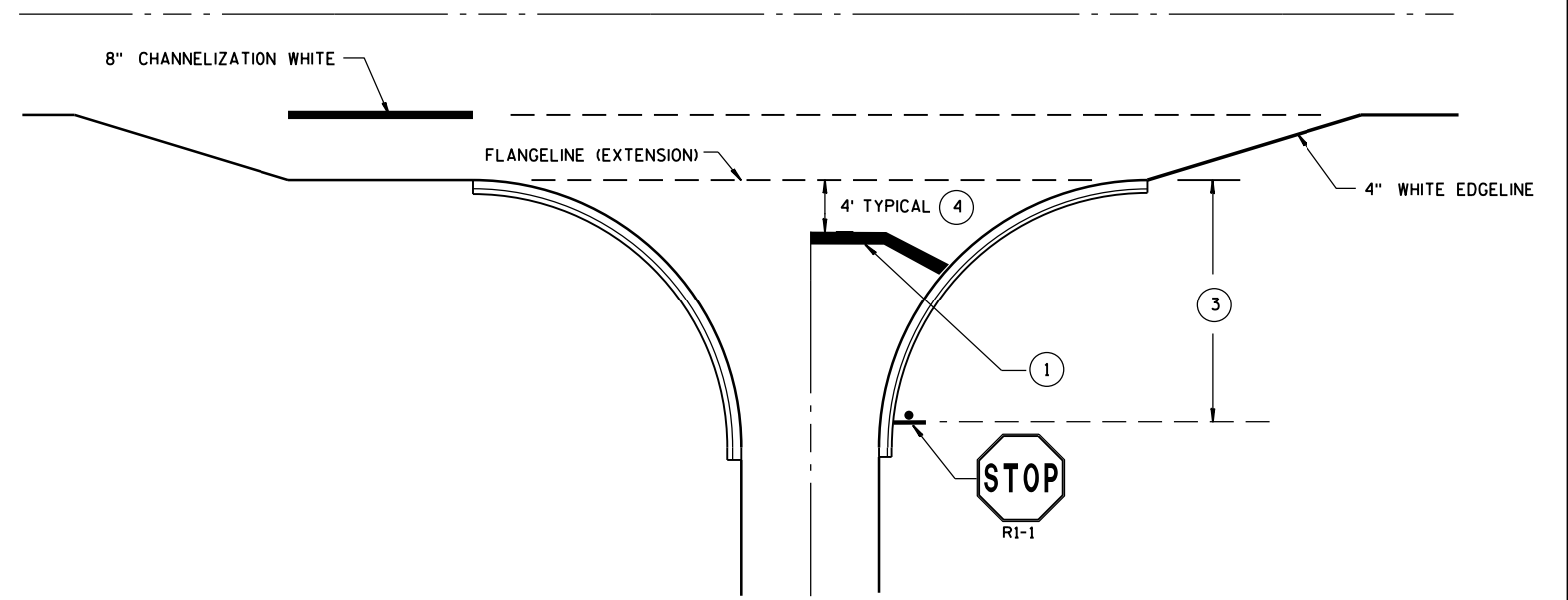
- ① MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.
- ② OR TO EDGE OF PAVEMENT WITHOUT CURB.



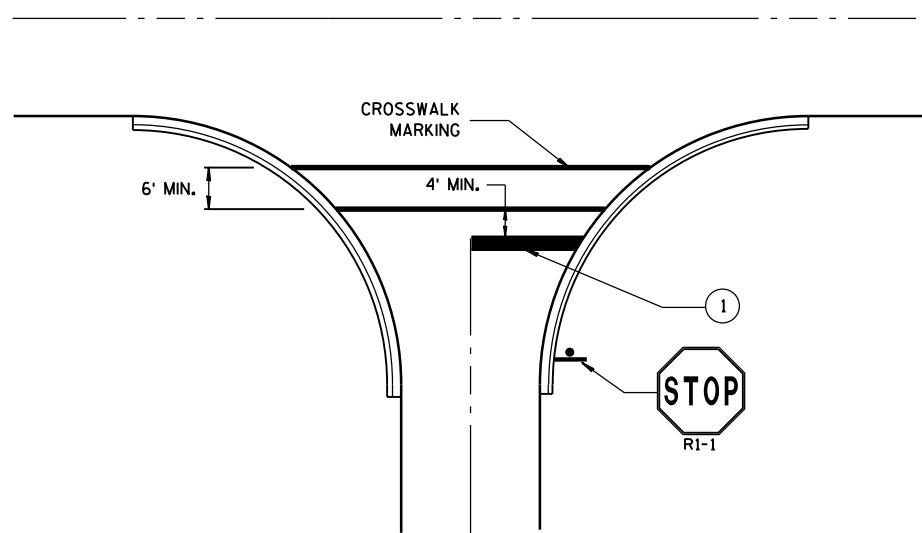
PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12-2016	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MARKING ENGINEER
FHWA	



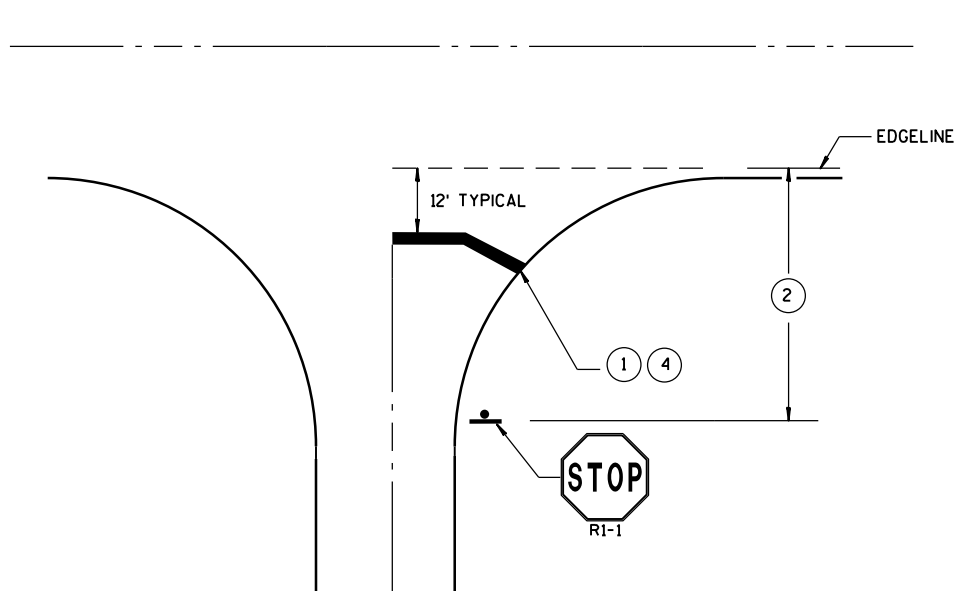
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

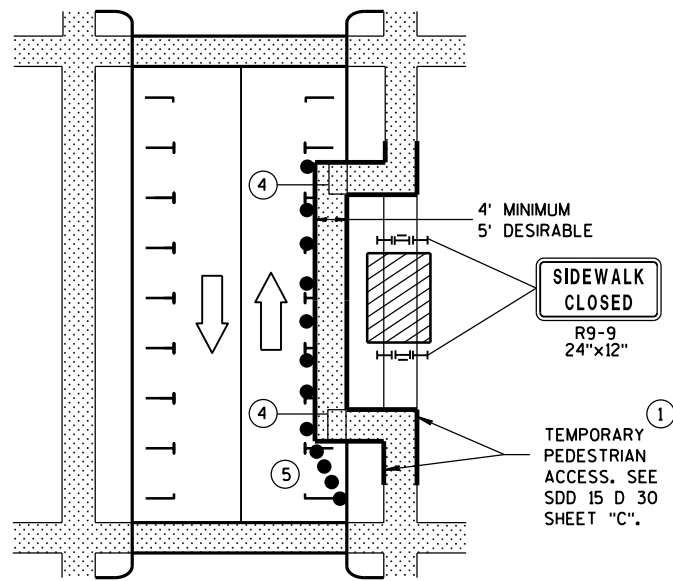
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

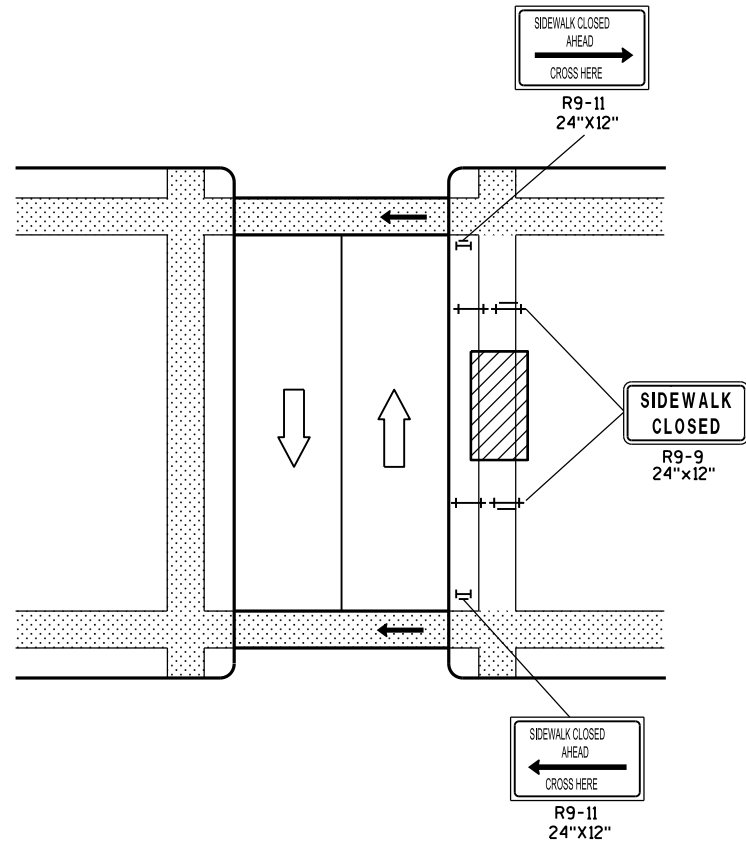
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: Sept., 2017 /S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

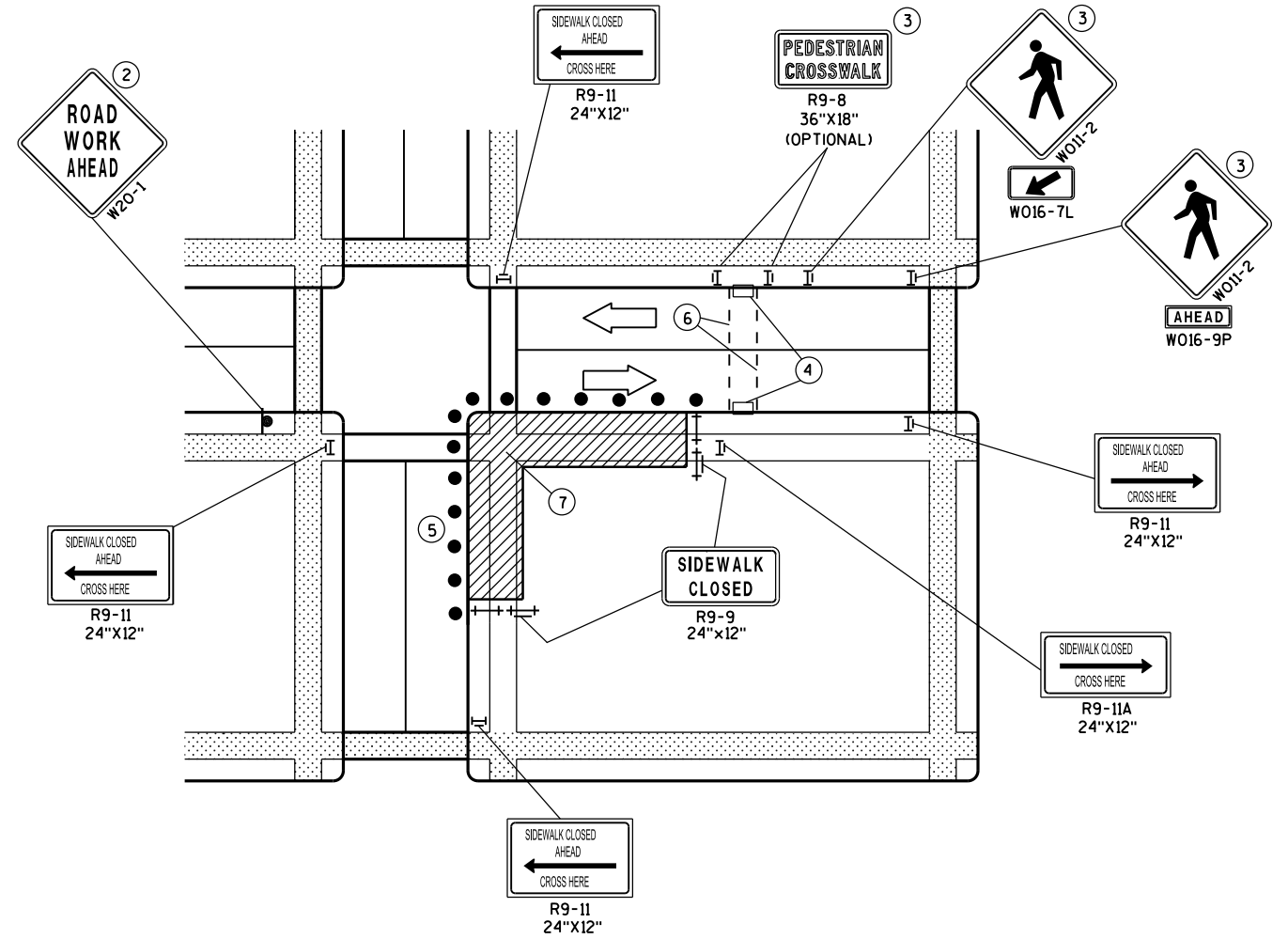
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

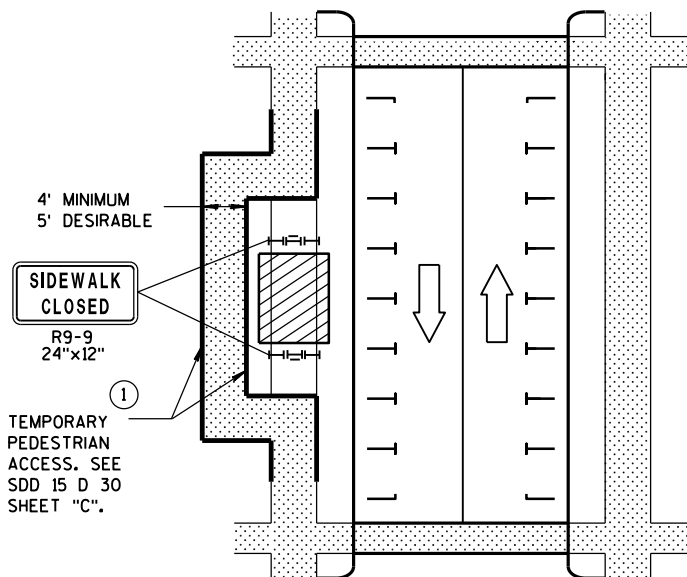


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"W0" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

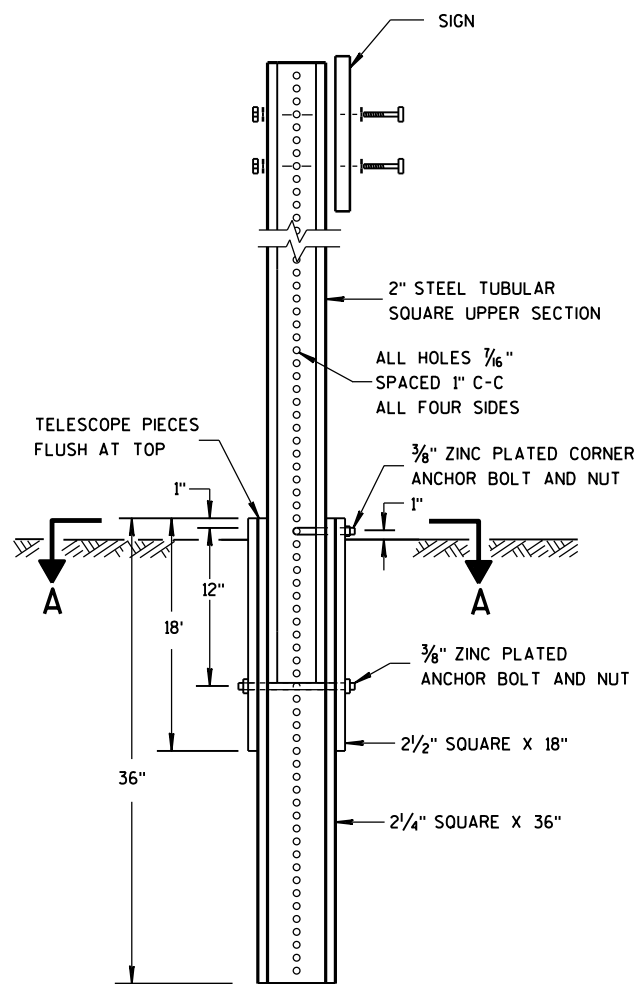
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

	SIGN ON PERMANENT SUPPORT		DIRECTION OF TRAFFIC
	UNDER PEDESTRIAN TRAFFIC		TRAFFIC CONTROL DRUM
	WORK AREA		
	PEDESTRIAN CHANNELIZATION DEVICE		
	TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		
	TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



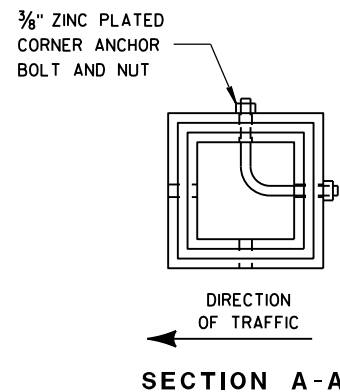
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

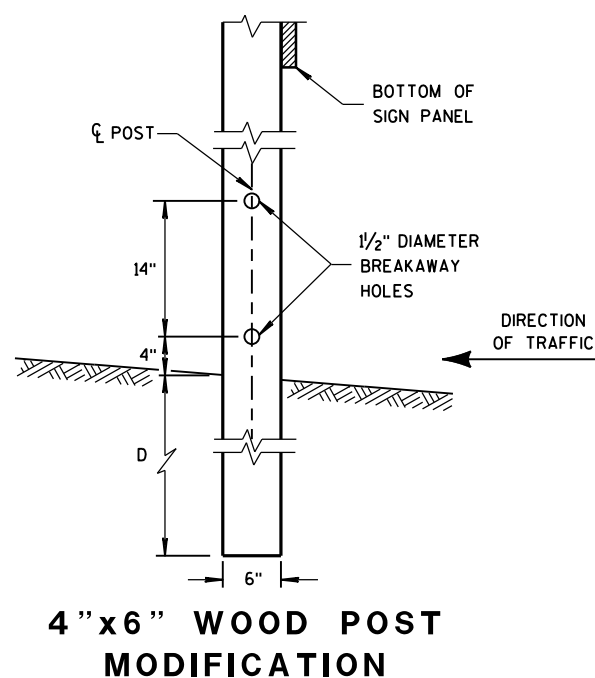
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

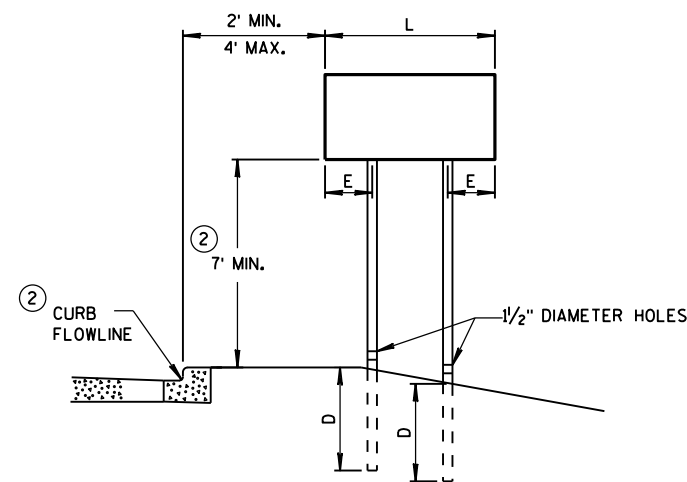
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.



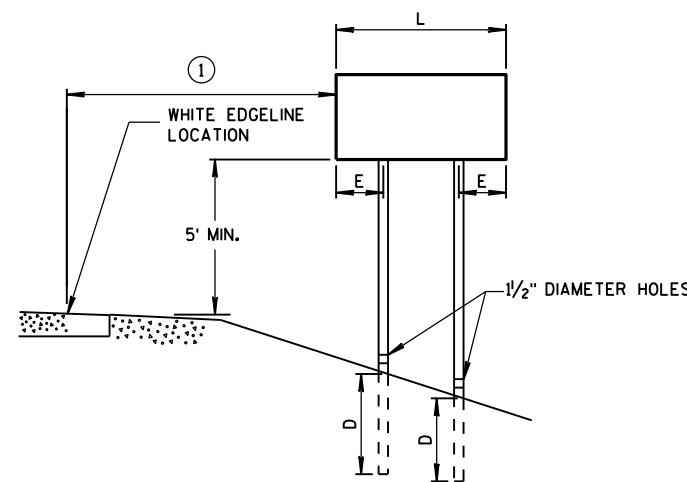
SECTION A-A



4" X 6" WOOD POST MODIFICATION



URBAN AREA



RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

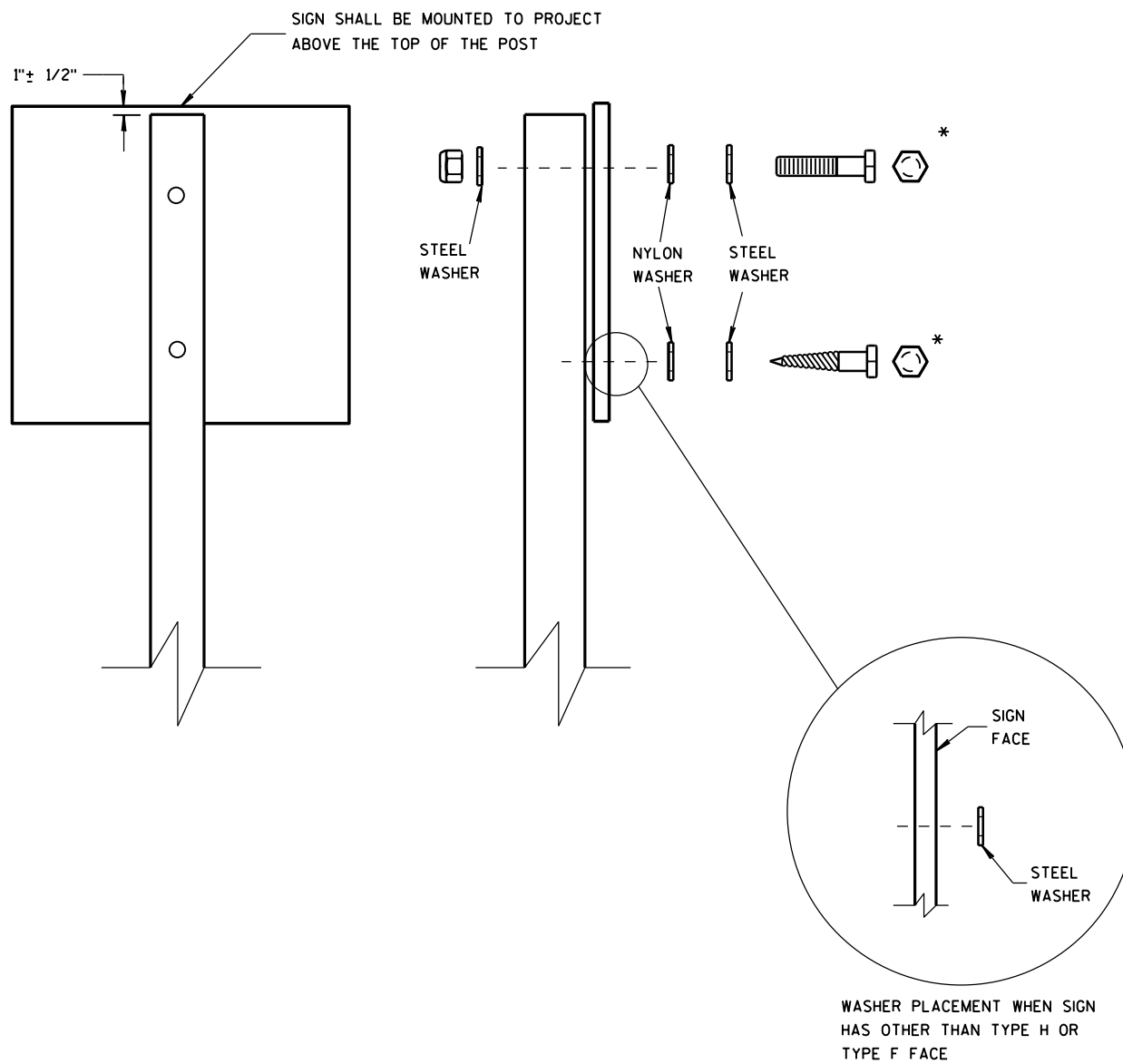
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" x 3"

MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS

RIVETS - 5/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

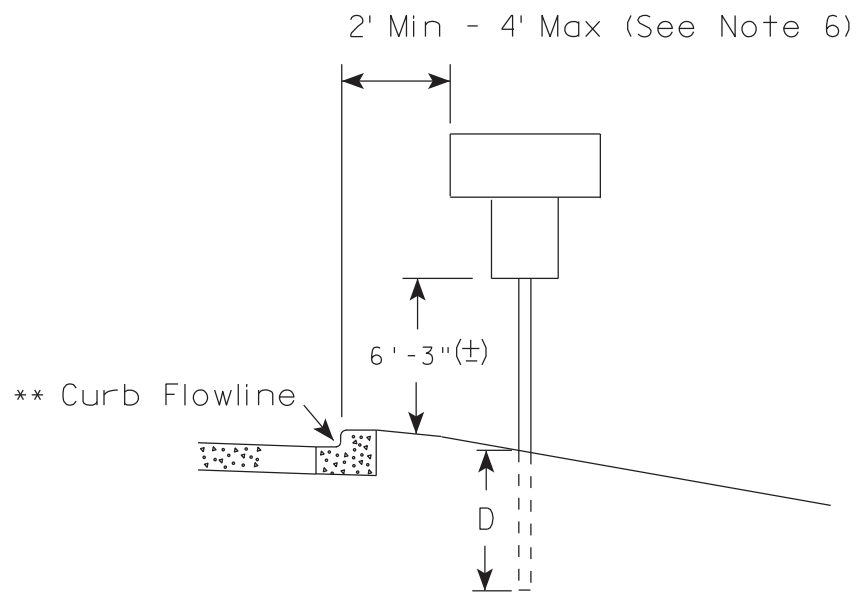
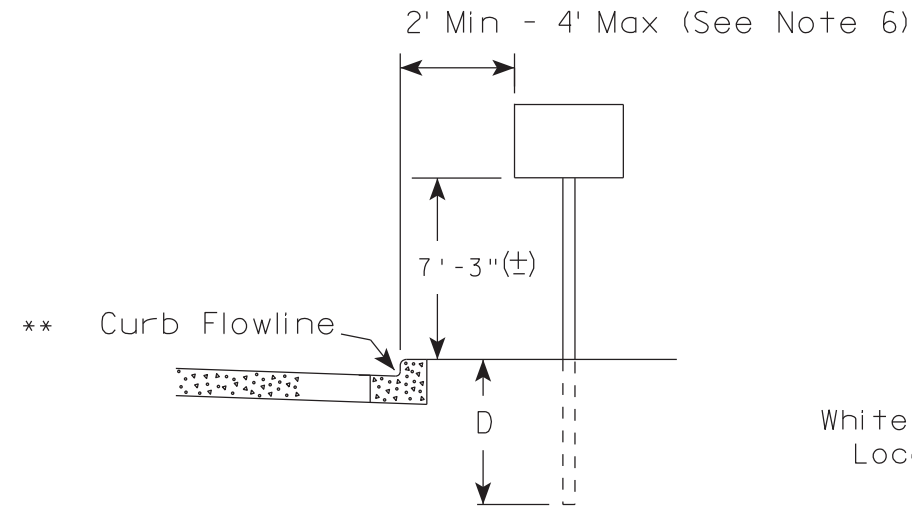
1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL

1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

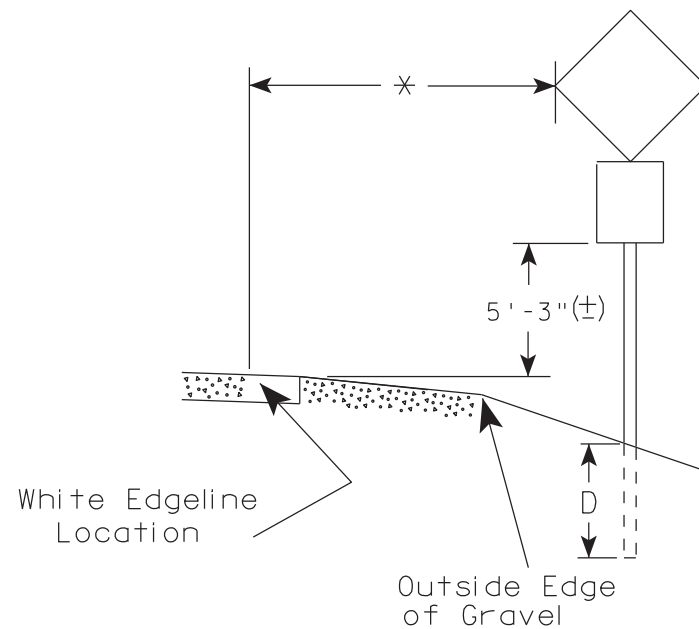
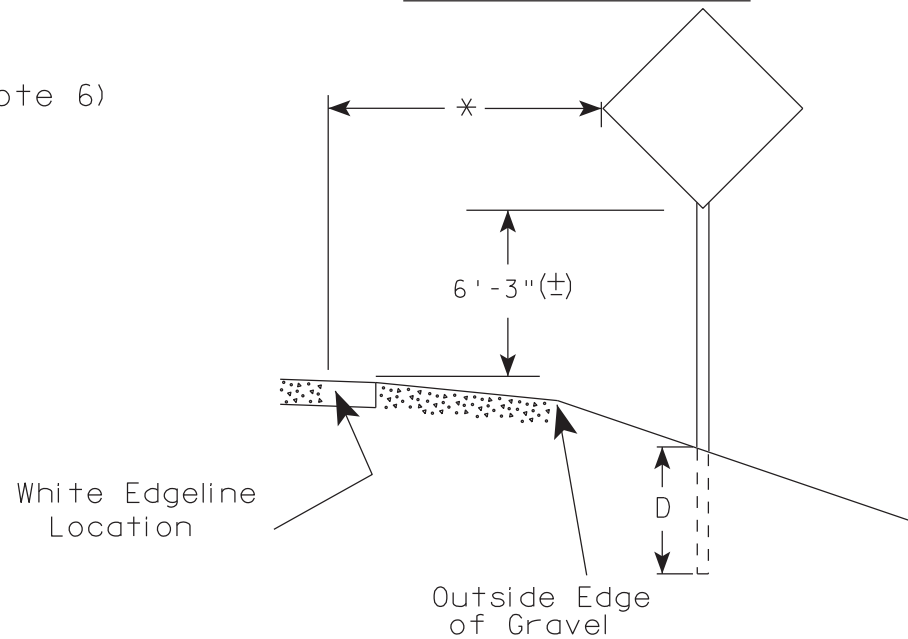
* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

✖✖ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

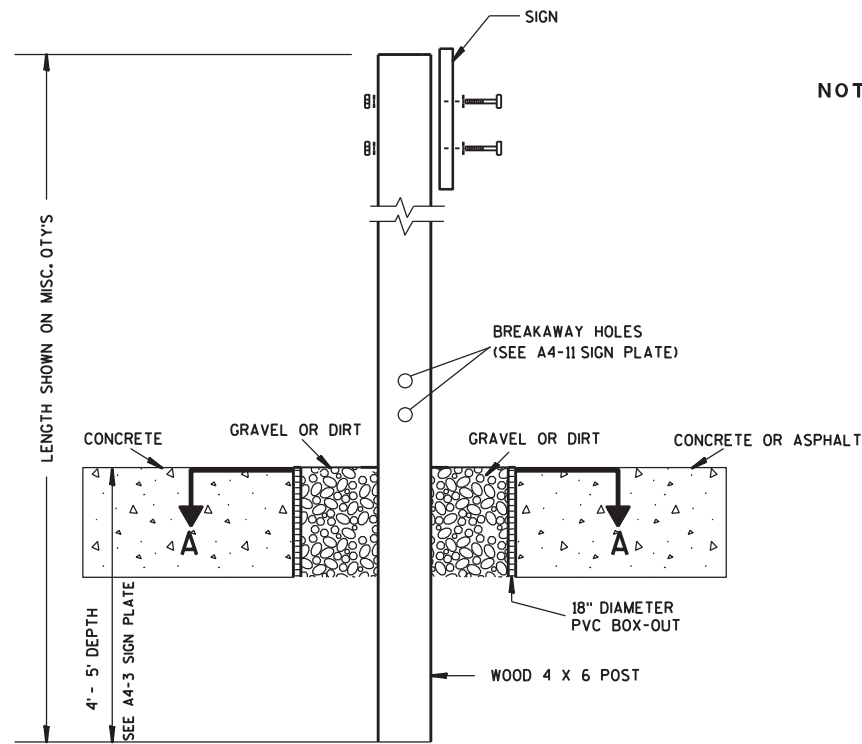
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

