WIS

MAR 2015

PROJECT ID: 6414-01-72

WITH: 6414-01-73

COUNTY: PORTAGE

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 = 258

33

N

DESIGN DESIGNATION

A.A.D.T.	2014	=	6,600
A.A.D.T.	2034	=	10,300
D.H.V.	11.6%	=	1,195
D.D.		=	58/42
T.		=	19.5%
DESIGN SPEED		=	35 MPH
ESALS		=	3,686,500

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 (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PLOVER - WAUPACA

MAPLE DRIVE INTERSECTION

STH 54

PORTAGE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6414-01-72	WISC 2015147	1

STATE PROJECT NUMBER

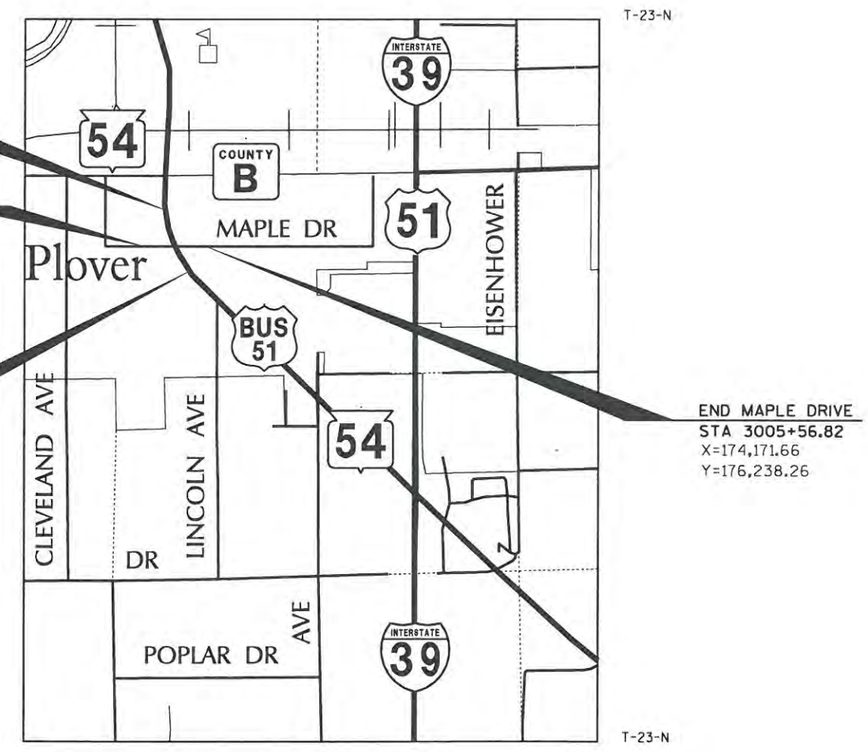
6414-01-72

BEGIN PROJECT
STA 200+24.13
X=173,455.41
Y=177,059.13

BEGIN MAPLE DRIVE
STA 2002+00.00
X=173,066.98
Y=176,225.47

END PROJECT
STA 308+48.30
X=173,863.98
Y=175,421.88

END MAPLE DRIVE
STA 3005+56.82
X=174,171.66
Y=176,238.26



LAYOUT
SCALE 0 0.33 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.323 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNT COORDINATE SYSTEM (WCCS), PORTAGE COUNTY.

VERTICAL DATUM ON THIS PLAN IS REFERENCED TO NAVD 88

ORIGINAL PLAN PREPARED BY:

Foth

Foth Infrastructure & Environment, LLC
5117 West Terrace Drive, Suite 401
Madison, WI 53718
Phone: 608-242-5900 Fax: 608-242-5999

WISCONSIN
CHRIS A. SAXBY
E-32744
MADISON
WI
PROFESSIONAL ENGINEER

10-20-14
DATE

CONSULTANT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	FOTH INFRASTRUCTURE & ENV
Designer	FOTH INFRASTRUCTURE & ENV
Project Manager	
Regional Examiner	
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/28/14 (Signature)

E

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER

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

CONTRACTOR SHALL VERIFY ALL UTILITY DEPTHS AT ALL PROPOSED CONNECTION POINTS TO EXISTNIG SYSTEMS PRIOR TO CONSTRUCTION.

6.5" HMA PAVEMENT TYPE E-10 SHALL BE PLACED WITH ONE 2.5 INCH LOWER LAYER (PG64-28, 19.0mm), ONE 2.25 INCH, INTERMEDIATE LAYER (PG64-28, 19.0mm), AND ONE 1.75 INCH UPPER LAYER (PG64-28P, 12.5mm)

THE CONTRACTORS PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING OR TURNING LANE.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE 3/4 INCH, BASE AGGREGATE DENSE 1 1/4 INCH OR HMA PAVEMENT TYPE E-10 IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH MAY VARY DEPENDING ON THE ACTUAL DISTRIBUTION OF THE MATERIAL AS APPROVED BY THE ENGINEER IN THE FIELD.

RESHAPE AND SEED ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY CONTRACTOR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT CONTRACTORS EXPENSE.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF ALL LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS IN ALL AREAS WHERE SUCH LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS MAY EXIST.

WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

ALL CURB AND GUTTER RADII DIMENSIONS AND ELEVATIONS ON THE PLANS ARE MEASURED TO THE FLANGE LINE.

EXISTING STORM SEWER THAT IS IN THE SAME TRENCH AS PROPOSED STORM SEWER SHALL BE REMOVED INCIDENTAL TO THE STORM SEWER PIPE.

UTILITIES

RICK PODOLAK
AT&T WISCONSIN
4TH FLOOR, 304 S DEWEY ST
EAU CLAIRE, WI 54701

CLAYTON VIRCKS
WISCONSIN PUBLIC SERVICE - ELECTRIC
PO BOX 1166
WAUSAU, WI 54402

MATT CURTIN
WISCONSIN PUBLIC SERVICE - ELECTRIC
2001 PLOVER ROAD
PLOVER RD, WI 54467

RUDI RUDINGER
CHARTER COMMUNICATIONS
5024 HEFFRON STREET
STEVENS POINT, WI 54481

RICH BODEN
VILLAGE OF PLOVER - SEWER
2400 POST ROAD
PO BOX 37
PLOVER, WI 54467

MATTHEW SALOUN
VILLAGE OF PLOVER - WATER
2400 POST ROAD
PO BOX 37
PLOVER, WI 54467

2

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

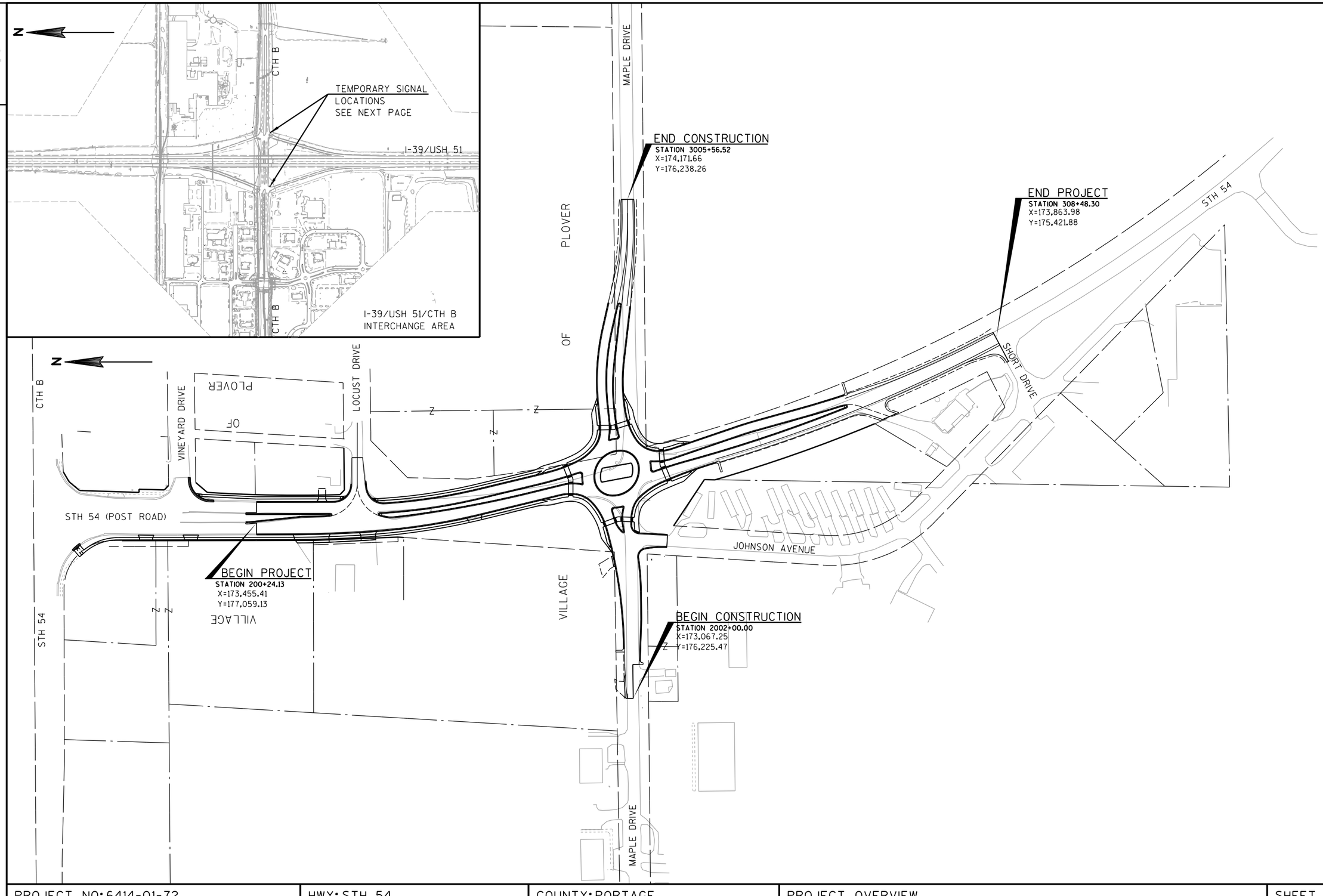
SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
CULVERT PIPES
UTILITY PLAN
LIGHTING PLAN
SIGNING AND PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT DATA & CONTROL

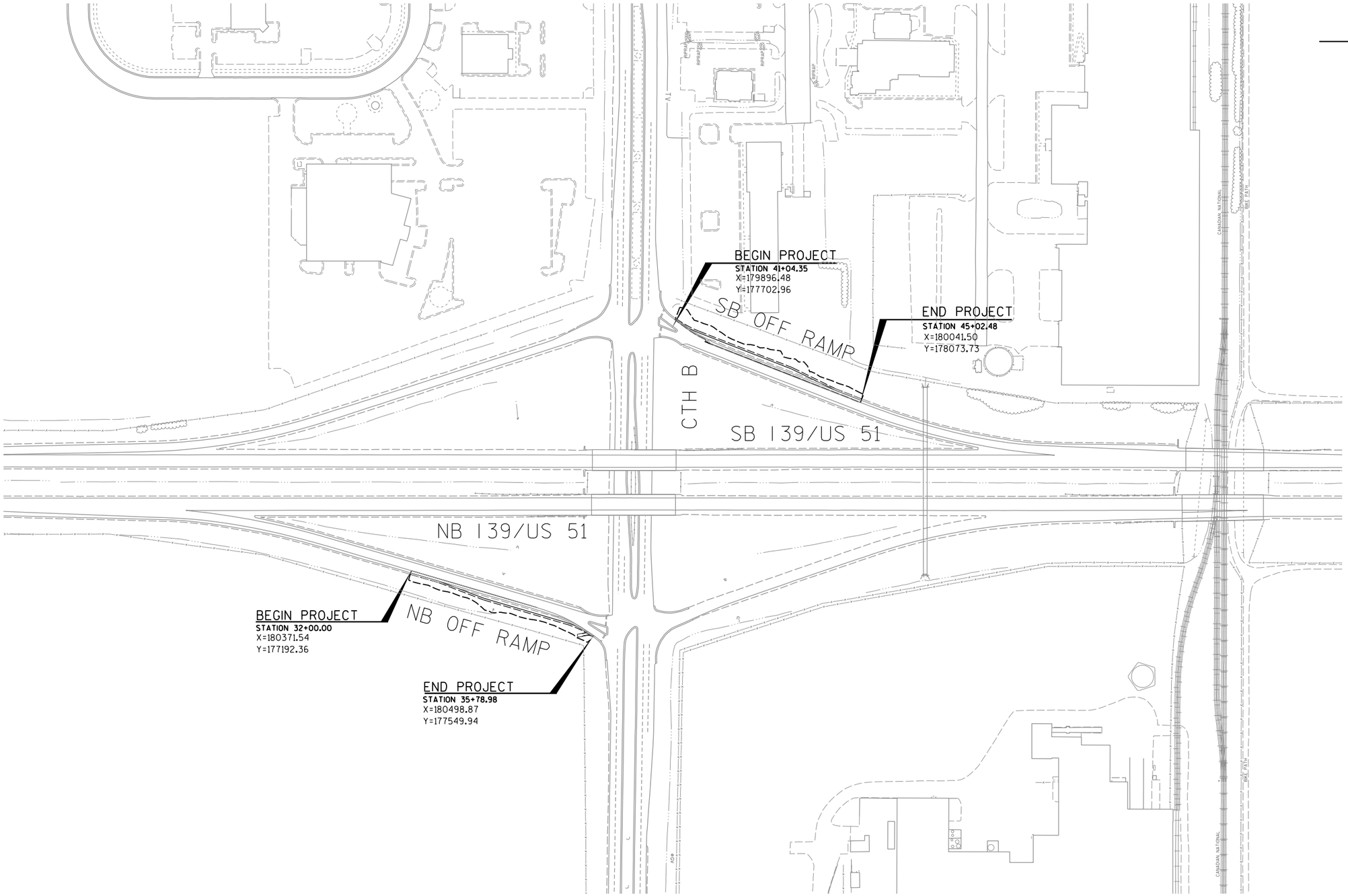
OTHER CONTACTS

DNR CONTACT: MARC HERSHFIELD
WisDNR TRANSPORTATION LIAISON
DNR SERVICE CENTER
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494

2

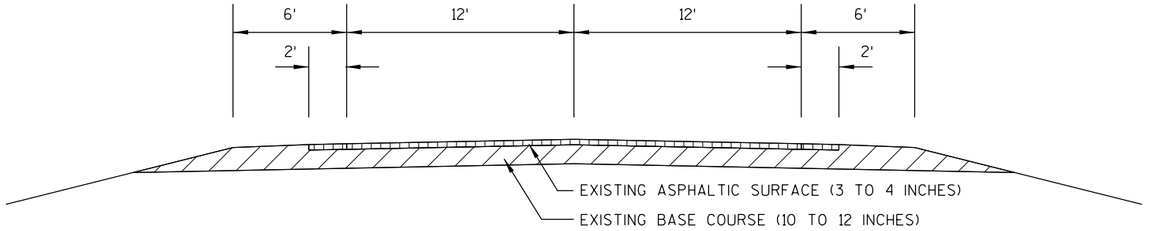


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 3	E

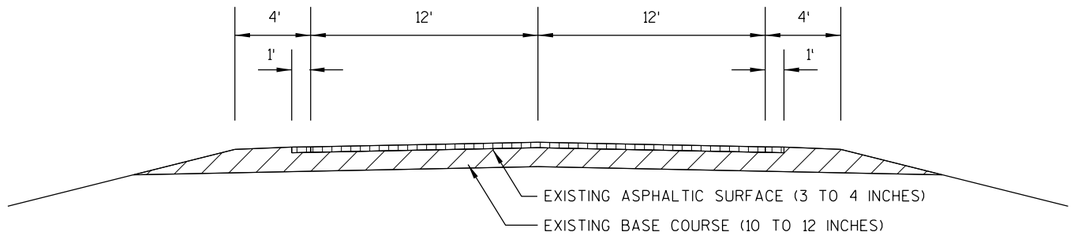


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 4	E

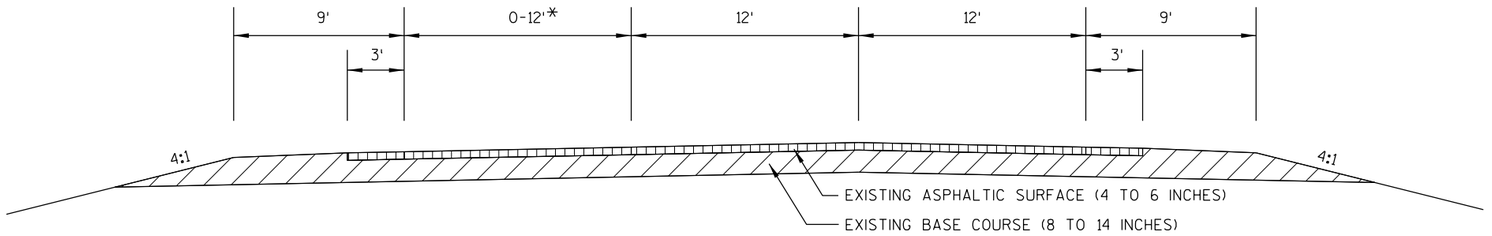
2



EXISTING TYPICAL SECTION
STA 3000+00 - STA 3005+55
MAPLE DRIVE EAST



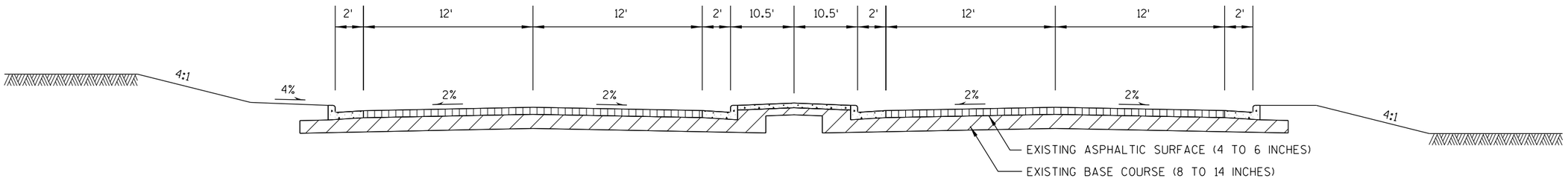
EXISTING TYPICAL SECTION
STA 2002+00 - STA 2006+50
MAPLE DRIVE WEST



* RIGHT TURN LANE FROM STA 204+75 - STA 208+00

EXISTING TYPICAL SECTION
STA 203+30 - STA 308+48

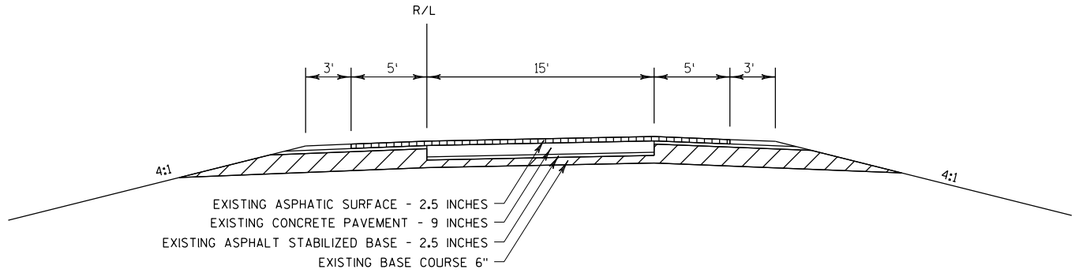
NOTE:
STA 302+77 TO STA 308+48
8 TO 10 INCHES EXISTING CONCRETE PAVEMENT
AND 6 TO 8 INCHES EXISTING BASE COURSE



EXISTING TYPICAL SECTION
STA 200+24 - STA 203+30

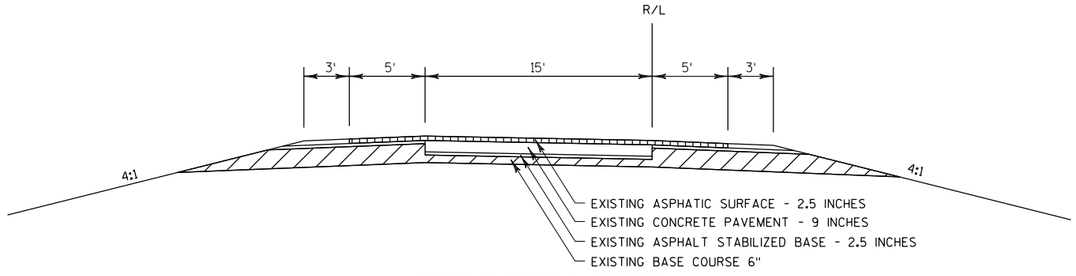
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EXISTING TYPICAL SECTIONS	SHEET 5	E

2



EXISTING TYPICAL SECTION

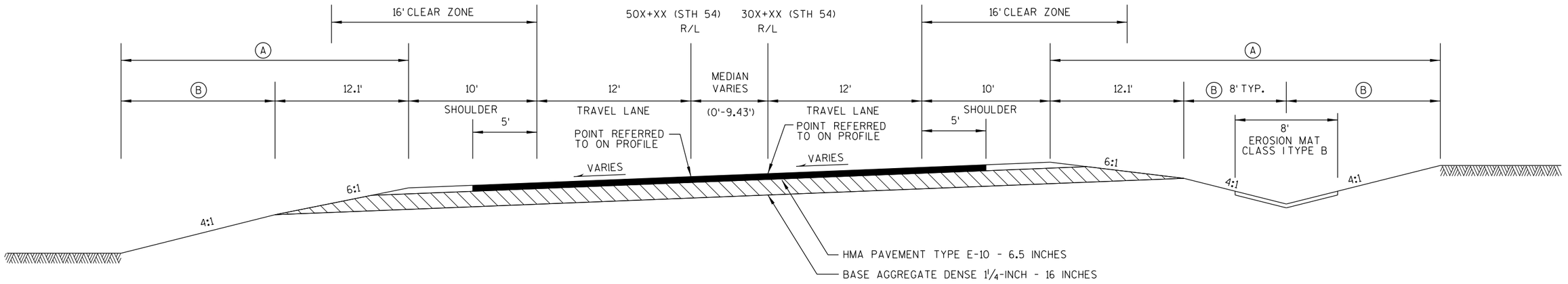
STA 41+04 - STA 45+02 (SOUTHBOUND OFF RAMP)



EXISTING TYPICAL SECTION

STA 32+00 - STA 35+79 (NORTHBOUND OFF RAMP)

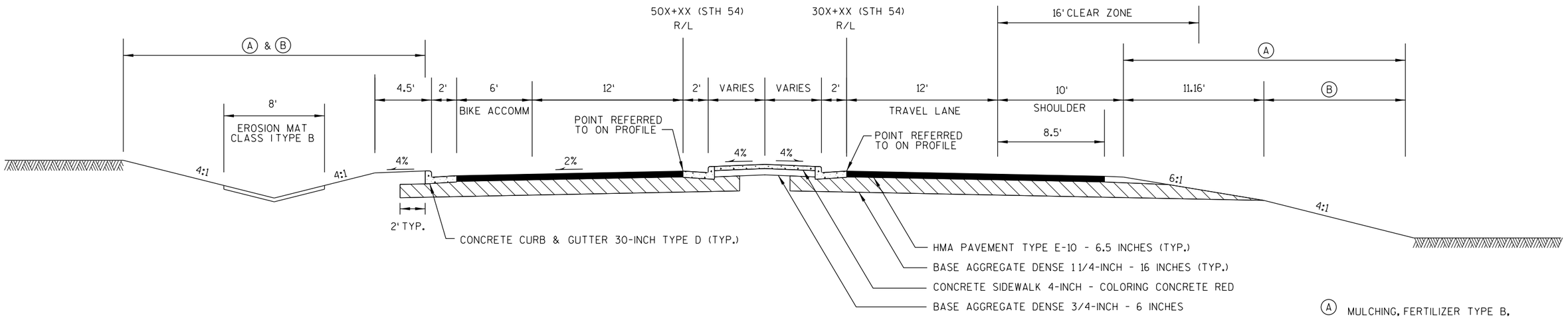
2



PROPOSED TYPICAL SECTION
STA 304+87 - STA 308+48 (STH 54)

(A) MULCHING, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20

(B) TOPSOIL AND MULCH

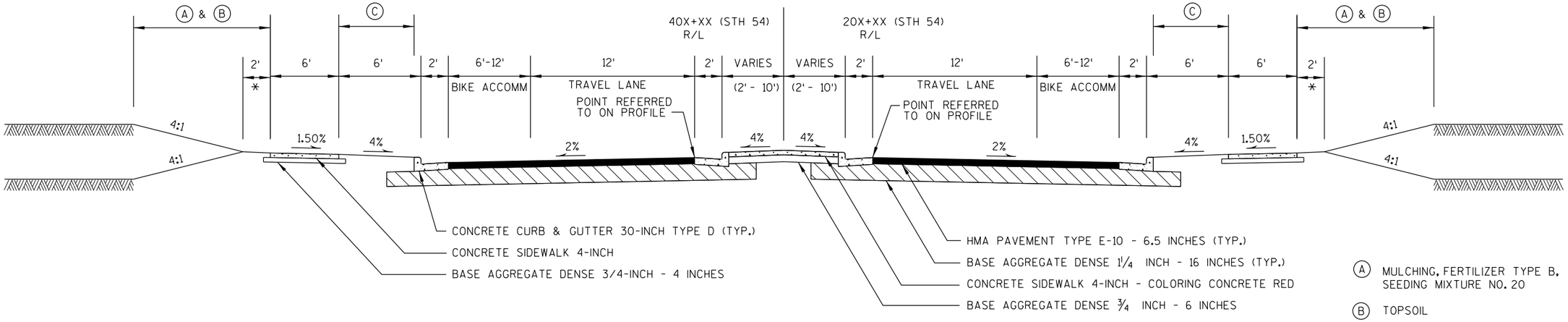


PROPOSED TYPICAL SECTION
STA 301+71 - STA 304+87 (STH 54)

(A) MULCHING, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20

(B) TOPSOIL

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PROPOSED TYPICAL SECTIONS	SHEET 7	E



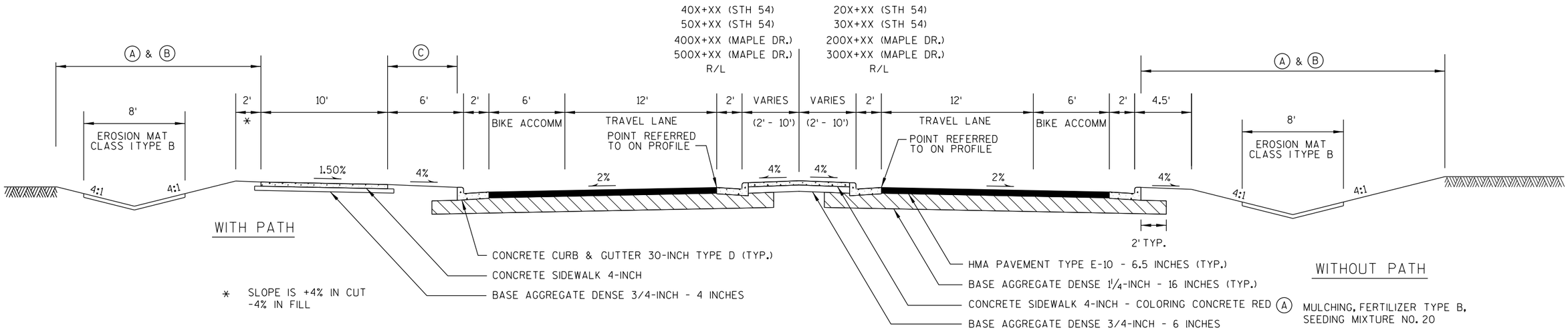
PROPOSED TYPICAL SECTION
STA 200+24 - STA 206+75 (STH 54)

Ⓐ MULCHING, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20

Ⓑ TOPSOIL

Ⓒ TOPSOIL, MULCHING, FERTILIZER FOR LAWN TYPE TURF, AND SEEDING MIXTURE NO. 40

* SLOPE IS +4% IN CUT
-4% IN FILL



WITH PATH

* SLOPE IS +4% IN CUT
-4% IN FILL

WITHOUT PATH

Ⓐ MULCHING, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20

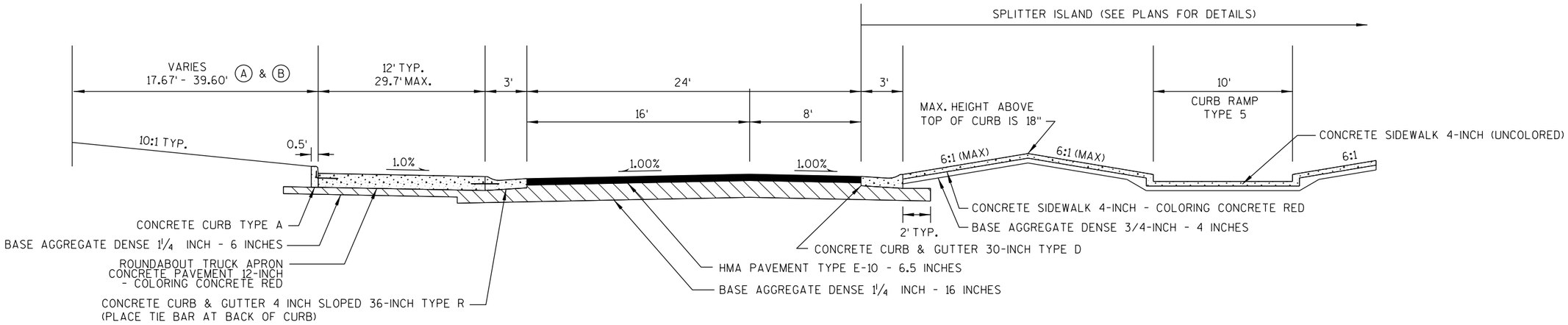
Ⓑ TOPSOIL

Ⓒ TOPSOIL, MULCHING, FERTILIZER FOR LAWN TYPE TURF, AND SEEDING MIXTURE NO. 40

PROPOSED TYPICAL SECTION
STA 206+75 - STA 301+71(STH 54)
STA 2005+65 - STA 3003+25 (MAPLE DR.)

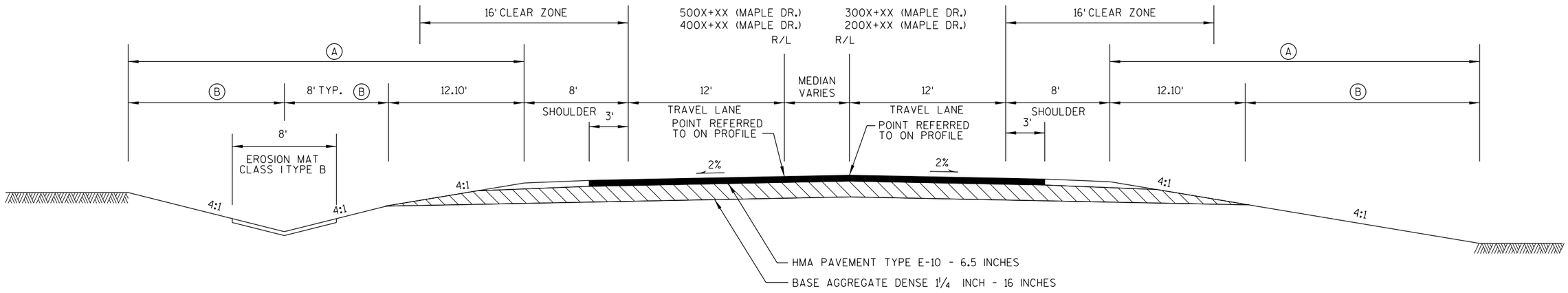
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PROPOSED TYPICAL SECTIONS	SHEET 8	E

2



PROPOSED TYPICAL SECTION

ROUNDABOUT HALF SECTION



PROPOSED TYPICAL SECTION

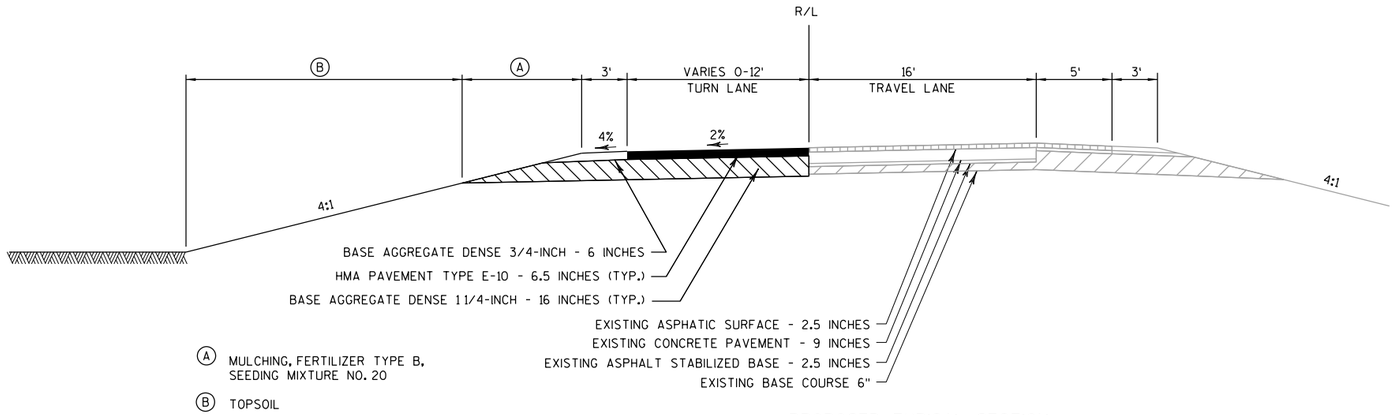
STA 2002+00 - STA 2005+65 (MAPLE DR.)
STA 3003+25 - STA 3005+56 (MAPLE DR.)

MAPLE DRIVE

(A) MULCHING, FERTILIZER TYPE B, SEEDING MIXTURE NO. 20

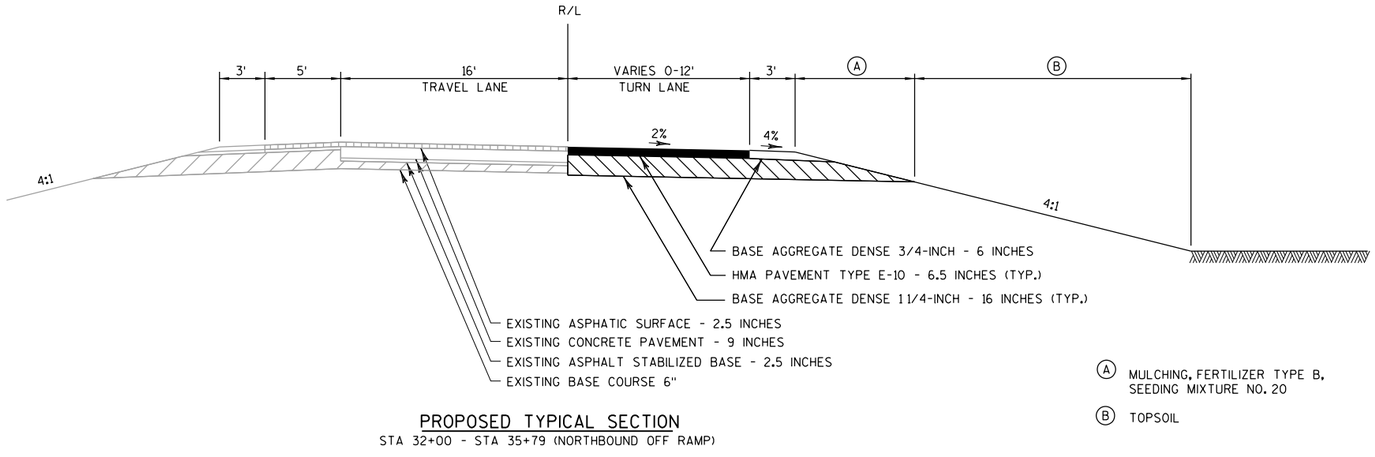
(B) TOPSOIL

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PROPOSED TYPICAL SECTIONS	SHEET 9	E



PROPOSED TYPICAL SECTION

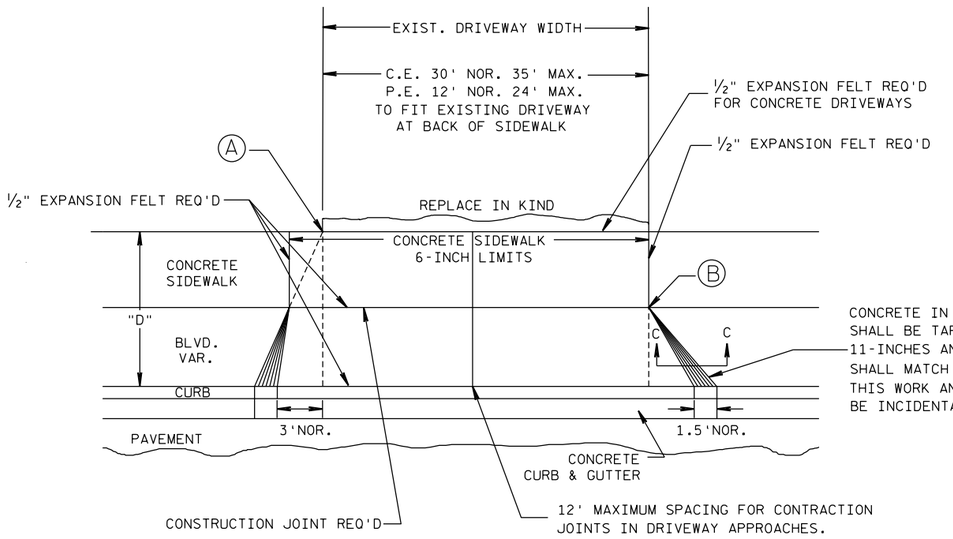
STA 41+04 - STA 45+02 (SOUTHBOUND OFF RAMP)



PROPOSED TYPICAL SECTION

STA 32+00 - STA 35+79 (NORTHBOUND OFF RAMP)

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

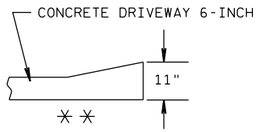


CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

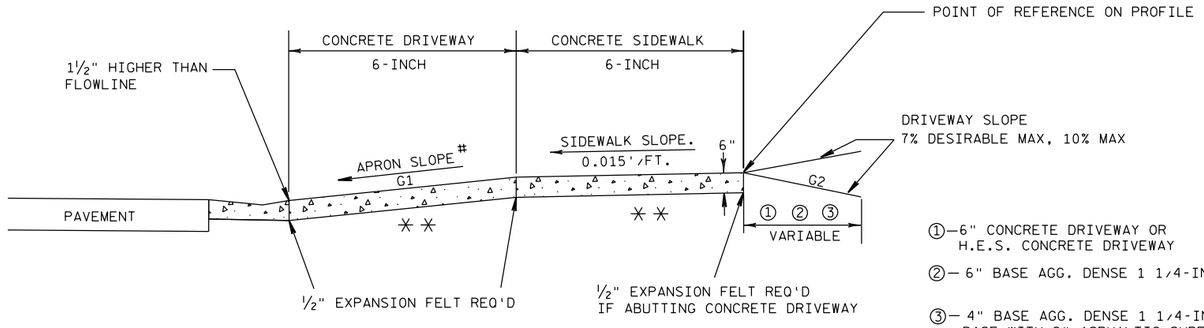
PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



SECTION C-C



TYPICAL SIDEWALK SECTION

①—6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

②— 6" BASE AGG. DENSE 1 1/4-INCH

③— 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE

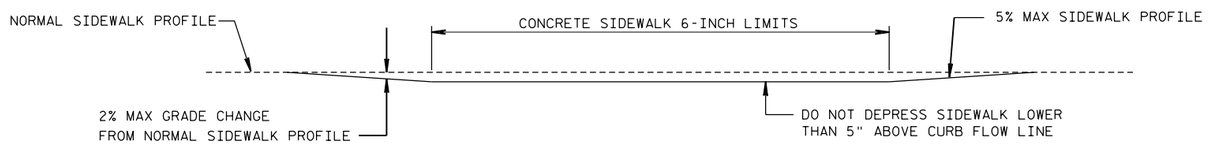
✳✳ = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

#

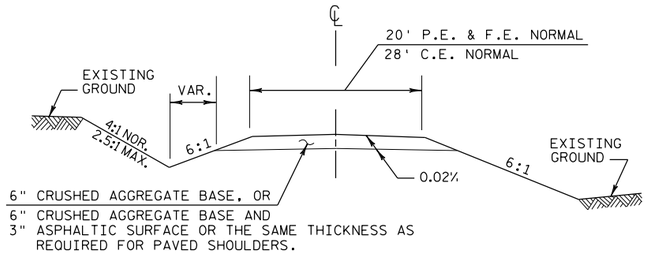
TERRACE	APRON SLOPE (G1)		
WIDTH	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

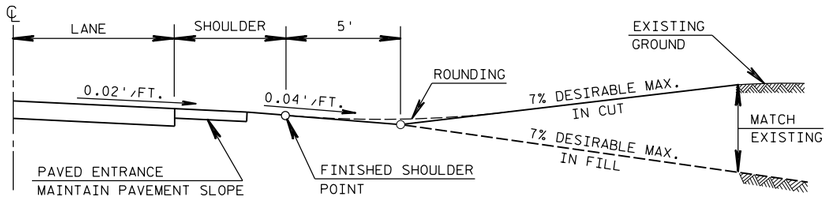
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



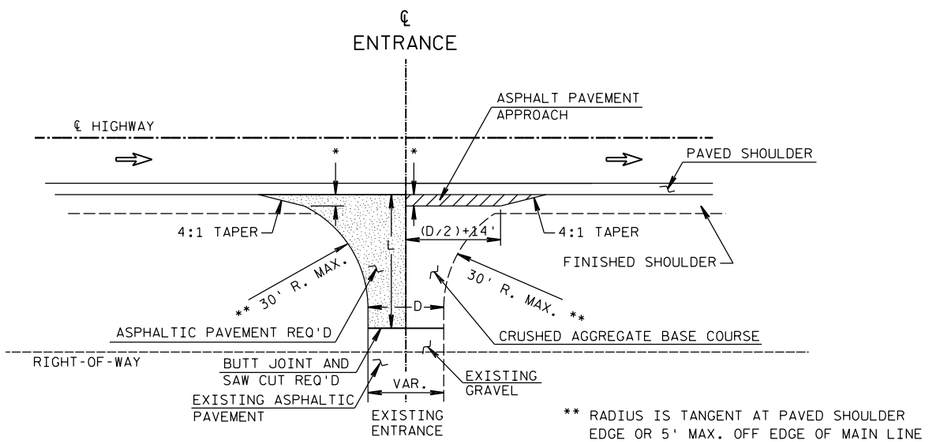
DEPRESSED SIDEWALK PROFILE DETAIL



TYPICAL CROSS SECTION



PROFILE VIEW



L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

D=DRIVEWAY WIDTH
D=20'TYP.(PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP.(CE's & FARM ENT.) (24'MIN.-35'MAX.)

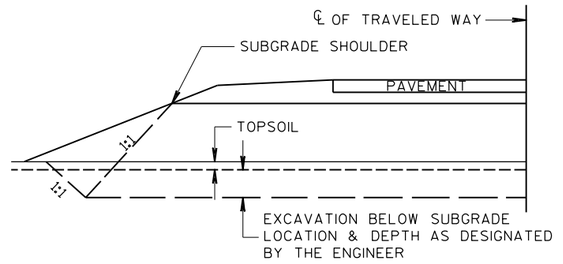
** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

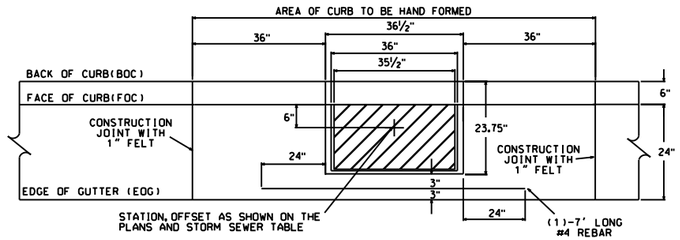
PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL (PE's, FE's & CE'S)

(FOR NEW CONSTRUCTION)



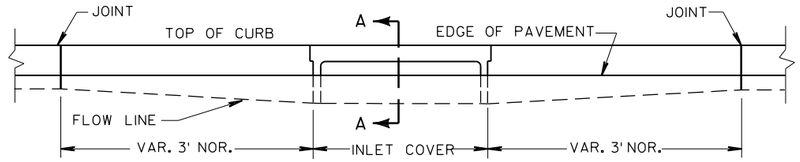
DETAIL FOR EXCAVATION BELOW SUBGRADE



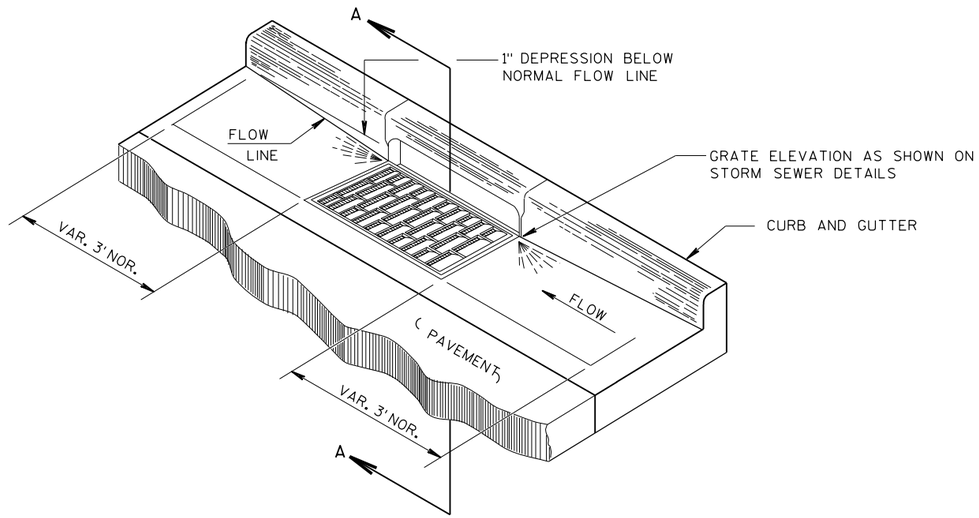
30 INCH TYPE D CURB AND GUTTER
PLAN VIEW

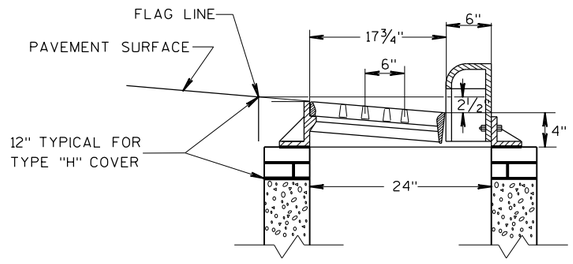
INLET LOCATIONS IN VARIOUS TYPES OF CURB

⊕ = CENTER OF STRUCTURE



ELEVATION

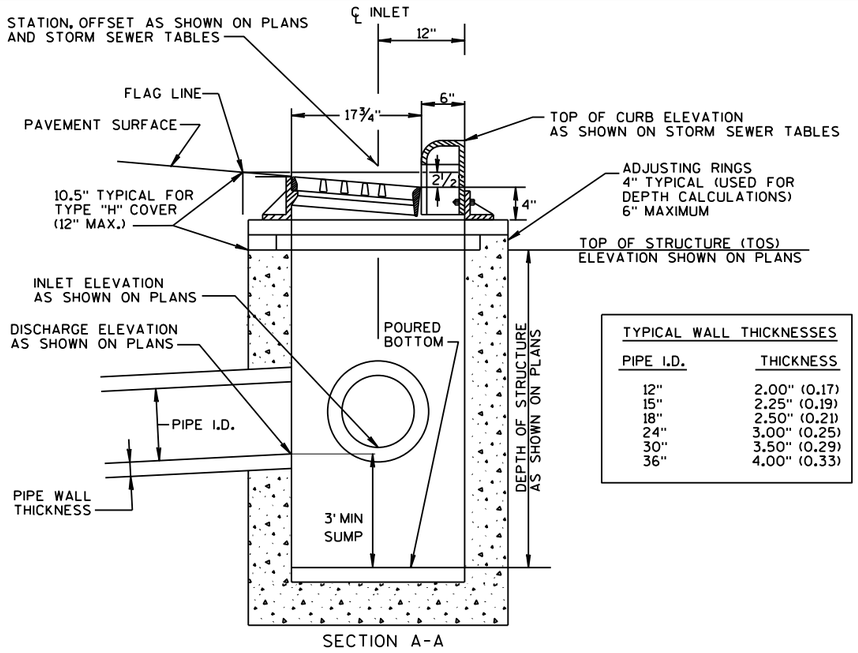




SECTION A-A

DETAIL OF CURB AND GUTTER AT CATCH BASINS

(2X3 INLET SHOWN)

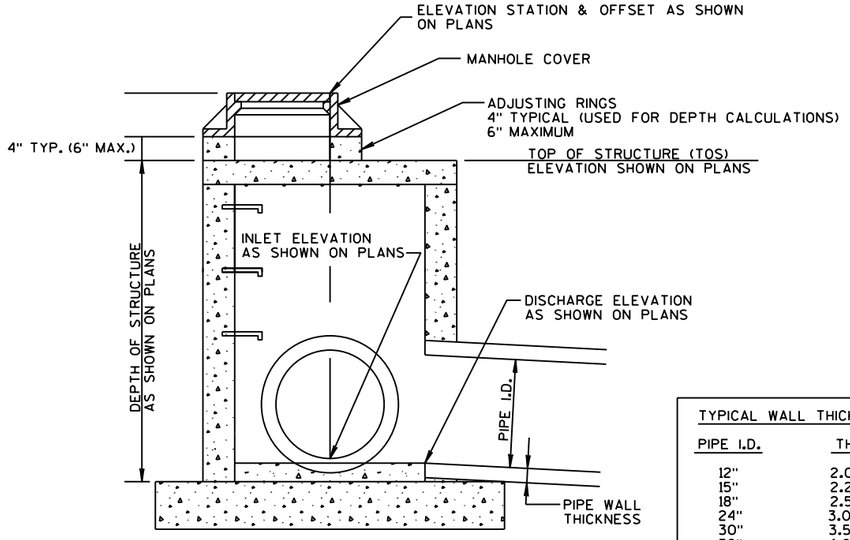


SECTION A-A

TYPICAL WALL THICKNESSES	
PIPE I.D.	THICKNESS
12"	2.00" (0.17)
15"	2.25" (0.19)
18"	2.50" (0.21)
24"	3.00" (0.25)
30"	3.50" (0.29)
36"	4.00" (0.33)

DETAIL OF CURB AND GUTTER AT CATCH BASIN

(CATCH BASIN 2X3-FT WITH H COVER SHOWN)



TYPICAL WALL THICKNESSES	
PIPE I.D.	THICKNESS
12"	2.00" (0.17)
15"	2.25" (0.19)
18"	2.50" (0.21)
24"	3.00" (0.25)
30"	3.50" (0.29)
36"	4.00" (0.33)

NOTES:

SEE S.D.D's FOR ADDITIONAL INFORMATION

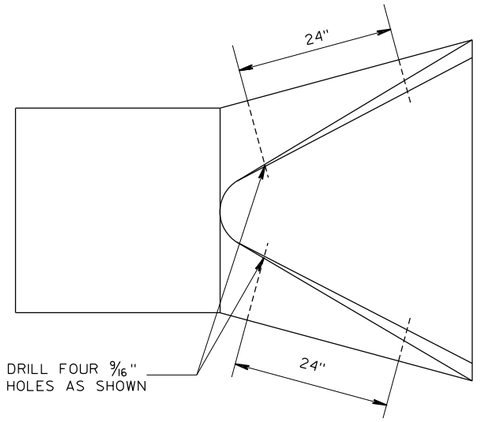
DETAIL OF STORM SEWER MANHOLES

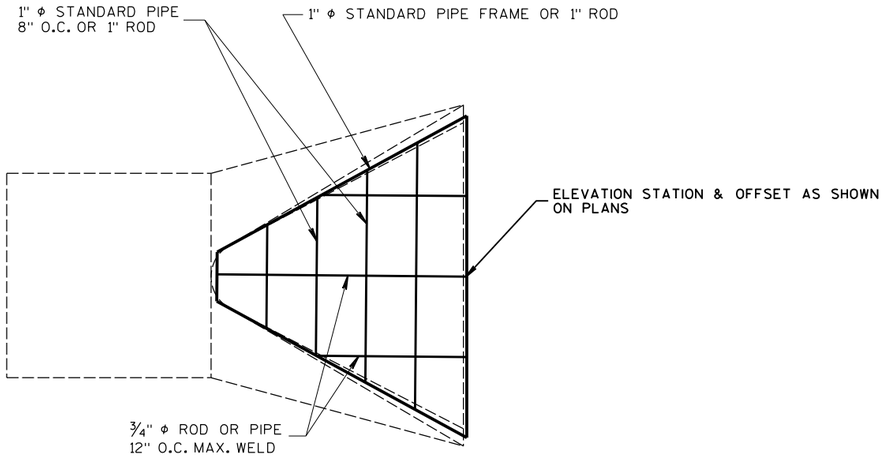
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

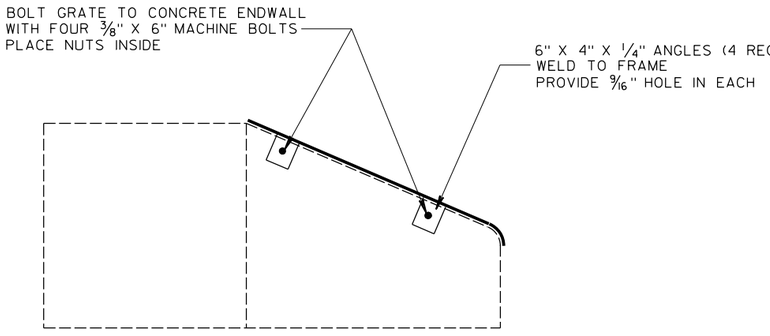
TOTAL PROJECT AREA = 10.06 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.24 ACRES

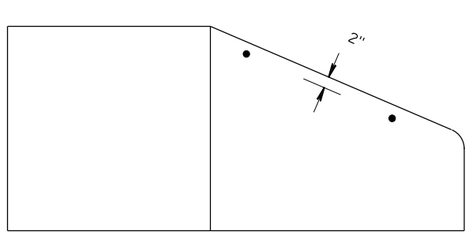
2

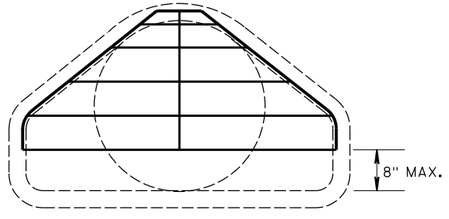




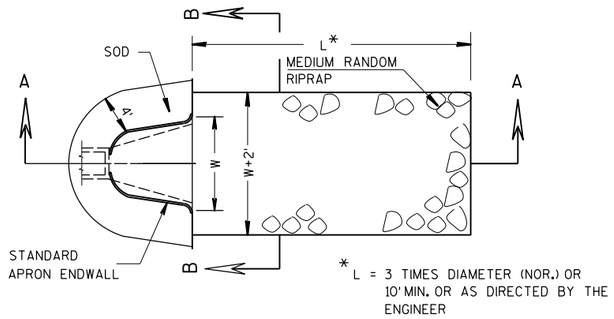
AT EACH PIPE

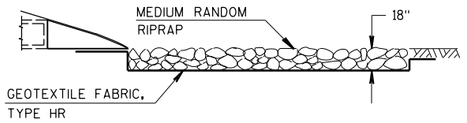




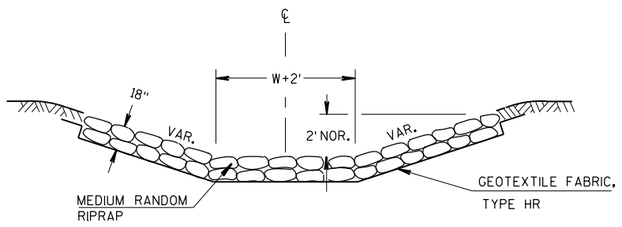


PIPE GRATE DETAIL



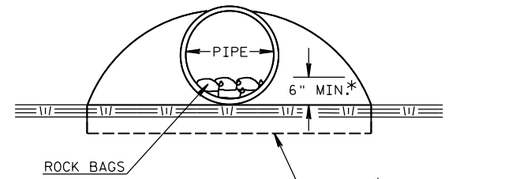


SECTION A-A



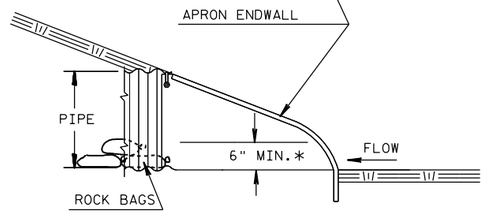
SECTION B-B

SOD, MEDIUM RIPRAP AND GEOTEXTILE FABRIC
DETAIL AT APRON ENDWALLS



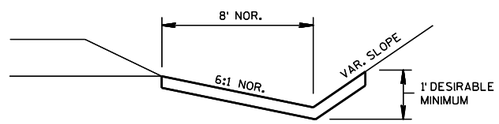
END VIEW

* OR AS DIRECTED
BY THE ENGINEER



SIDE VIEW

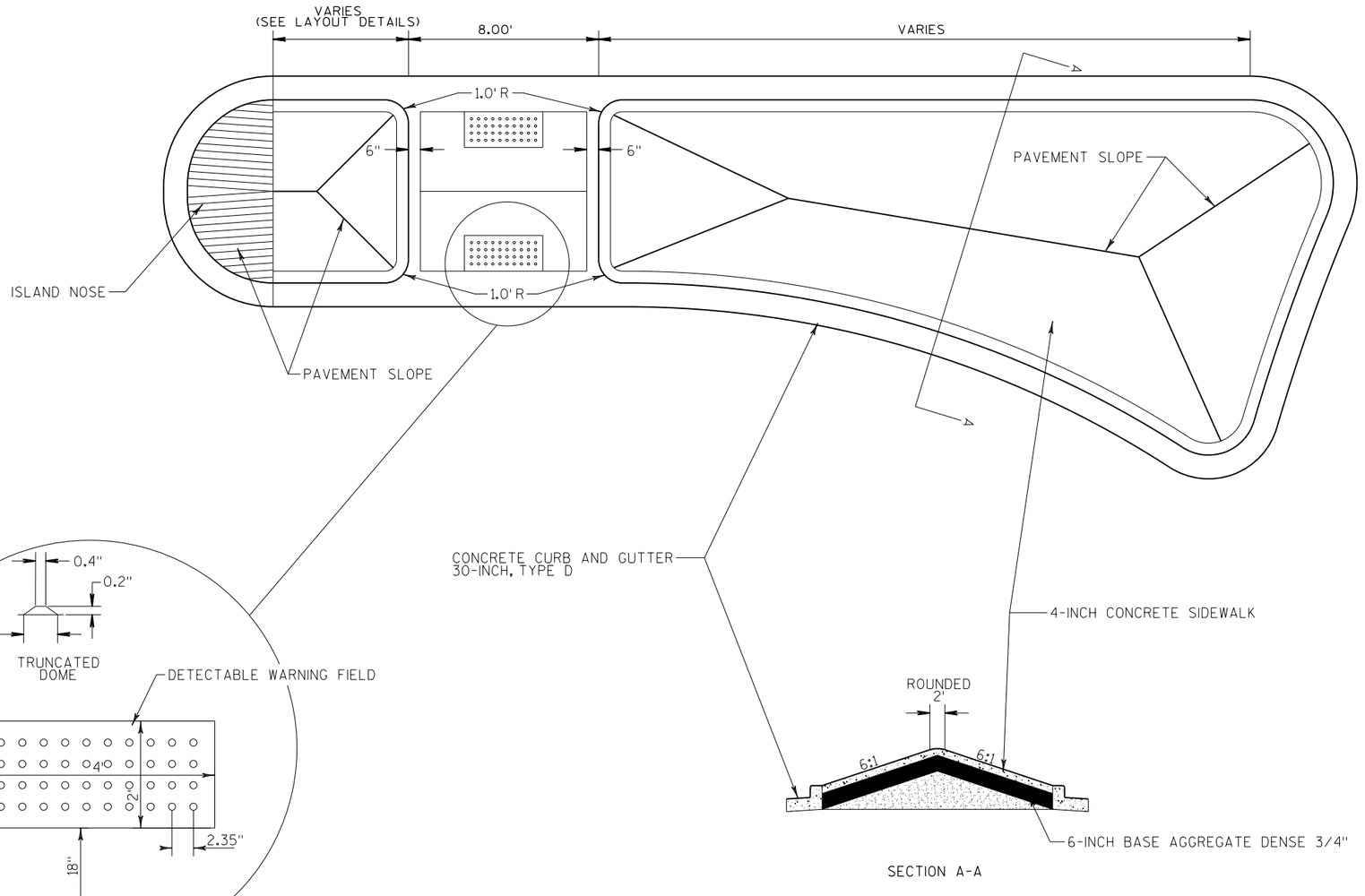
CULVERT PIPE CHECK



EROSION MAT DETAIL FOR DITCHES

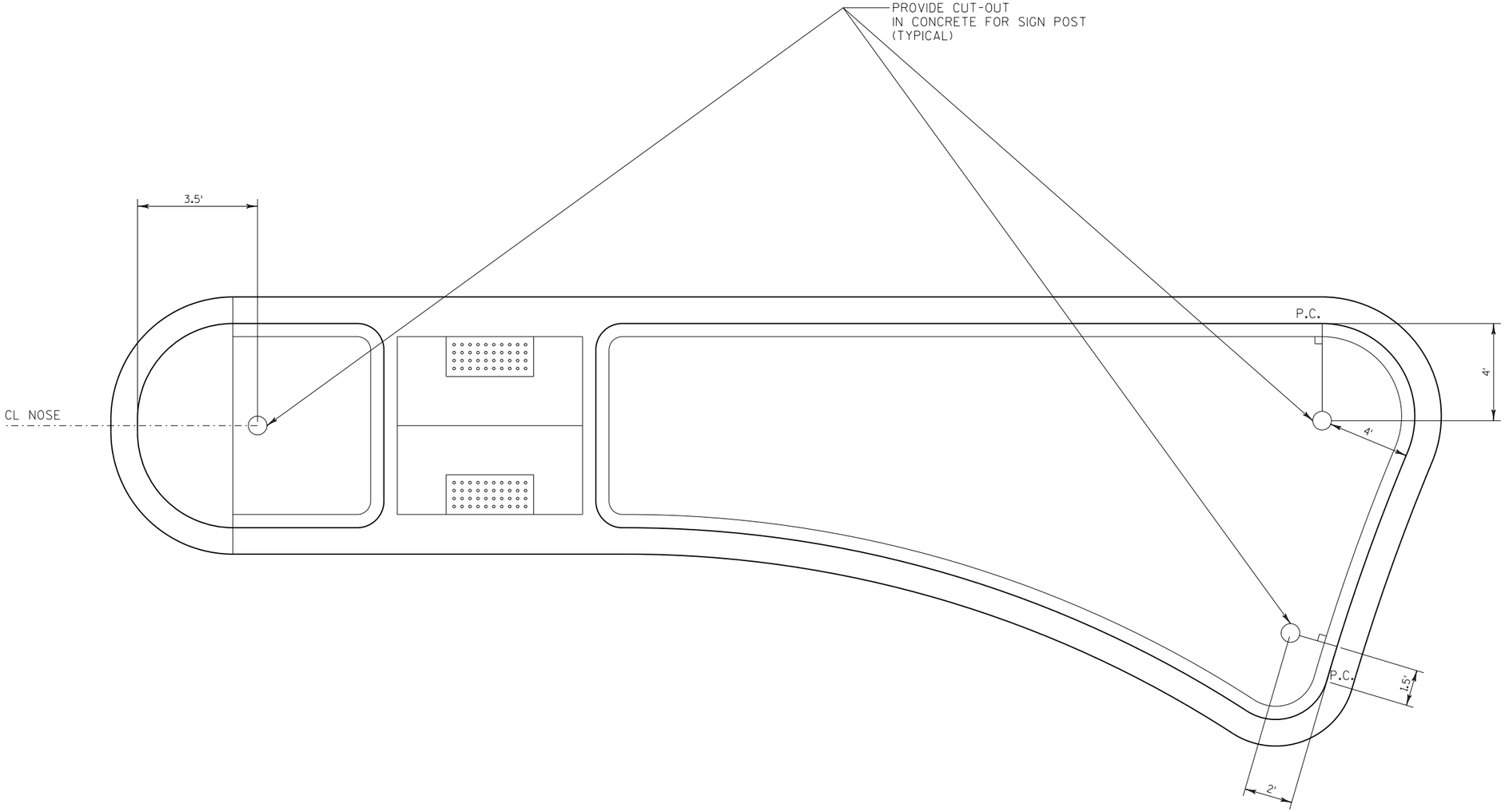
2

NOTES:
1. 3/4" FELT IS INCIDENTAL TO CURB AND GUTTER.
2. TROWEL ISLAND NOSE TO A SMOOTH FINISH.
3. TRUNCATED DOMES ALIGNED IN A ROW AND PERPENDICULAR TO THE EDGE OF PAVEMENT.
4. JOINT SPACING TO BE DETERMINED IN FIELD.



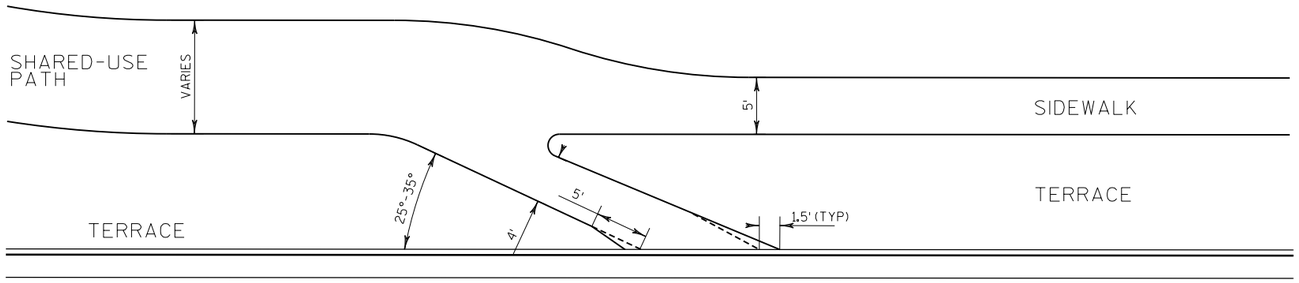
TYPICAL SPLITTER ISLAND DETAIL

2



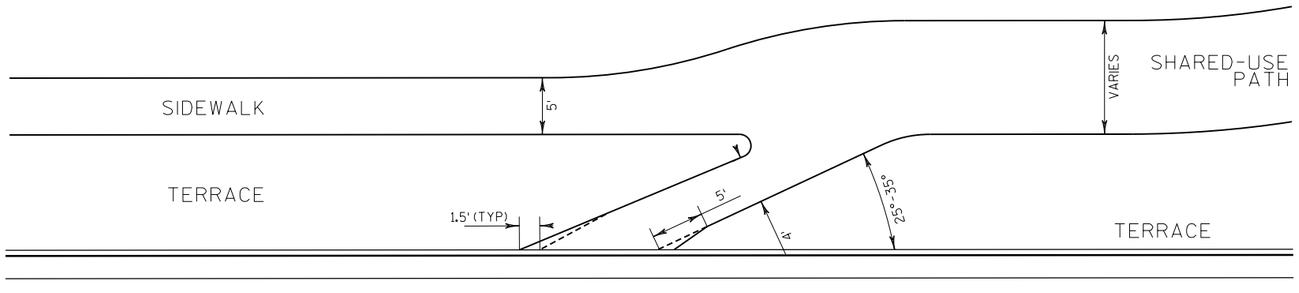
ISLAND SIGN LOCATION DETAIL (TYPICAL)

2



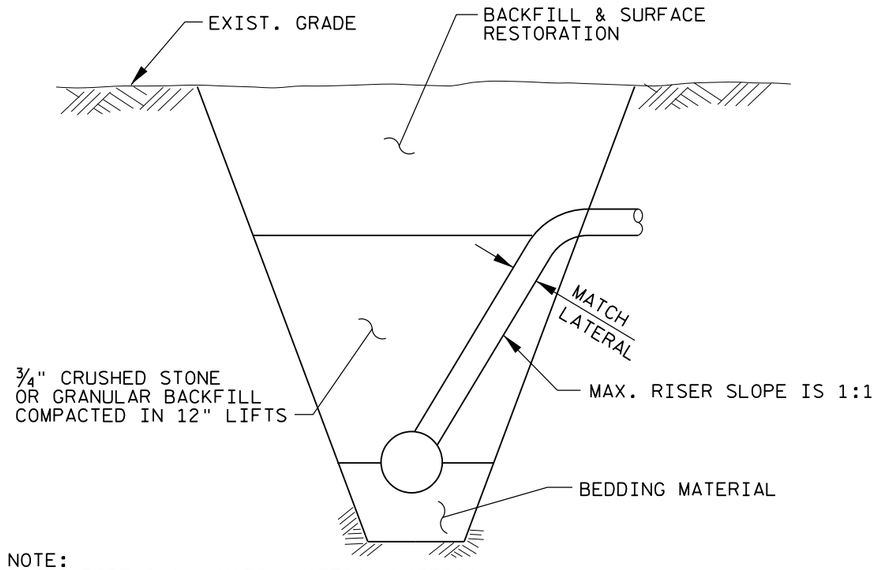
DIRECTION OF TRAVEL

BIKE RAMP ENTRANCE



DIRECTION OF TRAVEL

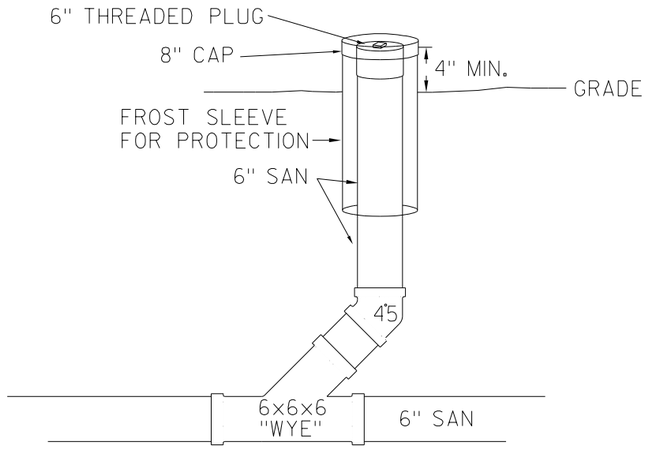
BIKE RAMP EXIT



NOTE:
RISER PIPE SHALL MATCH LATERAL MATERIAL

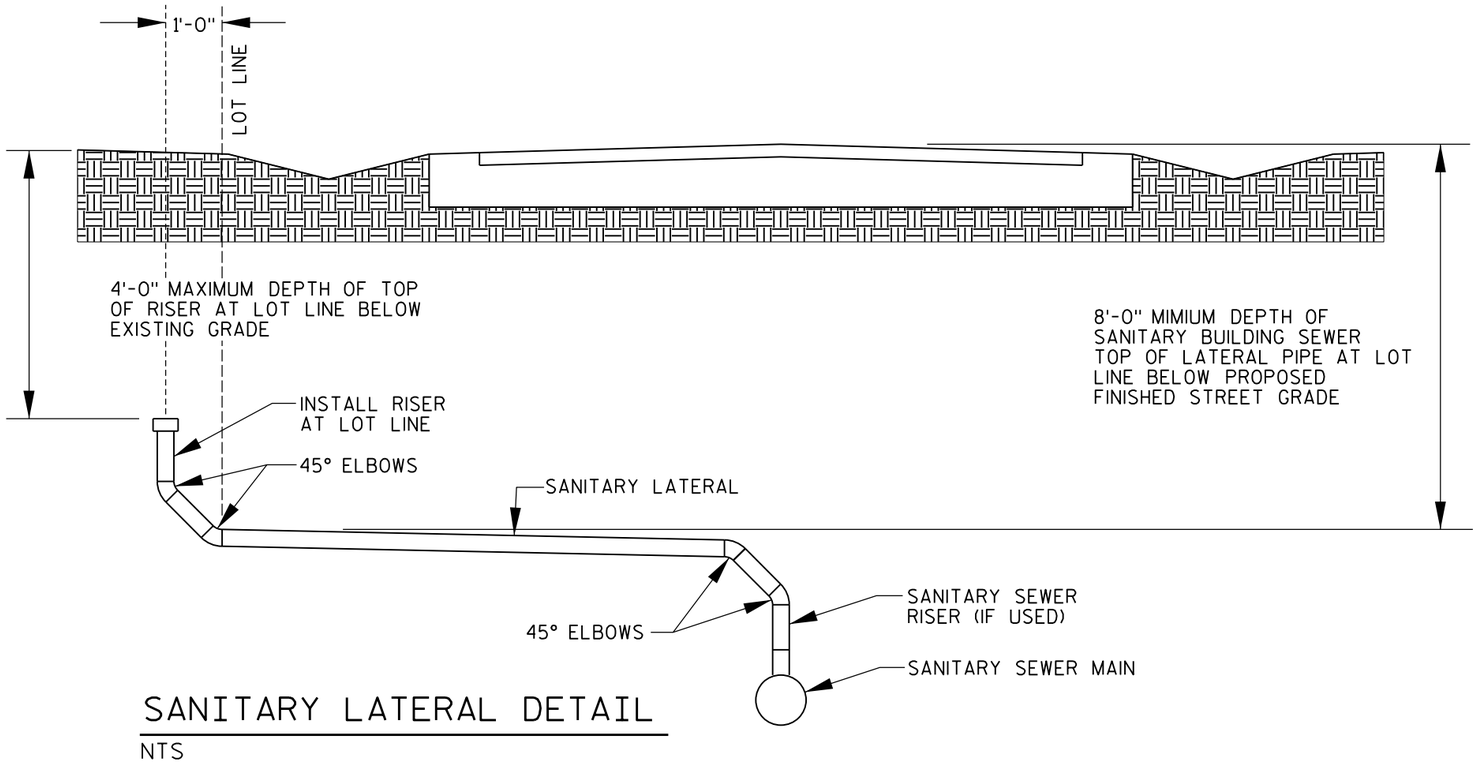
RISER DETAIL

NTS



CLEANOUT DETAIL

NTS



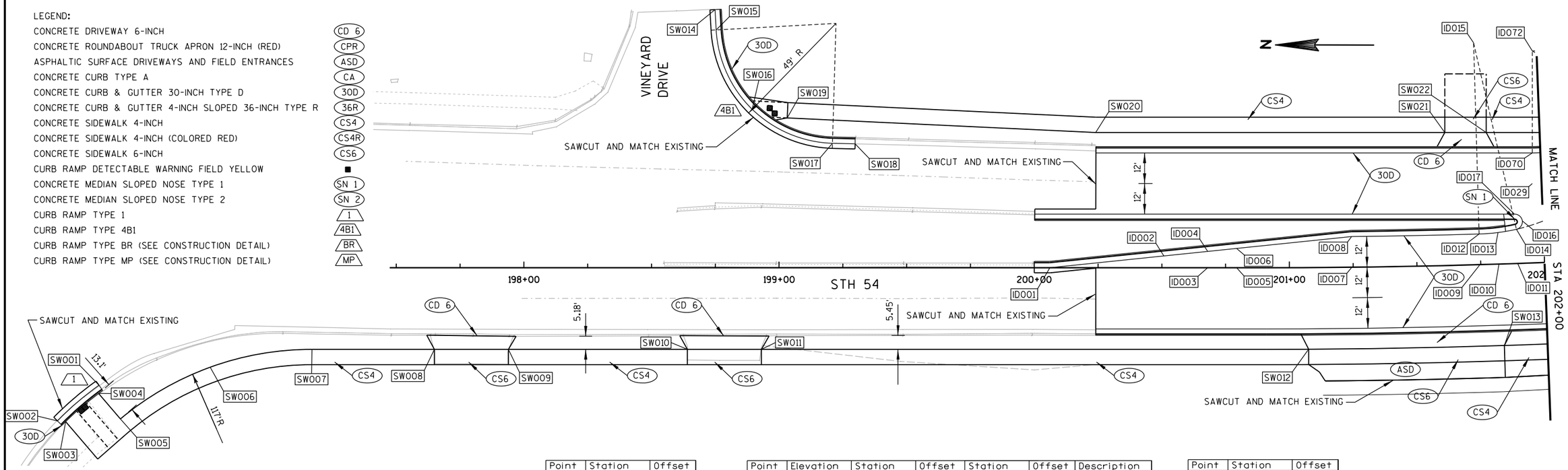
SANITARY LATERAL DETAIL

NTS

2

LEGEND:

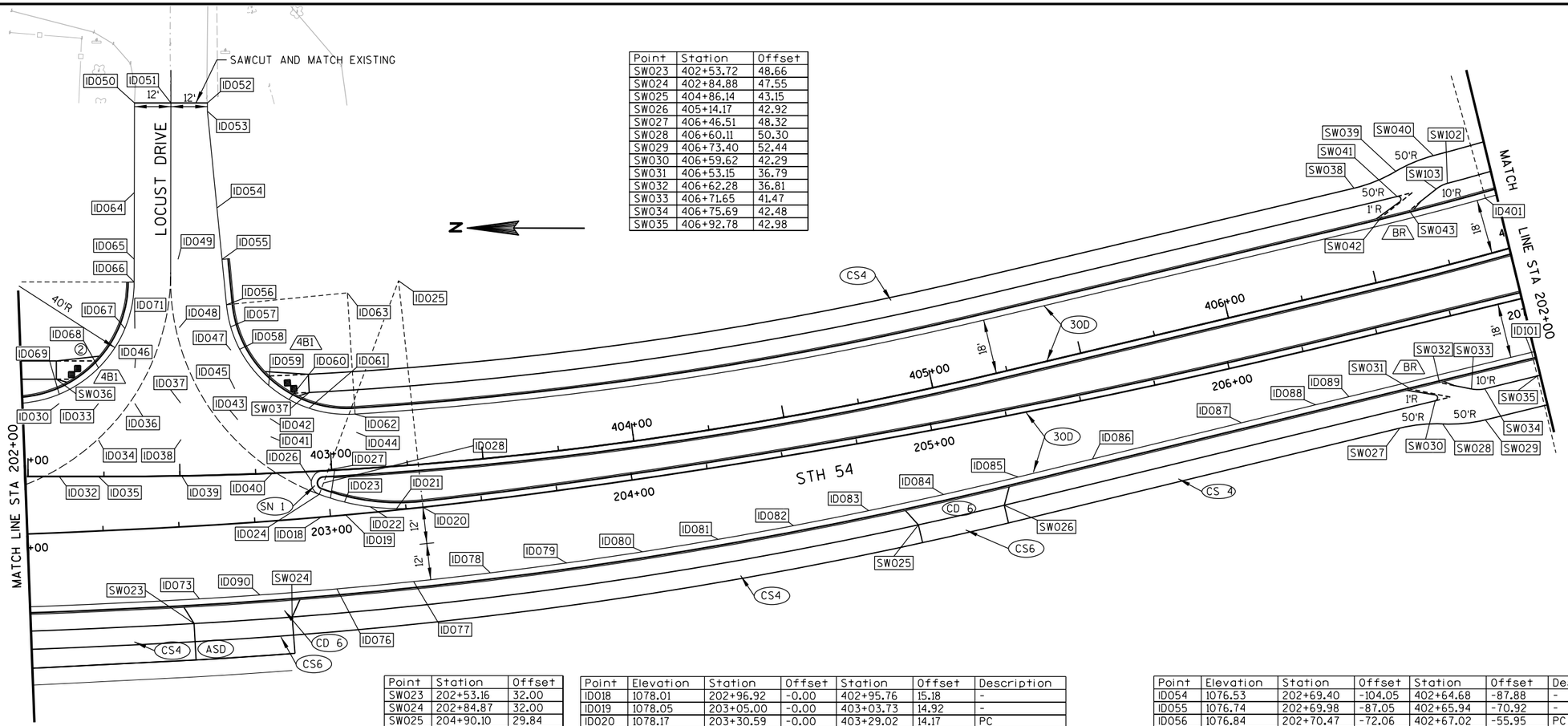
CONCRETE DRIVEWAY 6-INCH	CD 6
CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)	CPR
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASD
CONCRETE CURB TYPE A	CA
CONCRETE CURB & GUTTER 30-INCH TYPE D	30D
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	36R
CONCRETE SIDEWALK 4-INCH	CS4
CONCRETE SIDEWALK 4-INCH (COLORED RED)	CS4R
CONCRETE SIDEWALK 6-INCH	CS6
CURB RAMP DETECTABLE WARNING FIELD YELLOW	■
CONCRETE MEDIAN SLOPED NOSE TYPE 1	SN 1
CONCRETE MEDIAN SLOPED NOSE TYPE 2	SN 2
CURB RAMP TYPE 1	1
CURB RAMP TYPE 4B1	4B1
CURB RAMP TYPE BR (SEE CONSTRUCTION DETAIL)	BR
CURB RAMP TYPE MP (SEE CONSTRUCTION DETAIL)	MP



Point	Station	Offset
SW001	196+33.48	46.08
SW002	196+17.23	60.06
SW003	196+20.43	60.38
SW004	196+33.32	49.30
SW005	196+41.91	59.28
SW006	196+77.05	39.03
SW007	197+17.00	32.00
SW008	197+64.93	32.00
SW009	197+93.93	32.00
SW010	198+64.09	32.00
SW011	198+93.09	32.00
SW012	201+07.35	32.00
SW013	201+83.22	32.00

Point	Elevation	Station	Offset	Station	Offset	Description
ID001	1077.00	200+06.10	0.00	400+05.90	21.00	START TAPER
ID002	1076.76	200+50.79	-4.61	400+50.59	16.39	LOW PNT
ID003	1076.91	200+68.00	0.00	400+67.80	21.00	-
ID004	1076.85	200+68.00	-6.38	400+67.80	14.62	-
ID005	1076.94	200+79.33	0.00	400+79.13	21.00	-
ID006	1076.79	200+79.33	-7.55	400+79.13	13.45	LOW PNT
ID007	1077.14	201+24.49	-0.00	401+24.29	20.81	-
ID008	1077.02	201+24.49	-12.00	401+24.16	8.81	END TAPER
ID009	1077.40	201+74.70	-0.00	401+74.49	19.79	-
ID010	1077.43	201+82.11	0.00	401+81.90	19.57	-
ID011	1077.47	201+89.45	-0.00	401+89.23	19.33	-
ID012	1077.28	201+74.70	-12.00	401+74.15	7.80	PC
ID013	1077.31	201+82.11	-12.35	401+81.51	7.22	MID PNT
ID014	1077.35	201+89.45	-13.41	401+88.78	5.92	PC
ID015	-	201+74.70	-87.00	401+71.98	-67.17	75'RAD
ID016	1077.32	201+91.88	-16.59	401+91.09	2.66	MID PNT
ID017	1077.30	201+88.87	-19.36	401+88.00	0.00	PC
ID029	1077.09	201+96.33	-31.11	401+94.97	-12.00	-
ID070	1076.85	201+96.77	-43.10	401+94.97	-24.00	PC
ID072	-	201+98.27	-83.07	401+94.97	-64.00	40'RAD

Point	Station	Offset
SW014	398+74.73	-80.21
SW015	398+75.17	-72.22
SW016	398+89.30	-41.13
SW017	399+20.75	-27.80
SW018	399+29.60	-27.55
SW019	399+03.01	-37.74
SW020	400+23.85	-32.00
SW021	401+60.67	-32.00
SW022	401+76.92	-32.00



Point	Station	Offset
SW023	402+53.72	48.66
SW024	402+84.88	47.55
SW025	404+86.14	43.15
SW026	405+14.17	42.92
SW027	406+46.51	48.32
SW028	406+60.11	50.30
SW029	406+73.40	52.44
SW030	406+59.62	42.29
SW031	406+53.15	36.79
SW032	406+62.28	36.81
SW033	406+71.65	41.47
SW034	406+75.69	42.48
SW035	406+92.78	42.98

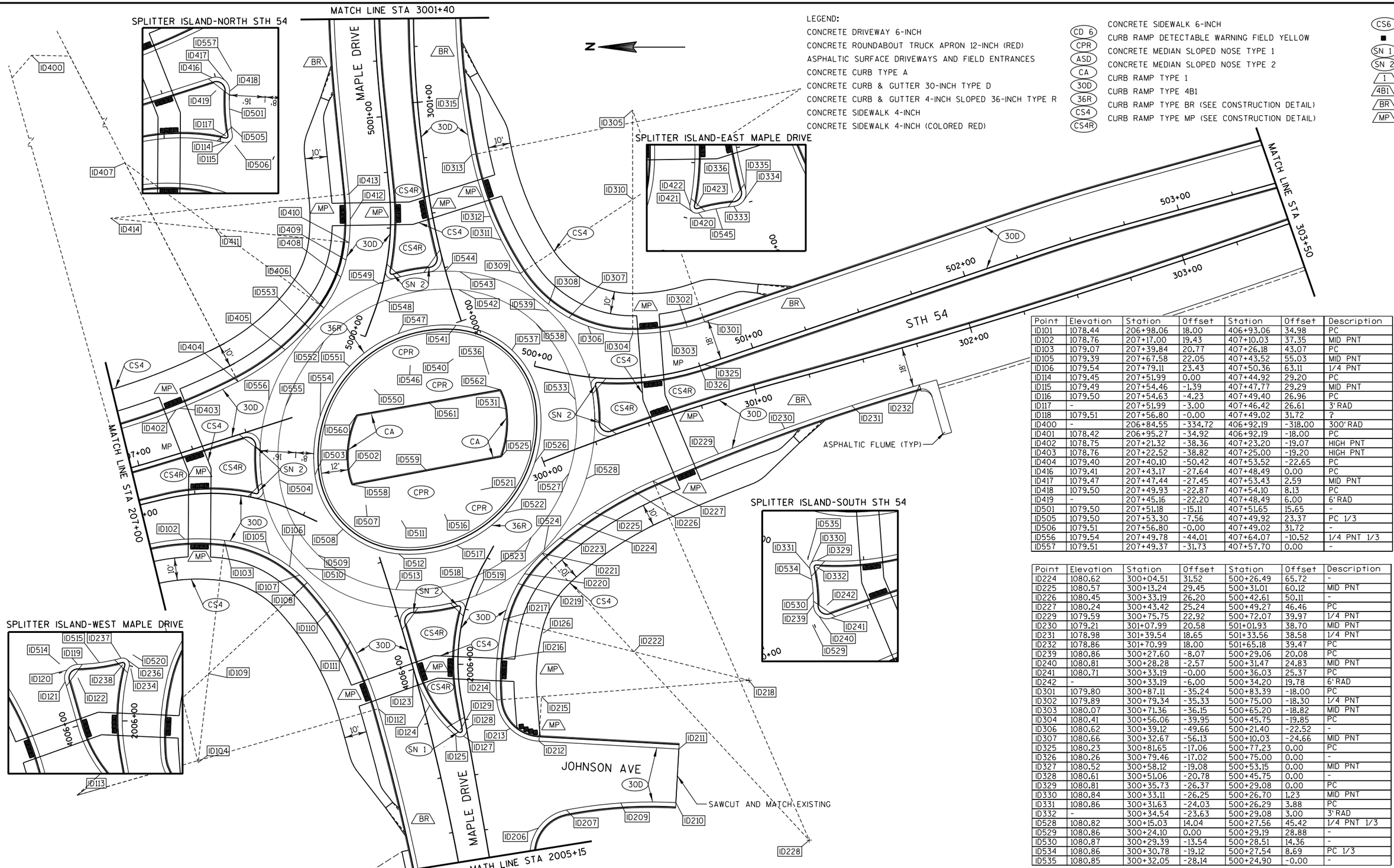
LEGEND:

CONCRETE DRIVEWAY 6-INCH	CD 6
CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)	CPR
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASD
CONCRETE CURB TYPE A	CA
CONCRETE CURB & GUTTER 30-INCH TYPE D	30D
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	36R
CONCRETE SIDEWALK 4-INCH	CS4
CONCRETE SIDEWALK 4-INCH (COLORED RED)	CS4R
CONCRETE SIDEWALK 6-INCH	CS6
CURB RAMP DETECTABLE WARNING FIELD YELLOW	■
CONCRETE MEDIAN SLOPED NOSE TYPE 1	SN 1
CONCRETE MEDIAN SLOPED NOSE TYPE 2	SN 2
CURB RAMP TYPE 1	1
CURB RAMP TYPE 4B1	4B1
CURB RAMP TYPE BR (SEE CONSTRUCTION DETAIL)	BR
CURB RAMP TYPE MP (SEE CONSTRUCTION DETAIL)	MP

Point	Station	Offset
SW023	202+53.16	32.00
SW024	202+84.87	32.00
SW025	204+90.10	29.84
SW026	205+18.75	28.73
SW027	206+50.03	32.00
SW028	206+64.03	34.00
SW029	206+78.03	36.00
SW030	206+63.49	26.00
SW031	206+56.77	20.50
SW032	206+66.23	20.50
SW033	206+76.02	25.06
SW034	206+80.24	26.00
SW035	206+98.06	26.00

Point	Elevation	Station	Offset	Station	Offset	Description
ID018	1078.01	202+96.92	-0.00	402+95.76	15.18	-
ID019	1078.05	203+05.00	-0.00	403+03.73	14.92	-
ID020	1078.17	203+30.59	-0.00	403+29.02	14.17	PC
ID021	1078.13	203+21.93	-0.48	403+20.44	13.94	1/4 PNT
ID022	1078.07	203+13.36	-1.90	403+11.94	12.77	MID PNT
ID023	1078.00	203+05.00	-4.25	403+03.60	10.67	1/4 PNT
ID024	1077.92	202+96.92	-7.51	402+95.52	7.67	PC
ID025	-	203+30.59	-75.00	403+26.80	-60.80	75'RAD
ID026	1077.86	202+94.72	-12.06	402+93.20	3.19	MID PNT
ID027	1077.85	202+98.77	-15.13	402+97.10	-0.00	PC
ID028	-	202+98.64	-11.13	402+97.10	4.00	4'RAD
ID030	1076.93	202+12.28	-42.50	402+10.27	-24.00	-
ID031	1077.17	202+11.77	-30.51	402+10.27	-12.00	-
ID032	1077.41	202+11.27	-18.52	402+10.27	0.00	-
ID033	1077.00	202+25.43	-41.93	402+23.24	-24.00	-
ID034	1077.24	202+24.87	-29.94	402+23.24	-12.00	-
ID035	1077.48	202+24.31	-17.95	402+23.24	0.00	-
ID036	1077.06	202+37.51	-41.35	402+35.26	-23.99	-
ID037	1077.13	202+52.78	-40.72	402+50.63	-24.00	-
ID038	1077.37	202+52.31	-28.73	402+50.63	-12.00	-
ID039	1077.61	202+51.84	-16.74	402+50.63	0.00	-
ID040	1077.76	202+81.92	-15.68	402+80.42	0.00	-
ID041	1077.52	202+82.34	-27.67	402+80.42	-12.00	-
ID042	1077.40	202+82.55	-33.67	402+80.42	-18.00	-
ID043	1077.35	202+71.68	-34.04	402+69.64	-18.00	-
ID044	1077.66	203+11.03	-26.75	403+08.88	-12.00	-
ID045	1077.17	202+71.36	-44.28	402+68.95	-28.22	-
ID046	1076.86	202+38.11	-53.03	402+35.32	-35.68	-
ID047	1077.00	202+70.96	-57.08	402+68.07	-41.00	-
ID048	1076.98	202+53.77	-65.48	402+50.63	-48.78	-
ID049	1076.84	202+54.68	-87.96	402+50.63	-71.27	-
ID050	1076.22	202+42.67	-140.13	402+35.68	-122.89	MATCH EXIST
ID051	1076.52	202+55.27	-139.48	402+48.99	-122.77	MATCH EXIST
ID052	1076.10	202+68.48	-138.74	402+62.29	-122.52	MATCH EXIST
ID053	1076.14	202+68.28	-136.03	402+62.21	-119.81	START TAPER

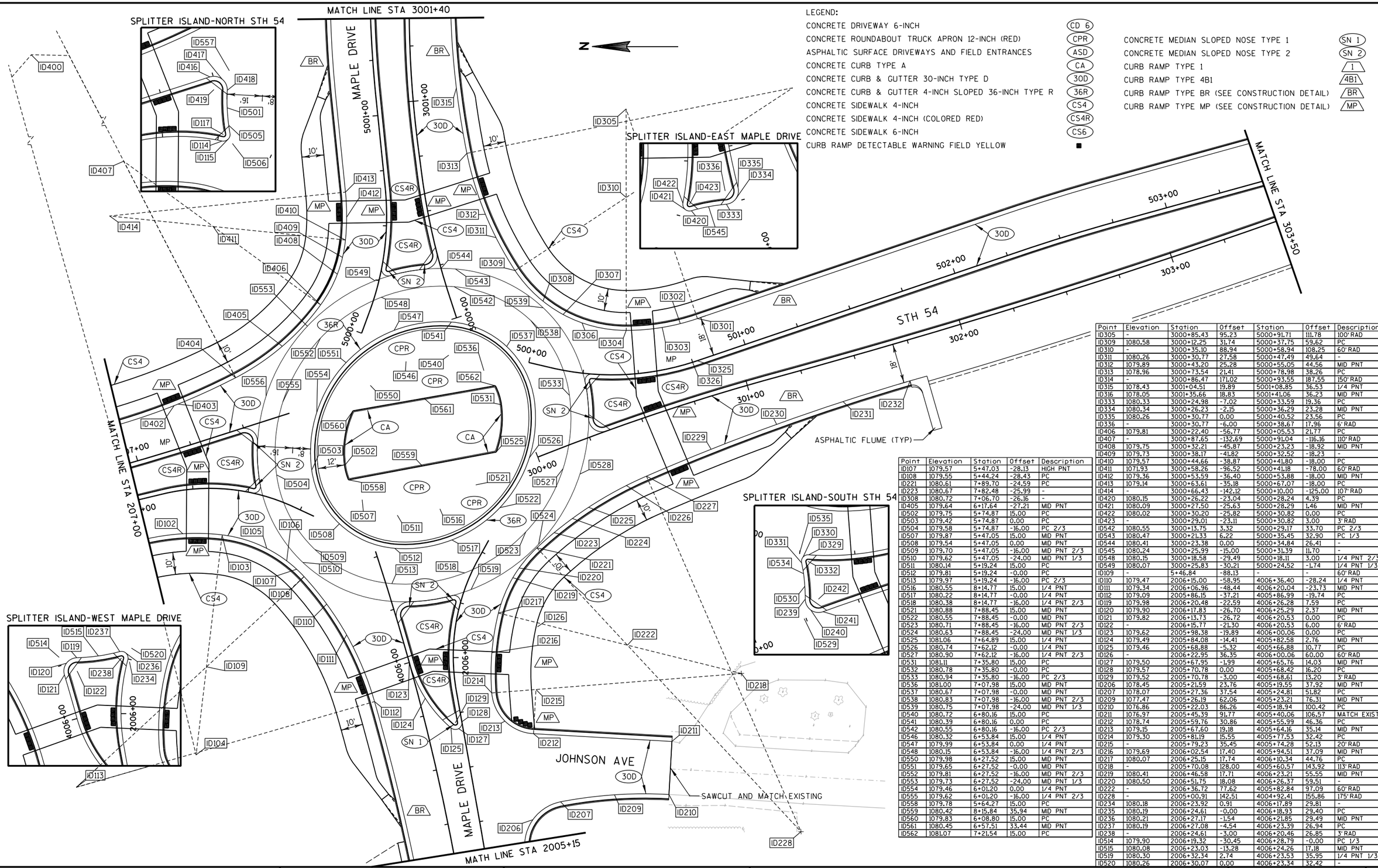
Point	Elevation	Station	Offset	Station	Offset	Description
ID054	1076.53	202+69.40	-104.05	402+64.68	-87.88	-
ID055	1076.74	202+69.98	-87.05	402+65.94	-70.92	-
ID056	1076.84	202+70.47	-72.06	402+67.02	-55.95	PC
ID057	1076.89	202+71.42	-64.73	402+68.25	-48.66	-
ID058	1077.00	202+73.99	-57.16	402+71.08	-41.19	1/4 PNT
ID059	1077.21	202+82.94	-44.58	402+80.42	-28.92	MID PNT
ID060	1077.32	202+89.48	-39.44	402+87.09	-24.00	-
ID061	1077.41	202+95.96	-36.05	402+93.63	-20.82	1/4 PNT
ID062	1077.54	203+11.22	-32.75	403+08.88	-18.00	PC
ID063	-	203+12.53	-72.73	403+08.88	-58.00	40'RAD
ID064	1076.52	202+41.02	-110.69	402+35.47	-93.41	-
ID065	1076.74	202+39.81	-88.76	402+35.32	-71.45	-
ID066	1076.70	202+39.40	-81.24	402+35.27	-63.92	PC
ID067	1076.62	202+35.47	-66.13	402+32.01	-48.65	LOW PNT
ID068	1076.70	202+25.98	-53.61	402+23.24	-35.69	MID PNT
ID069	1076.78	202+12.41	-45.54	402+10.27	-27.04	1/4 PNT
ID071	1076.69	202+38.78	-65.97	402+35.38	-48.63	-
ID073	1077.32	202+55.38	24.00	402+55.61	40.58	PC
ID076	1077.54	203+00.00	24.00	402+99.53	39.07	-
ID077	1077.67	203+25.00	24.00	403+24.16	38.32	-
ID078	1077.79	203+50.00	24.00	403+48.81	37.64	-
ID079	1077.92	203+75.00	23.99	403+73.42	37.03	-
ID080	1078.04	204+00.00	23.84	403+97.93	36.49	-
ID081	1078.12	204+25.00	23.52	404+22.44	36.03	-
ID082	1078.14	204+50.00	23.01	404+46.97	35.63	-
ID083	1078.11	204+75.00	22.33	404+71.51	35.31	-
ID084	1078.01	205+00.00	21.48	404+96.04	35.06	-
ID085	1077.91	205+25.00	20.45	405+20.58	34.88	-
ID086	1077.82	205+50.00	19.47	405+45.77	34.77	-
ID087	1077.81	206+00.00	18.26	405+96.16	34.54	-
ID088	1077.89	206+25.00	18.02	406+21.34	34.43	-
ID089	1077.94	206+36.19	18.00	406+32.61	34.38	-
ID090	1077.42	202+75.00	24.00	402+74.91	39.89	-
ID101	1078.44	206+98.06	18.00	406+93.06	34.98	PC
ID401	1078.42	206+95.27	-34.92	406+92.19	-18.00	PC



Point	Elevation	Station	Offset	Station	Offset	Description
ID101	1078.44	206+98.06	18.00	406+93.06	34.98	PC
ID102	1078.76	207+17.00	19.43	407+10.03	37.35	MID PNT
ID103	1079.07	207+39.84	20.77	407+26.18	43.07	PC
ID105	1079.39	207+67.58	22.05	407+43.52	55.03	MID PNT
ID106	1079.54	207+79.11	23.43	407+50.36	63.11	1/4 PNT
ID114	1079.45	207+51.99	0.00	407+44.92	29.20	PC
ID115	1079.49	207+54.46	-1.39	407+47.77	29.29	MID PNT
ID116	1079.50	207+54.63	-4.23	407+49.40	26.96	PC
ID117	-	207+51.99	-3.00	407+46.42	26.61	3' RAD
ID118	1079.51	207+56.80	-0.00	407+49.02	31.72	?
ID400	-	206+84.55	-334.72	406+92.19	-318.00	300' RAD
ID401	1078.42	206+95.27	-34.92	406+92.19	-18.00	PC
ID402	1078.75	207+21.32	-38.36	407+23.20	-19.07	HIGH PNT
ID403	1078.76	207+22.52	-38.82	407+25.00	-19.20	HIGH PNT
ID404	1079.40	207+40.10	-50.42	407+53.52	-22.65	PC
ID416	1079.41	207+43.17	-27.64	407+48.49	0.00	PC
ID417	1079.47	207+47.44	-27.45	407+53.43	2.59	MID PNT
ID418	1079.50	207+49.93	-22.87	407+54.10	8.13	PC
ID419	-	207+45.16	-22.20	407+48.49	6.00	6' RAD
ID501	1079.50	207+51.18	-15.11	407+51.65	15.65	-
ID505	1079.50	207+53.30	-7.56	407+49.92	23.37	PC 1/3
ID506	1079.51	207+56.80	-0.00	407+49.02	31.72	-
ID556	1079.54	207+49.78	-44.01	407+64.07	-10.52	1/4 PNT 1/3
ID557	1079.51	207+49.37	-31.73	407+57.70	0.00	-

Point	Elevation	Station	Offset	Station	Offset	Description
ID224	1080.62	300+04.51	31.52	500+26.49	65.72	-
ID225	1080.57	300+13.24	29.45	500+31.01	60.12	MID PNT
ID226	1080.45	300+33.19	26.20	500+42.61	50.11	-
ID227	1080.24	300+43.42	25.24	500+49.27	46.46	PC
ID229	1079.59	300+75.75	22.92	500+72.07	39.97	1/4 PNT
ID230	1079.21	301+07.99	20.58	501+01.93	38.70	MID PNT
ID231	1078.98	301+39.54	18.65	501+33.56	38.58	1/4 PNT
ID232	1078.86	301+70.99	18.00	501+65.18	39.47	PC
ID239	1080.86	300+27.60	-8.07	500+29.06	20.08	PC
ID240	1080.81	300+28.28	-2.57	500+31.47	24.83	MID PNT
ID241	1080.71	300+33.19	-0.00	500+36.03	25.37	PC
ID242	-	300+33.19	-6.00	500+34.20	19.78	6' RAD
ID301	1079.80	300+87.11	-35.24	500+83.39	-18.00	PC
ID302	1079.89	300+79.34	-35.33	500+75.00	-18.30	1/4 PNT
ID303	1080.07	300+71.36	-36.15	500+65.20	-18.82	MID PNT
ID304	1080.41	300+56.06	-39.95	500+45.75	-19.85	PC
ID306	1080.62	300+39.12	-49.66	500+21.40	-22.52	-
ID307	1080.66	300+32.67	-56.13	500+10.03	-24.66	MID PNT
ID325	1080.23	300+81.65	-17.06	500+77.23	0.00	PC
ID326	1080.26	300+79.46	-17.02	500+75.00	0.00	-
ID327	1080.52	300+58.12	-19.08	500+53.15	0.00	MID PNT
ID328	1080.61	300+51.06	-20.78	500+45.75	0.00	-
ID329	1080.81	300+35.73	-26.37	500+29.08	0.00	PC
ID330	1080.84	300+33.11	-26.25	500+26.70	1.23	MID PNT
ID331	1080.86	300+31.63	-24.03	500+26.29	3.88	PC
ID332	-	300+34.54	-23.63	500+29.08	3.00	3' RAD
ID528	1080.82	300+15.03	14.04	500+27.56	45.42	1/4 PNT 1/3
ID529	1080.86	300+24.10	0.00	500+29.19	28.88	-
ID530	1080.87	300+29.39	-13.54	500+28.51	14.36	-
ID534	1080.86	300+30.78	-19.12	500+27.54	8.69	PC 1/3
ID535	1080.85	300+32.05	-28.14	500+24.90	-0.00	-

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PAVING DETAILS	SHEET 23	E



LEGEND:

CONCRETE DRIVEWAY 6-INCH	CD 6
CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)	CPR
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASD
CONCRETE CURB TYPE A	CA
CONCRETE CURB & GUTTER 30-INCH TYPE D	30D
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	36R
CONCRETE SIDEWALK 4-INCH	CS4
CONCRETE SIDEWALK 4-INCH (COLORED RED)	CS4R
CONCRETE SIDEWALK 6-INCH	CS6
CURB RAMP DETECTABLE WARNING FIELD YELLOW	■
CONCRETE MEDIAN SLOPED NOSE TYPE 1	SN 1
CONCRETE MEDIAN SLOPED NOSE TYPE 2	SN 2
CURB RAMP TYPE 1	1
CURB RAMP TYPE 4B1	4B1
CURB RAMP TYPE BR (SEE CONSTRUCTION DETAIL)	BR
CURB RAMP TYPE MP (SEE CONSTRUCTION DETAIL)	MP

Point	Elevation	Station	Offset	Station	Offset	Description
ID305	-	3000+85.43	95.23	5000+91.71	111.78	100' RAD
ID309	1080.58	3000+12.25	31.74	5000+37.75	59.62	PC
ID310	-	3000+35.10	88.94	5000+58.94	108.25	60' RAD
ID311	1080.26	3000+30.77	27.58	5000+47.49	49.64	-
ID312	1079.89	3000+43.20	25.28	5000+55.05	44.56	MID PNT
ID313	1078.96	3000+73.54	21.41	5000+78.98	38.26	PC
ID314	-	3000+86.47	171.02	5000+93.55	187.55	150' RAD
ID315	1078.43	3001+04.51	19.89	5001+08.85	36.53	1/4 PNT
ID316	1078.05	3001+35.66	18.83	5001+41.06	36.23	MID PNT
ID333	1080.33	3000+24.98	-7.02	5000+33.59	19.36	PC
ID334	1080.34	3000+26.23	-2.15	5000+36.29	23.28	MID PNT
ID335	1080.26	3000+30.77	0.00	5000+40.52	23.56	PC
ID336	-	3000+30.77	-6.00	5000+38.67	17.96	6' RAD
ID406	1079.81	3000+22.40	-56.77	5000+05.53	21.77	PC
ID407	-	3000+87.65	-132.69	5000+91.04	-116.16	110' RAD
ID408	1079.75	3000+32.21	-45.87	5000+23.23	-18.92	MID PNT
ID409	1079.73	3000+38.17	-41.82	5000+32.52	-18.23	-
ID410	1079.57	3000+44.66	-38.87	5000+41.80	-18.00	PC
ID411	1071.93	3000+58.26	-96.52	5000+41.18	-78.00	60' RAD
ID412	1079.36	3000+53.59	-36.40	5000+53.88	-18.00	MID PNT
ID413	1079.14	3000+63.61	-35.18	5000+67.07	-18.00	PC
ID414	-	3000+66.43	-142.12	5000+10.00	-125.00	107' RAD
ID420	1080.15	3000+26.22	-23.04	5000+28.24	4.39	PC
ID421	1080.09	3000+27.50	-25.63	5000+28.29	1.46	MID PNT
ID422	1080.02	3000+30.20	-25.82	5000+30.82	0.00	PC
ID423	-	3000+29.01	-23.11	5000+30.82	3.00	3' RAD
ID542	1080.55	3000+13.75	3.32	5000+29.17	33.70	PC 2/3
ID543	1080.47	3000+21.33	6.22	5000+35.45	32.90	PC 1/3
ID544	1080.41	3000+23.38	0.00	5000+34.84	26.41	-
ID545	1080.24	3000+25.99	-15.00	5000+31.39	11.70	-
ID548	1080.15	3000+18.58	-29.49	5000+18.11	3.00	1/4 PNT 2/3
ID549	1080.07	3000+25.83	-30.21	5000+24.52	-1.74	1/4 PNT 1/3
ID109	-	5+46.84	-88.13	-	-	60' RAD
ID110	1079.47	2006+15.00	-58.95	4006+36.40	-28.24	1/4 PNT
ID111	1079.34	2006+06.96	-48.44	4006+20.04	-23.73	MID PNT
ID112	1079.09	2005+86.15	-37.21	4005+86.99	-19.74	PC
ID119	1079.38	2006+20.48	-22.59	4006+26.28	7.59	PC
ID120	1079.90	2006+17.83	-26.70	4006+25.29	2.37	MID PNT
ID121	1079.82	2006+13.73	-26.72	4006+20.53	0.00	PC
ID122	-	2006+15.77	-21.30	4006+20.53	6.00	6' RAD
ID123	1079.62	2005+98.38	-19.89	4006+00.06	0.00	PC
ID124	1079.49	2005+84.08	-14.41	4005+82.58	2.76	MID PNT
ID125	1079.46	2005+68.88	-5.32	4005+66.88	10.77	PC
ID126	-	2006+22.95	36.35	4006+00.06	60.00	60' RAD
ID127	1079.50	2005+67.95	-1.99	4005+65.76	14.03	MID PNT
ID128	1079.57	2005+70.78	0.00	4005+68.42	16.20	PC
ID129	1079.52	2005+70.78	-3.00	4005+68.61	13.20	3' RAD
ID206	1078.45	2005+21.59	23.76	4005+19.55	37.92	MID PNT
ID207	1078.07	2005+27.36	37.54	4005+24.81	51.82	PC
ID209	1077.47	2005+26.19	62.06	4005+23.21	76.31	MID PNT
ID210	1076.86	2005+22.03	86.26	4005+18.94	100.42	PC
ID211	1076.97	2005+45.39	91.77	4005+40.06	106.57	MATCH EXIST
ID212	1078.74	2005+59.76	30.86	4005+55.99	46.36	PC
ID213	1079.15	2005+67.60	19.18	4005+64.16	35.14	MID PNT
ID214	1079.30	2005+81.19	15.55	4005+77.53	32.42	PC
ID215	-	2005+79.23	35.45	4005+74.28	52.13	20' RAD
ID216	1079.69	2006+02.54	17.40	4005+94.51	37.09	MID PNT
ID217	1080.07	2006+25.15	17.74	4006+10.34	44.76	PC
ID218	-	2005+70.08	128.00	4005+60.57	143.92	113' RAD
ID219	1080.41	2006+46.58	17.71	4006+23.21	55.55	MID PNT
ID220	1080.50	2006+51.75	18.08	4006+26.37	59.51	-
ID222	-	2006+36.72	77.62	4005+82.84	97.09	60' RAD
ID228	-	2005+00.91	142.51	4004+92.41	155.86	175' RAD
ID234	1080.18	2006+23.92	0.91	4006+17.89	29.81	-
ID235	1080.19	2006+24.61	-0.00	4006+18.93	29.40	PC
ID236	1080.21	2006+27.17	-1.54	4006+21.85	29.49	MID PNT
ID237	1080.19	2006+27.08	-4.54	4006+23.39	26.94	PC
ID238	-	2006+24.61	-3.00	4006+20.46	26.85	3' RAD
ID514	1079.90	2006+19.32	-30.45	4006+28.79	-0.00	PC 1/3
ID515	1080.08	2006+23.03	-13.28	4006+24.26	17.18	MID PNT
ID519	1080.30	2006+32.34	2.74	4006+23.53	35.95	1/4 PNT 1/3
ID520	1080.26	2006+30.07	0.00	4006+23.34	32.42	-

Point	Elevation	Station	Offset	Description
ID107	1079.57	5+47.03	-28.13	HIGH PNT
ID108	1079.55	5+44.24	-28.43	PC
ID221	1080.61	7+89.70	-24.59	PC
ID223	1080.67	7+82.48	-25.99	-
ID308	1080.72	7+06.70	-26.16	-
ID405	1079.64	6+17.64	-27.21	MID PNT
ID502	1079.75	5+74.87	15.00	PC
ID503	1079.42	5+74.87	0.00	PC
ID504	1079.58	5+74.87	-16.00	PC 2/3
ID507	1079.87	5+47.05	15.00	MID PNT
ID508	1079.54	5+47.05	0.00	MID PNT
ID509	1079.70	5+47.05	-16.00	MID PNT 2/3
ID510	1079.62	5+47.05	-24.00	MID PNT 1/3
ID511	1080.14	5+19.24	15.00	PC
ID512	1079.81	5+19.24	-0.00	PC
ID513	1079.97	5+19.24	-16.00	PC 2/3
ID516	1080.55	8+14.77	15.00	1/4 PNT
ID517	1080.22	8+14.77	-0.00	1/4 PNT
ID518	1080.38	8+14.77	-16.00	1/4 PNT 2/3
ID521	1080.88	7+88.45	15.00	MID PNT
ID522	1080.55	7+88.45	-0.00	MID PNT
ID523	1080.71	7+88.45	-16.00	MID PNT 2/3
ID524	1080.63	7+88.45	-24.00	MID PNT 1/3
ID525	1081.06	7+64.89	15.00	1/4 PNT
ID526	1080.74	7+62.12	-0.00	1/4 PNT
ID527	1080.90	7+62.12	-16.00	1/4 PNT 2/3
ID531	1081.11	7+35.80	15.00	PC
ID532	1080.78	7+35.80	-0.00	PC
ID533	1080.94	7+35.80	-16.00	PC 2/3
ID536	1081.00	7+07.98	15.00	MID PNT
ID537	1080.67	7+07.98	-0.00	MID PNT
ID538	1080.83	7+07.98	-16.00	MID PNT 2/3
ID539	1080.75	7+07.98	-24.00	MID PNT 1/3
ID540	1080.72	6+80.16	15.00	PC
ID541	1080.39	6+80.16	0.00	PC
ID542	1080.55	6+80.16	-16.00	PC 2/3
ID546	1080.32	6+53.84	15.00	1/4 PNT
ID547	1079.99	6+53.84	0.00	1/4 PNT
ID548	1080.15	6+53.84	-16.00	1/4 PNT 2/3
ID550	1079.98	6+27.52	15.00	MID PNT
ID551	1079.65	6+27.52	-0.00	MID PNT
ID552	1079.81	6+27.52	-16.00	MID PNT 2/3
ID553	1079.73	6+27.52	-24.00	MID PNT 1/3
ID554	1079.46	6+01.20	0.00	1/4 PNT
ID555	1079.62	6+01.20	-16.00	1/4 PNT 2/3
ID558	1079.78	5+64.27	15.00	PC
ID559	1080.42	8+15.84	35.94	MID PNT
ID560	1079.83	6+08.80	15.00	PC
ID561	1080.45	6+57.51	33.44	MID PNT
ID562	1081.07	7+21.54	15.00	PC

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PAVING DETAILS	SHEET 24	E

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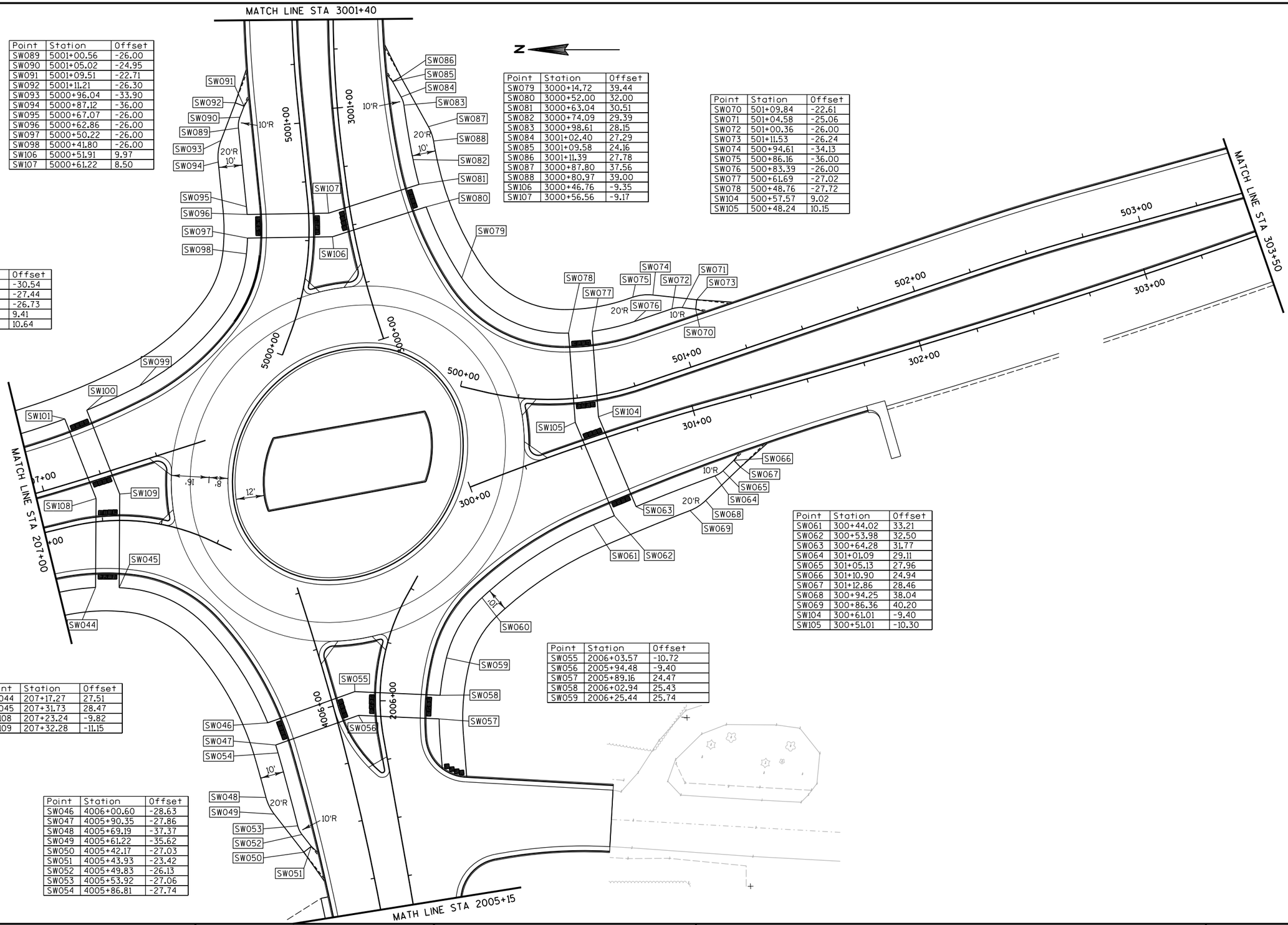

Point	Station	Offset
SW089	5001+00.56	-26.00
SW090	5001+05.02	-24.95
SW091	5001+09.51	-22.71
SW092	5001+11.21	-26.30
SW093	5000+96.04	-33.90
SW094	5000+87.12	-36.00
SW095	5000+67.07	-26.00
SW096	5000+62.86	-26.00
SW097	5000+50.22	-26.00
SW098	5000+41.80	-26.00
SW106	5000+51.91	9.97
SW107	5000+61.22	8.50

Point	Station	Offset
SW079	3000+14.72	39.44
SW080	3000+52.00	32.00
SW081	3000+63.04	30.51
SW082	3000+74.09	29.39
SW083	3000+98.61	28.15
SW084	3001+02.40	27.29
SW085	3001+09.58	24.16
SW086	3001+11.39	27.78
SW087	3000+87.80	37.56
SW088	3000+80.97	39.00
SW106	3000+46.76	-9.35
SW107	3000+56.56	-9.17

Point	Station	Offset
SW070	501+09.84	-22.61
SW071	501+04.58	-25.06
SW072	501+00.36	-26.00
SW073	501+11.53	-26.24
SW074	500+94.61	-34.13
SW075	500+86.16	-36.00
SW076	500+83.39	-26.00
SW077	500+61.69	-27.02
SW078	500+48.76	-27.72
SW104	500+57.57	9.02
SW105	500+48.24	10.15

Point	Station	Offset
SW099	407+52.18	-30.54
SW100	407+27.72	-27.44
SW101	407+17.48	-26.73
SW108	407+20.22	9.41
SW109	407+30.26	10.64

Point	Station	Offset
SW061	300+44.02	33.21
SW062	300+53.98	32.50
SW063	300+64.28	31.77
SW064	301+01.09	29.11
SW065	301+05.13	27.96
SW066	301+10.90	24.94
SW067	301+12.86	28.46
SW068	300+94.25	38.04
SW069	300+86.36	40.20
SW104	300+61.01	-9.40
SW105	300+51.01	-10.30

Point	Station	Offset
SW055	2006+03.57	-10.72
SW056	2005+94.48	-9.40
SW057	2005+89.16	24.47
SW058	2006+02.94	25.43
SW059	2006+25.44	25.74

Point	Station	Offset
SW044	207+17.27	27.51
SW045	207+31.73	28.47
SW108	207+23.24	-9.82
SW109	207+32.28	-11.15

Point	Station	Offset
SW046	4006+00.60	-28.63
SW047	4005+90.35	-27.86
SW048	4005+69.19	-37.37
SW049	4005+61.22	-35.62
SW050	4005+42.17	-27.03
SW051	4005+43.93	-23.42
SW052	4005+49.83	-26.13
SW053	4005+53.92	-27.06
SW054	4005+86.81	-27.74

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PAVING DETAILS	SHEET 25	E

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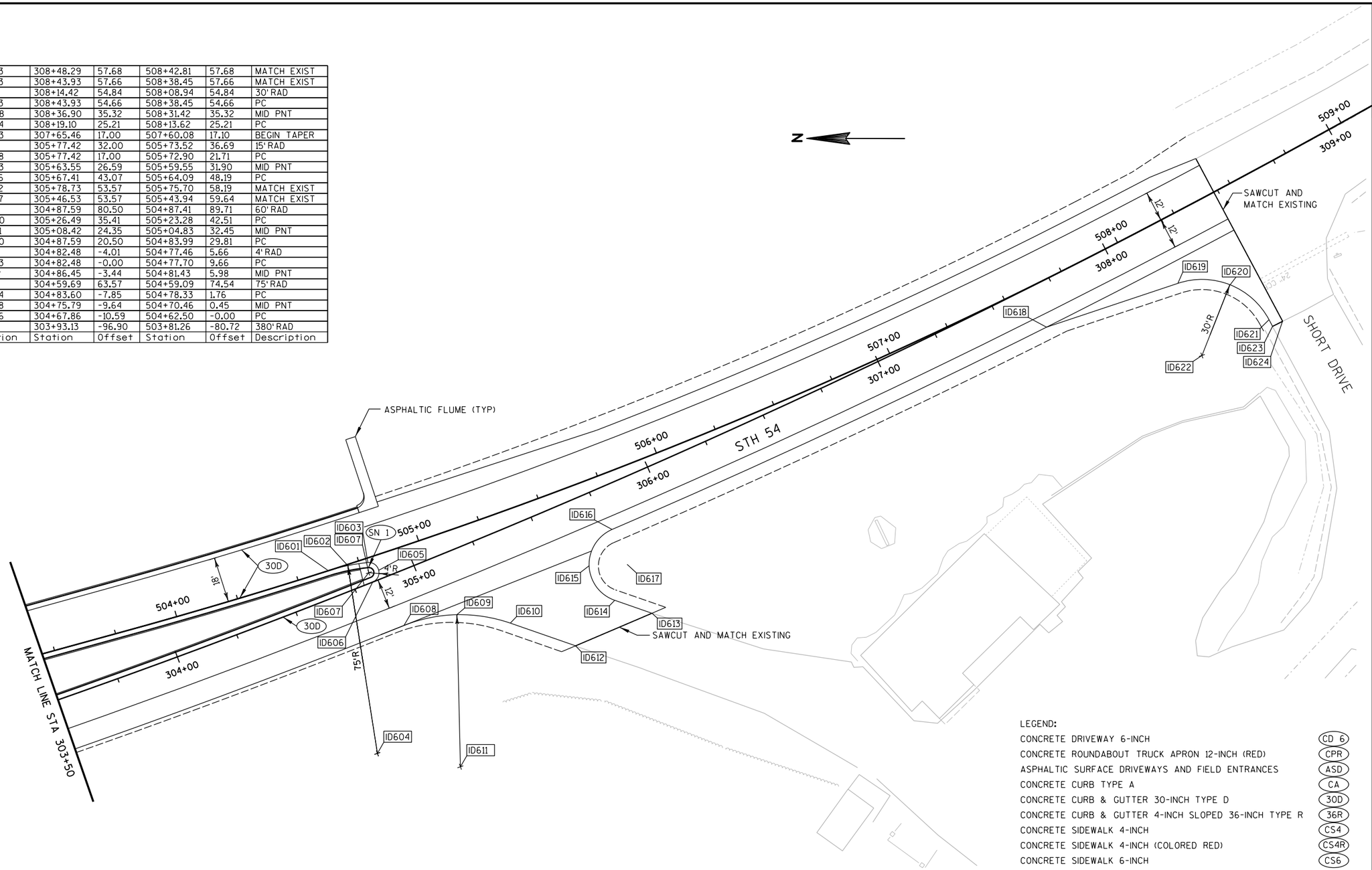
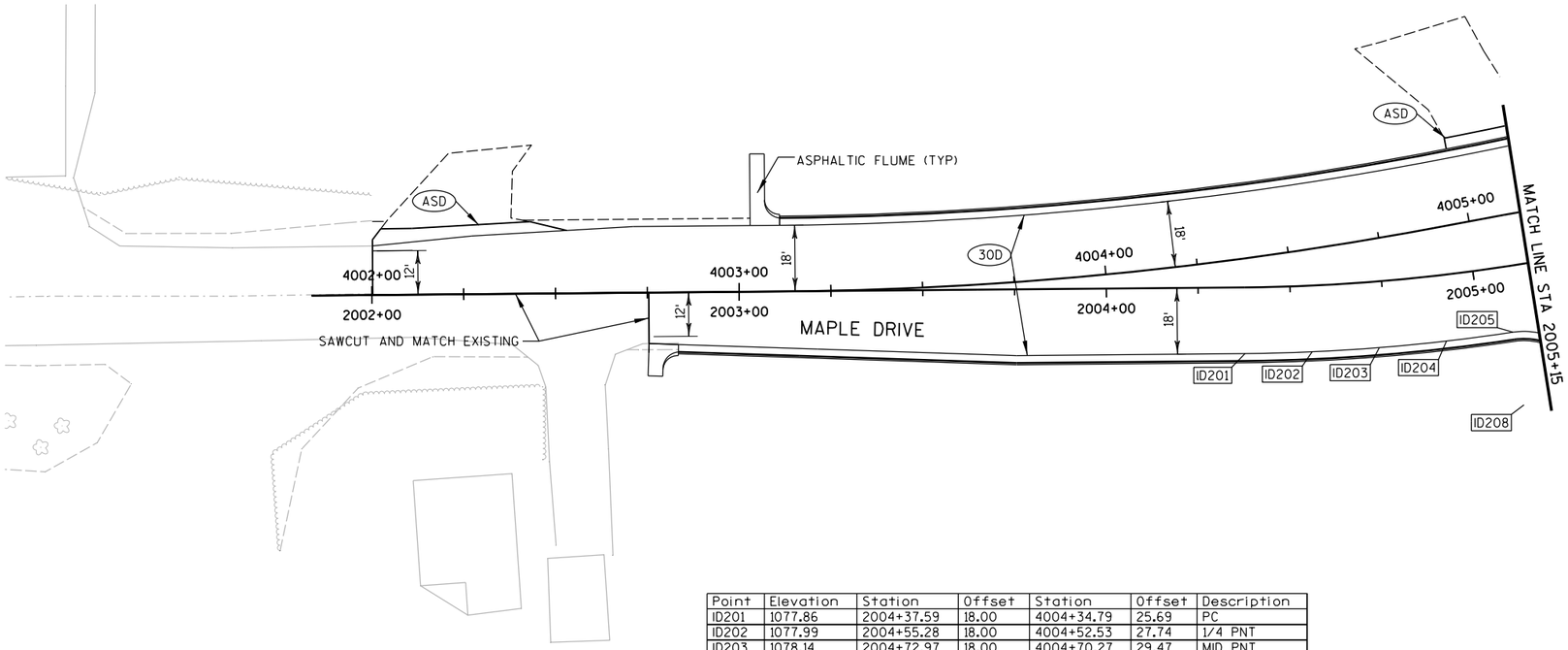
ID624	1079.53	308+48.29	57.68	508+42.81	57.68	MATCH EXIST
ID623	1079.53	308+43.93	57.66	508+38.45	57.66	MATCH EXIST
ID622	-	308+14.42	54.84	508+08.94	54.84	30'RAD
ID621	1079.73	308+43.93	54.66	508+38.45	54.66	PC
ID620	1080.08	308+36.90	35.32	508+31.42	35.32	MID PNT
ID619	1080.44	308+19.10	25.21	508+13.62	25.21	PC
ID618	1080.53	307+65.46	17.00	507+60.08	17.10	BEGIN TAPER
ID617	-	305+77.42	32.00	505+73.52	36.69	15'RAD
ID616	1080.78	305+77.42	17.00	505+72.90	21.71	PC
ID615	1080.63	305+63.55	26.59	505+59.55	31.90	MID PNT
ID614	1079.66	305+67.41	43.07	505+64.09	48.19	PC
ID613	1078.82	305+78.73	53.57	505+75.70	58.19	MATCH EXIST
ID612	1078.97	305+46.53	53.57	505+43.94	59.64	MATCH EXIST
ID611	-	304+87.59	80.50	504+87.41	89.71	60'RAD
ID610	1080.00	305+26.49	35.41	505+23.28	42.51	PC
ID609	1080.81	305+08.42	24.35	505+04.83	32.45	MID PNT
ID608	1080.50	304+87.59	20.50	504+83.99	29.81	PC
ID607	-	304+82.48	-4.01	504+77.46	5.66	4'RAD
ID606	1080.33	304+82.48	-0.00	504+77.70	9.66	PC
ID605	1081.22	304+86.45	-3.44	504+81.43	5.98	MID PNT
ID604	-	304+59.69	63.57	504+59.09	74.54	75'RAD
ID603	1080.74	304+83.60	-7.85	504+78.33	1.76	PC
ID602	1080.78	304+75.79	-9.64	504+70.46	0.45	MID PNT
ID601	1080.76	304+67.86	-10.59	504+62.50	-0.00	PC
ID318	-	303+93.13	-96.90	503+81.26	-80.72	380'RAD
Point	Elevation	Station	Offset	Station	Offset	Description



LEGEND:

CONCRETE DRIVEWAY 6-INCH	CD 6
CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)	CPR
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASD
CONCRETE CURB TYPE A	CA
CONCRETE CURB & GUTTER 30-INCH TYPE D	30D
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	36R
CONCRETE SIDEWALK 4-INCH	CS4
CONCRETE SIDEWALK 4-INCH (COLORED RED)	CS4R
CONCRETE SIDEWALK 6-INCH	CS6
CURB RAMP DETECTABLE WARNING FIELD YELLOW	■
CONCRETE MEDIAN SLOPED NOSE TYPE 1	SN 1
CONCRETE MEDIAN SLOPED NOSE TYPE 2	SN 2
CURB RAMP TYPE 1	1
CURB RAMP TYPE 4B1	4B1
CURB RAMP TYPE BR (SEE CONSTRUCTION DETAIL)	BR
CURB RAMP TYPE MP (SEE CONSTRUCTION DETAIL)	MP



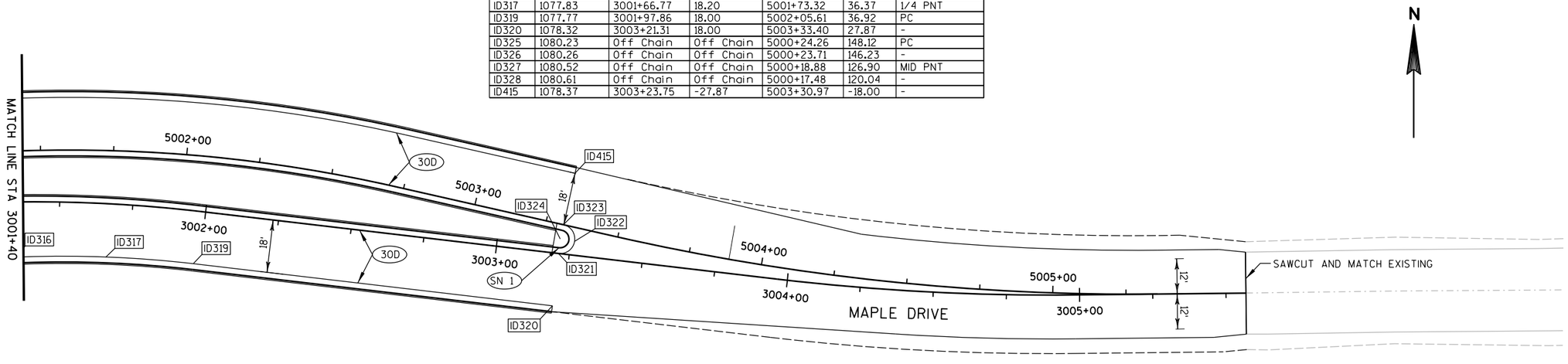
Point	Elevation	Station	Offset	Station	Offset	Description
ID201	1077.86	2004+37.59	18.00	4004+34.79	25.69	PC
ID202	1077.99	2004+55.28	18.00	4004+52.53	27.74	1/4 PNT
ID203	1078.14	2004+72.97	18.00	4004+70.27	29.47	MID PNT
ID204	1078.31	2004+90.66	18.00	4004+88.02	30.87	1/4 PNT
ID205	1078.49	2005+08.35	18.00	4005+06.25	31.83	PC
ID208	-	2005+08.35	38.00	4005+05.56	51.81	20' RAD

N

LEGEND:

CONCRETE DRIVEWAY 6-INCH	CD 6
CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)	CPR
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASD
CONCRETE CURB TYPE A	CA
CONCRETE CURB & GUTTER 30-INCH TYPE D	30D
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	36R
CONCRETE SIDEWALK 4-INCH	CS4
CONCRETE SIDEWALK 4-INCH (COLORED RED)	CS4R
CONCRETE SIDEWALK 6-INCH	CS6
CURB RAMP DETECTABLE WARNING FIELD YELLOW	■
CONCRETE MEDIAN SLOPED NOSE TYPE 1	SN 1
CONCRETE MEDIAN SLOPED NOSE TYPE 2	SN 2
CURB RAMP TYPE 1	1
CURB RAMP TYPE 4B1	4B1
CURB RAMP TYPE BR (SEE CONSTRUCTION DETAIL)	BR
CURB RAMP TYPE MP (SEE CONSTRUCTION DETAIL)	MP

Point	Elevation	Station	Offset	Station	Offset	Description
ID317	1077.83	3001+66.77	18.20	5001+73.32	36.37	1/4 PNT
ID319	1077.77	3001+97.86	18.00	5002+05.61	36.92	PC
ID320	1078.32	3003+21.31	18.00	5003+33.40	27.87	-
ID325	1080.23	Off Chain	Off Chain	5000+24.26	148.12	PC
ID326	1080.26	Off Chain	Off Chain	5000+23.71	146.23	-
ID327	1080.52	Off Chain	Off Chain	5000+18.88	126.90	MID PNT
ID328	1080.61	Off Chain	Off Chain	5000+17.48	120.04	-
ID415	1078.37	3003+23.75	-27.87	5003+30.97	-18.00	-



N

2

NB 139/US 51

N

32+00

33+00

34+00

35+00

36+00

NB OFF RAMP

SAWCUT AND MATCH EXISTING

STA 33+51.91, 12.00 RT

STA 35+18.51, 12.00 RT
PC

REMOVE EXISTING CURB & GUTTER

STA 35+18.51, 212.00 RT
200' RADIUS

ASPHALTIC FLUME

STA 35+78.98, 21.36 RT
PC

CTH B

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PAVING DETAIL	SHEET 28	E

2

N

STA 41+04.36, 18.85 LT
PC

STA 41+56.24, 212.00 LT
200' RAD

STA 41+56.24, 12.00 LT
PC

40+00

41+00

42+00

43+00

44+00

45+00

46+00

CTH B

SAWCUT AND MATCH EXISTING

STA 43+52.53, 12.00 LT

STA 45+02.48, 4.42 LT

SB OFF RAMP

SB I39/US 51

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PAVING DETAIL	SHEET 29	E

PROVIDE SEED NO. 40, FERTILIZER FOR LAWN TYPE TURF, AND PREPARE TOPSOIL FOR LAWN TYPE TURF.