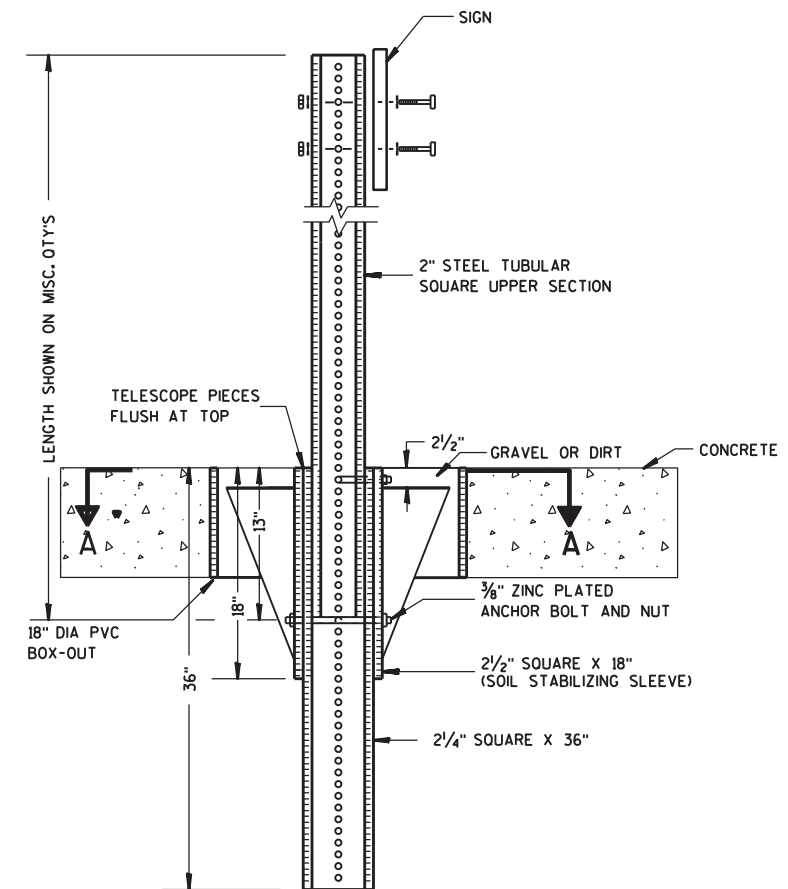
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

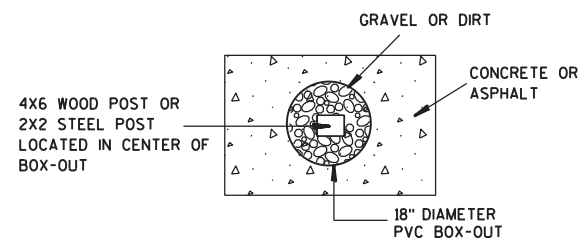
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



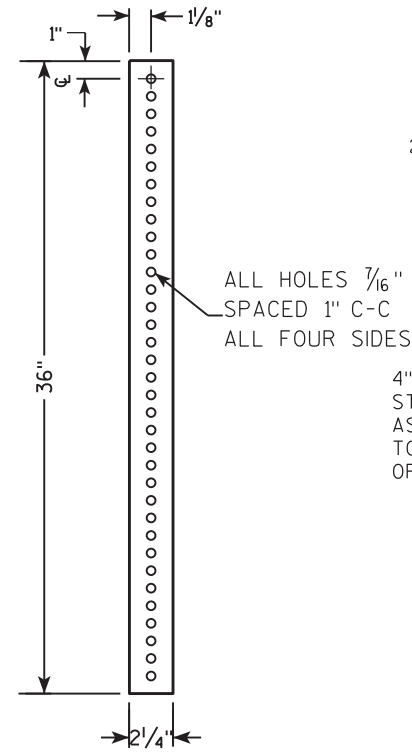
PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

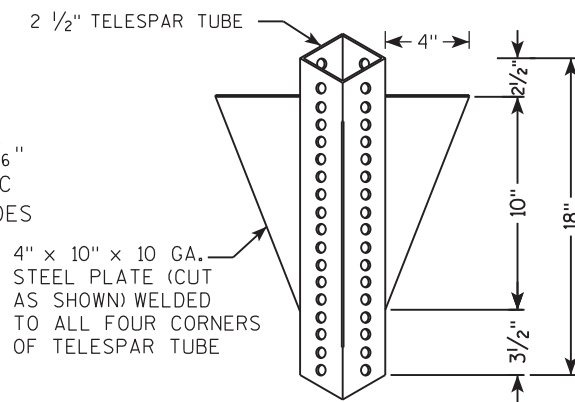
SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

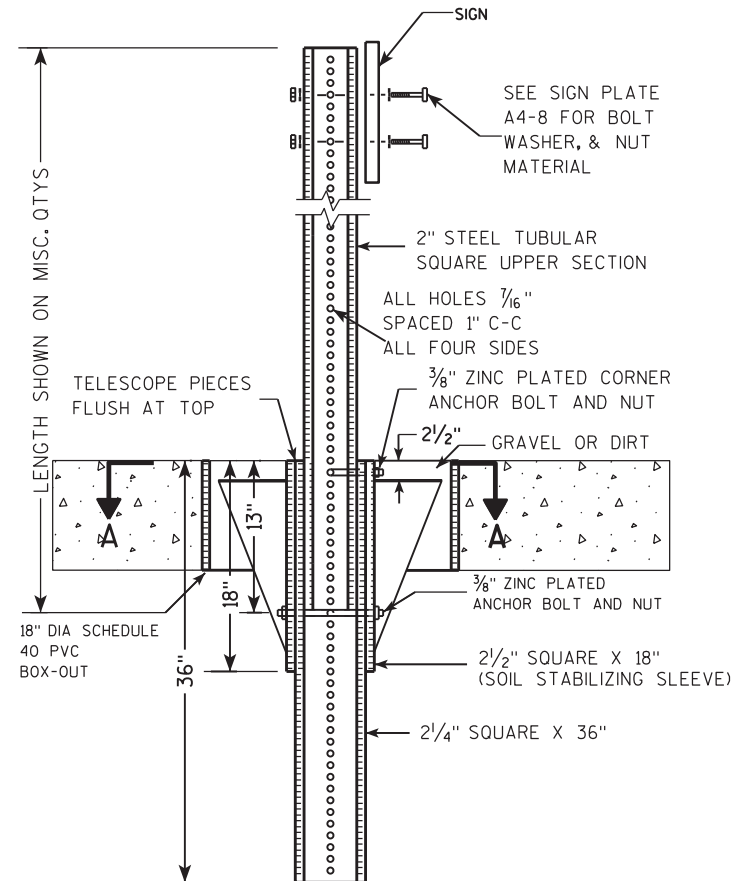
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



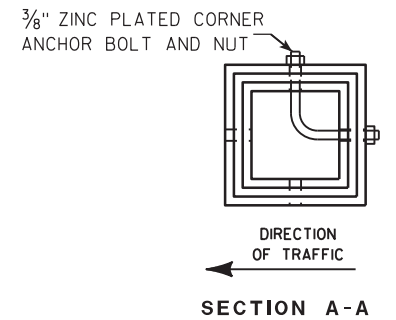
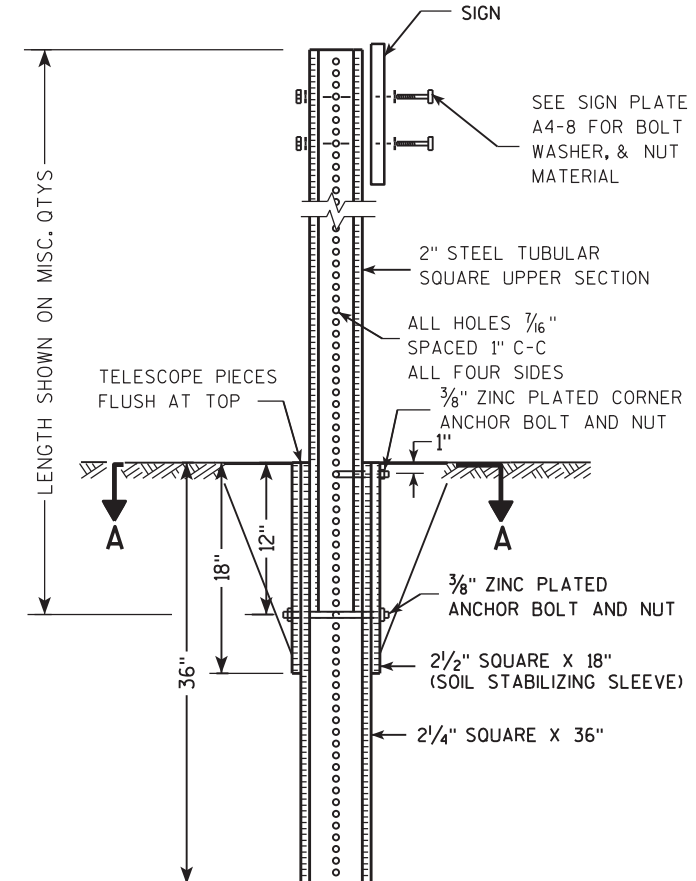
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



**DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)**



**DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

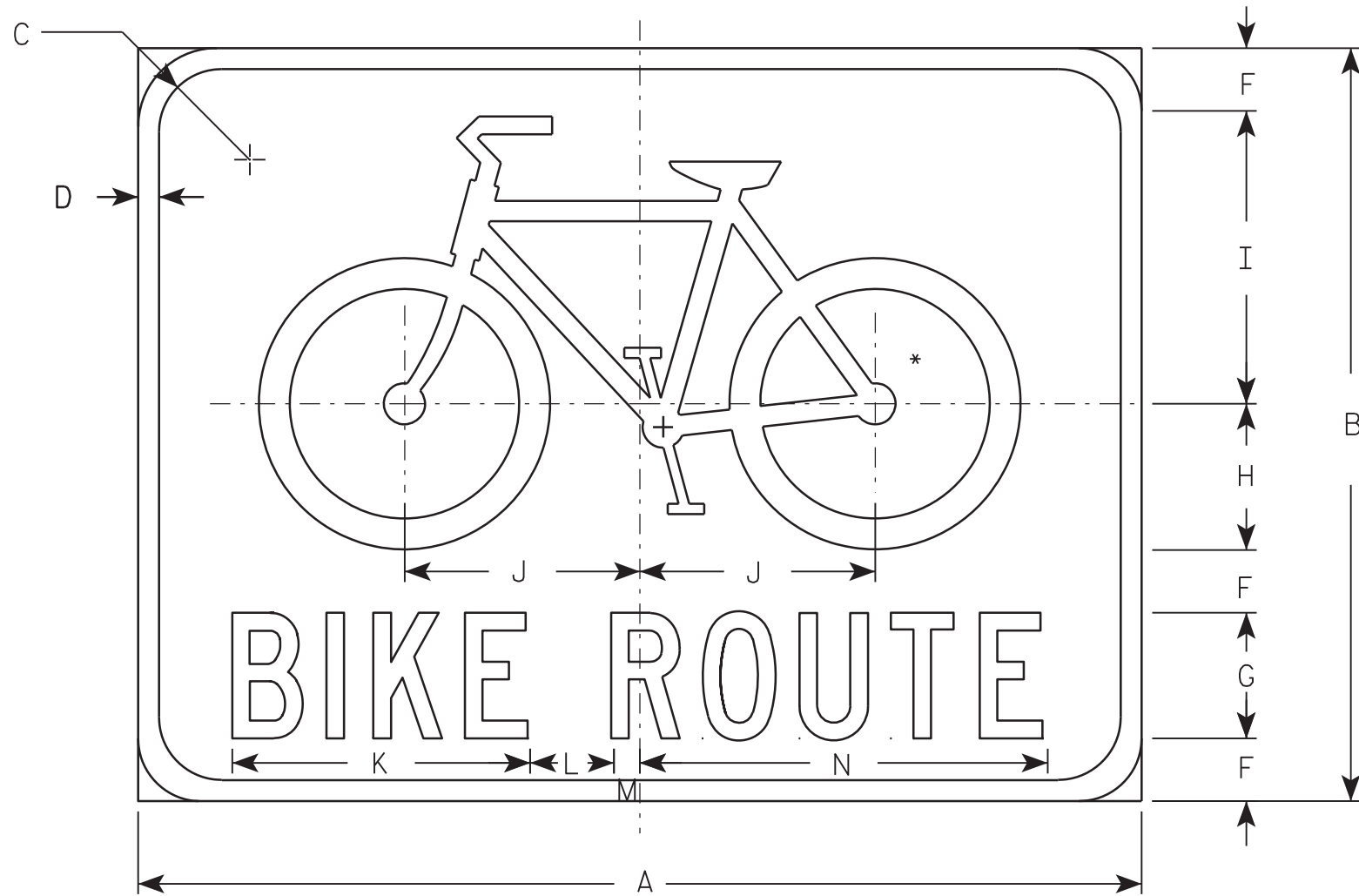
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - GREEN
 Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

D11-1

* See W11-1 for symbol design

Metric equivalent for this sign is:

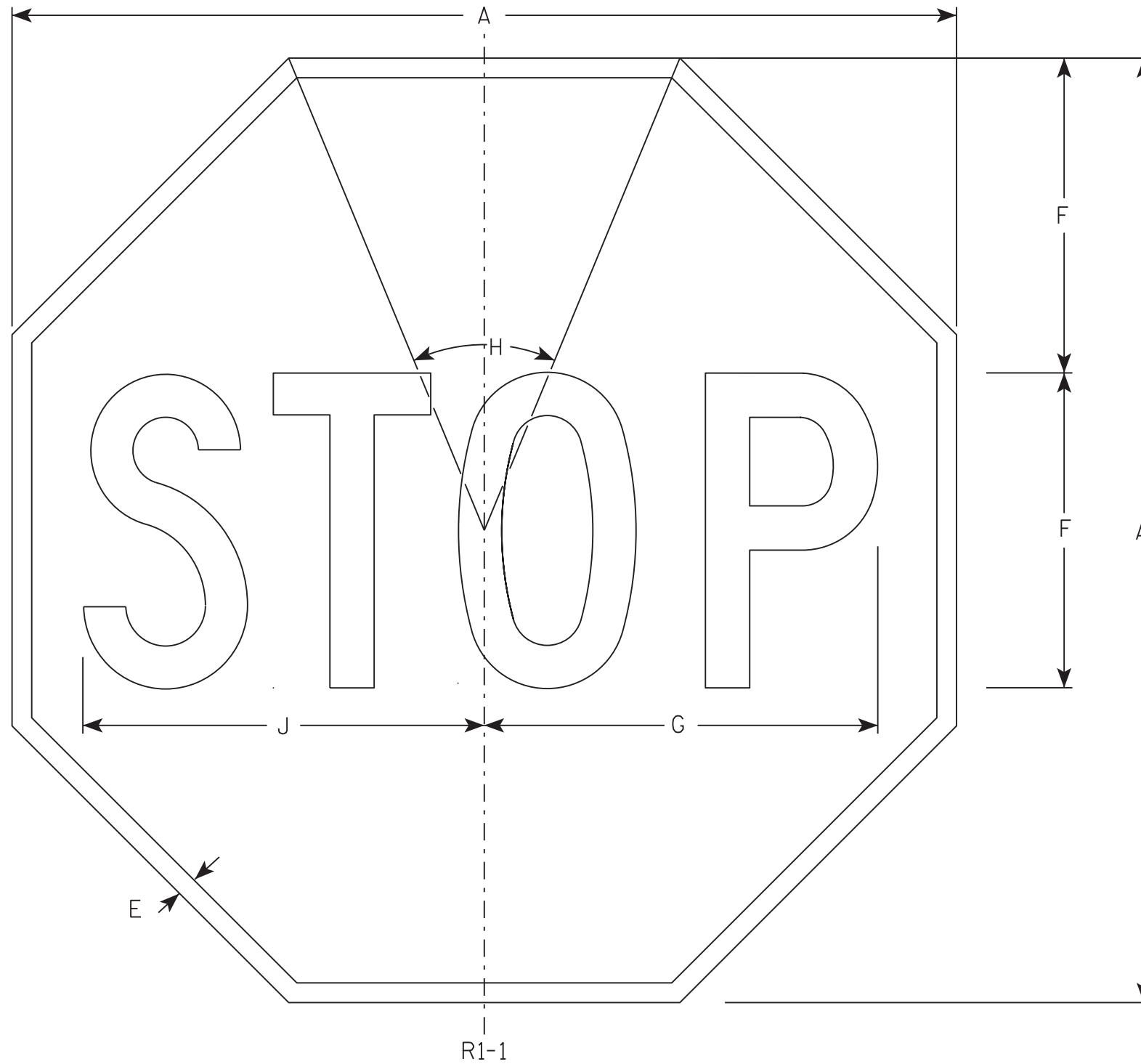
SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4												3.0	0.27	
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13												5.0	0.45	
4																												
5																												

STANDARD SIGN D11-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/24/04	PLATE NO. D11-1.1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

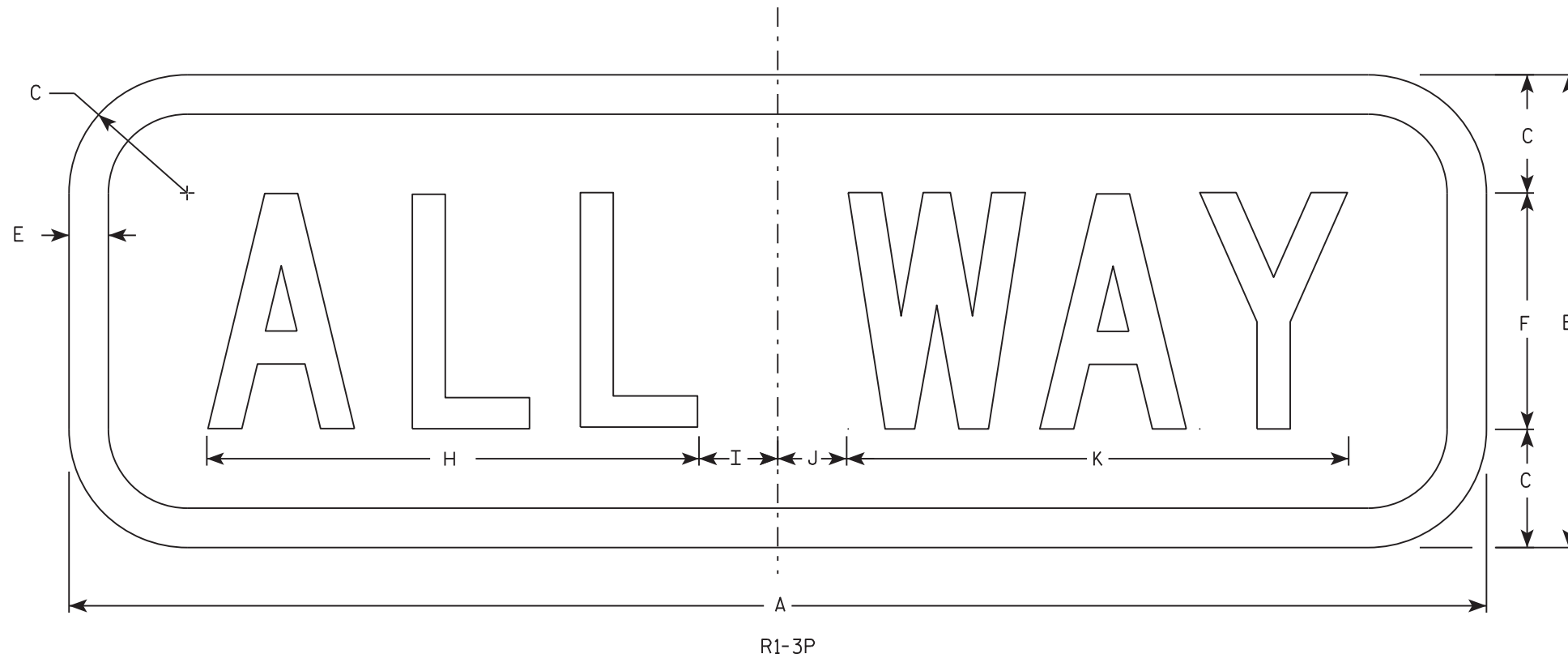
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - Red
Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
For 36"x36" R1-1 use 24"x9" R1-3P sign
For 48"x48" R1-1 use 30"x12" R1-3P sign



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

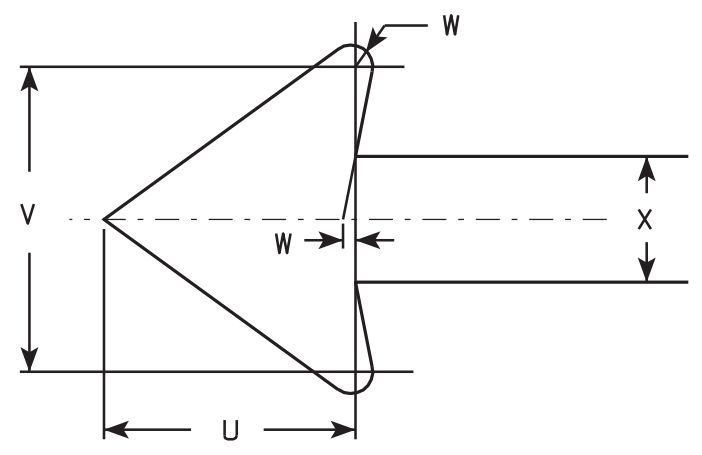
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

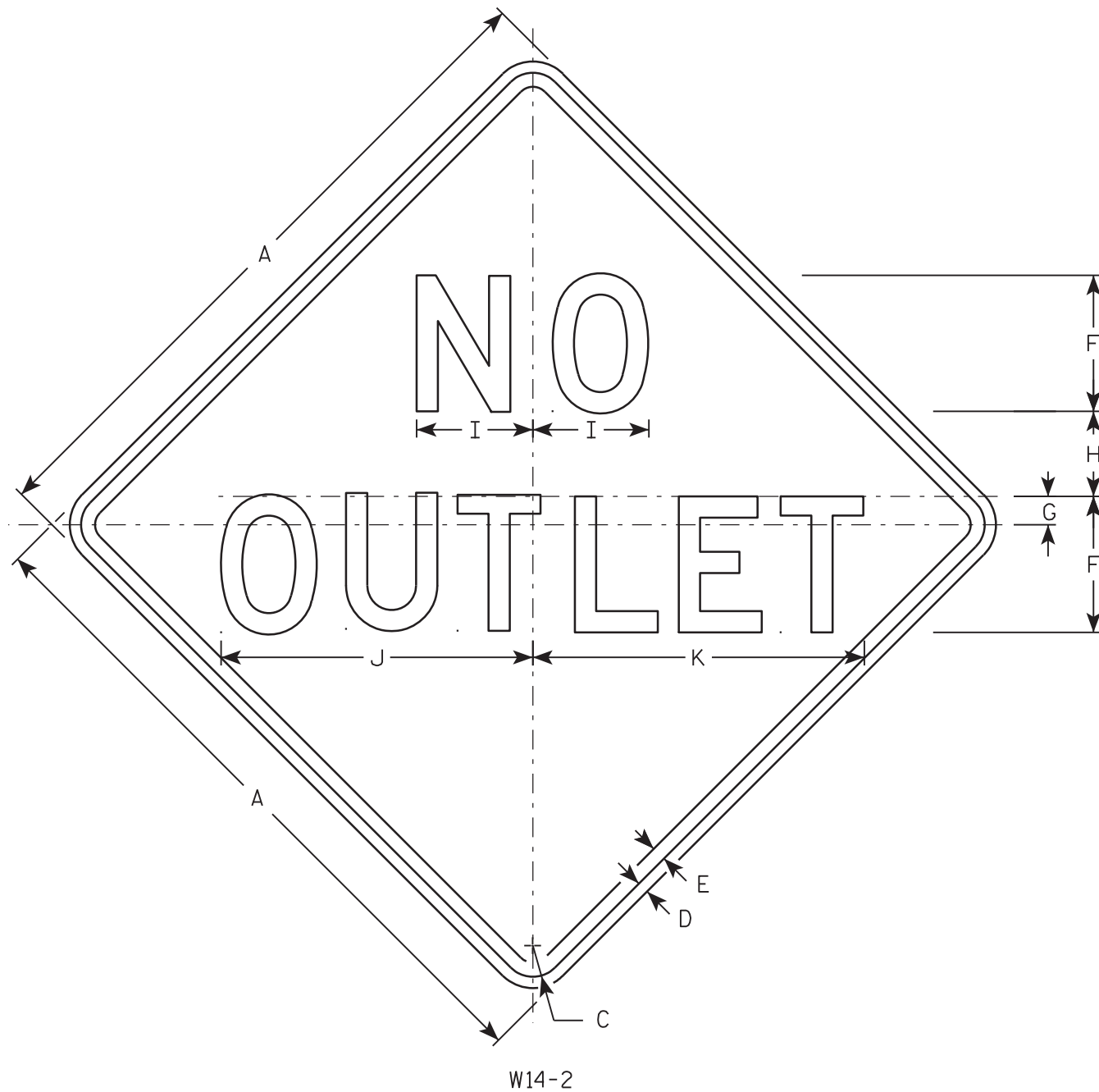
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		1 5/8	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

WISCONSIN DEPT OF TRANSPORTATION

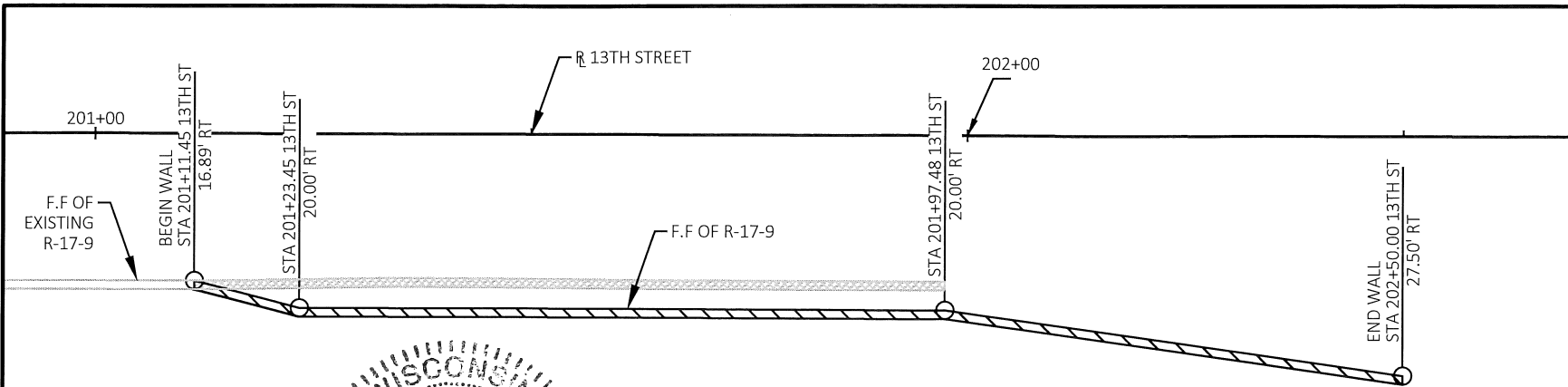
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-2.3

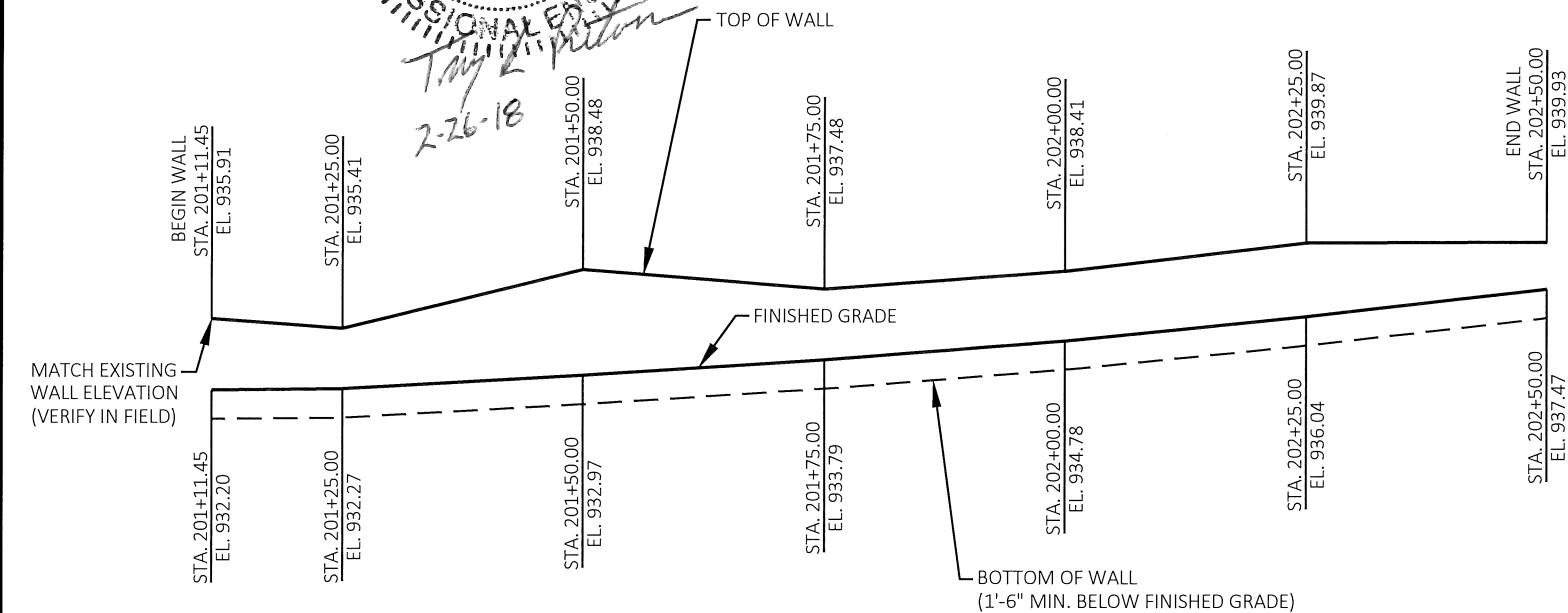
PROJECT NO:

SHEET NO:

E



PLAN

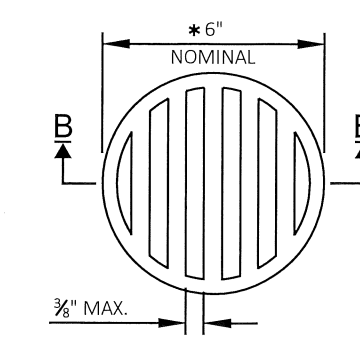
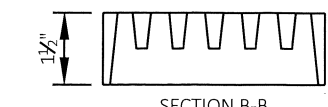


ELEVATION
(LOOKING @ F.F. OF WALL)

WALL EXTERNAL & OVERALL STABILITY EVAL.		
DIMENSIONS	EVALUATED LOCATIONS	
WALL HEIGHT (FEET)	7.0	5.33
EXPOSED WALL HEIGHT (FEET)	5.5	3.83
MINIMUM LENGTH OF REINFORCEMENT (FEET) <input checked="" type="checkbox"/>	8.0	8.0
WALL STATION	201+50	202+25
CAPACITY TO DEMAND RATION (CDR)		
SLIDING (CDR>1.0)	2.4	2.8
ECCENTRICITY (CDR>1.0)	5.5	8.0
OVERALL STABILITY (CDR>1.0) <input checked="" type="checkbox"/>	1.6	2.0
BEARING RESISTANCE (CDR>1.0)	3.0	4.0
FACTORED BEARING RESISTANCE (PSF)	6,500	6,500

GEOMETRY TABLE			
WALL STATION	ROADWAY STATION	OFFSET TO F.F. WALL	TOP OF WALL ELEVATION
201+11.45	201+11.45	16.89' RT.	935.91
201+25.00	201+25.00	20.00' RT.	935.41
201+50.00	201+50.00	20.00' RT.	938.48
201+75.00	201+75.00	20.00' RT.	937.48
202+00.00	202+00.00	20.36' RT.	938.41
202+25.00	202+25.00	23.93' RT.	939.87
202+50.00	202+50.00	27.50' RT.	939.93

TOTAL ESTIMATED QUANTITIES			
ITEM NUMBER	BID ITEMS	UNIT	TOTALS
SPV.0165.01	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-17-9	S.F.	222
SPV.0165.03	SALVAGE AND RESET WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-17-9	S.F.	523

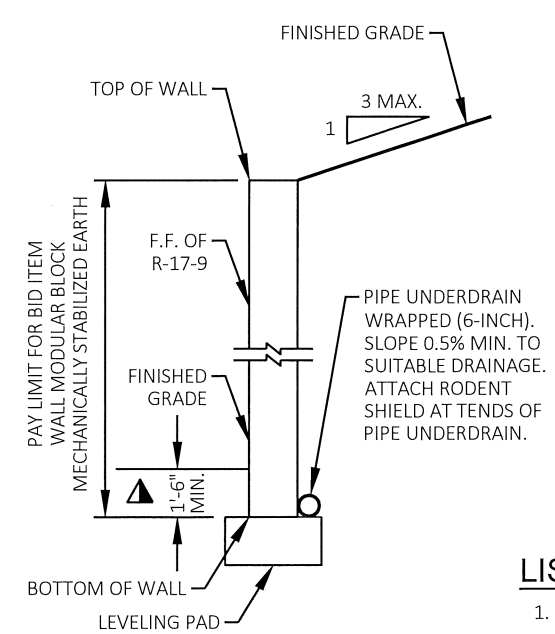


RODENT SHIELD DETAIL

* DIMENSION IS APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



TYPICAL CROSS SECTION OF RETAINING WALL

LIST OF DRAWINGS

- 1. WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-17-9

SOIL PARAMETERS		
SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)
GRANULAR BACKFILL (REINFORCING ZONE OR BACKFILL)	120	34°
(SAND) RETAINED SOIL*	115	30°

* DESIGN WALL FOR THESE VALVES

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-17-9 IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1' 6" BELOW FINISHED GRADE.

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM BID ITEM WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-17-9.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS & DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

SEE SPECIAL PROVISIONS FOR AESTHETIC TREATMENT TO WALL.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 100 PSF.

DESIGNER NOTES

- THE LENGTHS PROVIDED IN THE TABLE ARE THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED UPON THE MINIMUM DESCRIBED IN THE WALL SYSTEM SPECIAL PROVISIONS OR EXTERNAL AND OVERALL STABILITY AT THE DESIGNATED LOCATIONS. THESE DESIGNATED LOCATIONS REPRESENT TYPICAL AND CRITICAL WALL LOCATIONS, BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR DESIGN LENGTHS SHALL MEET OR EXCEED THE MINIMUM VALUES REPRESENTED IN THE TABLE AT THESE DESIGNATED LOCATIONS.
 - THE LENGTHS PROVIDED IN THE TABLE ARE THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED ON OVERALL STABILITY PERFORMED BY THE WALL DESIGNER. COMPOUND STABILITY IS THE CONTRACTORS RESPONSIBILITY.
 - MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS (1'-6" MINIMUM FOR ALL WALLS ON LEVEL GROUND). FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.
- NOMINAL MSE PANEL DIMENSIONS ARE 5-FOOT HIGH AND 5-10 FOOT WIDE. THE WALL DESIGNER SHALL PROVIDE DETAILS BASED ON NOMINAL PANEL DIMENSIONS AND CONFIGURATION. DETAILS SHALL BE ABLE TO ACCOMMODATE VARIOUS PANEL DIMENSIONS. THE CONTRACTOR AND WALL SUPPLIER SHALL COORDINATE DETAILS BASED ON THE ACTUAL PANEL DIMENSIONS.

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NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
Cedar corporation			
www.cedarcorp.com 800-472-7372			
ACCEPTED	William C. Decker, SR.		03/13/18
		CHIEF STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE R-17-9			
WALL MODULAR BLOCK MSE RETAINING WALL			
COUNTY	DUNN	TOWN/CITY/VILLAGE	MENOMONIE
DESIGN SPEC.	AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS		
DESIGNED BY	TLP	DESIGN CK'D.	ATA
DRAWN BY	BG	PLANS CK'D.	TLP
GENERAL PLAN			SHEET 1 OF 1

MAIN STREET - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY	
101+37		47.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101+50	13	47.0	0.0	14.0	22.6	22.6	6.7	15.9	0.0	0.0	15.9
102+00	50	45.0	0.0	13.0	85.2	85.2	25.0	60.2	0.0	0.0	60.2
102+50	50	45.0	0.0	13.0	83.3	83.3	24.1	59.3	0.0	0.0	59.3
103+00	50	45.0	0.0	13.0	83.3	83.3	24.1	59.3	0.0	0.0	59.3
103+50	50	45.0	0.0	13.0	83.3	83.3	24.1	59.3	0.0	0.0	59.3
104+00	50	45.0	0.0	13.0	83.3	83.3	24.1	59.3	0.0	0.0	59.3
104+50	50	61.0	0.0	32.0	98.1	98.1	41.7	56.5	0.0	0.0	56.5
105+00	50	44.8	1.6	23.0	98.0	98.0	50.9	47.0	1.5	1.9	45.1
105+50	50	63.1	0.1	23.0	99.9	99.9	42.6	57.3	1.6	2.0	55.3
106+00	50	54.1	3.2	23.0	108.5	108.5	42.6	65.9	3.1	4.0	62.0
106+50	50	56.8	3.2	23.0	102.7	102.7	42.6	60.1	5.9	7.7	52.4
107+00	50	66.8	0.0	23.0	114.4	114.4	42.6	71.9	3.0	3.9	68.0
107+50	50	68.2	0.0	30.1	125.0	125.0	49.2	75.8	0.0	0.0	75.8
108+00	50	47.7	2.5	11.0	107.3	107.3	38.1	69.3	2.3	3.0	66.3
108+50	50	51.2	1.1	11.0	91.6	91.6	20.4	71.2	3.3	4.3	66.9
109+00	50	51.1	0.9	11.0	94.7	94.7	20.4	74.4	1.9	2.4	71.9
109+50	50	51.9	1.0	11.0	95.4	95.4	20.4	75.0	1.8	2.3	72.7
110+00	50	54.4	1.6	11.0	98.4	98.4	20.4	78.1	2.4	3.1	74.9
110+50	50	54.2	1.0	11.0	100.6	100.6	20.4	80.2	2.4	3.1	77.1
111+00	50	62.9	0.0	22.0	108.4	108.4	30.6	77.9	0.9	1.2	76.7
111+50	50	51.1	1.0	11.0	105.6	105.6	30.6	75.0	0.9	1.2	73.8
112+00	50	56.3	0.0	11.0	99.4	99.4	20.4	79.1	0.9	1.2	77.9
112+50	50	67.0	0.0	11.0	114.2	114.2	20.4	93.8	0.0	0.0	93.8
113+00	50	49.3	1.0	11.0	107.7	107.7	20.4	87.3	0.9	1.2	86.1
113+50	50	48.8	1.1	11.0	90.8	90.8	20.4	70.5	1.9	2.5	67.9
114+00	50	31.2	0.0	11.0	74.1	74.1	20.4	53.7	1.0	1.3	52.4
114+50	50	39.2	0.0	15.0	65.2	65.2	24.1	41.1	0.0	0.0	41.1
115+00	50	40.0	0.0	15.0	73.3	73.3	27.8	45.6	0.0	0.0	45.6
115+05	5	42.0	0.0	11.0	7.6	7.6	2.4	5.2	0.0	0.0	5.2
COLUMN TOTALS					2622.1	797.3	1824.8	46.5	1778.3		

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

13TH STREET - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)	
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY		
197+75		14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
198+00	25	14.2	0.0	0.0	13.1	13.1	0.0	13.1	0.0	0.0	13.1	13.1
198+50	50	5.0	0.0	0.0	17.8	17.8	0.0	17.8	0.0	0.0	17.8	17.8
199+00	50	5.3	0.3	0.0	9.5	9.5	0.0	9.5	0.3	0.4	9.2	9.2
199+50	50	7.2	0.6	0.0	11.6	11.6	0.0	11.6	0.8	1.1	10.5	10.5
200+00	50	7.1	0.0	0.0	13.2	13.2	0.0	13.2	0.6	0.7	12.5	12.5
200+50	50	0.0	0.0	0.0	6.6	6.6	0.0	6.6	0.0	0.0	6.6	6.6
201+00	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
201+50	50	60.2	0.8	13.0	55.7	55.7	12.0	43.7	0.7	1.0	42.7	42.7
202+00	50	61.2	0.1	13.0	112.4	112.4	24.1	88.3	0.8	1.1	87.3	87.3
202+50	50	50.2	0.8	13.0	103.1	103.1	24.1	79.1	0.8	1.1	78.0	78.0
203+00	50	36.1	1.2	13.0	79.9	79.9	24.1	55.8	1.9	2.4	53.4	53.4
203+50	50	50.2	1.5	13.0	79.9	79.9	24.1	55.8	2.5	3.3	52.6	52.6
204+00	50	27.1	0.0	13.0	71.6	71.6	24.1	47.5	1.4	1.8	45.7	45.7
204+50	50	38.3	8.5	20.0	60.6	60.6	30.6	30.0	7.9	10.2	19.8	19.8
205+00	50	47.2	9.4	20.0	79.2	79.2	37.0	42.1	16.6	21.5	20.6	20.6
205+50	50	59.0	6.5	20.0	98.3	98.3	37.0	61.3	14.7	19.1	42.2	42.2
206+00	50	70.8	3.7	20.0	120.2	120.2	37.0	83.1	9.4	12.3	70.9	70.9
206+50	50	87.7	2.5	20.0	146.8	146.8	37.0	109.7	5.7	7.5	102.3	102.3
207+00	50	69.7	3.3	20.0	145.7	145.7	37.0	108.7	5.4	7.0	101.7	101.7
207+50	50	26.1	0.0	20.0	88.7	88.7	37.0	51.7	3.1	4.0	47.7	47.7
208+00	50	28.3	3.5	13.0	50.4	50.4	30.6	19.8	3.2	4.2	15.6	15.6
208+50	50	19.7	10.9	13.0	44.4	44.4	24.1	20.4	13.3	17.3	3.0	3.0
209+00	50	23.3	5.9	13.0	39.8	39.8	24.1	15.7	15.6	20.2	-4.5	-4.5
209+50	50	16.7	4.6	13.0	37.0	37.0	24.1	13.0	9.7	12.6	0.3	0.3
210+00	50	4.9	10.5	13.0	20.0	20.0	24.1	-4.1	14.0	18.2	-22.3	-22.3
210+50	50	0.0	16.2	13.0	4.5	4.5	24.1	-19.5	24.7	32.1	-51.7	-51.7
211+00	50	0.0	6.5	13.0	0.0	0.0	24.1	-24.1	21.0	27.3	-51.4	-51.4
211+50	50	16.1	16.7	13.0	14.9	14.9	24.1	-9.2	21.5	27.9	-37.1	-37.1
212+00	50	21.3	1.1	13.0	34.6	34.6	24.1	10.6	16.5	21.4	-10.9	-10.9
212+50	50	44.6	0.2	13.0	61.0	61.0	24.1	36.9	1.2	1.6	35.4	35.4
213+00	50	49.1	0.0	13.0	86.8	86.8	24.1	62.7	0.2	0.2	62.4	62.4
213+50	50	27.0	0.7	13.0	70.5	70.5	24.1	46.4	0.6	0.8	45.5	45.5
214+00	50	23.0	1.0	13.0	46.3	46.3	24.1	22.2	1.6	2.0	20.2	20.2
214+50	50	30.3	3.0	13.0	49.4	49.4	24.1	25.3	3.7	4.8	20.5	20.5
215+00	50	33.5	3.1	13.0	59.1	59.1	24.1	35.0	5.6	7.3	27.7	27.7
215+50	50	26.9	6.6	13.0	55.9	55.9	24.1	31.9	9.0	11.7	20.2	20.2
216+00	50	39.1	8.7	13.0	61.1	61.1	24.1	37.0	14.2	18.4	18.6	18.6
216+50	50	17.1	3.2	13.0	52.0	52.0	24.1	28.0	11.0	14.3	13.6	13.6
217+00	50	40.8	0.0	13.0	53.6	53.6	24.1	29.5	3.0	3.9	25.7	25.7
217+50	50	36.2	0.0	13.0	71.3	71.3	24.1	47.2	0.0	0.0	47.2	47.2
218+00	50	53.4	3.5	13.0	83.0	83.0	24.1	58.9	3.2	4.2	54.7	54.7
218+50	50	79.8	0.0	13.0	123.3	123.3	24.1	99.3	3.2	4.2	95.0	95.0
219+00	50	92.5	0.0	13.0	159.5	159.5	24.1	135.5	0.0	0.0	135.5	135.5
219+50	50	84.6	0.0	13.0	164.0	164.0	24.1	139.9	0.0	0.0	139.9	139.9
220+00	50	86.7	0.0	13.0	158.6	158.6	24.1	134.5	0.0	0.0	134.5	134.5
220+50	50	65.6	0.0	13.0	141.0	141.0	24.1	116.9	0.0	0.0	116.9	116.9
220+54	4	65.6	0.0	13.0	9.7	9.7	1.9	7.8	0.0	0.0	7.8	7.8
COLUMN TOTALS					3065.8	1019.5	2046.3	349.3	1697.0			

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

9

9

12TH AVENUE - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)	
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY		
15+25		43.2	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15+50	25	23.2	1.3	12.0	39.0	39.0	10.6	28.3	0.6	0.8	27.6	
15+97	47	16.1	3.1	12.0	34.2	34.2	20.9	13.3	3.8	5.0	8.3	
13TH STREET												
16+17		38.7	0.5	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16+50	33	41.3	0.0	8.0	48.9	48.9	9.8	39.1	0.3	0.4	38.7	
17+00	50	33.8	0.0	8.0	69.5	69.5	14.8	54.7	0.0	0.0	54.7	
17+25	25	23.6	0.0	8.0	26.6	26.6	7.4	19.2	0.0	0.0	19.2	
COLUMN TOTALS						218.2	63.5	154.7	4.7	6.2	148.5	

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

11TH AVENUE - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)	
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY		
11TH AVE WEST												
20+50		39.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21+00	50	24.8	2.1	12.0	59.1	59.1	21.3	37.8	1.9	2.5	35.3	
13TH STREET												
11TH AVE EAST												
25+18		61.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25+50	12	66.6	0.0	8.0	28.4	28.4	4.2	24.1	0.0	0.0	24.1	
26+00	50	22.3	0.0	8.0	82.3	82.3	14.8	67.5	0.0	0.0	67.5	
COLUMN TOTALS						169.7	40.3	129.4	1.9	2.5	126.9	

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

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10TH AVENUE - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)	
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY		
10TH AVE WEST												
30+12		27.3	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30+50	38	28.3	0.0	8.0	39.1	39.1	11.3	27.9	0.0	0.0	27.9	
30+89	39	28.3	10.0	8.0	40.9	40.9	11.6	29.3	7.2	9.4	19.9	
13TH STREET												
10TH AVE EAST												
35+18		30.2	2.6	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
35+50	32	32.7	0.0	9.0	37.3	37.3	10.7	26.6	1.5	2.0	24.6	
35+69	19	34.0	0.0	9.0	23.5	23.5	6.3	17.1	0.0	0.0	17.1	
COLUMN TOTALS							140.7	39.8	100.9	8.8	11.4	89.5

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

9TH AVE - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			COMMON				FILL		MASS HAUL CY (3)	
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)	RAW CY	1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	AVAILABLE MATERIAL CY (2)	RAW CY	1.3 ADJ CY		
40+35		18.1	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
40+50	15	20.8	0.1	6.0	10.8	10.8	3.3	7.5	0.0	0.0	7.4	
40+63	13	24.2	0.0	7.0	10.8	10.8	3.1	7.7	0.0	0.0	7.7	
COLUMN TOTALS							21.6	6.5	15.2	0.1	0.1	15.1

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

9

9

WILSON AVENUE - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			RAW CY	COMMON			AVAILABLE MATERIAL CY (2)	FILL		MASS HAUL CY (3)
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)		1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	RAW CY		1.3 ADJ CY		
WILSON AVE WEST												
45+50		40.4	0.2	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46+00	50	54.8	0.0	12.0	88.1	88.1	22.2	65.9	0.2	0.2	65.7	
46+14	14	49.2	0.0	15.0	27.0	27.0	7.0	20.0	0.0	0.0	20.0	
13TH STREET												
WILSON AVE EAST												
50+18		23.0	4.6	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
50+50	32	30.6	4.6	10.0	31.8	31.8	15.4	16.4	5.5	7.1	9.3	
51+00	50	16.9	8.3	10.0	44.0	44.0	18.5	25.5	11.9	15.5	9.9	
51+20	20	30.5	1.6	10.0	22.6	22.6	7.4	15.2	2.3	3.0	12.2	
COLUMN TOTALS						213.5	70.6	142.9	19.9	25.8	117.1	

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

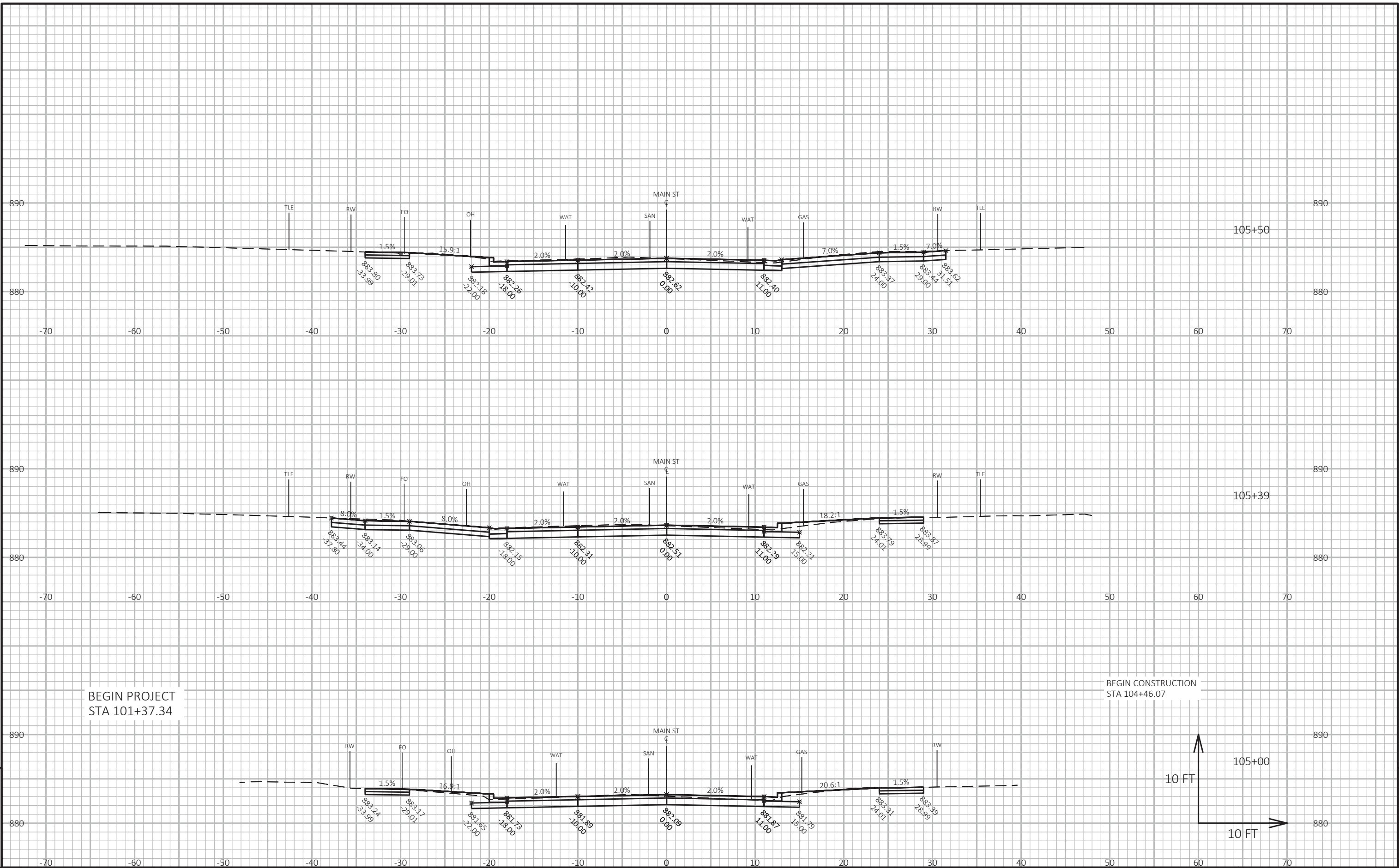
OAKWOOD BLVD - INCREMENTAL VOLUME

STATION	DISTANCE FT	END AREA			RAW CY	COMMON			AVAILABLE MATERIAL CY (2)	FILL		MASS HAUL CY (3)
		COMMON SF	FILL SF	SALVAGED/UNUSABLE PAVEMENT MATERIAL SF (1)		1.0 ADJ CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL CY	RAW CY		1.3 ADJ CY		
60+42		25.9	0.2	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
60+50	8	28.2	0.2	7.0	8.0	8.0	2.1	5.9	0.1	0.1	5.9	
61+00	50	41.1	0.0	7.0	64.2	64.2	13.0	51.2	0.2	0.2	51.0	
61+50	50	45.0	0.0	15.0	79.7	79.7	20.4	59.4	0.0	0.0	59.4	
61+68	18	44.1	0.0	17.0	24.1	24.1	8.0	16.1	0.1	0.1	16.0	
COLUMN TOTALS						176.0	43.4	132.6	0.3	0.4	132.2	

- 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN COMMON.
- 2) AVAILABLE MATERIAL = CUT MINUS THE SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 3) THE MASS HAUL = A + OR - QUANTITY CALCULATED FOR THE DIVISON. A POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL.

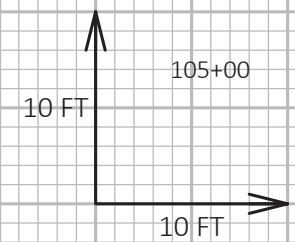
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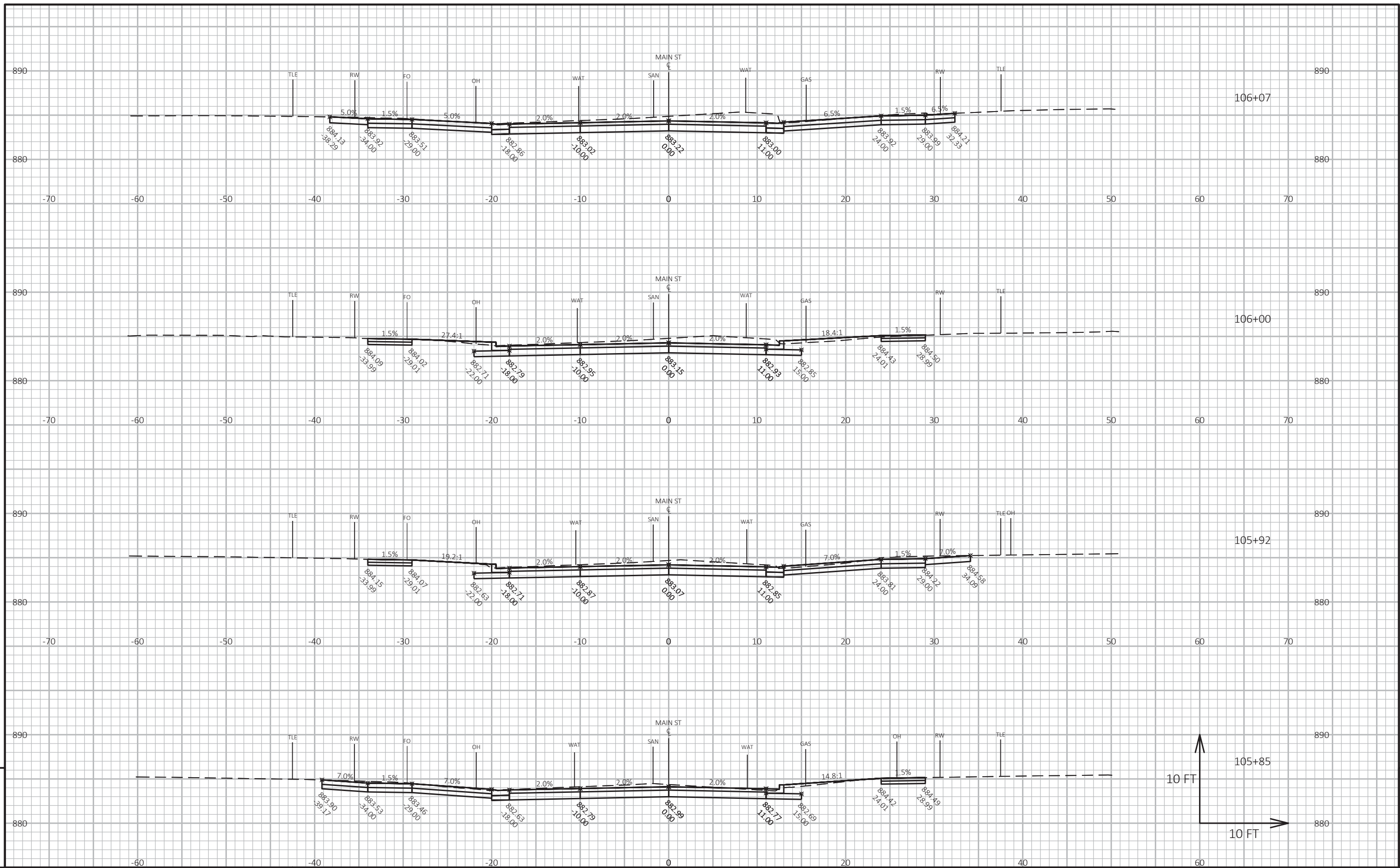
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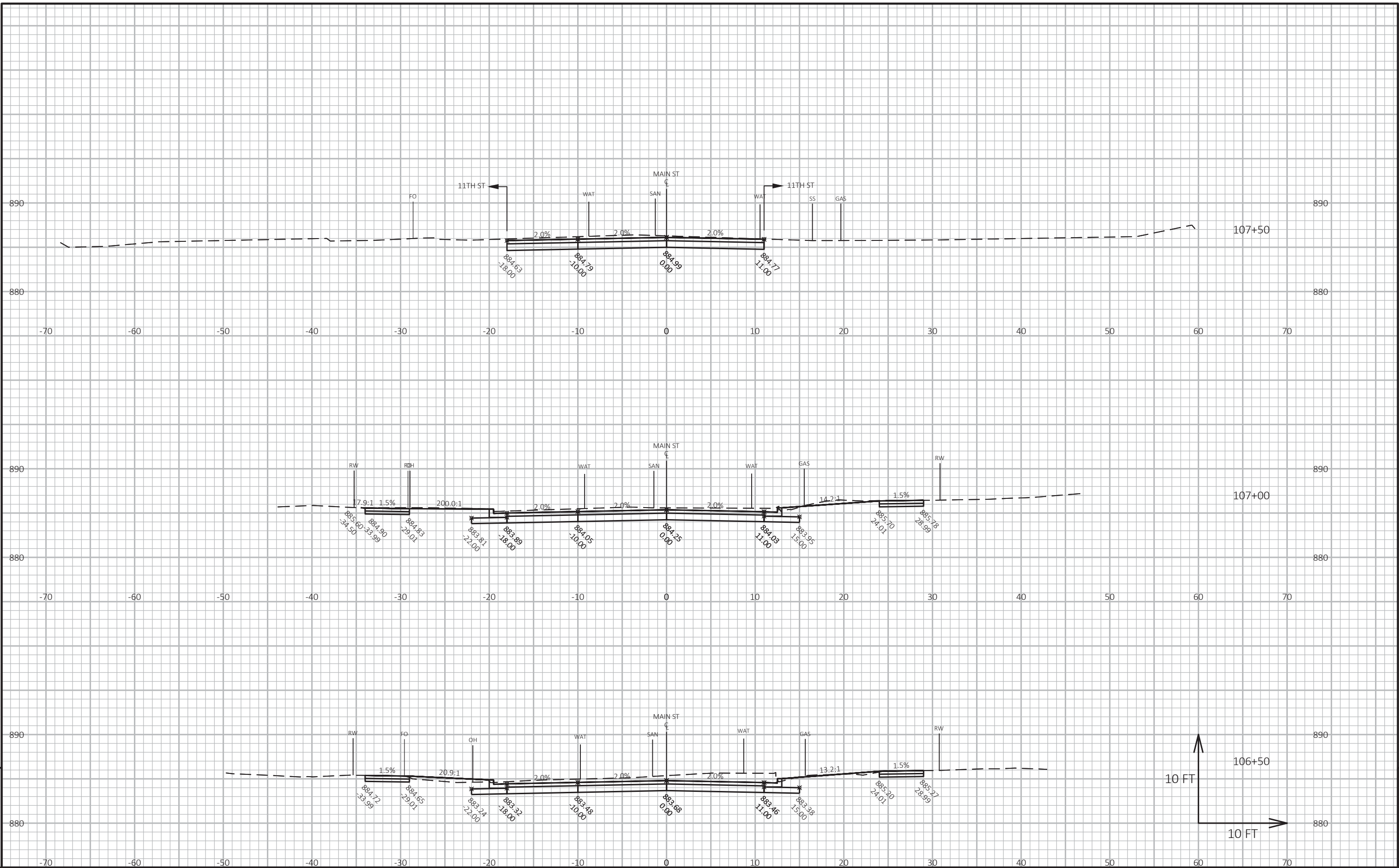
BEGIN PROJECT
STA 101+37.34

BEGIN CONSTRUCTION
STA 104+46.07

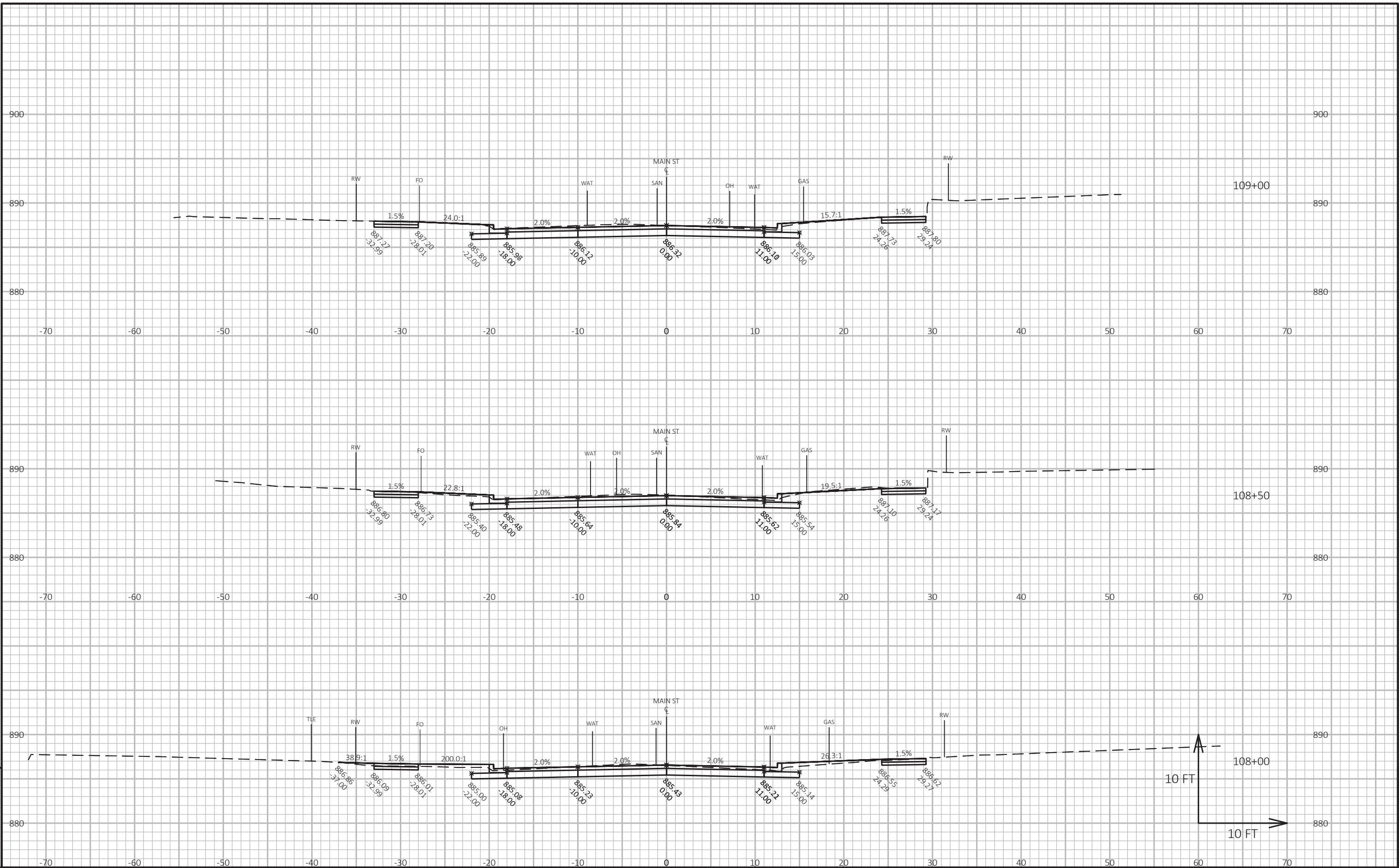




PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: MAIN ST SHEET 9



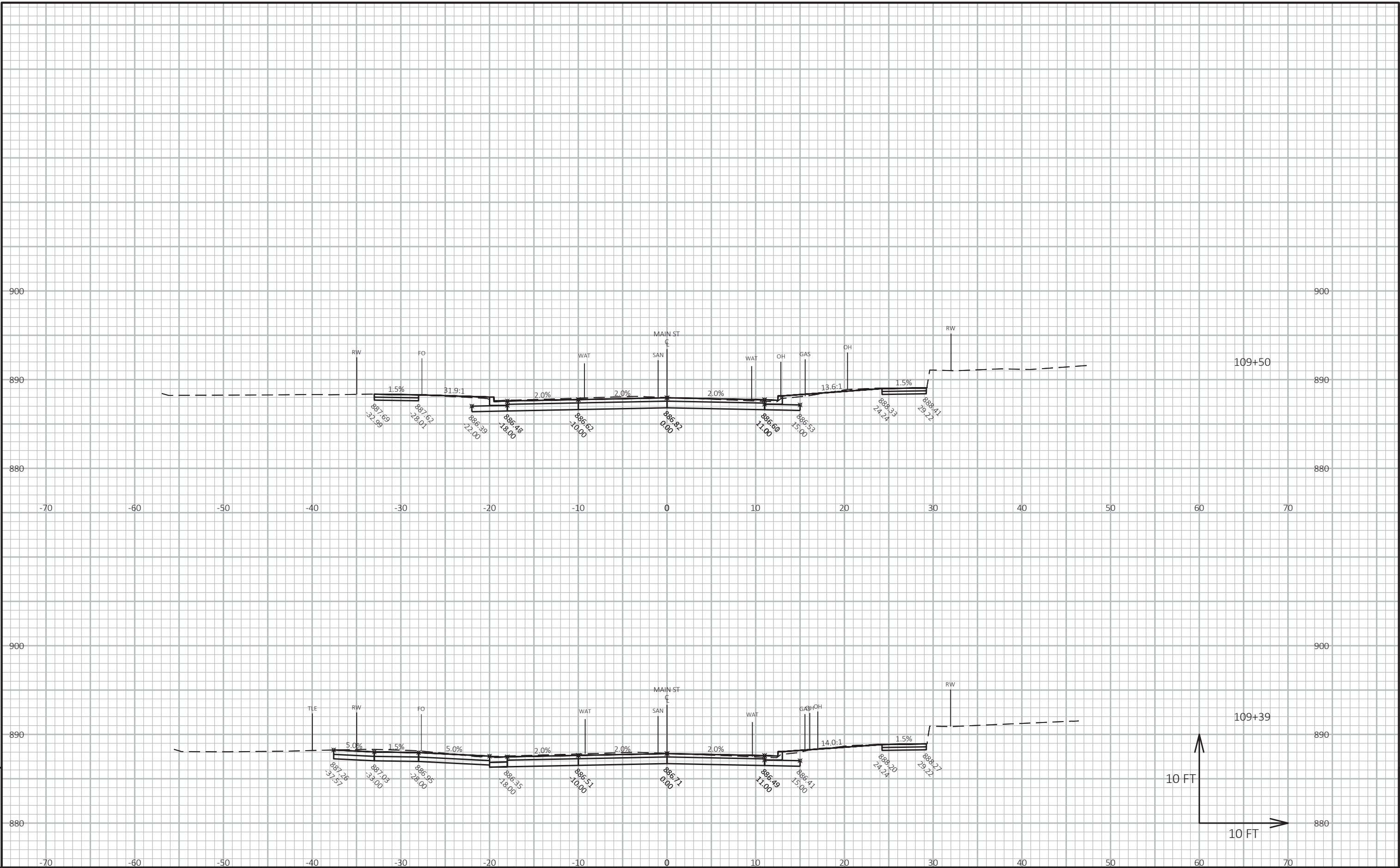
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: MAIN ST SHEET E