RIP RAP HEAVY & GEOTEXTILE FABRIC TYPE HR

CULVERT PIPE CHECK

INLET PROTECTION TYPE A

LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 30	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\022001_ec.dgn PLOT DATE : 11/19/2014 PLOT TIME : 2:54:21 PM PLOT BY : clm1

WISDOT/CADDS SHEET 42

2

MATCH LINE STA 3001+40

N

MAPLE DRIVE

5001+00

3001+00

CULVERT PIPE DITCH CHECK

CHARTER

VILLAGE OF PLOVER

AT&T

5000+00

4000+00

500+00

501+00

STH 54

502+00

503+00

MATCH LINE STA 303+50

303+00

302+00

301+00

300+00

MATCH LINE STA 207+00

SOD, SEE SDD 8D4; CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

4006+00

2006+00

CULVERT PIPE CHECK

APPROX

MAPLE DRIVE

JOHNSON AVENUE

MATH LINE STA 2005+15

LEGEND

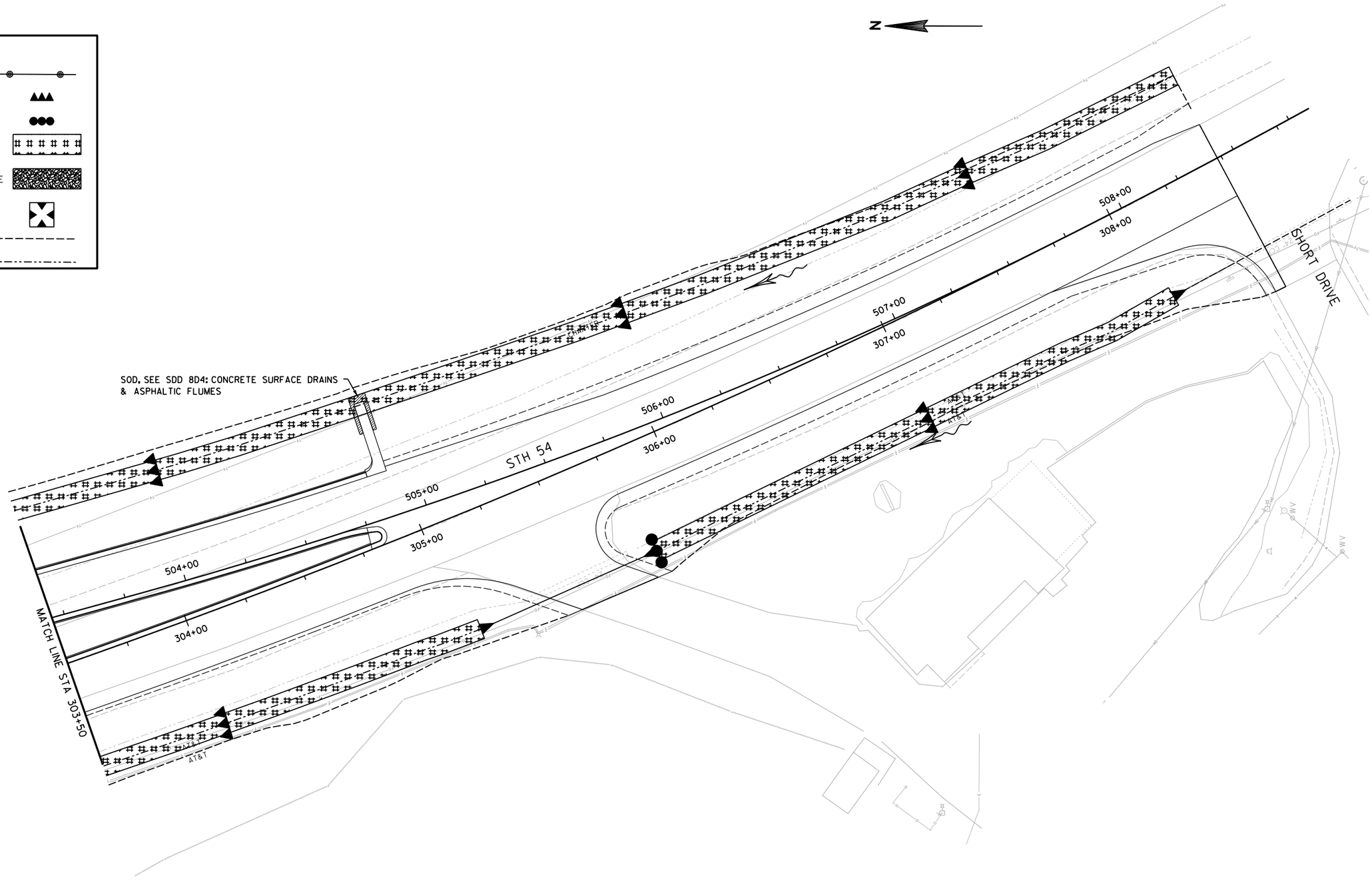
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 31	E

2

LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 32	E

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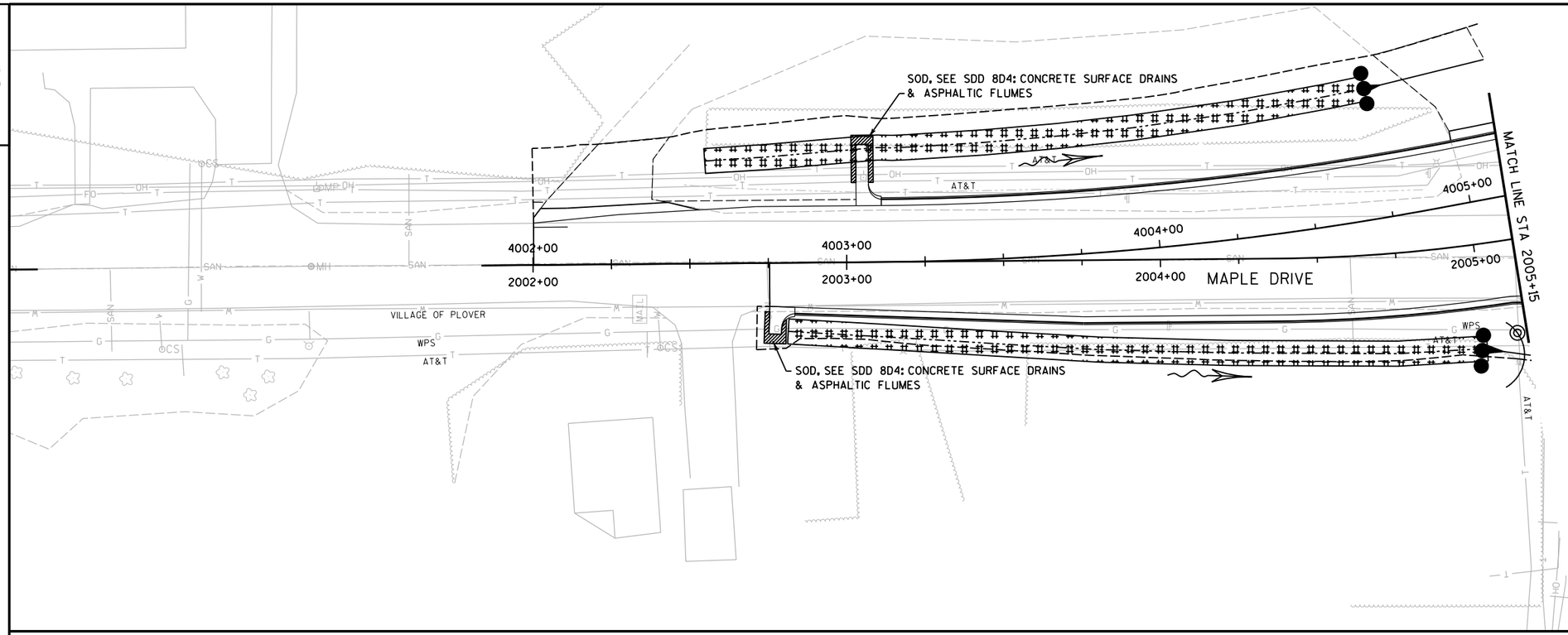
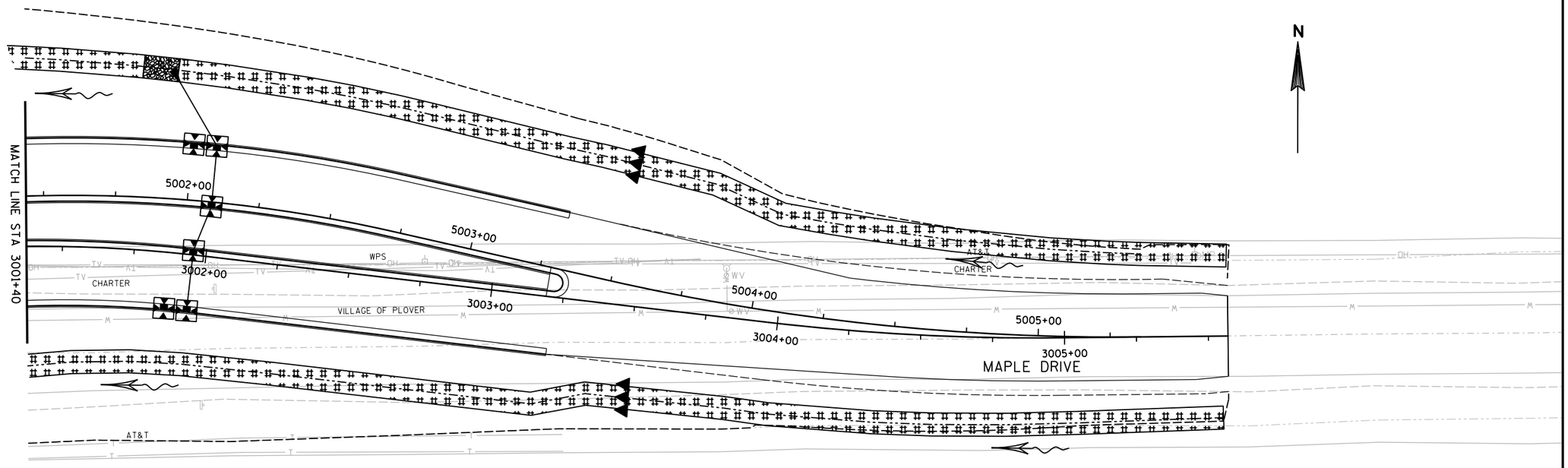


LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 33	E

2

NB 139/US 51

N

NB OFF RAMP

32+00

33+00

34+00

35+00

36+00

POT STA 36+56.74

CTH B

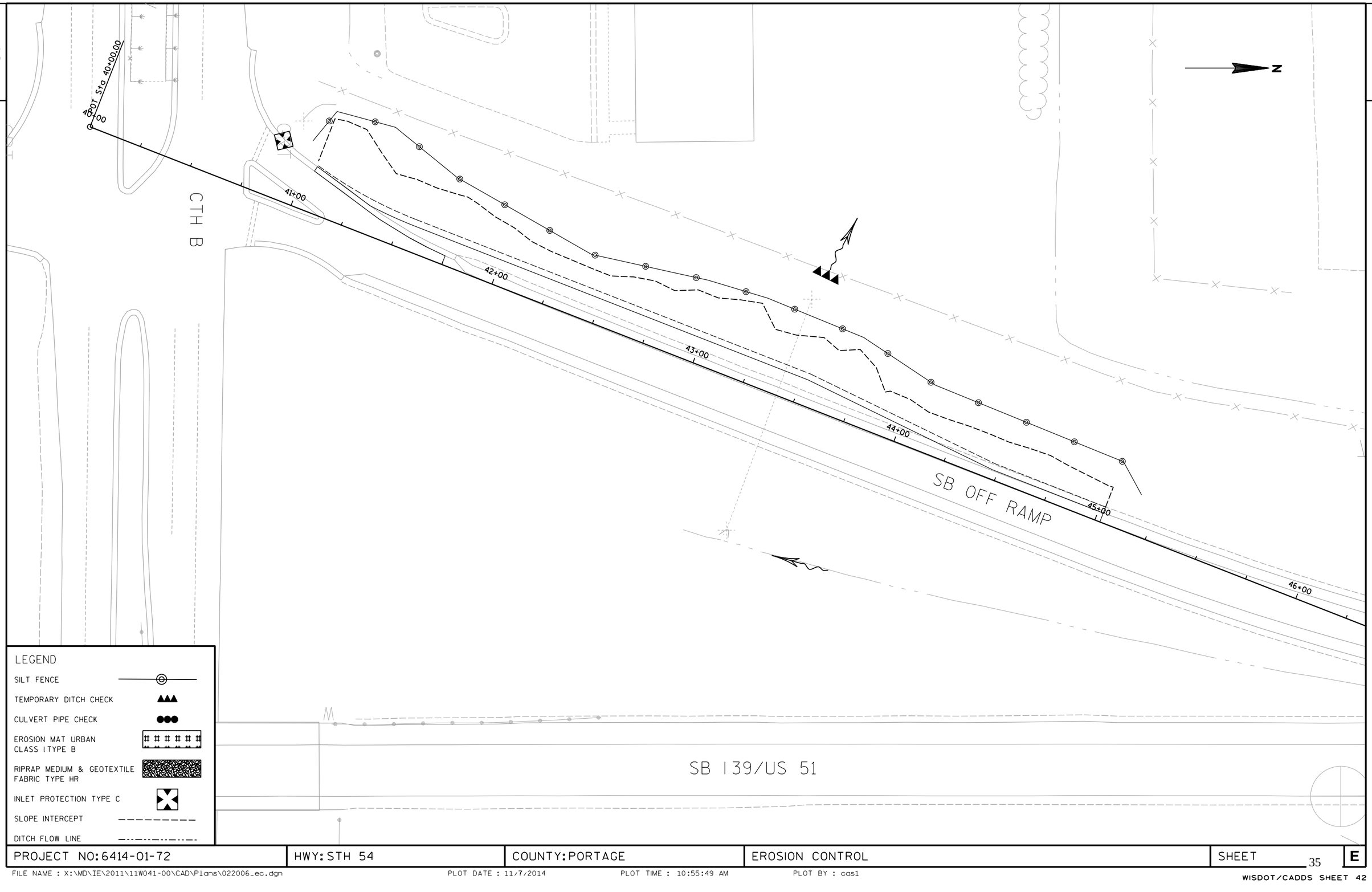
LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 34	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\022005_ec.dgn PLOT DATE : 11/7/2014 PLOT TIME : 10:54:06 AM PLOT BY : cas1

2



LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- EROSION MAT URBAN CLASS I TYPE B
- RIPRAP MEDIUM & GEOTEXTILE FABRIC TYPE HR
- INLET PROTECTION TYPE C
- SLOPE INTERCEPT
- DITCH FLOW LINE

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 35	E

STORM SEWER STRUCTURE SUMMARY

STRUCTURE I.D.	STATION	OFFSET		COVER TYPE	STRUCTURE TYPE	EDGE OF PAVEMENT/RIM ELEVATION	T/O/C ELEVATION	TOP OF STRUCTURE	OUTLET INVERT ELEVATION	DEPTH OF STRUCTURE	COMMENTS
1.00	200+56.98	0.69	RT	J	MANHOLES 8-FT DIAMETER	1076.91	-	1075.83	1067.91	7.92	-
1.01	200+50.64	6.10	LT	H-S	CATCH BASINS 2X3-FT	1076.76	1077.13	1075.89	1071.24	4.64	-
1.02	200+79.17	9.04	LT	H-S	CATCH BASINS 2X3-FT	1076.79	1077.16	1075.92	1071.53	4.38	-
1.03	400+67.00	1.50	RT	H-S	CATCH BASINS 2X3-FT	1076.82	1077.19	1075.95	1071.69	4.25	-
1.04	400+67.00	25.50	LT	H-S	CATCH BASINS 2X3-FT	1076.27	1076.64	1075.40	1072.21	3.18	-
1.05	400+75.00	25.50	LT	H-S	CATCH BASINS 2X3-FT	1076.29	1076.66	1075.42	1072.29	3.13	-
1.06	200+50.79	25.50	RT	H-S	CATCH BASINS 2X3-FT	1077.35	1077.72	1076.48	1073.35	3.13	-
2.01	202+96.58	31.42	RT	J	MANHOLES 6-FT DIAMETER	1078.10	-	1077.02	1069.19	7.83	-
2.02	204+73.00	57.26	RT	MS	INLETS MEDIAN 2 GRATE	1073.76	-	1073.76	1070.76	3.00	-
3.01	203+00.00	25.50	RT	H	CATCH BASINS 2X3-FT	1077.54	1077.91	1076.67	1072.68	3.98	-
3.02	203+02.44	6.80	LT	H	CATCH BASINS 2X3-FT	1077.97	1078.34	1077.10	1073.25	3.85	-
3.03	403+02.47	1.50	RT	H	CATCH BASINS 2X3-FT	1077.87	1078.24	1077.00	1073.32	3.67	-
3.04	403+13.32	19.50	LT	H	CATCH BASINS 2X3-FT	1077.57	1077.94	1076.70	1073.56	3.13	-
5.01	402+30.48	49.81	LT	H-S	CATCH BASINS 2X3-FT	1076.62	1076.99	1075.75	1071.42	4.32	-
6.01	405+87.06	19.50	LT	H-S	CATCH BASINS 2X3-FT	1077.71	1078.08	1076.84	1072.87	3.97	-
6.02	405+87.06	1.50	RT	H-S	CATCH BASINS 2X3-FT	1078.07	1078.44	1077.20	1073.08	4.12	-
6.03	205+82.33	1.50	LT	H-S	CATCH BASINS 2X3-FT	1078.16	1078.53	1077.29	1073.49	3.80	-
6.04	205+82.20	20.07	RT	H-S	CATCH BASINS 2X3-FT	1077.79	1078.16	1076.92	1073.71	3.20	-
6.05	205+90.44	19.91	RT	H-S	CATCH BASINS 2X3-FT	1077.80	1078.17	1076.93	1073.79	3.13	-
6.06	405+95.06	19.50	LT	H-S	CATCH BASINS 2X3-FT	1077.71	1078.08	1076.84	1073.71	3.13	-
8.01	407+39.82	22.16	LT	H	CATCH BASINS 2X3-FT	1079.10	1079.47	1078.23	1073.94	4.28	-
8.02	407+40.00	1.50	RT	H	CATCH BASINS 2X3-FT	1079.32	1079.69	1078.45	1074.40	4.04	-
8.03	407+38.99	12.16	RT	J	MANHOLES 4-FT DIAMETER	1080.70	-	1079.62	1074.62	5.00	-
8.04	5+80.51	25.50	LT	H-S	CATCH BASINS 2X3-FT	1079.50	1079.87	1078.63	1074.99	3.63	-
8.05	5+80.48	1.80	RT	T	CATCH BASINS 2X3-FT	1079.42	1079.69	1078.55	1075.26	3.29	-
8.06	5+88.48	1.80	RT	T	CATCH BASINS 2X3-FT	1079.43	1079.70	1078.56	1075.34	3.22	-
8.07	207+40.00	1.50	LT	H	CATCH BASINS 2X3-FT	1079.31	1079.68	1078.44	1075.11	3.33	-
8.08	207+39.96	22.27	RT	H	CATCH BASINS 2X3-FT	1079.10	1079.47	1078.23	1075.57	2.65	-
9.01	500+41.15	21.68	LT	H	CATCH BASINS 2X3-FT	1080.45	1080.82	1079.58	1074.69	4.88	-
9.02	500+41.97	1.49	RT	H	CATCH BASINS 2X3-FT	1080.65	1081.02	1079.78	1075.70	4.08	-
9.03	300+45.32	1.50	LT	H	CATCH BASINS 2X3-FT	1080.52	1080.89	1079.65	1075.89	3.75	-
9.04	300+47.00	26.49	RT	H	CATCH BASINS 2X3-FT	1080.17	1080.54	1079.30	1076.17	3.13	-
10.01	501+91.65	19.50	LT	H-S	CATCH BASINS 2X3-FT	1078.99	1079.36	1078.12	1074.51	3.61	-
10.02	501+91.65	1.50	RT	H-S	CATCH BASINS 2X3-FT	1079.35	1079.72	1078.48	1074.98	3.49	-
10.03	301+83.45	1.50	LT	H-S	CATCH BASINS 2X3-FT	1079.21	1079.58	1078.34	1075.21	3.13	-
10.04	501+99.65	19.50	LT	H-S	CATCH BASINS 2X3-FT	1079.00	1079.37	1078.13	1075.29	2.84	-
11.01	4006+07.59	22.95	RT	H	MANHOLES 5-FT DIAMETER	1079.25	-	1078.17	1073.77	4.40	-
11.02	4006+09.00	1.50	RT	H	MANHOLES 5-FT DIAMETER	1079.70	-	1078.62	1073.85	4.77	-
11.03	2006+09.85	1.50	LT	H	MANHOLES 5-FT DIAMETER	1080.02	-	1078.94	1073.93	5.01	-
11.04	2006+10.94	19.22	RT	H	MANHOLES 5-FT DIAMETER	1079.83	-	1078.75	1074.00	4.75	-
13.01	5000+43.23	19.50	LT	H	MANHOLES 5-FT DIAMETER	1079.53	-	1078.45	1072.10	6.35	-
13.02	5000+45.15	1.50	RT	H	MANHOLES 5-FT DIAMETER	1079.82	-	1078.74	1072.40	6.34	-
13.03	3000+41.41	1.50	LT	H	MANHOLES 5-FT DIAMETER	1080.04	-	1078.96	1072.66	6.30	-
13.04	3000+44.02	26.65	RT	H	MANHOLES 5-FT DIAMETER	1079.86	-	1078.78	1073.06	5.72	-
14.01	5002+08.50	19.50	LT	H-S	CATCH BASINS 2X3-FT	1077.72	1078.09	1076.85	1073.19	3.65	-
14.02	5002+08.54	1.50	RT	H-S	CATCH BASINS 2X3-FT	1078.09	1078.46	1077.22	1073.40	3.81	-
14.03	3001+95.47	1.50	LT	H-S	CATCH BASINS 2X3-FT	1078.13	1078.50	1077.26	1073.57	3.69	-
14.04	3001+95.43	19.50	RT	H-S	CATCH BASINS 2X3-FT	1077.77	1078.14	1076.90	1073.77	3.13	-
14.05	3001+87.12	19.52	RT	H-S	CATCH BASINS 2X3-FT	1077.77	1078.14	1076.90	1073.85	3.05	-
14.06	5002+00.79	19.50	LT	H-S	CATCH BASINS 2X3-FT	1077.73	1078.10	1076.86	1073.27	3.59	-

2

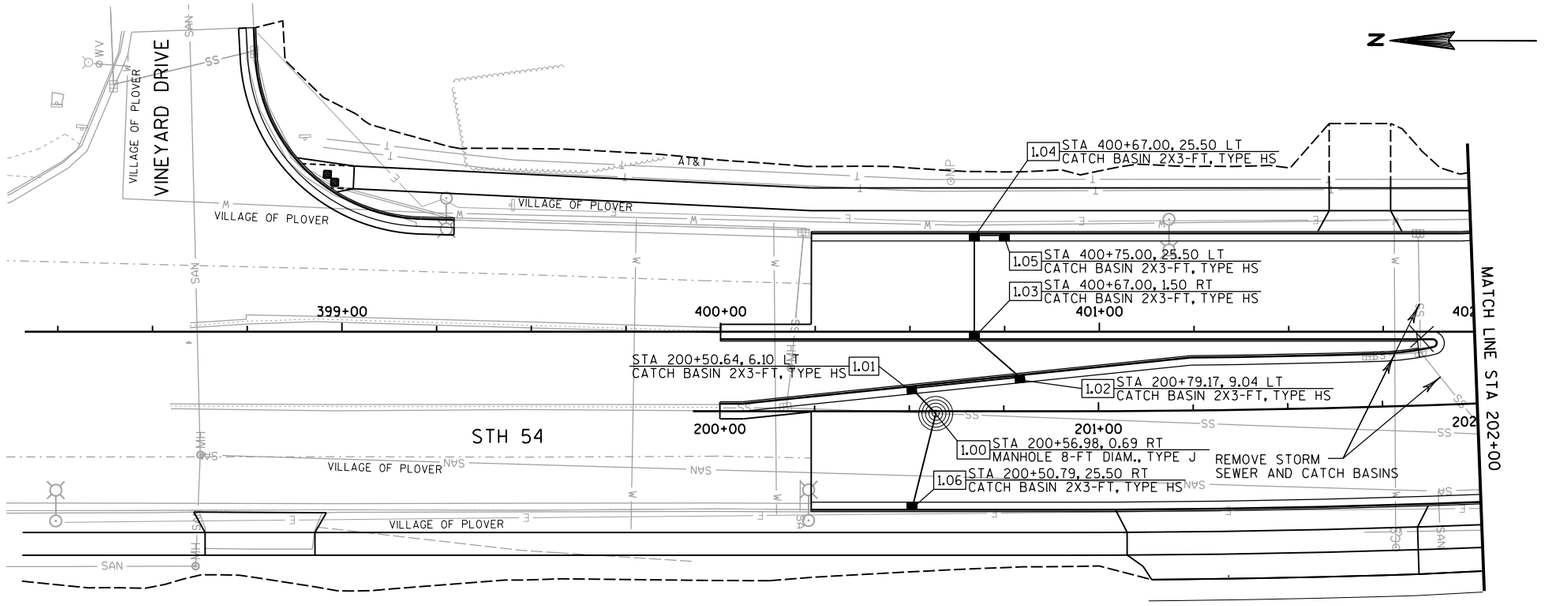
STORM SEWER PIPE SUMMARY

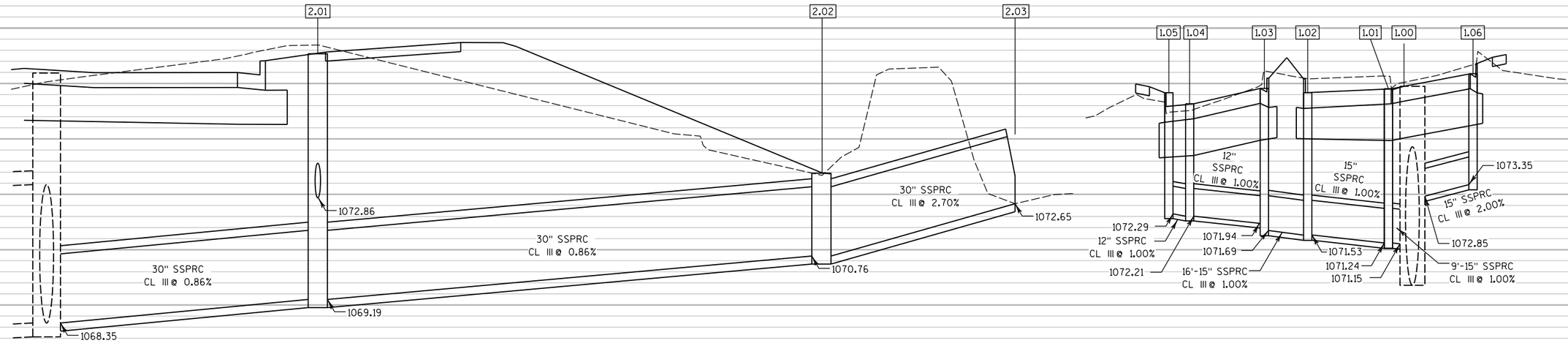
FROM STR	TO STR	LENGTH (ft)	(IN)	SLOPE (%)	DISCHARGE ELEVATION	INLET ELEVATION
1.00	1.01	9	15	1.00%	1071.15	1071.24
1.01	1.02	29	15	1.00%	1071.24	1071.53
1.02	1.03	16	15	1.00%	1071.53	1071.69
1.03	1.04	27	12	1.00%	1071.94	1072.21
1.04	1.05	8	12	1.00%	1072.21	1072.29
1.00	1.06	25	12	2.00%	1072.85	1073.35
EX MH	2.01	98	30	0.86%	1068.35	1069.19
2.01	2.02	182	30	0.86%	1069.19	1070.76
2.02	2.03	70	30	2.70%	1070.76	1072.65
2.01	3.01	7	15	1.00%	1072.61	1072.68
3.01	3.02	32	12	1.00%	1072.93	1073.25
3.02	3.03	7	12	1.00%	1073.25	1073.32
3.03	3.04	24	12	1.00%	1073.32	1073.56
4.00	EX PIPE	22	60	0.50%	1068.62	1068.73
5.00	5.01	71	12	2.00%	1070.00	1071.42
6.00	6.01	47	15	1.00%	1072.40	1072.87
6.01	6.02	21	15	1.00%	1072.87	1073.08
6.02	6.03	16	12	1.00%	1073.08	1073.24
6.03	6.04	22	12	1.00%	1073.49	1073.71
6.04	6.05	8	12	1.00%	1073.71	1073.79
6.01	6.06	8	12	1.00%	1073.63	1073.71
8.00	8.01	47	15	2.00%	1073.00	1073.94
8.01	8.02	23	15	2.00%	1073.94	1074.40
8.02	8.03	11	15	2.00%	1074.40	1074.62
8.03	8.04	12	12	1.00%	1074.87	1074.99
8.04	8.05	27	12	1.00%	1074.99	1075.26
8.05	8.06	8	12	1.00%	1075.26	1075.34
8.03	8.07	12	12	2.00%	1074.87	1075.11
8.07	8.08	23	12	2.00%	1075.11	1075.57

NOTE: LENGTH SHOWN IN TABLE ON PIPE SEGEMENTS INLCUDING ENDWALLS IS FROM CENTER OF STRUCTURE TO END OF ENDWALL

STORM SEWER PIPE SUMMARY

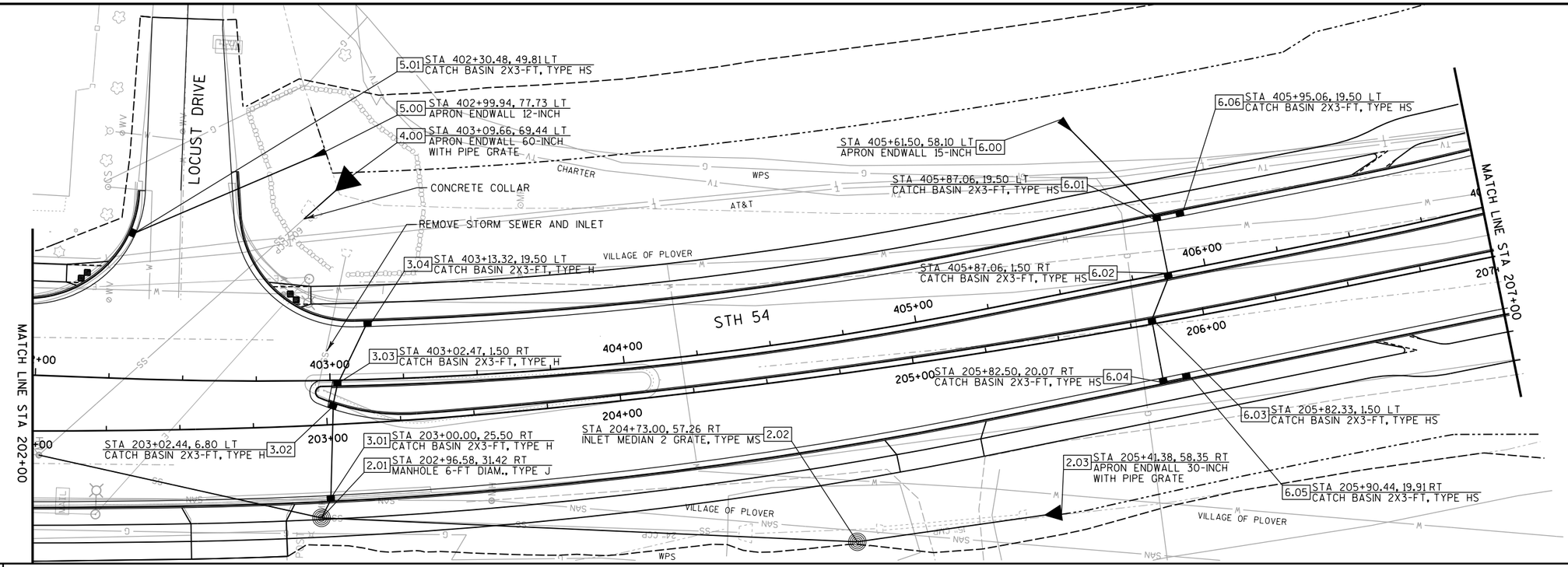
FROM STR	TO STR	LENGTH (ft)	(IN)	SLOPE (%)	DISCHARGE ELEVATION	INLET ELEVATION
9.00	9.01	53	15	2.00%	1073.63	1074.69
9.01	9.02	23	12	1.00%	1075.47	1075.70
9.02	9.03	19	12	1.00%	1075.70	1075.89
9.03	9.04	28	12	1.00%	1075.89	1076.17
10.00	10.01	33	15	1.00%	1074.18	1074.51
10.01	10.02	21	12	1.00%	1074.77	1074.98
10.02	10.03	23	12	1.00%	1074.98	1075.21
10.01	10.04	8	12	1.00%	1074.92	1075.00
11.00	11.01	47	30	0.34%	1173.61	1173.77
11.01	11.02	24	30	0.34%	1173.77	1173.85
11.02	11.03	22	30	0.34%	1173.85	1173.93
11.03	11.04	20	30	0.34%	1173.93	1174.00
11.04	11.05	44	30	0.34%	1174.00	1174.15
13.00	13.01	60	30	1.50%	1071.20	1072.10
13.01	13.02	20	30	1.50%	1072.10	1072.40
13.02	13.03	17	30	1.50%	1072.40	1072.66
13.03	13.04	27	30	1.50%	1072.66	1073.06
13.04	13.05	47	30	1.50%	1073.06	1073.77
14.00	14.01	31	15	1.00%	1072.88	1073.19
14.01	14.02	21	15	1.00%	1073.19	1073.40
14.02	14.03	17	12	1.00%	1073.40	1073.57
14.03	14.04	20	12	1.00%	1073.57	1073.77
14.04	14.05	8	12	1.00%	1073.77	1073.85
14.01	14.06	8	12	1.00%	0.00	0.08

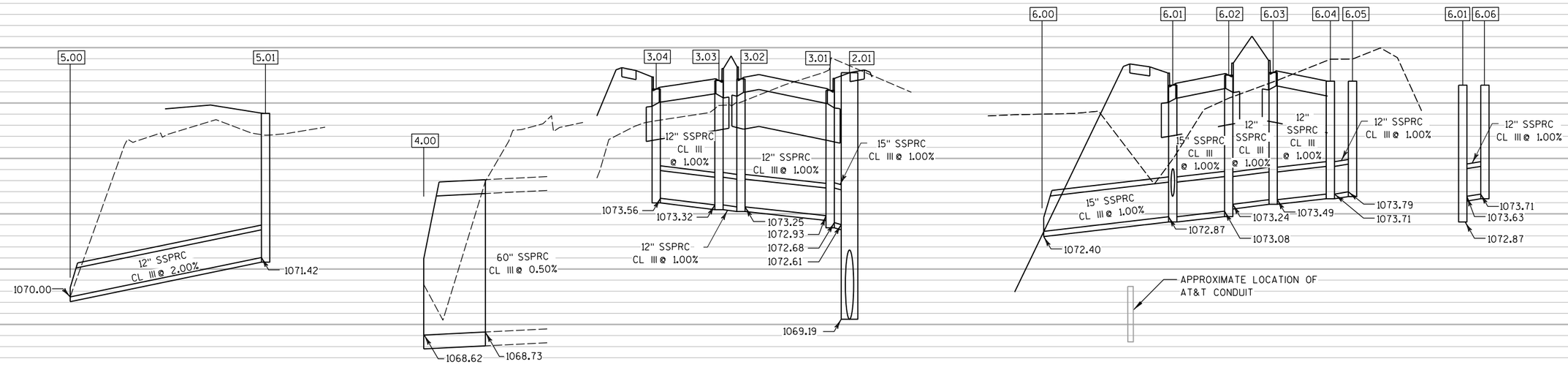




SEE NEXT SHEET FOR 2.01-2.03 PLAN VIEW

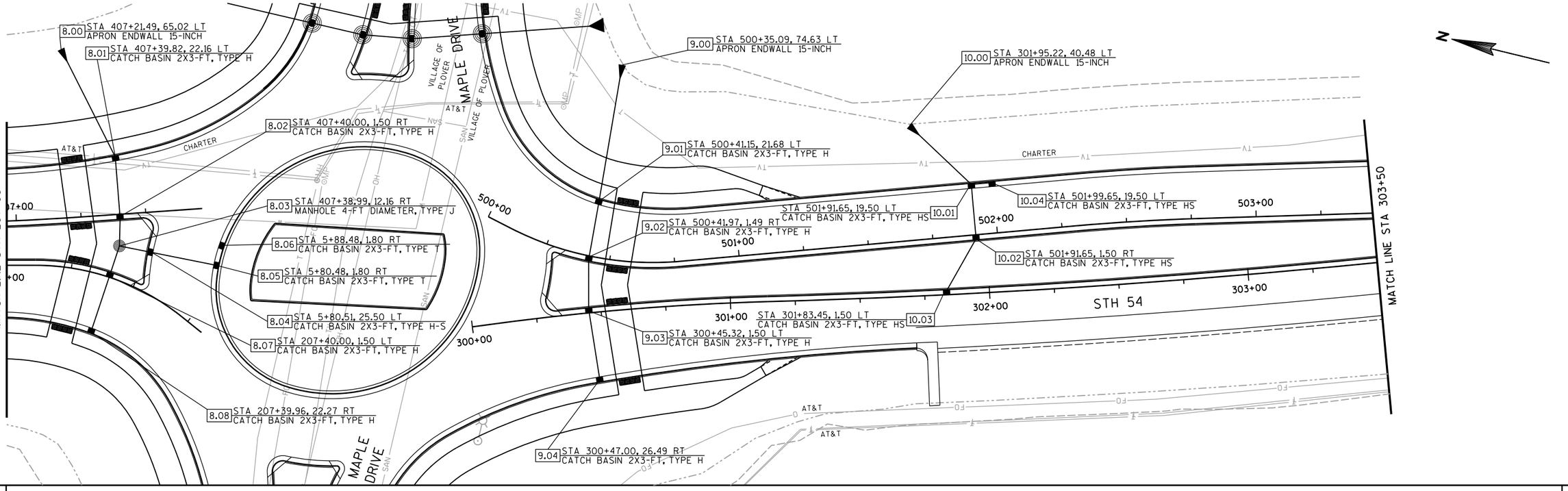
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	STORM SEWER	SHEET 38	E

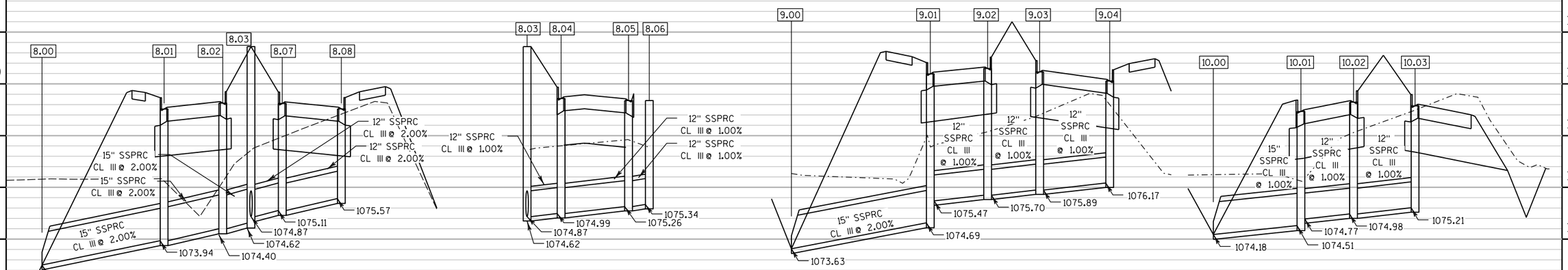




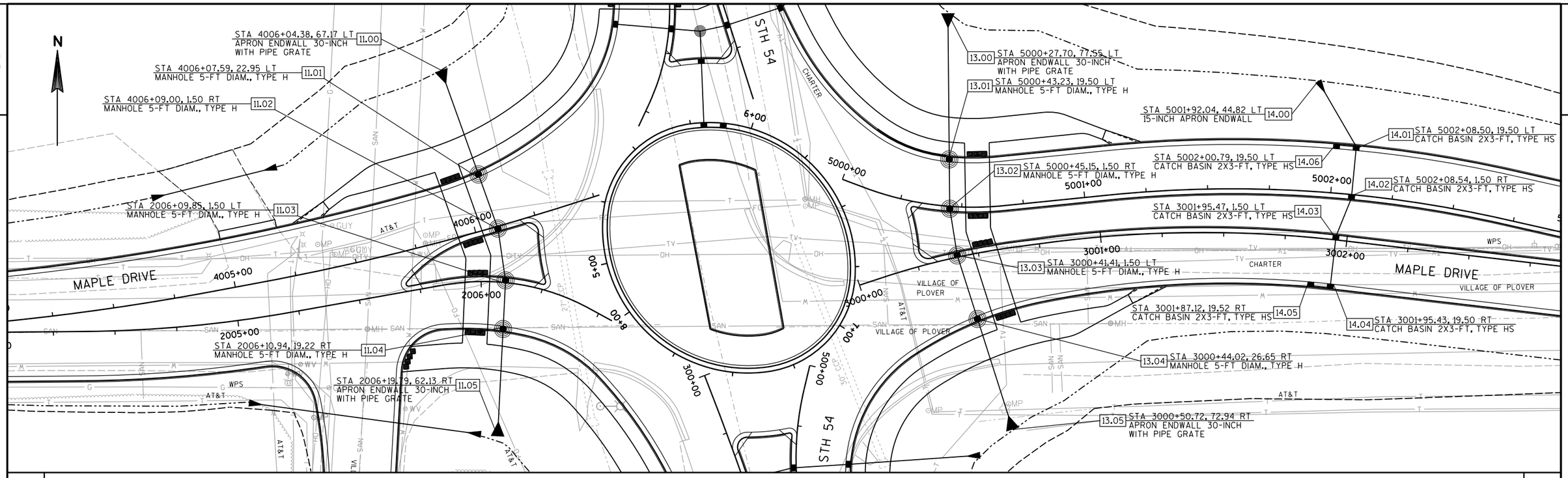
SEE PREVIOUS SHEET FOR 2.01-2.03 PROFILE

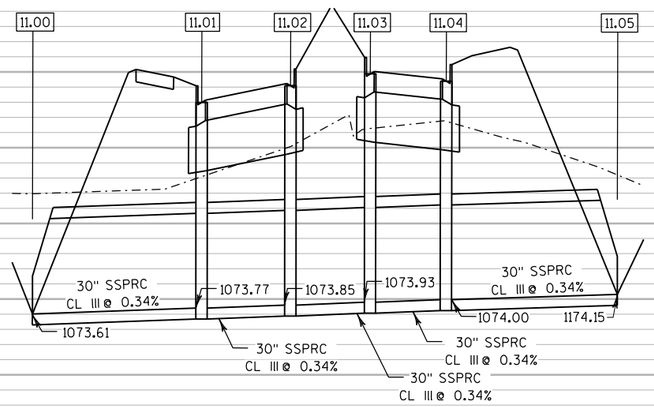
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	STORM SEWER	SHEET 39	E

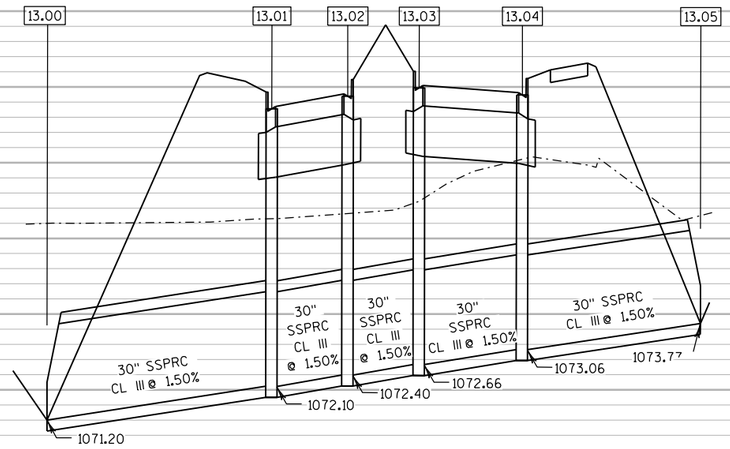


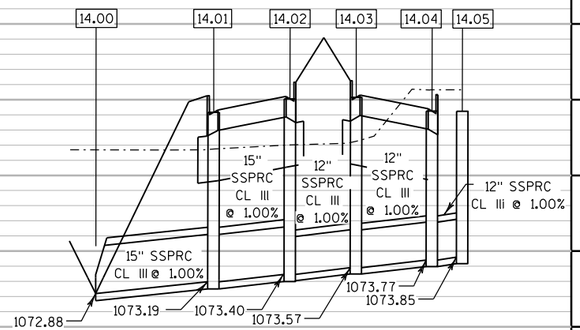


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	STORM SEWER	SHEET 40	E

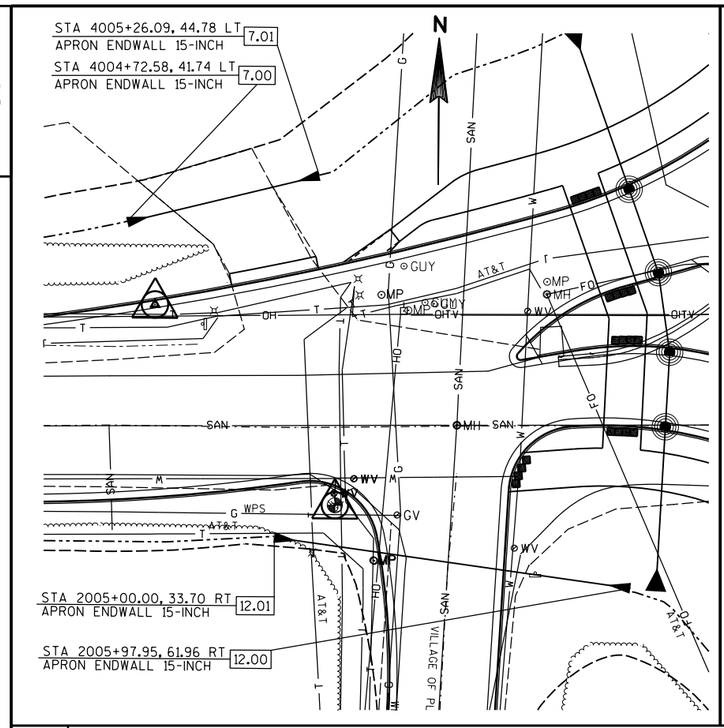


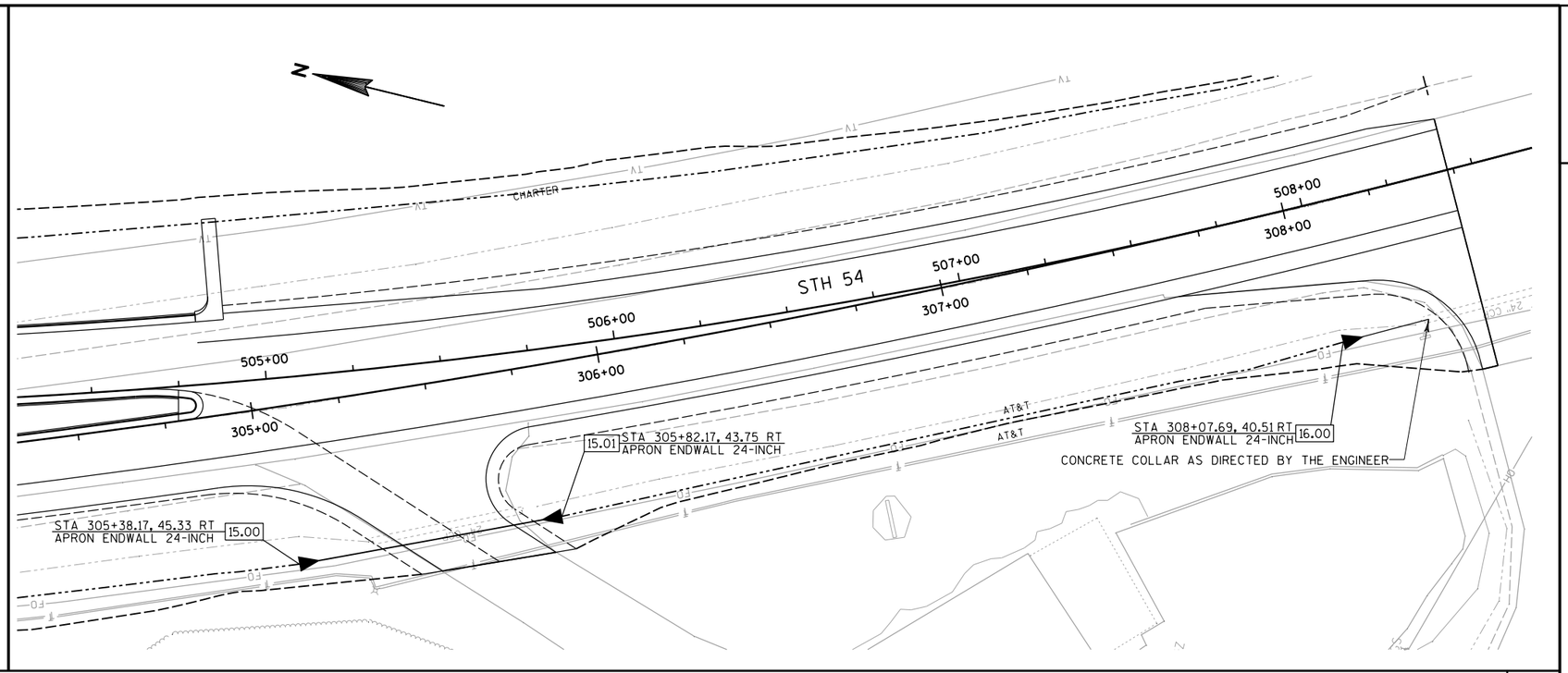


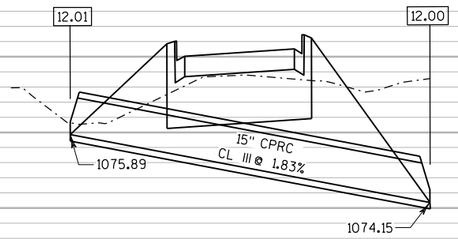


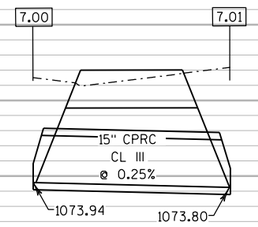


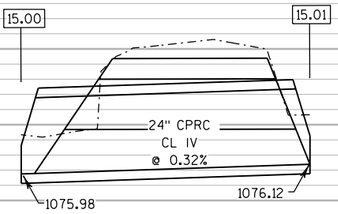
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	STORM SEWER	SHEET 41	E

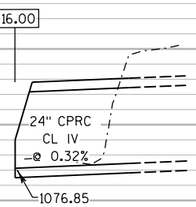












PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CULVERT PIPES	SHEET 42	E

2

NB 139/US 51

N

NB OFF RAMP

32+00

33+00

34+00

35+00

36+00

EXTEND 8'- 24" SSPRC CL III
APRON ENDWALL 24-INCH

CTH B

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CULVERT PIPES	SHEET 43	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\022506_ss.dgn PLOT DATE : 11/7/2014 PLOT TIME : 1:10:09 PM PLOT BY : cas1

2

N

STA 3001+38, 91'LT
MAINTAIN 2.5'MIN SEPARATION (TYP)

STA 3002+46, 80'LT

STA 3001+37, 43'LT
SANITARY CLEANOUT

STA 3002+50, 42'LT
SANITARY CLEANOUT

PROPOSED ROW

STA 3002+57, 40'RT

STA 3002+69, 39'RT

STA 3001+66, 47'RT

STA 3001+33, 47'RT

EXIST ROW

TLE

STA 3001+67, 70'RT

STA 3002+71, 58'RT

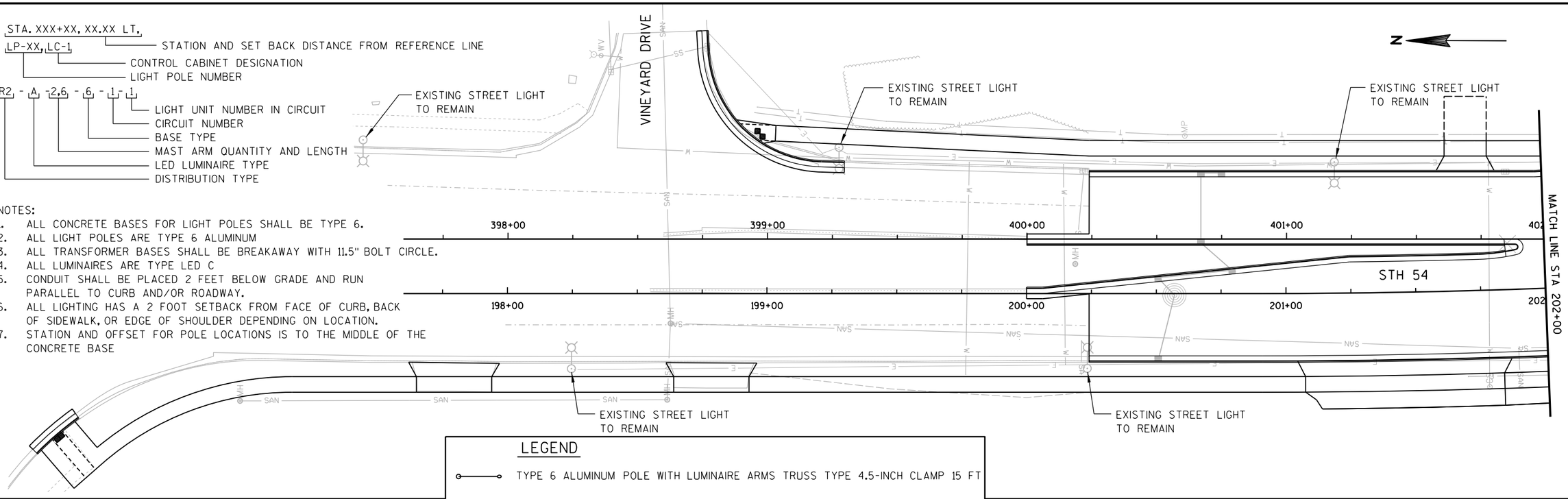
SEE PROJECT 6414-01-73 FOR SANITARY SEWER & WATER MAIN INFORMATION

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	UTILITY PLAN - SANITARY LATERALS	SHEET 44	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\023001_up.dgn PLOT DATE : 10/26/2014 PLOT TIME : 8:10:49 PM PLOT BY : clm1

STA. XXX+XX, XX.XX LT, — STATION AND SET BACK DISTANCE FROM REFERENCE LINE
LP-XX, LC-1 — CONTROL CABINET DESIGNATION
LIGHT POLE NUMBER
R2 - A - 2.6 - 6 - 1 - 1
LIGHT UNIT NUMBER IN CIRCUIT
CIRCUIT NUMBER
BASE TYPE
MAST ARM QUANTITY AND LENGTH
LED LUMINAIRE TYPE
DISTRIBUTION TYPE

NOTES:
1. ALL CONCRETE BASES FOR LIGHT POLES SHALL BE TYPE 6.
2. ALL LIGHT POLES ARE TYPE 6 ALUMINUM
3. ALL TRANSFORMER BASES SHALL BE BREAKAWAY WITH 11.5" BOLT CIRCLE.
4. ALL LUMINAIRES ARE TYPE LED C
5. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
6. ALL LIGHTING HAS A 2 FOOT SETBACK FROM FACE OF CURB, BACK OF SIDEWALK, OR EDGE OF SHOULDER DEPENDING ON LOCATION.
7. STATION AND OFFSET FOR POLE LOCATIONS IS TO THE MIDDLE OF THE CONCRETE BASE



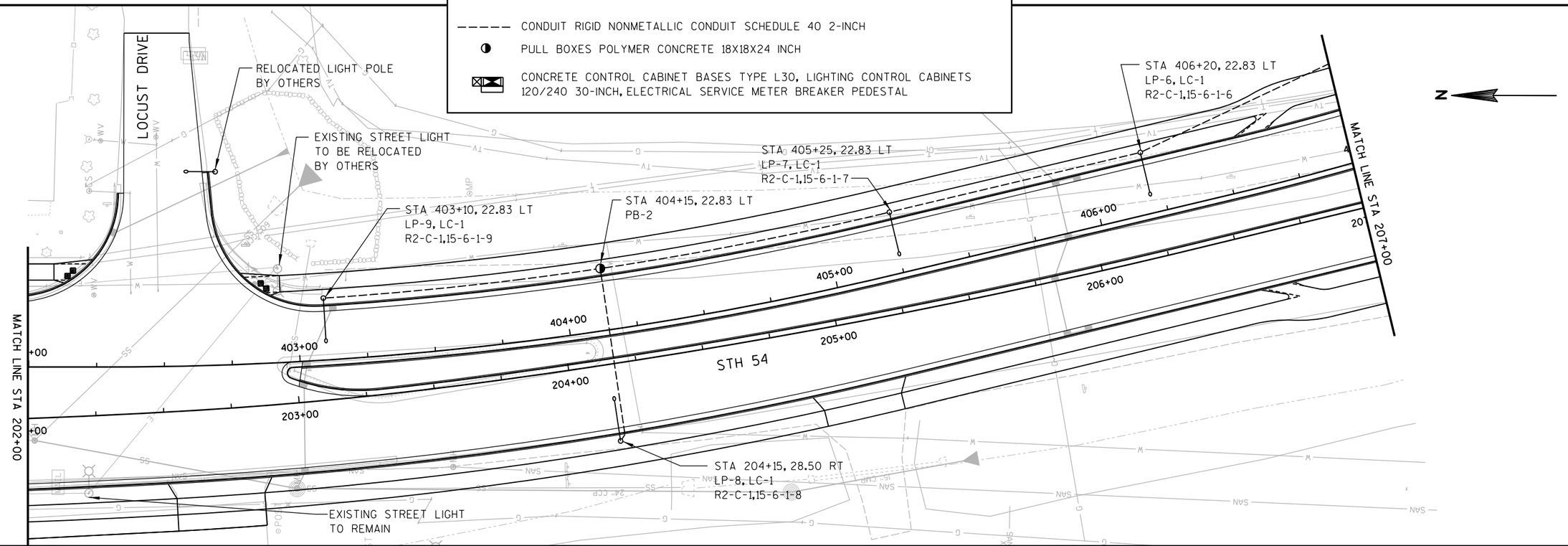
LEGEND

TYPE 6 ALUMINUM POLE WITH LUMINAIRE ARMS TRUSS TYPE 4.5-INCH CLAMP 15 FT

CONDUIT RIGID NONMETALLIC CONDUIT SCHEDULE 40 2-INCH

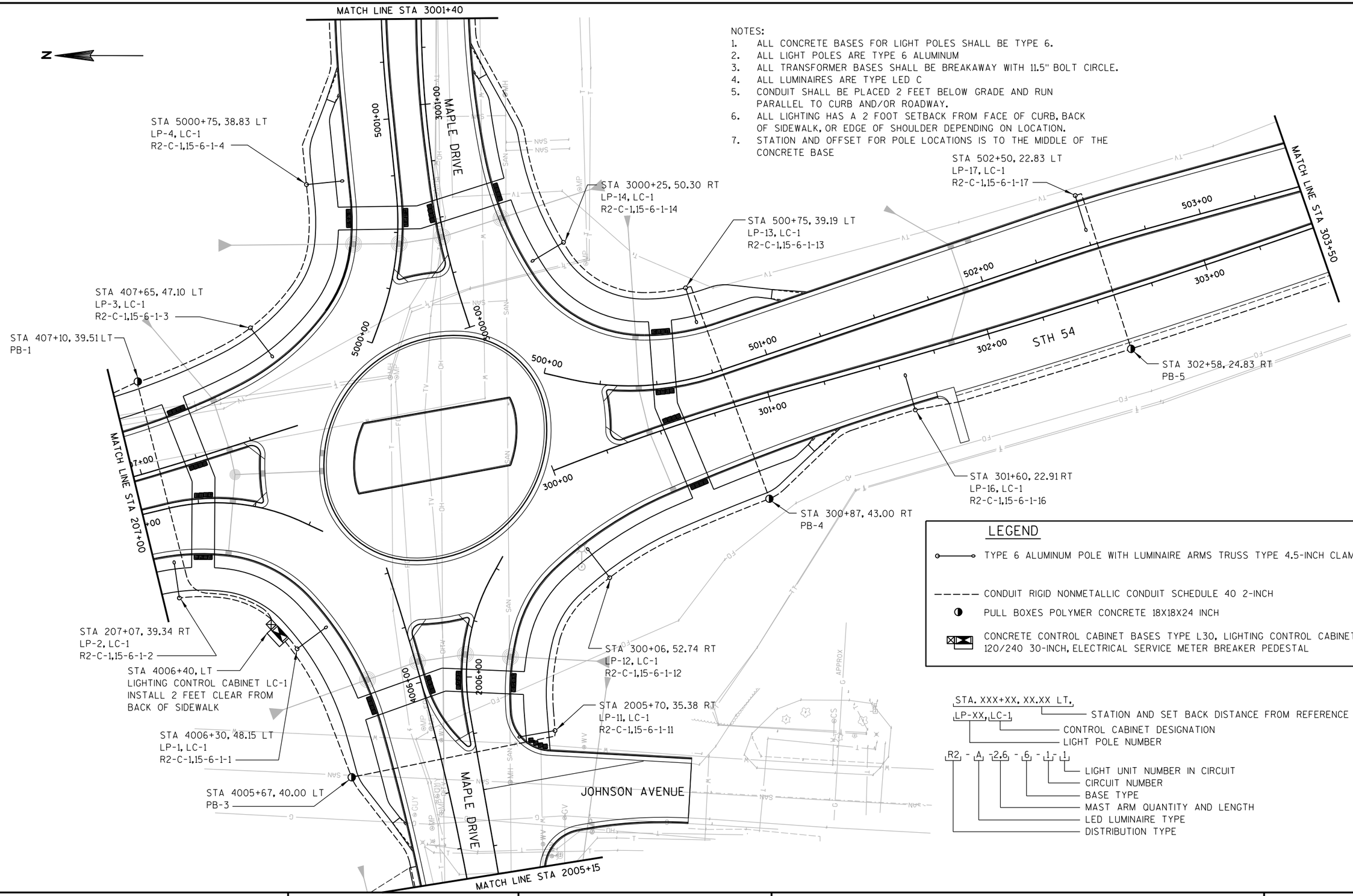
PULL BOXES POLYMER CONCRETE 18X18X24 INCH

CONCRETE CONTROL CABINET BASES TYPE L30, LIGHTING CONTROL CABINETS 120/240 30-INCH, ELECTRICAL SERVICE METER BREAKER PEDESTAL



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN	SHEET 45	E

2



NOTES:

1. ALL CONCRETE BASES FOR LIGHT POLES SHALL BE TYPE 6.
2. ALL LIGHT POLES ARE TYPE 6 ALUMINUM
3. ALL TRANSFORMER BASES SHALL BE BREAKAWAY WITH 11.5" BOLT CIRCLE.
4. ALL LUMINAIRES ARE TYPE LED C
5. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
6. ALL LIGHTING HAS A 2 FOOT SETBACK FROM FACE OF CURB, BACK OF SIDEWALK, OR EDGE OF SHOULDER DEPENDING ON LOCATION.
7. STATION AND OFFSET FOR POLE LOCATIONS IS TO THE MIDDLE OF THE CONCRETE BASE

LEGEND

- TYPE 6 ALUMINUM POLE WITH LUMINAIRE ARMS TRUSS TYPE 4.5-INCH CLAMP 15 FT
- CONDUIT RIGID NONMETALLIC CONDUIT SCHEDULE 40 2-INCH
- PULL BOXES POLYMER CONCRETE 18X18X24 INCH
- CONCRETE CONTROL CABINET BASES TYPE L30, LIGHTING CONTROL CABINETS 120/240 30-INCH, ELECTRICAL SERVICE METER BREAKER PEDESTAL

STA. XXX+XX, XX.XX LT,
- STATION AND SET BACK DISTANCE FROM REFERENCE LINE

LP-XX, LC-1
- CONTROL CABINET DESIGNATION
- LIGHT POLE NUMBER

R2 - A - 2.6 - 6 - 1 - 1
- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT NUMBER
- BASE TYPE
- MAST ARM QUANTITY AND LENGTH
- LED LUMINAIRE TYPE
- DISTRIBUTION TYPE

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	LIGHITNG PLAN	SHEET 46	E

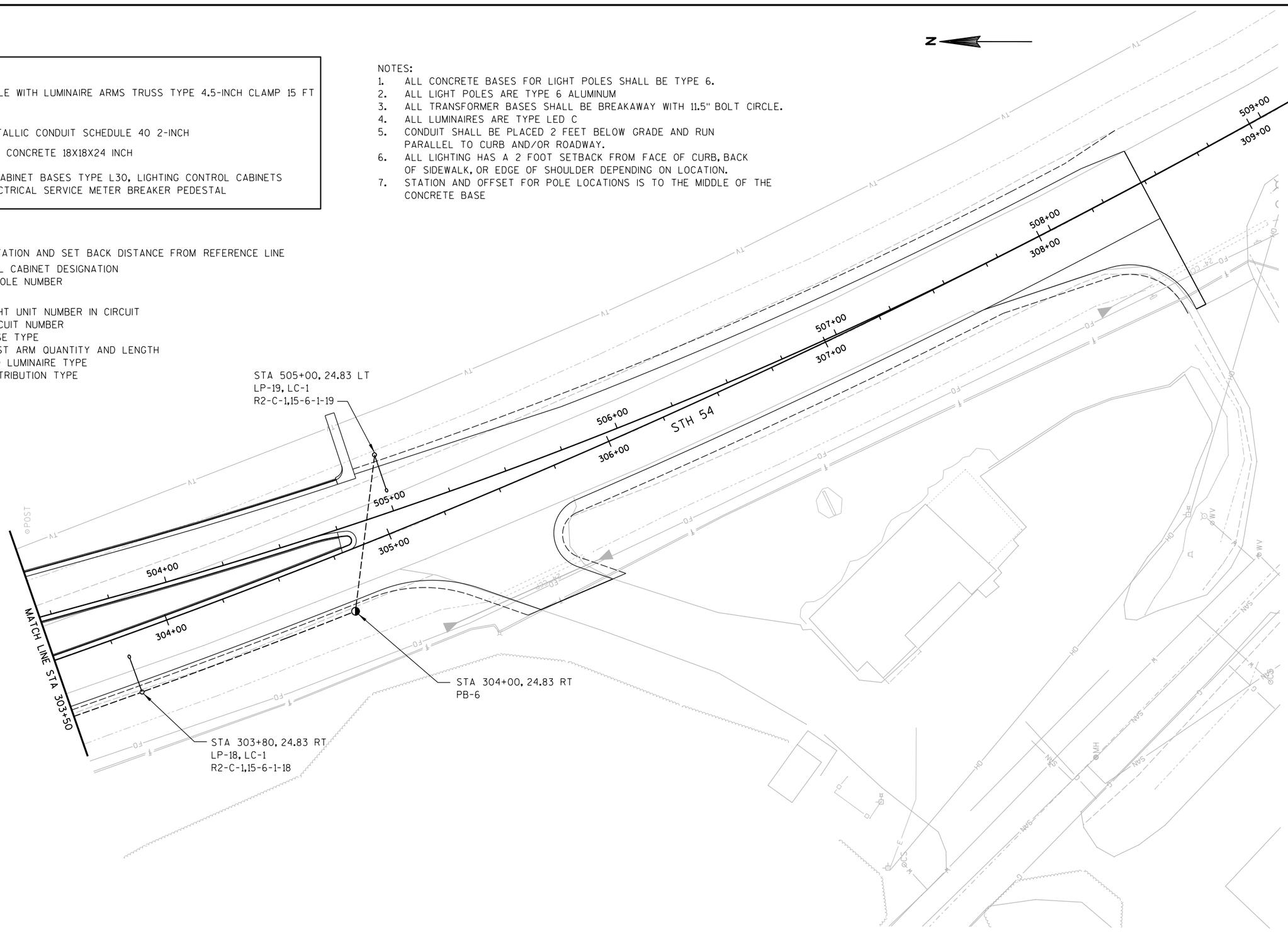
LEGEND

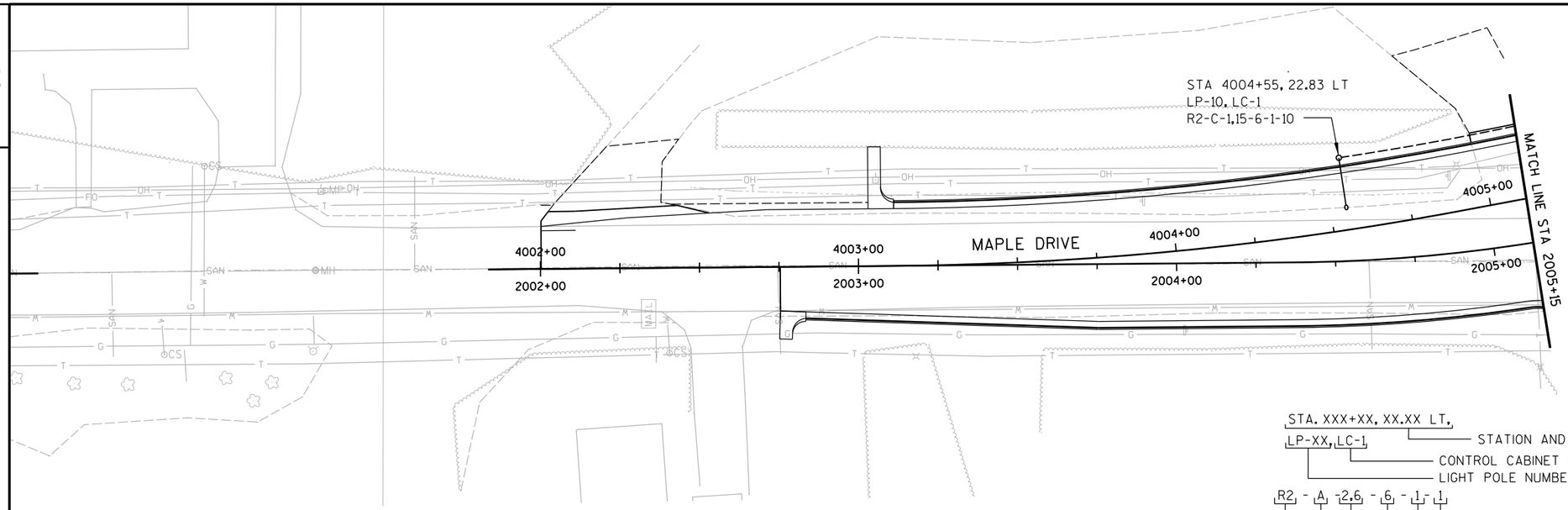
- TYPE 6 ALUMINUM POLE WITH LUMINAIRE ARMS TRUSS TYPE 4.5-INCH CLAMP 15 FT
- CONDUIT RIGID NONMETALLIC CONDUIT SCHEDULE 40 2-INCH
- PULL BOXES POLYMER CONCRETE 18X18X24 INCH
- CONCRETE CONTROL CABINET BASES TYPE L30, LIGHTING CONTROL CABINETS 120/240 30-INCH, ELECTRICAL SERVICE METER BREAKER PEDESTAL

NOTES:
1. ALL CONCRETE BASES FOR LIGHT POLES SHALL BE TYPE 6.
2. ALL LIGHT POLES ARE TYPE 6 ALUMINUM
3. ALL TRANSFORMER BASES SHALL BE BREAKAWAY WITH 11.5" BOLT CIRCLE.
4. ALL LUMINAIRES ARE TYPE LED C
5. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
6. ALL LIGHTING HAS A 2 FOOT SETBACK FROM FACE OF CURB, BACK OF SIDEWALK, OR EDGE OF SHOULDER DEPENDING ON LOCATION.
7. STATION AND OFFSET FOR POLE LOCATIONS IS TO THE MIDDLE OF THE CONCRETE BASE

STA. XXX+XX. XX.XX LT.
LP-XX, LC-1
- STATION AND SET BACK DISTANCE FROM REFERENCE LINE
- CONTROL CABINET DESIGNATION
- LIGHT POLE NUMBER

R2 - A - 2.6 - 6 - 1 - 1
- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT NUMBER
- BASE TYPE
- MAST ARM QUANTITY AND LENGTH
- LED LUMINAIRE TYPE
- DISTRIBUTION TYPE





STA. XXX+XX, XX.XX LT,
STATION AND SET BACK DISTANCE FROM REFERENCE LINE

LP-XX, LC-1
CONTROL CABINET DESIGNATION
LIGHT POLE NUMBER

R2 - A - 2.6 - 6 - 1 - 1
LIGHT UNIT NUMBER IN CIRCUIT
CIRCUIT NUMBER
BASE TYPE
MAST ARM QUANTITY AND LENGTH
LED LUMINAIRE TYPE
DISTRIBUTION TYPE

LEGEND

- TYPE 6 ALUMINUN POLE WITH LUMINAIRE ARMS TRUSS TYPE 4.5-INCH CLAMP 15 FT
- CONDUIT RIGID NONMETALLIC CONDUIT SCHEDULE 40 2-INCH
- PULL BOXES POLYMER CONCRETE 18X18X24 INCH
- CONCRETE CONTROL CABINET BASES TYPE L30, LIGHTING CONTROL CABINETS 120/240 30-INCH, ELECTRICAL SERVICE METER BREAKER PEDESTAL

NOTES:
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3. ALL TRANSFORMER BASES SHALL BE BREAKAWAY WITH 11.5" BOLT CIRCLE.
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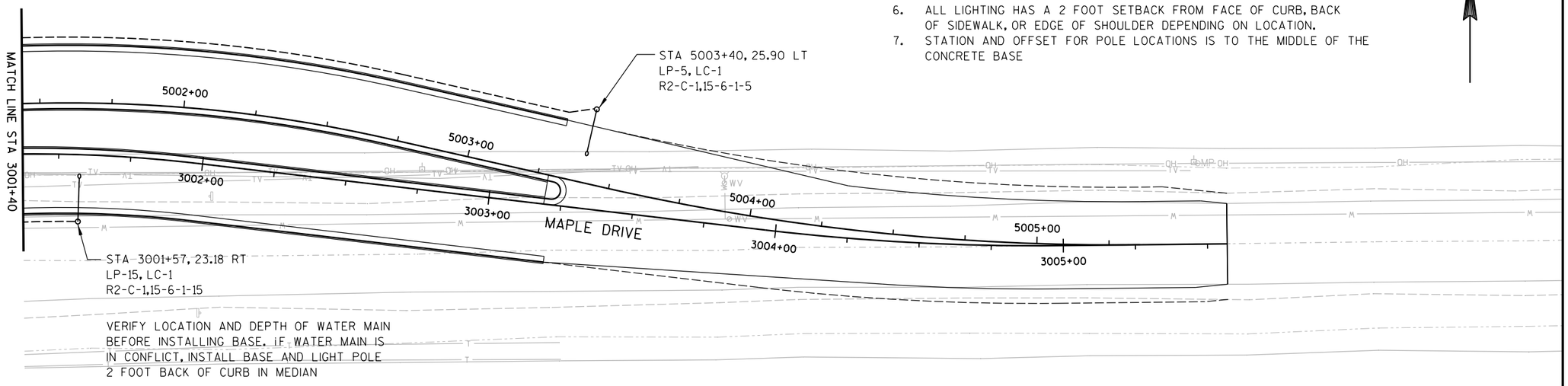
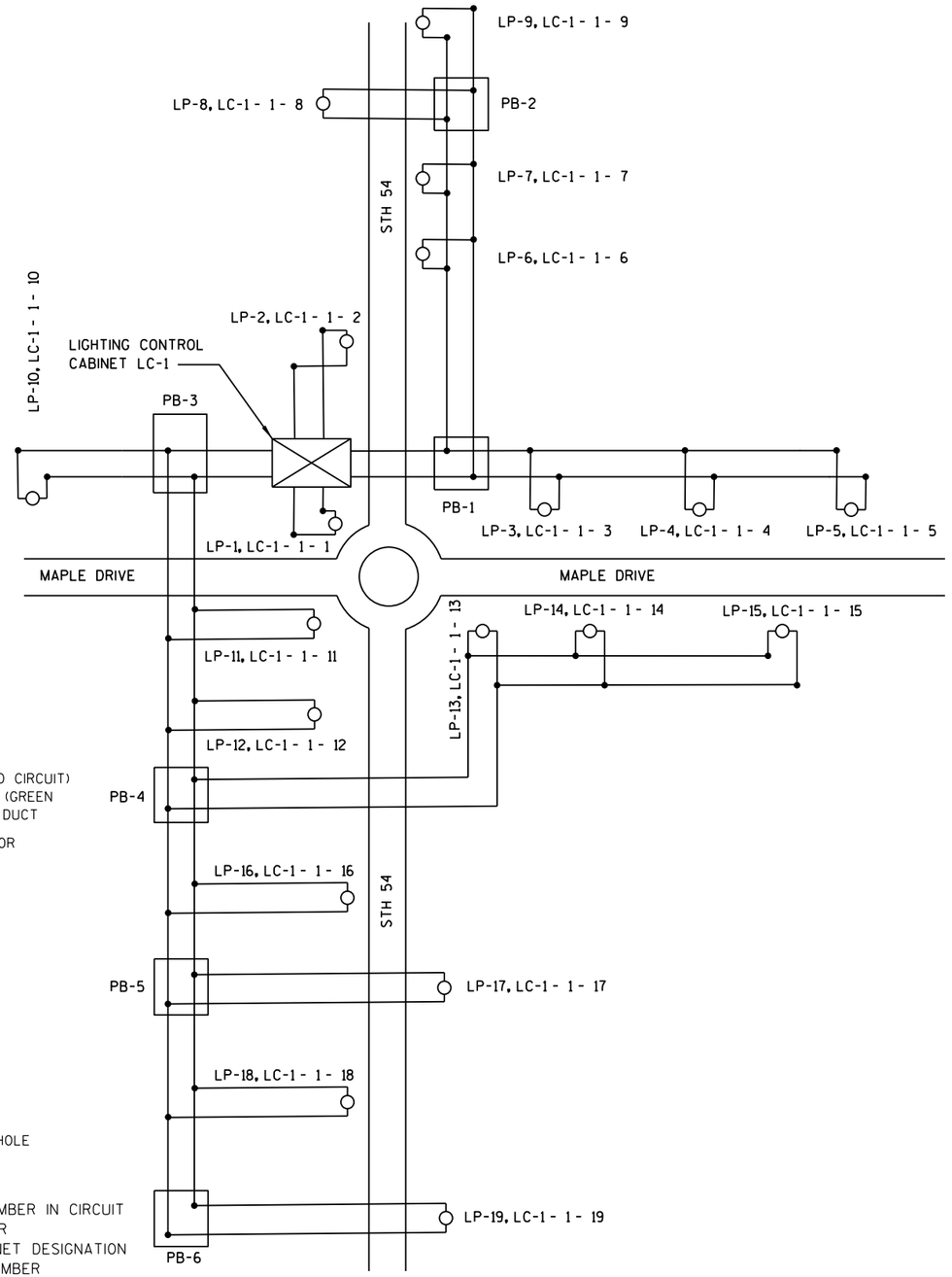
7. STATION AND OFFSET FOR POLE LOCATIONS IS TO THE MIDDLE OF THE CONCRETE BASE



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN	SHEET 48	E



NOTES:

1. PROVIDE 2 #8 (UNDERGROUND CIRCUIT) AND 1 #8 EQUIPMENT GROUND (GREEN COLOR INSULATION) IN 2-INCH DUCT
2. EQUIPMENT GROUND CONDUCTOR NOT SHOWN IN DIAGRAM

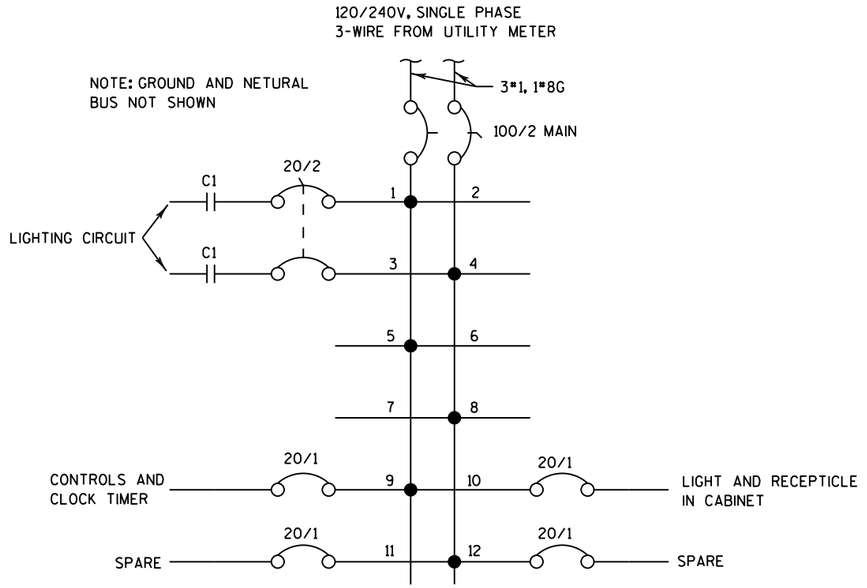
LEGEND

- ○ LUMINAIRE
- — CONDUCTOR-IN-DUCT (C-N-D)
- • JUNCTION IN POLE BASE OR HANDHOLE

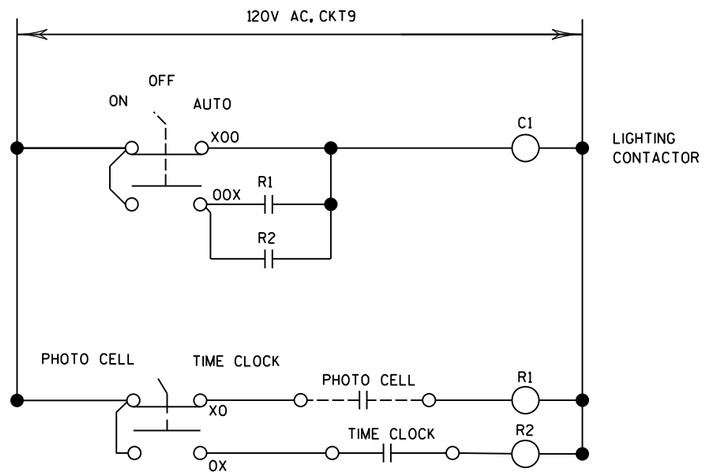
LP-1, LC-1 - 1 - 5
- 5 — LIGHT UNIT NUMBER IN CIRCUIT
- 1 — CIRCUIT NUMBER
- LC-1 — CONTROL CABINET DESIGNATION
- LP-1 — LIGHT POLE NUMBER

LIGHTING CIRCUIT DIAGRAM

NOT TO SCALE



LIGHTING CABINET PANELBOARD



CONTROL DIAGRAM

NOT TO SCALE

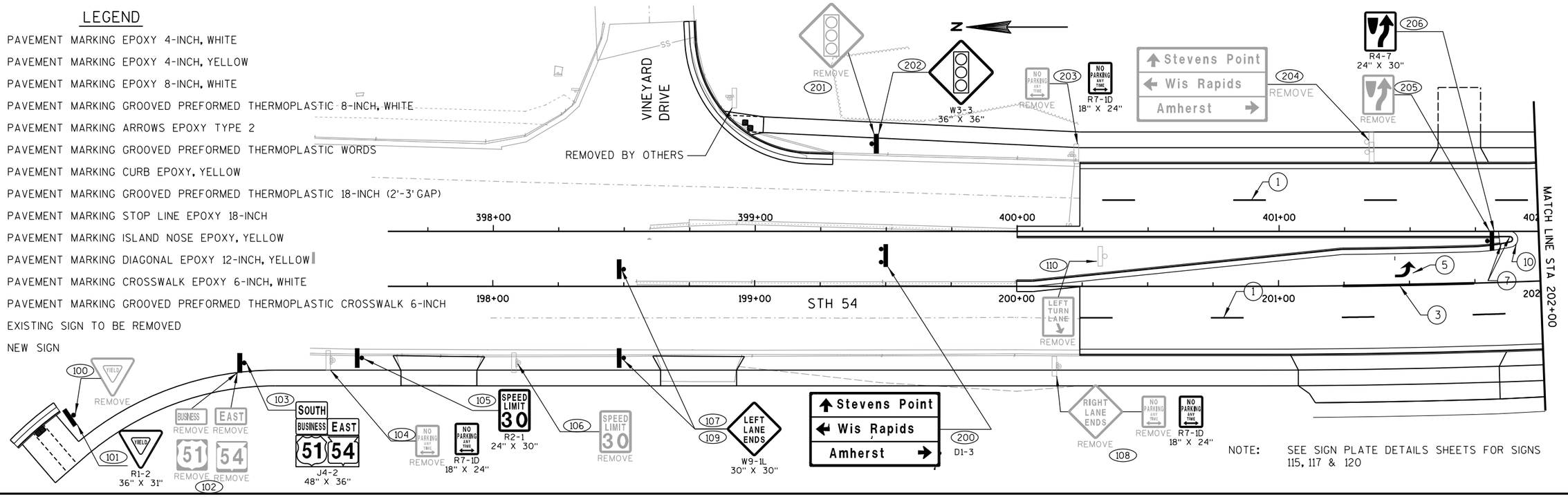
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN LIGHTING PLAN	SHEET 49	E

LEGEND

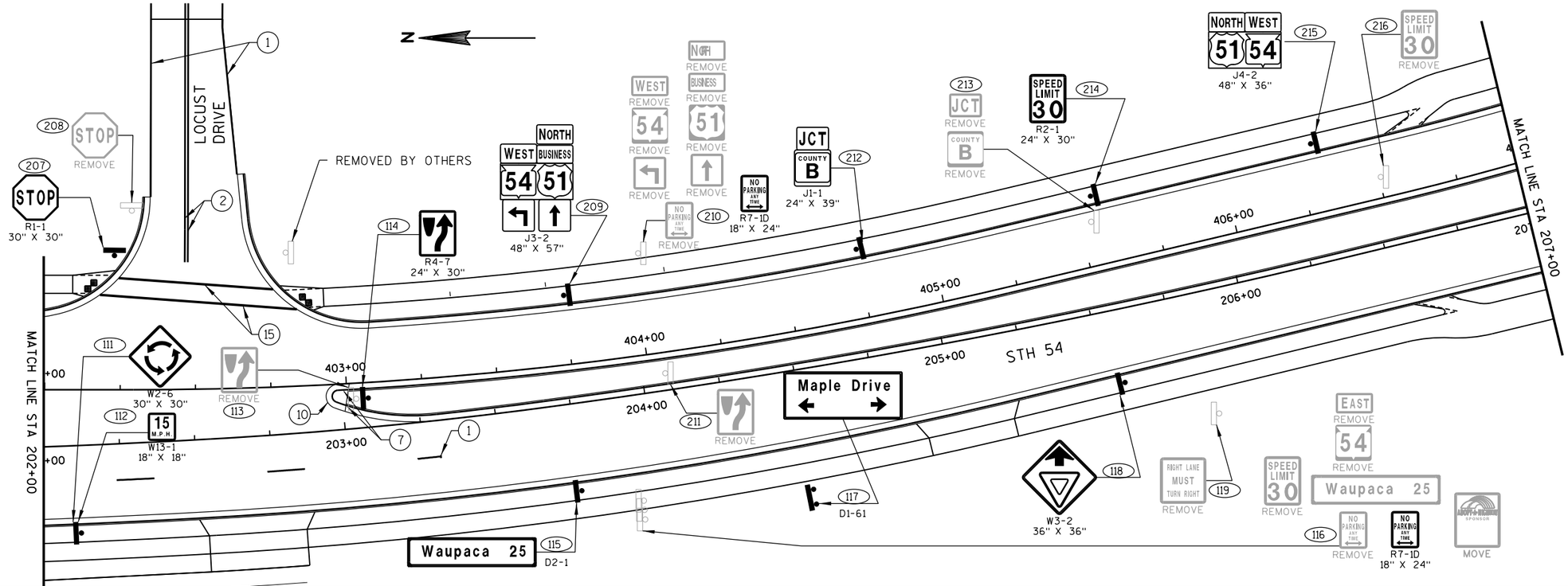
1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 8-INCH, WHITE
4. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, WHITE
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
7. PAVEMENT MARKING CURB EPOXY, YELLOW
8. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH (2'-3' GAP)
9. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
10. PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW
11. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH, WHITE
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH

EXISTING SIGN TO BE REMOVED

NEW SIGN

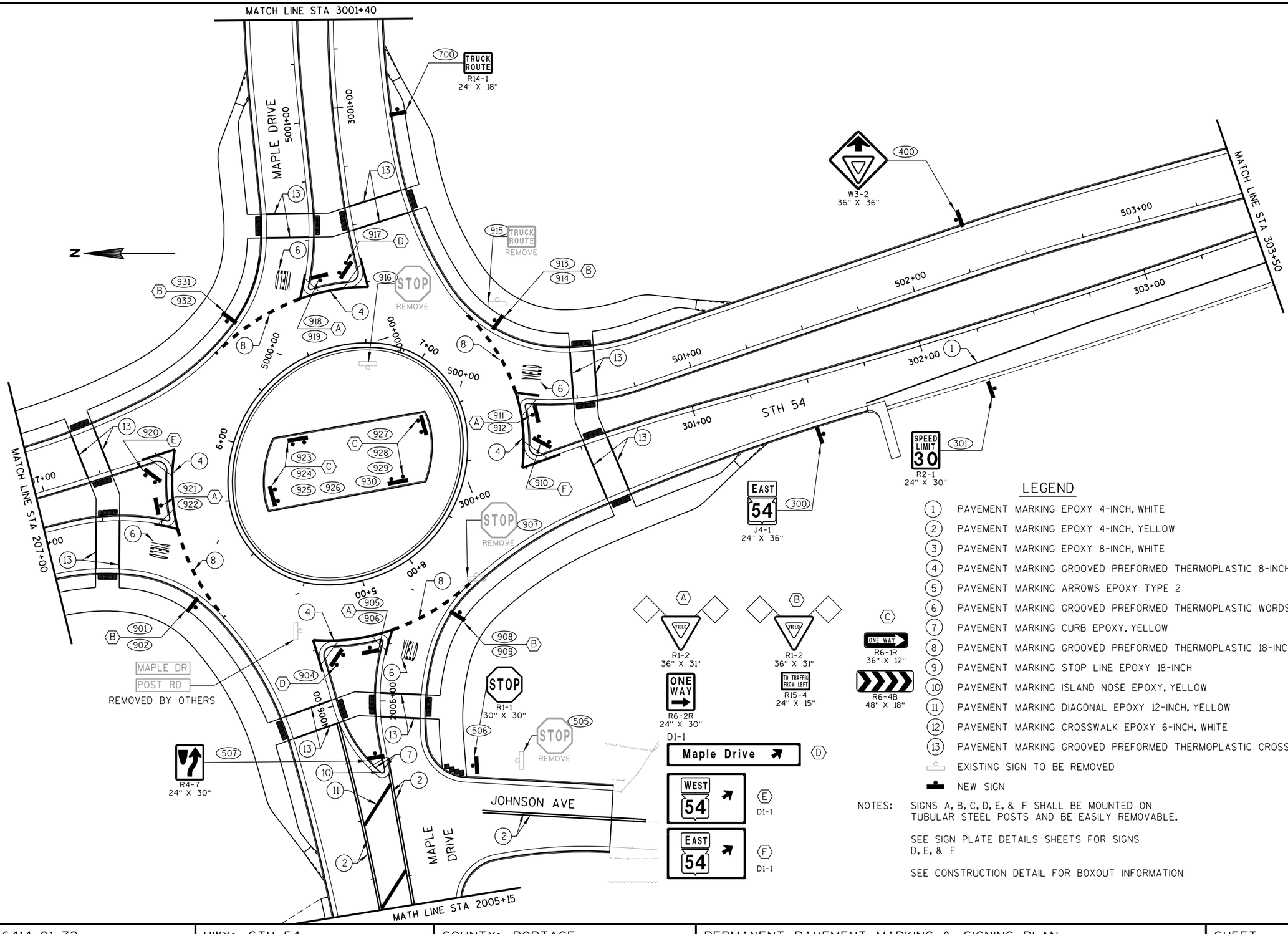


NOTE: SEE SIGN PLATE DETAILS SHEETS FOR SIGNS 115, 117 & 120



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 50	E

2



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 8-INCH, WHITE
4. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, WHITE
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
7. PAVEMENT MARKING CURB EPOXY, YELLOW
8. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH (2'-3' GAP)
9. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
10. PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW
11. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH, WHITE
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH

EXISTING SIGN TO BE REMOVED

NEW SIGN

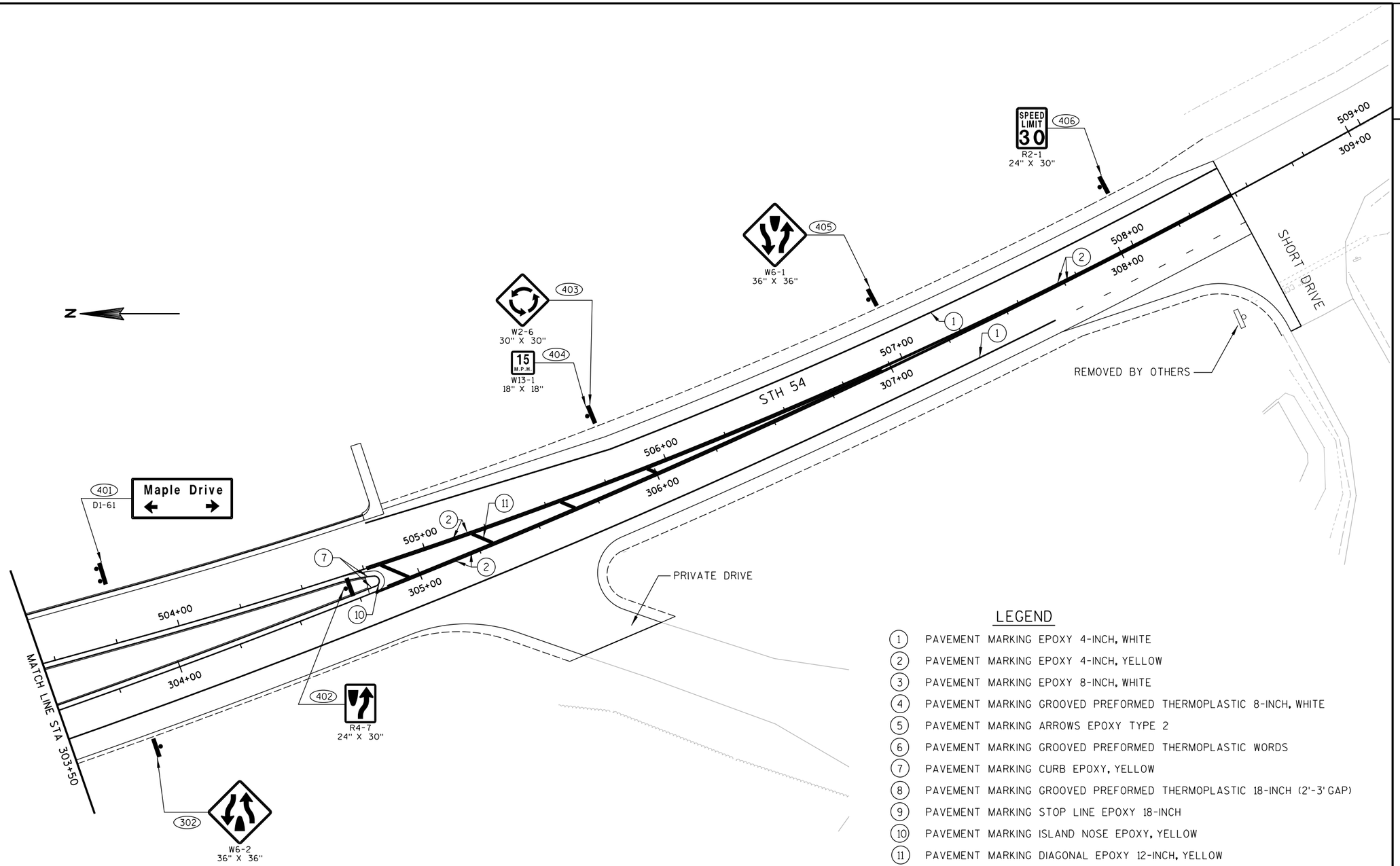
NOTES: SIGNS A, B, C, D, E, & F SHALL BE MOUNTED ON TUBULAR STEEL POSTS AND BE EASILY REMOVABLE.

SEE SIGN PLATE DETAILS SHEETS FOR SIGNS D, E, & F

SEE CONSTRUCTION DETAIL FOR BOXOUT INFORMATION

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 51	E

2



NOTE: SEE SIGN PLATE DETAILS SHEETS FOR SIGN 401

LEGEND

- (1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
- (2) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
- (3) PAVEMENT MARKING EPOXY 8-INCH, WHITE
- (4) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, WHITE
- (5) PAVEMENT MARKING ARROWS EPOXY TYPE 2
- (6) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
- (7) PAVEMENT MARKING CURB EPOXY, YELLOW
- (8) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH (2'-3' GAP)
- (9) PAVEMENT MARKING STOP LINE EPOXY 18-INCH
- (10) PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW
- (11) PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
- (12) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH, WHITE
- (13) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
- EXISTING SIGN TO BE REMOVED
- NEW SIGN

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 52	E

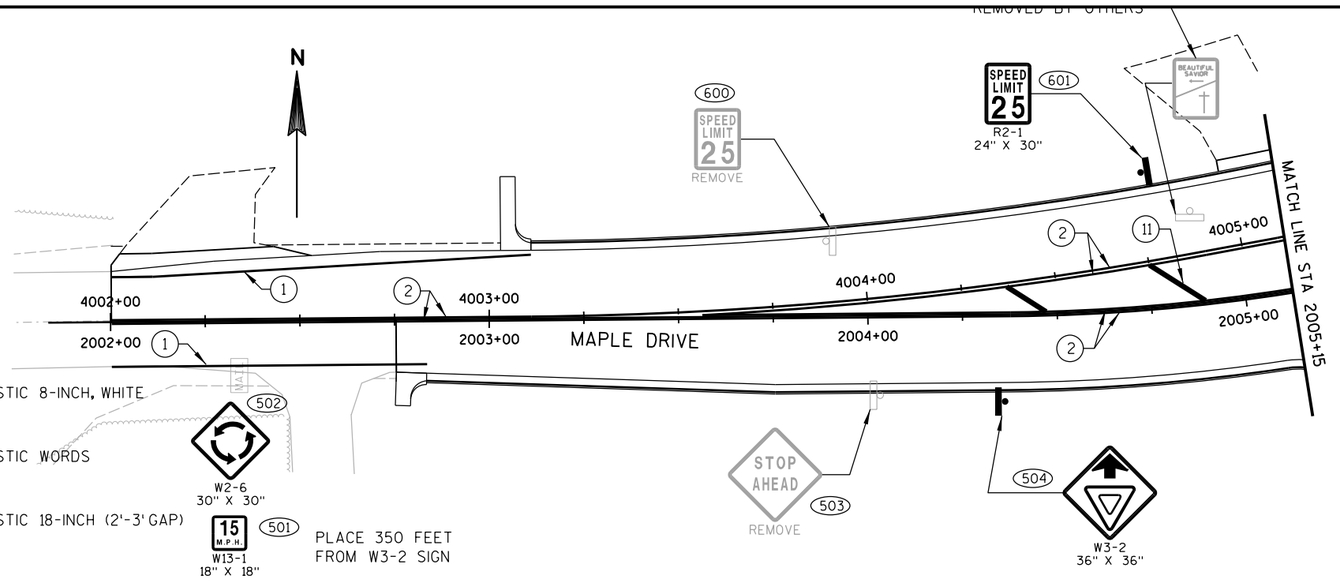
2

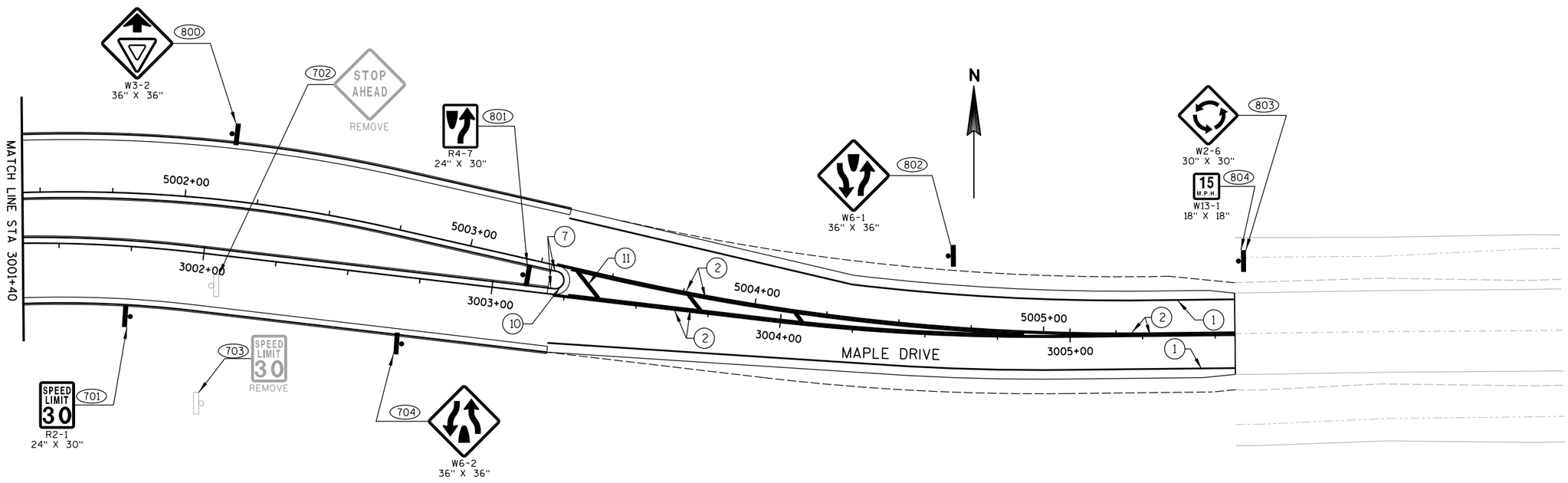
LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 8-INCH, WHITE
4. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, WHITE
5. PAVEMENT MARKING ARROWS EPOXY TYPE 2
6. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
7. PAVEMENT MARKING CURB EPOXY, YELLOW
8. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH (2'-3' GAP)
9. PAVEMENT MARKING STOP LINE EPOXY 18-INCH
10. PAVEMENT MARKING ISLAND NOSE EPOXY, YELLOW
11. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH, WHITE
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH

EXISTING SIGN TO BE REMOVED

NEW SIGN





PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 53	E

NB 139/US 51

139/US 51 NB

N16 INSTALL ON POLE WP13 AT 20+88 RT
N17 INSTALL ON POLE SB8 AT 21+00 RT
N18 INSTALL ON POLE WP10 AT 21+64 RT
N19 INSTALL ON POLE WP9 AT 21+82 RT
N20 INSTALL ON POLE SB7 AT 22+16 LT

STOP R1-1F 30" X 30"

STOP AHEAD REMOVE

REMOVE THE STOP AHEAD SIGN FROM THE TOP OF THE RAMP N1

TO REMAIN

REMOVING EXISTING PAVEMENT MARKING EDGE LINE

TO REMAIN

SIGN

SIGN

32+00

33+00

34+00

35+00

NB OFF RAMP

PLOVER
KOREAN WAR MEMORAL
AMHERST

N2

MOVE

WRONG WAY

N3

COUNTY B

MOVE

WRONG WAY

W3-3 36" X 36"

N4

LOCATE W3-3 SIGN ON RIGHT SIDE OF RAMP APPROXIMATELY 670 FEET FROM THE STOP BAR

N15

MOUNT ON SIGNAL POLE WP9
R4-7 24" X 30"

MOUNT ON SIGNAL POLE WP9
R3-2 24" X 24"

MOUNT ON SIGNAL POLE WP9
LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L 30" X 36"

REMOVE PAVEMENT MARKINGS (STOP LINE)

YIELD R1-2 36" X 31"
N5

STOP REMOVE
N6

ONE WAY R6-2L 24" X 30" MOUNT ON WP10
N7

TO REMAIN

DO NOT ENTER TO REMAIN

TO REMAIN

NORTH NORTH INTERSTATE 39 51

MOVE SIGN TO NOT CONFLICT WITH TRAFFIC SIGNAL
N14

EXISTING SIGNS TO REMAIN

20+00

21+00

22+00

CTH B

MOUNT ON SIGNAL POLE WP13
R4-7 24" X 30"
N12

MOUNT ON SIGNAL POLE WP13
LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50L 30" X 36"
N13

REMOVE
N11

9

STOP REMOVE
N9

ONE WAY REMOVE
N8

REMOVE
N10

ONE WAY
TO REMAIN

NB ON RAMP

STOP REMOVE

DO NOT ENTER TO REMAIN

EXISTING SIGNS TO REMAIN

LEGEND

1 PAVEMENT MARKING EPOXY 4-INCH, WHITE
2 PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3 PAVEMENT MARKING EPOXY 8-INCH, WHITE
5 PAVEMENT MARKING ARROWS EPOXY TYPE 2
9 PAVEMENT MARKING STOP LINE EPOXY 18-INCH
14 PAVEMENT MARKING WORDS EPOXY

EXISTING SIGN TO BE REMOVED
NEW SIGN

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 54	E

2

N

MOUNT ON SIGNAL POLE WP5

R4-7 24" X 30"

S10

REMOVING PAVEMENT MARKINGS (STOP LINE)

ONE WAY REMOVE

STOP REMOVE

STOP REMOVE

S9 S8 S7

YIELD R1-2 36" X 31"

S6

DO NOT ENTER TO REMAIN

EXISTING SIGNS TO REMAIN

9

41+00

11+00

MOUNT ON SIGNAL POLE WP5

LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-5OL 30" X 36"

S11

TO REMAIN

5

41+00

WRONG WAY

S4

COUNTY B MOVE

CTH B

REMOVE

S13

9

14

14

REMOVE

S12

DO NOT ENTER TO REMAIN

5

42+00

SB OFF RAMP

W3-3 36" X 36"

LOCATE W3-3 SIGN ON RIGHT SIDE OF RAMP APPROXIMATELY 670 FEET FROM THE STOP BAR

S1

STOP AHEAD REMOVE

S2

REMOVE THE STOP AHEAD SIGN FROM THE TOP OF THE RAMP

14

5

43+00

1

9

12+00

S15

R4-7 24" X 30"

MOUNT ON SIGNAL POLE WP2

STOP REMOVE

S14

WRONG WAY

AMHERST

PLOVER

KOREAN WAR MEMORIAL

S3

MOVE

MOUNT ON SIGNAL POLE WP2

LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-5OL 30" X 36"

S17

MOUNT ON SIGNAL POLE WP2

R3-2 24" X 24"

S16

DO NOT ENTER TO REMAIN

TO REMAIN

ONE WAY R6-2L 24" X 30"

MOUNT ON WP6

S5

2

3

44+00

GAS

LODGING

SB OFF RAMP

45+00

FOOD

FOOD

FOOD

SOUTH SOUTH INTERSTATE 39 51

MOVE SIGN TO NOT CONFLICT WITH TRAFFIC SIGNAL

S18

EXISTING SIGNS TO REMAIN

STOP R1-1F 30" X 30"

S19 INSTALL ON POLE SB5 AT 10+87 RT

S20 INSTALL ON POLE WP5 AT 11+07 LT

S21 INSTALL ON POLE WP6 AT 11+26 LT

S22 INSTALL ON POLE SB1 AT 11+79 LT

S23 INSTALL ON POLE WP2 AT 11+98 LT

1 PAVEMENT MARKING EPOXY 4-INCH, WHITE

2 PAVEMENT MARKING EPOXY 4-INCH, YELLOW

3 PAVEMENT MARKING EPOXY 8-INCH, WHITE

5 PAVEMENT MARKING ARROWS EPOXY TYPE 2

9 PAVEMENT MARKING STOP LINE EPOXY 18-INCH

14 PAVEMENT MARKING WORDS EPOXY

EXISTING SIGN TO BE REMOVED

NEW SIGN

I39/US 51 SB

SB I39/US 51

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT PAVEMENT MARKING & SIGNING PLAN	SHEET 55	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\024506_pm.dgn PLOT DATE : 11/7/2014 PLOT TIME : 1:14:04 PM PLOT BY : cas1

2

N

SIGN

SIGN

SIGN

SIGN

T306
1087.760

EACHERS

SB ON RAMP

SB 139/US 51

MB

SIGN

1500' MIN.

500' MIN.

185' TAPER - DRUMS SPACED AT 25'

335' BUFFER - DRUMS SPACED AT 50'

30+00

32+00

34+00

36+00

SHOULDER WORK
W21-5

FOR PORTABLE CHANGEABLE
MESSAGE BOARD USE
"RAMP WORK AHEAD"
"LOW SHOULDER"
OR OTHER MESSAGE SEQUENCE
APPROVED BY THE ENGINEER

END
ROAD WORK
G20-2A
48" X 24"

50' SPACING (TYP.)

END
ROAD WORK
G20-2A
48" X 24"

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

NOTE:
FOR INSTALLATION OF TRAFFIC SIGNALS AND LIGHTING EQUIPMENT AT RAMP TERMINALS CONTRACTOR MAY CLOSE UP TO ONE LANE OF TRAFFIC IN EACH DIRECTION ON CTH B. WORK TO BE COMPLETED BETWEEN 7 PM AND 6 AM. USE STANDARD DETAIL DRAWINGS 15D 20-2 TRAFFIC CONTROL, SINGLE LANE CLOSURE NON-FREEWAY/EXPRESSWAY AND 15D 27-2 TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH. TRAFFIC CONTROL FOR SIGNAL AND LIGHTING INSTALLATION ONLY IS INCIDENTAL TO BID ITEM "SPAN WIRE TRAFFIC SIGNALS FOR INTERSECTIONS (USH 51/CTH B RAMP TERMINALS) CONTRACTOR TO WISDOT MAINTAINED"

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - NB OFF RAMP CONSTRUCTION	SHEET 56	E

2

END ROAD WORK
G20-2A
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

CTH B

42+00

44+00

SB OFF RAMP

46+00

50' SPACING (TYP.)

335' BUFFER - DRUMS SPACED A 50'

185' TAPER - DRUMS SPACED AT 25'

500' MIN.

1500' MIN.

SHOULDER WORK
W21-5

MB

FOR PORTABLE CHANGEABLE MESSAGE BOARD USE
"RAMP WORK AHEAD"
"LOW SHOULDER"
OR OTHER MESSAGE SEQUENCE
APPROVED BY THE ENGINEER

SB 139/US 51

NB 139/US 51

NB ON RAMP

WATER TOWER

SIGN

NOTE:
FOR INSTALLATION OF TRAFFIC SIGNALS AND LIGHTING EQUIPMENT AT RAMP TERMINALS CONTRACTOR MAY CLOSE UP TO ONE LANE OF TRAFFIC IN EACH DIRECTION ON CTH B. WORK TO BE COMPLETED BETWEEN 7 PM AND 6 AM. USE STANDARD DETAIL DRAWINGS 15D 20-2 TRAFFIC CONTROL, SINGLE LANE CLOSURE NON-FREEWAY/EXPRESSWAY AND 15D 27-2 TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH. TRAFFIC CONTROL FOR SIGNAL AND LIGHTING INSTALLATION ONLY IS INCIDENTAL TO BID ITEM "SPAN WIRE TRAFFIC SIGNALS FOR INTERSECTIONS (USH 51/CTH B RAMP TERMINALS) CONTRACTOR TO WISDOT MAINTAINED"

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - SB OFF RAMP CONSTRUCTION	SHEET 57	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\025013_tc.dgn PLOT DATE : 11/4/2014 PLOT TIME : 6:19:43 AM PLOT BY : clm1

Plover

2

2

BUSINESS 51

BLACK OAK DR

N

GRANT AVE

AVE

54

COUNTY B

MAPLE DRIVE

PROJECT LOCATION

WILSON DR

BUSINESS 51

EISENHOWER

FOREST DR

54

PLEASANT DR

COOLIDGE

AVE

CLEVELAND AVE

LINCOLN AVE

HOOVER AVE

KENNEDY

LEGEND

DETOUR ROUTE

PRAIRIE DR

51

54

JACKSON

POPLAR DR

INTERSTATE 39

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	DETOUR ROUTE	SHEET 58	E

2

PRAIRIE DRIVE

PLEASANT DRIVE

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 3

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 2

N

M4-8 24" X 12"

MOUNT DETOUR SIGNS OVER EXISTING SIGNS

PLACE NEXT TO EXISTING SIGN

J3-2 48" X 57"

STH 54 West & BUS 51
Closed at Maple Dr

Follow Detour

EXACT LOCATION TO BE DETERMINED IN THE FIELD

FOOD, GAS AND LODGING PLAQUES TO BE COVERED BY OTHERS. SEE SPECIAL PROVISIONS FOR CONTACT INFORMATION.

R11-3 60" X 30"

ROAD CLOSED 1.5 MILES AHEAD LOCAL TRAFFIC ONLY

COVER EXISTING SIGNS

Waupaca
Wausau
Portage

Plover 2
Stevens Point 7
Wis Rapids 18

Waupaca
Wis Rapids

Stevens Point
Plover
Wis Rapids
Waupaca

M 6-1 21" X 21"

M4-8A 24" X 18"

END DETOUR

HARDING AVENUE

M 6-2 21" X 21"

M4-8 24" X 36"

J4-2 48" X 36"

EXIT 151

Waupaca Exit 151

DETOUR AHEAD W20-2

1 1/4 Miles

Waupaca

MOUNT DETOUR SIGNS OVER EXISTING SIGNS

COVER EXISTING SIGNS

COUNTY R

54

TRAFFIC CONTROL NOTES

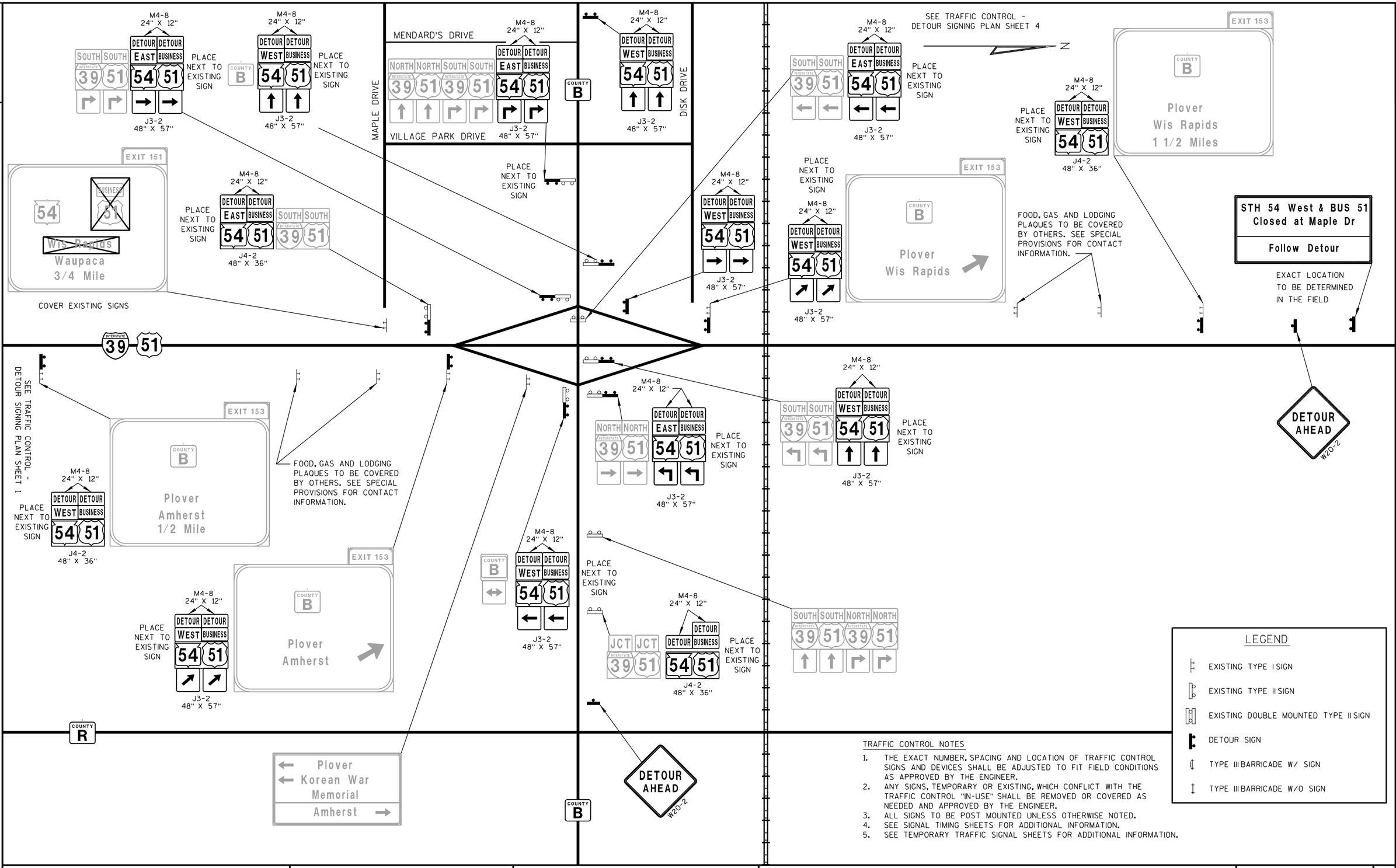
1. THE EXACT NUMBER, SPACING AND LOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.
3. ALL SIGNS TO BE POST MOUNTED UNLESS OTHERWISE NOTED.

LEGEND

- EXISTING TYPE I SIGN
- EXISTING TYPE II SIGN
- EXISTING DOUBLE MOUNTED TYPE II SIGN
- DETOUR SIGN
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 1	SHEET 59	E

2



TRAFFIC CONTROL NOTES

1. THE EXACT NUMBER, SPACING AND LOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.
3. ALL SIGNS TO BE POST MOUNTED UNLESS OTHERWISE NOTED.
4. SEE SIGNAL TIMING SHEETS FOR ADDITIONAL INFORMATION.
5. SEE TEMPORARY TRAFFIC SIGNAL SHEETS FOR ADDITIONAL INFORMATION.

LEGEND

- EXISTING TYPE I SIGN
- EXISTING TYPE II SIGN
- EXISTING DOUBLE MOUNTED TYPE II SIGN
- DETOUR SIGN
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 2	SHEET 60	E

CLEVELAND AVENUE

WILSON AVENUE

BRIDLEWOOD DRIVE

MOODIE LANE

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 4

FOREST DRIVE

LINCOLN AVENUE

HOOVER AVENUE

PLEASANT DRIVE

N

R11-3
60" X 30"
ROAD CLOSED
0.2 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3
60" X 30"
ROAD CLOSED
0.8 MILES AHEAD
LOCAL TRAFFIC ONLY

COVER EXISTING SIGNS AS SHOWN

M4-8
24" X 12"
DETOUR DETOUR
WEST BUSINESS
54 51

J3-2
48" X 57"

M4-8
24" X 12"
DETOUR DETOUR
WEST BUSINESS
54 51

J3-2
48" X 57"

M4-8
24" X 12"
DETOUR DETOUR
WEST BUSINESS
54 51

J3-2
48" X 57"

R11-3
60" X 30"
ROAD CLOSED
0.9 MILES AHEAD
LOCAL TRAFFIC ONLY

M4-8
24" X 12"
DETOUR DETOUR
WEST BUSINESS
54 51

J3-2
48" X 57"

M4-8
24" X 12"
DETOUR DETOUR
WEST BUSINESS
54 51

J3-2
48" X 57"

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 1

LEGEND

- EXISTING TYPE I SIGN
- EXISTING TYPE II SIGN
- EXISTING DOUBLE MOUNTED TYPE II SIGN
- DETOUR SIGN
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN

TRAFFIC CONTROL NOTES

1. THE EXACT NUMBER, SPACING AND LOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.
3. ALL SIGNS TO BE POST MOUNTED UNLESS OTHERWISE NOTED.

2

2

FOREMOST ROAD

CLEVELAND AVENUE

WISCONSIN AVENUE

MADISON AVENUE

WASHINGTON AVENUE

HOOVER AVENUE

EXACT LOCATION TO BE DETERMINED IN THE FIELD

STH 54 East & BUS 51 Closed at Maple Dr

Follow Detour

R11-3 60" X 30"

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY

EAST 54

J4-1 24" X 36" MOUNT ON BARRICADE

CEDAR DRIVE

CHESTNUT DRIVE

WILLOW DRIVE

GREEN DRIVE

SOUTH DRIVE

EARHART AVENUE

SOUTH DRIVE

DETOUR AHEAD

W20-2

A

M4-8 24" X 12"

DETOUR DETOUR WEST BUSINESS 54 51

J3-2 48" X 57"

D

M4-8 24" X 12"

DETOUR DETOUR EAST BUSINESS 54 51

J3-2 48" X 57"

E

R11-2 48" X 30"

ROAD CLOSED

TYPE III BARRICADE

F

TYPE III BARRICADE

G

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 2

N

JCT JCT 54 COUNTY B

M4-8 24" X 12"

DETOUR DETOUR EAST BUSINESS 54 51

J3-2 48" X 57"

JCT BUSINESS JCT 51 COUNTY B

M4-8 24" X 12"

DETOUR BUSINESS DETOUR BUSINESS NORTH EAST SOUTH 51 54 51

M 6-1 21" X 21"

COVER EXISTING SIGNS MOUNT DETOUR SIGNS OVER EXISTING SIGNS

Amherst

Stevens Point

Waupaca

MOUNT DETOUR SIGNS OVER EXISTING SIGNS

VINEYARD DRIVE

LOCUST DRIVE

MECCA DRIVE

IBER LANE

JCT JCT INTERSTATE 39 51

HOOVER AVENUE

MAPLE DRIVE

EXACT LOCATION TO BE DETERMINED IN THE FIELD

STH 54 East & BUS 51 Closed at Maple Dr

Follow Detour

R11-3 60" X 30"

ROAD CLOSED 0.2 MILES AHEAD LOCAL TRAFFIC ONLY

CLEVELAND AVENUE

WILSON AVENUE

ROSALIE PARKWAY

MAPLE DRIVE

JOHNSON AVENUE

SHORT DRIVE

SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 3

R11-3 60" X 30"

ROAD CLOSED 0.3 MILES AHEAD LOCAL TRAFFIC ONLY

R11-3 60" X 30"

ROAD CLOSED 0.9 MILES AHEAD LOCAL TRAFFIC ONLY

LEGEND

- EXISTING TYPE I SIGN
- EXISTING TYPE II SIGN
- EXISTING DOUBLE MOUNTED TYPE II SIGN
- DETOUR SIGN
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN

TRAFFIC CONTROL NOTES

1. THE EXACT NUMBER, SPACING AND LOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.
3. ALL SIGNS TO BE POST MOUNTED UNLESS OTHERWISE NOTED.
4. SEE SIGNAL TIMING SHEETS FOR ADDITIONAL INFORMATION.
5. SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 5 FOR ADDITIONAL INFORMATION.

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 4	SHEET 62	E

2

R11-2
48" X 30"
ROAD CLOSED

TYPE III BARRICADE (G)

TYPE III BARRICADE (F)

M4-8
24" X 12"
NORTH BUSINESS | DETOUR | DETOUR
51 | 54 | 51

M 6-1
21" X 21"

MOUNT DETOUR SIGNS OVER EXISTING SIGNS

WEST 54 END DETOUR
M4-8A
24" X 18"

EARHART AVENUE

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

M4-8
24" X 12"
DETOUR | DETOUR
EAST BUSINESS
54 | 51

J3-2
48" X 57"

COVER EXISTING SIGNS
BUSINESS EAST
51 54

M4-8
24" X 12"
DETOUR | DETOUR
BUSINESS EAST WEST
51 | 54 | 54

J3-3
72" X 57"

EAST STH 54
SOUTH BUSINIESS 51 (POST ROAD)

WEST STH 54
NORTH BUSINIESS 51 (POST ROAD)

EAST STH 54

WEST STH 54

COVER EXISTING SIGNS
EAST WEST
54 54

SOUTH DRIVE

25' TYP.

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

WEST 54

J3-1
24" X 57"

GREEN DRIVE

M4-8
24" X 12"
DETOUR | DETOUR
BUSINESS EAST WEST
51 | 54 | 54

J3-3
72" X 57"

BUSINESS 51 (POST ROAD)

M4-8
24" X 12"
DETOUR | DETOUR
WEST EAST BUSINESS
54 | 54 | 51

J3-3
72" X 57"

VINEYARD DRIVE

M4-8
24" X 12"
DETOUR | DETOUR
EAST BUSINESS
54 | 51

J3-2
48" X 57"

COUNTY B

WISCONSIN AVENUE

M4-8
24" X 12"
DETOUR | DETOUR
BUSINESS EAST
51 | 54

END DETOUR
M4-8A
24" X 18"

J3-2
48" X 57"

COVER EXISTING SIGNS
BUSINESS WEST BUSINESS
51 54 51

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

WISCONSIN AVENUE

CTH B

SOUTH DRIVE

M4-8
24" X 12"
DETOUR | DETOUR
EAST BUSINESS
54 | 51

J3-2
48" X 57"

GREEN DRIVE

BUSINESS 51 (POST ROAD)

TRAFFIC CONTROL NOTES

1. THE EXACT NUMBER, SPACING AND LOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
2. ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN-USE" SHALL BE REMOVED OR COVERED AS NEEDED AND APPROVED BY THE ENGINEER.
3. ALL SIGNS TO BE POST MOUNTED UNLESS OTHERWISE NOTED.
4. SEE SIGNAL TIMING SHEETS FOR ADDITIONAL INFORMATION.
5. SEE TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEETS 2 & 4 FOR ADDITIONAL INFORMATION.

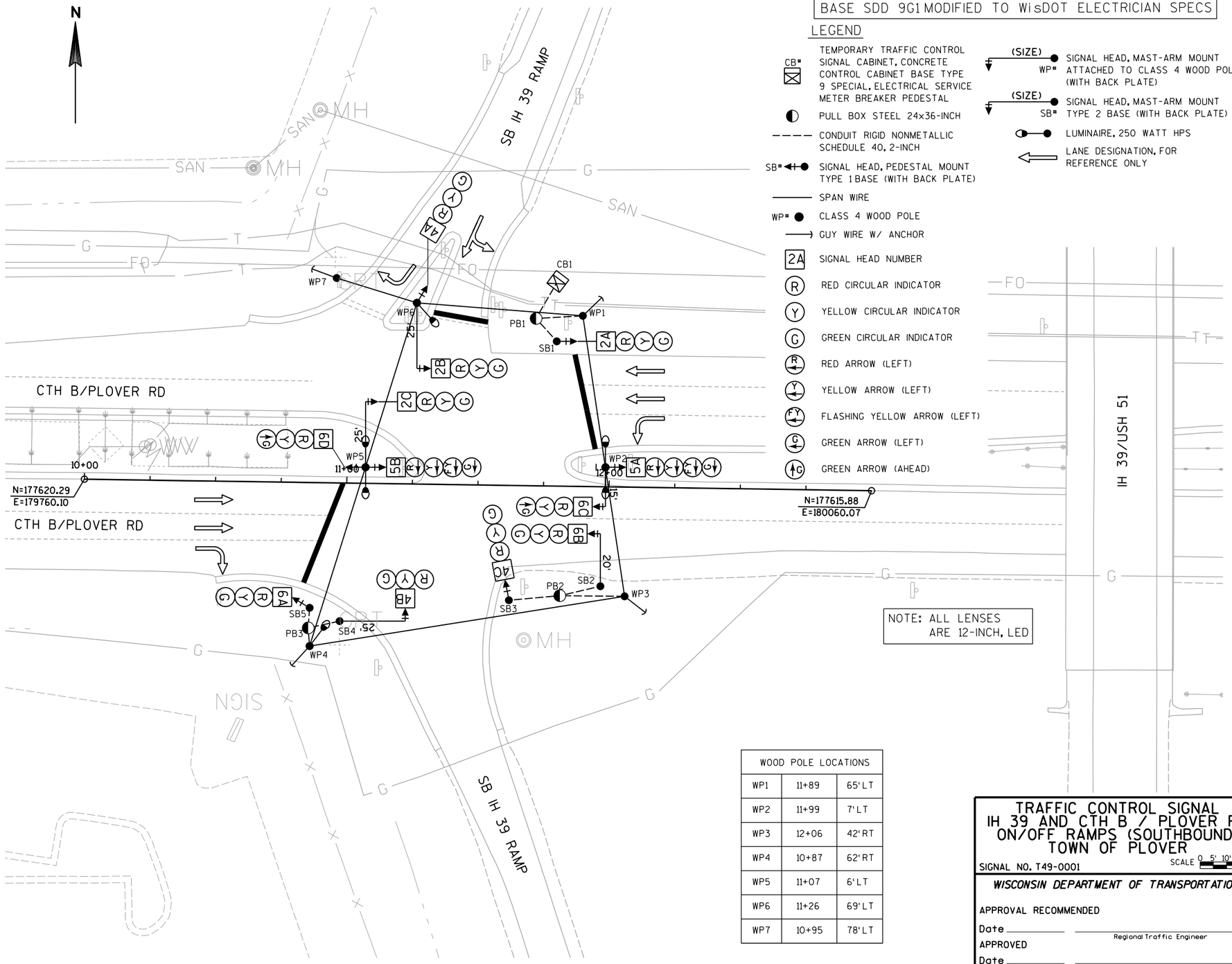
LEGEND

- EXISTING TYPE II SIGN
- DETOUR SIGN POST MOUNTED
- DETOUR SIGN MOUNTED IN BARREL
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE W/O SIGN
- TRAFFIC CONTROL DRUM W/O LIGHT

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - DETOUR SIGNING PLAN SHEET 5	SHEET 63	E

CONSTRUCTION NOTES:

1. CONTRACTOR TO TRANSPORT AND INSTALL STATE OWNED SIGNAL EQUIPMENT. CONTRACTOR TO FURNISH AND INSTALL WOOD POLES, SPAN WIRES, GUY WIRES, AND TRAFFIC SIGNAL CABLE TO COMPLETE THE INSTALLATION. SEE SPECIAL PROVISIONS FOR MORE DETAIL.
2. ALL SIGNAL COMPONENTS SHALL BE INSTALLED WITH NEW, CONTINUOUS CABLE FORM THE COMPONENT TO THE CONTROLLER CABINET.
3. SIGNAL IS TO BE PRETIMED.
4. ALL SIGNAL HEADS SHALL HAVE BACK PLATES.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SEWER AND WATER FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITY OWNERS SHALL BE NOTIFIED BY THE CONTRACTOR 72 HOURS PRIOR TO EXCAVATION.
6. THE CONTRACTOR SHALL COVER OR BAG THE TRAFFIC SIGNAL HEADS ONCE THEY ARE SET IN PLACE UNTIL THE INTERSECTION IS READY FOR COMPLETE OPERATION.
7. ALL METAL BOXES THAT CARRY 50 VOLTS OR MORE ARE TO BE BONDED.
8. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTION AND CAULKED (SILICONE) AFTER INSTALLATION.
9. ALL SIGNAL EQUIPMENT SHALL HAVE A MINIMUM OF 2' CLEARANCE TO FACE OF CURB.
10. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. TRAFFIC CONTROL, INCLUDING FLAGPERSONS, IF NECESSARY, SHALL BE IN ACCORDANCE WITH THE MANUAL OR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ARE CONSIDERED INCIDENTAL TO THE TRAFFIC SIGNAL INSTALLATION.
11. THE EXACT LOCATIONS OF SIGNAL BASES AND PULLBOXES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. LOCATION SHALL BE ADJUSTED TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
12. THE CONTRACTOR SHALL HAVE THE PULLBOXES AND THE CONDUIT RUNS INSPECTED BY THE ENGINEER BEFORE PLACING ANY SIGNAL CABLE INTO THE SYSTEM.
13. ALL DISTURBED AREAS SHALL BE RESTORED TO EXISTING CONDITIONS IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR CONSTRUCTION AND TO THE SATISFACTION OF THE ENGINEER.
14. EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED.
15. PROVIDE CONDUIT FROM GROUND TO 10-FOOT ON POLE WP1, WP3, WP4.
16. THE SPAN WIRES AND SIGNAL ASSEMBLIES SHALL HAVE A 17 FOOT MINIMUM HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS THROUGHOUT THE DURATION OF THE PROJECT.



3 YEAR + TEMP TO SEMI-PERMANENT SYSTEM
BASE SDD 9G1 MODIFIED TO WisDOT ELECTRICIAN SPECS

LEGEND

- CB# — TEMPORARY TRAFFIC CONTROL SIGNAL CABINET, CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL, ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX STEEL 24x36-INCH
- CONDUIT RIGID NONMETALLIC SCHEDULE 40, 2-INCH
- SB# — SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACK PLATE)
- SPAN WIRE
- WP# — CLASS 4 WOOD POLE
- GUY WIRE W/ ANCHOR
- 2A — SIGNAL HEAD NUMBER
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW (LEFT)
- Y — YELLOW ARROW (LEFT)
- FY — FLASHING YELLOW ARROW (LEFT)
- G — GREEN ARROW (LEFT)
- G — GREEN ARROW (AHEAD)
- (SIZE) WP# — SIGNAL HEAD, MAST-ARM MOUNT ATTACHED TO CLASS 4 WOOD POLE (WITH BACK PLATE)
- (SIZE) SB# — SIGNAL HEAD, MAST-ARM MOUNT TYPE 2 BASE (WITH BACK PLATE)
- LUMINAIRE, 250 WATT HPS
- LANE DESIGNATION, FOR REFERENCE ONLY

WOOD POLE LOCATIONS		
WP1	11+89	65'LT
WP2	11+99	7'LT
WP3	12+06	42'RT
WP4	10+87	62'RT
WP5	11+07	6'LT
WP6	11+26	69'LT
WP7	10+95	78'LT

TRAFFIC CONTROL SIGNAL
IH 39 AND CTH B / PLOVER RD ON/OFF RAMPS (SOUTHBOUND)
TOWN OF PLOVER

SIGNAL NO. T49-0001 SCALE 0 5' 10' 20'

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date _____ Regional Traffic Engineer
APPROVED
Date _____ State Electrical Engineer

I.D. NO. Controller Type : PAGE NO. OF

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - SB OFF RAMP	SHEET 64	E

2

SEQUENCE OF OPERATION

NOT USED | ⇦ | NOT USED | ⇩

		Ø1							Ø2						
			CLEAR TO							CLEAR TO					
	HEAD NUMBERS	R/W	✳✳						R/W	✳✳					
Ø1															
Ø2	2A, 2B, 2C								G	Y	R				
Ø3															
Ø4	4A, 4B, 4C								R	R	R				
RING 1 Ø5	5A, 5B								-	-	-				
Ø6	6A, 6B, 6C, 6D								R	R	R				
Ø7															
Ø8															
OLA															
OLB															
OLC	5A, 5B								R	R	R				
OLD															

	Ø3							Ø4							FLASH
		CLEAR TO							CLEAR TO						
	R/W	✳✳						R/W	✳✳						
Ø1															
Ø2								R	R	R					R
Ø3															
Ø4								G	Y	R					R
RING 1 Ø5								-	-	-					-
Ø6								R	R	R					R
Ø7															
Ø8															
OLA															
OLB															
OLC								R	R	R					R
OLD															

N

⇩ | OLC ⇨ | NOT USED | NOT USED

		Ø5							Ø6						
			CLEAR TO							CLEAR TO					
	HEAD NUMBERS	R/W	✳✳						R/W	✳✳					
Ø1															
Ø2	2A, 2B, 2C	R	R	R					R	R	R				
Ø3															
Ø4	4A, 4B, 4C	R	R	R					R	R	R				
RING 2 Ø5	5A, 5B	G	-	-					-	-	-				
Ø6	6A, 6B, 6C, 6D	R	R	R					G	Y	R				
Ø7															
Ø8															
OLA															
OLB															
OLC	5A, 5B	-	Y	R					FY	Y	R				
OLD															

	Ø7							Ø8						
		CLEAR TO							CLEAR TO					
	R/W	✳✳						R/W	✳✳					
Ø1														
Ø2														
Ø3														
Ø4														
RING 2 Ø5														
Ø6														
Ø7														
Ø8														
OLA														
OLB														
OLC														
OLD														

FY = FLASHING YELLOW

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

BARRIER

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	5 OR 6, OLC	4
3		
4	NONE	2, 5, 6, OLC
5	2	4, 6
6	2, OLC	4, 5
7		
8		

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1			
2		6	MAX.
3			
4			MAX.
5		2	MAX.
6		2	MAX.
7			
8			

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =
NONE

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OL"A"		
OL"B"		
OL"C"	5	6
OL"D"		

TYPE OF INTERCONNECT COMMUNICATION	
NONE	x
TBC	
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
2. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER.

IH 39 AND CTH B / PLOVER RD
ON / OFF RAMPS (SOUTHBOUND)
TOWN OF PLOVER

SIGNAL NO.