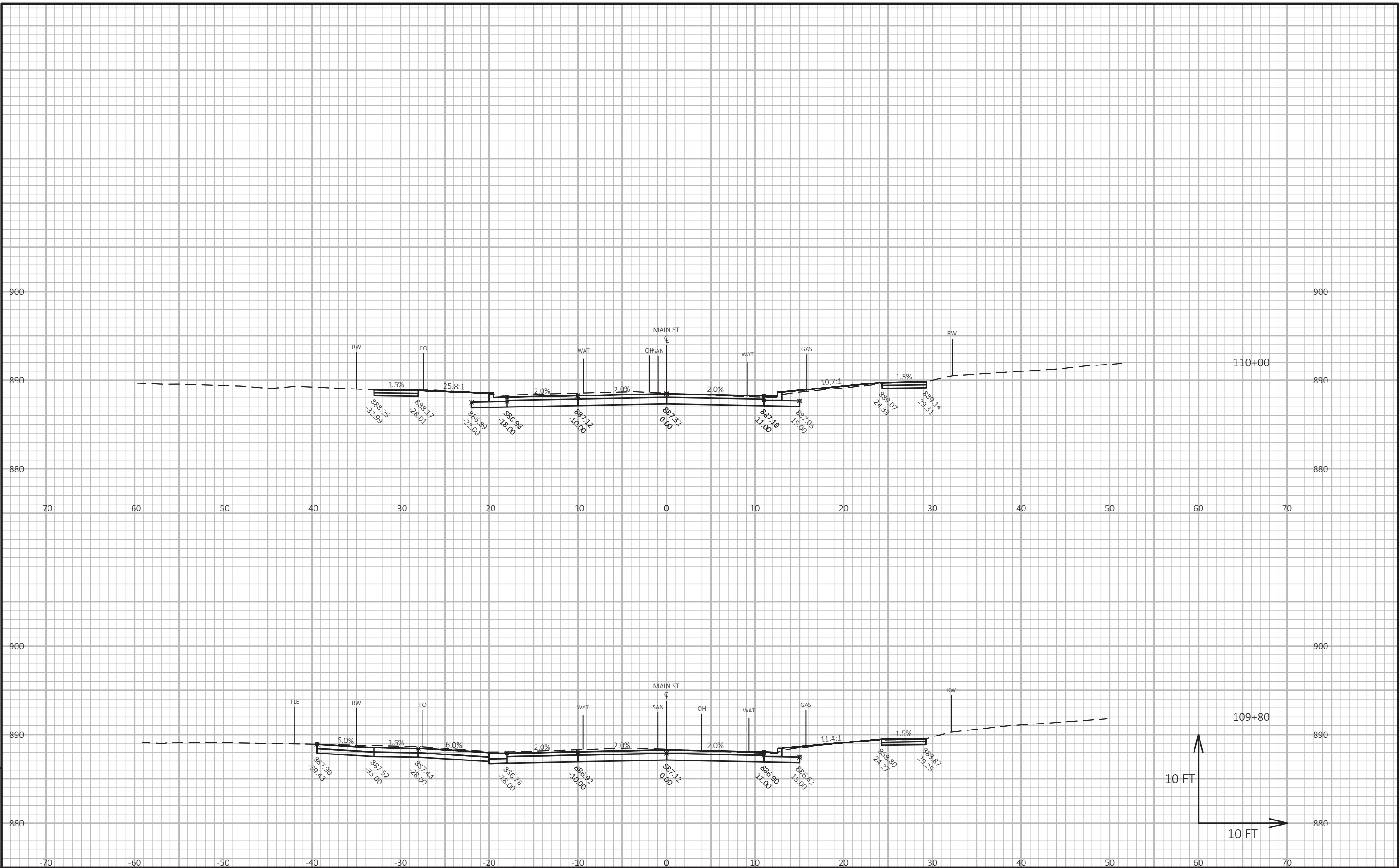
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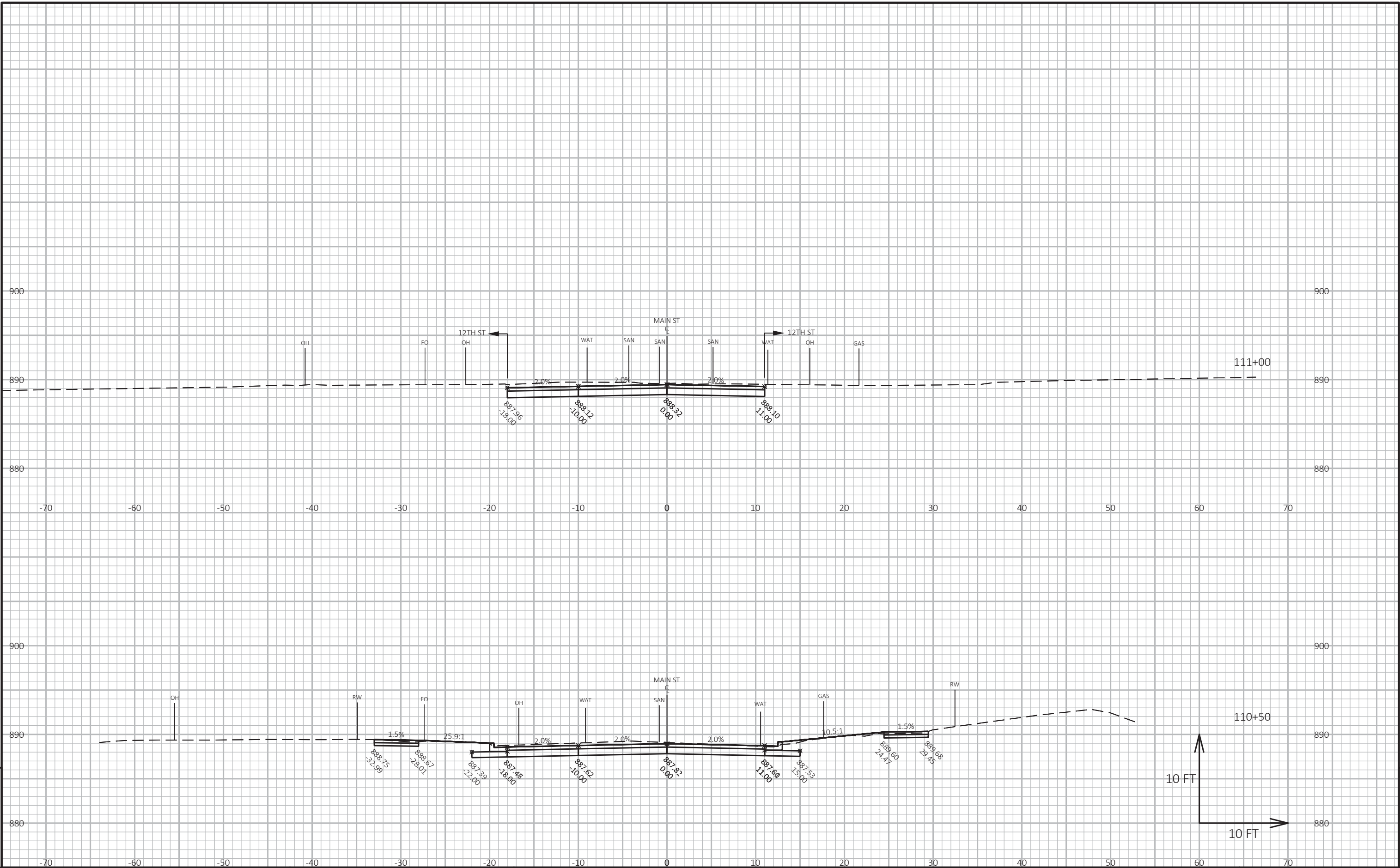
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: MAIN ST	SHEET	E
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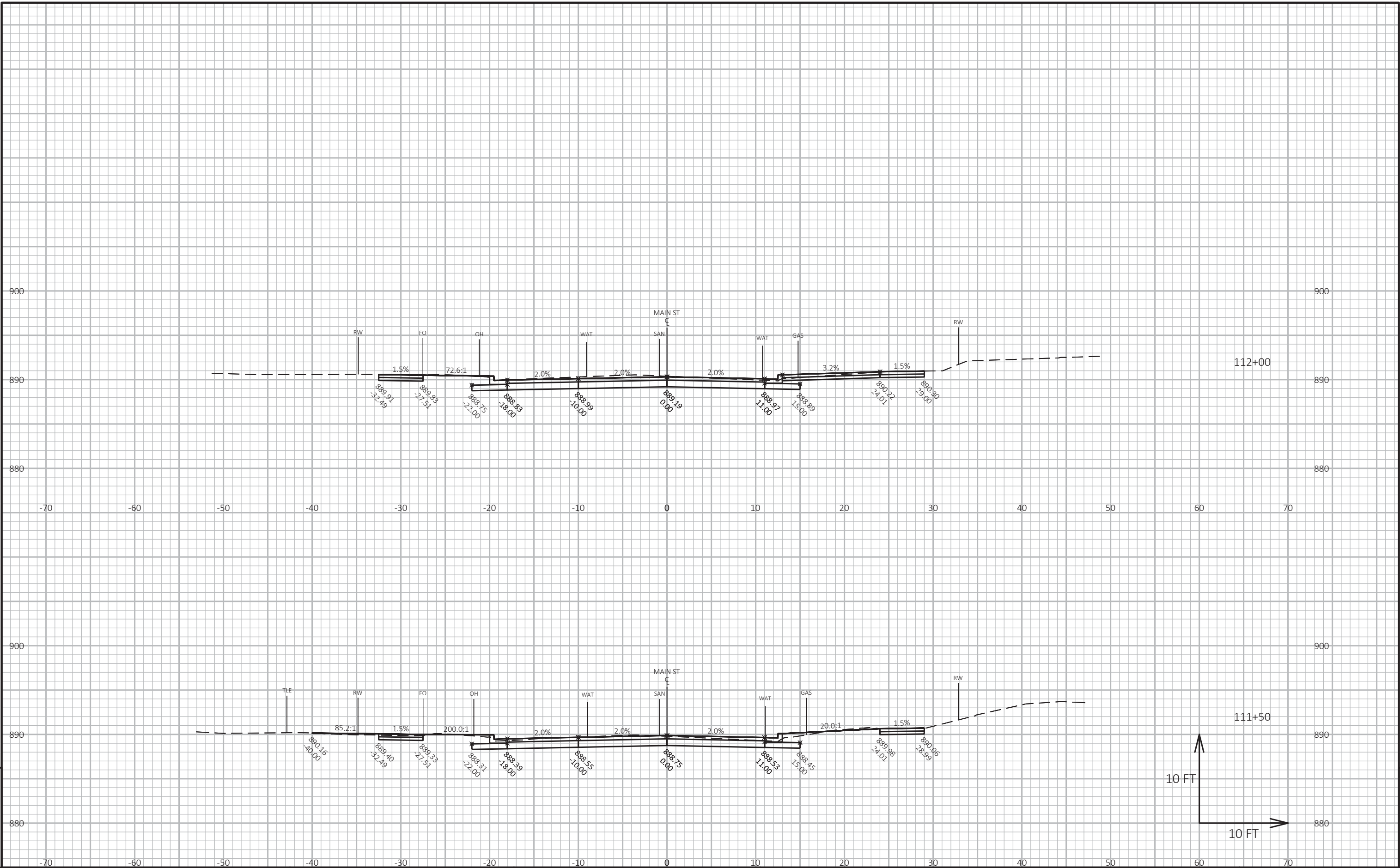
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: MAIN ST SHEET E



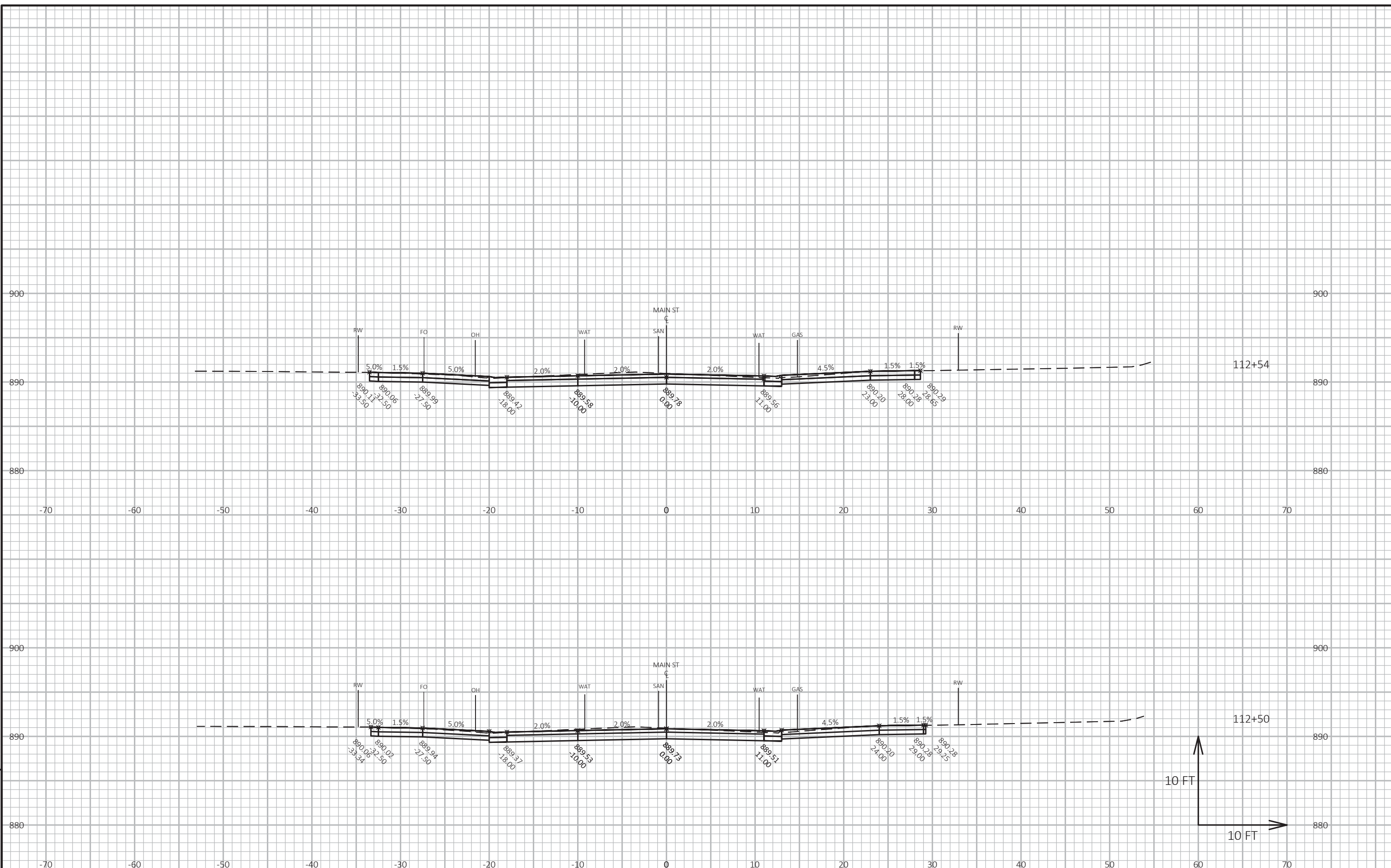
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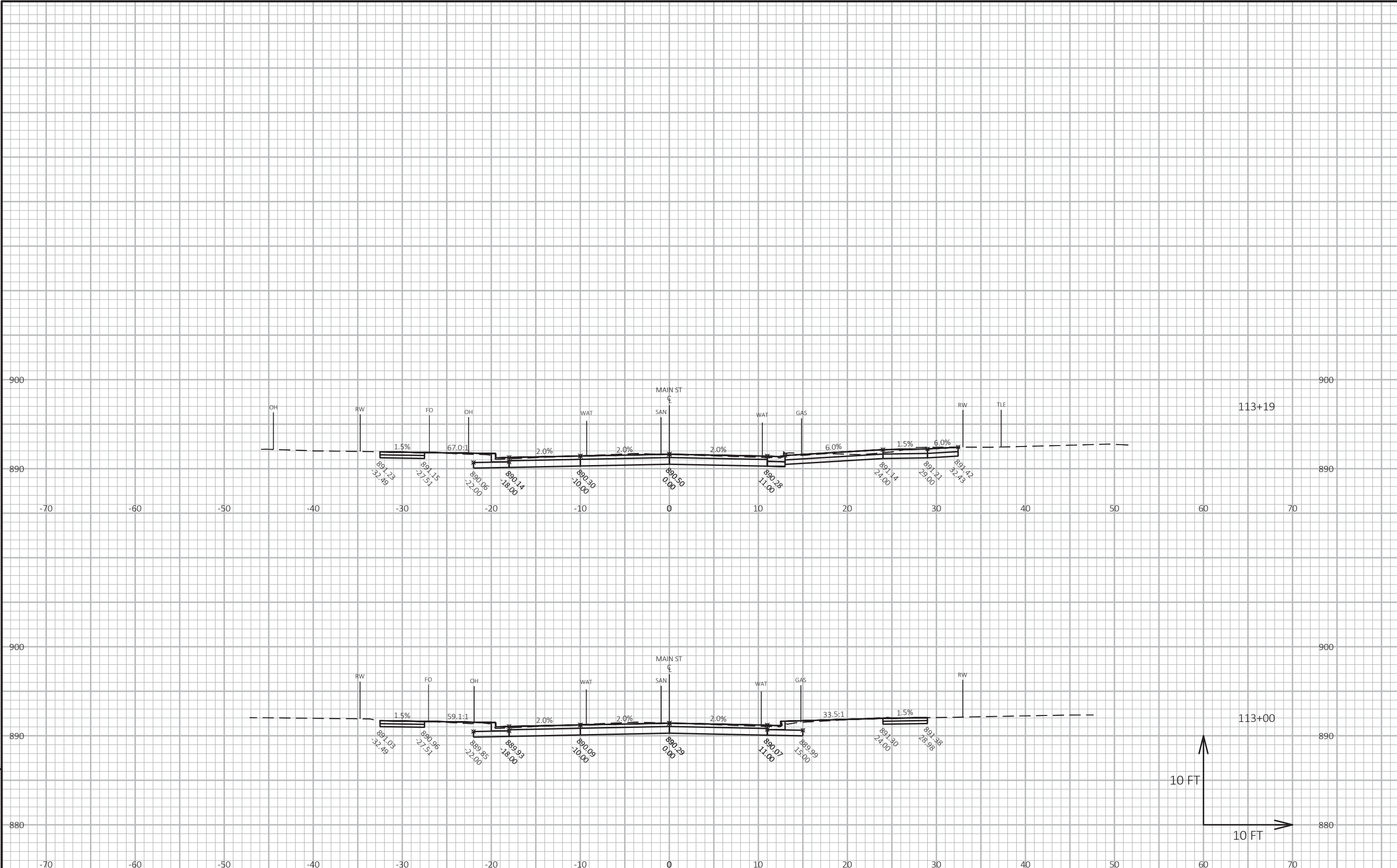
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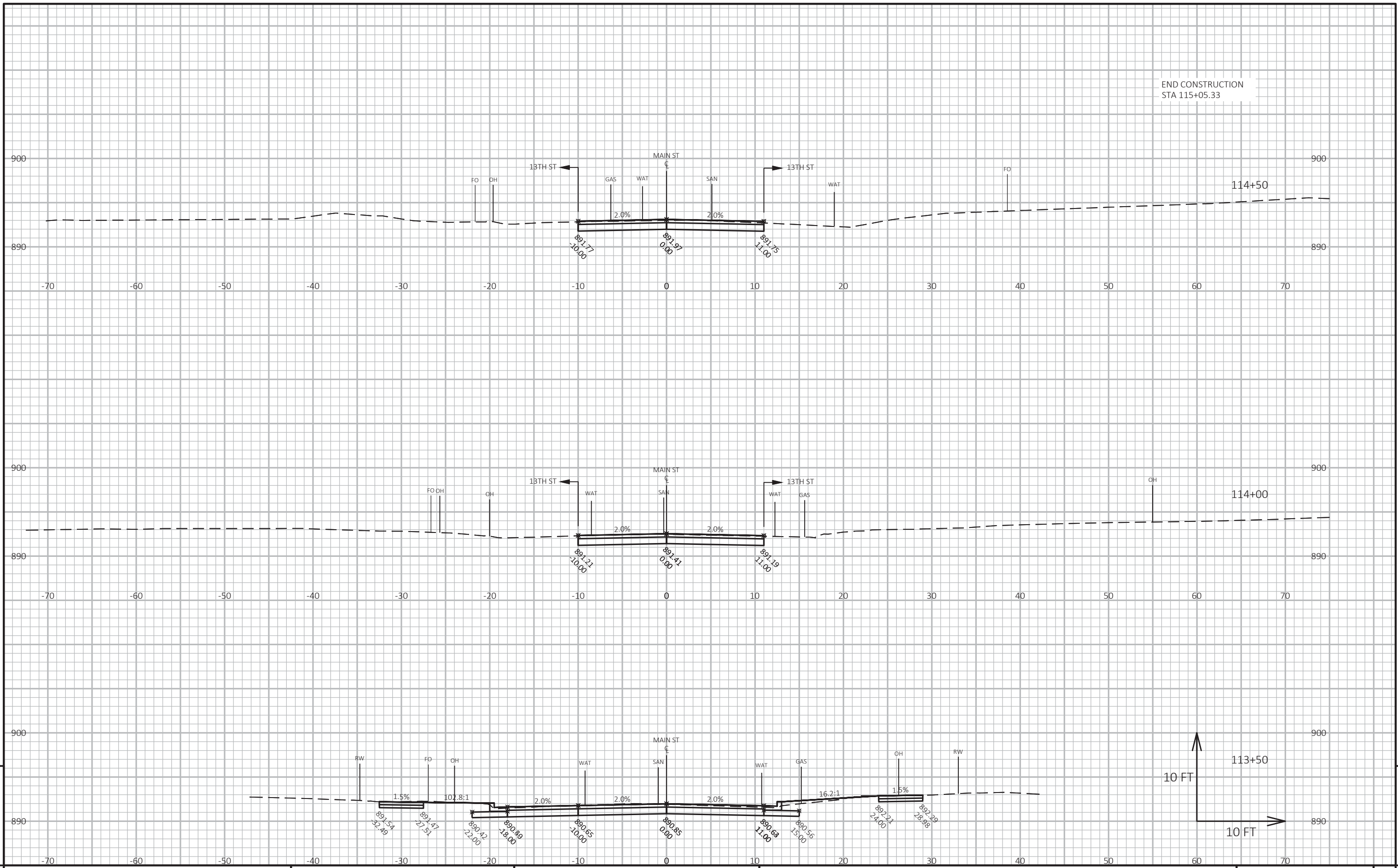
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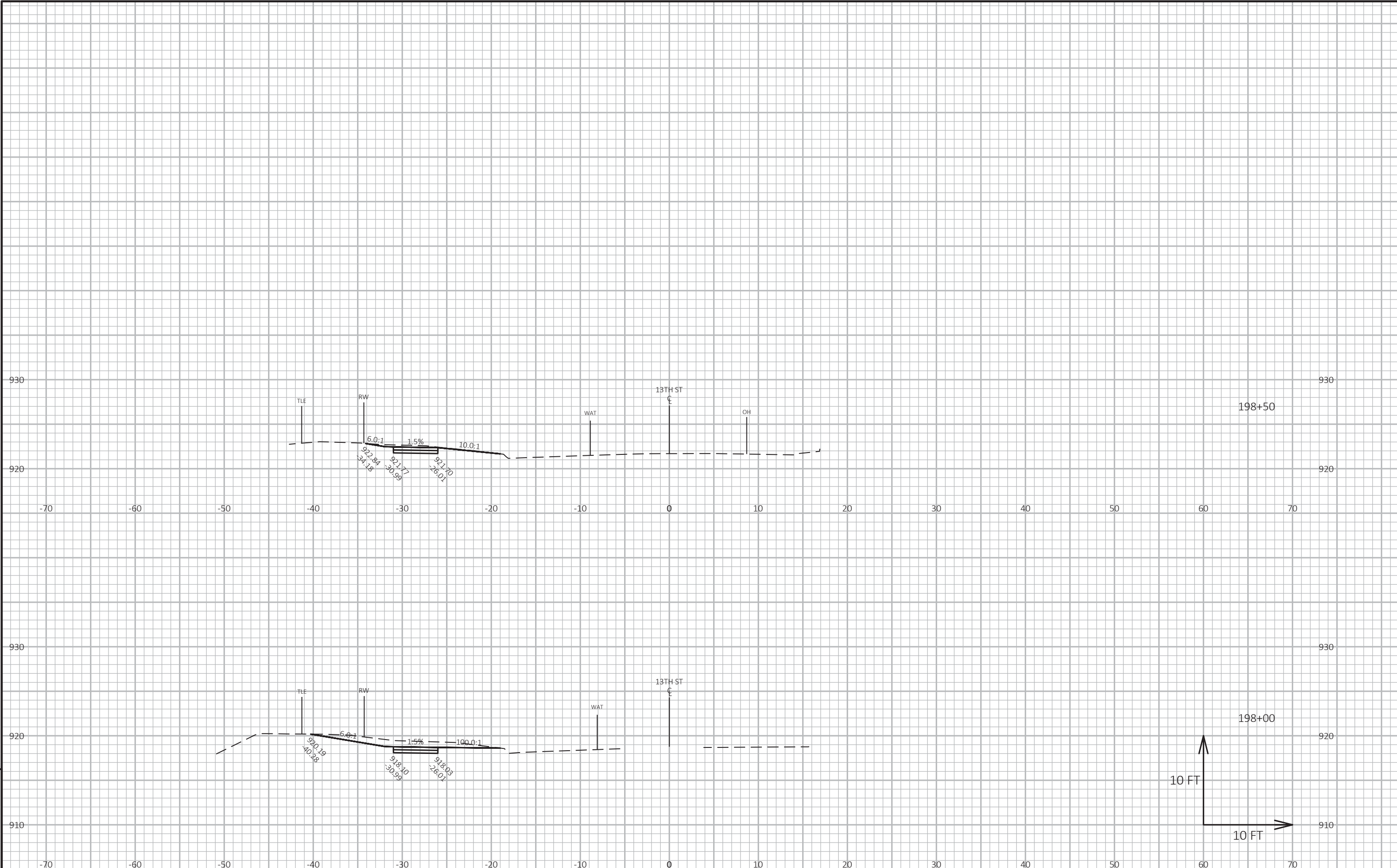
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PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: MAIN ST SHEET E



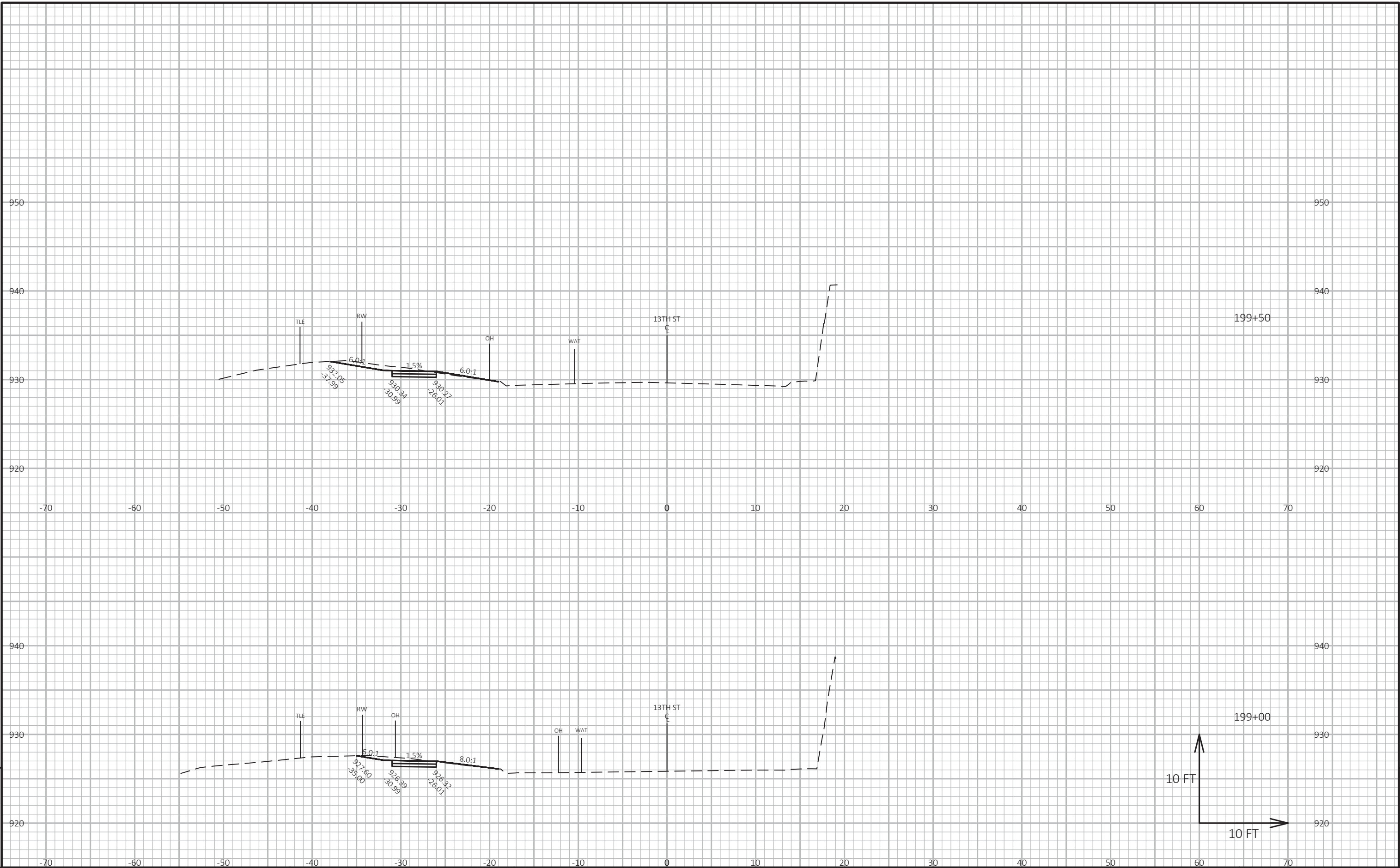
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9