CONTROLLER TYPE:

DATE PAGE NO. OF

CONSTRUCTION NOTES:

1. CONTRACTOR TO TRANSPORT AND INSTALL STATE OWNED SIGNAL EQUIPMENT. CONTRACTOR TO FURNISH AND INSTALL WOOD POLES, SPAN WIRES, GUY WIRES, AND TRAFFIC SIGNAL CABLE TO COMPLETE THE TRAFFIC SIGNAL INSTALLATION. SEE SPECIAL PROVISIONS FOR MORE DETAIL.
2. ALL SIGNAL COMPONENTS SHALL BE INSTALLED WITH NEW, CONTINUOUS CABLE FORM THE COMPONENT TO THE CONTROLLER CABINET.
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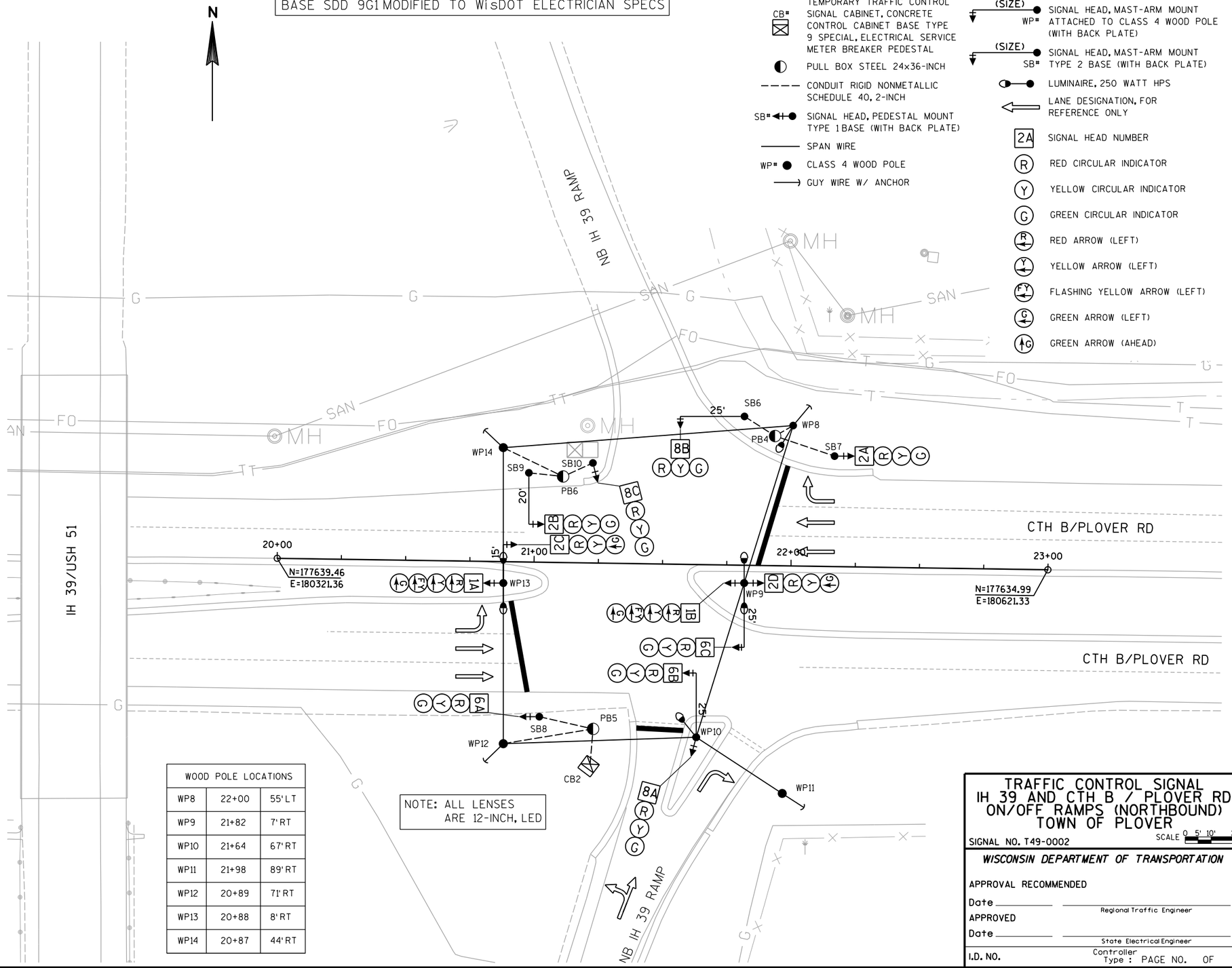
15. PROVIDE CONDUIT FROM GROUND TO 10-FOOT ON POLE WP8, WP12, WP14.
16. THE SPAN WIRES AND SIGNAL ASSEMBLIES SHALL HAVE A 17 FOOT MINIMUM HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS THROUGHOUT THE DURATION OF THE PROJECT.

3 YEAR + TEMP TO SEMI-PERMANENT SYSTEM
BASE SDD 9G1 MODIFIED TO WisDOT ELECTRICIAN SPECS



LEGEND

- CB* — TEMPORARY TRAFFIC CONTROL SIGNAL CABINET, CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL, ELECTRICAL SERVICE METER BREAKER PEDESTAL
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- SPAN WIRE
- WP* — CLASS 4 WOOD POLE
- GUY WIRE W/ ANCHOR
- (SIZE) WP* — SIGNAL HEAD, MAST-ARM MOUNT ATTACHED TO CLASS 4 WOOD POLE (WITH BACK PLATE)
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- LANE DESIGNATION, FOR REFERENCE ONLY
- 2A — SIGNAL HEAD NUMBER
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- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW (LEFT)
- Y — YELLOW ARROW (LEFT)
- FY — FLASHING YELLOW ARROW (LEFT)
- G — GREEN ARROW (LEFT)
- G — GREEN ARROW (AHEAD)

WOOD POLE LOCATIONS		
WP8	22+00	55' LT
WP9	21+82	7' RT
WP10	21+64	67' RT
WP11	21+98	89' RT
WP12	20+89	71' RT
WP13	20+88	8' RT
WP14	20+87	44' RT

NOTE: ALL LENSES ARE 12-INCH, LED

TRAFFIC CONTROL SIGNAL
IH 39 AND CTH B / PLOVER RD
ON/OFF RAMPS (NORTHBOUND)
TOWN OF PLOVER

SIGNAL NO. T49-0002 SCALE 0 5' 10' 20'

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date _____ Regional Traffic Engineer
APPROVED
Date _____ State Electrical Engineer

I.D. NO. Controller Type : PAGE NO. OF

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - NB OFF RAMP	SHEET 66	E

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø1 CLEAR TO	Ø1 CLEAR TO	Ø2 R/W	Ø2 CLEAR TO **	Ø2 CLEAR TO	Ø2 CLEAR TO	Ø3 R/W	Ø3 CLEAR TO **	Ø3 CLEAR TO	Ø3 CLEAR TO	Ø4 R/W	Ø4 CLEAR TO **	Ø4 CLEAR TO	Ø4 CLEAR TO	FLASH
Ø1	1A, 1B	G	–	–		–	–	–										-
Ø2	2A, 2B, 2C, 2D	R	R	R		G	Y	R										R
Ø3																		
Ø4																		
Ø5																		
Ø6	6A, 6B, 6C	R	R	R		R	R	R										R
Ø7																		
Ø8	8A, 8B, 8C	R	R	R		R	R	R										R
OLA	1A, 1B	–	Y	R		FY	Y	R										R
OLB																		
OLC																		
OLD																		

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø5 CLEAR TO	Ø5 CLEAR TO	Ø6 R/W	Ø6 CLEAR TO **	Ø6 CLEAR TO	Ø6 CLEAR TO	Ø7 R/W	Ø7 CLEAR TO **	Ø7 CLEAR TO	Ø7 CLEAR TO	Ø8 R/W	Ø8 CLEAR TO **	Ø8 CLEAR TO	Ø8 CLEAR TO
Ø1	1A, 1B					–	–	–						–	–		
Ø2	2A, 2B, 2C, 2D					R	R	R						R	R		
Ø3																	
Ø4																	
Ø5																	
Ø6	6A, 6B, 6C					G	Y	R						R	R		
Ø7																	
Ø8	8A, 8B, 8C					R	R	R						G	Y		
OLA	1A, 1B					R	R	R						R	R		
OLB																	
OLC																	
OLD																	

FY = FLASHING YELLOW

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

BARRIER

N

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2, 8
2	6, OLA	1, 8
3		
4		
5		
6	1 OR 2, OLA	8
7		
8	NONE	1, 2, 6, OLA

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		6	MAX.
2		6	MAX.
3			
4			
5			
6		2	MAX.
7			
8			MAX.

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

NONE

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OL"A"	1	2
OL"B"		
OL"C"		
OL"D"		

TYPE OF INTERCONNECT COMMUNICATION	
NONE	x
TBC	
CLOSED LOOP	
HARDWIRE	
TONE (FREQ)	

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

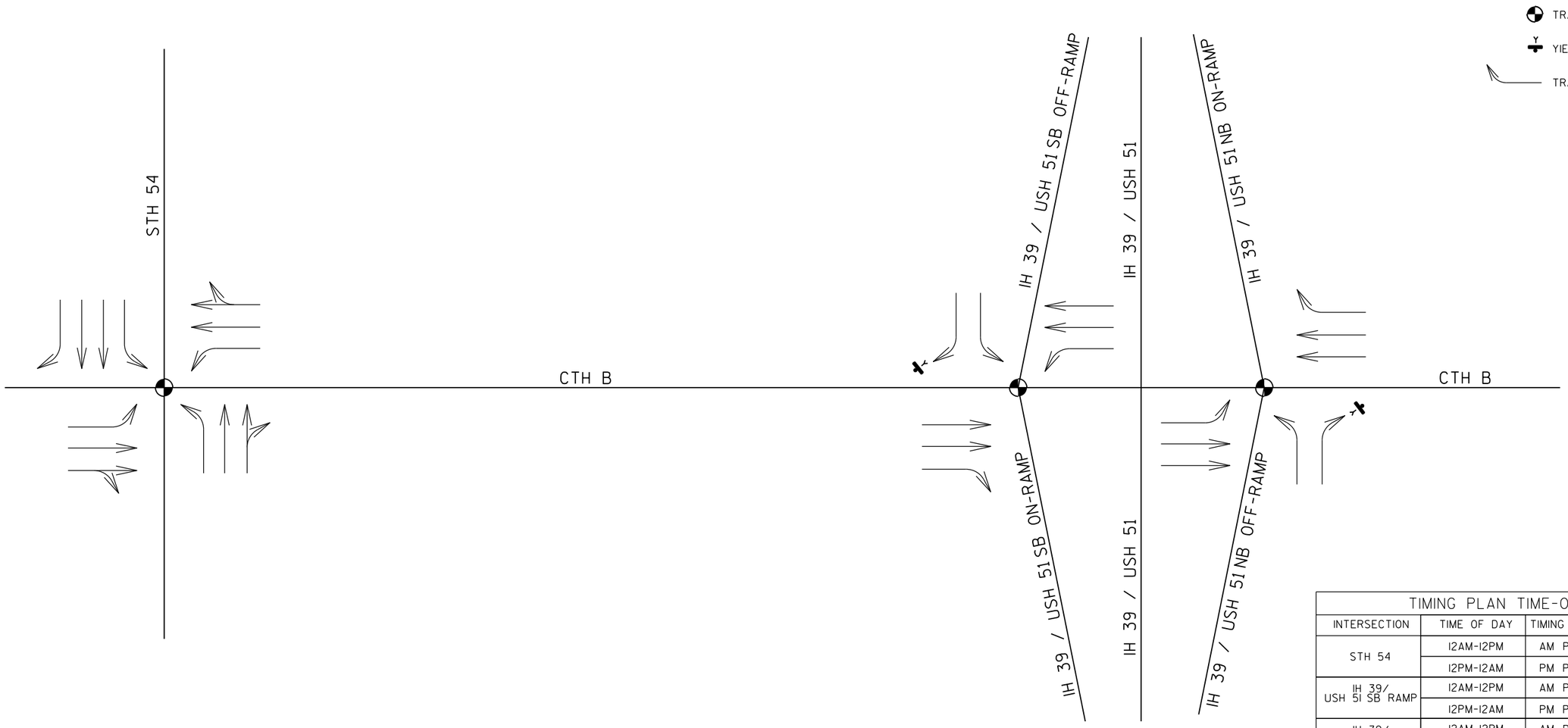
1. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
2. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER.

I 39 AND CTH B / PLOVER RD.
ON / OFF RAMP (NORTHBOUND)
TOWN OF PLOVER

SIGNAL NO.

CONTROLLER TYPE:

DATE PAGE NO. OF



TIMING PLAN TIME-OF-DAY			
INTERSECTION	TIME OF DAY	TIMING PLAN	CYCLE LENGTH
STH 54	12AM-12PM	AM PEAK	80 SEC
	12PM-12AM	PM PEAK	80 SEC
IH 39/ USH 51 SB RAMP	12AM-12PM	AM PEAK	60 SEC
	12PM-12AM	PM PEAK	60 SEC
IH 39/ USH 51 NB RAMP	12AM-12PM	AM PEAK	60 SEC
	12PM-12AM	PM PEAK	60 SEC

SIGNAL TIMING: STH 54 & CTH B

TIMING PLAN		01 06	02 06	04 07	04 08
AM	CYCLE=80 OFFSET=N/A	G 8 Y 3.5 AR 1.0 SPL 12.5	G 21.5 Y 4.5 AR 2.0 SPL 28	G 8 Y 3.5 AR 1.0 SPL 12.5	G 20.5 Y 4.5 AR 2.0 SPL 27
PM	CYCLE=80 OFFSET=N/A	G 8.5 Y 3.5 AR 1.0 SPL 13	G 21.5 Y 4.5 AR 2.0 SPL 28	G 11.5 Y 3.5 AR 1.0 SPL 16	G 16.5 Y 4.5 AR 2.0 SPL 23

SIGNAL TIMING: SB IH 39 / USH 51 RAMP & CTH B

TIMING PLAN		02 05	02 06	04
AM	CYCLE=60 OFFSET=0	G 13.5 Y 3.5 AR 1.0 SPL 18	G 16.5 Y 4.5 AR 2.0 SPL 23	G 12.5 Y 4.0 AR 2.5 SPL 19
PM	CYCLE=60 OFFSET=0	G 13.5 Y 3.5 AR 1.0 SPL 18	G 16.5 Y 4.5 AR 2.0 SPL 23	G 12.5 Y 4.0 AR 2.5 SPL 19

NOTE: SB IH 39 / USH 51 IS THE MASTER INTERSECTION.
OFFSET REFERENCED TO TS2-IST GREEN.
REFERENCE PHASE: 2+5.

SIGNAL TIMING: NB IH 39 / USH 51 RAMP & CTH B

TIMING PLAN		01 06	02 06	08
AM	CYCLE=60 OFFSET=27	G 14.5 Y 3.5 AR 1.0 SPL 19	G 11.5 Y 4.5 AR 2.0 SPL 18	G 16.5 Y 4.0 AR 2.5 SPL 23
PM	CYCLE=60 OFFSET=31	G 14.5 Y 3.5 AR 1.0 SPL 19	G 11.5 Y 4.5 AR 2.0 SPL 18	G 16.5 Y 4.0 AR 2.5 SPL 23

NOTE: OFFSET REFERENCED TO TS2-IST GREEN.
REFERENCE PHASE: 1+6.
MAST CONTROLLER: SB IH 39 / USH 51 RAMP.

CTH B TRAFFIC SIGNAL TIMING
TOWN OF PLOVER

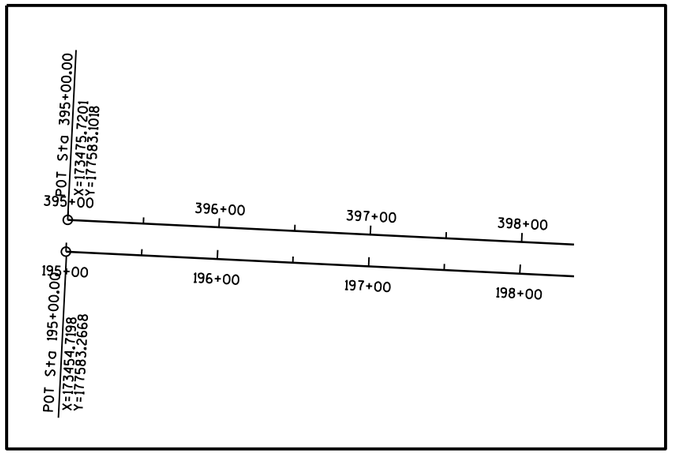
SIGNAL NO.

CONTROLLER TYPE:

DATE PAGE NO. OF

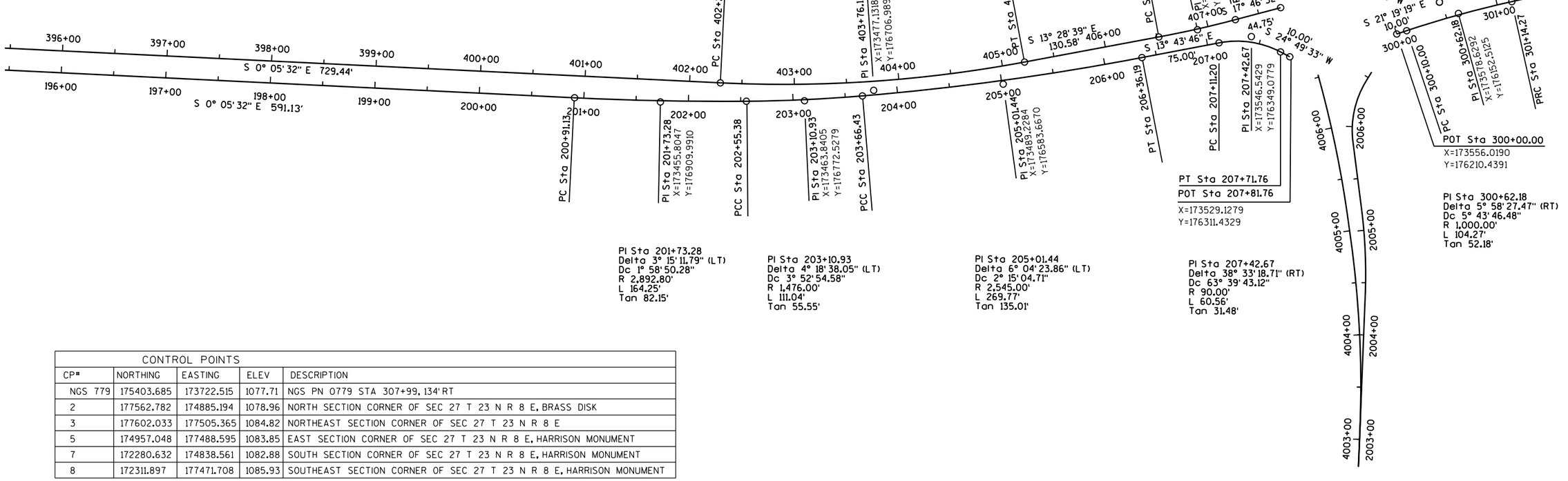
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL TIMING PLAN	SHEET 68	E

2



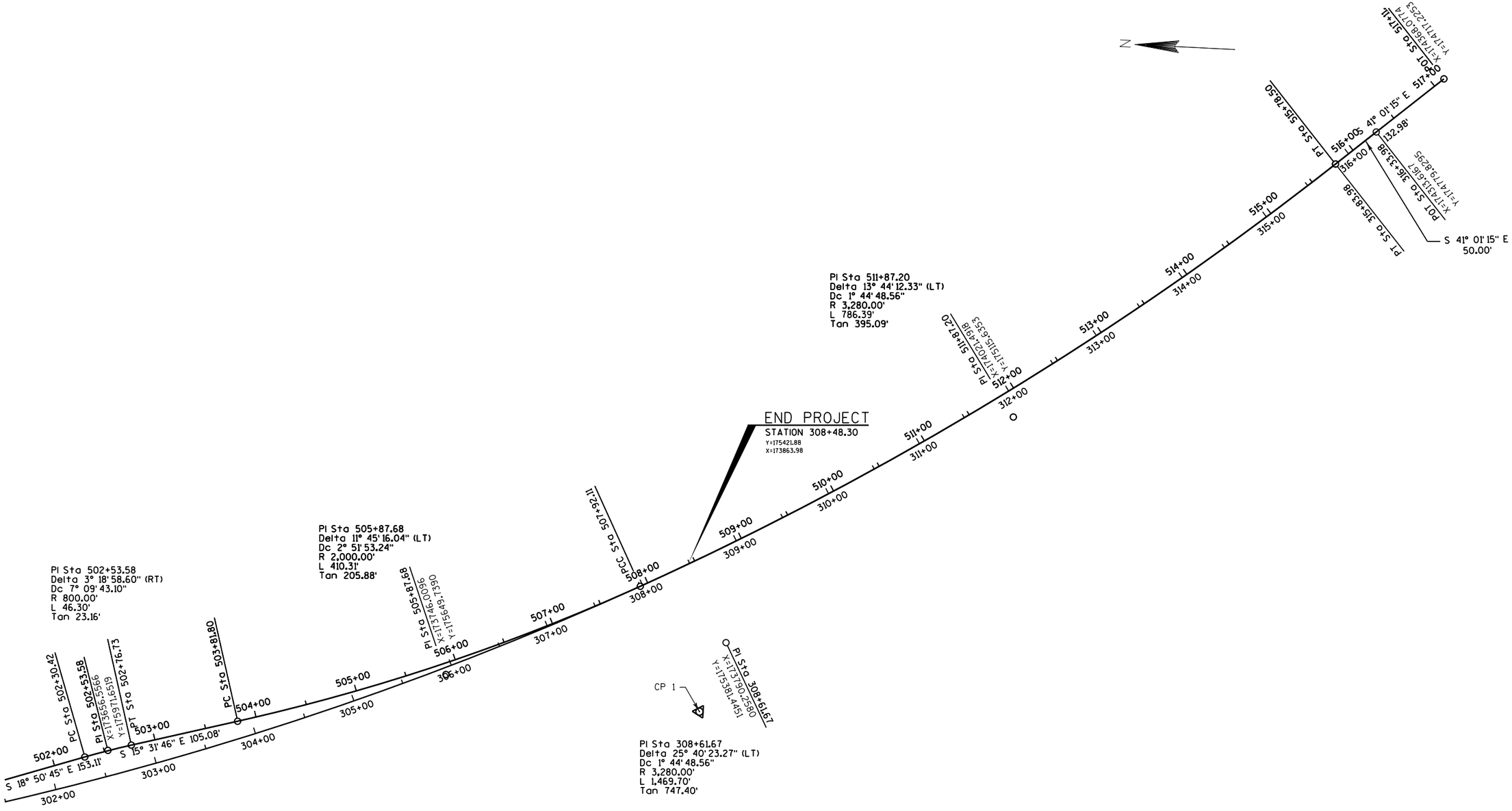
BENCHMARKS				
BM#	NORTHING	EASTING	ELEV	DESCRIPTION
215	176266.776	174593.488	1080.22	TOP NUT OF HYDRANT ON NORTH SIDE OF MAPLE DRIVE APPROXIMATELY 1034' WEST OF STH 54 INTERSECTION
216	176261.033	173997.098	1079.61	TOP NUT OF HYDRANT ON NORTH SIDE OF MAPLE DRIVE AT STA 5003+88.75, 11.65' LT
232	176207.686	173387.256	1079.44	TOP NUT OF HYDRANT IN SW QUADRANT OF MAPLE DRIVE AND JOHNSON AVENUE (STA 2005+16, 27.56' RT)
234	176199.846	172995.973	1079.22	TOP NUT OF HYDRANT ON SOUTH SIDE OF MAPLE DRIVE MID-BLOCK BETWEEN STH 54 AND ROSALIE PARKWAY
236	176256.785	172559.289	1078.28	TOP NUT OF HYDRANT IN NW QUADRANT OF MAPLE DRIVE AND ROSALIE PARKWAY

NOTE:
ALL BENCHMARKS WERE SET OFF NGS 779 SURVEY MONUMENT.
VERIFY BENCHMARK ELEVATIONS BEFORE USING FOR LAYOUT.



CONTROL POINTS				
CP#	NORTHING	EASTING	ELEV	DESCRIPTION
NGS 779	175403.685	173722.515	1077.71	NGS PN 0779 STA 307+99, 134' RT
2	177562.782	174885.194	1078.96	NORTH SECTION CORNER OF SEC 27 T 23 N R 8 E, BRASS DISK
3	177602.033	177505.365	1084.82	NORTHEAST SECTION CORNER OF SEC 27 T 23 N R 8 E
5	174957.048	177488.595	1083.85	EAST SECTION CORNER OF SEC 27 T 23 N R 8 E, HARRISON MONUMENT
7	172280.632	174838.561	1082.88	SOUTH SECTION CORNER OF SEC 27 T 23 N R 8 E, HARRISON MONUMENT
8	172311.897	177471.708	1085.93	SOUTHEAST SECTION CORNER OF SEC 27 T 23 N R 8 E, HARRISON MONUMENT

2



CONTROL POINT				
CP#	NORTHING	EASTING	ELEV	DESCRIPTION
1	175403.685	173722.515	1077.71	NGS PN 0779

2

N
POT Sta 4000+00.00
X=172866.9864
Y=176223.4142
4000+00
4001+00
N 89° 24' 42" E
311.17'
4002+00
4003+00
PC Sta 4003+11.17
PI Sta 4004+00.96
Delta 10° 04' 51.87" (LT)
Dc 5° 37' 41.77"
R 1,018.00'
L 179.12'
Tan 89.79'
PT Sta 4004+90.28
N 79° 19' 50" E
19.34'
4004+00
PC Sta 4005+09.62
4005+00
PI Sta 4005+76.13
Delta 7° 14' 55.07" (LT)
Dc 5° 27' 24.27"
R 1,050.00'
L 132.84'
Tan 66.51'
N 79° 48' 23" E
63.54'
4006+00
PT Sta 4006+42.46
S 72° 04' 55" E
10.00'
S 6°15'56" E
10.00'
POT Sta 4006+52.46
X=173611.7870
Y=176290.0614
2000+00
2001+00
N 89° 24' 42" E
437.59'
2002+00
2003+00
2004+00
PC Sta 2004+37.59
PI Sta 2004+79.60
Delta 9° 36' 18.85" (LT)
Dc 11° 27' 32.96"
R 500.00'
L 83.82'
Tan 42.01'
PT Sta 2004+79.60
2005+00
PC Sta 2005+21.42
PT Sta 2005+84.96
2006+00
PC Sta 2006+16.76
PI Sta 2006+16.76
Delta 38° 55' 41.06" (RT)
Dc 63° 39' 43.12"
R 90.00'
L 61.15'
Tan 31.81'
PT Sta 2006+46.10
PC Sta 2006+59.10
PI Sta 2006+59.10
Delta 71° 39' 34" (RT)
Dc 45° 50' 11.84"
R 125.00'
L 156.31'
Tan 89.79'
PT Sta 2006+59.10
X=173518.4109
Y=176232.5480
2007+00
2008+00
2009+00
2010+00
2011+00
2012+00
2013+00
2014+00
2015+00
2016+00
2017+00
2018+00
2019+00
2020+00
2021+00
2022+00
2023+00
2024+00
2025+00
POT Sta 5000+00.00
X=173611.7870
Y=176290.0614
PC Sta 5000+10.00
PI Sta 5000+39.04
Delta 26° 09' 39.47" (LT)
Dc 45° 50' 11.84"
R 125.00'
L 57.07'
Tan 29.04'
PT Sta 5000+67.07
N 84° 07' 17" E
42.54'
PC Sta 5001+09.62
5001+00
PI Sta 5001+38.84
X=173754.9968
Y=176272.4454
PI Sta 5001+91.29
Delta 18° 33' 12.29" (RT)
Dc 11° 27' 32.96"
R 500.00'
L 161.91'
Tan 81.67'
PI Sta 5001+91.29
X=173800.8591
Y=176292.2233
5002+00
PT Sta 5002+71.53
S 77° 19' 30" E
77.41'
5003+00
PC Sta 5003+48.94
PI Sta 5004+42.79
Delta 13° 22' 57.58" (LT)
Dc 7° 09' 43.10"
R 800.00'
L 186.86'
Tan 93.86'
PI Sta 5004+42.79
X=174047.6291
Y=176236.7247
5004+00
5005+00
PT Sta 5005+35.79
X=174141.4782
Y=176237.8840
N 89° 17' 32" E
58.28'
S 69° 43' 03" E
10.00'
N 71° 39' 34" E
10.00'
3001+00
N 82° 28' 21" E
12.33'
3002+00
S 83° 24' 14" E
198.43'
3003+00
3004+00
3005+00
POT Sta 3000+00.00
X=173618.8015
Y=176247.1833
PI Sta 3000+38.39
Delta 10° 48' 47.31" (RT)
Dc 19° 05' 54.94"
R 300.00'
L 56.62'
Tan 28.39'
PT Sta 3000+66.62
PC Sta 3000+78.95
PT Sta 3001+98.13
PC Sta 3002+96.56
PI Sta 3003+96.56
Delta 14° 07' 24.62" (RT)
Dc 11° 51' 00.77"
R 483.50'
L 119.18'
Tan 59.90'
PC Sta 3003+48.94
PI Sta 3004+47.62
Delta 7° 18' 13.88" (LT)
Dc 7° 09' 43.10"
R 800.00'
L 101.98'
Tan 51.06'
PI Sta 3004+47.62
X=174062.3346
Y=176236.9063
PT Sta 3004+98.54
POT Sta 3005+56.82
X=174171.6611
Y=176238.2568
3000+00
3001+00
3002+00
3003+00
3004+00
3005+00
3006+00
3007+00
3008+00
3009+00
3010+00
3011+00
3012+00
3013+00
3014+00
3015+00
3016+00
3017+00
3018+00
3019+00
3020+00
3021+00
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3030+00
3031+00
3032+00
3033+00
3034+00
3035+00
3036+00
3037+00
3038+00
3039+00

2

N

POT Sta 40+00.00
X=179858.46
Y=177605.77

BEGIN PROJECT
STATION 41+04.35
X=179896.48
Y=177702.96

41+00
42+00
43+00
44+00
45+00
46+00

END PROJECT
STATION 45+02.48
X=180041.50
Y=178073.73

POT Sta 47+02.48
X=180114.35
Y=178259.99

WATER TOWER

SB OFF RAMP

CTH B

SB 139/US 51

NB 139/US 51

POT Sta 30+00.00
X=180315.15
Y=177000.47

30+00
31+00
32+00
33+00
34+00
35+00
36+00

BEGIN PROJECT
STATION 32+00.00
X=180371.54
Y=177192.36

NB OFF RAMP

POT Sta 36+56.74
X=180500.30
Y=177630.57

END PROJECT
STATION 35+78.98
X=180498.87
Y=177549.94

T29.
110'8.10

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 72	E

DATE 16JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6414-01-72 QUANTITY
0010	201.0120	Clearing	ID	28.000	28.000
0020	201.0205	Grubbing	STA	5.000	5.000
0030	201.0220	Grubbing	ID	28.000	28.000
0040	202.0105	Roadside Clearing	STA	5.000	5.000
0050	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0060	204.0100	Removing Pavement	SY	18,250.000	18,250.000
0070	204.0150	Removing Curb & Gutter	LF	1,840.000	1,840.000
0080	204.0155	Removing Concrete Sidewalk	SY	16.000	16.000
0090	204.0215	Removing Catch Basins	EACH	5.000	5.000
0100	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	60.000	60.000
0110	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	28.000	28.000
0120	204.0245	Removing Storm Sewer (size) 03. 21-Inch	LF	50.000	50.000
0130	205.0100	Excavation Common	CY	14,220.000	14,220.000
0140	213.0100	Finishing Roadway (project) 01. 6414-01-72	EACH	1.000	1.000
0150	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,355.000	1,355.000
0160	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	17,870.000	17,870.000
0170	405.0100	Coloring Concrete Red	CY	400.000	400.000
0180	416.0160	Concrete Driveway 6-Inch	SY	145.000	145.000
0190	416.0512	Concrete Roundabout Truck Apron 12-Inch	SY	570.000	570.000
0200	455.0120	Asphaltic Material PG64-28	TON	210.000	210.000
0210	455.0140	Asphaltic Material PG64-28P	TON	85.000	85.000
0220	455.0605	Tack Coat	GAL	815.000	815.000
0230	460.1110	HMA Pavement Type E-10	TON	5,060.000	5,060.000
0240	460.2000	Incentive Density HMA Pavement	DOL	3,240.000	3,240.000
0250	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	15.000	15.000
0260	465.0315	Asphaltic Flumes	SY	64.000	64.000
0270	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000
0280	522.0115	Culvert Pipe Reinforced Concrete Class III 15-Inch	LF	123.000	123.000
0290	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	64.000	64.000
0300	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0310	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	9.000	9.000
0320	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0330	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	5.000	5.000
0340	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	1.000	1.000
0350	601.0105	Concrete Curb Type A	LF	195.000	195.000
0360	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	6,533.000	6,533.000
0370	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	310.000	310.000
0380	602.0405	Concrete Sidewalk 4-Inch	SF	33,900.000	33,900.000
0390	602.0415	Concrete Sidewalk 6-Inch	SF	1,280.000	1,280.000
0400	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	304.000	304.000
0410	606.0200	Riprap Medium	CY	80.000	80.000
0420	606.0300	Riprap Heavy	CY	190.000	190.000
0430	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	499.000	499.000

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DATE 16JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6414-01-72 QUANTITY
0440	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	316.000	316.000
0450	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	648.000	648.000
0460	608.0360	Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	LF	14.000	14.000
0470	611.0530	Manhole Covers Type J	EACH	3.000	3.000
0480	611.0624	Inlet Covers Type H	EACH	20.000	20.000
0490	611.0639	Inlet Covers Type H-S	EACH	24.000	24.000
0500	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0510	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0520	611.1230	Catch Basins 2x3-FT	EACH	38.000	38.000
0530	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0540	611.2005	Manholes 5-FT Diameter	EACH	8.000	8.000
0550	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0560	611.2008	Manholes 8-FT Diameter	EACH	1.000	1.000
0570	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0580	611.8105	Adjusting Catch Basin Covers	EACH	2.000	2.000
0590	611.8110	Adjusting Manhole Covers	EACH	2.000	2.000
0620	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6414-01-72	EACH	1.000	1.000
0630	619.1000	Mobilization	EACH	0.870	0.870
0640	620.0300	Concrete Median Sloped Nose	SF	475.000	475.000
0650	624.0100	Water	MGAL	395.000	395.000
0660	625.0100	Topsoil	SY	18,210.000	18,210.000
0670	627.0200	Mulching	SY	13,610.000	13,610.000
0680	628.1104	Erosion Bales	EACH	100.000	100.000
0690	628.1504	Silt Fence	LF	2,400.000	2,400.000
0700	628.1520	Silt Fence Maintenance	LF	2,400.000	2,400.000
0710	628.1905	Mobilizations Erosion Control	EACH	7.000	7.000
0720	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0730	628.2008	Erosion Mat Urban Class I Type B	SY	4,590.000	4,590.000
0740	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0750	628.7015	Inlet Protection Type C	EACH	57.000	57.000
0760	628.7504	Temporary Ditch Checks	LF	140.000	140.000
0770	628.7555	Culvert Pipe Checks	EACH	25.000	25.000
0780	628.7560	Tracking Pads	EACH	2.000	2.000
0790	628.7570	Rock Bags	EACH	50.000	50.000
0800	629.0210	Fertilizer Type B	CWT	10.200	10.200
0810	630.0120	Seeding Mixture No. 20	LB	299.000	299.000
0820	630.0140	Seeding Mixture No. 40	LB	32.000	32.000
0830	630.0200	Seeding Temporary	LB	50.000	50.000
0840	631.0300	Sod Water	MGAL	7.000	7.000
0850	631.1000	Sod Lawn	SY	31.000	31.000
0860	633.5100	Markers Row	EACH	17.000	17.000
0870	633.5200	Markers Culvert End	EACH	12.000	12.000
0880	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	6.000	6.000
0890	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	41.000	41.000
0900	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	8.000	8.000
0910	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	2.000	2.000
0920	634.0809	Posts Tubular Steel 2x2-Inch X 9.5-FT	EACH	10.000	10.000
0930	634.0810	Posts Tubular Steel 2x2-Inch X 10-FT	EACH	9.000	9.000
0940	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	3.000	3.000
0950	637.2210	Signs Type II Reflective H	SF	480.060	480.060

DATE 16JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6414-01-72 QUANTITY
0960	637.2230	Signs Type II Reflective F	SF	143.250	143.250
0970	638.2102	Moving Signs Type II	EACH	7.000	7.000
0980	638.2602	Removing Signs Type II	EACH	39.000	39.000
0990	638.3000	Removing Small Sign Supports	EACH	40.000	40.000
1000	642.5201	Field Office Type C	EACH	1.000	1.000
1010	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 6414-01-02	DAY	124.000	124.000
1020	643.0300	Traffic Control Drums	DAY	3,945.000	3,945.000
1030	643.0420	Traffic Control Barricades Type III	DAY	4,796.000	4,796.000
1040	643.0715	Traffic Control Warning Lights Type C	DAY	4,142.000	4,142.000
1050	643.0900	Traffic Control Signs	DAY	2,161.000	2,161.000
1060	643.0910	Traffic Control Covering Signs Type I	EACH	8.000	8.000
1070	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000
1080	643.1050	Traffic Control Signs PCMS	DAY	44.000	44.000
1090	643.2000	Traffic Control Detour (project) 01. 6414-01-72	EACH	1.000	1.000
1100	643.3000	Traffic Control Detour Signs	DAY	39,894.000	39,894.000
1110	645.0120	Geotextile Fabric Type HR	SY	560.000	560.000
1120	646.0106	Pavement Marking Epoxy 4-Inch	LF	5,660.000	5,660.000
1130	646.0126	Pavement Marking Epoxy 8-Inch	LF	50.000	50.000
1140	646.0600	Removing Pavement Markings	LF	352.000	352.000
1150	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	7.000	7.000
1160	647.0356	Pavement Marking Words Epoxy	EACH	4.000	4.000
1170	647.0456	Pavement Marking Curb Epoxy	LF	120.000	120.000
1180	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	194.000	194.000
1190	647.0606	Pavement Marking Island Nose Epoxy	EACH	5.000	5.000
1200	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	130.000	130.000
1210	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	120.000	120.000
1220	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	730.000	730.000
1230	650.4000	Construction Staking Storm Sewer	EACH	61.000	61.000
1240	650.4500	Construction Staking Subgrade	LF	6,616.000	6,616.000
1250	650.5000	Construction Staking Base	LF	6,616.000	6,616.000
1260	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	6,533.000	6,533.000
1270	650.7000	Construction Staking Concrete Pavement	LF	322.000	322.000
1280	650.8500	Construction Staking Electrical Installations (project) 01. 6414-01-72	LS	1.000	1.000
1290	650.9910	Construction Staking Supplemental Control (project) 01. 6414-01-72	LS	1.000	1.000
1300	650.9920	Construction Staking Slope Stakes	LF	6,616.000	6,616.000
1310	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	12,720.000	12,720.000
1320	653.0135	Pull Boxes Steel 24x36-Inch	EACH	6.000	6.000
1330	654.0101	Concrete Bases Type 1	EACH	6.000	6.000
1340	654.0102	Concrete Bases Type 2	EACH	4.000	4.000
1350	654.0106	Concrete Bases Type 6	EACH	19.000	19.000
1360	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
1370	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
1380	655.0610	Electrical Wire Lighting 12 AWG	LF	3,230.000	3,230.000
1390	655.0620	Electrical Wire Lighting 8 AWG	LF	18,080.000	18,080.000
1400	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. Sta. 11+79	LS	1.000	1.000

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DATE 16JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6414-01-72 QUANTITY
1410	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. Sta. 21+23	LS	1.000	1.000
1420	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. Sta. 4006+40	LS	1.000	1.000
1430	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	19.000	19.000
1440	657.0327	Poles Type 6-Aluminum	EACH	19.000	19.000
1450	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	19.000	19.000
1460	659.1125	Luminaires Utility LED C	EACH	19.000	19.000
1470	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
1480	690.0150	Sawing Asphalt	LF	1,037.000	1,037.000
1490	690.0250	Sawing Concrete	LF	439.000	439.000
1500	715.0415	Incentive Strength Concrete Pavement	DOL	285.000	285.000
1510	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	1,200.000	1,200.000
1520	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
1530	SPV.0030	Special 01. Fertilizer For Lawn Type Turf	CWT	1.700	1.700
1540	SPV.0060	Special 01. Temporary Signal Control Cabinet	EACH	2.000	2.000
1550	SPV.0060	Special 02. Pull Boxes Polymer Concrete 18x18x24 Inch	EACH	6.000	6.000
1630	SPV.0060	Special 10. Sanitary Cleanout	EACH	2.000	2.000
1640	SPV.0060	Special 11. Tracer Wire Access Box	EACH	4.000	4.000
1650	SPV.0060	Special 12. Pavement Marking Grooved Preformed Thermoplastic Words	EACH	4.000	4.000
1660	SPV.0060	Special 14. Pipe Grates 30-Inch	EACH	5.000	5.000
1670	SPV.0060	Special 15. Pipes Grates 60-Inch	EACH	1.000	1.000
1740	SPV.0090	Special 07. Sanitary Lateral 6-Inch	LF	300.000	300.000
1760	SPV.0090	Special 09. Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch	LF	330.000	330.000
1770	SPV.0090	Special 10. Grooved Pavement Marking Preformed Thermoplastic 8-Inch	LF	235.000	235.000
1780	SPV.0090	Special 11. Pavement Marking Grooved Preformed Thermoplastic 18-Inch	LF	92.000	92.000
1790	SPV.0105	Special 01. Span Wire Traffic Signals For Intersections	LS	1.000	1.000
1800	SPV.0105	Special 02. Removing Utility Vault 12x6x7	LS	1.000	1.000
1810	SPV.0120	Special 01. Water For Seeded Areas	MGAL	407.000	407.000
1820	SPV.0180	Special 01. Preparing Topsoil For Lawn Type Turf	SY	1,605.000	1,605.000
1850	SPV.0200	Special 03. Sanitary Riser	VF	73.500	73.500

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CLEARNING AND GRUBBING

CATEGORY	STA	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
0010	401+82	LT	8	8
	402+07	LT	12	12
	3000+40	RT	8	8
	PROJECT TOTAL		28	28

CLEARNING AND GRUBBING

CATEGORY	STA	STA	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	2003+50	2005+50	2	2
	4002+50	4005+50	3	3
	PROJECT TOTAL		5	5

REMOVING SMALL PIPE CULVERTS

CATEGORY	STA	LOCATION	203.0100 EA	DESCRIPTION DIAMETER (INCH)	LENGTH (FT)	TYPE
0010	205+05	RT	1	15	51	CMP
	305+50	RT	1	24	45	CONC.
	500+00	LT	1	30	100	CONC.
	4006+34	CL	1	27	107	CONC.
	PROJECT TOTAL		4			

REMOVING PAVEMENT

CATEGORY	STA	STA	204.0100 SY
0010	302+77	308+49	18,250
	PROJECT TOTAL		18,250

REMOVING CURB & GUTTER

CATEGORY	STA	STA	LOCATION	204.0150 LF	COMMENT
0010	5+03	5+53	LT	120	NW QUADRANT
	6+17	6+82	RT	50	NE QUADRANT
	6+92	7+30	LT	120	SW QUADRANT
	7+61	7+93	LT	50	SW QUADRANT
	35+02	35+80	RT	85	NB RAMP
	41+04	41+80	LT	85	SB RAMP
	196+19	196+35	RT	20	PED RAMP
	200+24	203+34	RT	310	RIGHT CURB LINE
	398+77	399+30	LT	85	RADIUS RETURN
	399+99	401+88	RT	190	MEDIAN
	400+00	401+88	LT	190	MEDIAN
	400+24	402+32	LT	230	LEFT CURB LINE
	402+67	403+10	LT	65	LEFT RADIUS RETURN
	402+94	404+09	RT	240	MEDIAN
	PROJECT TOTAL			1,840	

FINISHING ROADWAY (6414-01-72)

CATEGORY	LOCATION	213.0100 EACH
0010	PROJECT	1
	PROJECT TOTAL	1

REMOVING CONCRETE SIDEWALK

CATEGORY	STA	STA		204.0155 SY
0010	196+25	196+40	RT	16
				16

REMOVING STORMWATER STRUCTURES

CATEGORY	STA	LOCATION	204.0215 REMOVING CATCH BASINS EA
0010	35+60	RT	1
	401+71	RT	1
	401+84	LT	1
	401+85	RT	1
	402+96	RT	1
	PROJECT TOTAL		5

REMOVING STORM SEWER

CATEGORY	STA	LOCATION	204.0245.01 12-INCH LF	204.0245.02 15-INCH LF	204.0245.03 21-INCH LF
0010	35+60	RT	15	-	-
	401+80	RT	14	-	-
	401+85	LT	31	-	-
	401+95	RT	-	28	-
	403+00	LT	-	-	50
	PROJECT TOTAL		60	28	50

Category	Division	From/To Station	Location	Excavation Common (item # 205.0100) Cut	EBS CY	Salvaged/ Unusable Pavement Material	Available Material	Unexpanded Fill	Expanded Fill Factor 1.10	Mass Ordinate +/-	Comment:
0010	1	5+00 TO 8+22	UNDISTRIBUTED	650	65			1275	1403	-1403	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			650	160	0	0	1275	1403	-1403	
0010	2	196+50 TO 207+50	UNDISTRIBUTED	2141	210	0	2141	361	397	1743	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			2141	210	0	2141	361	397	1743	
0010	3	300+50 TO 308+48	UNDISTRIBUTED	2097	210	0	2097	326	359	1739	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			2097	210	0	2097	326	359	1739	
0010	4	399+00 TO 407+00	UNDISTRIBUTED	2412	240	0	2412	1119	1231	1182	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			2412	240	0	2412	1119	1231	1182	
0010	5	500+50 TO 508+43	UNDISTRIBUTED	759	75	0	759	964	1060	-301	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			759	75	0	759	964	1060	-301	
0010	6	2002+75 TO 2006+00	UNDISTRIBUTED	368	35	0	368	72	80	288	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			368	35	0	368	72	80	288	
0010	7	3000+50 TO 3005+57	UNDISTRIBUTED	1599	160	0	1599	215	236	1363	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			1599	160	0	1599	215	236	1363	
0010	8	4002+00 TO 4006+00	UNDISTRIBUTED	723	70	0	723	176	194	529	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			723	70	0	723	176	194	529	
0010	9	5000+50 TO 5005+36	UNDISTRIBUTED	1023	100	0	1023	252	277	746	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			1023	100	0	1023	252	277	746	
0010	10	LOCUST DRIVE	UNDISTRIBUTED	185	20	0	185	0	0	185	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			185	20	0	185	0	0	185	
0010	11	JOHNSON AVE	UNDISTRIBUTED	125	10	0	125	0	0	125	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			125	10	0	125	0	0	125	
0010	12	STH 54/ MAPLE DRIVE	PAVEMENT REMOVAL	0	0	2500	-2500	0	0	-2500	
	Division Subtotal			0	0	2500	-2500	0	0	-2500	
0010	13	32+00 TO 35+75	UNDISTRIBUTED	359	36	300	59	14	16	44	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			359	36	300	59	14	16	44	
0010	14	41+05 TO 45+03	UNDISTRIBUTED	402	40	320	82	11	13	70	UNDISTRIBUTED EBS ESTIMATED 10% OF EXCAVATION COMMON
	Division Subtotal			402	40	320	82	11	13	70	
			Grand Total	**12,844**	**1,366**	**3,120**	**9,074**	**4,786**	**5,265**	**3,809**	
			Total Excavation Common		**14,210**						

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut for individual Category
3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

BASE AGGREGATE DENSE

CATEGORY	STA	STA	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	COMMENTS
0010	5+00	8+22	RT	-	2,250	45	ROADWAY IN RAB INSIDE CROSS WALKS
	32+00	36+79	RT	45	615	13	RAMP
	41+04	45+03	LT	45	650	14	RAMP
	196+18	196+35	RT	-	10	1	CURB REPLACEMENT
	196+18	200+00	RT	70	-	2	SIDEWALK
	200+00	203+25	RT	55	-	2	SIDEWALK
	200+00	201+25	LT	30	-	1	MEDIAN
	200+00	203+25	RT	-	1,550	31	MAINLINE AND LEFT TURN LANE
	203+00	207+50	LT	100	-	2	MEDIAN
	203+25	207+33	RT	75	-	2	SIDEWALK TO CROSS WALK
	203+25	207+33	RT	-	1,200	24	MAINLINE TO CROSS WALK
	300+30	304+80	LT	160	-	4	MEDIAN
	300+52	304+85	RT	40	1,300	27	MAINLINE & SHOULDER-CROSS WALK TO END OF MEDIAN NOSE
	304+85	308+48	LT&RT	180	2,150	47	MAINLINE & SHOULDER-MEDIAN NOSE TO PROJECT LIMITS
	398+73	399+30	LT	-	55	2	CURB REPLACEMENT
	398+90	400+00	LT	20	-	1	SIDEWALK
	400+00	402+21	LT	35	-	1	SIDEWALK
	400+00	403+25	LT	-	1,200	24	MAINLINE AND LOCUST DRIVE
	402+80	407+27	LT	85	-	2	SIDEWALK TO CROSS WALK
	403+25	407+27	LT	-	1,050	21	MAINLINE TO CROSS WALK
	500+49	504+80	LT	-	1,150	23	MAINLINE-CROSS WALK TO END OF MEDIAN NOSE
	2002+00	2005+18	LT&RT	35	2,050	42	MAINLINE SHOULDERS-TO CROSS WALKS INCLUDING JOHNSON AVE
	2005+75	2006+25	LT	20	-	1	MEDIAN
	3000+30	3003+25	LT	90	-	2	MEDIAN
	3000+48	3003+22	RT	-	740	15	MAINLINE-CROSS WALK TO END OF MEDIAN NOSE
	3003+22	3005+57	LT&RT	95	1,150	25	MAINLINE & SHOULDER-MEDIAN NOSE TO PROJECT LIMITS
	4005+30	4005+80	LT	10	-	1	SIDEWALK TO CROSS WALK
	5000+50	5001+21	LT	15	-	1	SIDEWALK TO CROSS WALK
	5000+52	5003+32	LT	-	750	15	MAINLINE-CROSS WALK TO END OF MEDIAN NOSE
				25	-	1	SIDEWALK-NW QUAD OF RAB BETWEEN CROSS WALKS
				25	-	1	SIDEWALK-NE QUAD OF RAB BETWEEN CROSS WALKS
				50	-	1	SIDEWALK SW QUAD OF RAB
				50	-	1	SIDEWALK SW QUAD OF RAB
		PROJECT TOTAL		1,355	17,870	395	

COLORING CONCRETE

CATEGORY	STA	STA	LOCATION	405.0100 COLORING CONCRETE RED CY
0010	5+00	8+22	ROUNDABOUT APRON	190
	200+00	201+90	NORTH SPLITTER ISLAND	18
	202+97	207+52	NORTH SPLITTER ISLAND	57
	300+30	304+85	SOUTH SPLITTER ISLAND	80
	3000+26	3003+24	EAST SPLITTER ISLAND	45
	4005+72	4006+24	WEST SPLITTER ISLAND	10
			PROJECT TOTAL	400

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CONCRETE DRIVEWAY

CATEGORY	STA	STA	LOCATION	416.0160 6-INCH SY
0010	197+60	198+00	RT	20
	198+70	198+90	RT	20
	204+80	205+20	RT	20
	401+55	401+80	LT	13
	201+05	201+85	RT	50
	202+50	202+90	RT	22
		PROJECT TOTAL		145

CONCRETE PAVEMENT

CATEGORY	STA	STA	LOCATION	416.0512 CONCRETE ROUNDABOUT TRUCK APRON 12-INCH SY
0010	5+00	8+22	ROUNDABOUT APRON	570
			PROJECT TOTAL	570

HMA PAVEMENT

CATEGORY	STA	STA	455.0120 ASPHALTIC MATERIAL PG64-28 TON	455.0140 ASPHALTIC MATERIAL PG64-28P TON	455.0605 TACK GAL	460.1110 HMA PAVEMENT TYPE E-10 TON
0010	32+00	36+79	6	2	20	120
	41+04	45+03	6	2	25	135
	196+15	196+34	1	1	1	2
	398+72	399+30	1	1	2	7
	200+00	203+27	17	7	70	425
	203+25	206+70	12	5	50	290
	304+85	308+48	15	6	67	380
	400+00	403+25	17	7	70	416
	403+25	406+60	10	4	40	245
	504+81	508+43	10	4	40	250
	2002+75	2005+75	13	5	55	335
	3003+21	3005+57	8	3	30	175
	4002+00	4005+40	10	4	40	235
	5003+31	5005+36	7	3	25	150
	3001+14	3003+23	6	3	25	150
	301+12	304+86	12	5	45	300
	5+00	8+22	41	16	145	1020
	5001+13	5003+32	7	3	25	160
	501+10	504+81	11	4	40	265
	PROJECT TOTAL		210	85	815	5060

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ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STA	STA	LOCATION	465.0120 TON
0010	201+05	201+80	RT	8
	202+49	202+80	RT	3
	4002+01	4002+52	LT	2
	4004+98	4005+20	LT	2
		PROJECT TOTAL		15

ASPHALTIC FLUMES

CATEGORY	STA	LOCATION	465.0315 SY
0010	35+50	RT	20
	301+75	RT	13
	504+90	LT	15
	2002+75	RT	6
	4003+05	LT	10
	PROJECT TOTAL		64

CULVERT PIPE REINFORCED CONCRETE

CATEGORY	STATION	STATION	LOCATION	522.0115 15-INCH LF	522.0324 24-INCH LF	520.8000 CONCRTE COLLARS FOR PIPE* EA	SLOPE (%)
0010	33+75	33+75	RT	-	8	1	-
	305+38	305+82	RT	-	32	-	0.32%
	308+08	308+30	RT	-	24	1	0.32%
	2005+00	2005+98	RT	83	-	-	1.83%
	4004+73	4005+26	LT	40	-	-	0.25%
		PROJECT TOTAL		123	64	2	

* ADDITIONAL QUANTITIES FOUND ON STORM SEWER PIPE TABLE

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE

CATEGORY	ID	STATION	LOCATION	522.1012 12-INCH EACH	522.1015 15-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1060 60-INCH EACH	633.5200 MARKERS CULVERT END EACH	SPV.0060.14 PIPE GRATE 30-INCH EA	SPV.0060.15 PIPE GRATE 60-INCH EA
0010	-	33+75.00	37.3 RT	-	-	1	-	-	1	-	-
	2.03	205+41.38	58.4 RT	-	-	-	1	-	1	1	-
	4.00	403+09.66	69.4 LT	-	-	-	-	1	1	-	1
	5.00	402+99.94	77.7 LT	1	-	-	-	-	1	-	-
	6.00	405+61.19	58.6 LT	-	1	-	-	-	1	-	-
	7.01	4004+72.58	41.7 LT	-	1	-	-	-	-	-	-
	7.01	4005+26.09	44.8 LT	-	1	-	-	-	-	-	-
	8.00	407+21.49	65.0 LT	-	1	-	-	-	1	-	-
	9.00	500+35.09	74.6 LT	-	1	-	-	-	1	-	-
	10.00	301+95.22	40.5 LT	-	1	-	-	-	1	-	-
	11.00	4006+04.38	67.2 LT	-	-	-	1	-	1	1	-
	11.05	2006+19.19	62.1 RT	-	-	-	1	-	1	1	-
	12.00	2005+97.95	62.0 RT	-	1	-	-	-	-	-	-
	12.01	2005+00.00	33.7 RT	-	1	-	-	-	-	-	-
	13.00	5000+27.70	77.6 LT	-	-	-	1	-	1	1	-
	13.05	3000+50.72	72.9 RT	-		-	1	-	1	1	-
	14.00	5001+92.04	44.8 LT	-	1	-	-	-	-	-	-
	15.00	305+38.17	45.3 RT	-	-	1	-	-	-	-	-
	15.01	305+82.17	43.8 RT	-	-	1	-	-	-	-	-
	16.00	308+07.69	40.5 RT	-	-	1	-	-	-	-	-
		PROJECT TOTAL		1	9	4	5	1	12	5	1

CONCRETE CURB & GUTTER

CATEGORY	STA	STA	LOCATION	601.0411 30-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING* LF	COMMENTS
0010	5+04	8+21	LT	30	30	MAPLE MEDIAN ISLAND
	5+11	5+16	LT	27	27	MAPLE MEDIAN ISLAND
	5+22	5+64	LT	110	110	NW QUADRANT
	5+72	5+75	LT	18	18	STH 54 MEDIAN ISLAND
	5+85	5+88	LT	19	19	STH 54 MEDIAN ISLAND
	5+95	6+52	LT	115	115	NE QUADRANT
	6+59	6+63	LT	19	19	MAPLE MEDIAN ISLAND
	6+71	6+73	LT	16	16	MAPLE MEDIAN ISLAND
	6+84	7+24	LT	95	95	SE QUADRANT
	7+32	7+34	LT	18	18	STH 54 MEDIAN ISLAND
	7+43	7+46	LT	18	18	STH 54 MEDIAN ISLAND
	7+56	8+16	LT	130	130	SW QUADRANT
	196+17	196+35	RT	21	21	CURB RAMP
	200+00	201+85	LT	185	185	MEDIAN
	200+24	203+25	RT	305	305	OUTSIDE CURB
	203+01	203+25	LT	25	25	MEDIAN
	203+25	207+32	RT	405	405	OUTSIDE CURB
	203+25	207+32	LT	405	405	MEDIAN
	300+52	304+79	LT	430	430	MEDIAN
	300+54	301+71	RT	115	115	OUTSIDE CURB
	398+77	399+30	LT	30	30	RADIUS RETURN
	400+00	401+84	RT	185	185	MEDIAN
	400+24	402+33	LT	230	230	OUTSIDE CURB
	402+68	403+25	LT	89	89	OUTSIDE CURB
	403+01	403+25	RT	24	24	MEDIAN
	403+25	407+30	RT	405	405	MEDIAN
	403+25	407+28	LT	400	400	OUTSIDE CURB
	500+48	504+75	RT	425	425	MEDIAN
	500+49	504+81	LT	430	430	OUTSIDE CURB
	2002+83	2005+25	RT	305	305	OUTSIDE CURB
	2005+47	2005+90	RT	97	97	OUTSIDE CURB
	2005+75	2005+94	LT	19	19	MEDIAN
	3000+48	3003+19	LT	270	270	MEDIAN
	3000+51	3003+21	RT	265	265	OUTSIDE CURB
	4005+72	4005+93	RT	23	23	MEDIAN
	4003+11	4005+87	LT	270	270	OUTSIDE CURB
	5000+52	5003+29	RT	275	275	MEDIAN
	5000+51	5003+31	LT	285	285	OUTSIDE CURB
		PROJECT TOTAL		6,533	6,533	

*ADDITIONAL STAKING QUANTITIES FOUND ON CONCRETE CURB AND GUTTER TYPE A AND 36-INCH TYPE T TABLE

CONCRETE CURB & GUTTER

CATEGORY	STA	STA	601.0105 TYPE A LF	601.0580 4-IN SLOPED 36-IN TYPE R LF	COMMENTS
0010	5+00	8+22	195	-	SPLITTER ISLAND
	5+00	8+22	-	310	TRUCK APRON
	PROJECT TOTAL		195	310	

CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	STA	LOCATION	602.0505 SF
0010	196+27	RT	8
	207+27	RT	16
	207+27	LT	16
	300+57	LT	16
	300+59	RT	16
	399+00	LT	8
	402+15	LT	8
	402+85	LT	8
	407+23	LT	16
	407+25	RT	16
	500+53	RT	16
	500+54	LT	16
	2005+65	RT	16
	2006+95	RT	16
	2006+97	LT	16
	3000+52	LT	16
	3000+56	RT	16
	4005+96	LT	16
	4005+98	RT	16
	5000+55	LT	16
	5000+57	RT	16
	PROJECT TOTAL		304

CONCRETE SIDEWALK

CATEGORY	STA	STA	LOCATION	602.0405 4-INCH SF	602.0415 6-INCH SF	COMMENTS
0010	5+00	8+21	LT	730	-	MAPLE SPLITTER ISLAND
	5+15	5+62	LT	1,400	-	NW QUADRANT
	5+98	6+59	LT	1,600	-	NE QUADRANT
	6+78	7+26	LT	1,900	-	SE QUADRANT
	7+44	8+16	LT	2,050	-	SW QUADRANT
	196+20	197+65	RT	1,090	-	-
	197+65	197+94	RT	-	180	-
	197+94	198+64	RT	420	-	-
	198+64	198+93	RT	-	180	-
	198+93	201+07	RT	1,270	-	-
	200+00	201+85	LT	1,450	-	-
	201+07	201+83	RT	-	460	-
	201+83	202+53	RT	420	-	-
	202+53	202+85	RT	-	190	-
	202+85	204+90	RT	1,260	-	-
	203+01	207+52	LT	4,600	-	-
	204+90	205+19	RT	-	180	-
	205+19	207+32	RT	1,590	-	-
	300+30	304+80	LT	6,350	-	-
	398+89	401+61	LT	1,350	-	-
	401+61	401+77	LT	-	90	-
	401+77	402+22	LT	220	-	-
	402+80	407+28	LT	2,600	-	-
	3000+27	3003+19	LT	3,600	-	-
	PROJECT TOTAL			33,900	1,280	

RIP RAP & GEOTEXTILE FABRIC

CATEGORY	STA	LOCATION		RIPRAP MEDIUM 606.0200 CY	RIPRAP HEAVY 606.0300 CY	GEOTEXTILE FABRIC TYPE HR 645.0120 SY
0010	5+35	77'	LT	12	-	34
	6+15	80'	LT	10	-	23
	7+05	75'	LT	13	-	39
	205+60	53'	RT	10	-	28
	403+00	37'	LT	-	190	330
	405+75	55'	LT	7	-	20
	407+25	62'	LT	6	-	19
	501+62	42'	LT	7	-	20
	5001+88	41'	LT	5	-	17
	7+95	75'	LT	10	-	30
	PROJECT TOTAL			80	190	560

ST SEWER PIPE REINF CONC CLASS III

CATEGORY 0010		608.0312	608.0315	608.0330	608.0360	520.8000
FROM STR	TO STR	12-INCH	15-INCH	30-INCH	60-INCH	CONCRETE COLLARS FOR PIPE*
		LF	LF	LF	LF	EA
1.00	1.01	-	9	-	-	-
1.01	1.02	-	27	-	-	-
1.02	1.03	-	16	-	-	-
1.03	1.04	27	-	-	-	-
1.04	1.05	8	-	-	-	-
1.00	1.06	25	-	-	-	-
EX MH	2.01	-	-	98	-	-
2.01	2.02	-	-	182	-	-
2.02	2.03	-	-	64	-	-
2.01	3.01	-	7	-	-	-
3.01	3.02	32	-	-	-	-
3.02	3.03	7	-	-	-	-
3.03	3.04	24	-	-	-	-
4.00	EX PIPE	-	-	-	14	1
5.00	5.01	65	-	-	-	-
6.00	6.01	-	41	-	-	-
6.01	6.02	-	21	-	-	-
6.02	6.03	16	-	-	-	-
6.03	6.04	22	-	-	-	-
6.04	6.05	8	-	-	-	-
6.01	6.06	8	-	-	-	-
8.00	8.01	-	41	-	-	-
8.01	8.02	-	23	-	-	-
8.02	8.03	-	11	-	-	-
8.03	8.04	12	-	-	-	-
8.04	8.05	27	-	-	-	-
8.05	8.06	8	-	-	-	-
8.03	8.07	12	-	-	-	-
8.07	8.08	23	-	-	-	-
SUBTOTAL		324	196	344	14	1

ST SEWER PIPE REINF CONC CLASS III

CATEGORY 0010		608.0312	608.0315	608.0330	608.3060	520.8000
FROM STR	TO STR	12-INCH	15-INCH	30-INCH	60-INCH	CONCRETE COLLARS FOR PIPE*
		LF	LF	LF	LF	EA
9.00	9.01	-	47	-	-	-
9.01	9.02	23	-	-	-	-
9.02	9.03	19	-	-	-	-
9.03	9.04	28	-	-	-	-
10.00	10.01	-	27	-	-	-
10.01	10.02	21	-	-	-	-
10.02	10.03	23	-	-	-	-
10.01	10.04	8	-	-	-	-
11.00	11.01	-	-	41	-	-
11.01	11.02	-	-	24	-	-
11.02	11.03	-	-	22	-	-
11.03	11.04	-	-	20	-	-
11.04	11.05	-	-	38	-	-
13.00	13.01	-	-	54	-	-
13.01	13.02	-	-	20	-	-
13.02	13.03	-	-	17	-	-
13.03	13.04	-	-	27	-	-
13.04	13.05	-	-	41	-	-
14.00	14.01	-	25	-	-	-
14.01	14.02	-	21	-	-	-
14.02	14.03	17	-	-	-	-
14.03	14.04	20	-	-	-	-
14.04	14.05	8	-	-	-	-
14.01	14.06	8	-	-	-	-
SUBTOTAL		175	120	304	0	0
PROJECT TOTAL		499	316	648	14	1

*ADDITIONAL QUANTITIES FOUND ON CULVERT PIPE TABLE

STORM SEWER MANHOLES & INLETS

CATEGORY	STRUCTURE I.D.	STATION	OFFSET	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0642 INLET COVERS TYPE MS EACH	611.0652 INLET COVERS TYPE T EACH	COMMENTS
0010	1.00	200+56.98	0.69 RT	-	-	-	-	1	-	-	-	1	-	-	-
	1.01	200+50.64	6.10 LT	1	-	-	-	-	-	-	1	-	-	-	-
	1.02	200+79.17	9.04 LT	1	-	-	-	-	-	-	1	-	-	-	-
	1.03	400+67.00	1.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	1.04	400+67.00	25.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	1.05	400+75.00	25.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	1.06	200+50.79	25.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	2.01	202+96.58	31.42 RT	-	-	-	1	-	-	-	-	1	-	-	-
	2.02	204+73.00	57.26 RT	-	-	-	-	-	1	-	-	-	1	-	-
	3.01	203+00.00	25.50 RT	1	-	-	-	-	-	1	-	-	-	-	-
	3.02	203+02.44	6.80 LT	1	-	-	-	-	-	1	-	-	-	-	-
	3.03	403+02.47	1.50 RT	1	-	-	-	-	-	1	-	-	-	-	-
	3.04	403+13.32	19.50 LT	1	-	-	-	-	-	1	-	-	-	-	-
	5.01	402+30.48	49.81 LT	1	-	-	-	-	-	-	1	-	-	-	-
	6.01	405+87.06	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	6.02	405+87.06	1.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	6.03	205+82.33	1.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	6.04	205+82.20	20.07 RT	1	-	-	-	-	-	-	1	-	-	-	-
	6.05	205+90.44	19.91 RT	1	-	-	-	-	-	-	1	-	-	-	-
	6.06	405+95.06	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	8.01	407+39.82	22.16 LT	1	-	-	-	-	-	1	-	-	-	-	-
	8.02	407+40.00	1.50 RT	1	-	-	-	-	-	1	-	-	-	-	-
	8.03	407+38.99	12.16 RT	-	1	-	-	-	-	-	-	1	-	-	-
	8.04	5+80.51	25.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	8.05	5+80.48	1.80 RT	1	-	-	-	-	-	-	-	-	-	1	-
	8.06	5+88.48	1.80 RT	1	-	-	-	-	-	-	-	-	-	1	-
	8.07	207+40.00	1.50 LT	1	-	-	-	-	-	1	-	-	-	-	-
	8.08	207+39.96	22.27 RT	1	-	-	-	-	-	1	-	-	-	-	-
	9.01	500+41.15	21.68 LT	1	-	-	-	-	-	1	-	-	-	-	-
	9.02	500+41.97	1.49 RT	1	-	-	-	-	-	1	-	-	-	-	-
	9.03	300+45.32	1.50 LT	1	-	-	-	-	-	1	-	-	-	-	-
	9.04	300+47.00	26.49 RT	1	-	-	-	-	-	1	-	-	-	-	-
	10.01	501+91.65	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	10.02	501+91.65	1.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	10.03	301+83.45	1.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	10.04	501+99.65	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	11.01	4006+07.59	22.95 RT	-	-	1	-	-	-	1	-	-	-	-	-
	11.02	4006+09.00	1.50 RT	-	-	1	-	-	-	1	-	-	-	-	-
	11.03	2006+09.85	1.50 LT	-	-	1	-	-	-	1	-	-	-	-	-
	11.04	2006+10.94	19.22 RT	-	-	1	-	-	-	1	-	-	-	-	-
	13.01	5000+43.23	19.50 LT	-	-	1	-	-	-	1	-	-	-	-	-
	13.02	5000+45.15	1.50 RT	-	-	1	-	-	-	1	-	-	-	-	-
	13.03	3000+41.41	1.50 LT	-	-	1	-	-	-	1	-	-	-	-	-
	13.04	3000+44.02	26.65 RT	-	-	1	-	-	-	1	-	-	-	-	-
	14.01	5002+08.50	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	14.02	5002+08.54	1.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	14.03	3001+95.47	1.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	14.04	3001+95.43	19.50 RT	1	-	-	-	-	-	-	1	-	-	-	-
	14.05	3001+87.12	19.52 RT	1	-	-	-	-	-	-	1	-	-	-	-
	14.06	5002+00.79	19.50 LT	1	-	-	-	-	-	-	1	-	-	-	-
	PROJECT TOTAL			38	1	8	1	1	1	20	24	3	1	2	

3

ADJUSTING MANHOLE COVERS AND CATCH BASIN COVERS

CATEGORY	STA	OFFSET	LOCATION	611.8110 ADJUSTING MANHOLE COVER EACH	611.8105 ADJUSTING CATCH BASIN COVER EACH
0010	200+18.81	22.28	LT	1	-
	200+17.48	0.18	LT	-	1
	202+02.11	8.18	RT	1	-
	400+21.93	27.28	LT	-	1
	PROJECT TOTAL			2	2

EROSION BALES

CATEGORY	LOCATION	628.1104 EA
0010	UNDISTRIBUTED	100
	PROJECT TOTAL	100

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	LOCATION	618.0100 EACH
0010	PROJECT	1
	PROJECT TOTAL	1

SILT FENCE

CATEGORY	STA	STA	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF
0010	32+00	36+79	RT	360	360
	41+04	45+03	LT	440	440
	196+35	201+13	RT	490	490
	398+77	401+61	LT	295	295
	401+77	402+31	LT	130	130
	402+67	403+71	LT	140	140
	405+54	405+75	LT	25	25
	407+12	407+32	LT	25	25
	500+15	500+60	LT	25	25
	501+66	501+87	LT	25	25
	2005+04	2005+07	RT	25	25
	2005+81	2006+33	RT	35	35
	3000+39	3000+64	RT	25	25
	5000+10	5000+45	LT	25	25
	UNDISTRIBUTED			335	335
	PROJECT TOTAL			2,400	2,400

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STA	LOCATION	620.0300 SF
0010	201+87	LT	40
	203+00	LT	50
	207+46	LT	35
	207+52	RT	25
	300+31	LT	35
	300+35	LT	25
	304+81	RT	50
	2005+72	LT	45
	2006+17	LT	35
	2006+25	RT	20
	3000+29	LT	35
	3000+29	LT	20
	3003+20	RT	60
	PROJECT TOTAL		475

MOBILIZATION EROSION CONTROL

CATEGORY	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	7	5
PROJECT TOTAL	7	5

LANDSCAPING

CATEGORY	STA	STA	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0120.01 WATER FOR SEEDED AREAS MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
0010	5+24	5+40	LT	380	280	105	0.2	6	1	-	0.1	9	70
	5+92	6+60	LT	880	700	180	0.5	14	2	-	0.1	20	100
	6+87	7+30	LT	650	480	170	0.3	10	2	-	0.1	15	100
	7+49	8+20	LT	830	640	185	0.4	13	2	-	0.1	19	100
	32+00	36+79	RT	500	500	-	0.3	9	-	-	-	11	-
	41+04	45+03	LT	650	650	-	0.4	11	-	-	-	15	-
	196+15	207+00	RT	2,000	1,300	705	0.9	26	14	-	0.4	44	580
	301+00	308+35	RT	2,100	1,550	570	1.3	38	-	-	0.1	47	10
	398+77	402+25	LT	520	330	190	0.1	3	6	-	0.2	12	360
	402+75	407+00	LT	2,850	2,300	545	1.6	47	4	-	0.2	63	240
	501+00	508+40	LT	2,400	1,750	645	1.5	44	-	-	0.1	53	5
	2002+70	2005+25	RT	350	150	200	0.2	6	-	-	0.0	8	-
	3001+00	3005+57	RT	1,350	950	405	0.8	24	-	-	0.1	30	5
	4002+00	4006+00	LT	1,150	880	275	0.7	20	1	-	0.1	26	30
	5001+00	5005+66	LT	1,600	1,150	415	1.0	28	-	-	0.1	35	5
	UNDISTRIBUTED			-	-	-	-	-	-	50	-	-	-
	PROJECT TOTAL			18,210	13,610	4,590	10.2	299	32	50	1.7	407	1,605

INLET PROTECTION

CATEGORY	STA	LOCATION	TYPE C 628.7015 EA
0010	5+81	RT	1
	5+81	LT	1
	5+88	RT	1
	35+58	RT	1
	40+85	LT	1
	200+08	LT	1
	200+51	LT	1
	200+51	RT	1
	200+79	LT	1
	201+70	LT	1
	201+90	LT	1
	203+00	RT	1
	203+02	LT	1
	205+82	RT	1
	205+82	LT	1
	205+90	RT	1
	207+40	RT	1
	207+40	LT	1
	300+45	LT	1
	300+47	RT	1
	301+83	LT	1
	398+45	LT	1
	398+75	LT	1
	400+10	LT	1
	400+67	RT	1
	400+67	LT	1
	400+75	LT	1
	401+75	RT	1
	401+80	LT	1
		SUBTOTAL	29

INLET PROTECTION

CATEGORY	STA	LOCATION	TYPE C 628.7015 EA
0010	402+30	LT	1
	402+98	RT	1
	403+02	RT	1
	403+13	LT	1
	405+87	RT	1
	405+87	LT	1
	405+95	LT	1
	407+40	RT	1
	407+40	LT	1
	500+41	LT	1
	500+42	RT	1
	501+92	RT	1
	501+92	LT	1
	501+99	LT	1
	2006+11	RT	1
	2006+11	LT	1
	3000+41	LT	1
	3000+44	RT	1
	3001+87	RT	1
	3001+95	RT	1
	3001+95	LT	1
	4006+08	LT	1
	4006+09	RT	1
	5000+43	LT	1
	5000+45	RT	1
	5002+00	LT	1
	5002+09	RT	1
	5002+09	LT	1
		SUBTOTAL	28
		PROJECT TOTAL	57

INLET PROTECTION

CATEGORY	STA	LOCATION	TYPE A 628.7005 EA
0010	204+75	RT	1

TRACKING PAD

CATEGORY	LOCATION	628.7560 EA
0010	UNDISTRIBUTED	2
	PROJECT TOTAL	2

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF
0010	43+45	LT	10
	204+15	RT	10
	206+50	RT	10
	302+00	RT	10
	304+00	RT	10
	307+00	RT	10
	404+00	LT	10
	406+00	LT	10
	502+00	LT	10
	504+00	LT	10
	506+00	LT	10
	507+50	LT	10
	3003+50	RT	10
	5003+50	LT	10
	PROJECT TOTAL		140

MARKERS ROW

CATEGORY	STATION	OFFSET		633.5100 MARKERS ROW EACH
0010	21+99.90	36.62	LT	1
	21+99.87	41.62	LT	1
	24+02.29	57.23	LT	1
	25+03.86	79.59	LT	1
	25+31.57	99.29	LT	1
	28+04.39	143.22	LT	1
	28+50.69	39.45	RT	1
	30+25.47	101.41	LT	1
	32+44.97	39.68	LT	1
	33+07.97	39.54	LT	1
	33+07.20	30.54	LT	1
	107+16.23	107.05	LT	1
	110+02.18	115.37	LT	1
	113+19.35	101.03	LT	1
	113+98.71	79.93	LT	1
	115+52.50	81.7	LT	1
	118+49.49	54.59 LT	LT	1
	PROJECT TOTAL			17

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH
0010	33+75	RT	3
	204+95	RT	5
	305+80	RT	3
	2005+00	RT	2
	2006+00	RT	5
	3000+50	RT	5
	4004+75	LT	2
	PROJECT TOTAL		25

SOD

CATEGORY	LOCATION		631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
0010	35+50	RT	1	5
	301+75	RT	1	7
	504+85	LT	2	7
	2002+80	RT	1	5
	4003+05	LT	2	7
	PROJECT TOTAL		7	31

FIELD OFFICE TYPE C

CATEGORY	LOCATION	642.5201 EACH
0010	PROJECT	1
	PROJECT TOTAL	1

ROCK BAGS

CATEGORY	LOCATION	628.7570 EA
0010	UNDISTRIBUTED	50
	PROJECT TOTAL	50

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					SIGNS											
CATEGORY 0010					634.0612 POSTS WOOD 4X6-INCH 12-FT	634.0614 POSTS WOOD 4X6-INCH 14-FT	634.0616 POSTS WOOD 4X6-INCH 16-FT	634.0618 POSTS WOOD 4X6-INCH 18-FT	634.0809 POSTS TUBULAR STEEL 2X2-INCH 9.5-FT	634.0810 POSTS TUBULAR STEEL 2X2-INCH 10-FT	634.0811 POSTS TUBULAR STEEL 2X2-INCH 11-FT	637.2210 SIGNS TYPE II REFLECTIVE H	637.2230 SIGNS TYPE II REFLECTIVE F	638.2102 MOVING SIGNS TYPE II	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS
SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE (INCH X INCH)	EA	EA	EA	EA	EA	EA	EA	SF	SF	EA	EA	EA
S100	196+39	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S101	196+39	RT	R1-2	36X31	-	1	-	-	-	-	-	7.75	-	-	-	-
S102	197+05	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S103	197+05	RT	J42-2	48X36	-	2	-	-	-	-	-	14.00	-	-	-	-
			M3-3	24X12	-	-	-	-	-	-	-	-	-	-	-	-
			M4-3	24X12	-	-	-	-	-	-	-	-	-	-	-	-
			M1-4	24X24	-	-	-	-	-	-	-	-	-	-	-	-
			M3-2	24X12	-	-	-	-	-	-	-	-	-	-	-	-
			M1-6	24X24	-	-	-	-	-	-	-	-	-	-	-	-
S104	197+38	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
			R7-1D	18X24	-	1	-	-	-	-	-	3.00	-	-	-	-
S105	197+50	RT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S106	198+09	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S107	198+50	RT	W9-1R	30X30	-	1	-	-	-	-	-	-	6.25	-	-	-
S108	200+16	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
			R7-1D	18X24	-	1	-	-	-	-	-	3.00	-	-	-	-
S109	200+06	LT	R3-55L	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S110	200+33	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S111	202+11	RT	W2-6	30X30	-	1	-	-	-	-	-	-	6.25	-	-	-
S112	202+11	RT	W13-1	18X18	-	-	-	-	-	-	-	-	2.25	-	-	-
S113	203+04	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S114	203+08	LT	R4-7	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S115	203+75	RT	D2-1	72X15	-	2	-	-	-	-	-	7.50	-	-	-	-
S116	203+94	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	3
			R7-1D	18X24	-	1	-	-	-	-	-	3.00	-	-	-	-
			MOVE		-	-	-	-	-	-	-	-	-	1	-	-
S117	204+50	RT	MAPLE DR	54X24	-	2	-	-	-	-	-	9.00	-	-	-	-
S118	205+56	RT	W3-2	36X36	-	-	1	-	-	-	-	-	9.00	-	-	-
S119	205+84	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S200	199+50	LT	D1-3	90X42		2			-	-	-					
S201	399+44	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S202	399+44	LT	W3-3	36X36	-	-	1	-	-	-	-	-	9.00	-	-	-
S203	400+20	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
			R7-1D	18X24	-	1	-	-	-	-	-	3.00	-	-	-	-
S204	401+33	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	2
S205	401+79	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S206	401+79	RT	R4-7	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S207	402+23	LT	R1-1	30X30	-	1	-	-	-	-	-	6.25	-	-	-	-
S208	402+28	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S209	403+75	LT	J3-2	48X57	-	-	-	2	-	-	-	21.00	-	-	-	-
			M3-4	-	-	-	-	-	-	-	-	-	-	-	-	-
			M1-4	-	-	-	-	-	-	-	-	-	-	-	-	-
			M5-1L	-	-	-	-	-	-	-	-	-	-	-	-	-
			M3-1	-	-	-	-	-	-	-	-	-	-	-	-	-
			M4-3	-	-	-	-	-	-	-	-	-	-	-	-	-
			M1-6	-	-	-	-	-	-	-	-	-	-	-	-	-
			M6-1	-	-	-	-	-	-	-	-	-	-	-	-	-
S210	404+01	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	2
			R7-1D	18X24	-	1	-	-	-	-	-	3.00	-	-	-	-
S211	404+05	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S212	404+75	LT	J1-1	24X39	-	2	-	-	-	-	-	6.50	-	-	-	-
			M1-5A	-	-	-	-	-	-	-	-	-	-	-	-	-
			M2-1	-	-	-	-	-	-	-	-	-	-	-	-	-
S213	405+53	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S214	405+55	LT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S215	406+30	LT	J4-1	48X36	-	-	1	-	-	-	-	12.00	-	-	-	-
			M3-4	-	-	-	-	-	-	-	-	-	-	-	-	-
			M1-6	-	-	-	-	-	-	-	-	-	-	-	-	-
S216	406+50	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S300	301+50	RT	J4-1	24X36	-	-	1	-	-	-	-	6.00	-	-	-	-
			M3-2	-	-	-	-	-	-	-	-	-	-	-	-	-
			M1-6	-	-	-	-	-	-	-	-	-	-	-	-	-
S301	302+24	RT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S302	303+82	RT	W6-2	36X36	-	1	-	-	-	-	-	-	9.00	-	-	-
S400	502+26	LT	W3-2	36X36	-	-	1	-	-	-	-	-	9.00	-	-	-
S401	503+75	LT	MAPLE DRIVE	54X24	-	2	-	-	-	-	-	9.00	-	-	-	-
S402	504+66	RT	R4-7	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S403	505+77	LT	W2-6	30X30	-	1	-	-	-	-	-	-	6.25	-	-	-
S404	505+77	LT	W13-1	18X18	-	-	-	-	-	-	-	-	6.25	-	-	-
S405	506+97	LT	W6-1	36X36	-	1	-	-	-	-	-	-	9.00	-	-	-
S406	507+98	LT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
			SUBTOTAL		0	32	5	2	0	0	0	154.00	72.25	1	18	22

SIGNS

CATEGORY 0010					634.0612 POSTS WOOD 4X6-INCH 12-FT	634.0614 POSTS WOOD 4X6-INCH 14-FT	634.0616 POSTS WOOD 4X6-INCH 16-FT	634.0618 POSTS WOOD 4X6-INCH 18-FT	634.0809 POSTS TUBULAR STEEL 2X2-INCH 9.5-FT	634.0810 POSTS TUBULAR STEEL 2X2-INCH 10-FT	634.0811 POSTS TUBULAR STEEL 2X2-INCH 11-FT	637.2210 SIGNS TYPE II REFLECTIVE H	637.2230 SIGNS TYPE II REFLECTIVE F	638.2102 MOVING SIGNS TYPE II	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS
SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE (INCH X INCH)	EA	EA	EA	EA	EA	EA	EA	SF	SF	EA	EA	EA
S501	2000+83	RT	W13-1	18X18	1	-	-	-	-	-	-	-	2.25	-	-	-
S502	2000+83	RT	W2-6	30X30	-	-	-	-	-	-	-	-	6.25	-	-	-
S503	2004+03	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S504	2004+36	RT	W3-2	36X36	-		1	-	-	-	-	-	9.00	-	-	-
S505	2005+64	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S506	2005+66	RT	R1-1	30X30	-	1	-	-	-	-	-	6.25	-	-	-	-
S507	2005+78	LT	R4-7	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S600	4003+90	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S601	4004+76	LT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S700	3000+97	RT	R14-1	24X18	-	1	-	-	-	-	-	3.00	-	-	-	-
S701	3001+76	RT	R2-1	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S702	3002+03	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S703	3002+05	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S704	3002+71	RT	W6-2	36X36	-	-	1	-	-	-	-	-	9.00	-	-	-
S800	5002+13	LT	W3-2	36X36	-	-	1	-	-	-	-	-	9.00	-	-	-
S801	5003+19	RT	R4-7	24X30	-	1	-	-	-	-	-	5.00	-	-	-	-
S802	5004+65	LT	W6-1	36X36	-	1	-	-	-	-	-	-	9.00	-	-	-
S803	3005+60	LT	W2-6	30X30	1	-	-	-	-	-	-	-	6.25	-	-	-
S804	3005+60	LT	W13-1	18X18	-	-	-	-	-	-	-	-	2.25	-	-	-
S901	5+49.9	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S902	5+49.9	LT	R1-54	24X15	-	-	-	-	-	-	-	2.50	-	-	-	-
S904	5+11	LT	D1-1	66X15	-	-	-	-	2	-	-	6.88	-	-	-	-
S905	5+02.	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S906	5+02	LT	R6-2R	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S907	7+86	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S908	7+97	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S909	7+97	LT	R1-54	24X15	-	-	-	-	-	-	-	2.50	-	-	-	-
S910	7+42	LT	STH 54	42X30	-	-	-	-	-	-	2	8.75	-	-	-	-
S911	7+35	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S912	7+35	LT	R6-2R	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S913	7+09	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S914	7+09	LT	R1-54	24X15	-	-	-	-	-	-	-	2.50	-	-	-	-
S915	7+07	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S916	6+75	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S917	6+69	LT	D1-1	66X15	-	-	-	-	-	1	-	6.88	-	-	-	-
S918	6+62	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S919	6+62	LT	R6-2R	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S920	5+84	LT	STH 54	42X30	-	-	-	-	-	-	1	8.75	-	-	-	-
S921	5+76	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S922	5+76	LT	R6-2R	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S923	6+14	RT	R6-1R	36X12	1	-	-	-	2	-	-	3.00	-	-	-	-
S924	6+14	RT	R6-4B	48X18	-	-	-	-	-	-	-	6.00	-	-	-	-
S925	5+74	RT	R6-1R	36X12	1	-	-	-	2	-	-	3.00	-	-	-	-
S926	5+74	RT	R6-4B	48X18	-	-	-	-	-	-	-	6.00	-	-	-	-
S927	7+30	RT	R6-1R	36X12	1	-	-	-	2	-	-	3.00	-	-	-	-
S928	7+30	RT	R6-4B	48X18	-	-	-	-	-	-	-	6.00	-	-	-	-
S929	7+71	RT	R6-1R	36X12	1	-	-	-	2	-	-	3.00	-	-	-	-
S930	7+71	RT	R6-4B	48X48	-	-	-	-	-	-	-	16.00	-	-	-	-
S931	6+34.36	LT	R1-2	36X31	-	-	-	-	-	1	-	7.75	-	-	-	-
S932	6+34.36	LT	R1-54	24X15	-	-	-	-	-	-	-	2.50	-	-	-	-
				SUBTOTAL	6	7	3	0	10	9	3	198.50	53.00	0	8	8

					SIGNS											
CATEGORY 0010					634.0612 POSTS WOOD 4X6-INCH	634.0614 POSTS WOOD 4X6-INCH	634.0616 POSTS WOOD 4X6-INCH	634.0618 POSTS WOOD 4X6-INCH	634.0809 POSTS TUBULAR STEEL 2X2-INCH	634.0810 POSTS TUBULAR STEEL 2X2-INCH	634.0811 POSTS TUBULAR STEEL 2X2-INCH	637.2210	637.2230	638.2102 MOVING	638.2602 REMOVING	638.3000 REMOVING
SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE (INCH X INCH)	12-FT EA	14-FT EA	16-FT EA	18-FT EA	9.5-FT EA	10-FT EA	11-FT EA	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	SIGNS TYPE II EA	SIGNS TYPE II EA	SMALL SIGN SUPPORTS EA
N1	30+00	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
N2	32+05	RT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
N3	35+05	RT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
N4	21+85	RT	R4-7	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
			R3-2	24X24	-	-	-	-	-	-	-	4.00	-	-	-	-
			R10-50L	30X36	-	-	-	-	-	-	-	7.50	-	-	-	-
N5	35+90	RT	R1-2	36X31	-	1	-	-	-	-	-	3.88	-	-	-	-
N6	35+90	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
N7	35+90	RT	R6-2L	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
N8	36+00	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
N9	35+85	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
N10	21+70	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	-
N11	20+85	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	-
N12	20+90	RT	R4-7	-	-	-	-	-	-	-	-	5.00	-	-	-	-
N13	20+90	RT	R10-50L	-	-	-	-	-	-	-	-	7.50	-	-	-	-
N14	20+85	RT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
N15	-	RT	W3-3	36X36	-	-	-	-	-	-	-	-	9.00	-	-	-
N16	20+88	RT	R1-1F	36X36								5.18				
N17	21+00	RT	R1-1F	36X36								5.18				
N18	21+64	RT	R1-1F	36X36								5.18				
N19	21+82	RT	R1-1F	36X36								5.18				
N20	22+16	LT	R1-1F	36X36								5.18				
S1	47+00	LT	W3-3	36X36	-	-	-	-	-	-	-	-	9.00	-	-	-
S2	47+00	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S3	44+00	LT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
S4	41+80	LT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
S5	40+90	LT	R6-2L	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S6	40+90	LT	R1-2	36X31	-	1	-	-	-	-	-	3.88	-	-	-	-
S7	40+80	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S8	40+80	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S9	40+80	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	-
S10	11+00	LT	R4-7	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S11	11+05	LT	R10-50L	30X36	-	-	-	-	-	-	-	7.50	-	-	-	-
S12	11+90	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S13	11+20	LT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S14	40+95	RT	REMOVE	-	-	-	-	-	-	-	-	-	-	-	1	1
S15	11+90	LT	R4-7	24X30	-	-	-	-	-	-	-	5.00	-	-	-	-
S16	11+90	LT	R3-2	24X24	-	-	-	-	-	-	-	4.00	-	-	-	-
S17	11+90	LT	R10-50L	30X36	-	-	-	-	-	-	-	7.50	-	-	-	-
S18	12+10	LT	MOVE	-	-	-	-	-	-	-	-	-	-	1	-	-
S19	10+87	RT	R1-1F	30X30	-	-	-	-	-	-	-	5.18	-	-	-	-
S20	11+07	LT	R1-1F	30X30	-	-	-	-	-	-	-	5.18	-	-	-	-
S21	11X26	LT	R1-1F	30X30	-	-	-	-	-	-	-	5.18	-	-	-	-
S22	11+79	LT	R1-1F	30X30	-	-	-	-	-	-	-	5.18	-	-	-	-
S23	11+98	LT	R1-1F	30X30	-	-	-	-	-	-	-	5.18	-	-	-	-
				SUBTOTAL	0	2	0	0	0	0	0	127.56	18	6	13	10
				TOTAL	6	41	8	2	10	9	3	480.06	143.25	7	39	40

			TRAFFIC CONTROL																			
		643.0200.01	643.0300			643.0420			643.0715			643.0900			643.2000.01	643.3000			643.1050	643.0910	643.0920	649.0400
CATEGORY	LOCATION	TRAFFIC CONTROL SURVEILANCE AND MAINTENANCE (6414-01-02) DAY	TRAFFIC CONTROL DRUMS NUMBER	DAY	TOTAL	BARRICADES TYPE III NUMBER	DAY	TOTAL	TRAFFIC CONTROL WARNING LIGHTS TYPE C NUMBER	DAY	TOTAL	TRAFFIC CONTROL SIGNS NUMBER	DAY	TOTAL	TRAFFIC CONTROL DETOUR PROJECT EACH	TRAFFIC CONTROL DETOUR SIGNS NUMBER	DAY	TOTAL	TRAFFIC CONTROL SIGNS PCMS DAY	TRAFFIC CONTROL* COVERING SIGNS TYPE I EACH	TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	TEMPORARY PAVMENT MARKING REMOVEABLE TAPE 4-INCH LF
0010	TRAFFIC CONTROL AND DETOUR ROUTE	124	30	109	3,270	44	109	4,796	38	109	4,142	19	109	2,071	1	366	109	39,894	-	8	8	730
	NORTHBOUND OFF RAMP		22	15	330	-	-	-	-	-	-	3	15	45	-	-	-	-	22	-	-	-
	SOUTHBOUND OFF RAMP		23	15	345	-	-	-	-	-	-	3	15	45	-	-	-	-	22	-	-	-
	PROJECT TOTAL	124			3,945			4,796			4,142			2,161	1			39,894	44	8	8	730

SIGN SUMMARY TABLE	
J4-2	6
J2-1	1
J2-2	32
J2-3	3
J2-4	1
M1-4	41
M1-6	46
M3-2	17
M3-4	27
M4-3	40
M4-8	92
M4-8A	3
M5-1L	10
M5-1R	3
M6-1	62
M6-2	9
R11-2	11
R11-3	8
W2O-2	7
NO CODE	9

* NOTE: THERE IS 1 CYCLE OF COVERING SIGNS

PAVEMENT MARKINGS

CATEGORY 0010

STATION	STATION	LOCATION	646.0106 EPOXY 4-INCH WHITE LF	646.0106 EPOXY 4-INCH YELLOW LF	646.0126 EPOXY 8-INCH LF	647.0456 CURB EPOXY LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EA	647.0726 DIAGONAL EPOXY 12-INCH LF	647.0766 CROSS WALK EPOXY 6-INCH EA	SPV.0090.09 GROOVED CROSSWALK PREFORMED THERMOPLASTIC CROSSWALK 6-INC H EA	SPV.0090.10 GROOVED PREFORMED THERMOPLASTIC 8-INCH LF	SPV.0090.11 GROOVED PREFORMED THERMOPLASTIC 18-INCH LF	COMMENTS
5+44	5+70	LT	-	-	-	-	-	-	-	-	-	-	24	
5+70	5+90	LT	-	-	-	-	-	-	-	-	-	60	-	
6+24	6+55	LT	-	-	-	-	-	-	-	-	-	-	24	
6+55	6+76	LT	-	-	-	-	-	-	-	-	-	55	-	
7+04	7+28	LT	-	-	-	-	-	-	-	-	-	-	22	
7+28	7+51	LT	-	-	-	-	-	-	-	-	-	60	-	
7+90	8+16	LT	-	-	-	-	-	-	-	-	-	-	22	
8+16	5+19	LT	-	-	-	-	-	-	-	-	-	60	-	
10+84		RT	-	-	-	-	38	-	-	-	-	-	-	
11+32	11+53	LT	-	-	-	-	22	-	-	-	-	-	-	
11+90		LT	-	-	-	-	37	-	-	-	-	-	-	
20+96		RT	-	-	-	-	36	-	-	-	-	-	-	
21+40	21+60	RT	-	-	-	-	20	-	-	-	-	-	-	
21+93		LT	-	-	-	-	41	-	-	-	-	-	-	
200+25	203+30	RT	90	-	-	-	-	-	-	-	-	-	-	
201+25	201+75	RT	-	-	50	-	-	-	-	-	-	-	-	
207+25		RT	-	-	-	-	-	-	-	-	40	-	-	SB ENTRANCE
300+55		RT	-	-	-	-	-	-	-	-	50	-	-	SB EXIT
301+70	308+48	RT	620	-	-	-	-	-	-	-	-	-	-	
304+80	308+48	LT	-	685	-	-	-	-	35	-	-	-	-	
304+80		LT	-	-	-	20	-	1	-	-	-	-	-	
400+25	402+00	LT	50	-		-	-	-	-	-	-	-	-	
401+85		RT	-	-	-	20	-	1	-	-	-	-	-	
402+18	402+85	LT	120	175	-	-	-	-	-	120	-	-	-	LOCUST DRIVE
403+00		RT	-	-	-	40	-	1	-	-	-	-	-	
407+25		LT	-	-	-	-	-	-	-	-	40	-	-	NB EXIT
500+50		LT	-	-	-	-	-	-	-	-	40	-	-	NB ENTRANCE
504+81	508+43	LT	360	685	-	-	-	-	-	-	-	-	-	
2002+00	2002+84	RT	85	-	-	-	-	-	-	-	-	-	-	
2002+00	2005+75	RT	-	640	-	-	-	-	-	-	-	-	-	JOHNSON AVE
2005+75		LT	-	-	-	30	-	1	-	-	-	-	-	
2006+00		RT	-	-	-	-	-	-	-	-	35	-	-	EB ENTRANCE
3000+50		RT	-	-	-	-	-	-	-	-	50	-	-	EB EXIT
3003+21	3005+57	RT	240	440	-	-	-	-	-	-	-	-	-	
3003+25		LT	-	-	-	10	-	1	-	-	-	-	-	
4002+00	4003+12	LT	115	-	-	-	-	-	-	-	-	-	-	
4002+00	405+93	RT	-	675	-	-	-	-	70	-	-	-	-	
4006+00		LT	-	-	-	-	-	-	-	-	40	-	-	WB EXIT
5000+55		LT	-	-	-	-	-	-	-	-	35	-	-	WB ENTRANCE
5003+30	5005+36		235	-	-	-	-	-	-	-	-	-	-	
5003+30	505+35	RT	-	445	-	-	-	-	25	-	-	-	-	
	SUBTOTAL		1915	3745										
	PROJECT TOTAL		5660		50	120	194	5	130	120	330	235	92	

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REMOVING PAVEMENT MARKINGS

CATEGORY	STATION	STATION	LOCATION	646.0600 LF
0010	11+10	-	LT	16
	11+45	-	LT	20
	-	-	RT	20
	21+85	-	RT	16
	32+12	33+52	RT	140
	43+50	44+90	LT	140
		PROJECT TOTAL		352

PAVEMENT MARKINGS SYMBOLS AND ARROWS

CATEGORY	STATION	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EA	647.0356 PAVEMENT MARKING WORDS EPOXY ONLY EA	SPV.0060.12 GROOVED PREFORMED THERMOPLASTIC WORDS EA
0010	33+90	1	-	-
	34+35	-	1	-
	34+75	1	-	-
	35+25	-	1	-
	35+60	-	-	-
	35+70	1	-	-
	41+10	1	-	-
	41+20	-	-	-
	41+60	-	1	-
	42+05	1	-	-
	42+45	-	1	-
	42+90	1	-	-
	201+45	1	-	-
	207+50	-	-	1
	2006+25	-	-	1
	5000+25	-	-	1
	500+30	-	-	1
PROJECT TOTAL		7	4	4

STAKING

CATEGORY	STA	STA	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
0010	5+00	8+22	3	322	322	322	-	-	322
	32+00	35+79	1	379	379	-	-	-	379
	41+04	45+03	-	399	399	-	-	-	399
	196+20	207+82	15	1,162	1,162	-	-	-	1,162
	300+24	308+48	1	824	824	-	-	-	824
	398+73	407+58	15	885	885	-	-	-	885
	500+25	508+43	7	818	818	-	-	-	818
	2002+75	2006+30	3	355	355	-	-	-	355
	3000+23	3005+57	6	534	534	-	-	-	534
	4002+00	4006+29	3	429	429	-	-	-	429
	5000+27	5005+36	7	509	509	-	-	-	509
	PROJECT TOTAL		61	6,616	6,616	322	1	1	6,616

CATEGORY	STRUCTURE ID	STA	LOCATION (1)	SPV.0060.01 TEMPORARY SIGNAL CONTROL CABINET EA	SPAN WIRETRAFFIC SIGNAL SPV.0105.01 TRAFFIC SIGNAL INSTALLATION FOR INTERSECTION LS	656.0200 ELEC SERVICE METER BREAKER PEDESTAL* LS	653.0135 PULL BOXES STEEL 24X36-INCH EA	654.0101 CONCRETE BASES TYPE 1 EA	654.0102 CONCRETE BASES TYPE 2 EA	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EA
0010	SB5	10+86.0	48.0 RT	-	-	-	-	1	-	-
	PB3	10+86.0	55.0 RT	-	-	-	1	-	-	-
	SB4	10+98.0	56.0 RT	-	-	-	-	-	1	-
	-	11+00.0	0.0 LT	-	1	-	-	-	-	-
	SB3	11+62.0	44.0 RT	-	-	-	-	1	-	-
	PB1	11+71.0	64.0 LT	-	-	-	1	-	-	-
	SB1	11+79.0	55.0 LT	-	-	-	-	1	-	-
	CB1	11+79.0	77.0 LT	1	-	1	-	-	-	1
	PB2	11+82.0	42.0 RT	-	-	-	1	-	-	-
	SB2	11+97.0	38.0 RT	-	-	-	-	-	1	-
	SB9	20+97.0	35.0 LT	-	-	-	-	-	1	-
	SB8	21+03.0	60.0 RT	-	-	-	-	1	-	-
	PB6	21+11.0	33.0 LT	-	-	-	1	-	-	-
	SB10	21+22.0	39.0 LT	-	-	-	-	1	-	-
	CB2	21+23.0	78.0 RT	1	-	1	-	-	-	1
	PB5	21+24.0	65.0 RT	-	-	-	1	-	-	-
	SB6	21+81.0	58.0 LT	-	-	-	-	-	1	-
	PB4	21+93.0	50.0 LT	-	-	-	1	-	-	-
	-	22+00.0	0.0 LT	-	1	-	-	-	-	-
	SB7	22+16.0	43.0 LT	-	-	-	-	1	-	-
			PROJECT TOTAL	2	2	2	6	6	4	2

*ADDITIONAL QUANTITIES FOUND ON CONCRETE CONTROL CABINET BASE TABLE

SUMMARY OF STATE FURNISHED MATERIALS FOR SPV.0105.01
SPAN WIRE TRAFFIC SIGNALS FOR INTERSECTIONS (USH 51/CTHB RAMP TERMINALS),
CONTRACTOR TO WISDOT MAINTAINED

QUANTITY EACH	DESCRIPTION
6	13 FT SIGNAL STANDARDS
4	POLES TYPE 4
2	TROMBONE ARMS, 15 FT
2	TROMBONE ARMS, 20 FT
6	TROMBONE ARMS, 25 FT
6	PEDESTAL BASES
4	TRANSFORMER BASES
20	TRAFFIC SIGNAL FACES WITH BACKPLATES, 3-SECTION
4	TRAFFIC SIGNAL FACES WITH BACKPLATES, 4-SECTION
20	LED MODULE 12 INCH, RED BALL
20	LED MODULE 12 INCH, YELLOW BALL
16	LED MODULE 12 INCH, GREEN BALL
4	LED MODULE 12 INCH, RED ARROW
8	LED MODULE 12 INCH, YELLOW ARROW
8	LED MODULE 12 INCH, GREEN ARROW
12	LUMINAIRE ARMS
12	LUMINAIRES UTILITY HPS 250 WATTS

FOR INFORMATIONAL PURPOSES ONLY

3

CONDUIT

CATEGORY	FROM STR	TO STR	652.0225 RIGID NONMETALLIC SHEDULE 40* 2-INCH LF
0010	CB2	PB5	14
	PB5	SB8	21
	PB5	WP12	45
	WP14	PB6	36
	PB6	SB9	13
	PB6	SB10	13
	WP8	PB4	18
	PB4	SB6	14
	PB4	SB7	24
	CB1	PB1	15
	PB1	WP1	28
	PB1	SB1	12
	WP3	PB2	35
	PB2	SB2	16
	PB2	SB3	19
	WP4	PB3	17
	PB3	SB4	12
	PB3	SB5	8
	PROJECT TOTAL		360

*ADDITIONAL QUANTITIES FOUND ON LIGHTING CIRCUIT TABLE

LIGHTING

CATAGORY	STRUCTURE ID	STATION	LOCATION	654.0106 CONCRETE BASES TYPE 6 EACH	655.0610 ELECTRICAL WIRING LIGHTING 12 AWG* LF	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0327 POLES TYPE 6-ALUMINUM EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2 INCH CLAMP 15-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH
0010	LP-1	4006+30	48.15 LT	1	170	1	1	1	1
	LP-2	207+07	39.34 RT	1	170	1	1	1	1
	LP-3	407+65	47.10 LT	1	170	1	1	1	1
	LP-4	5000+75	38.83 LT	1	170	1	1	1	1
	LP-5	5003+40	25.90 LT	1	170	1	1	1	1
	LP-6	406+20	22.83 LT	1	170	1	1	1	1
	LP-7	405+25	22.83 LT	1	170	1	1	1	1
	LP-8	204+15	28.50 RT	1	170	1	1	1	1
	LP-9	403+10	22.83 LT	1	170	1	1	1	1
	LP-10	4004+55	22.83 LT	1	170	1	1	1	1
	LP-11	2005+70	35.38 RT	1	170	1	1	1	1
	LP-12	300+06	52.74 RT	1	170	1	1	1	1
	LP-13	500+75	39.19 LT	1	170	1	1	1	1
	LP-14	3000+25	50.30 RT	1	170	1	1	1	1
	LP-15	3001+57	23.18 RT	1	170	1	1	1	1
	LP-16	301+60	22.91 RT	1	170	1	1	1	1
	LP-17	502+50	22.83 LT	1	170	1	1	1	1
	LP-18	303+80	24.83 RT	1	170	1	1	1	1
	LP-19	505+00	24.83 LT	1	170	1	1	1	1
				19	3230	19	19	19	19

* ELECTRICAL WIRING LIGHTING 12 AWG IS WIRING FOR POLES FROM SPLICE IN TRANSFORMER HAND HOLE TO LUMINAIRE

CONCRETE CONTROL CABINET BASE

CATEGORY	STATION	LOCATION	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	656.0200 ELEC SERVICE METER BREAKER PEDESTAL* EACH
0010	4006+40	LT	1	1	1
		PROJECT TOTAL	1	1	1

*ADDITIONAL QUANTITIES FOUND ON SPAN WIRETRAFFIC SIGNAL TABLE

PULLBOXES

CATEGORY	STRUCTURE	STATION	LOCATION	SPV.0060.02 PULL BOXES POLYMER CONCRETE 18X18X24 INCH EACH
0010	PB-1	407+10	39.51 LT	1
	PB-2	404+15	22.83 LT	1
	PB-3	4005+67	40.00 LT	1
	PB-4	300+87	43.00 RT	1
	PB-5	302+58	24.83 RT	1
	PB-6	304+00	24.83 RT	1
	PROJECT TOTAL			6

SAWING

CATEGORY	STA	STA	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	32+00	35+25	325	-
	35+25	35+80	-	55
	41+04	41+85	-	85
	41+85	45+03	320	-
	196+16	196+34	-	26
	200+00	200+24	-	53
	201+14	202+85	174	-
	305+46	305+79	33	-
	308+44	308+48	5	73
	398+73	399+30	-	94
	400+00	400+29	-	53
	402+35	402+63	24	-
	2002+00	2002+76	104	-
	2005+22	2005+45	24	-
	3005+82	3005+82	28	-
	PROJECT TOTAL		1037	439

CONDUIT

CATEGORY	FROM STRUCTURE	TO STRUCTURE	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40* 2-INCH LF	655.0620 ELECTRICAL WIRING LIGHTING 8 AWG** LF
0010	LP-1	LC-1	15	85
	LC-1	LP-2	55	205
	LC-1	PB-1	145	475
	PB-1	LP-6	90	310
	LP-6	LP-7	95	325
	LP-7	PB-2	105	355
	PB-2	LP-9	105	355
	PB-2	LP-8	65	235
	PB-1	LP-3	55	205
	LP-3	LP-4	75	265
	LP-4	LP-5	280	880
	LC-1	PB-3	70	250
	PB-3	LP-10	115	385
	PB-3	LP-11	95	325
	LP-11	LP-12	80	280
	LP-12	PB-4	80	280
	PB-4	LP-13	100	340
	LP-13	LP-14	65	235
	LP-14	LP-15	130	430
	PB-4	LP-16	80	280
	LP-16	PB-5	100	340
	PB-5	LP-17	75	265
	PB-5	LP-18	125	415
	LP-18	PB-6	95	325
	PB-6	LP-19	65	235
	PROJECT TOTAL		12,360	18,080

*ADDITIONAL QUANTITIES FOUND ON TEMPORARY TRAFFIC SIGNAL CONDUIT TABLE

** ELECTRICAL WIRING LIGHTING 8 AWG IS WIRING FROM PULL BOX TO POLE & POLE TO POLE

SANITARY CLEANOUT

CATEGORY	STA	LOCATION	SPV.0060.10 EACH
0020	3001+37	43' LT	1
	3002+50	42' LT	1
		SUBTOTAL	2

TRACER WIRE ACCESS BOX

CATEGORY	STA	LOCATION	SPV.0060.11 EACH
0020	3001+38	91' LT	1
	3001+67	70' RT	1
	3002+46	80' LT	1
	3002+71	58' RT	1
		SUBTOTAL	4

SANITARY LATERAL

CATEGORY	STA	LOCATION	SPV.0090.07 6-INCH LF
0020	3001+33	LT	138
	3001+66	RT	22
	3002+57	LT	120
	3002+69	RT	20
		SUBTOTAL	300

SANITARY RISER

CATEGORY	STA	LOCATION	SPV.0200.03 VF
0020	3001+33	47' RT	13.1
	3001+38	91' LT	4.0
	3001+66	47' RT	15.4
	3001+67	70' RT	4.0
	3002+46	80' LT	4.0
	3002+57	40' LT	13.5
	3002+69	39' RT	15.5
	3002+71	58' RT	4.0
		SUBTOTAL	73.5

3

TRANSPORTATION PROJECT PLAT NO: 6414-01-22 - 4.01

THAT PART OF LOT 1A OF CSM 1698, AND THAT PART OF LOT 1 OF CSM 3473, AND THAT PART OF LOT 2 OF CSM 6641, AND THAT PART OF LOT 2 OF CSM 7504, AND THAT PART OF THE NE 1/4 AND THE SE 1/4 OF THE NW 1/4 OF SECTION 27, T23N, RANGE 8 EAST, PORTAGE COUNTY, WISCONSIN.

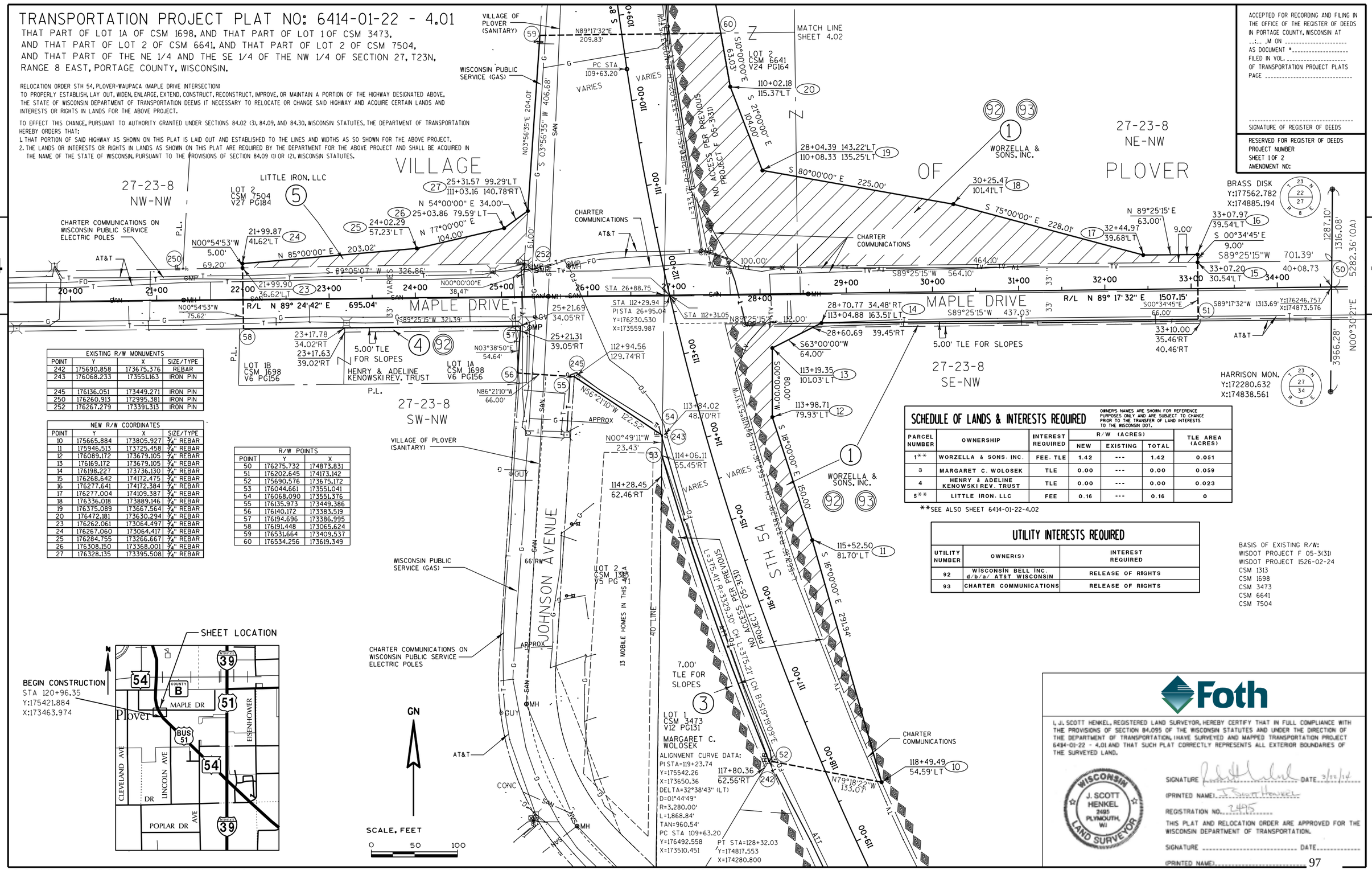
RELOCATION ORDER STH 54, PLOVER-WAUPACA (MAPLE DRIVE INTERSECTION)
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN PORTAGE COUNTY, WISCONSIN AT __:__ _M ON _____
AS DOCUMENT #_____
FILED IN VOL._____
OF TRANSPORTATION PROJECT PLATS
PAGE _____

_____
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER
SHEET 1 OF 2
AMENDMENT NO:



EXISTING R/W MONUMENTS			
POINT	Y	X	SIZE/TYPE
242	175690.858	173675.376	REBAR
243	176068.233	173551.163	IRON PIN
245	176136.051	173449.271	IRON PIN
250	176260.913	172995.381	IRON PIN
252	176267.279	173391.313	IRON PIN

NEW R/W COORDINATES			
POINT	Y	X	SIZE/TYPE
10	175665.884	173805.927	¾" REBAR
11	175946.513	173725.458	¾" REBAR
12	176089.172	173679.105	¾" REBAR
13	176169.172	173679.105	¾" REBAR
14	176198.227	173736.130	¾" REBAR
15	176268.642	174172.475	¾" REBAR
16	176277.641	174172.384	¾" REBAR
17	176277.004	174109.387	¾" REBAR
18	176336.018	173889.146	¾" REBAR
19	176375.089	173667.564	¾" REBAR
20	176472.181	173630.294	¾" REBAR
23	176262.061	173064.497	¾" REBAR
24	176267.060	173064.417	¾" REBAR
25	176284.755	173266.667	¾" REBAR
26	176308.150	173368.001	¾" REBAR
27	176328.135	173395.508	¾" REBAR

R/W POINTS		
POINT	Y	X
50	176275.732	174873.831
51	176202.645	174173.142
52	175690.576	173675.172
53	176044.661	173551.041
54	176068.090	173551.376
55	176135.973	173449.386
56	176140.172	173383.519
57	176194.696	173386.995
58	176191.448	173065.624
59	176531.664	173409.537
60	176534.256	173619.349

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE WISCONSIN DOT.

PARCEL NUMBER	OWNERSHIP	INTEREST REQUIRED	R/W (ACRES) NEW	R/W (ACRES) EXISTING	R/W (ACRES) TOTAL	TLE AREA (ACRES)
1**	WORZELLA & SONS. INC.	FEE. TLE	1.42	---	1.42	0.051
3	MARGARET C. WOLOSEK	TLE	0.00	---	0.00	0.059
4	HENRY & ADELINE KENOWSKI REV. TRUST	TLE	0.00	---	0.00	0.023
5**	LITTLE IRON. LLC	FEE	0.16	---	0.16	0

**SEE ALSO SHEET 6414-01-22-4.02

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
92	WISCONSIN BELL INC. d/b/a/ AT&T WISCONSIN	RELEASE OF RIGHTS
93	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS

BASIS OF EXISTING R/W:
WISDOT PROJECT F 05-3(31)
WISDOT PROJECT 1526-02-24
CSM 1313
CSM 1698
CSM 3473
CSM 6641
CSM 7504

Foth

I, J. SCOTT HENKEL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT 6414-01-22 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN J. SCOTT HENKEL 2495 PLYMOUTH, WI LAND SURVEYOR

SIGNATURE _____ DATE 5/22/14
(PRINTED NAME) J. Scott Henkel
REGISTRATION NO. 2495

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE _____ DATE _____
(PRINTED NAME) _____

97

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plats\040101_rp.dgn
APPRAISAL PLAT DATE: FEBRUARY 13, 2014
PLOT DATE : 6/3/2014
PLOT TIME : 2:54:38 PM
PLOT BY : cas1

TRANSPORTATION PROJECT PLAT NO: 6414-01-22 - 4.02, AMENDMENT NO: 1
AMENDS UTILITY PARCEL NO: 91 NAME, ON TRANSPORTATION PROJECT PLAT 6414-01-22-4.02, RECORDED AS DOCUMENT NO: 794991

THAT PART OF LOT 1 OF CSM 6641; PART OF LOT 4 OF CSM 6783; PART OF LOT 1 OF CSM 6797; PART OF LOTS 3 AND 4 OF CSM 6844; PART OF LOTS 1 AND 2 OF CSM 7504, ALL LOCATED IN AND INCLUDING UNPLATTED LANDS IN THE NW 1/4 OF NW 1/4 OF SECTION 27; ALSO PART OF LOT 1 OF CSM 6641, LOCATED IN THE NE 1/4 OF NW 1/4 OF SECTION 27, ALL IN T23N, R8E, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER STH 54, PLOVER-WAUPACA (MAPLE DRIVE INTERSECTION)
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

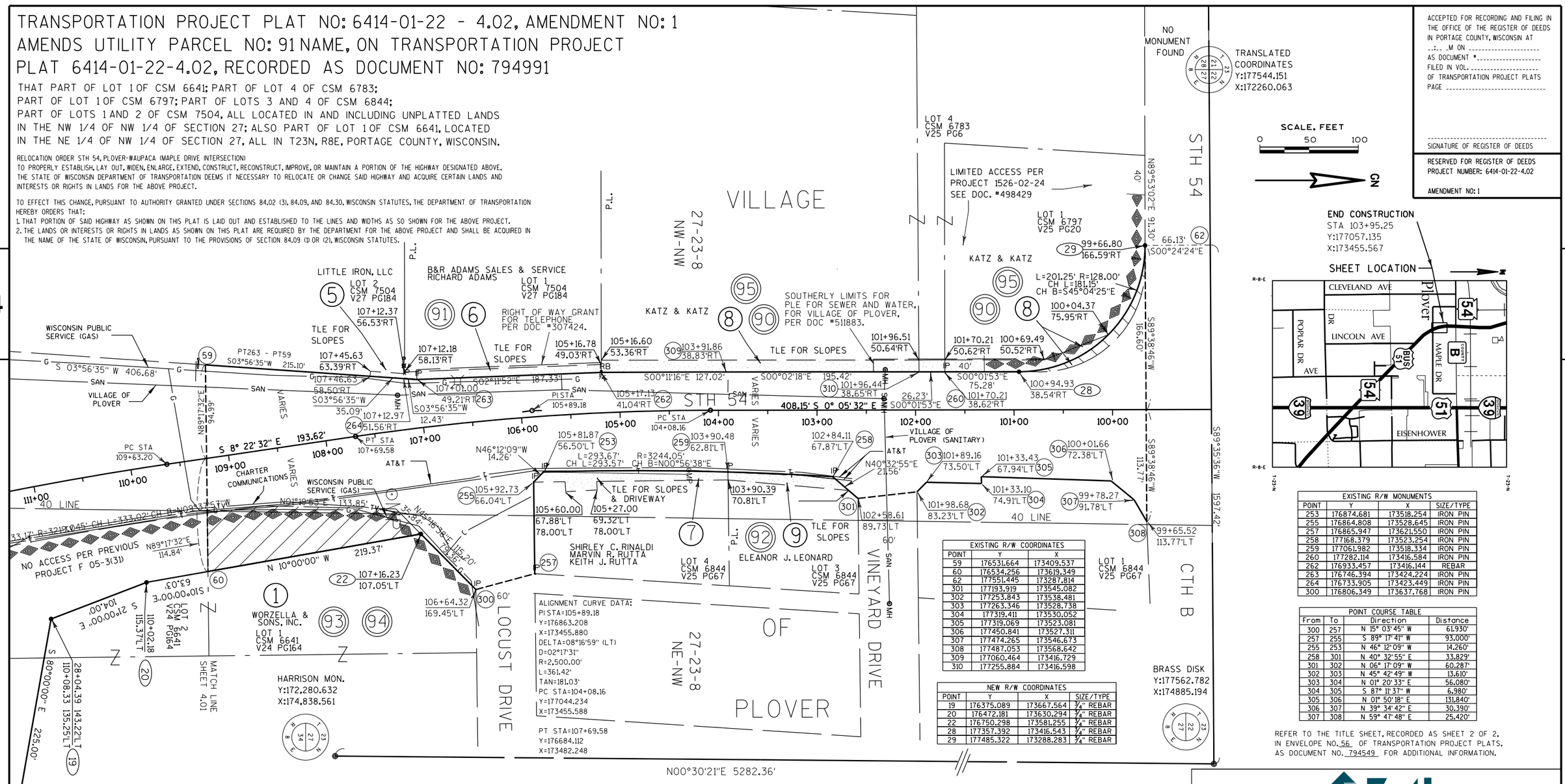
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN PORTAGE COUNTY, WISCONSIN AT ___:___ M ON _____ AS DOCUMENT # _____ FILED IN VOL. _____ OF TRANSPORTATION PROJECT PLATS PAGE _____

_____ SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 6414-01-22-4.02
AMENDMENT NO: 1

SCALE, FEET 0 50 100



EXISTING R/W MONUMENTS			
POINT	Y	X	SIZE/TYPE
253	176874.681	173518.254	IRON PIN
255	176864.808	173528.645	IRON PIN
257	176865.947	173621.550	IRON PIN
258	177168.379	173523.254	IRON PIN
259	177061.982	173518.334	IRON PIN
260	177282.114	173416.584	IRON PIN
262	176933.457	173416.144	REBAR
263	176746.394	173424.224	IRON PIN
264	176733.905	173423.449	IRON PIN
300	176806.349	173637.768	IRON PIN

POINT COURSE TABLE			
From	To	Direction	Distance
300	257	N 15° 03' 45" W	61.930'
257	255	S 89° 17' 41" W	93.000'
255	253	N 46° 12' 09" W	14.260'
258	301	N 40° 32' 55" E	33.829'
301	302	N 06° 17' 09" W	60.287'
302	303	N 45° 42' 49" W	13.610'
303	304	N 01° 20' 33" E	56.080'
304	305	S 87° 11' 37" W	6.980'
305	306	N 01° 50' 18" E	131.840'
306	307	N 39° 34' 42" E	30.390'
307	308	N 59° 47' 48" E	25.420'

EXISTING R/W COORDINATES			
POINT	Y	X	
59	176531.664	173409.537	
60	176534.256	173619.349	
62	177551.445	173287.814	
301	177193.919	173545.082	
302	177253.843	173538.481	
303	177263.346	173528.738	
304	177319.411	173530.052	
305	177319.069	173523.081	
306	177450.841	173527.311	
307	177474.265	173546.673	
308	177487.053	173568.642	
309	177060.464	173416.729	
310	177255.884	173416.598	

NEW R/W COORDINATES			
POINT	Y	X	SIZE/TYPE
19	176375.089	173667.564	¾" REBAR
20	176472.181	173630.294	¾" REBAR
22	176750.298	173581.255	¾" REBAR
28	177357.392	173416.543	¾" REBAR
29	177485.322	173288.283	¾" REBAR

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN ENVELOPE NO. 56 OF TRANSPORTATION PROJECT PLATS, AS DOCUMENT NO. 794549 FOR ADDITIONAL INFORMATION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE WISCONSIN DOT.

PARCEL NUMBER	OWNERSHIP	INTEREST REQUIRED	R/W (ACRES) NEW	EXISTING	TOTAL	TLE AREA (ACRES)
1**	WORZELLA & SONS. INC.	FEE	0.22	---	0.22	0
5**	LITTLE IRON. LLC	TLE	0.00	---	0.00	0.004
6	RICHARD ADAMS	TLE	0.00	---	0.00	0.064
7	SHIRLEY C. RINALDI. ET. AL.	TLE	0.00	---	0.00	0.051
8	KATZ & KATZ	FEE. TLE	0.03	---	0.03	0.137
9	ELEANOR J. LEONARD	TLE	0.00	---	0.00	0.028

**SEE ALSO SHEET 6414-01-22-4.01

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
90	VILLAGE OF PLOVER WATER	RELEASE OF RIGHTS
91	FRONTIER NORTH INC. f/k/a WISCONSIN TELEPHONE CO.	RELEASE OF RIGHTS
92	WISCONSIN BELL INC. d/b/a/ AT&T WISCONSIN	RELEASE OF RIGHTS
93	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
94	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS
95	VILLAGE OF PLOVER SEWER	RELEASE OF RIGHTS

BASIS OF EXISTING R/W:
WISDOT PROJECT F 05-3(31)
WISDOT PROJECT 1526-02-24
CSM 1698
CSM 6641
CSM 6783
CSM 6797
CSM 6844
CSM 7504

Foth

L.J. SCOTT HENKEL, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT 6414-01-22 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

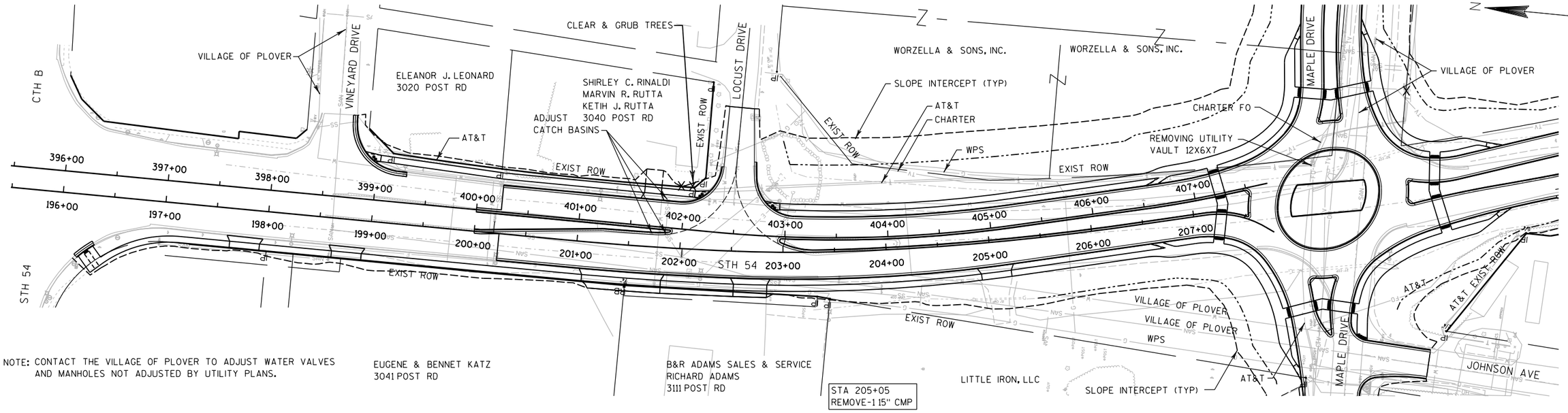
WISCONSIN J. SCOTT HENKEL 2405 PLYMOUTH, WI LAND SURVEYOR

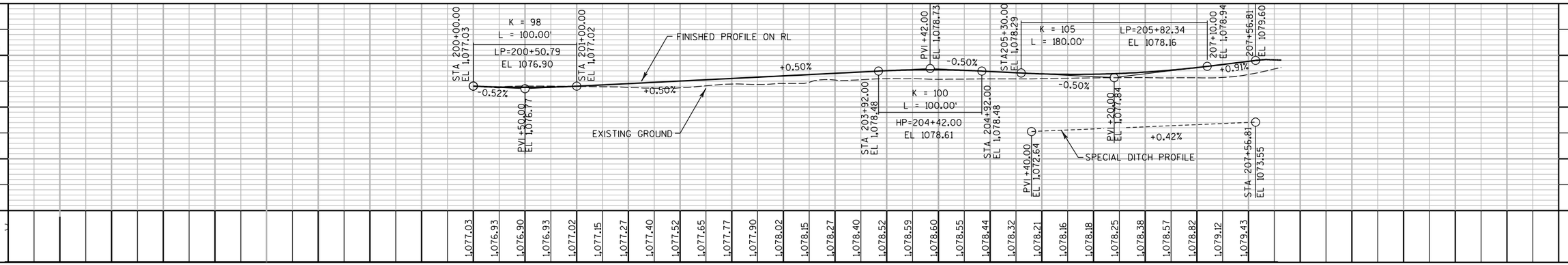
SIGNATURE _____ DATE 3/14/14
(PRINTED NAME) J. SCOTT HENKEL
REGISTRATION NO. 2405

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE _____ DATE _____
(PRINTED NAME) _____

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plats\040102_rp.dgn
APPRAISAL PLAT DATE: FEBUARY 13, 2014
PLOT DATE : 6/3/2014 PLOT TIME : 2:55:52 PM PLOT BY : cas1





PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE STH 54	SHEET 99	E

CONTROL POINT				
CP#	NORTHING	EASTING	ELEV	DESCRIPTION
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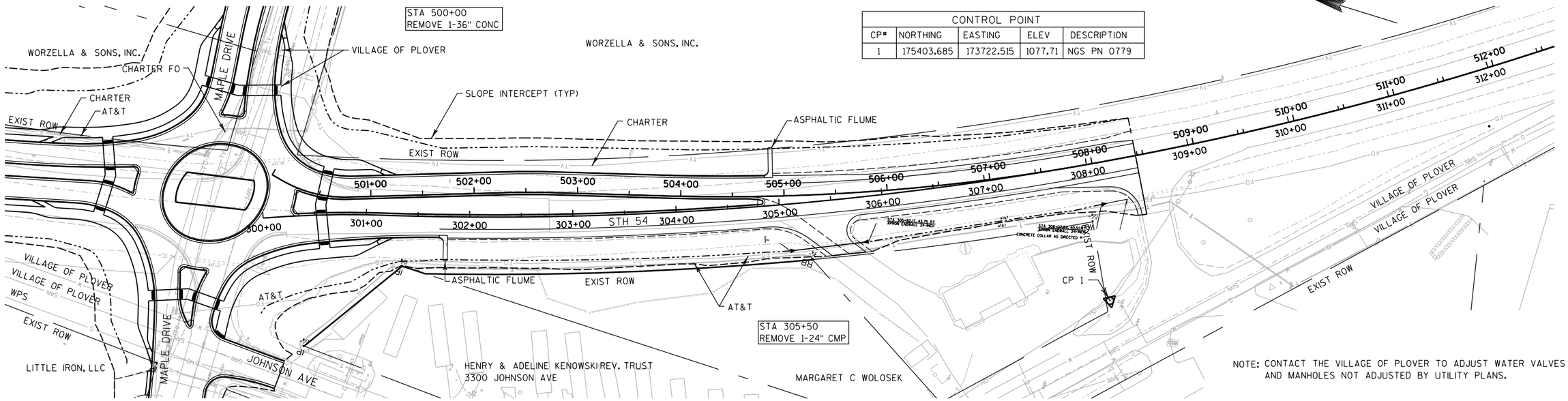
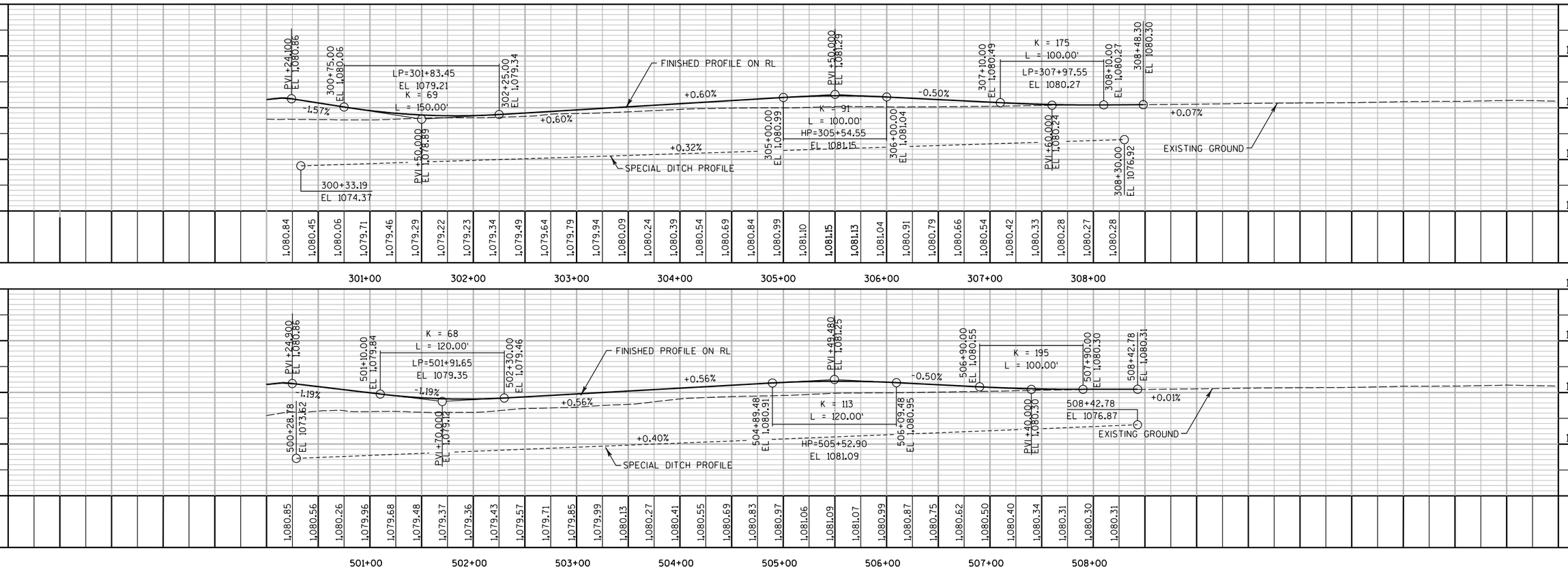
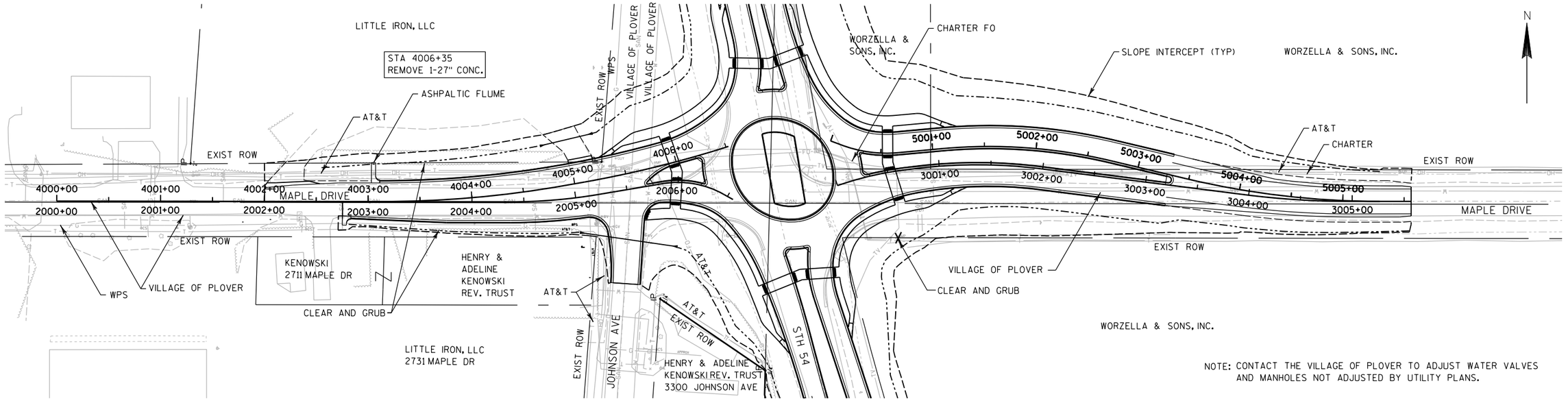


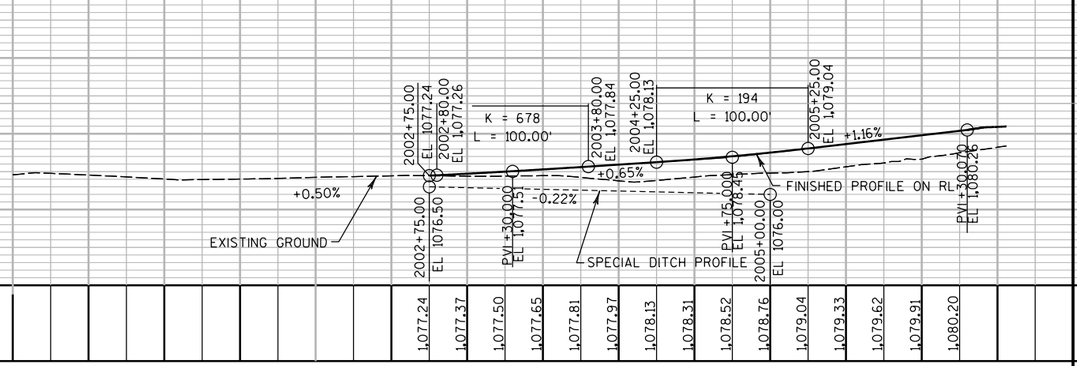
NOTE: CONTACT THE VILLAGE OF PLOVER TO ADJUST WATER VALVES AND MANHOLES NOT ADJUSTED BY UTILITY PLANS.

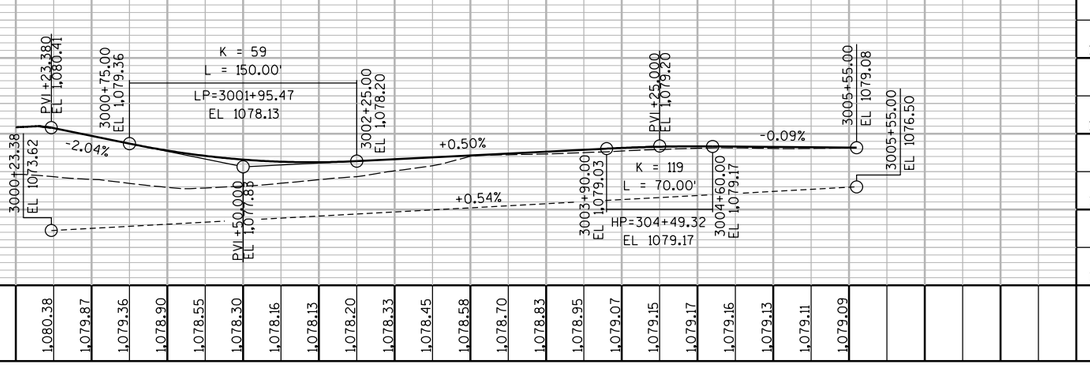


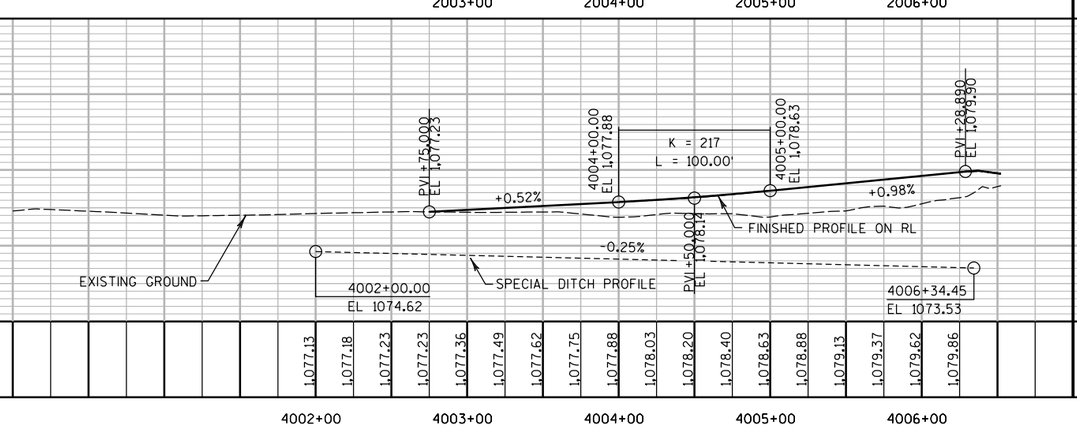
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE STH 54	SHEET 100	E

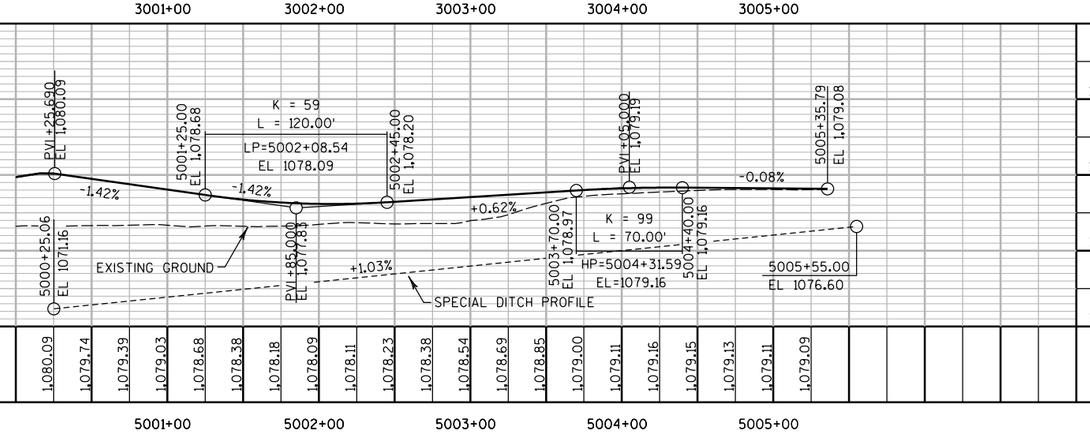


NOTE: CONTACT THE VILLAGE OF PLOVER TO ADJUST WATER VALVES AND MANHOLES NOT ADJUSTED BY UTILITY PLANS.

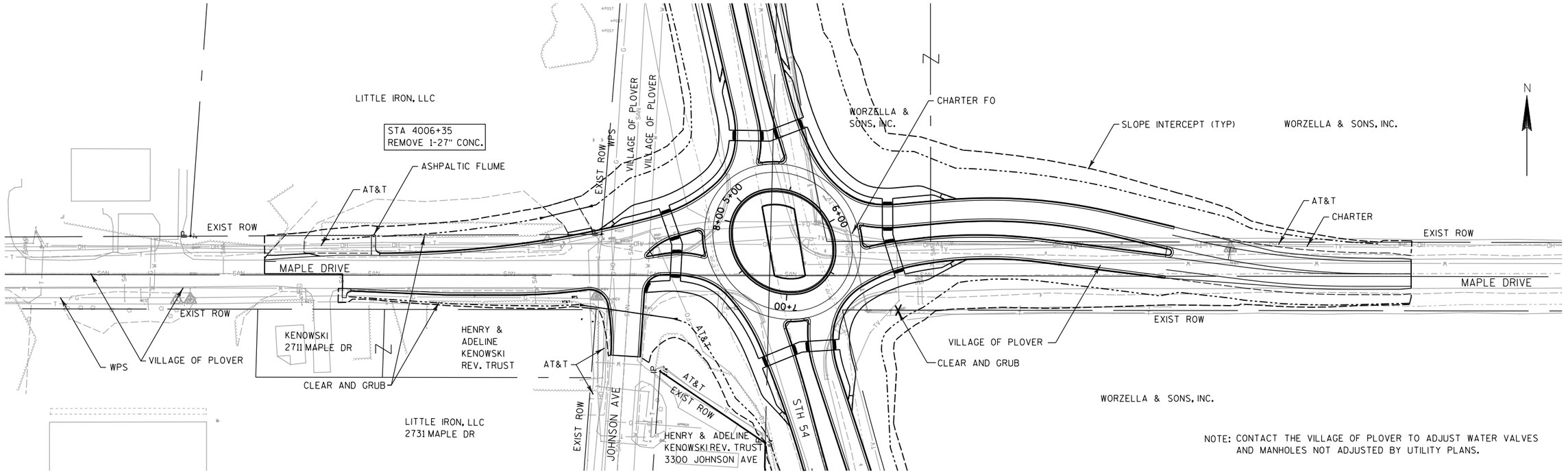


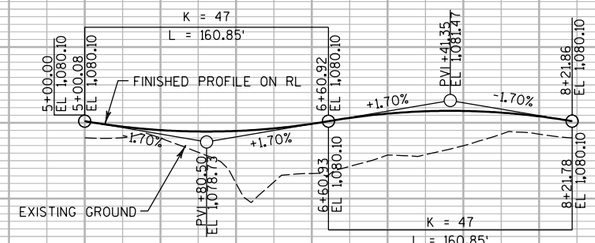






PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE MAPLE DRIVE	SHEET 101 E

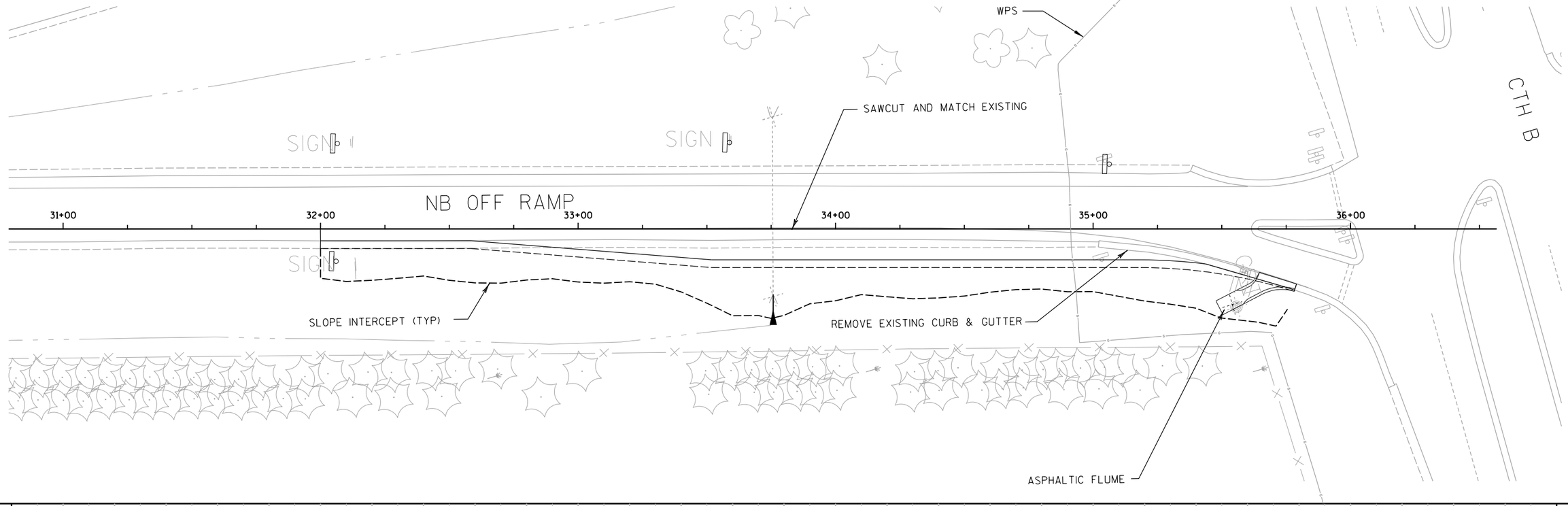




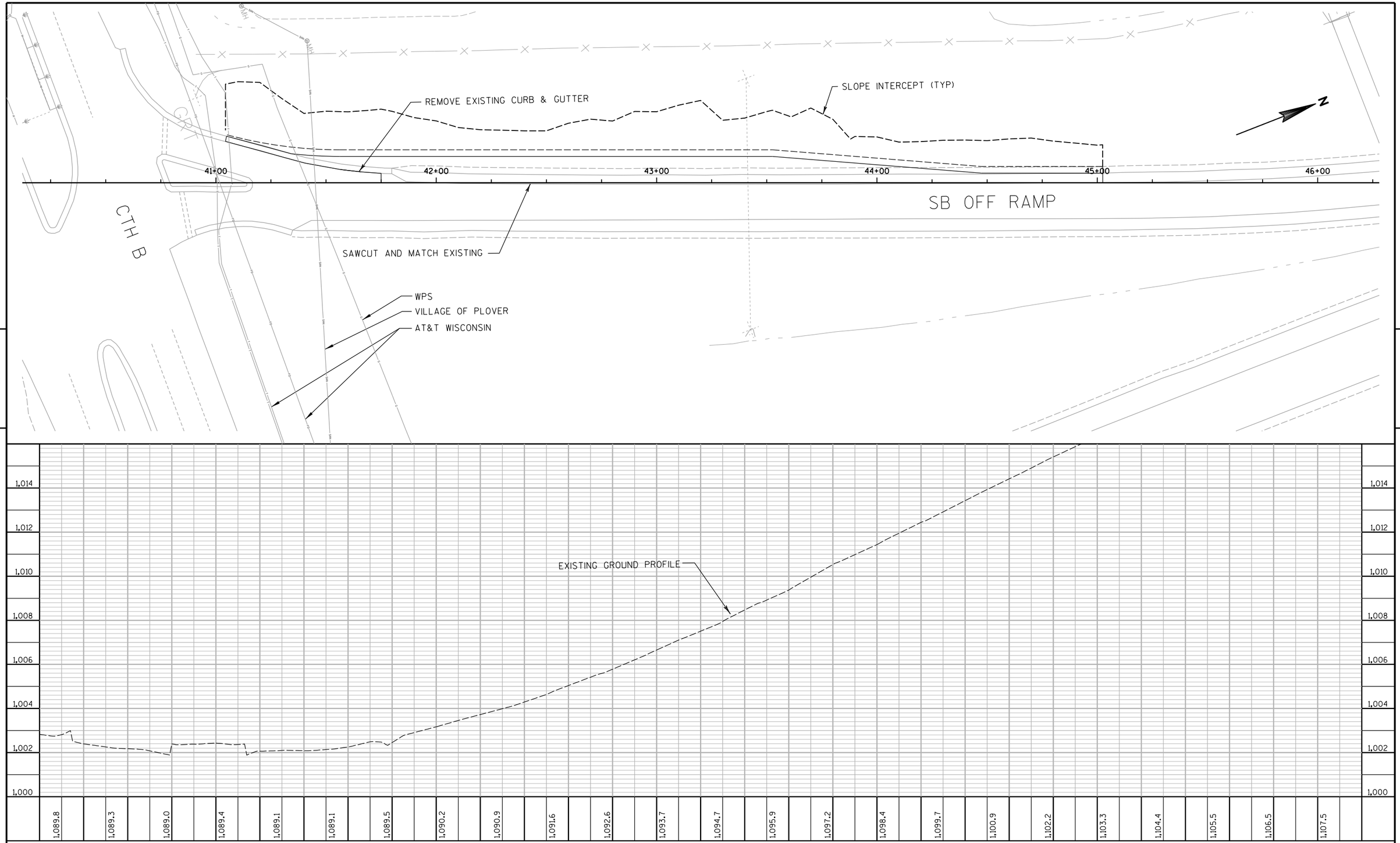
1,080.10 1,079.74 1,079.52 1,079.42 1,079.46 1,079.63 1,079.93 1,080.32 1,080.60 1,080.76 1,080.78 1,080.67 1,080.42

5+00 6+00 7+00 8+00

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE	SHEET 102	E



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE	SHEET 103	E

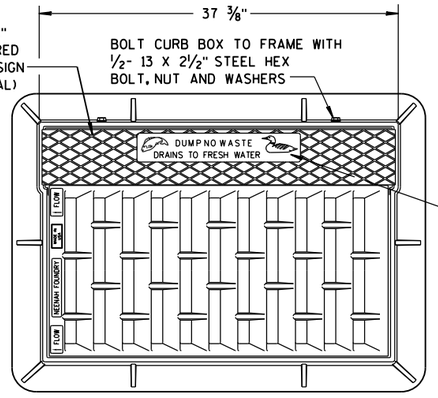


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PLAN & PROFILE	SHEET 104	E

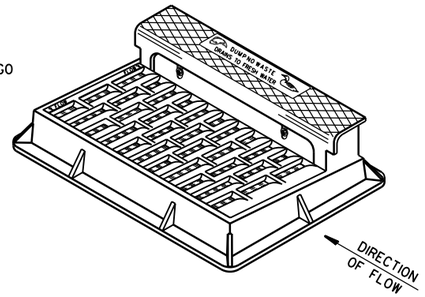
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C14-01	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D04-01	LIGHTING CONTROL CABINET
09E01-13E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-13G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09G01-03C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
15A01-11	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C18-03	MEDIAN ISLAND MARKING
15C20-01	YIELD MARKING
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-04	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

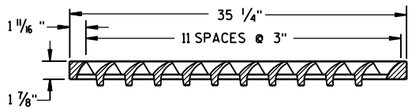
6

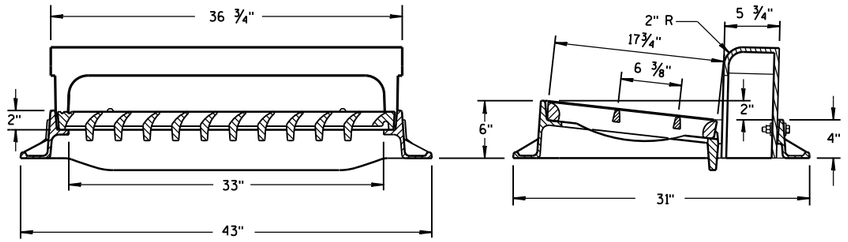


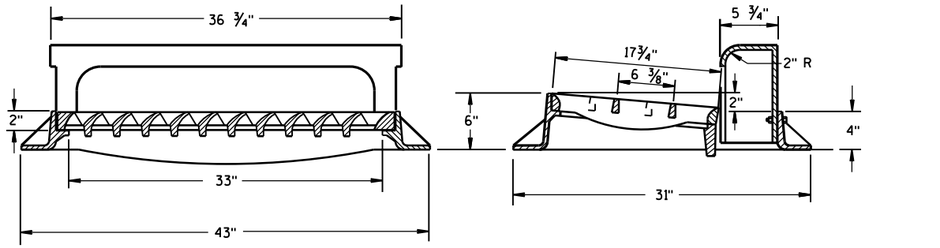
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

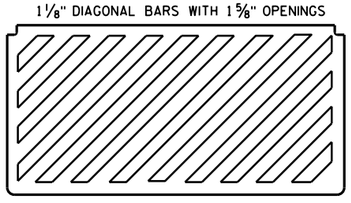






TYPE "H"

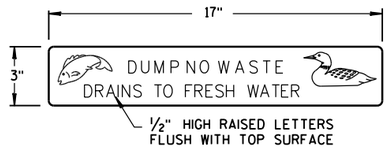
NOTE: EITHER CASTING IS ACCEPTABLE



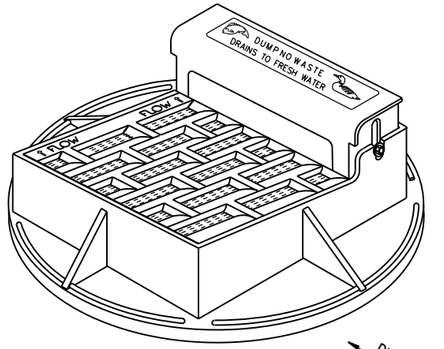
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

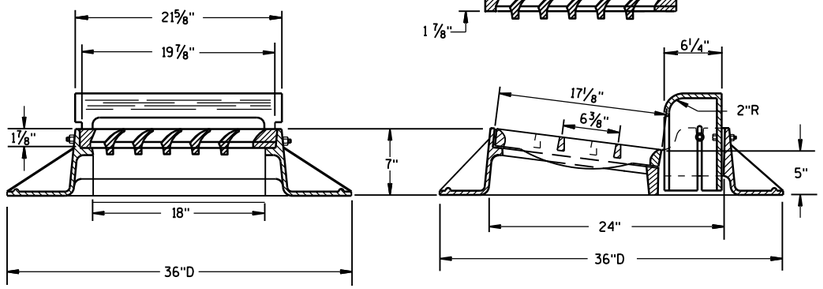


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



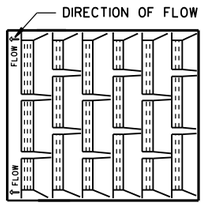
TYPE "A"

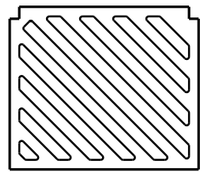
GENERAL NOTES

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 CATCH BASIN, MANHOLE AND INLET 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.

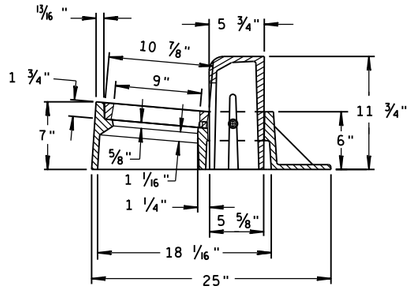


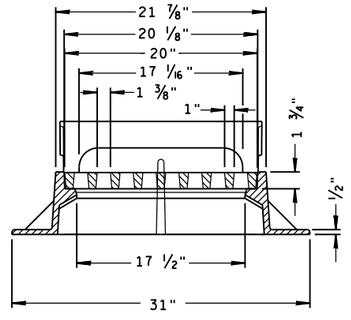


SPECIAL GRATE FOR TYPE "A" COVER

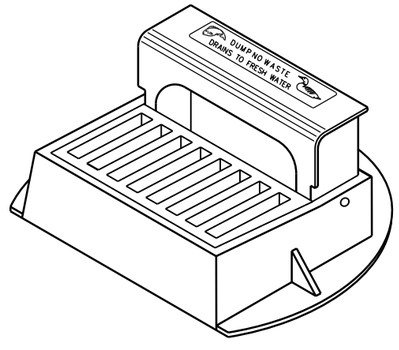
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"

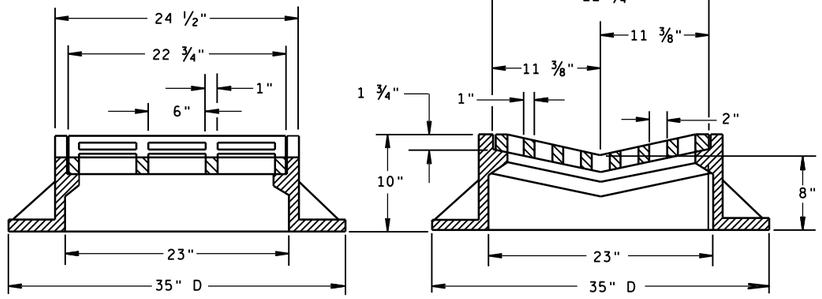


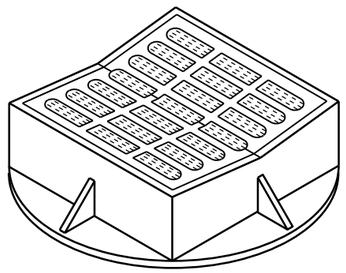
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

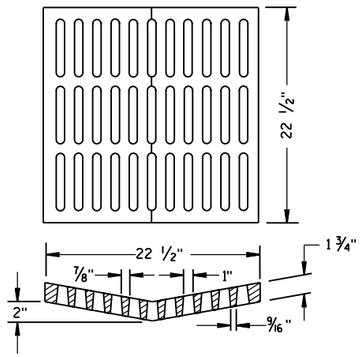
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

S.D.D. 8 A 5-19a





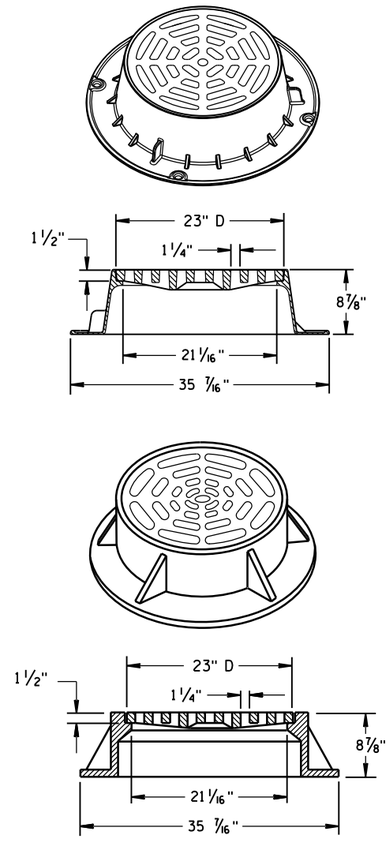
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

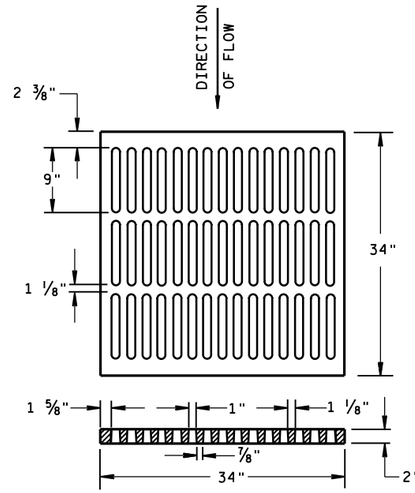
NOTE: EITHER CASTING IS ACCEPTABLE

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 CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

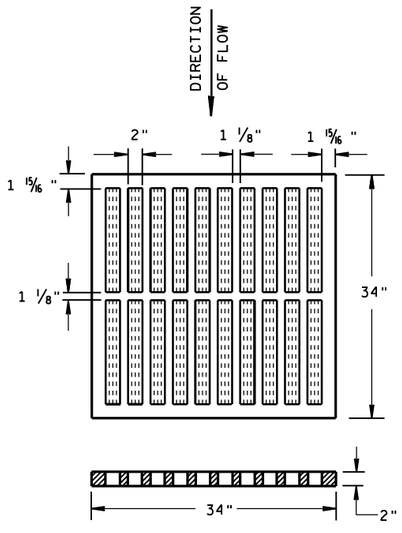
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

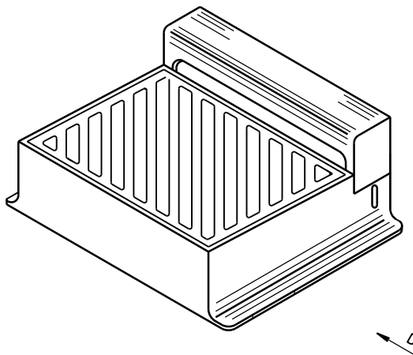
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



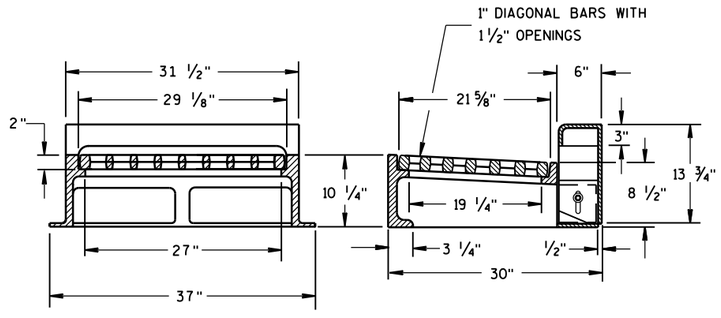
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

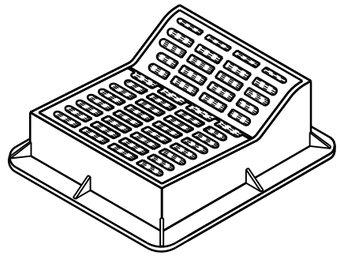
11/27/2013 — DATE

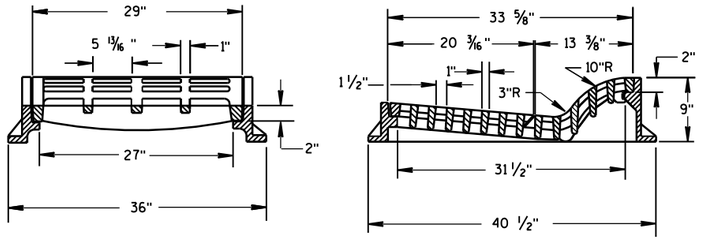
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

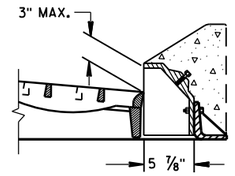
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

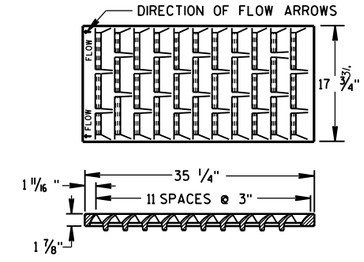
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

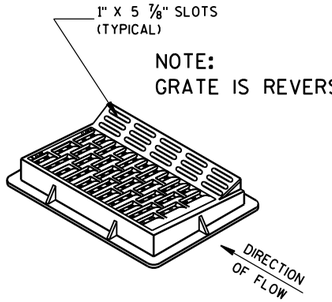
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

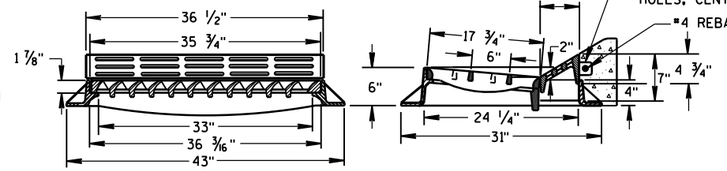
GENERAL NOTES

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



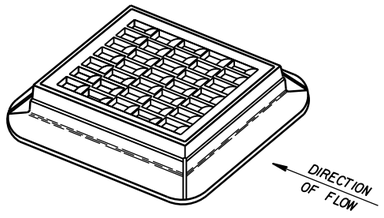


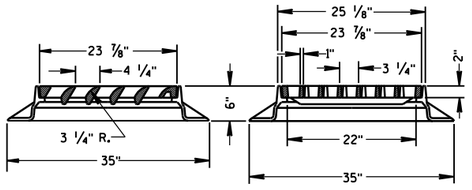


TYPE "HM"

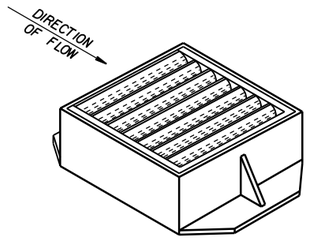
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

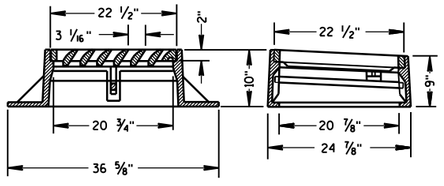
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



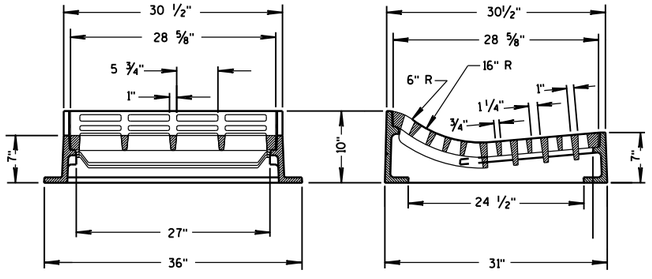


TYPE "S"



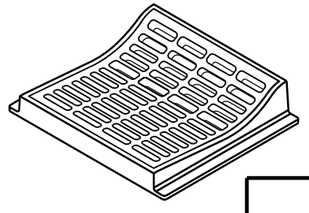


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

108

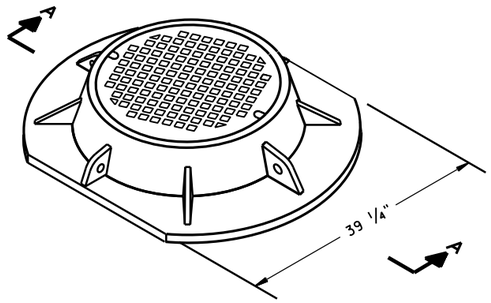
FHWA

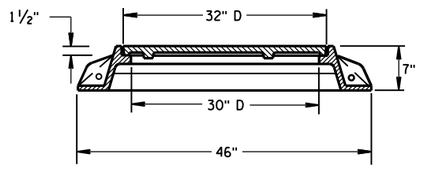
6

S.D.D. 8 A 5-19c

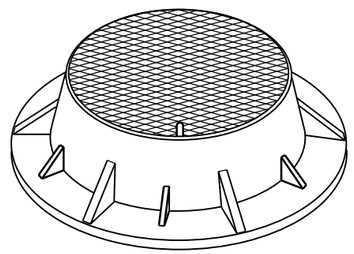
6

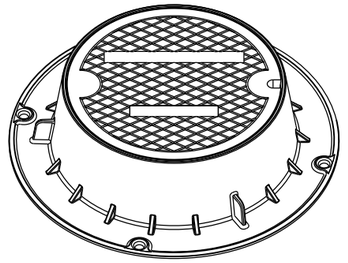
S.D.D. 8 A 5-19c

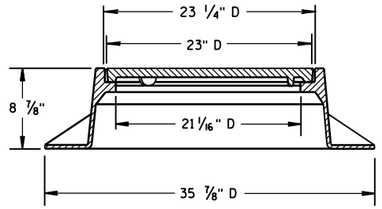


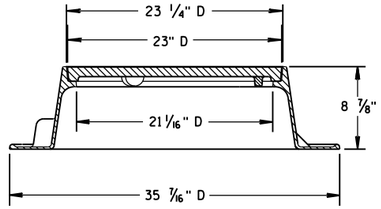


SECTION A-A
TYPE "K"









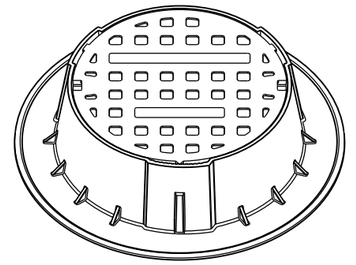
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

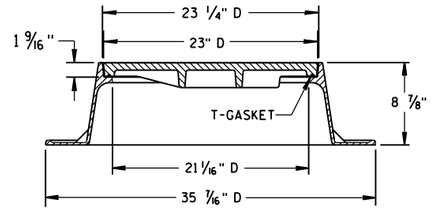
GENERAL NOTES

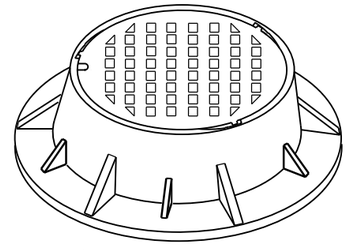
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

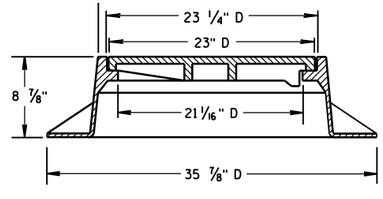
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

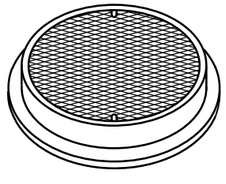


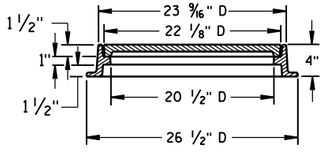




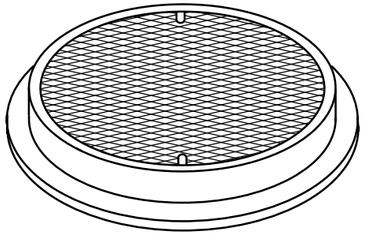


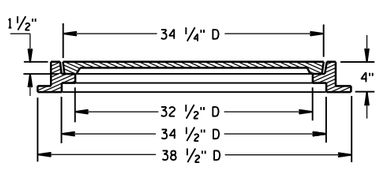
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



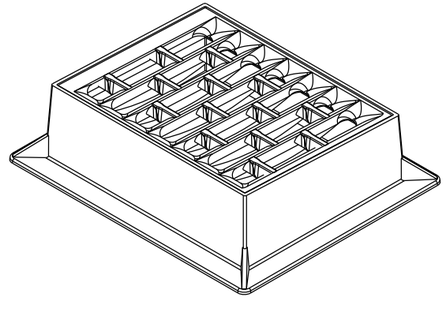


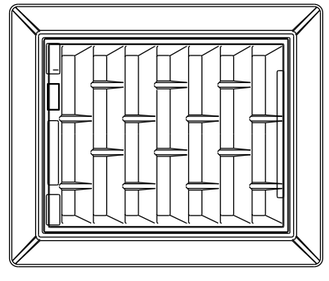
TYPE "L"

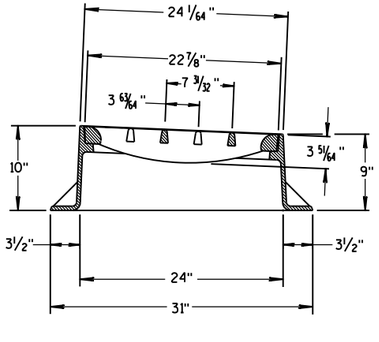


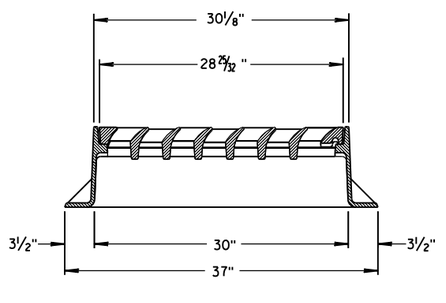


TYPE "M"









INLET COVER TYPE "BW"

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

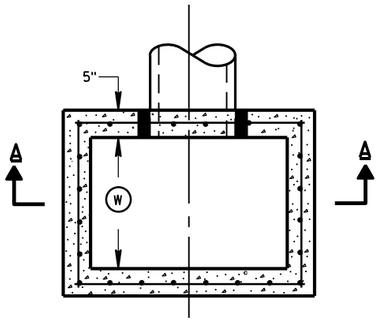
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

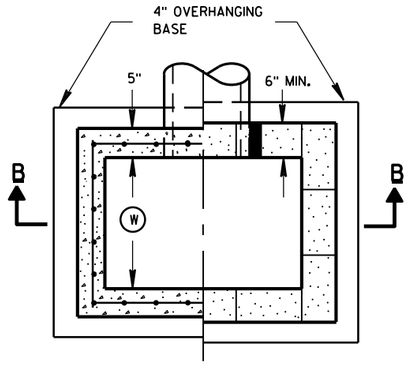
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

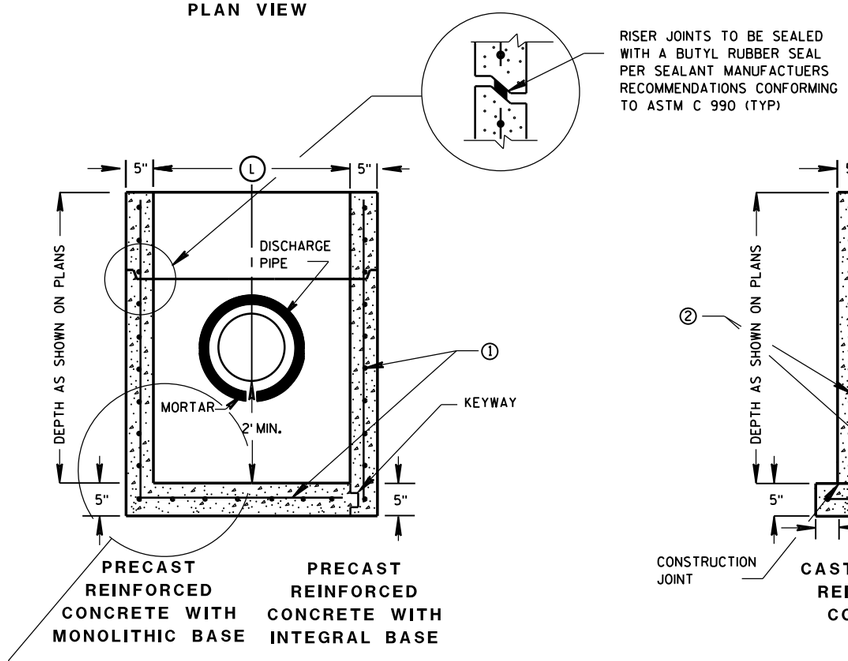
S.D.D. 8 A 5-19d



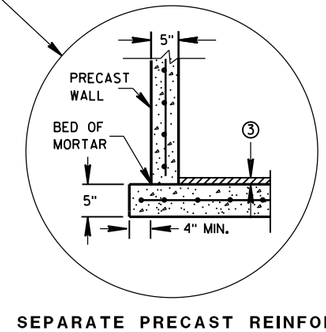
PLAN VIEW



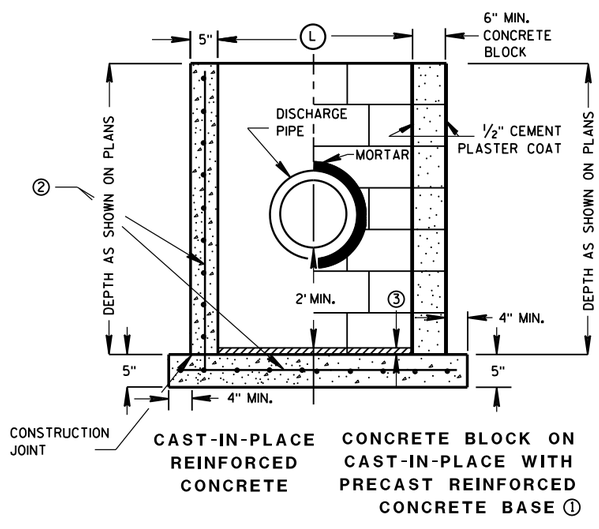
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

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 PRECAST CATCH BASIN 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 GRANULAR 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" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS 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.

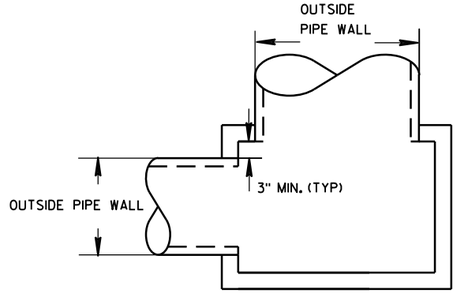
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



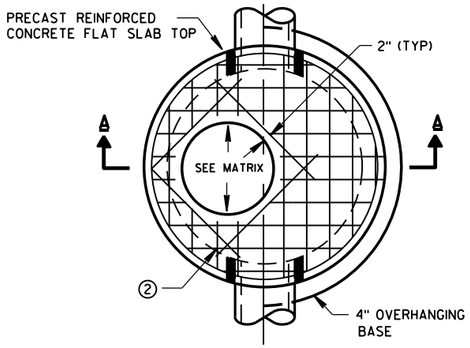
DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

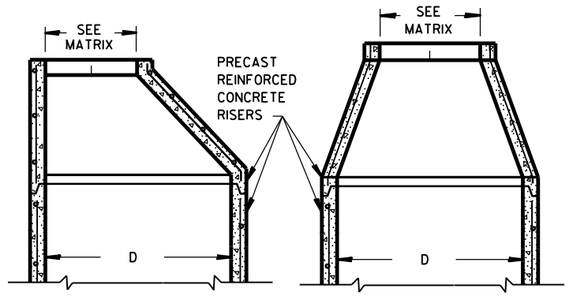
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

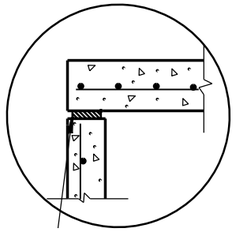


PLAN VIEW CIRCULAR OPENING

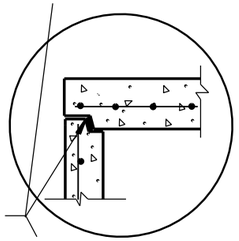


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

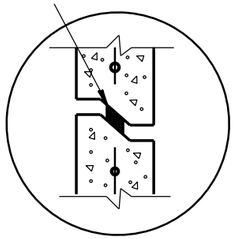


TOP WITH PLAIN END JOINT



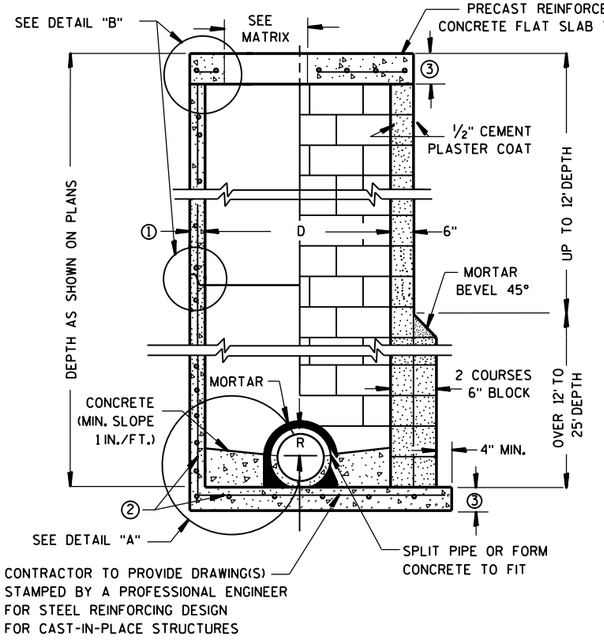
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



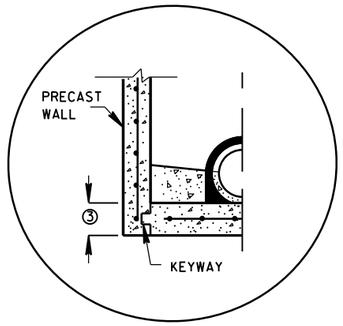
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

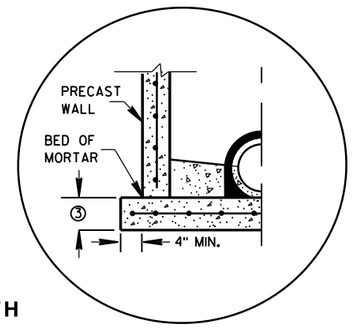


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

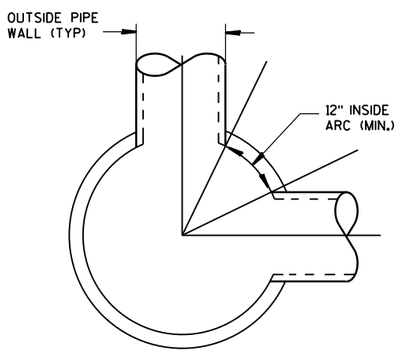


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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 MANHOLE 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 GRANULAR 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. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 ½" 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 PERMITED 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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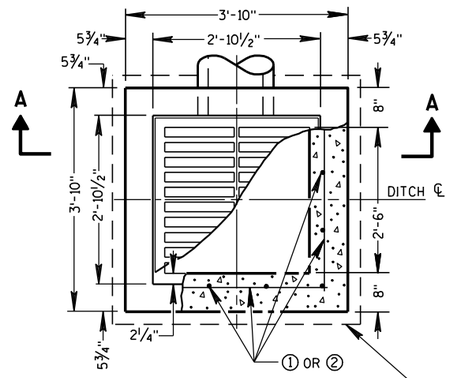
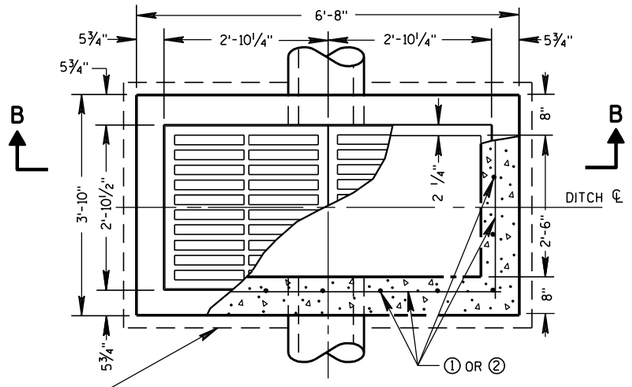
S.D.D. 8 B 9-1

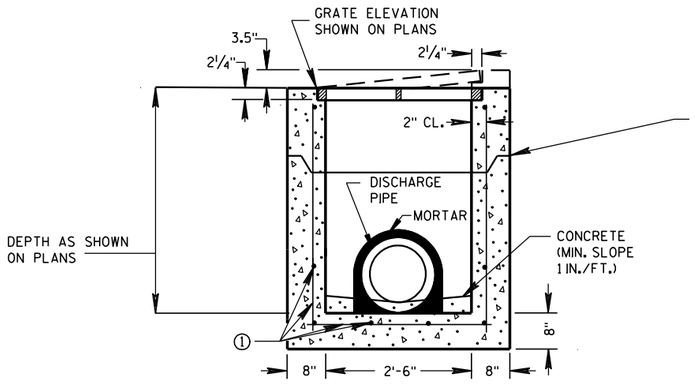


PLAN VIEW

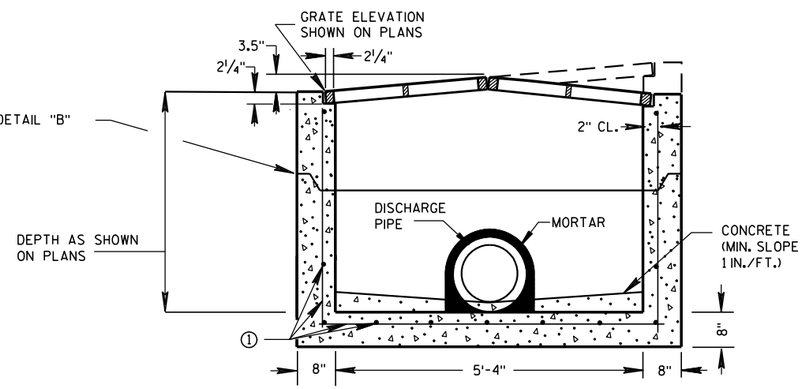


PLAN VIEW

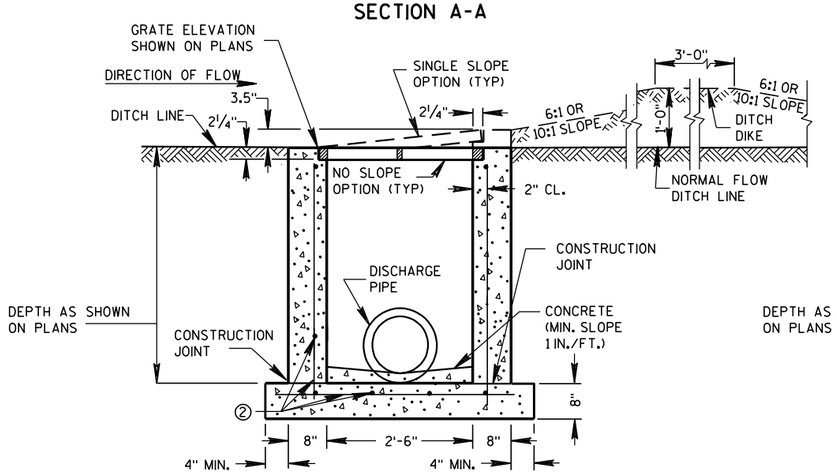
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



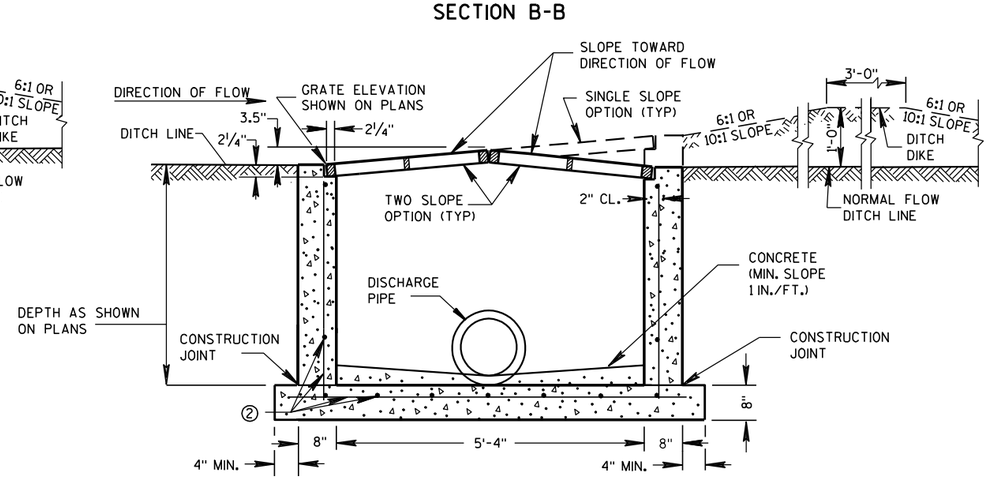
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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.

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

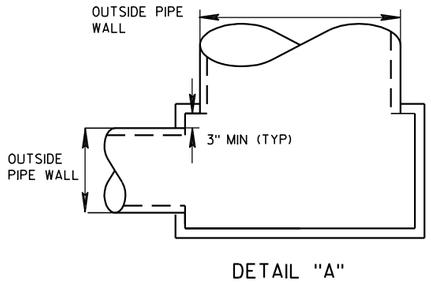
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

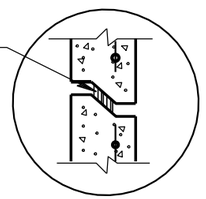
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

INLETS MEDIAN 1 AND 2 GRATE

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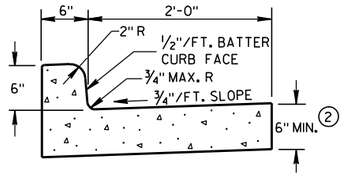
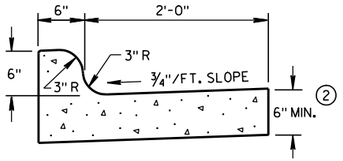
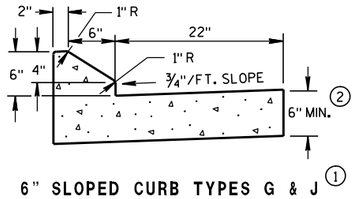


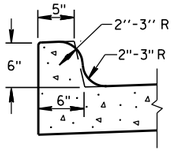
TYPES A & D (1)



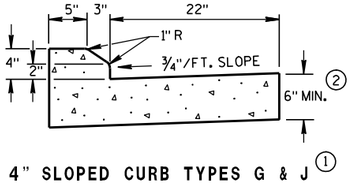
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

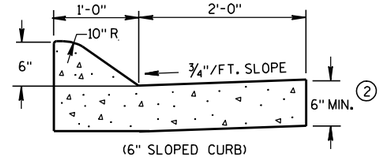


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

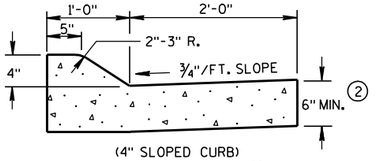


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

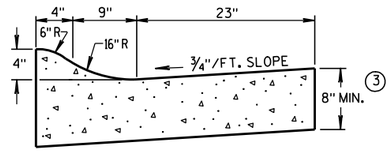


(6" SLOPED CURB)



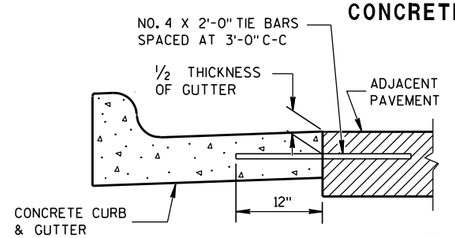
(4" SLOPED CURB)

TYPES A & D (1)

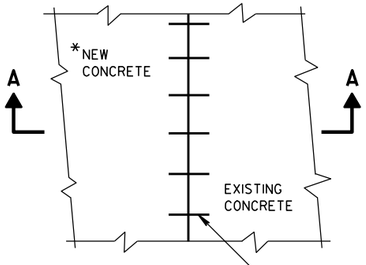


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

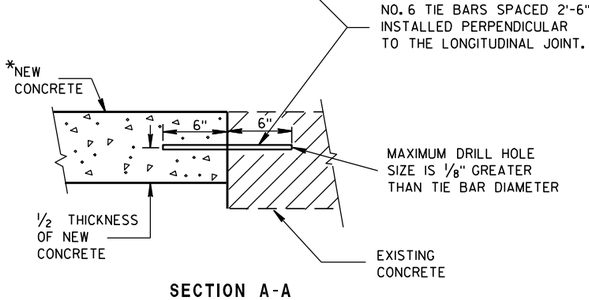


TYPICAL TIE BAR LOCATION (1)



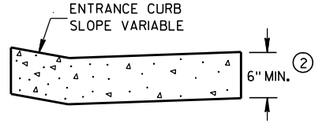
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

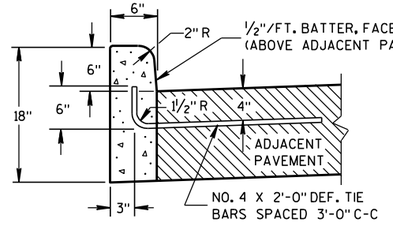


SECTION A-A

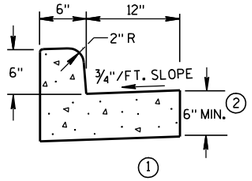
TIE BARS DRILLED INTO EXISTING PAVEMENT



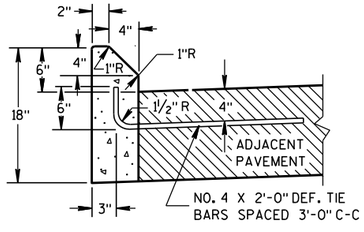
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

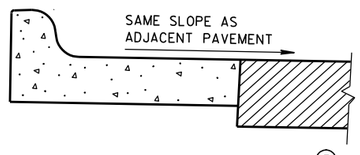


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"

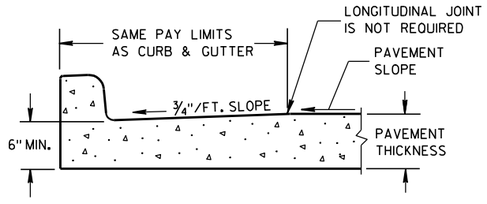


(1)
TYPES G & J

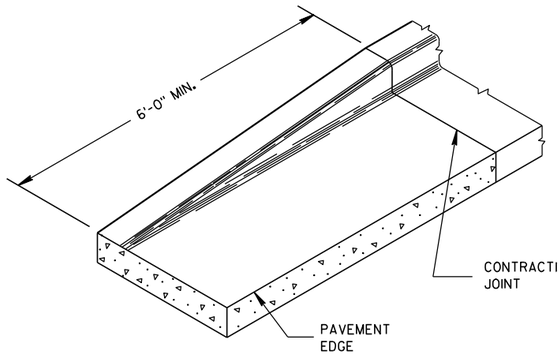
CONCRETE CURB



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

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. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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 AND R.

(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) 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.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

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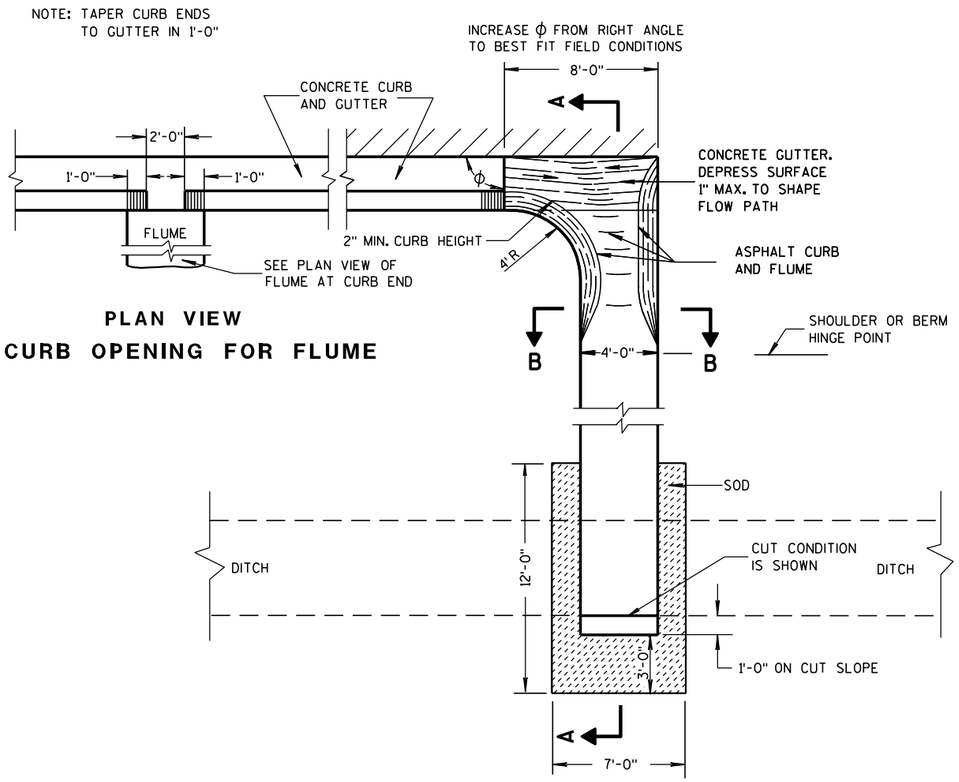
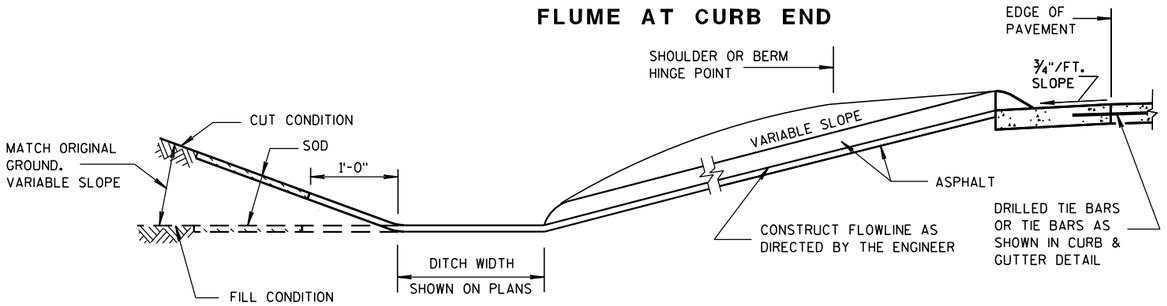
ASPHALTIC FLUME

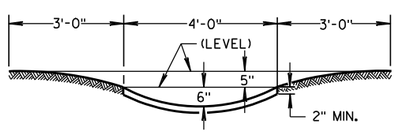


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

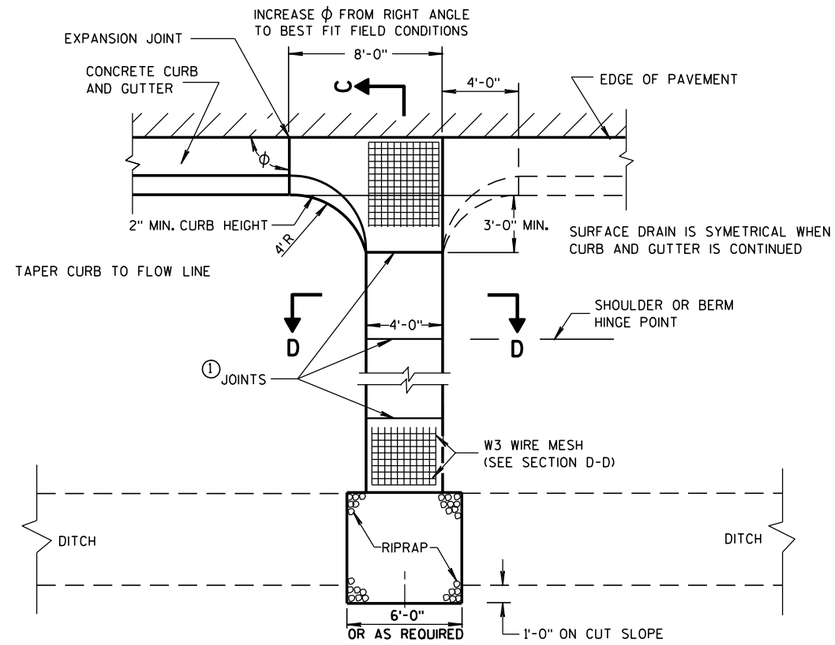
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

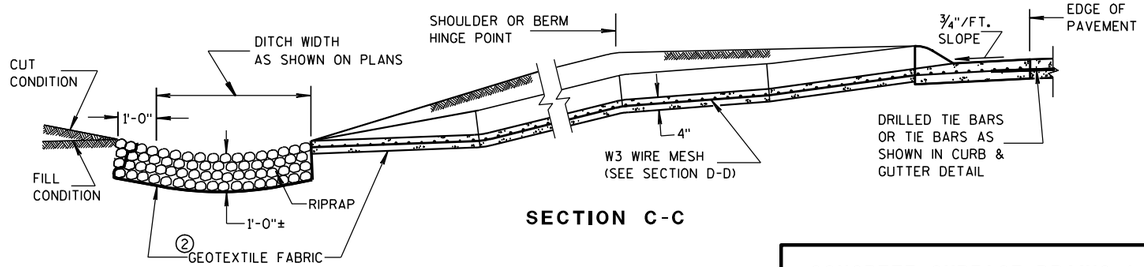
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

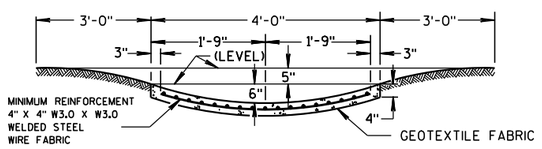
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



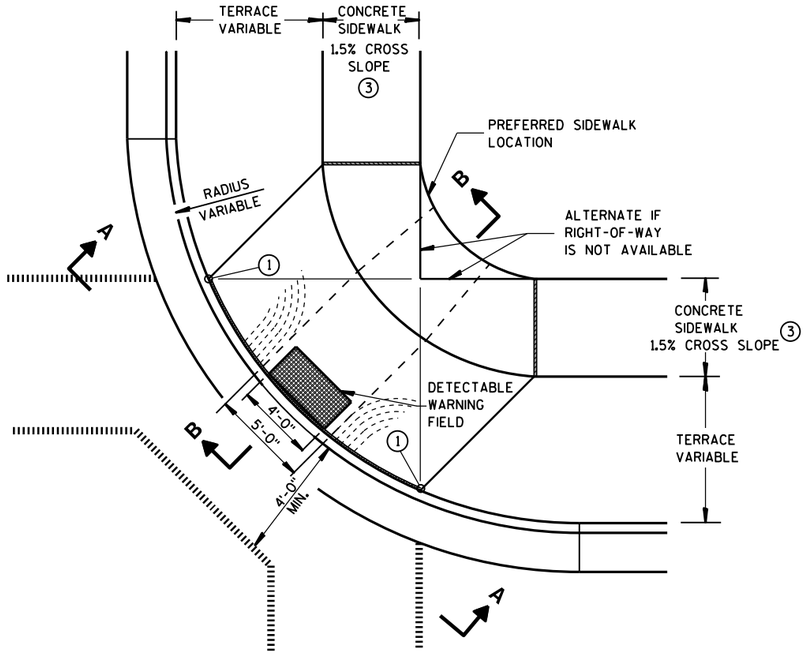
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

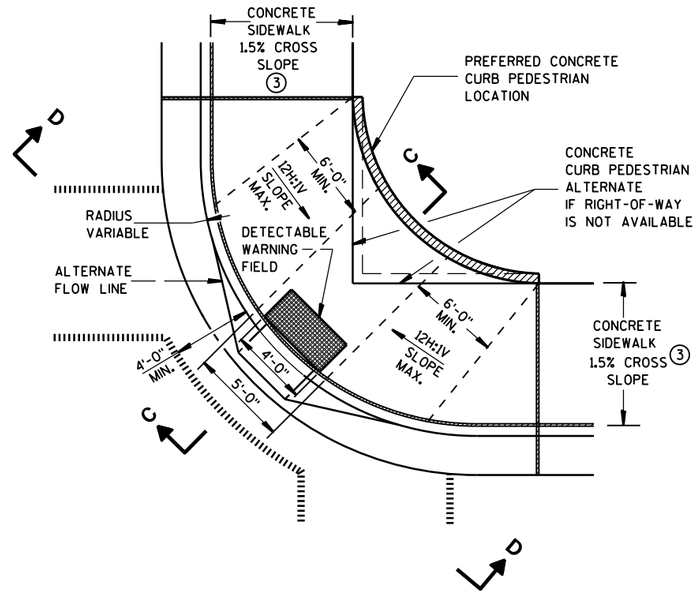
6
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. 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.

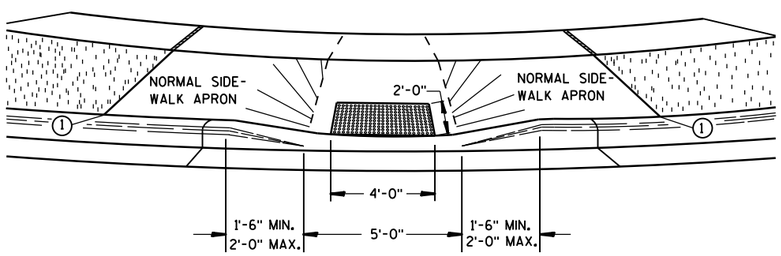
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

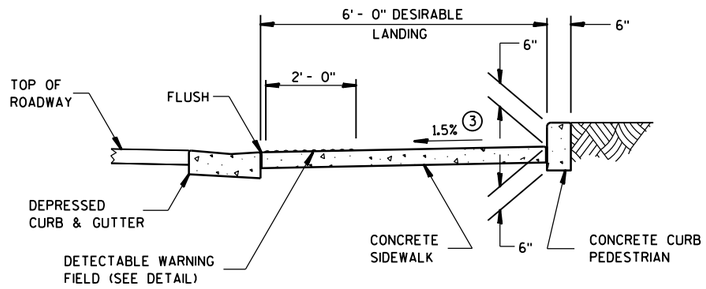
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

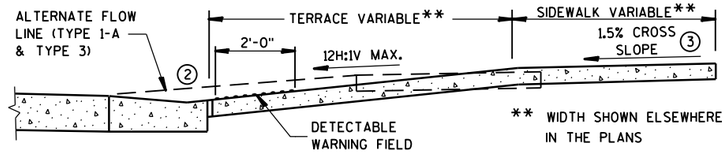
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



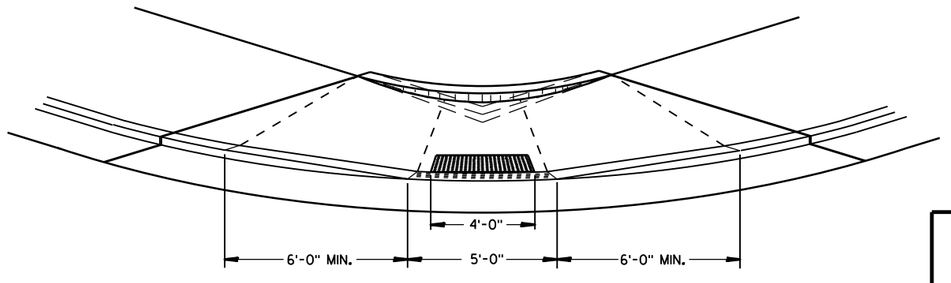
VIEW A-A



SECTION C-C



SECTION B-B



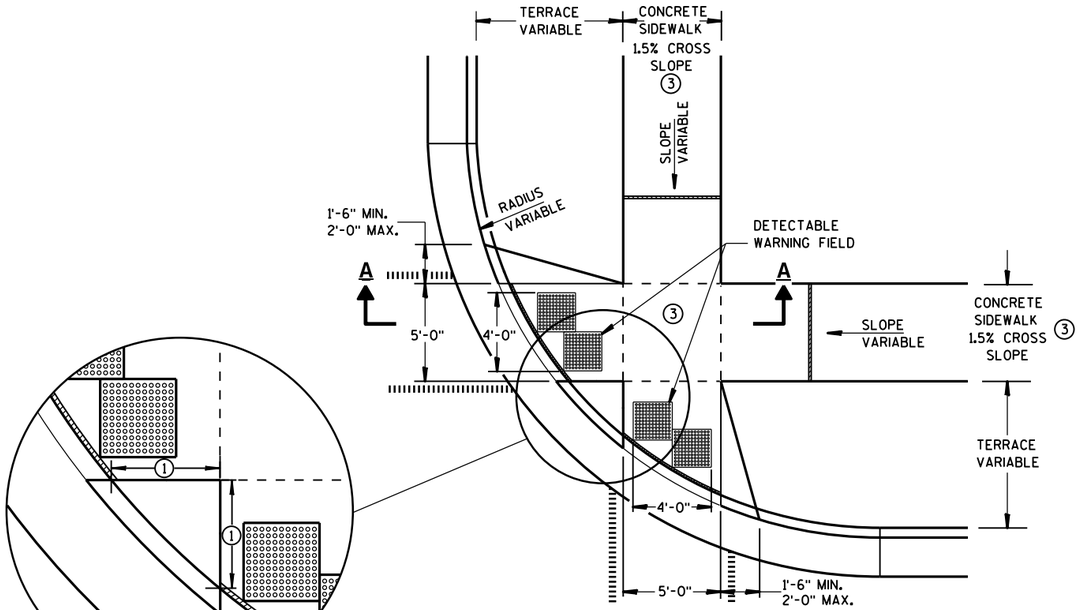
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

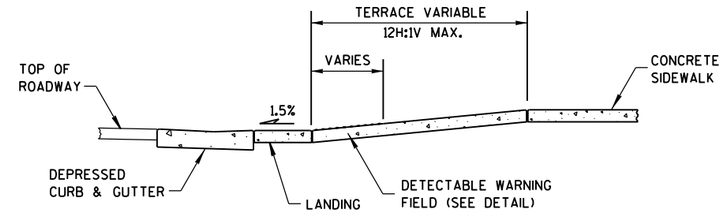
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

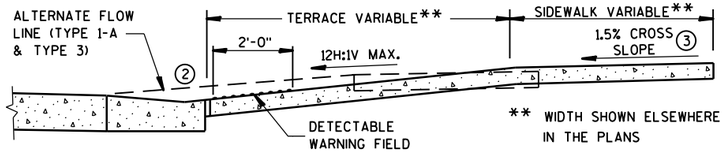
S.D.D. 8 D 5-15a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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

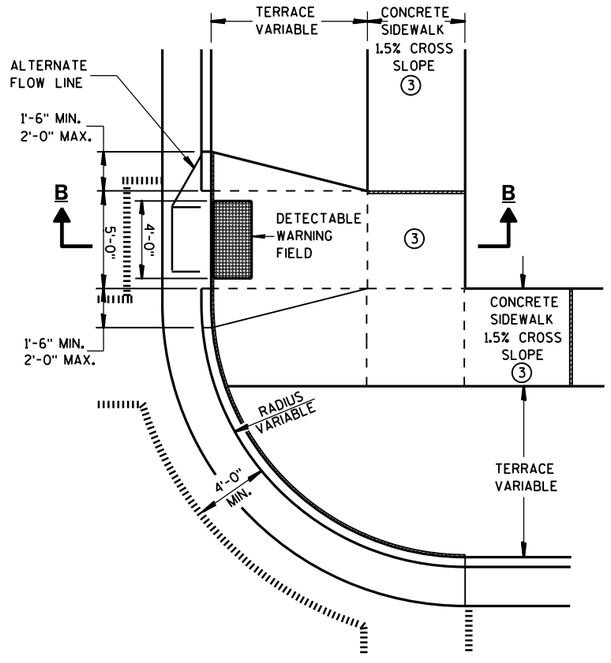
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



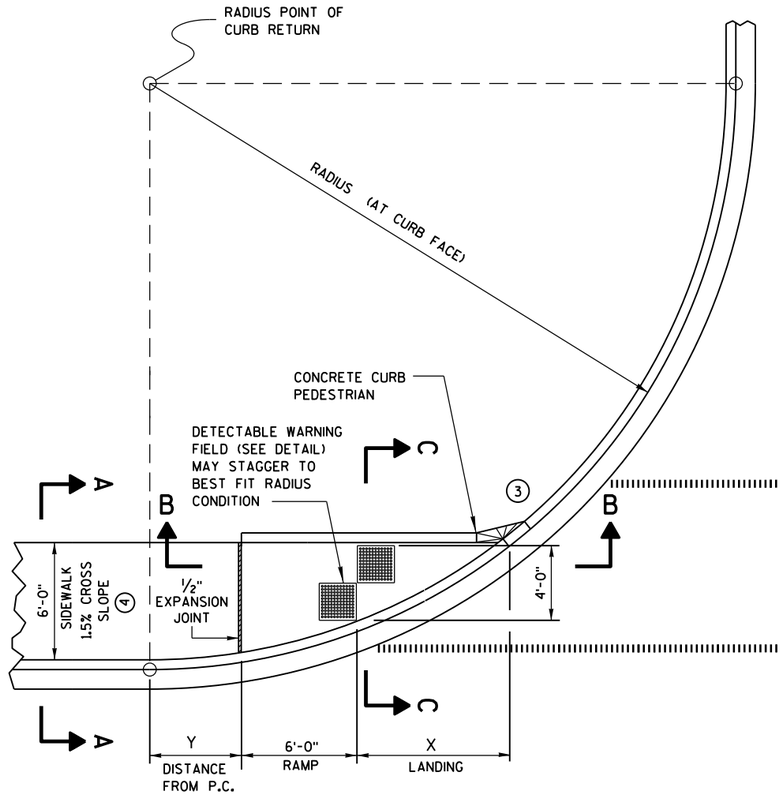
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

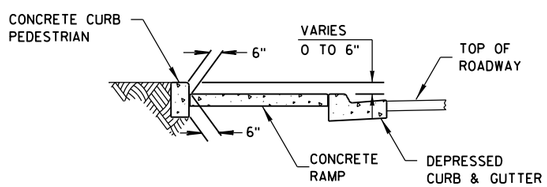
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

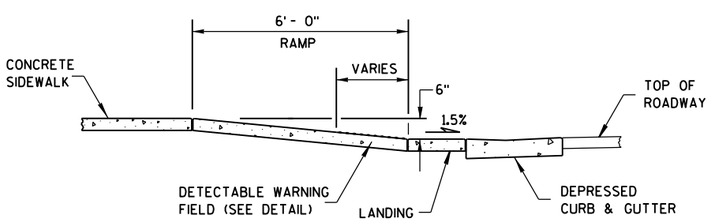
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



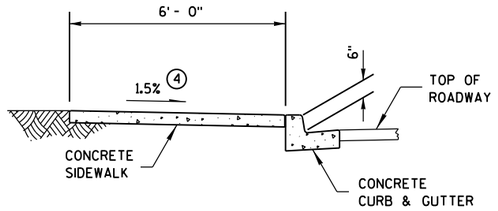
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

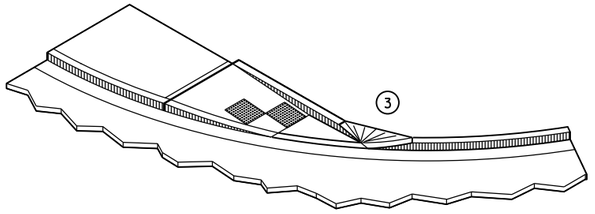
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

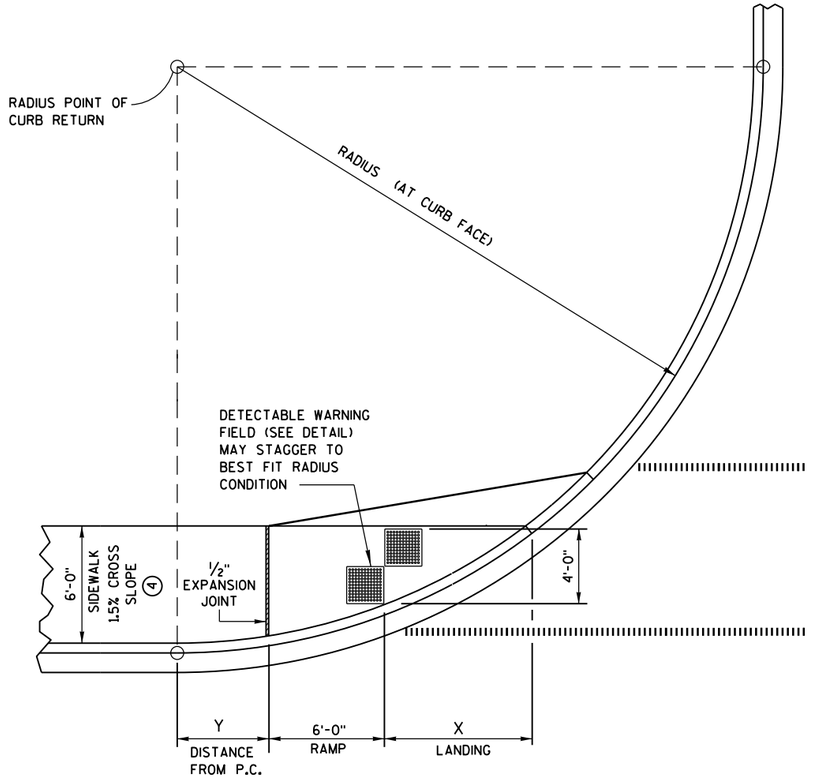
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

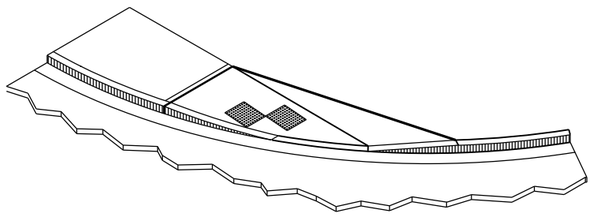
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

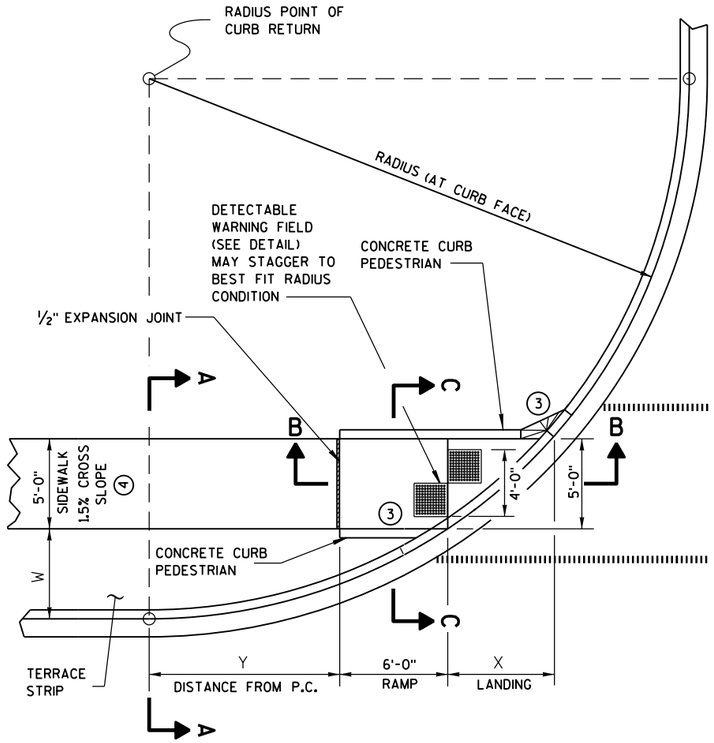
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

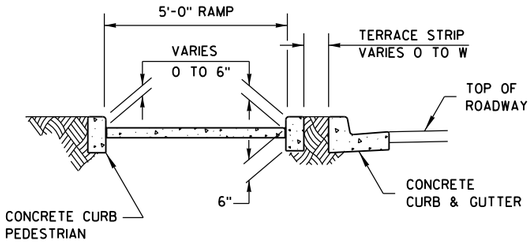
S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

SECTION A-A FOR TYPE 4B

SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

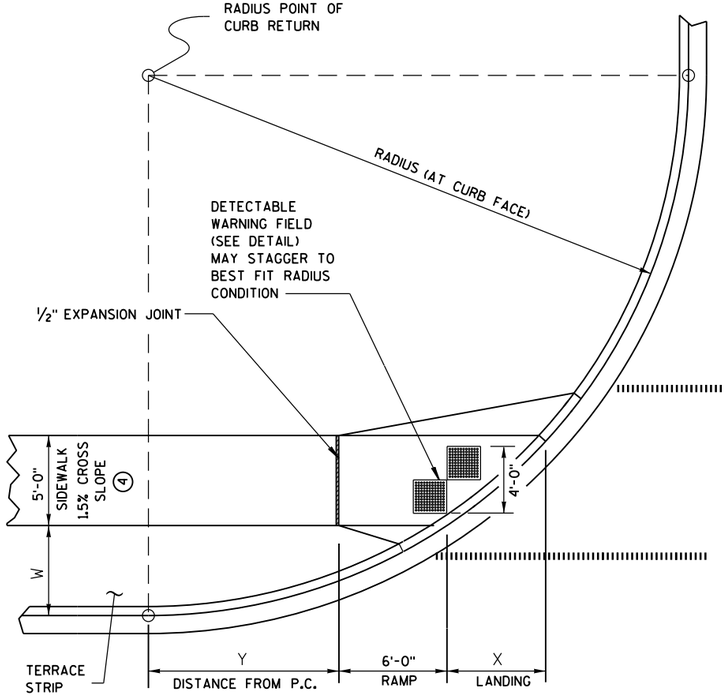
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

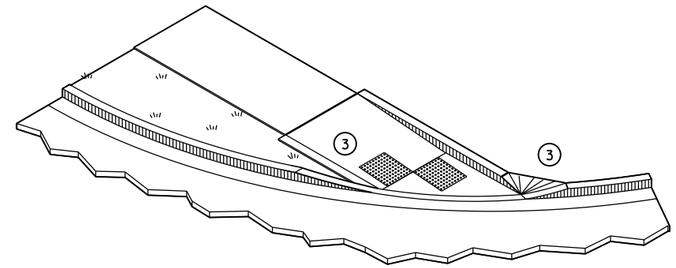
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

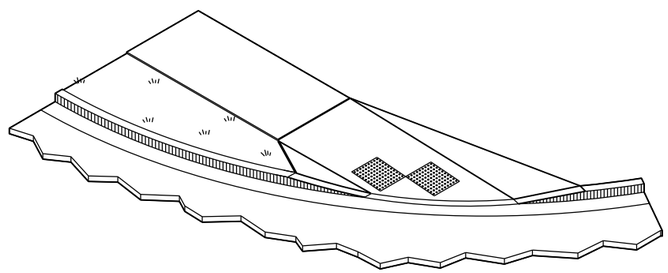
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



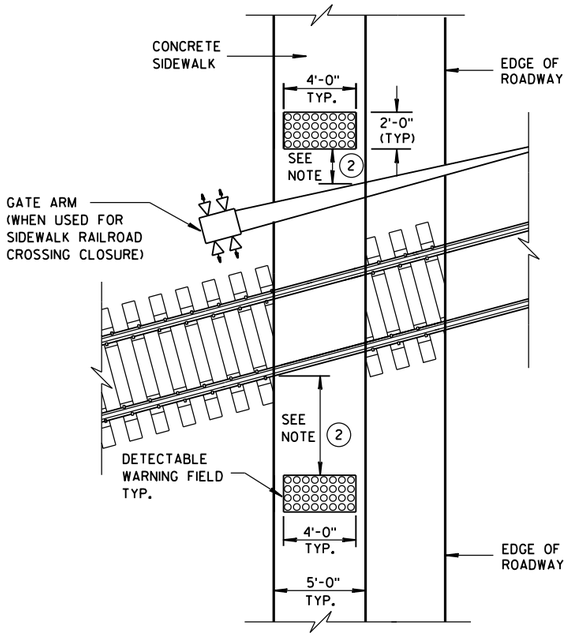
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

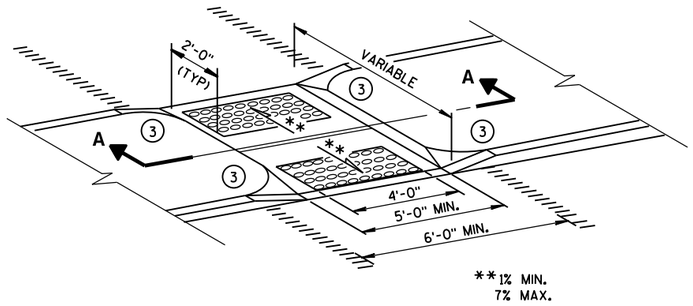
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

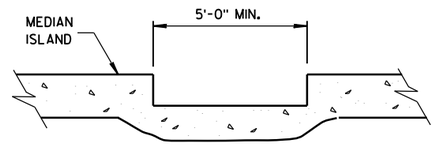
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

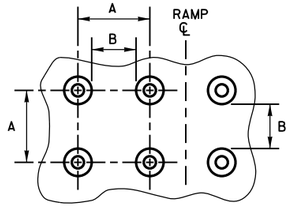
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



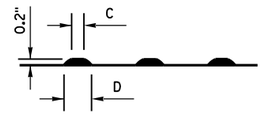
SECTION A-A



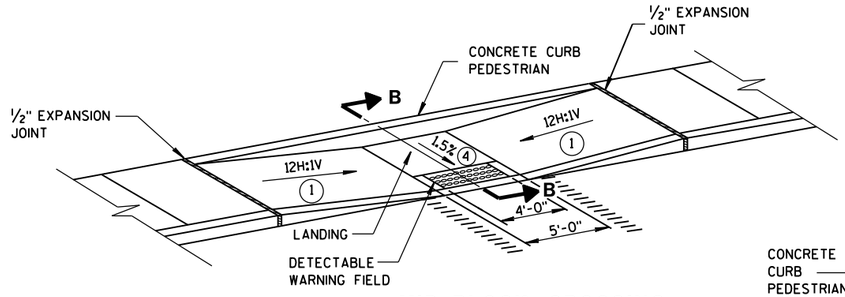
PLAN VIEW

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

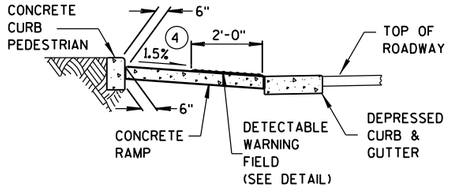
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

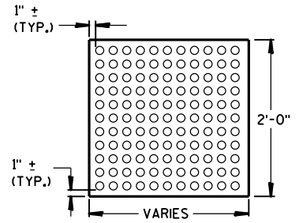


MID-BLOCK CROSSING
TYPE 7A



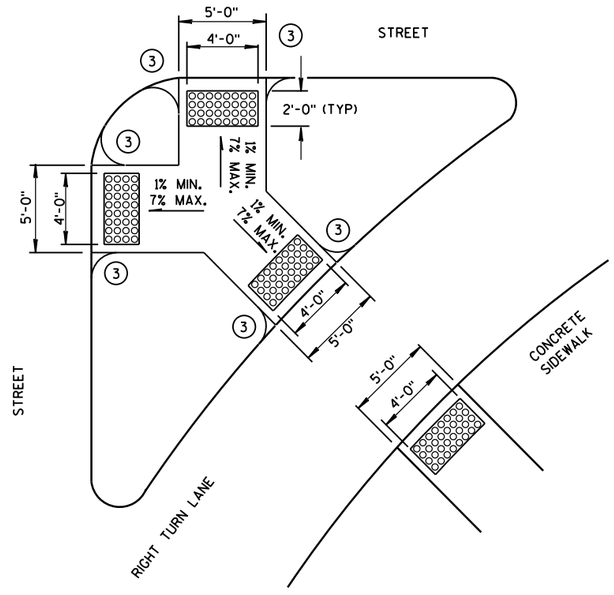
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

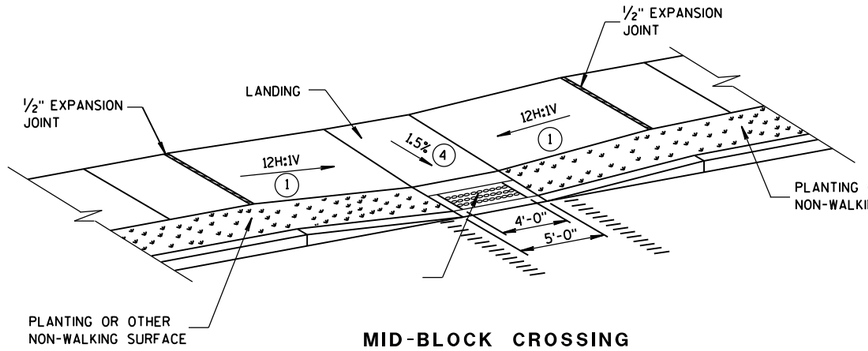


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

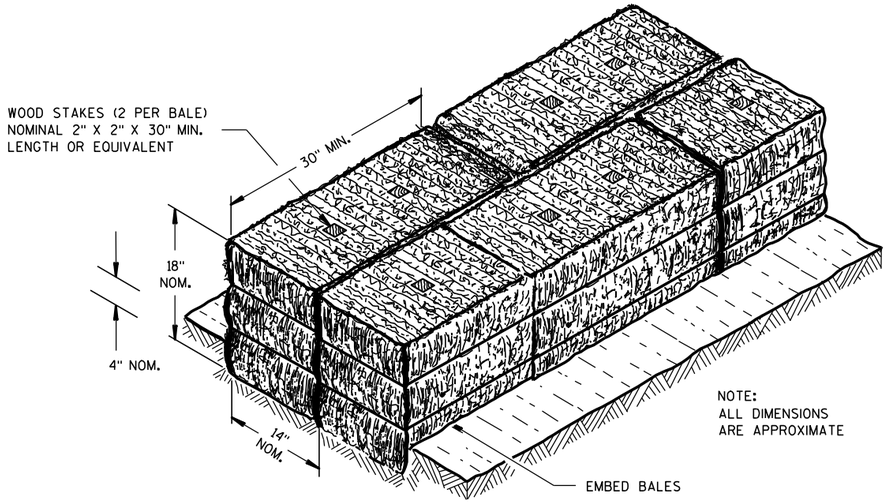
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

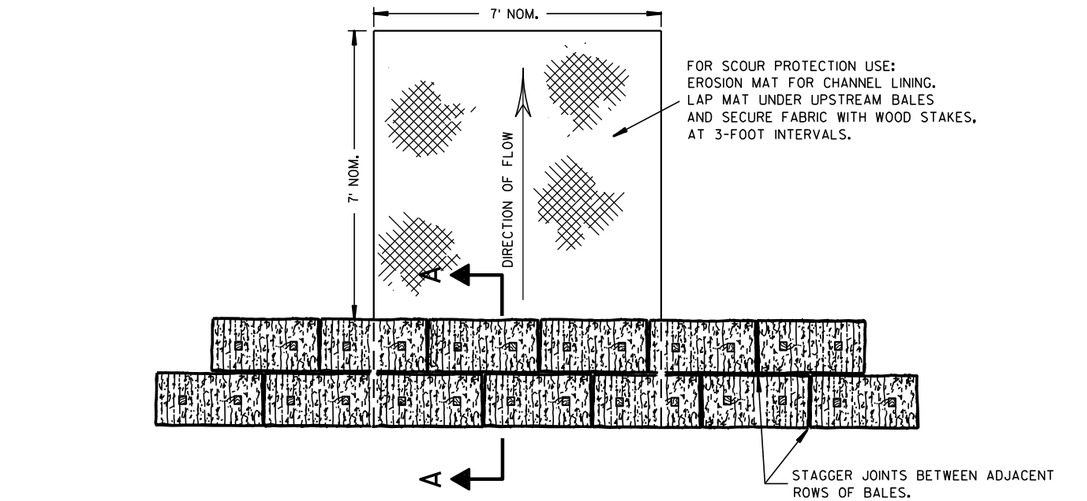
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

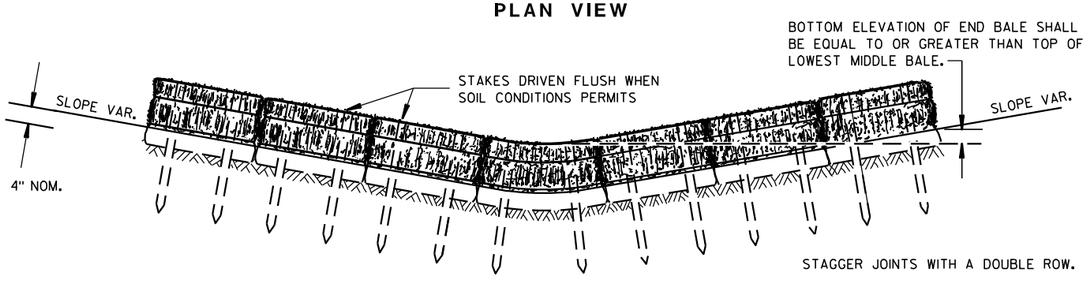
S.D.D. 8 D 5-15e



SECTION A-A



PLAN VIEW



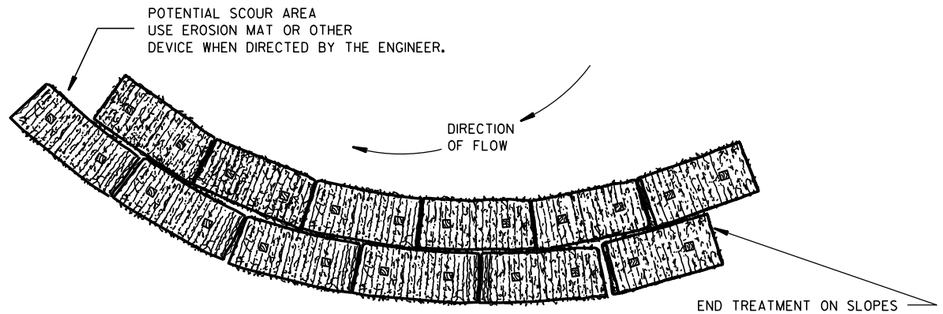
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

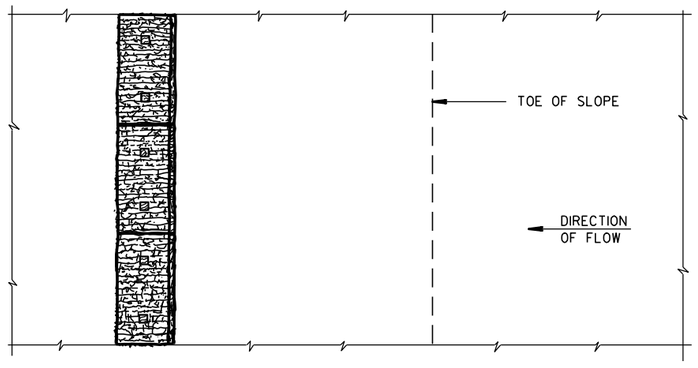
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

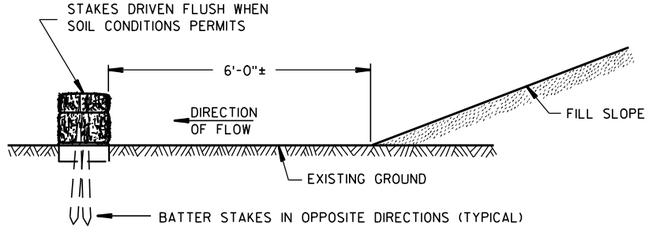


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

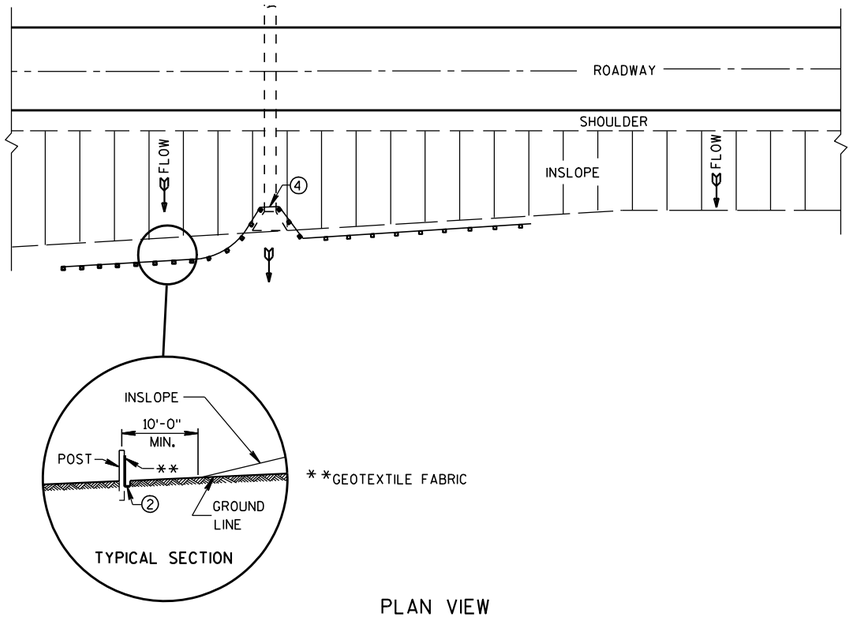
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

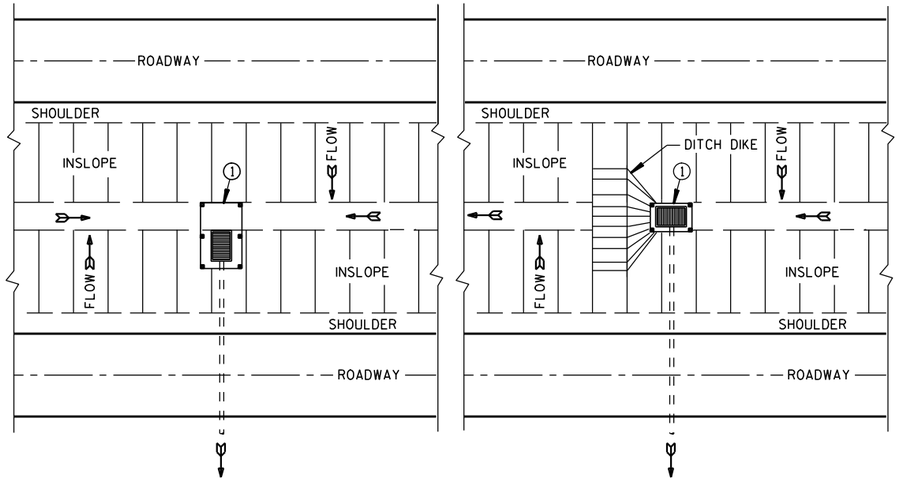
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



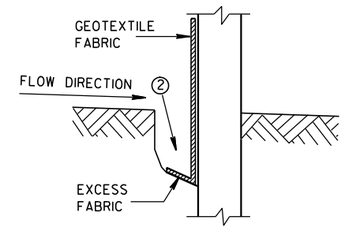
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

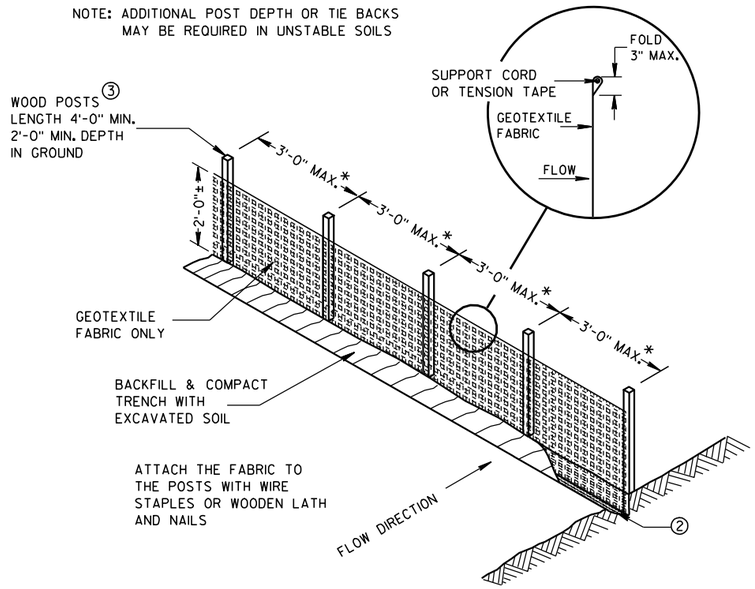
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

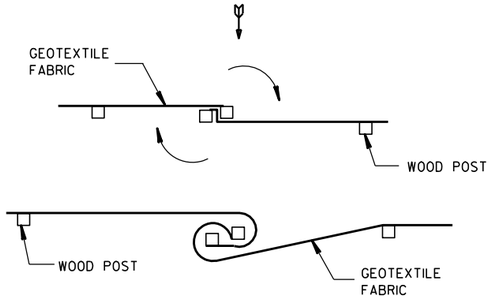


TRENCH DETAIL

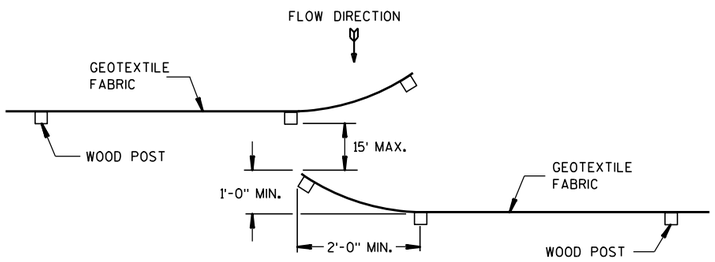


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

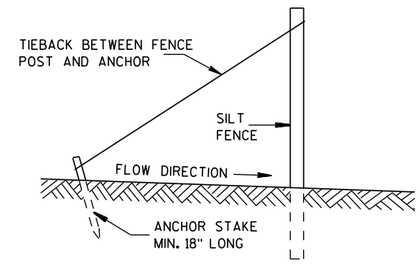


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

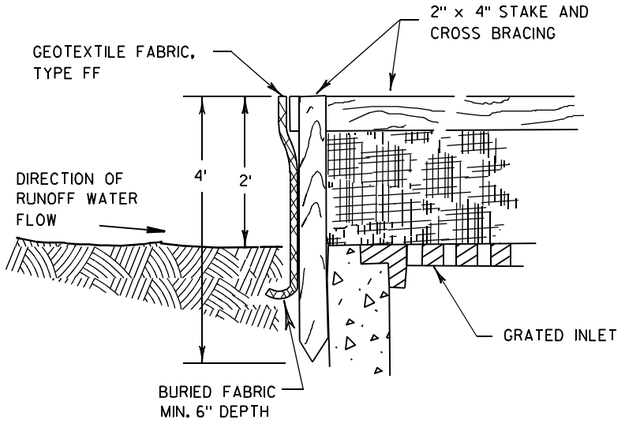
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

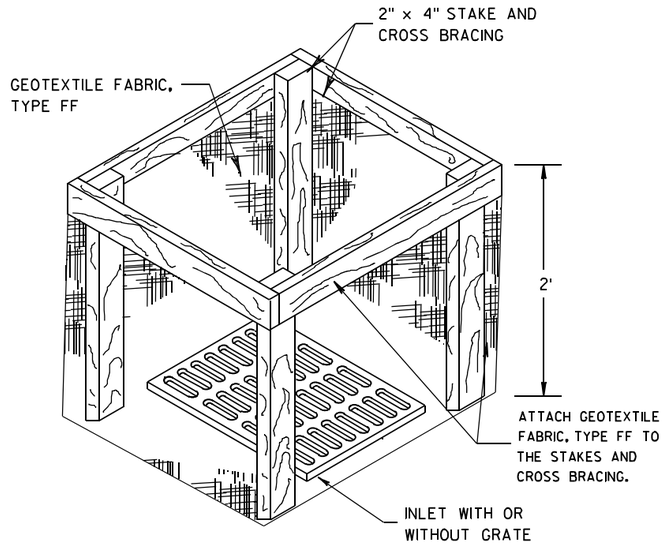
6

S.D.D. 8 E 9-6

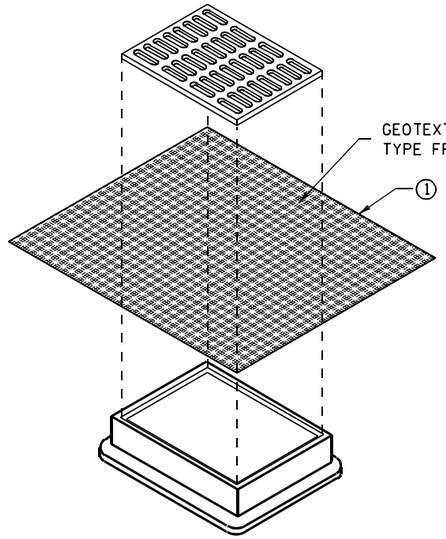
6

S.D.D. 8 E 9-6



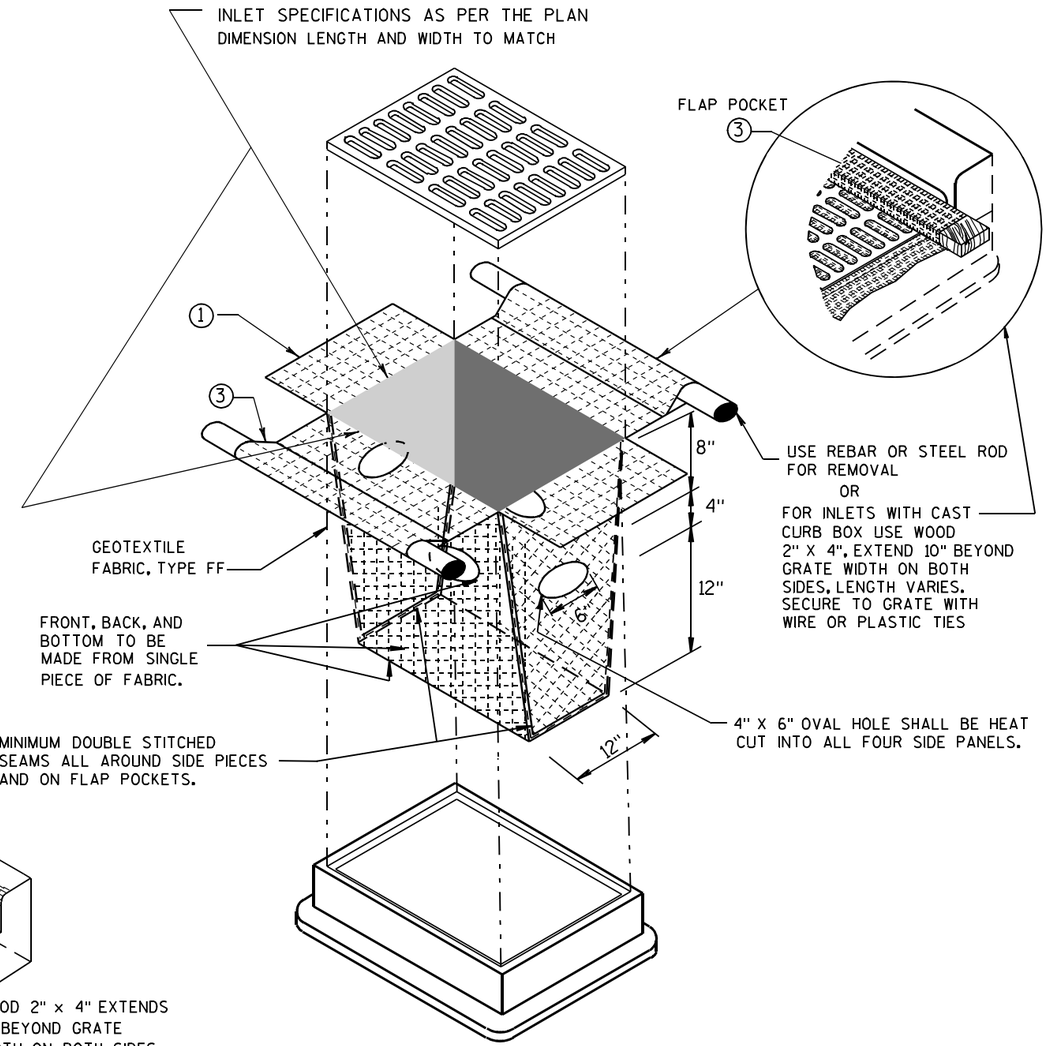


INLET PROTECTION, TYPE A



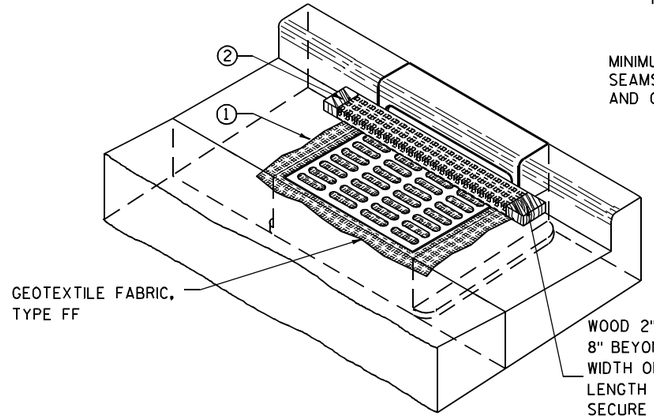
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

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

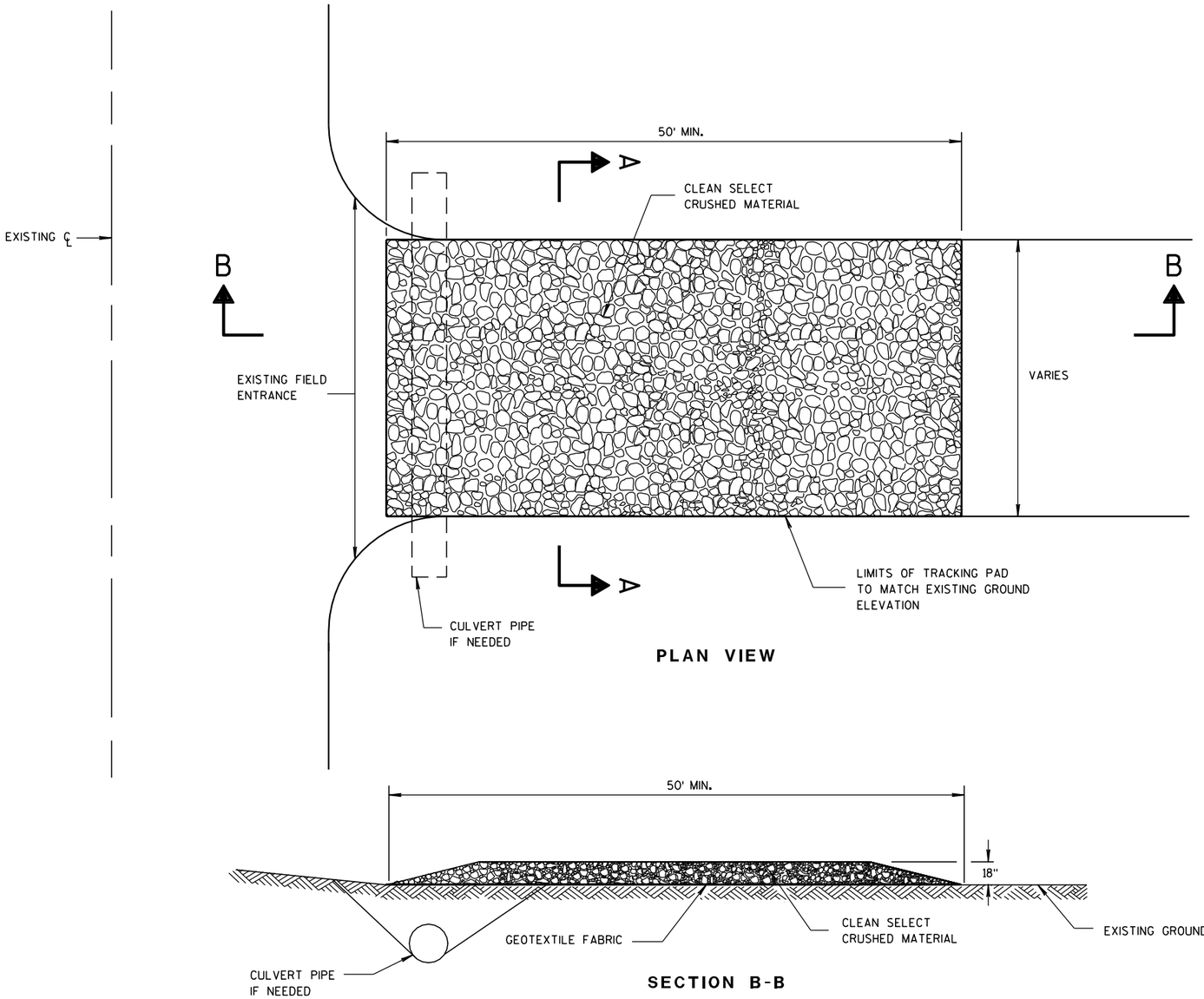
APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

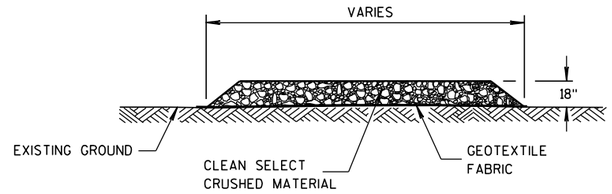
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

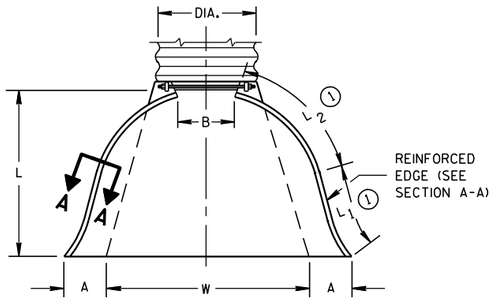
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

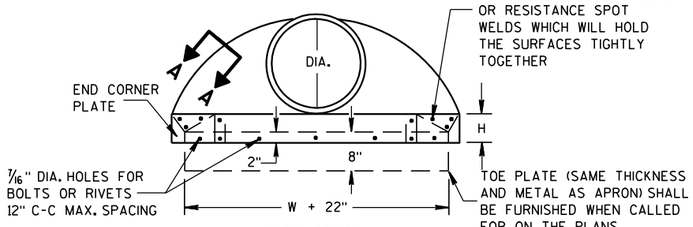
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

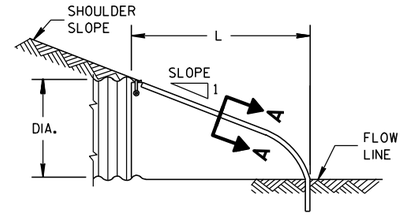
*MINIMUM
**MAXIMUM



PLAN VIEW

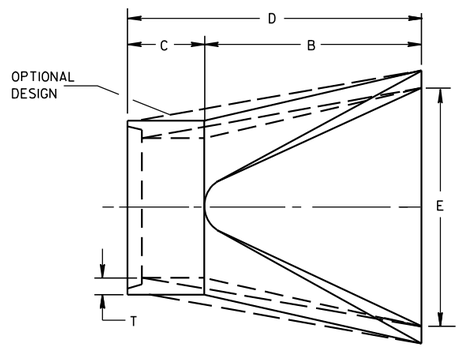


END VIEW

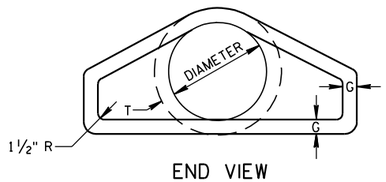


SIDE ELEVATION

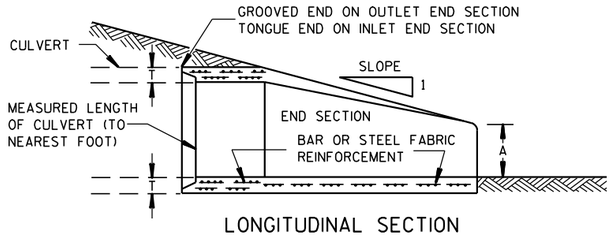
METAL ENDWALLS



PLAN

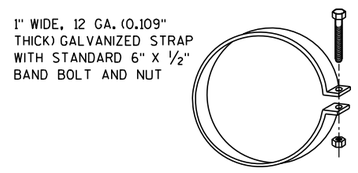


END VIEW



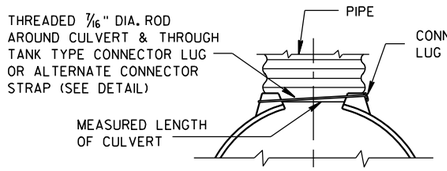
LONGITUDINAL SECTION

CONCRETE ENDWALLS

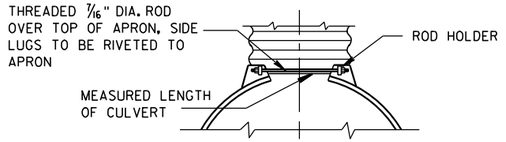


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

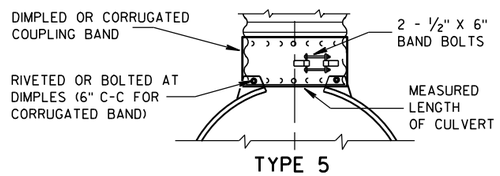


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

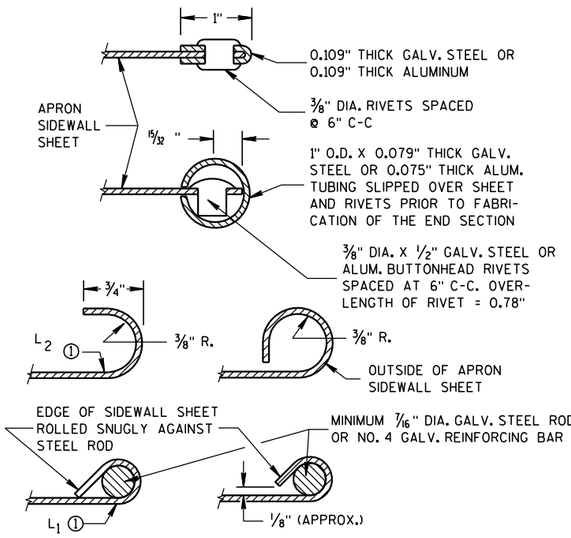
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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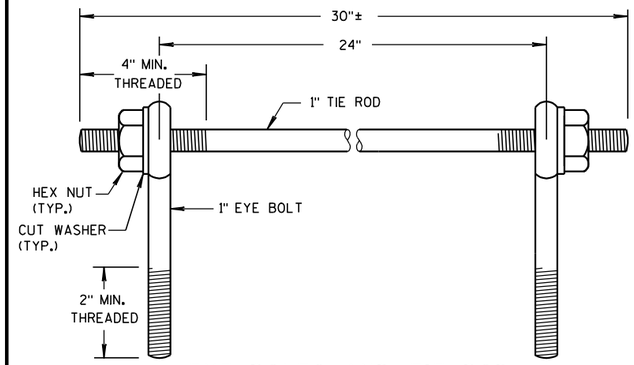
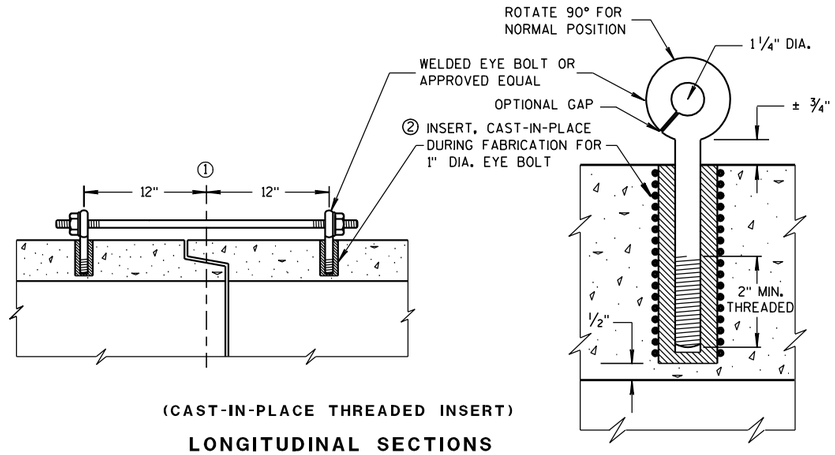
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

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 ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

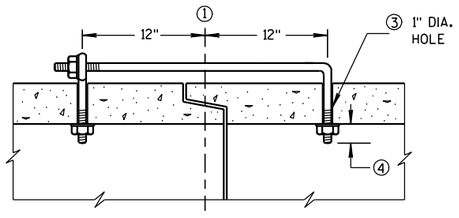
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

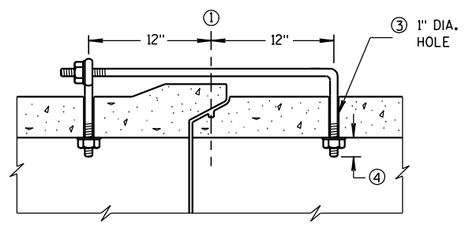
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

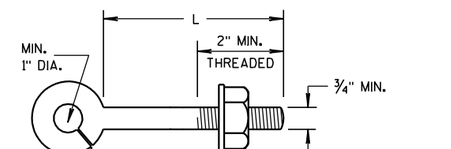


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

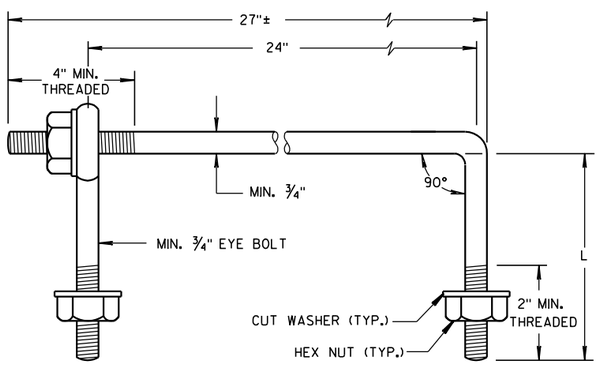
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

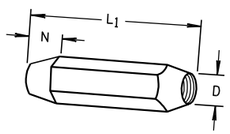
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

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 7/16

DIMENSIONS SHOWN ARE IN INCHES



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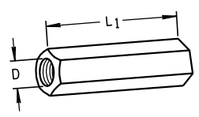
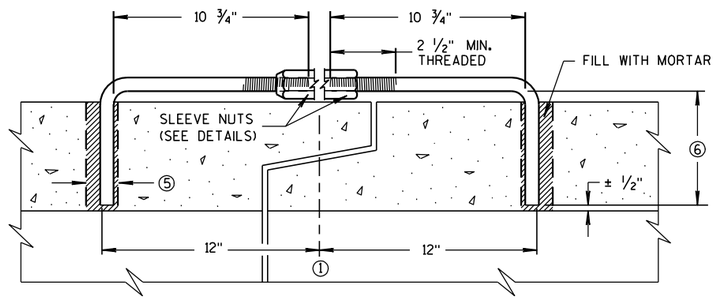


PLAIN

RIGHT AND LEFT THREADS

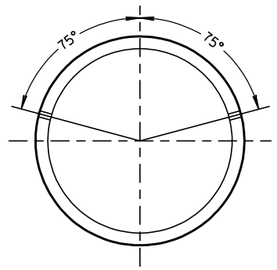
SLEEVE NUTS



LONGITUDINAL SECTION

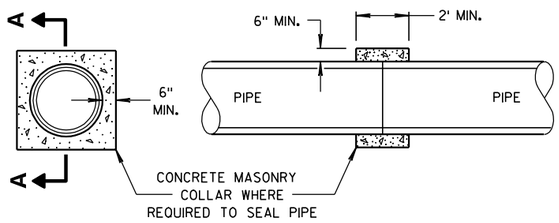
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

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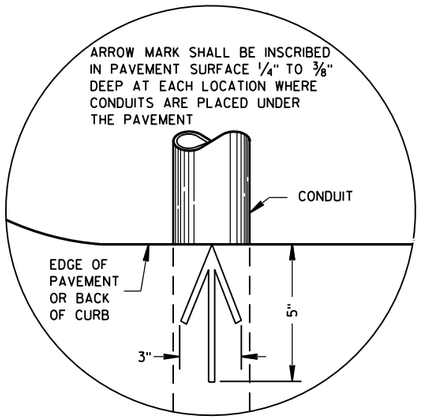
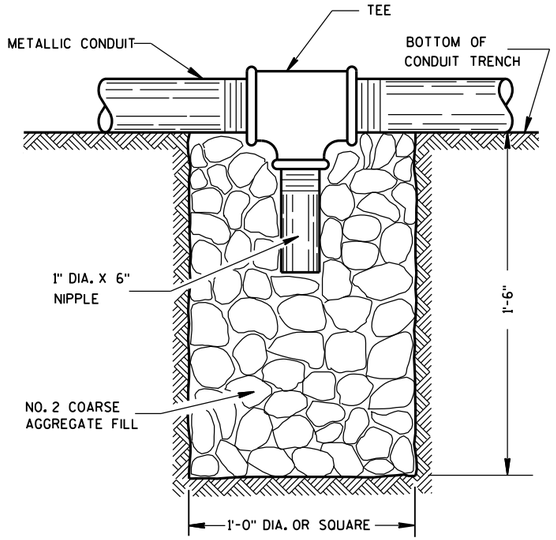
S.D.D. 8 F 4-7



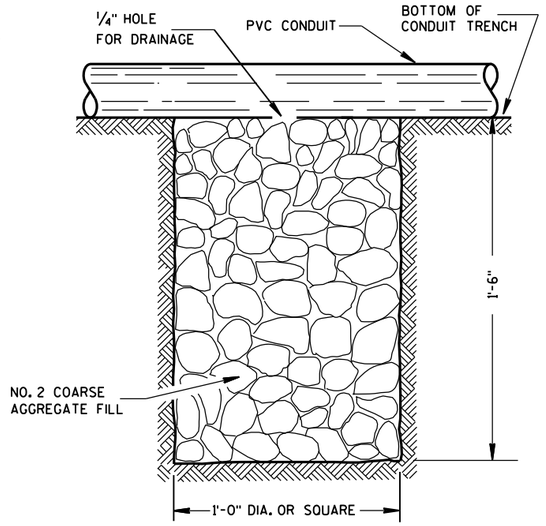
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

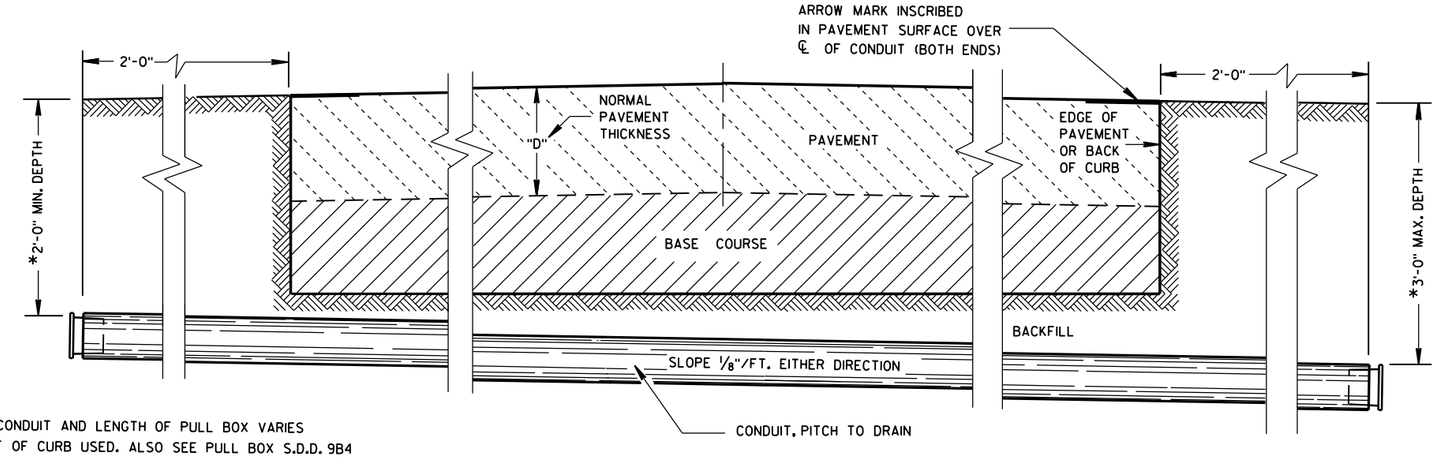
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT UNDER PAVED HIGHWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

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S.D.D. 9 B 2-8

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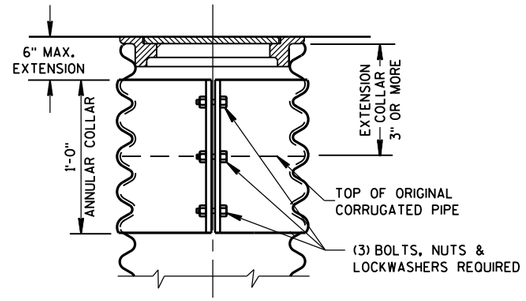
S.D.D. 9 B 2-8

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

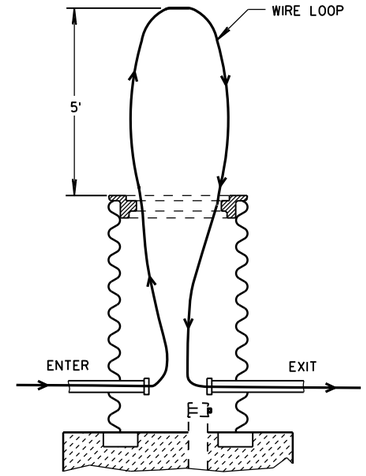
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

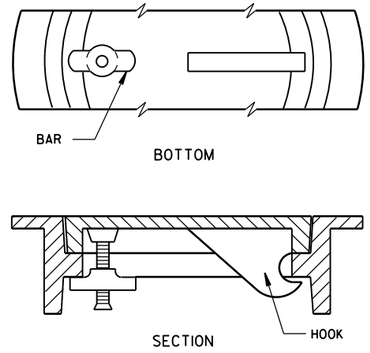
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

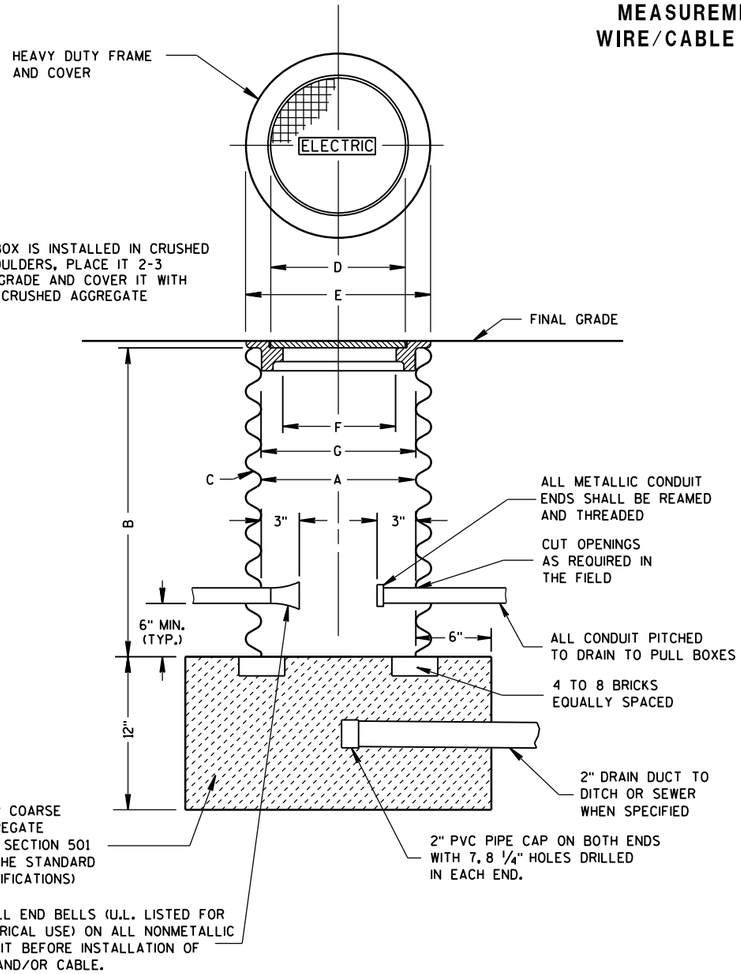


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



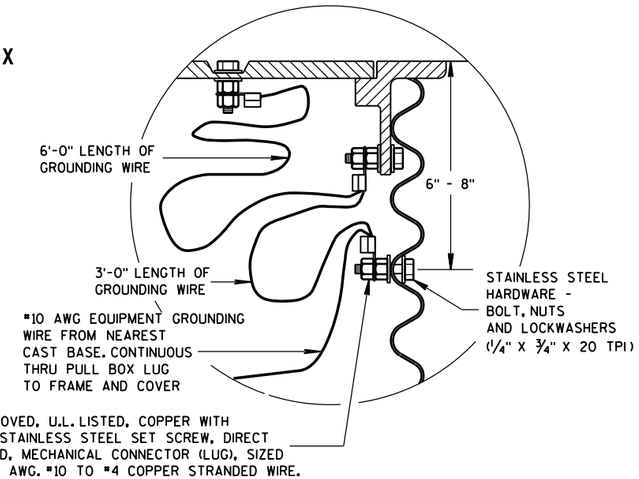
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

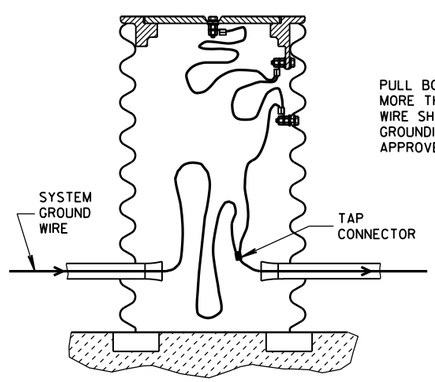
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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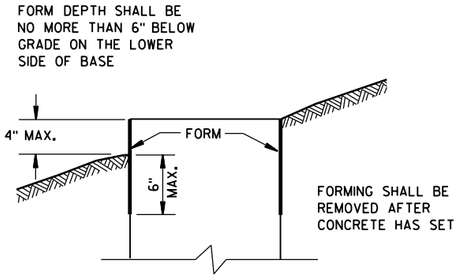
S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