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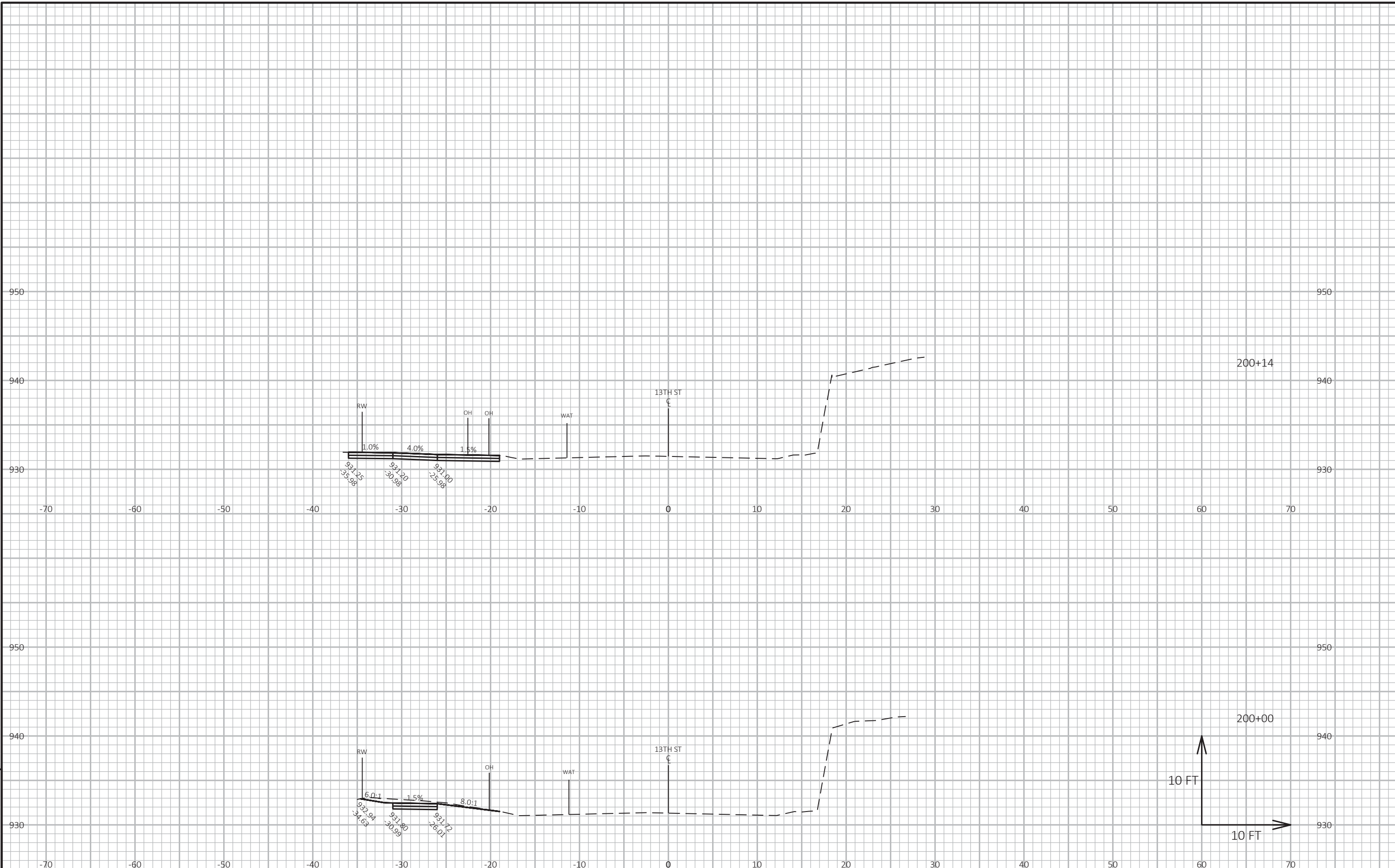
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET E



9

9

PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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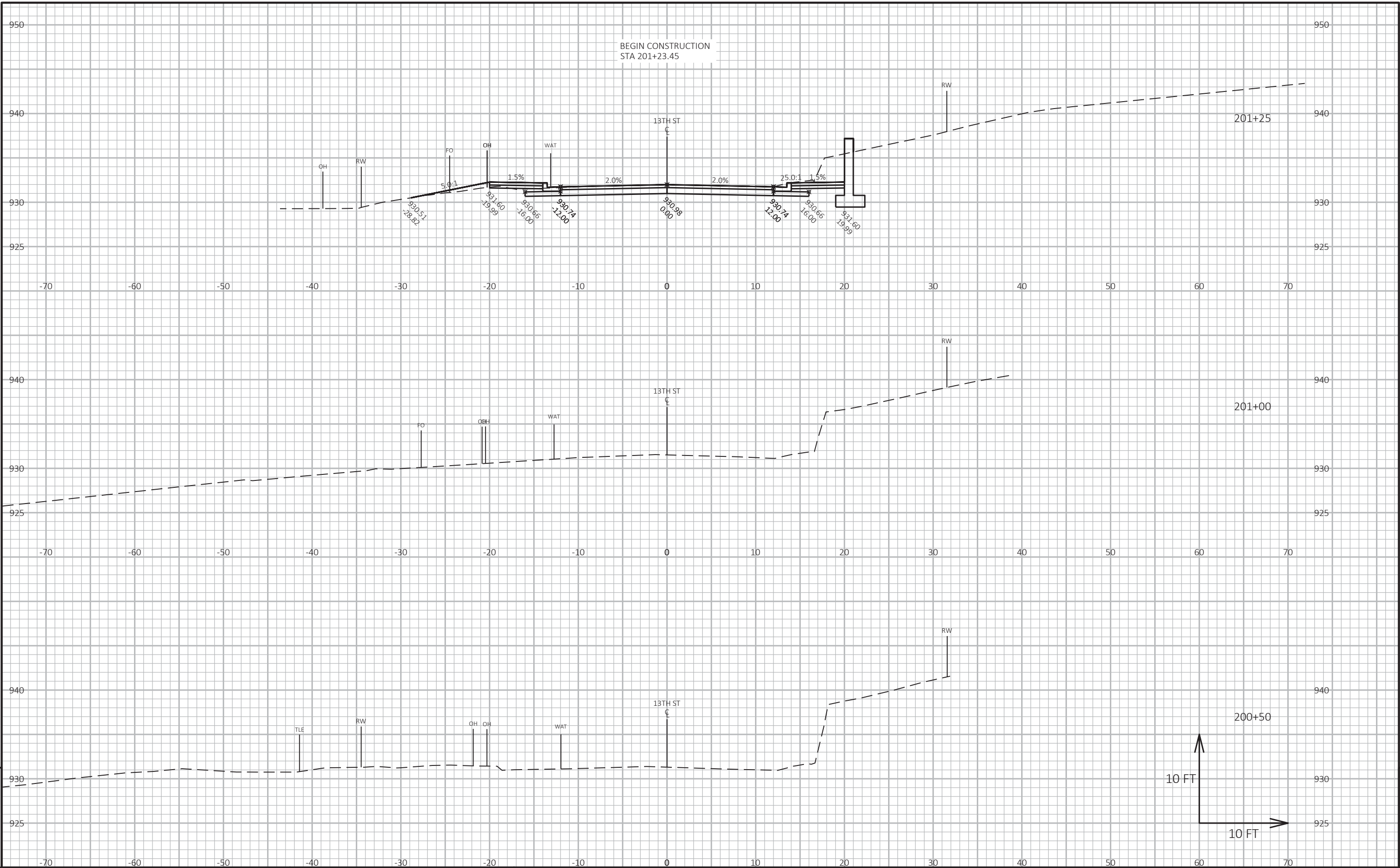


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET
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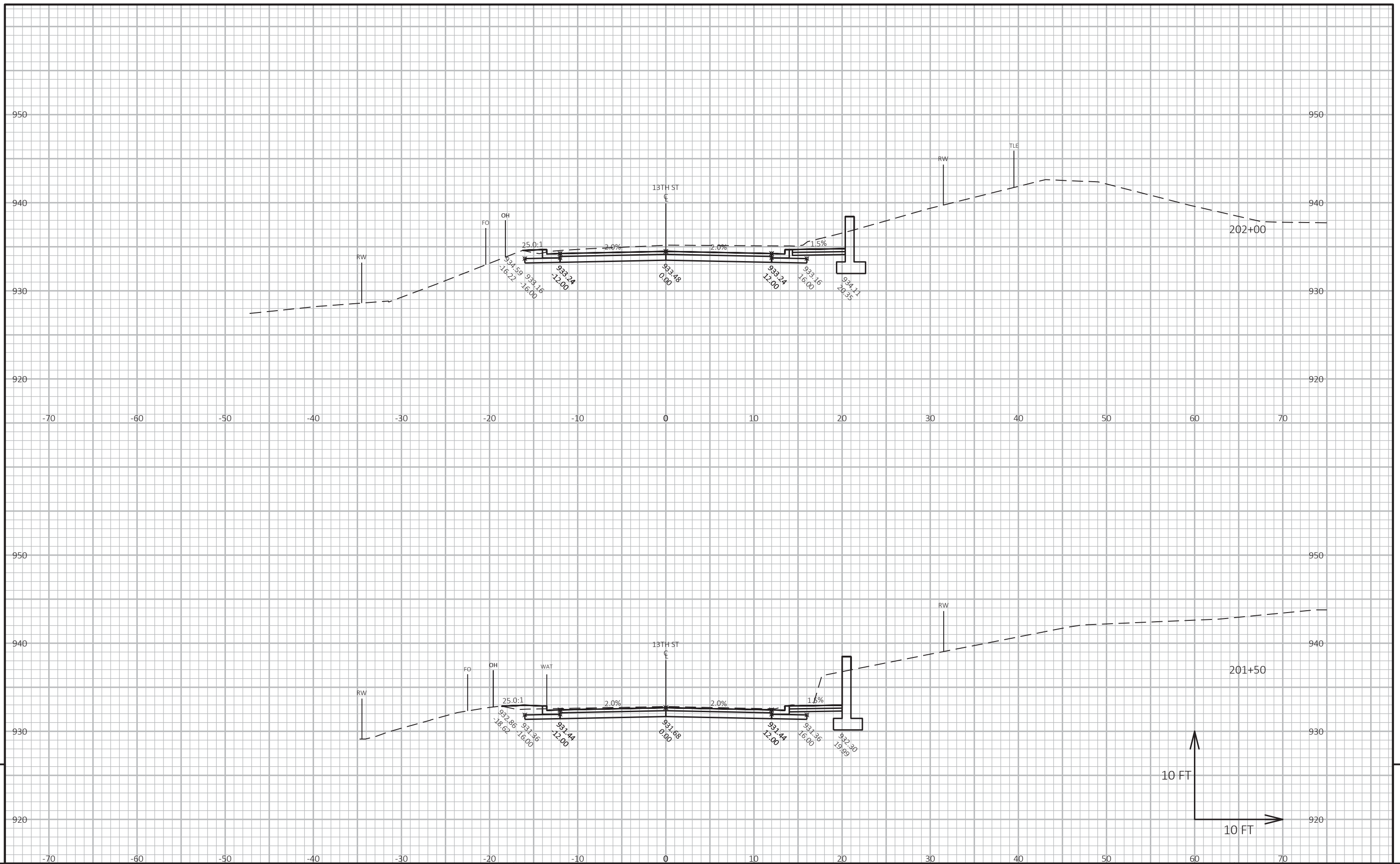
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E



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET
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9

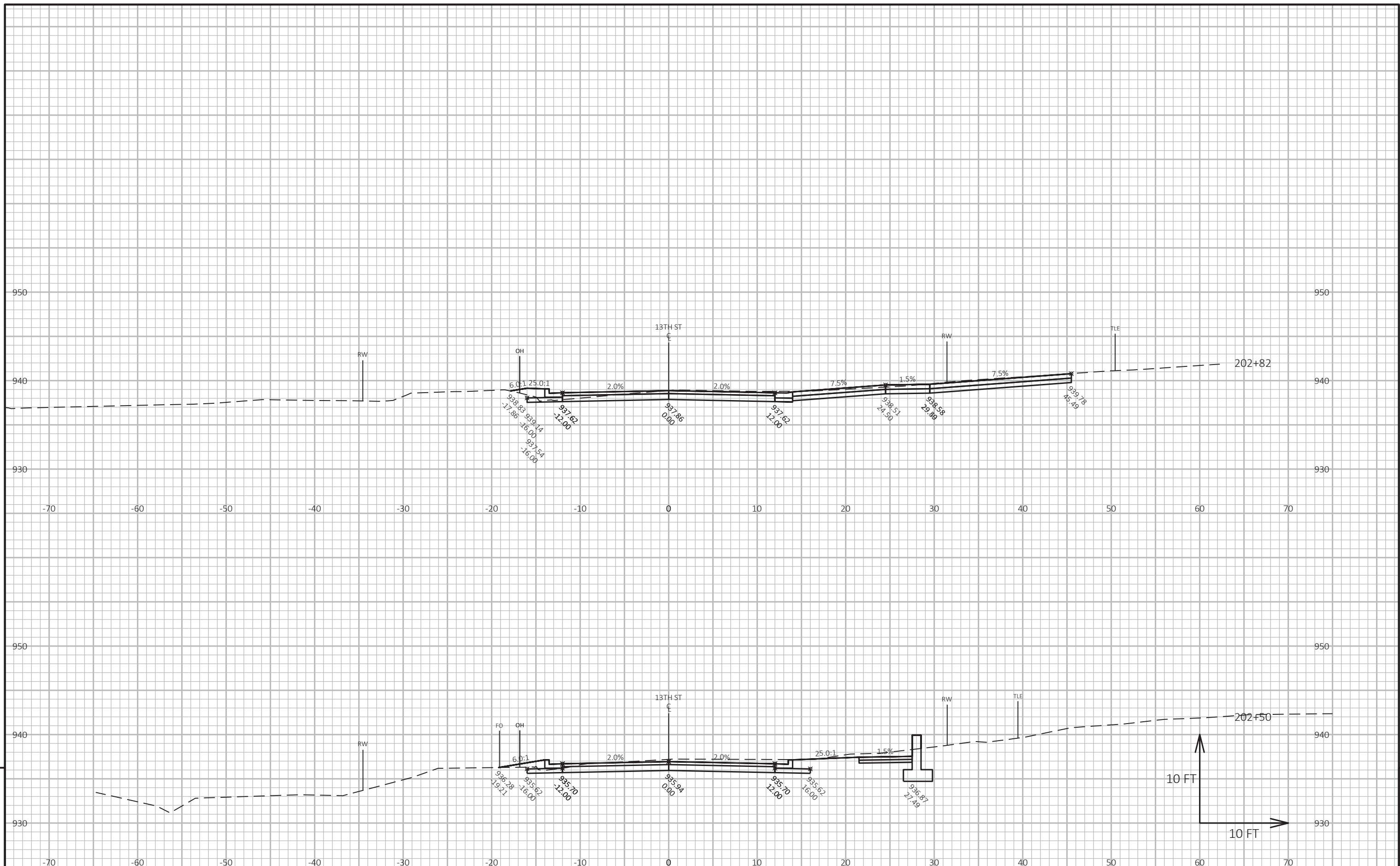


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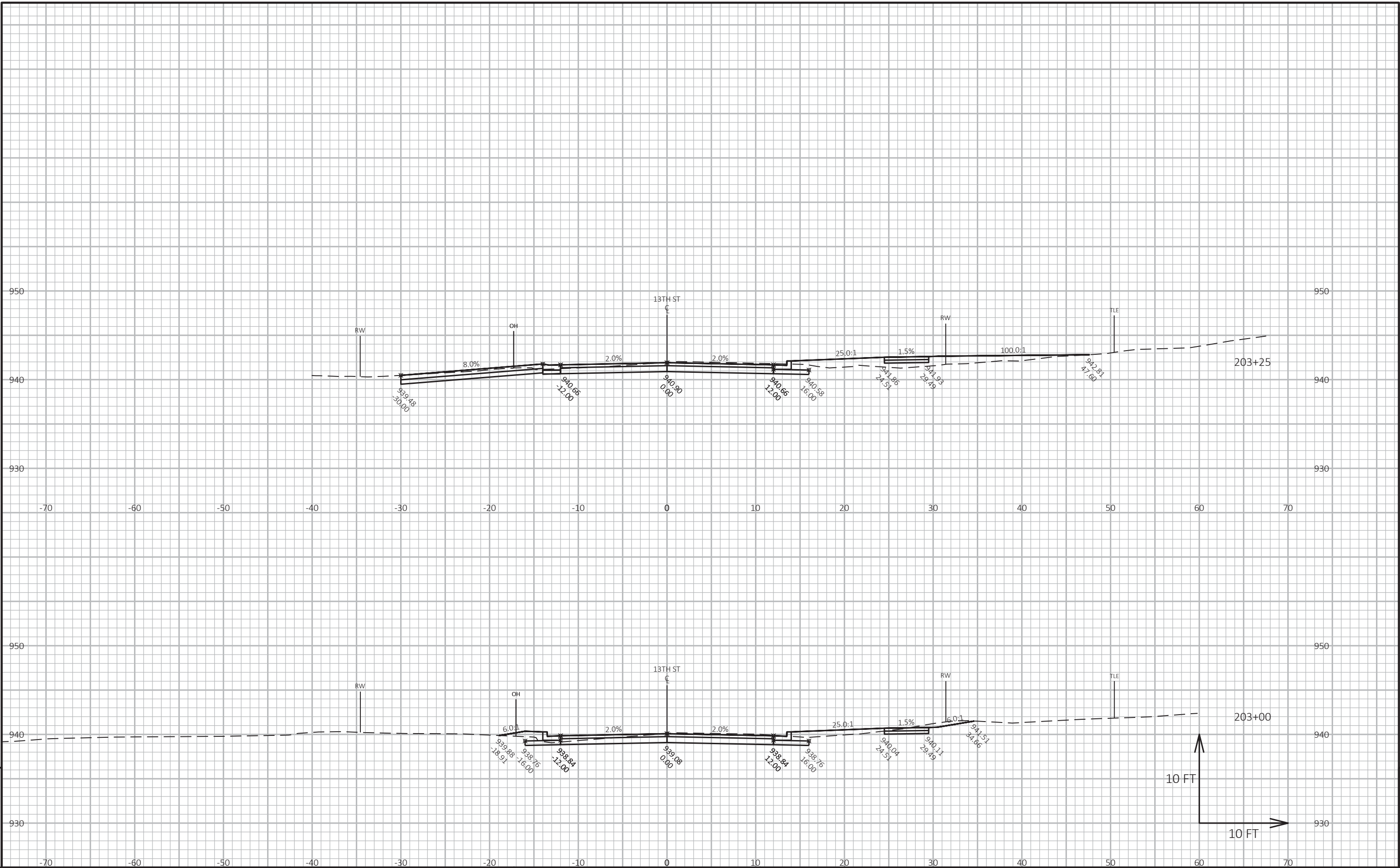
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PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET E

FILE NAME : I:\CLIENTS-MENO\M\0055 CITY OF MENOMONIE\803 MAIN STREET - STREET & UTILITY IMPROVEMENTS\79960008\090212-XS.DWG PLOT DATE : 1/5/2018 8:50 AM PLOT BY : BRIAN GENSKOW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET 9



9

9

PROJECT NO: 7996-00-09

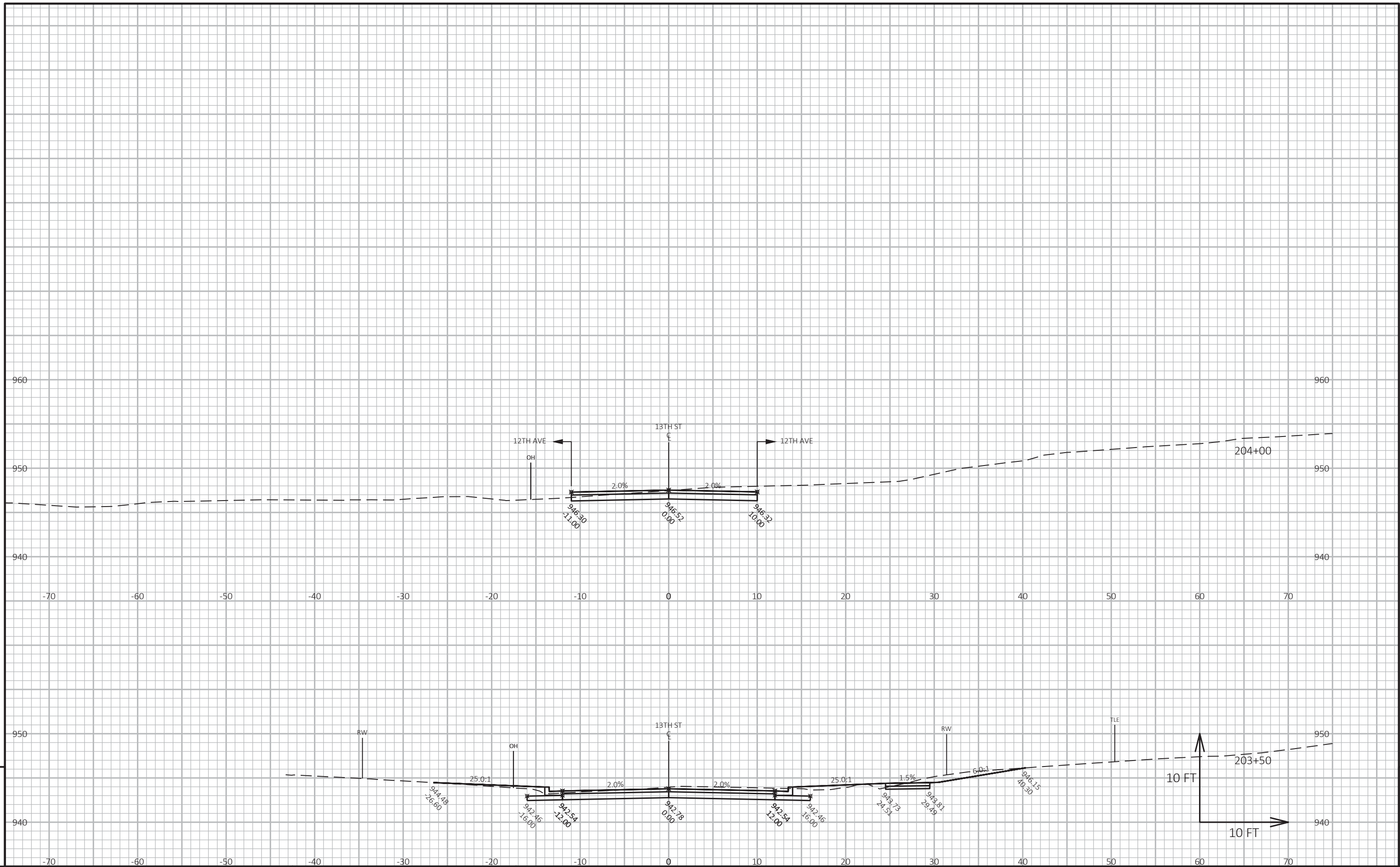
HWY: LOCAL STREET

COUNTY: DUNN

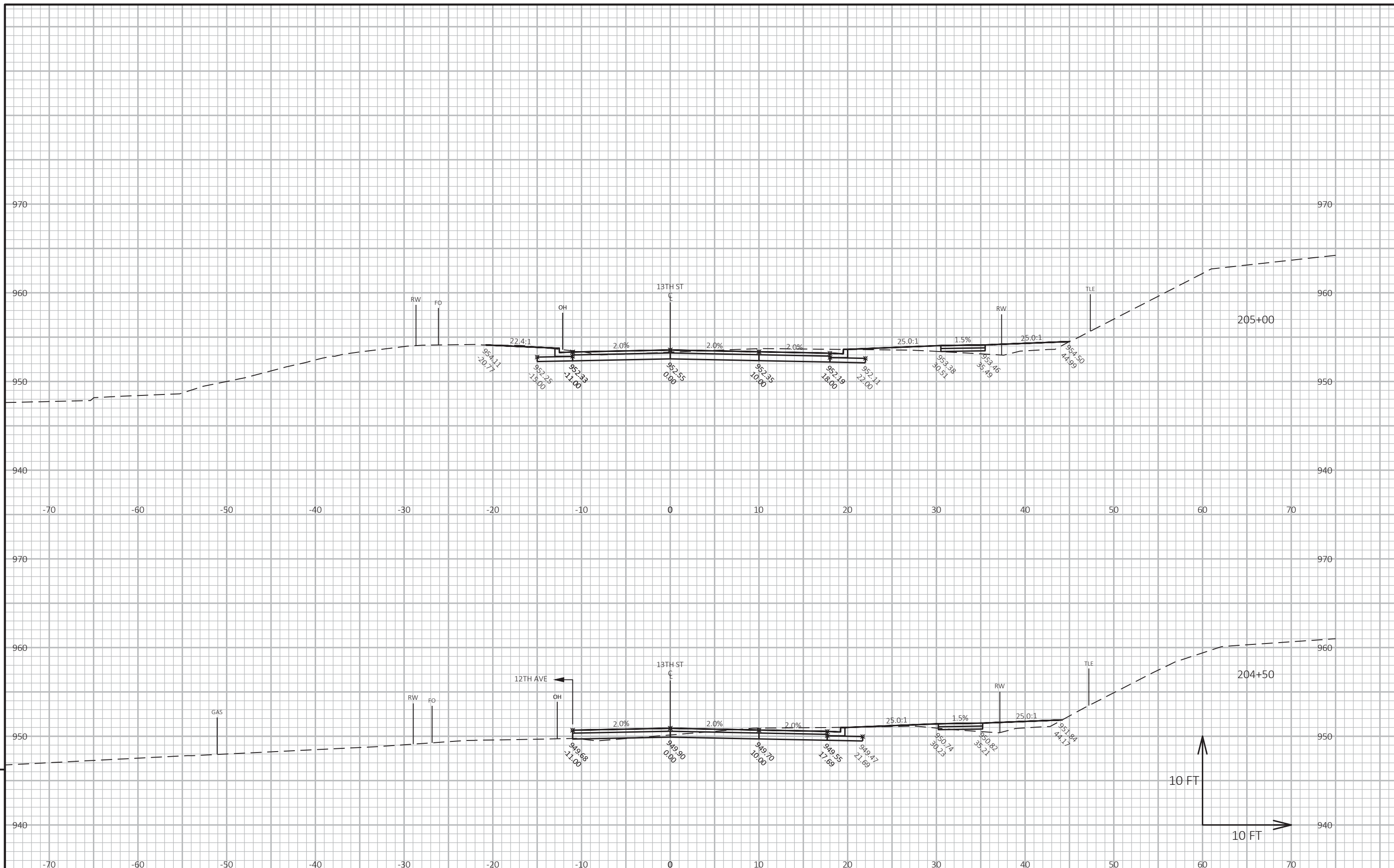
CROSS SECTIONS: 13TH ST

SHEET

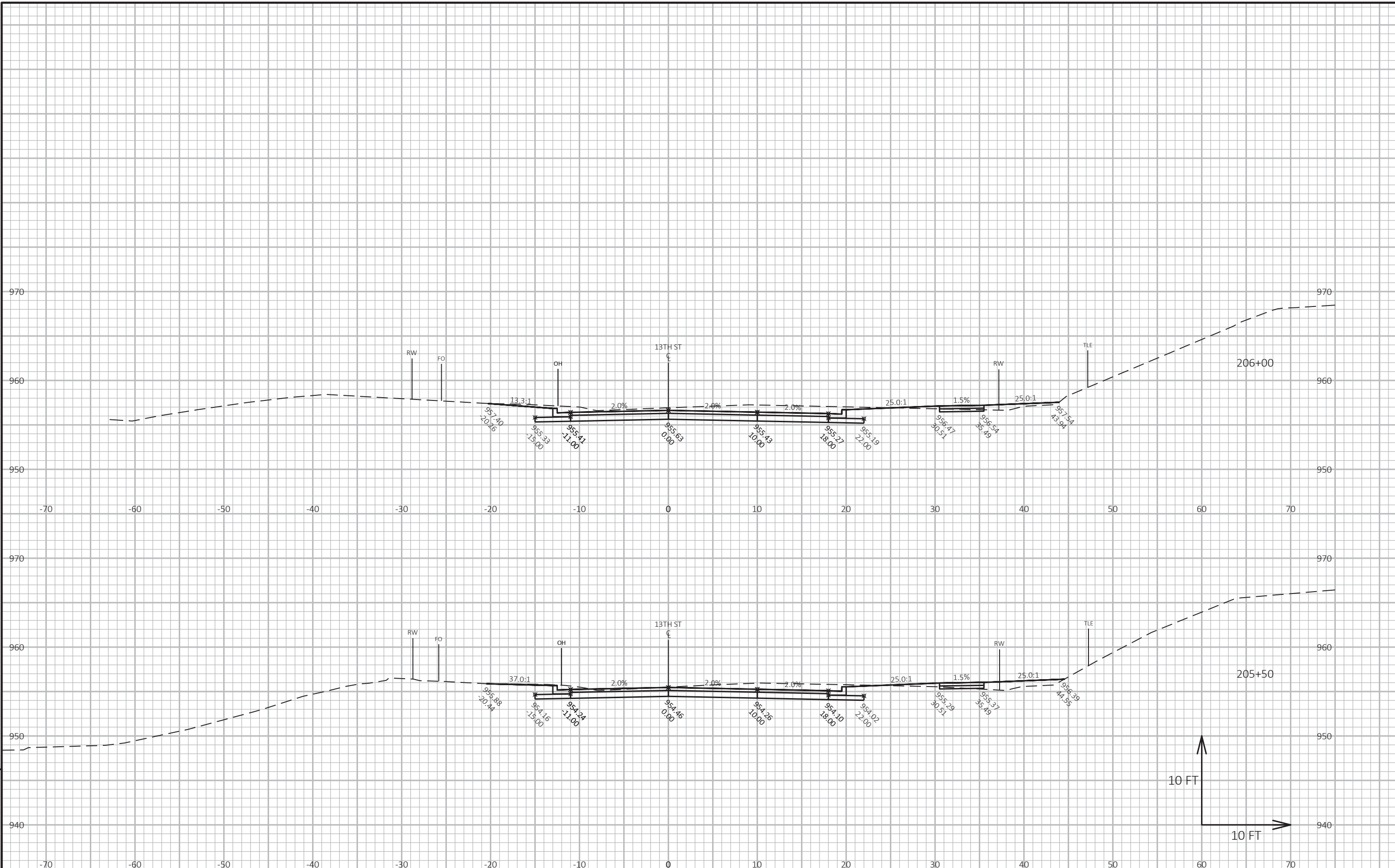
E



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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PROJECT NO: 7996-00-09

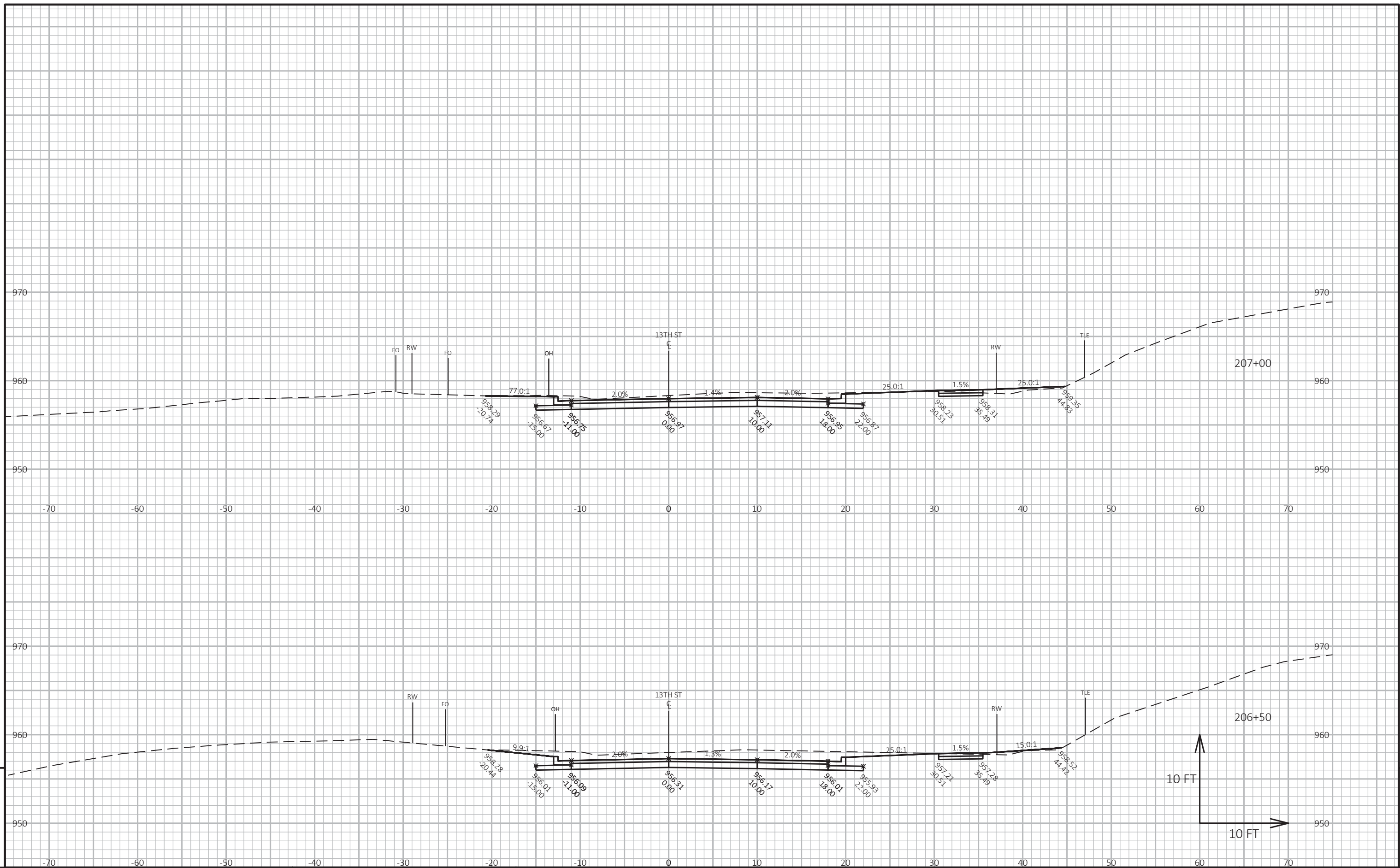
HWY: LOCAL STREET

COUNTY: DUNN

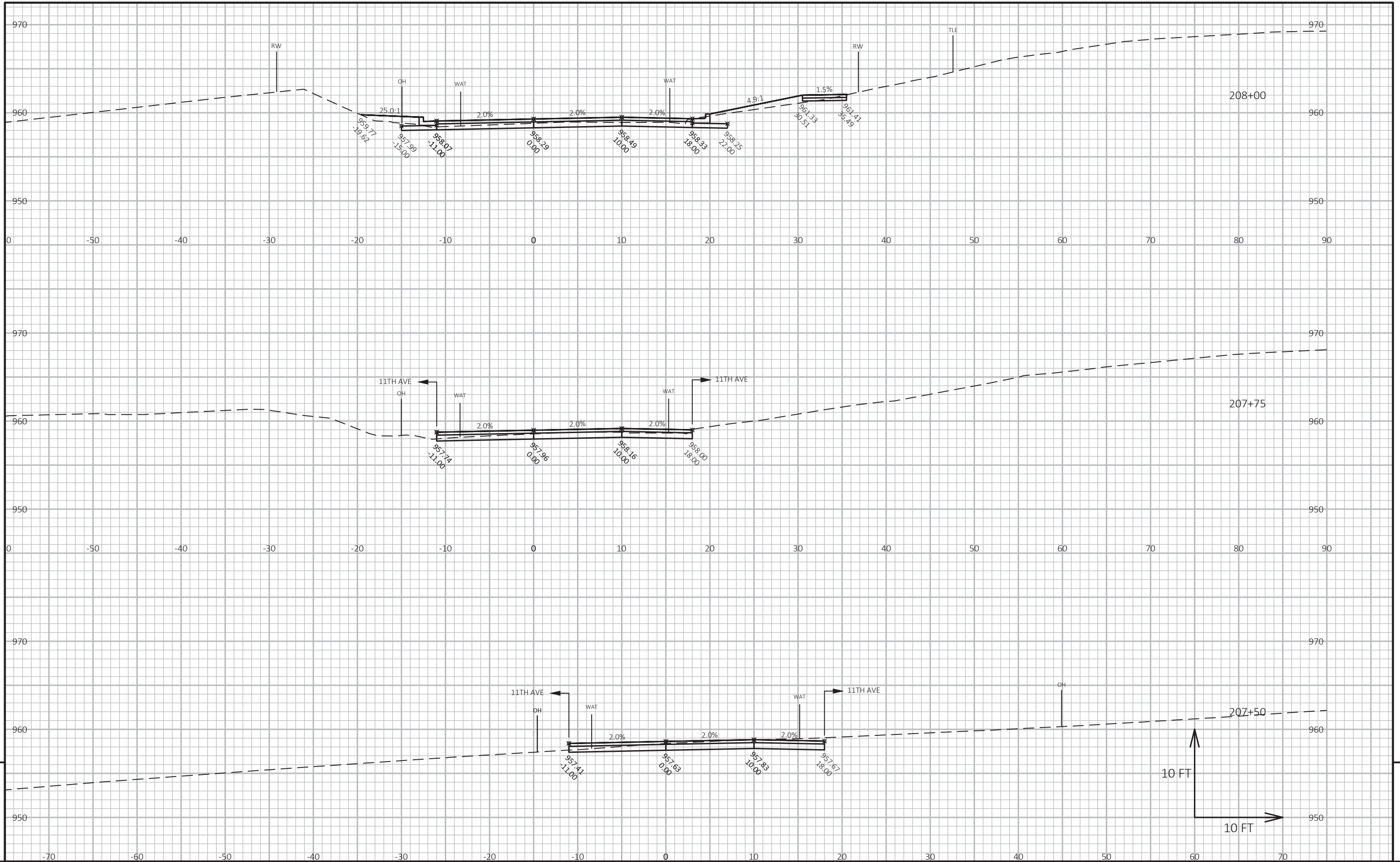
CROSS SECTIONS: 13TH ST

SHEET

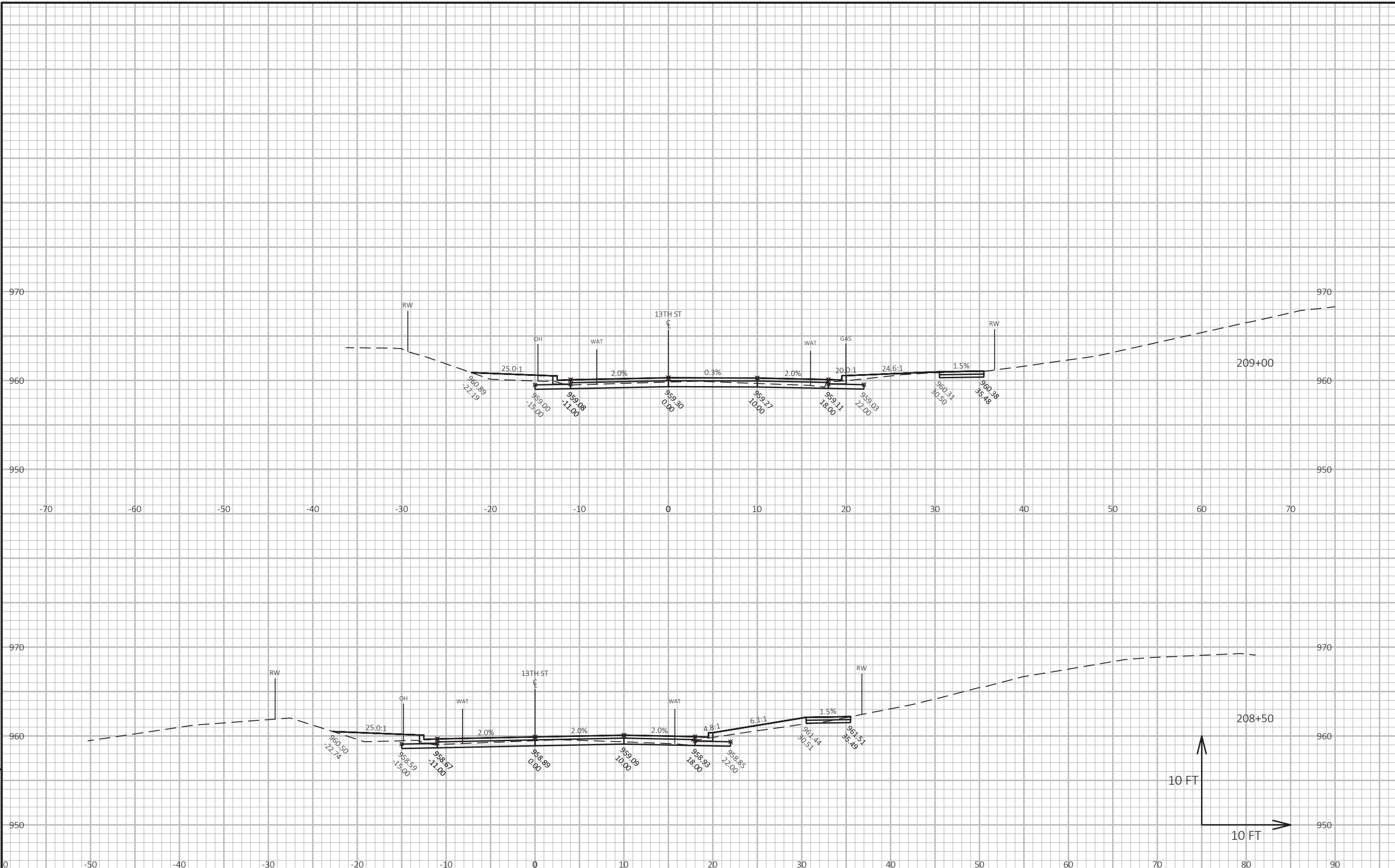
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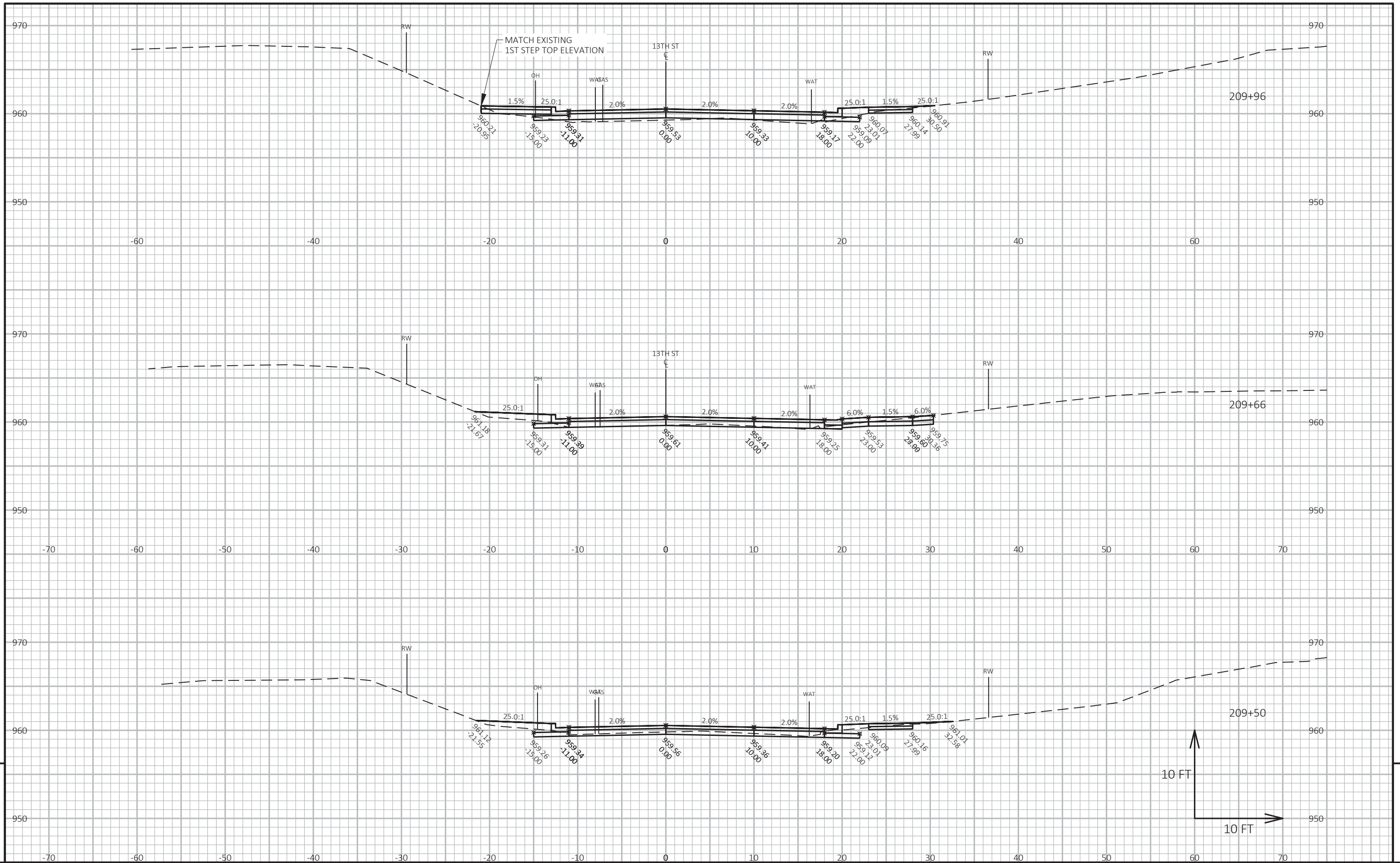
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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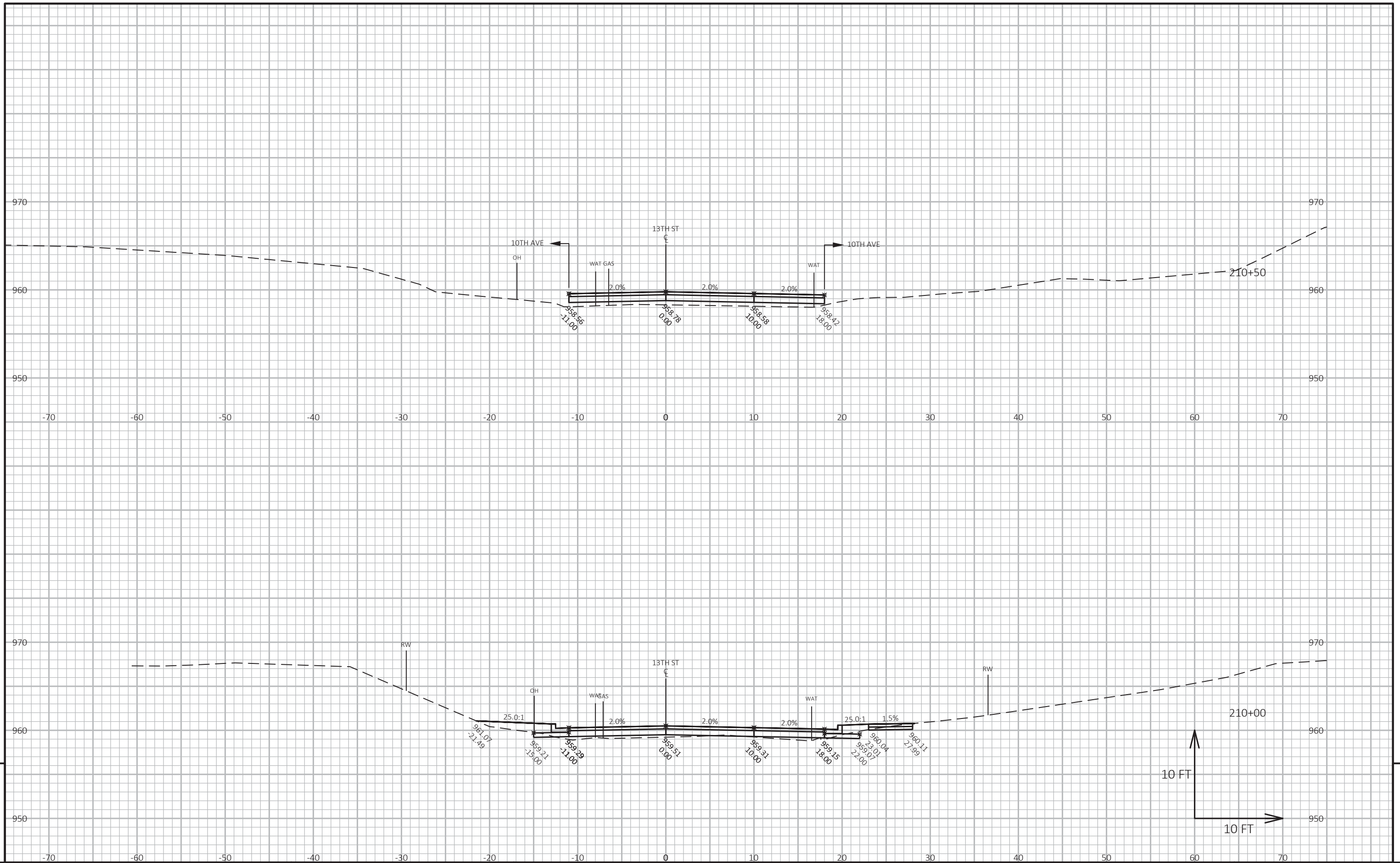
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET 9



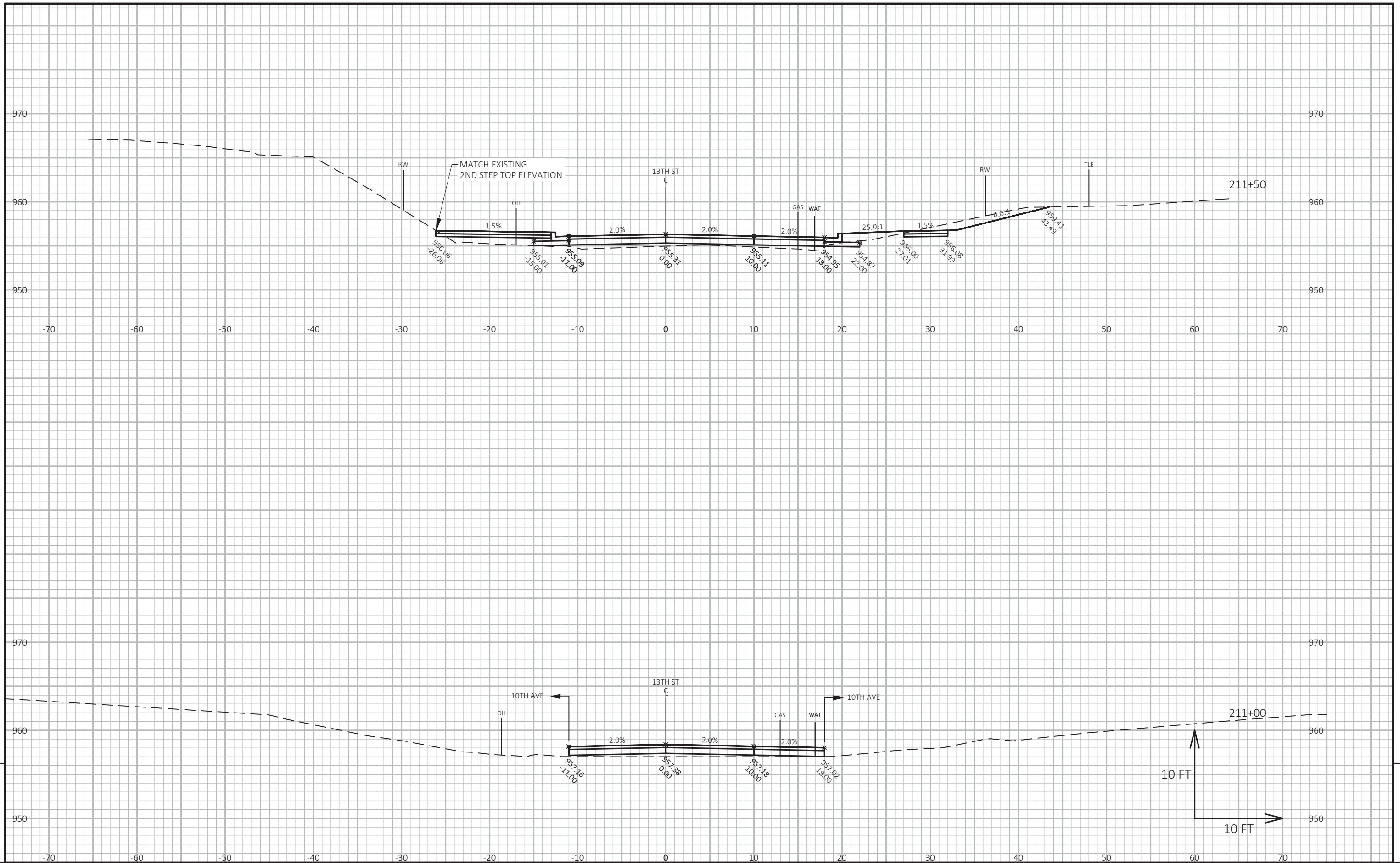
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET 9



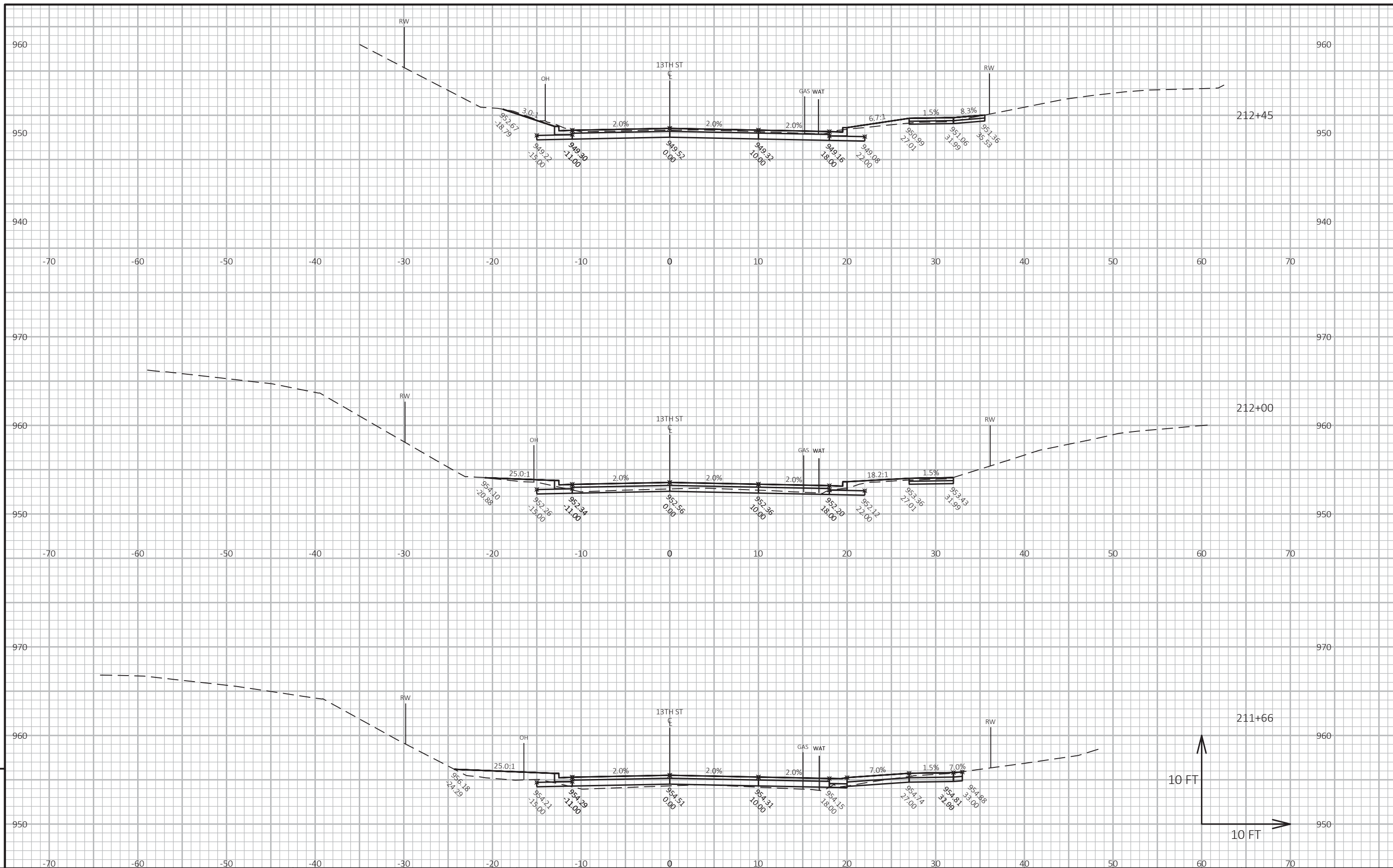
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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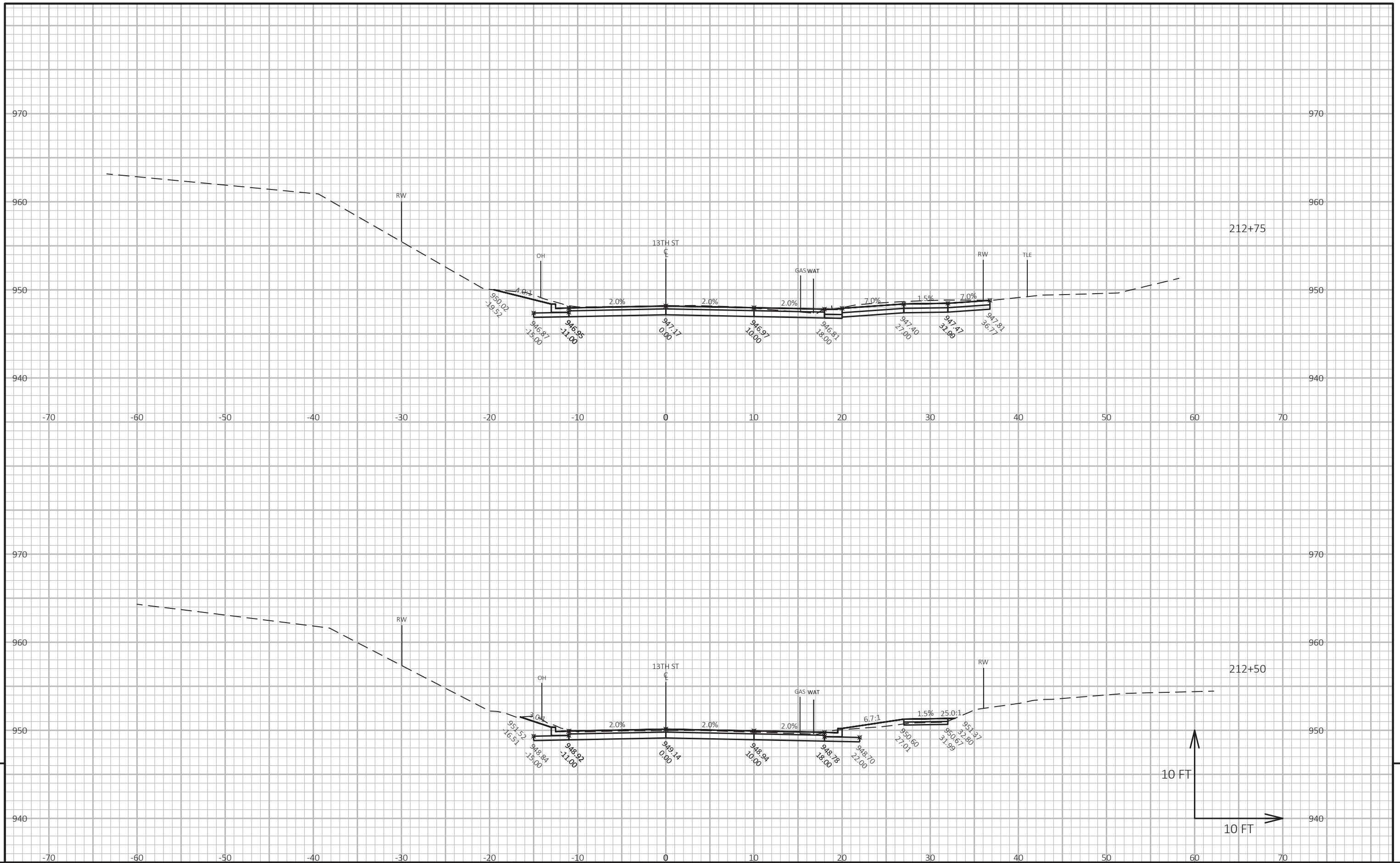
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PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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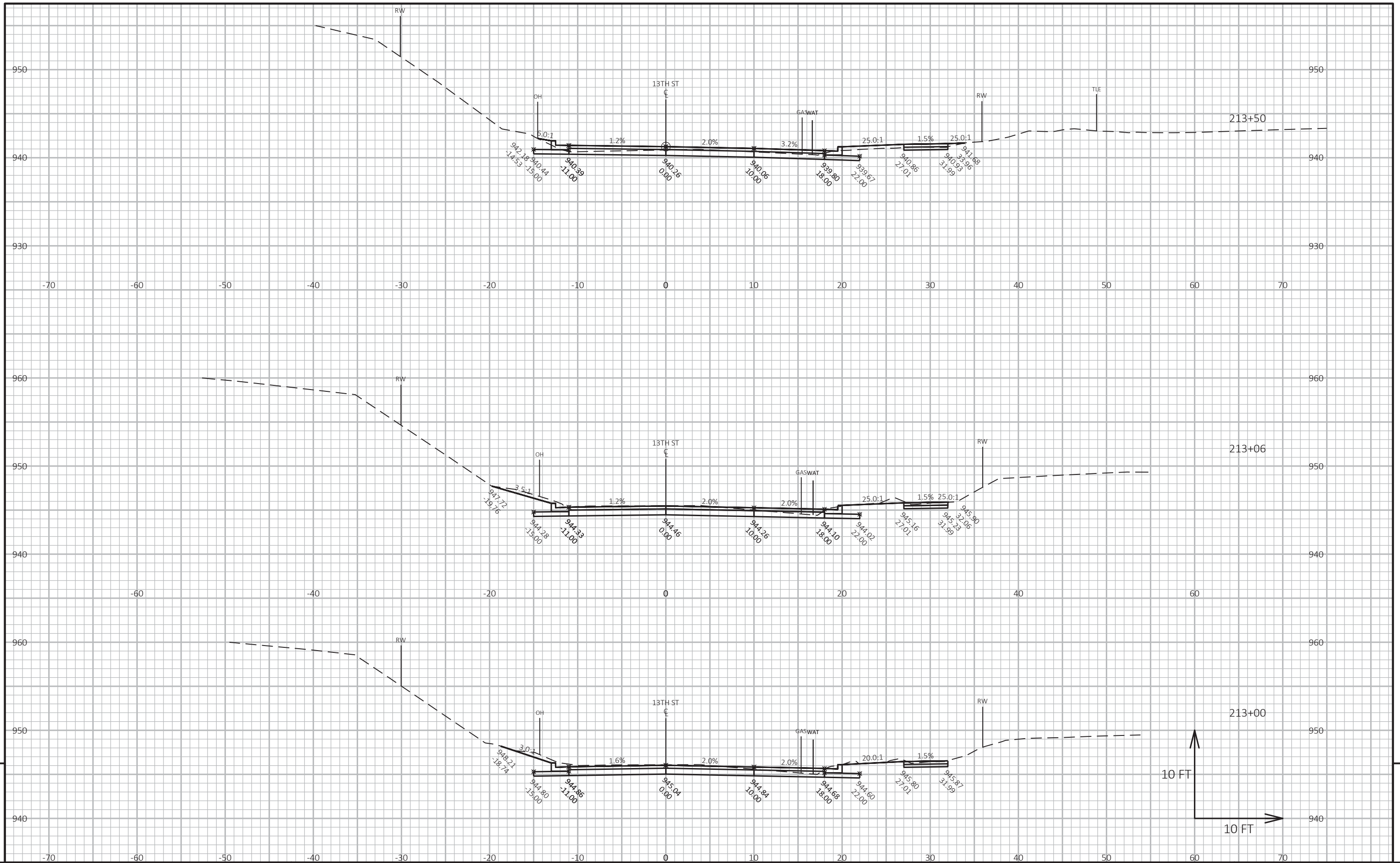
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET 9