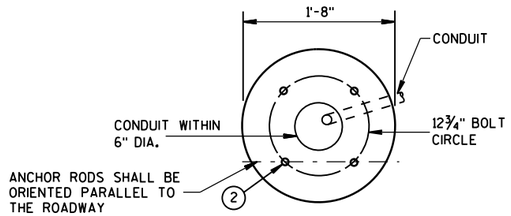
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

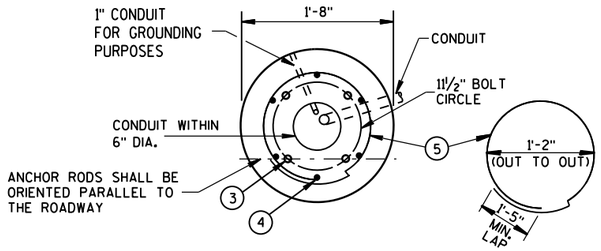
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

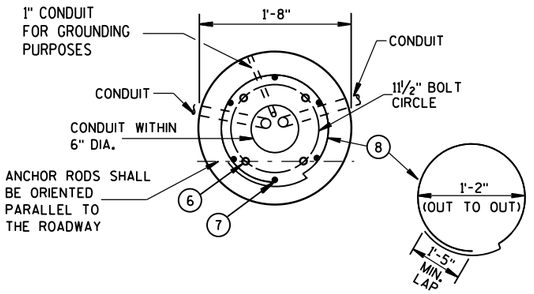
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

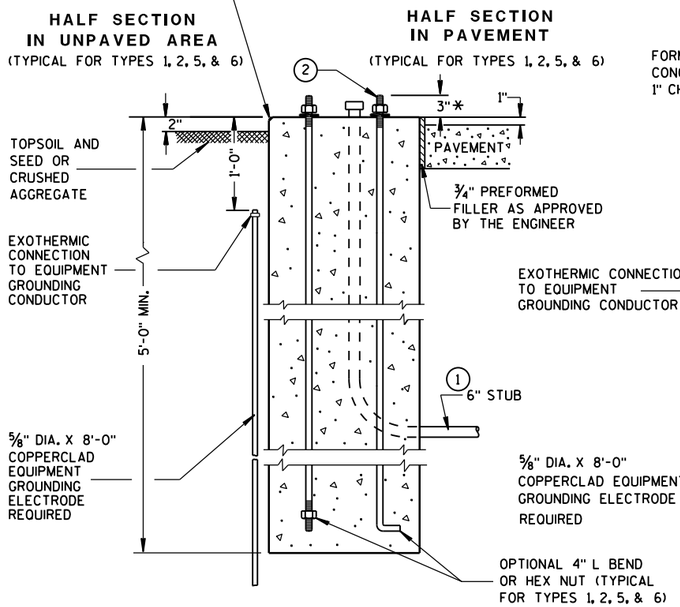






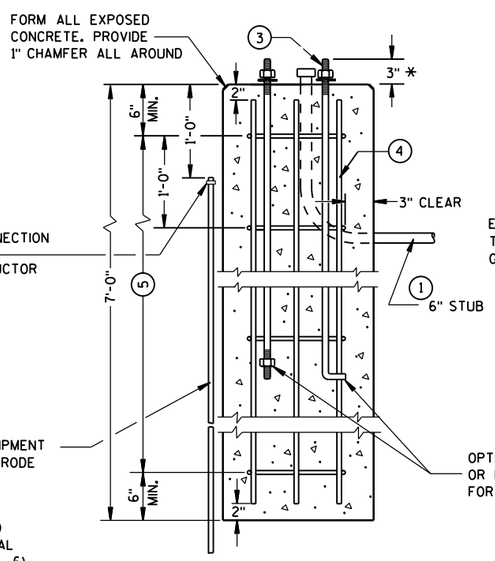
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

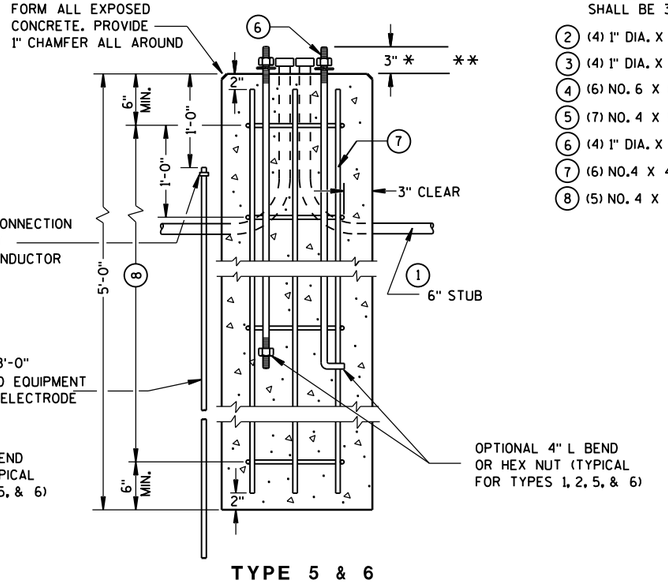


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

6

S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

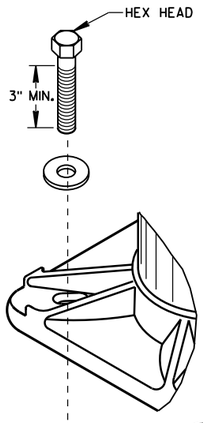
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

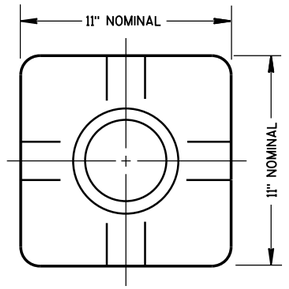
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

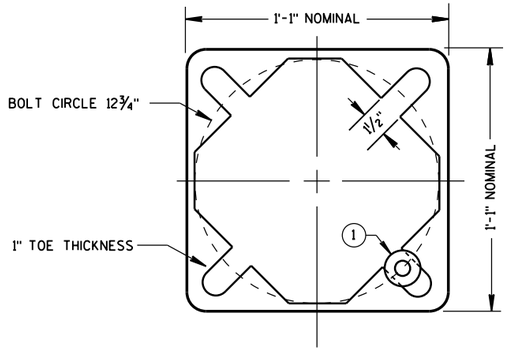
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

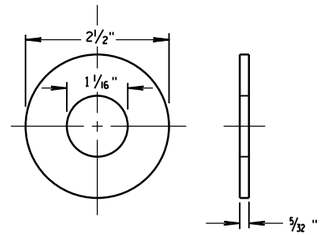




TOP VIEW
(PEDESTAL BASE)

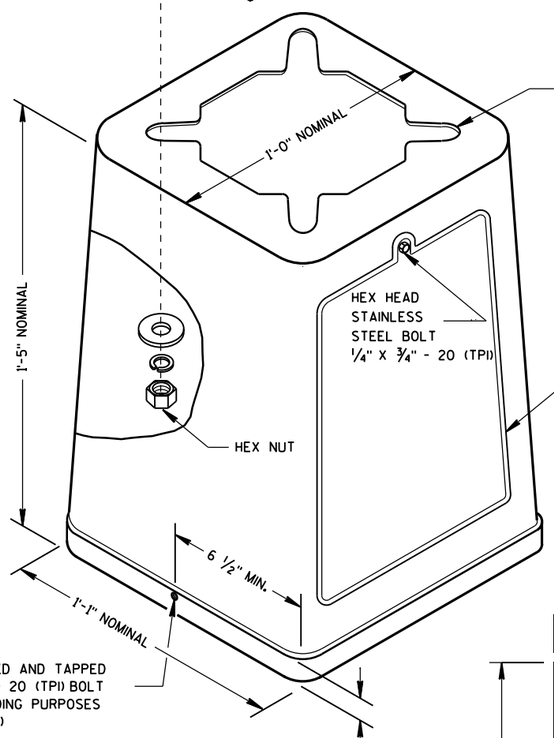


BOTTOM VIEW
(PEDESTAL BASE)

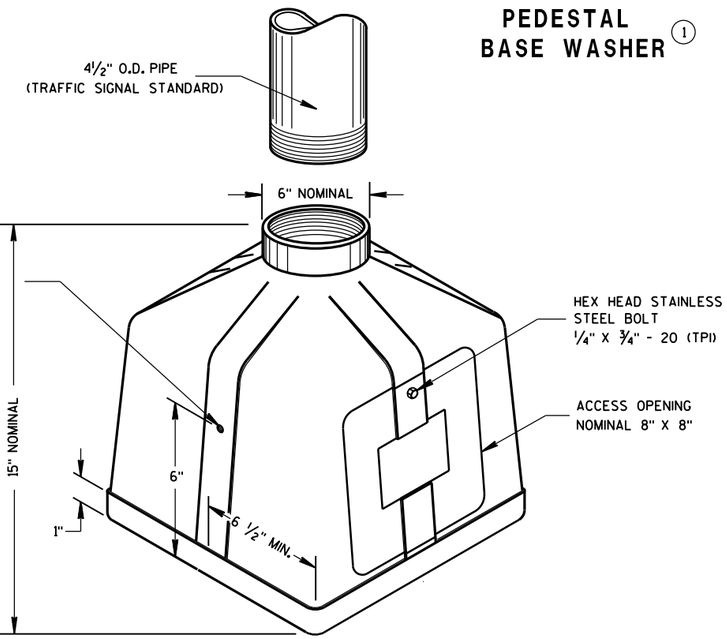


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

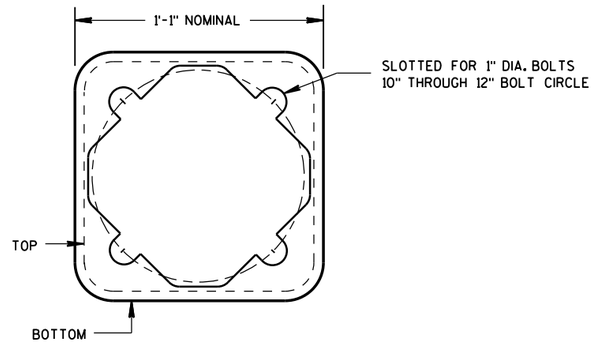
PEDESTAL BASE WASHER (1)



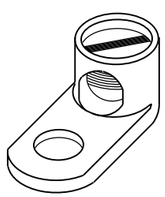
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

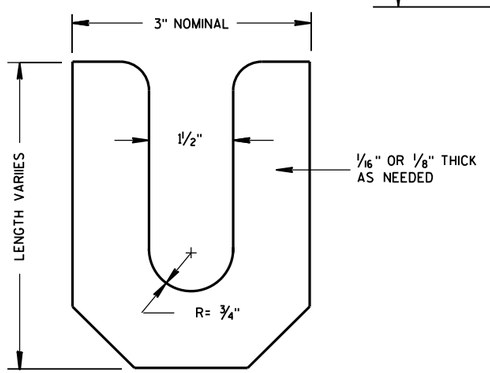


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



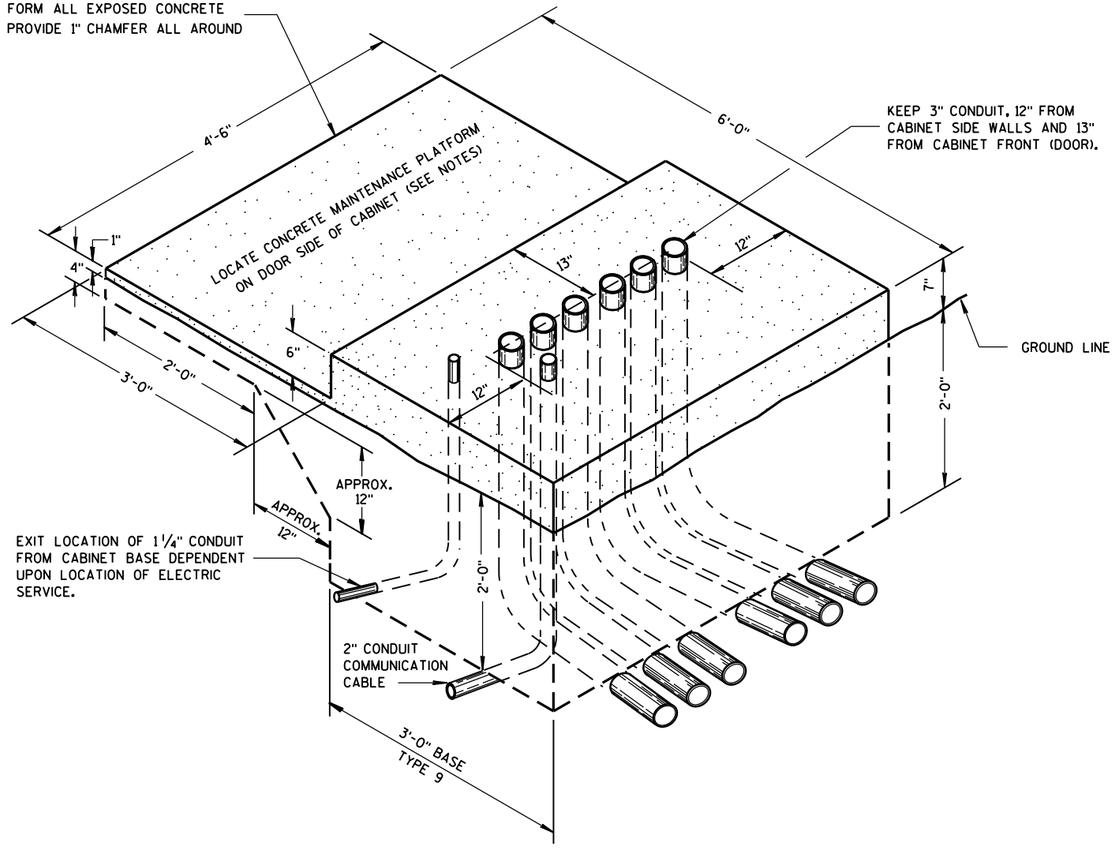
LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

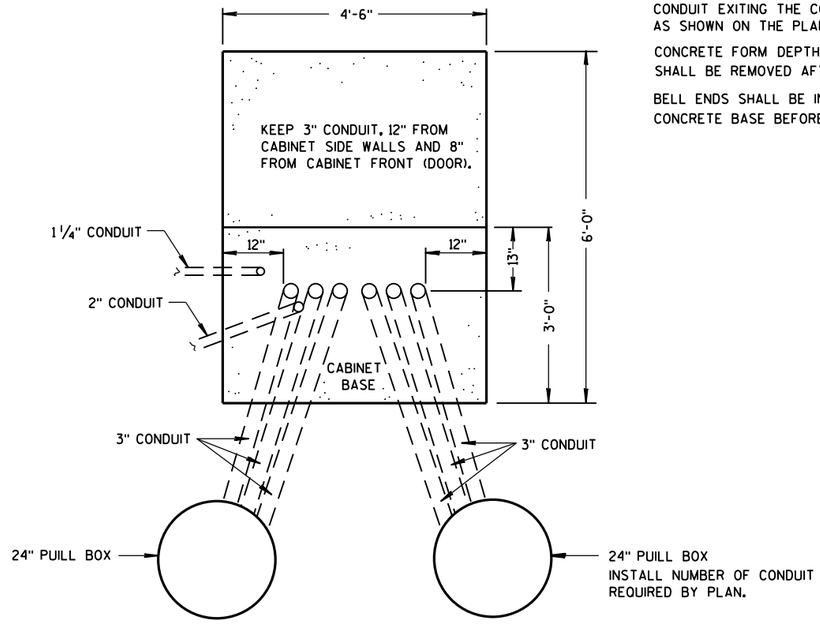
6
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

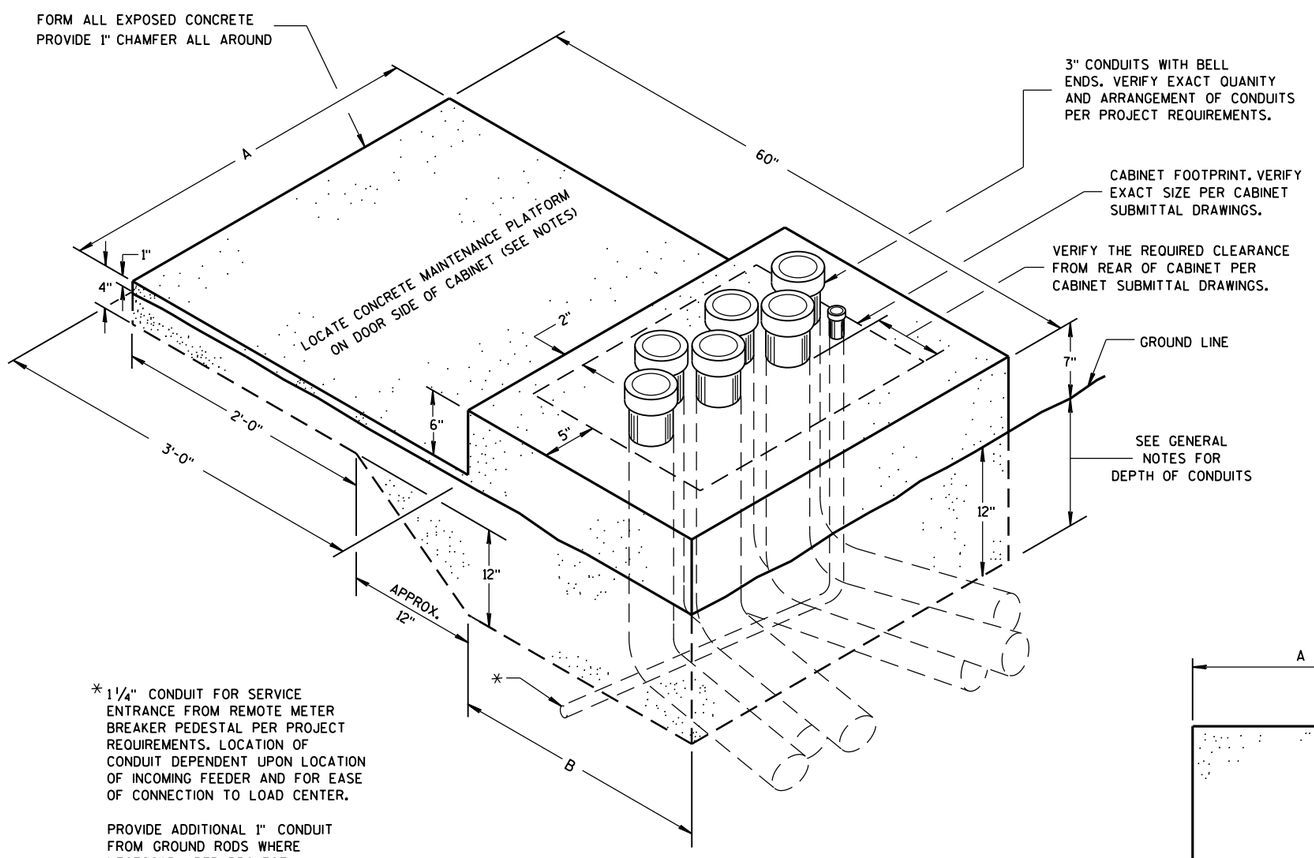
CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 6-7



* 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

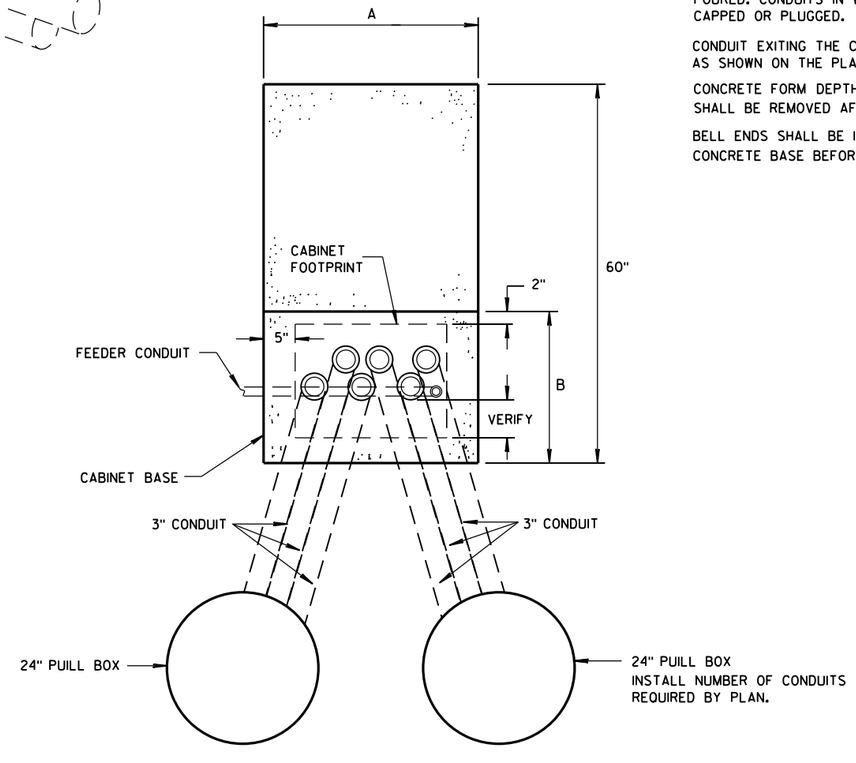
PROVIDE ADDITIONAL 1" CONDUIT FROM GROUND RODS WHERE NECESSARY PER PROJECT REQUIREMENTS.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS	
		A	B
L24	24"	34"	24"
L30	30"	40"	24"



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

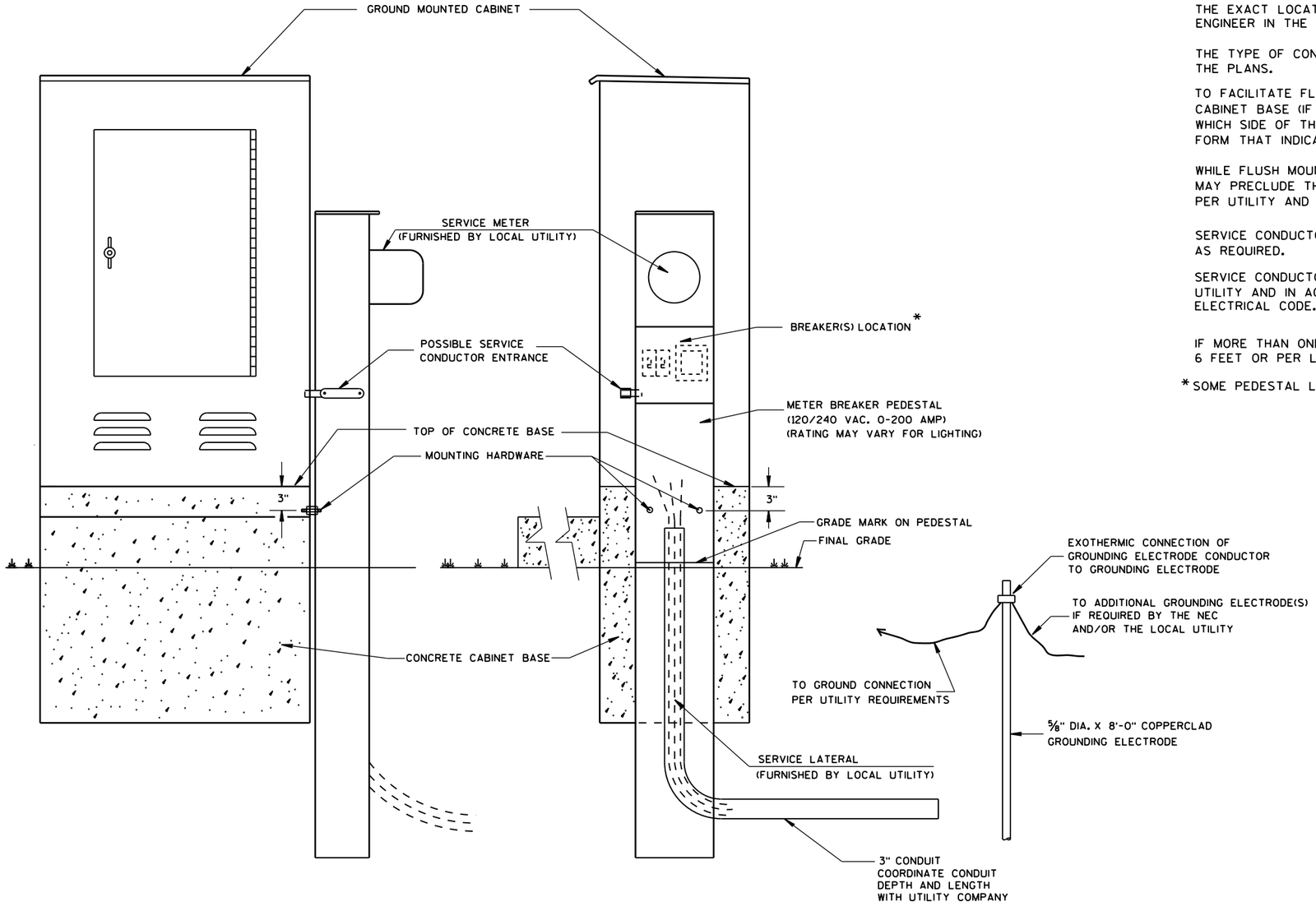
CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
FHWA

6

S.D.D. 9 C 14-1



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

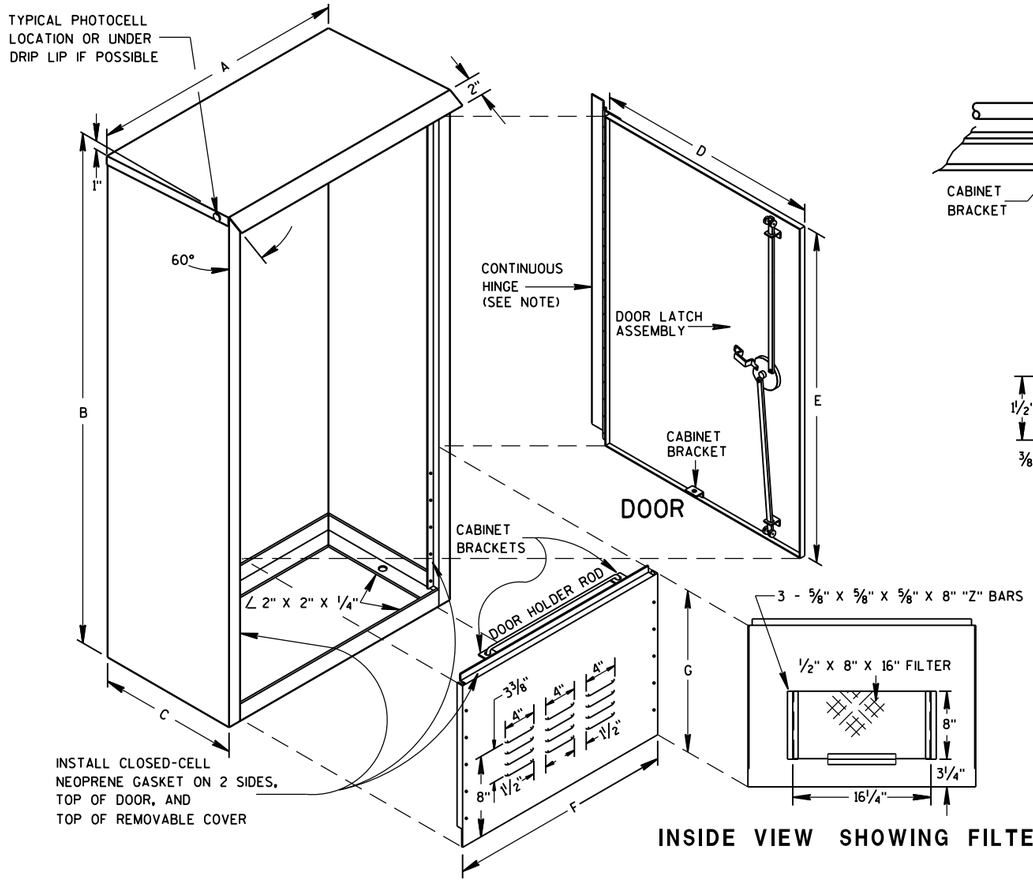
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

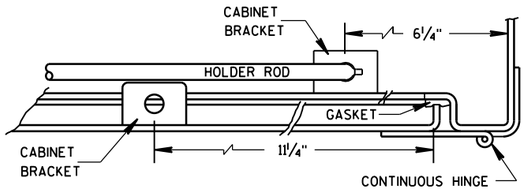
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 D 1-5

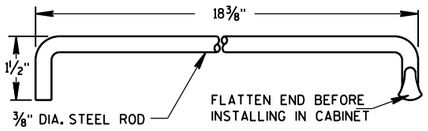


REMOVABLE COVER

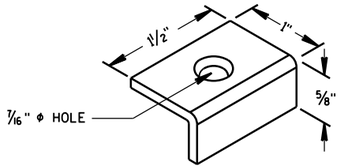
INSIDE VIEW SHOWING FILTER



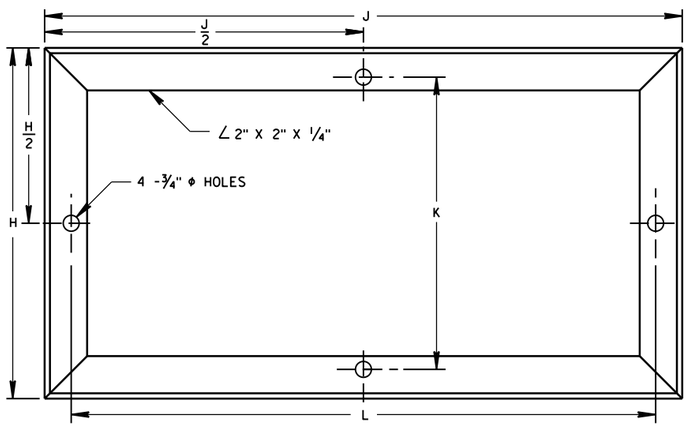
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

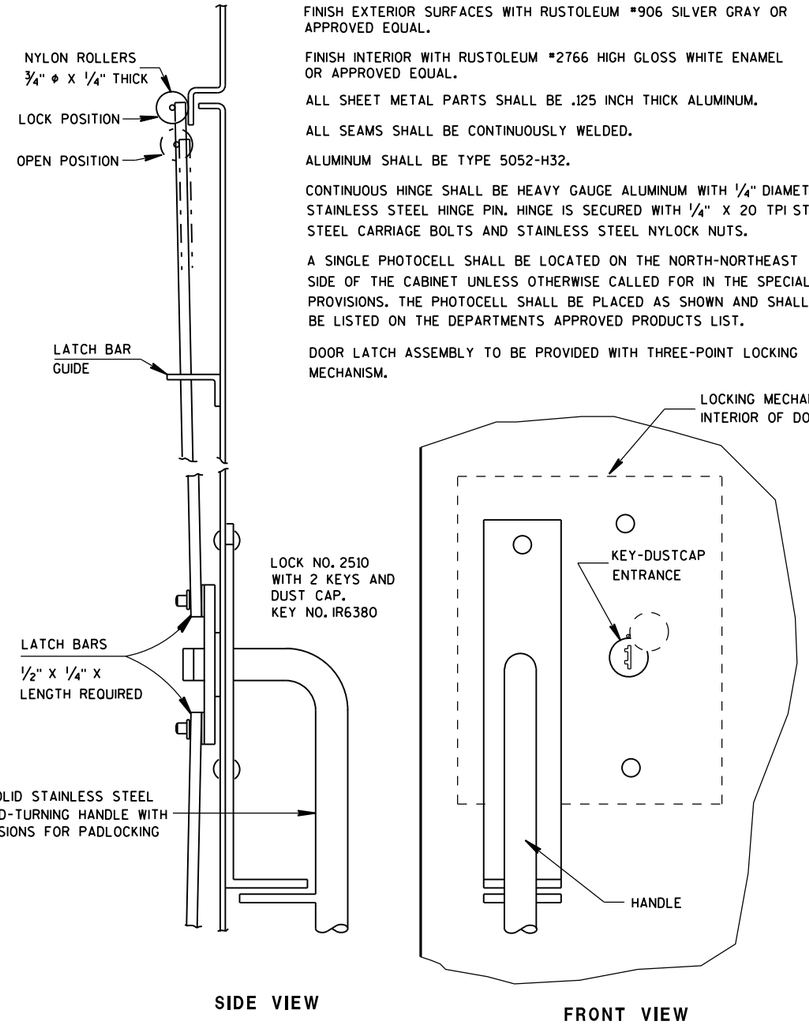
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

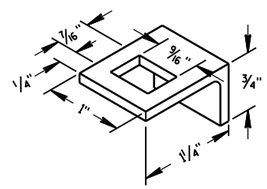
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

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S.D.D. 9 D 2-3

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S.D.D. 9 D 2-3

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

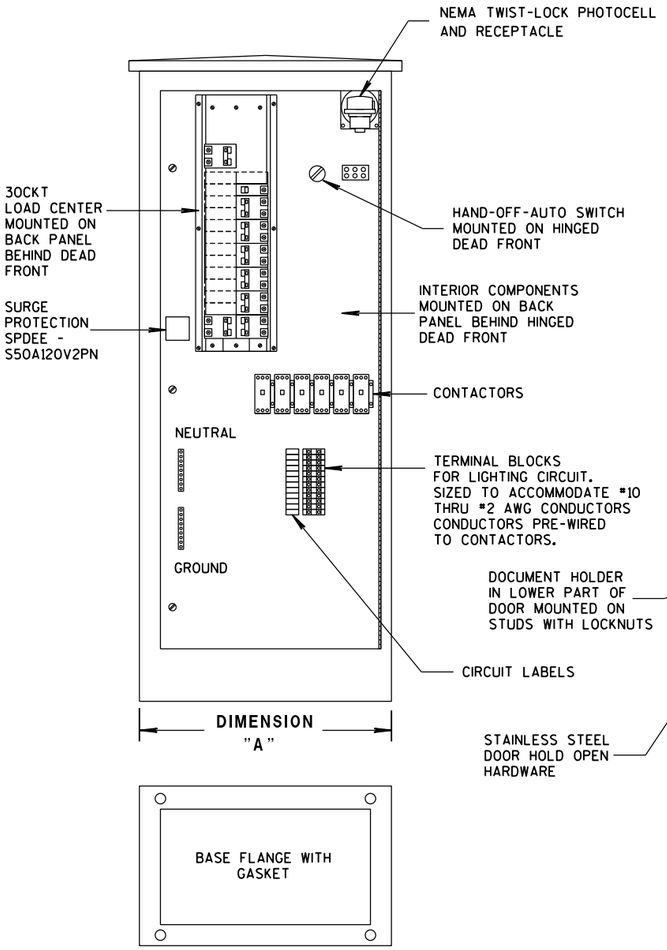
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW

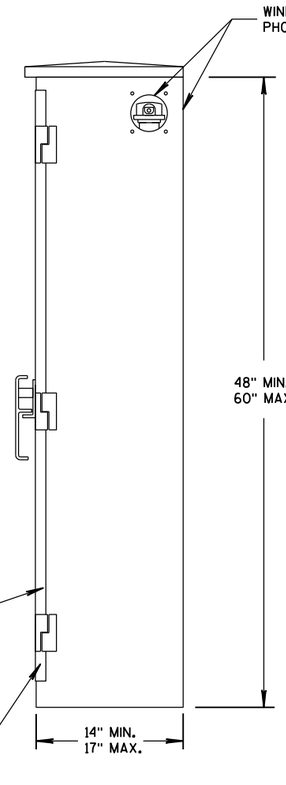
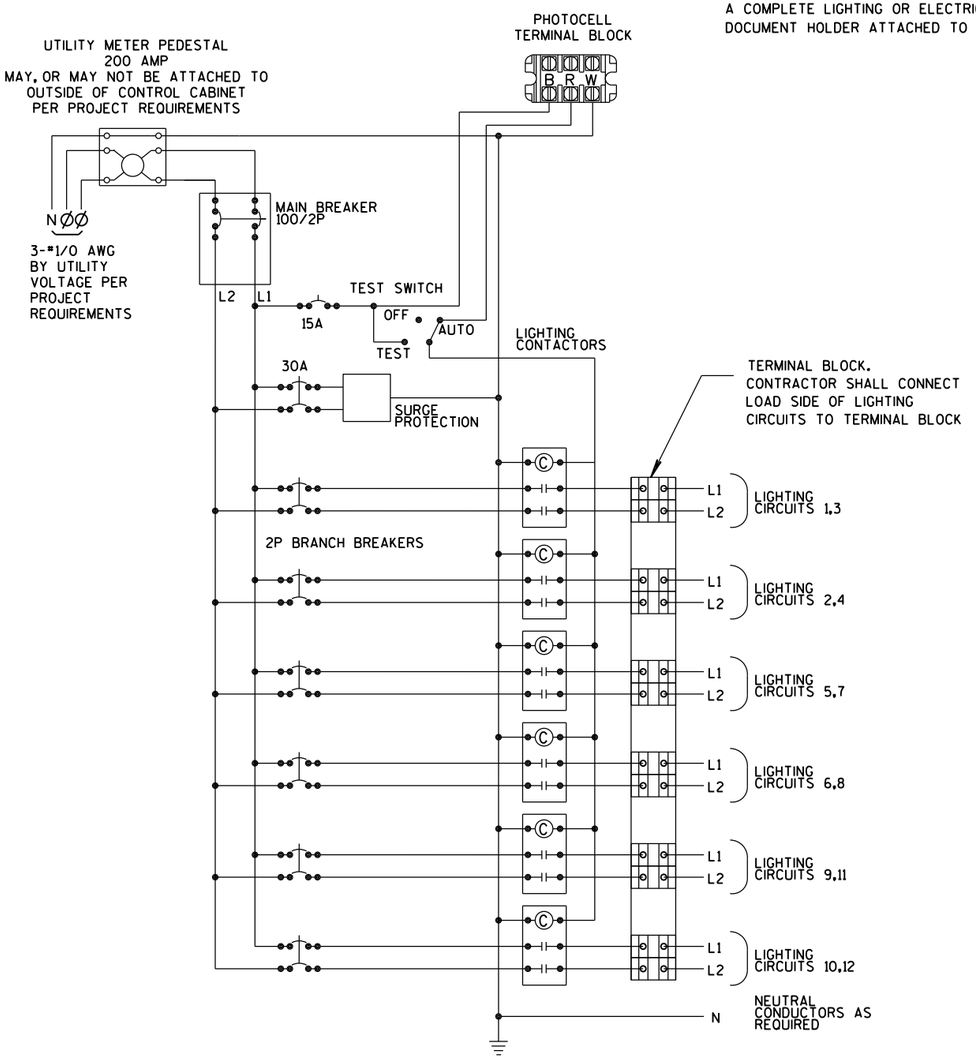


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"



CONTROL CABINET SCHEMATIC

LIGHTING CONTROL CABINET

LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINEER
FHWA

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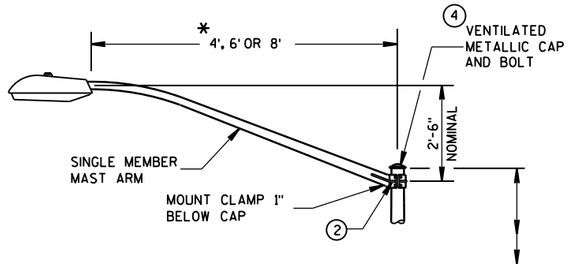
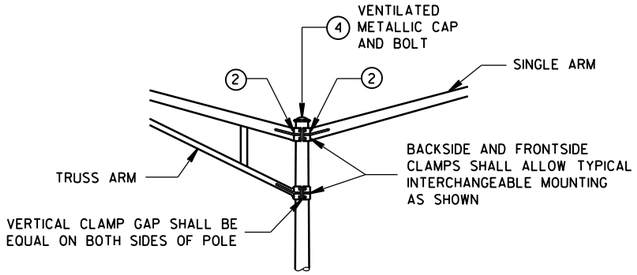
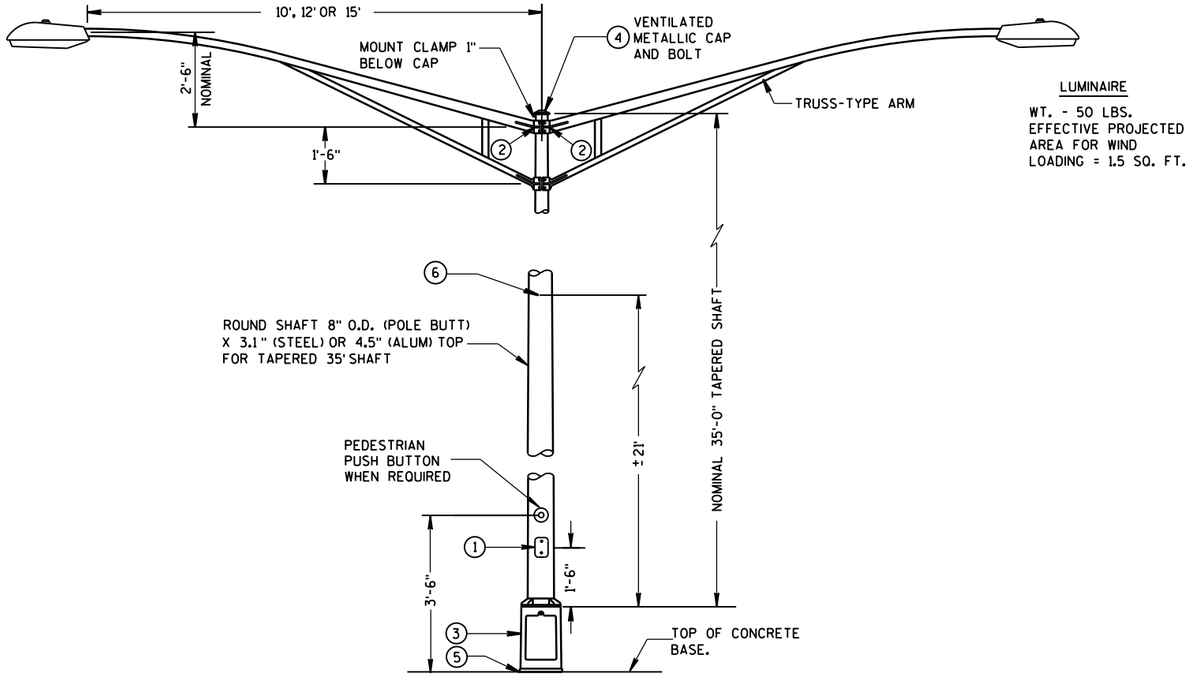
S.D.D. 9 D 4-1

* RISE FOR 4' ARM SHALL BE 2'-0".





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE EITHER GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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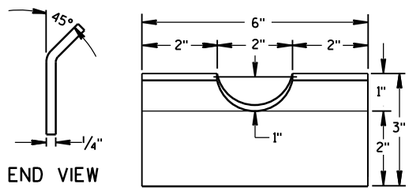
S.D.D. 9 E 1-13e

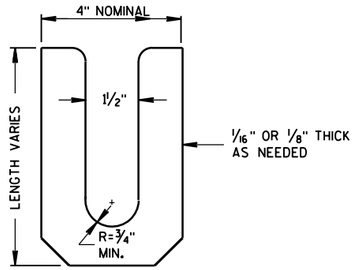


END VIEW

FRONT VIEW

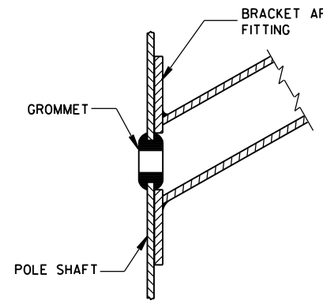
RECTANGULAR CLAMP SHIM

(4 TO A SET)

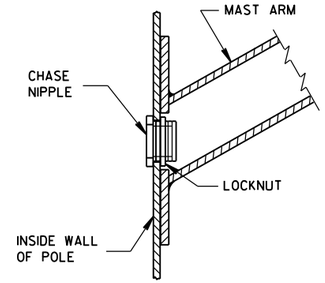


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

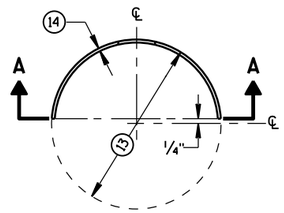
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

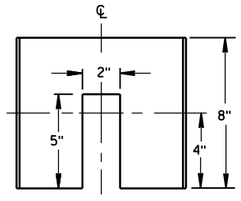
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



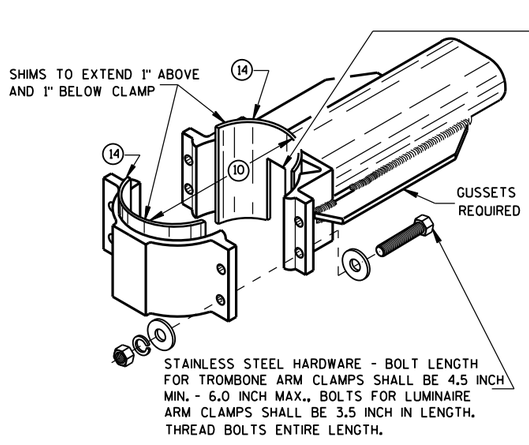
PLAN VIEW



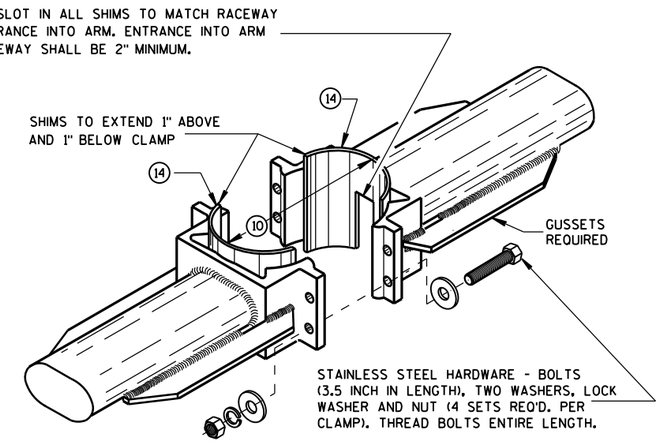
SECTION A-A

CIRCULAR CLAMP SHIM

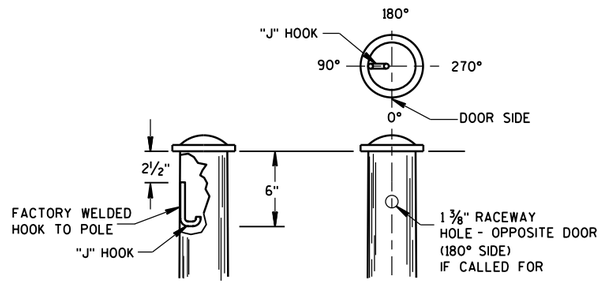
(2 TO A SET)



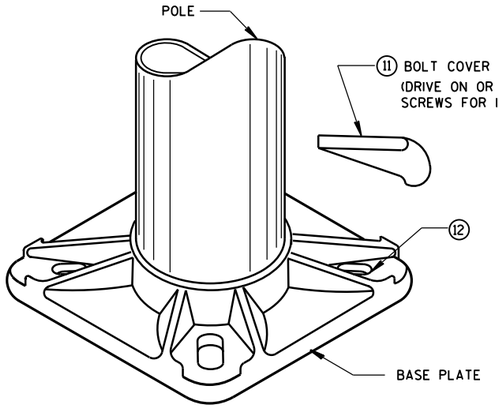
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



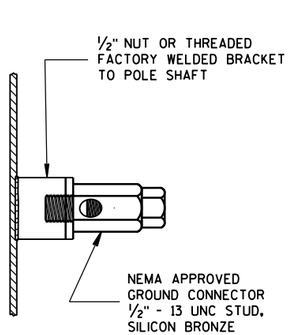
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

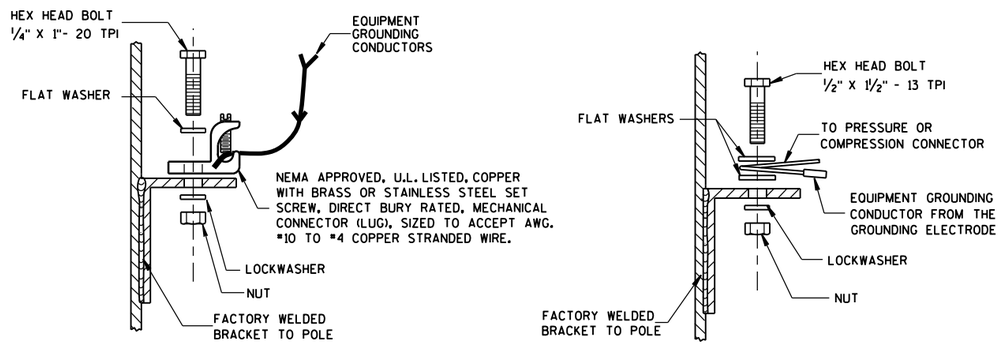


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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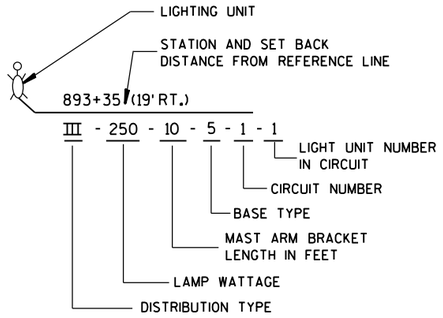
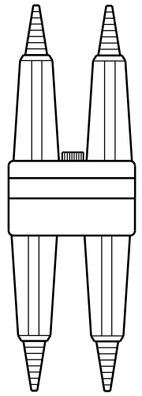
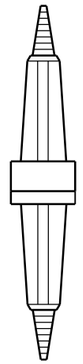
S.D.D. 9 E 1-13g



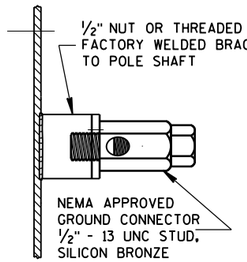
LIGHTING UNIT CODE
(TYPICAL)

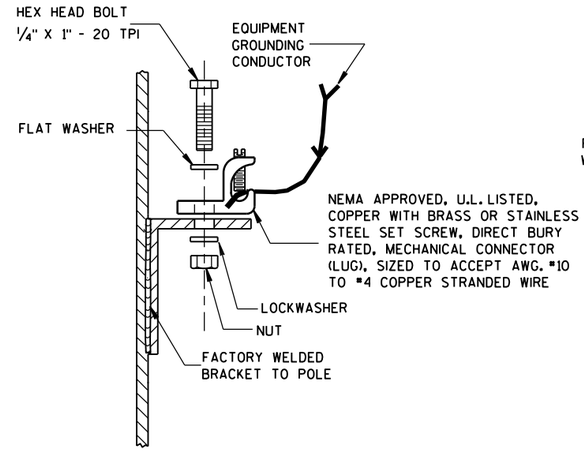


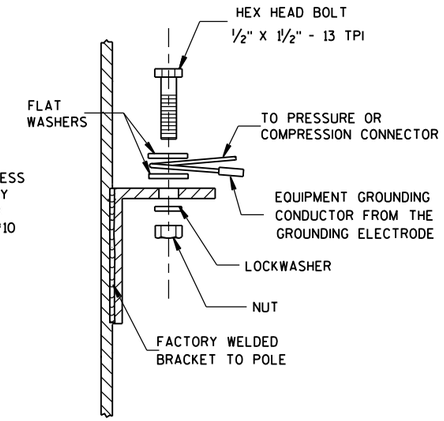
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



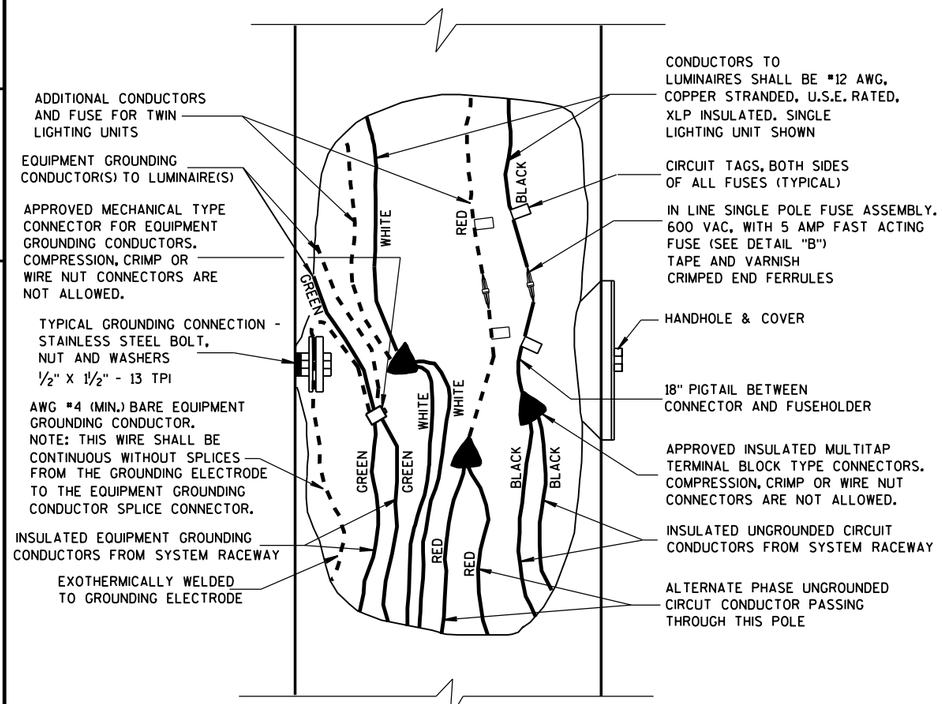
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



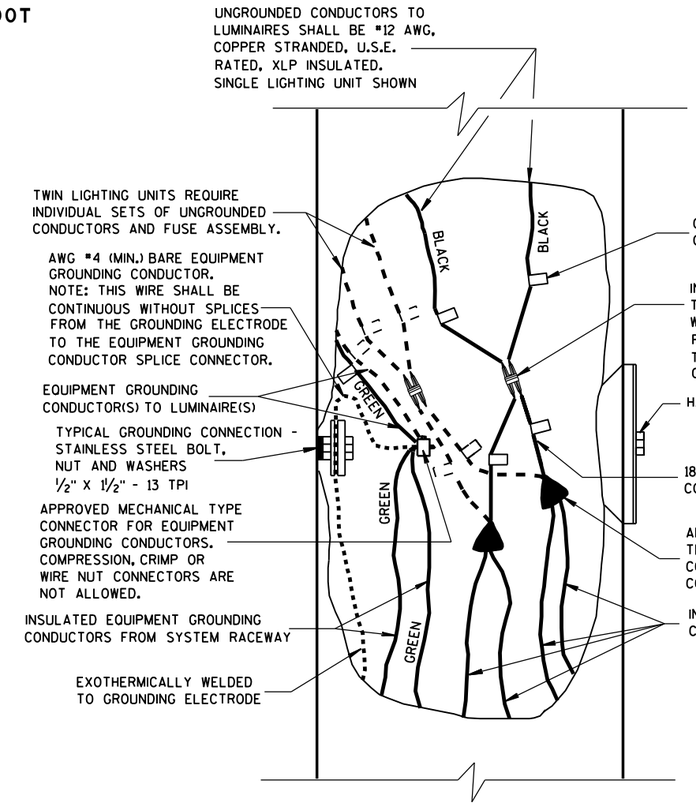




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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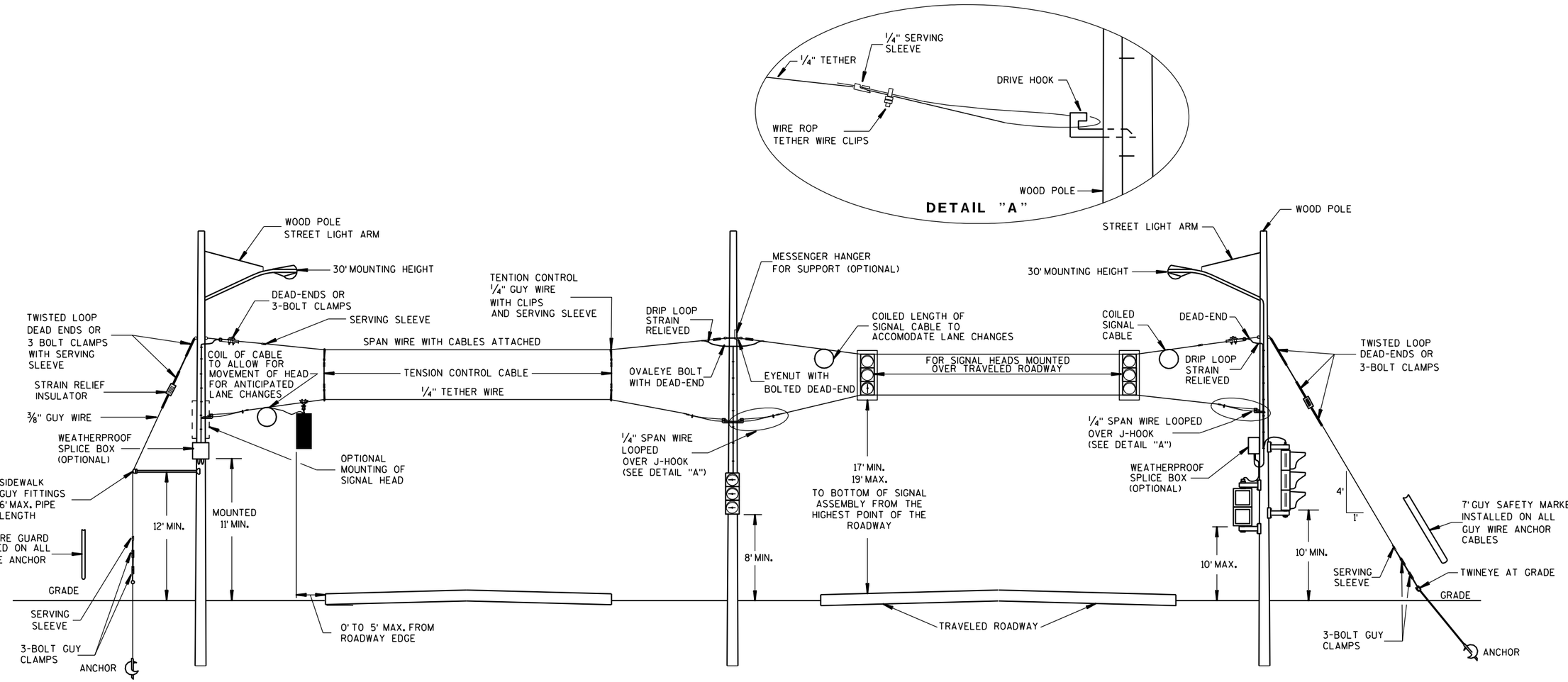
S.D.D. 9 E 3-5



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Aganthangarayanan
STATE ELECTRICAL ENGI

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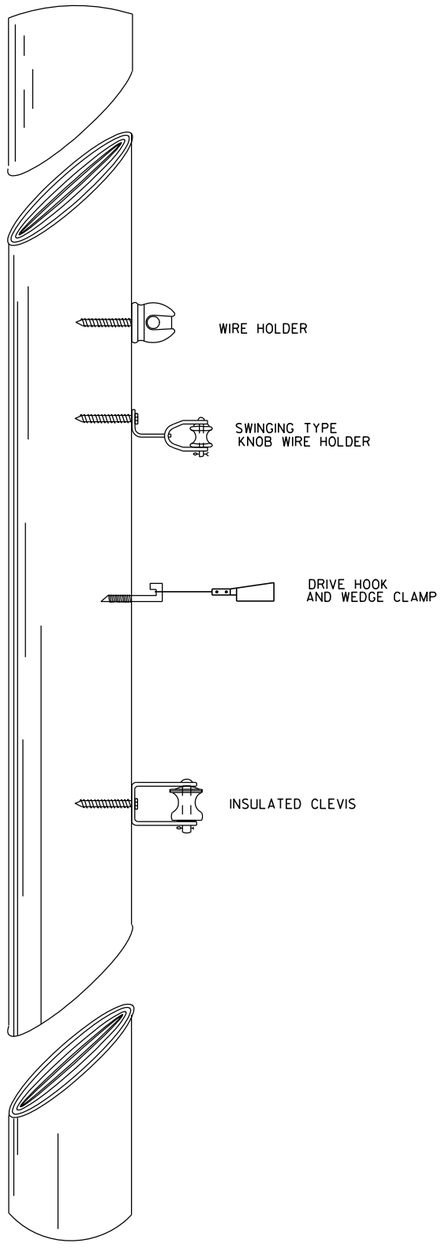
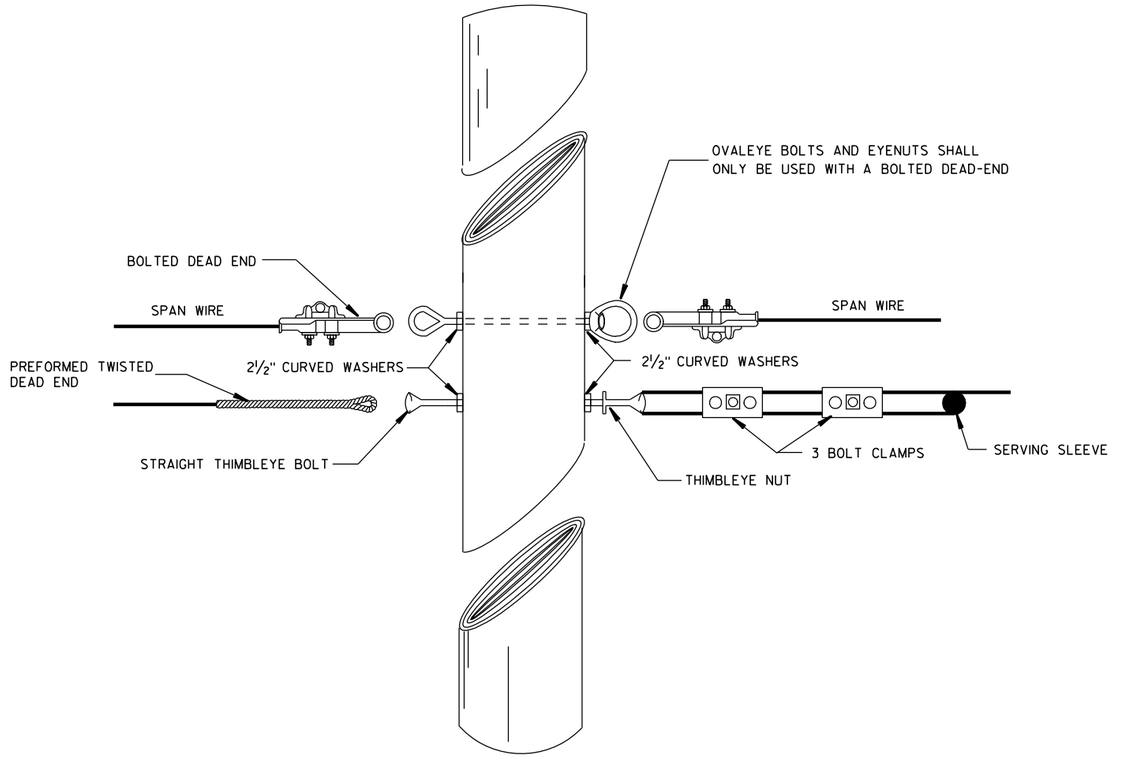


TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI
HWYS
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S.D.D. 9 G 1-3d

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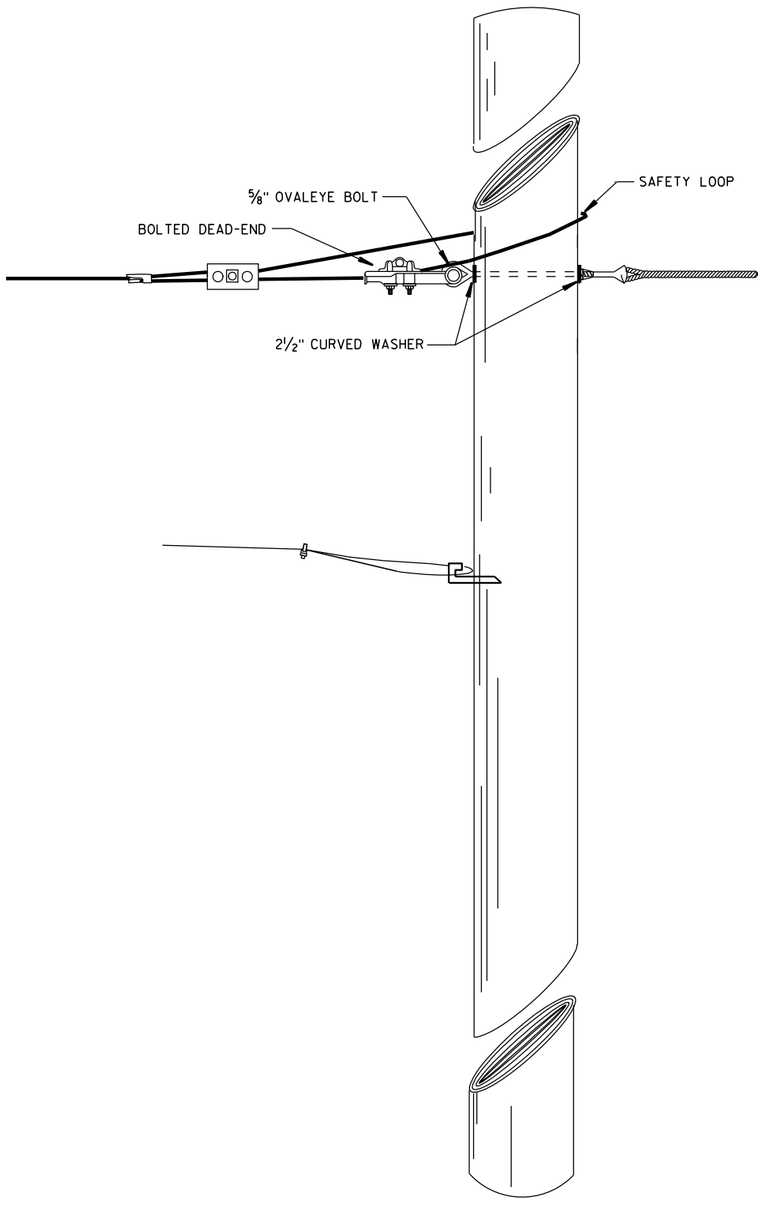
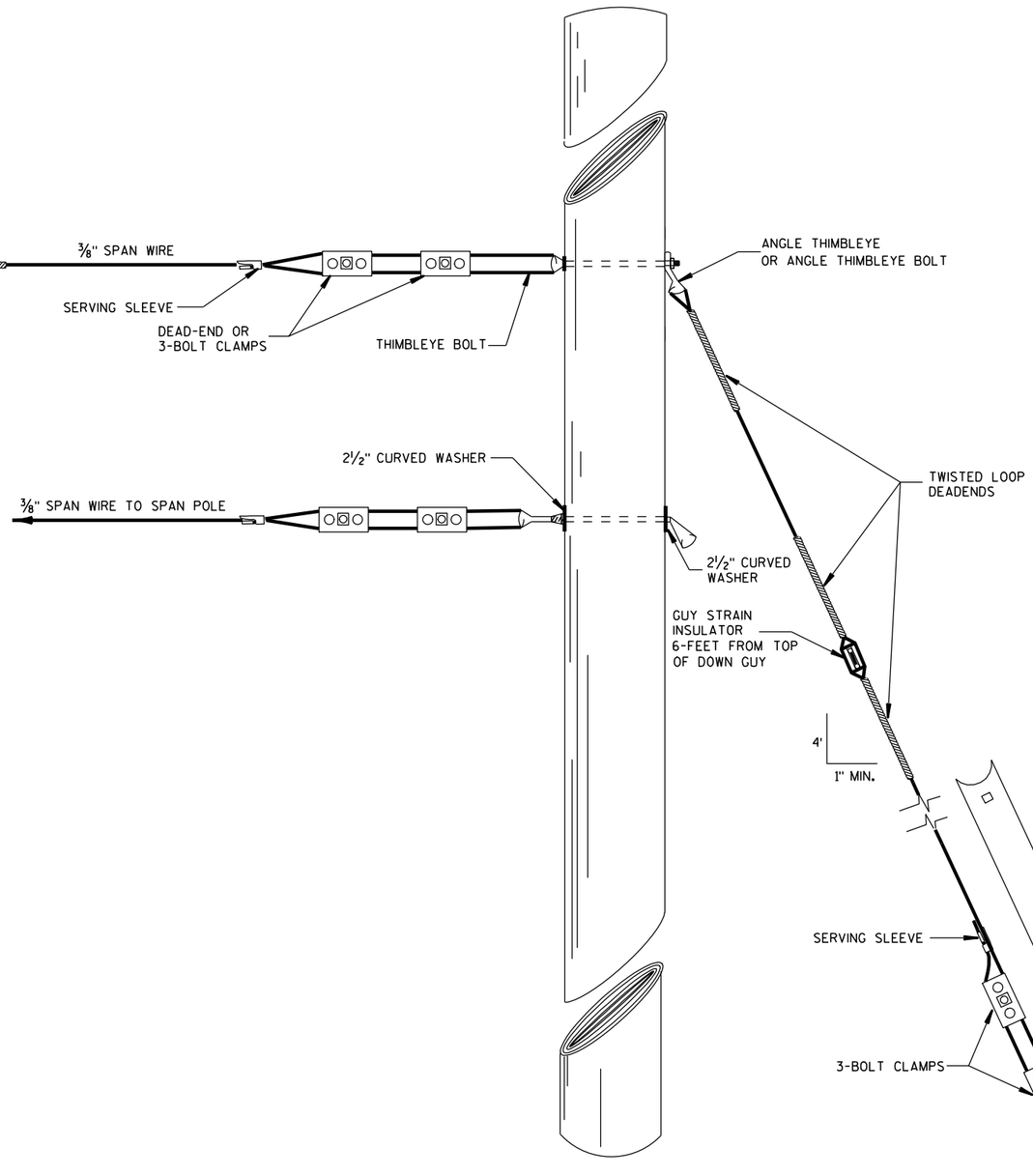
S.D.D. 9 G 1-3d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE

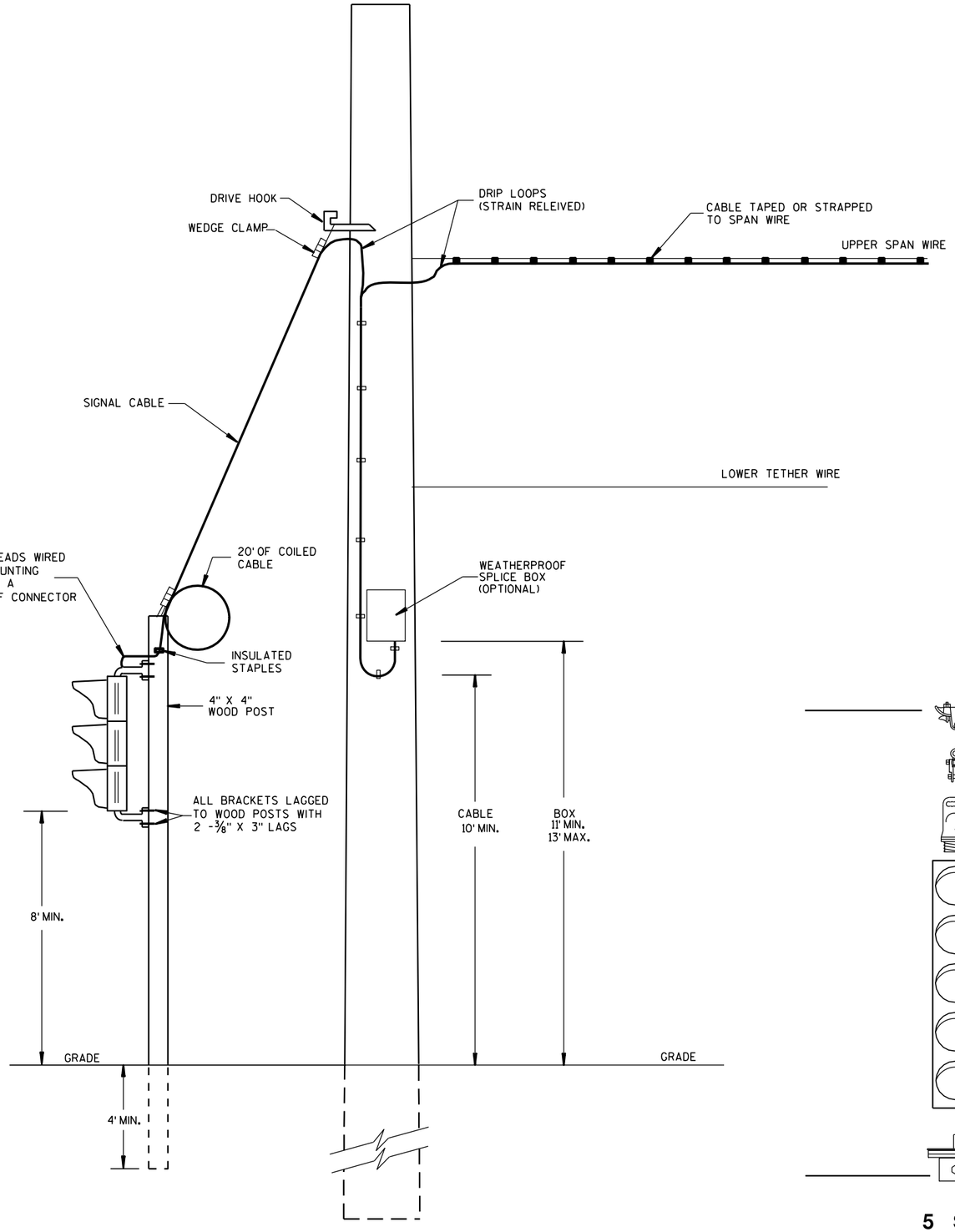
TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

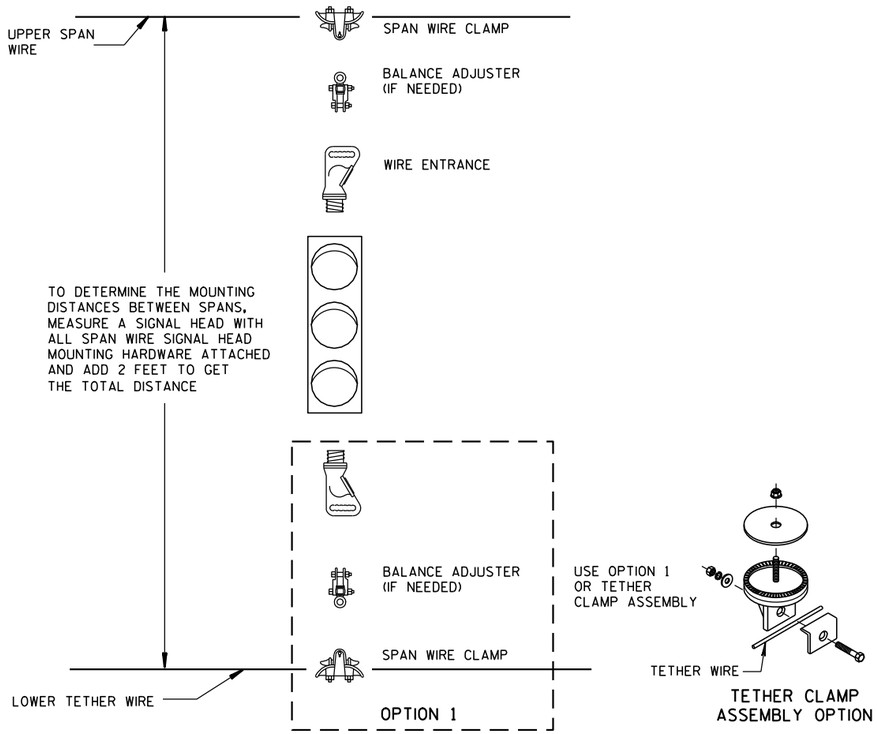
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Aganthanarayanan
STATE ELECTRICAL ENGI 140 HWYS
FHWA

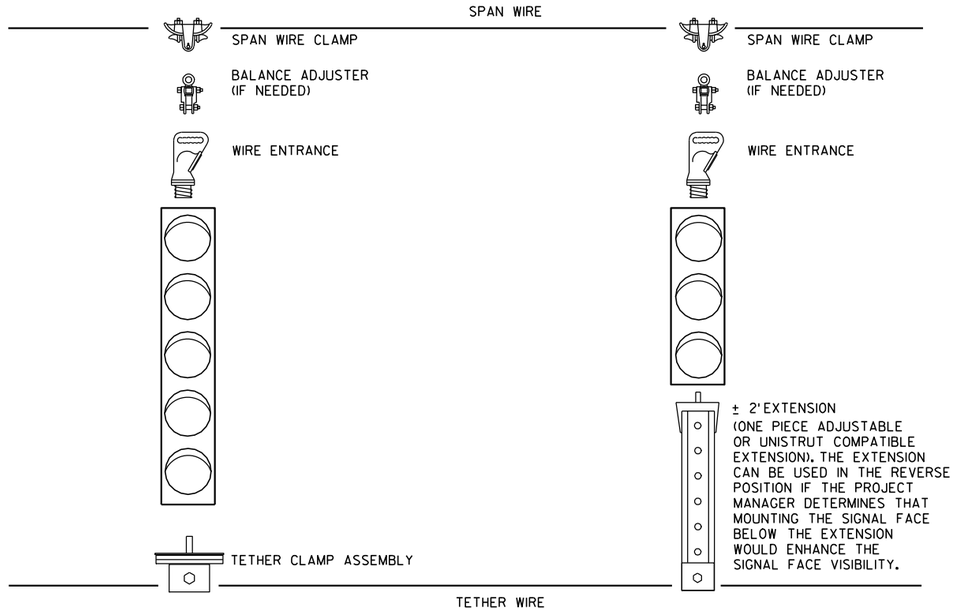
6
S.D.D. 9 G 1-3e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

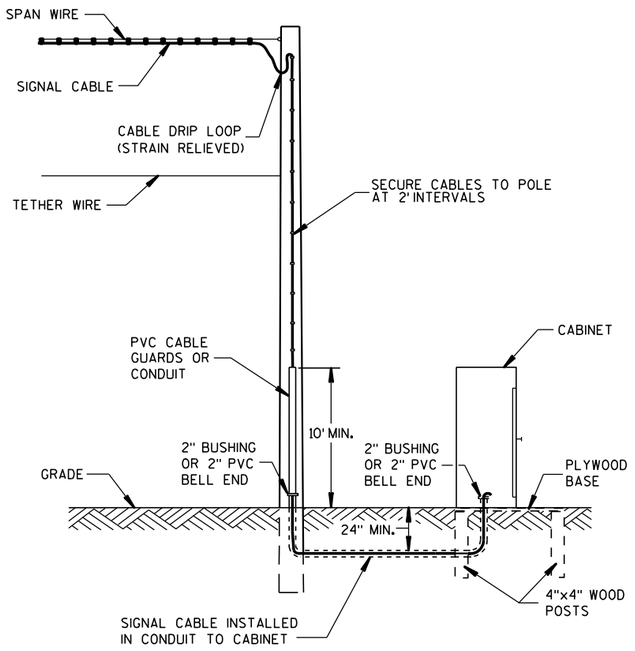
APPROVED

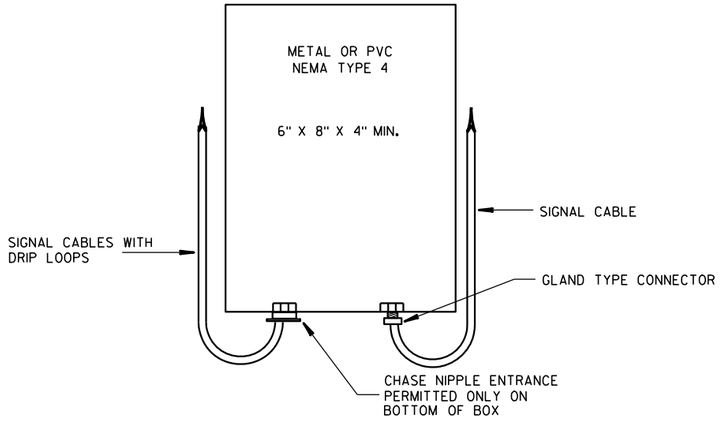
7-14-08	/S/ Balu Aganthangarayanan
DATE	STATE ELECTRICAL ENGI

FHWA

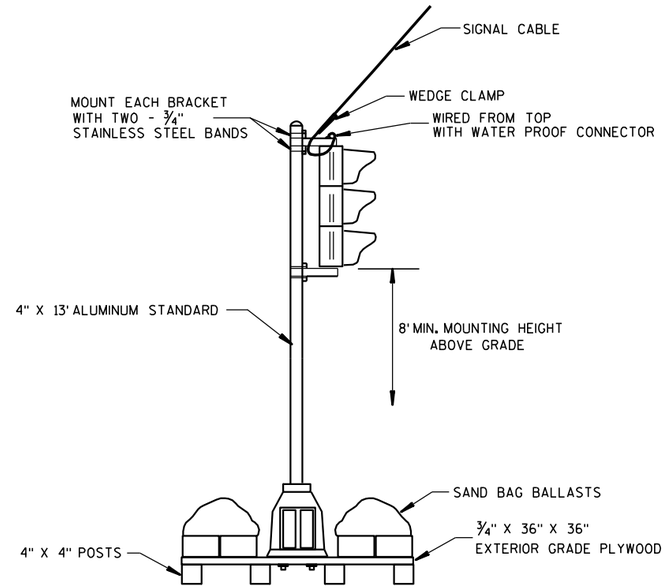
HWYS

6
S.D.D. 9 G 1-3f

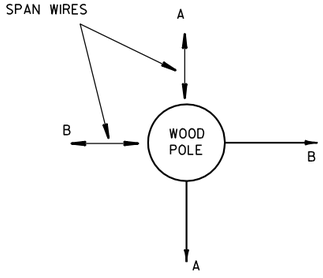




SPLICE BOX

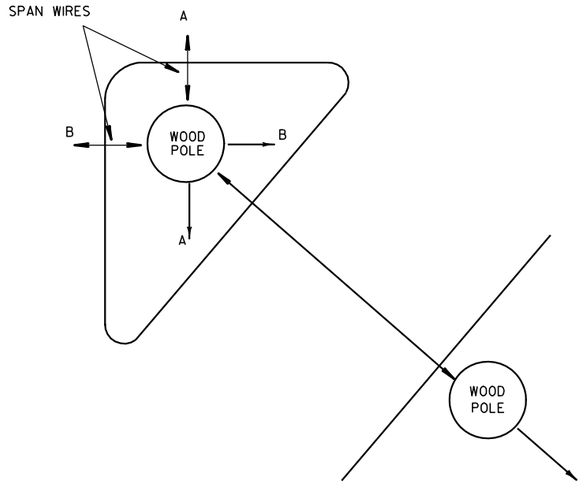


TYPICAL SKID TYPE TEMPORARY

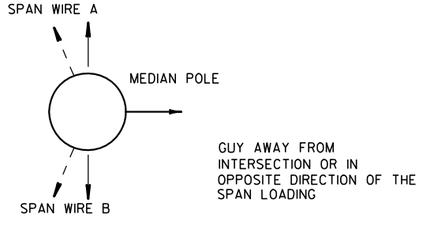


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Aganthangayanan
STATE ELECTRICAL ENGI

142

HWYS

FHWA

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S.D.D. 9 G 1-3g

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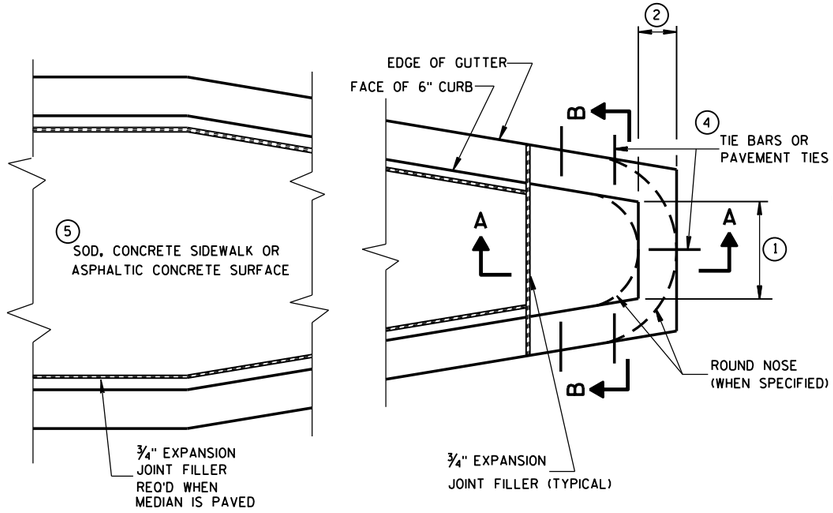
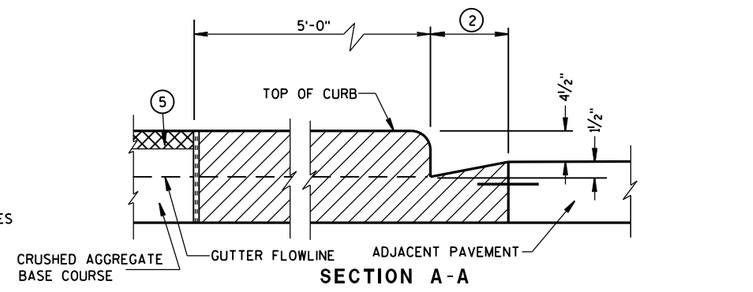
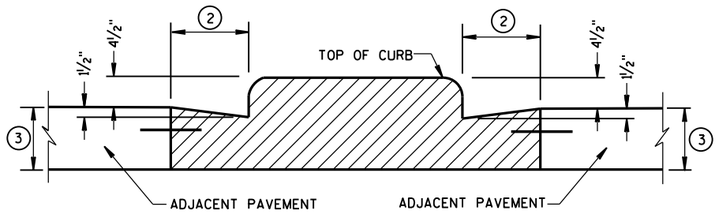
S.D.D. 9 G 1-3g







CONCRETE MEDIAN BLUNT NOSE DETAIL

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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

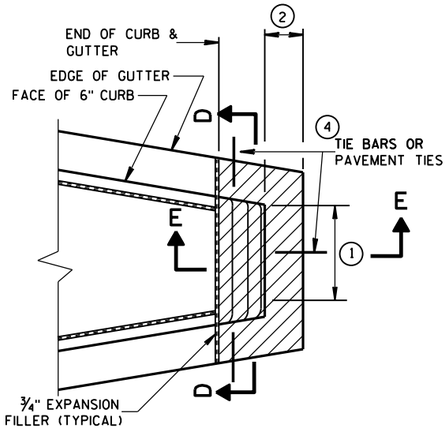
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

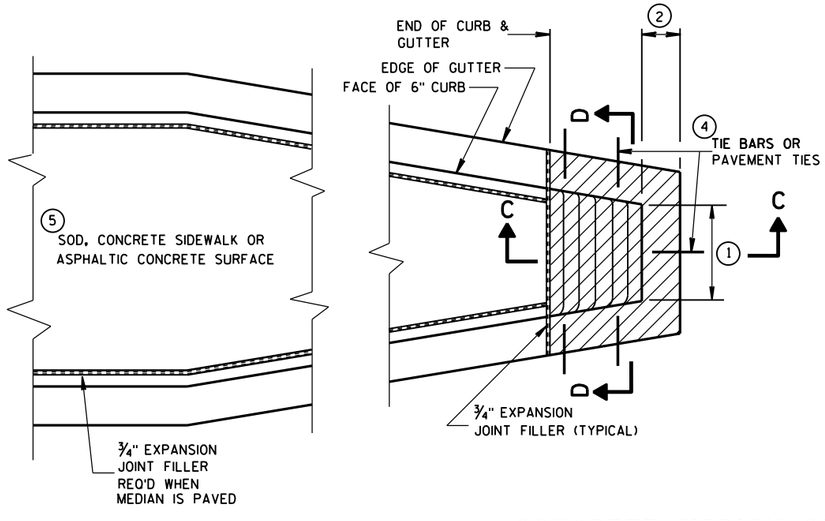
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

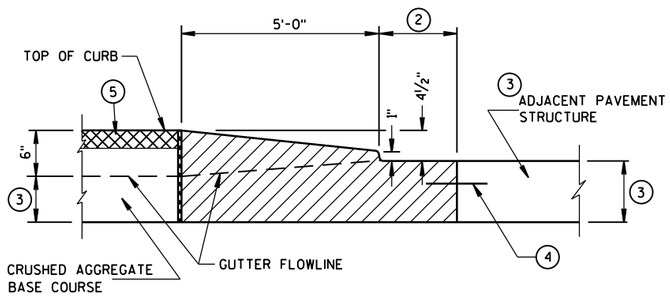
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

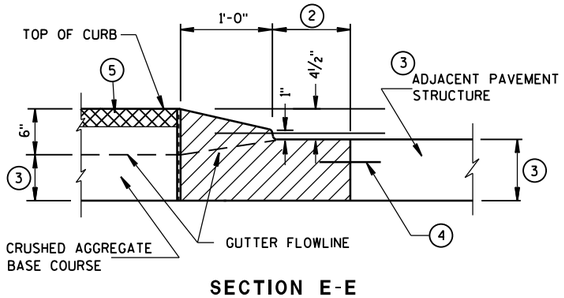
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



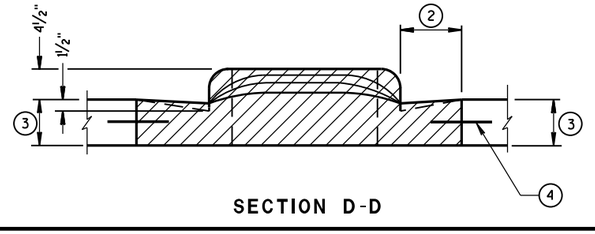






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

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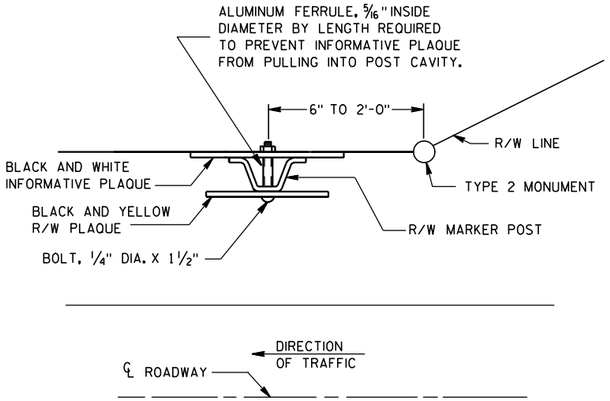
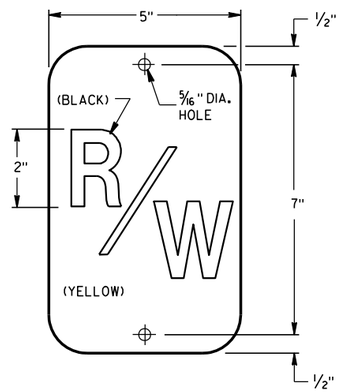
S.D.D. 11 B 2-2

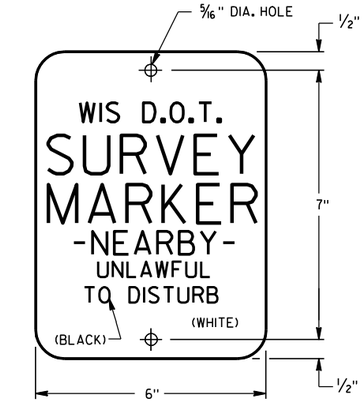


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

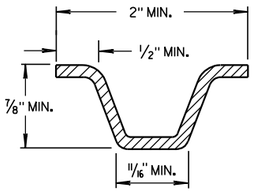
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

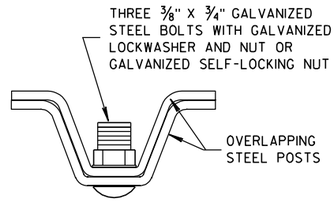
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.

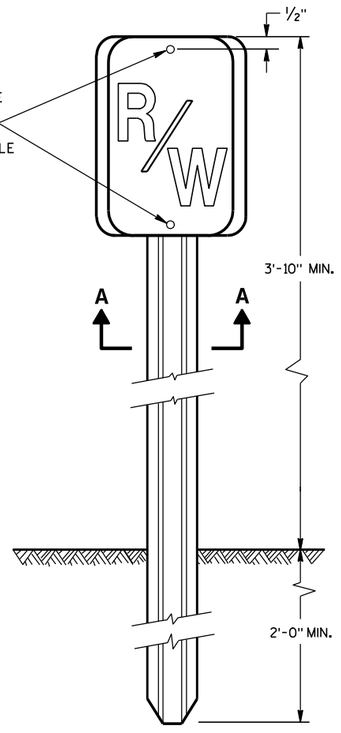


MIN. WEIGHT 1.12 LB./FT.

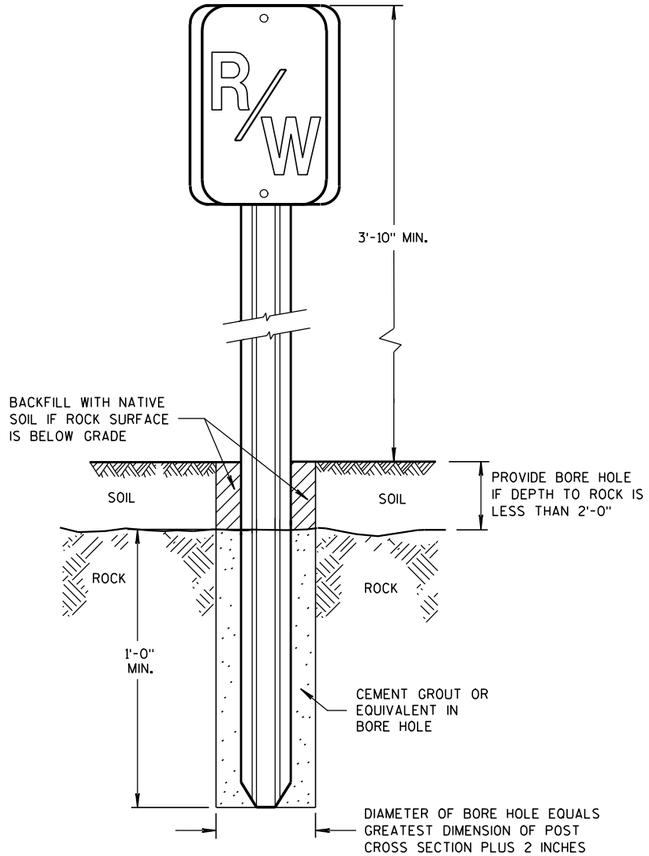
SECTION A-A



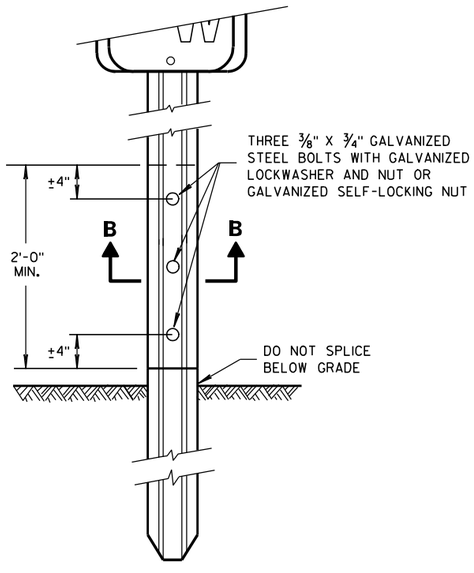
SECTION B-B



FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)



FRONT VIEW
SPLICE DETAIL

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/27/09 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MA[illegible]GINEER

FHWA

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S.D.D. 15 A 1-11

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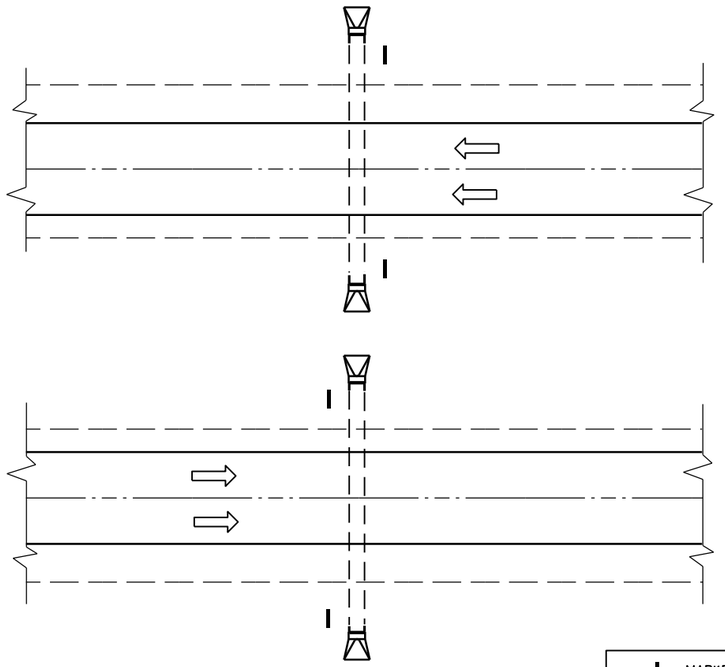
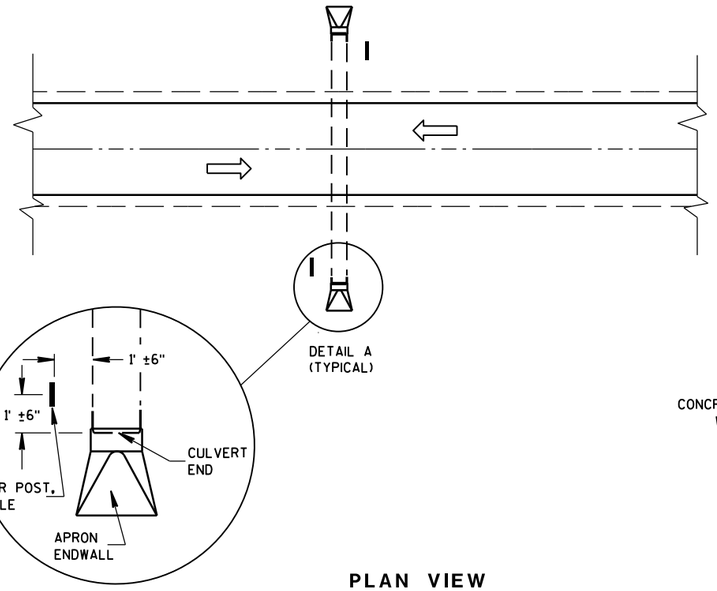
S.D.D. 15 A 1-11



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

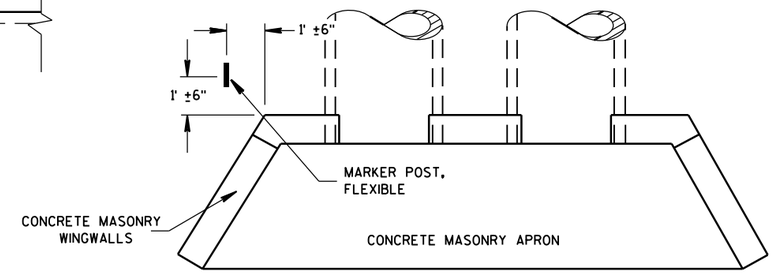
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

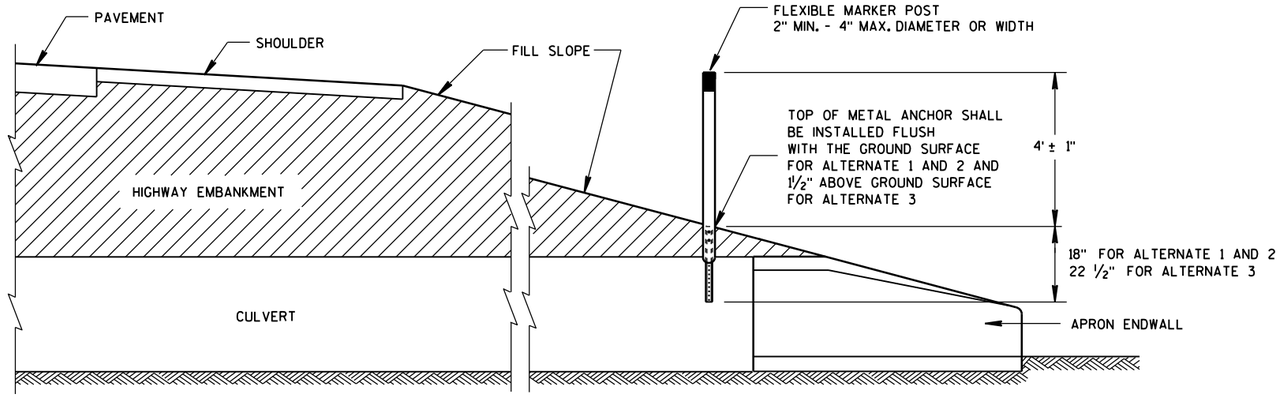
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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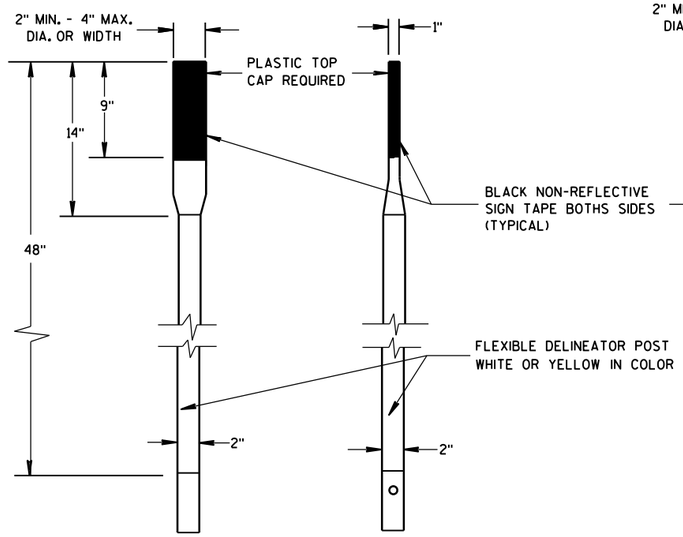
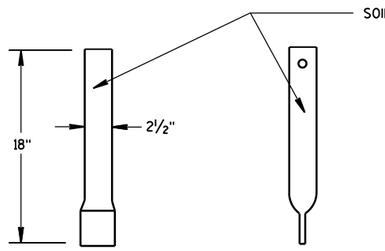
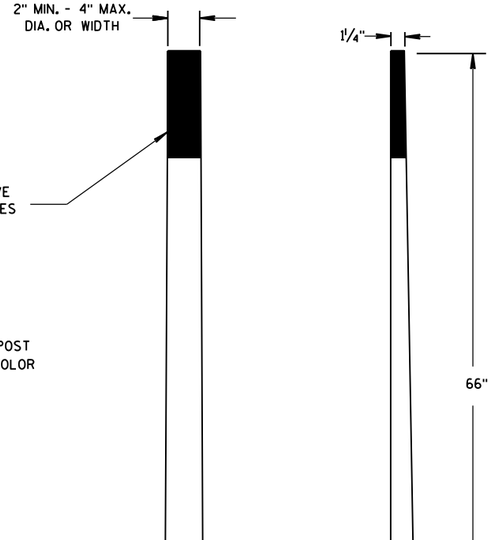
S.D.D. 15 A 3-2a





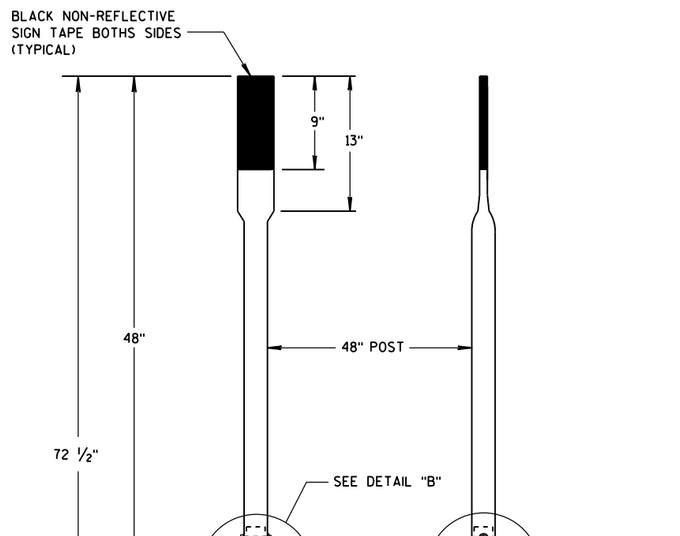
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

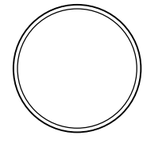
ALTERNATE 2



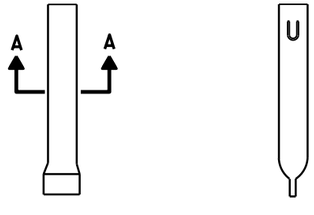
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

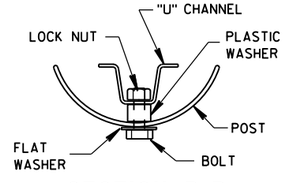


SECTION A-A

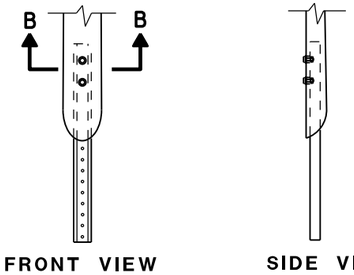


FRONT VIEW SIDE VIEW

ALTERNATE 1

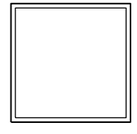


SECTION B-B

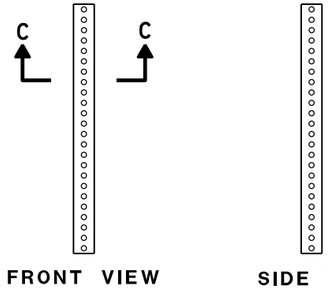


FRONT VIEW SIDE VIEW

ALTERNATE 2



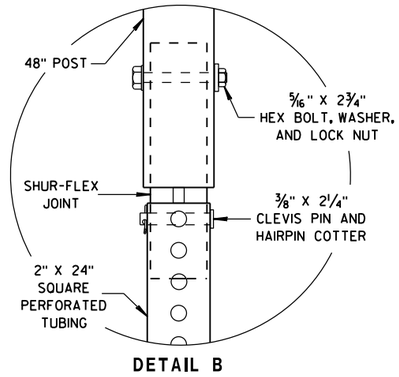
SECTION C-C



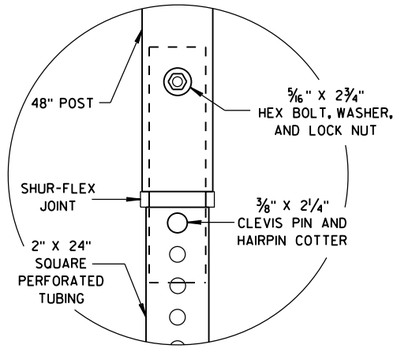
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

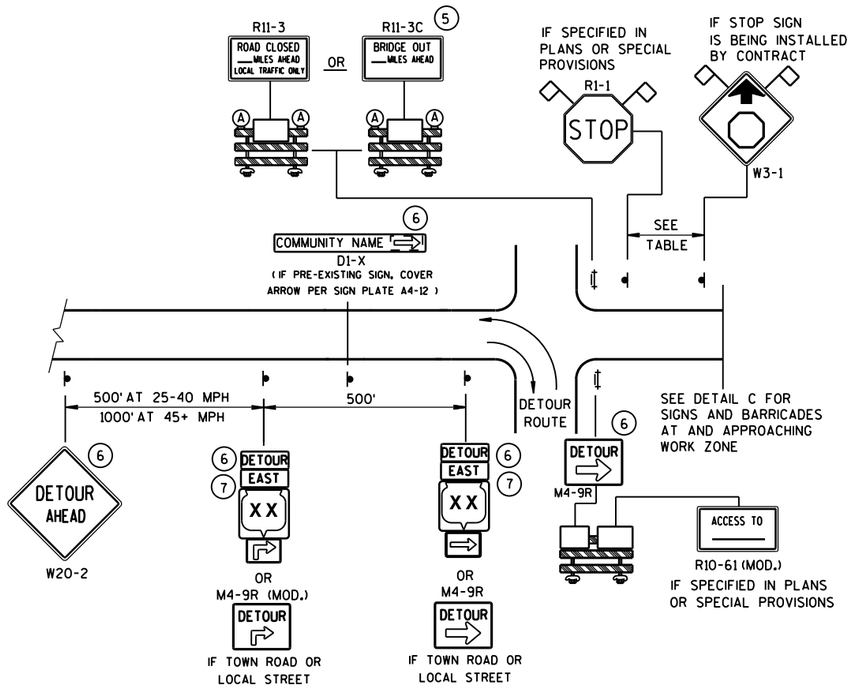
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

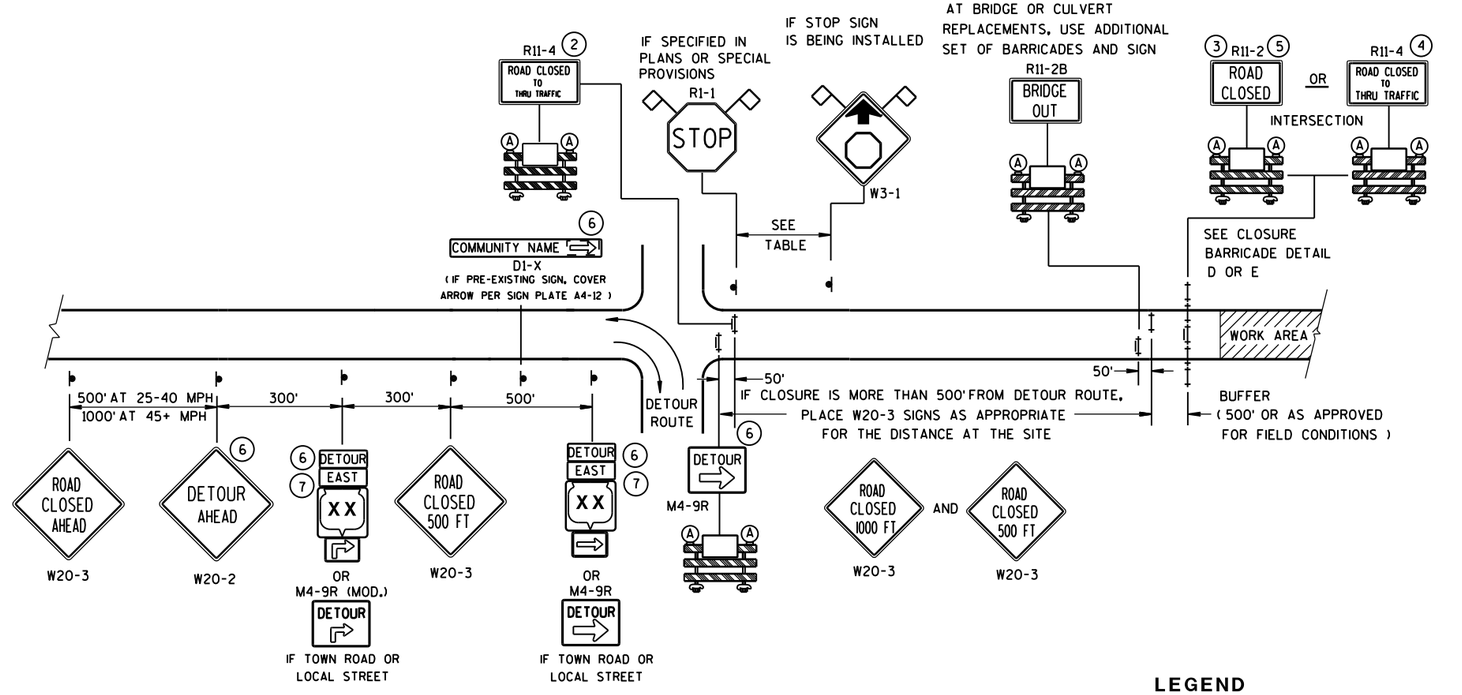
6

S.D.D. 15 A 3-2b



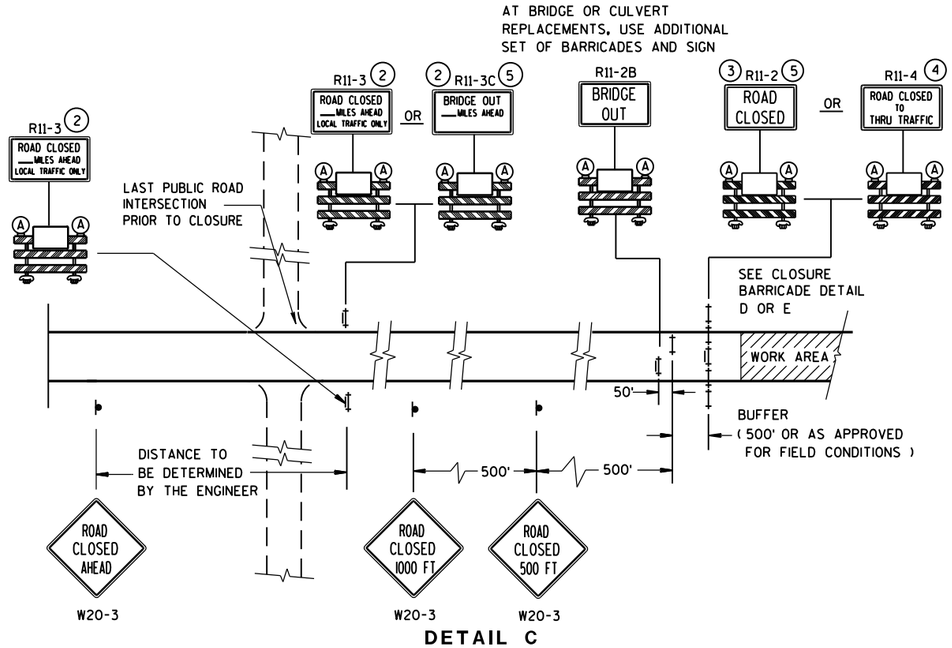
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — DESIGN

FHWA

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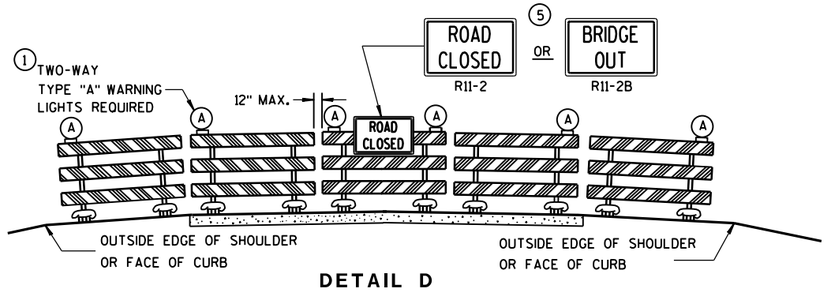
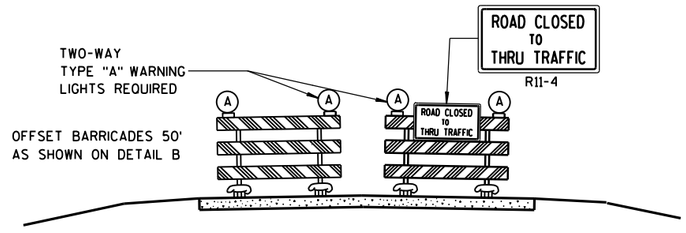
S.D.D. 15 C 2-5a



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

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

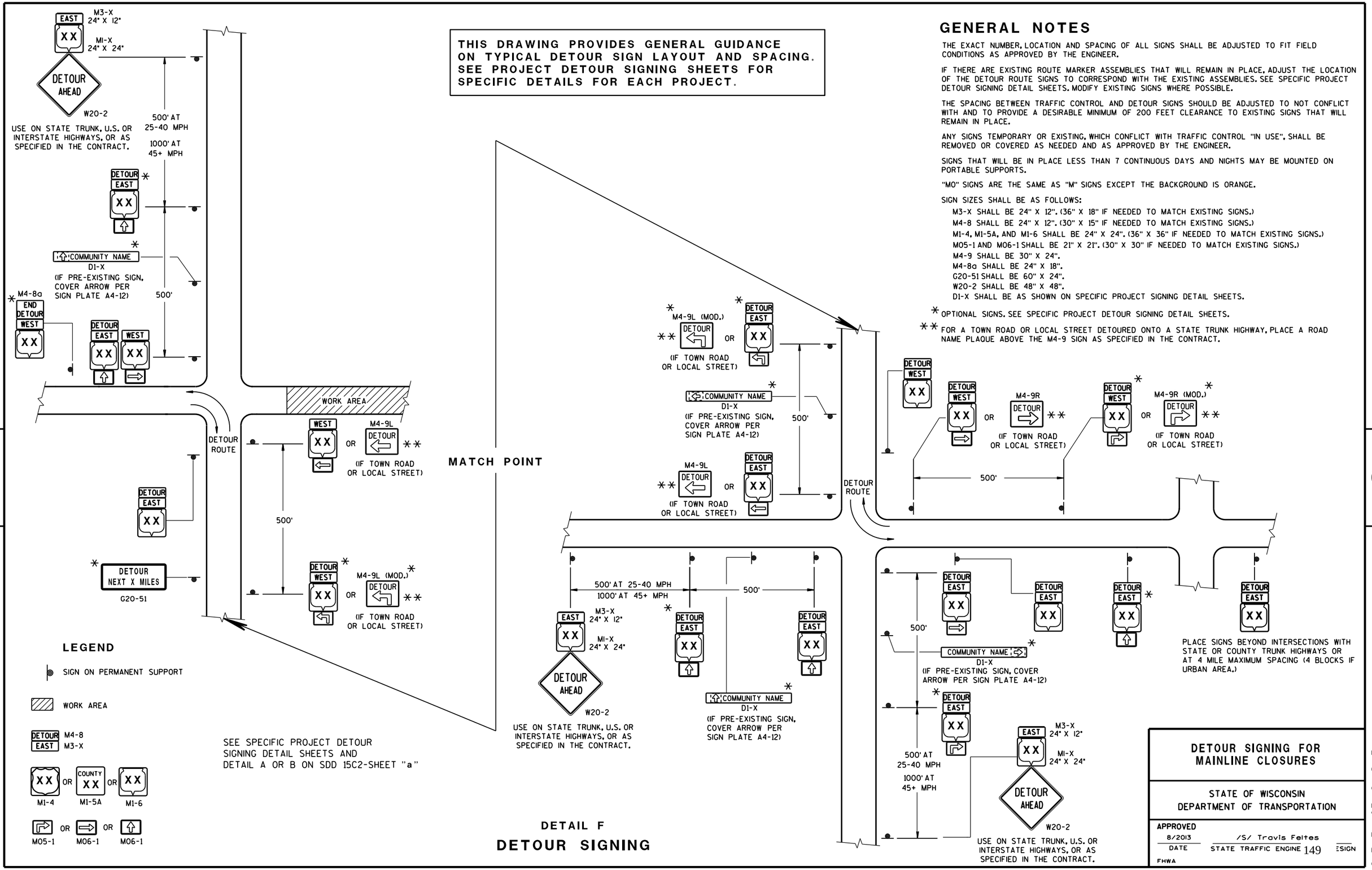
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- 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.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

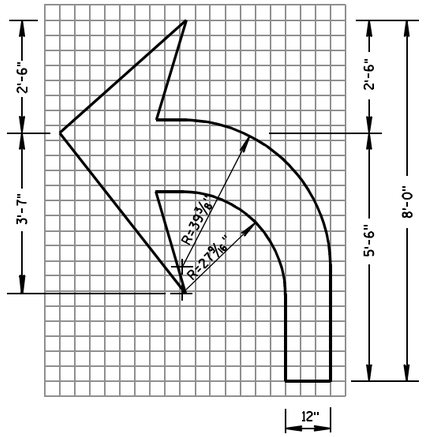
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

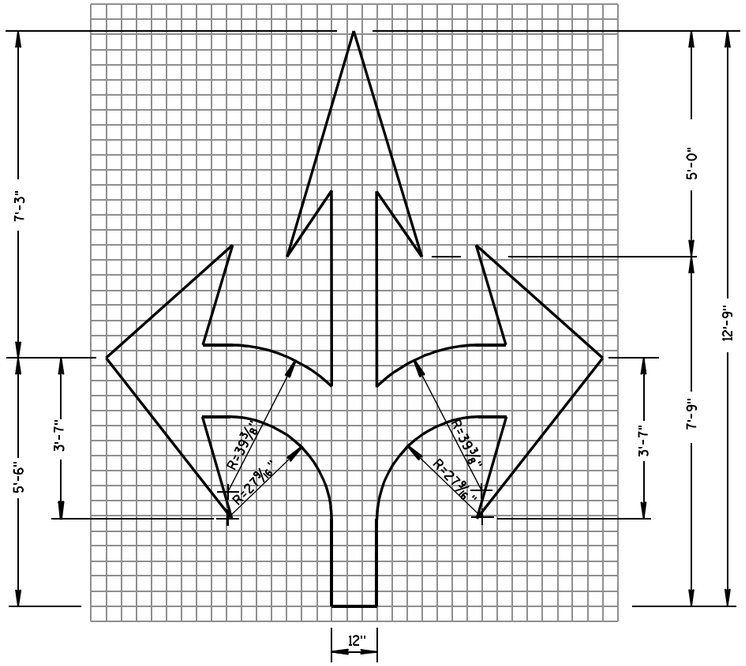
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINE ESIGN
FHWA

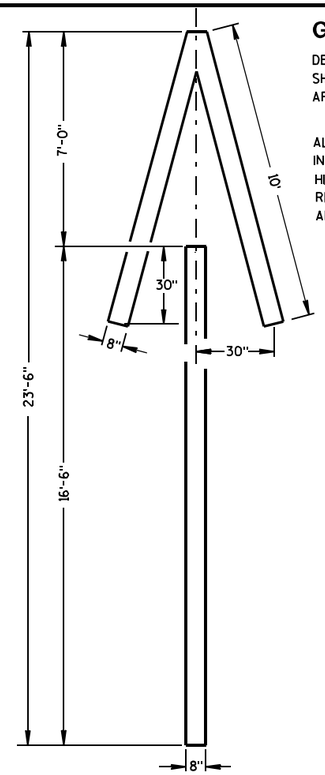
6
S.D.D. 15 C 2-5c



TYPE 2



TYPE 6

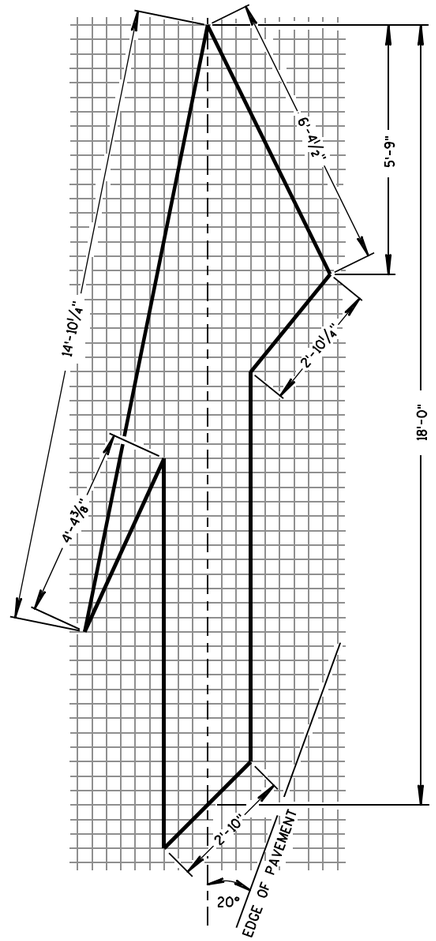


TYPE 4

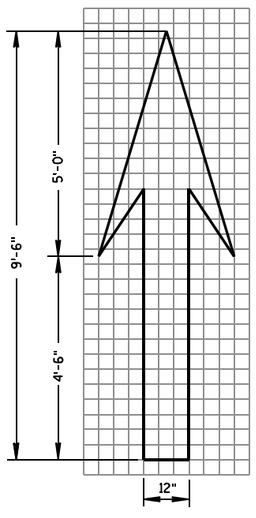
GENERAL NOTES

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.

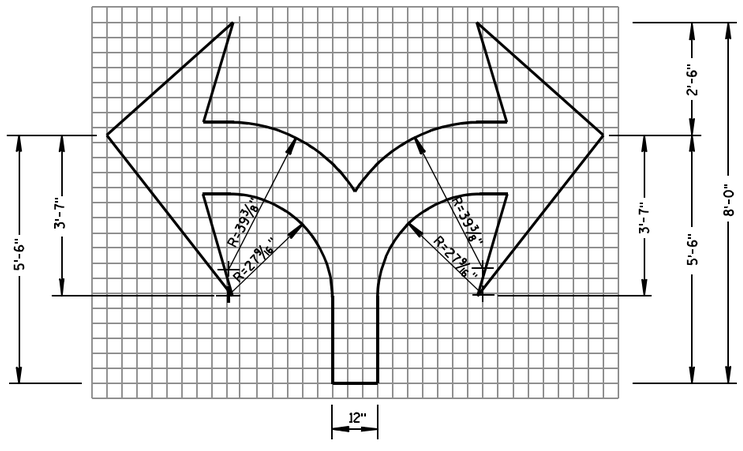
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



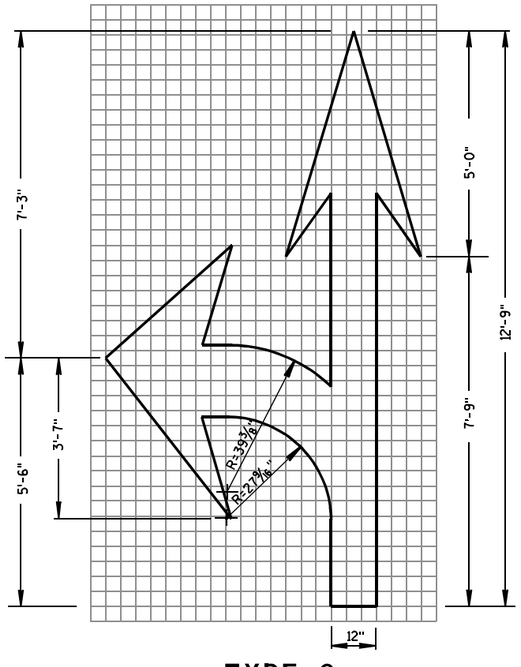
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 7-12c

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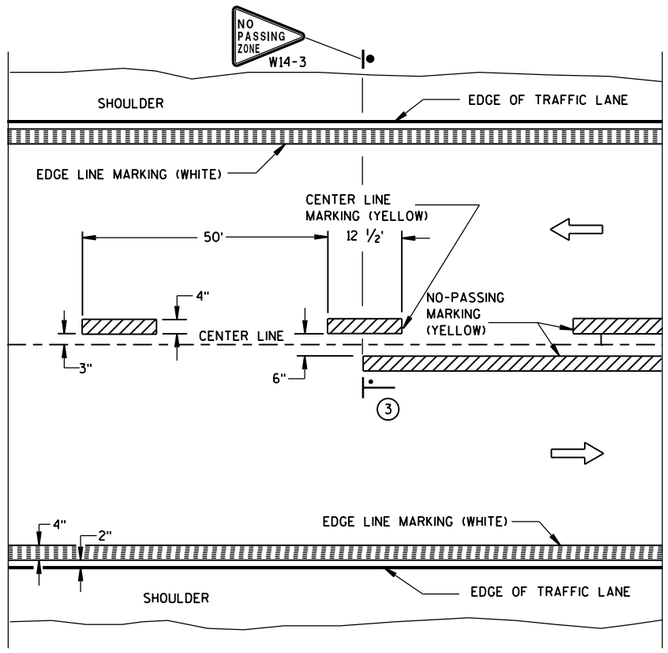
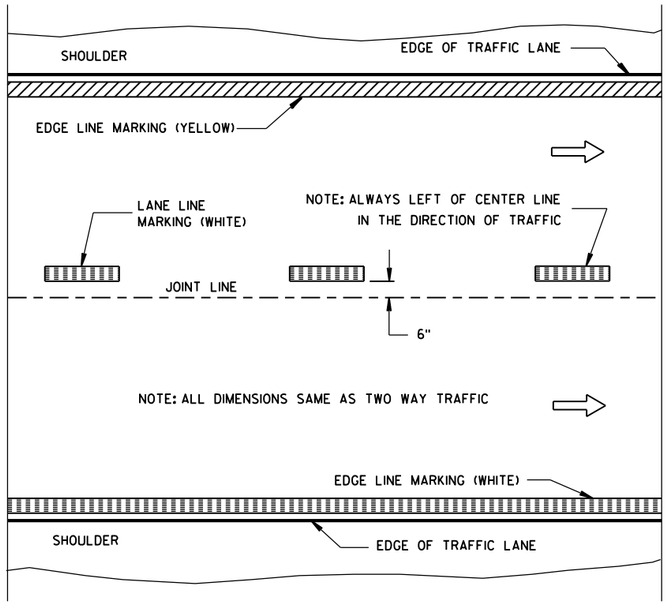
S.D.D. 15 C 7-12c

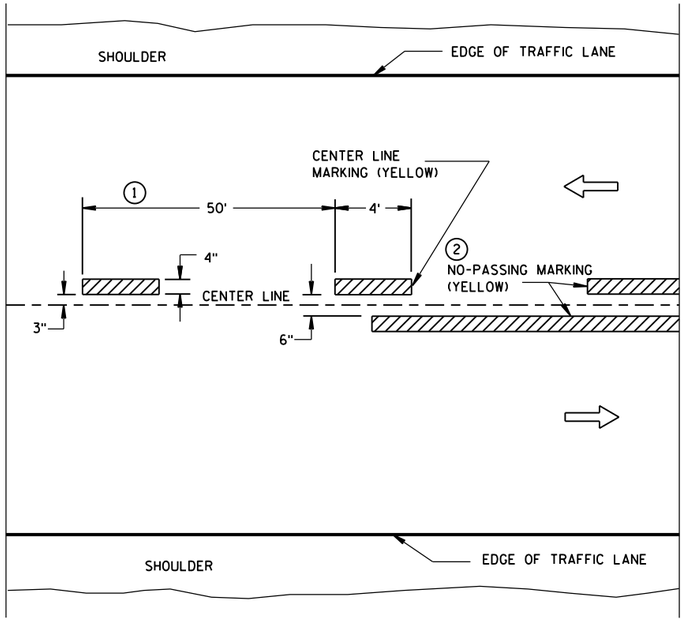


TWO WAY TRAFFIC

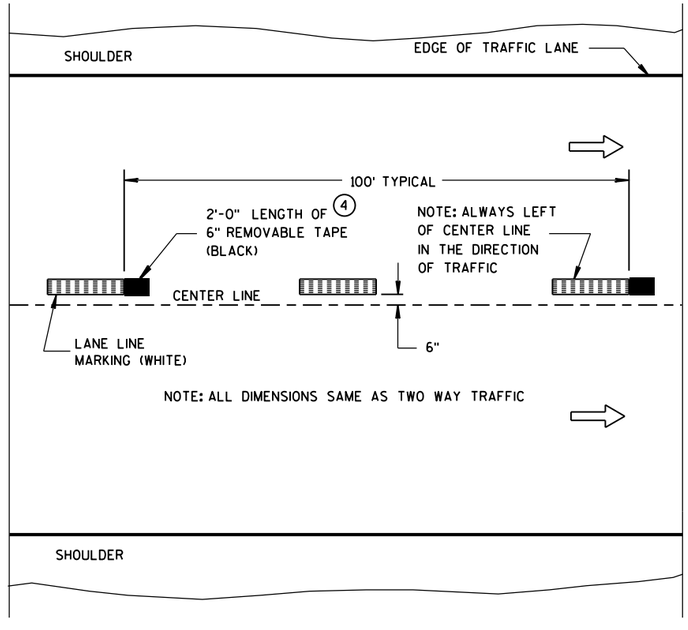


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

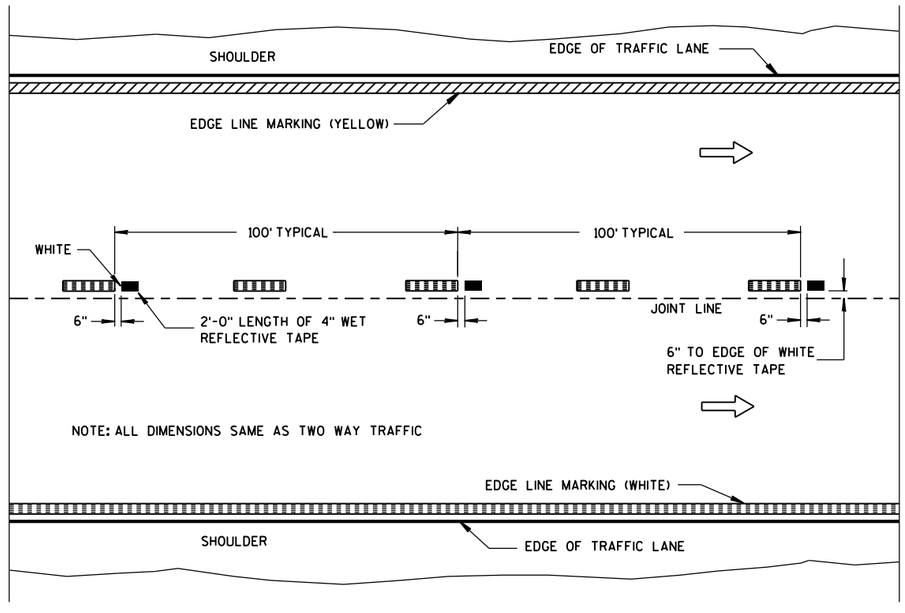
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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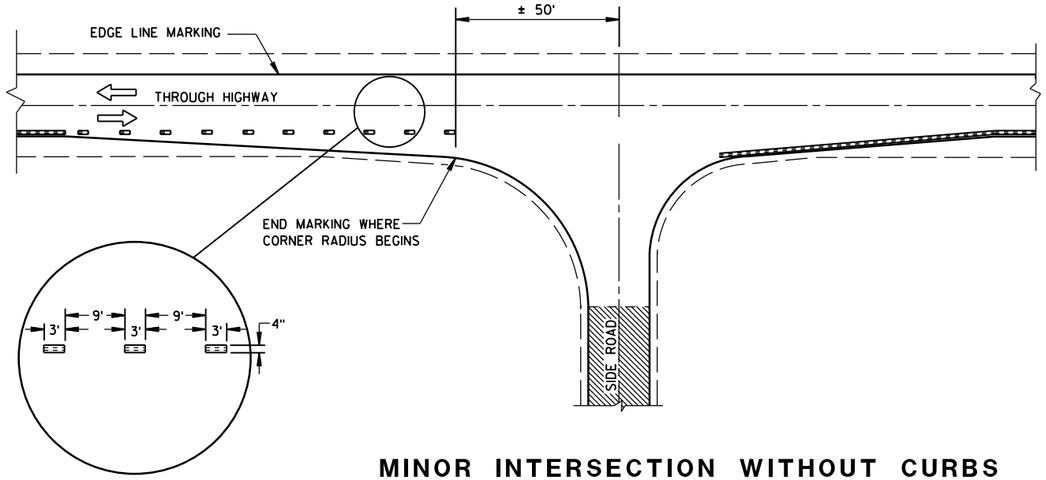
S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

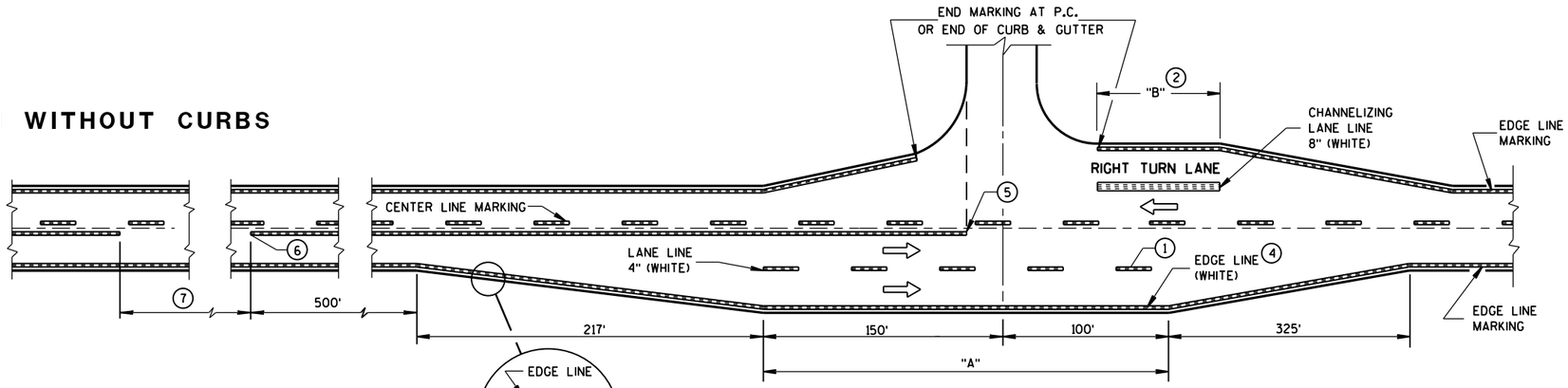
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

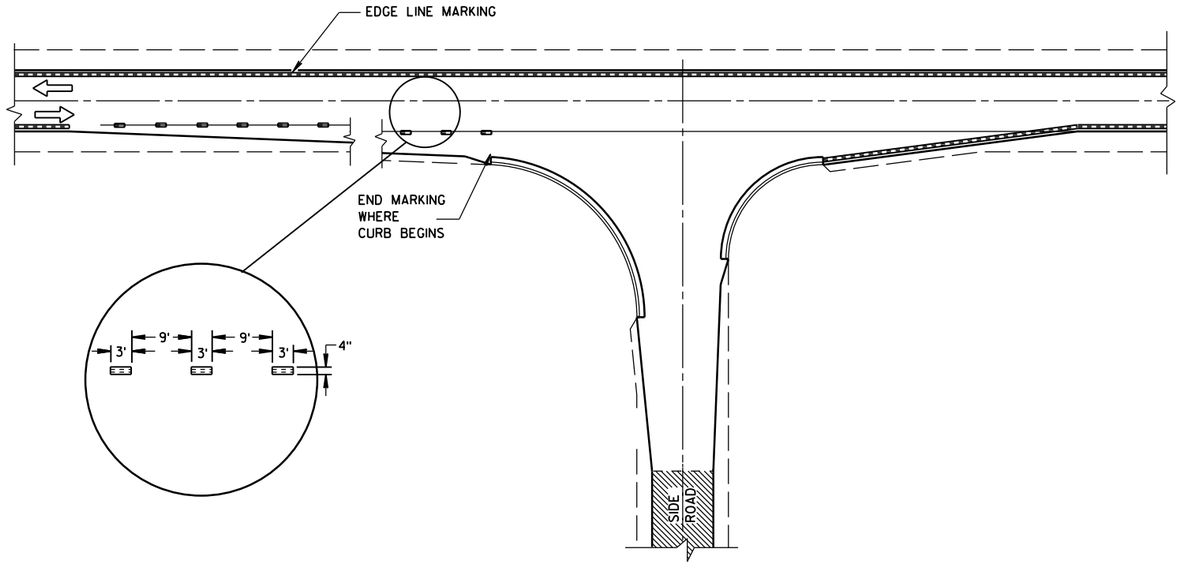
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



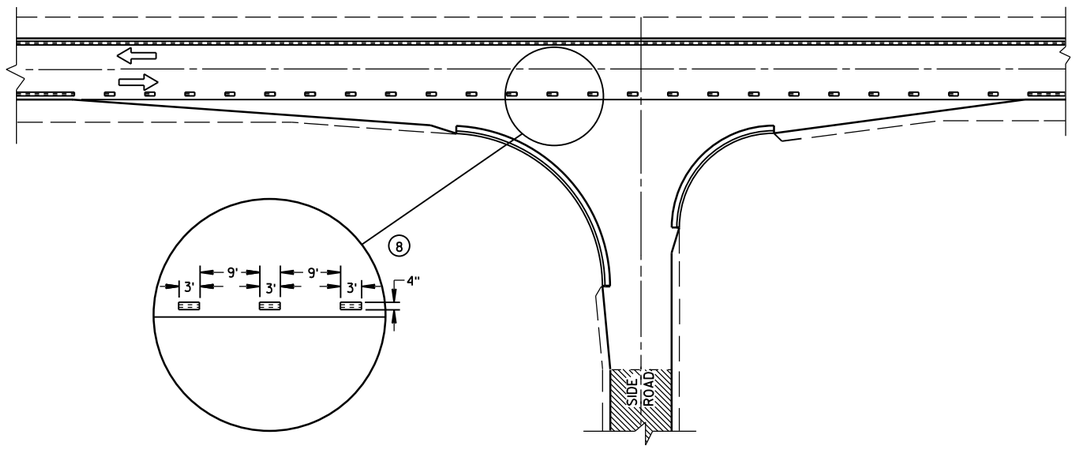
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 152

6

S.D.D. 15 C 8-16b

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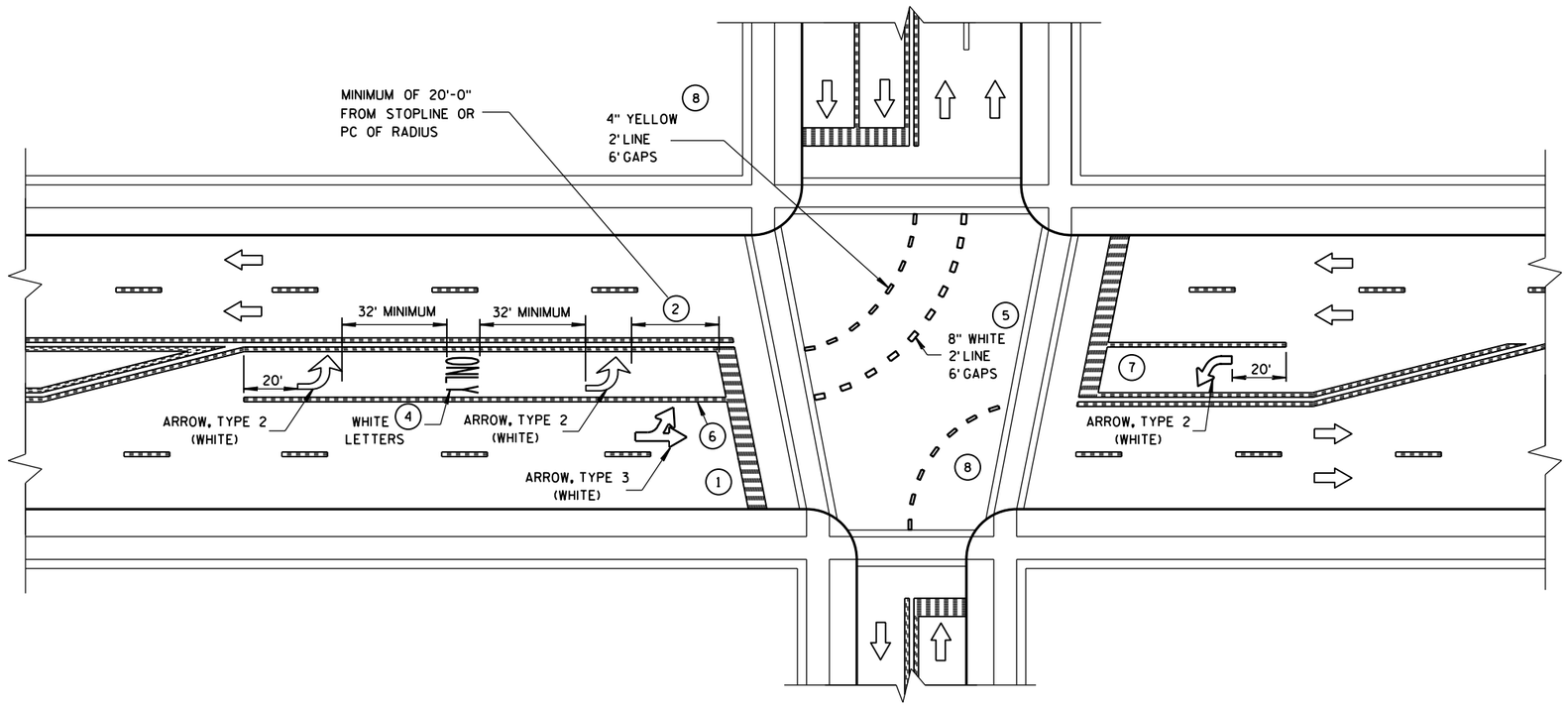
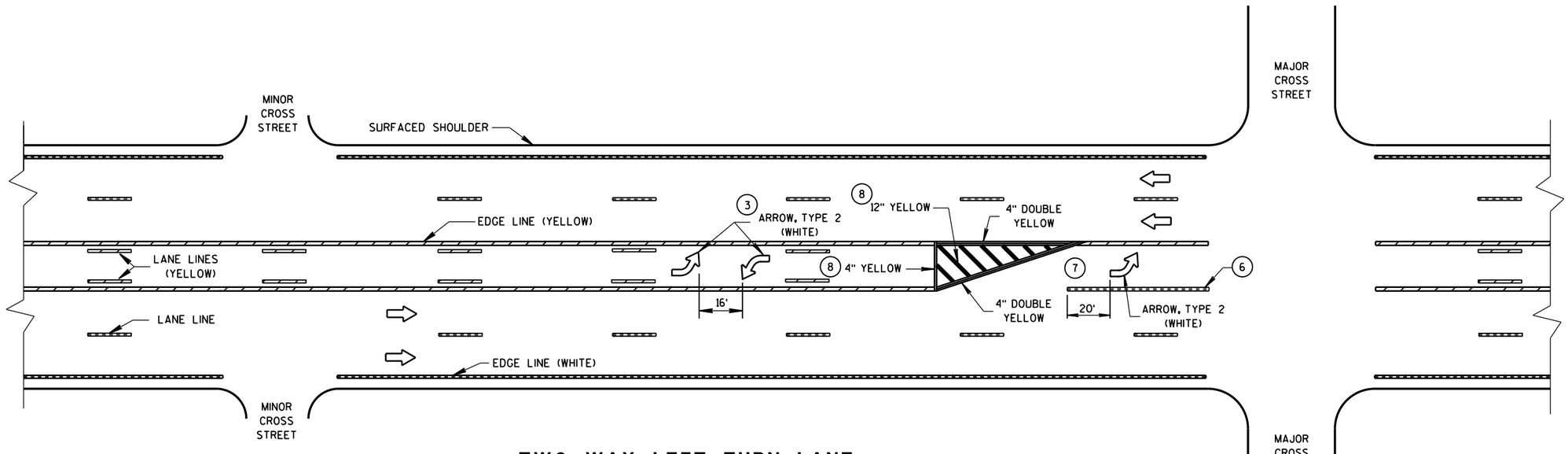
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-16e

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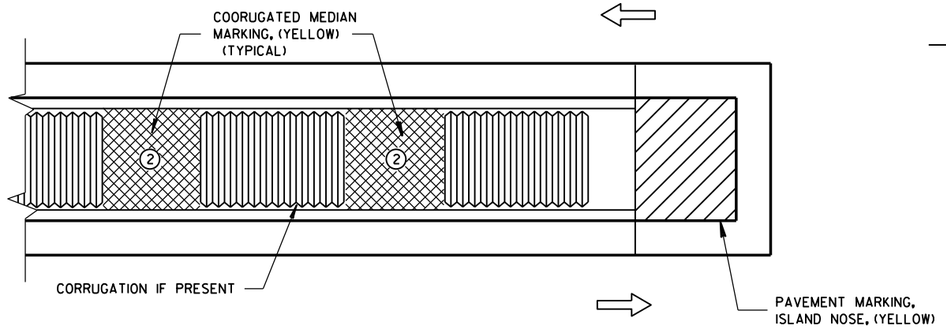
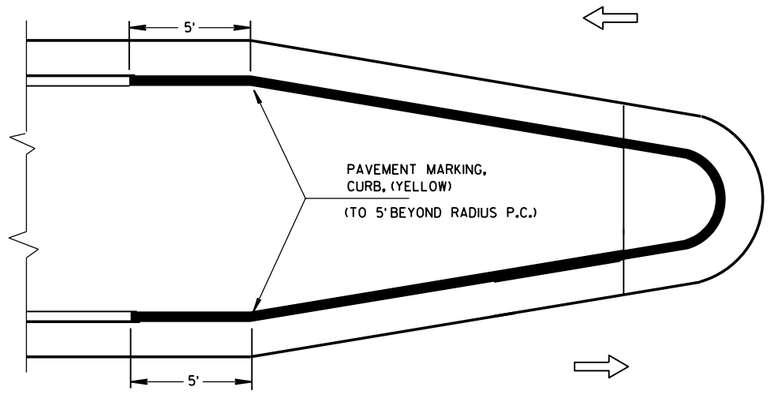
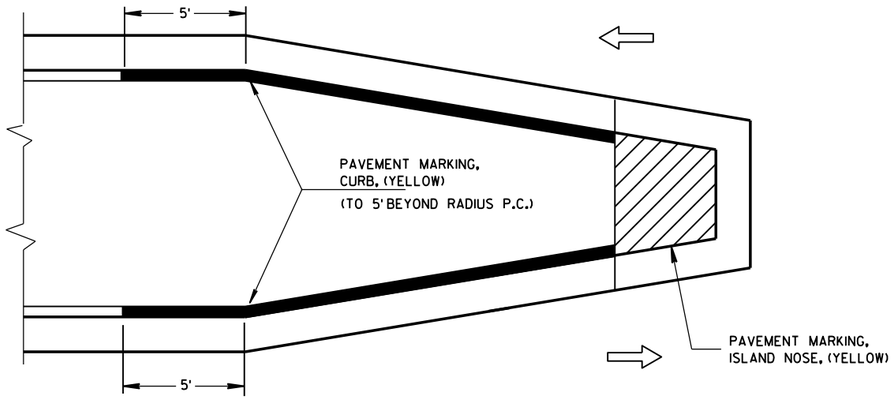
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

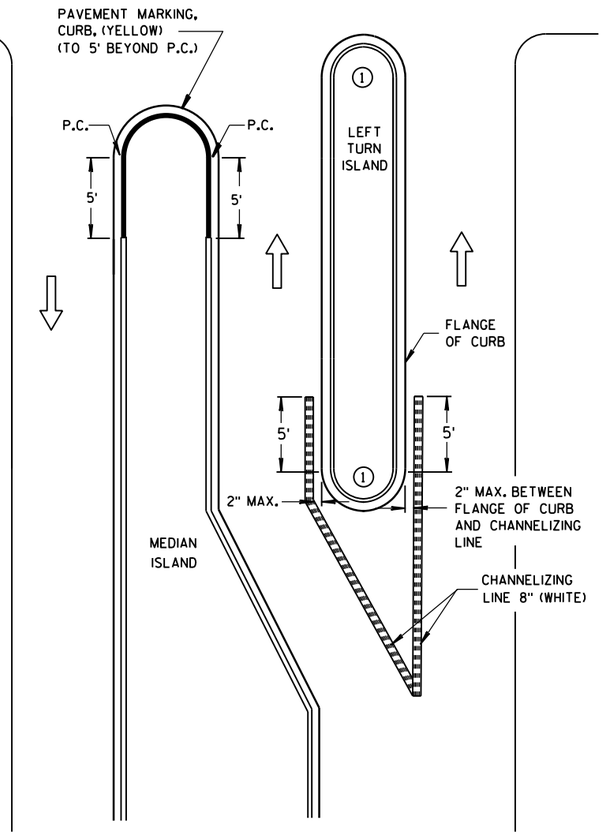


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

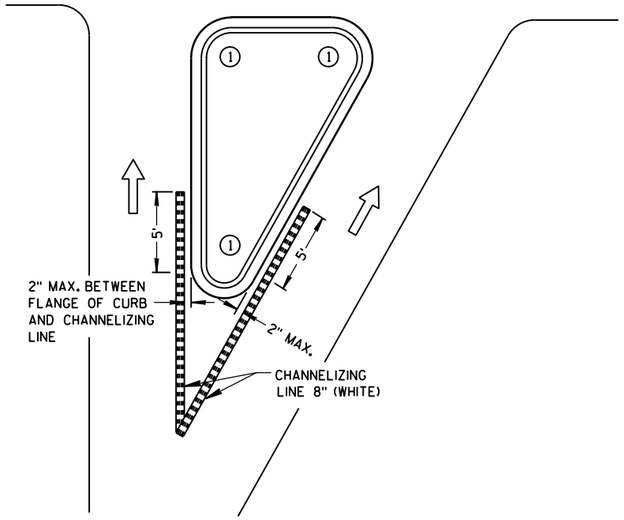


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

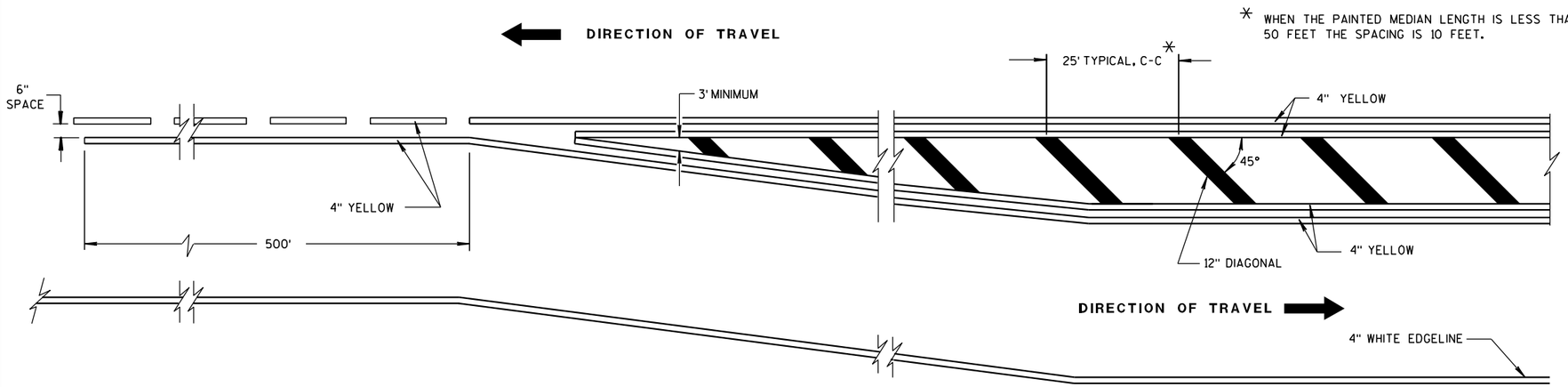
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

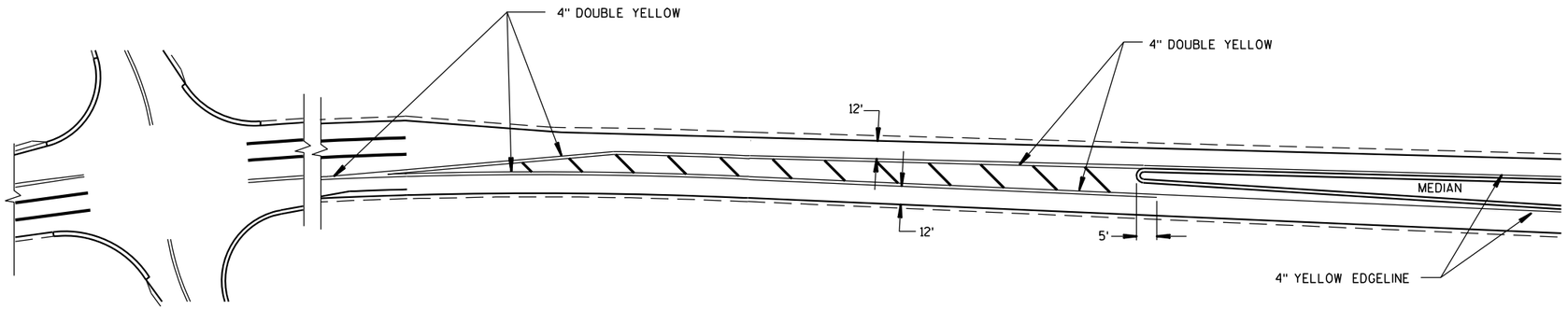
S.D.D. 15 C 8-16f



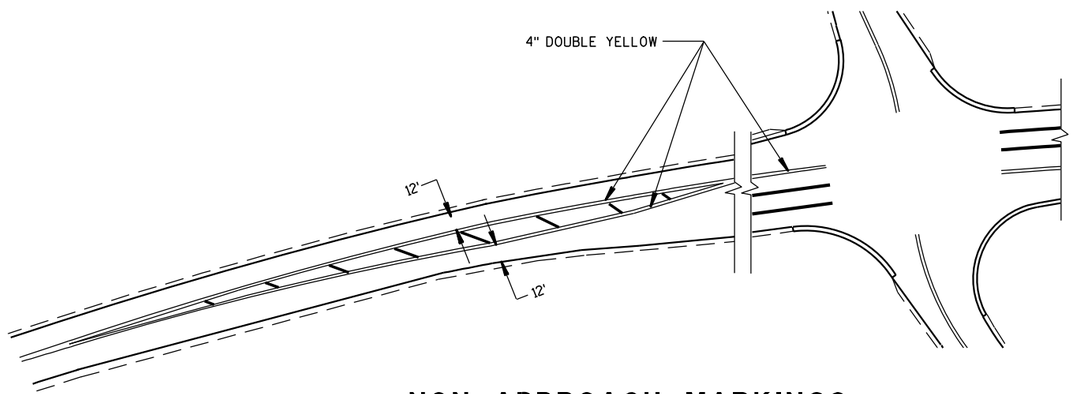
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

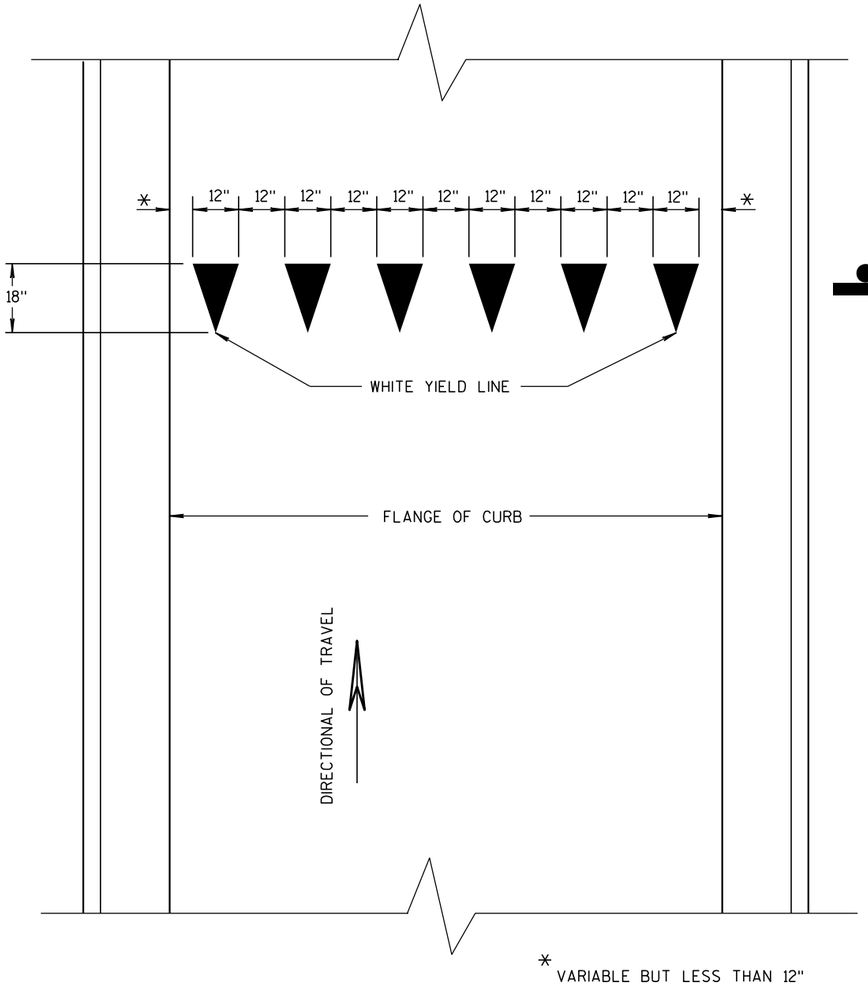
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 155 IGN
FHWA	

6

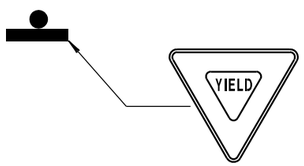
S.D.D. 15 C 18-3

6

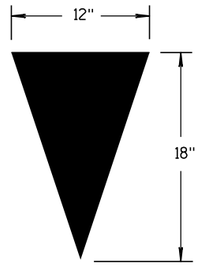
S.D.D. 15 C 18-3



YIELD LINE



R1-2
36" X 31"



YIELD TRIANGLE

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1/28/05 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

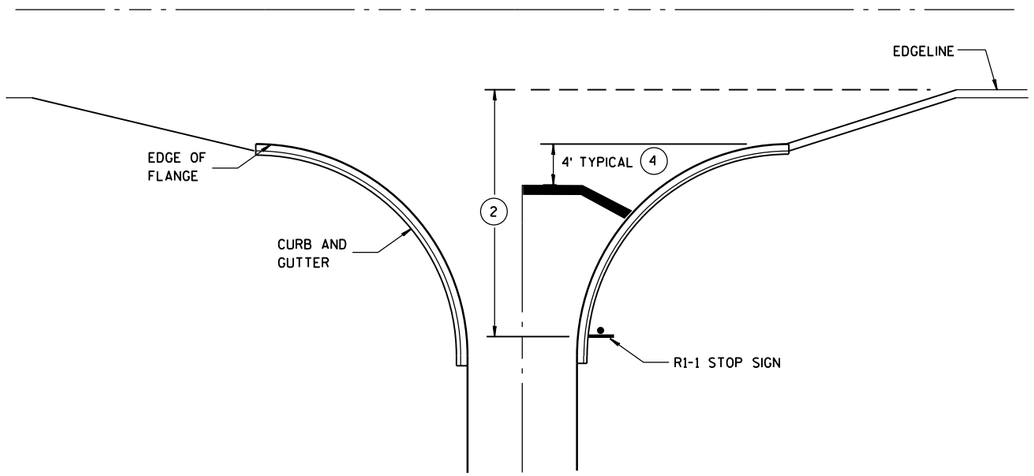
FHWA

6

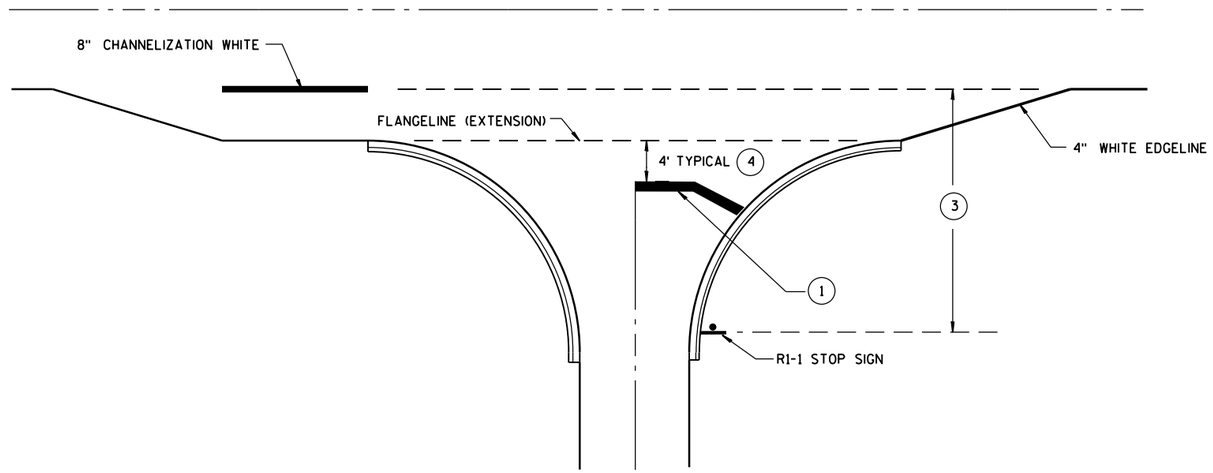
S.D.D. 15 C 20-1

6

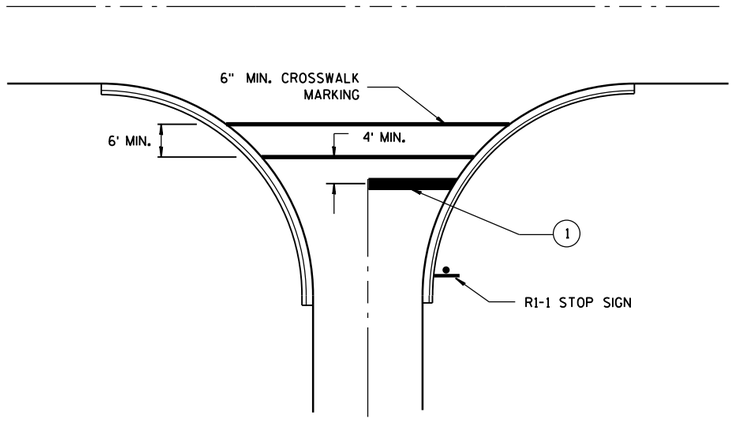
S.D.D. 15 C 20-1



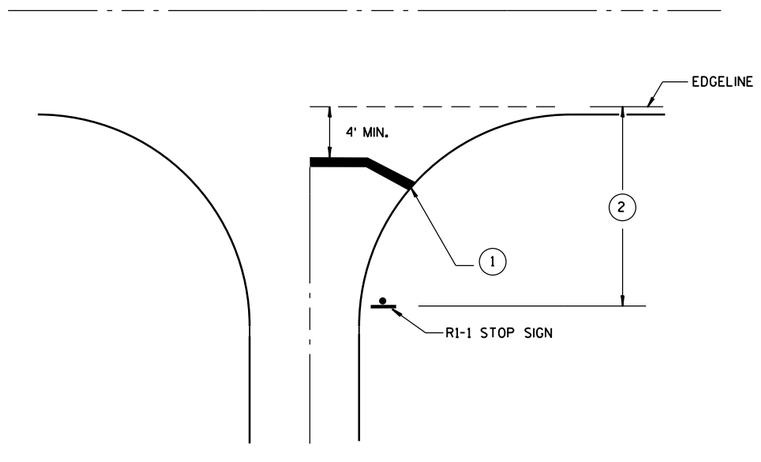
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

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.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

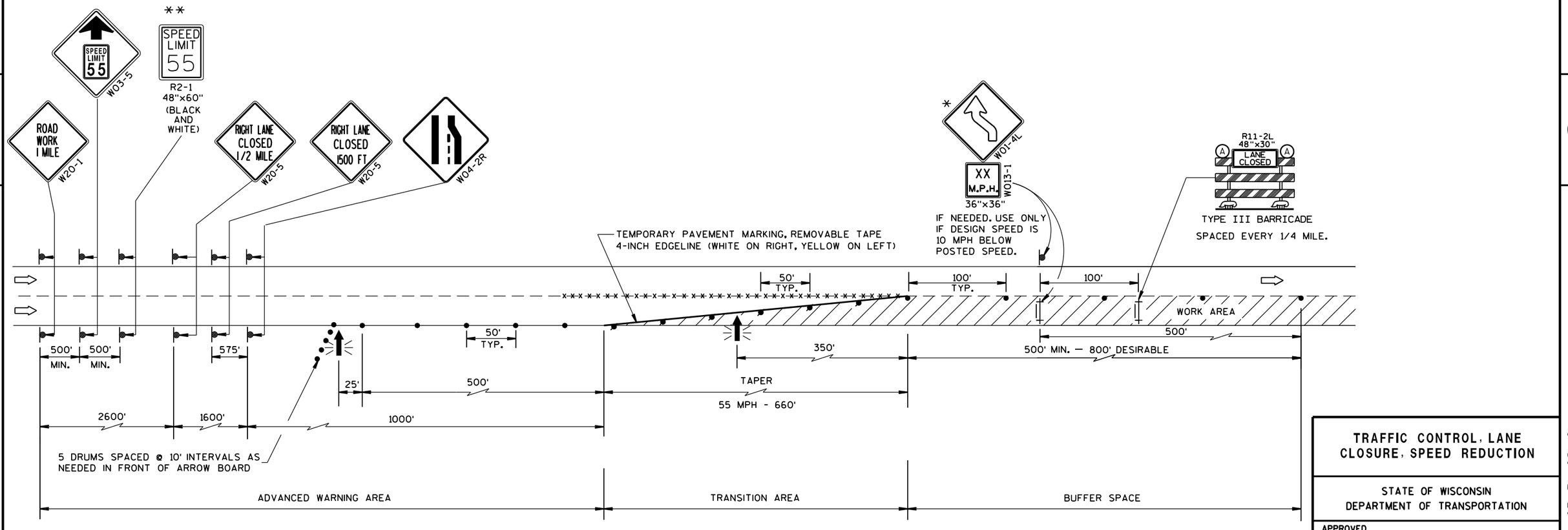
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



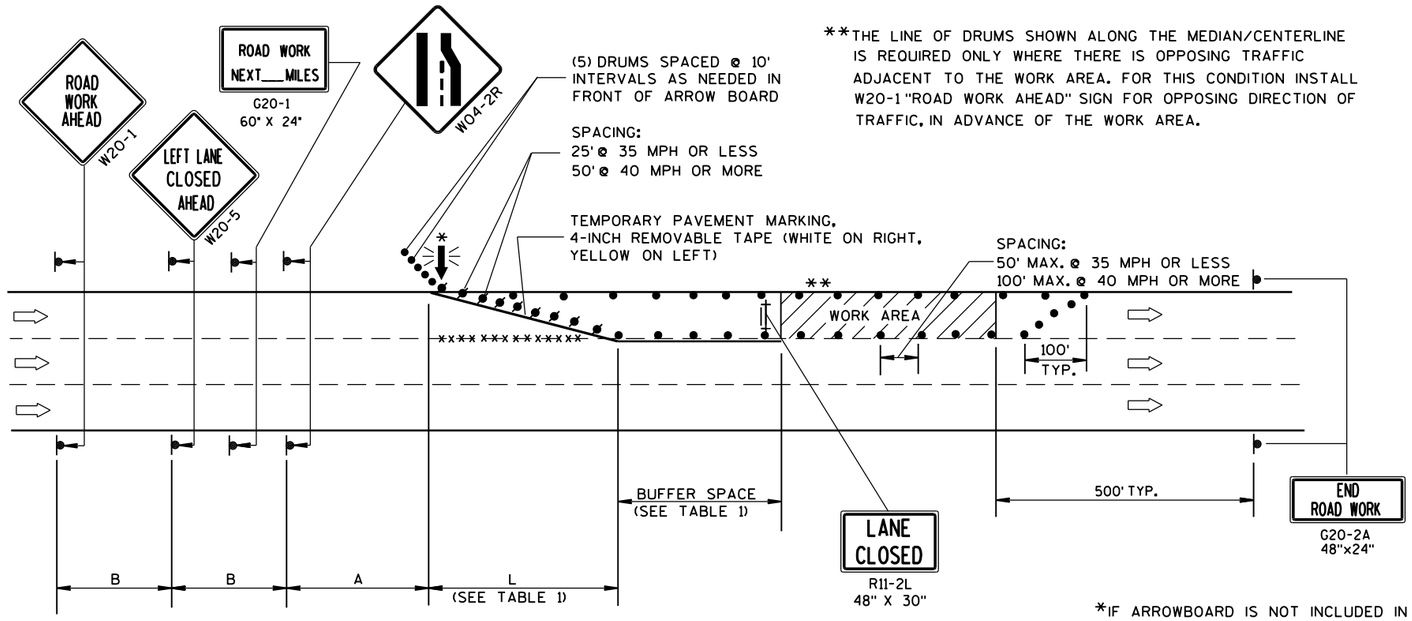
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 12-4



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

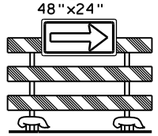


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS 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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 20-2

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

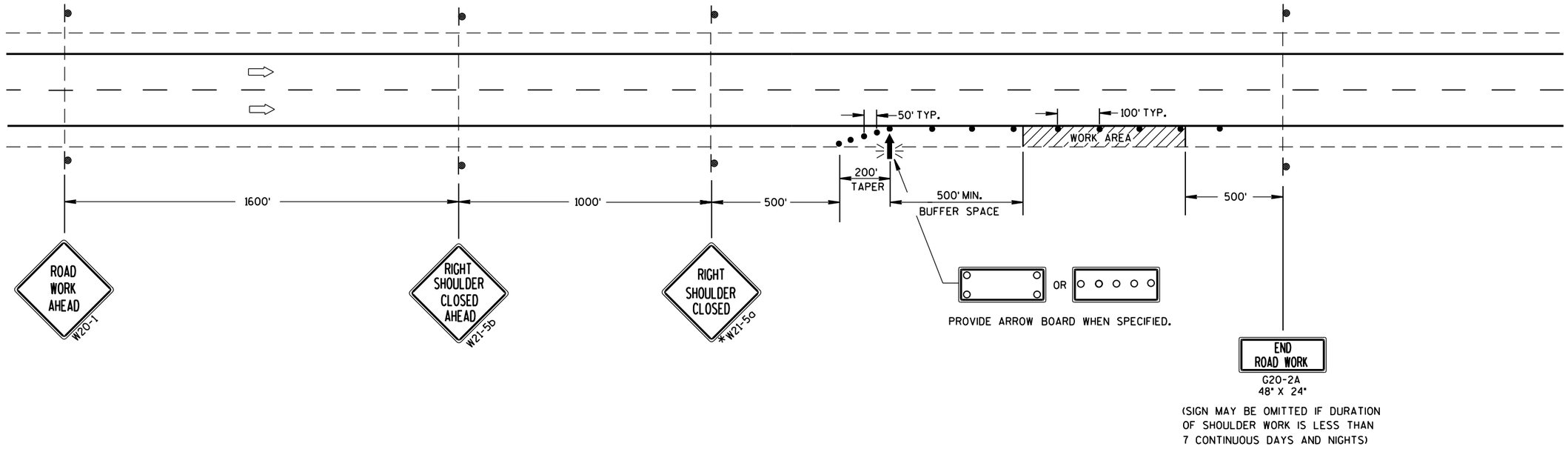
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

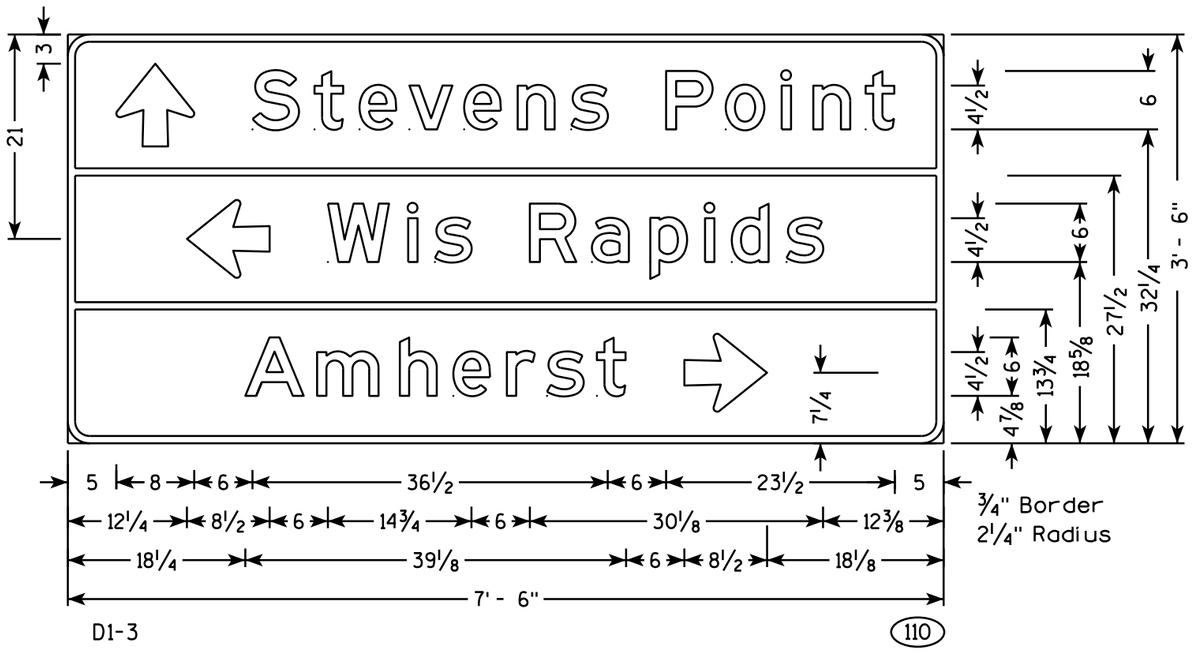
S.D.D. 15 D 27-2

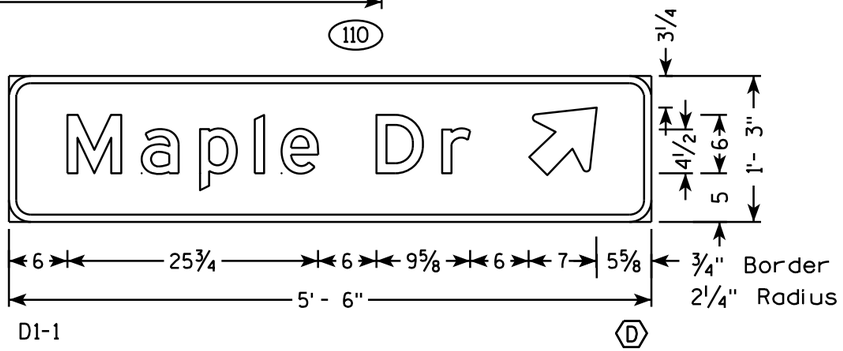
6

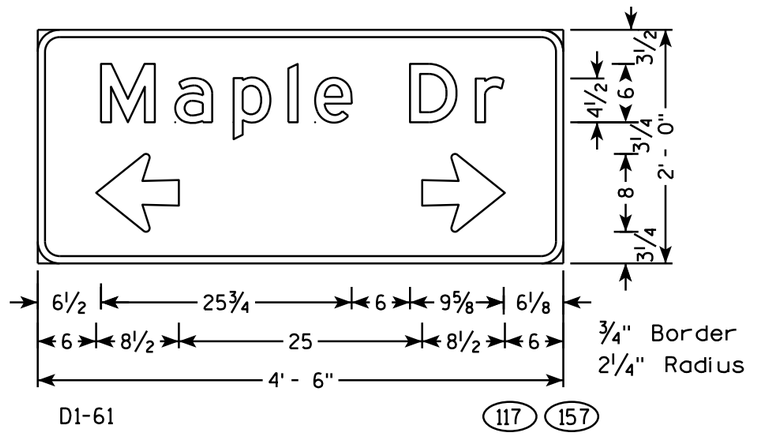
S.D.D. 15 D 27-2

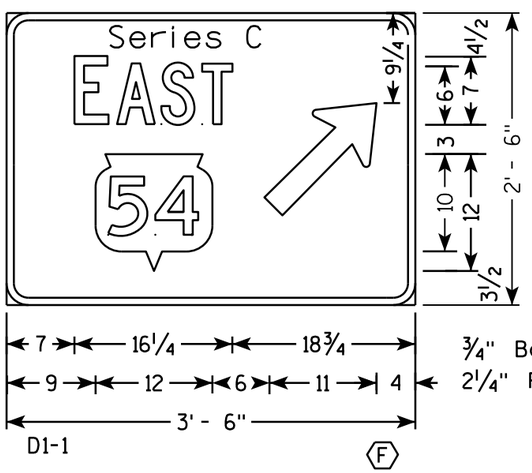
NOTES

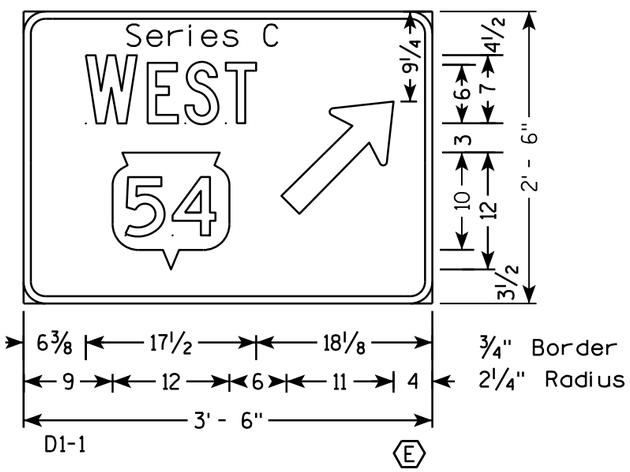
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown

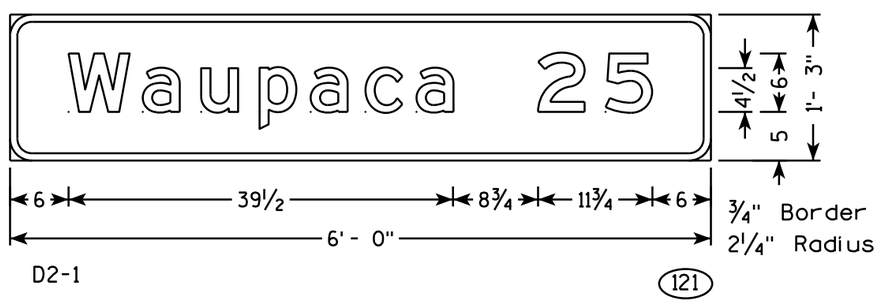






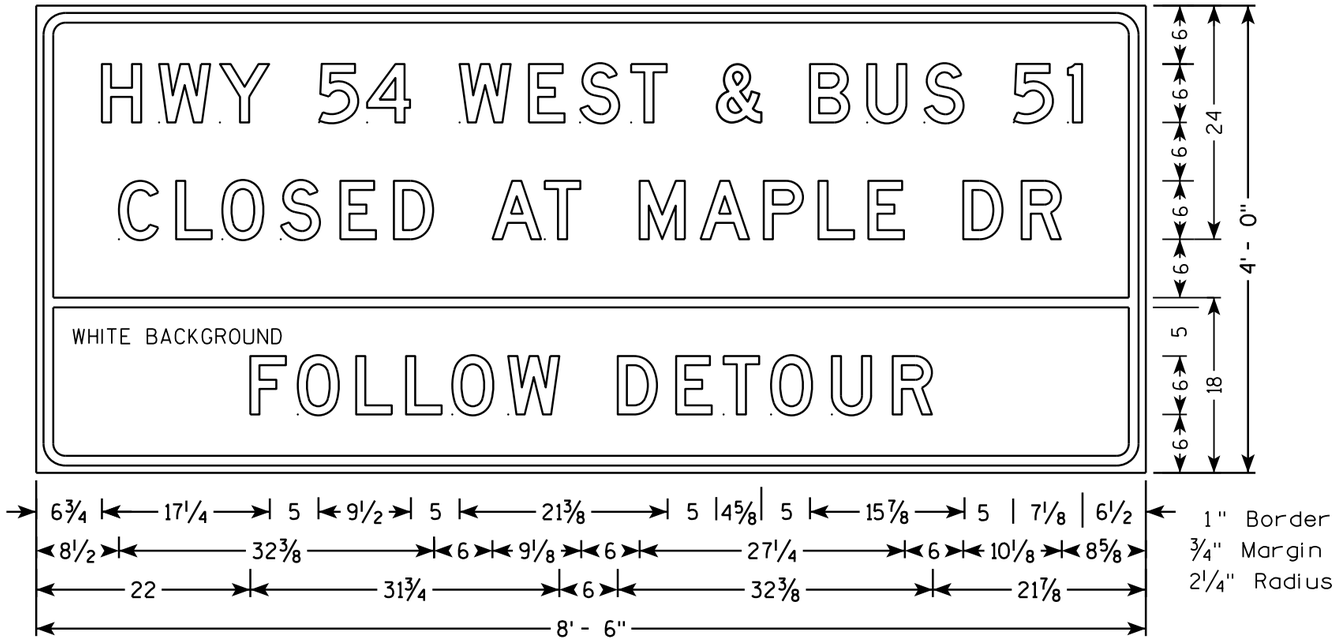






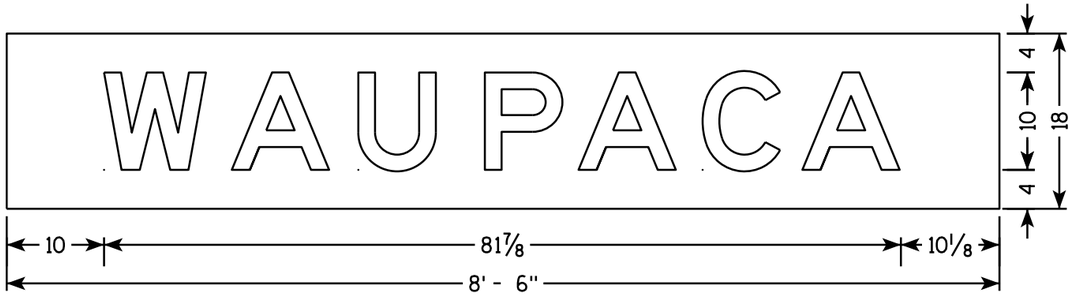
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET NO: E

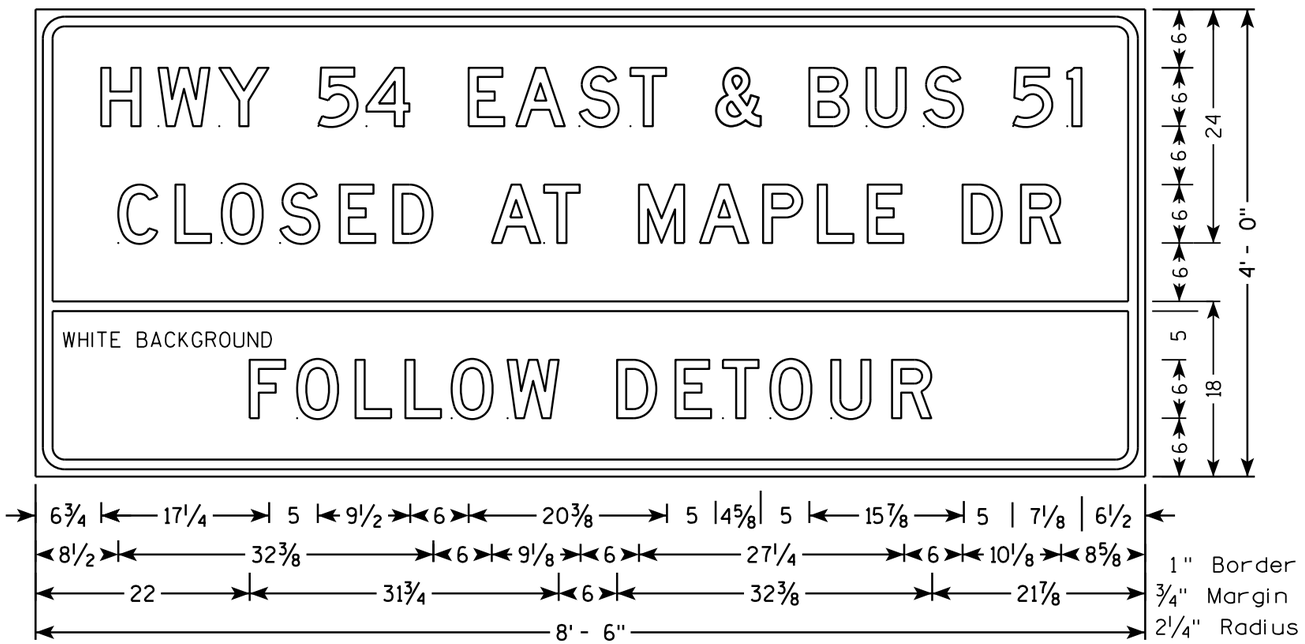
FILE NAME : C:\CAEFiles\Projects\tr_d4\4492A514.dgn PLOT DATE : 05-MAY-2014 10:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - ORANGE except as Shown
   Message - BLACK
3. Message Series - D





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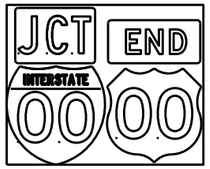
7

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	TEMPORARY SIGNING	SHEET NO:	E

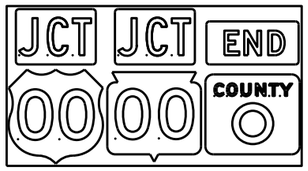
FILE NAME : C:\CAEFiles\Projects\tr_d4\4494A614.dgn PLOT DATE : 26-JUN-2014 10:58 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

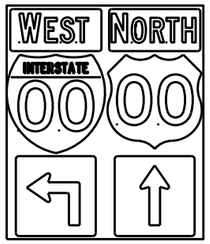


J1-2

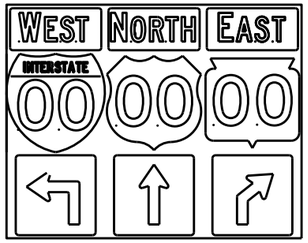


J1-3

J2-1



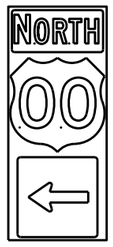
J2-2



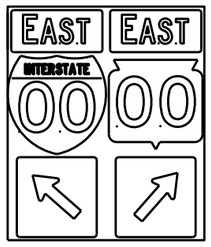
J2-3

JV

(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



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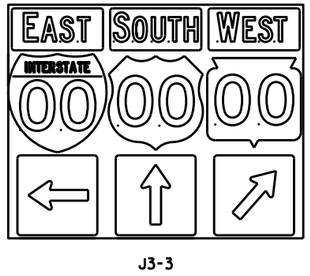
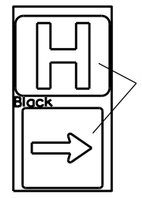


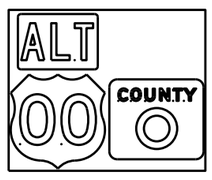
J3-3



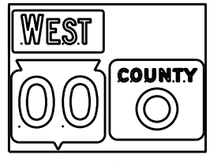
Blue Background

JH-1

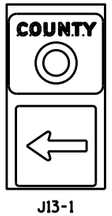
J4-1



J4-2



J4-2



J13-1

J12-1

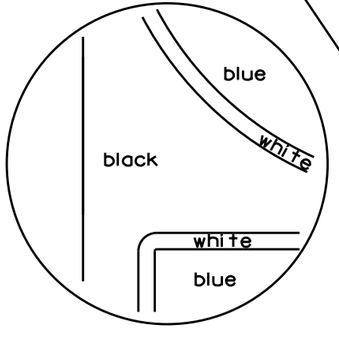
J32-1

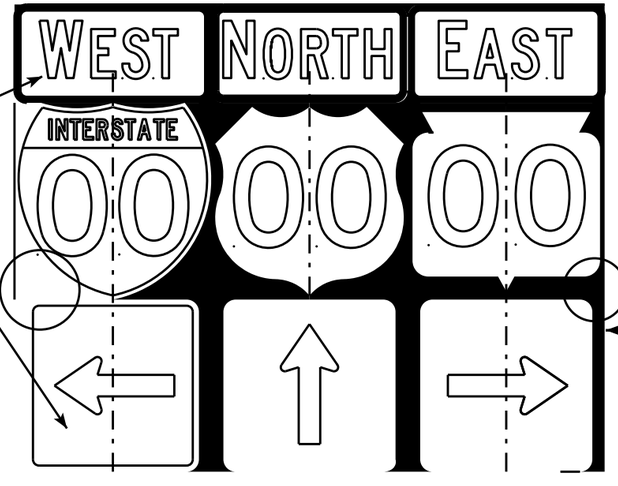
J33-1

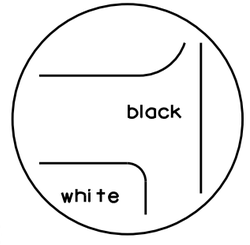
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

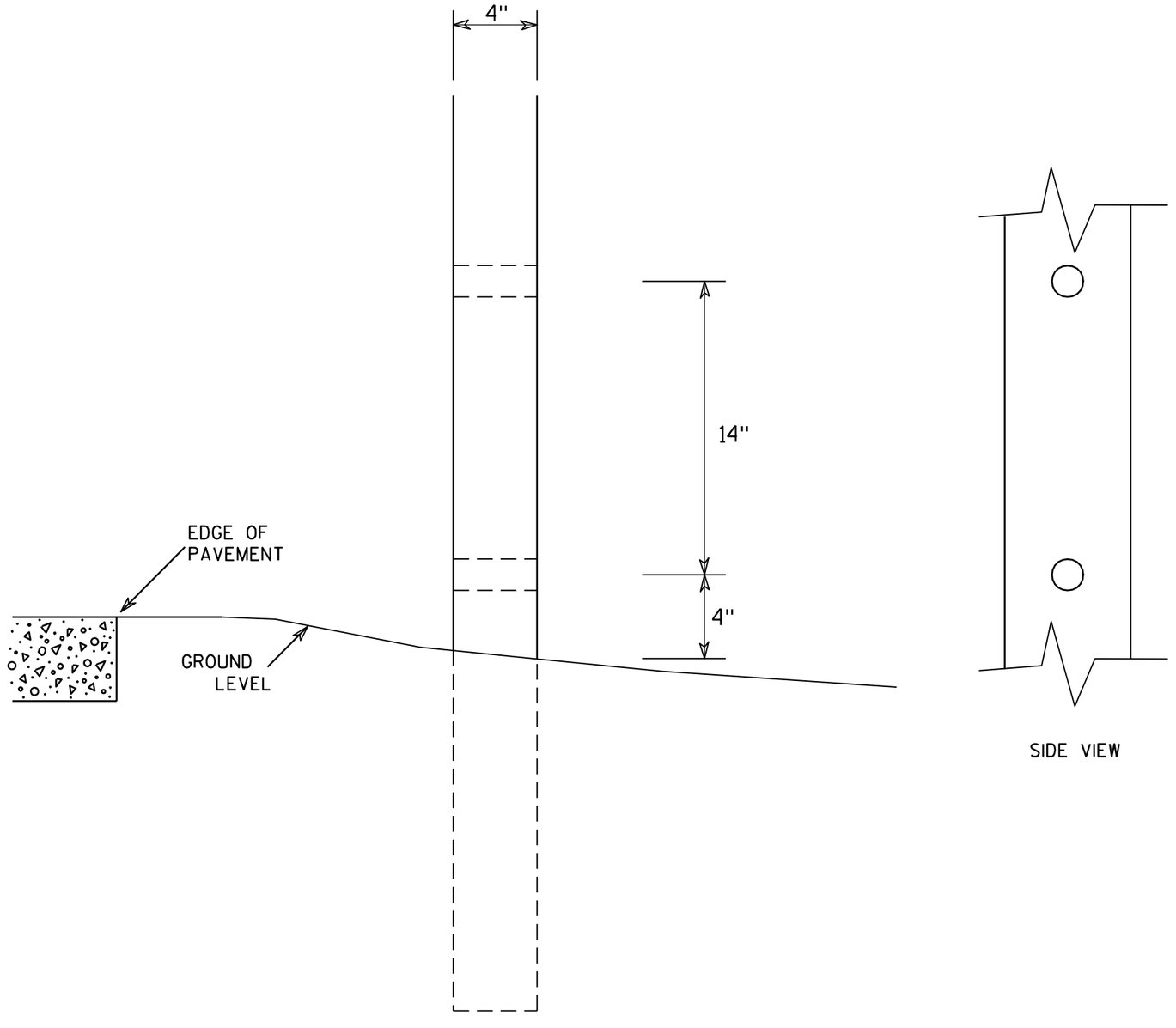
DATE 2/06/14 PL... A2-1S.8

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

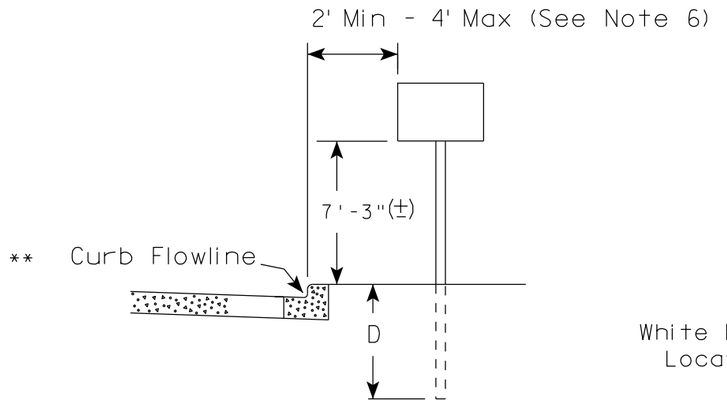
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

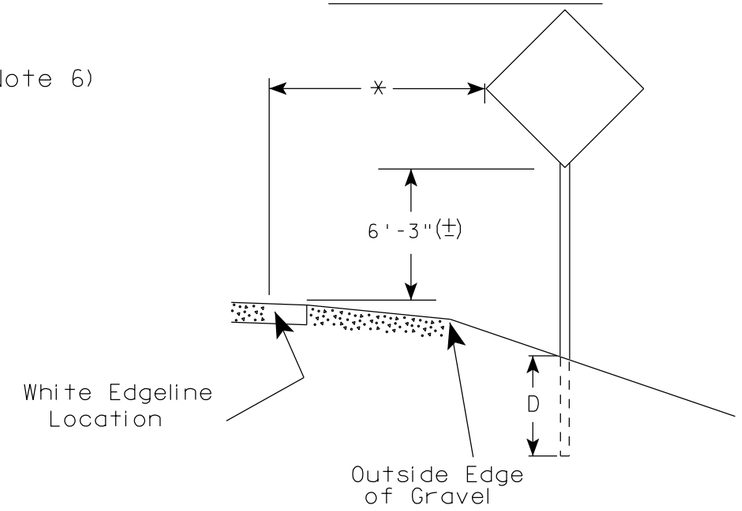
DATE 3/27/97 PLATE NO. A4-11.2

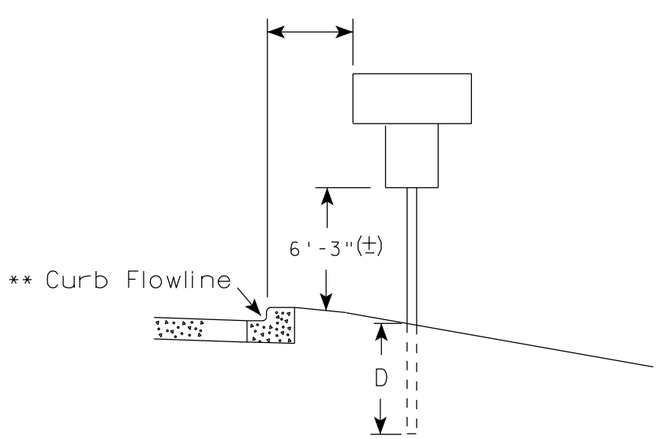
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E

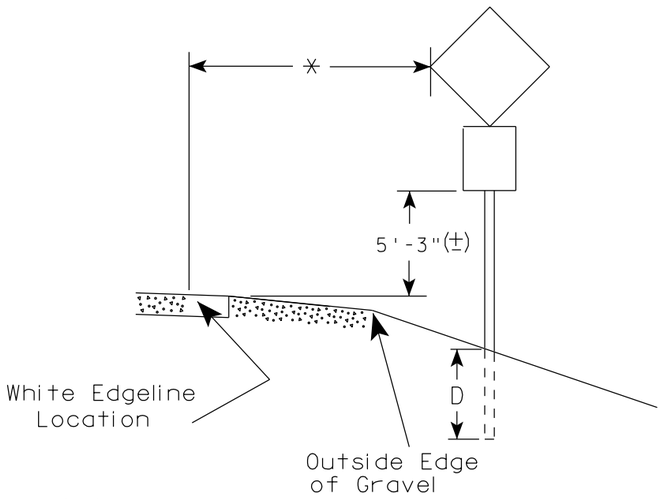
URBAN AREA



RURAL AREA (See Note 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. 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.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet, 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 directd 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" (±).

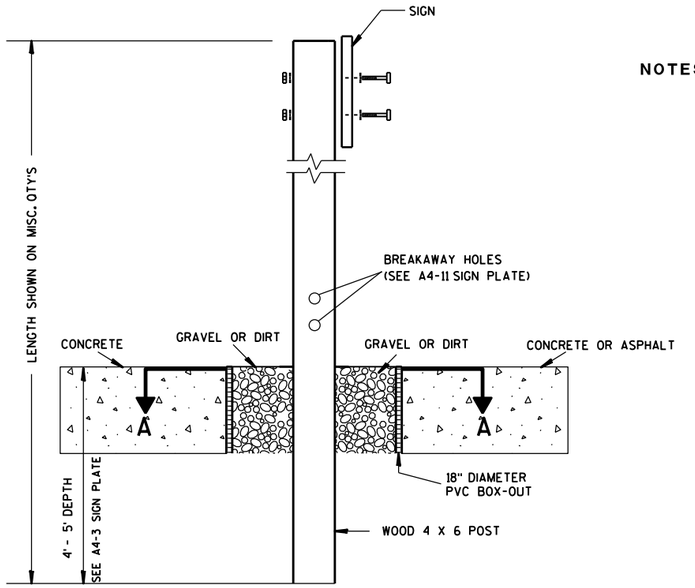
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

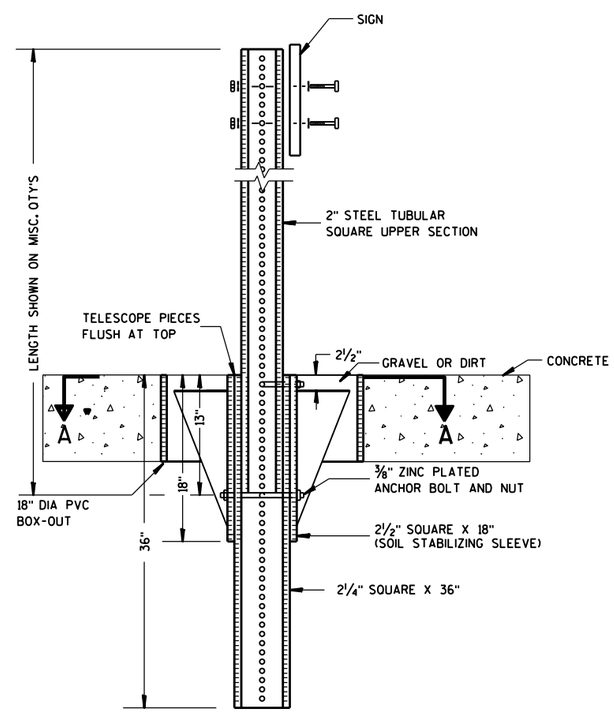
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

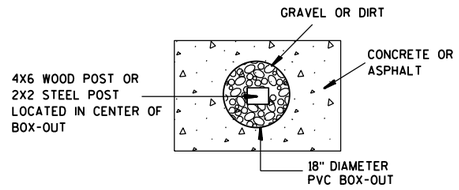
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

WISCONSIN DEPT OF TRANSPORTATION

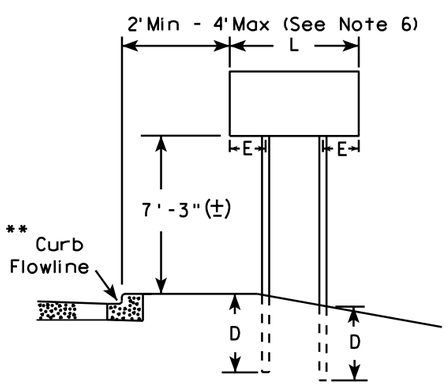
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

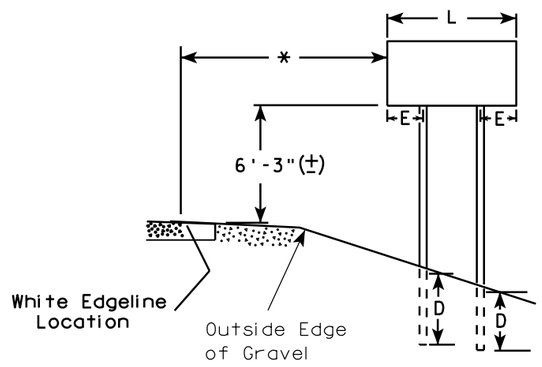
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

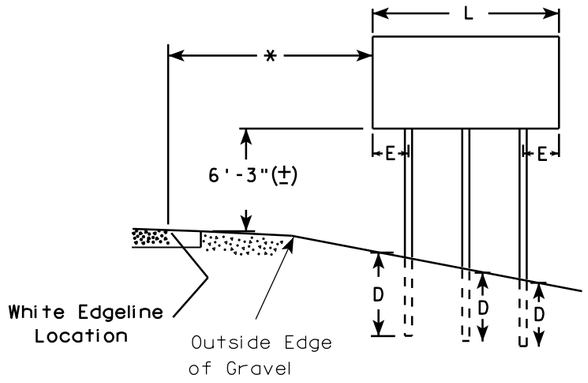
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

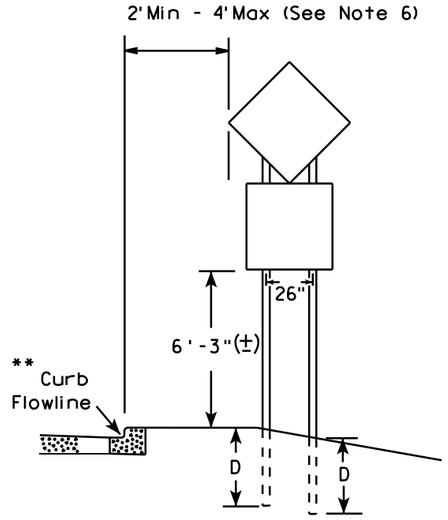
URBAN AREA



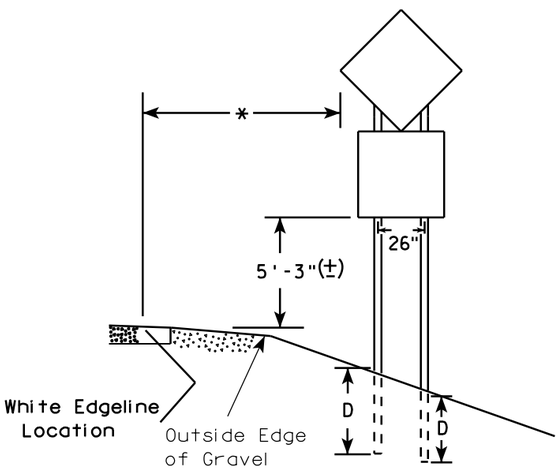
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. 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), 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" (±).

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

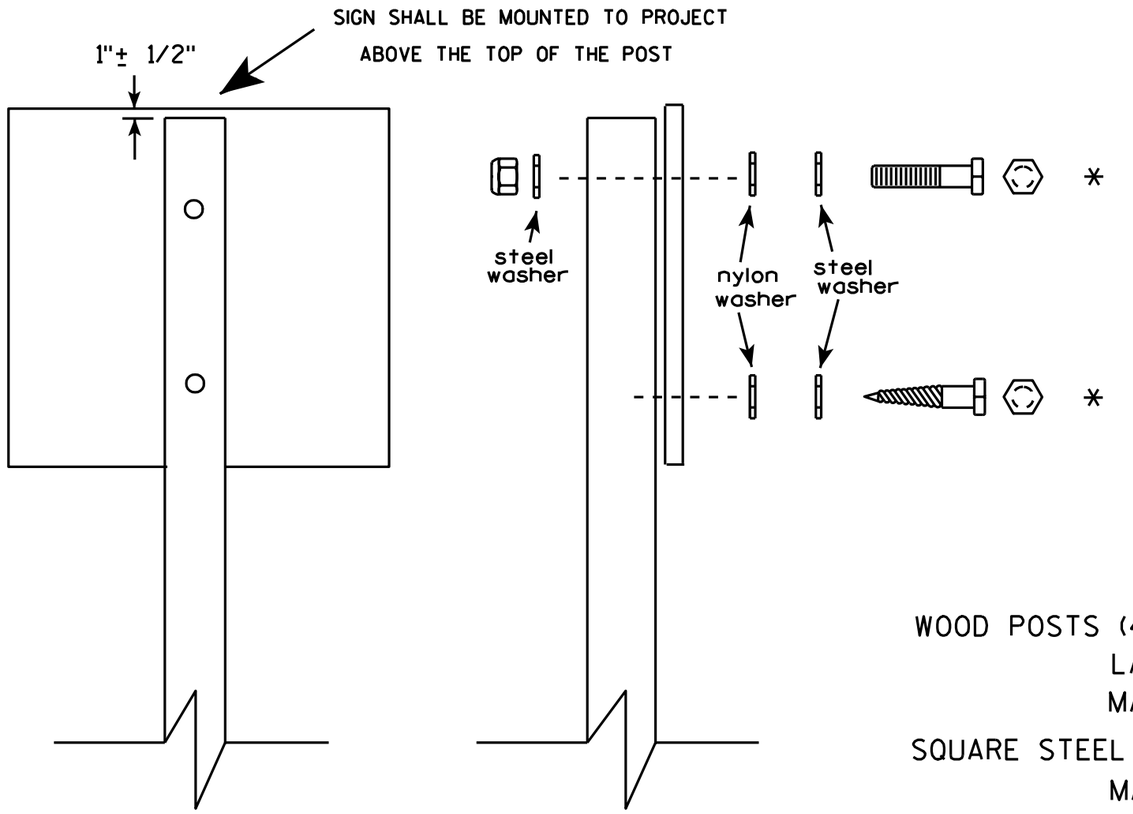
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 12-NOV-2014 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



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

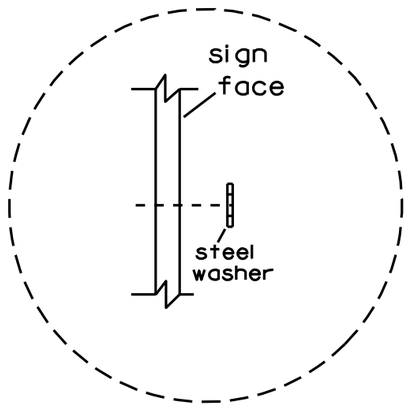
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 - 9/32 " (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.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

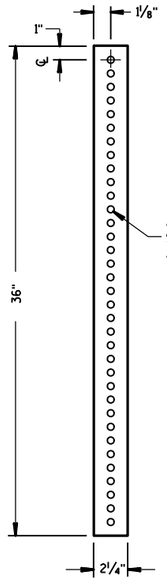
7

PROJECT NO:

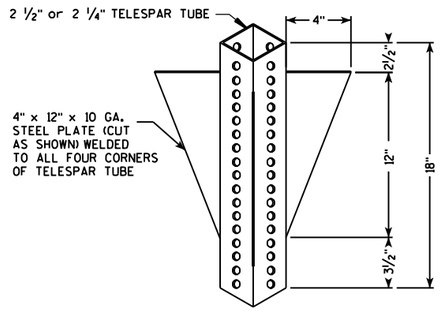
SHEET NO: 168 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

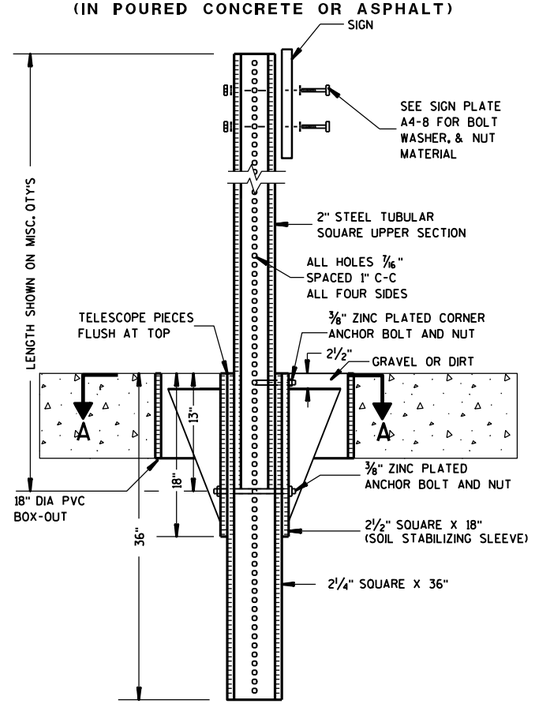
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



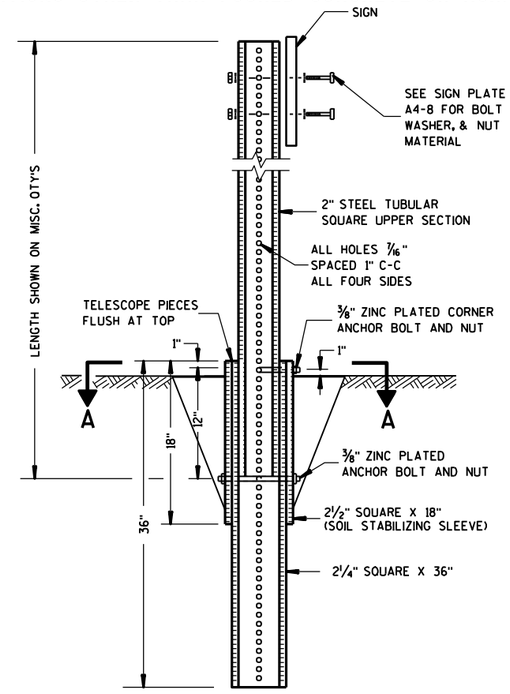
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

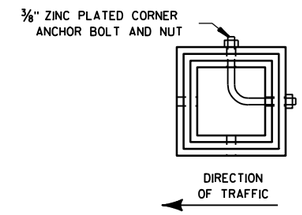


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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).

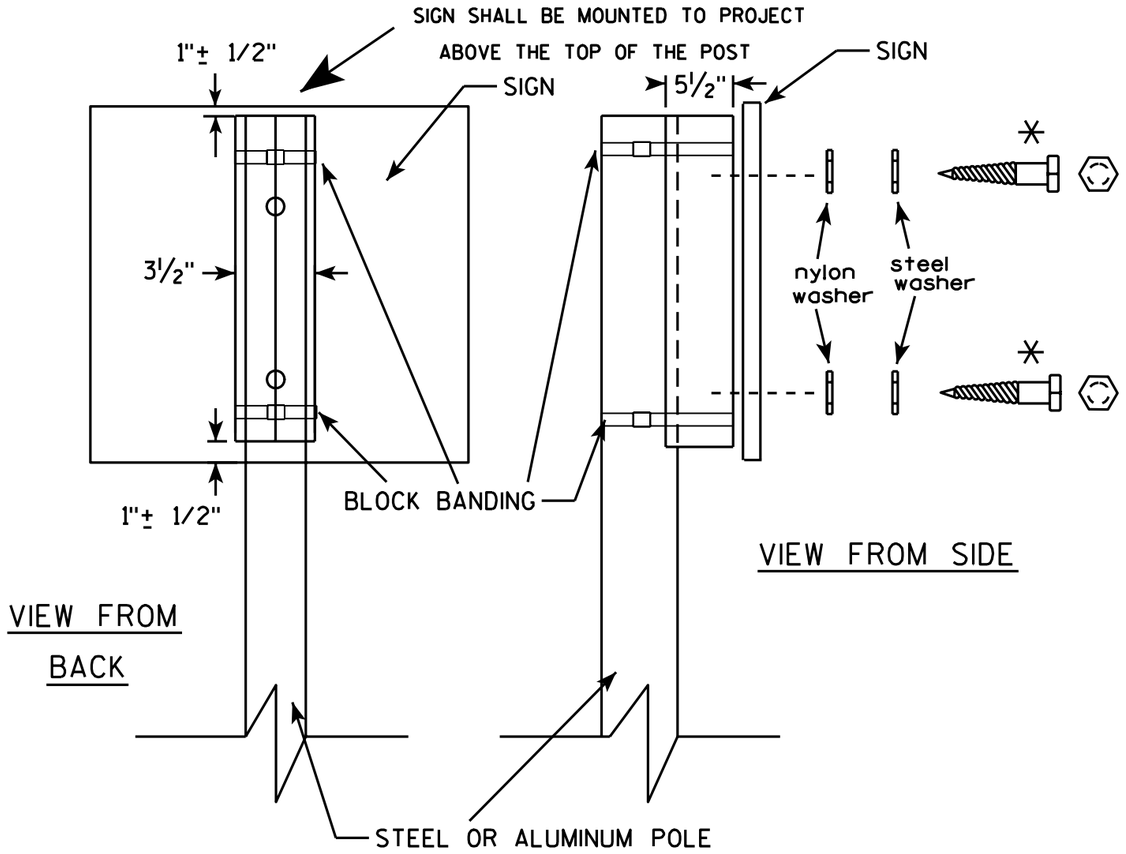
TUBULAR STEEL SIGN POST A4-9

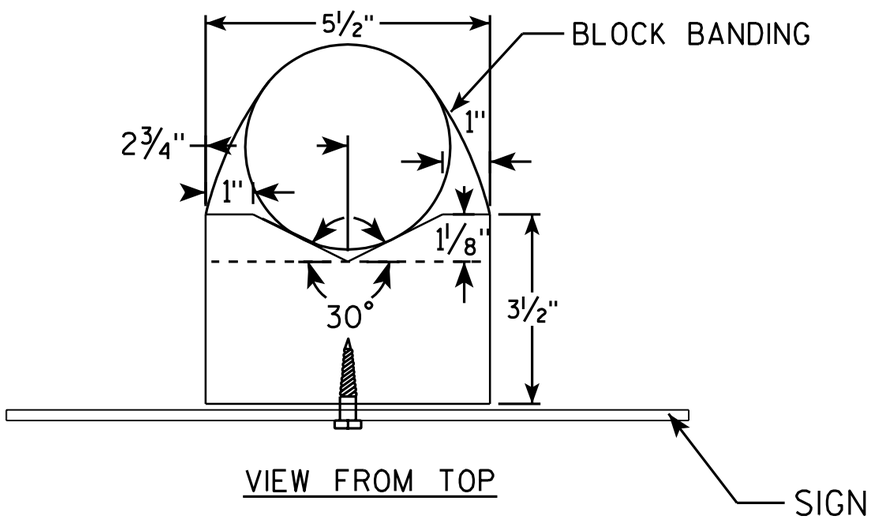
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

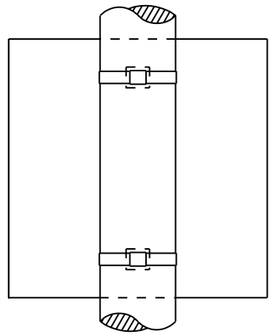
DATE 7/12/07 PLATE NO. A5-10.1

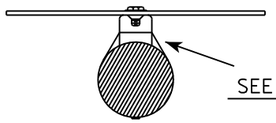
PROJECT NO:

SHEET NO: 170 E

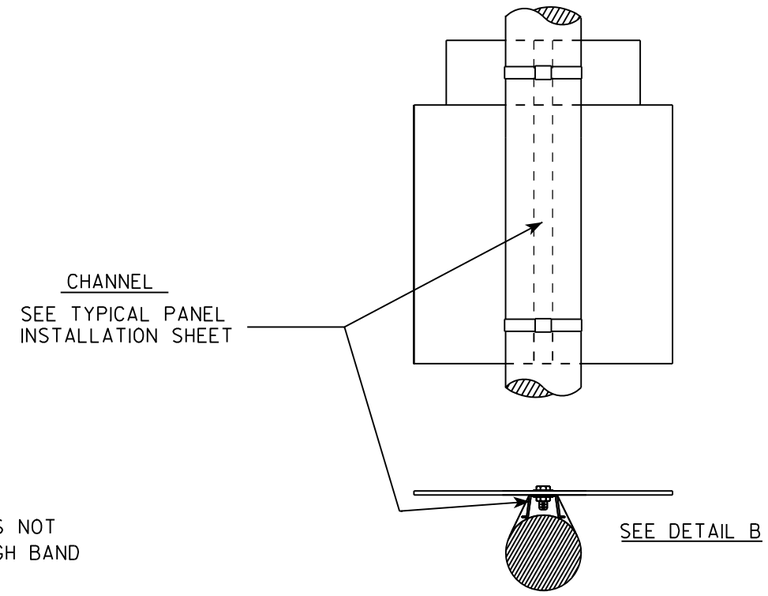
BANDING

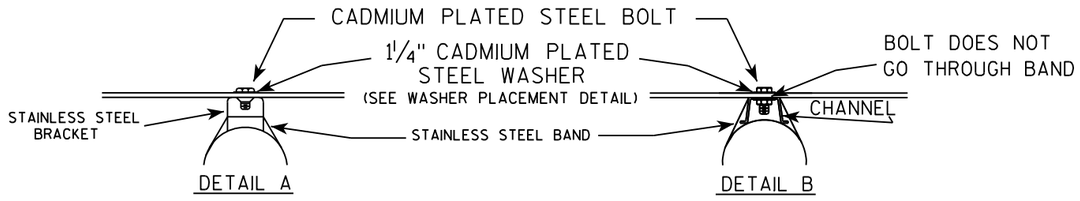
SINGLE SIGN



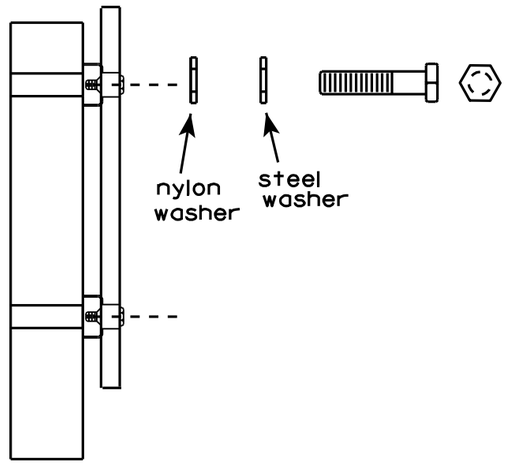


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

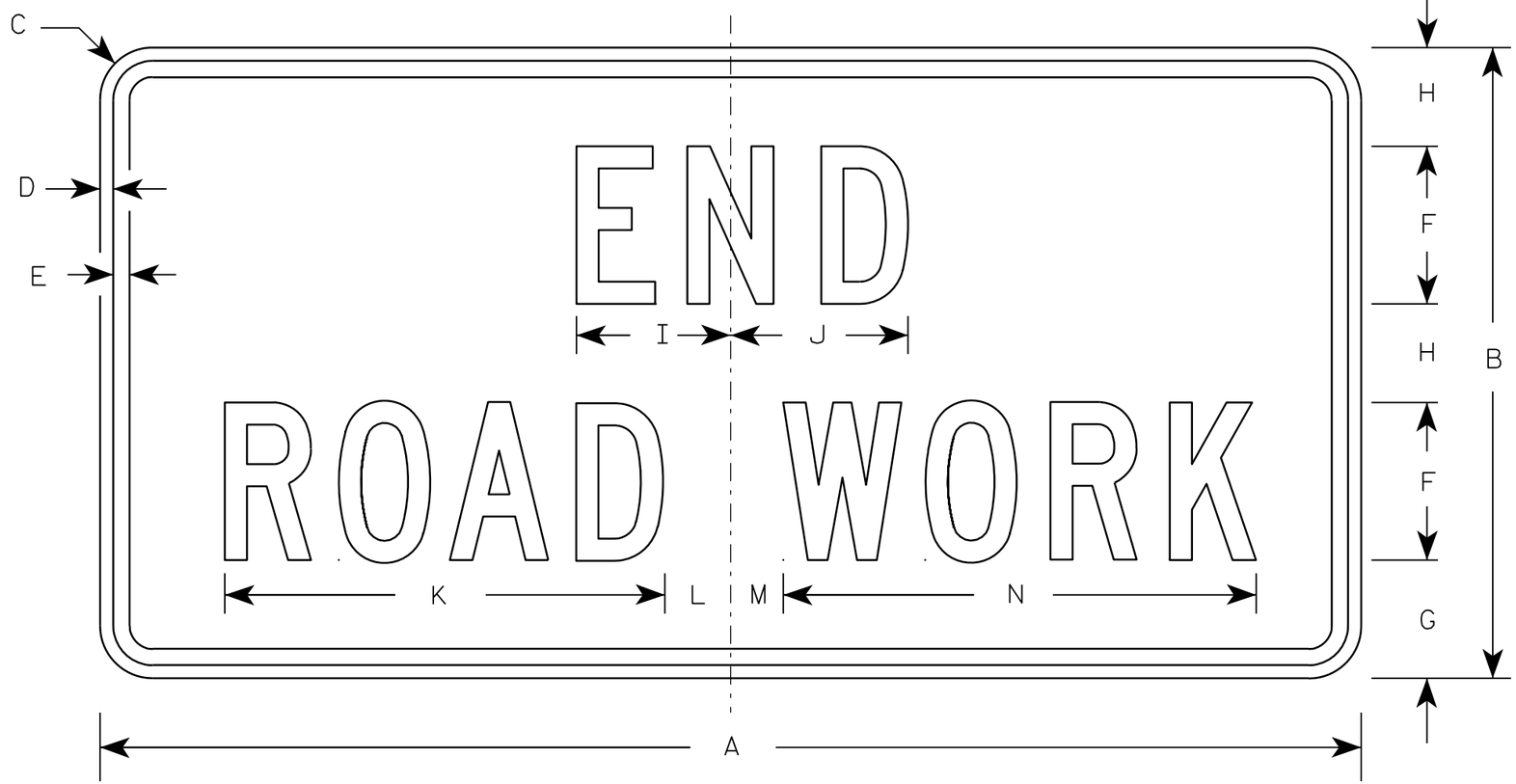
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 171	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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 m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

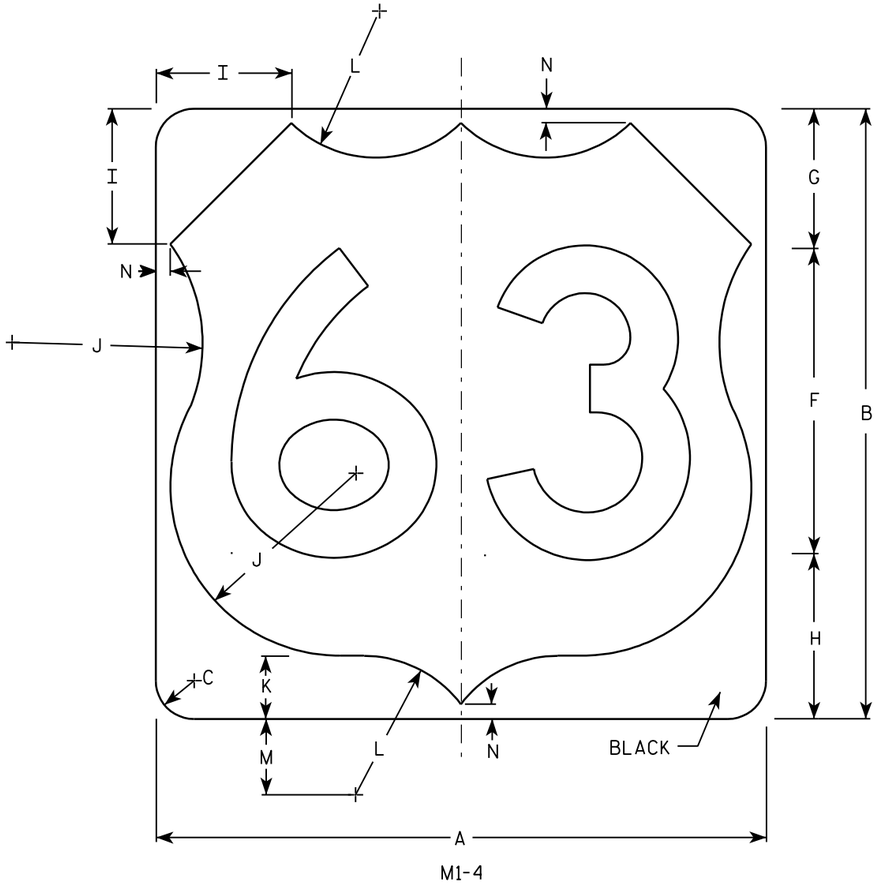
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

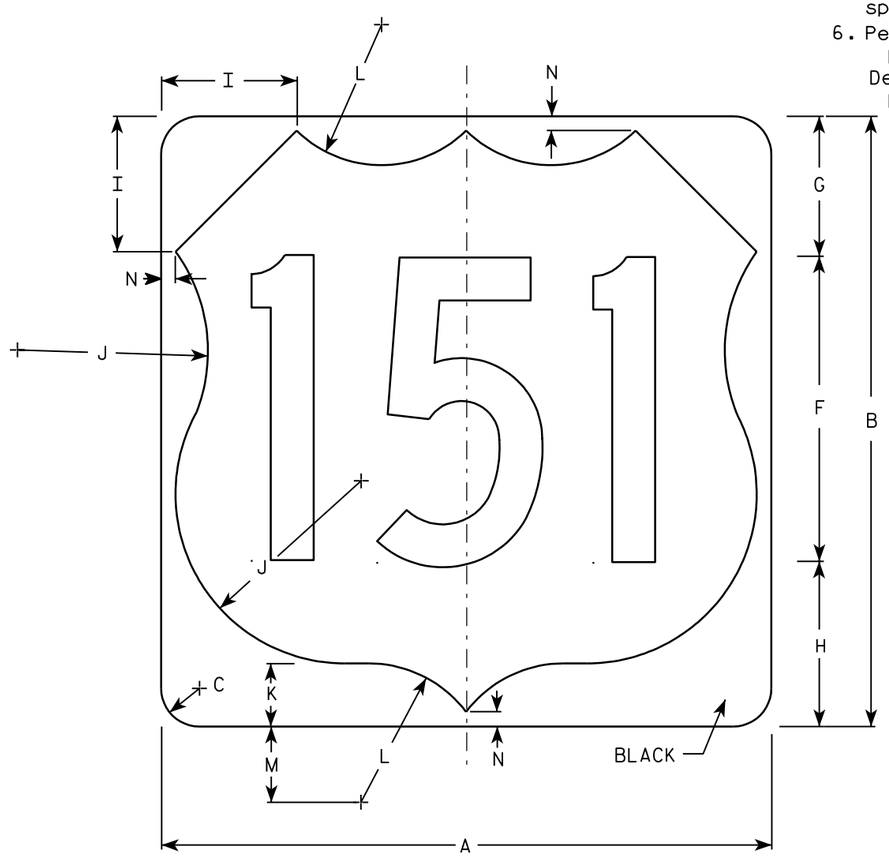
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 172	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
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. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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 m2
1																												
2	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0	.36
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81

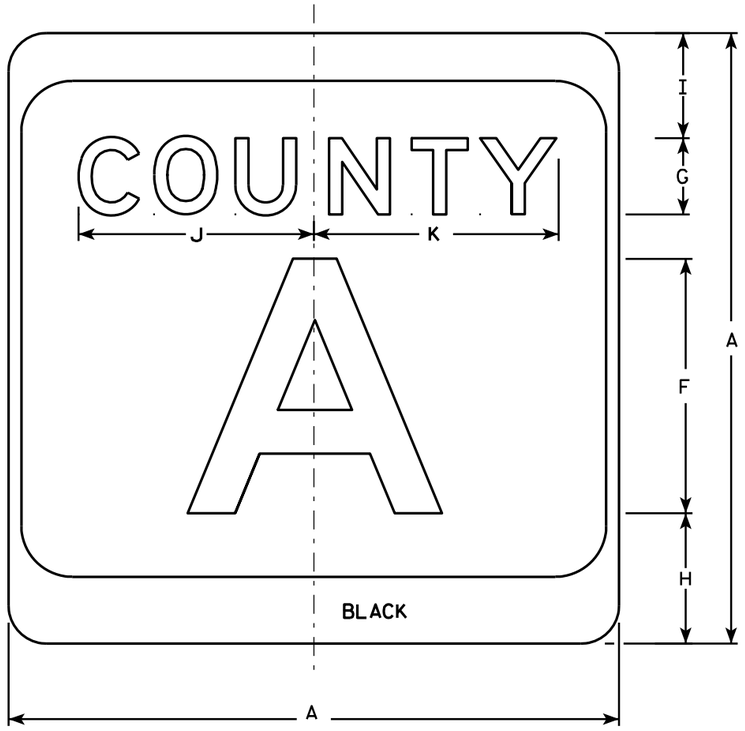
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

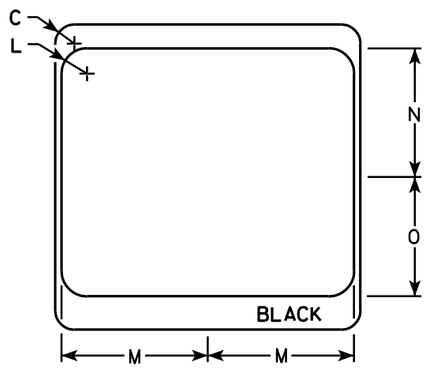
APPROVED Matthew R Rauch
for State Traffic Engineer

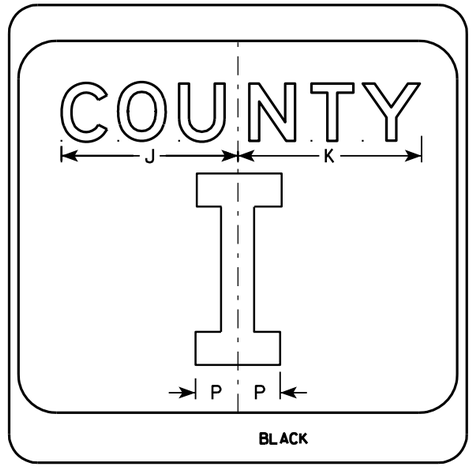
DATE 08/25/05 PLATE NO. M1-4.9

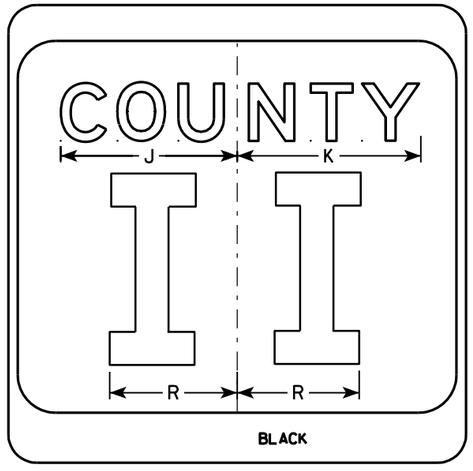
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

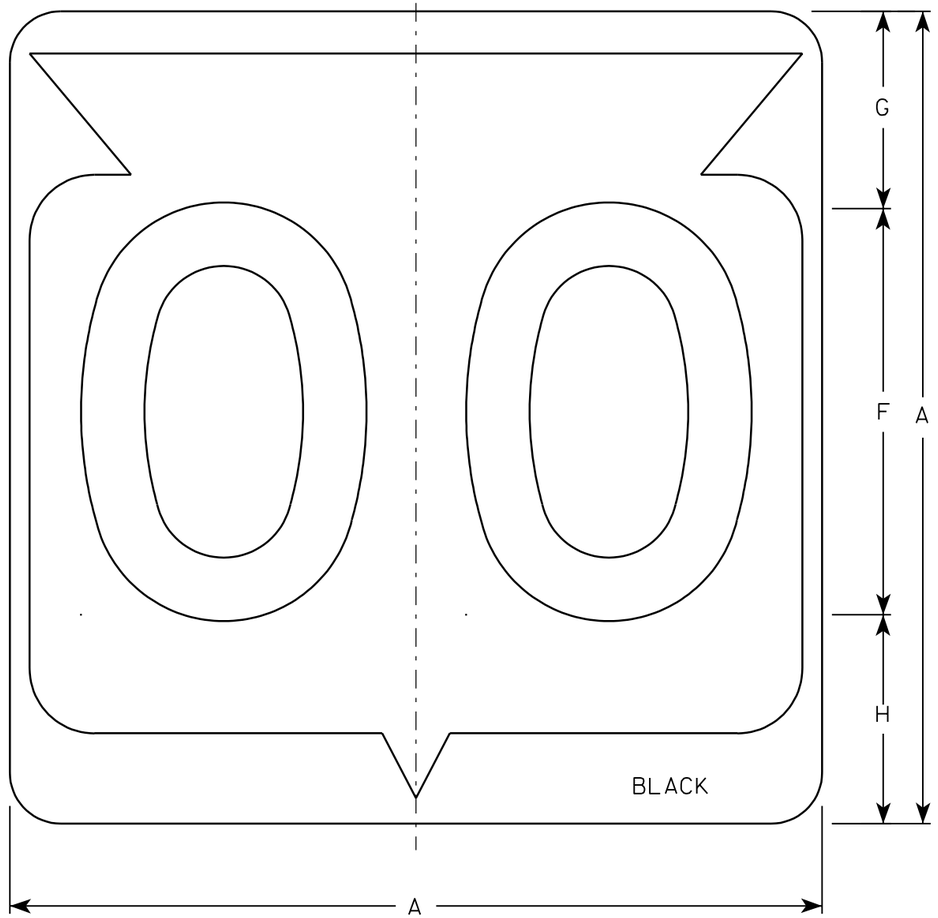
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

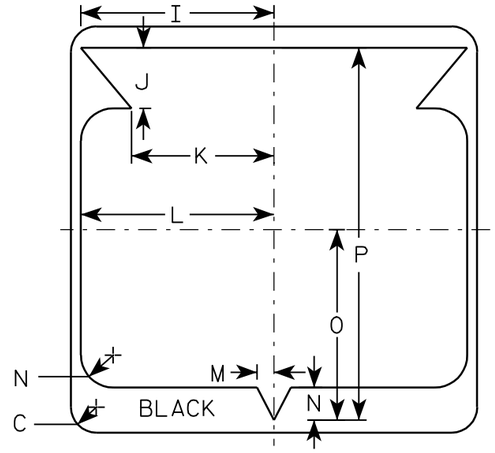
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 174 | E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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 m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

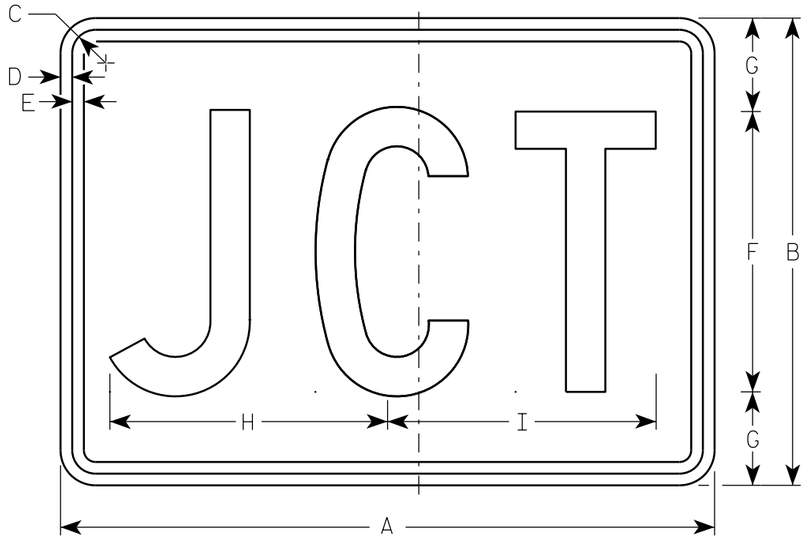
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

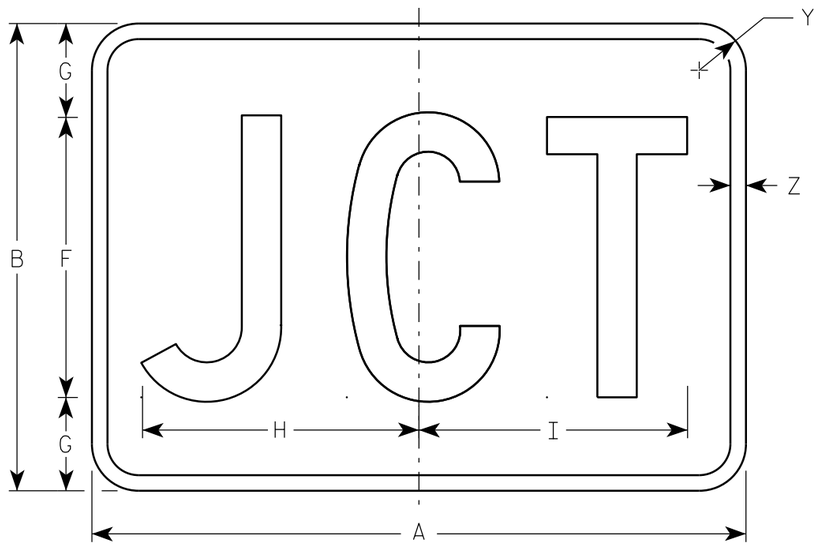
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 175	E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

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																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

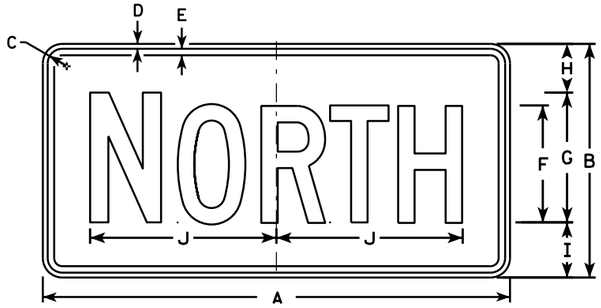
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

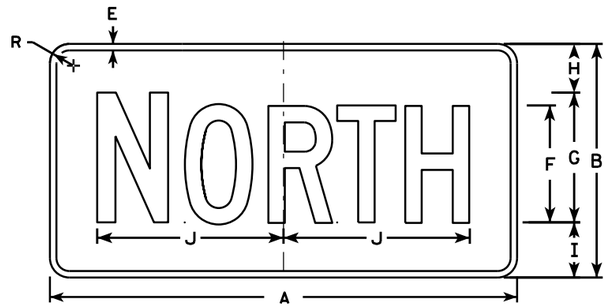
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 176 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

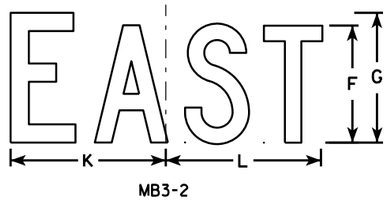


M3-1
MK3-1
MM3-1
MN3-1

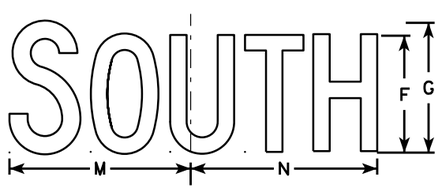


MB3-1

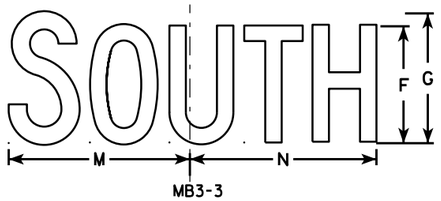
M3-2
MK3-2
MM3-2
MN3-2



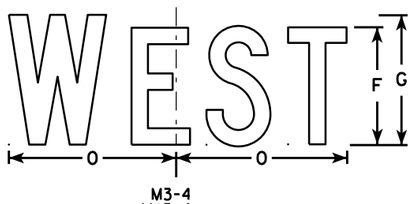
MB3-2



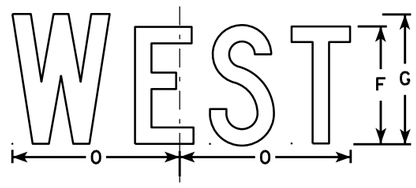
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

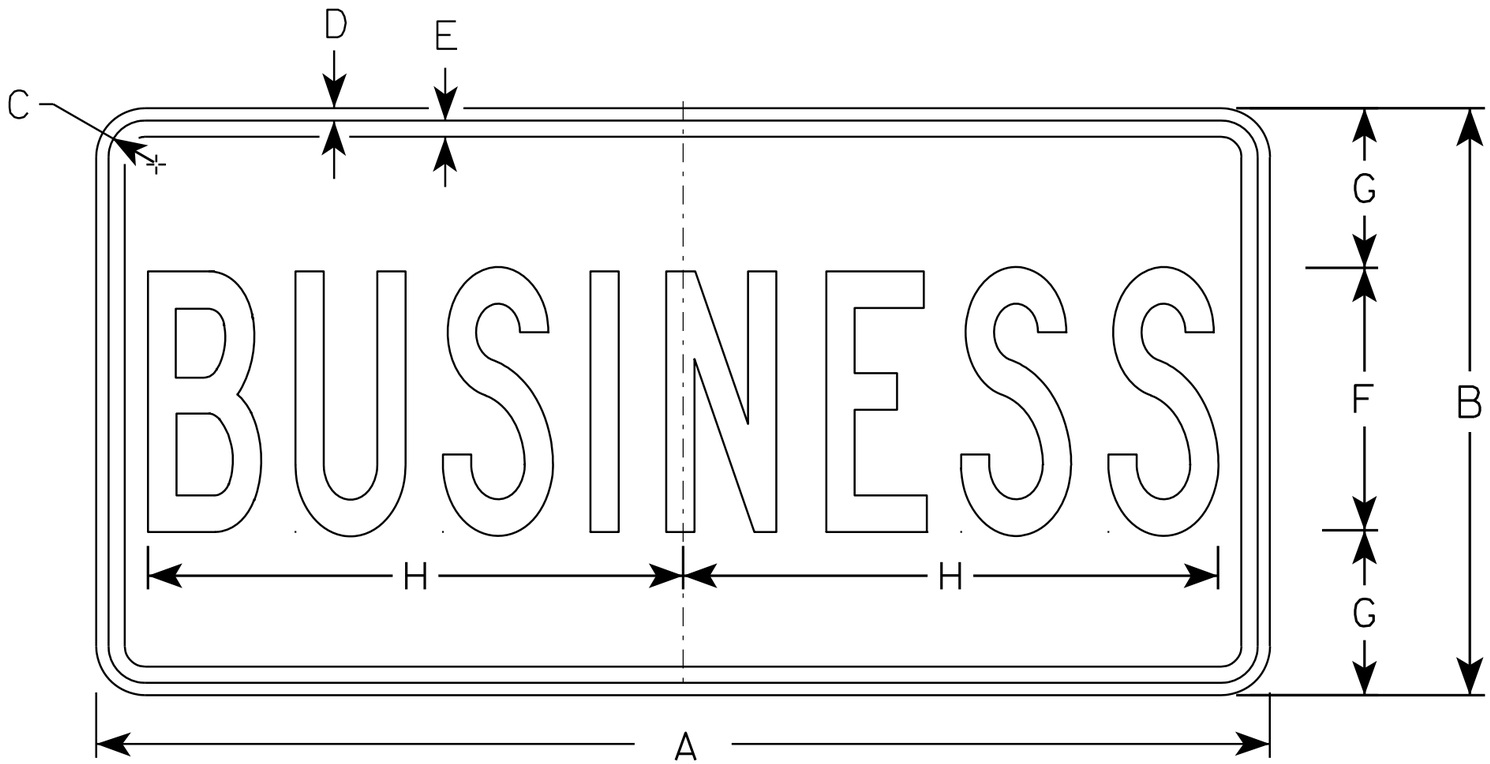
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

7



M4-3

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - See Note 5
   Message - Black
3. Message Series - B
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. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary Signs
   Background - Reflective

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																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/8	3/8	1/2	8	5	16 3/8																			4.5
4																											
5																											

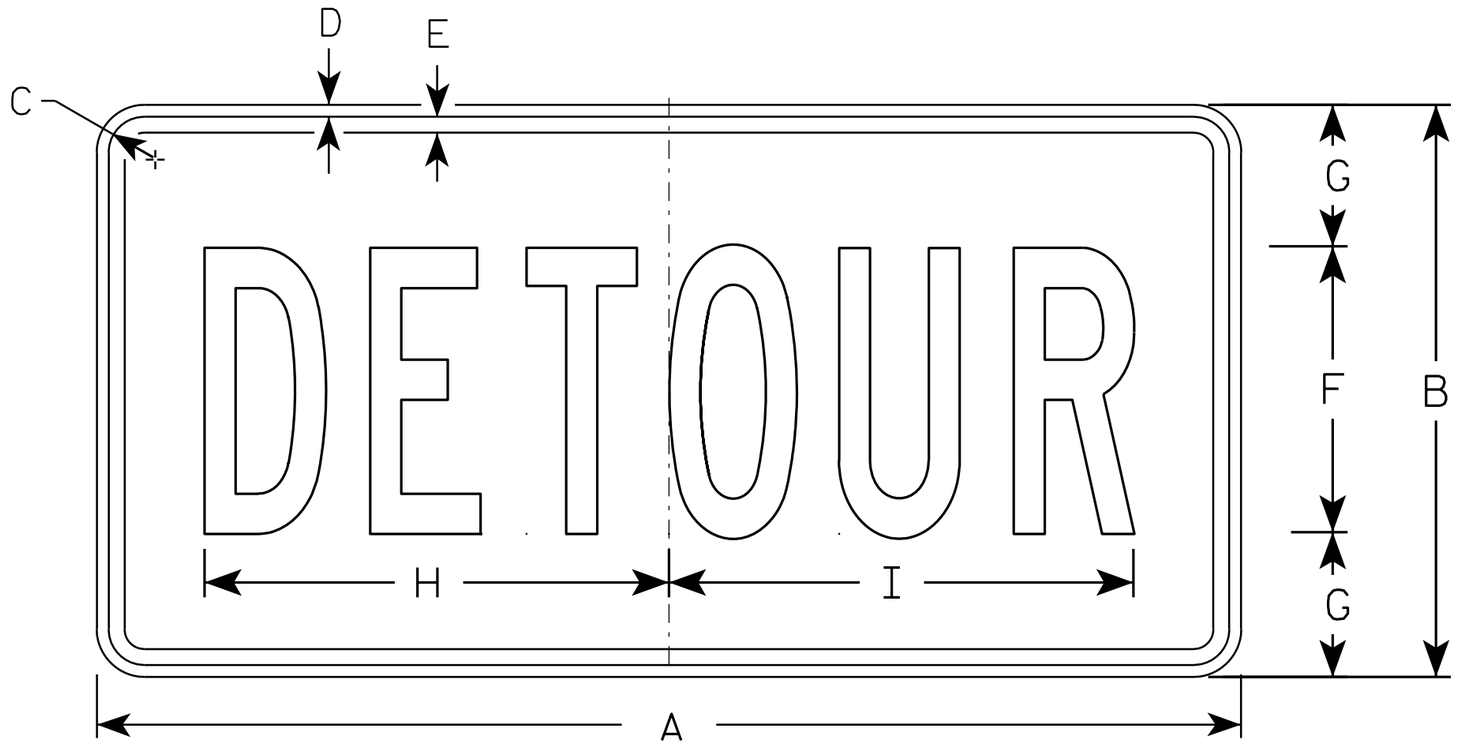
STANDARD SIGN
M4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-3.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 178 | E



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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.

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																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

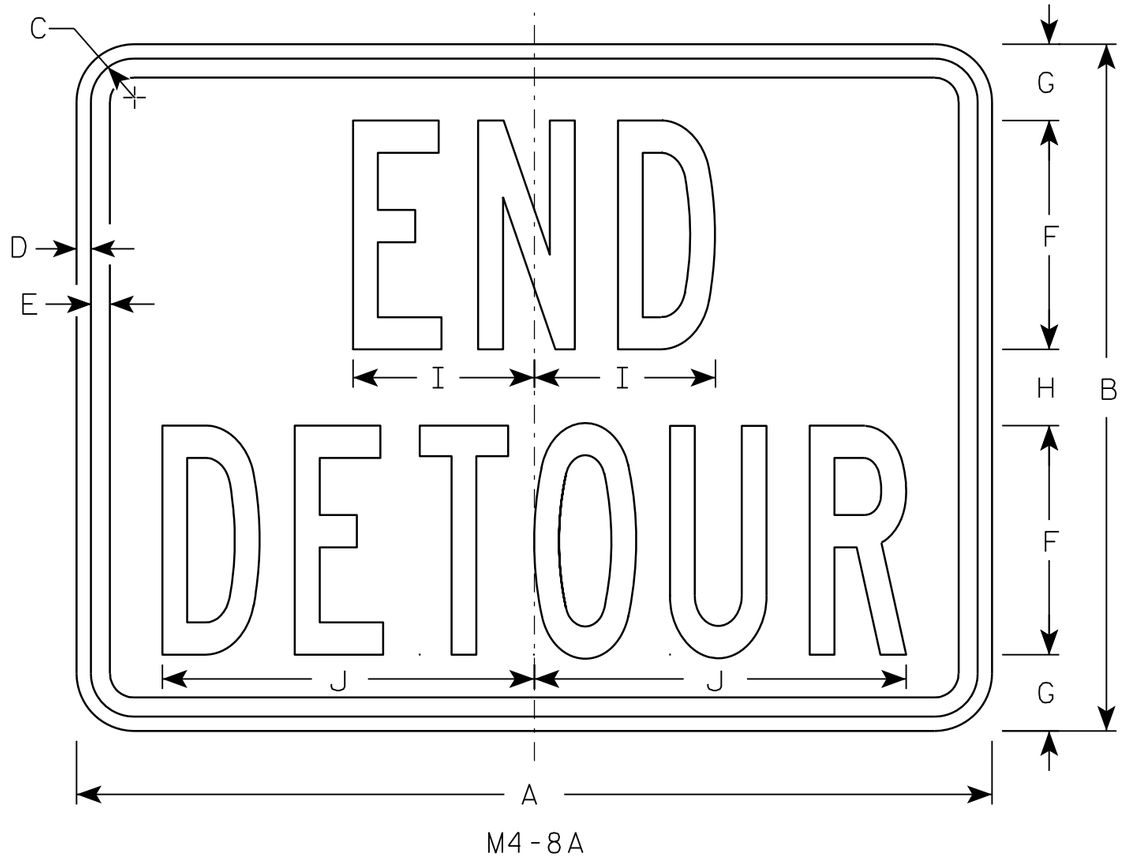
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 179	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
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.

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																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

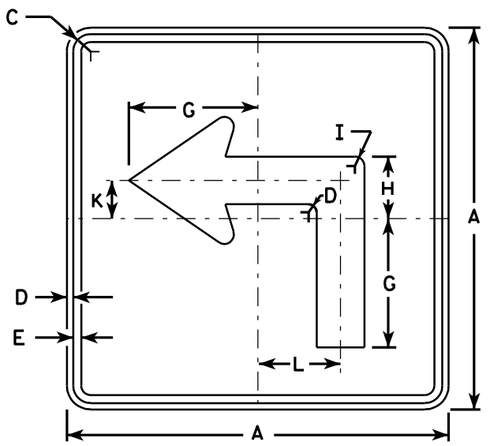
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

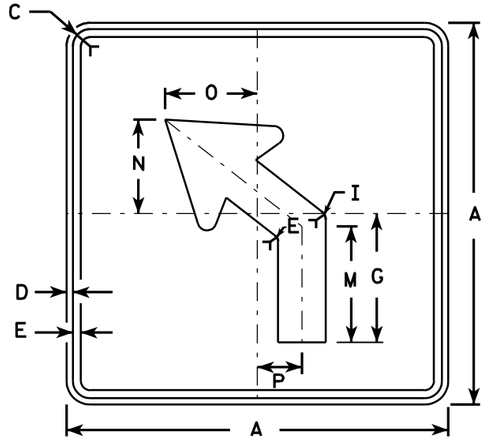
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

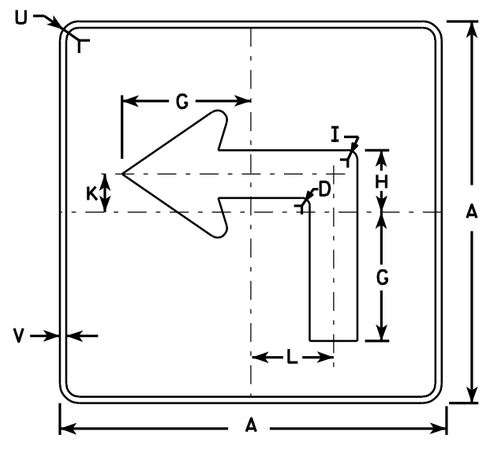
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 180	E



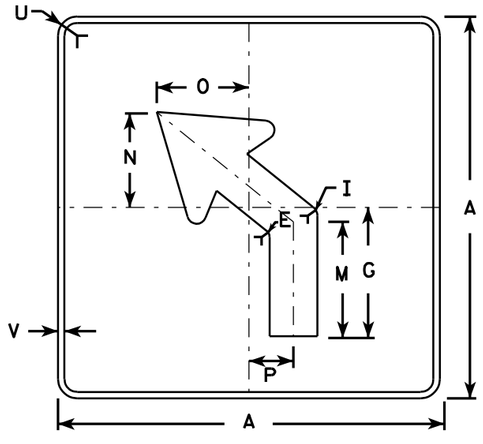
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



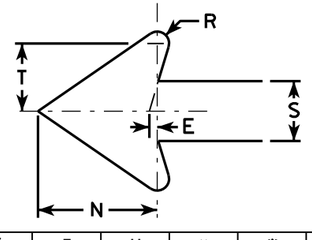
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. 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.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

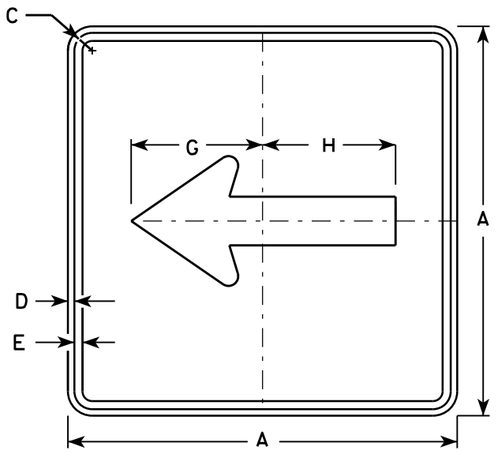
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

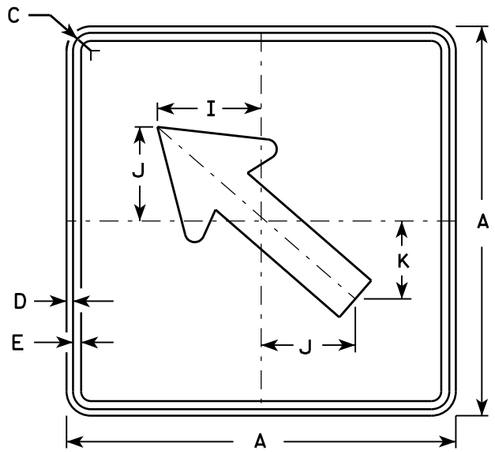
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 181 | E



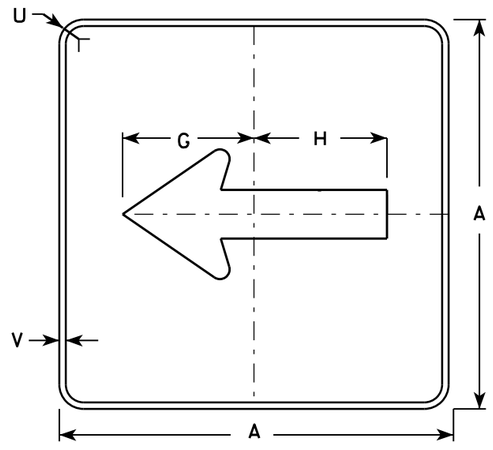
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



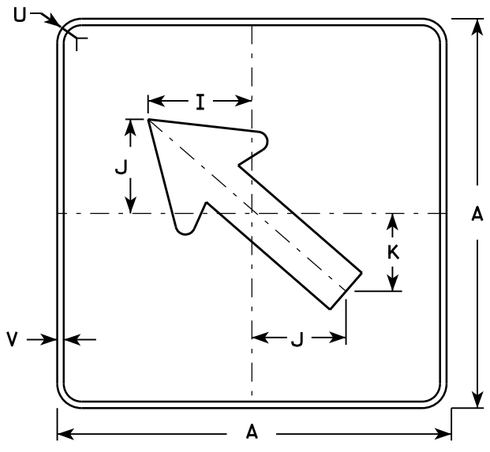
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

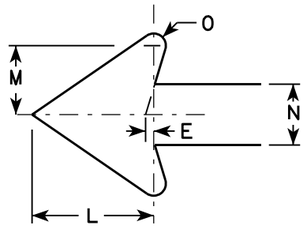
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1



MB6-2



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																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

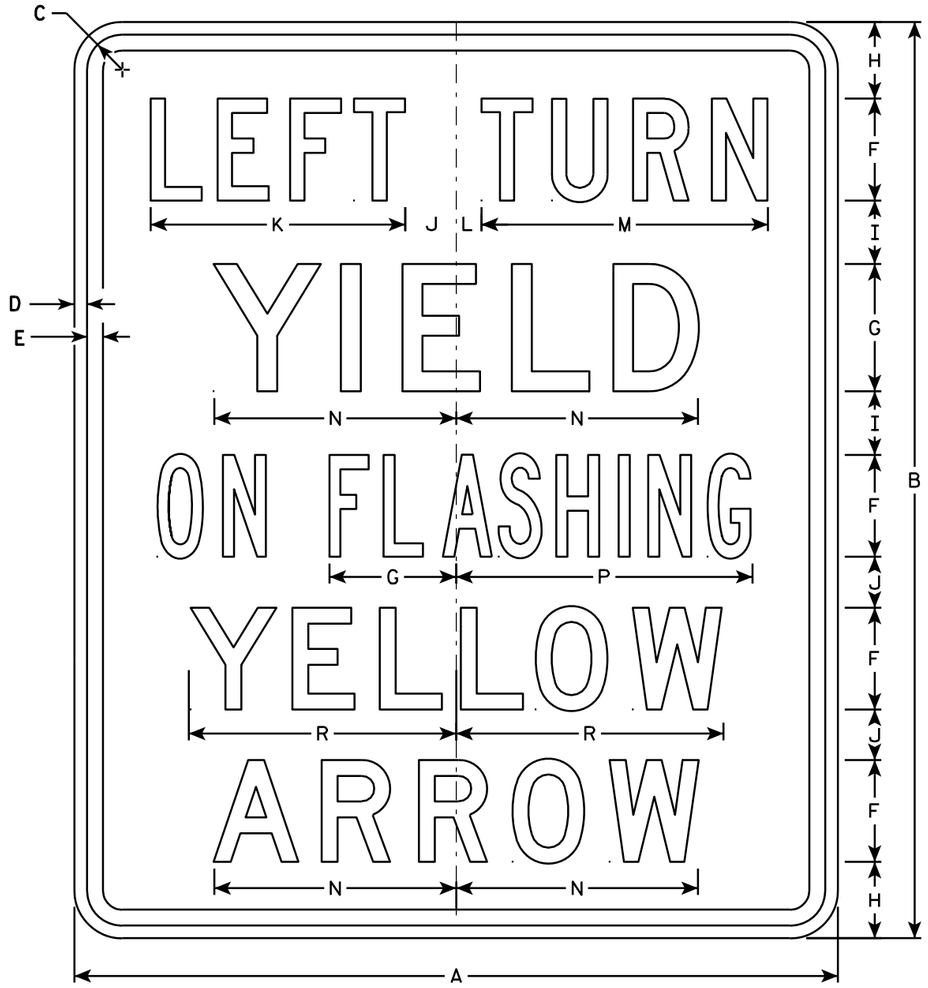
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE 182 M6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

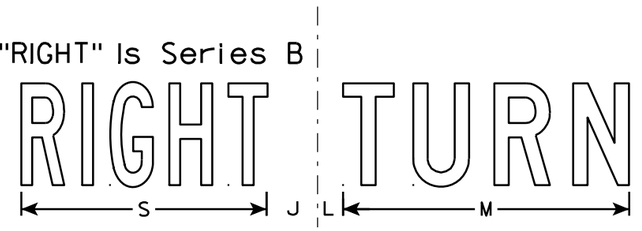


R10-50L

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 - Black
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. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

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																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

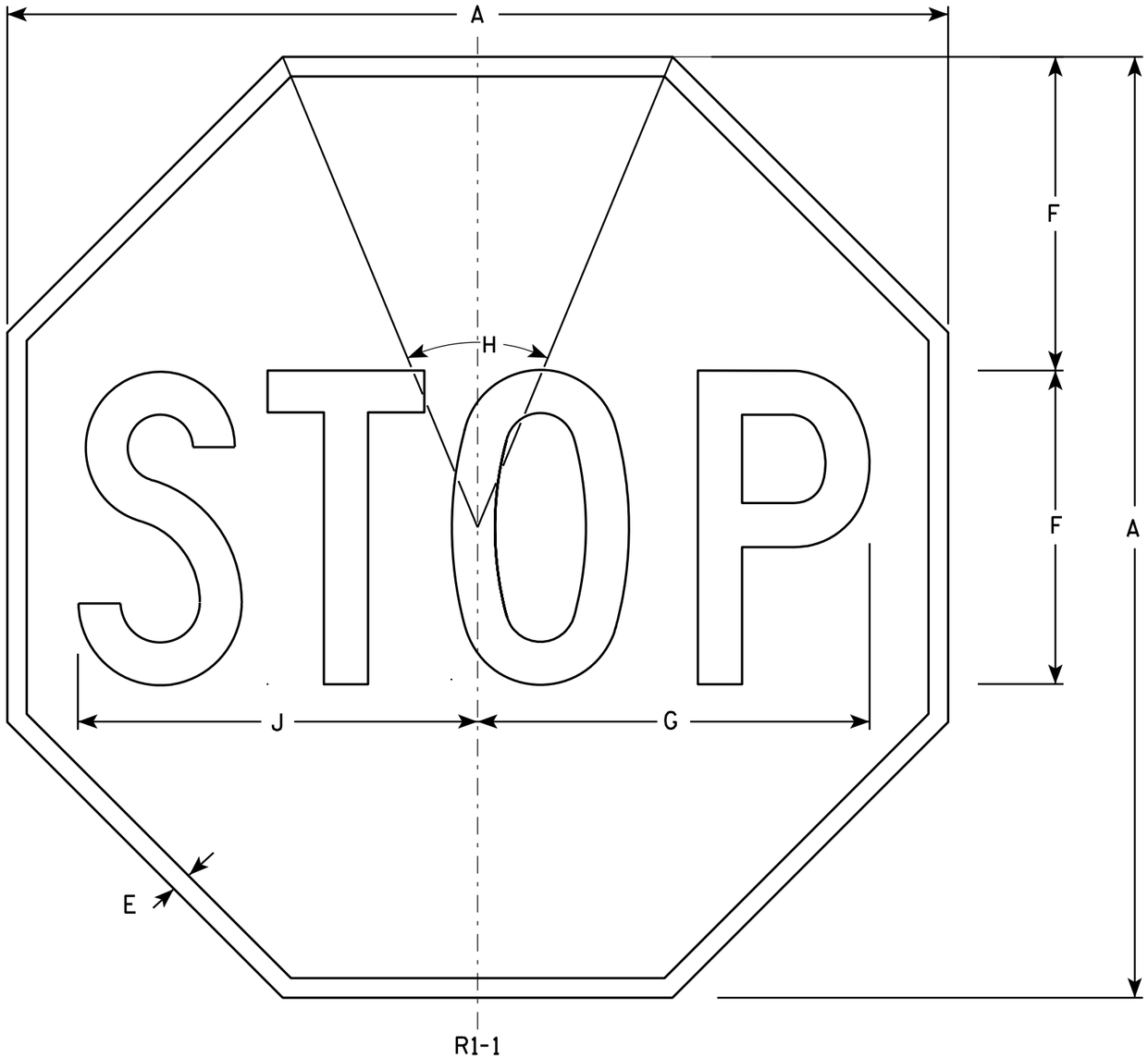
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E



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

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				3/8	8	10	45°		10 1/4																	3.31
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

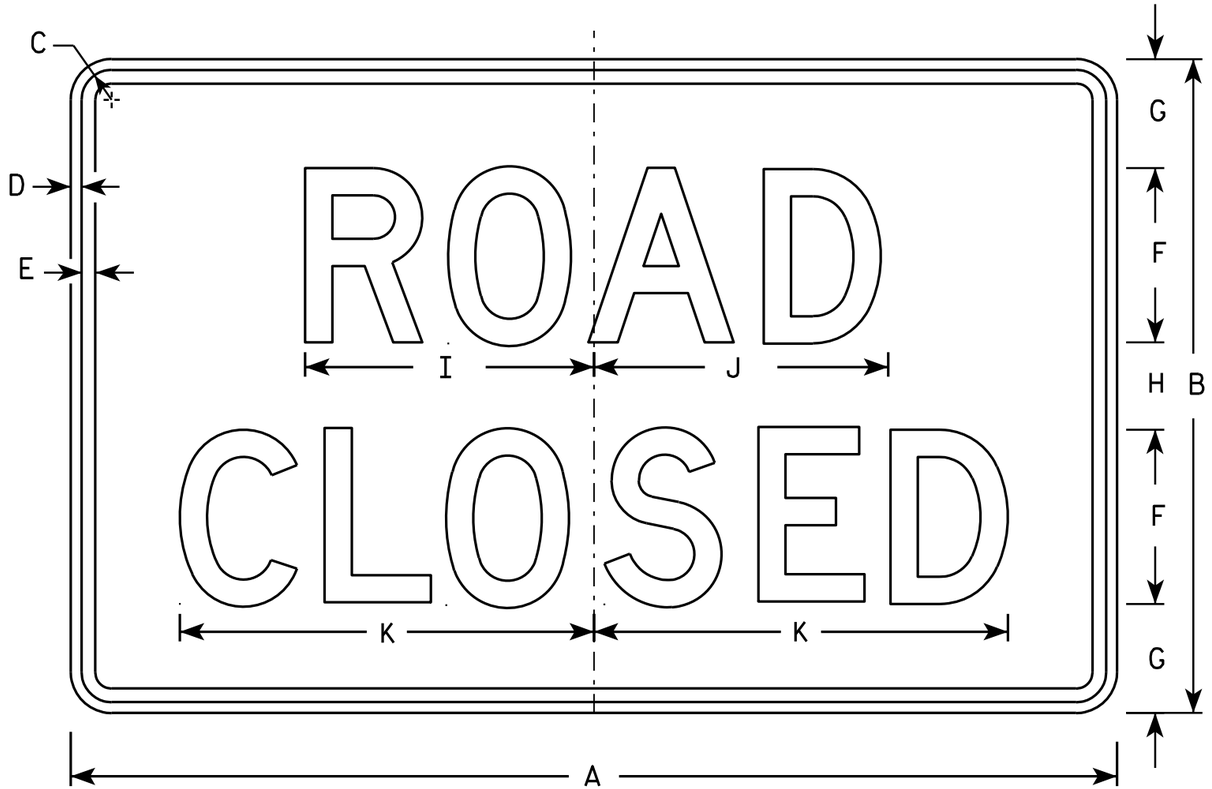
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

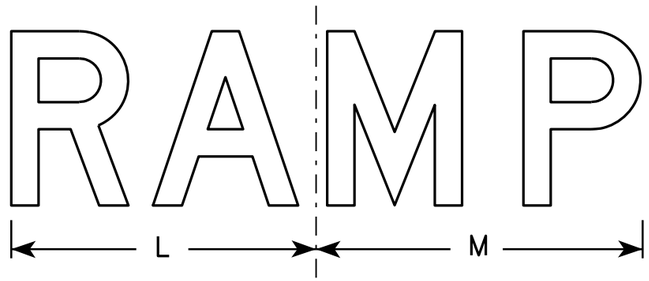
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 184	E



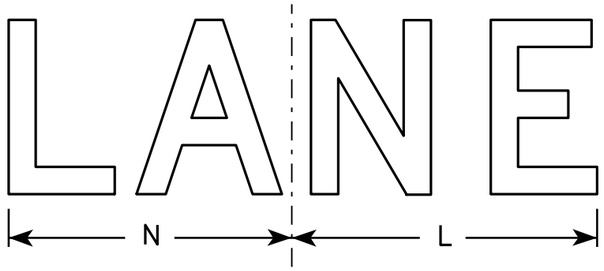
R11-2

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 - 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.
5. Modify the message as required.