9

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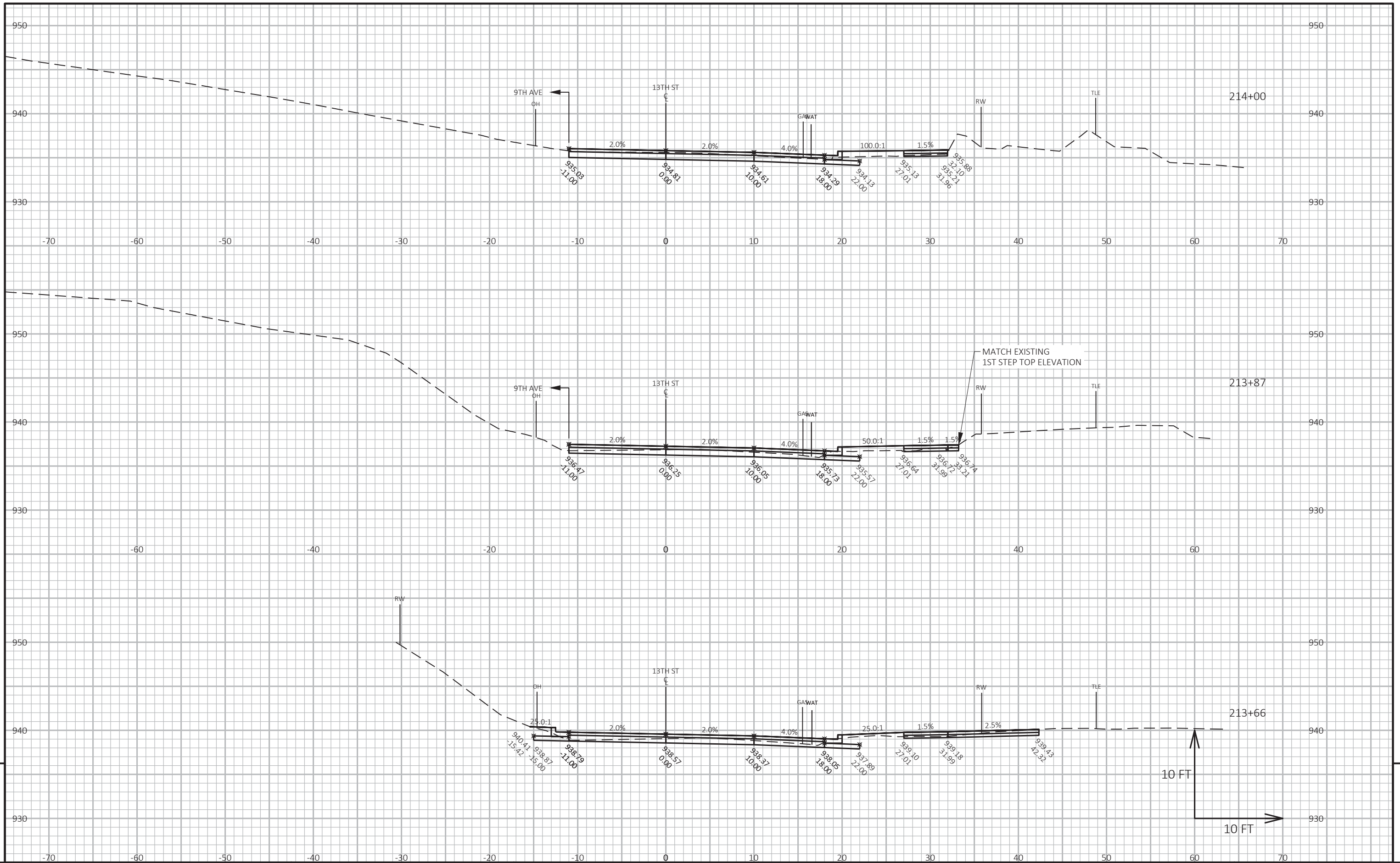
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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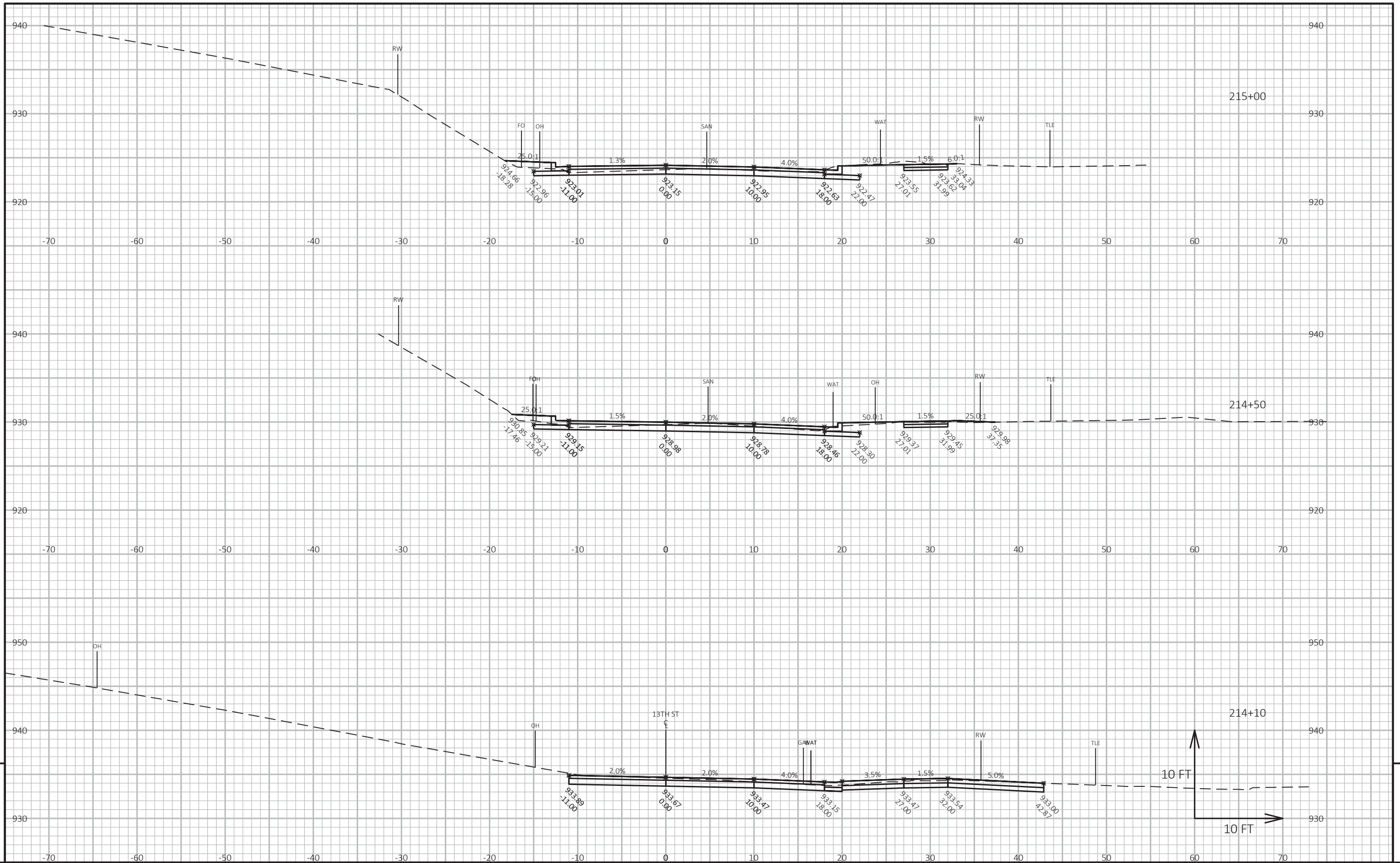
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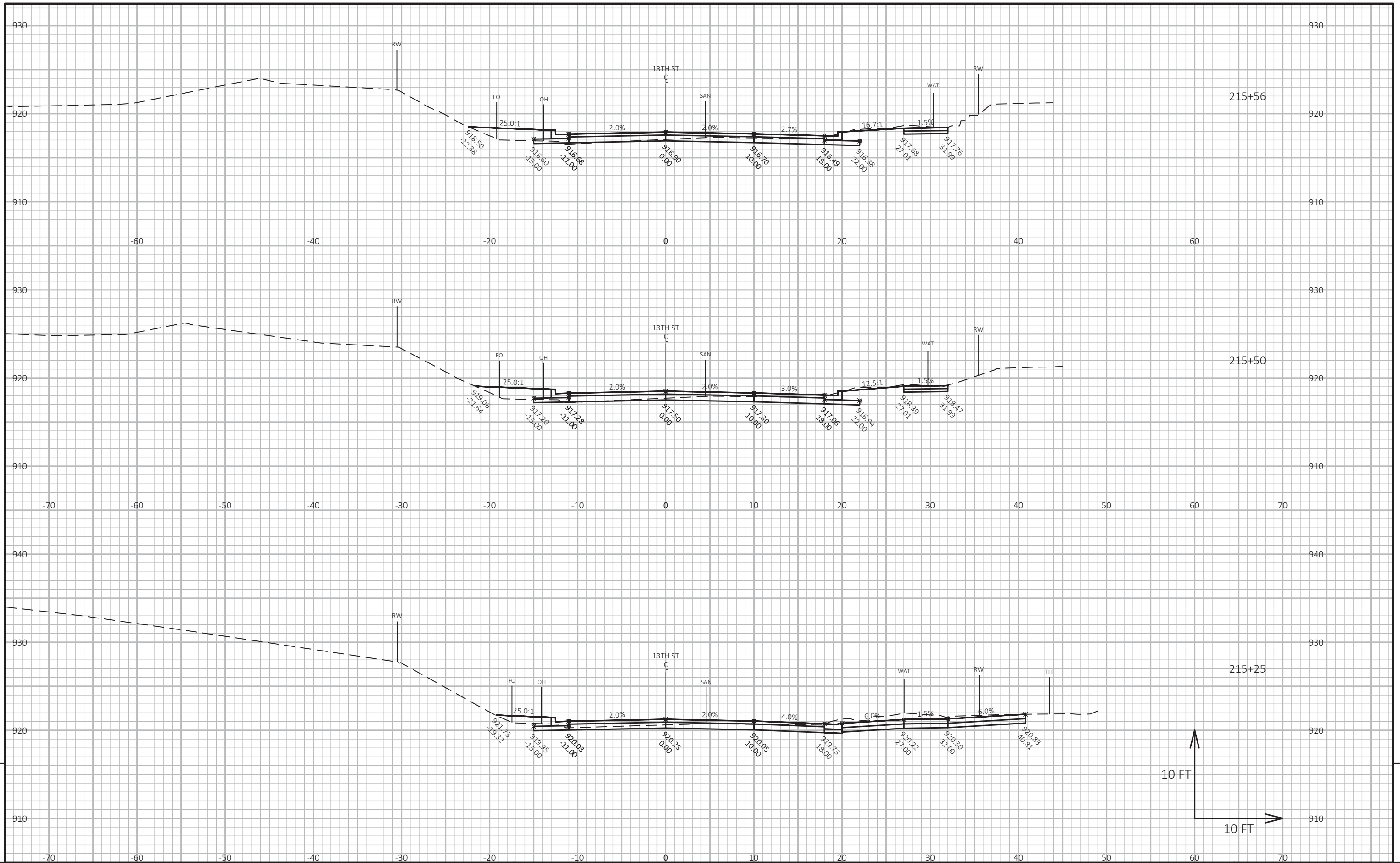
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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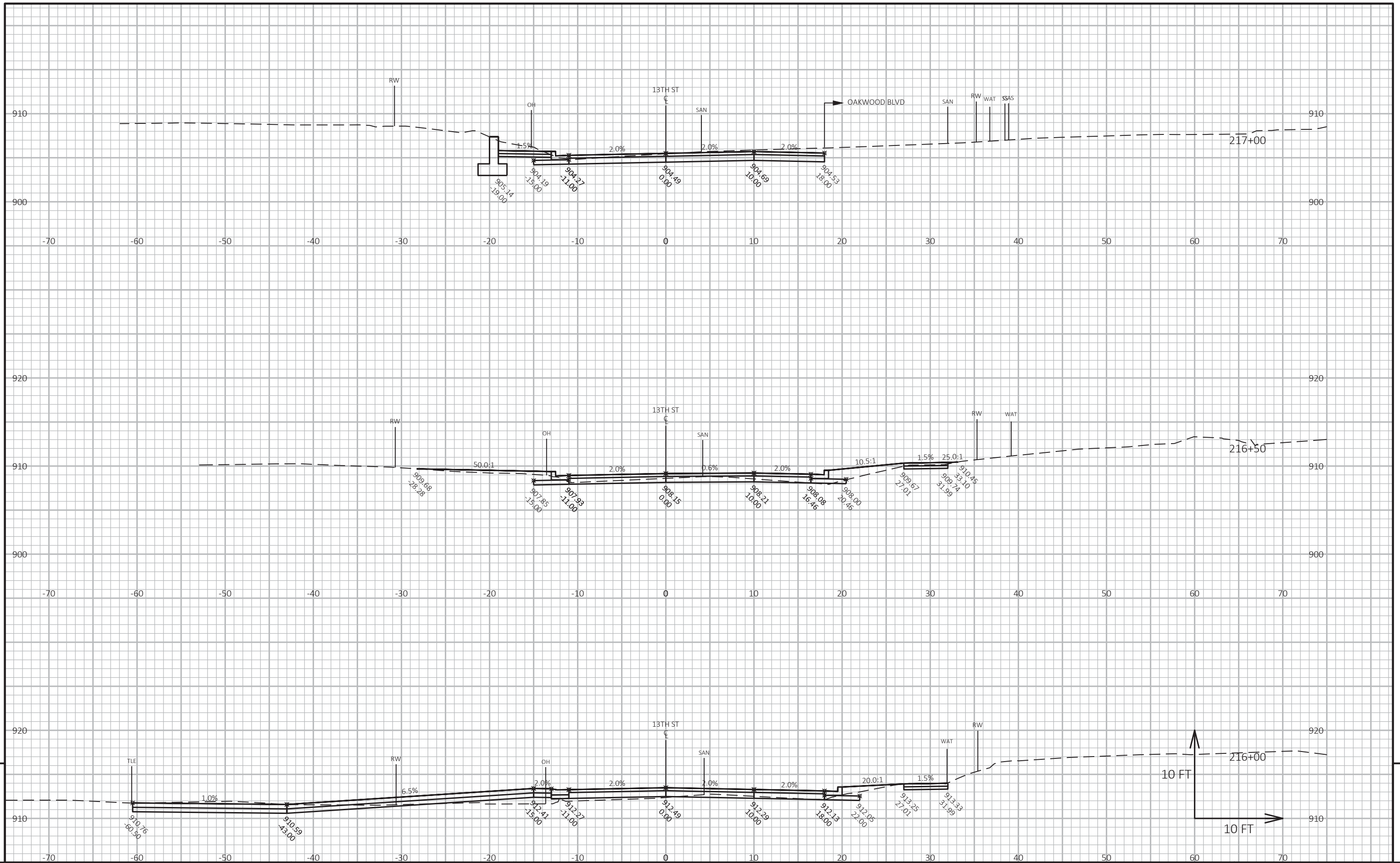


PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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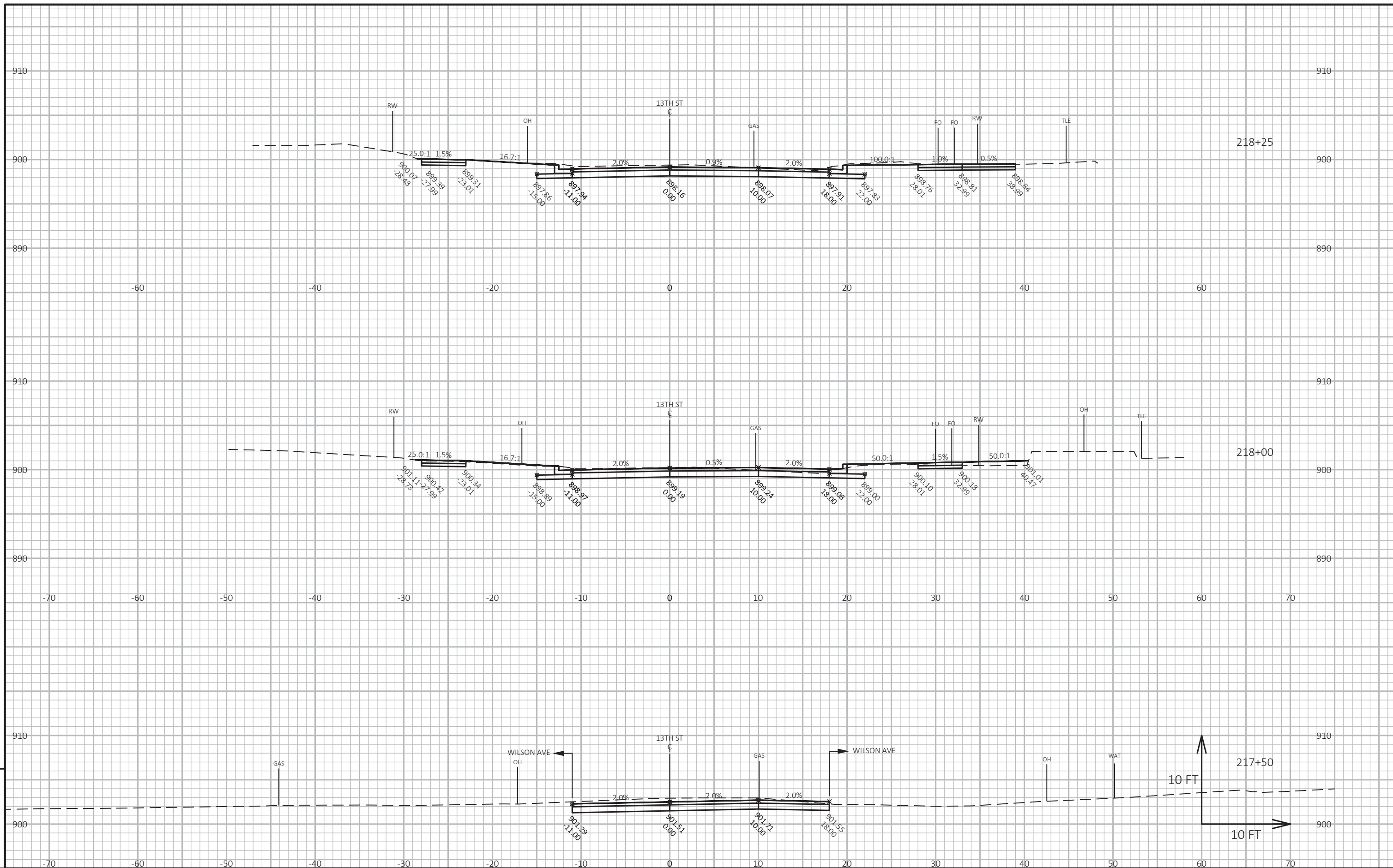


PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET 9

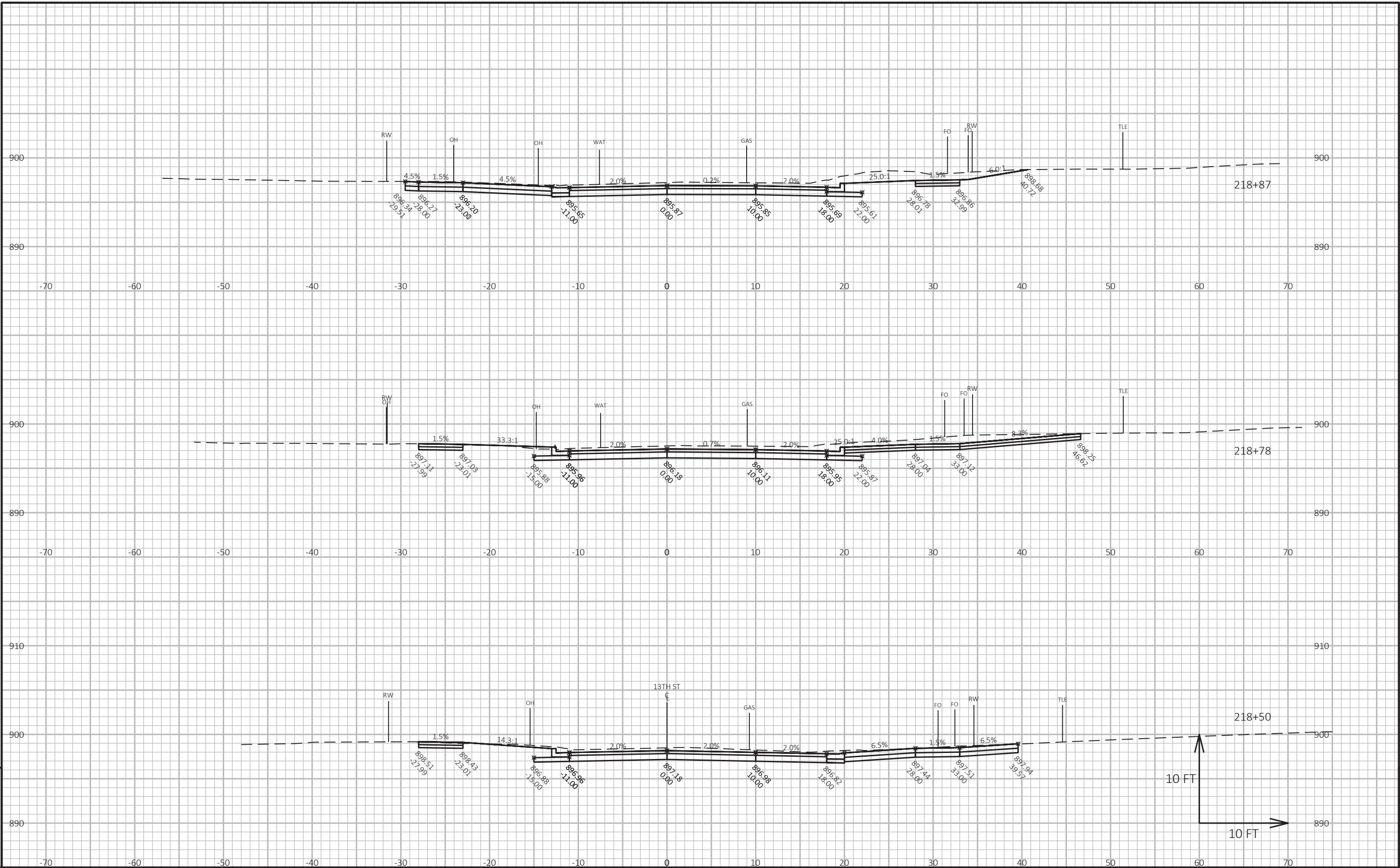




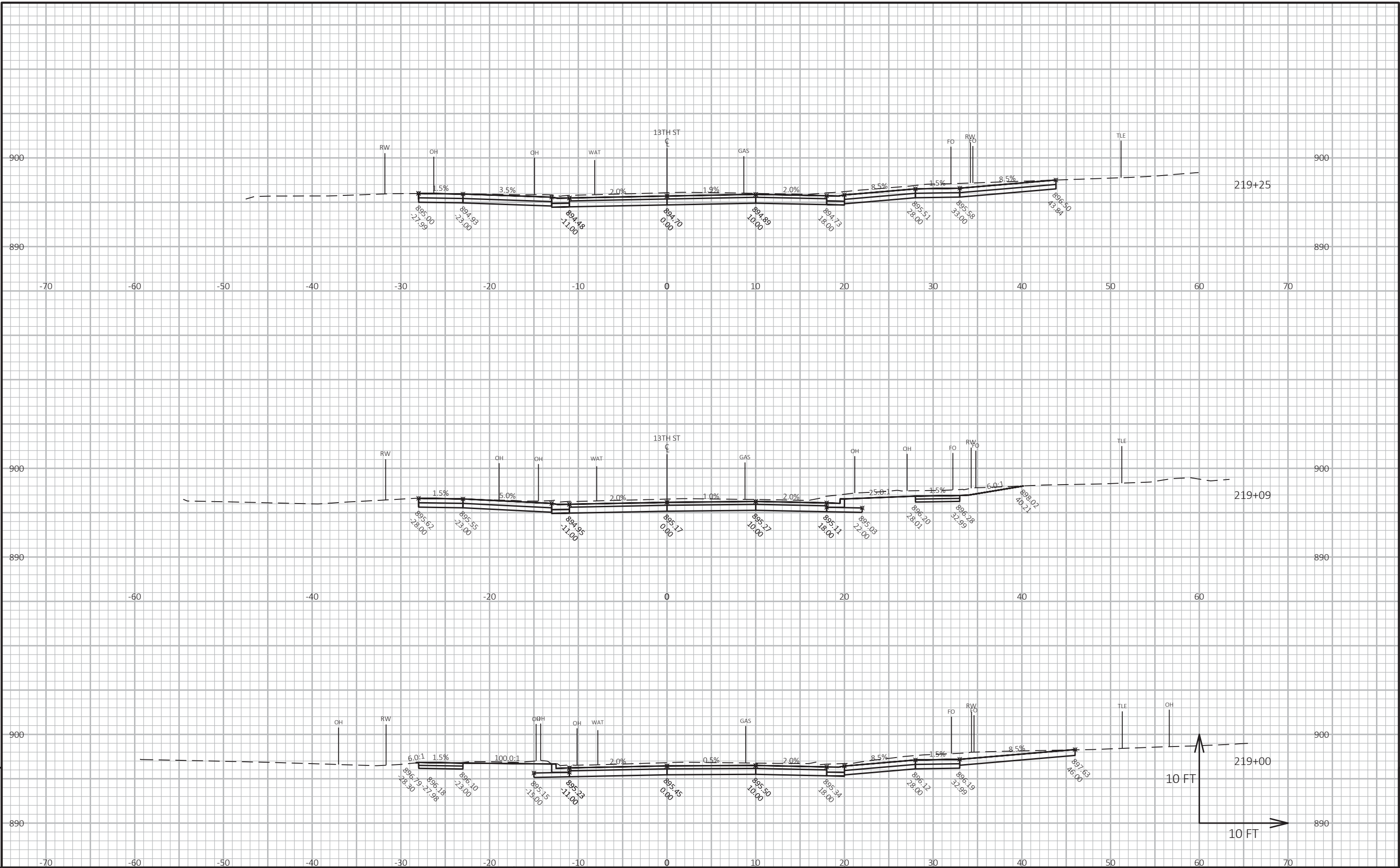
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET 9
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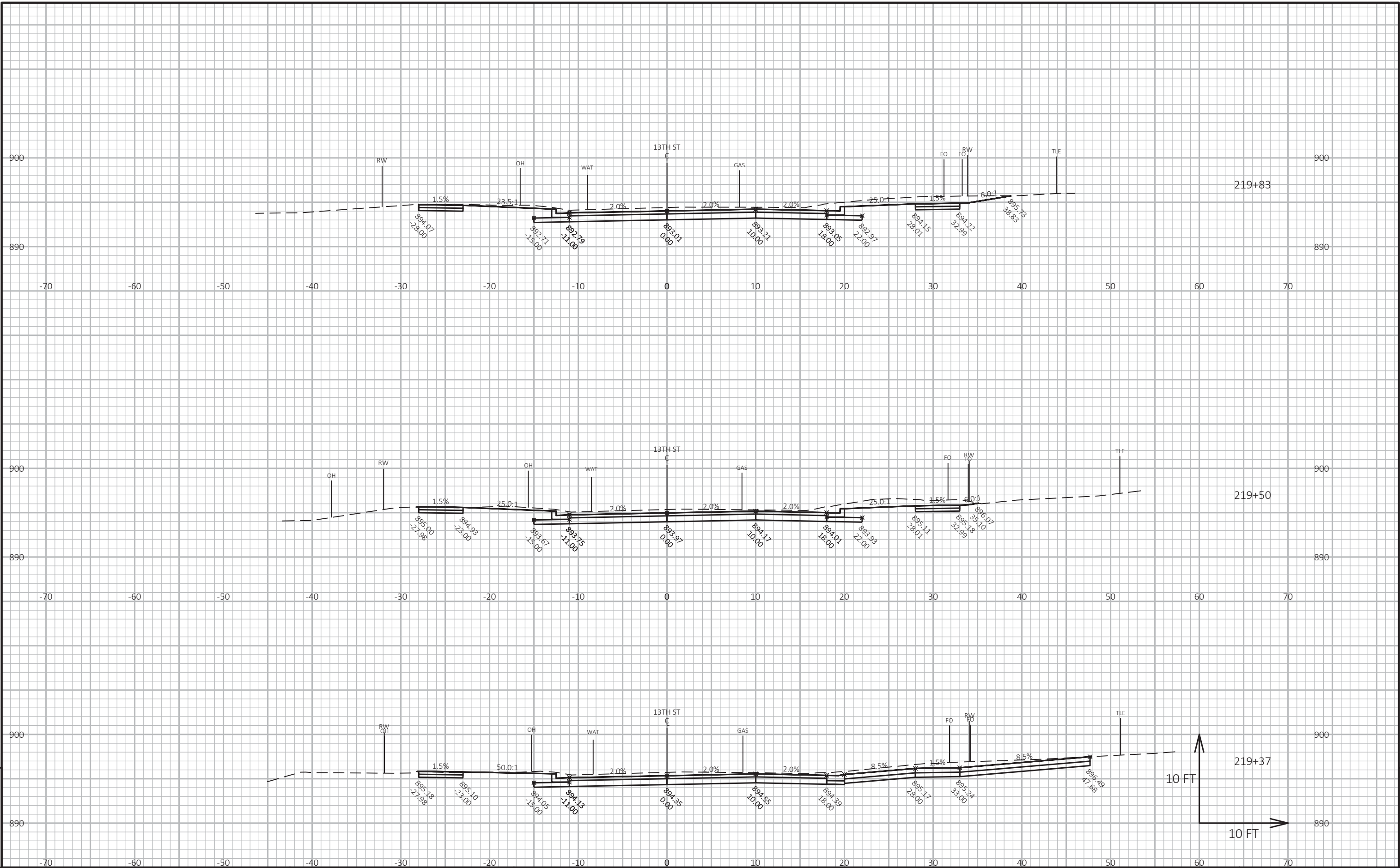
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET E

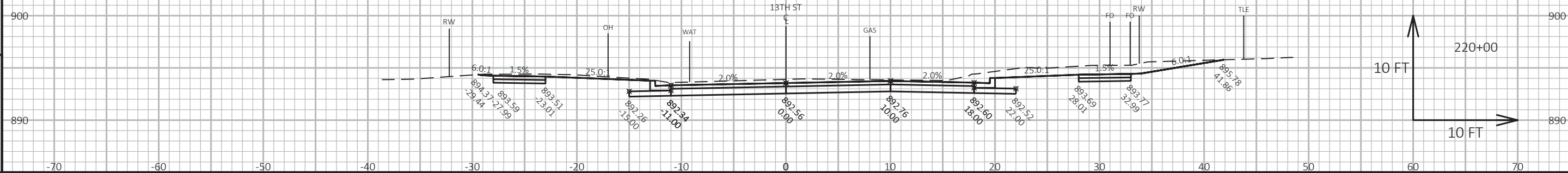


PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 13TH ST SHEET E



PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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END PROJECT
STA 220+54.30



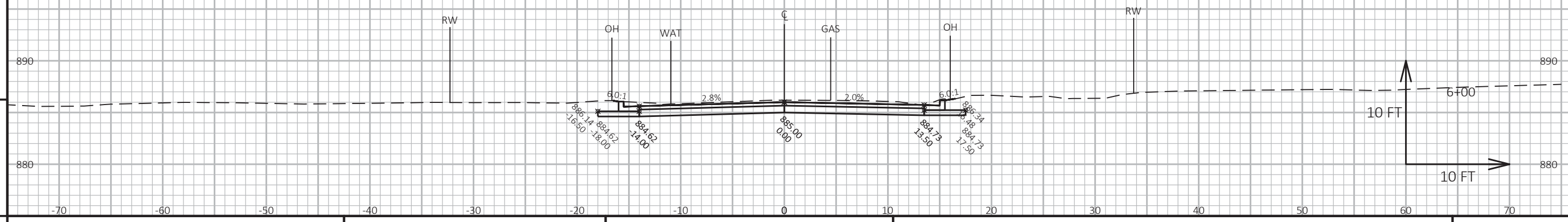
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PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 13TH ST	SHEET	E
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BEGIN CONSTRUCTION
STA 5+05.00

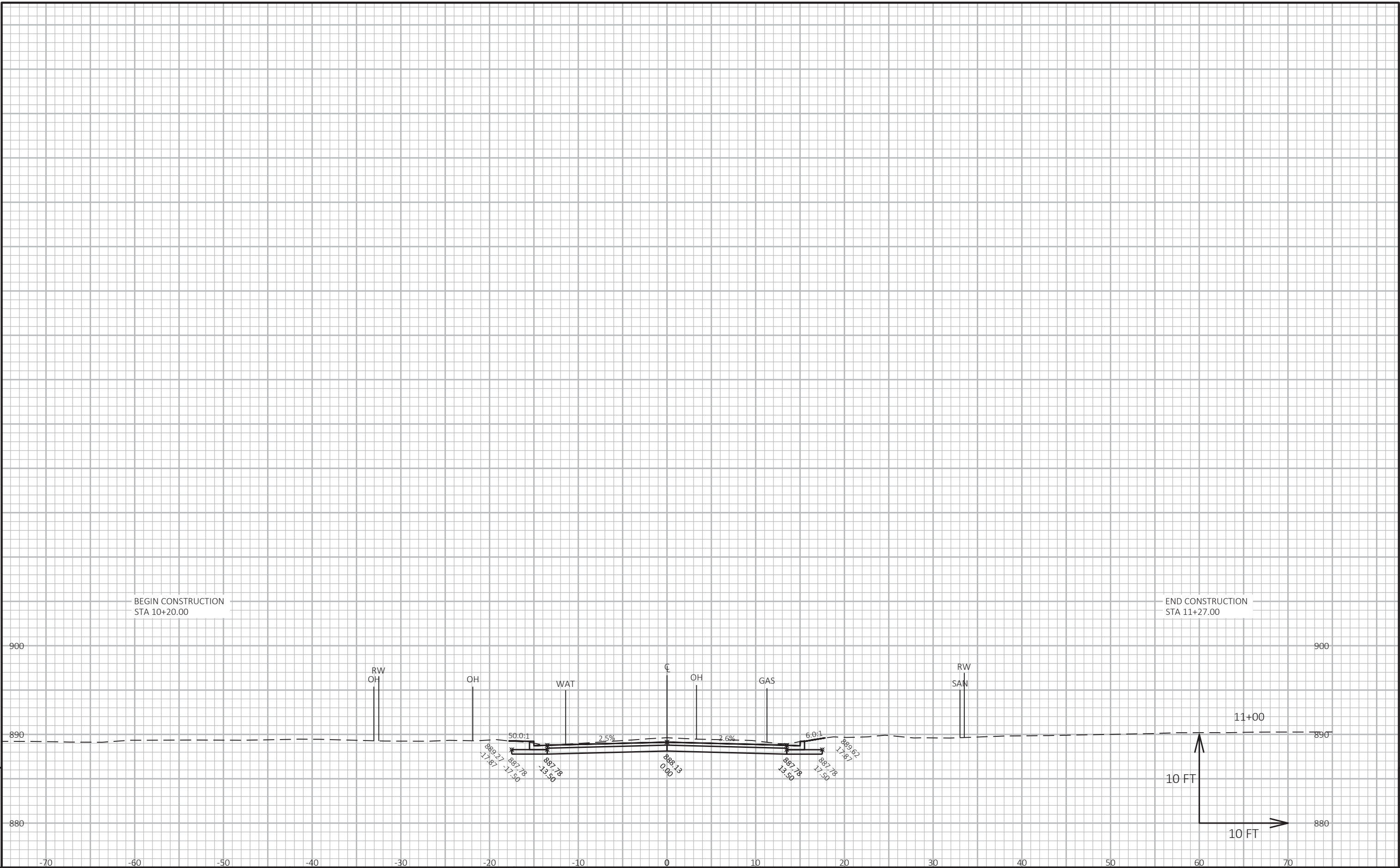
END CONSTRUCTION
STA 6+20.00



9

9

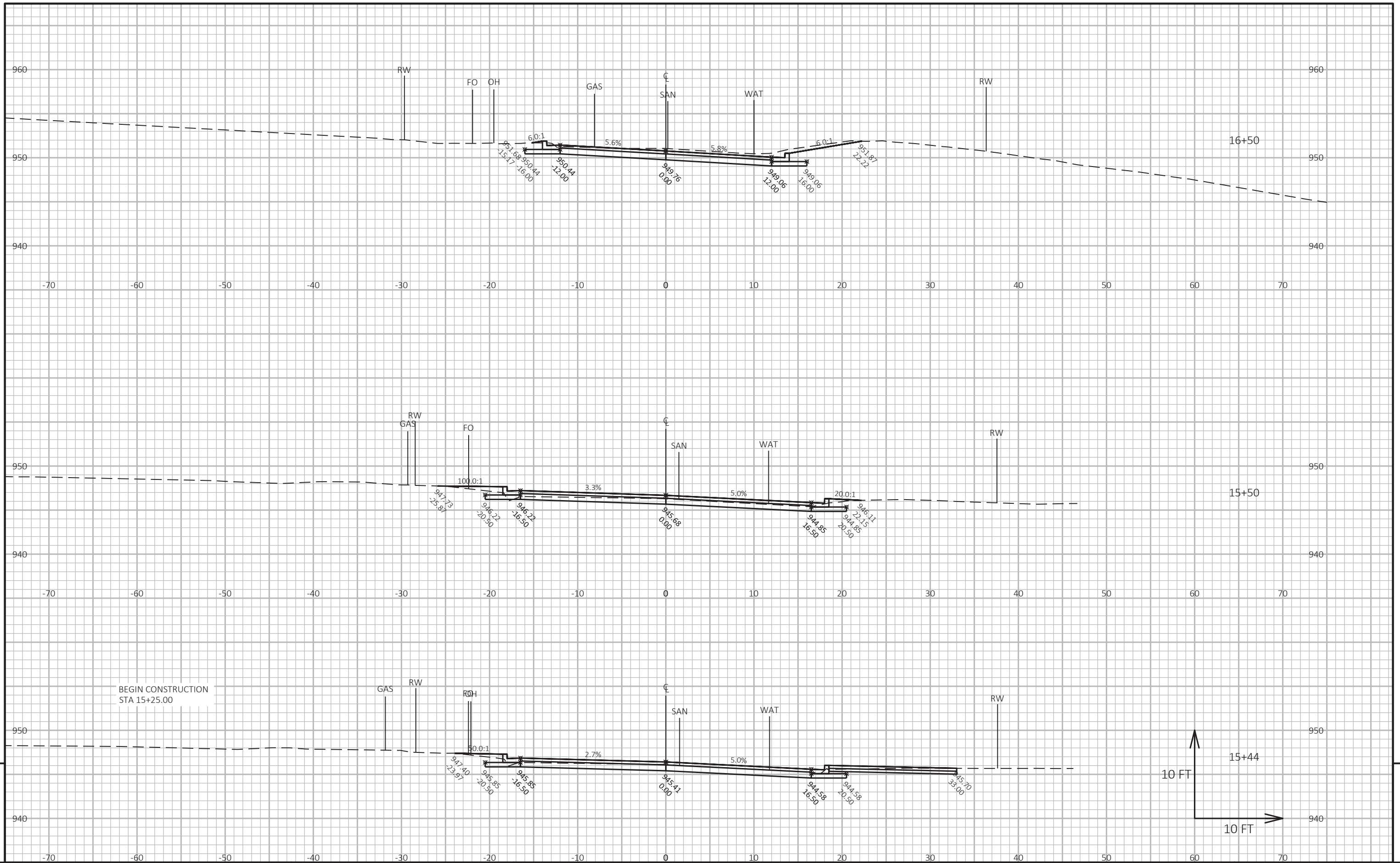
PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 11TH ST SHEET E



9

9

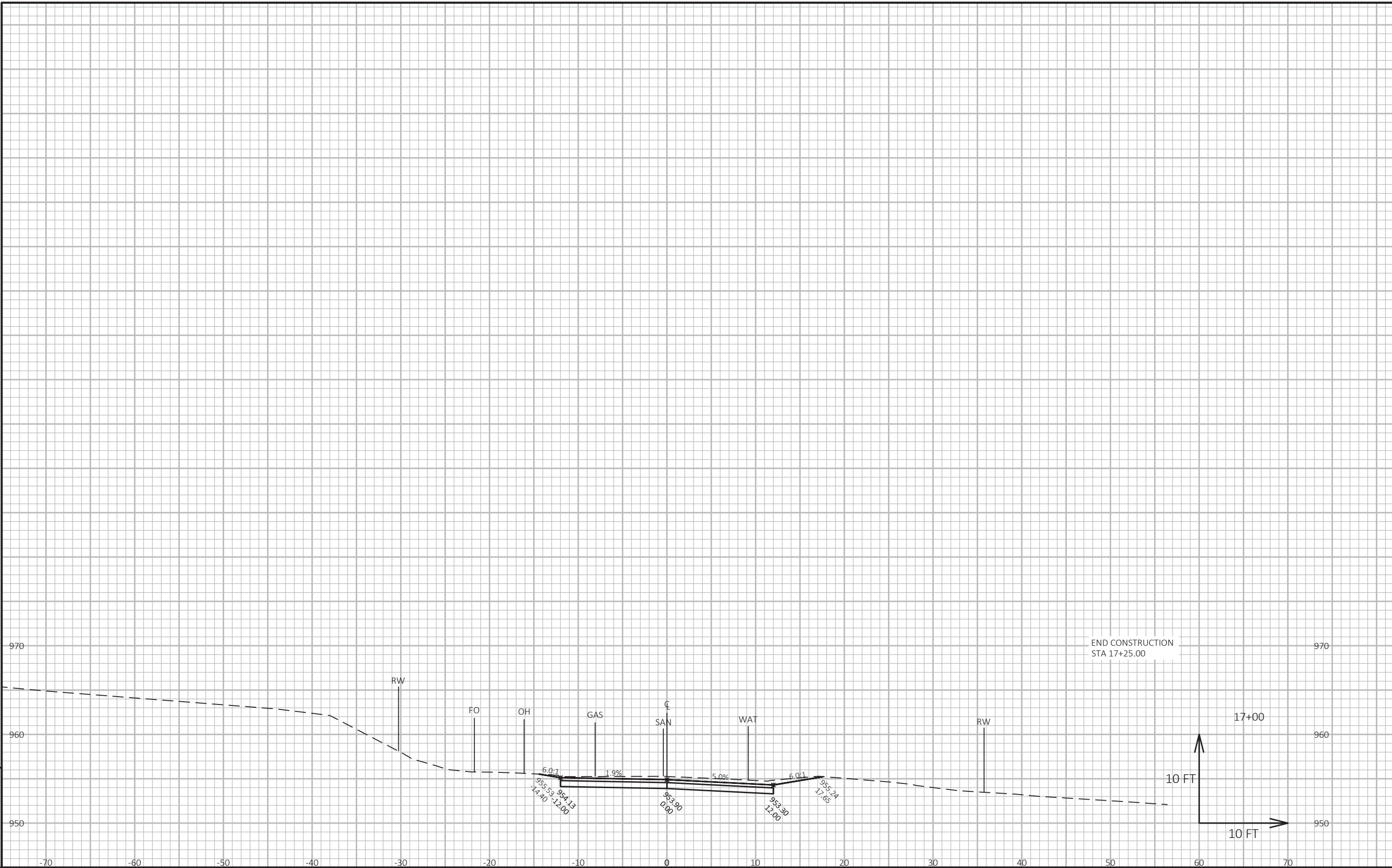
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 12TH ST	SHEET	E
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9

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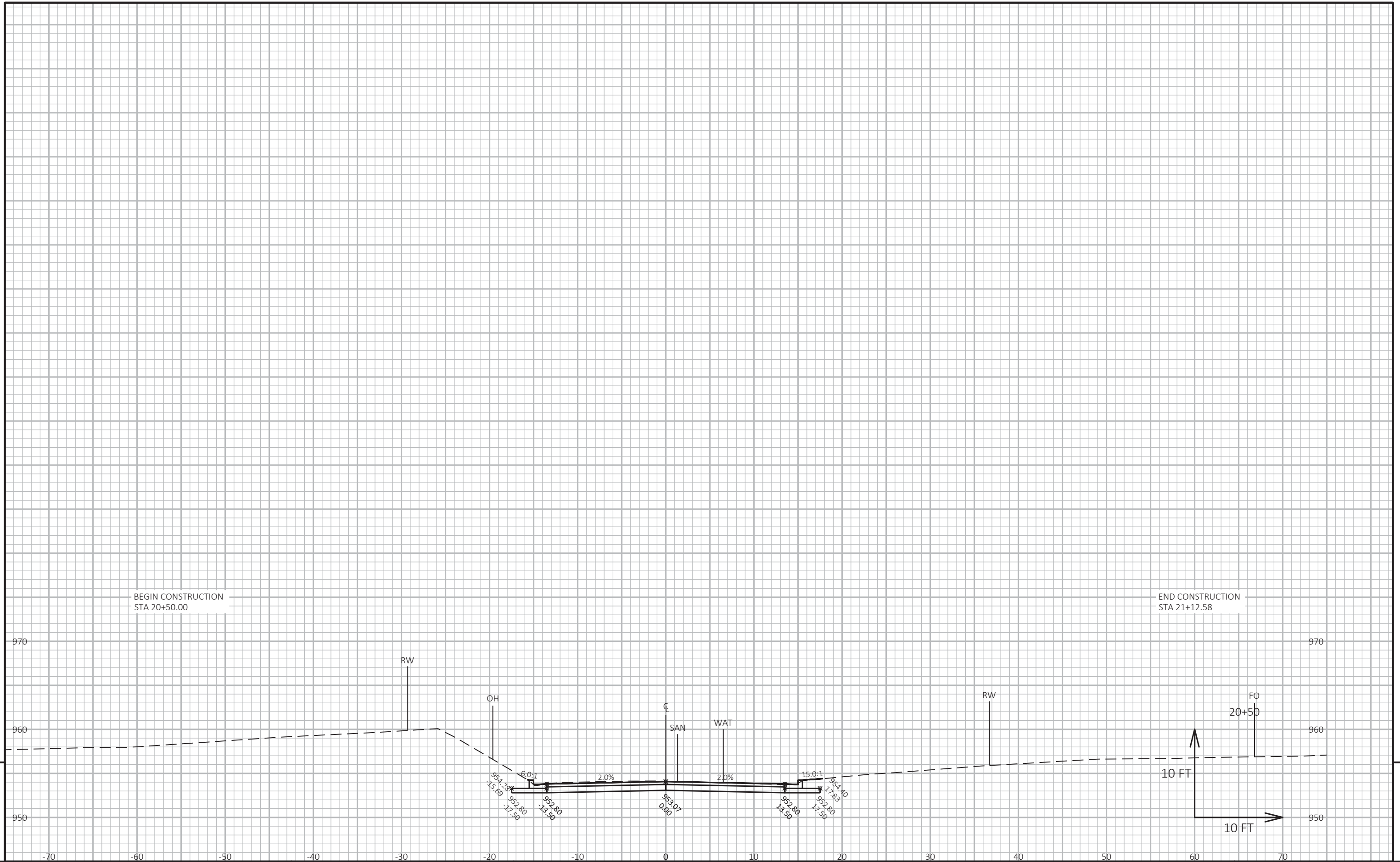
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 12TH AVE	SHEET	E
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9

9

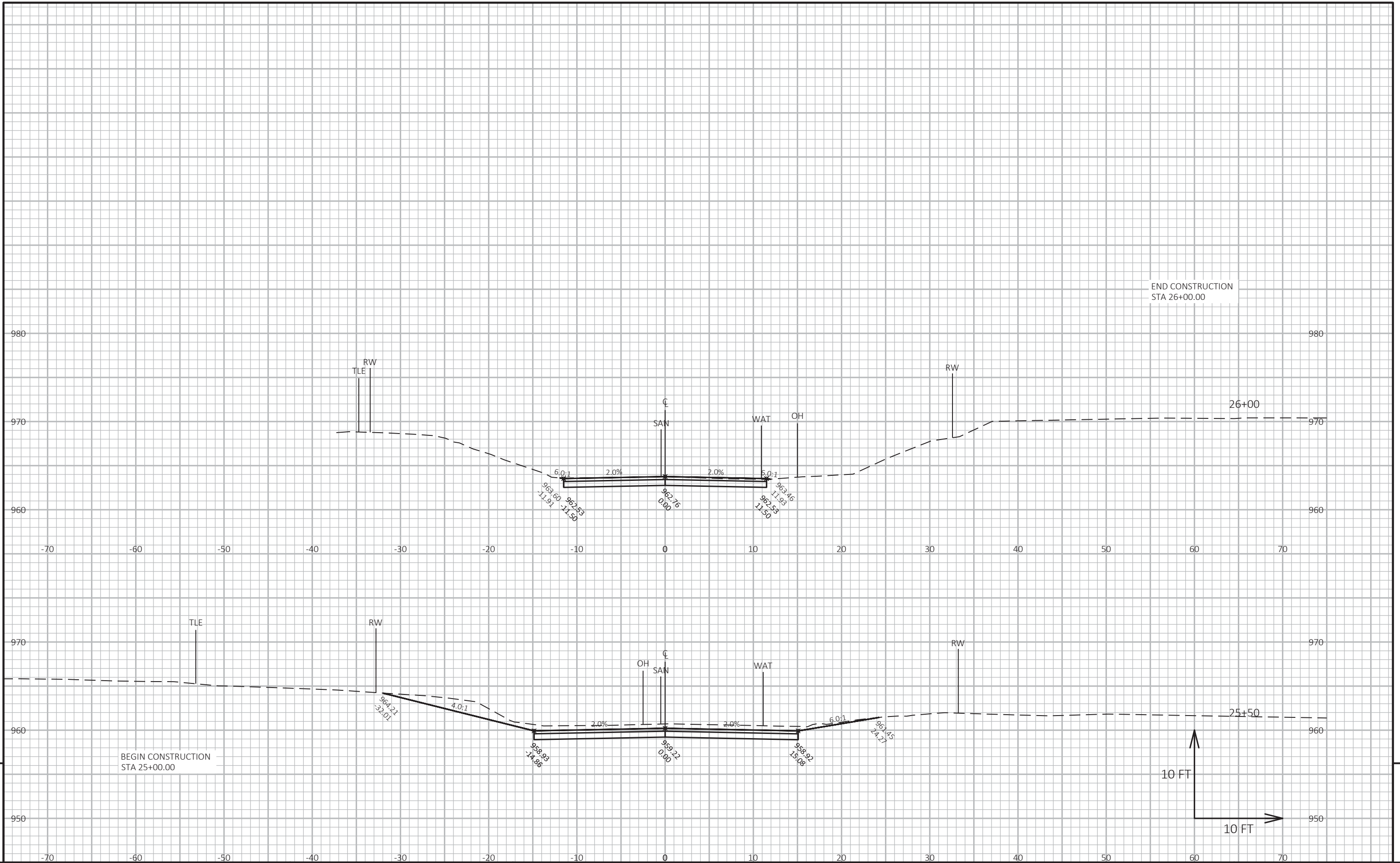
PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 12TH AVE	SHEET	E
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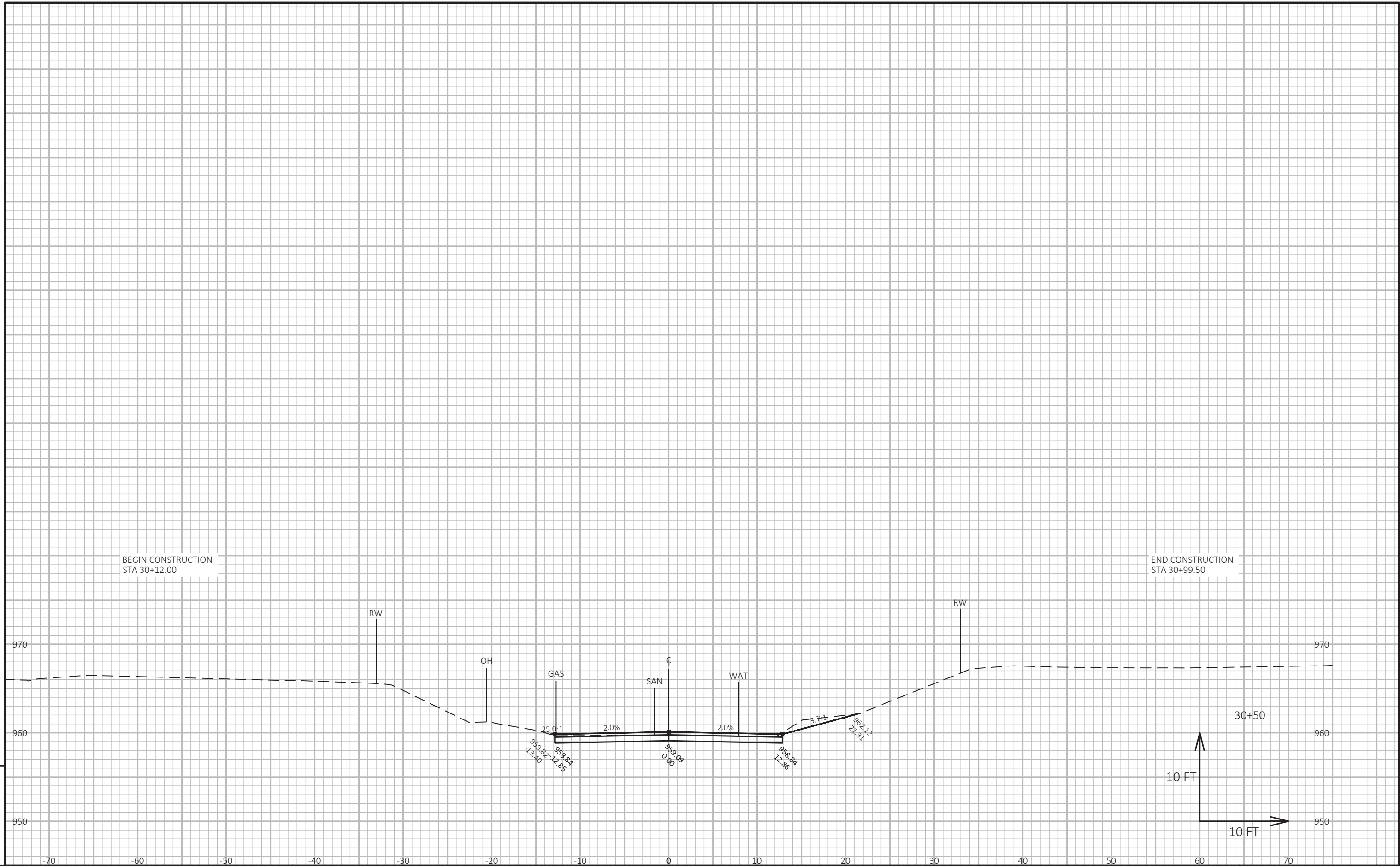
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PROJECT NO: 7996-00-09	HWY: LOCAL STREET	COUNTY: DUNN	CROSS SECTIONS: 11TH AVE - WEST	SHEET	E
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PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: 11TH AVE - EAST SHEET 9



BEGIN CONSTRUCTION
STA 30+12.00

END CONSTRUCTION
STA 30+99.50

RW

RW

970

970

960

960

950

950

30+50

10 FT

10 FT

PROJECT NO: 7996-00-09

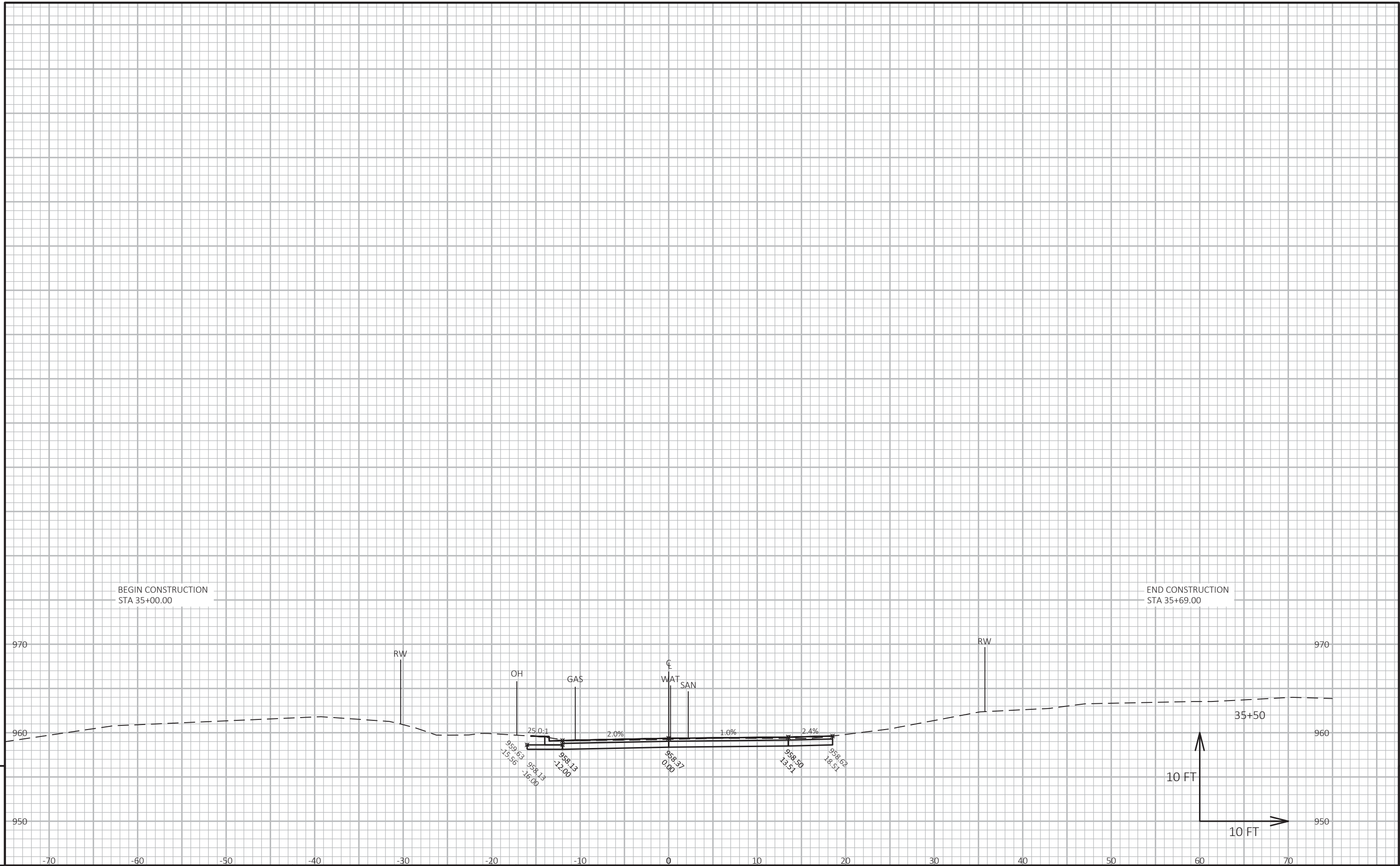
HWY: LOCAL STREET

COUNTY: DUNN

CROSS SECTIONS: 10TH AVE - WEST

SHEET

E



BEGIN CONSTRUCTION
STA 35+00.00

END CONSTRUCTION
STA 35+69.00

970

970

960

960

950

950

RW

RW

OH

GAS

C

WAT

SAN

25.0:1

2.0%

1.0%

2.4%

35+50

10 FT

10 FT

9

9

PROJECT NO: 7996-00-09

HWY: LOCAL STREET

COUNTY: DUNN

CROSS SECTIONS: 10TH AVE - EAST

SHEET

E

FILE NAME : I:\CLIENTS-MENO\M\M0055 CITY OF MENOMONIE\803 MAIN STREET - STREET & UTILITY IMPROVEMENTS\79960008\SHEETS\PLAN\090240-XS.DWG
LAYOUT NAME - 47-xs

PLOT DATE : 1/5/2018 8:52 AM

PLOT BY : BRIAN GENSKOW

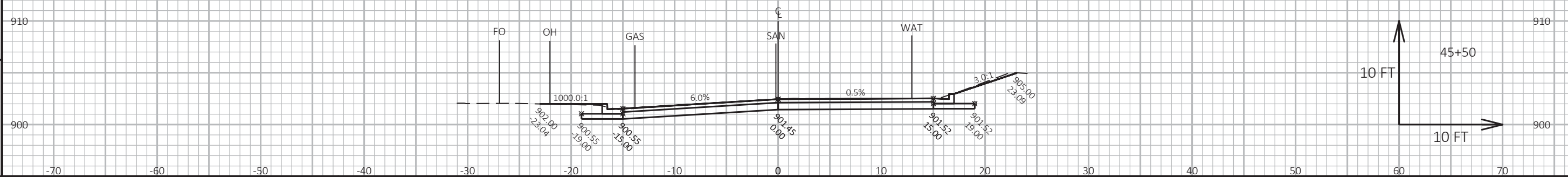
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD5 SHEET 49

BEGIN CONSTRUCTION
STA 45+50.00

END CONSTRUCTION
STA 46+26.15



PROJECT NO: 7996-00-09

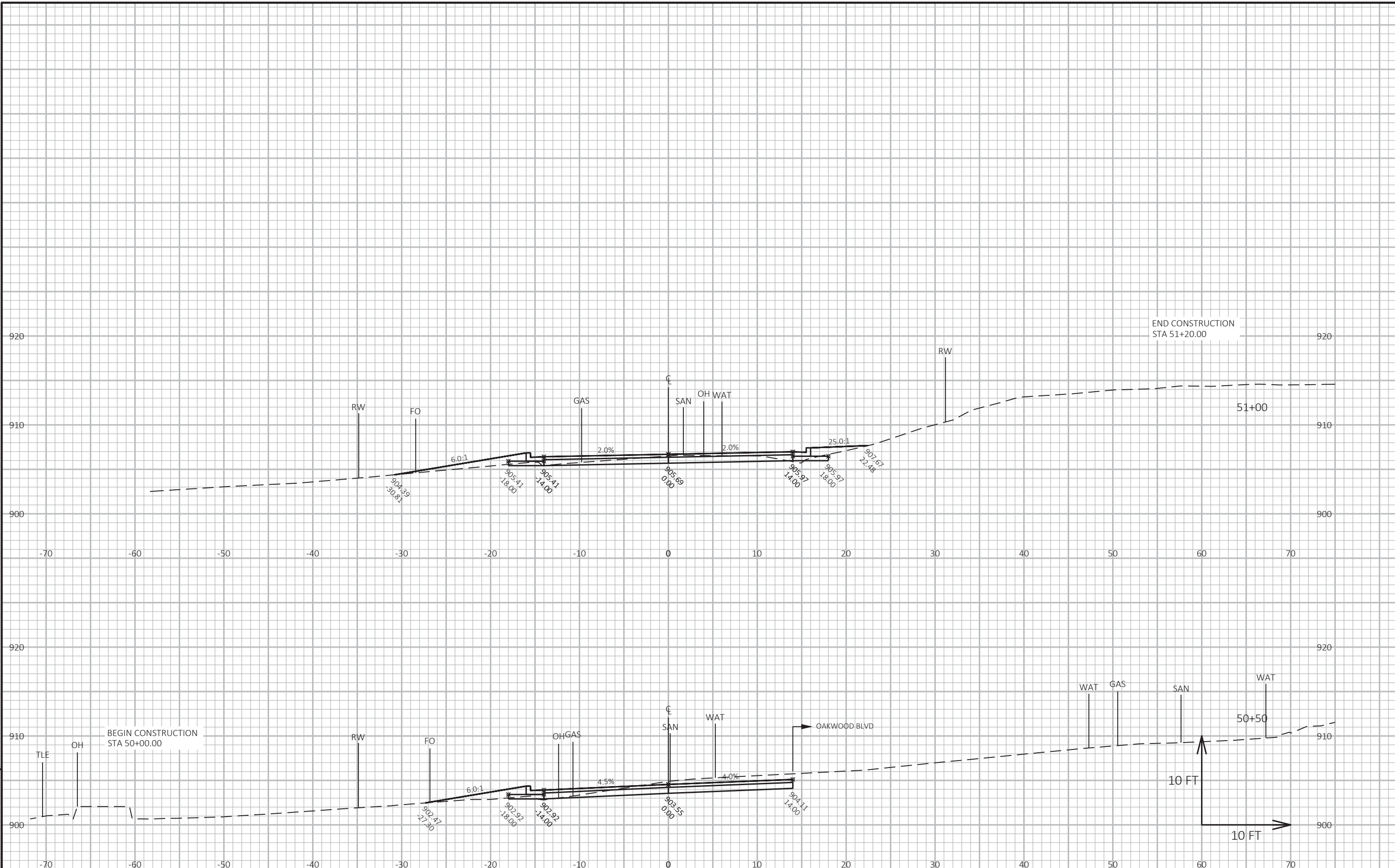
HWY: LOCAL STREET

COUNTY: DUNN

CROSS SECTIONS: WILSON AVE - WEST

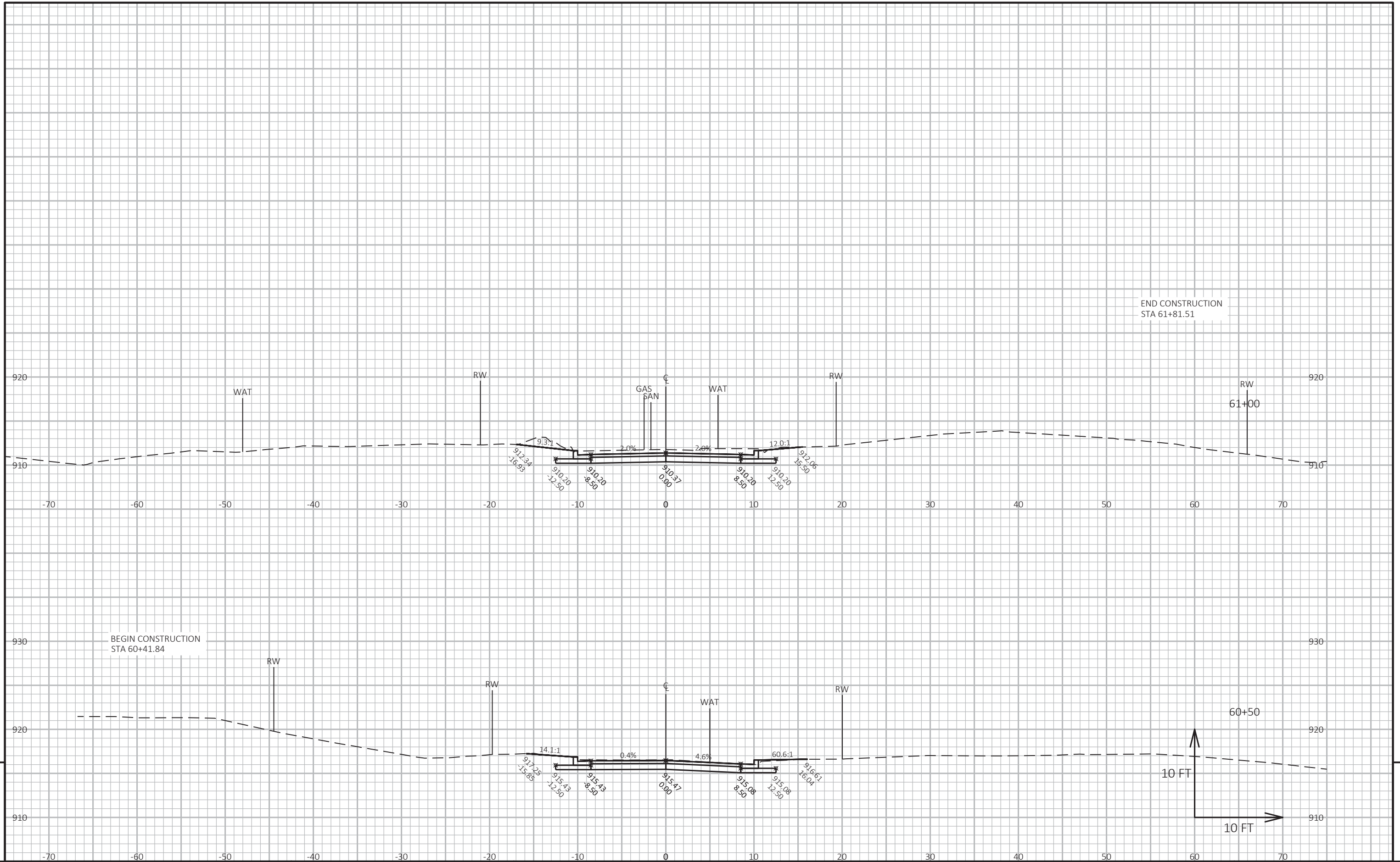
SHEET

E



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: WILSON AVE - EAST SHEET 9

FILE NAME: I:\CLIENTS-MENO\M\0055 CITY OF MENOMONIE\803 MAIN STREET - STREET & UTILITY IMPROVEMENTS\79960008\090240-XS.DWG PLOT DATE: 1/5/2018 8:52 AM PLOT BY: BRIAN GENSKOW PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD5 SHEET 49



PROJECT NO: 7996-00-09 HWY: LOCAL STREET COUNTY: DUNN CROSS SECTIONS: OAKWOOD BLVD SHEET 9 E



Wisconsin Department of Transportation

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<http://www.dot.wisconsin.gov>