R11-2R



R11-2L

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																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

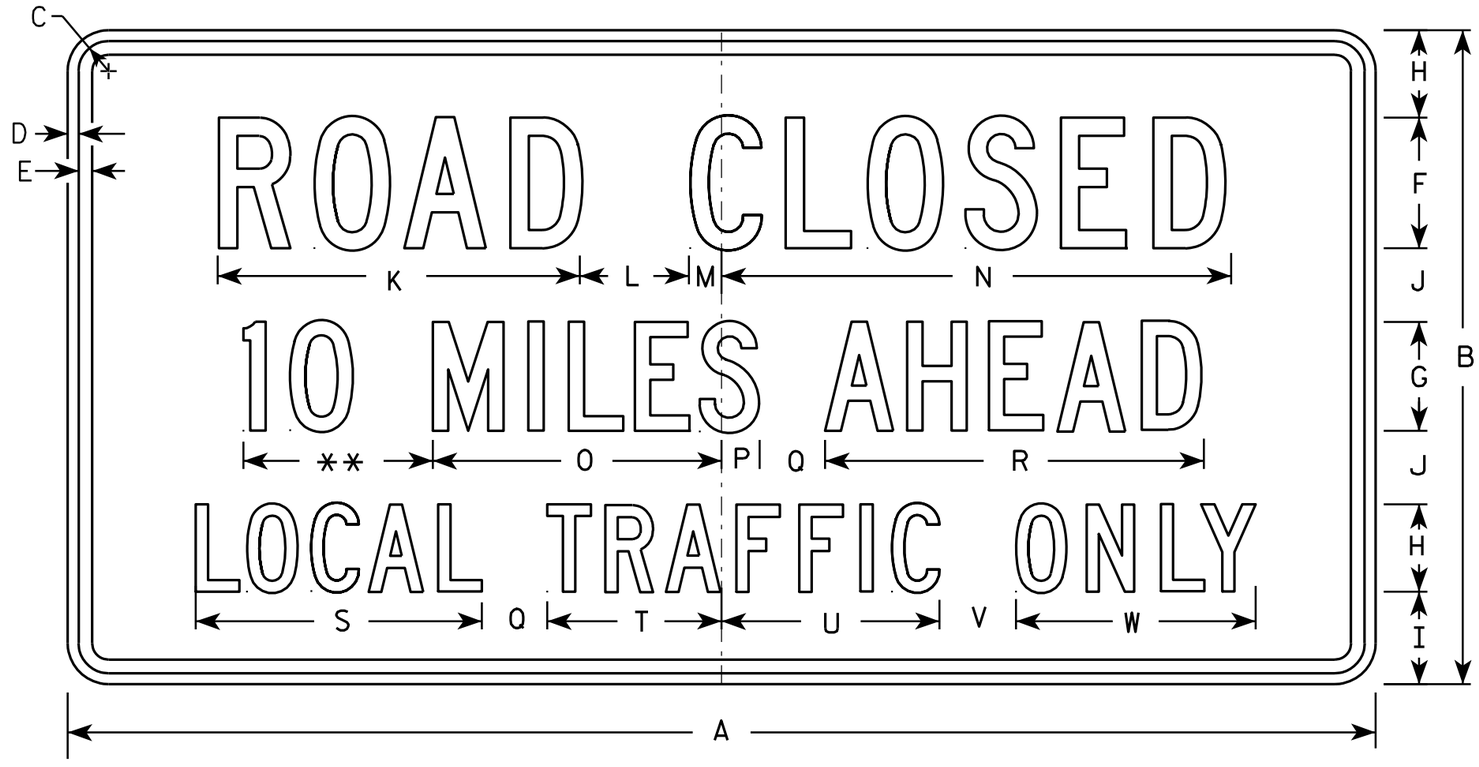
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 185	E



R11-3

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 - Black
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.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 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.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

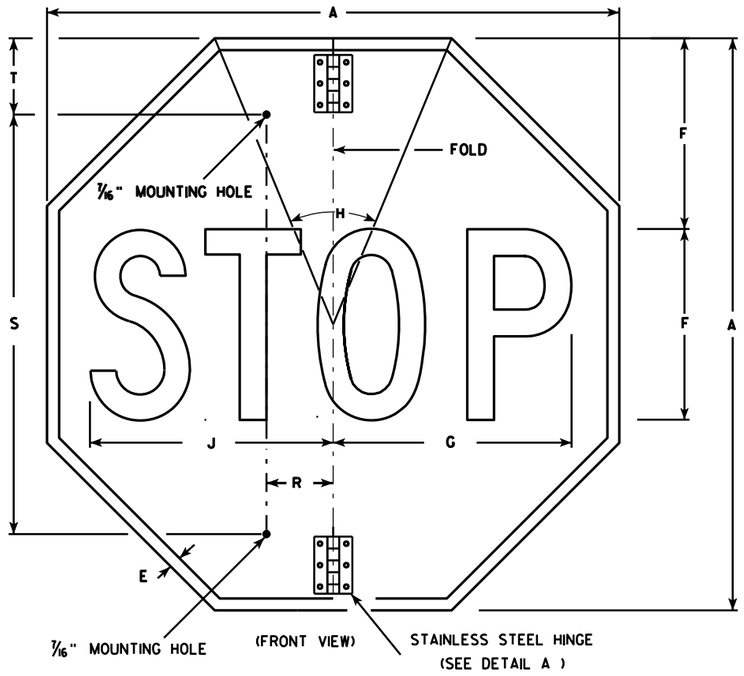
STANDARD SIGN
R11-3

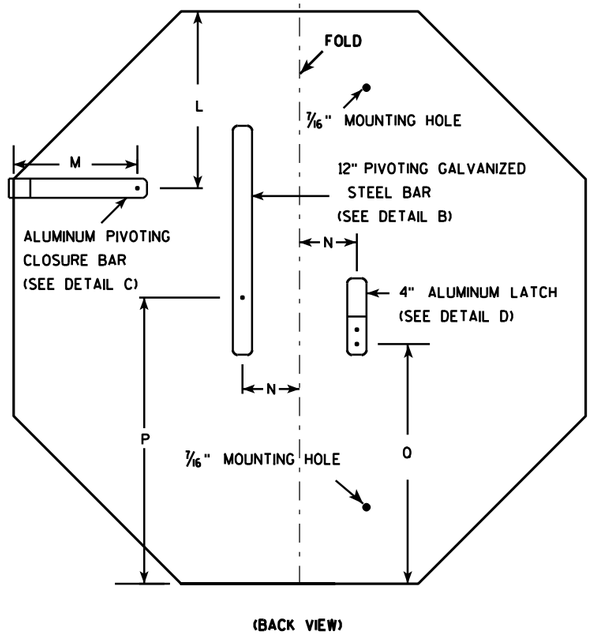
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

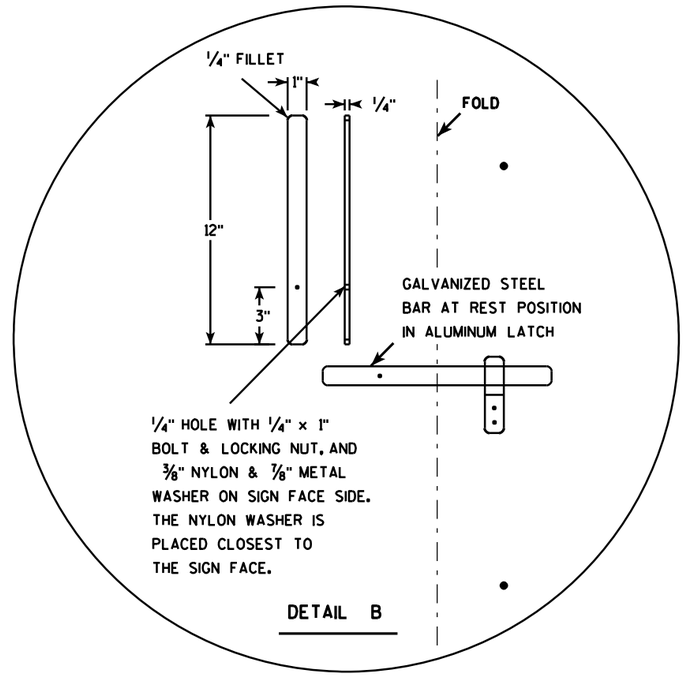
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E



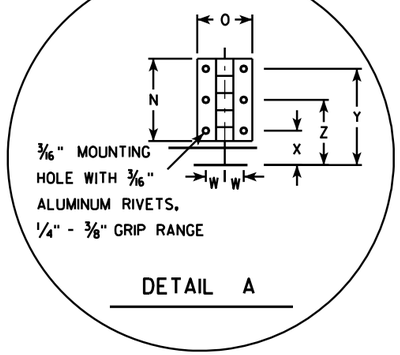


NOTES

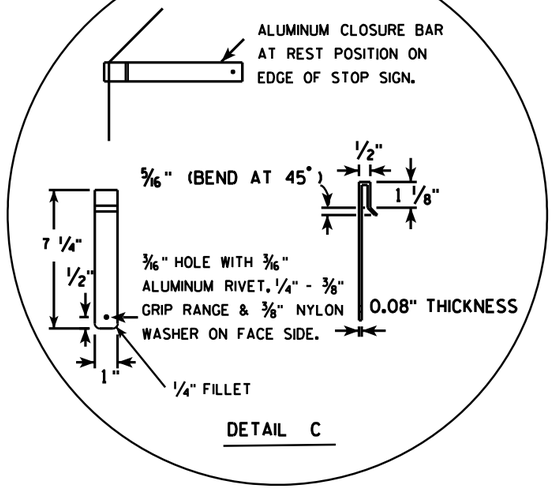
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



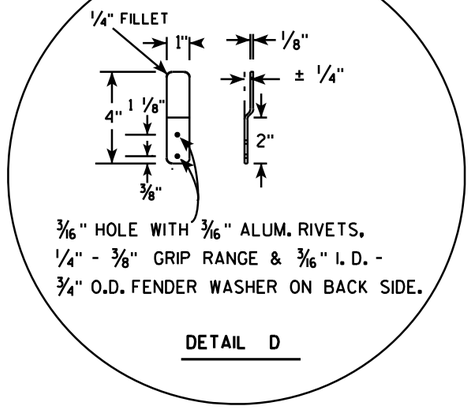
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

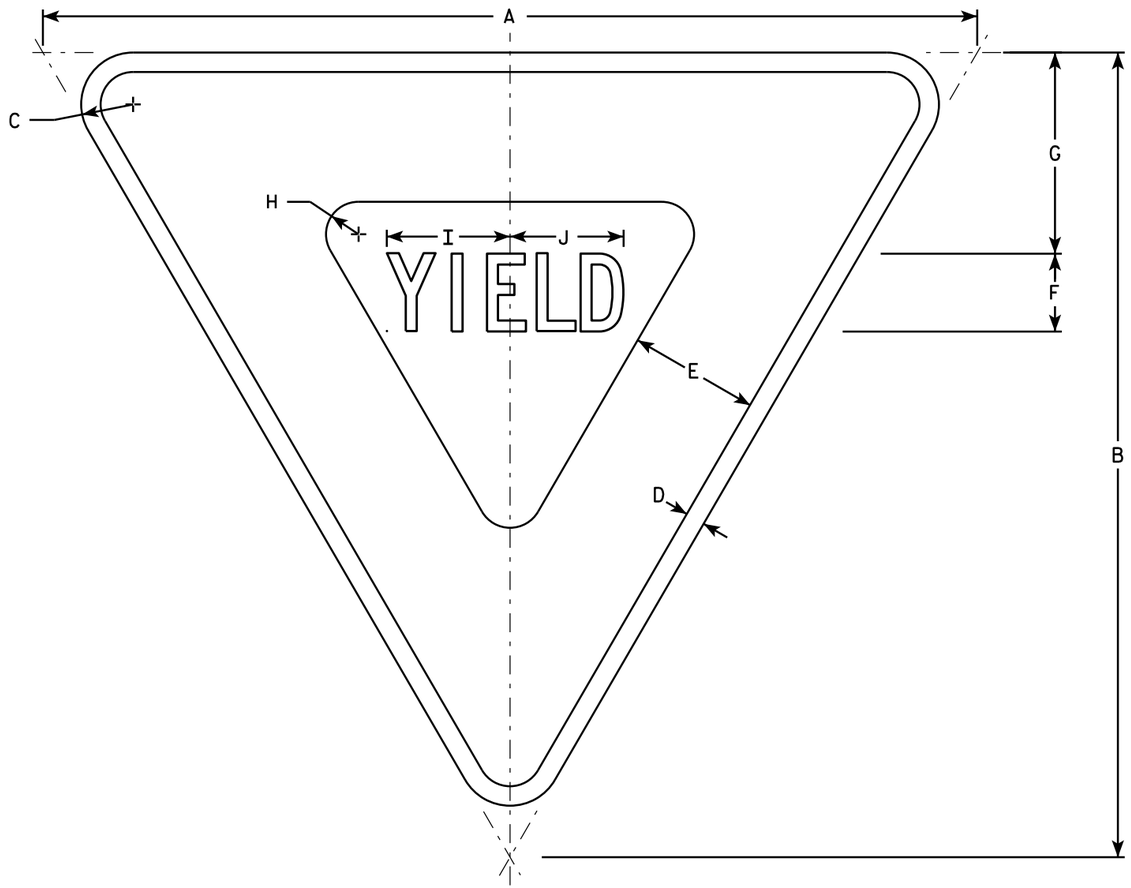
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 187	E



R1-2

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 - See note 5
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.
5. The border strip and word message are reflectorized red.

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	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

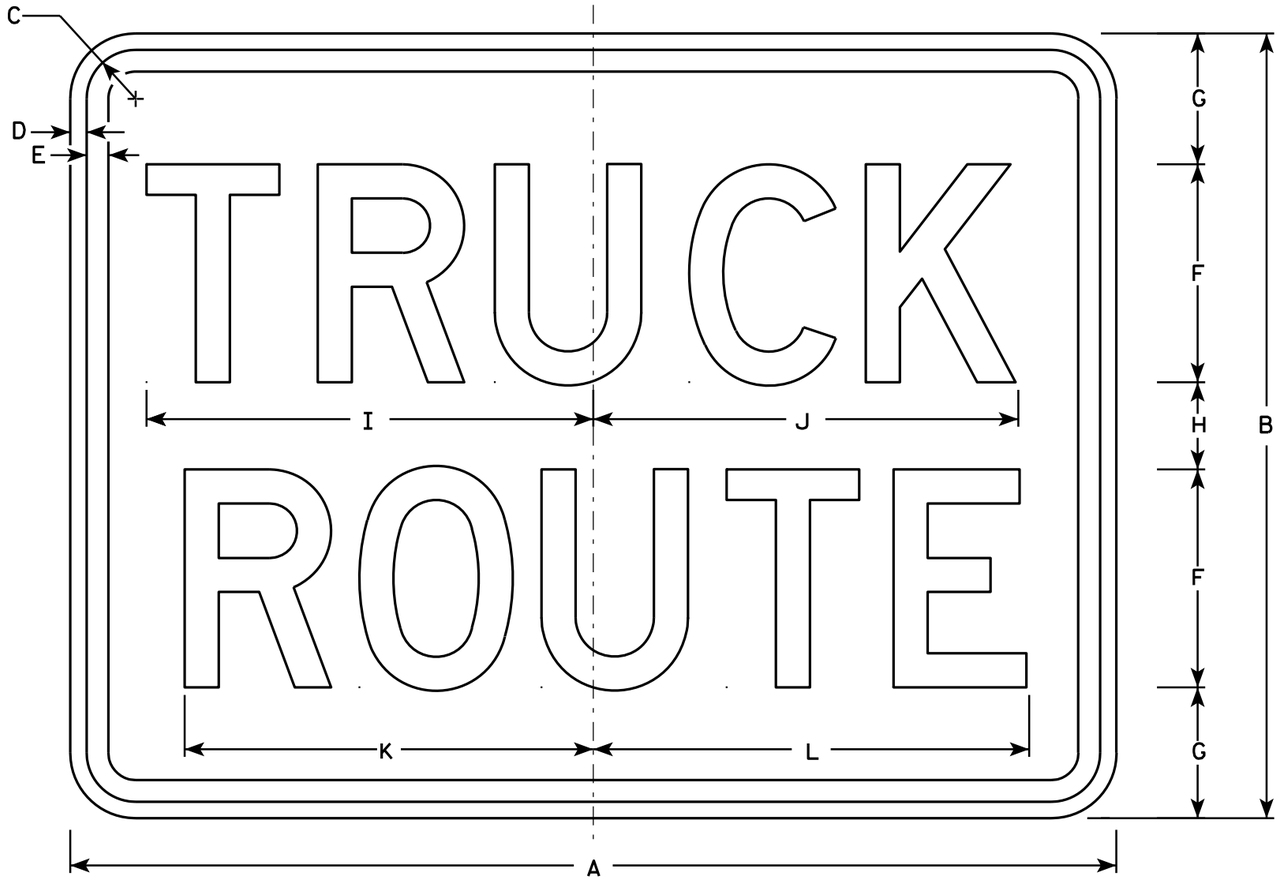
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R14-1

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 - 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.

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																											
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/8	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

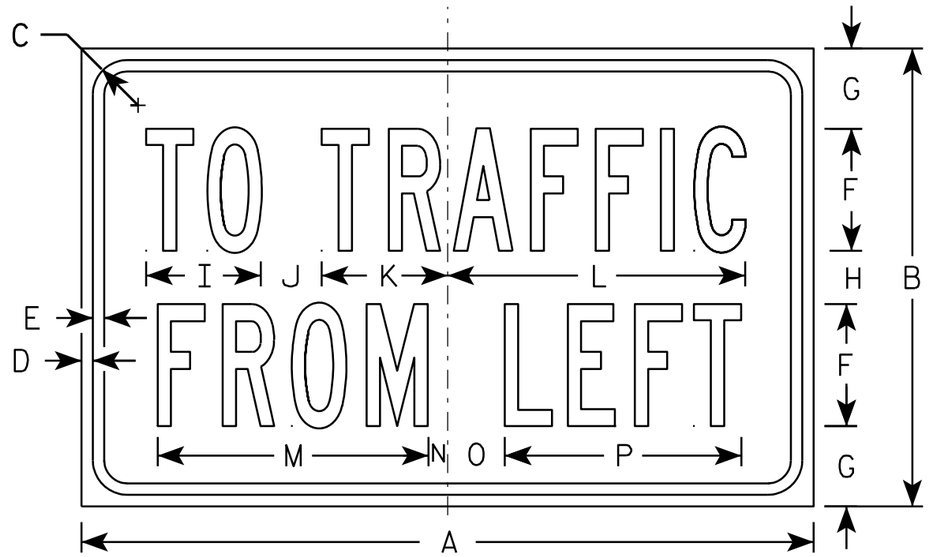
STANDARD SIGN
R14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R14-1.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	E



R1-54

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 - Black
3. Message Series - B

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																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

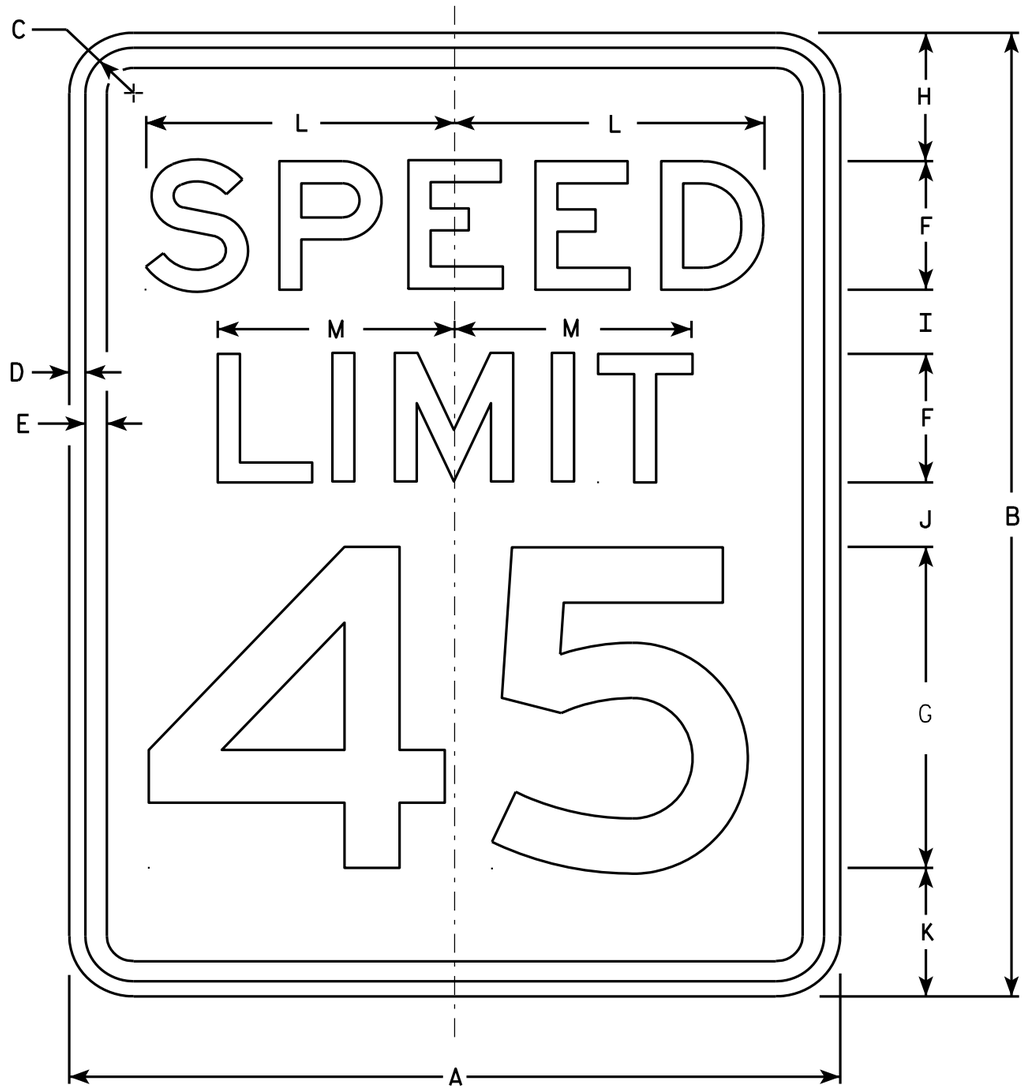
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190	E



R2-1

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 - Black
3. Message Series - E
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. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

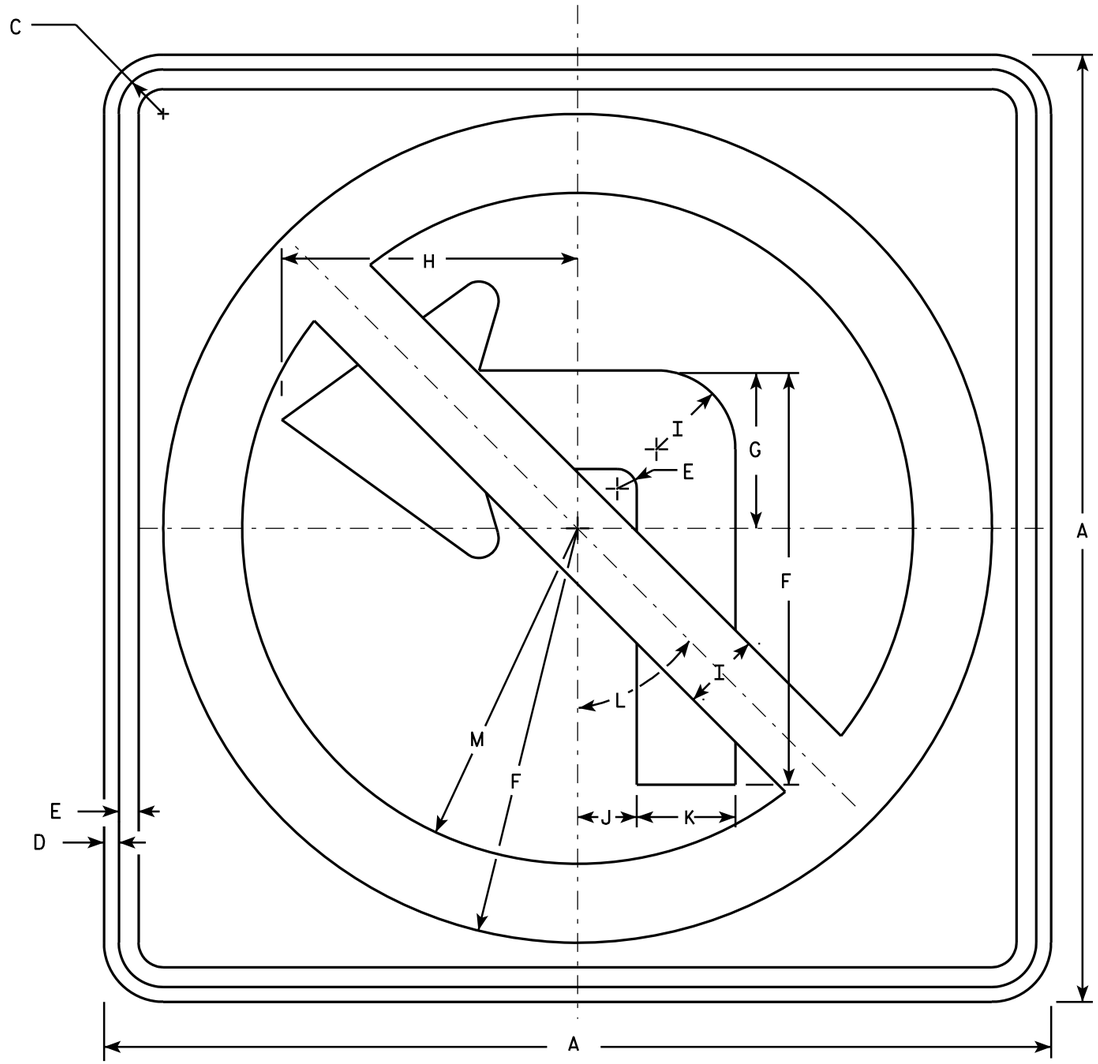
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

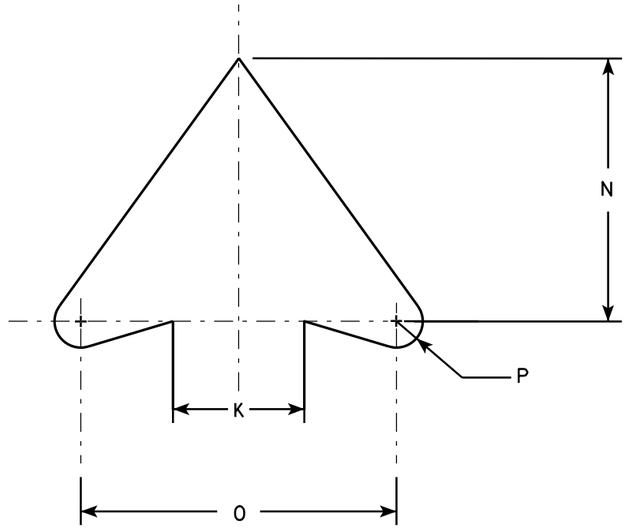
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E



R3-2

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 - See note 4
3. 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.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

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	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

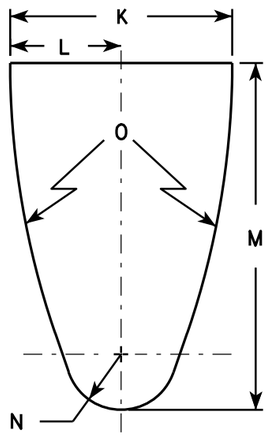
STANDARD SIGN
R3-2

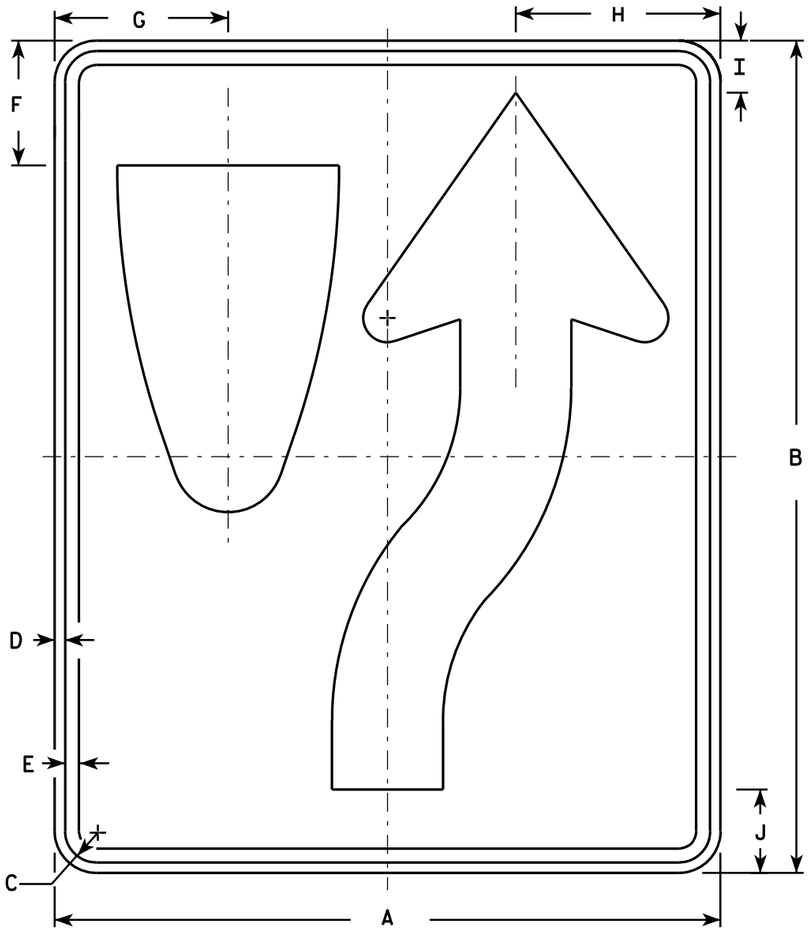
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 192	E

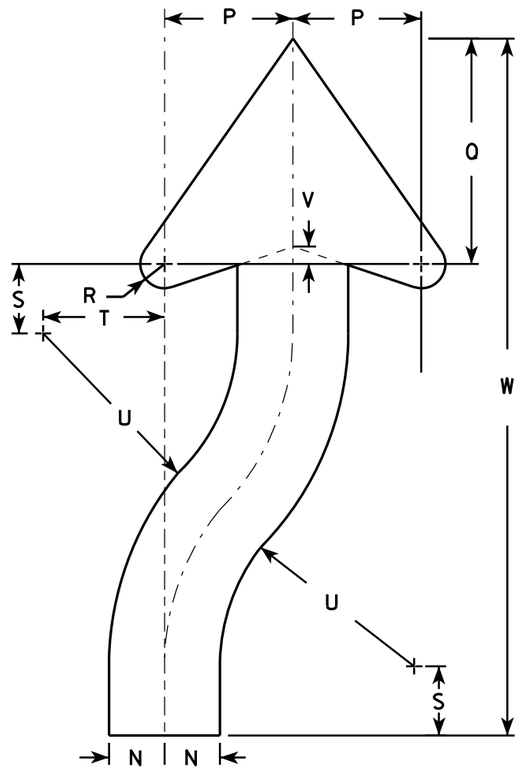




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

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	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

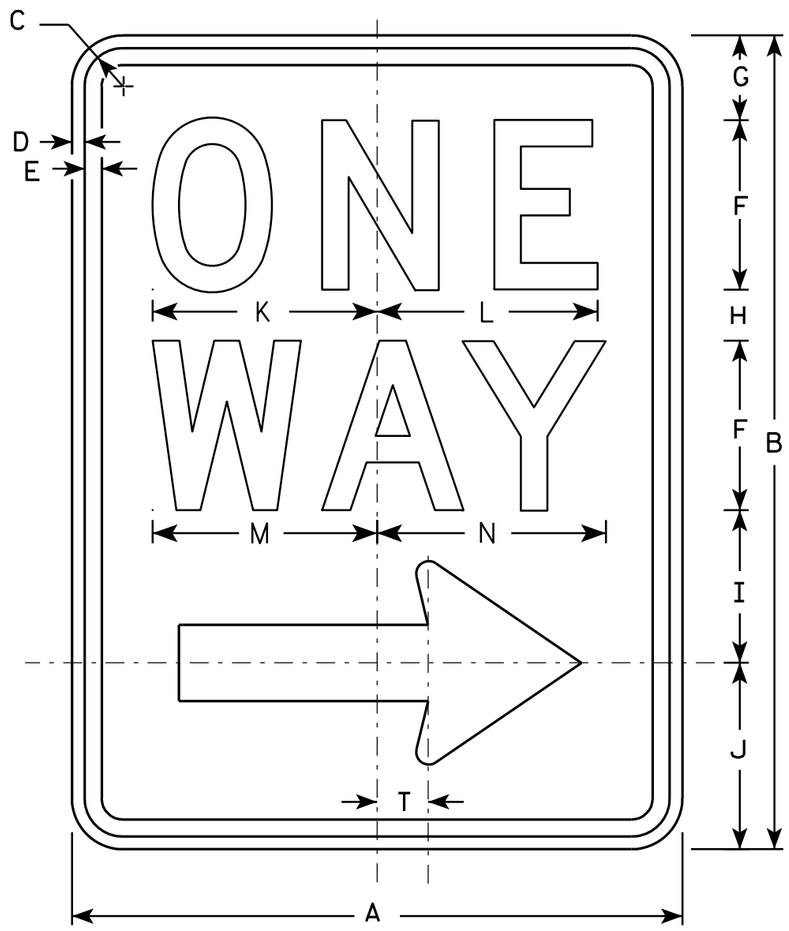
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

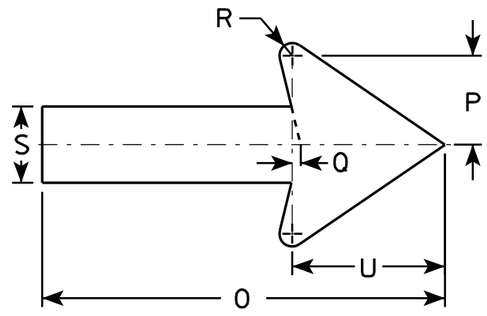
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 193	E



R6-2R

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 - 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.
5. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

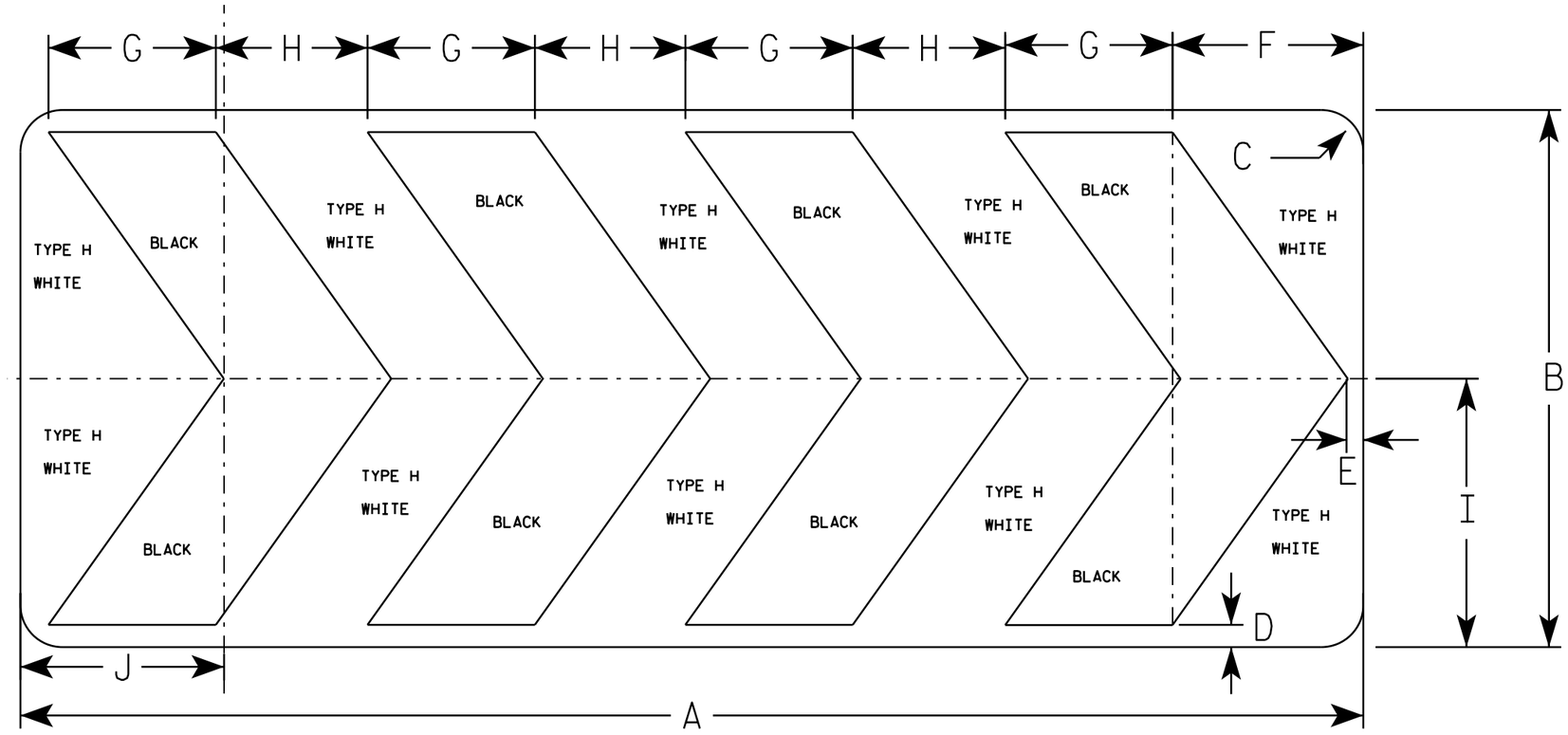
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 194	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. 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.



R6-4B

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																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

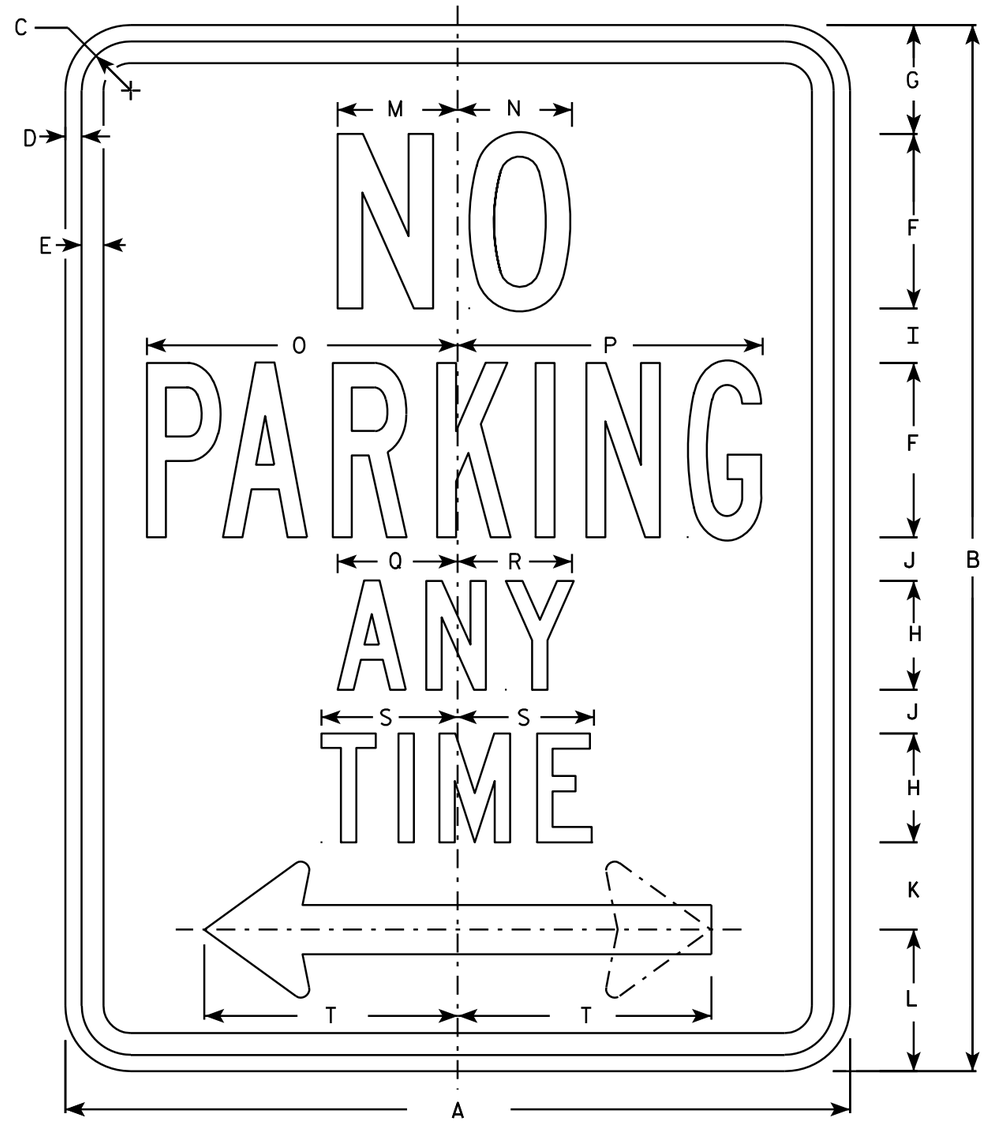
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

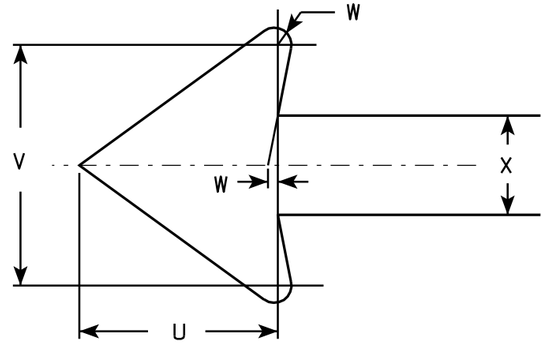
WISDOT/CADDS SHEET 42



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)



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

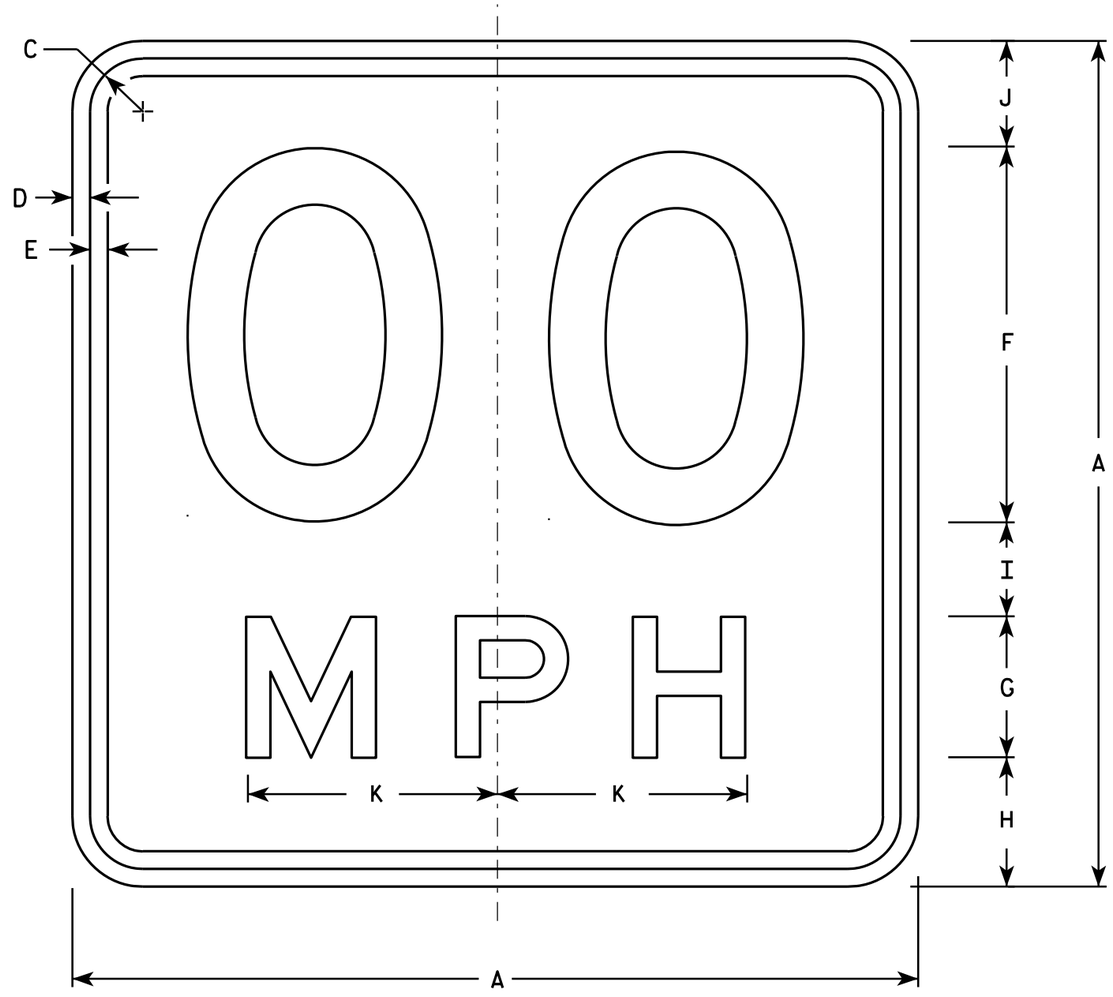
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 196	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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 - See Note 6
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. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	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		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

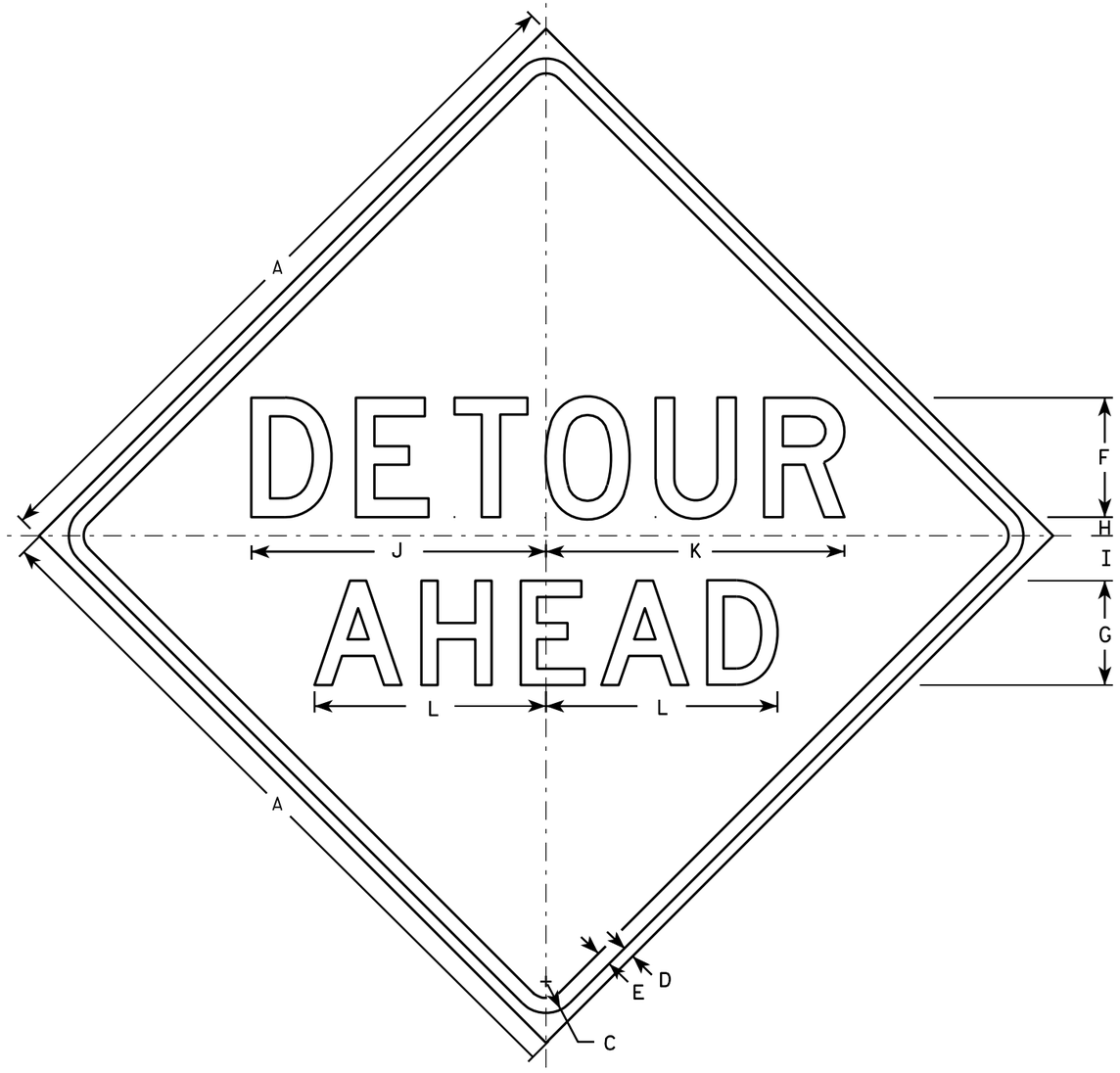
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

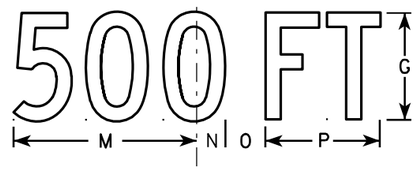
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

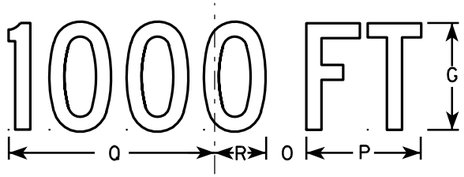
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 197 | E



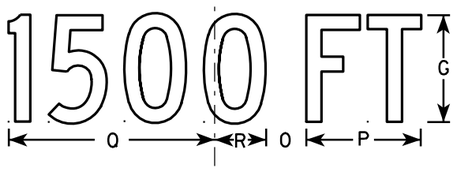
W20-2A



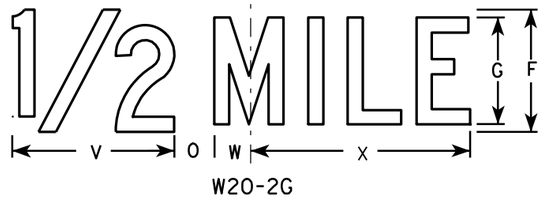
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
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. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

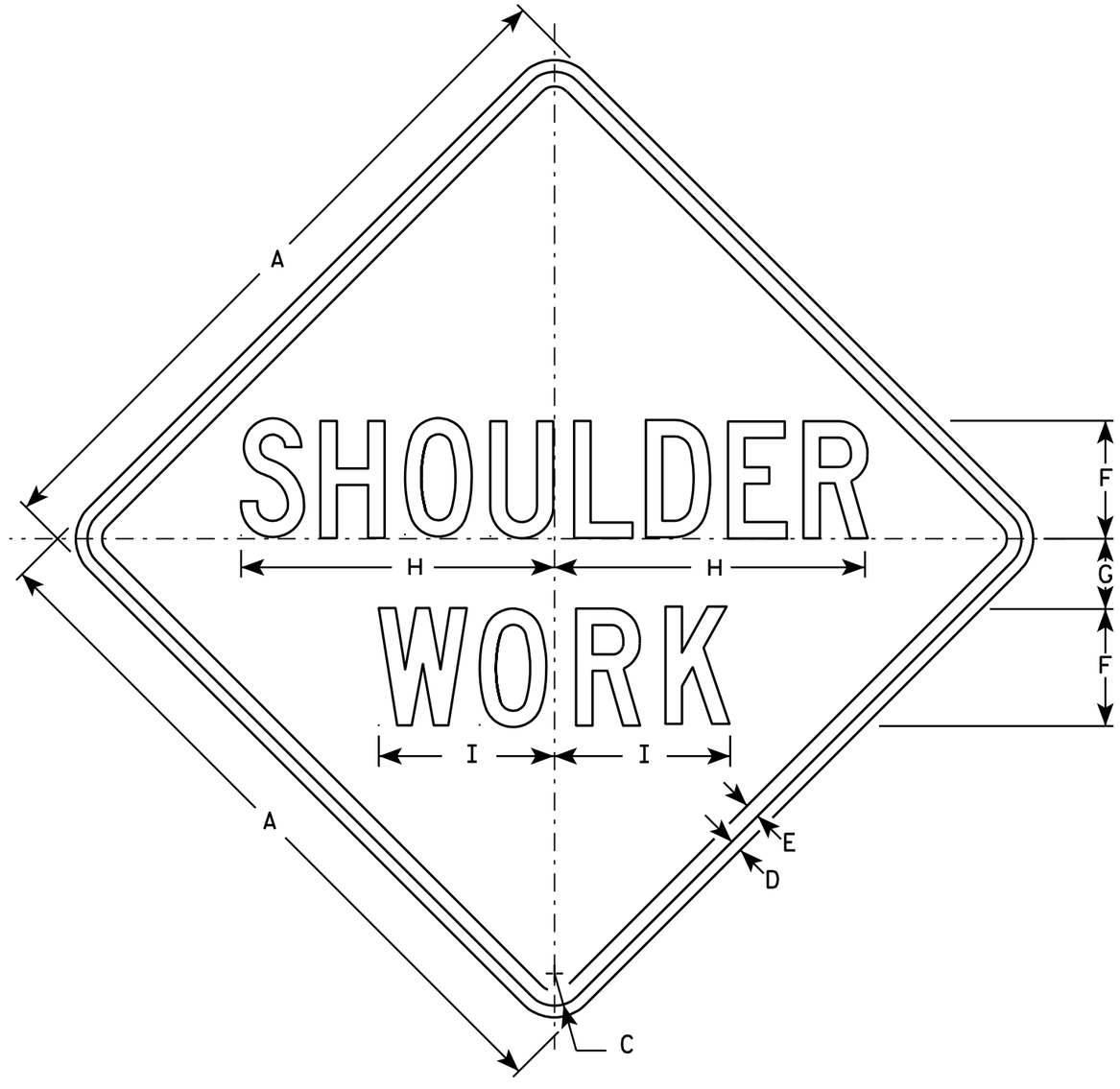
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 198	E



W21-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
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.

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	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

STANDARD SIGN
W21-5

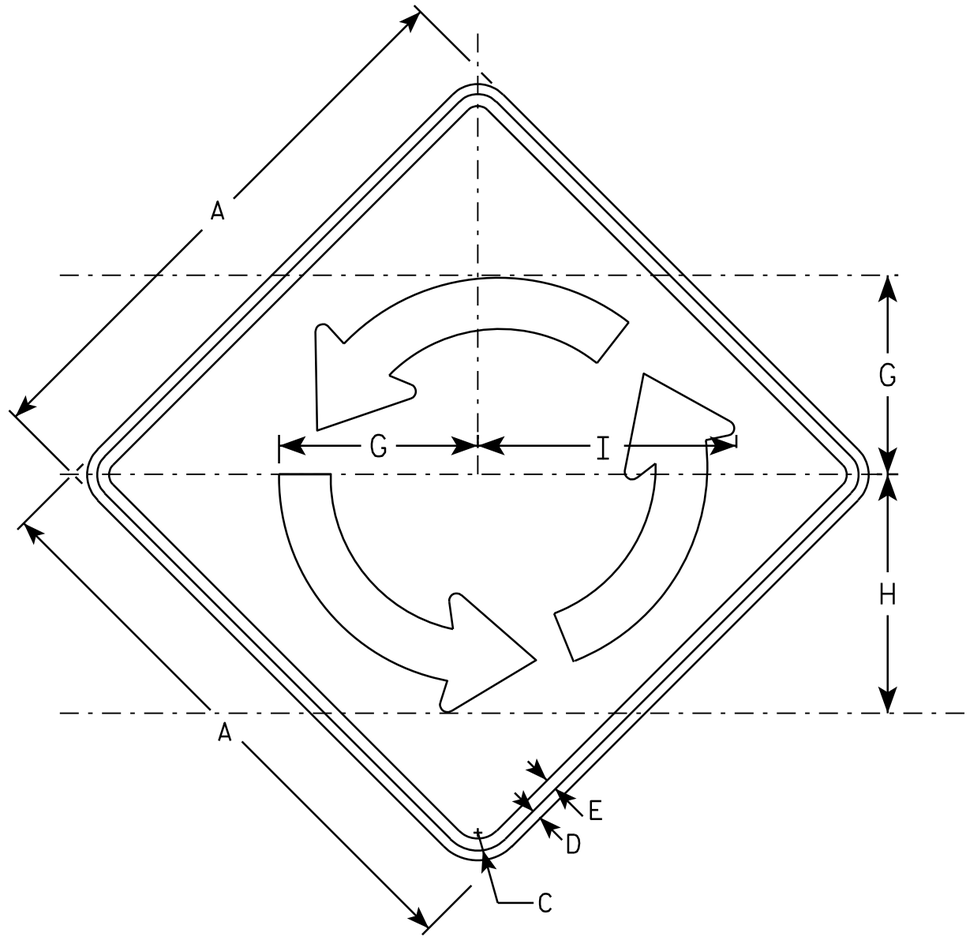
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 199 | E

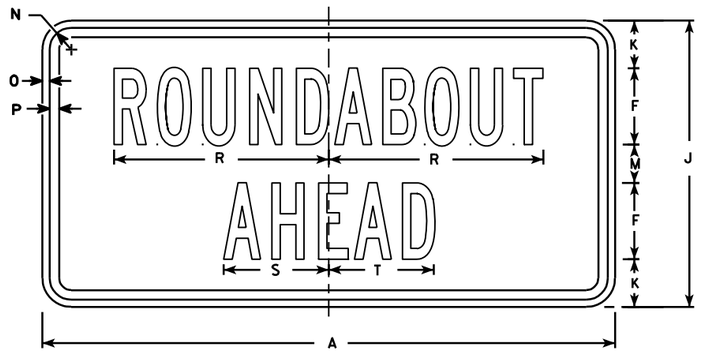
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W215.DGN PLOT DATE : 21-MAR-2011 08:01 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.207338:1.000000
WISDOT/CADDS SHEET 42



W2-6

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 - B
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.



W2-6P

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	W2-6 Area sq. ft.	W2-6P Area sq. ft.
1																										
2S	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
2M	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
3	36		1 5/8	5/8	3/4	5	12 1/2	15	16 1/4	18	2 5/8		2 3/4	1 1/8	3/8	1/2		14	7	6 3/4					9.00	4.50
4	48		2 1/4	3/4	1	6	16 5/8	20	16 1/4	24	4 3/8		3 5/8	1 3/8	1/2	5/8		17	8 1/4	8 1/4					16.0	8.0
5																										

STANDARD SIGN
W2-6

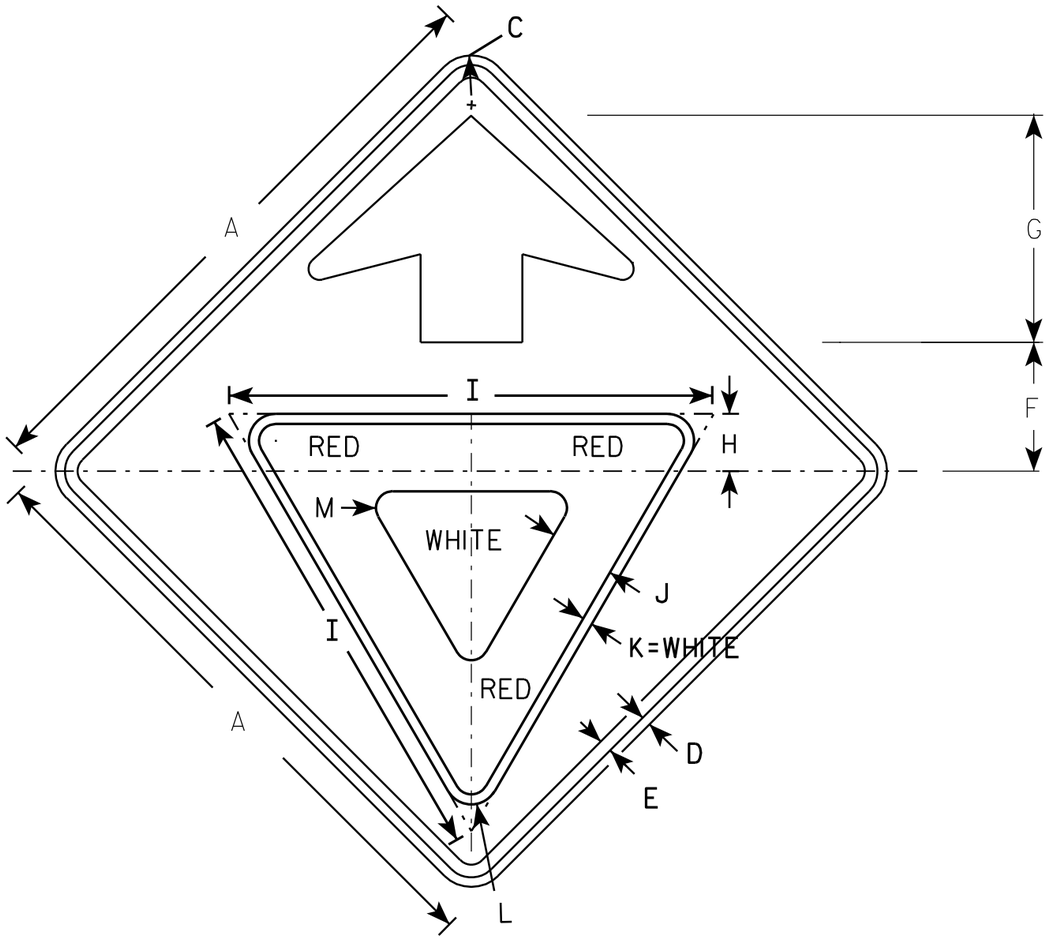
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5

PROJECT NO:

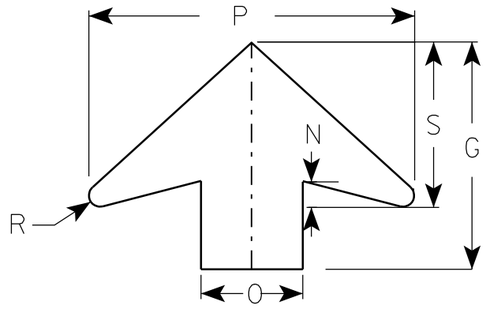
SHEET NO: 200 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

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		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

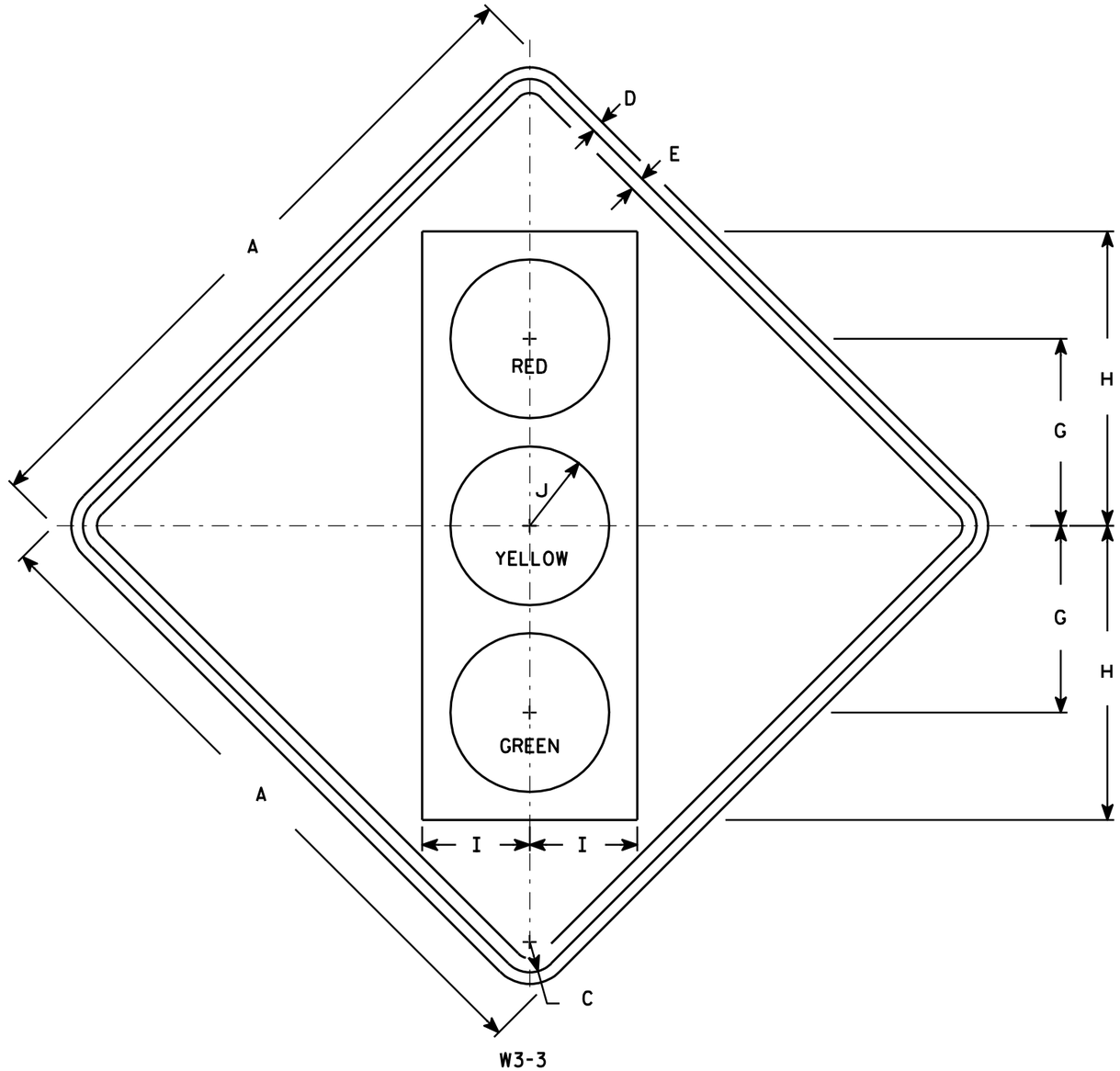
SHEET NO: 201 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W32.DGN PLOT DATE : 07-JUN-2010 13:03 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7



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 - See Note 4
3. 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.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

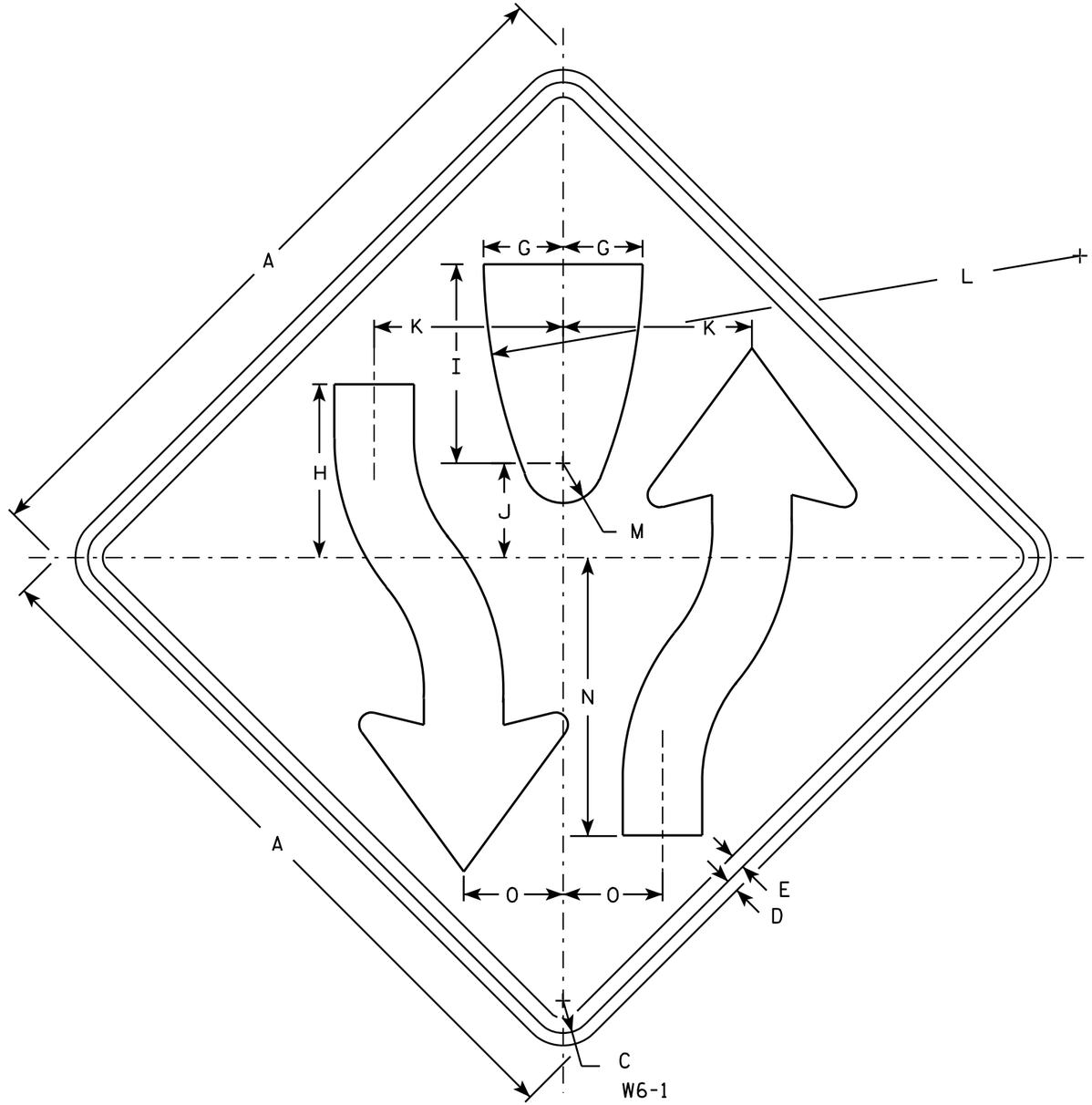
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

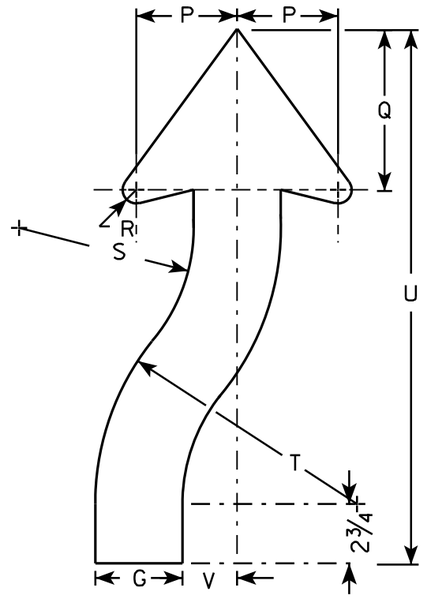
DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | 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. 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.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

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		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

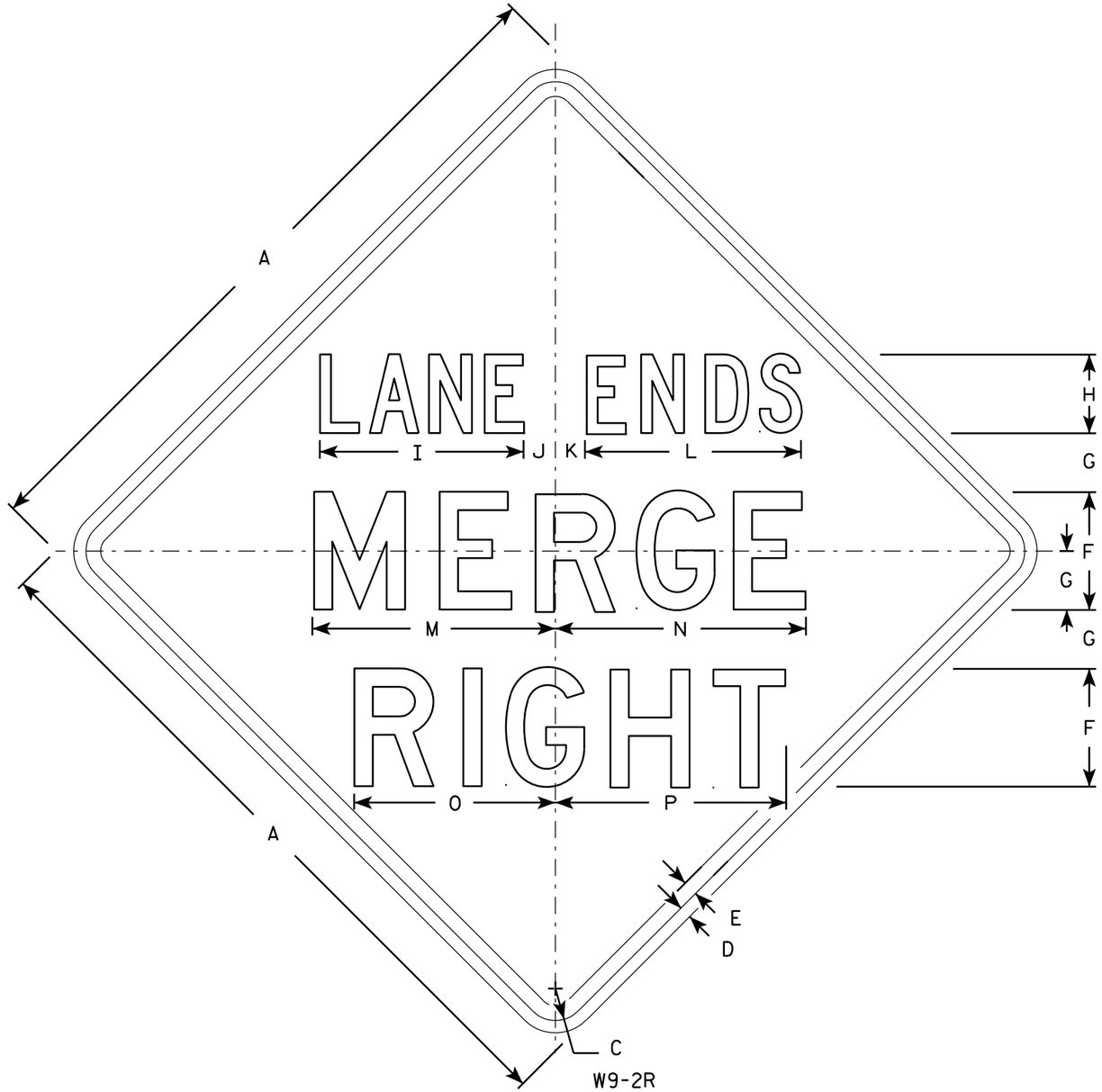
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

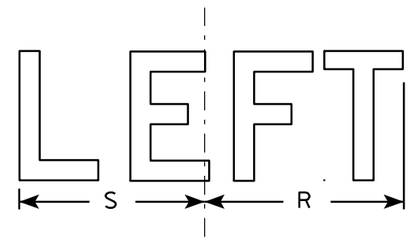
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W9-2R



W9-2L

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 - 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. Line 1 is Series C, lines 2 & 3 are Series D.
6. W9-1L is the same as W9-2R except the word LEFT replaces RIGHT.

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		1 3/8	1/2	5/8	5	2 1/2	3	8	1	1 1/8	8 1/4	10 3/8	10 5/8	8 5/8	9 7/8		7 5/8	7 1/8								6.25
2S	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4		9 1/8	8 1/2								9.0
2M	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4		9 1/8	8 1/2								9.0
3																											
4	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
5	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0

STANDARD SIGN
W9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-2.10

PROJECT NO:

SHEET NO: 204 E

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
196+50.00	0	2.6	3.1	0	0	0	0	0
197+00.00	50.00	1.7	2.5	4	5	4	6	-2
197+50.00	50.00	1.5	2.5	3	5	7	11	-4
197+79.43	29.43	11.4	0.0	7	1	14	12	2
198+00.00	20.57	0.6	3.3	5	1	19	14	5
198+50.00	50.00	0.0	9.8	1	12	19	27	-8
198+78.59	28.59	14.0	0.0	7	5	27	33	-6
199+00.00	21.41	0.0	10.9	6	4	32	37	-5
199+50.00	50.00	0.0	7.4	0	17	32	56	-24
200+00.00	50.00	7.7	16.5	7	22	39	80	-41
200+24.13	24.13	29.6	7.3	17	11	56	92	-36
200+50.00	25.87	92.7	1.9	59	4	114	97	17
201+00.00	50.00	103.7		182	4	296	101	195
201+50.00	50.00	117.4	0.5	205	1	501	102	399
202+00.00	50.00	83.0	0.0	186	0	687	102	584
202+50.00	50.00	83.9	0.0	155	0	841	102	739
202+69.03	19.03	95.9	0.0	63	0	904	102	802
203+00.00	30.97	75.2	0.5	98	0	1003	103	900
203+50.00	50.00	61.8	10.1	127	10	1129	114	1016
204+00.00	50.00	56.5	20.6	110	28	1239	145	1094
204+50.00	50.00	51.8	57.1	100	72	1339	224	1115
205+00.00	50.00	70.6	4.0	113	57	1453	286	1166
205+50.00	50.00	66.4	5.8	127	9	1579	296	1283
205+82.33	32.33	85.2	3.1	91	5	1670	302	1368
206+00.00	17.67	90.9	3.2	58	2	1728	304	1424
206+50.00	50.00	94.9	5.1	172	8	1900	313	1587
207+00.00	50.00	67.4	10.9	150	15	2050	329	1721
207+25.00	25.00	44.1	23.3	52	16	2102	346	1755
207+50.00	25.00	39.6	76.2	39	46	2141	397	1743

2141	361

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut for individual Category
3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within
4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
300+50.00	0.00	44.0	104.5	0	0	0	0	0
301+00.00	50.00	67.0	39.8	103	134	103	147	-44
301+50.00	50.00	81.6	7.3	138	44	240	195	45
301+81.10	31.10	99.4	6.8	104	8	345	204	141
302+00.00	18.90	100.5	7.3	70	5	415	209	205
302+50.00	50.00	102.5	8.6	188	15	603	226	377
303+00.00	50.00	88.7	8.1	177	15	780	243	537
303+50.00	50.00	74.9	6.9	151	14	931	258	673
304+00.00	50.00	70.7	5.0	135	11	1066	270	796
304+50.00	50.00	67.9	6.2	128	10	1194	281	913
305+00.00	50.00	48.9	10.1	108	15	1302	298	1004
305+50.00	50.00	97.5	0.0	136	9	1438	308	1130
305+54.55	4.55	97.4	0.0	16	0	1454	308	1146
306+00.00	45.45	43.0	5.4	118	5	1573	313	1259
306+50.00	50.00	47.9	3.6	84	8	1657	322	1334
307+00.00	50.00	56.3	2.7	96	6	1753	329	1424
307+50.00	50.00	56.8	3.6	105	6	1858	335	1523
307+97.55	47.55	50.8	9.5	95	12	1953	348	1605
308+00.00	2.45	51.3	9.9	5	1	1957	349	1608
308+48.29	48.29	105.5	0.0	140	9	2097	359	1739

2097	326

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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

9

9

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
399+00.00	0.00	9.3	0.0	0	0	0	0	0
399+50.00	50.00	0.1	6.4	9	6	9	7	2
400+00.00	50.00	0.5	4.5	1	10	9	18	-8
400+50.00	50.00	53.6	3.8	50	8	59	26	33
400+67.00	17.00	51.8	3.2	33	2	93	28	64
401+00.00	33.00	43.9	5.0	58	5	151	34	117
401+50.00	50.00	34.5	10.0	73	14	224	49	174
401+68.00	18.00	41.8	0.0	25	3	249	53	196
402+00.00	32.00	23.1	0.0	38	0	288	53	235
402+50.00	50.00	24.7	0.0	44	0	332	53	279
403+00.00	50.00	12.9	0.0	35	0	367	53	314
403+50.00	50.00	106.7	77.4	111	72	477	132	346
404+00.00	50.00	127.3	102.3	217	166	694	315	379
404+50.00	50.00	155.4	105.9	262	193	956	527	429
404+55.00	5.00	159.2	103.6	29	19	985	548	437
405+00.00	45.00	174.8	86.5	278	158	1263	722	541
405+50.00	50.00	174.5	65.9	323	141	1587	878	709
405+85.29	35.29	164.7	52.0	222	77	1808	962	846
406+00.00	14.71	159.8	47.3	88	27	1897	992	905
406+50.00	50.00	137.9	51.9	276	92	2172	1093	1079
407+00.00	50.00	121.2	82.9	240	125	2412	1231	1182

2412	1119

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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
500+50.00	0.00	29.5	135.1	0	0	0	0	0
501+00.00	50.00	26.3	80.7	52	200	52	220	-168
501+50.00	50.00	24.7	31.6	47	104	99	334	-235
501+91.65	41.65	24.9	28.8	38	47	137	385	-248
502+00.00	8.35	24.0	29.9	8	9	145	395	-251
502+50.00	50.00	20.8	34.3	41	59	186	461	-275
503+00.00	50.00	18.4	45.1	36	74	222	542	-319
503+50.00	50.00	17.6	48.4	33	87	256	637	-381
504+00.00	50.00	23.0	42.0	38	84	293	729	-436
504+50.00	50.00	21.1	45.0	41	81	334	818	-483
505+00.00	50.00	18.0	25.3	36	65	370	889	-519
505+50.00	50.00	13.9	29.4	30	51	400	945	-545
506+00.00	50.00	25.2	16.0	36	42	436	991	-555
506+50.00	50.00	26.3	11.2	48	25	484	1019	-535
507+00.00	50.00	32.1	9.3	54	19	538	1040	-502
507+50.00	50.00	39.5	4.3	66	13	604	1054	-449
508+00.00	50.00	47.5	0.9	81	5	685	1059	-374
508+42.82	42.82	46.6	0.8	75	1	759	1060	-301

759	964

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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

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FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090101_ew.dgn PLOT DATE : 11/4/2014 PLOT TIME : 10:24:59 AM PLOT BY : clm1
WISDOT/CADDS SHEET 49

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
500+50.00	0.00	29.5	135.1	0	0	0	0	0
501+00.00	50.00	26.3	80.7	52	200	52	220	-168
501+50.00	50.00	24.7	31.6	47	104	99	334	-235
501+91.65	41.65	24.9	28.8	38	47	137	385	-248
502+00.00	8.35	24.0	29.9	8	9	145	395	-251
502+50.00	50.00	20.8	34.3	41	59	186	461	-275
503+00.00	50.00	18.4	45.1	36	74	222	542	-319
503+50.00	50.00	17.6	48.4	33	87	256	637	-381
504+00.00	50.00	23.0	42.0	38	84	293	729	-436
504+50.00	50.00	21.1	45.0	41	81	334	818	-483
505+00.00	50.00	18.0	25.3	36	65	370	889	-519
505+50.00	50.00	13.9	29.4	30	51	400	945	-545
506+00.00	50.00	25.2	16.0	36	42	436	991	-555
506+50.00	50.00	26.3	11.2	48	25	484	1019	-535
507+00.00	50.00	32.1	9.3	54	19	538	1040	-502
507+50.00	50.00	39.5	4.3	66	13	604	1054	-449
508+00.00	50.00	47.5	0.9	81	5	685	1059	-374
508+42.82	42.82	46.6	0.8	75	1	759	1060	-301

759	964

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

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Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
2002+75.40	0.00	38.4	0.0	0	0	0	0	0
2003+00.00	24.60	36.6	0.4	34	0	34	0	34
2003+50.00	50.00	35.9	1.0	67	1	101	2	100
2004+00.00	50.00	32.1	2.0	63	3	164	5	160
2004+50.00	50.00	29.3	4.8	57	6	221	12	210
2005+00.00	50.00	20.3	8.2	46	12	267	25	242
2005+50.00	50.00	13.8	0.0	32	8	299	33	265
2006+00.00	50.00	61.0	45.6	69	42	368	80	288
				368	72			

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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
300050	0.00	37.7	91.0	0	0	0	0	0
300100	50.00	72.7	33.1	102	115	102	126	-24
300150	50.00	130.7	13.6	188	43	291	174	117
300195.47	45.47	138.2	11.0	226	21	517	197	320
300200	4.53	137.5	10.8	23	2	540	199	341
300250	50.00	121.5	10.5	240	20	780	220	559
300300	50.00	103.5	2.5	208	12	988	234	755
300350	50.00	95.2	0.0	184	2	1172	236	936
300400	50.00	63.5	0.0	147	0	1319	236	1083
300450	50.00	47.7	0.0	103	0	1422	236	1186
300500	50.00	41.7	0.0	83	0	1505	236	1269
300550	50.00	47.1	0.0	82	0	1587	236	1351
300556.82	6.82	47.8	0.0	12	0	1599	236	1363
				1599	215			

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4) Estimated EBS quantities are not inlcuded in the Mass Ordinate.

Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
4002+00.00	0.00	58.3	0.0	0	0	0	0	0
4002+50.00	50.00	58.8	0.0	108	0	108	0	108
4003+00.00	50.00	60.4	0.0	110	0	219	0	219
4003+50.00	50.00	53.1	7.3	105	7	324	7	316
4004+00.00	50.00	39.5	10.6	86	17	410	26	384
4004+50.00	50.00	42.6	9.2	76	18	486	46	440
4005+00.00	50.00	38.0	11.7	75	19	560	67	493
4005+50.00	50.00	48.2	28.1	80	37	640	108	532
4006+00.00	50.00	41.2	56.8	83	79	723	194	529
				723	176			

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Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
5000+50.39	0.00	99.1	102.6	0	0	0	0	0
5001+00.00	49.61	86.7	48.9	171	139	171	153	18
5001+50.00	50.00	77.7	10.5	152	55	323	214	109
5002+00.00	50.00	71.0	8.0	138	17	461	232	228
5002+08.54	8.54	70.3	7.9	22	3	483	235	248
5002+50.00	41.46	59.3	8.1	100	12	582	249	334
5003+00.00	50.00	42.0	10.0	94	17	676	267	409
5003+50.00	50.00	40.9	0.0	77	9	753	277	476
5004+00.00	50.00	35.4	0.0	71	0	824	277	546
5004+50.00	50.00	39.4	0.0	69	0	893	277	616
5005+00.00	50.00	41.6	0.0	75	0	968	277	691
5005+35.79	35.79	41.3	0.0	55	0	1023	277	746
				1023	252			

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Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
32+00	0	22.8	0	0	0	0	0	0
32+50	50.00	23.3	0	43	0	43	0	43
33+00	50.00	23.8	0	44	0	86	0	86
33+50	50.00	24.2	0.7	44	1	131	1	130
33+76	25.78	24.6	10.6	23	5	154	7	147
34+00	24.22	25.7	0.9	23	5	177	12	164
34+50	50.00	26.1	1.2	48	2	225	14	210
35+00	50.00	27.1	0	49	1	274	16	258
35+50	50.00	30.5	0	53	0	327	16	311
35+75	25.00	38.8	0	32	0	359	16	344
				359	14			

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Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.10	
41+05	0	33.6	0	0	0	0	0	0
41+50	45.00	33	0	56	0	56	0	56
42+00	50.00	36.7	0	65	0	120	0	120
42+50	50.00	27.4	0	59	0	179	0	179
43+00	50.00	25.6	2.7	49	3	228	3	226
43+41	40.61	25.4	2	38	4	267	7	260
43+50	9.39	22.4	4.2	8	1	275	8	267
44+00	50.00	23.4	0.2	42	4	318	12	305
44+50	50.00	22.6	0	43	0	360	13	348
45+00	50.00	20.9	0	40	0	400	13	388
45+02	2.43	21	0	2	0	402	13	390
				402	11			

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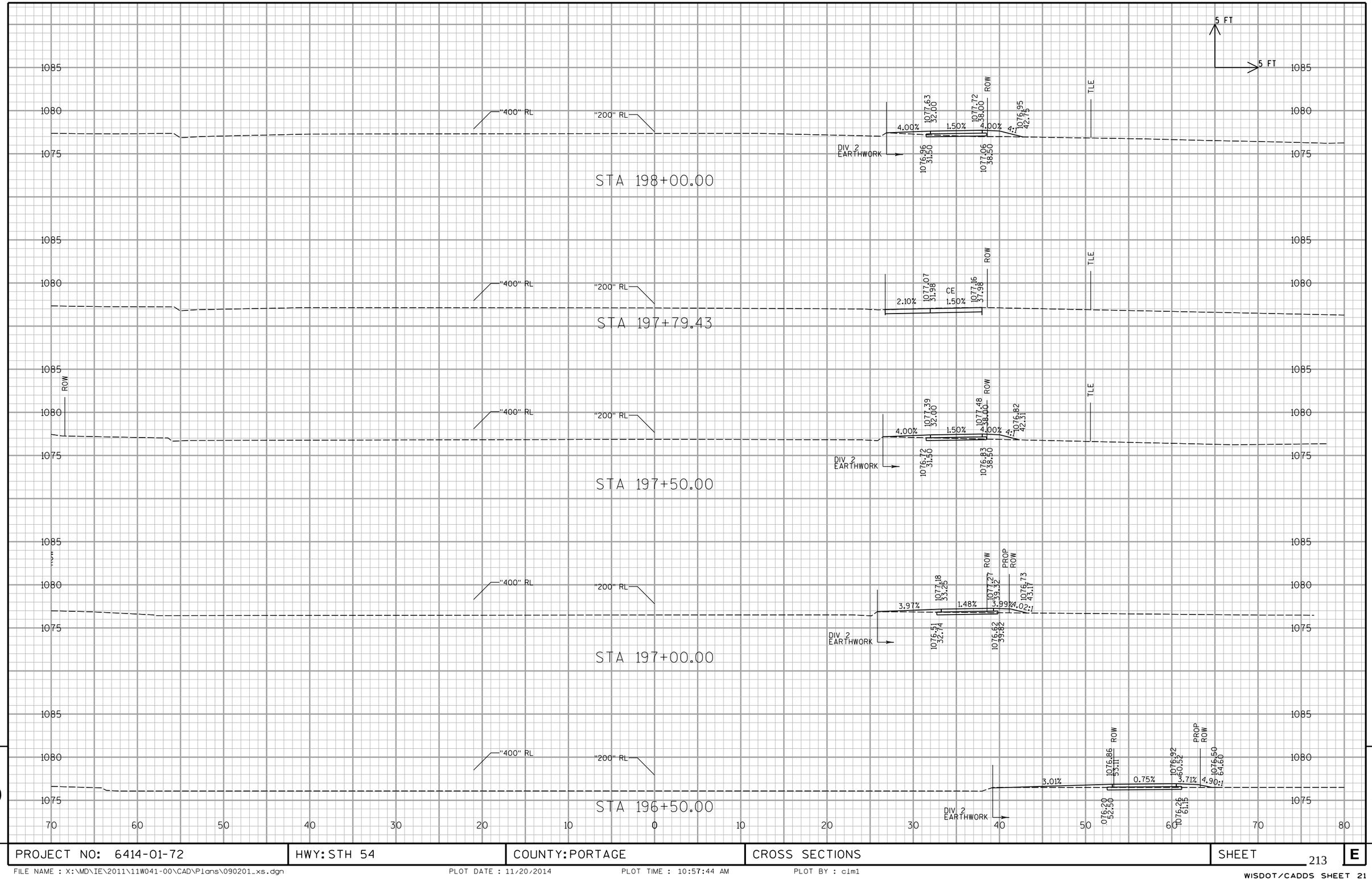
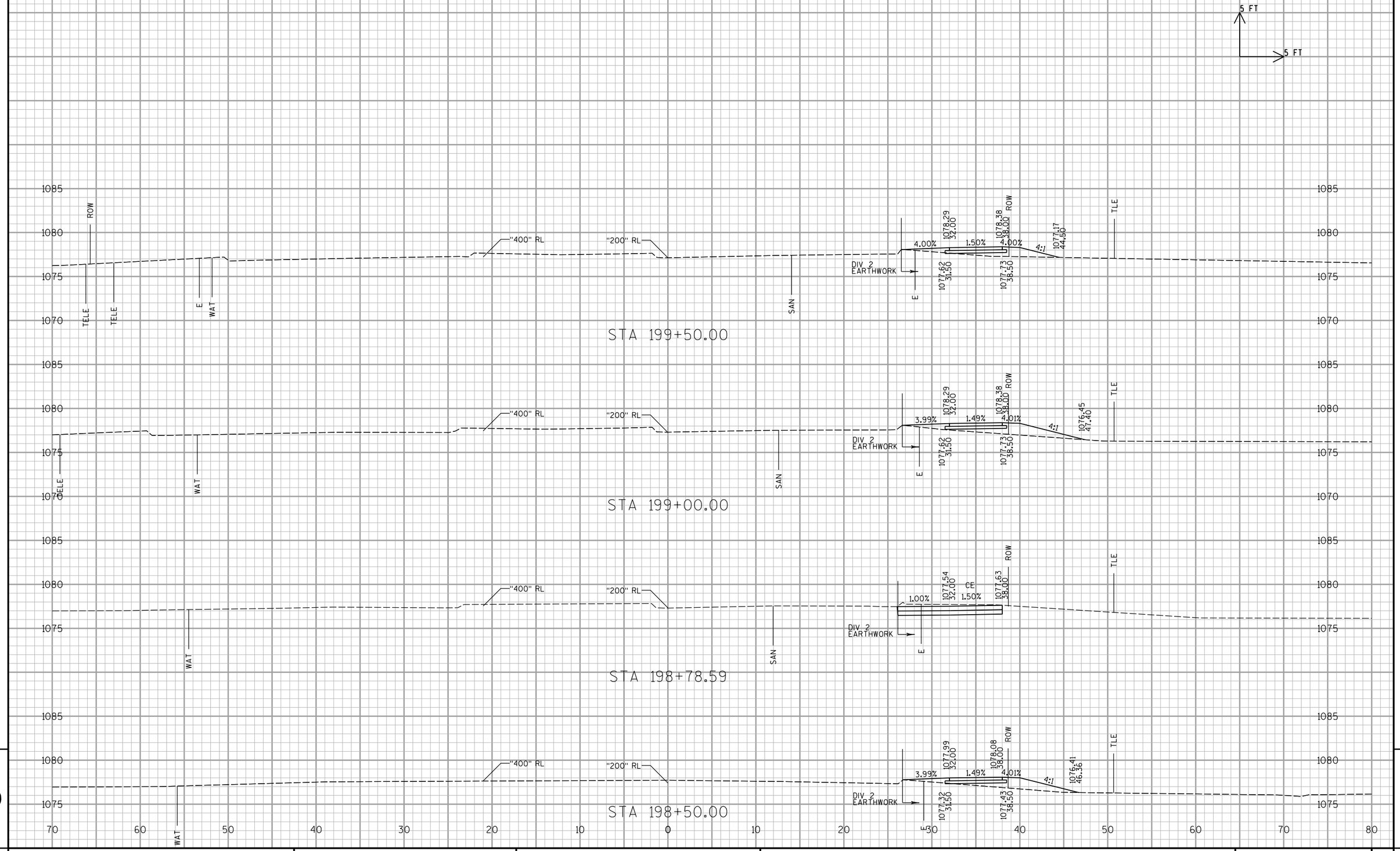


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 213	E



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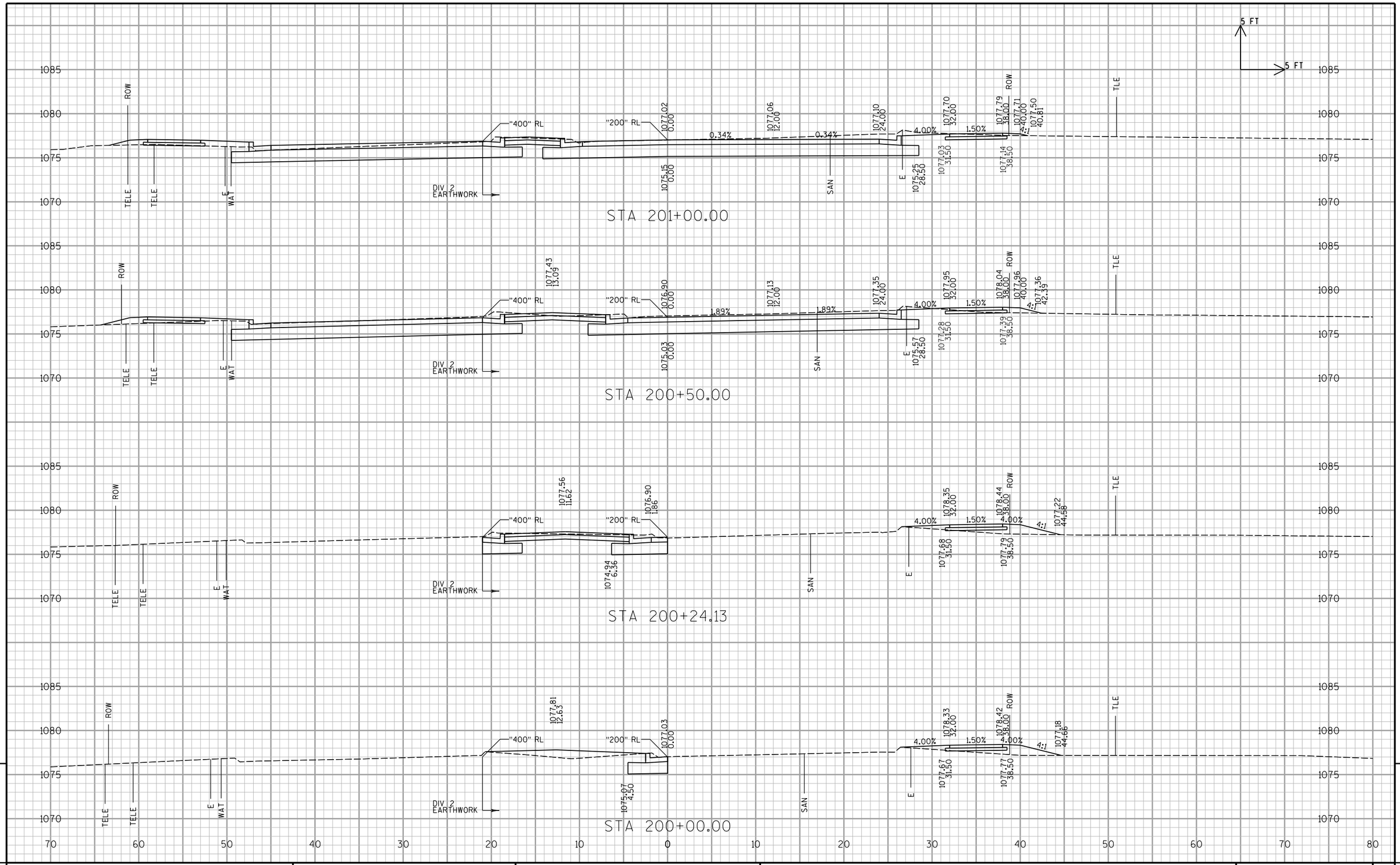
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 214	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:44 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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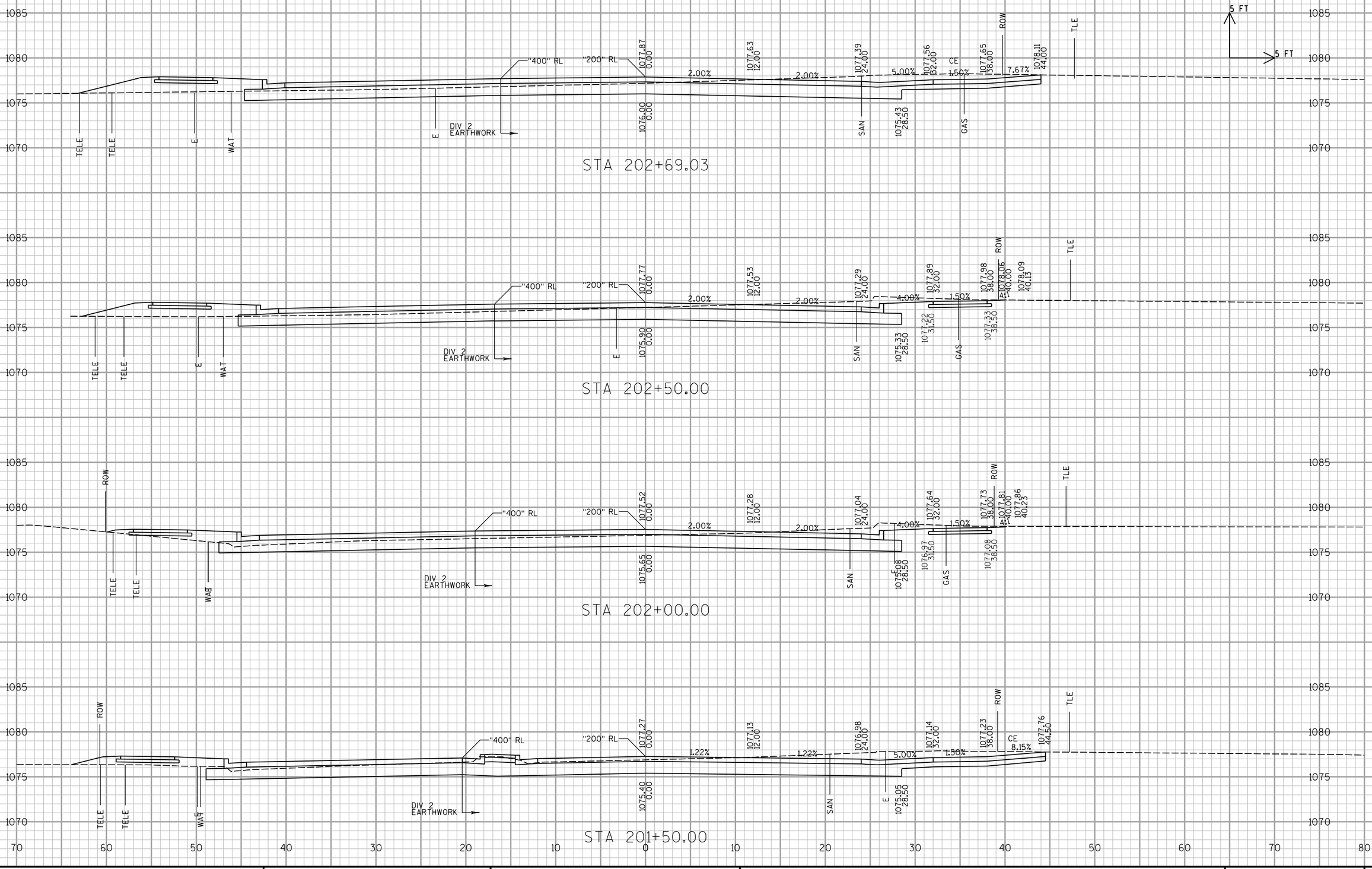
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 215	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:52 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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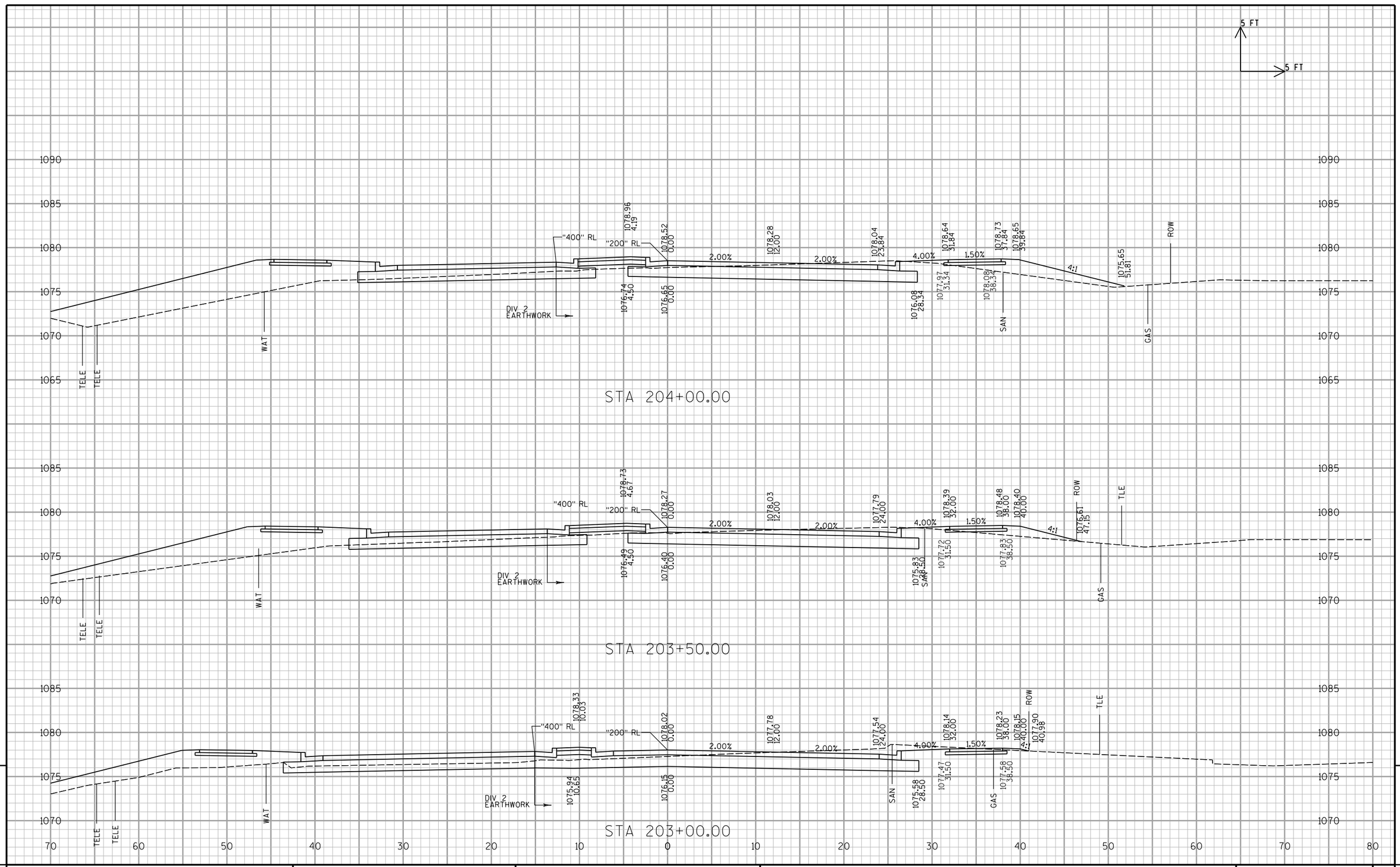
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 216	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:53 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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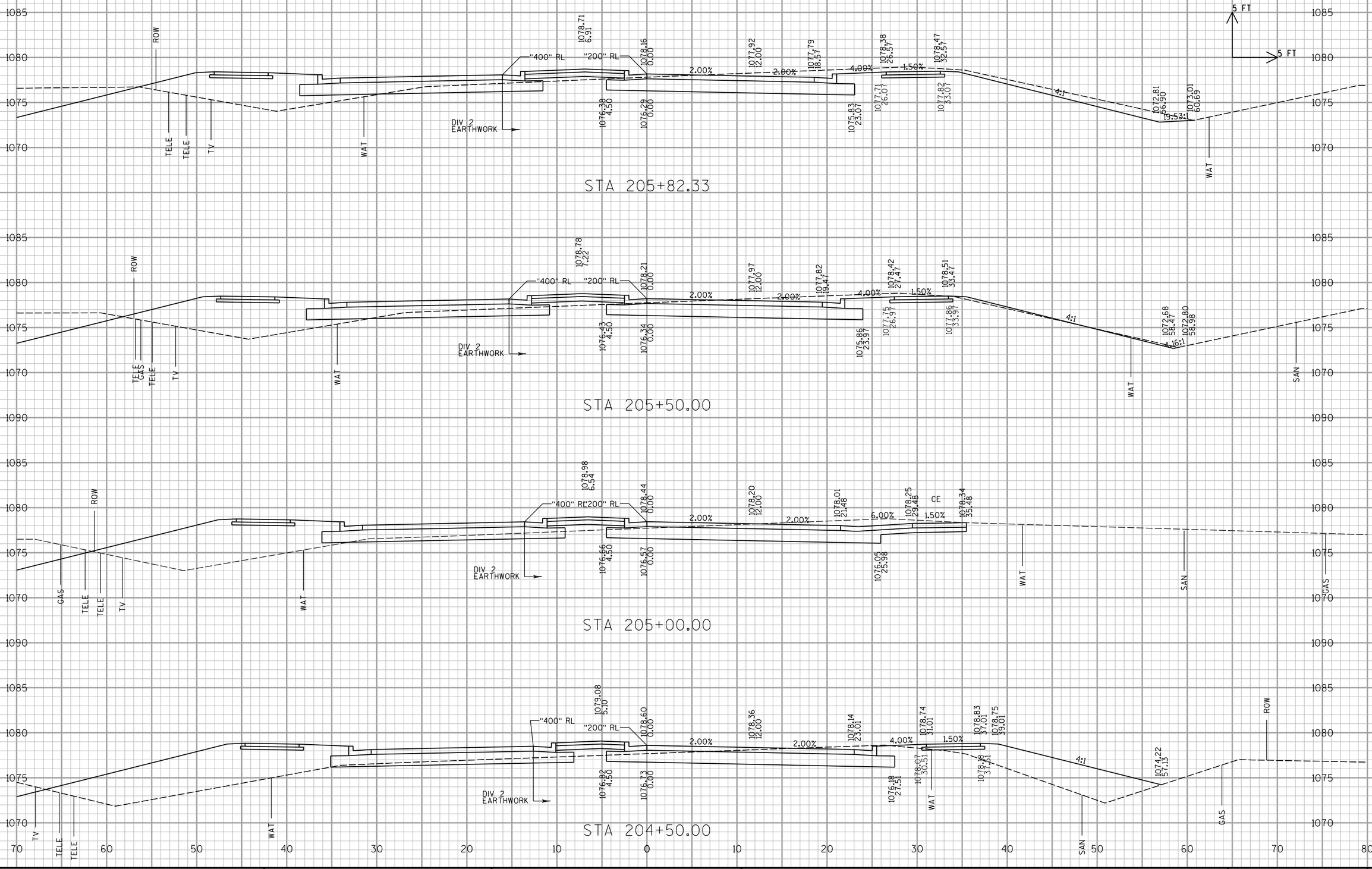
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 217	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:53 AM PLOT BY : clm1

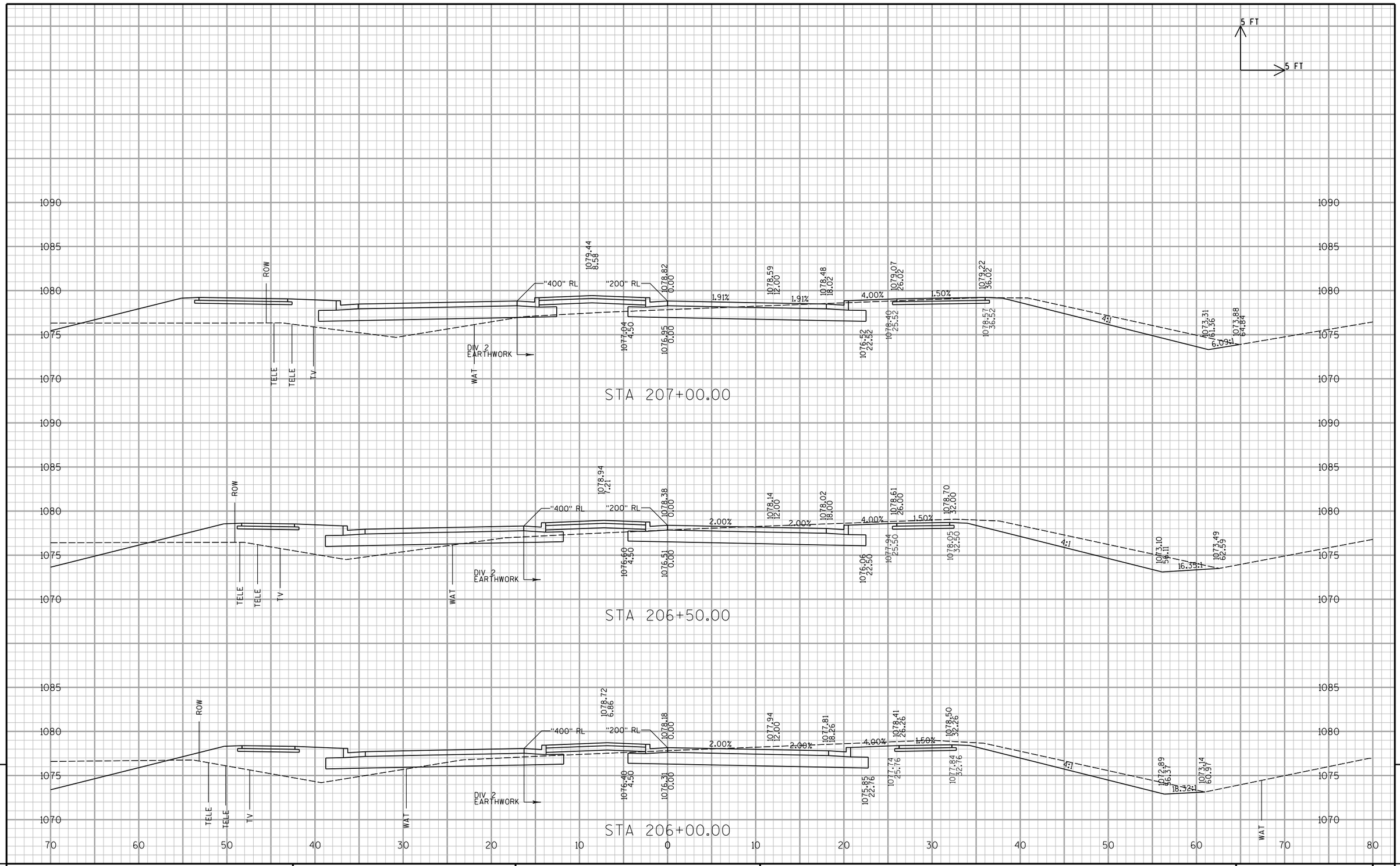
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 218	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:54 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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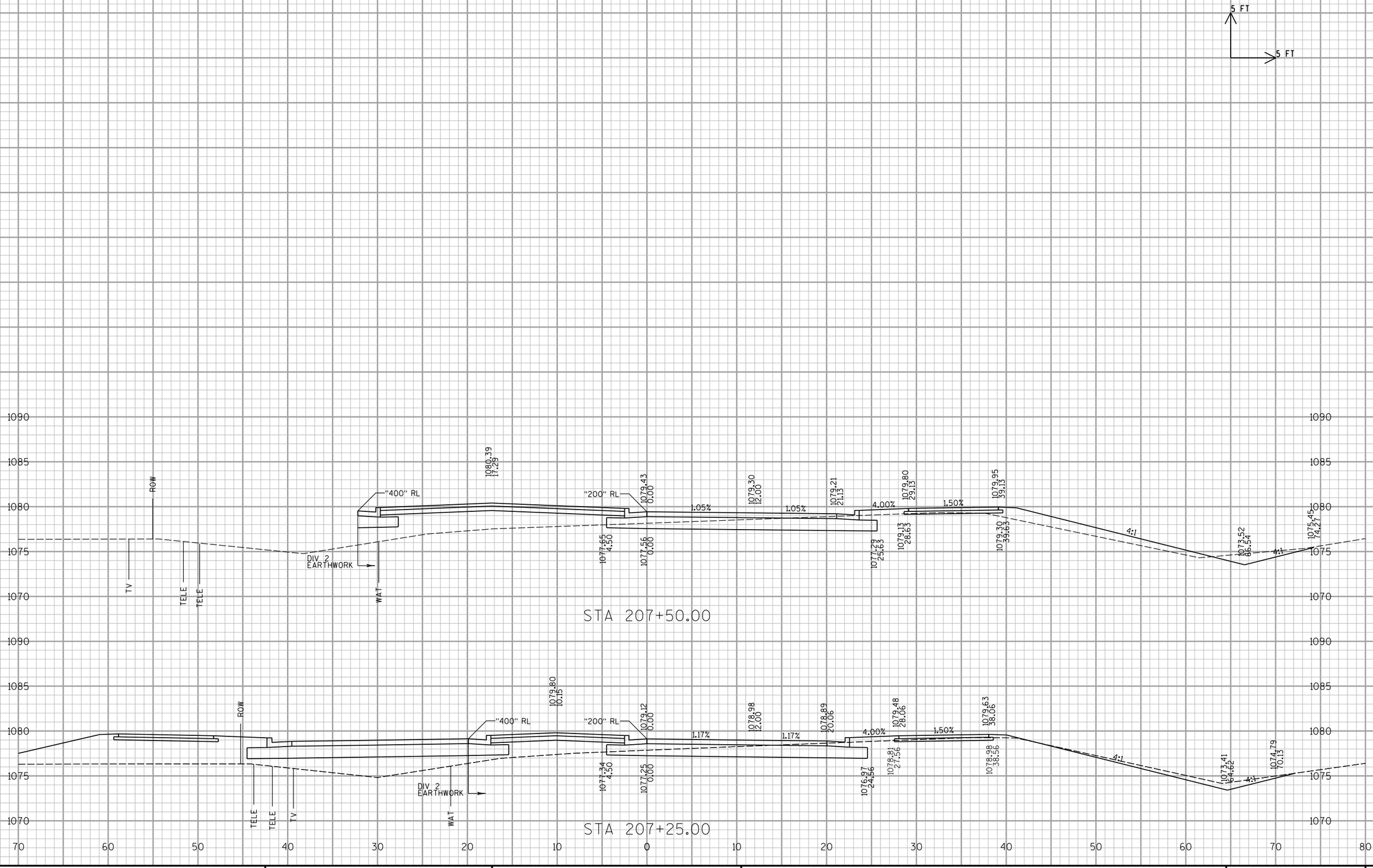
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 219	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:55 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21

5 FT

5 FT



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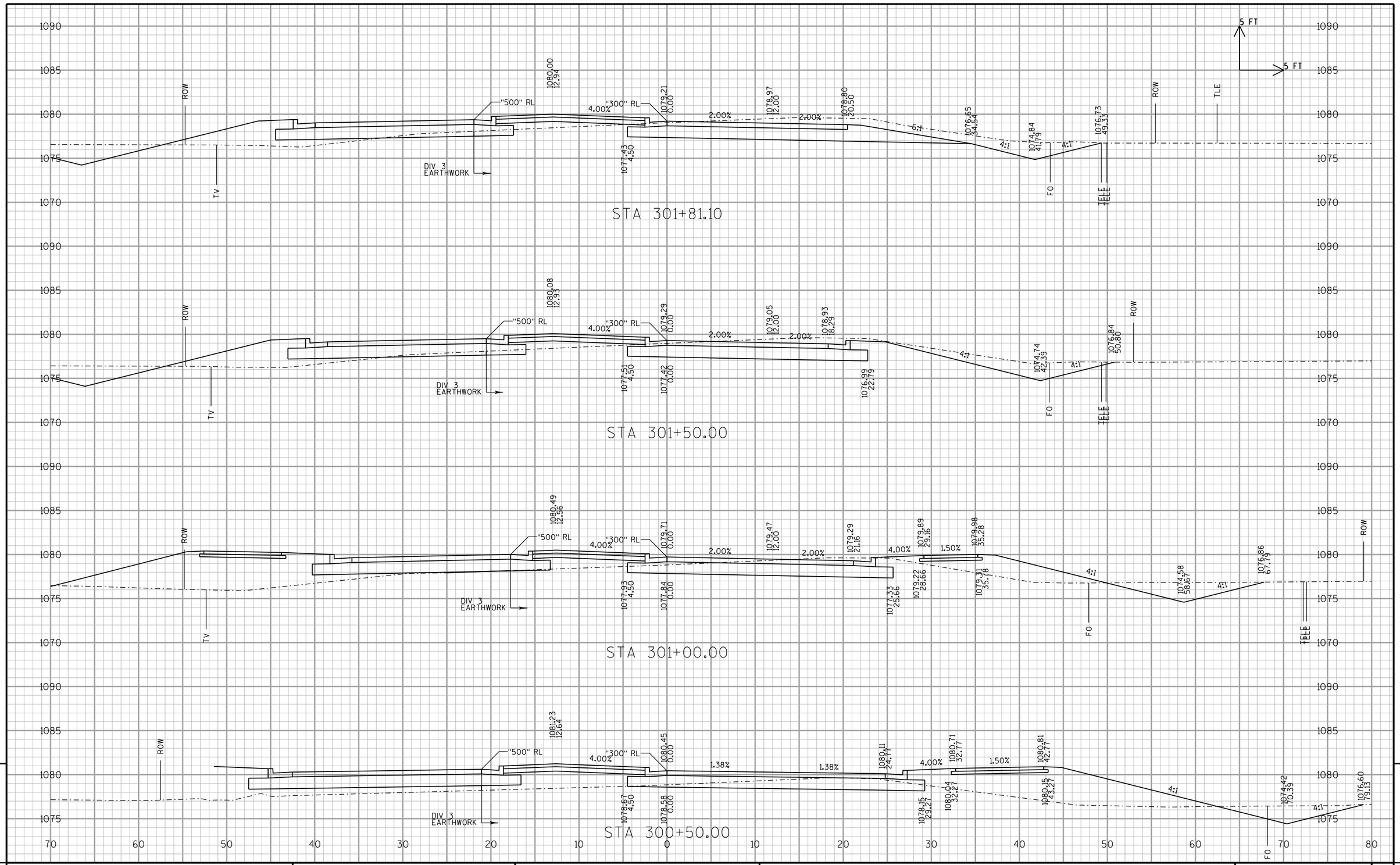
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 220	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090201_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:55 AM PLOT BY : clm1

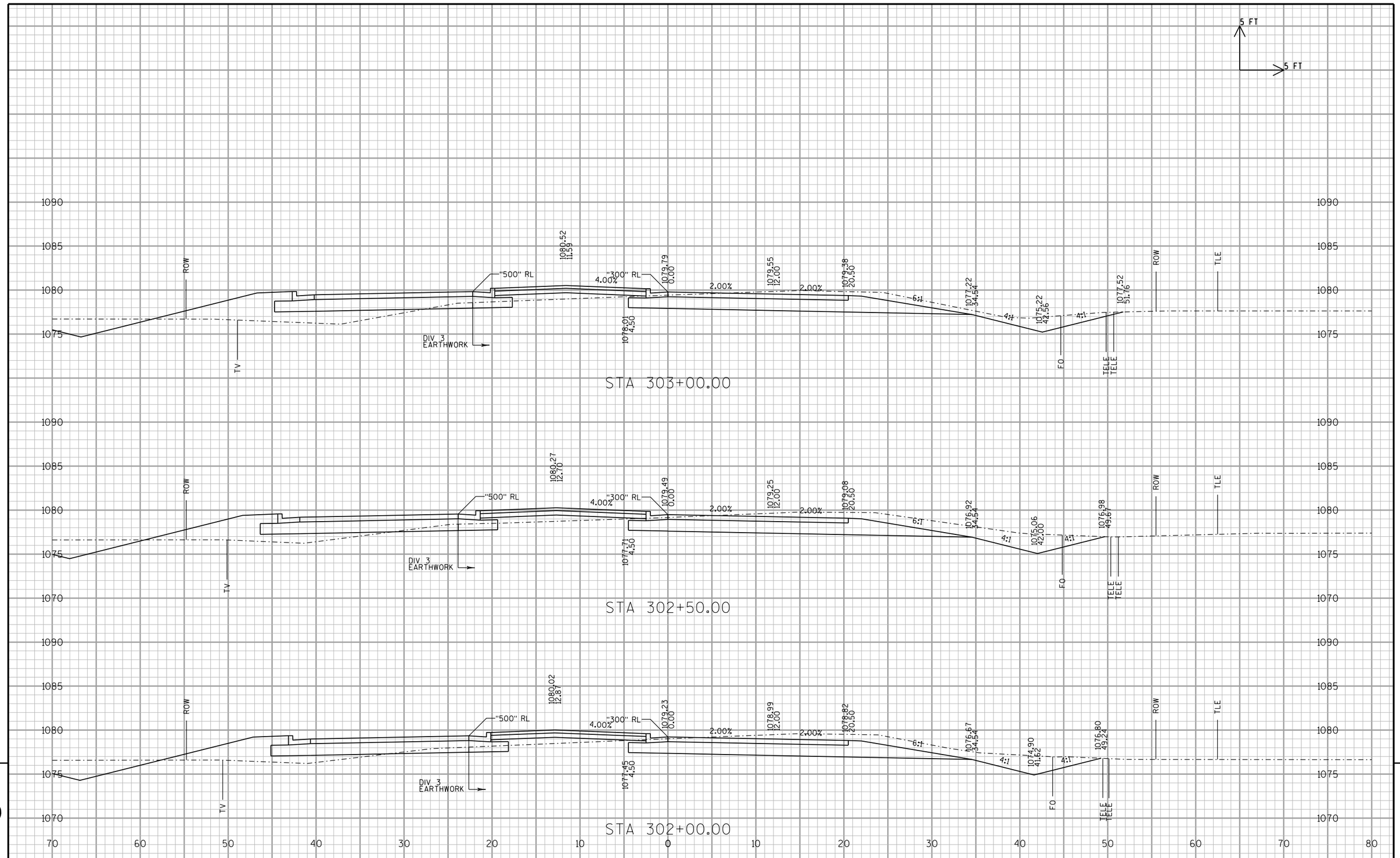
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 221	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090202_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:56 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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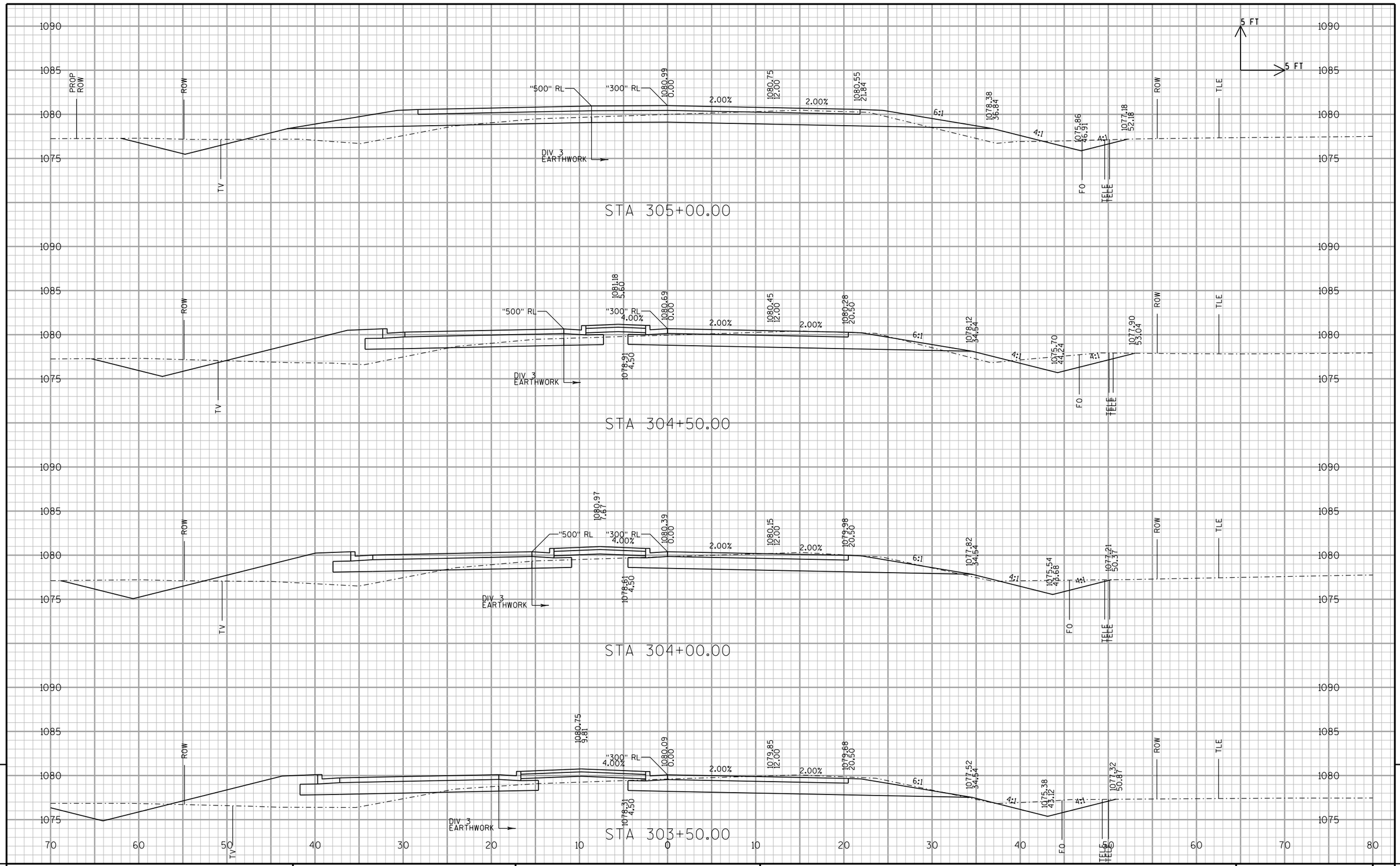
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 222	E



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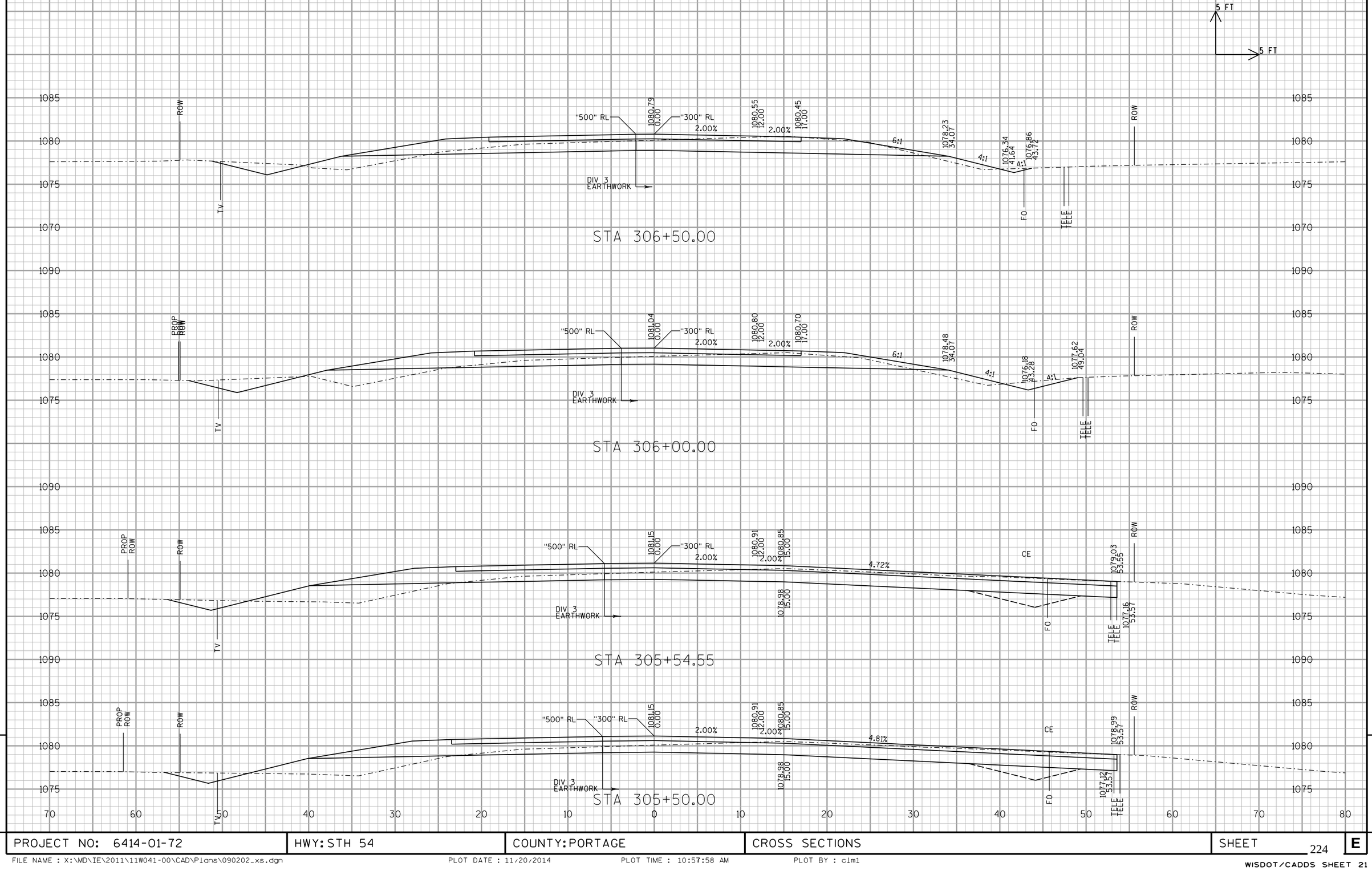
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 223	E

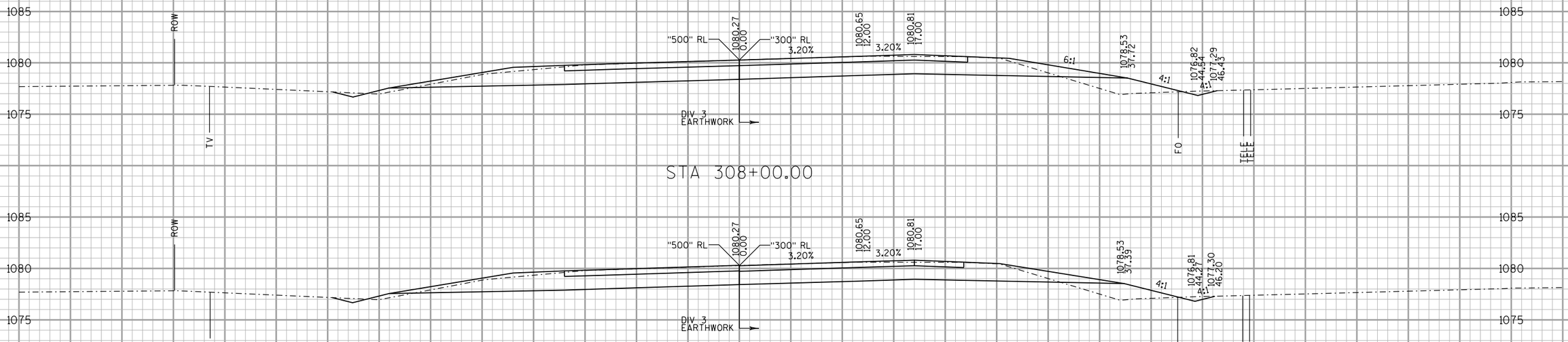


PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 224	E

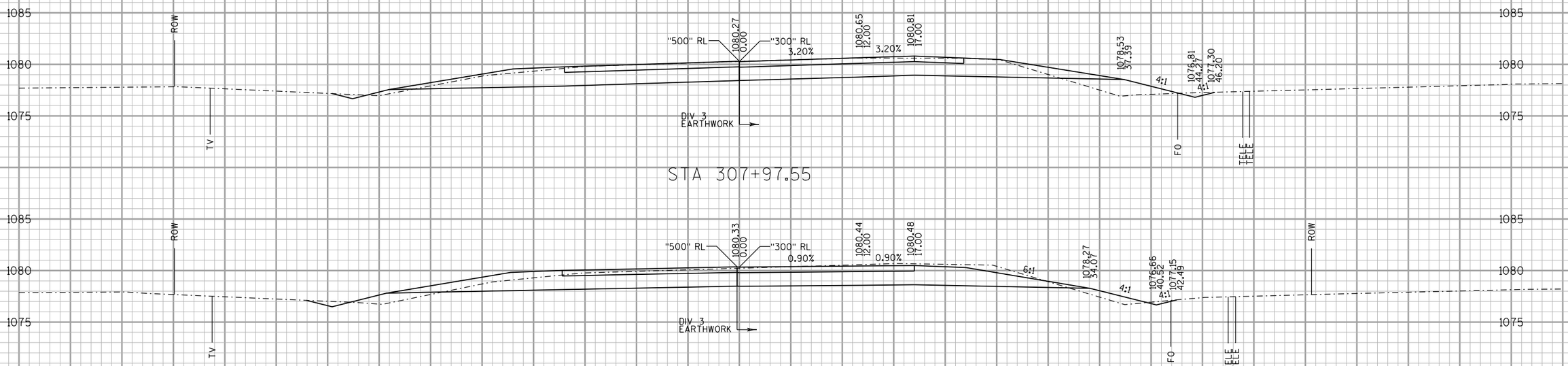
5 FT

5 FT

STA 308+00.00

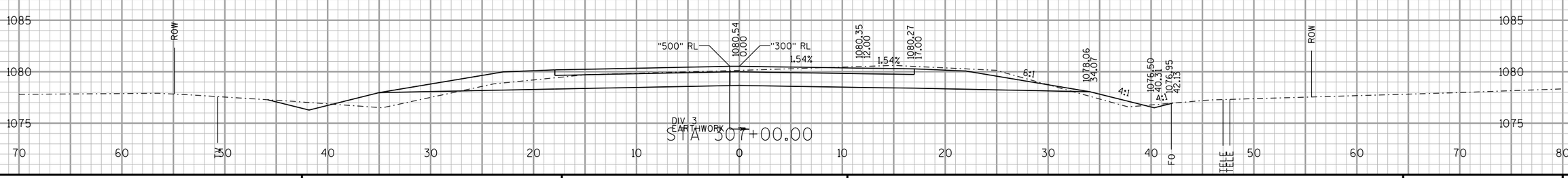


STA 307+97.55



STA 307+50.00

STA 307+00.00



9

9

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 225	E

5 FT
5 FT

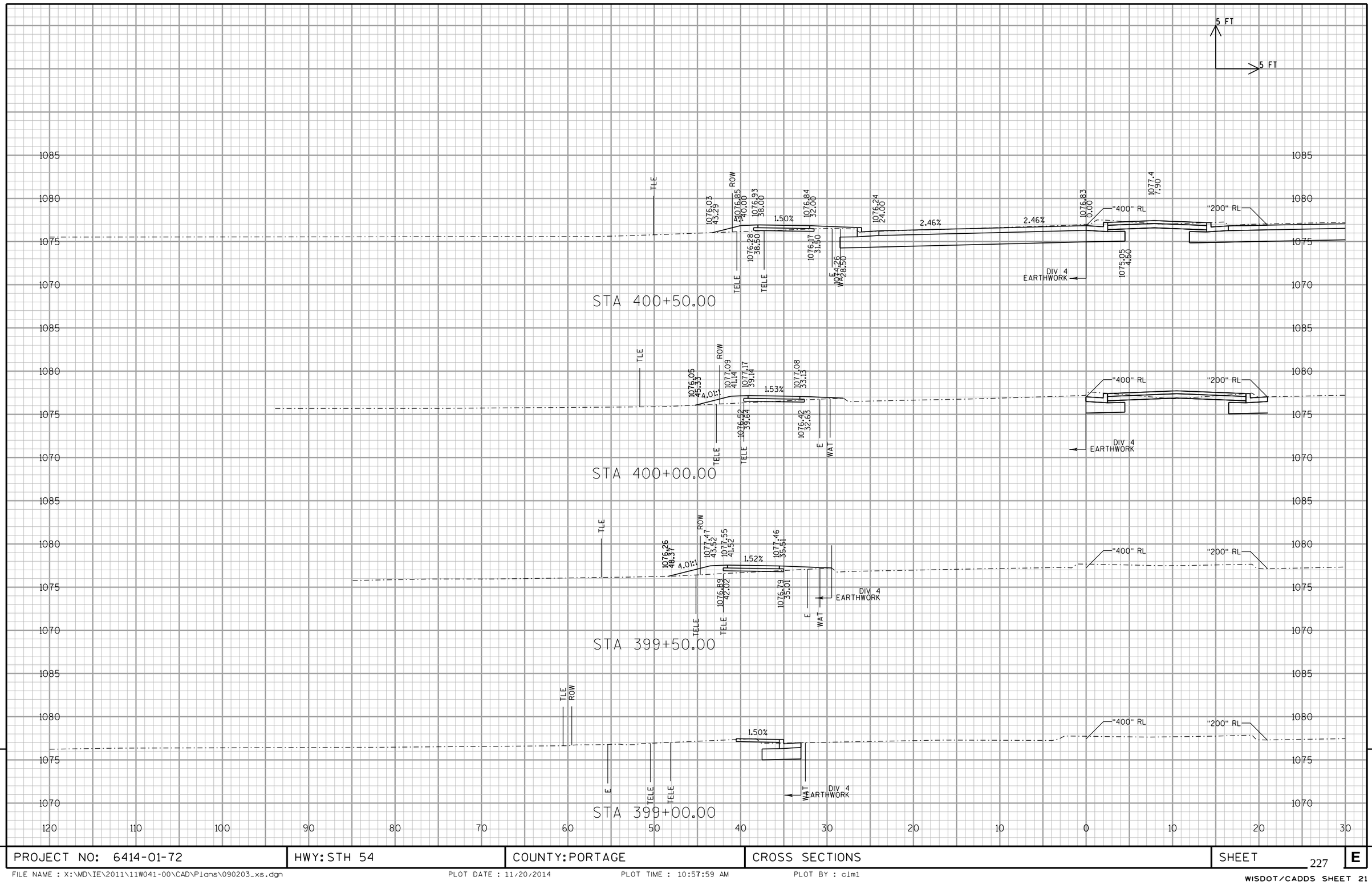
1090
1085
1080
1075

ROW
T.V.
"300" RL
1080.30
0.00
3.20%
1080.68
12.00
3.20%
1080.84
19.00
3.22%
CE
1079.53
57.74
1078.43
0.00
DIV 3
EARTHWORK
STA 308+48.29
1078.97
17.00
FO
TELE
TELE
1077.67
57.68

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

9 9

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 226	E



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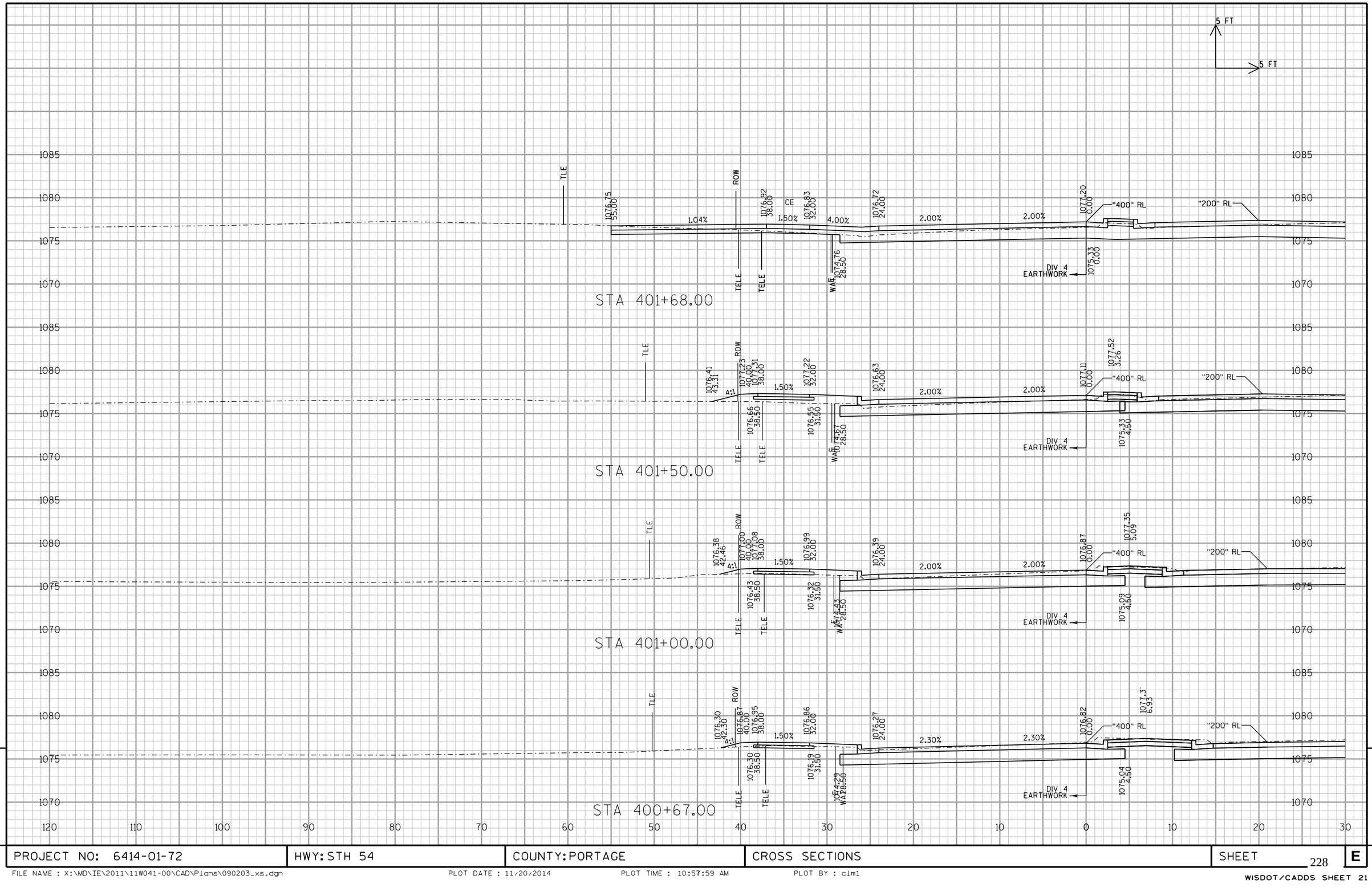
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 227	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090203_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:59 AM PLOT BY : clm1

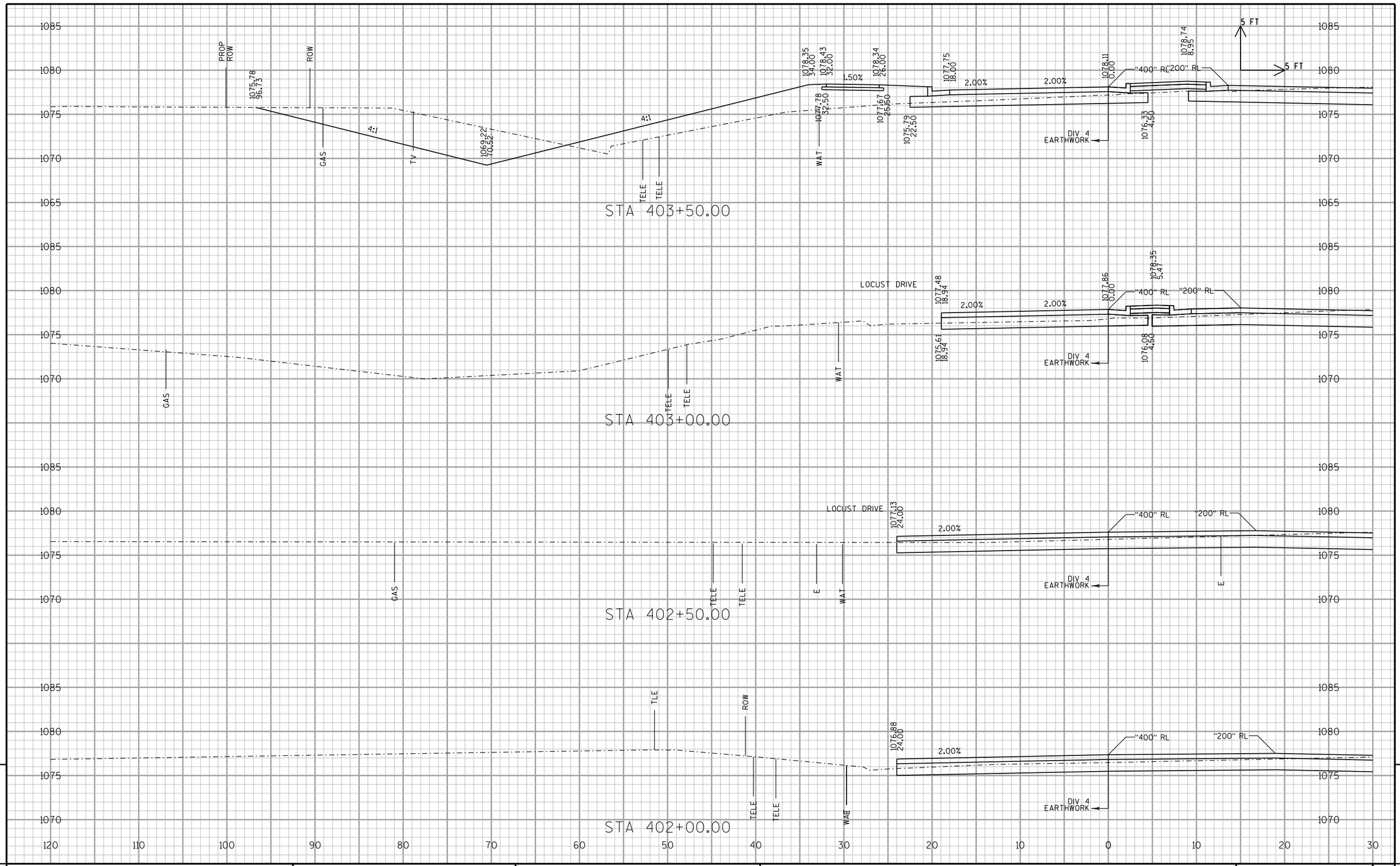
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 228	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090203_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:57:59 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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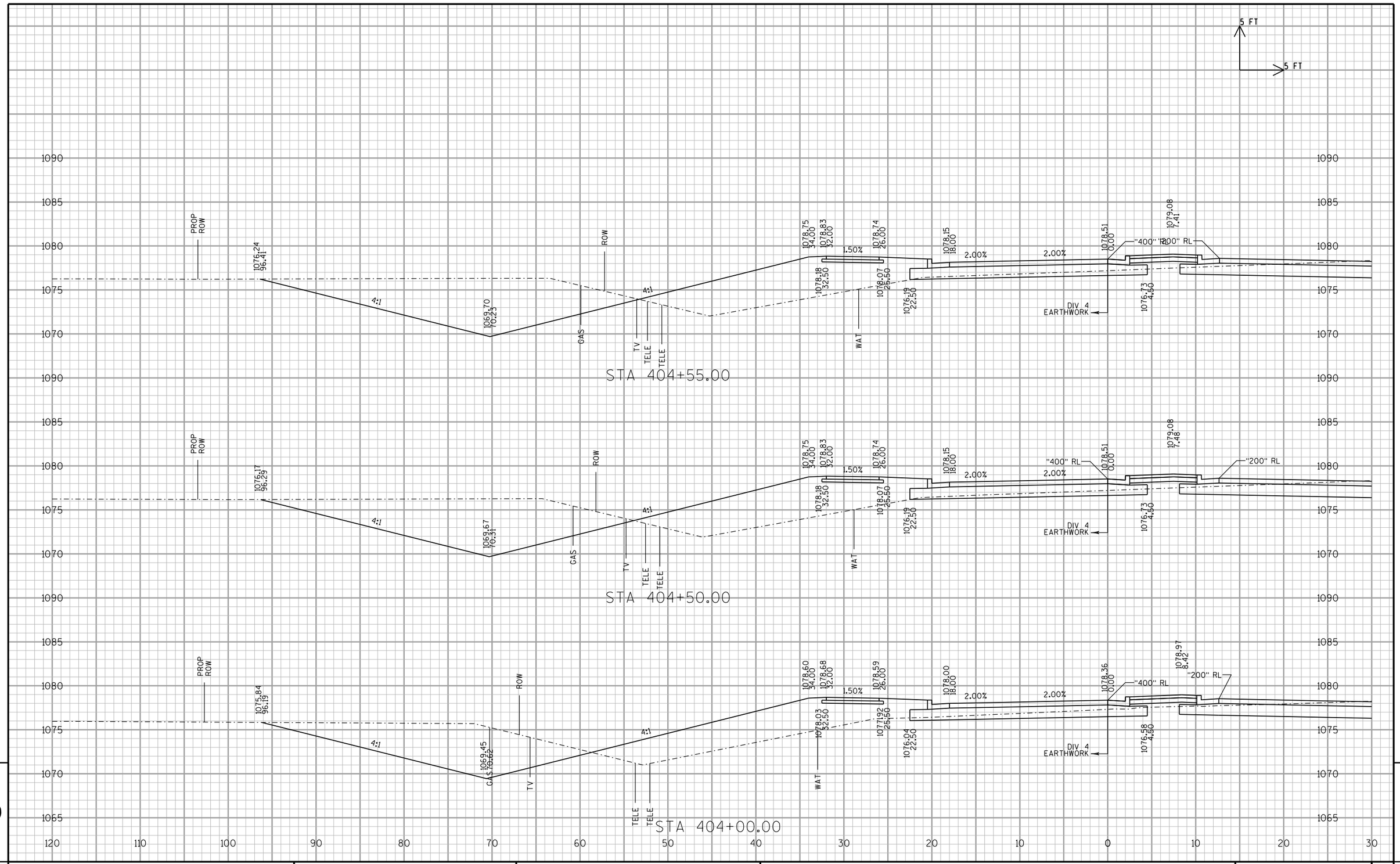
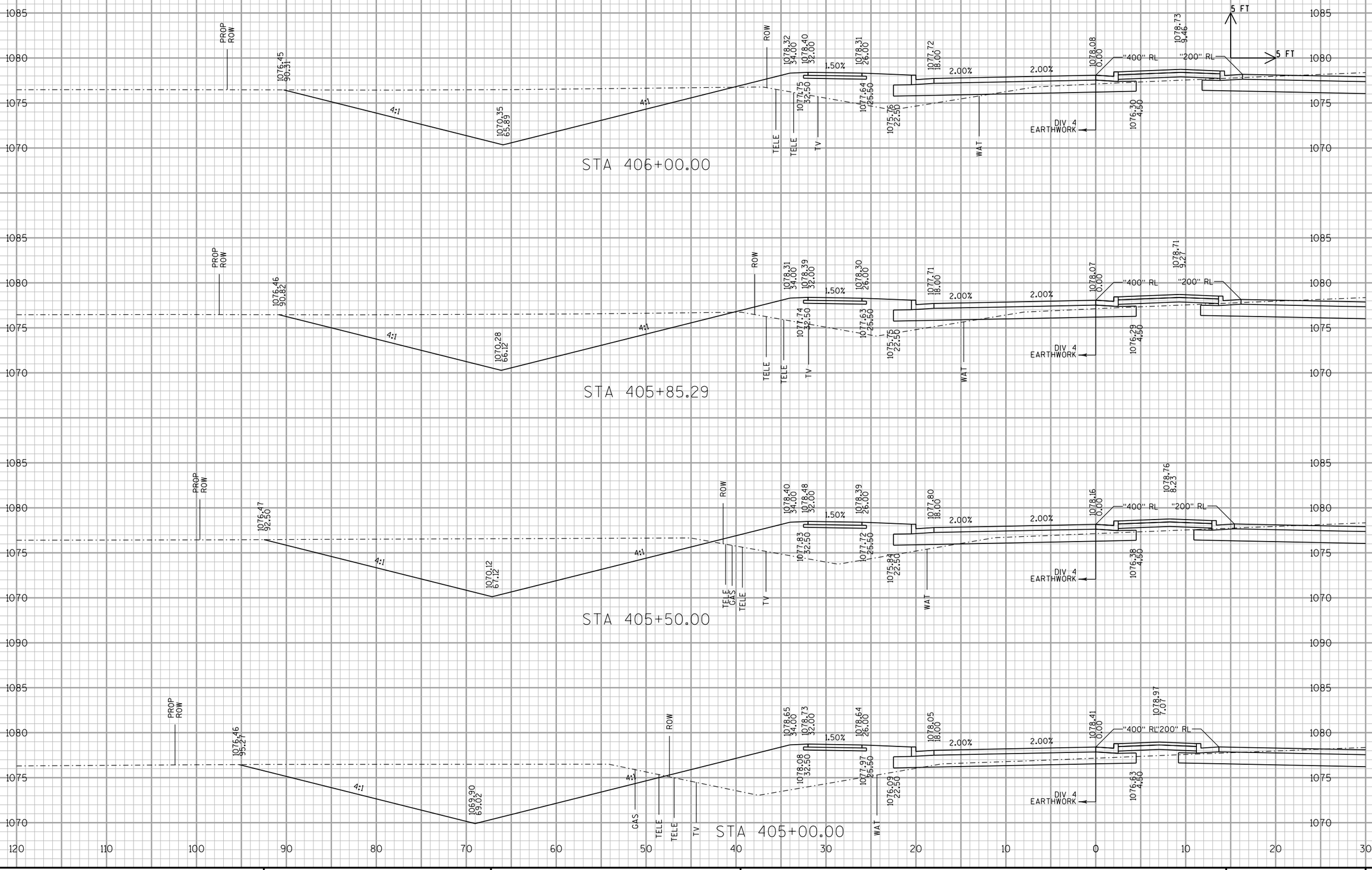
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 229	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090203_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:00 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 230	E



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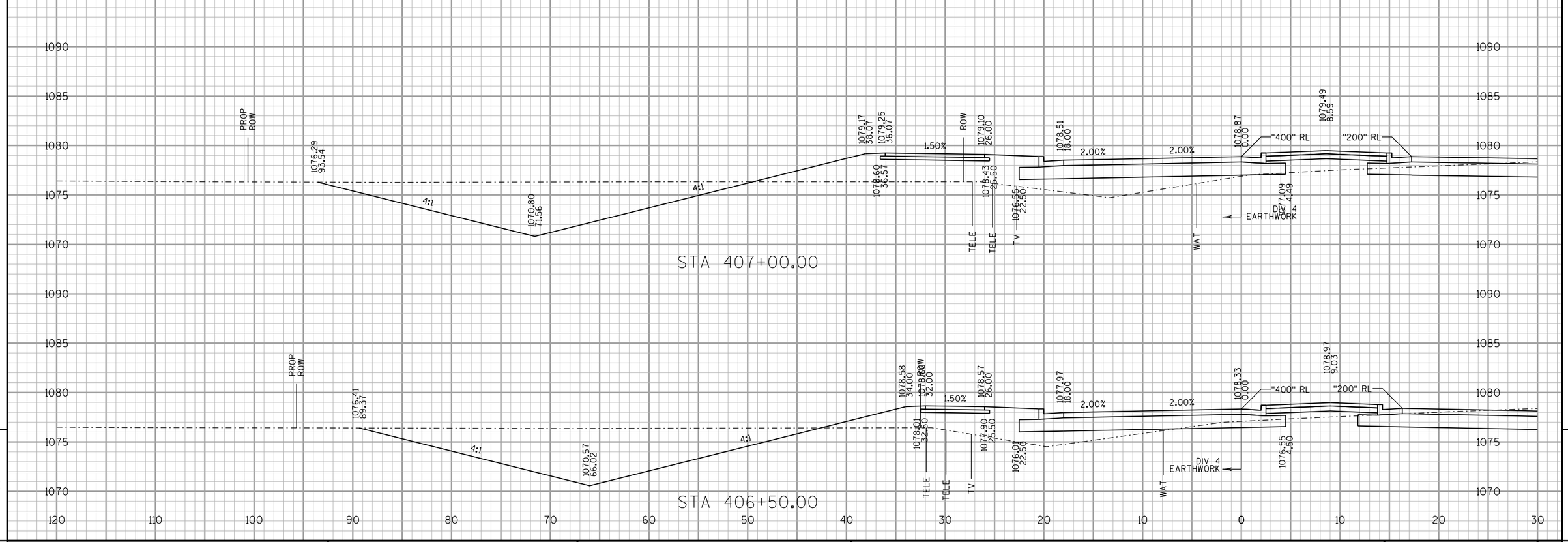
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 231	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090203_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:00 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21

5 FT
5 FT



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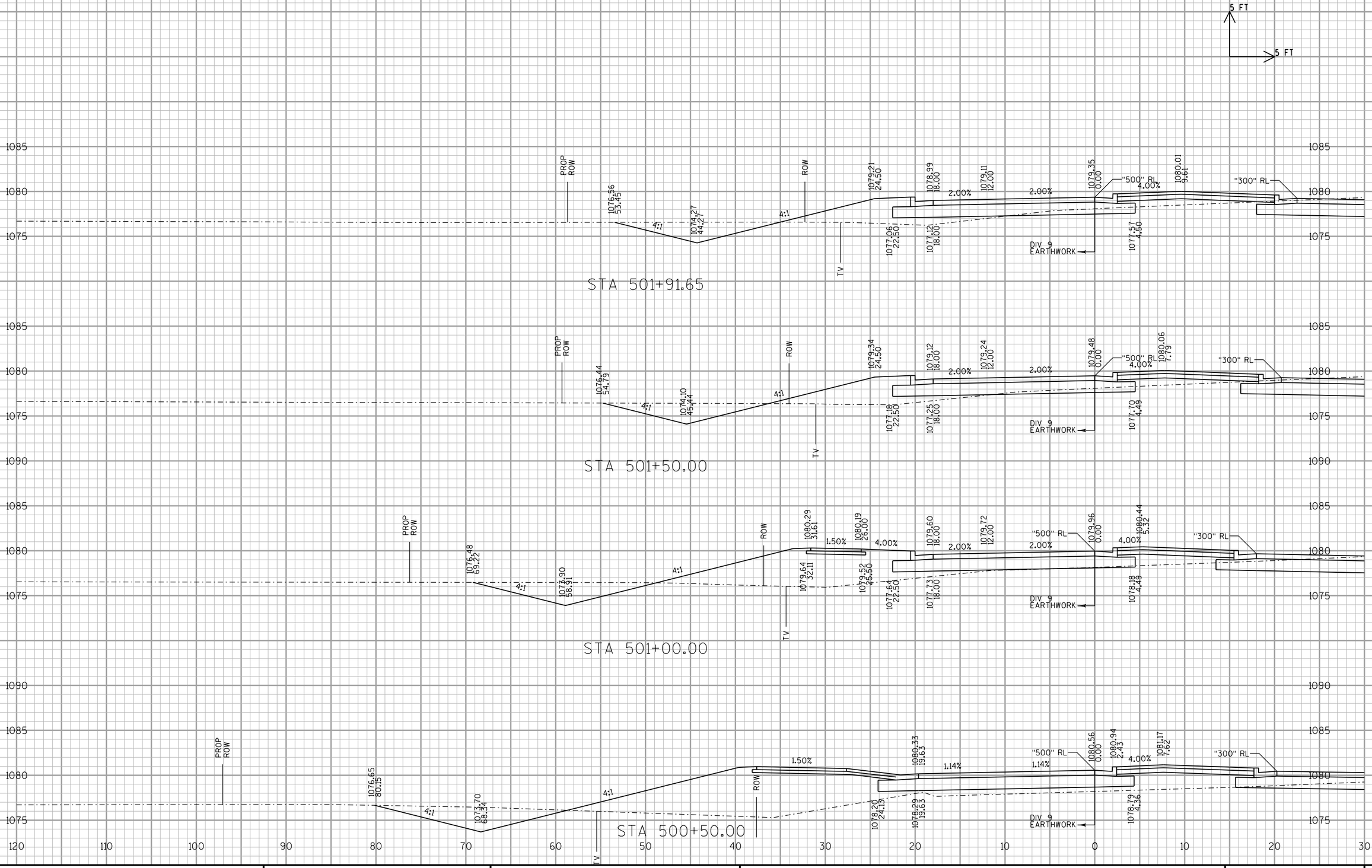
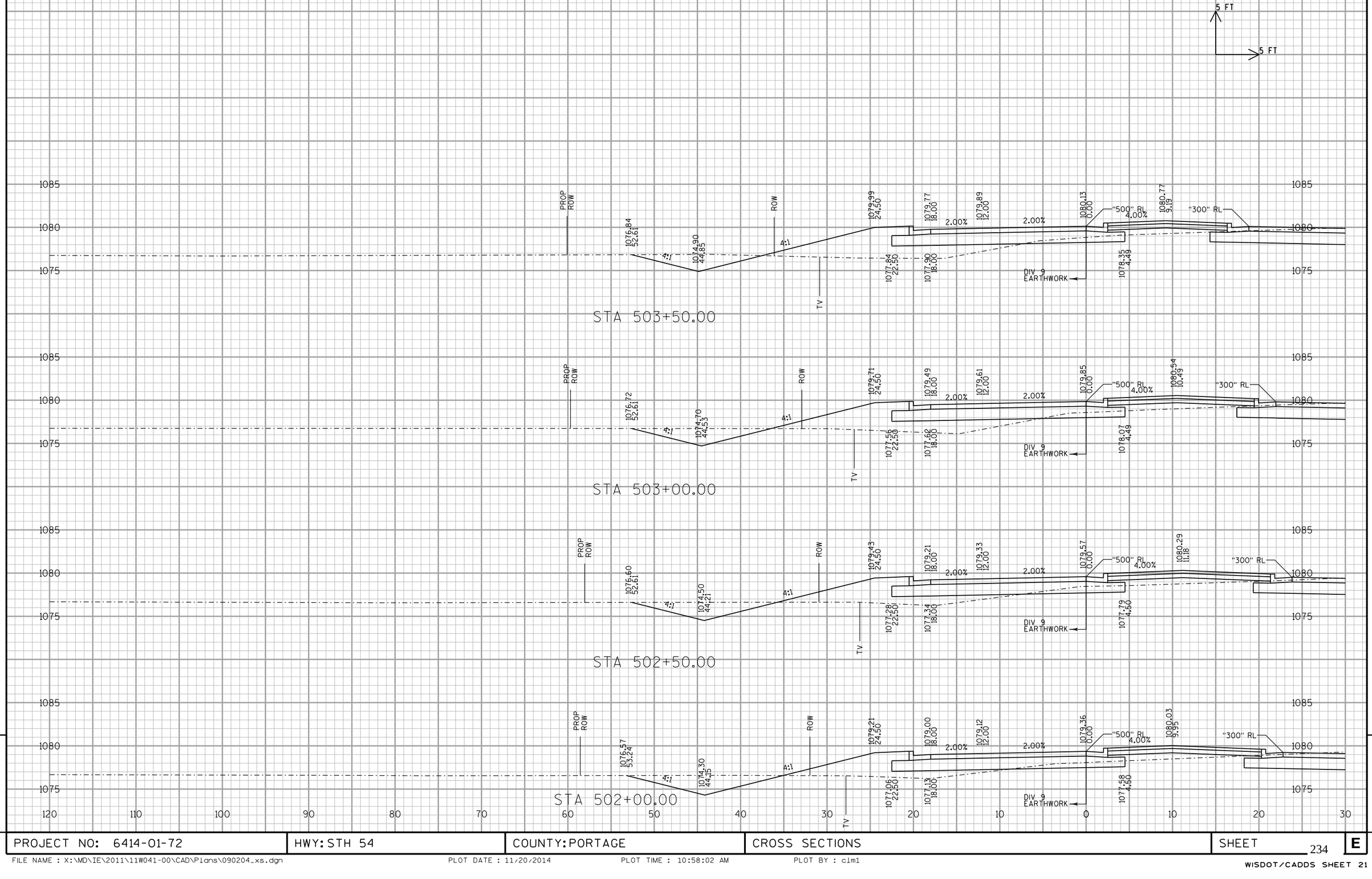
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 232	E



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 233	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090204_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:01 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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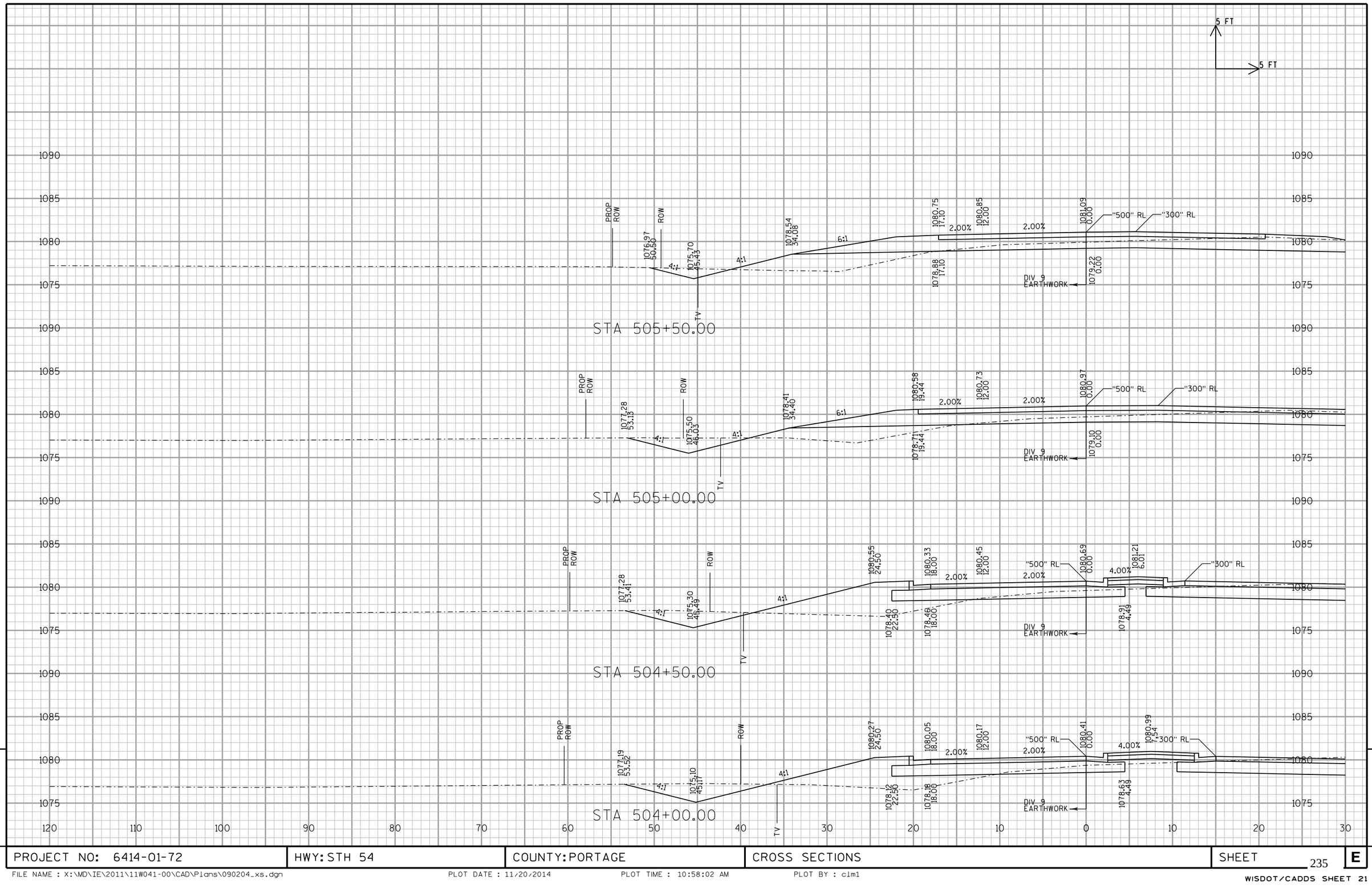
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 234	E



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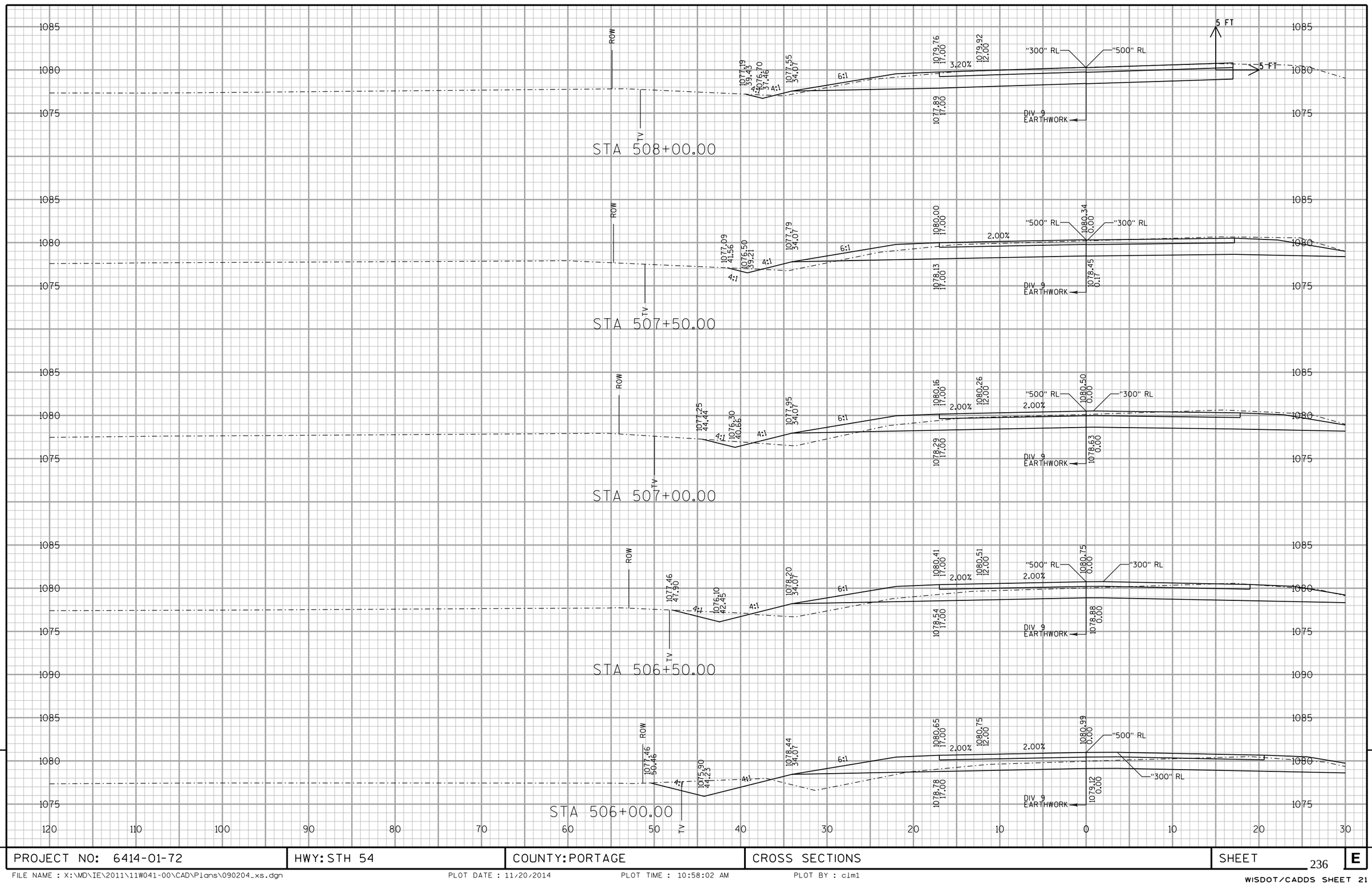
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 235	E



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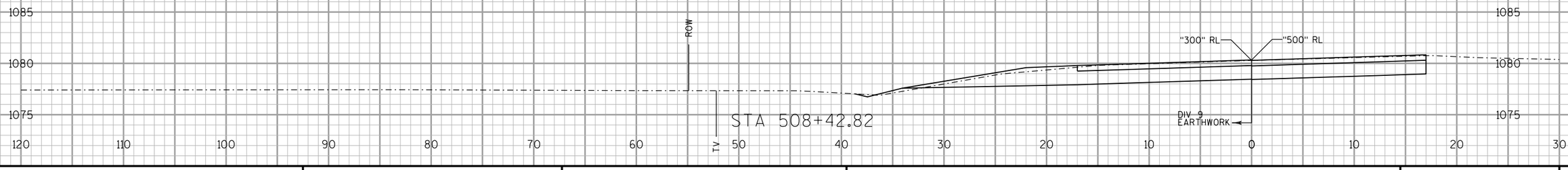
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 236	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090204_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:02 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21

5 FT

5 FT



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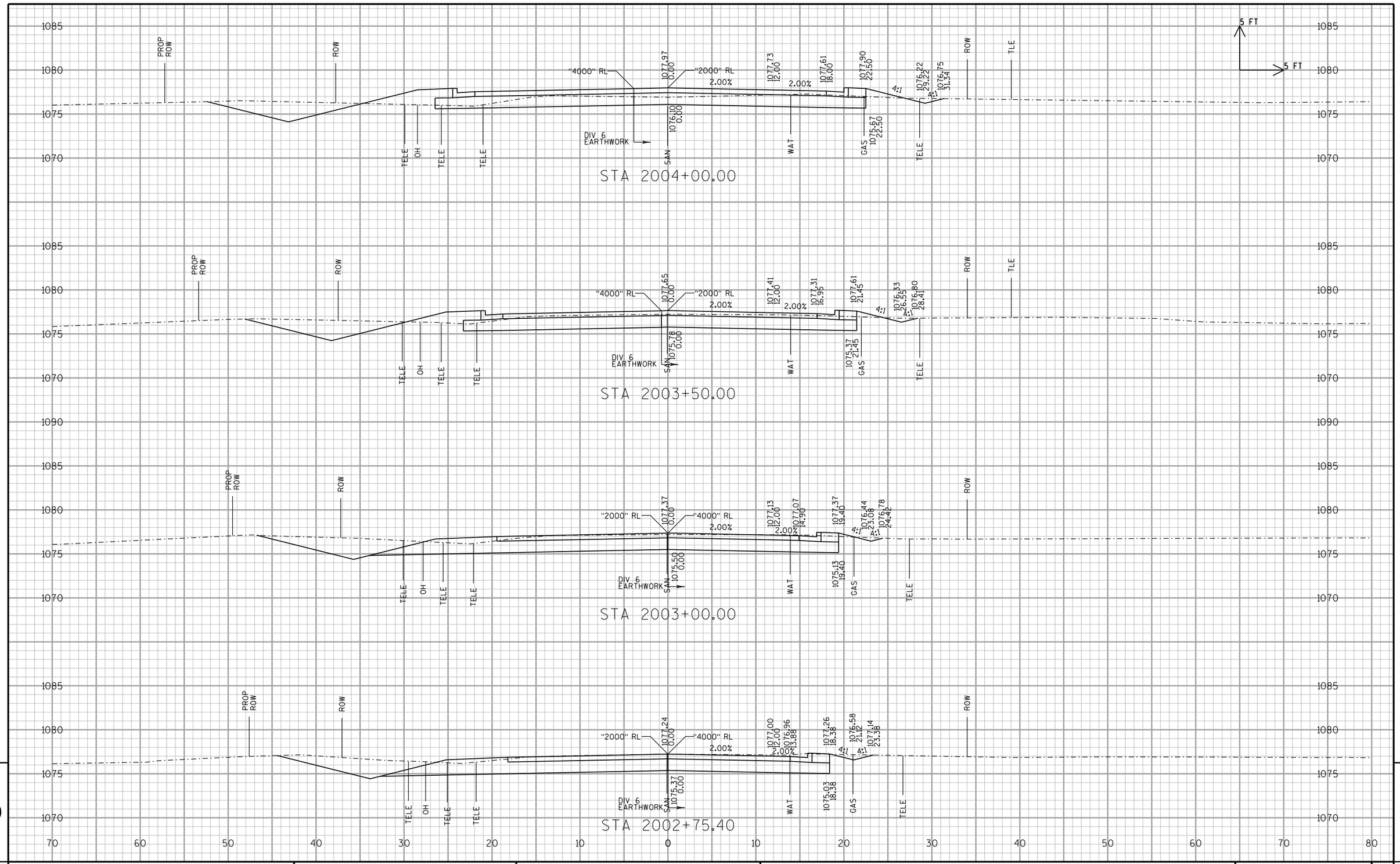
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 237	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090204_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:03 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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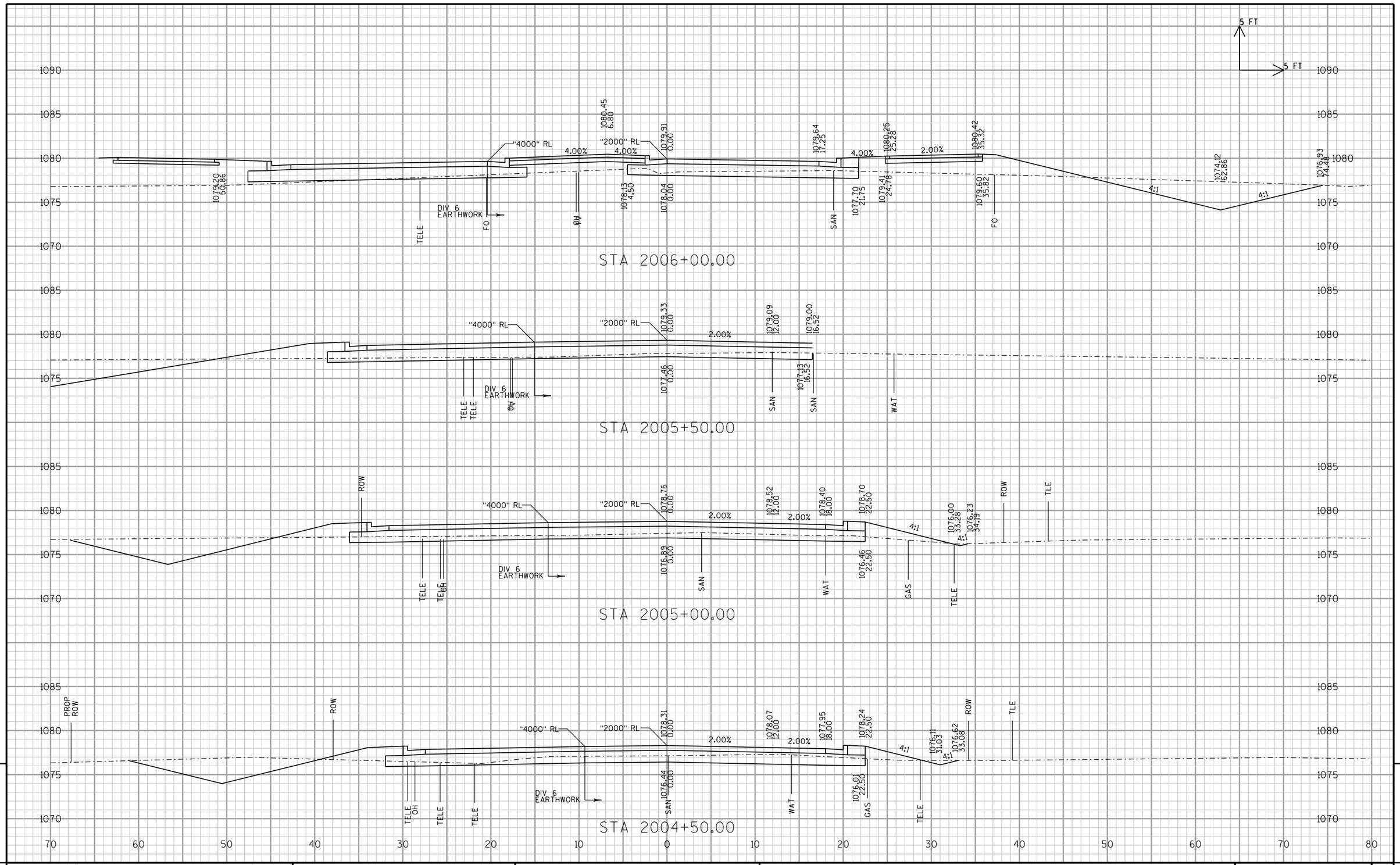
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 238	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090205_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:03 AM PLOT BY : clm1

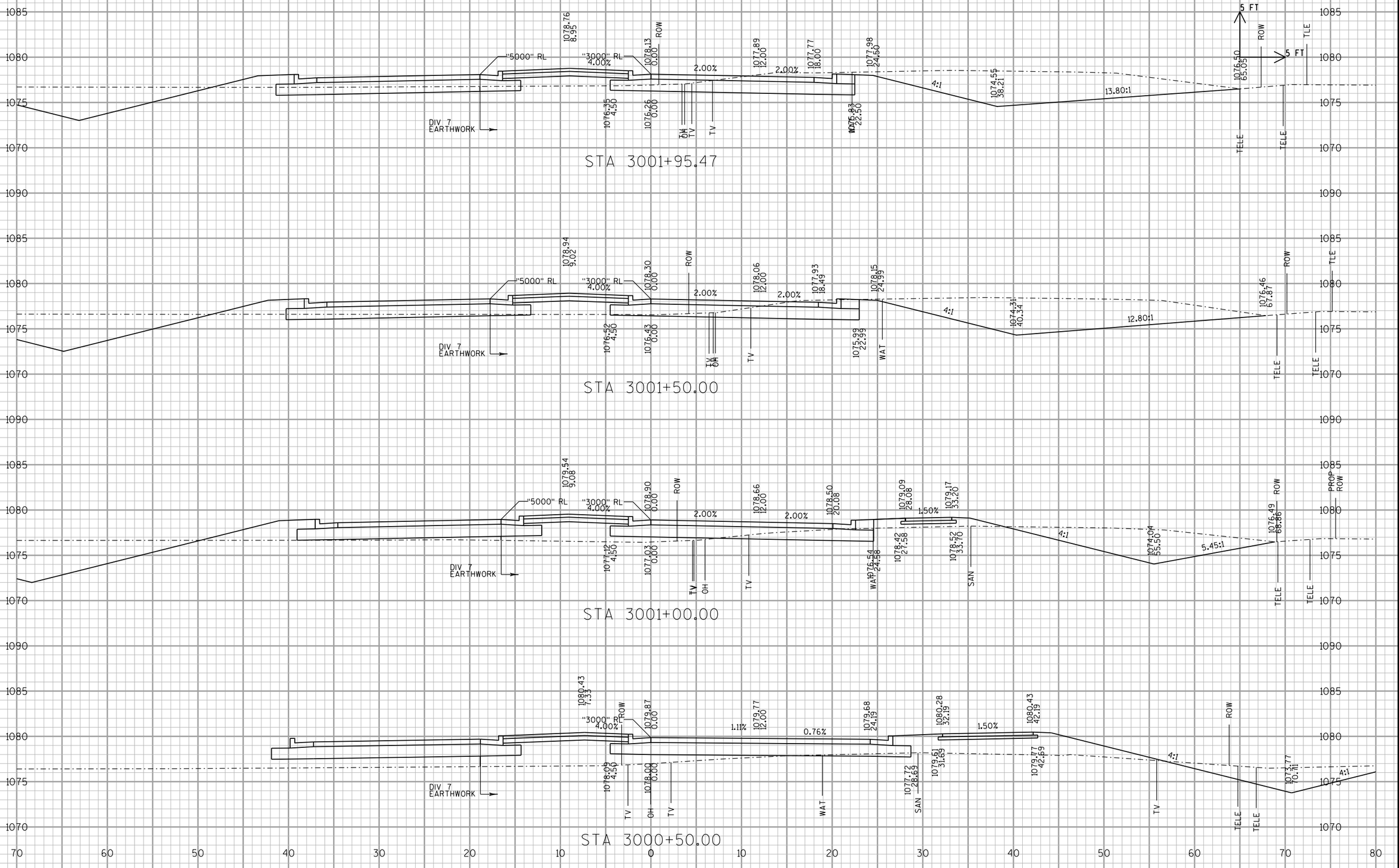
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 239	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090205_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:04 AM PLOT BY : clm1

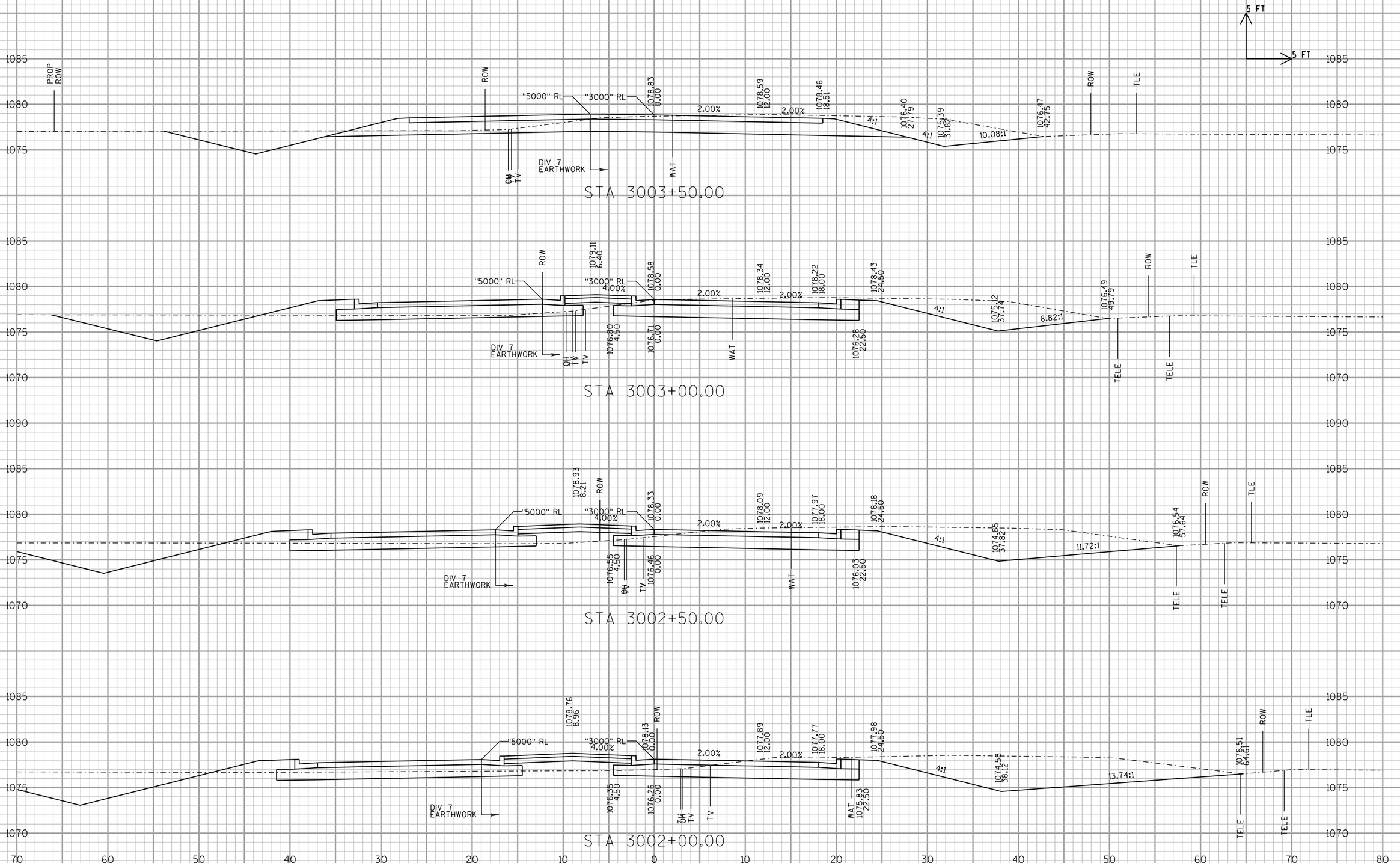
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 240	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090206_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:04 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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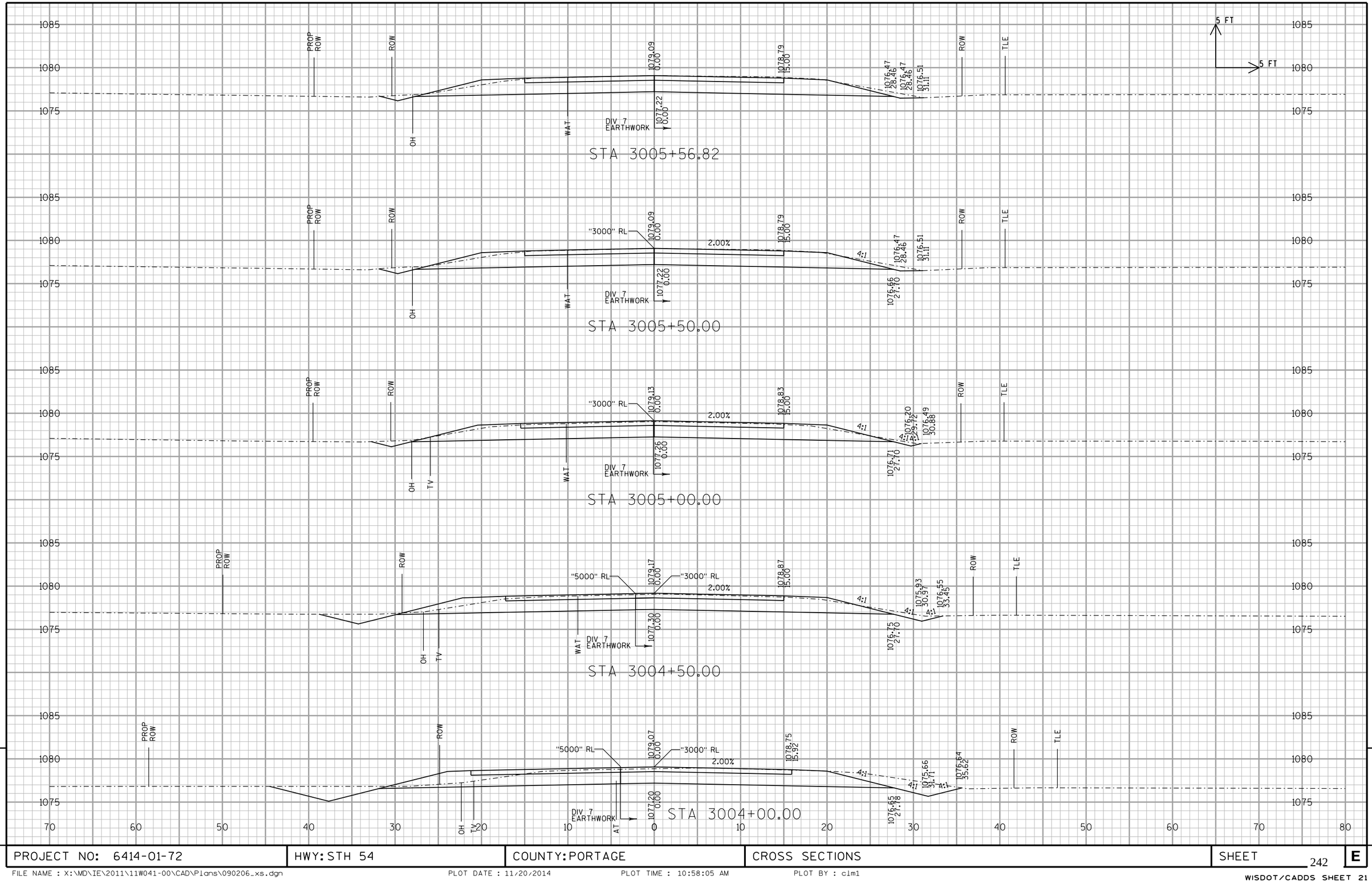
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 241	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090206_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:05 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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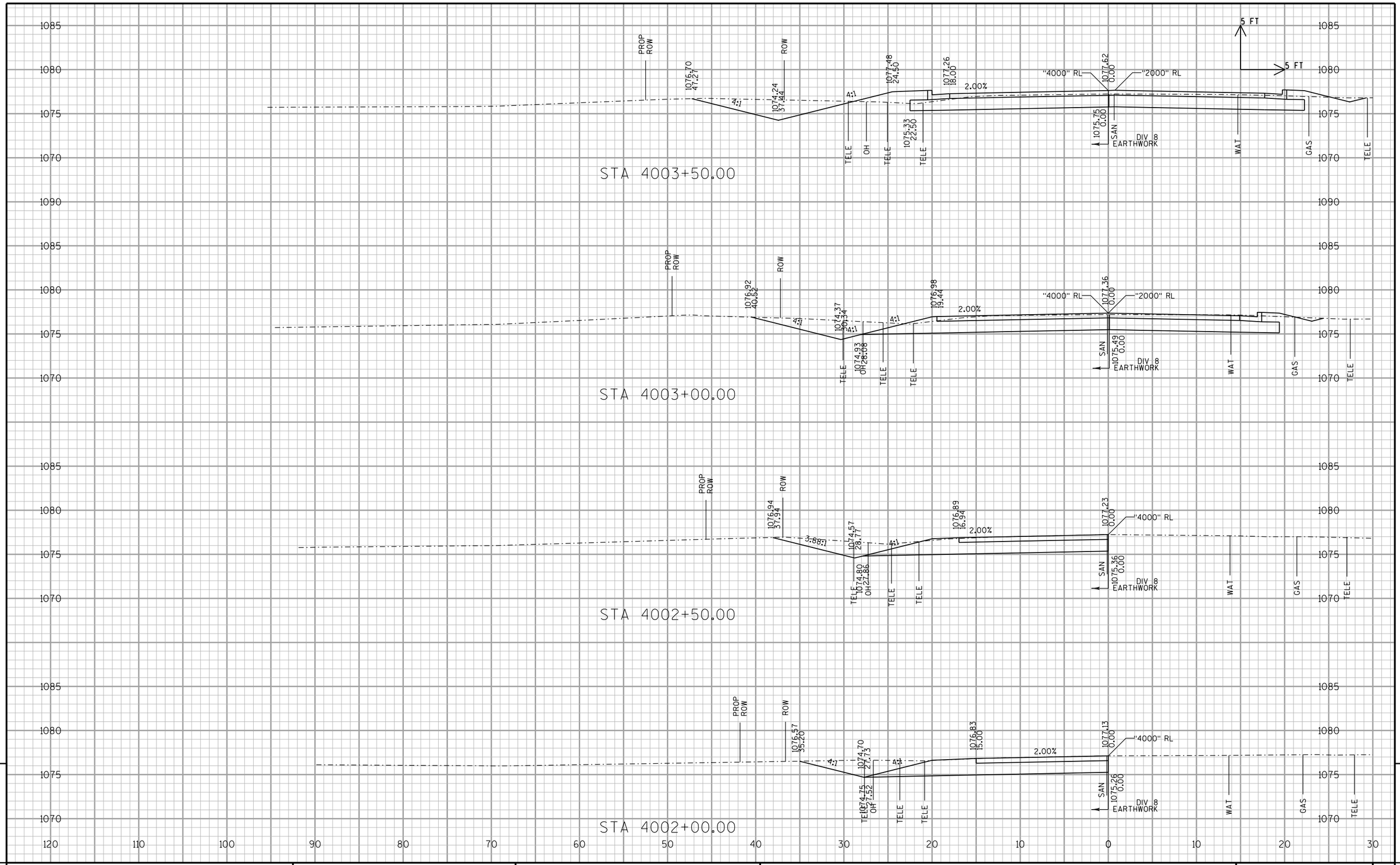
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 242	E



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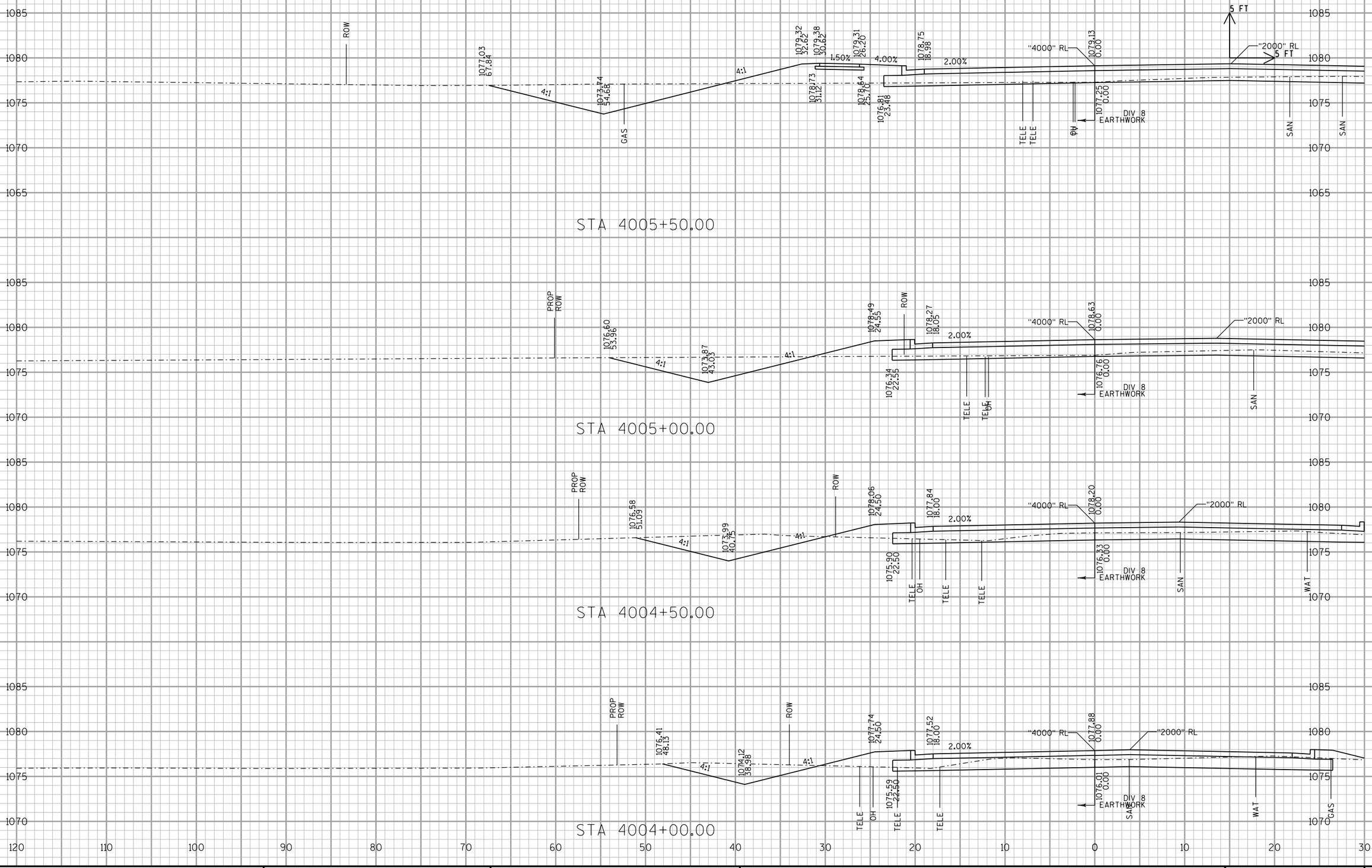
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 243	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090207_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:06 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



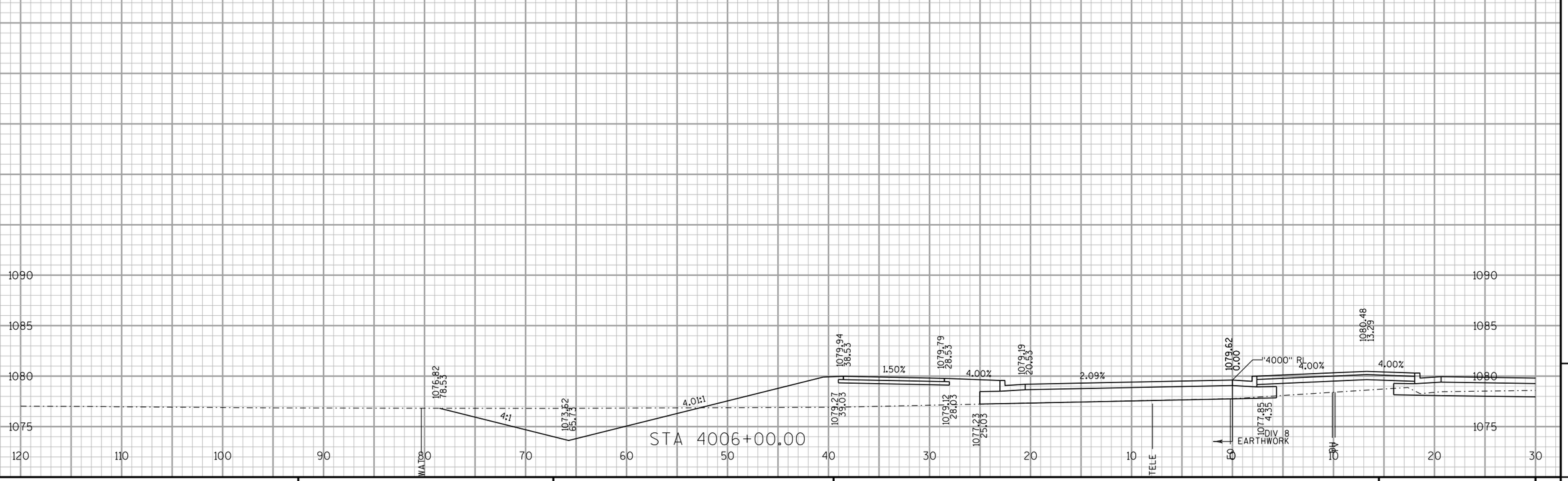
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 244	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090207_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:06 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21

5 FT

5 FT



9

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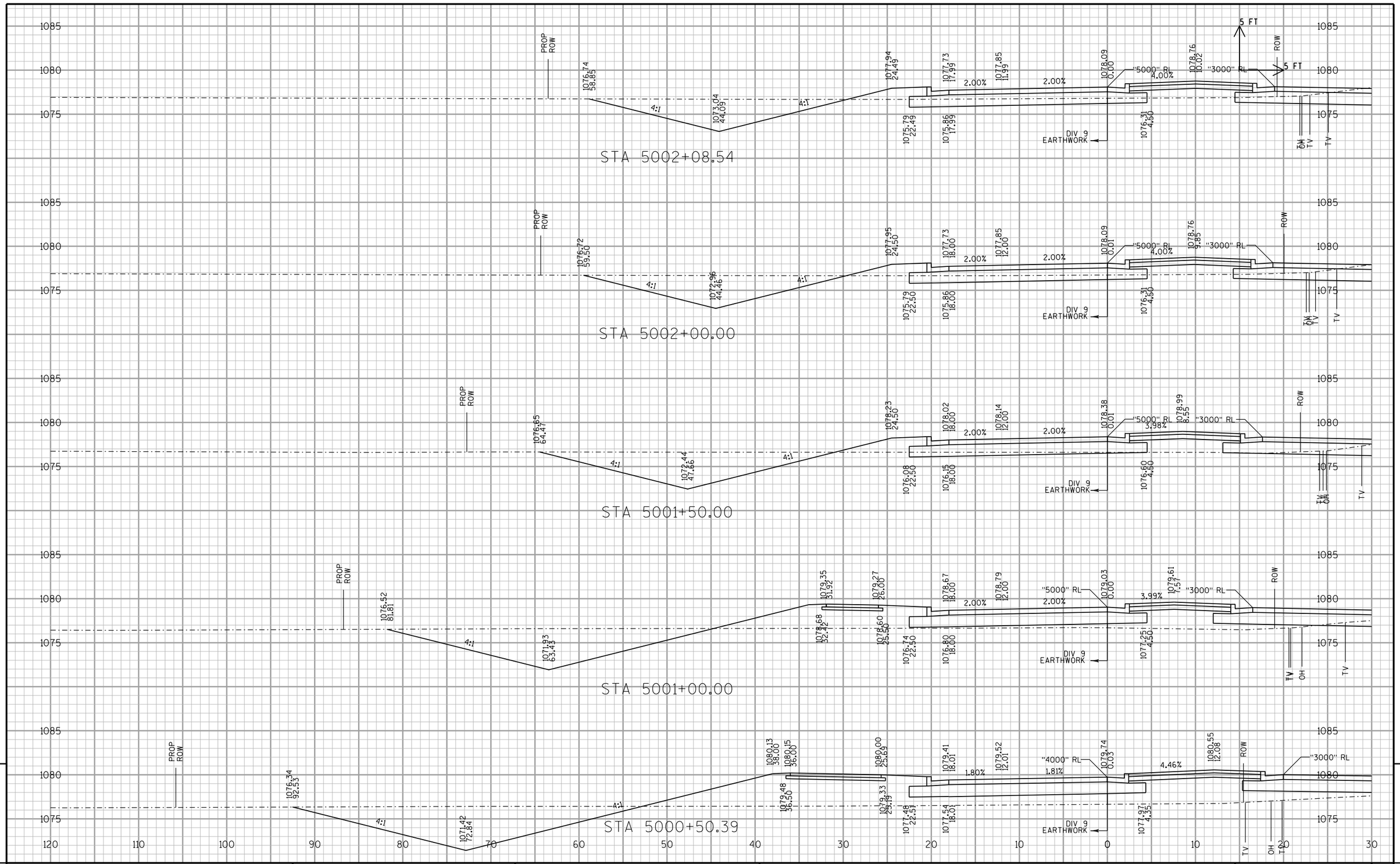
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 245	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090207_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:06 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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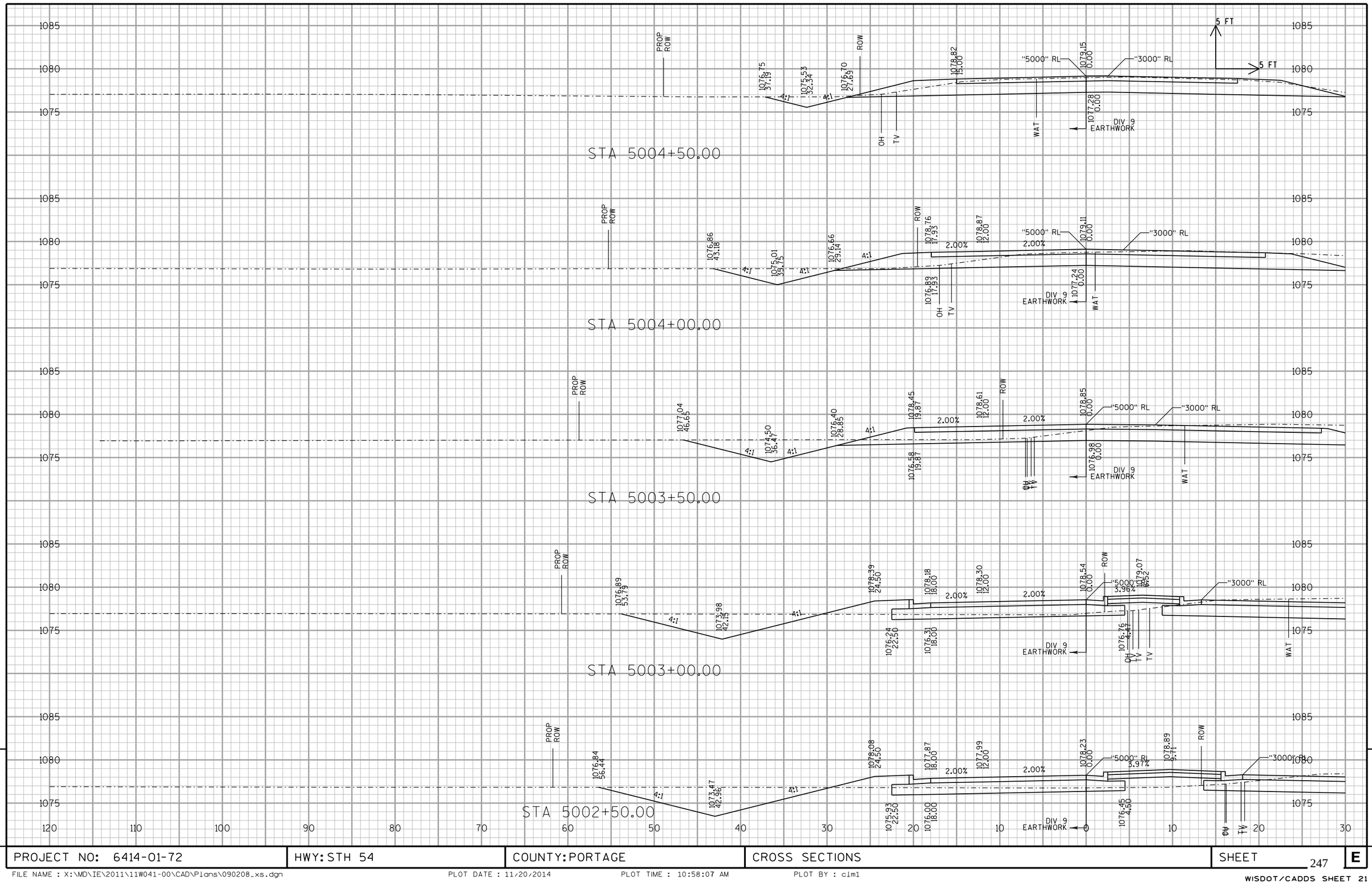
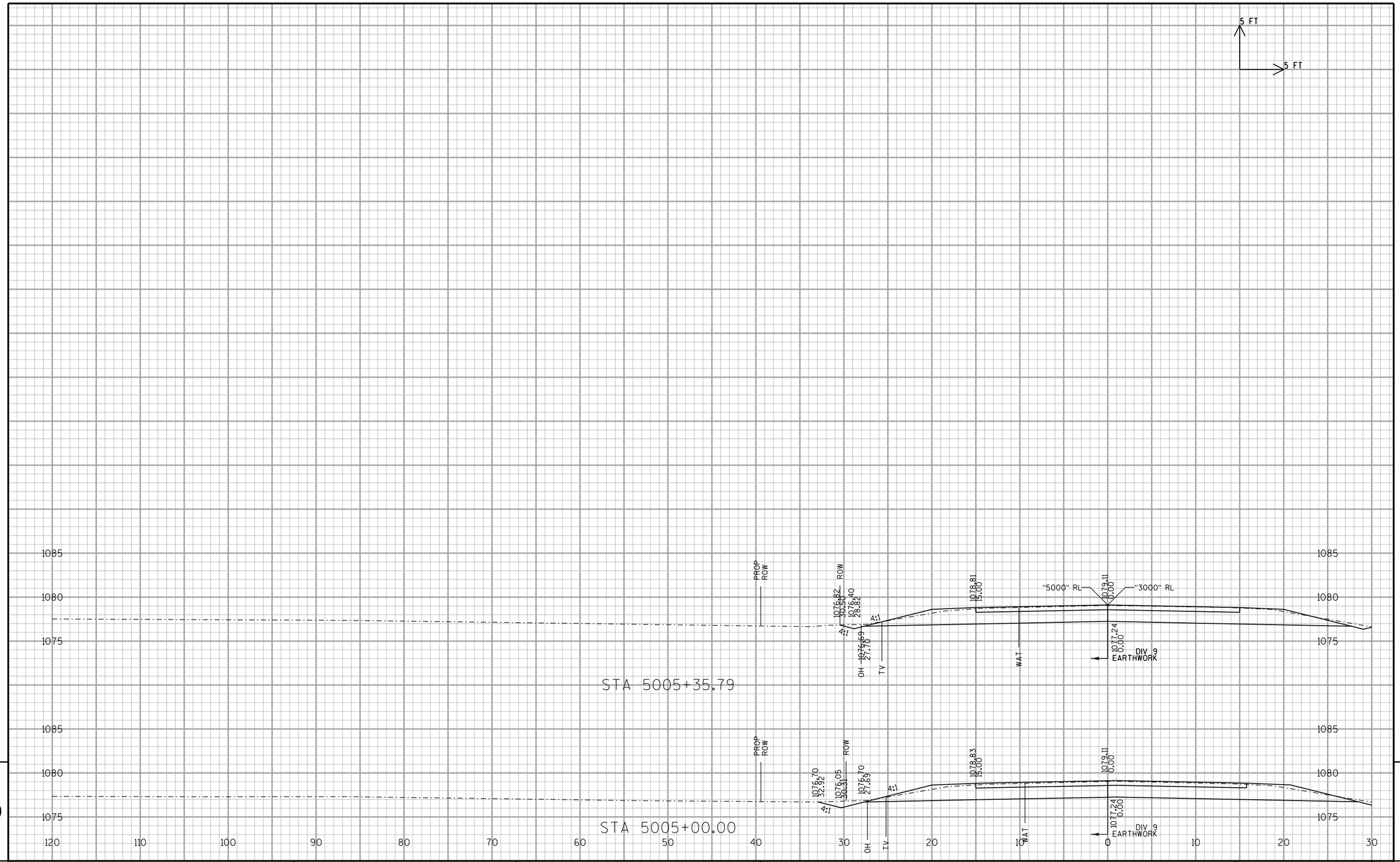
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 246	E



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 247	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090208_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:07 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



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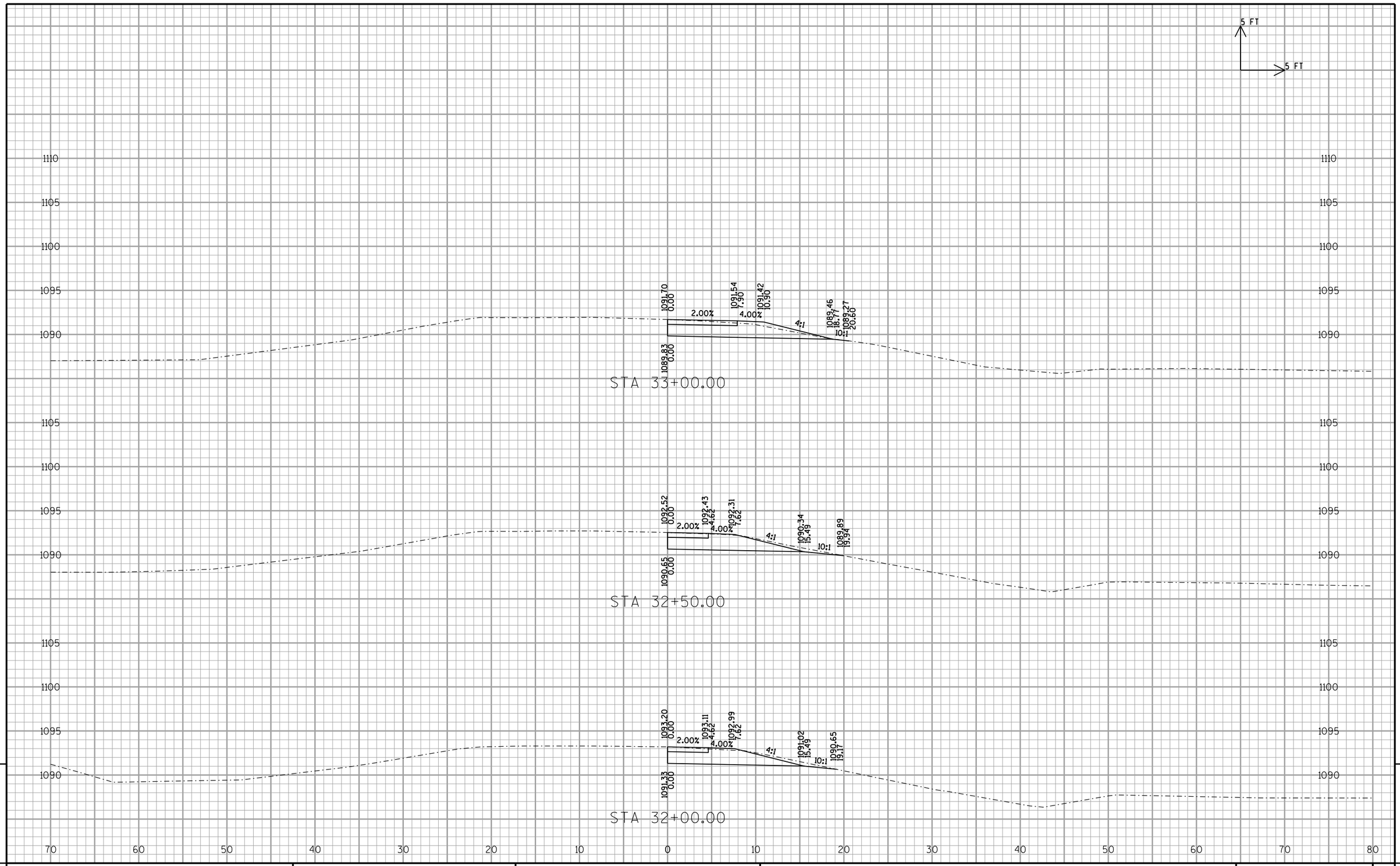
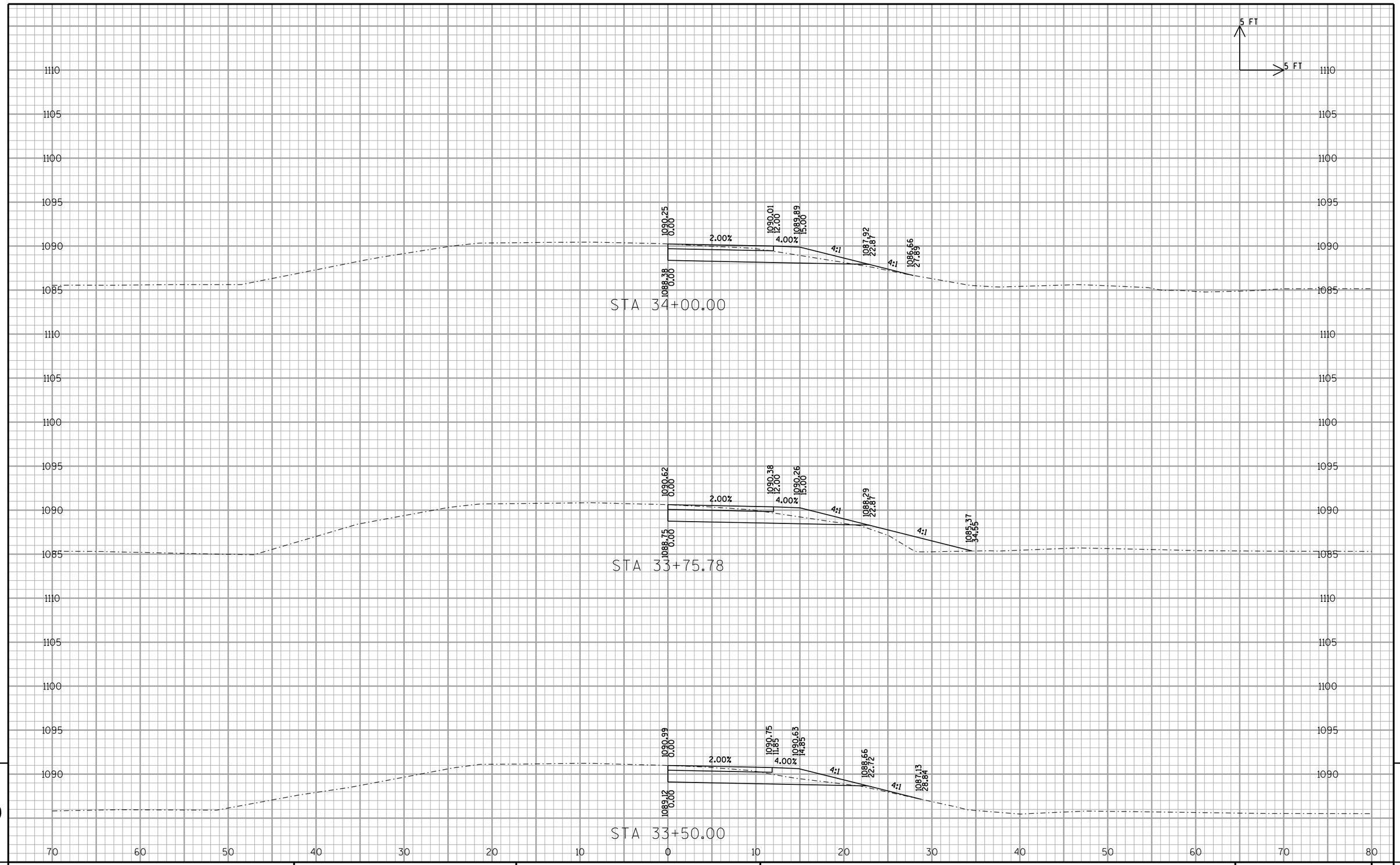
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 248	E



9

9

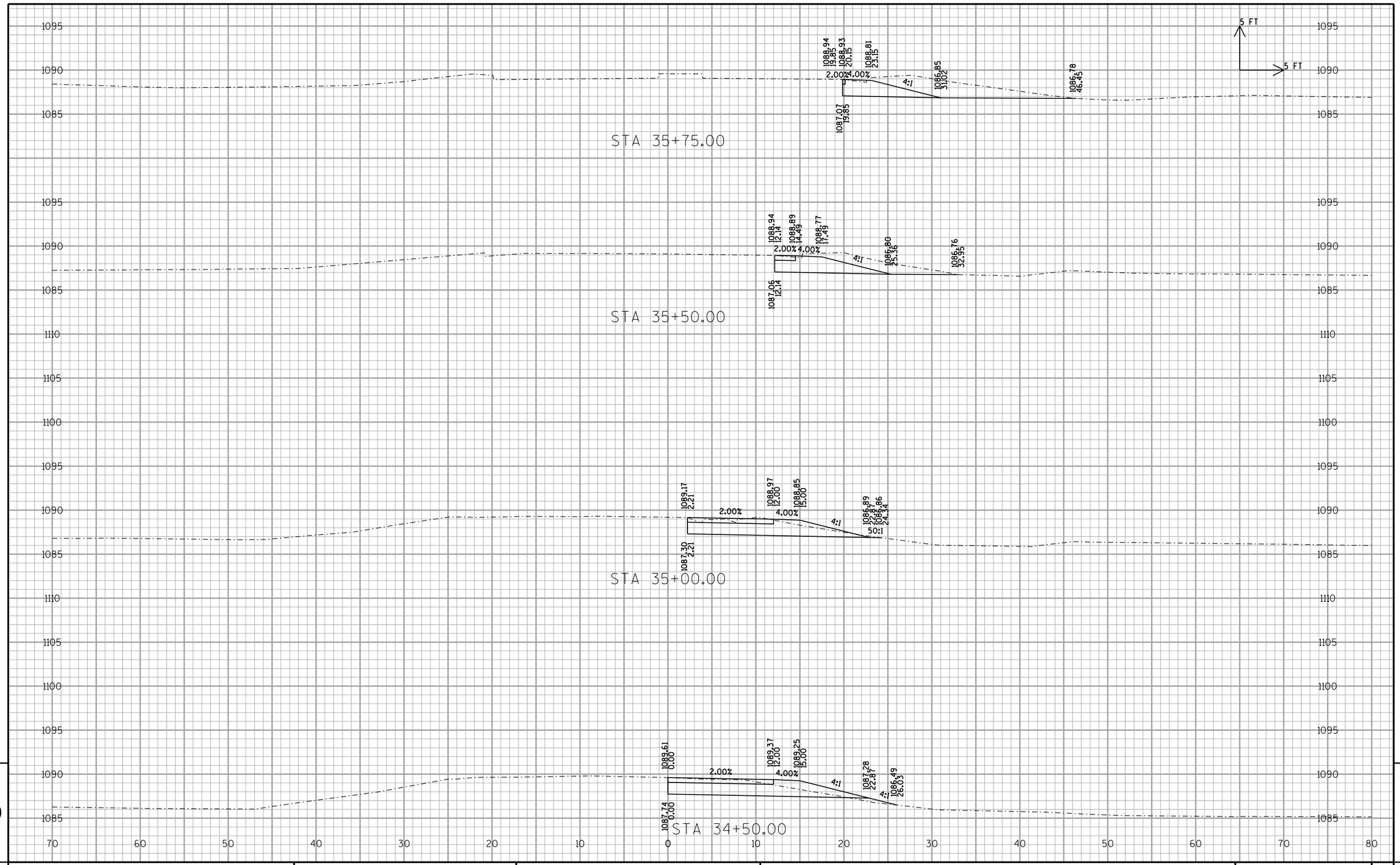
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 249	E



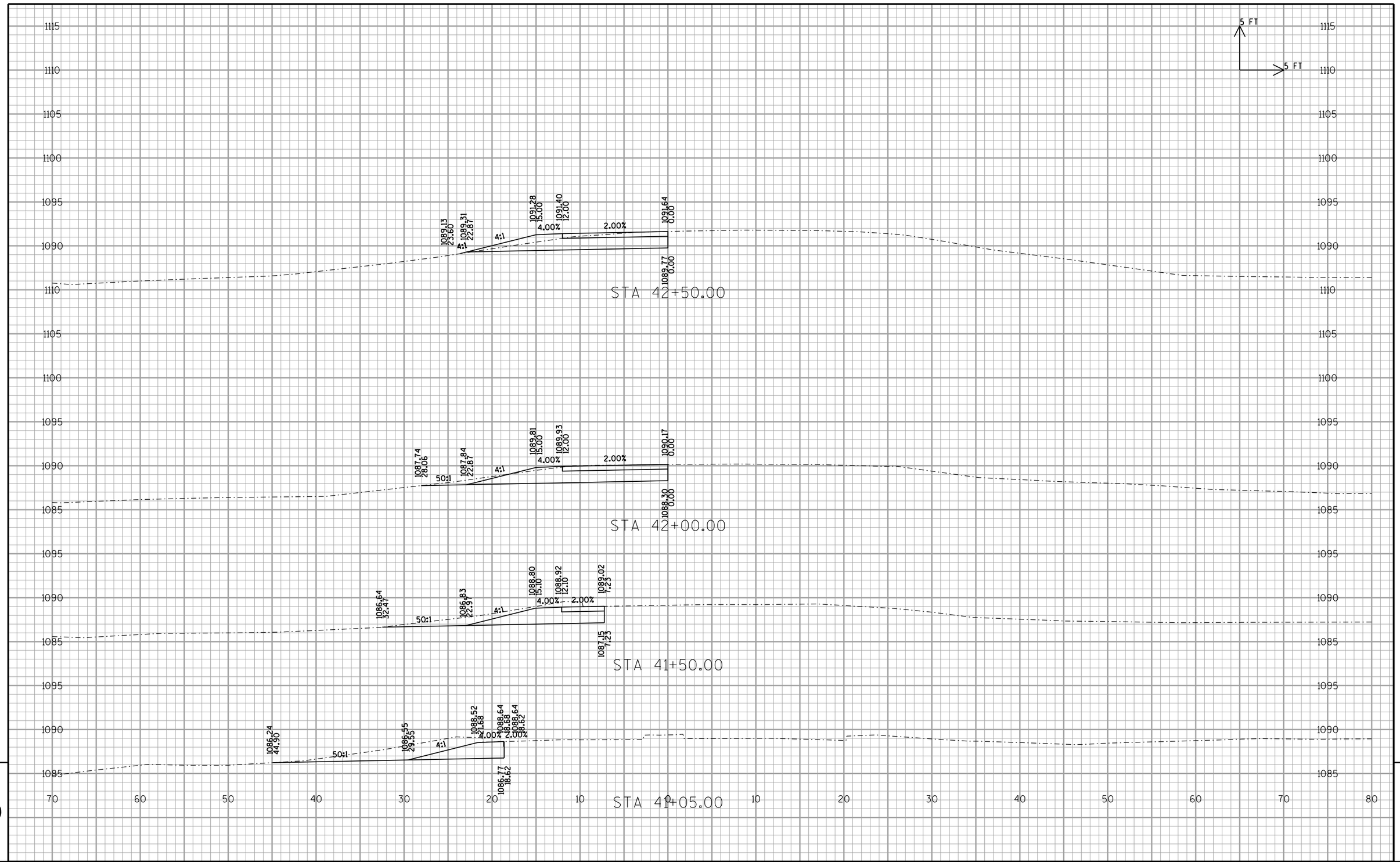
PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 250	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090209_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:08 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 251	E



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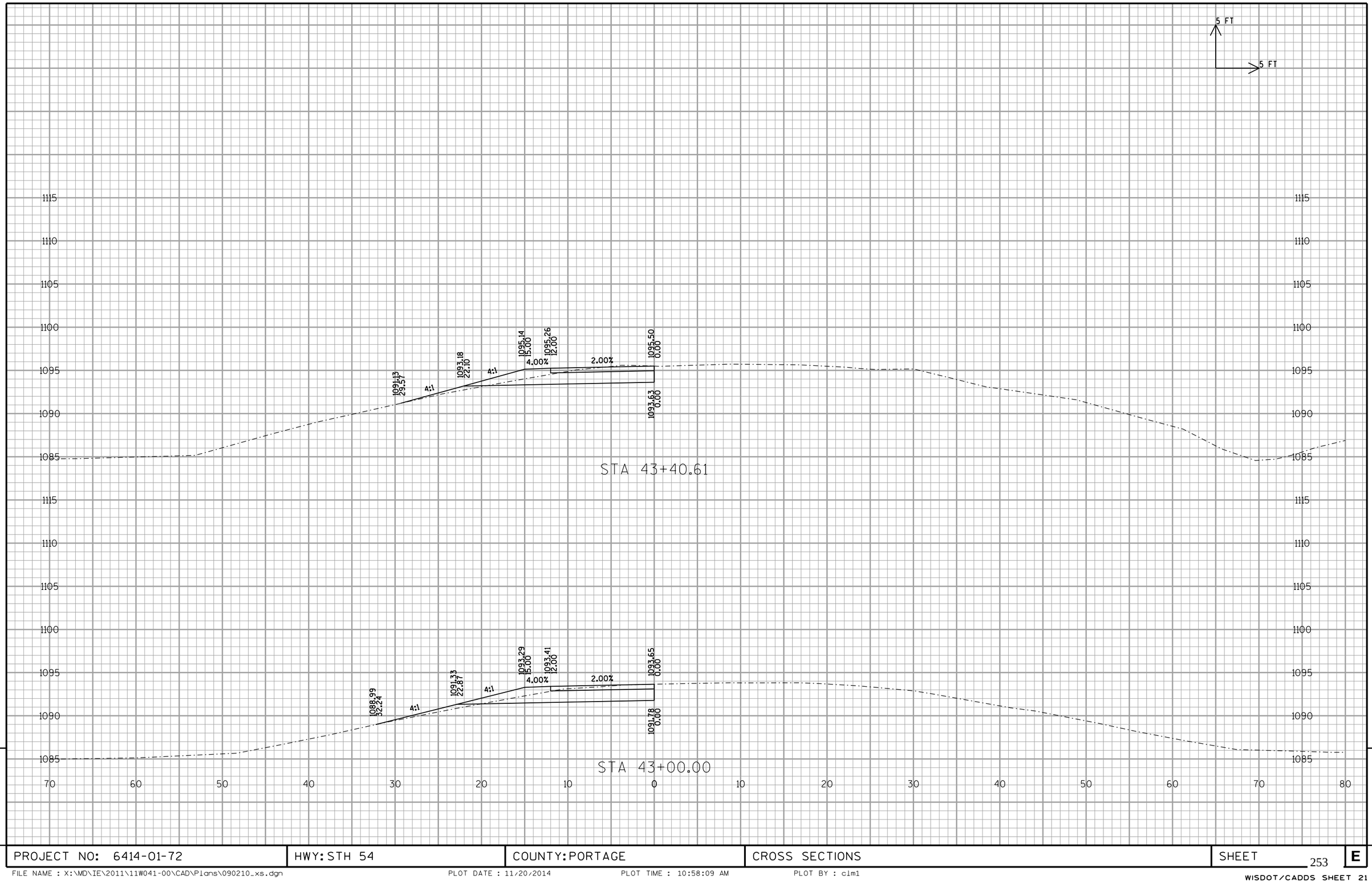
9

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 252	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090210_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:09 AM PLOT BY : clm1

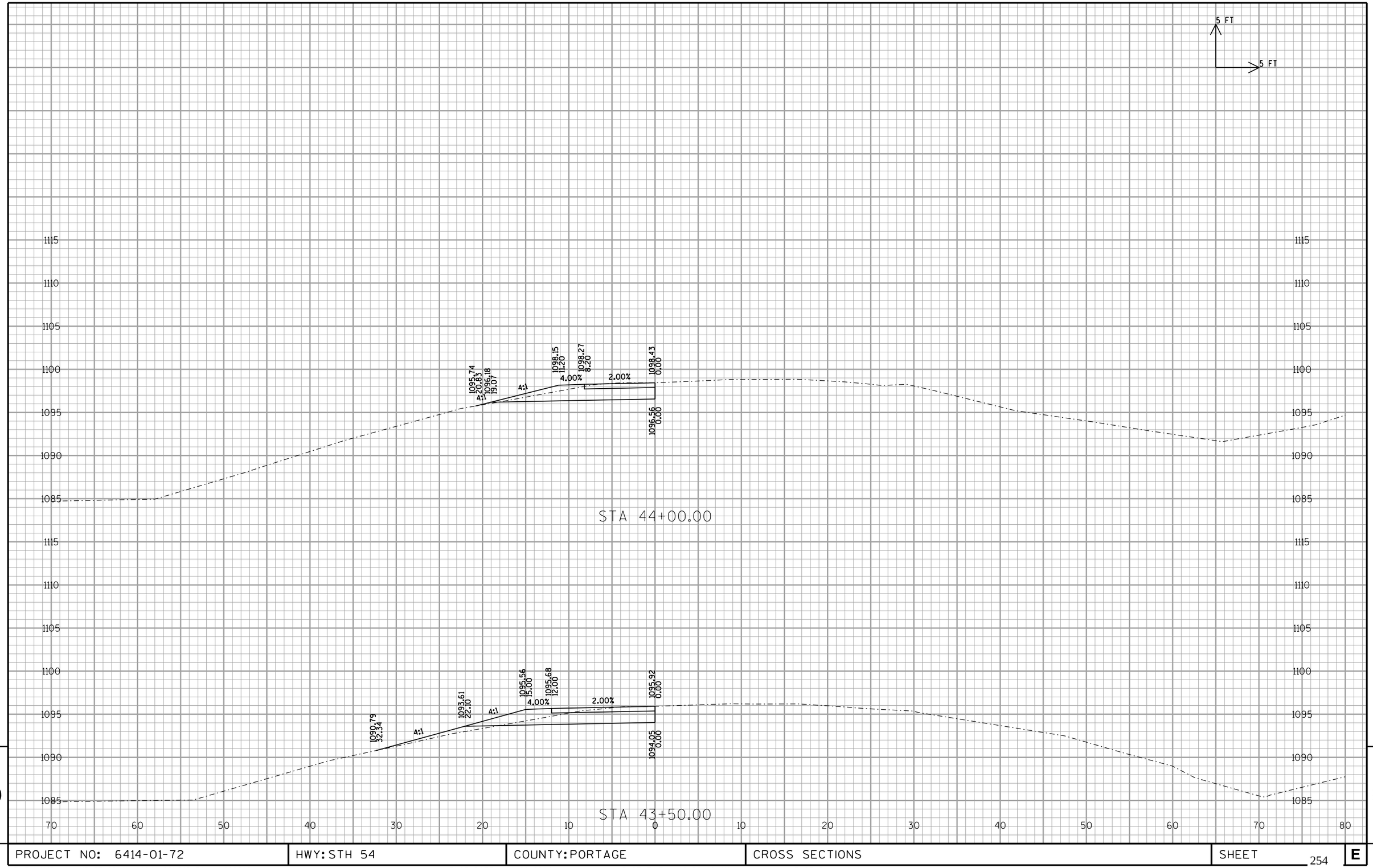
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 253	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090210_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:09 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 254	E

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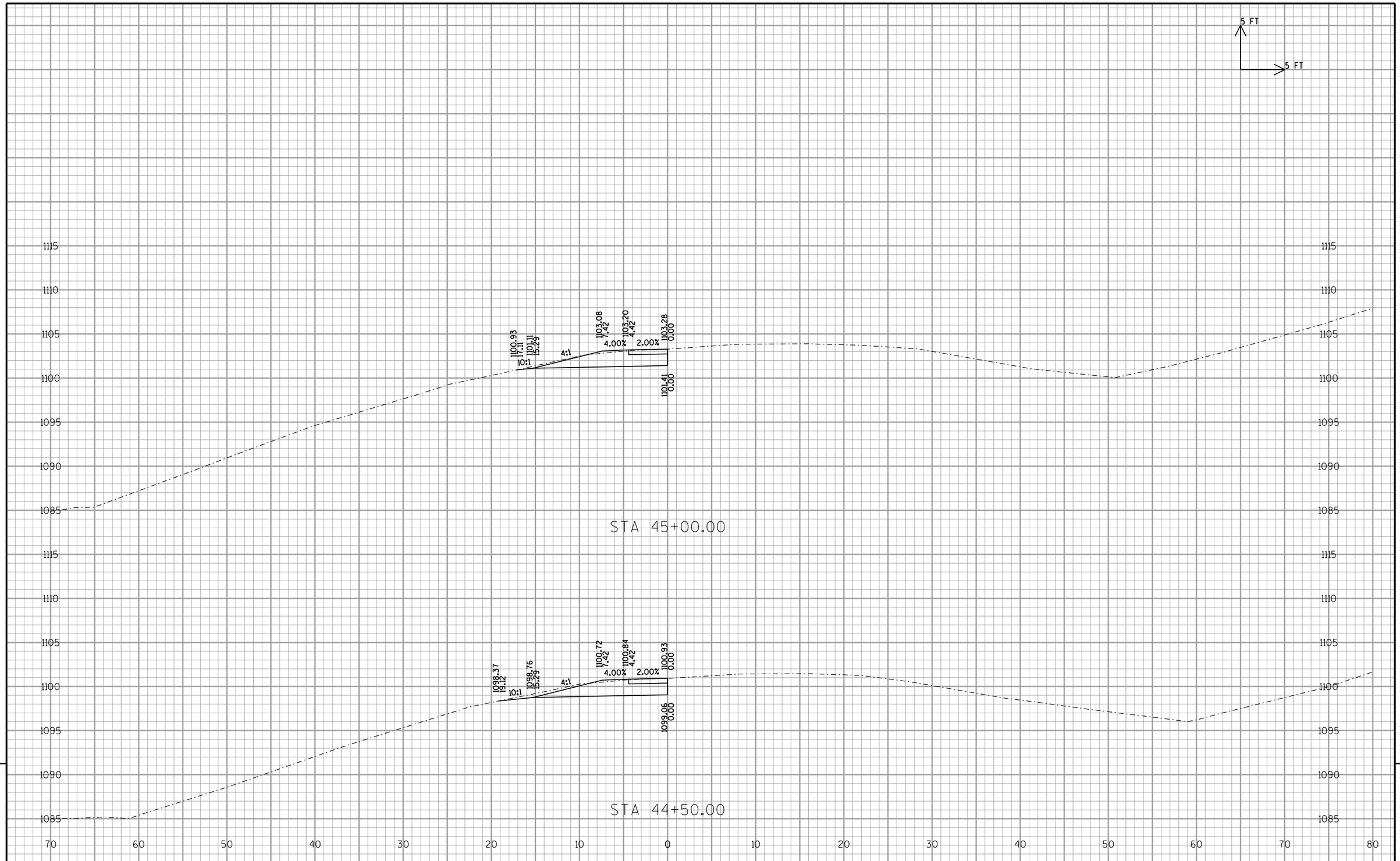
WISDOT/CADDS SHEET 21



PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET 255	E

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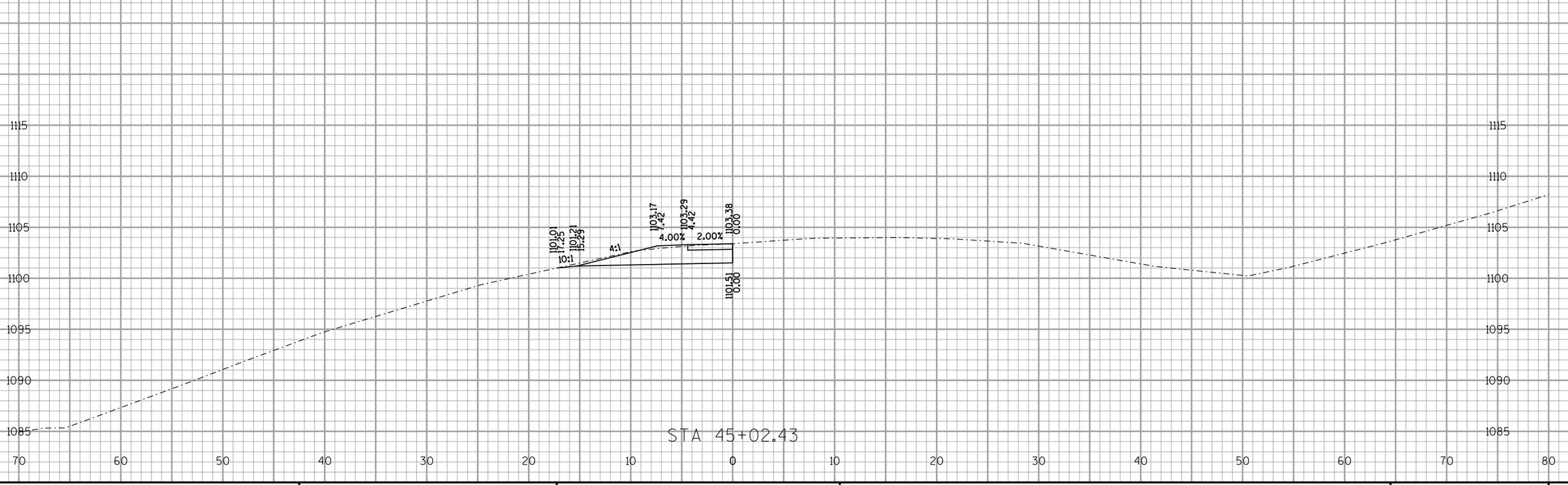
WISDOT/CADDS SHEET 21

5 FT

5 FT



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9

PROJECT NO: 6414-01-72	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS	SHEET	E

FILE NAME : X:\MD\IE\2011\11W041-00\CAD\Plans\090210_xs.dgn PLOT DATE : 11/20/2014 PLOT TIME : 10:58:10 AM PLOT BY : clm1

WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WIS MAR 2015

PROJECT ID: 6414-01-73

WISTU: 6414-01-73

COUNTY: PORTAGE

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 = 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PLOVER - WAUPACA

MAPLE DRIVE INTERSECTION

STH 54

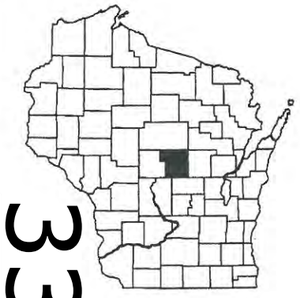
LOCAL UTILITY

PORTAGE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6414-01-73		

STATE PROJECT NUMBER

6414-01-73



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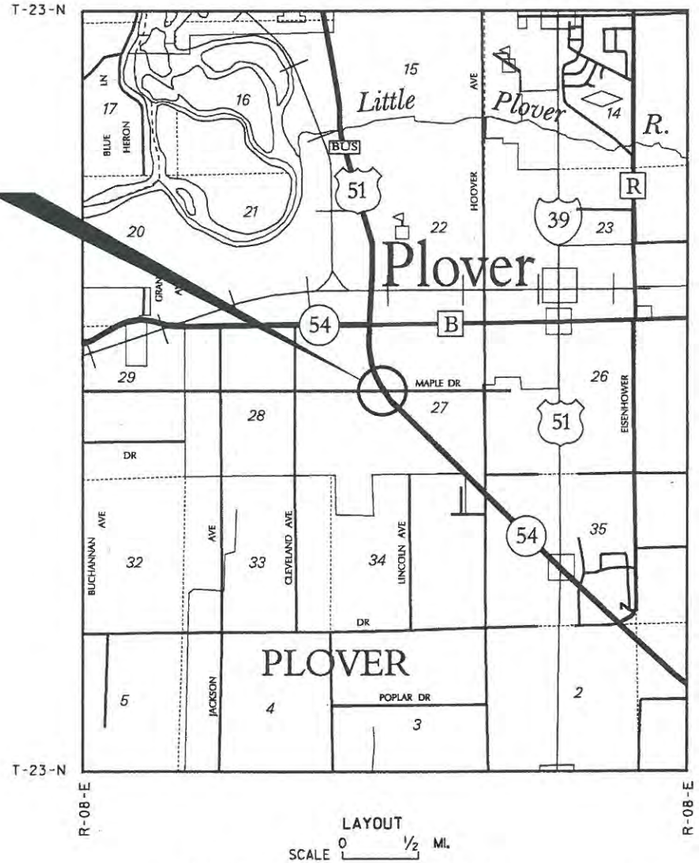
PROJECT 6414-01-73



LAYOUT

SCALE 0 ½ MI.

TOTAL NET LENGTH OF CENTERLINE = 0.139 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), PORTAGE COUNTY.

ACCEPTED FOR VILLAGE OF PLOVER

BY

7-25-14 Dan H Schlutt

DATE VILLAGE PRESIDENT

ORIGINAL PLANS PREPARED BY

AECOM

WISCONSIN BRUCE N. GERLAND E26213 Stevens Point, WI 7/25/14 PROFESSIONAL ENGINEER

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	FOTH INFRASTRUCTURE & ENV
Designer	BRUCE GERLAND
Project Manager	
Regional Examiner	
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/28/14 (Signature)

E

DESIGN DESIGNATION

A.A.D.T. 2014	=	6,600
A.A.D.T. 2034	=	10,300
D.H.V. 11.6%	=	1,195
D.D.	=	58/42
T.	=	19.5%
DESIGN SPEED	=	35 MPH
ESALS	=	3,686,500

CONVENTIONAL SYMBOLS

PLAN

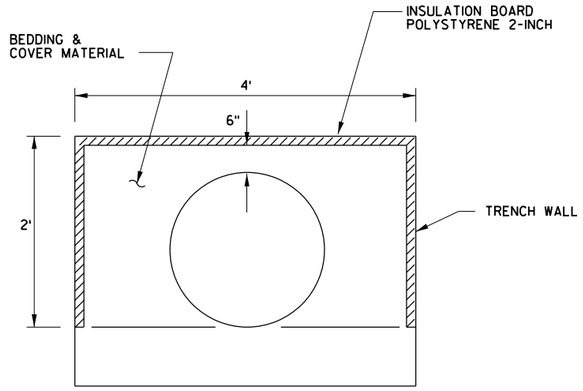
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

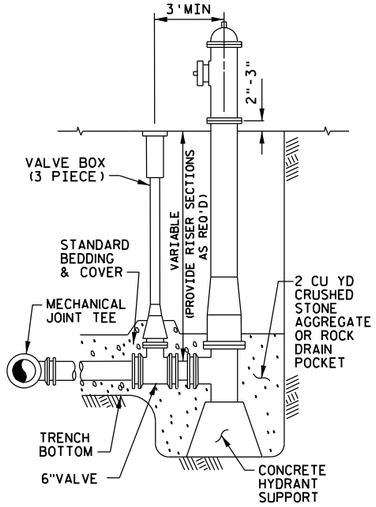
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

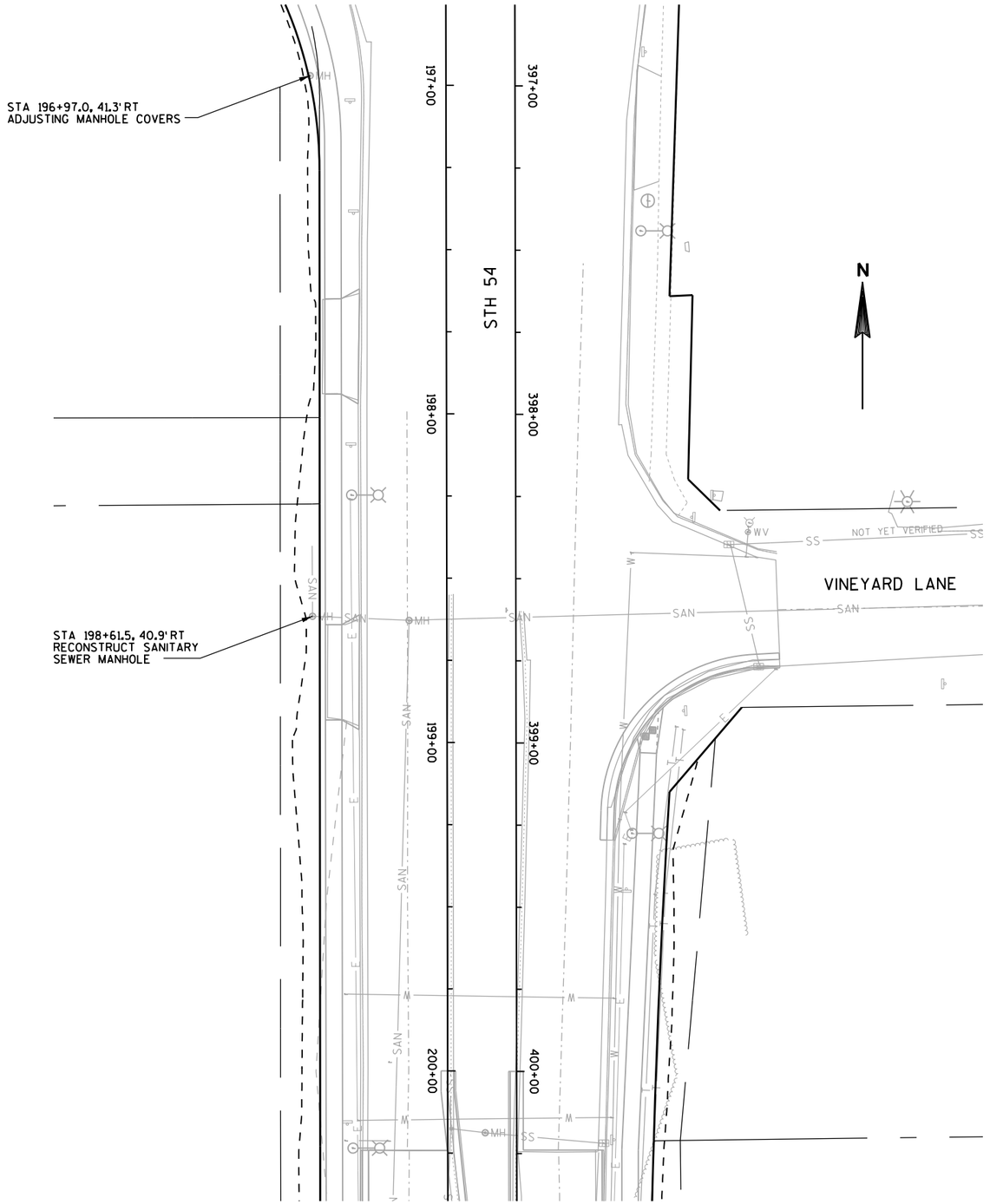
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE



BURIED PIPING INSULATION
NTS



TYPICAL HYDRANT DETAIL
NTS

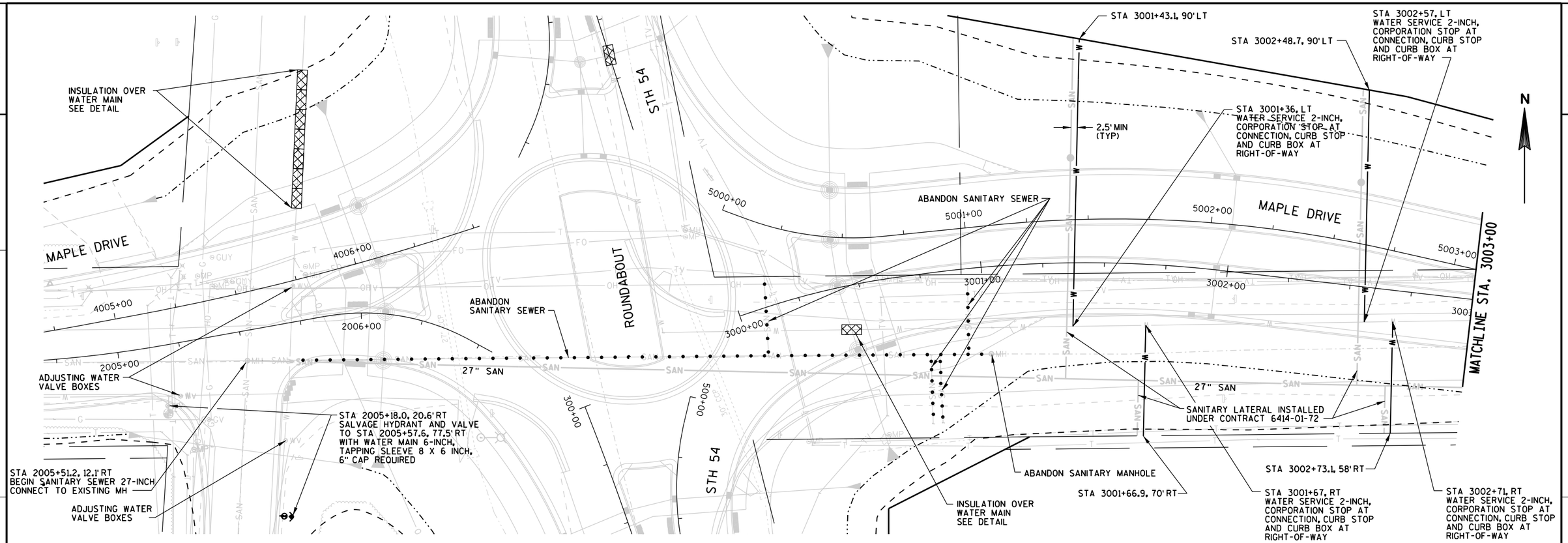


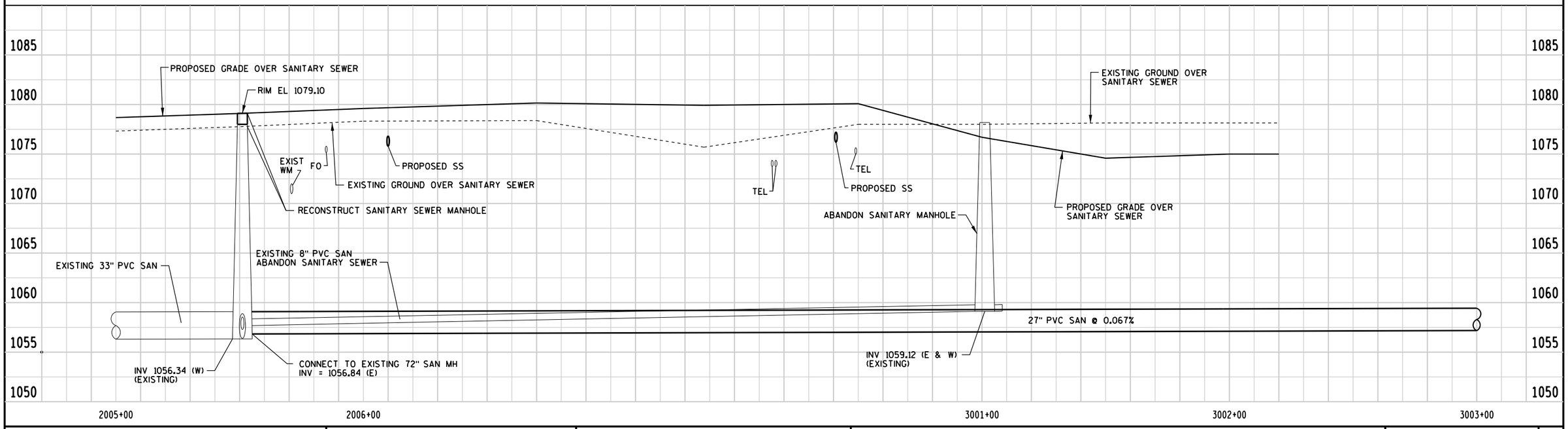
2

PROJECT NUMBER: 6414-01-73	HWY: STH 54	COUNTY: PORTAGE	CONSTRUCTION DETAILS	SHEET 2	E

FILE NAME: L:\Work\Projects\66136\task_92_sth54_maple_dr\021001_cd.dgn
BATCH PRINT SHEET 1 OF 1
PRINTER DRIVER: S:_acm-CADstds_Libraries\WisDOT\MicroStation\Resources\MS_Printing\Printer_Drivers\ET_PDF_11 x 17.plt
PEN TABLE: L:\Work\Projects\66136\task_92_sth54_maple_dr\MS_Printing\Pen_Tables\ET_WisDOT.tbl
PLOT DATE: 10/22/2014
PLOT TIME: 2:11:47 PM
PLOT SCALE: 1:480
WISDOT/CADDS SHEET 42

2





PROJECT NUMBER: 6414-01-73	HWY: STH 54	COUNTY: PORTAGE	SANITARY SEWER & WATER MAIN	SHEET 3	E

FILE NAME: L:\Work\Projects\66136\task_92_sth54_maple_dr\023001_up.dgn
BATCH PRINT SHEET 1 OF 1
PRINTER DRIVER: S:_acm-CADstds_Libraries\WISDOT\MicroStation\Resources\MS_Printing\Printer_Drivers\AE_PDF_11 x 17.plt
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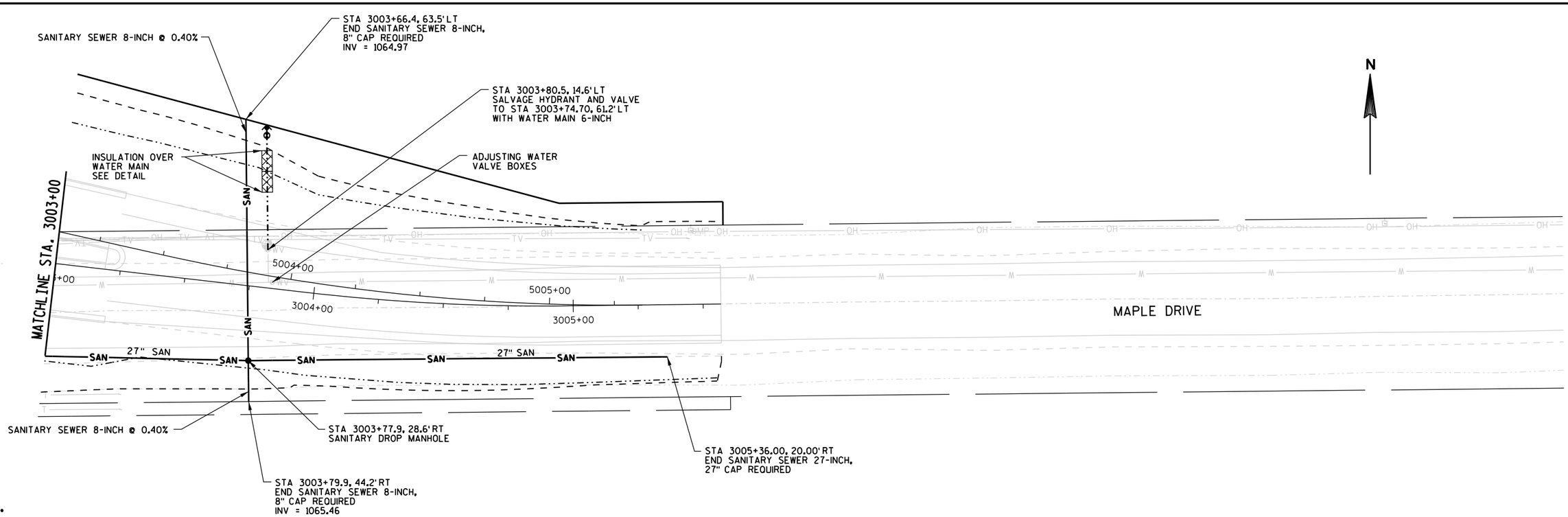
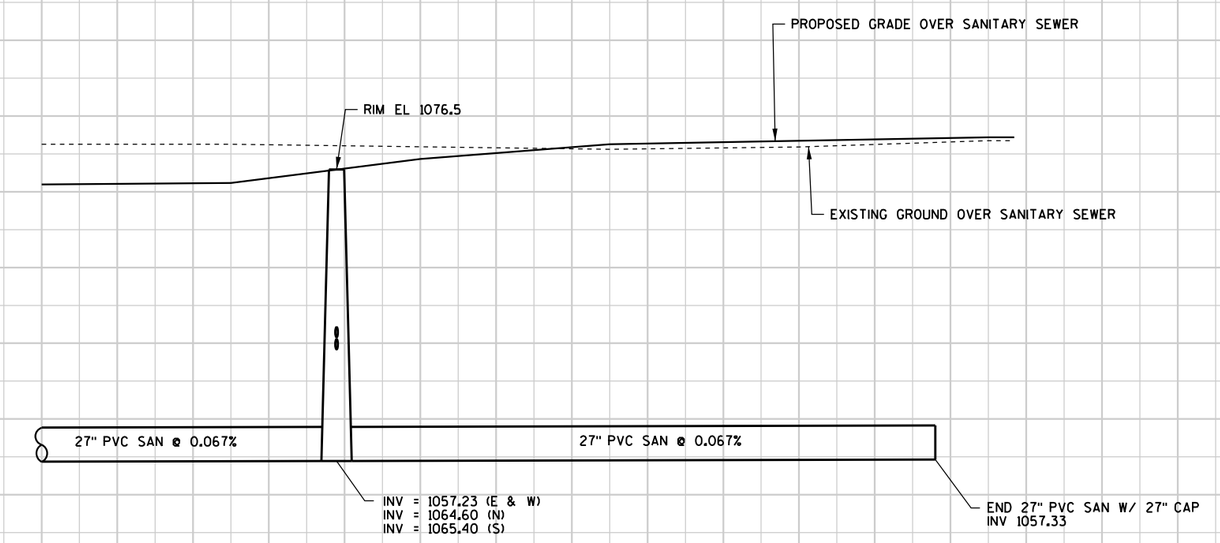
PLOT DATE: 10/24/2014
PLOT TIME: 1:16:56 PM
PLOT SCALE: 1:40
WISDOT/CADDS SHEET 41





PROJECT NUMBER: 6414-01-73	HWY: STH 54	COUNTY: PORTAGE	SANITARY SEWER & WATER MAIN	SHEET 4	E

FILE NAME: L:\Work\Projects\66136\task_92_sth54_maple_dr\023002_up.dgn
BATCH PRINT SHEET 1 OF 1
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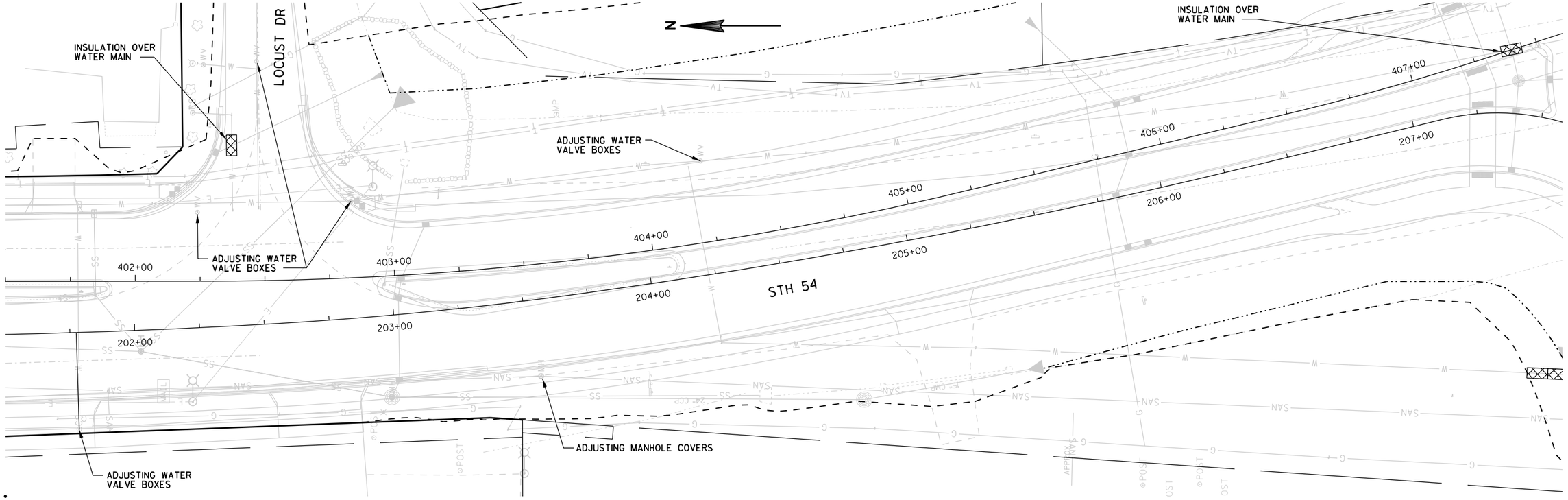
PLOT DATE: 10/22/2014
PLOT TIME: 2:15:44 PM
PLOT SCALE: 1:40
WISDOT/CADDS SHEET 41



PROJECT NUMBER: 6414-01-73	HWY: STH 54	COUNTY: PORTAGE	SANITARY SEWER & WATER MAIN	SHEET 5	E

FILE NAME: L:\Work\Projects\66136\task_92_sth54_maple_dr\023003_up.dgn
BATCH PRINT SHEET 1 OF 1

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PLOT DATE: 10/22/2014
PLOT TIME: 2:16:08 PM

PLOT SCALE: 1:40

WISDOT/CADDS SHEET 41

DATE 16JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6414-01-73 QUANTITY
0590	611.8110	Adjusting Manhole Covers	EACH	2.000	2.000
0600	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000
0610	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-Inch	SY	85.000	85.000
0630	619.1000	Mobilization	EACH	0.130	0.130
1560	SPV.0060	Special 03. Salvage Hydrant And Valve	EACH	2.000	2.000
1570	SPV.0060	Special 04. Adjust Water Main Valve Box	EACH	9.000	9.000
1580	SPV.0060	Special 05. Abandon Sanitary Manhole	EACH	1.000	1.000
1590	SPV.0060	Special 06. Watermain Tapping Sleeve 8 X 6-Inch	EACH	1.000	1.000
1600	SPV.0060	Special 07. Cap Watermain To Remain In Service	EACH	1.000	1.000
1610	SPV.0060	Special 08. Cap Sanitary Sewer To Remain In Service	EACH	3.000	3.000
1620	SPV.0060	Special 09. Sanitary Manhole Casting	EACH	1.000	1.000
1680	SPV.0090	Special 01. Watermain 6-Inch	LF	50.000	50.000
1690	SPV.0090	Special 02. Abandon Sanitary Sewer	LF	421.000	421.000
1700	SPV.0090	Special 03. Sanitary Sewer Televising	LF	841.000	841.000
1710	SPV.0090	Special 04. Sanitary Sewer 8-Inch	LF	109.000	109.000
1720	SPV.0090	Special 05. Sanitary Sewer 27-Inch	LF	732.000	732.000
1730	SPV.0090	Special 06. Class B Bedding	LF	1,141.000	1,141.000
1750	SPV.0090	Special 08. Water Service 2-Inch	LF	300.000	300.000
1830	SPV.0200	Special 01. Sanitary Drop Manhole	VF	18.520	18.520
1840	SPV.0200	Special 02. Reconstruct Sanitary Manhole	VF	2.540	2.540

INSULATION BOARD POLYSTYRENE 2-INCH

FROM	-	TO	612.0902.S SY
402+37.4, 48.2' LT	-	402+38.2, 56.2' LT	7
407+36.0, 0.6' LT	-	407+44.0, 0.4' RT	7
4005+81.5, 28.1' LT	-	4005+96.5, 81.5' LT	50
3000+38.3, 17.0' RT	-	3000+46.0, 18.5' RT	7
5003+85.0, 31.6' RT	-	5003+81.7, 47.3' LT	14
PROJECT TOTAL			85

SALVAGE HYDRANT AND VALVE

FROM	-	TO	SPV.0060.03 SALVAGE HYDRANT AND VALVE EACH
2005+18.0, 20.6' RT	-	2005+57.6, 77.5' RT	1
3003+80.5, 14.6' LT	-	3003+74.7, 61.2' LT	1
PROJECT TOTAL			2

ADJUST WATERMAIN VALVE BOX

STATION	LOCATION	SPV.0060.04 ADJUST WATERMAIN VALVE BOX EACH
201+77.5	37.3' RT	1
402+24.0	26.5' LT	1
402+48.2	84.4' LT	1
402+84.3	29.5' LT	1
404+22.9	31.3' LT	1
2005+22.9	21.5' RT	1
2005+60.6	46.7' RT	1
3003+83.7	2.3' LT	1
4005+73.2	2.0' RT	1
PROJECT TOTAL		9

WATERMAIN FITTINGS

STATION	LOCATION	SPV.0060.06 WATERMAIN TAPPING SLEEVE 8 X 6-INCH EACH
2005+57.6	77.5' RT	1
PROJECT TOTAL		1

CAP WATERMAIN

STATION	LOCATION	SPV.0060.07 CAP WATERMAIN TO REMAIN IN SERVICE EACH
2005+18.0	20.6' RT	1
PROJECT TOTAL		1

WATERMAIN

FROM	-	TO	SPV.0090.01 WATERMAIN 6-INCH LF
2005+57.6, 77.5' RT			3
3003+80.5, 14.6' LT		3003+74.7, 61.2' LT	47
PROJECT TOTAL			50

WATER SERVICE

STATION	LOCATION	SPV.0090.08 WATER SERVICE 2-INCH LF
3001+36	LT	116
3001+67	RT	45
3002+57	LT	94
3002+71	RT	45
PROJECT TOTAL		300

ABANDON SANITARY SEWER

FROM	-	TO	SPV.0090.02 ABANDON SANITARY SEWER LF
2005+51.2, 12.1' RT	-	3000+99.5, 30.4' RT	301
3000+06.0, 19.0' RT	-	3000+14.5, 12.5' LT	33
3000+75.3, 32.9' RT	-	3000+69.1, 60.6' RT	28
3000+76.8, 33.5' RT	-	3000+73.2, 60.8' RT	28
3000+90.5, 34.5' RT	-	3000+93.9, 4.2' RT	31
		PROJECT TOTAL	421

SANITARY MANHOLE

STATION	LOCATION	RIM ELEVATION	LOWEST INVERT ELEVATION	SPV.0200.01 SANITARY DROP MANHOLE VF	SPV.0060.09 SANITARY MANHOLE CASTING EACH
3003+77.9	28.6' RT	1076.50	1057.23	18.52	1
PROJECT TOTAL				18.52	1

ADJUSTING MANHOLE COVERS

STATION	LOCATION	611.8110 EACH
196+97.0	41.3' RT	1
203+53.4	29.5' RT	1
PROJECT TOTAL		2

SANITARY SEWER

FROM	-	TO	SPV.0090.04 SANITARY SEWER 8-INCH LF	SPV.0090.05 SANITARY SEWER 27-INCH LF	SPV.0090.06 CLASS B BEDDING LF	SPV.0090.03 SANITARY SEWER TELEVISING LF
2005+51.2, 12.1' RT		3003+77.9, 28.6' RT	---	571	571	571
3003+77.9, 28.6' RT		3005+36.00, 20' RT	---	161	161	161
3003+66.4, 63.5' LT		3003+77.9, 28.6' RT	93	---	93	93
3003+79.9, 44.2' RT		3003+77.9, 28.6' RT	16	---	16	16
3001+32 LT			---	---	138	---
3001+64 RT			---	---	22	---
3002+57 LT			---	---	120	---
3002+69 RT			---	---	20	---
		PROJECT TOTAL	109	732	1,141	841

ABANDON SANITARY MANHOLE

STATION	LOCATION	SPV.0060.05 ABANDON SANITARY MANHOLE EACH
3000+99.5	30.4' RT	1
PROJECT TOTAL		1

RECONSTRUCT SANITARY MANHOLE

STATION	LOCATION	SPV.0200.02 RECONSTRUCT SANITARY MANHOLE VF	611.8120.S COVER PLATES TEMPORARY EACH
2005+51.2	12.1' RT	1.11	1
198+61.5	40.9' RT	1.43	--
PROJECT TOTAL		2.54	1

CAP SANITARY SEWER

STATION	LOCATION	SPV.0060.08 CAP SANITARY SEWER TO REMAIN IN SERVICE EACH
3003+66.4	63.5' LT	1
3003+79.9	44.2' RT	1
3005+36.0	20' RT	1
PROJECT TOTAL		3

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov