gre FEB 13, 2024

PROJECT ID: 4831-05-71

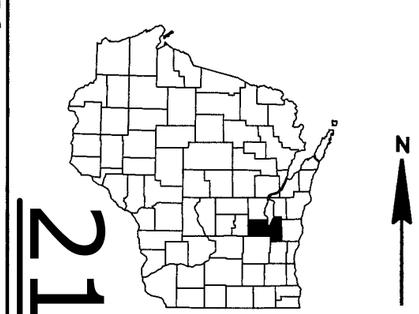
WITH: N/A

COUNTY: FOND DU LAC

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 = 264



21

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

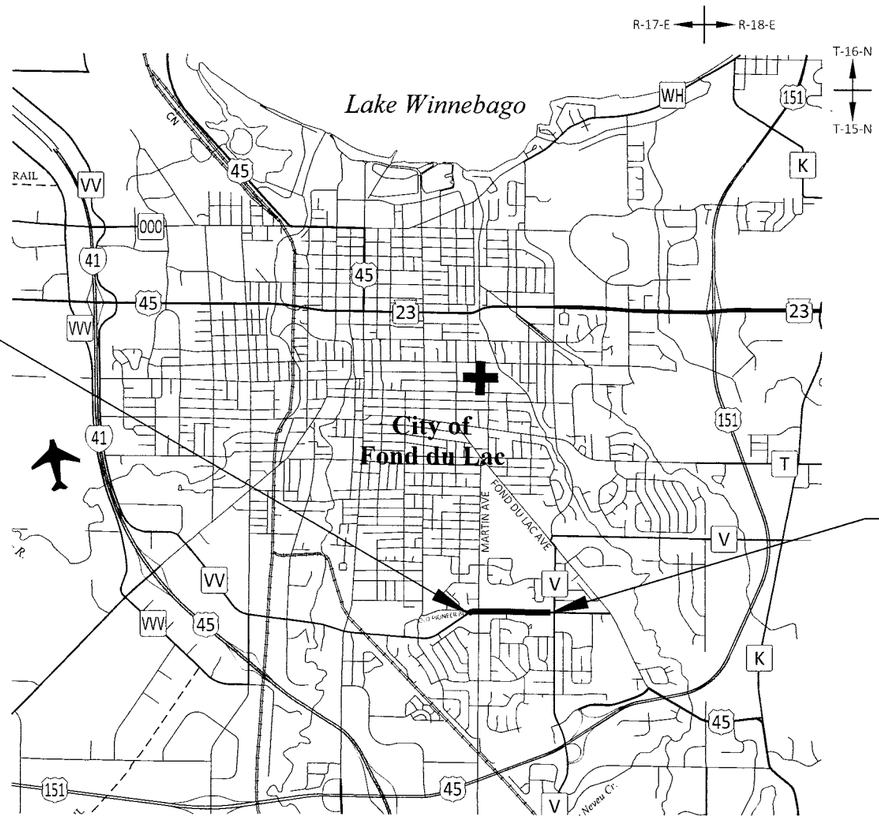
C FOND DU LAC, CTH VV

CTH V TO MARTIN AVENUE

CTH VV
FOND DU LAC COUNTY

STATE PROJECT NUMBER
4831-05-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4831-05-71	WISC 2024231	1



BEGIN PROJECT
STA 80+30.00
Y = 377425.357
X = 820702.396

END PROJECT
STA 105+80.00

DESIGN DESIGNATION

A.A.D.T.	2024	=	6,640
A.A.D.T.	2044	=	8,100
D.H.V.		=	606
D.D.		=	50/50
T.		=	12.1
DESIGN SPEED		=	40 MPH
ESALS		=	1,300,000 HMA

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 (300'EB')
- 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

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.483 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ACCEPTED FOR

FOND DU LAC COUNTY

Date 10/17/23 THOMAS JANKE HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
93 South Pioneer Road, Suite 300
Fond du Lac, WI 54935
(920) 924-5720

WISCONSIN JEFFREY A. CHVOSTA E-39047 SLINGER, WI PROFESSIONAL ENGINEER

DATE: 10/17/23

JEFFREY A. CHVOSTA, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GREMMER & ASSOCIATES, INC.
Designer	GREMMER & ASSOCIATES, INC.
Project Manager	JODI JAROSINSKI
Regional Examiner	NORTHEAST REGION
Regional Supervisor	BRIAN EDWARDS

APPROVED FOR THE DEPARTMENT

DATE: 10/19/2023 {Signature}

E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-010101-TI.DWG PLOT DATE : 10/17/2023 10:25 AM PLOT BY : AARON SARAUER PLOT NAME :

GENERAL NOTES

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

SAWCUT LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATION AND LAYOUT OF PRIVATE ENTRANCES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

PROPOSED SECTIONS AS SHOWN ON THE CROSS SECTION SHEETS SHOW THE FINISHED SURFACE OF TOPSOIL WHERE REQUIRED.

CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATIONS WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.

ROTATE MANHOLE COVERS TO MATCH LANE LINES OR CENTER OF LANE AS DIRECTED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL ITEMS SHOWN ARE APPROXIMATE, THE EXACT LOCATION SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THAT THE MEASURE IS NO LONGER NECESSARY.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
CURB RAMP DETAILS
EROSION CONTROL PLAN
STORM SEWER LAYOUT
SANITARY SEWER & WATER MAIN PLAN
SIGNING PLAN
LIGHTING PLAN
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING PLAN
TRAFFIC CONTROL
ALIGNMENT DIAGRAM

ABBREVIATIONS

A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
A.D.T.	AVERAGE DAILY TRAFFIC
AE, AEW	APRON ENDWALL
AGG	AGGREGATE
ASPH	ASPHALT
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CC	CENTER OF CURVATURE
CE	COMMERCIAL ENTRANCE
C/L	CENTER LINE
CONC	CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE
CMP	CORRUGATED METAL PIPE
D	DEGREE OF CURVE
Δ	DELTA
D.H.V.	DESIGN HOURLY VOLUME
E	EXTERNAL DISTANCE FROM MIDPOINT OF CIRCULAR CURVE FROM ANGLE INTERSECTION
EL, ELEV	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
FE	FIELD ENTRANCE
F/L, FL	FLOW LINE
HT	HEIGHT
INTER	INTERSECTION
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
MP	MARKER POST
NC	NORMAL CROWN
NOM	NOMINAL
NOR, NORM	NORMAL
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
P.L.	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
RO	RUN OFF LENGTH
SALV	SALVAGED
SDD	STANDARD DETAIL DRAWING(S)
SE	SUPERELEVATION
SEG	SEGMENT
SHLD	SHOULDER
S/L	SURVEY LINE
T.	PERCENT TRUCKS
T	TANGENT LENGTH
TEMP	TEMPORARY
TER	TERRACE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
V	VELOCITY OR DESIGN SPEED
VAR	VARIABLE
VC	VERTICAL CURVE
VCL	VERTICAL CURVE LENGTH
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPRC	VERTICAL POINT OF REVERSE CURVATURE
VPT	VERTICAL POINT OF TANGENCY

DESIGN CONTACT

GREMMER & ASSOCIATES, INC.
93 SOUTH PIONEER ROAD, SUITE 300
FOND DU LAC, WI 54935
ATTN: JEFFREY CHOSTA, PE
PHONE: (920) 924-5720
EMAIL: j.chvosta@gremmerassociates.com

DNR AREA LIAISON

WISCONSIN DEPT. OF NATURAL RESOURCES
NORTHEAST REGION HQ
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727
ATTN: JEREMIAH SCHIEFELBEIN
PHONE: (920)-360-3784
EMAIL: Jeremiah.Schiefelbein@wisconsin.gov

WISDOT CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHEAST REGION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
ATTN: JODI JAROSINSKI
PHONE: (920) 492-4129
EMAIL: jodi.jarosinski@dot.wi.gov

FOND DU LAC COUNTY CONTACT

FOND DU LAC COUNTY HIGHWAY DEPARTMENT
1820 SOUTH HICKORY STREET
P.O. BOX 1234
FOND DU LAC, WI 54937
ATTN: RYAN SOMMER, HIGHWAY ENGINEER
PHONE: (920) 929-3408
EMAIL: ryan.sommer@fdlco.wi.gov

CITY OF FOND DU LAC CONTACT

CITY OF FOND DU LAC
160 SOUTH MACY STREET
P.O. BOX 150
FOND DU LAC, WI 54936
ATTN: CHRIS JOHNSON, CITY ENGINEER
PHONE: (920) 322-3449
EMAIL: cjohnson@fdl.wi.gov

UTILITIES

COMMUNICATIONS

AT&T WISCONSIN
70 EAST DIVISION STREET
FOND DU LAC, WI 54935
ATTN: CHARLES BARTELT
PHONE: (920) 929-1013
MOBILE: (920) 410-5104
EMAIL: cb1461@att.com

ELECTRIC & GAS

ALLIANT ENERGY CORPORATION
883 WEST SCOTT STREET
FOND DU LAC, WI 54937
ATTN: BILL BASTIAN
PHONE: (920) 322-6719
EMAIL: williambastian@alliantenergy.com

WATER

CITY OF FOND DU LAC
109 NORTH MACY STREET
FOND DU LAC, WI 54935
ATTN: TRAVIS KLOETZKE
PHONE: (920) 322-3683
EMAIL: tkloetzke@fdl.wi.gov

SEWER

TOWN OF FOND DU LAC SANITARY DISTRICT #4
100 CAMELOT DRIVE
FOND DU LAC, WI 54935
ATTN: MAX FRANZEN
PHONE: (920) 322-1726
EMAIL: maxwell.f@excelengineer.com

COMMUNICATIONS

SPECTRUM
165 KNIGHTS WAY
FOND DU LAC, WI 54935
ATTN: TODD HILDEBRANDT
PHONE: (920) 794-4946
EMAIL: todd.hildebrandt@charter.com

ELECTRICAL

CITY OF FOND DU LAC
530 DOTY STREET
FOND DU LAC, WI 54935
ATTN: RAY DILTS
PHONE: (920) 322-3554
EMAIL: rdilts@fdl.wi.gov

SEWER

CITY OF FOND DU LAC
160 SOUTH MACY STREET
P.O. BOX 150
FOND DU LAC, WI 54935-0150
ATTN: CHRISTOPHER JOHNSON
PHONE: (920) 322-3449
EMAIL: cjohnson@fdl.wi.gov

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

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			.25 .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 = 6.471 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 6.364 ACRES

2

CONTROL POINT TABLE

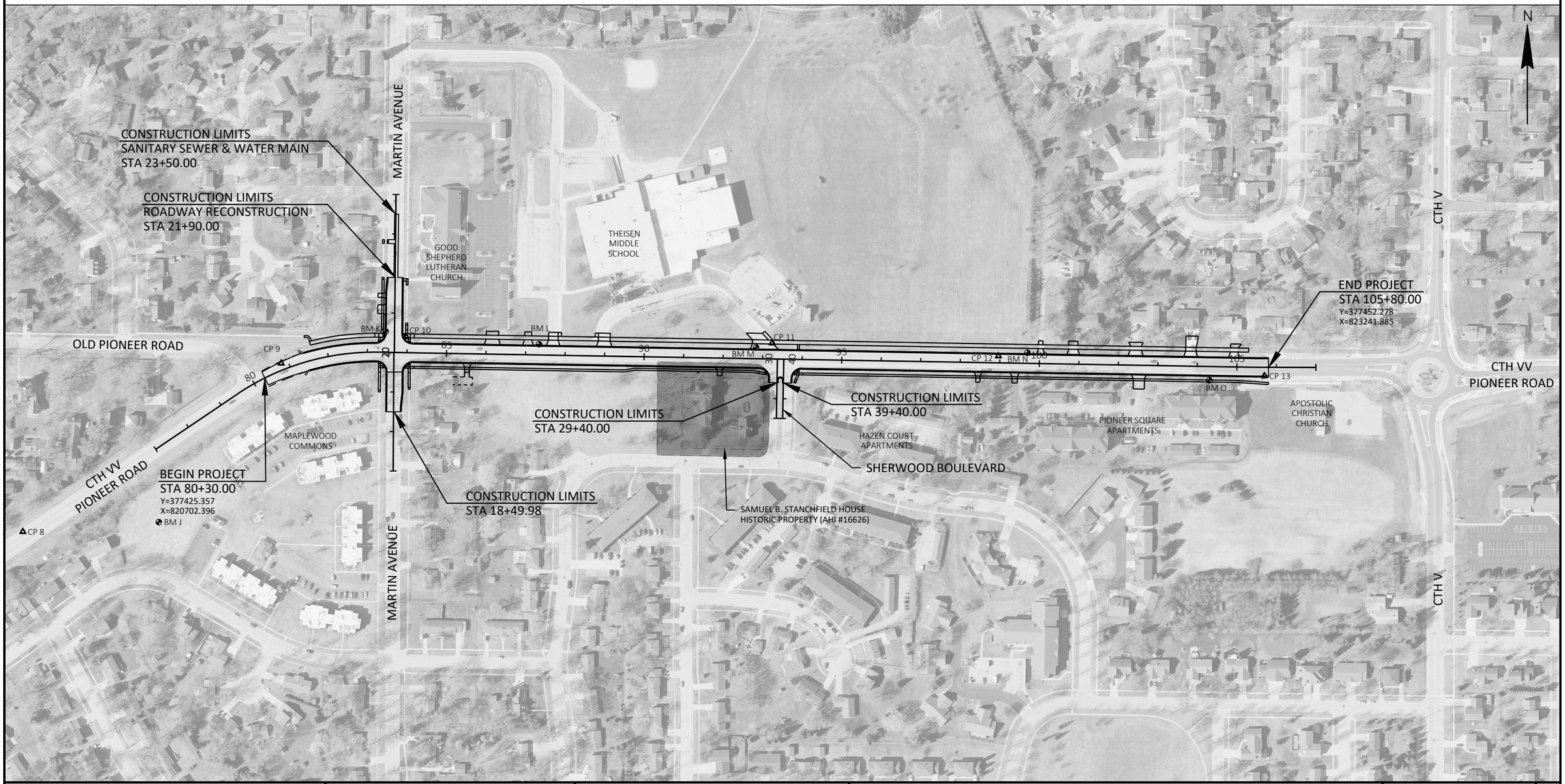
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
8	MAG NAIL IN ASPHALT, NORTH SIDE OF CTH VV, 600' NORTHEAST OF HAWTHORNE PLACE	377036.4260	820090.1060	808.76
9	MAG NAIL IN ASPHALT, NORTH SIDE OF CTH VV, 100' EAST OF OLD PIONEER ROAD (EAST)	377462.6190	820743.8390	808.58
10	MAG NAIL IN SIDEWALK JOINT, NORTHEAST CORNER OF CTH VV AND MARTIN AVENUE	377529.3420	821060.3590	808.75
11	MAG NAIL IN CONCRETE JOINT, NORTH SIDE OF CTH VV, EAST SIDE OF EAST THEISEN SCHOOL DRIVEWAY	377513.9570	821986.1510	819.36
12	MAG NAIL IN ASPHALT, NORTH SIDE OF CTH VV, 100' WEST OF DRIVEWAY TO #W5371	377481.0140	822558.4920	819.67
13	MAG NAIL IN ASPHALT FLUME, SOUTH SIDE OF CTH VV, WEST OF DRIVEWAY TO #W5324	377430.6650	823231.5960	820.12

BENCH MARK TABLE

BM	DESCRIPTION	ELEVATION
J	"X" ON TOP OF NORTH SIDE OF CONCRETE BASE OF WEST LIGHT POLE, 150' SOUTH OF CTH VV	811.42
K	ARROW ON FLANGE OF HYDRANT, NORTHWEST CORNER OF CTH VV AND MARTIN AVENUE	811.47
L	ARROW ON FLANGE OF HYDRANT, NORTH SIDE OF CTH VV, AT WEST PARKING LOT FOR THEISEN MIDDLE SCHOOL	815.25
M	BURY BOLT ON FLANGE OF HYDRANT, NORTH SIDE OF CTH VV, AT EAST DRIVEWAY TO THEISEN MIDDLE SCHOOL	822.20
N	BURY BOLT ON FLANGE OF HYDRANT, NORTH SIDE OF CTH VV, AT DRIVEWAY TO W5371	819.06
O	BURY BOLT ON FLANGE OF HYDRANT, SOUTH SIDE OF CTH VV, AT PIONEER SQUARE APARTMENTS	818.28

**VERTICAL DATUM REFERENCED TO NAVD 88 (2012).

2

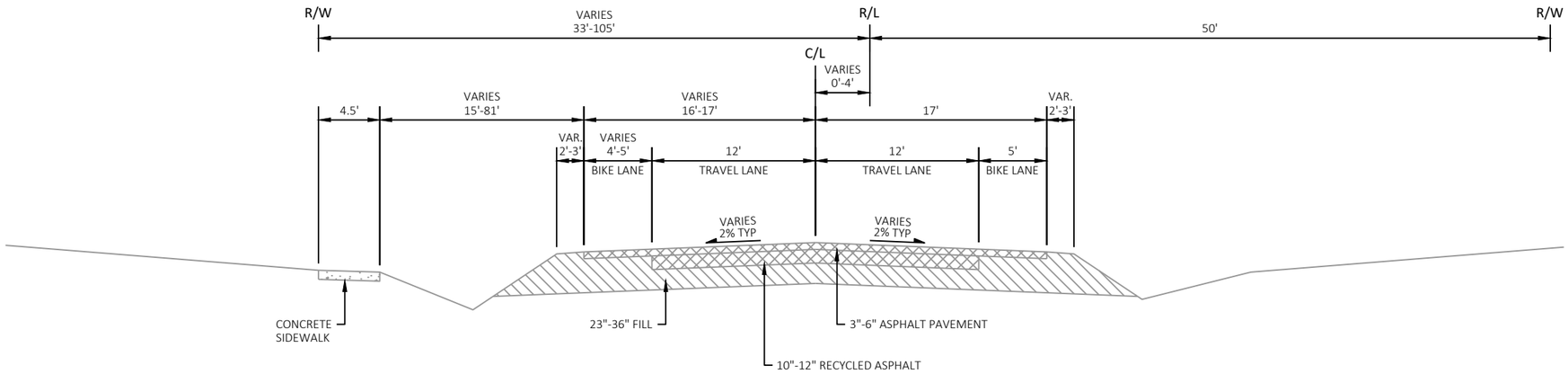


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-020201-PO.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 10/30/2023 2:10 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:250 FT

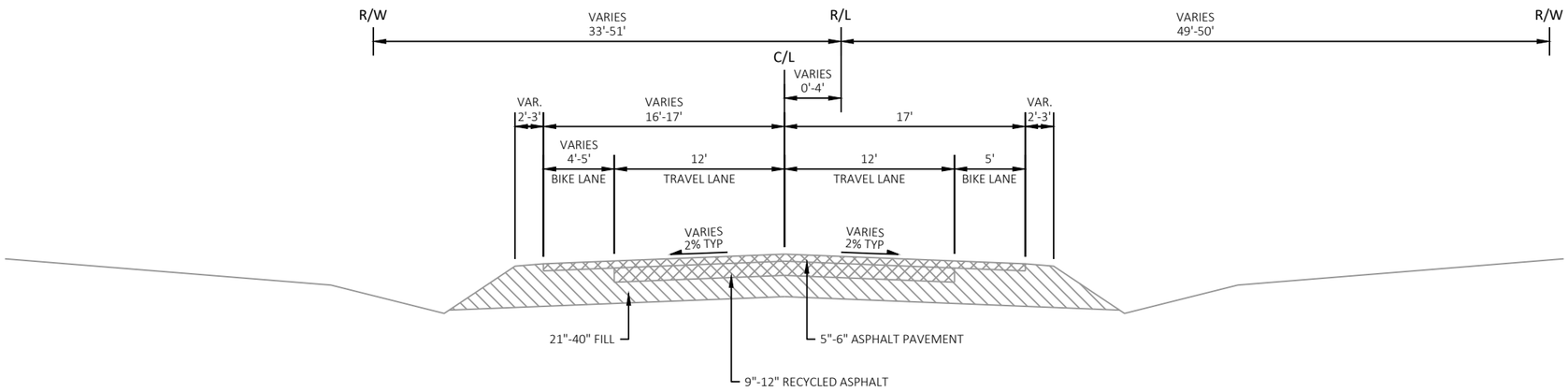
2



TYPICAL EXISTING SECTION

CTH VV

STA 80+30 - STA 89+12



TYPICAL EXISTING SECTION

CTH VV

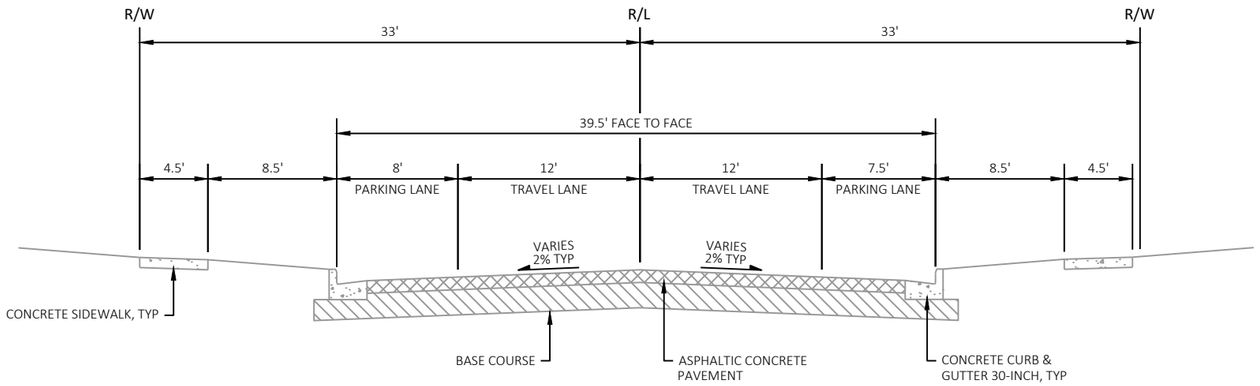
STA 89+12 - STA 105+80

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-020301-TS.DWG
LAYOUT NAME - Sheet - 01

PLOT DATE : 10/30/2023 2:10 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT

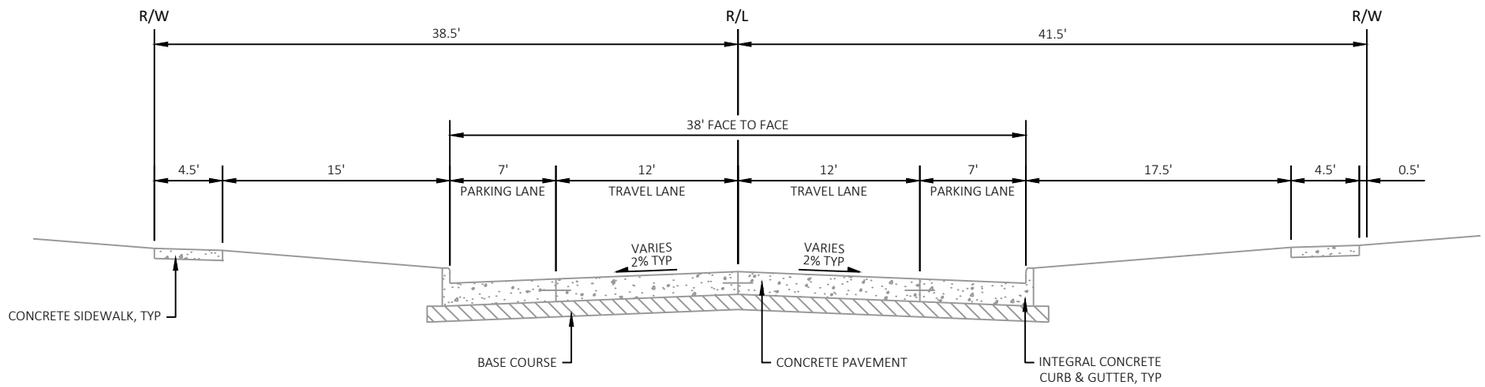
2



TYPICAL EXISTING SECTION

MARTIN AVENUE

STA 19+58 - STA 21+90



TYPICAL EXISTING SECTION

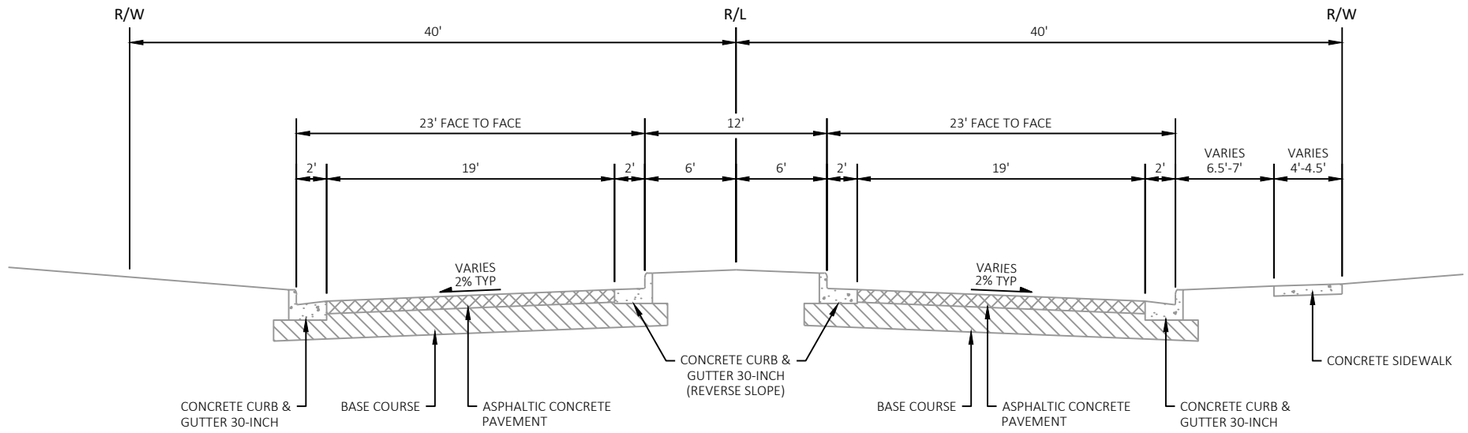
MARTIN AVENUE

STA 18+50 - STA 19+58

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-020301-TS.DWG
LAYOUT NAME - Sheet - 02

PLOT DATE : 10/30/2023 2:10 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT



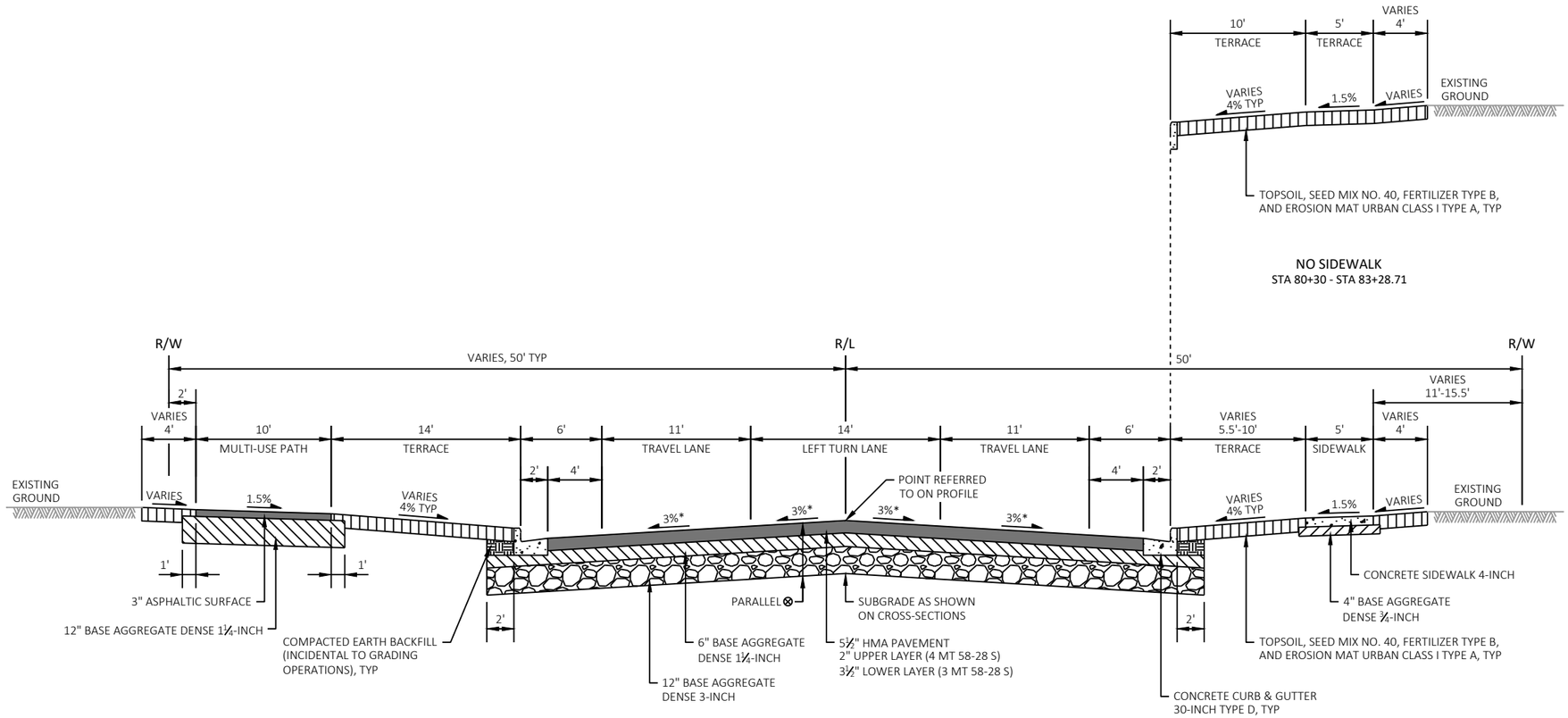
TYPICAL EXISTING SECTION

SHERWOOD BOULEVARD

STA 29+40 - STA 30+00 / STA 39+40 - STA 40+00

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 6	E

2



NOTES:

(A) SEEDING & FERTILIZER

* CROSS SLOPE VARIES DUE TO SUPERELEVATION (SEE CROSS SECTIONS AND SUPERELEVATION TABLE FOR FURTHER DETAILS).

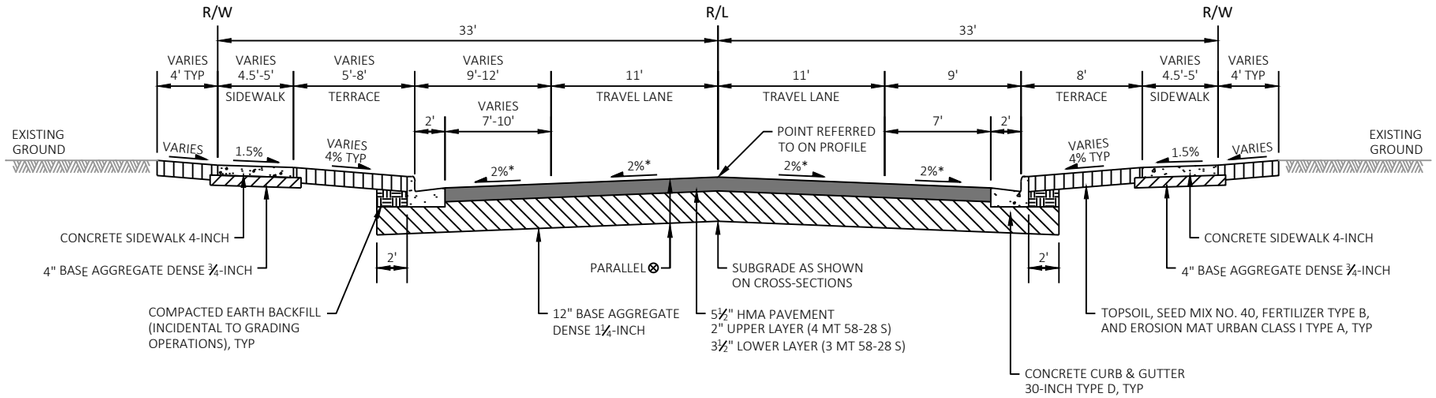
⊗ SUBGRADE SLOPES ARE PARALLEL TO TRAVEL LANE.

TYPICAL FINISHED SECTION

CTH VV
STA 80+30 - STA 105+80

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 7	E

2



TYPICAL FINISHED SECTION

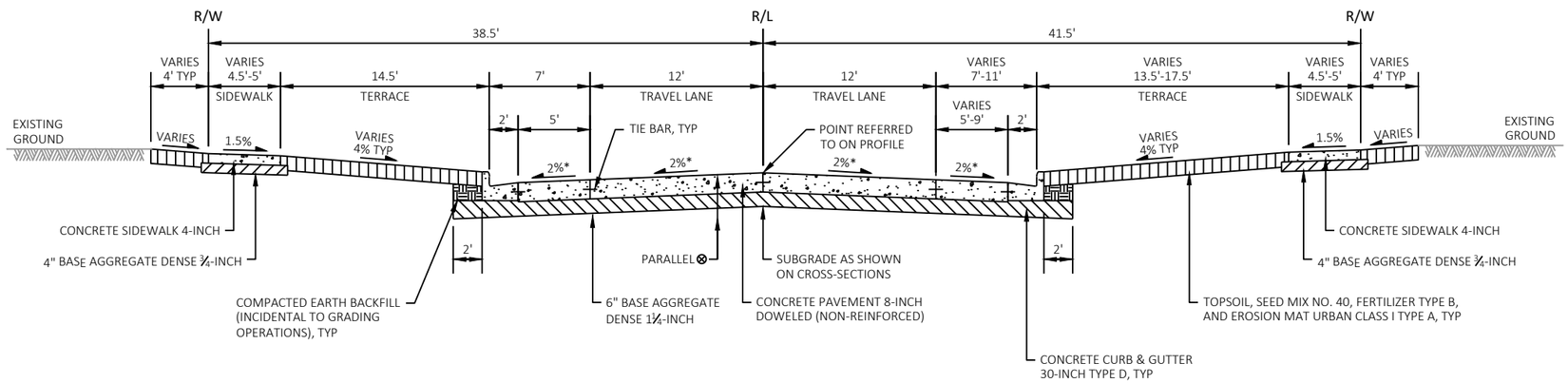
MARTIN AVENUE
STA 19+50.45 - STA 21+90

NOTES:

Ⓐ SEEDING & FERTILIZER

* CROSS SLOPE VARIES DUE TO SUPERELEVATION (SEE CROSS SECTIONS AND SUPERELEVATION TABLE FOR FURTHER DETAILS).

⊗ SUBGRADE SLOPES ARE PARALLEL TO TRAVEL LANE.



TYPICAL FINISHED SECTION

MARTIN AVENUE
STA 18+50 - STA 19+50.45

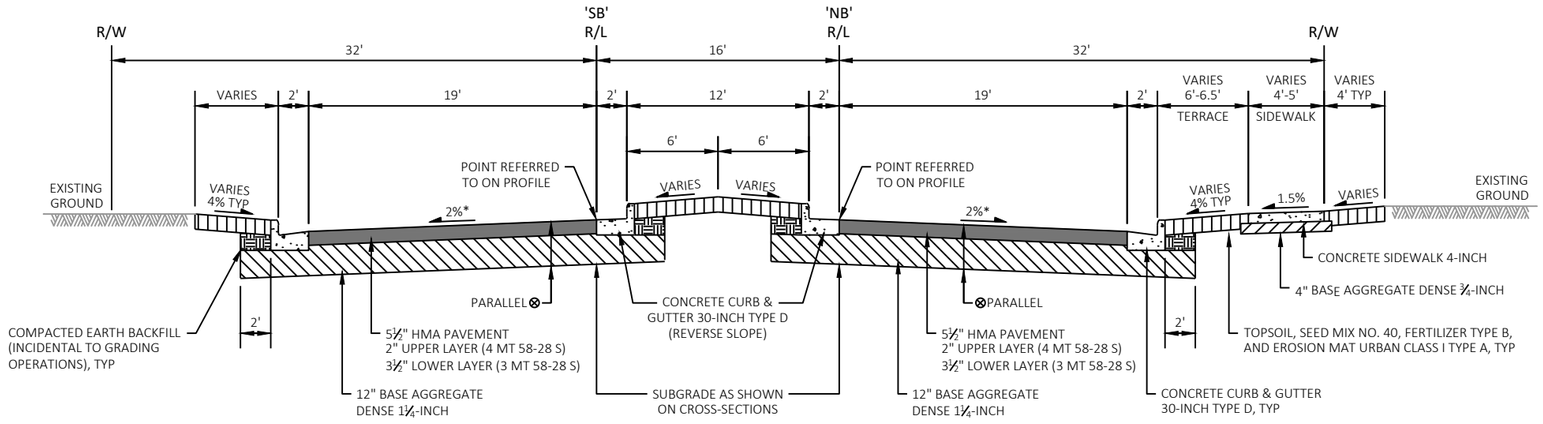
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 8	E

NOTES:

Ⓐ SEEDING & FERTILIZER

* CROSS SLOPE VARIES DUE TO SUPERELEVATION (SEE CROSS SECTIONS AND SUPERELEVATION TABLE FOR FURTHER DETAILS).

⊗ SUBGRADE SLOPES ARE PARALLEL TO TRAVEL LANE.

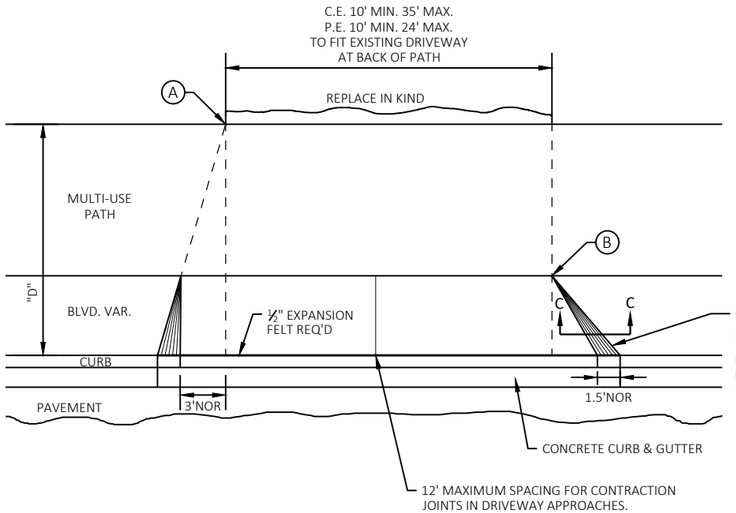


TYPICAL FINISHED SECTION

SHERWOOD BOULEVARD

STA 29+40 - STA 30+00 / STA 39+40 - STA 40+00

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 9	E

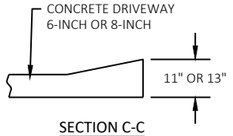


PLAN VIEW

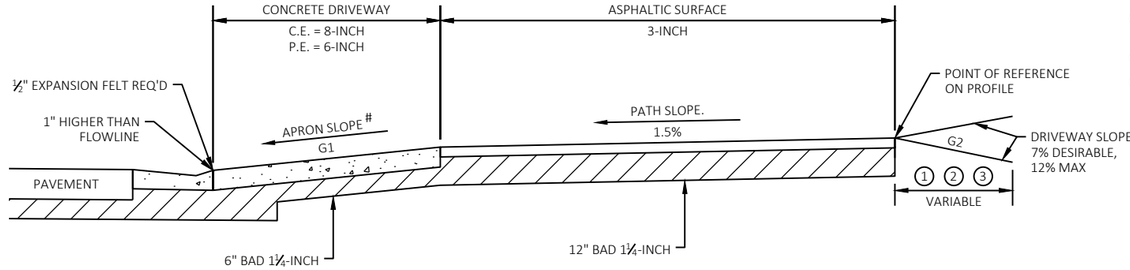
CONCRETE IN THE 1.25' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES OR 13-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

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

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



SECTION C-C



TYPICAL PATH SECTION

① – C.E. 8" CONC DWY OVER 6" BAD 1¼-INCH
P.E. 6" CONC DWY OVER 6" BAD 1¼-INCH

② – 6" BASE AGG. DENSE ¾-INCH

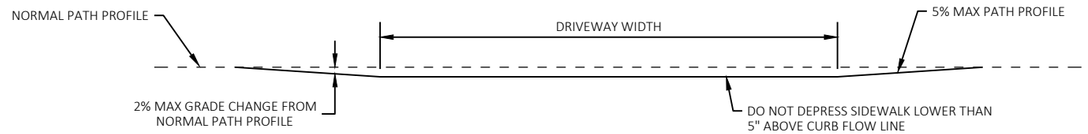
③ – C.E. 4" ASPH SURFACE OVER 6" BAD 1¼-INCH
P.E. 3" ASPH SURFACE OVER 6" BAD 1¼-INCH

\#

TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	11.5
4 FT	5.0	7.0	11.5
5 FT	4.0	7.0	11.5
6 FT	4.0	7.0	11.5
7 FT	3.5	7.0	11.5
≥ 8 FT	3.0	7.0	11.5

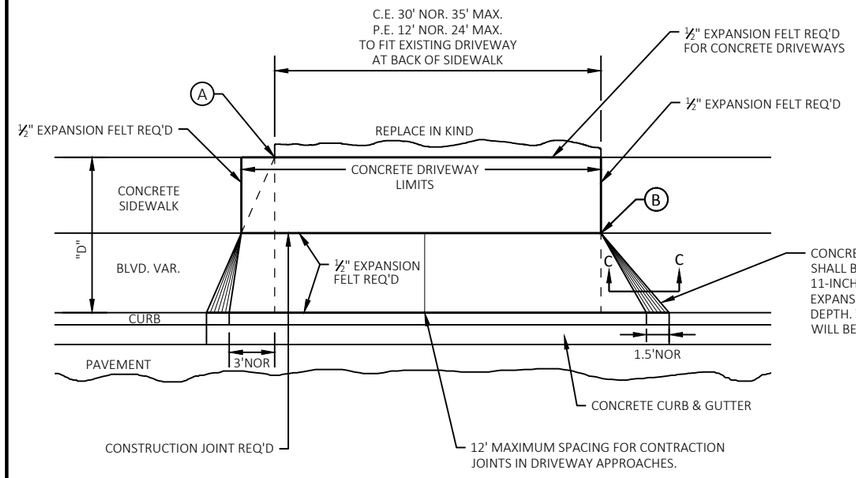
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS PATH PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



DEPRESSED PATH PROFILE DETAIL

URBAN ENTRANCE DETAIL WITH MULTI-USE PATH AND CURB & GUTTER

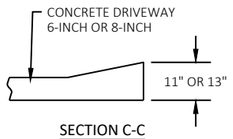


PLAN VIEW

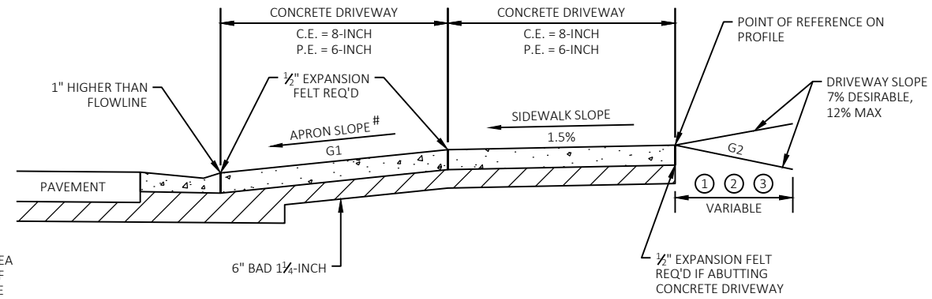
CONCRETE IN THE 1.25' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES OR 13-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

Ⓐ 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 – C.E. 8" CONC DWY OVER 6" BAD 1¼-INCH
P.E. 6" CONC DWY OVER 6" BAD 1¼-INCH

② – 6" BASE AGG. DENSE ¾-INCH

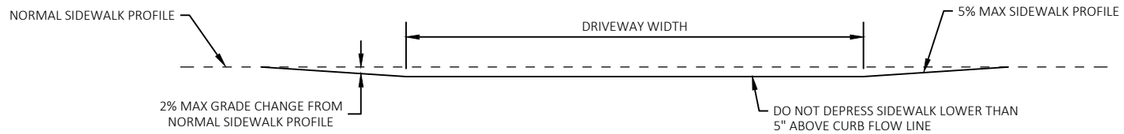
③ – C.E. 4" ASPH SURFACE OVER 6" BAD 1¼-INCH
P.E. 3" ASPH SURFACE OVER 6" BAD 1¼-INCH

\#

TERRACE WIDTH	APRON SLOPE (G1)		
	MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	11.5
4 FT	5.0	7.0	11.5
5 FT	4.0	7.0	11.5
6 FT	4.0	7.0	11.5
7 FT	3.5	7.0	11.5
≥ 8 FT	3.0	7.0	11.5

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

URBAN ENTRANCE DETAIL WITH SIDEWALK AND CURB & GUTTER

NOTES:

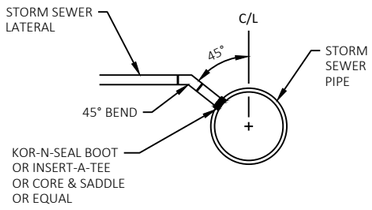
STORM SEWER LATERALS SHALL BE INSTALLED WITH 4-FEET OF DESIRABLE COVER AND 3-FEET OF MINIMUM COVER.

STORM SEWER LATERALS WHEN CONNECTED DIRECTLY TO THE STORM SEWER PIPE SHALL BE AT AN ELEVATION NO LOWER THAN THE SPRING LINE.

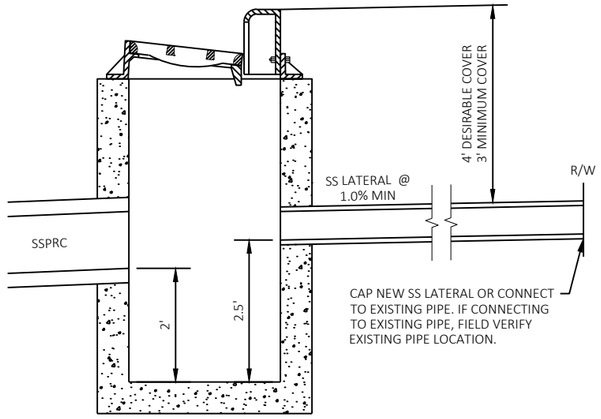
STORM SEWER LATERAL DEPTHS SHALL BE ADJUSTED TO AVOID UTILITY CONFLICTS.

STORM SEWER LATERALS SHALL BE CAPPED AT A POINT BEYOND THE RIGHT-OF-WAY LINE OR SHALL BE CONNECTED TO AN EXISTING PIPE.

STORM SEWER LATERAL LOCATIONS SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.

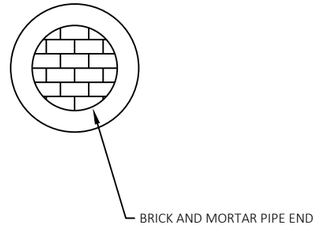


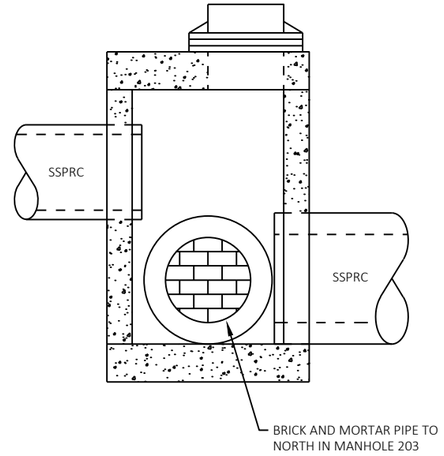
STORM SEWER PIPE CONNECTION



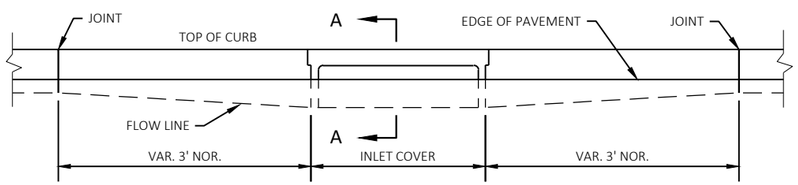
CATCH BASIN CONNECTION

STORM SEWER LATERAL CONNECTION

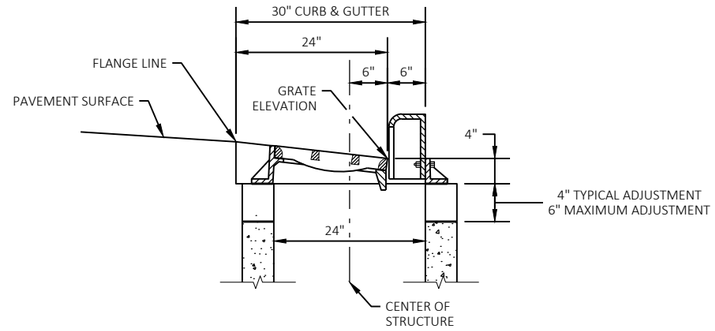




STORM SEWER BULKHEAD



ELEVATION

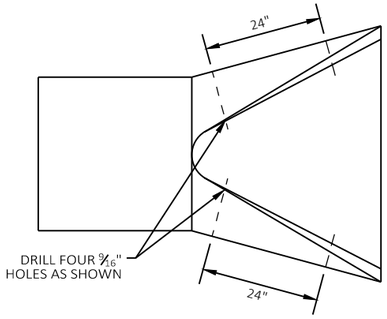


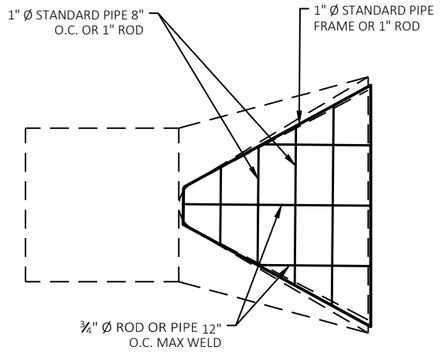
(INLETS & CATCH BASINS 2'X3'-H & 2'X3'-HS)

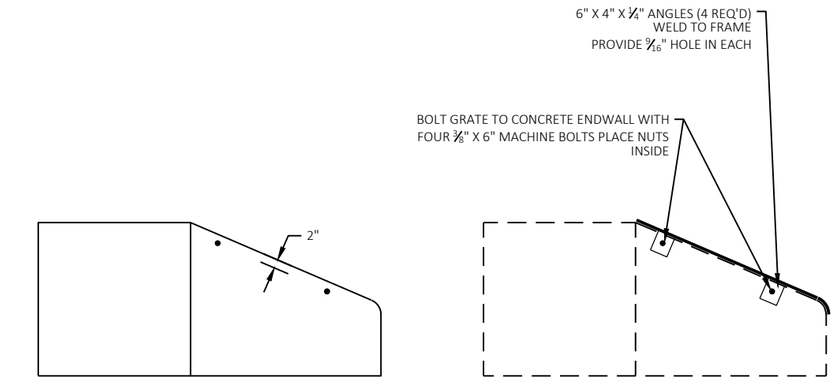
SECTION A-A

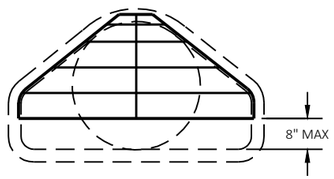
CURB AND GUTTER DETAIL AT INLETS

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 11	E

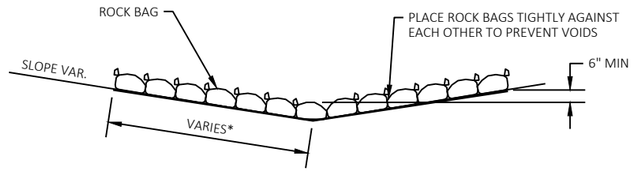




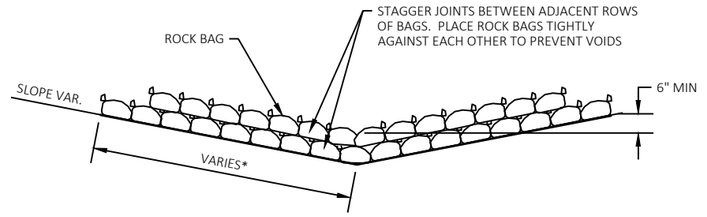




PIPE GRATE DETAIL



SIDE VIEW (SINGLE LAYER)

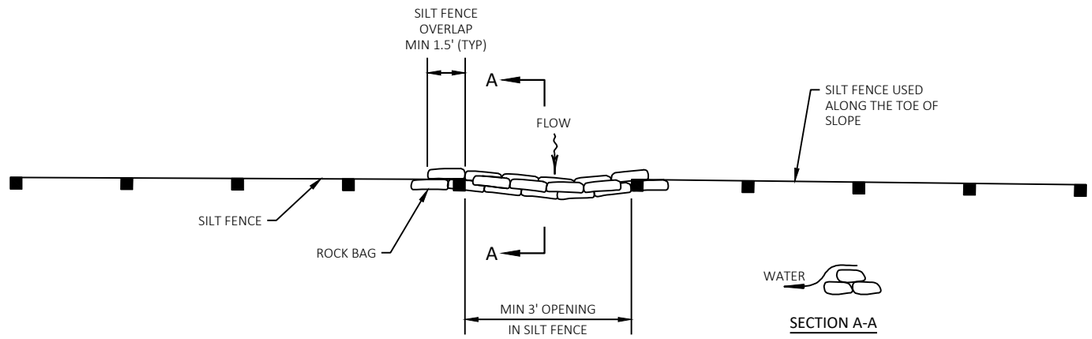


* LENGTH AND NUMBER OF BAGS MAY VARY DEPENDING ON DESIRED DEPTH OF WATER POOL

SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

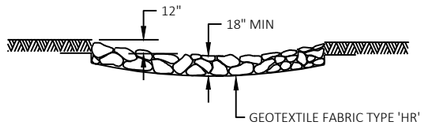
PAID AS ROCK BAGS



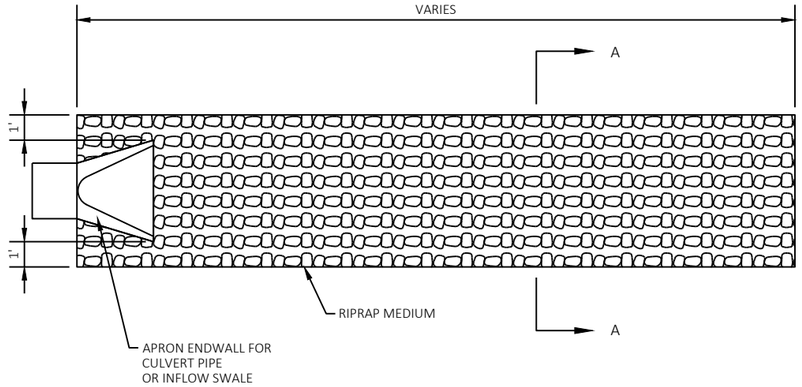
TOP VIEW

SECTION A-A

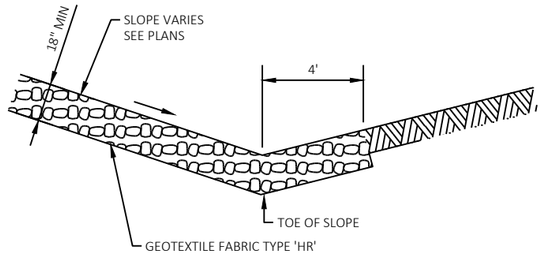
ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL



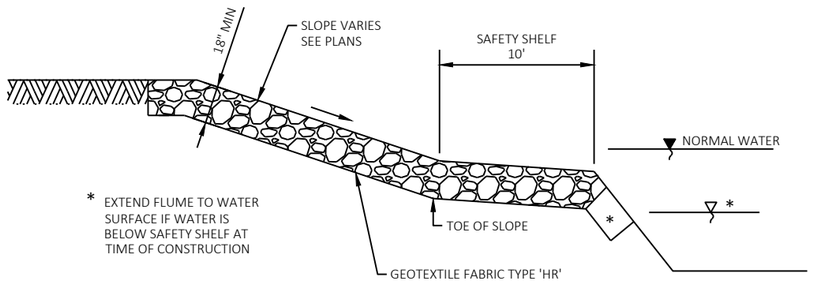
SECTION A-A



PLAN VIEW

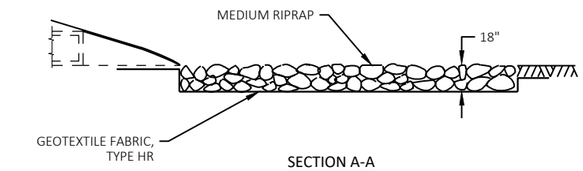


SIDE VIEW WHEN DISCHARGING TO DITCH

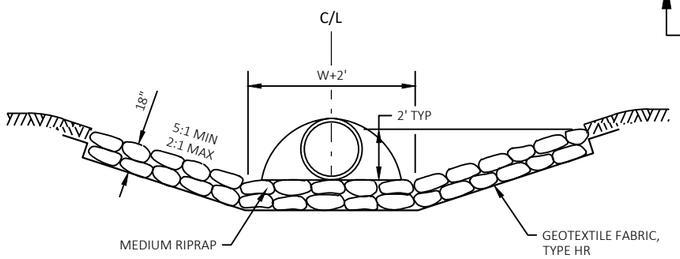


SIDE VIEW WHEN DISCHARGING TO POND

RIPRAP FLUME DETAIL

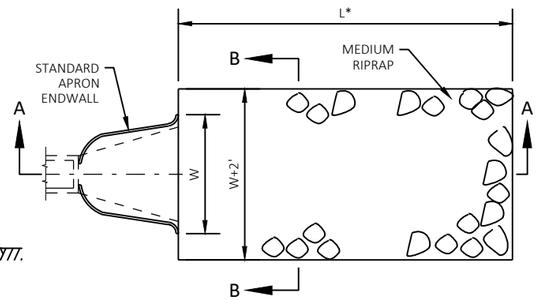


SECTION A-A



SECTION B-B

* L = 3 TIMES DIAMETER (NOR) OR 10' MINIMUM OR AS DIRECTED BY THE ENGINEER

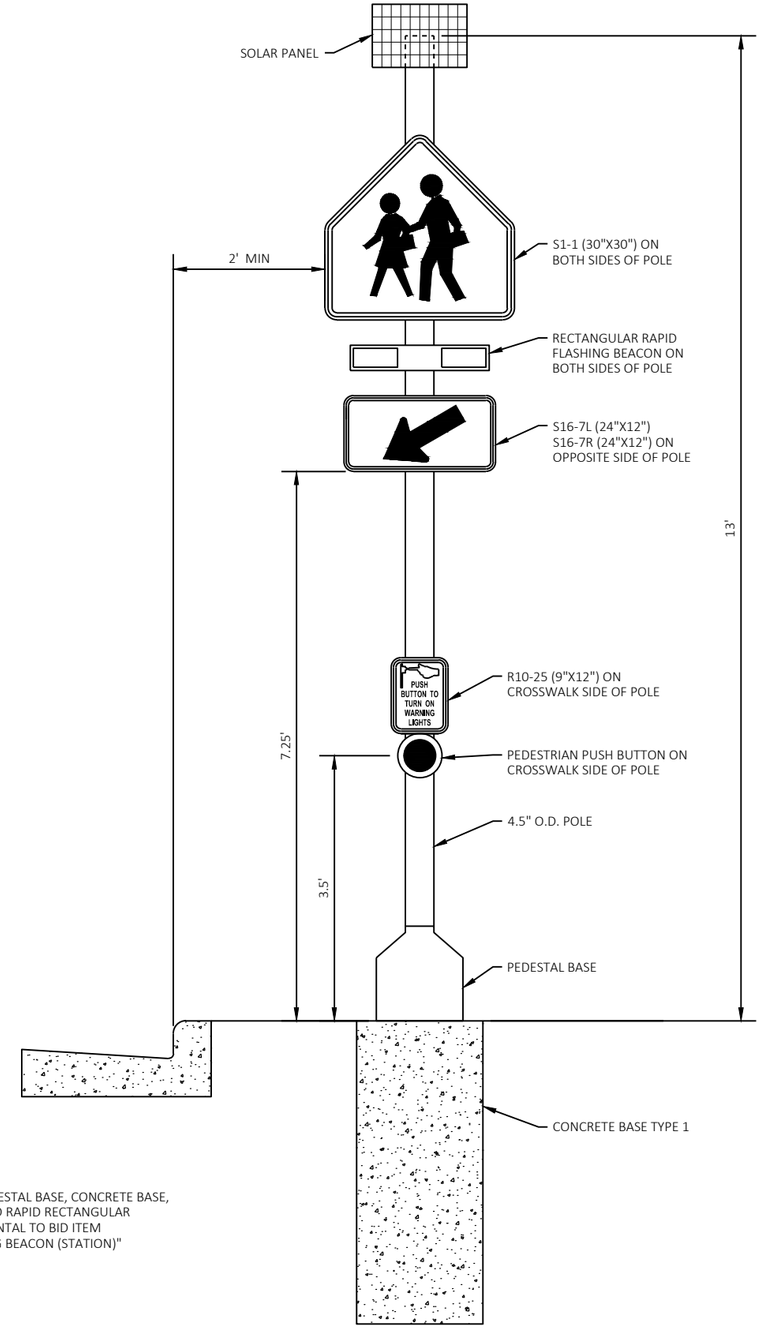


PLAN VIEW

MEDIUM RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 13	E

2

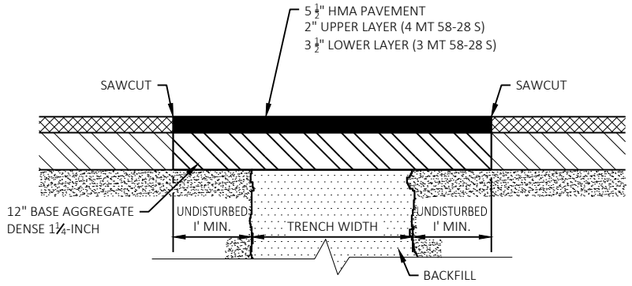


NOTES:

SIGNS, SOLAR PANEL, POLE, PEDESTAL BASE, CONCRETE BASE, PEDESTRIAN PUSH BUTTON, AND RAPID RECTANGULAR FLASHING BEACONS ARE INCIDENTAL TO BID ITEM "RECTANGULAR RAPID FLASHING BEACON (STATION)"

RECTANGULAR RAPID FLASHING BEACON DETAIL

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 14	E



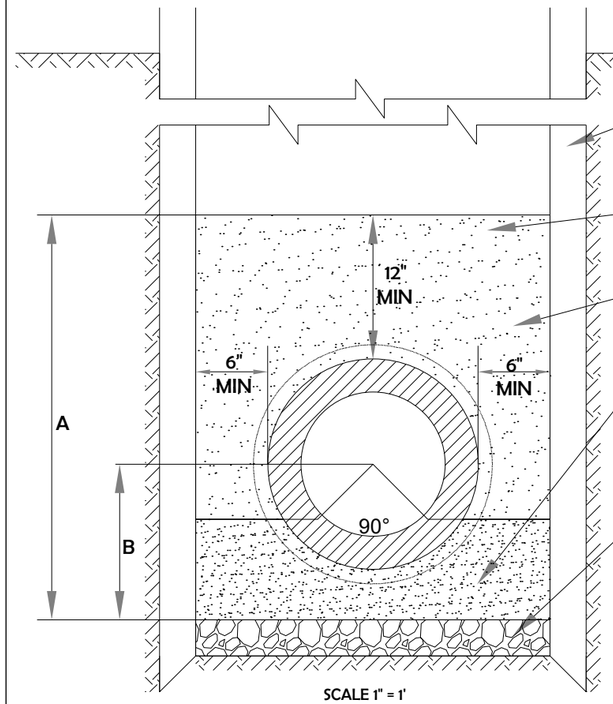
NOTES:

1. REMOVAL OF EXISTING PAVEMENT STRUCTURE IS INCIDENTAL TO UTILITY WORK.
2. CONTRACTOR SHALL BACKFILL UTILITY TRENCH TO TOP OF EXISTING PAVEMENT. INCIDENTAL TO UNDERGROUND UTILITY ITEMS.
3. REMOVAL OF UTILITY TRENCH BACKFILL TO ROADWAY SUBGRADE IS INCIDENTAL TO OTHER ITEMS.

UTILITY TRENCH PAVEMENT REPAIR

1-A-2

TRENCH SECTION (TYPICAL)



GROUND OR PAVEMENT SURFACE

SHEATHING AS REQUIRED BY PLAN, SPECIFICATIONS OR WISCONSIN ADMINISTRATIVE CODE

SEE SPECIFICATIONS FOR FILL MATERIAL

COVER MATERIAL

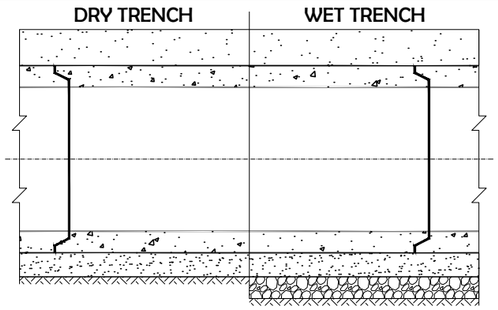
BEDDING MATERIAL TO BE PLACED BEFORE SETTING PIPE:
- 4" MIN UNDER BARREL
- 3" MIN UNDER BELL

3" CRUSHED AGGREGATE BASE REQUIRED IN WET TRENCH. COST TO BE INCIDENTAL TO SEWER INSTALLATION

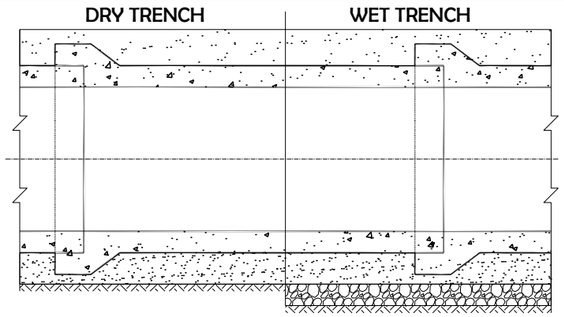
A = BEDDING MATERIAL LIMITS FOR PVC, CORRUGATED POLYETHYLENE, POLYPROPYLENE & POLYMER MORTAR PIPE
B = BEDDING LIMITS FOR CONCRETE PIPE

SCALE 1" = 1'

BELL AND SPIGOT JOINT SHOWN



TONGUE AND GROOVE CROSS SECTION (EXAGGERATED)



BELL AND SPIGOT CROSS SECTION (EXAGGERATED)

REVISED 02/27/14 BY NW
J:\CITYDWG\Civil 3D Drawings\DTL\City SDDs\TRENCH SECTION DETAIL.PDF

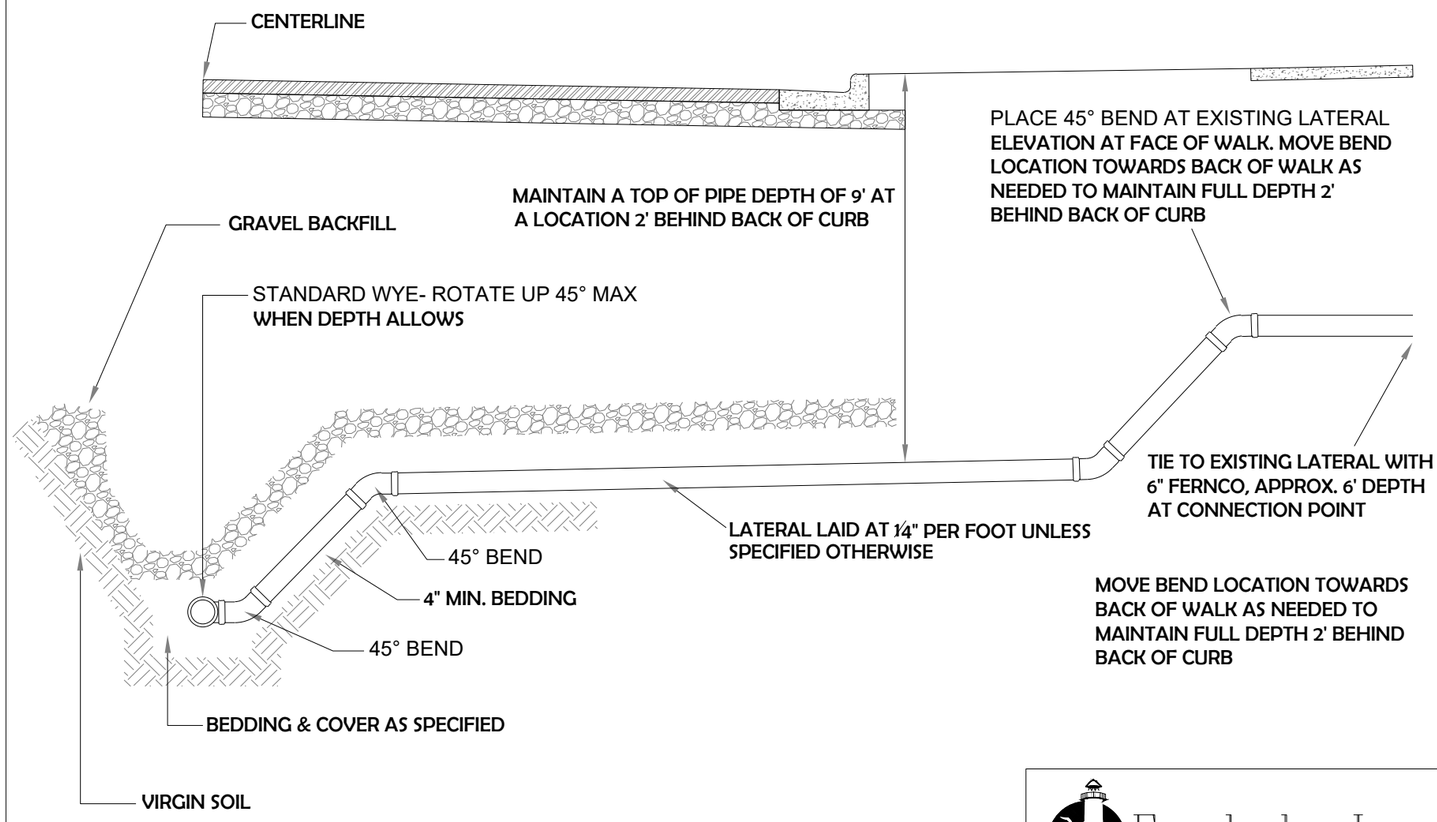
Fond du Lac
First on the Lake

DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

2

1-A-3

SANITARY RISER DETAIL (TYPICAL)
EXISTING LATERAL



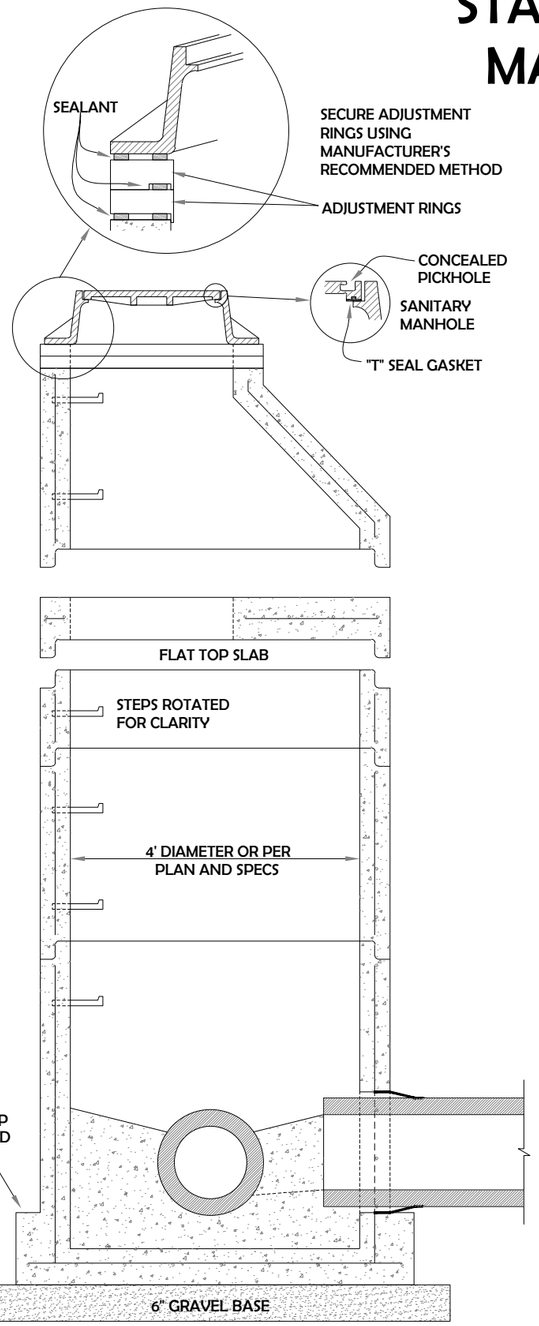
Fond du Lac
First on the Lake

DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

SCALE: 1" = 4'
REVISED 03/20/18 BV NW
J:\CITYDWG\Civil 3D Drawings\DTL\City SDDs\Sanitary Riser Detail-Existing Lateral.pdf

1-B-1

STANDARD PRECAST MANHOLE DETAIL



- 6 INCHES OF CRUSHED STONE BASE REQUIRED
- CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM DESIGNATION C478
- MANHOLE CONCRETE STRENGTH TO BE 4,000 PSI OR GREATER
- MIN. MANHOLE WALL, BASE & FLAT TOP SLAB THICKNESSES
  4 FT I.D.: 5 INCH WALL, 6 INCH BASE & FLAT TOP SLAB
  5 FT I.D.: 6 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
  6 FT I.D.: 7 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
  8 FT I.D.: 9 INCH WALL, 8 INCH BASE & FLAT TOP SLAB
- MANHOLE BASE TO BE CONSTRUCTED OF CLASS "C" CONCRETE, MINIMUM OF 12 INCHES PLACED UNDER FLOW LINE OF PIPE
- STORM SEWER BENCH SLOPE - 1 INCH PER FT
  SANITARY SEWER BENCH SLOPE - 3 INCHES PER FT
- PIPE HOLES TO BE MANUFACTURED SO AS TO ALLOW FOR LATERAL AND VERTICAL MOVEMENT, AS WELL AS ANGULAR ADJUSTMENT THROUGH 15°
- PIPE TO MANHOLE CONNECTORS SHALL MEET ASTM C923 (KOR-N-SEAL, QUIK-LOK OR EQUAL)
- JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING RUBBER TYPE GASKETS OR PRE-FORMED JOINT MATERIAL
- MANHOLE STEPS TO BE PLACED AT 16 INCH INTERVALS. THE FIRST STEP SHALL BE PLACED 16 INCHES ABOVE THE BENCH. THE TOP STEP MAY VARY FROM 16 INCHES - 24 INCHES FROM THE TOP OF CASTING. STEPS SHALL BE STEEL REINFORCED PLASTIC. MANHOLE STEPS SHALL BE ALIGNED OVER THE OUTGOING PIPE.
- BARREL SECTION - 12 INCH, 16 INCH, 24 INCH, 32 INCH, 48 INCH AND 64 INCH HIGH. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ INCH PER LINEAL FOOT
- ECCENTRIC CONE MAY VARY IN HEIGHT FROM 28 INCHES TO 36 INCHES
- INSTALL FLAT TOP WHEN SHOWN ON PLANS, IN SPECIFICATIONS OR APPROVED BY ENGINEER
- ADJUSTMENT RINGS SHALL BE HDPE ADJUSTING RINGS BY LADTECH, INC., CRETEX PRO-RING, OR EJ INFRA-RISER. RINGS SHALL HAVE AN INSIDE DIAMETER OF APPROX. 23-3/4 INCHES. CONCRETE ADJUSTMENT RINGS SHALL NOT BE ALLOWED.
- FRAME SHALL BE NEENAH FOUNDRY R-1550 OR EQUAL.
- SANITARY MANHOLE LID TO HAVE CONCEALED PICK HOLES AND "T" SEAL GASKET.

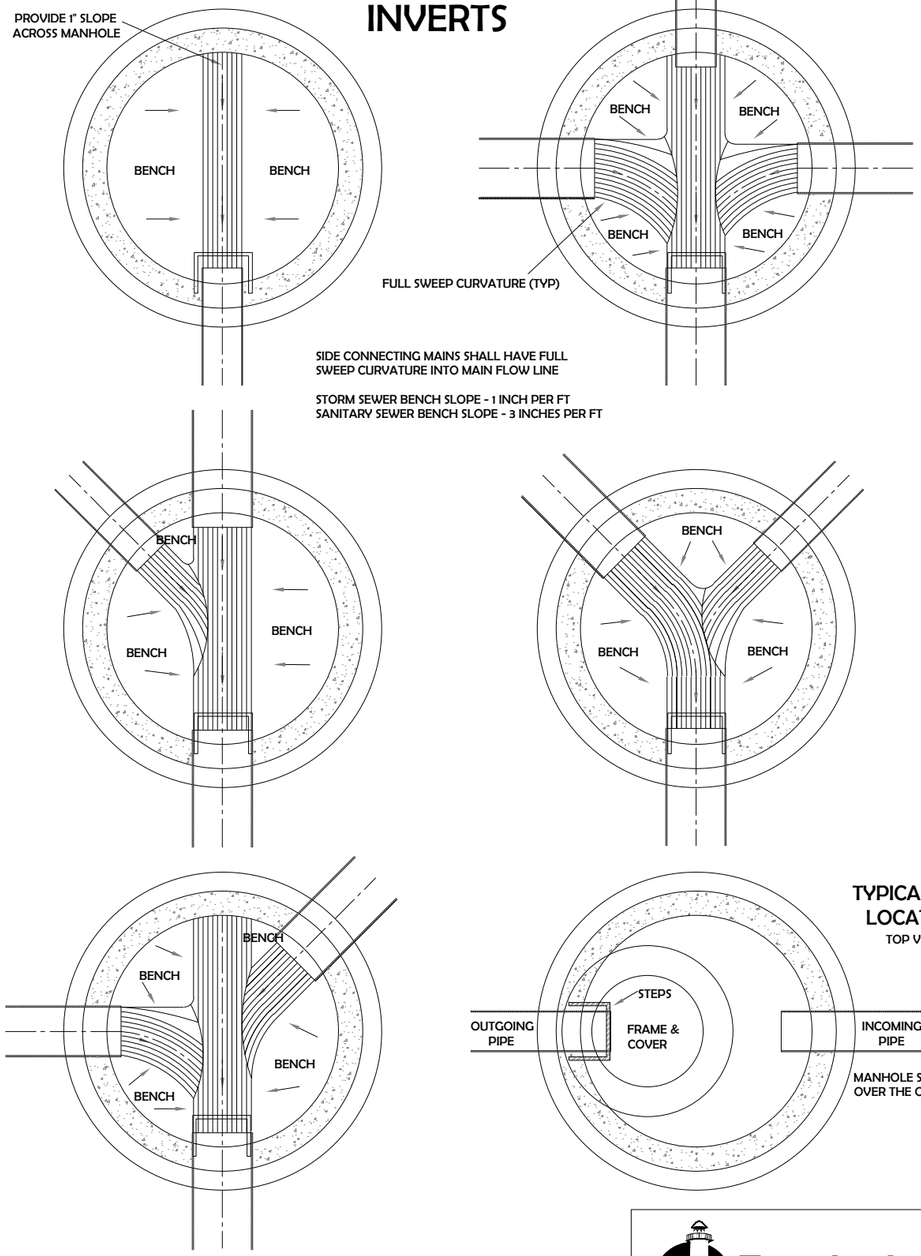
Fond du Lac
First on the Lake

DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

SCALE: 1" = 2'
REVISED 04/01/21 BY NW
J:\CITYDWG\Civil 3D Drawings\DTL\City SDDs\PRECAST MANHOLE DETAIL.PDF

1-B-2

STANDARD MANHOLE INVERTS



SIDE CONNECTING MAINS SHALL HAVE FULL SWEEP CURVATURE INTO MAIN FLOW LINE

STORM SEWER BENCH SLOPE - 1 INCH PER FT
SANITARY SEWER BENCH SLOPE - 3 INCHES PER FT

TYPICAL STEP LOCATION
TOP VIEW

MANHOLE STEPS SHALL BE ALIGNED OVER THE OUTGOING PIPE

HEIGHT OF BENCH:
- PIPES 12 INCHES OR LESS = 0.8 X DIA. OF SEWER
- PIPES 15 TO 24 INCHES = 12 INCHES
- PIPES GREATER THAN 24 INCHES = SPRING LINE OF LARGEST PIPE
- ALL SANITARY PIPES 12 INCHES OR LESS HAVE A BENCH POURED TO SPRING LINE WHENEVER A LESSER HEIGHT BENCH IS ALLOWED FOR ADJOINING PIPES.

Fond du Lac
First on the Lake

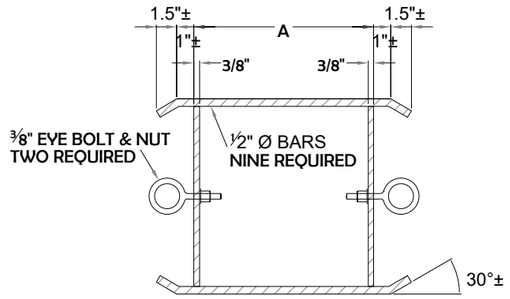
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

REVISED 04/01/21 BY NW
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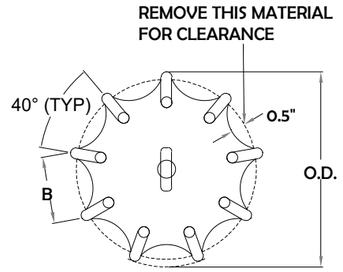
2

1-C-2

MANDREL FOR DEFLECTION TESTS



SIDE OR TOP VIEW



END VIEW

NOTE:
1. TOLERANCE ON MANDREL O.D. IS ± 0.010"

REQUIRED DIMENSIONS:
1. MANDREL DIMENSIONS ON "O.D."
2. 40° SPACING BETWEEN ANGLES
3. DIMENSIONS A ARE MINIMUMS
ALL OTHER DIMENSIONS ARE OPTIONAL

SUGGESTED MANDREL DESIGN

NOMINAL PIPE SIZE I.D.	A (MIN.)	MINIMUM MANDREL O.D. (INCHES)							
		DEFLECTION= D-3034 SDR-35				DEFLECTION= F-949			
		5%	B	7.5%	B	5%	B	7.5%	B
8"	8"	7.28	2.496	7.09	2.424	7.27	2.484	7.08	2.424
10"	10"	9.08	3.108	8.85	3.024	9.07	3.096	8.83	3.024
12"	10"	10.79	3.684	10.51	3.600				
15"	12"	13.20	4.512	12.85	4.392				
		F679 PS46 12454C PIPE				F679 PS46 12364C PIPE			
		5%	B	7.5%	B	5%	B	7.5%	B
18"	15"	16.13	5.520	15.70	5.316	16.20	5.544	15.78	5.400
21"	18"	19.00	6.492	18.50	6.324	19.09	6.528	18.59	6.360
24"	21"	21.36	7.308	20.79	7.116	21.46	7.344	20.89	7.152
27"	24"	24.06	8.232	23.43	8.016	24.17	8.268	23.54	8.052

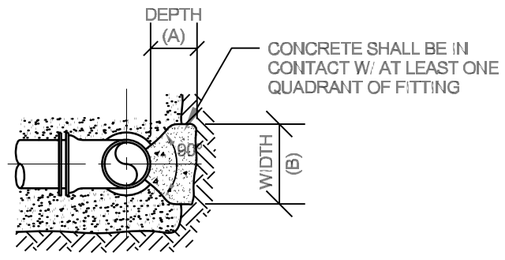
Fond du Lac
First on the Lake

DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND TRAFFIC DIVISION
CITY OF FOND DU LAC, WISCONSIN

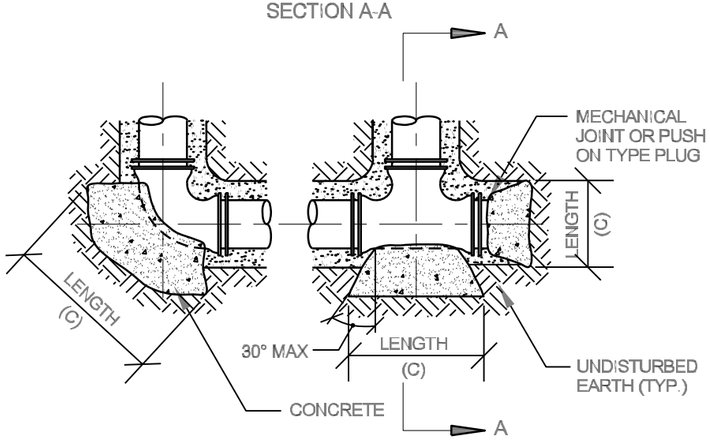
SCALE: 1" = 2'
REVISED 12/13/19 BY NW
J:\CITYDWG\Civil 3D Drawings\DTL\City SDDs\MANDREL FOR DEFLECTION TESTS.PDF

THRUST BLOCKING NOTES:

1. CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 2000 PSI & SHALL BE CAST AGAINST UNDISTURBED EARTH.
2. FITTINGS SHALL BE ENCASED IN PLASTIC TO PREVENT CONCRETE BONDING TO FITTINGS.
3. FORM CONCRETE AS REQUIRED TO PREVENT CONTACT OR INTERFERENCE W/PIPE JOINTS.
4. THE LENGTH OF THE THRUST BLOCK SHALL BE APPROXIMATELY TWICE THE WIDTH. BEARING AREA = LENGTH (A) X WIDTH (B).



SECTION A-A



BEND PLAN
(* VARIES)

TEE PLAN

PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE
THRUST BLOCKING

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 11/30/99	S-9

THRUST BLOCK DIMENSIONS (1)

PIPE SIZE	A	11 1/4° BEND		22 1/2° BEND		45° BEND		90° BEND		TEE/DEAD END	
		B	C	B	C	B	C	B	C	B	C
6"	1'-0	1'-8	1'-0	1'-8	1'-0	1'-8	1'-0	1'-8	1'-4	1'-8	1'-0
8"	1'-2	2'-0	1'-0	2'-0	1'-0	2'-0	1'-0	2'-0	1'-10	2'-0	1'-4
10"	1'-4	2'-3	1'-0	2'-3	1'-0	2'-3	1'-4	2'-3	2'-4	2'-3	1'-8
12"	1'-6	2'-6	1'-0	2'-6	1'-0	2'-6	1'-8	2'-6	3'-0	2'-6	2'-2
16"	2'-0	3'-0	1'-0	3'-0	1'-2	3'-0	2'-4	3'-0	4'-4	3'-0	3'-0
20"	2'-6	3'-9	1'-0	3'-9	1'-6"	3'-9	2'-10"	3'-9	5'-4"	3'-9	3'-9"
24"	3'-0	4'-3	1'-0	4'-3	1'-10"	4'-3	3'-8"	4'-3	6'-8"	4'-3	4'-8"

(1) DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING PRESSURE OF 4000 PSF.

PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE
THRUST BLOCK DIMENSIONS

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 11/30/99	S-11

U.S. JOINT RESTRAINT LENGTHS(1) (FEET)

PIPE SIZE	HORIZONTAL & VERTICAL-UP BENDS				
	11 1/4° BEND	22 1/2° BEND	45° BEND	90° BEND	DEAD END
6"	2	4	7	16	31
8"	3	5	9	21	41
10"	3	5	11	25	49
12"	3	6	13	30	58
16"	4	8	17	39	75
18"	4	9	19	44	84
20"	5	10	20	48	92
24"	6	12	24	57	109
PIPE SIZE	VERTICAL-DOWN BENDS				
	11 1/4° BEND	22 1/2° BEND	45° BEND	90° BEND	
6"	4	7	13	31	
8"	5	9	17	41	
10"	5	10	21	49	
12"	6	12	25	59	
16"	8	16	32	77	
18"	9	18	37	95	
20"	10	19	40	95	
24"	12	23	47	113	

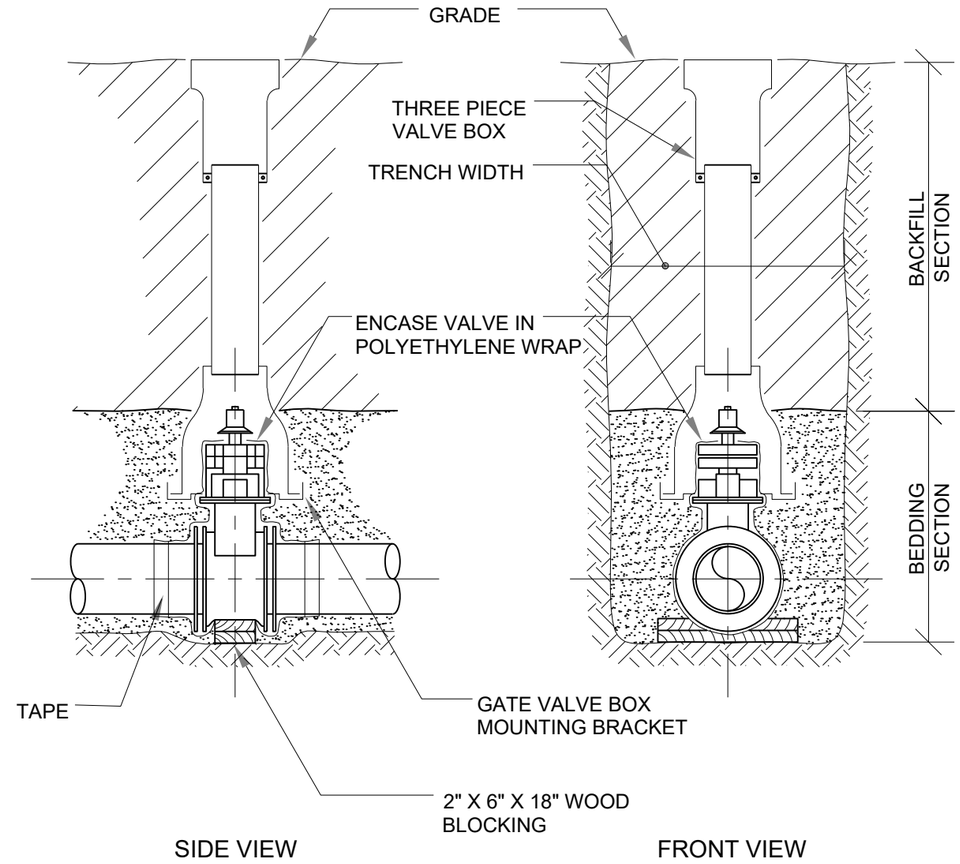
(1) RESTRAINT LENGTHS BASED ON DIPRA PUBLICATION "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" SECOND EDITION 1986. WITH THE FOLLOWING ASSUMPTIONS:
LAY CONDITION - TYPE 4
SOILS - CLAY 1 (TABLE 3, PG. 11)
DEPTH - 6'-0
PIPE ENCASED IN POLYETHYLENE WRAP
SAFTEY FACTOR - 1.5
PIPELINE PRESSURE - 100 PSI

PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE
U.S. JOINT RESTRAINT LENGTHS

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 11/30/99	S-12.1



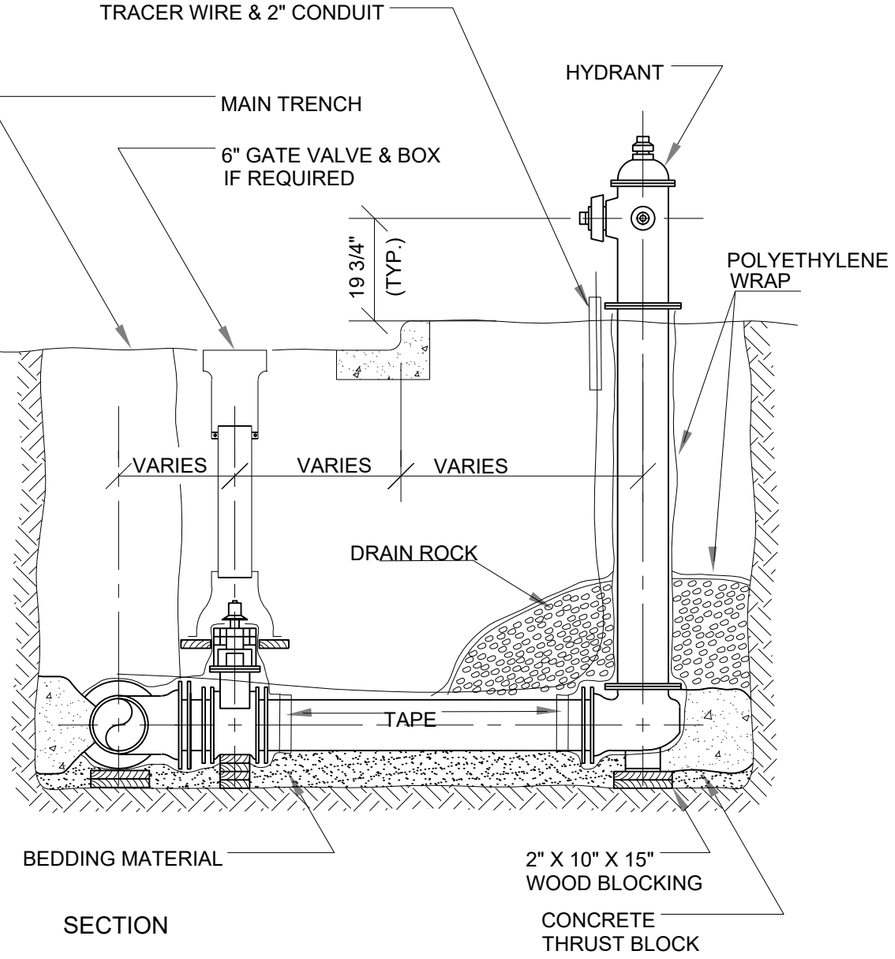
PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE
RESILIENT SEATED GATE VALVE & BOX SETTING WITH PVC WATER MAIN

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 2/15/2000	S-13

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021001-CD.DWG
LAYOUT NAME - SHEET - 11
PLOT DATE : 10/30/2023 2:11 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1:1
WISDOT/CADDS SHEET 42



SECTION

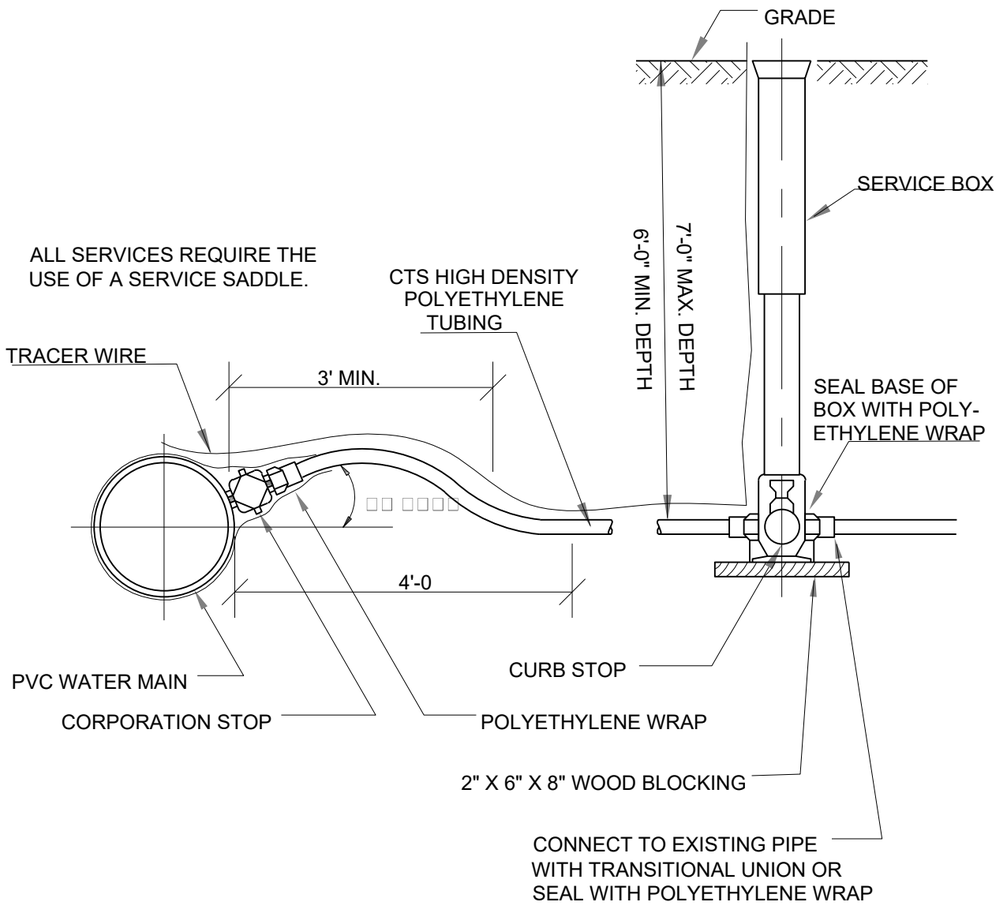
PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE STANDARD HYDRANT WITH PVC WATER MAIN

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 3/29/2010	S-15

SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	3/4" x 1"	1" x 3/4" x 1"	2 1/2"
1 1/4"	1" x 1 1/4"	1 1/4" x 1" x 1 1/4"	2 1/2"
1 1/2"	1 1/2"	1 1/2"	2 1/2"
2"	2"	2"	2 1/2"



PROJECT
STANDARD DETAILS FOR WATER MAIN CONSTRUCTION

CITY OF FOND DU LAC
WATER UTILITY
FOND DU LAC COUNTY, WISCONSIN

TITLE POLYETHYLENE WATER SERVICE

DRAWN	JS	JOB NO. E101-54.01	DETAIL NO.
CHECKED	MW	DATE 2/14/14	S-16

SUPERELEVATION REPORT FOR 'CTH VV'

TRANSITION EVENT POINTS		RATE (FT/FT)			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
CURVE 1					
Manual	76+99.17	-0.04	-0.03	-0.03	-0.04
Manual	78+31.84	-0.04	-0.03	-0.03	-0.04
EndNormalShoulder	78+45.25	-0.04	-0.03	-0.03	-0.04
EndNormalCrown	78+45.25	-0.04	-0.03	-0.03	-0.04
LevelCrown	79+07.75	0	0	-0.03	-0.04
BeginFullSuper	79+70.25	0.03	0.03	-0.03	-0.04

TERRACE SLOPES

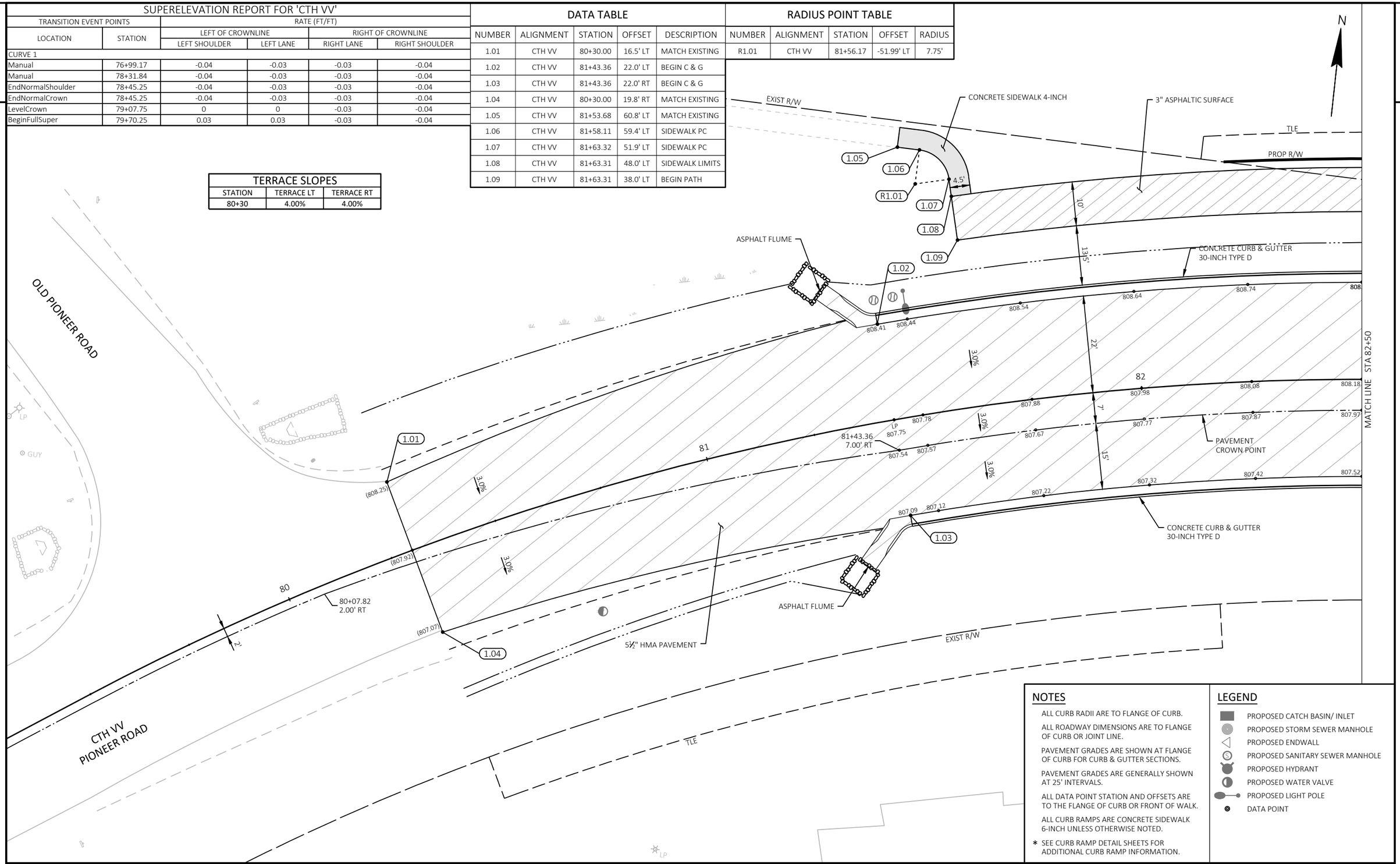
STATION	TERRACE LT	TERRACE RT
80+30	4.00%	4.00%

DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
1.01	CTH VV	80+30.00	16.5' LT	MATCH EXISTING
1.02	CTH VV	81+43.36	22.0' LT	BEGIN C & G
1.03	CTH VV	81+43.36	22.0' RT	BEGIN C & G
1.04	CTH VV	80+30.00	19.8' RT	MATCH EXISTING
1.05	CTH VV	81+53.68	60.8' LT	MATCH EXISTING
1.06	CTH VV	81+58.11	59.4' LT	SIDEWALK PC
1.07	CTH VV	81+63.32	51.9' LT	SIDEWALK PC
1.08	CTH VV	81+63.31	48.0' LT	SIDEWALK LIMITS
1.09	CTH VV	81+63.31	38.0' LT	BEGIN PATH

RADIUS POINT TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	RADIUS
R1.01	CTH VV	81+56.17	-51.99' LT	7.75'



NOTES

- ALL CURB RADII ARE TO FLANGE OF CURB.
- ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.
- PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.
- PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.
- ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.
- ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.
- * SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 22	E

2

DATA TABLE

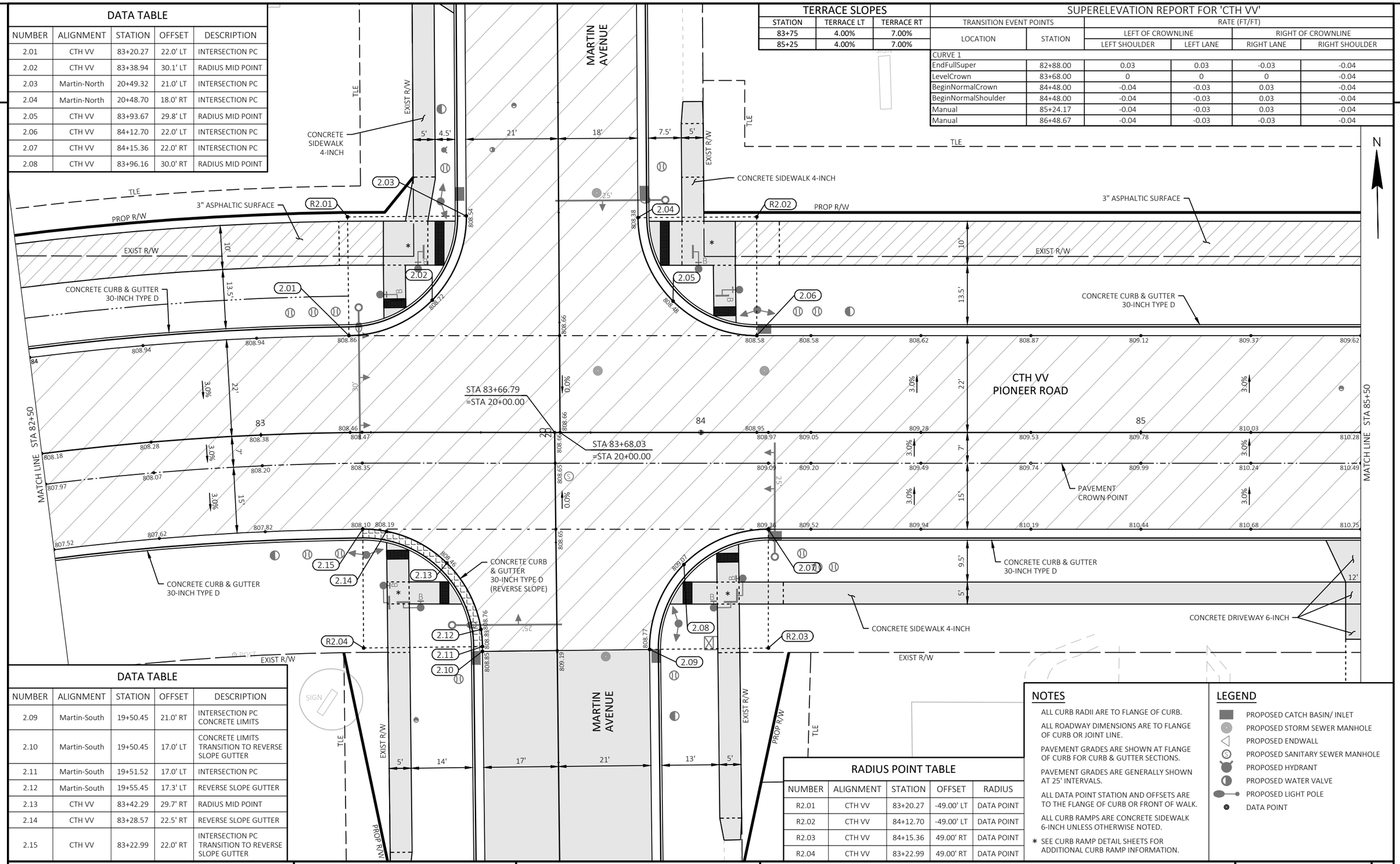
NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
2.01	CTH VV	83+20.27	22.0' LT	INTERSECTION PC
2.02	CTH VV	83+38.94	30.1' LT	RADIUS MID POINT
2.03	Martin-North	20+49.32	21.0' LT	INTERSECTION PC
2.04	Martin-North	20+48.70	18.0' RT	INTERSECTION PC
2.05	CTH VV	83+93.67	29.8' LT	RADIUS MID POINT
2.06	CTH VV	84+12.70	22.0' LT	INTERSECTION PC
2.07	CTH VV	84+15.36	22.0' RT	INTERSECTION PC
2.08	CTH VV	83+96.16	30.0' RT	RADIUS MID POINT

TERRACE SLOPES

STATION	TERRACE LT	TERRACE RT
83+75	4.00%	7.00%
85+25	4.00%	7.00%

SUPERELEVATION REPORT FOR 'CTH VV'

TRANSITION EVENT POINTS		RATE (FT/FT)			
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
CURVE 1					
EndFullSuper	82+88.00	0.03	0.03	-0.03	-0.04
LevelCrown	83+68.00	0	0	0	-0.04
BeginNormalCrown	84+48.00	-0.04	-0.03	0.03	-0.04
BeginNormalShoulder	84+48.00	-0.04	-0.03	0.03	-0.04
Manual	85+24.17	-0.04	-0.03	0.03	-0.04
Manual	86+48.67	-0.04	-0.03	-0.03	-0.04



DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
2.09	Martin-South	19+50.45	21.0' RT	INTERSECTION PC CONCRETE LIMITS
2.10	Martin-South	19+50.45	17.0' LT	CONCRETE LIMITS TRANSITION TO REVERSE SLOPE GUTTER
2.11	Martin-South	19+51.52	17.0' LT	INTERSECTION PC
2.12	Martin-South	19+55.45	17.3' LT	REVERSE SLOPE GUTTER
2.13	CTH VV	83+42.29	29.7' RT	RADIUS MID POINT
2.14	CTH VV	83+28.57	22.5' RT	REVERSE SLOPE GUTTER
2.15	CTH VV	83+22.99	22.0' RT	INTERSECTION PC TRANSITION TO REVERSE SLOPE GUTTER

RADIUS POINT TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	RADIUS
R2.01	CTH VV	83+20.27	-49.00' LT	DATA POINT
R2.02	CTH VV	84+12.70	-49.00' LT	DATA POINT
R2.03	CTH VV	84+15.36	49.00' RT	DATA POINT
R2.04	CTH VV	83+22.99	49.00' RT	DATA POINT

NOTES

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- ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.
- PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.
- PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.
- ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.
- ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.
- * SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

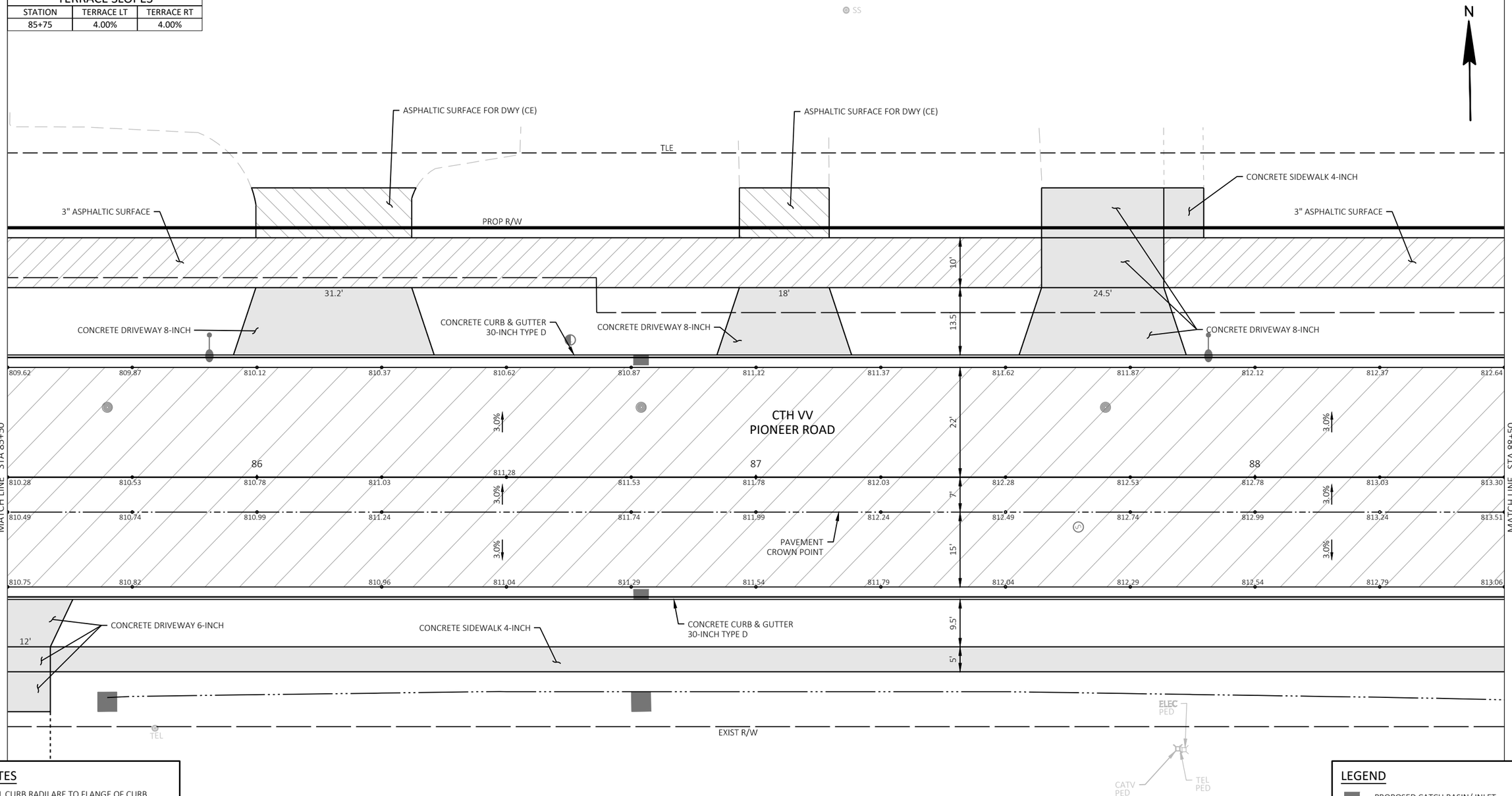
- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 23	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021201-PD.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

TERRACE SLOPES		
STATION	TERRACE LT	TERRACE RT
85+75	4.00%	4.00%



NOTES

- ALL CURB RADII ARE TO FLANGE OF CURB.
- ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.
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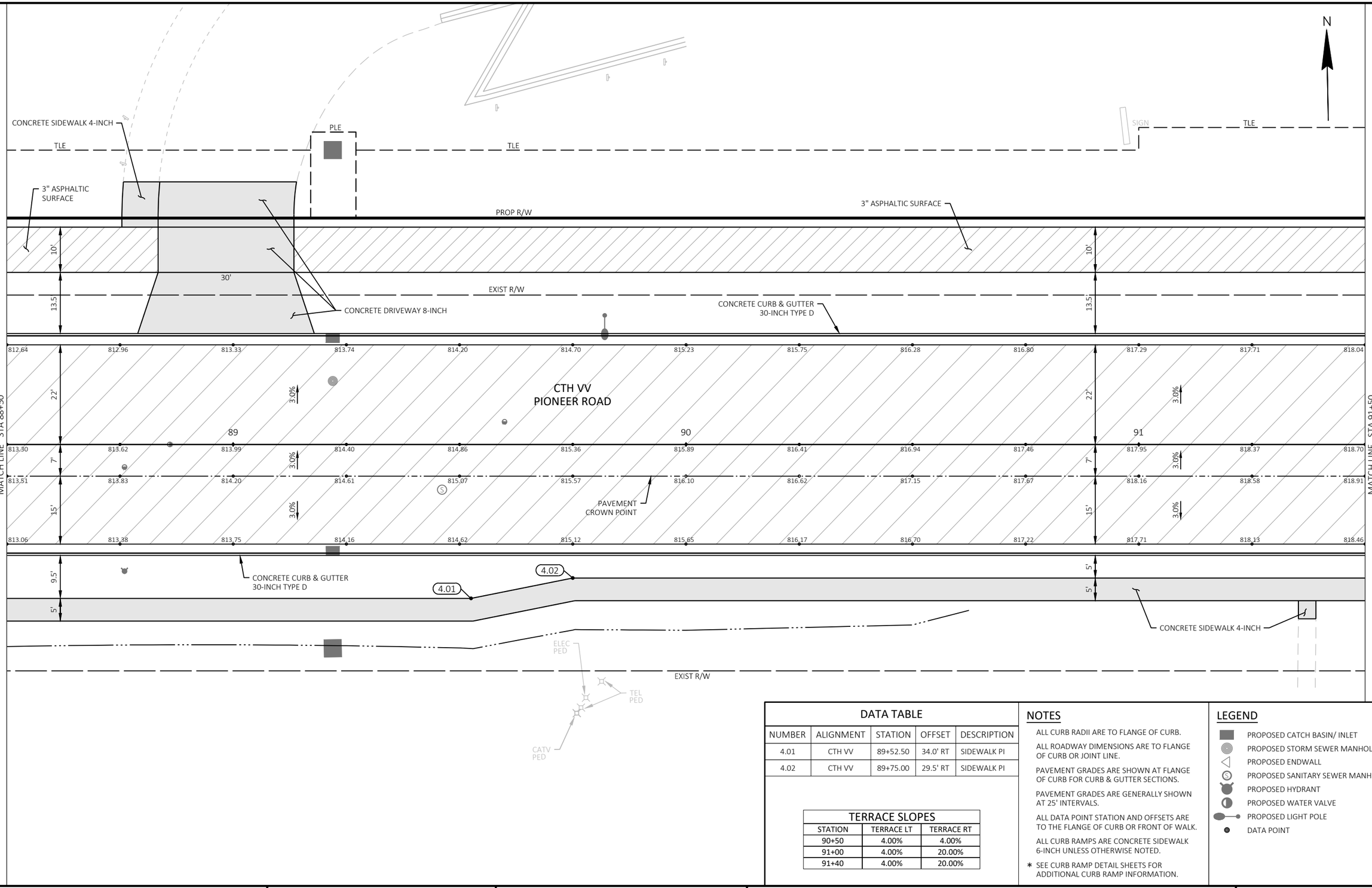
LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 24	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021201-PD.DWG
LAYOUT NAME - Sheet-03
PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2



DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
4.01	CTH VV	89+52.50	34.0' RT	SIDEWALK PI
4.02	CTH VV	89+75.00	29.5' RT	SIDEWALK PI

TERRACE SLOPES

STATION	TERRACE LT	TERRACE RT
90+50	4.00%	4.00%
91+00	4.00%	20.00%
91+40	4.00%	20.00%

NOTES

ALL CURB RADII ARE TO FLANGE OF CURB.

ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.

PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.

ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.

* SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 25	E

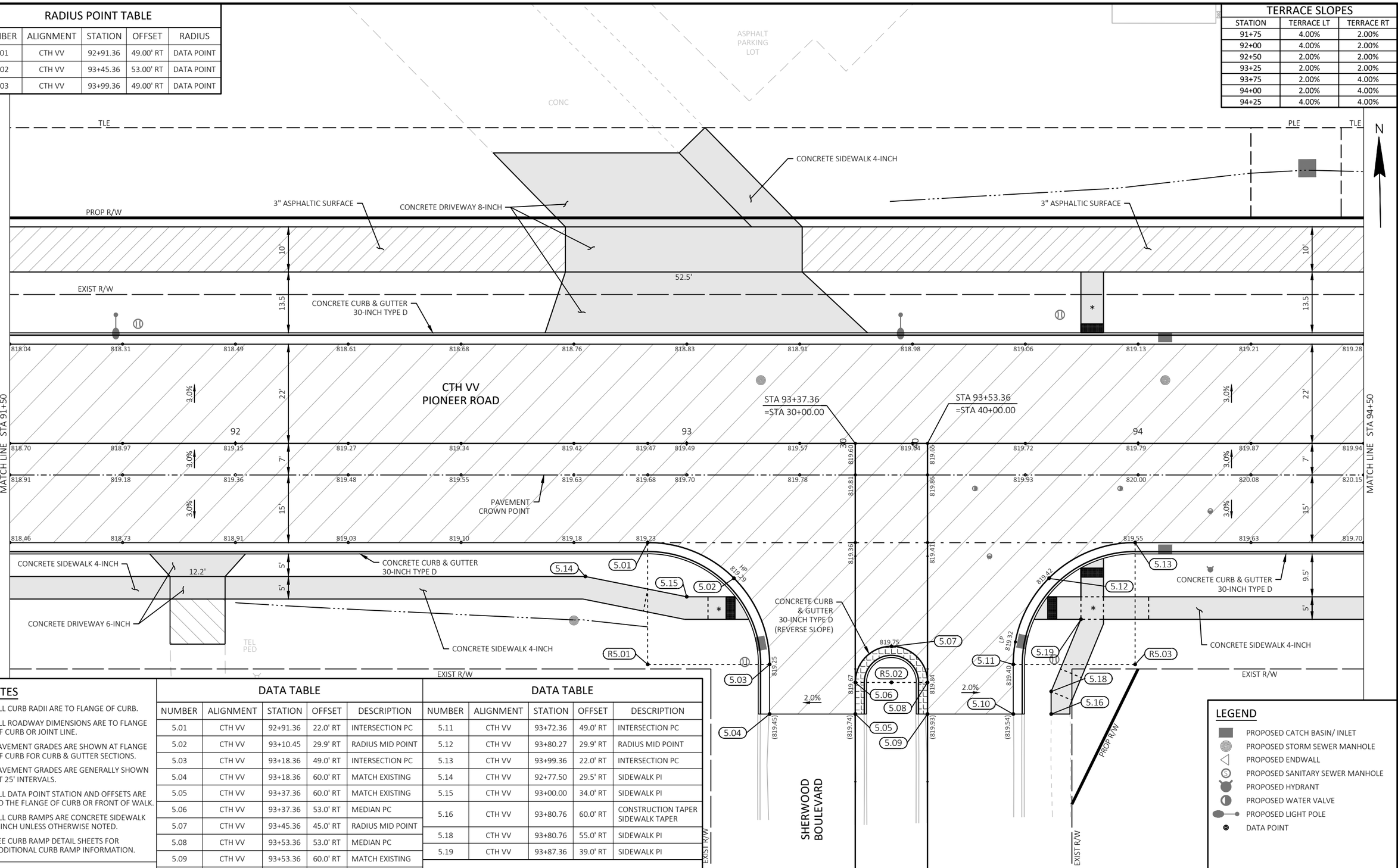
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LAYOUT NAME - Sheet-04
PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

RADIUS POINT TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	RADIUS
R5.01	CTH VV	92+91.36	49.00' RT	DATA POINT
R5.02	CTH VV	93+45.36	53.00' RT	DATA POINT
R5.03	CTH VV	93+99.36	49.00' RT	DATA POINT

TERRACE SLOPES

STATION	TERRACE LT	TERRACE RT
91+75	4.00%	2.00%
92+00	4.00%	2.00%
92+50	2.00%	2.00%
93+25	2.00%	2.00%
93+75	2.00%	4.00%
94+00	2.00%	4.00%
94+25	4.00%	4.00%



NOTES

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- ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.
- * SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
5.01	CTH VV	92+91.36	22.0' RT	INTERSECTION PC
5.02	CTH VV	93+10.45	29.9' RT	RADIUS MID POINT
5.03	CTH VV	93+18.36	49.0' RT	INTERSECTION PC
5.04	CTH VV	93+18.36	60.0' RT	MATCH EXISTING
5.05	CTH VV	93+37.36	60.0' RT	MATCH EXISTING
5.06	CTH VV	93+37.36	53.0' RT	MEDIAN PC
5.07	CTH VV	93+45.36	45.0' RT	RADIUS MID POINT
5.08	CTH VV	93+53.36	53.0' RT	MEDIAN PC
5.09	CTH VV	93+53.36	60.0' RT	MATCH EXISTING
5.10	CTH VV	93+72.36	60.0' RT	MATCH EXISTING

DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
5.11	CTH VV	93+72.36	49.0' RT	INTERSECTION PC
5.12	CTH VV	93+80.27	29.9' RT	RADIUS MID POINT
5.13	CTH VV	93+99.36	22.0' RT	INTERSECTION PC
5.14	CTH VV	92+77.50	29.5' RT	SIDEWALK PI
5.15	CTH VV	93+00.00	34.0' RT	SIDEWALK PI
5.16	CTH VV	93+80.76	60.0' RT	CONSTRUCTION TAPER SIDEWALK TAPER
5.18	CTH VV	93+80.76	55.0' RT	SIDEWALK PI
5.19	CTH VV	93+87.36	39.0' RT	SIDEWALK PI

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 26	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021201-PD.DWG
LAYOUT NAME - Sheet-05
PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

TLE

3" ASPHALTIC SURFACE

PROP R/W

10'

EXIST R/W

13.5'

CONCRETE CURB & GUTTER
30-INCH TYPE D

819.28 819.36 819.43 819.49 HP 819.51 819.49 819.43 819.36 819.28 819.21 819.13 819.06 818.98

STA 94+50

MATCH LINE

3.0%

CTH VV
PIONEER ROAD

22'

95 96 97

819.94 820.02 820.09 820.15 HP 820.17 820.15 820.09 820.02 819.94 819.87 819.79 819.72 819.64

820.15 820.23 820.30 820.36 HP 820.38 820.36 820.30 820.23 820.15 820.08 820.00 819.93 819.85

PAVEMENT
CROWN POINT

7'

15'

819.70 819.78 819.85 819.91 HP 819.93 819.91 819.85 819.78 819.70 819.63 819.55 819.48 819.40

CONCRETE CURB & GUTTER
30-INCH TYPE D

9.5'

5'

CONCRETE SIDEWALK 4-INCH

GUY PP TEL PED PP

EXIST R/W

POST

GARAGE

STA 97+50

MATCH LINE

NOTES

ALL CURB RADII ARE TO FLANGE OF CURB.

ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.

PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.

ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.

* SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 27	E

2

TERRACE SLOPES		
STATION	TERRACE LT	TERRACE RT
99+75	2.00%	4.00%

N

TLE

TLE

ASPHALTIC SURFACE FOR DWY (PE)

3" ASPHALTIC SURFACE

PROP R/W

10'

10.6'

EXIST R/W

13.5

CONCRETE CURB & GUTTER
30-INCH TYPE D

CONCRETE DRIVEWAY 6-INCH

818.98 818.91 818.83 818.76 818.63 818.42 818.11 817.71 817.21 816.62 816.02 815.48 815.01

MATCH LINE STA 97+50

3.0%

CTH VV
PIONEER ROAD

22'

98 99 100

819.64 819.57 819.49 819.42 819.29 819.08 818.77 818.37 817.87 817.28 816.68 816.14 815.67

3.0%

7'

819.85 819.78 819.70 819.63 819.50 819.29 818.98 818.58 818.08 817.49 816.89 816.35 815.88

3.0%

15'

PAVEMENT
CROWN POINT

819.40 819.33 819.25 819.18 819.05 818.84 818.53 818.13 817.63 817.04 816.44 815.90 815.43

MATCH LINE STA 100+50

9.5'

5'

CONCRETE CURB & GUTTER
30-INCH TYPE D

10.7'

14'

CONCRETE SIDEWALK 4-INCH

CONCRETE DRIVEWAY 6-INCH

CONCRETE SIDEWALK 4-INCH

CONCRETE DRIVEWAY 6-INCH

CONCRETE SIDEWALK 4-INCH

EXIST R/W

BASE AGGREGATE DENSE ¾-INCH

ASPHALTIC SURFACE FOR DWY (PE)

PP
TEL PED
TV PED
T-POLE
TEL PED
PP
TV PED
T-POLE
LP
LP
PP

NOTES

ALL CURB RADII ARE TO FLANGE OF CURB.

ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.

PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.

ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.

* SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 28	E

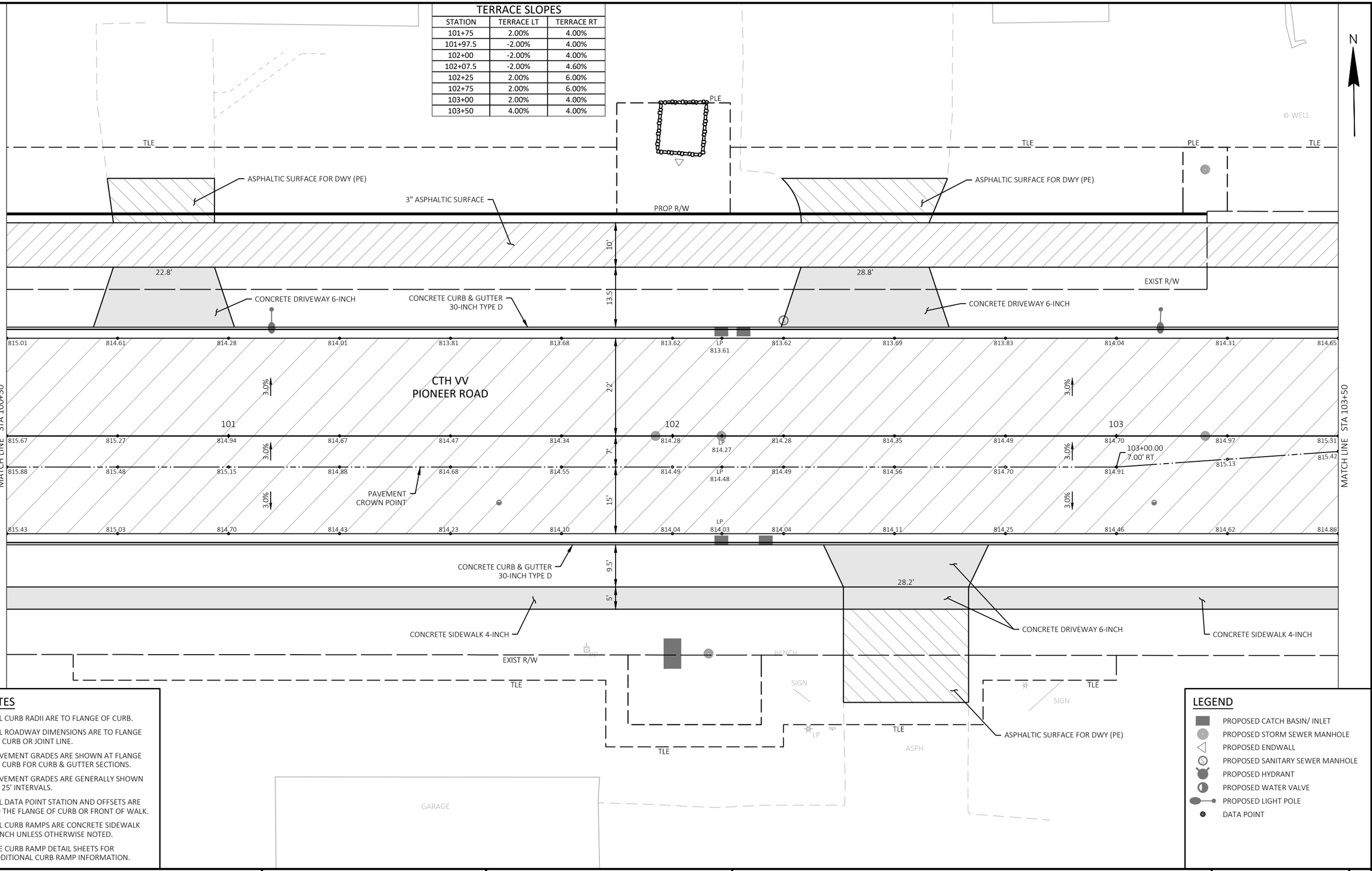
FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021201-PD.DWG
LAYOUT NAME - Sheet-07

PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

TERRACE SLOPES		
STATION	TERRACE LT	TERRACE RT
101+75	2.00%	4.00%
101+97.5	-2.00%	4.00%
102+00	-2.00%	4.00%
102+07.5	-2.00%	4.60%
102+25	2.00%	6.00%
102+75	2.00%	6.00%
103+00	2.00%	4.00%
103+50	4.00%	4.00%



NOTES

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ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.

PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.

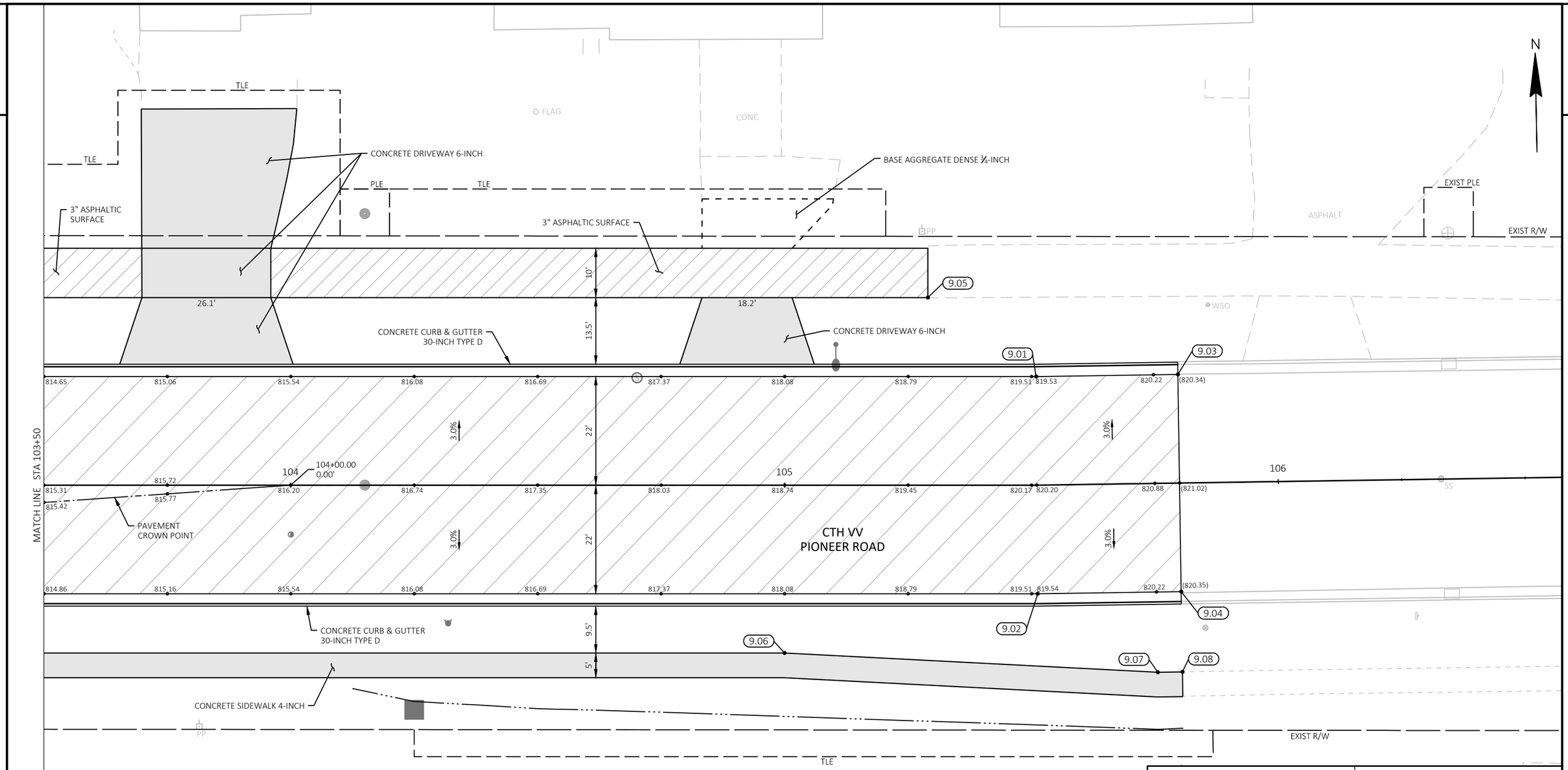
ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.

* SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 29	E



DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
9.01	CTH VV	105+50.93	22.0' LT	C & G PI
9.02	CTH VV	105+51.10	22.0' RT	C & G PI
9.03	CTH VV	105+80.00	22.0' LT	MATCH EXISTING
9.04	CTH VV	105+80.00	22.0' RT	MATCH EXISTING
9.05	CTH VV	105+29.00	38.0' LT	MATCH EXISTING
9.06	CTH VV	105+00.00	34.0' RT	SIDEWALK PI
9.07	CTH VV	105+75.00	38.2' RT	SIDEWALK PI
9.08	CTH VV	105+80.00	38.2' RT	MATCH EXISTING

TERRACE SLOPES

STATION	TERRACE LT	TERRACE RT
105+10	4.00%	4.00%
105+25	3.00%	4.00%
105+80	3.00%	4.00%

NOTES

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- PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.
- PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.
- ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.
- ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.
- ∗ SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT

PROJECT NO: 4831-05-71 | HWY: CTH VV | COUNTY: FOND DU LAC | PLAN DETAILS | SHEET 30 | E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021201-PD.DWG
LAYOUT NAME - Sheet-09

PLOT DATE : 11/27/2023 2:37 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT

NOTES

ALL CURB RADII ARE TO FLANGE OF CURB.

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PAVEMENT GRADES ARE SHOWN AT FLANGE OF CURB FOR CURB & GUTTER SECTIONS.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.

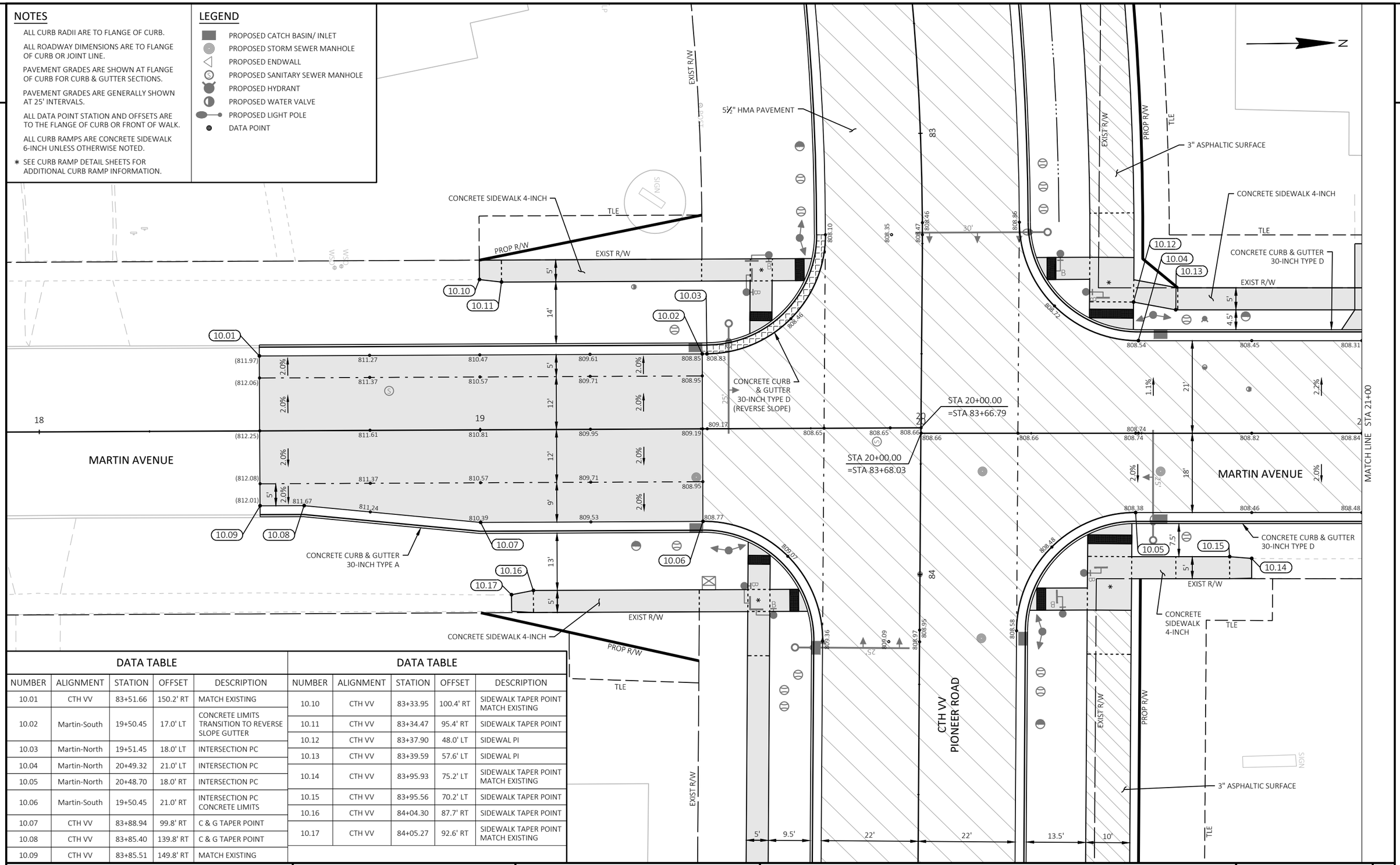
ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.

ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.

∗ SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT



DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
10.01	CTH VV	83+51.66	150.2' RT	MATCH EXISTING
10.02	Martin-South	19+50.45	17.0' LT	CONCRETE LIMITS TRANSITION TO REVERSE SLOPE GUTTER
10.03	Martin-North	19+51.45	18.0' LT	INTERSECTION PC
10.04	Martin-North	20+49.32	21.0' LT	INTERSECTION PC
10.05	Martin-North	20+48.70	18.0' RT	INTERSECTION PC
10.06	Martin-South	19+50.45	21.0' RT	INTERSECTION PC CONCRETE LIMITS
10.07	CTH VV	83+88.94	99.8' RT	C & G TAPER POINT
10.08	CTH VV	83+85.40	139.8' RT	C & G TAPER POINT
10.09	CTH VV	83+85.51	149.8' RT	MATCH EXISTING

DATA TABLE

NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
10.10	CTH VV	83+33.95	100.4' RT	SIDEWALK TAPER POINT MATCH EXISTING
10.11	CTH VV	83+34.47	95.4' RT	SIDEWALK TAPER POINT
10.12	CTH VV	83+37.90	48.0' LT	SIDEWAL PI
10.13	CTH VV	83+39.59	57.6' LT	SIDEWAL PI
10.14	CTH VV	83+95.93	75.2' LT	SIDEWALK TAPER POINT MATCH EXISTING
10.15	CTH VV	83+95.56	70.2' LT	SIDEWALK TAPER POINT
10.16	CTH VV	84+04.30	87.7' RT	SIDEWALK TAPER POINT
10.17	CTH VV	84+05.27	92.6' RT	SIDEWALK TAPER POINT MATCH EXISTING

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 31	E

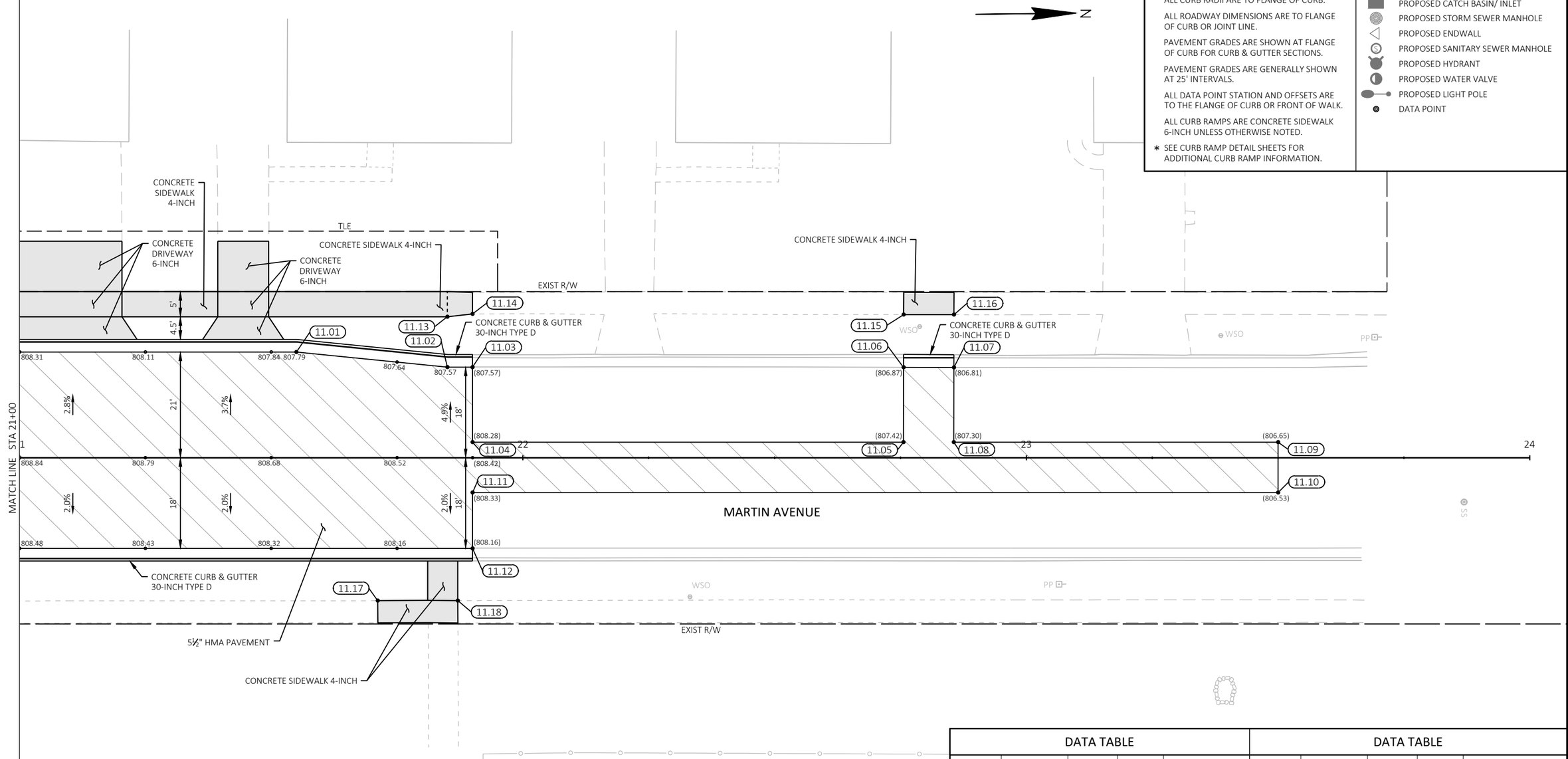
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LAYOUT NAME - Sheet-10
PLOT DATE : 11/27/2023 2:38 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

NOTES

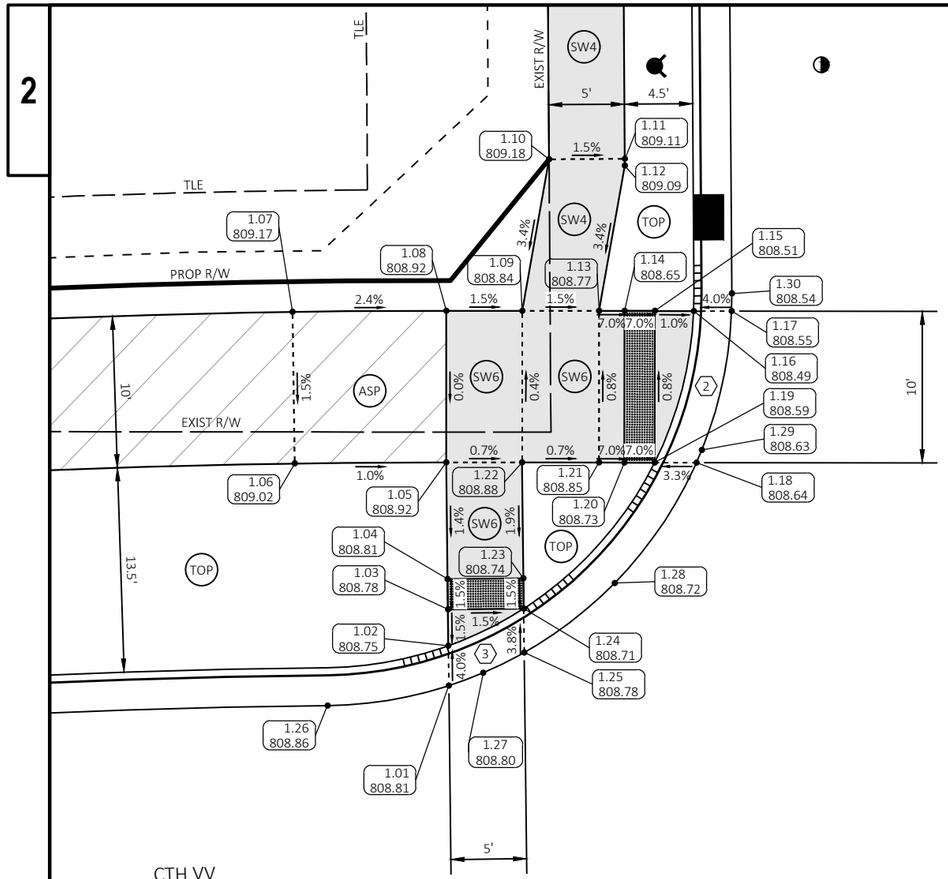
- ALL CURB RADII ARE TO FLANGE OF CURB.
- ALL ROADWAY DIMENSIONS ARE TO FLANGE OF CURB OR JOINT LINE.
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- PAVEMENT GRADES ARE GENERALLY SHOWN AT 25' INTERVALS.
- ALL DATA POINT STATION AND OFFSETS ARE TO THE FLANGE OF CURB OR FRONT OF WALK.
- ALL CURB RAMPS ARE CONCRETE SIDEWALK 6-INCH UNLESS OTHERWISE NOTED.
- ∗ SEE CURB RAMP DETAIL SHEETS FOR ADDITIONAL CURB RAMP INFORMATION.

LEGEND

- PROPOSED CATCH BASIN/ INLET
- PROPOSED STORM SEWER MANHOLE
- PROPOSED ENDWALL
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED LIGHT POLE
- DATA POINT



DATA TABLE					DATA TABLE				
NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION	NUMBER	ALIGNMENT	STATION	OFFSET	DESCRIPTION
11.01	CTH VV	83+45.84	154.8' LT	C & G TAPER POINT	11.10	CTH VV	83+72.57	350.0' LT	MATCH EXISTING
11.02	CTH VV	83+48.61	184.9' LT	C & G TAPER POINT	11.11	CTH VV	83+73.65	190.0' LT	MATCH EXISTING
11.03	CTH VV	83+48.57	189.9' LT	MATCH EXISTING	11.12	CTH VV	83+84.75	190.1' LT	MATCH EXISTING
11.04	CTH VV	83+63.47	190.0' LT	MATCH EXISTING	11.13	CTH VV	83+38.61	184.8' LT	SIDEWALK TAPER POINT
11.05	CTH VV	83+62.81	275.6' LT	MATCH EXISTING	11.14	CTH VV	83+38.00	189.8' LT	SIDEWALK TAPER POINT MATCH EXISTING
11.06	CTH VV	83+47.94	275.5' LT	MATCH EXISTING	11.15	CTH VV	83+37.48	275.4' LT	MATCH EXISTING
11.07	CTH VV	83+47.89	285.5' LT	MATCH EXISTING	11.16	CTH VV	83+37.42	285.4' LT	MATCH EXISTING
11.08	CTH VV	83+62.73	285.6' LT	MATCH EXISTING	11.17	CTH VV	83+95.24	171.3' LT	MATCH EXISTING
11.09	CTH VV	83+62.23	350.0' LT	MATCH EXISTING	11.18	CTH VV	83+95.12	187.2' LT	MATCH EXISTING



NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

CURB RAMP - 1						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1.01	CTH VV	83+28.00	23.27' LT	808.81	377513.88	820990.64
1.02	CTH VV	83+27.97	25.90' LT	808.75	377516.51	820990.65
1.03	CTH VV	83+27.94	28.30' LT	808.78	377518.91	820990.67
1.04	CTH VV	83+27.92	30.30' LT	808.81	377520.91	820990.68
1.05	CTH VV	83+27.83	38.00' LT	808.92	377528.61	820990.72
1.06	CTH VV	83+18.41	38.00' LT	809.02	377528.71	820980.72
1.07	CTH VV	83+18.41	48.00' LT	809.17	377538.71	820980.75
1.08	CTH VV	83+27.83	48.00' LT	808.92	377538.61	820990.90
1.09	CTH VV	83+32.82	48.00' LT	808.84	377538.52	820995.90
1.10	CTH VV	83+34.58	58.00' LT	809.18	377548.49	820997.85
1.11	CTH VV	83+39.58	58.04' LT	809.11	377548.44	821002.85
1.12	CTH VV	83+39.59	57.58' LT	809.09	377547.98	821002.85
1.13	CTH VV	83+37.90	48.00' LT	808.77	377538.43	821000.98
1.14	CTH VV	83+39.57	48.00' LT	808.65	377538.40	821002.66
1.15	CTH VV	83+41.57	48.00' LT	808.51	377538.36	821004.66
1.16	CTH VV	83+44.13	48.00' LT	808.49	377538.32	821007.22

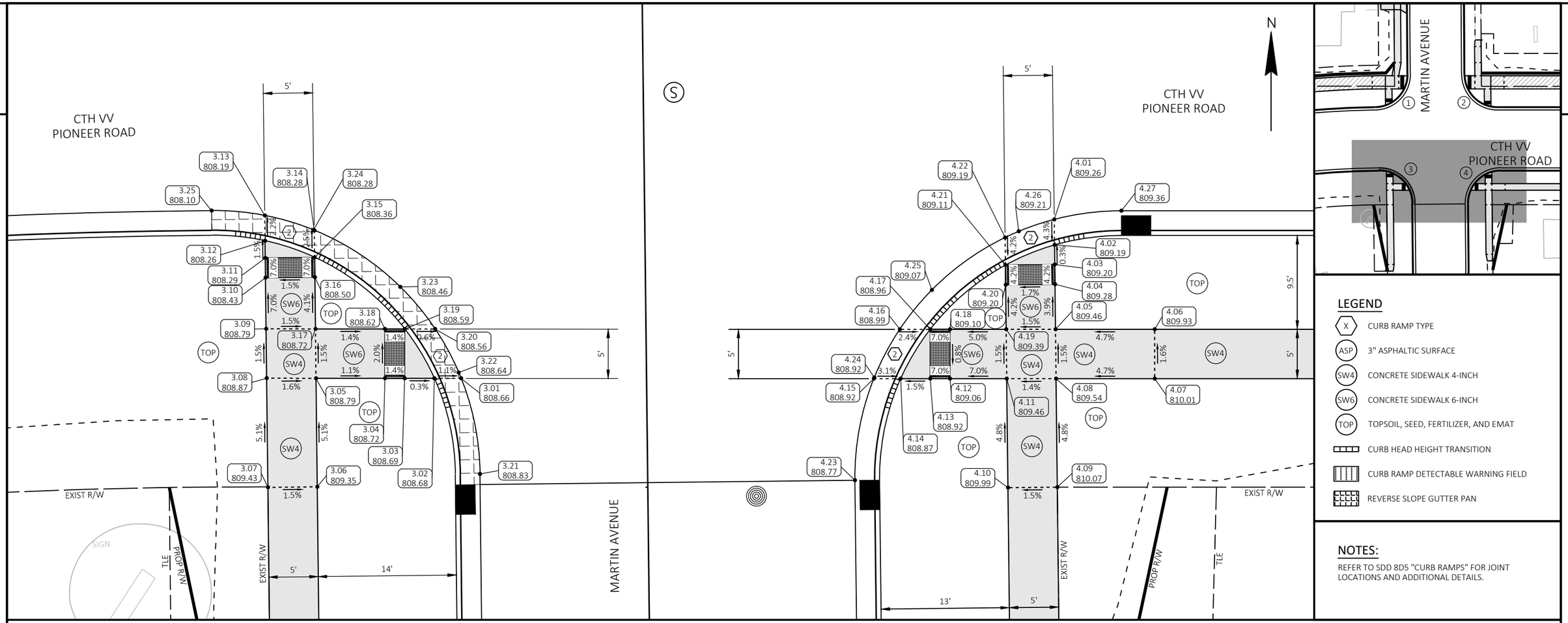
CURB RAMP - 1						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1.17	CTH VV	83+46.64	48.00' LT	808.55	377538.27	821009.72
1.18	CTH VV	83+44.33	38.00' LT	808.64	377528.31	821007.24
1.19	CTH VV	83+41.57	38.00' LT	808.59	377528.36	821004.47
1.20	CTH VV	83+39.57	38.00' LT	808.73	377528.40	821002.47
1.21	CTH VV	83+37.90	38.00' LT	808.85	377528.43	821000.80
1.22	CTH VV	83+32.82	38.00' LT	808.88	377528.52	820995.72
1.23	CTH VV	83+32.91	30.36' LT	808.74	377520.88	820995.68
1.24	CTH VV	83+32.94	28.36' LT	808.71	377518.88	820995.67
1.25	CTH VV	83+32.97	25.46' LT	808.78	377515.98	820995.65
1.26	CTH VV	83+20.27	22.00' LT	808.86	377512.71	820982.61
1.27	CTH VV	83+30.27	24.12' LT	808.80	377514.69	820992.92
1.28	CTH VV	83+38.94	30.05' LT	808.72	377520.46	821001.70
1.29	CTH VV	83+44.69	38.84' LT	808.63	377529.14	821007.61
1.30	CTH VV	83+46.65	49.15' LT	808.54	377539.42	821009.76

CURB RAMP - 2						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2.01	CTH VV	83+85.72	48.00' LT	808.39	377537.58	821048.75
2.02	CTH VV	83+88.22	48.00' LT	808.33	377537.54	821051.25
2.03	CTH VV	83+90.81	48.00' LT	808.37	377537.49	821053.84
2.04	CTH VV	83+92.81	48.00' LT	808.51	377537.46	821055.84
2.05	CTH VV	83+95.71	48.00' LT	808.71	377537.41	821058.74
2.06	CTH VV	83+95.64	58.00' LT	809.13	377547.41	821058.84
2.07	CTH VV	84+00.64	58.03' LT	809.21	377547.35	821063.84
2.08	CTH VV	84+00.71	48.00' LT	808.78	377537.32	821063.74
2.09	CTH VV	84+07.86	48.00' LT	808.89	377537.20	821070.89
2.10	CTH VV	84+17.86	48.00' LT	809.09	377537.03	821080.89
2.11	CTH VV	84+17.86	38.00' LT	808.94	377527.03	821080.71
2.12	CTH VV	84+07.86	38.00' LT	808.74	377527.20	821070.72
2.13	CTH VV	84+07.97	28.56' LT	808.55	377517.76	821070.66
2.14	CTH VV	84+07.99	26.56' LT	808.52	377515.76	821070.65
2.15	CTH VV	84+08.01	24.95' LT	808.50	377514.15	821070.64
2.16	CTH VV	84+08.04	22.41' LT	808.56	377511.60	821070.63

CURB RAMP - 2						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2.17	CTH VV	84+03.02	23.79' LT	808.53	377513.08	821065.63
2.18	CTH VV	84+02.99	26.51' LT	808.47	377515.79	821065.65
2.19	CTH VV	84+02.97	28.51' LT	808.50	377517.79	821065.66
2.20	CTH VV	84+02.86	38.00' LT	808.67	377527.28	821065.72
2.21	CTH VV	84+00.71	38.00' LT	808.63	377527.32	821063.56
2.22	CTH VV	83+95.71	38.00' LT	808.56	377527.41	821058.57
2.23	CTH VV	83+92.81	38.00' LT	808.52	377527.46	821055.67
2.24	CTH VV	83+90.81	38.00' LT	808.38	377527.49	821053.67
2.25	CTH VV	83+88.04	38.00' LT	808.44	377527.54	821050.90
2.26	CTH VV	84+12.70	22.00' LT	808.58	377511.12	821075.28
2.27	CTH VV	84+02.41	24.04' LT	808.53	377513.33	821065.03
2.28	CTH VV	83+93.67	29.84' LT	808.48	377519.29	821056.39
2.29	CTH VV	83+87.81	38.54' LT	808.43	377528.08	821050.68
2.30	CTH VV	83+85.70	48.82' LT	808.38	377538.40	821048.75

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CURB RAMP DETAILS	SHEET 33	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021301-CR.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 10/30/2023 2:12 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

CURB RAMP - 3						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3.01	CTH VV	83+48.47	39.00' RT	808.66	377451.25	821009.97
3.02	CTH VV	83+45.76	39.00' RT	808.68	377451.30	821007.26
3.03	CTH VV	83+42.75	39.00' RT	808.69	377451.35	821004.26
3.04	CTH VV	83+40.75	39.00' RT	808.72	377451.39	821002.26
3.05	CTH VV	83+33.77	39.00' RT	808.79	377451.52	820995.28
3.06	CTH VV	83+33.91	50.00' RT	809.35	377440.52	820995.22
3.07	CTH VV	83+28.91	50.06' RT	809.43	377440.55	820990.22
3.08	CTH VV	83+28.77	39.00' RT	808.87	377451.61	820990.28
3.09	CTH VV	83+28.71	34.00' RT	808.79	377456.61	820990.31
3.10	CTH VV	83+28.65	28.82' RT	808.43	377461.79	820990.34
3.11	CTH VV	83+28.62	26.82' RT	808.29	377463.79	820990.35
3.12	CTH VV	83+28.60	25.08' RT	808.26	377465.53	820990.36
3.13	CTH VV	83+28.57	22.52' RT	808.19	377468.09	820990.38
3.14	CTH VV	83+33.59	24.02' RT	808.28	377466.50	820995.37
3.15	CTH VV	83+33.62	26.75' RT	808.36	377463.76	820995.35
3.16	CTH VV	83+33.65	28.75' RT	808.50	377461.76	820995.34

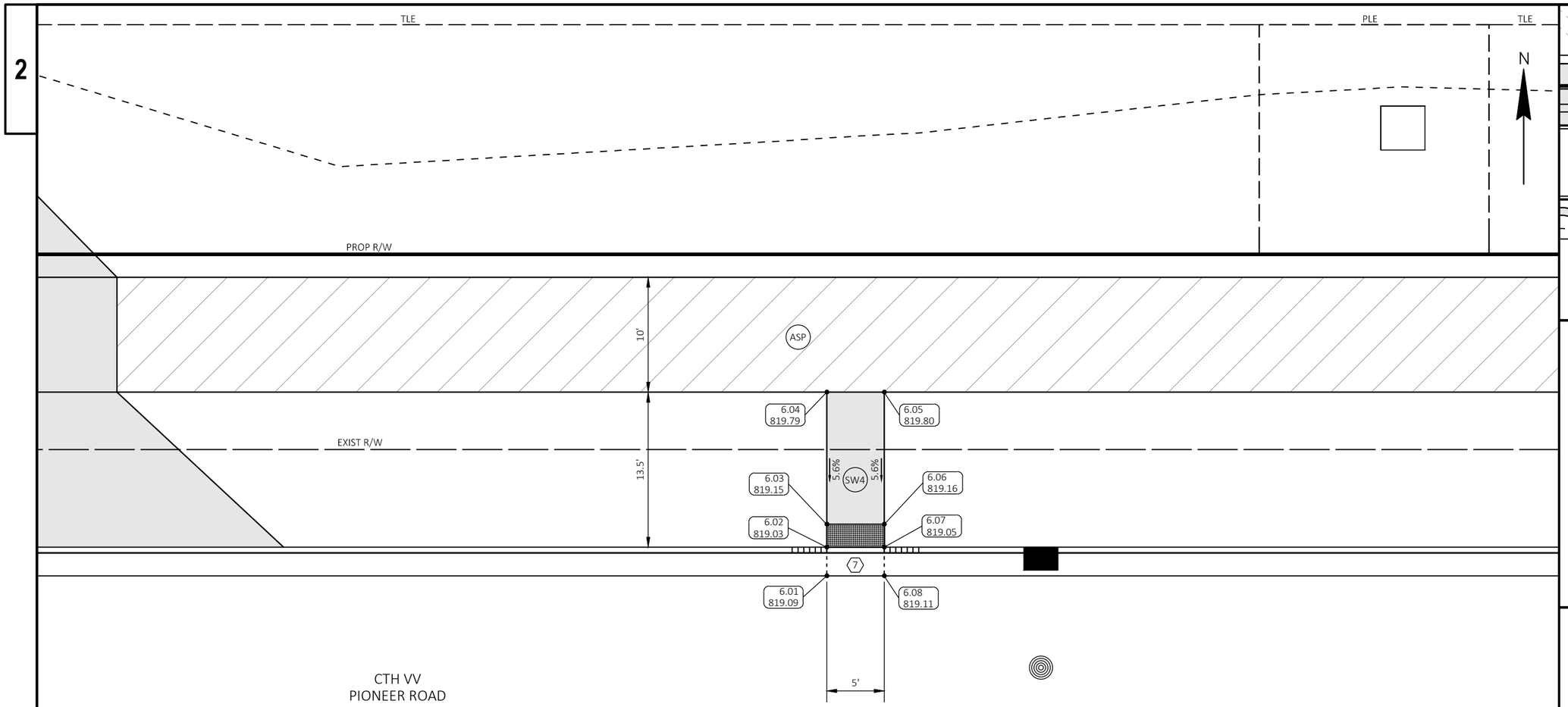
CURB RAMP - 3						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3.17	CTH VV	83+33.71	34.00' RT	808.72	377456.52	820995.31
3.18	CTH VV	83+40.75	34.00' RT	808.62	377456.39	821002.35
3.19	CTH VV	83+42.75	34.00' RT	808.59	377456.35	821004.35
3.20	CTH VV	83+45.83	34.00' RT	808.56	377456.30	821007.43
3.21	CTH VV	83+50.40	48.68' RT	808.83	377441.53	821011.72
3.22	CTH VV	83+48.22	38.40' RT	808.64	377451.85	821009.74
3.23	CTH VV	83+42.29	29.73' RT	808.46	377460.63	821003.96
3.24	CTH VV	83+33.50	23.98' RT	808.28	377466.54	820995.28
3.25	CTH VV	83+22.99	22.00' RT	808.10	377468.69	820984.99

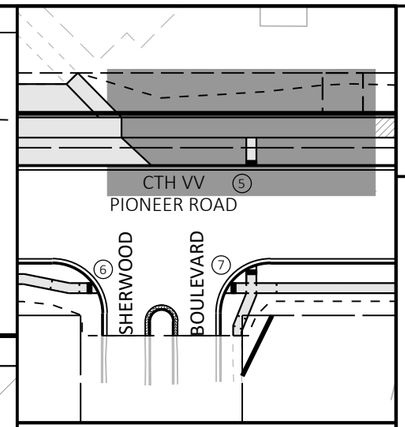
CURB RAMP - 4						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4.01	CTH VV	84+08.56	22.87' RT	809.26	377466.33	821070.37
4.02	CTH VV	84+08.59	25.45' RT	809.19	377463.74	821070.35
4.03	CTH VV	84+08.61	27.44' RT	809.20	377461.75	821070.34
4.04	CTH VV	84+08.63	29.44' RT	809.28	377459.75	821070.33
4.05	CTH VV	84+08.69	34.00' RT	809.46	377455.20	821070.30
4.06	CTH VV	84+18.74	34.00' RT	809.93	377455.02	821080.36
4.07	CTH VV	84+18.74	39.00' RT	810.01	377450.02	821080.27
4.08	CTH VV	84+08.74	39.00' RT	809.54	377450.20	821070.27
4.09	CTH VV	84+08.87	50.00' RT	810.07	377439.20	821070.21
4.10	CTH VV	84+03.87	50.06' RT	809.99	377439.22	821065.21
4.11	CTH VV	84+03.74	39.00' RT	809.46	377450.28	821065.27
4.12	CTH VV	83+97.99	39.00' RT	809.06	377450.38	821059.52
4.13	CTH VV	83+95.99	39.00' RT	808.92	377450.41	821057.52
4.14	CTH VV	83+92.99	39.00' RT	808.87	377450.47	821054.52
4.15	CTH VV	83+90.28	39.00' RT	808.92	377450.51	821051.81
4.16	CTH VV	83+92.91	34.00' RT	808.99	377455.47	821054.53

CURB RAMP - 4						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4.17	CTH VV	83+95.99	34.00' RT	808.96	377455.41	821057.61
4.18	CTH VV	83+97.99	34.00' RT	809.10	377455.38	821059.61
4.19	CTH VV	84+03.68	34.00' RT	809.39	377455.28	821065.30
4.20	CTH VV	84+03.63	29.50' RT	809.20	377459.78	821065.33
4.21	CTH VV	84+03.61	27.50' RT	809.11	377461.78	821065.34
4.22	CTH VV	84+03.58	24.70' RT	809.19	377464.58	821065.36
4.23	CTH VV	83+88.36	49.31' RT	808.77	377440.24	821049.72
4.24	CTH VV	83+90.32	38.88' RT	808.92	377450.63	821051.86
4.25	CTH VV	83+96.16	30.02' RT	809.07	377459.39	821057.84
4.26	CTH VV	84+04.95	24.08' RT	809.21	377465.17	821066.74
4.27	CTH VV	84+15.36	22.00' RT	809.36	377467.08	821077.18

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CURB RAMP DETAILS	SHEET 34	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-021301-CR.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 10/30/2023 2:12 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42





LEGEND

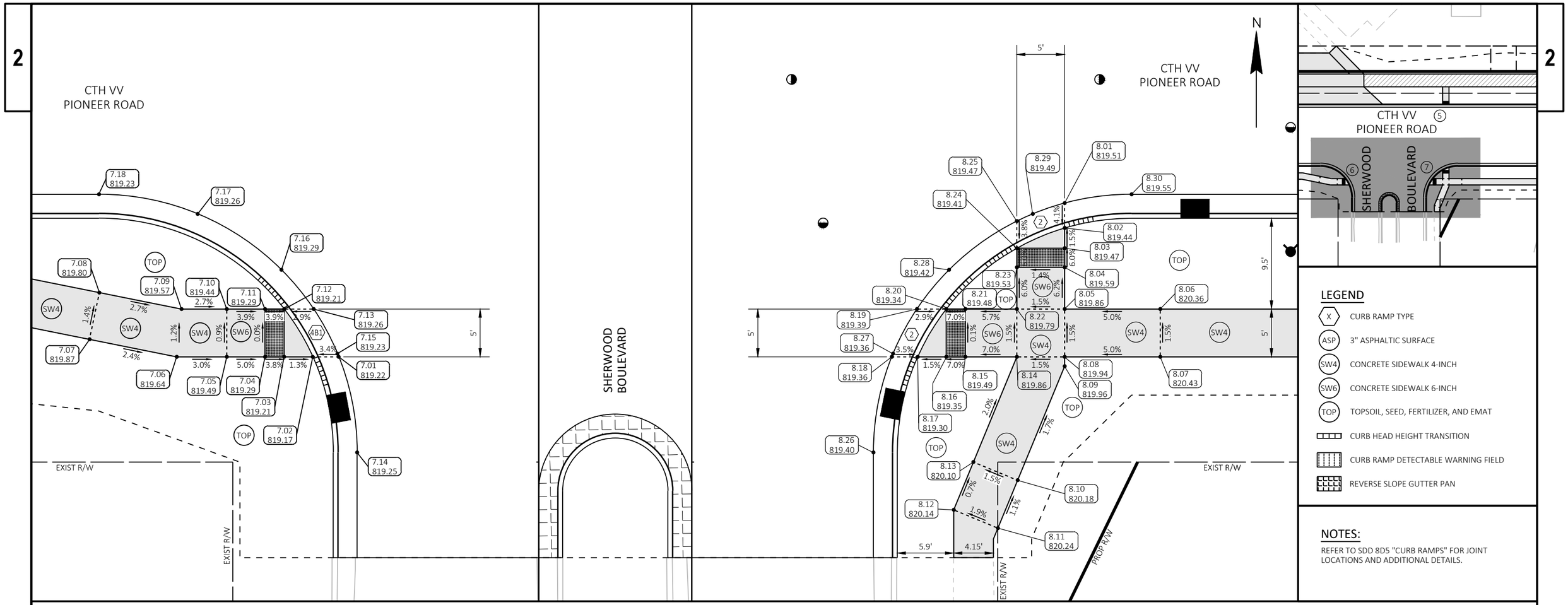
- X — CURB RAMP TYPE
- ASP — 3" ASPHALTIC SURFACE
- SW4 — CONCRETE SIDEWALK 4-INCH
- SW6 — CONCRETE SIDEWALK 6-INCH
- TOP — TOPSOIL, SEED, FERTILIZER, AND EMAT
- CURB HEAD HEIGHT TRANSITION
- CURB RAMP DETECTABLE WARNING FIELD
- REVERSE SLOPE GUTTER PAN

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

CTH VV
PIONEER ROAD

CURB RAMP - 6						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6.01	CTH VV	93+87.36	22.00' LT	819.09	377494.35	822049.80
6.02	CTH VV	93+87.36	24.50' LT	819.03	377496.85	822049.84
6.03	CTH VV	93+87.36	26.50' LT	819.15	377498.85	822049.87
6.04	CTH VV	93+87.36	38.00' LT	819.79	377510.35	822050.07
6.05	CTH VV	93+92.36	38.00' LT	819.80	377510.27	822055.07
6.06	CTH VV	93+92.36	26.50' LT	819.16	377498.77	822054.87
6.07	CTH VV	93+92.36	24.50' LT	819.05	377496.77	822054.84
6.08	CTH VV	93+92.36	22.00' LT	819.11	377494.27	822054.79



CURB RAMP - 7						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7.01	CTH VV	93+16.44	39.00' RT	819.22	377434.58	821977.84
7.02	CTH VV	93+13.73	39.00' RT	819.17	377434.63	821975.12
7.03	CTH VV	93+10.73	39.00' RT	819.21	377434.68	821972.13
7.04	CTH VV	93+08.73	39.00' RT	819.29	377434.72	821970.13
7.05	CTH VV	93+04.73	39.00' RT	819.49	377434.78	821966.13
7.06	CTH VV	92+99.50	39.00' RT	819.64	377434.87	821960.90
7.07	CTH VV	92+90.38	37.17' RT	819.87	377436.86	821951.81
7.08	CTH VV	92+91.41	32.28' RT	819.80	377441.73	821952.93
7.09	CTH VV	93+00.00	34.00' RT	819.57	377439.86	821961.49
7.10	CTH VV	93+04.73	34.00' RT	819.44	377439.78	821966.22
7.11	CTH VV	93+08.73	34.00' RT	819.29	377439.71	821970.22
7.12	CTH VV	93+10.73	34.00' RT	819.21	377439.68	821972.21
7.13	CTH VV	93+13.81	34.00' RT	819.26	377439.63	821975.29
7.14	CTH VV	93+18.36	49.00' RT	819.25	377424.55	821979.58
7.15	CTH VV	93+16.30	38.67' RT	819.23	377434.92	821977.71
7.16	CTH VV	93+10.45	29.91' RT	819.29	377443.78	821972.01

CURB RAMP - 7						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7.17	CTH VV	93+01.69	24.06' RT	819.26	377449.78	821963.35
7.18	CTH VV	92+91.36	22.00' RT	819.23	377452.01	821953.05

CURB RAMP - 8						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
8.01	CTH VV	93+92.36	22.92' RT	819.51	377449.35	822054.02
8.02	CTH VV	93+92.36	25.52' RT	819.44	377446.75	822053.98
8.03	CTH VV	93+92.36	27.64' RT	819.47	377444.64	822053.94
8.04	CTH VV	93+92.36	29.64' RT	819.59	377442.64	822053.91
8.05	CTH VV	93+92.36	34.00' RT	819.86	377438.28	822053.83
8.06	CTH VV	94+02.36	34.00' RT	820.36	377438.10	822063.83
8.07	CTH VV	94+02.36	39.00' RT	820.43	377433.10	822063.74
8.08	CTH VV	93+92.36	39.00' RT	819.94	377433.28	822053.75
8.09	CTH VV	93+92.36	39.99' RT	819.96	377432.29	822053.73
8.10	CTH VV	93+87.45	51.91' RT	820.18	377420.46	822048.61
8.11	CTH VV	93+85.39	56.91' RT	820.24	377415.49	822046.47
8.12	CTH VV	93+80.76	55.00' RT	820.14	377417.48	822041.88
8.13	CTH VV	93+82.83	50.00' RT	820.10	377422.44	822044.02
8.14	CTH VV	93+87.36	39.00' RT	819.86	377433.36	822048.75
8.15	CTH VV	93+81.99	39.00' RT	819.49	377433.46	822043.38
8.16	CTH VV	93+79.99	39.00' RT	819.35	377433.49	822041.38

CURB RAMP - 8						
POINT NO.	ALIGNMENT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
8.17	CTH VV	93+76.99	39.00' RT	819.30	377433.54	822038.38
8.18	CTH VV	93+74.28	39.00' RT	819.36	377433.59	822035.67
8.19	CTH VV	93+76.91	34.00' RT	819.39	377438.54	822038.38
8.20	CTH VV	93+79.99	34.00' RT	819.34	377438.49	822041.46
8.21	CTH VV	93+81.99	34.00' RT	819.48	377438.45	822043.46
8.22	CTH VV	93+87.36	34.00' RT	819.79	377438.36	822048.83
8.23	CTH VV	93+87.36	29.64' RT	819.53	377442.72	822048.91
8.24	CTH VV	93+87.36	27.64' RT	819.41	377444.72	822048.94
8.25	CTH VV	93+87.36	24.81' RT	819.47	377447.55	822048.99
8.26	CTH VV	93+72.36	49.00' RT	819.40	377423.62	822033.58
8.27	CTH VV	93+74.41	38.67' RT	819.36	377433.92	822035.81
8.28	CTH VV	93+80.27	29.91' RT	819.42	377442.58	822041.81
8.29	CTH VV	93+89.03	24.06' RT	819.49	377448.28	822050.67
8.30	CTH VV	93+99.36	22.00' RT	819.55	377450.15	822061.04

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CURB RAMP DETAILS	SHEET 36	E

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- ROCK BAG DITCH CHECK
- INLET PROTECTION (TYPE)
- CULVERT PIPE CHECKS
- RIPRAP MEDIUM
- EROSION MAT URBAN CLASS I TYPE A
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

WHEN THE PLANS SHOW TWO INLET PROTECTION TYPES TOGETHER, USE TYPE A INLET PROTECTION DURING GRADING OPERATIONS.

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

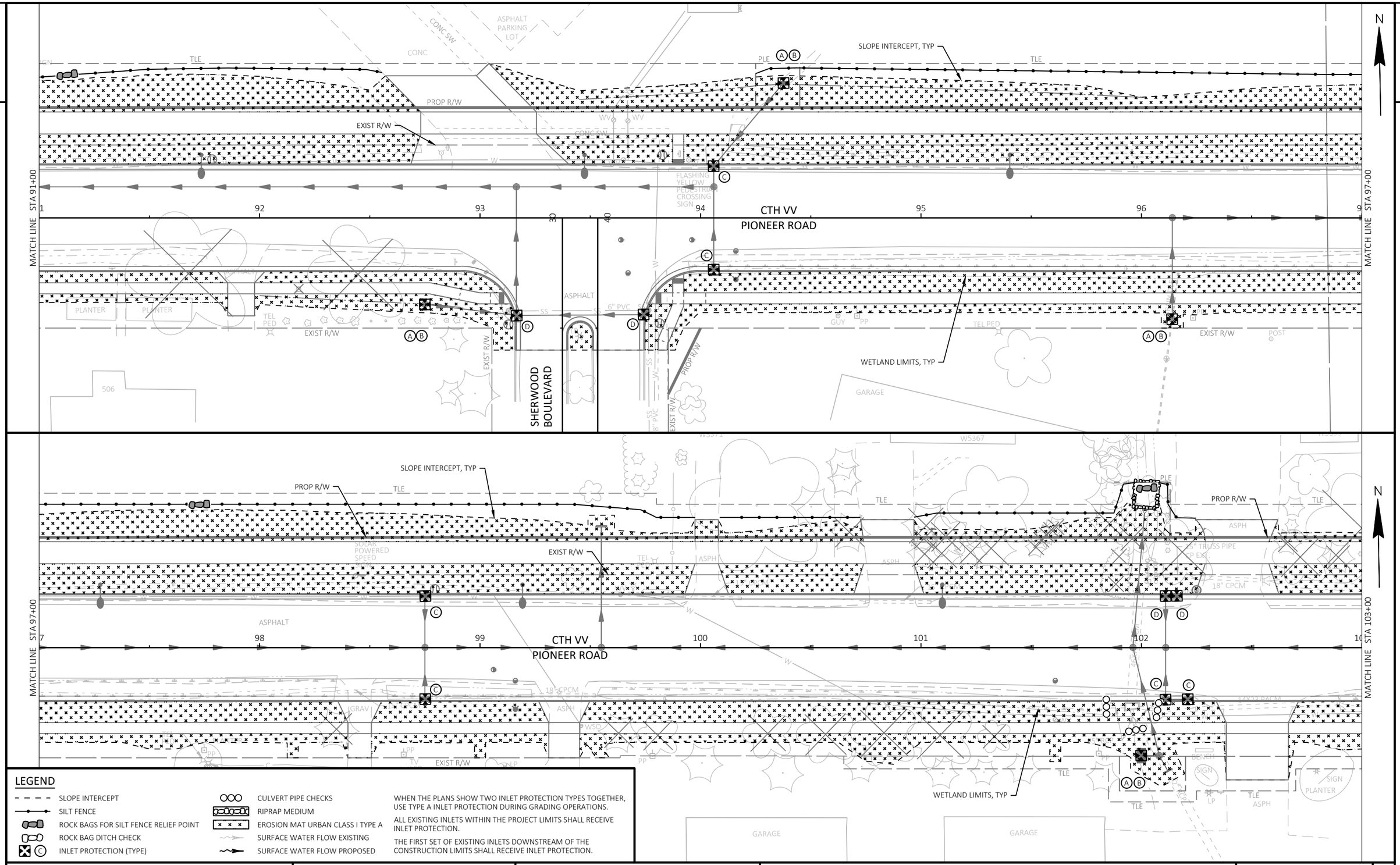
THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 37	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022001-EC.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 10/30/2023 2:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- ROCK BAG DITCH CHECK
- INLET PROTECTION (TYPE) (C)
- CULVERT PIPE CHECKS
- RIPRAP MEDIUM
- EROSION MAT URBAN CLASS I TYPE A
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

WHEN THE PLANS SHOW TWO INLET PROTECTION TYPES TOGETHER, USE TYPE A INLET PROTECTION DURING GRADING OPERATIONS.

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 38	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022001-EC.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 10/30/2023 2:13 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

MATCH LINE STA 103+00

CTH VV
PIONEER ROAD

EXIST R/W

WETLAND LIMITS, TYP

SLOPE INTERCEPT, TYP

PROP R/W

MARTIN AVENUE

PIONEER SQUARE APARTMENTS
620

N

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- ROCK BAGS FOR SILT FENCE RELIEF POINT
- ROCK BAG DITCH CHECK
- INLET PROTECTION (TYPE)
- CULVERT PIPE CHECKS
- RIPRAP MEDIUM
- EROSION MAT URBAN CLASS I TYPE A
- SURFACE WATER FLOW EXISTING
- SURFACE WATER FLOW PROPOSED

WHEN THE PLANS SHOW TWO INLET PROTECTION TYPES TOGETHER, USE TYPE A INLET PROTECTION DURING GRADING OPERATIONS.

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE INLET PROTECTION.

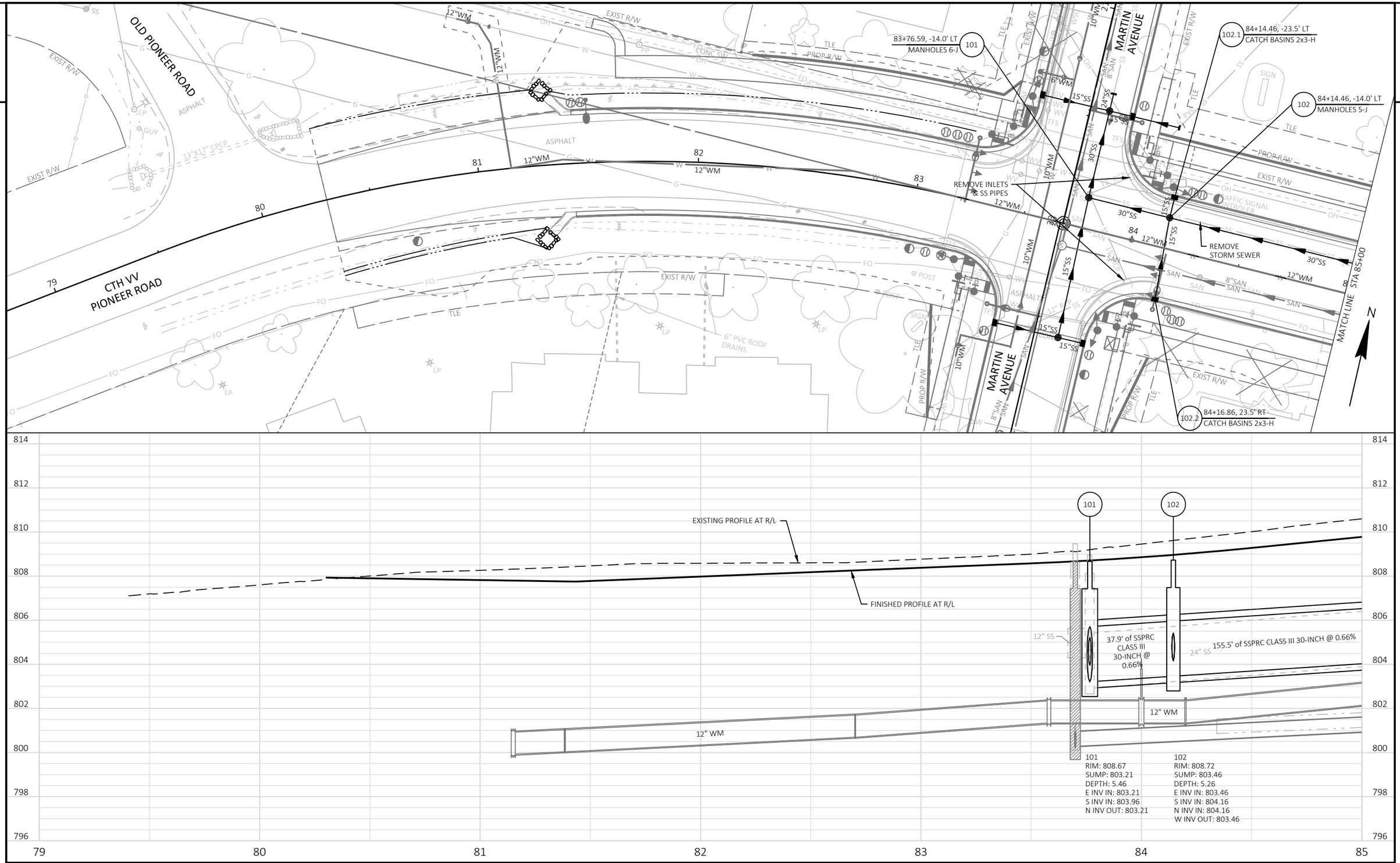
THE FIRST SET OF EXISTING INLETS DOWNSTREAM OF THE CONSTRUCTION LIMITS SHALL RECEIVE INLET PROTECTION.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	EROSION CONTROL PLAN	SHEET 39	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022001-EC.DWG
LAYOUT NAME - Sheet-03

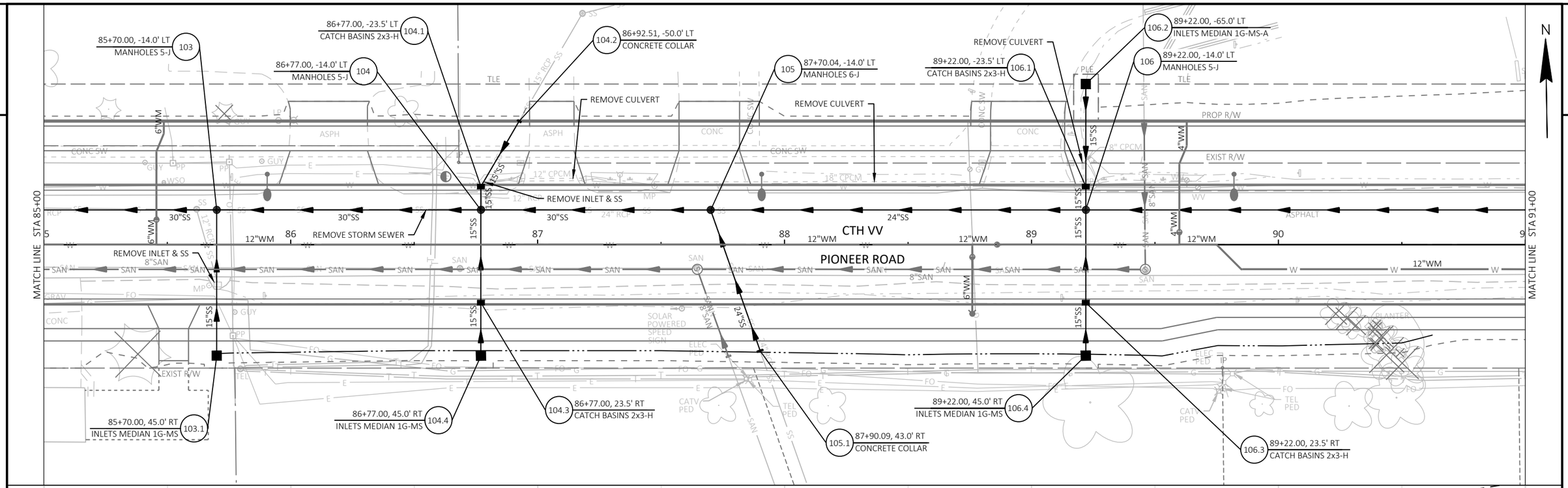
PLOT DATE : 10/30/2023 2:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

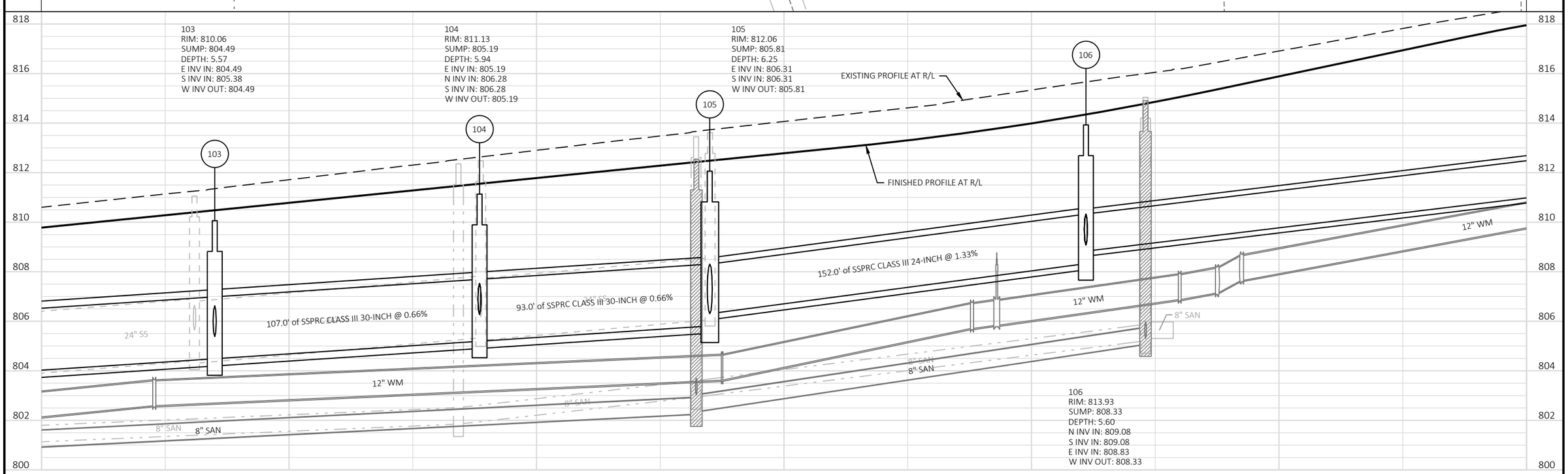
WISDOT/CADDS SHEET 44



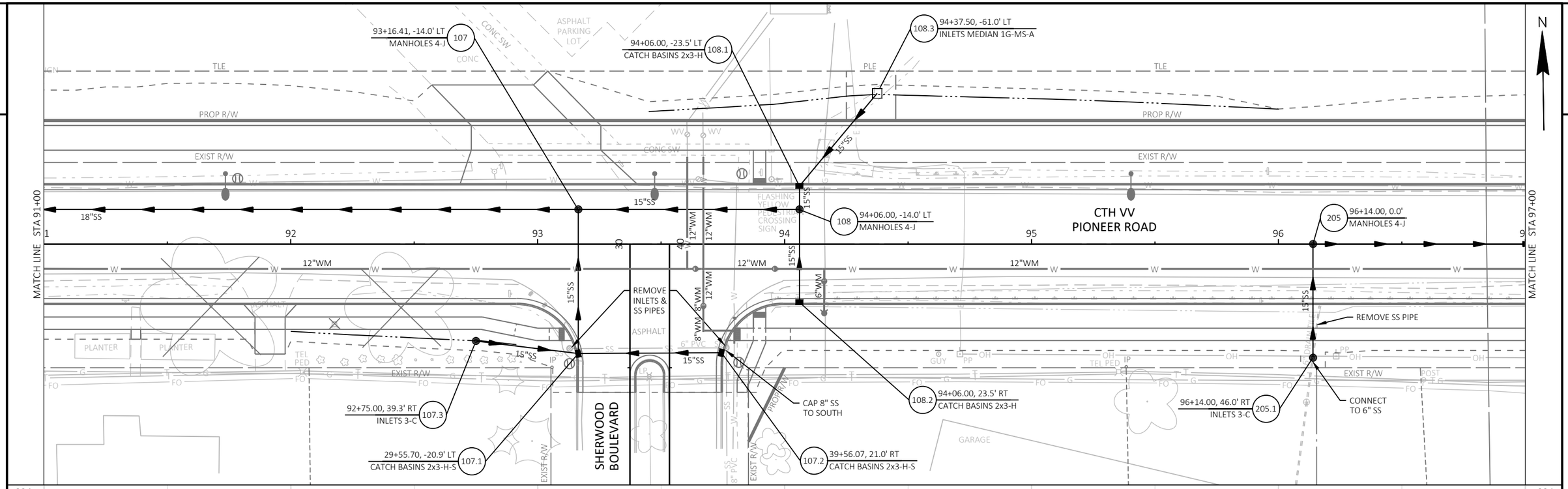
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: CTH VV	SHEET 40	E

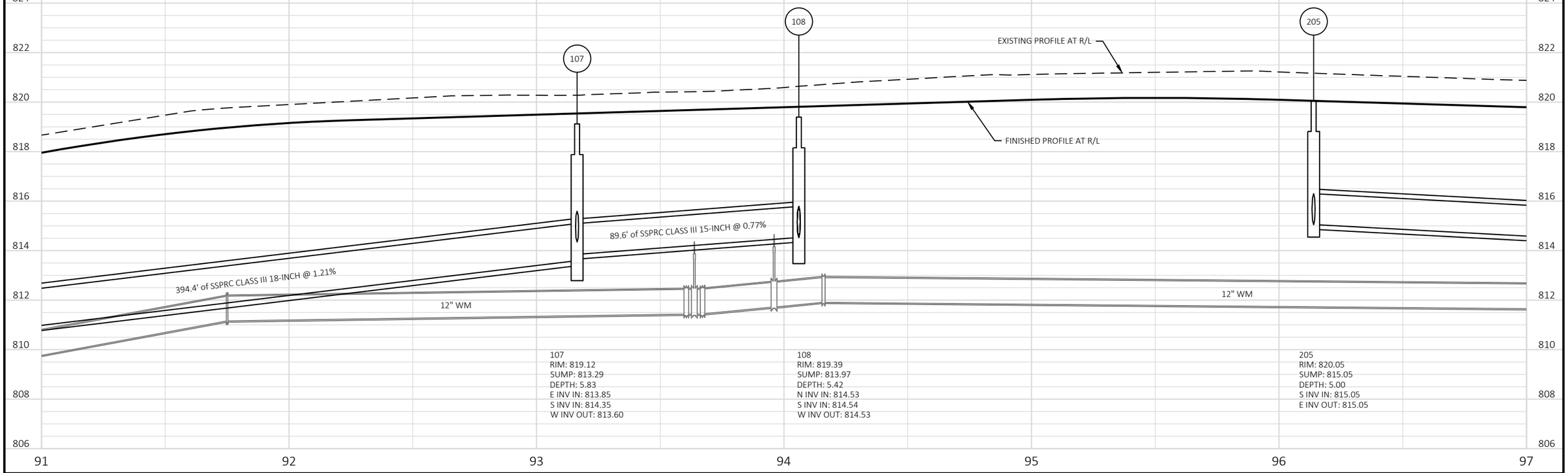
FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022501-SS.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 10/30/2023 2:13 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41





PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: CTH VV	SHEET 41	E





PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: CTH VV	SHEET 42	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022501-SS.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 10/30/2023 2:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

THEISEN POND AND STORM SEWER TO BE BUILT CITY OF FOND DU LAC

99+55.00, -55.0' LT
BULKHEAD PIPE 203.1

BULKHEAD PIPE TO NORTH

98+75.00, -23.5' LT
CATCH BASINS 2x3-H 204.1

204 98+75.00, 0.0'
MANHOLES 4-J

98+75.00, 23.5' RT
CATCH BASINS 2x3-H 204.2

203 99+55.00, 0.0'
MANHOLES 9-J

102+01.43, -60.8' LT
APRON ENDWALLS FOR CPRC 24-INCH 300

403.1 102+11.00, -23.5' LT
CATCH BASINS 2x3-H-S

403.2 102+16.00, -23.5' LT
CATCH BASINS 2x3-H

101+96.19, 0.0'
MANHOLES 9-J 301

403 102+11.00, 0.0'
MANHOLES 6-J

102+00.00, 49.0' RT
INLETS MEDIAN 2G-MS SINGLE SLOPE GRATE @ 6:1 303

102+08.13, 49.0' RT
MANHOLES 7-J 302

102+12.04, 56.0' RT
CONCRETE COLLAR 304

403.4 102+21.00, 23.5' RT
CATCH BASINS 2x3-H

403.3 102+11.00, 23.5' RT
CATCH BASINS 2x3-H-S

REMOVE CULVERT

REMOVE SS PIPE & ENDWALL

REMOVE INLET & SS PIPES

REMOVE SS PIPE

CTH VV
PIONEER ROAD

MATCH LINE STA 97+00

MATCH LINE STA 103+00

N

261.0' of SSPRC CLASS III 15-INCH @ 0.54%

80.0' of SSPRC CLASS III 18-INCH @ 2.00%

241.2' of SSPRC CLASS III 48-INCH @ 0.30%

109.0' of SSPRC CLASS III 24-INCH @ 0.50%

14.8' of SSPRC CLASS III 30-INCH @ 0.50%

EXISTING PROFILE AT R/L

FINISHED PROFILE AT R/L

204
RIM: 819.08
SUMP: 813.39
DEPTH: 5.69
W INV IN: 813.64
N INV IN: 813.64
S INV IN: 813.64
E INV OUT: 813.39

203
RIM: 817.76
SUMP: 804.32
DEPTH: 13.44
E INV IN: 804.32
W INV IN: 811.79
N INV OUT: 804.32

301
RIM: 814.28
SUMP: 805.05
DEPTH: 9.24
E INV IN: 808.18
S INV IN: 805.05
W INV OUT: 805.05
N INV OUT: 809.55

403
RIM: 814.27
SUMP: 808.26
DEPTH: 6.01
E INV IN: 808.76
N INV IN: 809.51
S INV IN: 809.51
W INV OUT: 808.26

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: CTH VV	SHEET 43	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022501-SS.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 10/31/2023 12:50 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

402.1 103+20.00, -60.0' LT
INLETS 3-C

401.1 104+15.00, -55.0' LT
INLETS 3-C

REMOVE CULVERT

REMOVE CULVERT

CTH VV
PIONEER ROAD

401 104+15.00, 0.0'
MANHOLES 5-J

400 105+73.48, 0.2' RT
CONNECT TO EX MH

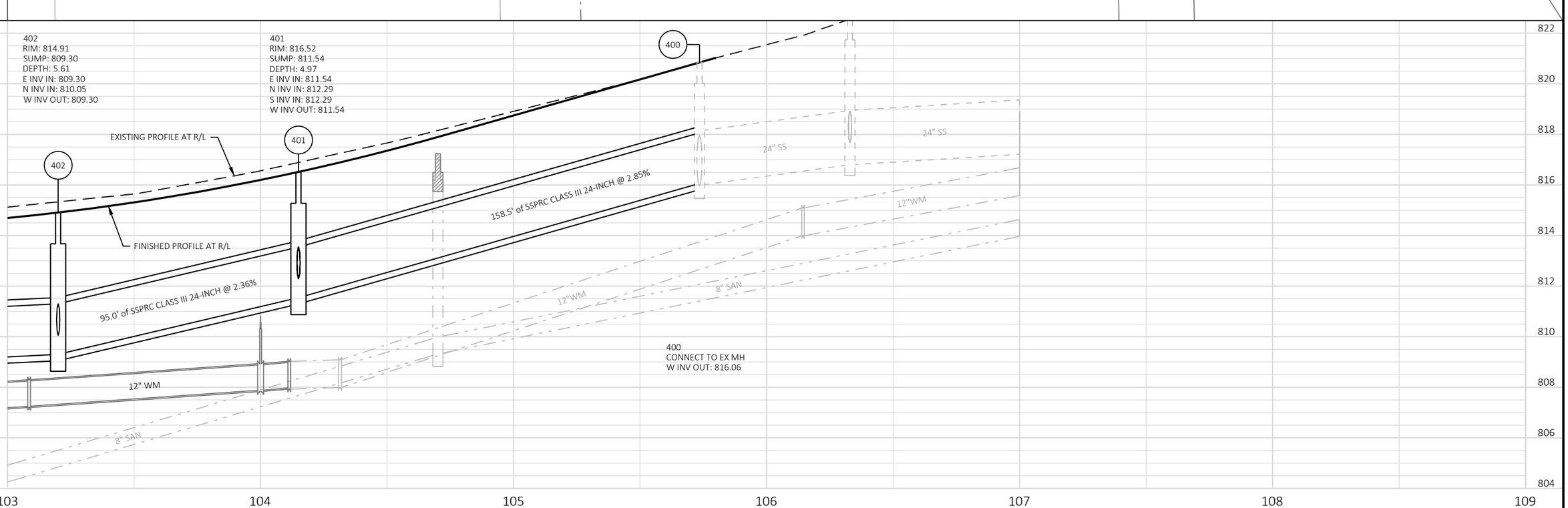
REMOVE SS PIPE & ENDWALL

402 103+20.00, 0.0'
MANHOLES 5-J

401.2 104+25.00, 45.5' RT
INLETS MEDIAN 1G-MS

MATCH LINE STA 103+00

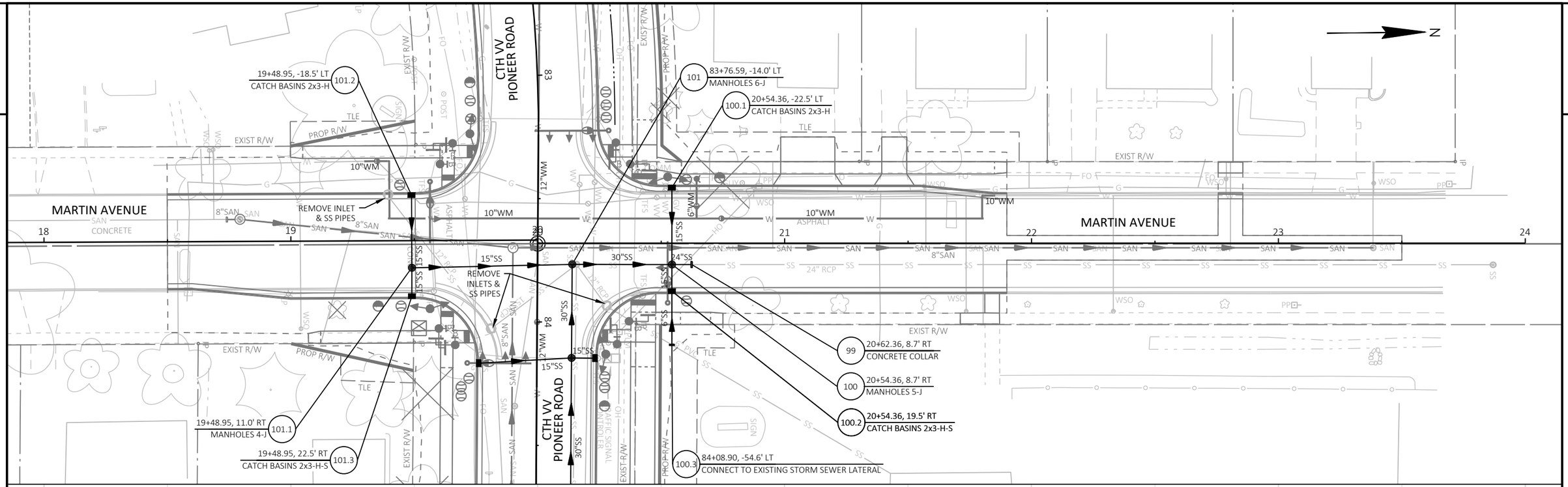
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: CTH VV	SHEET 44	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022501-SS.DWG
LAYOUT NAME - Sheet-05

PLOT DATE : 10/30/2023 2:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

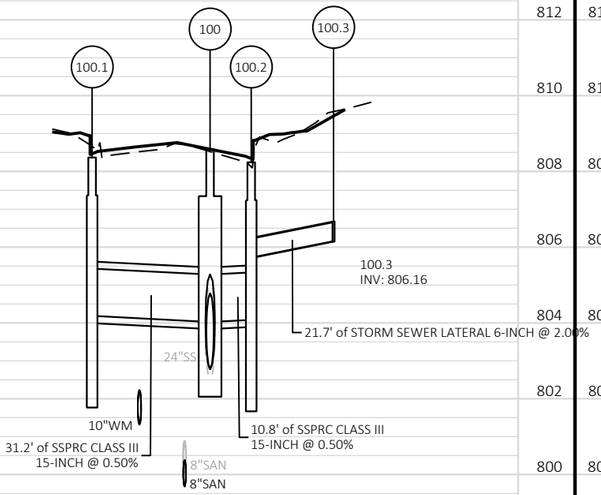


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER LAYOUT: MARTIN AVENUE	SHEET 45	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-022502-SS.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 10/30/2023 2:13 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

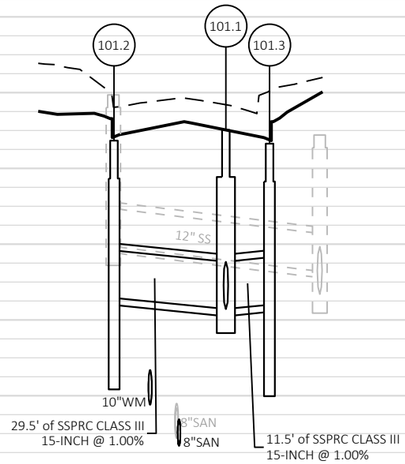
2



100.1
RIM: 808.36
SUMP: 802.18
DEPTH: 6.18
E INV OUT: 804.18

100
RIM: 808.59
SUMP: 802.72
DEPTH: 5.87
W INV IN: 804.03
E INV IN: 804.03
S INV IN: 802.78
N INV OUT: 802.78

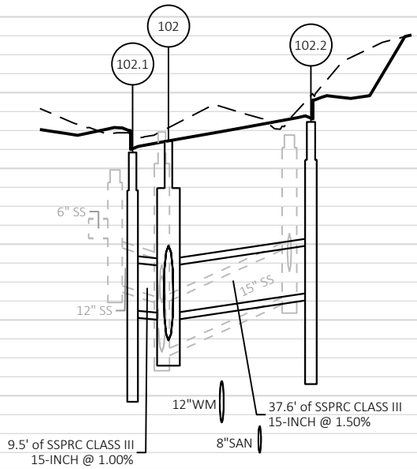
100.2
RIM: 808.24
SUMP: 802.08
DEPTH: 6.16
E INV IN: 805.73
W INV OUT: 804.08



101.2
RIM: 808.73
SUMP: 802.58
DEPTH: 6.15
E INV OUT: 804.58

101.1
RIM: 809.01
SUMP: 804.16
DEPTH: 4.86
W INV IN: 804.29
E INV IN: 804.29
N INV OUT: 804.29

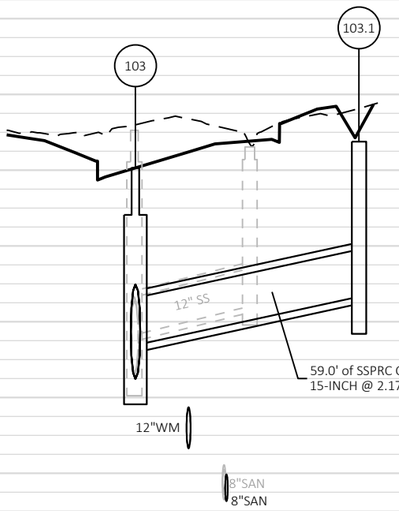
101.3
RIM: 808.65
SUMP: 802.40
DEPTH: 6.25
W INV OUT: 804.40



102.1
RIM: 808.42
SUMP: 802.26
DEPTH: 6.16
S INV OUT: 804.26

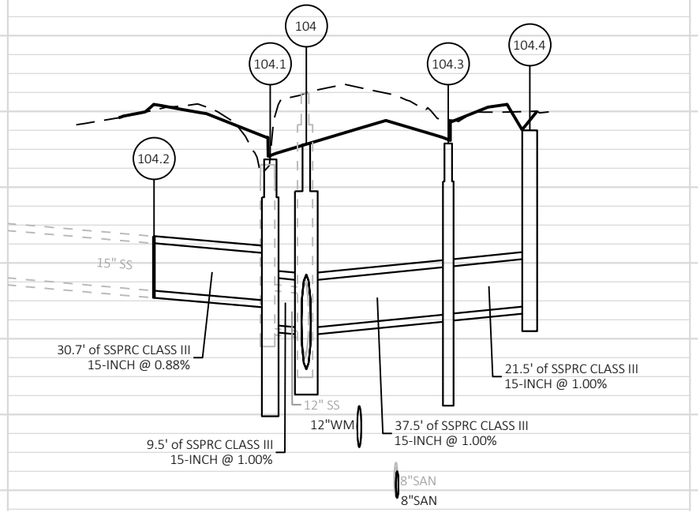
102
RIM: 808.72
SUMP: 803.46
DEPTH: 5.26
E INV IN: 803.46
S INV IN: 804.16
N INV IN: 804.16
W INV OUT: 803.46

102.2
RIM: 809.23
SUMP: 802.73
DEPTH: 6.50
N INV OUT: 804.73



103
RIM: 810.06
SUMP: 804.49
DEPTH: 5.57
E INV IN: 804.49
S INV IN: 805.38
W INV OUT: 804.49

103.1
RIM: 810.75
SUMP: 806.35
DEPTH: 4.40
N INV OUT: 806.66



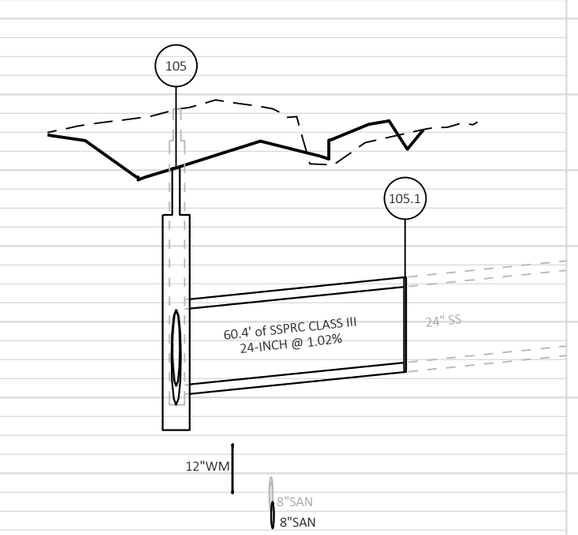
104.2
INV: 807.27

104.1
RIM: 810.73
SUMP: 804.37
DEPTH: 6.36
NE INV IN: 807.00
S INV OUT: 806.37

104
RIM: 811.13
SUMP: 805.19
DEPTH: 5.94
E INV IN: 805.19
N INV IN: 806.28
S INV IN: 806.28
W INV OUT: 805.19

104.3
RIM: 811.15
SUMP: 804.65
DEPTH: 6.50
S INV IN: 806.65
N INV OUT: 806.65

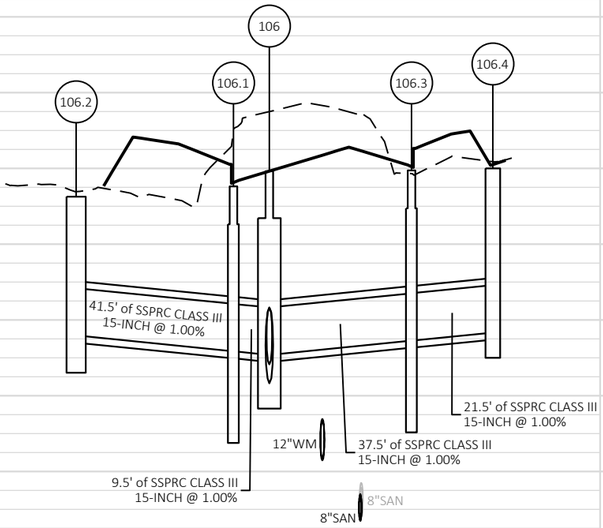
104.4
RIM: 811.50
SUMP: 806.87
DEPTH: 4.63
N INV OUT: 806.87



105
RIM: 812.06
SUMP: 805.81
DEPTH: 6.25
E INV IN: 806.31
S INV IN: 806.31
W INV OUT: 805.81

105.1
INV: 806.92

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	STORM SEWER PROFILES	SHEET 46	E



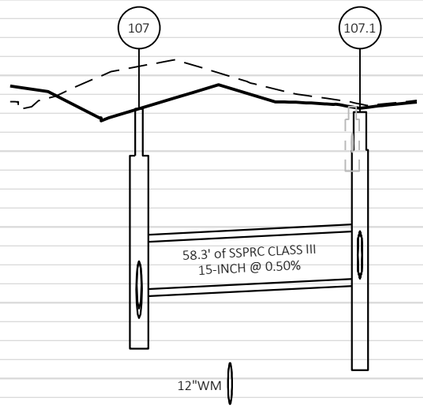
106.2
RIM: 813.25
SUMP: 809.28
DEPTH: 3.97
S INV OUT: 809.59

106.1
RIM: 813.53
SUMP: 807.17
DEPTH: 6.35
N INV IN: 809.17
S INV OUT: 809.17

106
RIM: 813.93
SUMP: 808.33
DEPTH: 5.60
N INV IN: 809.08
S INV IN: 809.08
E INV IN: 808.83
W INV OUT: 808.33

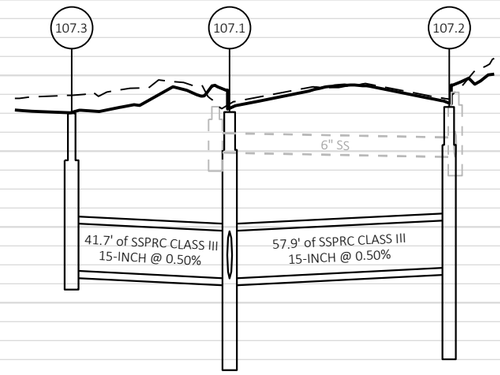
106.3
RIM: 813.95
SUMP: 807.45
DEPTH: 6.49
S INV IN: 809.45
N INV OUT: 809.45

106.4
RIM: 814.00
SUMP: 809.67
DEPTH: 4.33
N INV OUT: 809.67



107
RIM: 819.12
SUMP: 813.29
DEPTH: 5.83
E INV IN: 813.85
S INV IN: 814.35
W INV OUT: 813.60

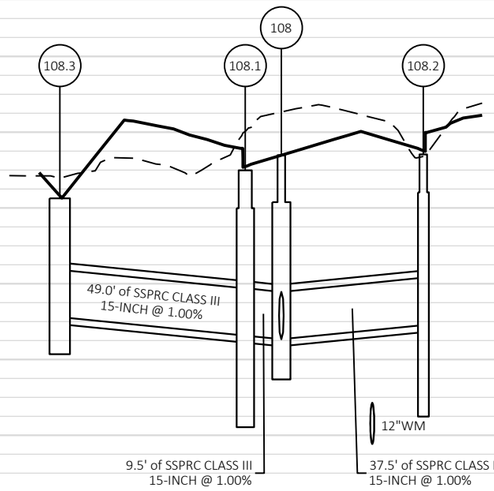
107.1
RIM: 819.03
SUMP: 812.64
DEPTH: 6.40
E INV IN: 814.64
W INV IN: 814.64
N INV OUT: 814.64



107.3
RIM: 819.00
SUMP: 814.85
DEPTH: 4.15
E INV OUT: 814.85

107.1
RIM: 819.03
SUMP: 812.64
DEPTH: 6.40
E INV IN: 814.64
W INV IN: 814.64
N INV OUT: 814.64

107.2
RIM: 819.17
SUMP: 812.93
DEPTH: 6.24
W INV OUT: 814.93

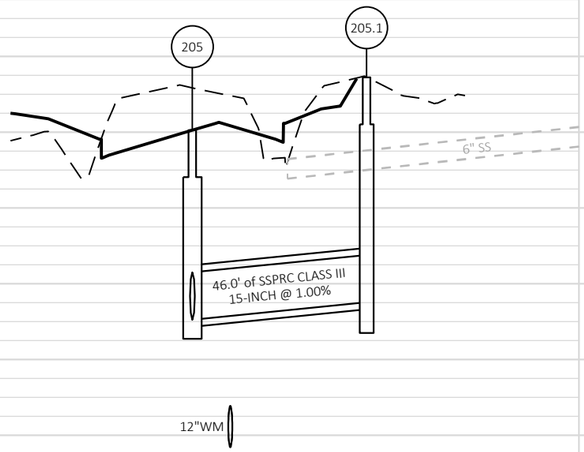


108.3
RIM: 818.25
SUMP: 814.81
DEPTH: 3.44
SW INV OUT: 815.12

108.1
RIM: 818.99
SUMP: 812.63
DEPTH: 6.36
NE INV IN: 814.63
S INV OUT: 814.63

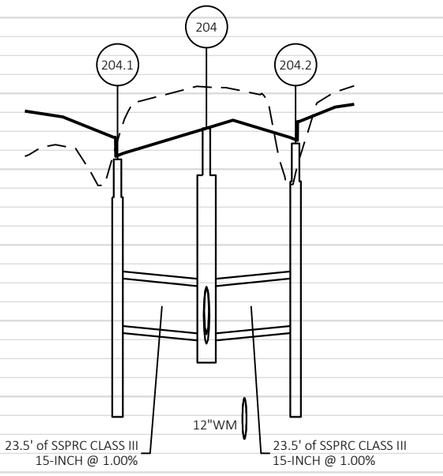
108
RIM: 819.39
SUMP: 813.97
DEPTH: 5.42
N INV IN: 814.53
S INV IN: 814.54
W INV OUT: 814.53

108.2
RIM: 819.41
SUMP: 812.91
DEPTH: 6.50
N INV OUT: 814.91



205
RIM: 820.05
SUMP: 815.05
DEPTH: 5.00
S INV IN: 815.05
E INV OUT: 815.05

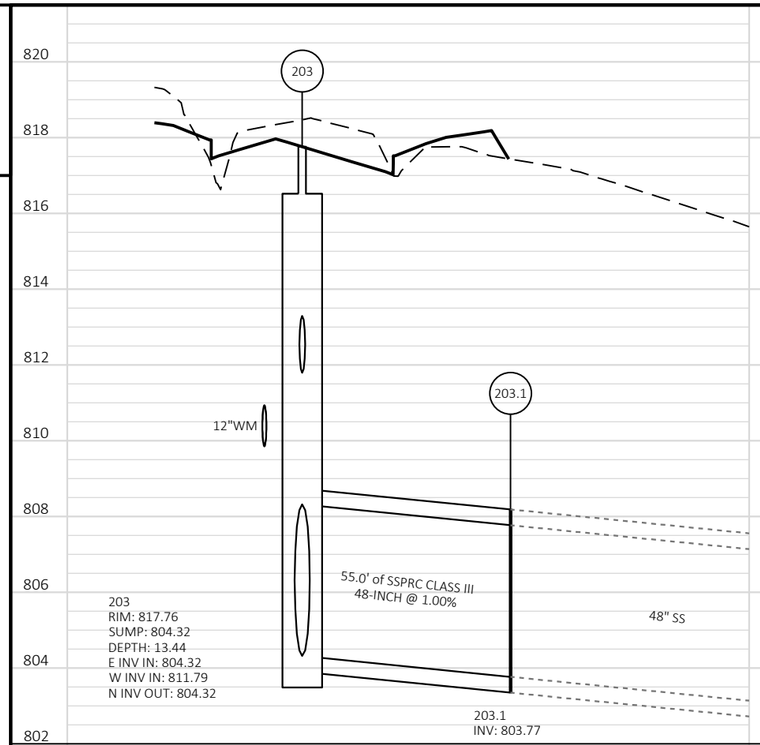
205.1
RIM: 821.45
SUMP: 815.20
DEPTH: 6.25
N INV OUT: 815.51

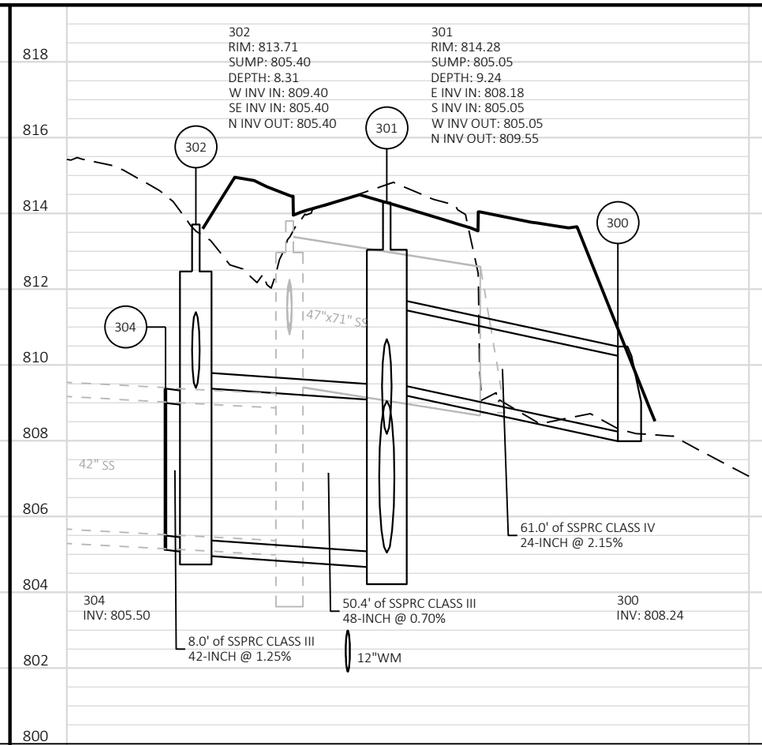


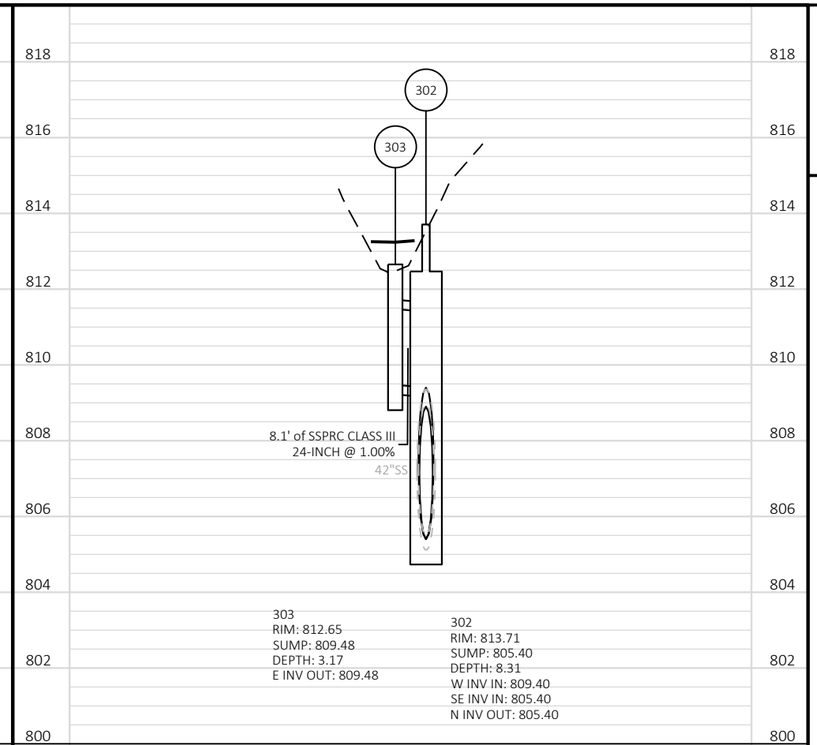
204.1
RIM: 818.26
SUMP: 811.88
DEPTH: 6.38
S INV OUT: 813.88

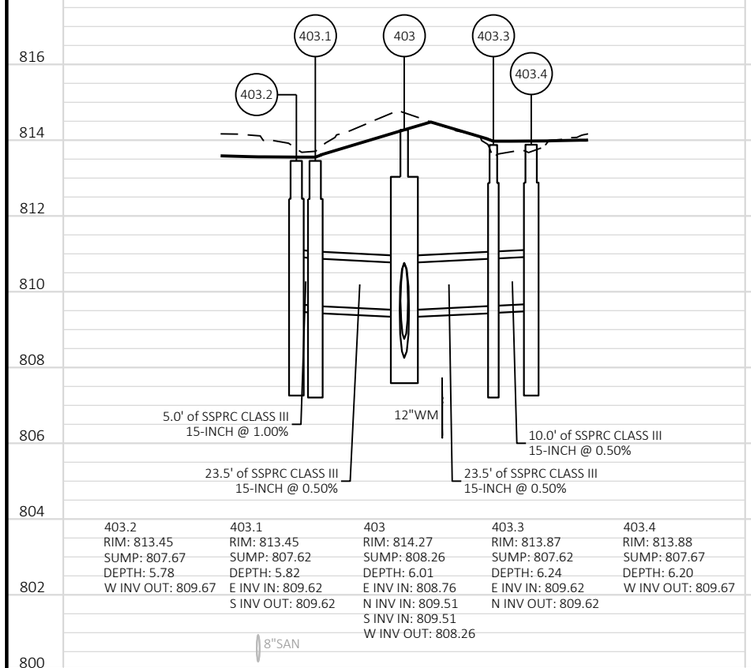
204
RIM: 819.08
SUMP: 813.39
DEPTH: 5.69
W INV IN: 813.64
N INV IN: 813.64
S INV IN: 813.64
E INV OUT: 813.39

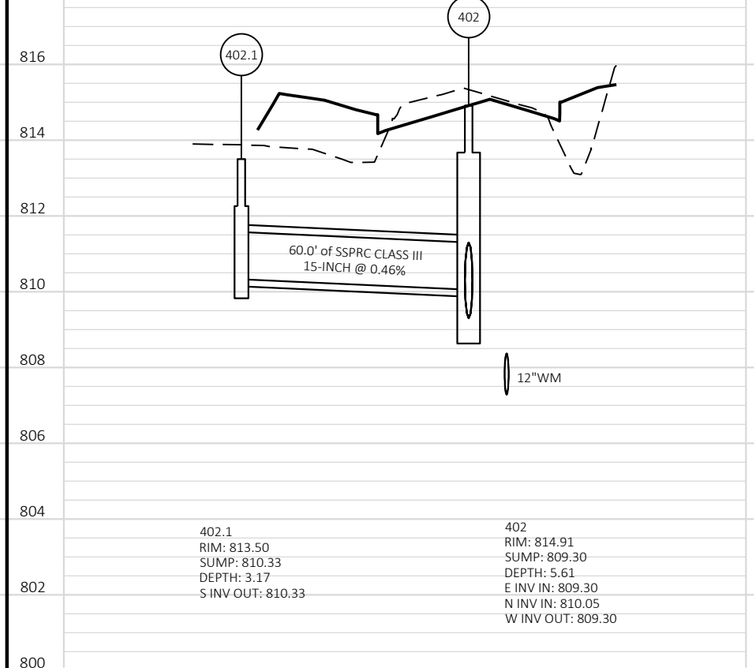
204.2
RIM: 818.68
SUMP: 811.88
DEPTH: 6.80
N INV OUT: 813.88

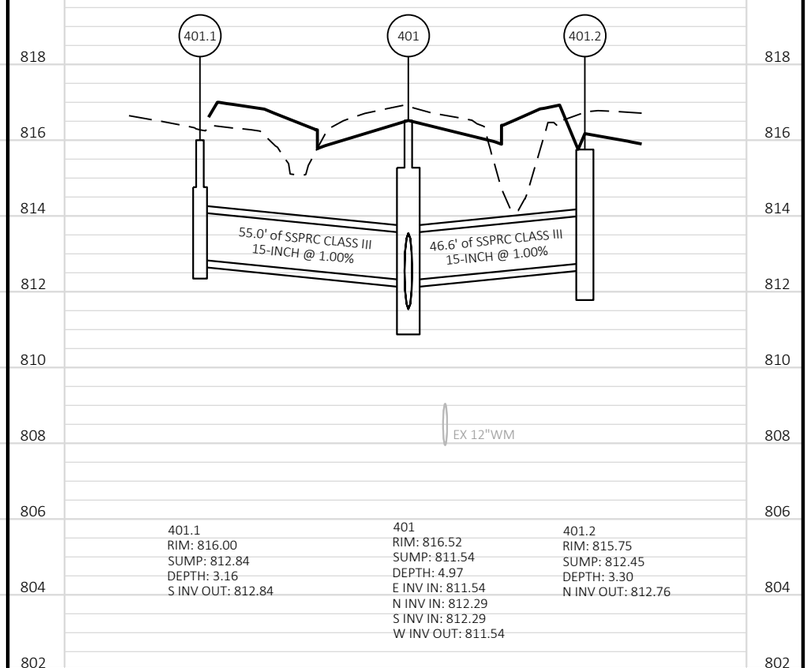

203
203.1
12"WM
55.0' of SSPRC CLASS III
48-INCH @ 1.00%
48" SS
203
RIM: 817.76
SUMP: 804.32
DEPTH: 13.44
E INV IN: 804.32
W INV IN: 811.79
N INV OUT: 804.32
203.1
INV: 803.77


302
RIM: 813.71
SUMP: 805.40
DEPTH: 8.31
W INV IN: 809.40
SE INV IN: 805.40
N INV OUT: 805.40
301
RIM: 814.28
SUMP: 805.05
DEPTH: 9.24
E INV IN: 808.18
S INV IN: 805.05
W INV OUT: 805.05
N INV OUT: 809.55
302
301
300
304
47"x71" SS
42" SS
61.0' of SSPRC CLASS IV
24-INCH @ 2.15%
304
INV: 805.50
50.4' of SSPRC CLASS III
48-INCH @ 0.70%
300
INV: 808.24
8.0' of SSPRC CLASS III
42-INCH @ 1.25%
12"WM


302
303
8.1' of SSPRC CLASS III
24-INCH @ 1.00%
42"SS
303
RIM: 812.65
SUMP: 809.48
DEPTH: 3.17
E INV OUT: 809.48
302
RIM: 813.71
SUMP: 805.40
DEPTH: 8.31
W INV IN: 809.40
SE INV IN: 805.40
N INV OUT: 805.40


403.1
403
403.3
403.4
403.2
5.0' of SSPRC CLASS III
15-INCH @ 1.00%
12"WM
10.0' of SSPRC CLASS III
15-INCH @ 0.50%
23.5' of SSPRC CLASS III
15-INCH @ 0.50%
23.5' of SSPRC CLASS III
15-INCH @ 0.50%
403.2
RIM: 813.45
SUMP: 807.67
DEPTH: 5.78
W INV OUT: 809.67
403.1
RIM: 813.45
SUMP: 807.62
DEPTH: 5.82
E INV IN: 809.62
S INV OUT: 809.62
403
RIM: 814.27
SUMP: 808.26
DEPTH: 6.01
E INV IN: 808.76
N INV IN: 809.51
S INV IN: 809.51
W INV OUT: 808.26
403.3
RIM: 813.87
SUMP: 807.62
DEPTH: 6.24
E INV IN: 809.62
N INV OUT: 809.62
403.4
RIM: 813.88
SUMP: 807.67
DEPTH: 6.20
W INV OUT: 809.67
8"SAN


402
402.1
60.0' of SSPRC CLASS III
15-INCH @ 0.46%
12"WM
402.1
RIM: 813.50
SUMP: 810.33
DEPTH: 3.17
S INV OUT: 810.33
402
RIM: 814.91
SUMP: 809.30
DEPTH: 5.61
E INV IN: 809.30
N INV IN: 810.05
W INV OUT: 809.30


401.1
401
401.2
55.0' of SSPRC CLASS III
15-INCH @ 1.00%
46.6' of SSPRC CLASS III
15-INCH @ 1.00%
EX 12"WM
401.1
RIM: 816.00
SUMP: 812.84
DEPTH: 3.16
S INV OUT: 812.84
401
RIM: 816.52
SUMP: 811.54
DEPTH: 4.97
E INV IN: 811.54
N INV IN: 812.29
S INV IN: 812.29
W INV OUT: 811.54
401.2
RIM: 815.75
SUMP: 812.45
DEPTH: 3.30
N INV OUT: 812.76

STORM SEWER STRUCTURE DATA

STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	RIM/GRATE ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	SUMP DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
99	MARTIN-NORTH	20+62.36	8.67	RT	CONCRETE COLLAR					100-99 IN	S	SSPRC CLASS III 24-INCH	802.70	FROM STR: 100	--	--	
100	MARTIN-NORTH	20+54.36	8.66	RT	MANHOLES 5-J	808.59	802.72	5.87	0.06	100.1-100 IN 100.2-100 IN 101-100 IN 100-99 OUT	W E S N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH SSPRC CLASS III 24-INCH	804.03 804.03 802.78 802.78	FROM STR: 100.1 FROM STR: 100.2 FROM STR: 101 TO STR: 99	-- -- -- 8.00'	-- -- -- 0.99%	
100.1	MARTIN-NORTH	20+54.36	-22.50	LT	CATCH BASINS 2X3-H	808.36	802.18	6.18	2.00	100.1-100 OUT	E	SSPRC CLASS III 15-INCH	804.18	TO STR: 100	31.16'	0.50%	
100.2	MARTIN-NORTH	20+54.36	19.50	RT	CATCH BASINS 2X3-H-S	808.24	802.08	6.16	2.00	100.3-100.2 IN 100.2-100 OUT	E W	STORM SEWER LATERAL 6-INCH SSPRC CLASS III 15-INCH	805.73 804.08	FROM STR: 100.3 TO STR: 100	-- 10.84'	-- 0.50%	
100.3	CTH VV	84+08.90	-54.64	LT	CONNECT TO EXISTING STORM SEWER LATERAL					100.3-100.2 OUT	W	STORM SEWER LATERAL 6-INCH	806.16	TO STR: 100.2	21.73'	2.00%	
101	CTH VV	83+76.59	-14.00	LT	MANHOLES 6-J	808.67	803.21	5.46	0.00	102-101 IN 101.1-101 IN 101-100 OUT	E S N	SSPRC CLASS III 30-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH	803.21 803.96 803.21	FROM STR: 102 FROM STR: 101.1 TO STR: 100	-- -- 40.42'	-- -- 1.07%	
101.1	MARTIN-SOUTH	19+48.95	11.00	RT	MANHOLES 4-J	809.01	804.16	4.86	0.13	101.2-101.1 IN 101.3-101.1 IN 101.1-101 OUT	W E N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	804.29 804.29 804.29	FROM STR: 101.2 FROM STR: 101.3 TO STR: 101	-- -- 64.95'	-- -- 0.50%	
101.2	MARTIN-SOUTH	19+48.95	-18.50	LT	CATCH BASINS 2X3-H	808.73	802.58	6.15	2.00	101.2-101.1 OUT	E	SSPRC CLASS III 15-INCH	804.58	TO STR: 101.1	29.50'	1.00%	
101.3	MARTIN-SOUTH	19+48.95	22.50	RT	CATCH BASINS 2X3-H-S	808.65	802.40	6.25	2.00	101.3-101.1 OUT	W	SSPRC CLASS III 15-INCH	804.40	TO STR: 101.1	11.50'	1.00%	
102	CTH VV	84+14.46	-14.00	LT	MANHOLES 5-J	808.72	803.46	5.26	0.00	103-102 IN 102.2-102 IN 102.1-102 IN 102-101 OUT	E S N W	SSPRC CLASS III 30-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH	803.46 804.16 804.16 803.46	FROM STR: 103 FROM STR: 102.2 FROM STR: 102.1 TO STR: 101	-- -- -- 37.88'	-- -- -- 0.66%	
102.1	CTH VV	84+14.46	-23.50	LT	CATCH BASINS 2X3-H	808.42	802.26	6.16	2.00	102.1-102 OUT	S	SSPRC CLASS III 15-INCH	804.26	TO STR: 102	9.50'	1.00%	
102.2	CTH VV	84+16.86	23.50	RT	CATCH BASINS 2X3-H	809.23	802.73	6.50	2.00	102.2-102 OUT	N	SSPRC CLASS III 15-INCH	804.73	TO STR: 102	37.58'	1.50%	
103	CTH VV	85+70.00	-14.00	LT	MANHOLES 5-J	810.06	804.49	5.57	0.00	104-103 IN 103.1-103 IN 103-102 OUT	E S W	SSPRC CLASS III 30-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH	804.49 805.38 804.49	FROM STR: 104 FROM STR: 103.1 TO STR: 102	-- -- 155.54'	-- -- 0.66%	
103.1	CTH VV	85+70.00	45.00	RT	INLETS MEDIAN 1G-MS	810.75	806.35	4.40	0.31	103.1-103 OUT	N	SSPRC CLASS III 15-INCH	806.66	TO STR: 103	59.00'	2.17%	
104	CTH VV	86+77.00	-14.00	LT	MANHOLES 5-J	811.13	805.19	5.94	0.00	105-104 IN 104.1-104 IN 104.3-104 IN 104-103 OUT	E N S W	SSPRC CLASS III 30-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH	805.19 806.28 806.28 805.19	FROM STR: 105 FROM STR: 104.1 FROM STR: 104.3 TO STR: 103	-- -- -- 107.00'	-- -- -- 0.66%	
104.1	CTH VV	86+77.00	-23.50	LT	CATCH BASINS 2X3-H	810.73	804.37	6.36	2.00	104.2-104.1 IN 104.1-104 OUT	NE S	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	807.00 806.37	FROM STR: 104.2 TO STR: 104	-- 9.50'	-- 1.00%	
104.2	CTH VV	86+92.51	-50.00	LT	CONCRETE COLLAR					104.2-104.1 OUT	SW	SSPRC CLASS III 15-INCH	807.27	TO STR: 104.1	30.70'	0.88%	
104.3	CTH VV	86+77.00	23.50	RT	CATCH BASINS 2X3-H	811.15	804.65	6.50	2.00	104.4-104.3 IN 104.3-104 OUT	S N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	806.65 806.65	FROM STR: 104.4 TO STR: 104	-- 37.50'	-- 1.00%	
104.4	CTH VV	86+77.00	45.00	RT	INLETS MEDIAN 1G-MS	811.50	806.87	4.63	0.00	104.4-104.3 OUT	N	SSPRC CLASS III 15-INCH	806.87	TO STR: 104.3	21.50'	1.00%	
105	CTH VV	87+70.04	-14.00	LT	MANHOLES 6-J	812.06	805.81	6.25	0.00	106-105 IN 105.1-105 IN 105-104 OUT	E S W	SSPRC CLASS III 24-INCH SSPRC CLASS III 24-INCH SSPRC CLASS III 30-INCH	806.31 806.31 805.81	FROM STR: 106 FROM STR: 105.1 TO STR: 104	-- -- 93.04'	-- -- 0.66%	
105.1	CTH VV	87+90.09	43.00	RT	CONCRETE COLLAR					105.1-105 OUT	N	SSPRC CLASS III 24-INCH	806.92	TO STR: 105	60.42'	1.02%	
106	CTH VV	89+22.00	-14.00	LT	MANHOLES 5-J	813.93	808.33	5.60	0.00	106.1-106 IN 106.3-106 IN 107-106 IN 106-105 OUT	N S E W	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 18-INCH SSPRC CLASS III 24-INCH	809.08 809.08 808.83 808.33	FROM STR: 106.1 FROM STR: 106.3 FROM STR: 107 TO STR: 105	-- -- -- 151.96'	-- -- -- 1.33%	
106.1	CTH VV	89+22.00	-23.50	LT	CATCH BASINS 2X3-H	813.53	807.17	6.35	2.00	106.2-106.1 IN 106.1-106 OUT	N S	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	809.17 809.17	FROM STR: 106.2 TO STR: 106	-- 9.50'	-- 1.00%	
106.2	CTH VV	89+22.00	-65.00	LT	INLETS MEDIAN 1G-MS-A	813.25	809.28	3.97	0.31	106.2-106.1 OUT	S	SSPRC CLASS III 15-INCH	809.59	TO STR: 106.1	41.50'	1.00%	
106.3	CTH VV	89+22.00	23.50	RT	CATCH BASINS 2X3-H	813.95	807.45	6.49	2.00	106.4-106.3 IN 106.3-106 OUT	S N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	809.45 809.45	FROM STR: 106.4 TO STR: 106	-- 37.50'	-- 1.00%	
106.4	CTH VV	89+22.00	45.00	RT	INLETS MEDIAN 1G-MS	814.00	809.67	4.33	0.00	106.4-106.3 OUT	N	SSPRC CLASS III 15-INCH	809.67	TO STR: 106.3	21.50'	1.00%	
107	CTH VV	93+16.41	-14.00	LT	MANHOLES 4-J	819.12	813.29	5.83	0.31	108-107 IN 107.1-107 IN 107-106 OUT	E S W	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 18-INCH	813.85 814.35 813.60	FROM STR: 108 FROM STR: 107.1 TO STR: 106	-- -- 394.41'	-- -- 1.21%	
107.1	SHERWOOD-SB	29+55.70	-20.94	LT	CATCH BASINS 2X3-H-S	819.03	812.64	6.40	2.00	107.2-107.1 IN 107.3-107.1 IN 107.1-107 OUT	E W N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	814.64 814.64 814.64	FROM STR: 107.2 FROM STR: 107.3 TO STR: 107	-- -- 58.30'	-- -- 0.50%	
107.2	SHERWOOD-NB	39+56.07	21.01	RT	CATCH BASINS 2X3-H-S	819.17	812.93	6.24	2.00	107.2-107.1 OUT	W	SSPRC CLASS III 15-INCH	814.93	TO STR: 107.1	57.95'	0.50%	

NOTES:

1. TOTAL DEPTH = RIM/GRATE ELEVATION - STRUCTURE INVERT ELEVATION.
2. MANHOLES SHALL BE CONSTRUCTED IN A WAY THAT WILL ALLOW THE CASTING TO BE ALIGNED IN THE MIDDLE OF A LANE OR ON A JOINT LINE.
3. CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATION WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.
4. STATION/ OFFSET OF STORM SEWER STRUCTURES ARE TO THE CENTER OF STRUCTURE EXCEPT FOR CONCRETE APRON ENDWALLS WHICH ARE TO PIPE END.

2

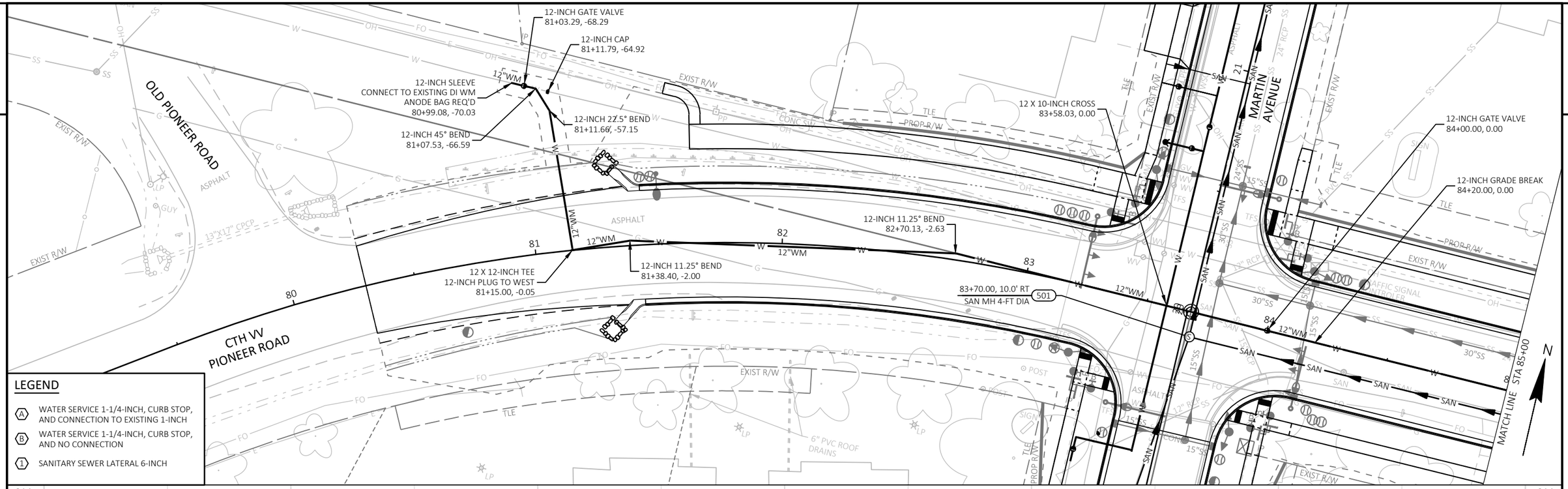
STORM SEWER STRUCTURE DATA

STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	RIM/GRATE ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	SUMP DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
107.3	CTH VV	92+75.00	39.25	RT	INLETS 3-C	819.00	814.85	4.15	0.00	107.3-107.1 OUT	E	SSPRC CLASS III 15-INCH	814.85	TO STR: 107.1	41.73'	0.50%	
108	CTH VV	94+06.00	-14.00	LT	MANHOLES 4-J	819.39	813.97	5.42	0.56	108.1-108 IN 108.2-108 IN 108-107 OUT	N S W	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	814.53 814.54 814.53	FROM STR: 108.1 FROM STR: 108.2 TO STR: 107	-- -- 89.59'	-- -- 0.77%	
108.1	CTH VV	94+06.00	-23.50	LT	CATCH BASINS 2X3-H	818.99	812.63	6.36	2.00	108.3-108.1 IN 108.1-108 OUT	NE S	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	814.63 814.63	FROM STR: 108.3 TO STR: 108	-- 9.50'	-- 1.00%	
108.2	CTH VV	94+06.00	23.50	RT	CATCH BASINS 2X3-H	819.41	812.91	6.50	2.00	108.2-108 OUT	N	SSPRC CLASS III 15-INCH	814.91	TO STR: 108	37.50'	1.00%	
108.3	CTH VV	94+37.50	-61.00	LT	INLETS MEDIAN 1G-MS-A	818.25	814.81	3.44	0.31	108.3-108.1 OUT	SW	SSPRC CLASS III 15-INCH	815.12	TO STR: 108.1	48.97'	1.00%	
203	CTH VV	99+55.00	0.00		MANHOLES 9-J	817.76	804.32	13.44	0.00	301-203 IN 204-203 IN 203-203.1 OUT	E W N	SSPRC CLASS III 48-INCH SSPRC CLASS III 18-INCH SSPRC CLASS III 48-INCH	804.32 811.79 804.32	FROM STR: 301 FROM STR: 204 TO STR: 203.1	-- -- 55.00'	-- -- 1.00%	
203.1	CTH VV	99+55.00	-55.00	LT	BULKHEAD PIPE					203-203.1 IN	S	SSPRC CLASS III 48-INCH	803.77	FROM STR: 203	--	--	
204	CTH VV	98+75.00	0.00		MANHOLES 4-J	819.08	813.39	5.69	0.00	205-204 IN 204.1-204 IN 204.2-204 IN 204-203 OUT	W N S E	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 18-INCH	813.64 813.64 813.64 813.39	FROM STR: 205 FROM STR: 204.1 FROM STR: 204.2 TO STR: 203	-- -- -- 80.00'	-- -- -- 2.00%	
204.1	CTH VV	98+75.00	-23.50	LT	CATCH BASINS 2X3-H	818.26	811.88	6.38	2.00	204.1-204 OUT	S	SSPRC CLASS III 15-INCH	813.88	TO STR: 204	23.50'	1.00%	
204.2	CTH VV	98+75.00	23.50	RT	CATCH BASINS 2X3-H	818.68	811.88	6.80	2.00	204.2-204 OUT	N	SSPRC CLASS III 15-INCH	813.88	TO STR: 204	23.50'	1.00%	
205	CTH VV	96+14.00	0.00		MANHOLES 4-J	820.05	815.05	5.00	0.00	205.1-205 IN 205-204 OUT	S E	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	815.05 815.05	FROM STR: 205.1 TO STR: 204	-- 261.00'	-- 0.54%	
205.1	CTH VV	96+14.00	46.00	RT	INLETS 3-C	821.45	815.20	6.25	0.31	205.1-205 OUT	N	SSPRC CLASS III 15-INCH	815.51	TO STR: 205	46.00'	1.00%	
300	CTH VV	102+01.43	-60.77	LT	APRON ENDWALLS FOR CPRC 24-INCH					301-300 IN	S	SSPRC CLASS IV 24-INCH	808.24	FROM STR: 301	--	--	
301	CTH VV	101+96.19	0.00		MANHOLES 9-J	814.28	805.05	9.24	0.00	403-301 IN 302-301 IN 301-203 OUT 301-300 OUT	E S W N	SSPRC CLASS III 30-INCH SSPRC CLASS III 48-INCH SSPRC CLASS III 48-INCH SSPRC CLASS IV 24-INCH	808.18 805.05 805.05 809.55	FROM STR: 403 FROM STR: 302 TO STR: 203 TO STR: 300	-- -- 241.19' 61.00'	-- -- 0.30% 2.15%	
302	CTH VV	102+08.13	49.00	RT	MANHOLES 7-J	813.71	805.40	8.31	0.00	303-302 IN 304-302 IN 302-301 OUT	W SE N	SSPRC CLASS III 24-INCH SSPRC CLASS III 42-INCH SSPRC CLASS III 48-INCH	809.40 805.40 805.40	FROM STR: 303 FROM STR: 304 TO STR: 301	-- -- 50.43'	-- -- 0.70%	
303	CTH VV	102+00.00	49.00	RT	INLETS MEDIAN 2G-MS SINGLE SLOPE GRATE @ 6:1	812.65	809.48	3.17	0.00	303-302 OUT	E	SSPRC CLASS III 24-INCH	809.48	TO STR: 302	8.13'	1.00%	
304	CTH VV	102+12.04	55.98	RT	CONCRETE COLLAR					304-302 OUT	NW	SSPRC CLASS III 42-INCH	805.50	TO STR: 302	8.00'	1.25%	
400	CTH VV	105+73.48	0.18	RT	CONNECT TO EX MH					400-401 OUT	W	SSPRC CLASS III 24-INCH	816.06	TO STR: 401	158.48'	2.85%	
401	CTH VV	104+15.00	0.00		MANHOLES 5-J	816.52	811.54	4.97	0.00	400-401 IN 401.1-401 IN 401.2-401 IN 401-402 OUT	E N S W	SSPRC CLASS III 24-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 24-INCH	811.54 812.29 812.29 811.54	FROM STR: 400 FROM STR: 401.1 FROM STR: 401.2 TO STR: 402	-- -- -- 95.00'	-- -- -- 2.36%	
401.1	CTH VV	104+15.00	-55.00	LT	INLETS 3-C	816.00	812.84	3.16	0.00	401.1-401 OUT	S	SSPRC CLASS III 15-INCH	812.84	TO STR: 401	55.00'	1.00%	
401.2	CTH VV	104+25.00	45.50	RT	INLETS MEDIAN 1G-MS	815.75	812.45	3.30	0.31	401.2-401 OUT	N	SSPRC CLASS III 15-INCH	812.76	TO STR: 401	46.59'	1.00%	
402	CTH VV	103+20.00	0.00		MANHOLES 5-J	814.91	809.30	5.61	0.00	401-402 IN 402.1-402 IN 402-403 OUT	E N W	SSPRC CLASS III 24-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 24-INCH	809.30 810.05 809.30	FROM STR: 401 FROM STR: 402.1 TO STR: 403	-- -- 109.00'	-- -- 0.50%	
402.1	CTH VV	103+20.00	-60.00	LT	INLETS 3-C	813.50	810.33	3.17	0.00	402.1-402 OUT	S	SSPRC CLASS III 15-INCH	810.33	TO STR: 402	60.00'	0.46%	
403	CTH VV	102+11.00	0.00		MANHOLES 6-J	814.27	808.26	6.01	0.00	402-403 IN 403.1-403 IN 403.3-403 IN 403-301 OUT	E N S W	SSPRC CLASS III 24-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH SSPRC CLASS III 30-INCH	808.76 809.51 809.51 808.26	FROM STR: 402 FROM STR: 403.1 FROM STR: 403.3 TO STR: 301	-- -- -- 14.81'	-- -- -- 0.50%	
403.1	CTH VV	102+11.00	-23.50	LT	CATCH BASINS 2X3-H-S	813.45	807.62	5.82	2.00	403.2-403.1 IN 403.1-403 OUT	E S	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	809.62 809.62	FROM STR: 403.2 TO STR: 403	-- 23.50'	-- 0.50%	
403.2	CTH VV	102+16.00	-23.50	LT	CATCH BASINS 2X3-H	813.45	807.67	5.78	2.00	403.2-403.1 OUT	W	SSPRC CLASS III 15-INCH	809.67	TO STR: 403.1	5.00'	1.00%	
403.3	CTH VV	102+11.00	23.50	RT	CATCH BASINS 2X3-H-S	813.87	807.62	6.24	2.00	403.4-403.3 IN 403.3-403 OUT	E N	SSPRC CLASS III 15-INCH SSPRC CLASS III 15-INCH	809.62 809.62	FROM STR: 403.4 TO STR: 403	-- 23.50'	-- 0.50%	
403.4	CTH VV	102+21.00	23.50	RT	CATCH BASINS 2X3-H	813.88	807.67	6.20	2.00	403.4-403.3 OUT	W	SSPRC CLASS III 15-INCH	809.67	TO STR: 403.3	10.00'	0.50%	

2

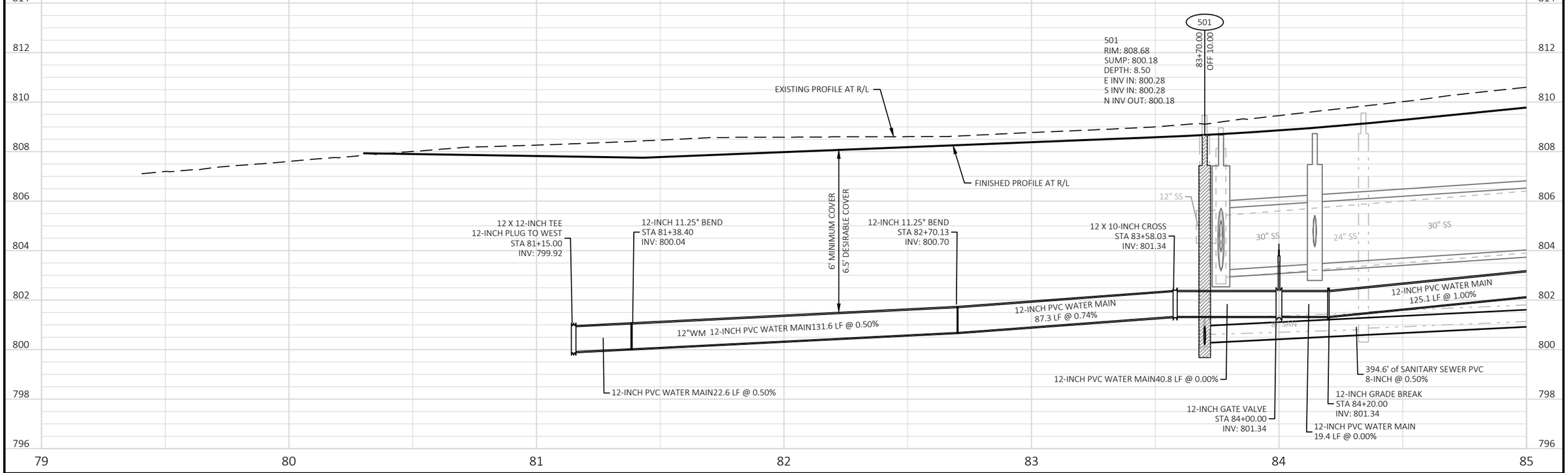
NOTES:

1. TOTAL DEPTH = RIM/GRATE ELEVATION - STRUCTURE INVERT ELEVATION.
2. MANHOLES SHALL BE CONSTRUCTED IN A WAY THAT WILL ALLOW THE CASTING TO BE ALIGNED IN THE MIDDLE OF A LANE OR ON A JOINT LINE.
3. CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATION WHEN CONNECTING NEW STORM SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING INLETS AND MANHOLES.
4. STATION/ OFFSET OF STORM SEWER STRUCTURES ARE TO THE CENTER OF STRUCTURE EXCEPT FOR CONCRETE APRON ENDWALLS WHICH ARE TO PIPE END.

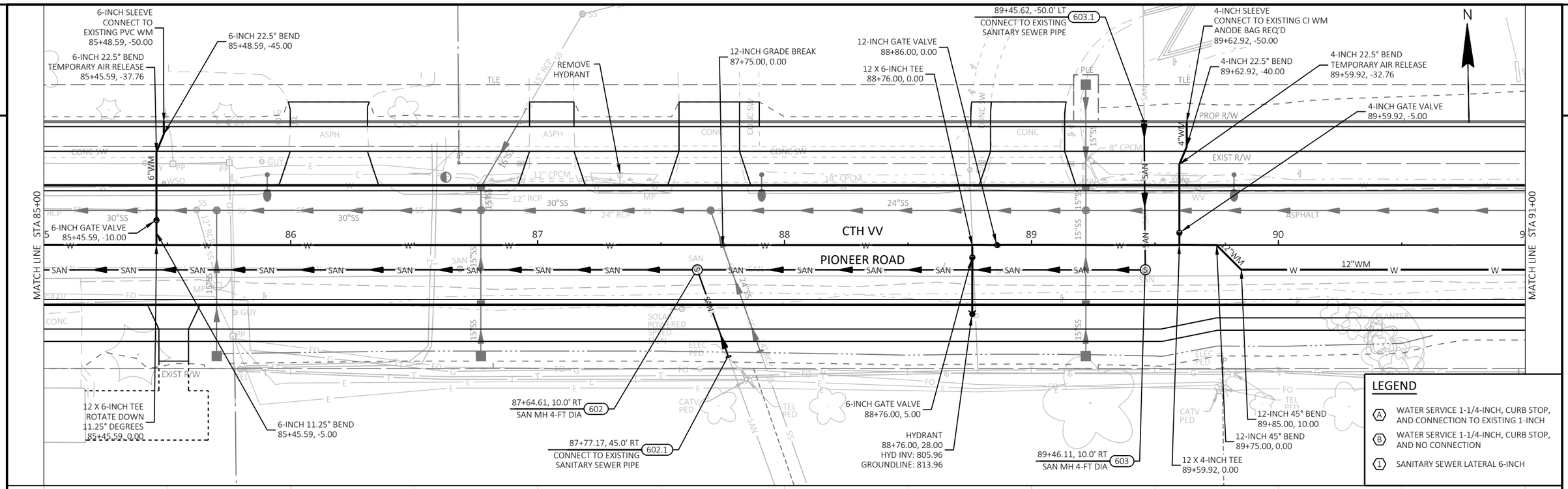


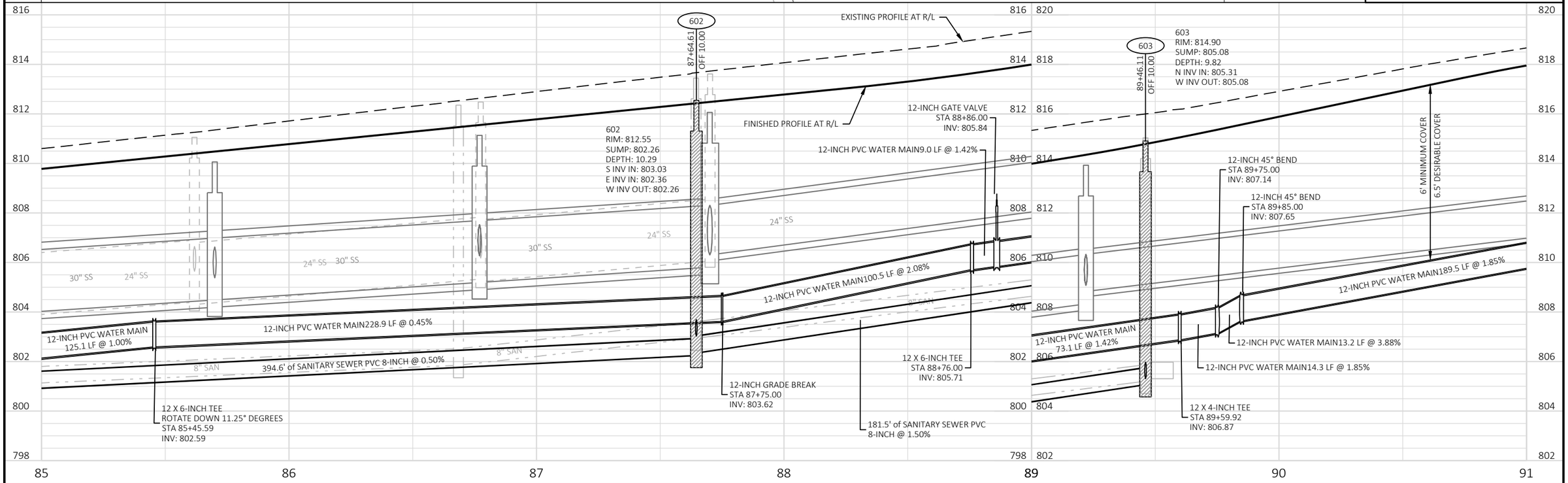
LEGEND

- (A) WATER SERVICE 1-1/4-INCH, CURB STOP, AND CONNECTION TO EXISTING 1-INCH
- (B) WATER SERVICE 1-1/4-INCH, CURB STOP, AND NO CONNECTION
- (1) SANITARY SEWER LATERAL 6-INCH



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: CTH VV	SHEET 51	E





PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: CTH VV	SHEET 52	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023001-UP.DWG
LAYOUT NAME - Sheet-02
PLOT DATE : 10/30/2023 2:14 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

N

LEGEND

- (A) WATER SERVICE 1-1/4-INCH, CURB STOP, AND CONNECTION TO EXISTING 1-INCH
- (B) WATER SERVICE 1-1/4-INCH, CURB STOP, AND NO CONNECTION
- (1) SANITARY SEWER LATERAL 6-INCH

MATCH LINE STA 91+00

MATCH LINE STA 97+00

CTH VV
PIONEER ROAD

SHERWOOD BOULEVARD

12 X 12-INCH CROSS
93+67.09, 10.00

12-INCH GATE VALVE
93+63.80, 10.00

12-INCH GATE VALVE
93+96.01, 10.00

REMOVE HYDRANT

12 X 12-INCH TEE
93+60.55, 10.00

12 X 6-INCH TEE
94+16.00, 10.00

12-INCH GRADE BREAK
91+75.00, 10.00

6-INCH GATE VALVE
94+16.00, 15.00

HYDRANT
94+16.00, 28.00
HYD INV: 812.16
GROUNDLINE: 820.16

FLASHING YELLOW PEDESTRIAN CROSSING SIGN

12"WM

18"SS

15"SS

6" PVC SS

8" PVC SS

CONC SW

ASPHALT PARKING LOT

ASPHALT

CONC

TLE

PLE

PROP R/W

EXIST R/W

PLANTER

TEL PED

GUY

POST

GARAGE

EXISTING PROFILE AT R/L

FINISHED PROFILE AT R/L

6' MINIMUM COVER
6.5' DESIRABLE COVER

12-INCH GRADE BREAK
STA 91+75.00
INV: 811.16

12-INCH GATE VALVE
STA 93+63.80
INV: 811.43

12-INCH GATE VALVE
STA 93+96.01
INV: 811.72

12 X 12-INCH TEE
STA 93+60.55
INV: 811.43

12 X 12-INCH CROSS
STA 93+67.09
INV: 811.44

12 X 6-INCH TEE
STA 94+16.00
INV: 811.91

12-INCH PVC WATER MAIN184.7 LF @ 0.15%

12-INCH PVC WATER MAIN2.0 LF @ 0.00%

12-INCH PVC WATER MAIN2.0 LF @ 0.00%

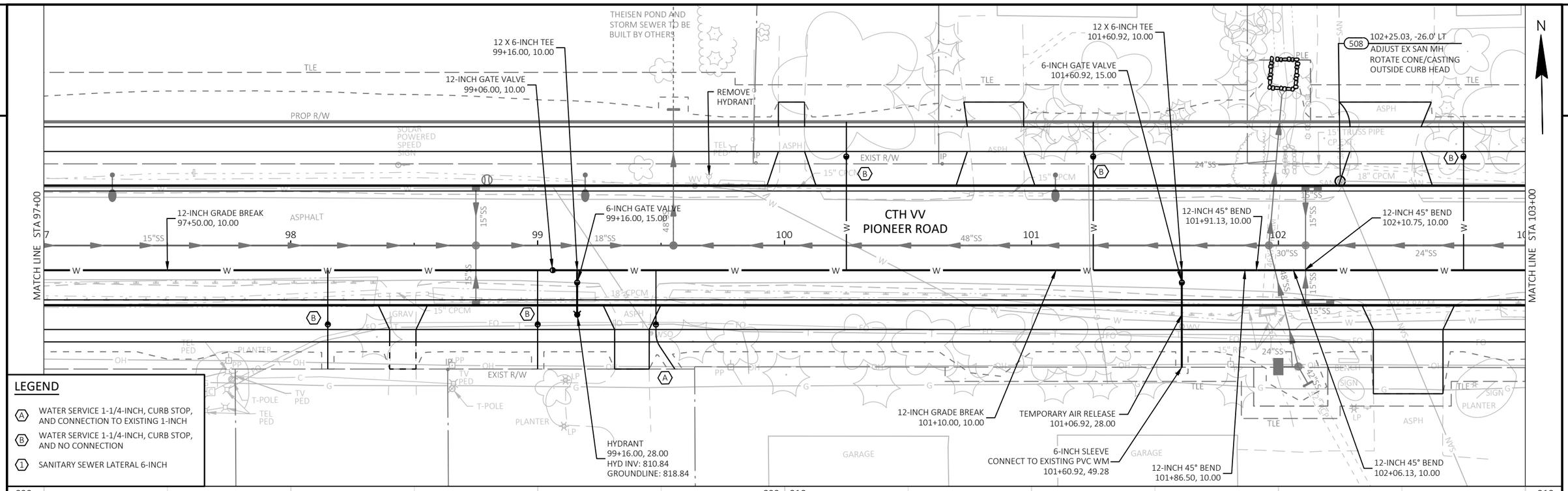
12-INCH PVC WATER MAIN27.7 LF @ 0.97%

12-INCH PVC WATER MAIN19.0 LF @ 1.00%

12-INCH PVC WATER MAIN333.5 LF @ 0.09%

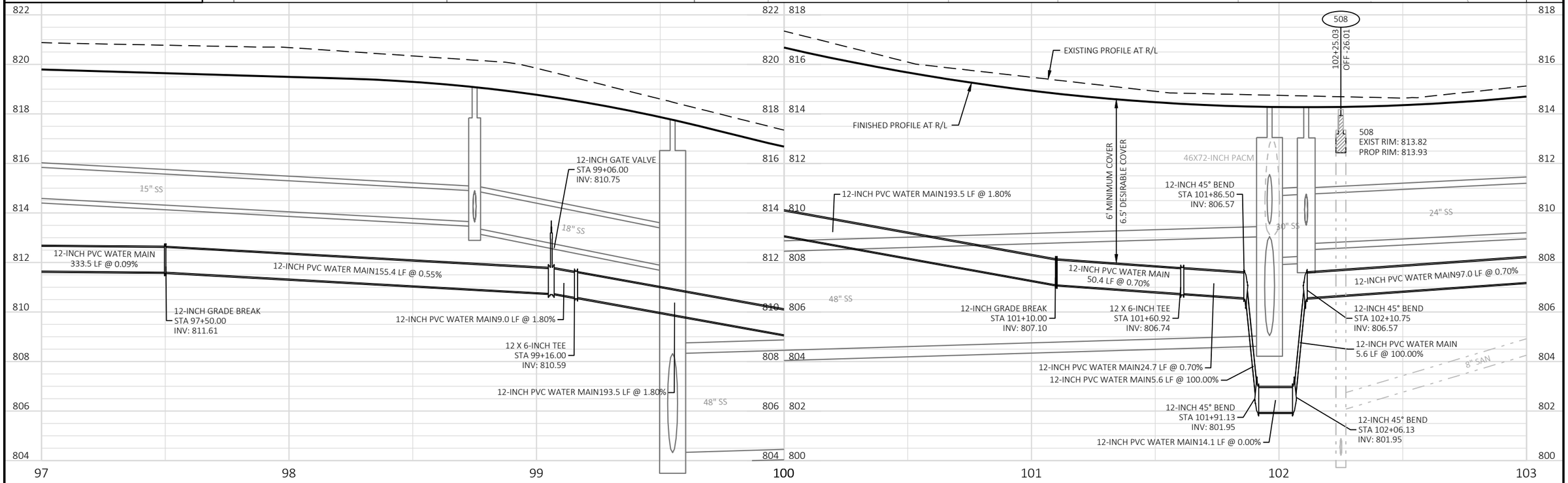
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: CTH VV	SHEET 53	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023001-UP.DWG
LAYOUT NAME - Sheet-03
PLOT DATE : 10/30/2023 2:14 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41



LEGEND

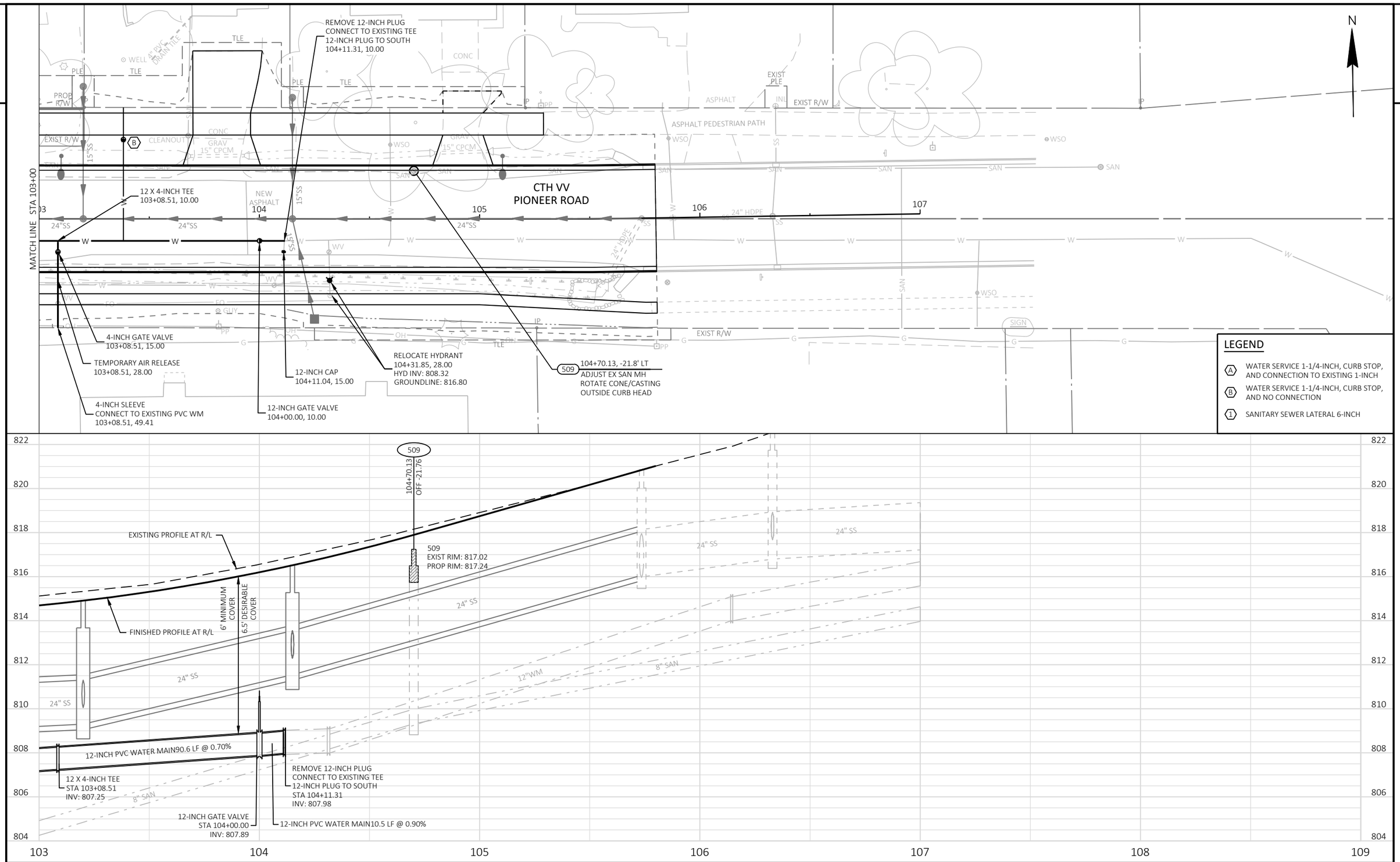
- (A) WATER SERVICE 1-1/4-INCH, CURB STOP, AND CONNECTION TO EXISTING 1-INCH
- (B) WATER SERVICE 1-1/4-INCH, CURB STOP, AND NO CONNECTION
- (1) SANITARY SEWER LATERAL 6-INCH



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: CTH VV	SHEET 54	E

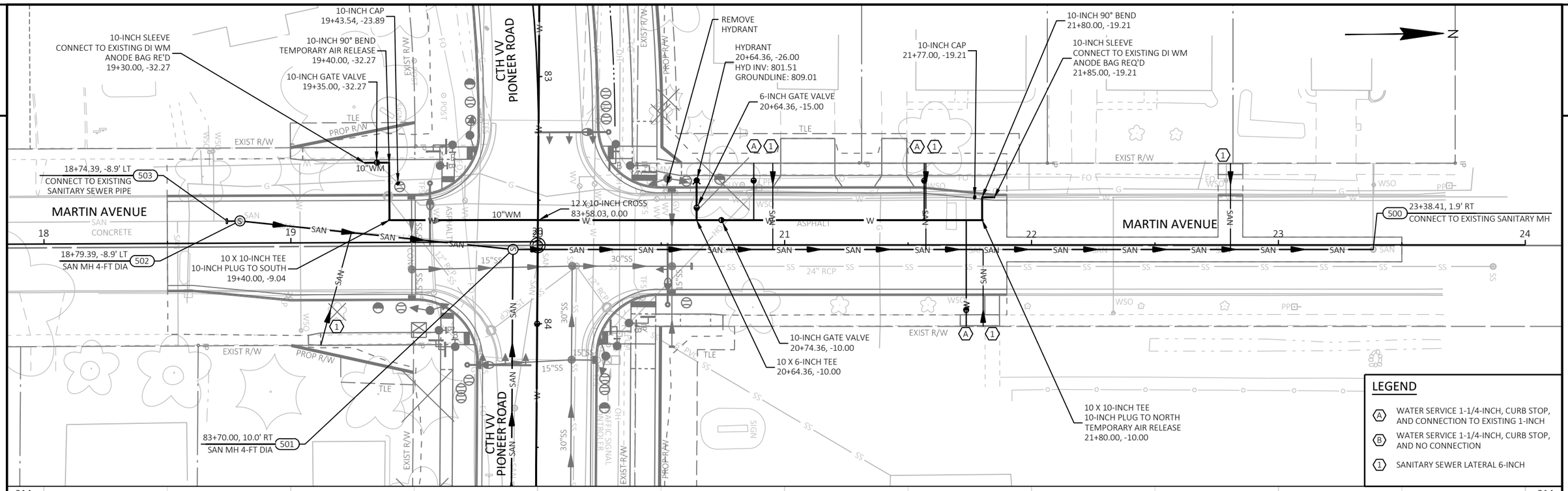
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LAYOUT NAME - Sheet-04
PLOT DATE : 10/30/2023 2:14 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

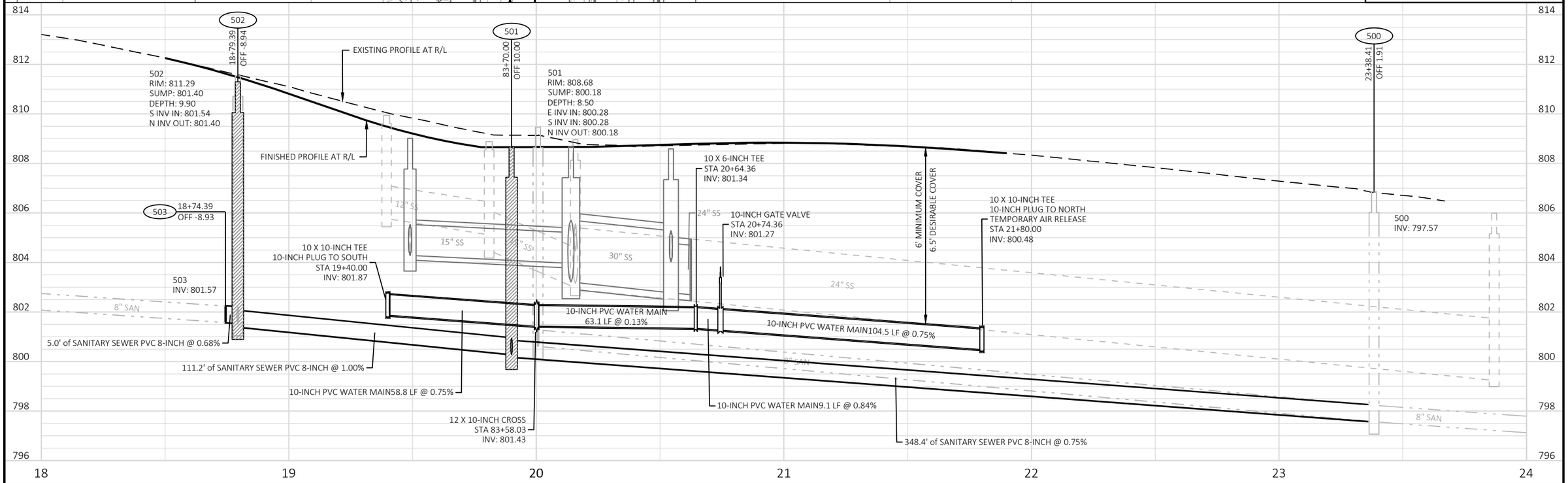
2



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: CTH VV	SHEET 55	E

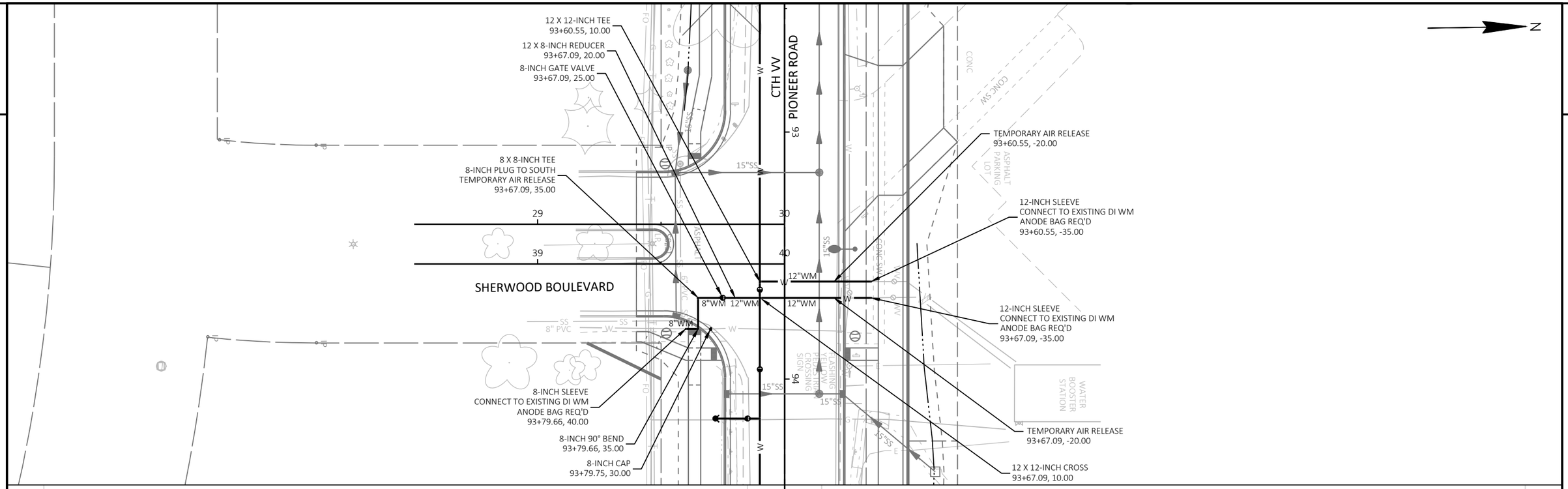
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LAYOUT NAME - Sheet-05
PLOT DATE : 10/30/2023 2:14 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

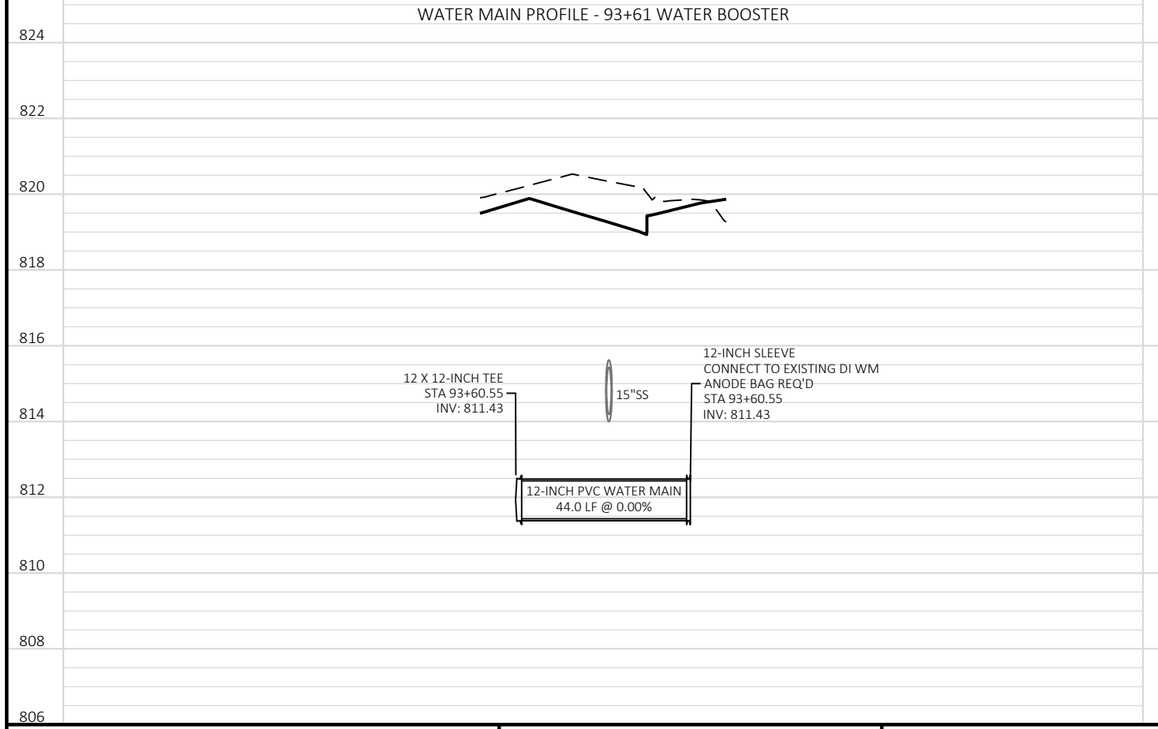


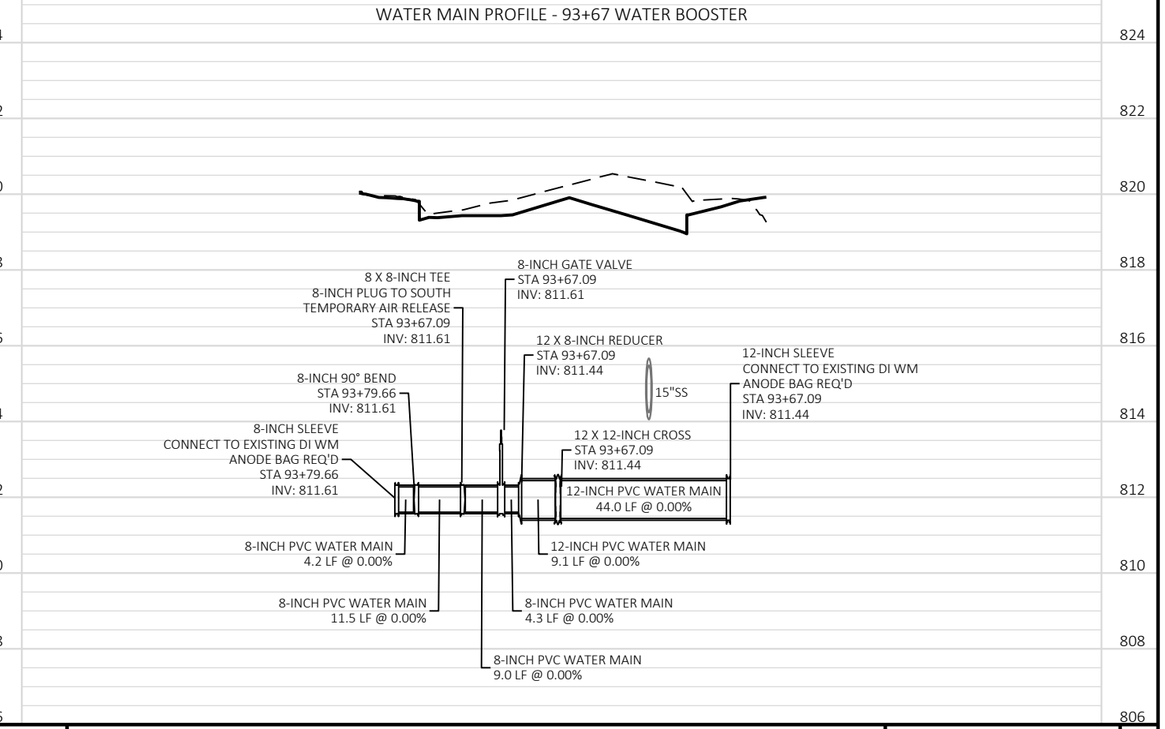


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: MARTIN AVENUE	SHEET 56	E

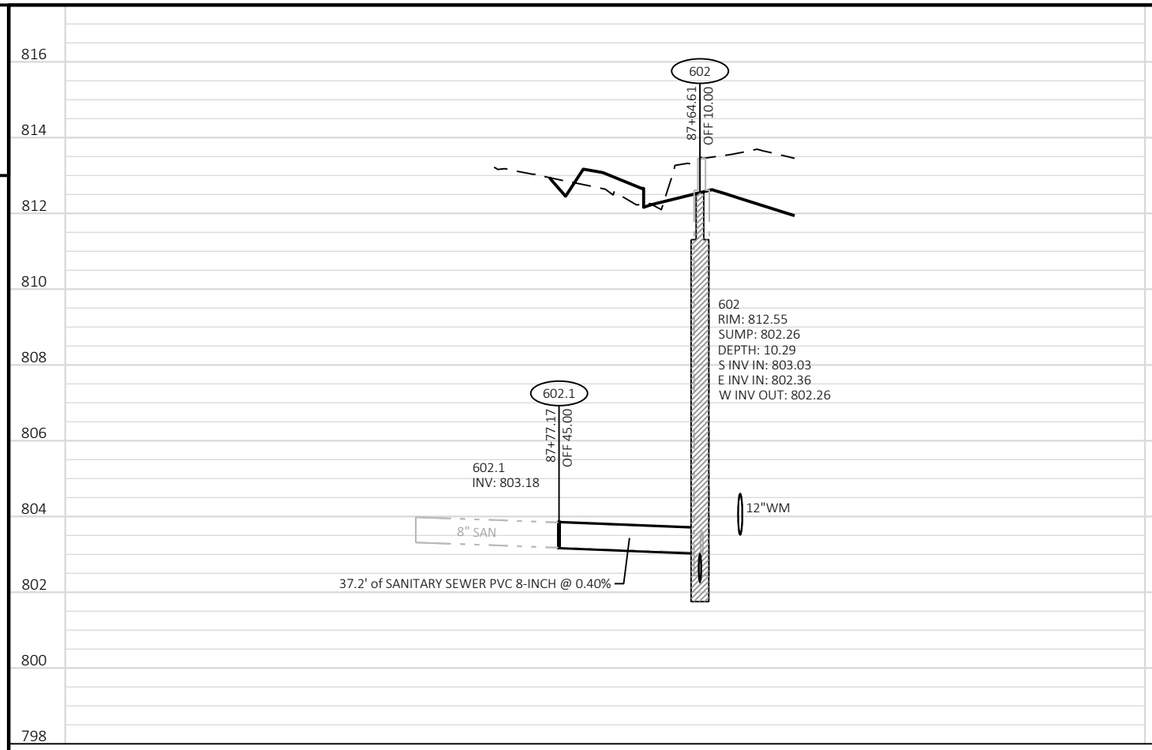
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LAYOUT NAME - Sheet-01
PLOT DATE : 10/30/2023 2:15 PM
PLOT BY : AARON SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

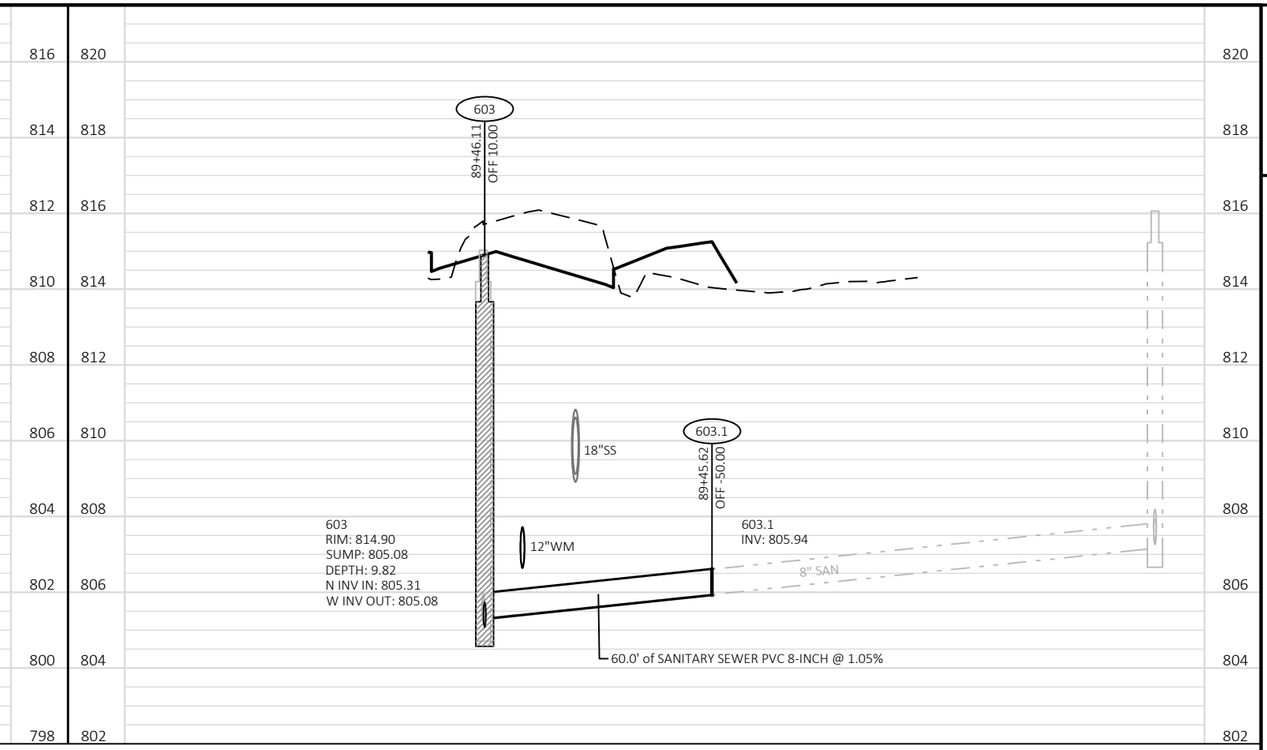






PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SANITARY SEWER & WATER MAIN PLANS: SHERWOOD BOULEVARD	SHEET 57	E



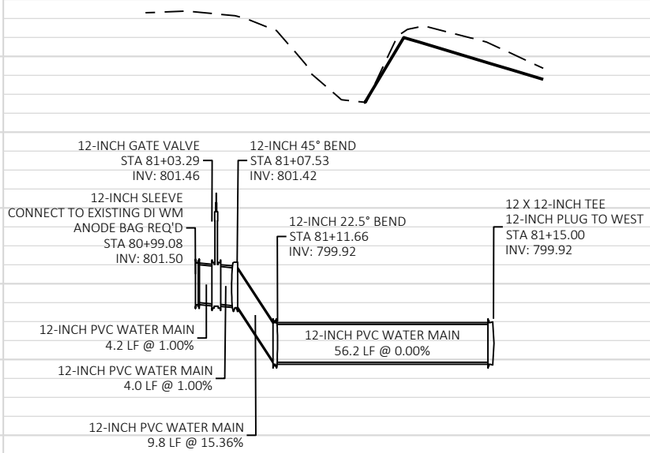


SANITARY SEWER SCHEDULE

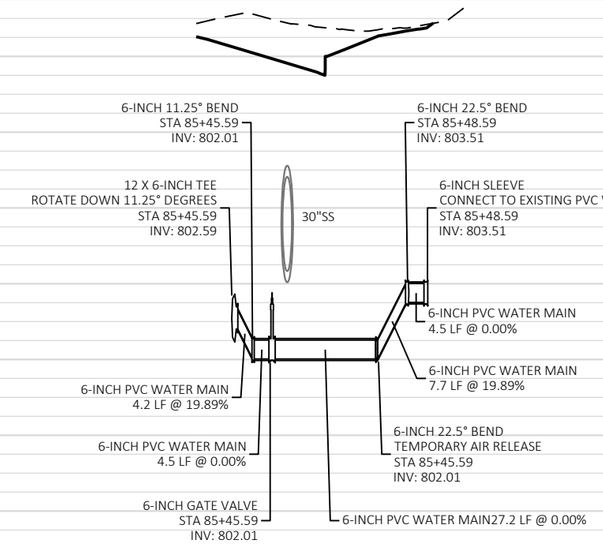
STRUCTURE NUMBER	ALIGNMENT	STATION	OFFSET	LOCATION	TYPE	EXIST RIM ELEVATION	PROP RIM ELEVATION	STRUCTURE INV ELEV	TOTAL DEPTH	CONNECTING PIPES	PIPE DIRECTION	PIPE SIZE & TYPE	PIPE INVERT	PIPE ROUTE	PIPE LENGTH	PIPE SLOPE	REMARKS
500	MARTIN-NORTH	23+38.41	1.91	RT	CONNECT TO EXISTING SANITARY MH					501-500 IN	S	SANITARY SEWER PVC 8-INCH	797.57	FROM STR: 501	--	--	
501	CTH VV	83+70.00	10.00	RT	SAN MH 4-FT DIA	-	808.68	800.18	8.50	602-501 IN 502-501 IN 501-500 OUT	E S N	SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH	800.28 800.28 800.18	FROM STR: 602 FROM STR: 502 TO STR: 500	-- -- 348.42'	-- -- 0.75%	
502	MARTIN-SOUTH	18+79.39	-8.94	LT	SAN MH 4-FT DIA	-	811.29	801.40	9.90	503-502 IN 502-501 OUT	S N	SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH	801.54 801.40	FROM STR: 503 TO STR: 501	-- 111.23'	-- 1.00%	
503	MARTIN-SOUTH	18+74.39	-8.93	LT	CONNECT TO EXISTING SANITARY SEWER PIPE					503-502 OUT	N	SANITARY SEWER PVC 8-INCH	801.57	TO STR: 502	5.00'	0.68%	
508	CTH VV	102+25.03	-26.01	LT	ADJUST EX SAN MH ROTATE CONE/CASTING OUTSIDE CURB HEAD	813.82	813.93										
509	CTH VV	104+70.13	-21.76	LT	ADJUST EX SAN MH ROTATE CONE/CASTING OUTSIDE CURB HEAD	817.02	817.24										
602	CTH VV	87+64.61	10.00	RT	SAN MH 4-FT DIA	-	812.55	802.26	10.29	602.1-602 IN 603-602 IN 602-501 OUT	S E W	SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH	803.03 802.36 802.26	FROM STR: 602.1 FROM STR: 603 TO STR: 501	-- -- 394.60'	-- -- 0.50%	
602.1	CTH VV	87+77.17	45.00	RT	CONNECT TO EXISTING SANITARY SEWER PIPE					602.1-602 OUT	N	SANITARY SEWER PVC 8-INCH	803.18	TO STR: 602	37.19'	0.40%	
603	CTH VV	89+46.11	10.00	RT	SAN MH 4-FT DIA	-	814.90	805.08	9.82	603.1-603 IN 603-602 OUT	N W	SANITARY SEWER PVC 8-INCH SANITARY SEWER PVC 8-INCH	805.31 805.08	FROM STR: 603.1 TO STR: 602	-- 181.50'	-- 1.50%	
603.1	CTH VV	89+45.62	-50.00	LT	CONNECT TO EXISTING SANITARY SEWER PIPE					603.1-603 OUT	S	SANITARY SEWER PVC 8-INCH	805.94	TO STR: 603	60.00'	1.05%	

NOTES:
1. TOTAL DEPTH = RIM ELEVATION - STRUCTURE INVERT ELEVATION.
2. MANHOLES SHALL BE CONSTRUCTED IN A WAY THAT WILL ALLOW THE CASTING TO BE ALIGNED IN THE MIDDLE OF A LANE OR ON A JOINT LINE.
3. CONTRACTOR SHALL VERIFY EXISTING PIPE SIZES, MATERIALS AND INVERT ELEVATION WHEN CONNECTING NEW SANITARY SEWER INTO EXISTING PIPES PRIOR TO MANUFACTURING MANHOLES.
4. STATION/ OFFSET OF SANITARY SEWER STRUCTURES ARE TO THE CENTER OF STRUCTURE.

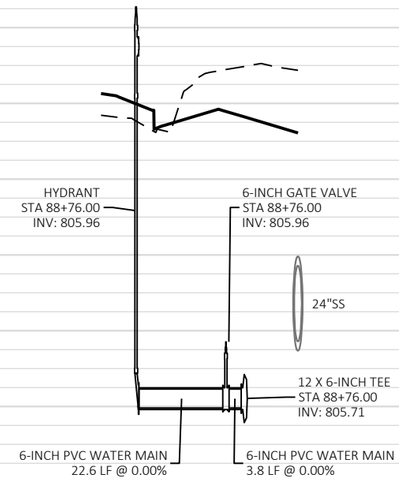
WATER MAIN PROFILE - 81+15 CONNECTION



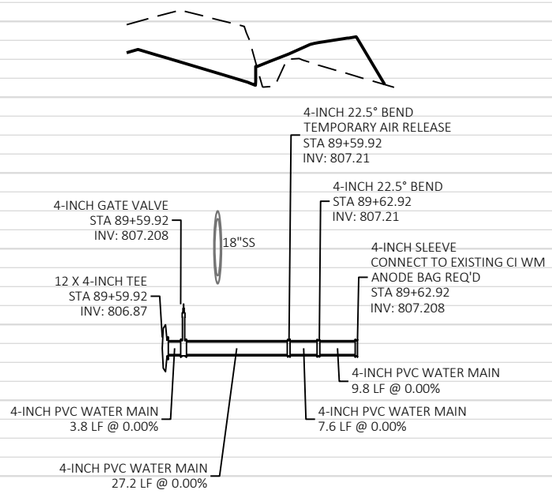
WATER MAIN PROFILE - 85+46 WATER SERVICE



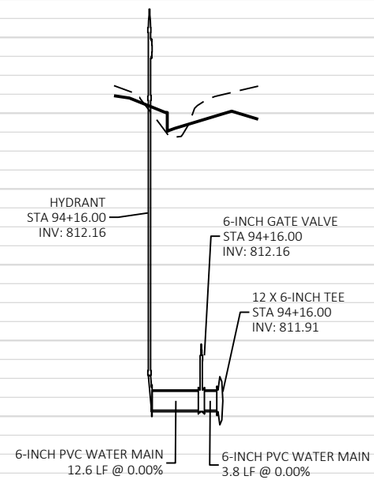
WATER MAIN PROFILE - 88+76 HYDRANT



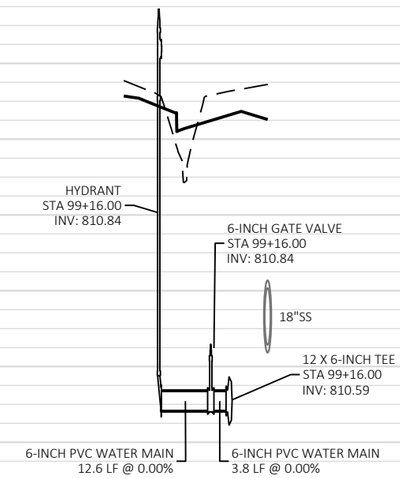
WATER MAIN PROFILE - 89+60 WATER SERVICE



WATER MAIN PROFILE - 94+16 HYDRANT



WATER MAIN PROFILE - 99+16 HYDRANT



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	WATER MAIN PROFILES	SHEET 59	E

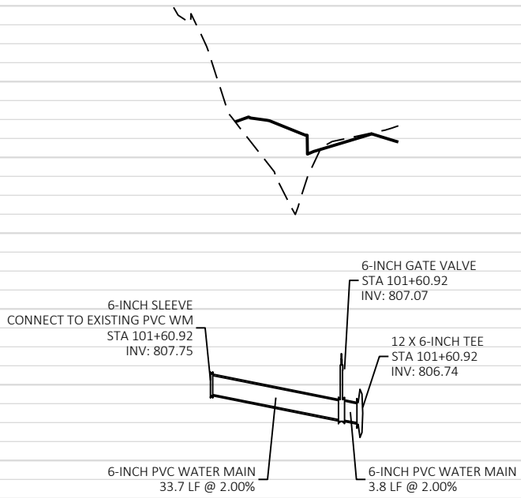
FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023002-UP.DWG
LAYOUT NAME - Sheet-21

PLOT DATE : 10/30/2023 2:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

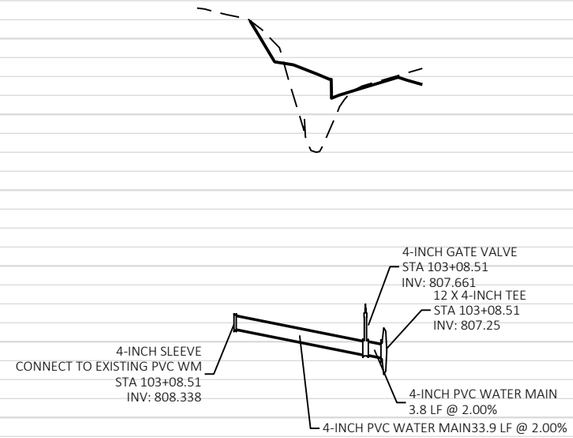
WISDOT/CADDS SHEET 41

2

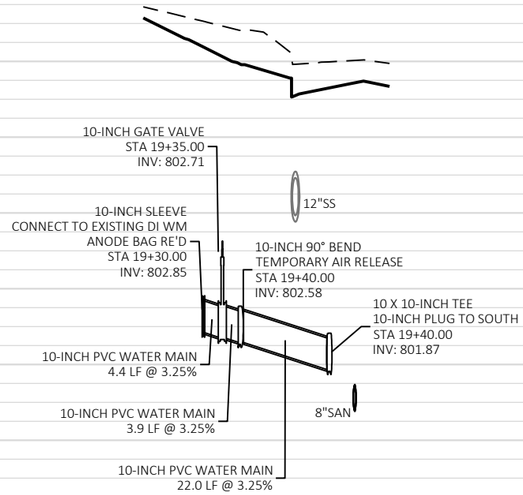
WATER MAIN PROFILE - 101+61 WATER SERVICE



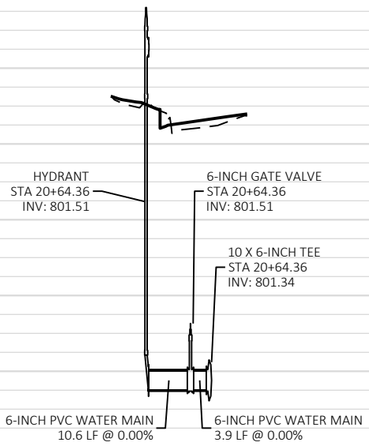
WATER MAIN PROFILE - 103+09 WATER SERVICE



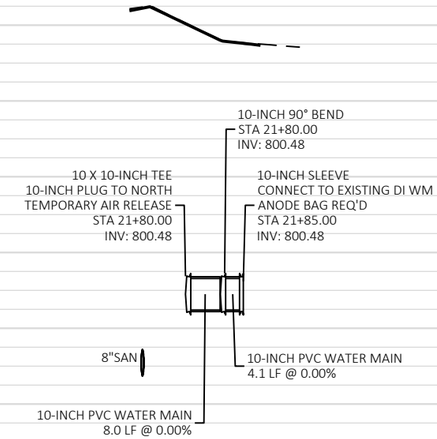
WATER MAIN PROFILE - 19+40 CONNECTION



WATER MAIN PROFILE - 20+64 HYDRANT



WATER MAIN PROFILE - 21+80 CONNECTION



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	WATER MAIN PROFILES	SHEET 60	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023002-UP.DWG
LAYOUT NAME - Sheet-22
PLOT DATE : 10/30/2023 2:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

LEGEND

- XXX — SIGN - REMOVE AND REPLACE
- XXX — SIGN - REMOVE EXISTING
- XXX — SIGN - PLACE NEW
- XXX — SIGN - MOVE EXISTING
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST(S)

OLD PIONEER ROAD

CTH VV
PIONEER ROAD

79 80 81 82 83 84

MARTIN AVENUE

MATCH LINE STA 85+00

MATCH LINE STA 91+00

86 87 88 89 90

CTH VV
PIONEER ROAD

N

101 W3-3 36"X36"

102 FOND DU LAC INFORMATION SIGN TO BE MOVED

103 FOND DU LAC INFORMATION SIGN TO BE MOVED

104 NO PARKING ANY TIME REMOVE

105 BIKE LANE REMOVE

106 NO PARKING ANY TIME R7-1L 18"X24"

107 NO PARKING ANY TIME R7-1R 18"X24"

108 REMOVE

109 S1-1 30"X30" S16-7L 24"X12" STOP R1-1F 30"X30"

110 S1-1 30"X30" S16-7L 24"X12" STOP R1-1F 30"X30"

111 REMOVE

112 NO PARKING ANY TIME R7-1R 18"X24"

113 NO PARKING ANY TIME R7-1L 18"X24"

114 BIKE LANE REMOVE

201 CO FAIRGROUNDS D1-1 72"X12"

202 CO FAIRGROUNDS NO PARKING ANY TIME REMOVE

203 NO PARKING ANY TIME R7-1D 18"X24"

204 SPEED LIMIT 35 END SCHOOL ZONE R2-1 24"X30" S5-2 24"X30"

205 DO NOT ENTER STOP MOVE MOVE

206 NO PARKING ANY TIME R7-1D 18"X24"

207 SOLAR POWERED SIGN & POLE TO BE MOVED INSTALL CONCRETE BASE TYPE 1

208 DO NOT ENTER STOP MOVE MOVE

209 AHEAD REMOVE

210 "WRONG WAY DO NOT ENTER SIGN" TO BE MOVED

211 ONLY MOVE

212 DO NOT ENTER STOP MOVE MOVE

213 NO PARKING ANY TIME R7-1D 18"X24"

214 NO PARKING ANY TIME R7-1D 18"X24"

215 AHEAD FINES HIGHER S1-1 30"X30" S16-9P 24"X12" R2-6P 24"X18"

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SIGNING PLAN	SHEET 61	E

2

MATCH LINE STA 91+00

303 ONE WAY R6-2R 24"X30"

304 ONE WAY R6-2L 24"X30"

305 NO PARKING ANY TIME R7-1D 18"X24"

307 BUS STOP SIGN & POST TO BE MOVED

308 (SEE RRFB DETAIL FOR ADDITIONAL INFORMATION) S1-1 RRFB S16-7R R10-25 S1-1 RRFB S16-7L

310 REMOVE

312 NO PARKING ANY TIME R7-1D 18"X24"

314 AHEAD FINES HIGHER S1-1 30"X30" S16-9P 24"X12" R2-6P 24"X18"

FLASHING YELLOW PEDESTRIAN CROSSING SIGN

91 92 93 94 95 96 97

CTH VV
PIONEER ROAD

SHERWOOD BOULEVARD

SHERWOOD BLVD

301 NO PARKING ANY TIME R7-1R 18"X24"

302 REMOVE

306 STOP R1-1 30"X30"

309 (SEE RRFB DETAIL FOR ADDITIONAL INFORMATION) S1-1 RRFB S16-7L R10-25 S1-1 RRFB S16-7R

311 NO PARKING ANY TIME R7-1L 18"X24"

313 NO PARKING ANY TIME R7-1D 18"X24"

POST

MATCH LINE STA 97+00

MATCH LINE STA 103+00

401 AHEAD REMOVE

402 SOLAR POWERED SIGN & POLE TO BE MOVED

403 NO PARKING ANY TIME R7-1D 18"X24"

407 NO PARKING ANY TIME R7-1D 18"X24"

SOLAR POWERED SPEED SIGN

97 98 99 100 101 102 103

CTH VV
PIONEER ROAD

313 NO PARKING ANY TIME R7-1D 18"X24"

404 SPEED LIMIT 35 REMOVE

405 SPEED LIMIT 35 R2-1 24"X30" END SCHOOL ZONE S5-2 24"X30"

406 NO PARKING ANY TIME R7-1D 18"X24"

BENCH

SIGN

GARAGE

GARAGE

LEGEND

- XXX — SIGN - REMOVE AND REPLACE
- XXX — SIGN - REMOVE EXISTING
- XXX — SIGN - PLACE NEW
- XXX — SIGN - MOVE EXISTING
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST(S)

N

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SIGNING PLAN	SHEET 62	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023201-PS.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 10/30/2023 2:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

2

N

MATCH LINE STA 103+00

CTH VV
PIONEER ROAD

103 104 105 106 107

501 NO PARKING ANY TIME R7-1D 18"X24"

502 JCT COUNTY VV MOVE

503 NO PARKING ANY TIME R7-1D 18"X24"

504 NO PARKING THIS SIDE MOVE

WELL
FLAG
CLEANOUT
WSO
SAN
WV
SS
SIGN
PIONEER SQUARE APARTMENTS 620

LEGEND

- XXX — SIGN - REMOVE AND REPLACE
- XXX — SIGN - REMOVE EXISTING
- XXX — SIGN - PLACE NEW
- XXX — SIGN - MOVE EXISTING
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST(S)

Z

MARTIN AVENUE

18 19 20 21 22 23 24

CTH VV
PIONEER ROAD

83 84

601 BUS STOP SIGN & POST TO BE MOVED

602 S1-1 30"X30" S16-7L 24"X12" R1-1F 30"X30" STOP

603 REMOVE

604 S1-1 30"X30" S16-7L 24"X12" R1-1F 30"X30" STOP

864 MARTIN AVENUE
858
852
174 MARTIN PLACE
877
POST
SIGN
TRAFFIC SIGNAL CONTROLLER

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	SIGNING PLAN	SHEET 63	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-023201-PS.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 10/30/2023 2:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

STREET LIGHTING PLANS PREPARED BY:

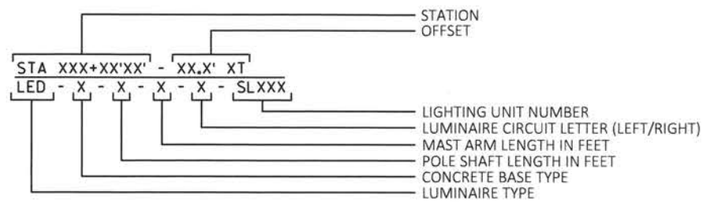
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EVANSVILLE, WI
PROFESSIONAL ENGINEER

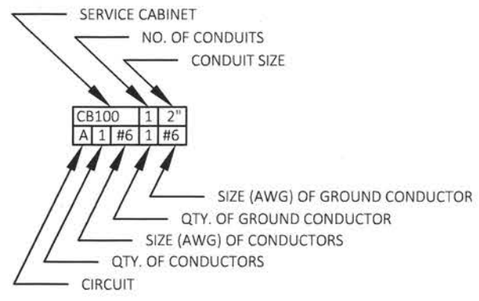
10/27/23
(DATE) (SIGNATURE)

LIGHTING PLAN LEGEND:

- PROPOSED LIGHTING UNIT
- EXISTING LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- COMMUNICATION VAULT TYPE I
- LIGHTING CONDUIT SCHEDULE 40
- LIGHTING CONDUIT SCHEDULE 80



CONDUIT/CONDUCTOR LEGEND



PWO = PULL/TRACER WIRE ONLY

NEU = NEUTRAL

CONDUCTOR COLOR LEGEND

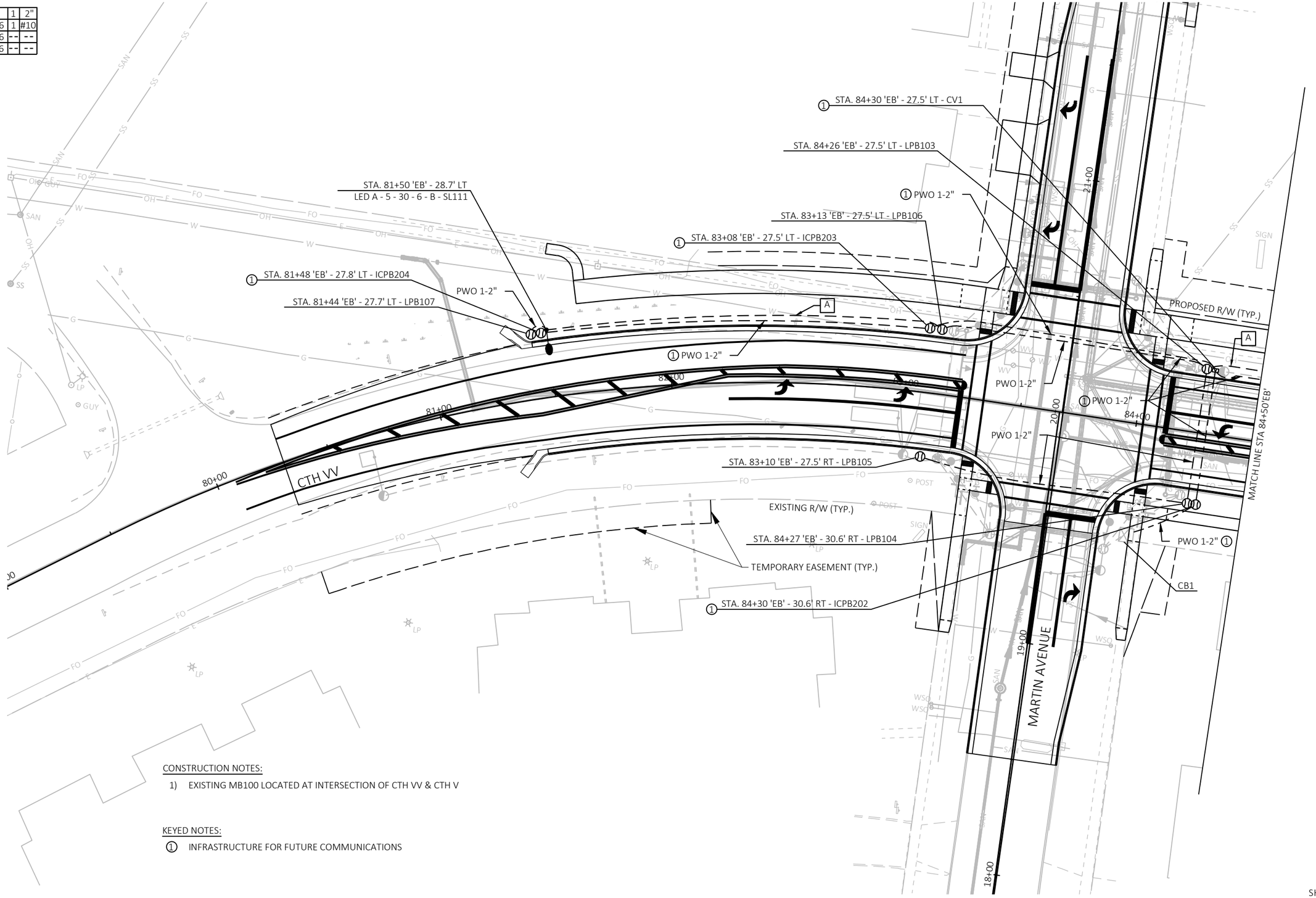
MB100

LIGHTING CONDUCTORS
A - BLACK B - RED — & NEUTRAL
120V PHASE TO NEUTRAL

GENERAL STREET LIGHTING NOTES:

1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.
2) PITCH ALL CONDUITS TOWARD PULLBOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN. DO NOT SPLICE IN PULLBOXES.
3) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4) REFER TO STAKING DATA FOR EXACT OFFSET LOCATIONS, WITH ALL LOCATIONS APPROVED BY THE ENGINEER PRIOR TO INSTALL.
5) CONDUIT FOR FUTURE COMMUNICATIONS SHALL BE INSTALLED AT A DEPTH OF 30" TO 36".
6) TRACER WIRE MARKER POSTS SHALL BE INSTALLED NEXT TO THE PULL BOX ON EACH END OF THE COMMUNICATION CONDUIT.

A	=	MB100	1	2"
		A	1	#6	1	#10
		B	1	#6	--	--
		NEU	1	#6	--	--



CONSTRUCTION NOTES:

1) EXISTING MB100 LOCATED AT INTERSECTION OF CTH VV & CTH V

KEYED NOTES:

① INFRASTRUCTURE FOR FUTURE COMMUNICATIONS

SHEET 2 OF 6

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET 65	E

FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 20

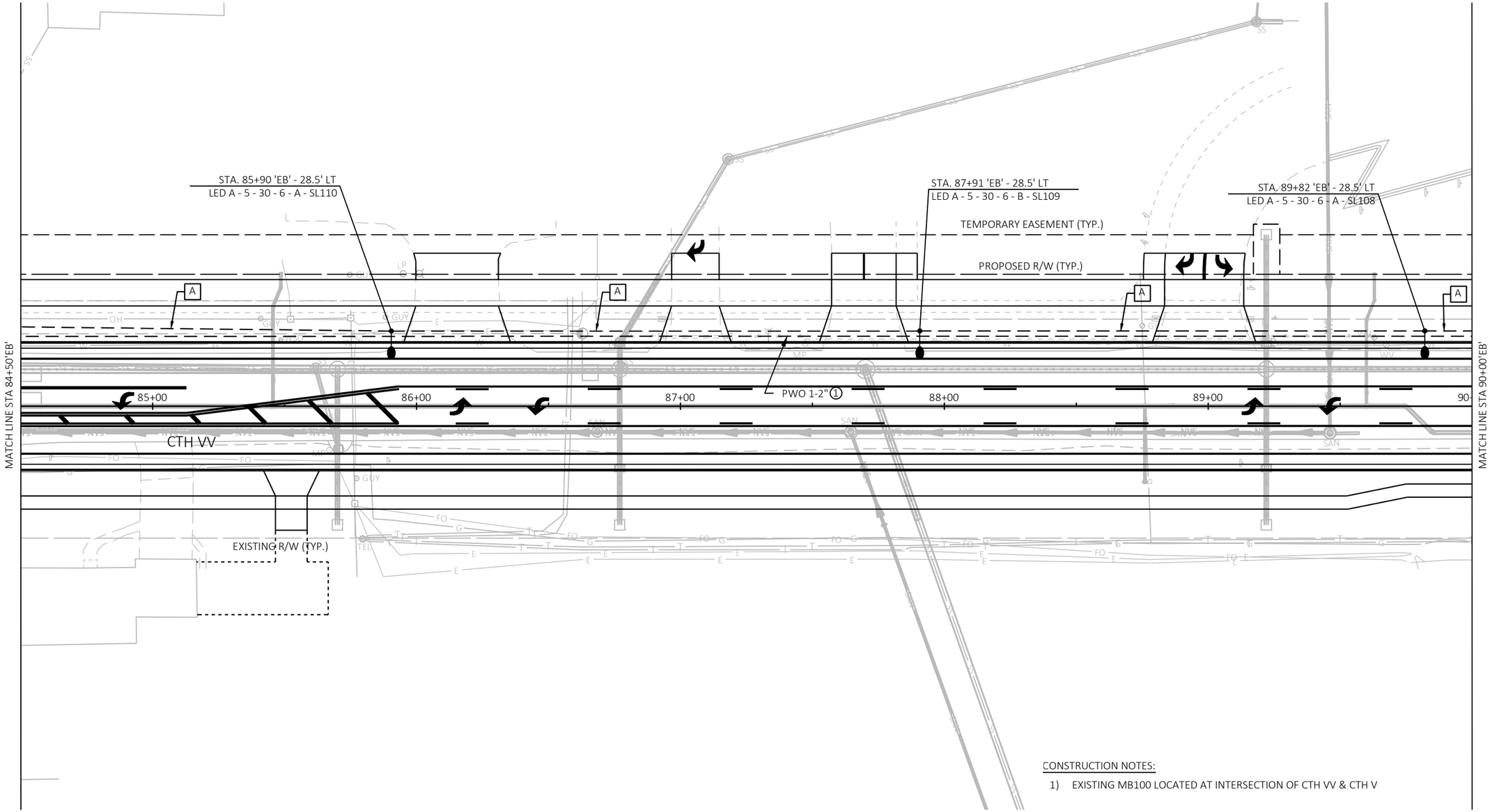
PLOT DATE : 10/27/2023 3:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

A =

MB100			1	2"
A	1	#6	1	#10
B	1	#6	--	--
NEU	1	#6	--	--



CONSTRUCTION NOTES:

1) EXISTING MB100 LOCATED AT INTERSECTION OF CTH VV & CTH V

KEYED NOTES:

1 INFRASTRUCTURE FOR FUTURE COMMUNICATIONS

SHEET 3 OF 6

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET 66	E

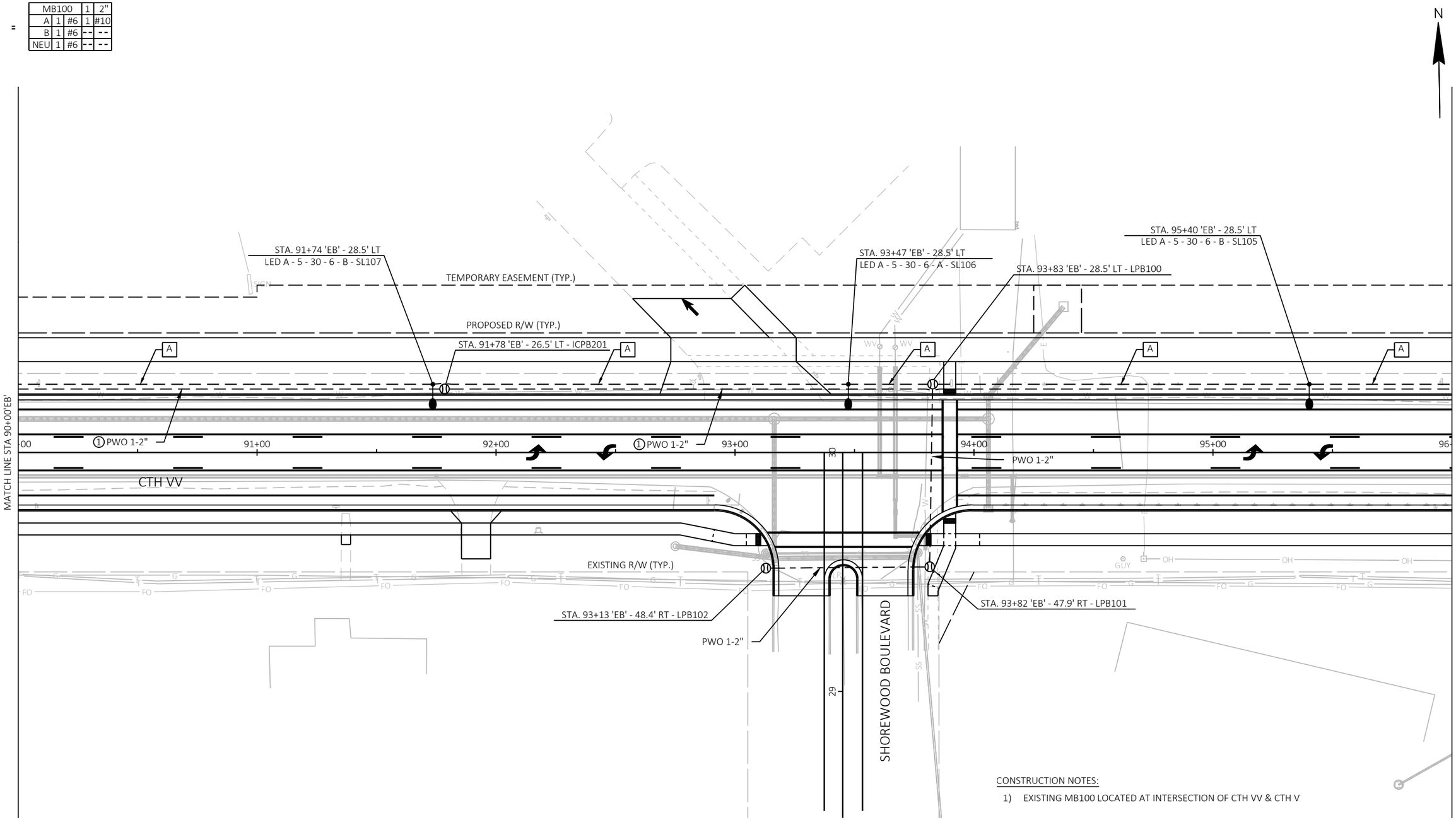
FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 21

PLOT DATE : 10/27/2023 3:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

A =

MB100			1	2"
A	1	#6	1	#10
B	1	#6	--	--
NEU	1	#6	--	--



CONSTRUCTION NOTES:

1) EXISTING MB100 LOCATED AT INTERSECTION OF CTH VV & CTH V

KEYED NOTES:

1 INFRASTRUCTURE FOR FUTURE COMMUNICATIONS

SHEET 4 OF 6

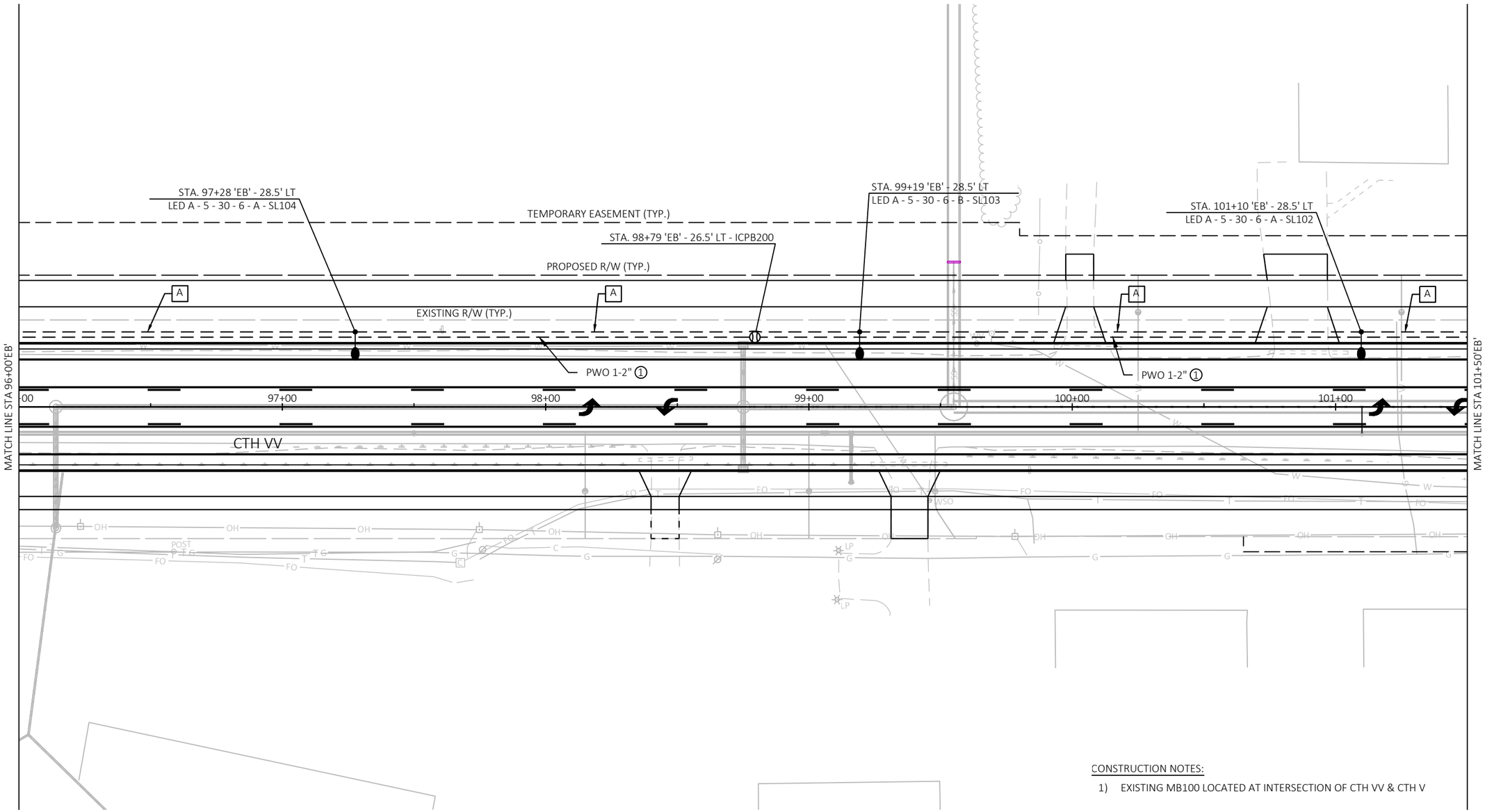
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET 67	E

FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 22

PLOT DATE : 10/27/2023 3:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

A	=	MB100	1	2"
		A	1	#6	1	#10
		B	1	#6	--	--
		NEU	1	#6	--	--



CONSTRUCTION NOTES:

1) EXISTING MB100 LOCATED AT INTERSECTION OF CTH VV & CTH V

KEYED NOTES:

1 INFRASTRUCTURE FOR FUTURE COMMUNICATIONS

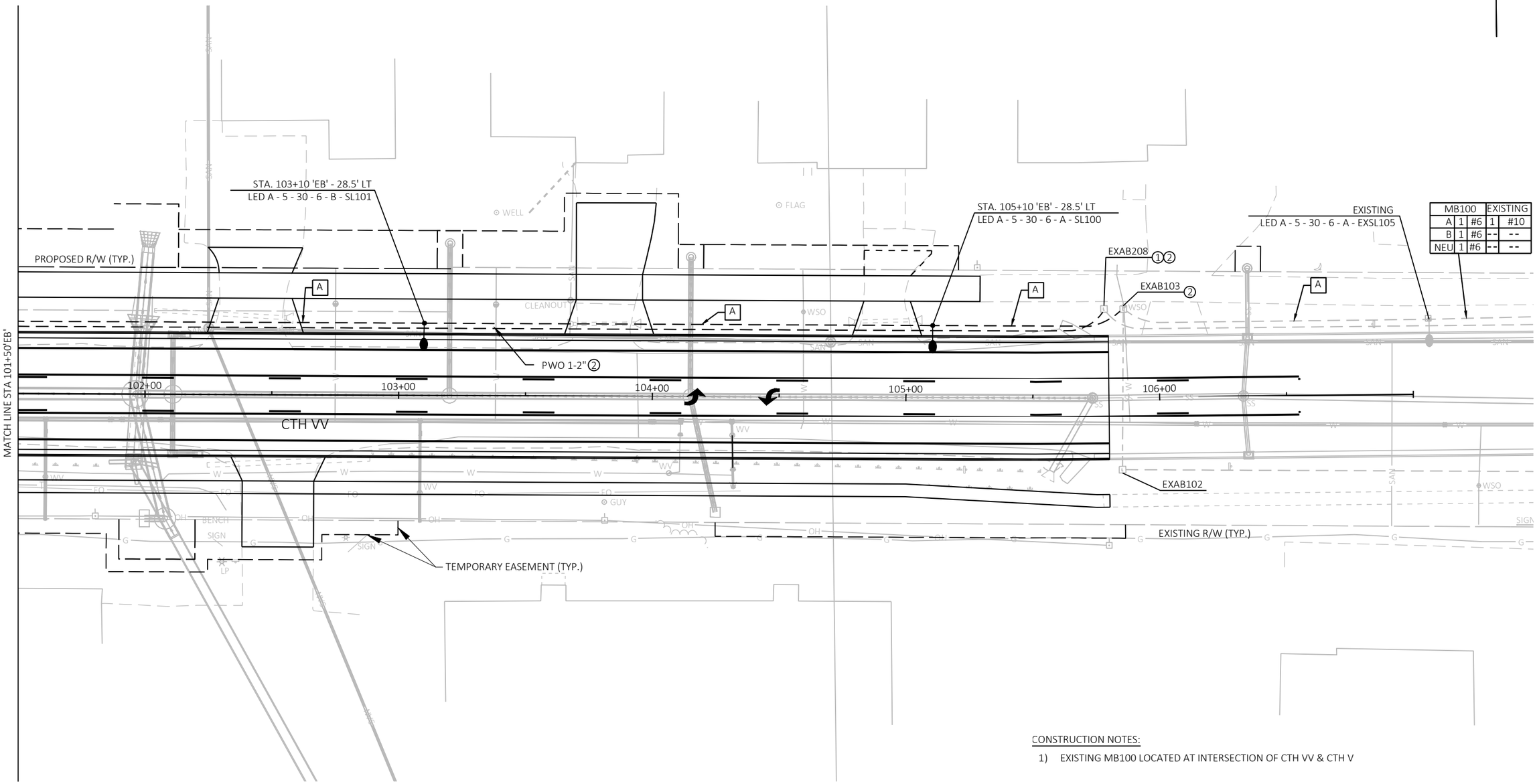
SHEET 5 OF 6

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET 68	E

FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 23
PLOT DATE : 10/27/2023 3:51 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

A =	MB100		1	2"
	A	1	#6	1 #10
	B	1	#6	-- --
	NEU	1	#6	-- --



CONSTRUCTION NOTES:

1) EXISTING MB100 LOCATED AT INTERSECTION OF CTH VV & CTH V

KEYED NOTES:

① INFRASTRUCTURE FOR FUTURE COMMUNICATIONS

② INSTALL CONDUIT IN EXISTING ACCESS BOX

SHEET 6 OF 6

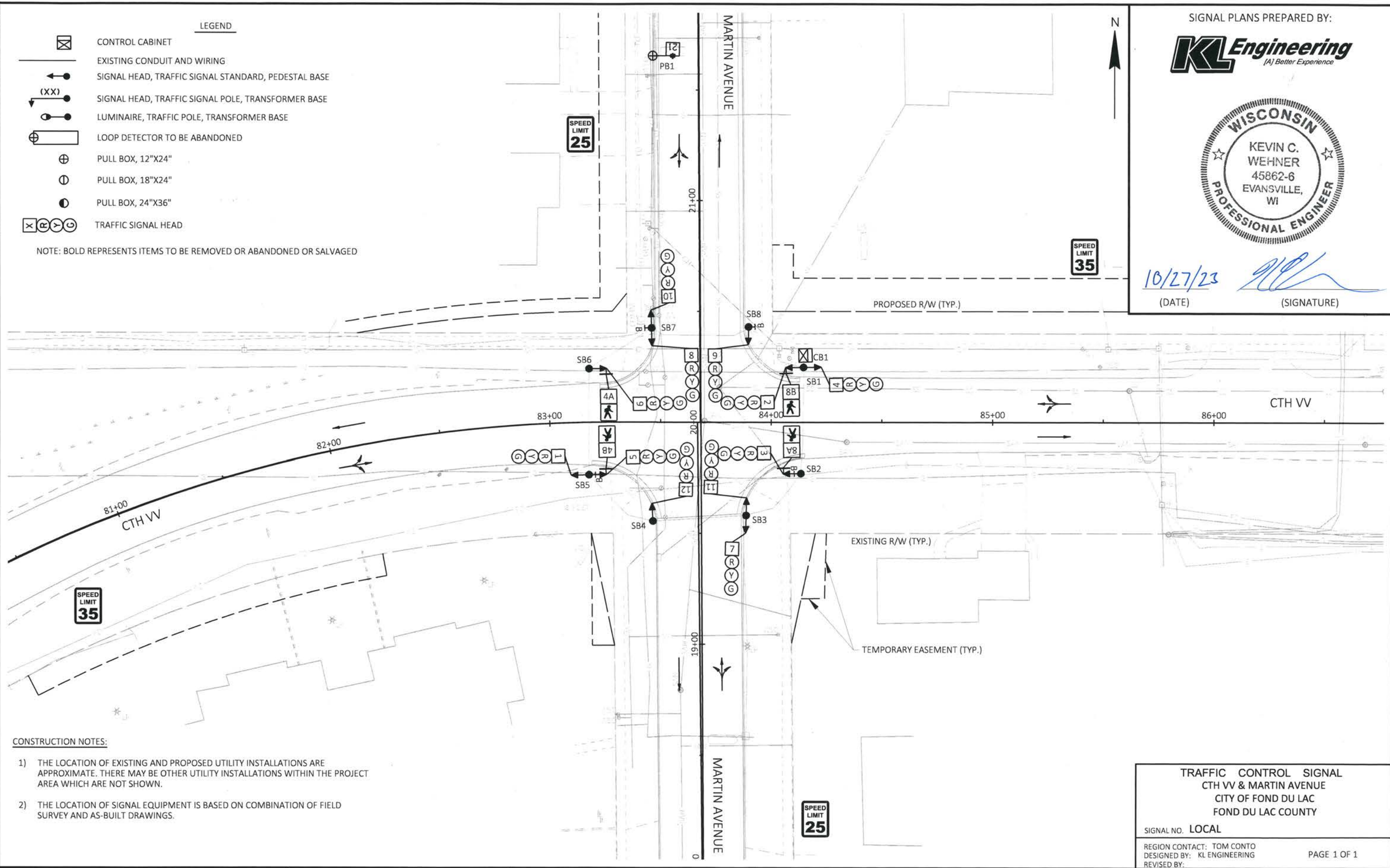
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET 69	E

2

LEGEND

- CONTROL CABINET
- EXISTING CONDUIT AND WIRING
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR TO BE ABANDONED
- PULL BOX, 12"X24"
- PULL BOX, 18"X24"
- PULL BOX, 24"X36"
- TRAFFIC SIGNAL HEAD

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR ABANDONED OR SALVAGED



CONSTRUCTION NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

2) THE LOCATION OF SIGNAL EQUIPMENT IS BASED ON COMBINATION OF FIELD SURVEY AND AS-BUILT DRAWINGS.

SIGNAL PLANS PREPARED BY:

KL Engineering
[A] Better Experience

WISCONSIN
KEVIN C. WEHNER
45862-6
EVANSVILLE, WI
PROFESSIONAL ENGINEER

10/27/23
(DATE) (SIGNATURE)

TRAFFIC CONTROL SIGNAL
CTH VV & MARTIN AVENUE
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL

REGION CONTACT: TOM CONTO
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 70	E

FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\024001-SR.DWG
LAYOUT NAME - INT

PLOT DATE : 10/27/2023 3:14 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- XX WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES

1. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE SHEET PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. PAVEMENT MARKING, LIGHTING, INTERCONNECT PLAN, AND STORM SEWER SHOWN IN GRAYSHADE FOR PLAN CLARITY.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH UTILITY FACILITIES.
4. THE FINAL LOCATION AND ORIENTATION OF PEDESTRIAN BUTTONS MUST ADHERE TO THE LATEST STANDARDS OF THE AMERICANS WITH DISABILITIES ACT.
5. ALL SIGNAL HEADS SHALL BE MOUNTED VERTICALLY.
6. ABOVE GROUND WIRING FOR PEDESTRIAN BUTTONS SHALL NOT BE SPLICED.

MARTIN AVENUE
CTH VV
PROPOSED R/W (TYP.)
EXISTING R/W (TYP.)
INSTALL GPS EVP RECEIVER
TEMPORARY LIMITED EASEMENT (TYP.)
SPEED LIMIT 25
SPEED LIMIT 35
CAUTION
41,42,71,72 - 6'x20' 3 TURNS EACH
22,23,51,52 - 6'x20' 2 TURNS EACH
11,12,62,63 - 6'x20' 2 TURNS EACH
31,32,81,82 - 6'x20' 1 TURNS EACH
PB1 PB2 PB3 PB4 PB5 PB7 PB8 PB9 PB10 PB11 PB12 PB14
SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16
CB1
83+00 84+00 85+00 21+00

TRAFFIC CONTROL SIGNAL
CTH VV & MARTIN AVENUE
CITY OF FOND DU LAC
FOND DU LAC COUNTY

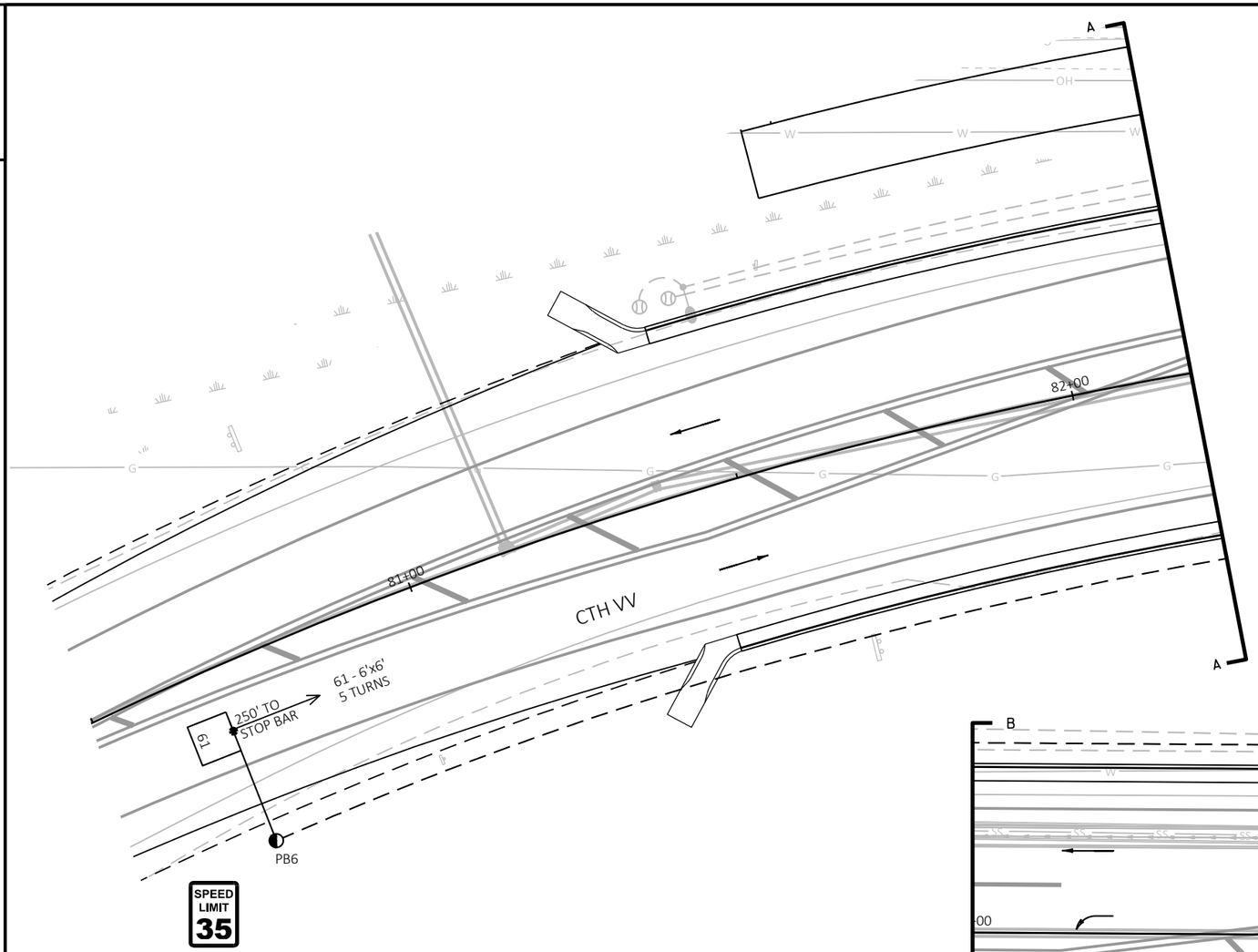
SIGNAL NO. LOCAL

REGION CONTACT: TOM CONTO
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TRAFFIC SIGNAL PLAN	SHEET 71	E

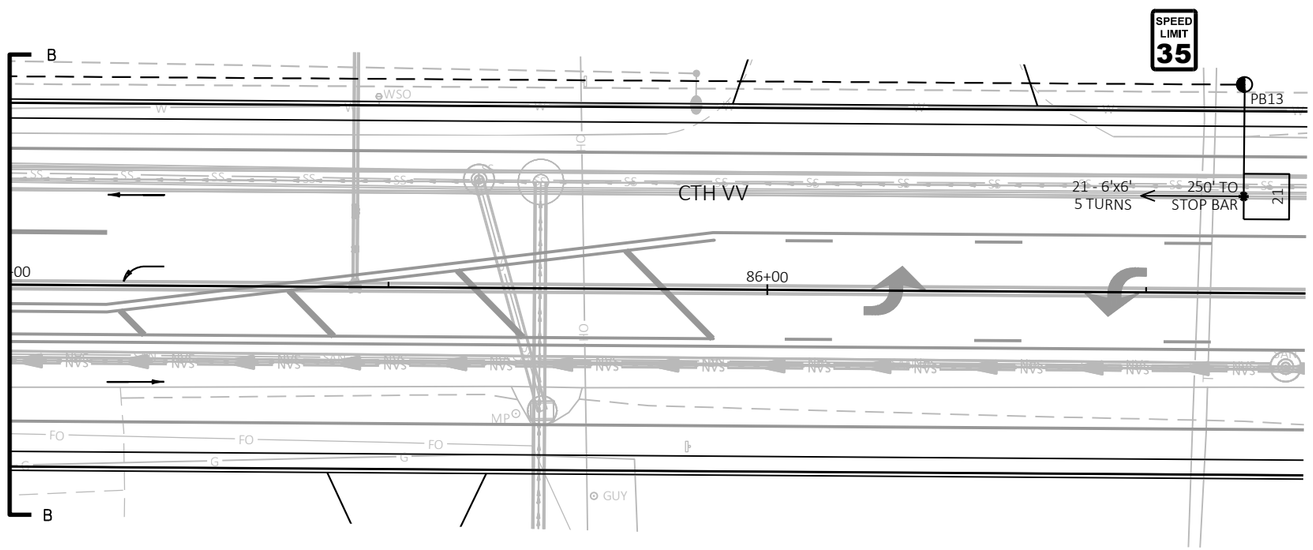
FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - INT
PLOT DATE : 10/27/2023 12:10 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



LEGEND

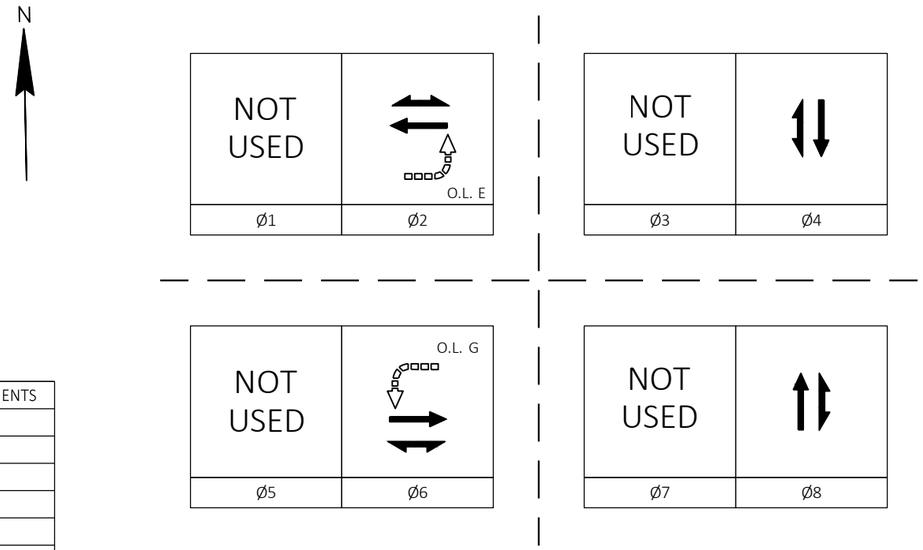
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX, 24" X 36"
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LANE DESIGNATION FOR INFO ONLY

N

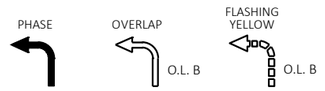

B
WSO
W
SS
SS
SS

	HEAD NUMBERS	FLASH
Ø1		
Ø2	6-8	R
Ø3		
Ø4	14-16	R
Ø5		
Ø6	1-3	R
Ø7		
Ø8	11-13	R
Ø2 PED	2A,2B	
Ø4 PED	4A,4B	
Ø6 PED	6A,6B	
Ø8 PED	8A,8B	

O.L. ASSIGNMENTS			
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E	4,5	R	ø2
O.L.F			
O.L.G	9,10	R	ø6
O.L.H			



LEGEND



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	EB	6
4	EVP	B	WB	2
5	EVP	C	NB	8
6	EVP	D	SB	4
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

1. AFTER PREEMPTION SEQUENCE A OR B, CONTROLLER SHALL RETURN TO PHASE 2+6.
2. AFTER PREEMPTION SEQUENCE C OR D, CONTROLLER SHALL RETURN TO PHASE 4+8.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4		8		X
5				
6	X	2	MIN	X
7				
8		4		X

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM
LOCATION OF MASTER
CONTROLLER NO.: N/A
SIGNAL SYSTEM #:

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
DETECTOR #(S)	12	22	23	43	44	52	62	63	83	84							DETECTOR #(S)
PHASE CALLED	1	2	2	4	4	5	6	6	8	8							PHASE CALLED
PHASE EXTENDED	1	2	2	4	4	5	6	6	8	8							PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY	3			3	10	3			3	10							CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
DETECTOR #(S)	11	21		41	42	51	61		81	82							DETECTOR #(S)
PHASE CALLED	1	2		4	4	5	6		8	8							PHASE CALLED
PHASE EXTENDED	1	2		4	4	5	6		8	8							PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY					5					5							CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
CTH VV & MARTIN AVENUE
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL

REGION CONTACT: TOM CONTO
DESIGNED BY: KL ENGINEERING
REVISED BY:

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TRAFFIC SIGNAL PLAN	SHEET 73	E

FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - SOO
PLOT DATE : 10/27/2023 12:11 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ##########

INTERSECTION:	CTH VV & MARTIN AVENUE

SIGNAL WIRE	BLK-BLACK	RED-RED	GRN-GREEN
COLOR CODING	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE:	Oct-23

N

CB1 TO	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	DWALK	WALK		
SB1	12	11	8	RED	ORG	GRN								
		15	4	RED/BLK	ORG/BLK	GRN/BLK			BLK/WHT					
SB2	12	8A	8								BLK	BLU		
		BUTTON	6											
SB3	12	16	4	RED	ORG	GRN								
SB4	12	4B	4								BLK	BLU		
		BUTTON	6											
SB5	12	1	6	RED	ORG	GRN								
		9	O.L.G				RED/BLK	ORG/BLK	BLK/WHT					
SB6	12	6A	6								BLK	BLU		
		BUTTON	4											
SB7	12	7	2	RED	ORG	GRN								
		8	2	RED	ORG	GRN								
		10	O.L.G				RED/BLK	ORG/BLK	BLK/WHT					
SB8	12	4A	4								BLK	BLU		
		BUTTON	4											
SB9	12	12	8	RED	ORG	GRN								
		14	4	RED/BLK	ORG/BLK	GRN/BLK			BLK/WHT					
SB10	12	2B	2								BLK	BLU		
		BUTTON	2											
SB11	12	13	8	RED	ORG	GRN								
SB12	12	2A	2								BLK	BLU		
		BUTTON	2											
SB13	12	6	2	RED	ORG	GRN								
		4	O.L.E				RED/BLK	ORG/BLK	BLK/WHT					
SB14	12	8B	8								BLK	BLU		
		BUTTON	8											
SB15	12	2	6	RED	ORG	GRN								
		3	6	RED	ORG	GRN								
		5	O.L.E				RED/BLK	ORG/BLK	BLK/WHT					
SB16	12	6B	6								BLK	BLU		
		BUTTON	8											

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	CB1

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB3
SB3	SB7
CB1	SB15
SB15	SB11

TRAFFIC CONTROL SIGNAL
CTH VV & MARTIN AVENUE
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL

REGION CONTACT: TOM CONTO
DESIGNED BY: KL ENGINEERING
REVISED BY:

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TRAFFIC SIGNAL PLAN	SHEET 74	E

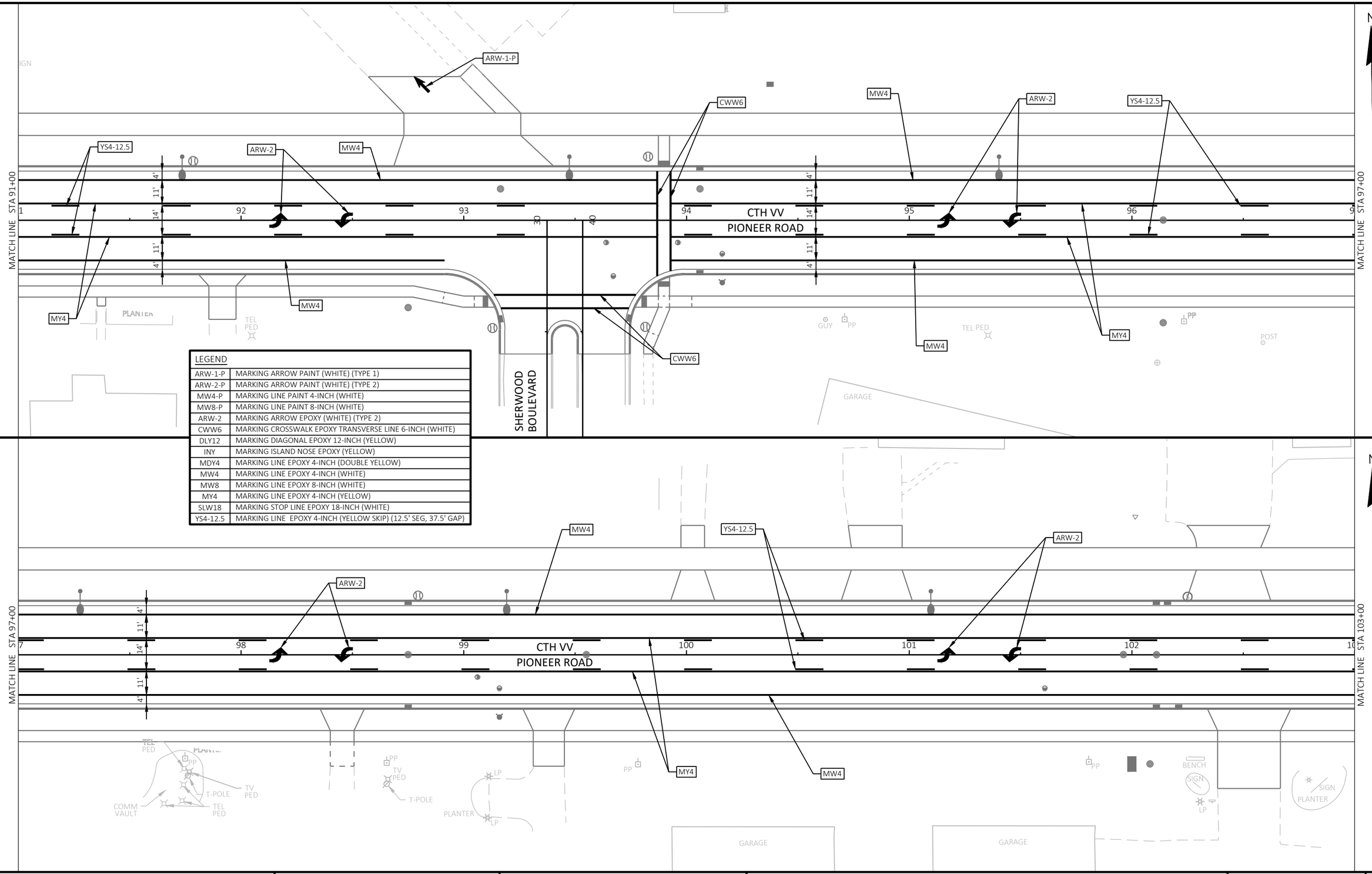
FILE NAME : G:\GREMMER\20028 CTH VV RECONSTRUCTION\CIVIL 3D\20028-001\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - Cable Routing
PLOT DATE : 10/27/2023 12:11 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

LEGEND	
ARW-1-P	MARKING ARROW PAINT (WHITE) (TYPE 1)
ARW-2-P	MARKING ARROW PAINT (WHITE) (TYPE 2)
MW4-P	MARKING LINE PAINT 4-INCH (WHITE)
MW8-P	MARKING LINE PAINT 8-INCH (WHITE)
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
CWW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
DLY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
INY	MARKING ISLAND NOSE EPOXY (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MW4	MARKING LINE EPOXY 4-INCH (WHITE)
MW8	MARKING LINE EPOXY 8-INCH (WHITE)
MY4	MARKING LINE EPOXY 4-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
YS4-12.5	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5' SEG, 37.5' GAP)

OLD PIONEER ROAD
CTH VV
PIONEER ROAD
MARTIN AVENUE
MATCH LINE STA 85+00
MATCH LINE STA 91+00
CTH VV
PIONEER ROAD

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN	SHEET 75 E

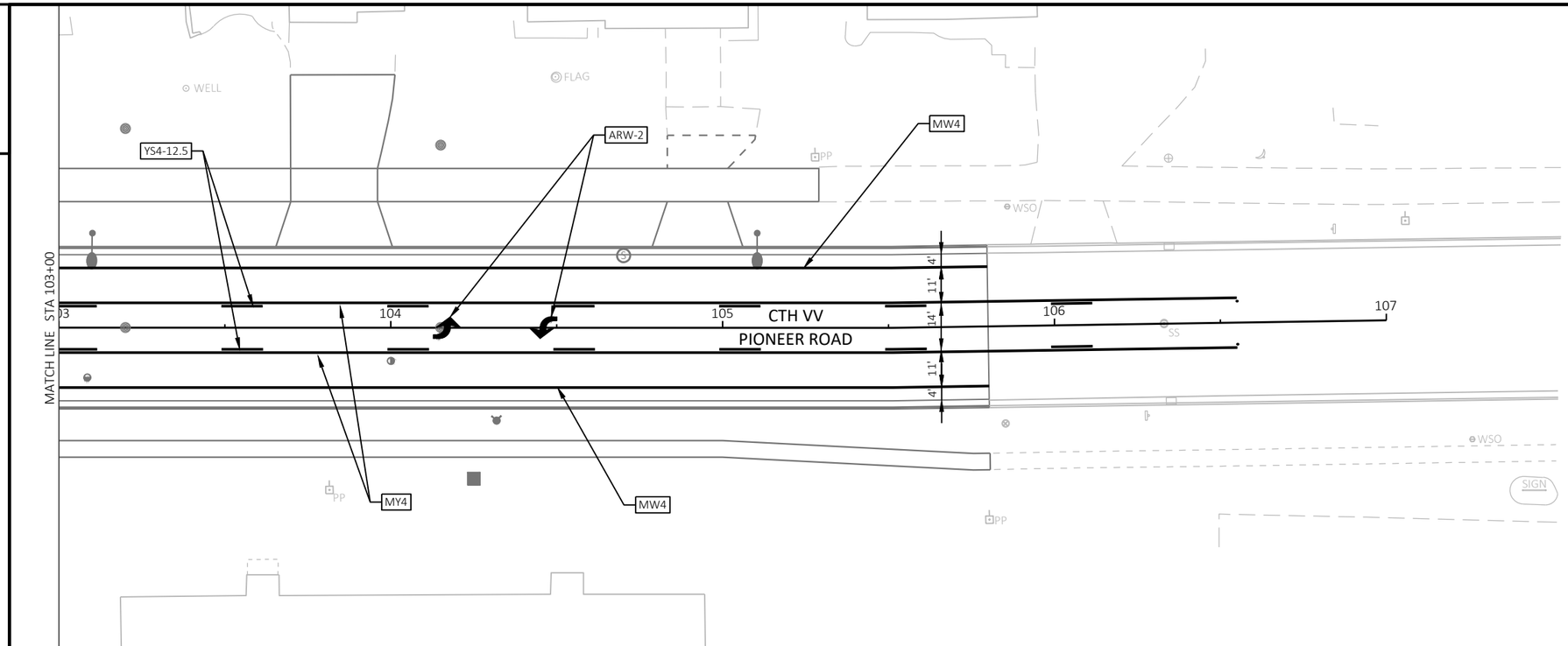
2

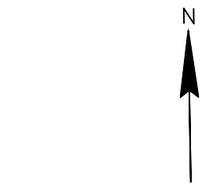


LEGEND	
ARW-1-P	MARKING ARROW PAINT (WHITE) (TYPE 1)
ARW-2-P	MARKING ARROW PAINT (WHITE) (TYPE 2)
MW4-P	MARKING LINE PAINT 4-INCH (WHITE)
MW8-P	MARKING LINE PAINT 8-INCH (WHITE)
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
CWW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
DLY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
INY	MARKING ISLAND NOSE EPOXY (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MW4	MARKING LINE EPOXY 4-INCH (WHITE)
MW8	MARKING LINE EPOXY 8-INCH (WHITE)
MY4	MARKING LINE EPOXY 4-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
YS4-12.5	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5' SEG, 37.5' GAP)

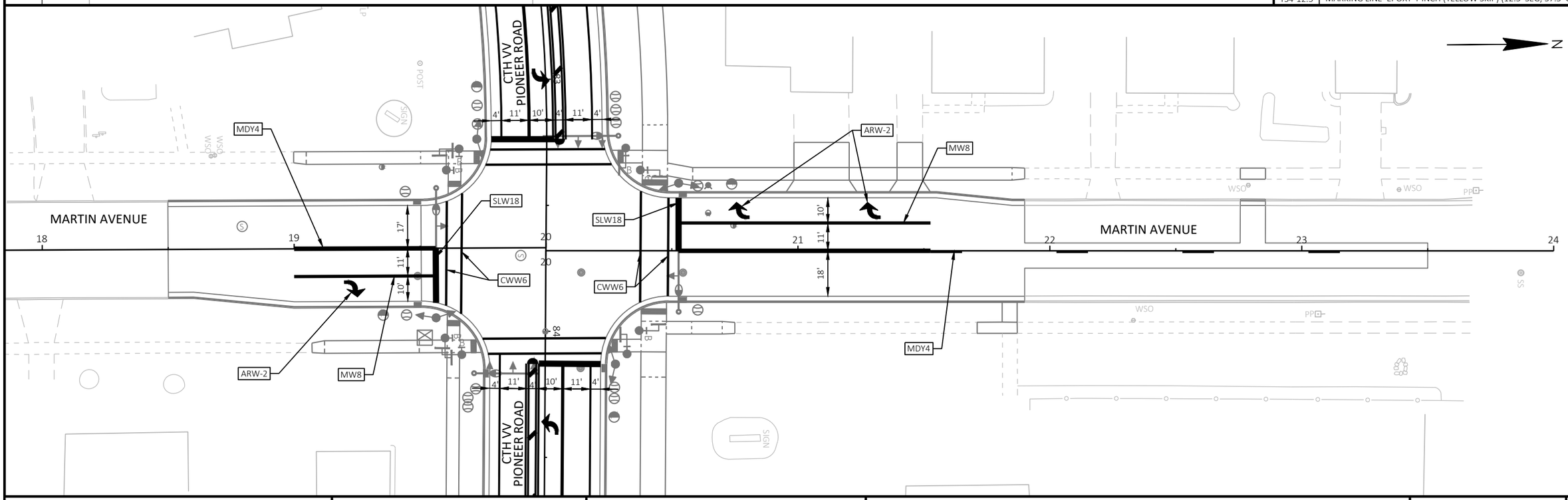
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN	SHEET 76	E

2





LEGEND	
ARW-1-P	MARKING ARROW PAINT (WHITE) (TYPE 1)
ARW-2-P	MARKING ARROW PAINT (WHITE) (TYPE 2)
MW4-P	MARKING LINE PAINT 4-INCH (WHITE)
MW8-P	MARKING LINE PAINT 8-INCH (WHITE)
ARW-2	MARKING ARROW EPOXY (WHITE) (TYPE 2)
CWW6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
DLY12	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
INY	MARKING ISLAND NOSE EPOXY (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MW4	MARKING LINE EPOXY 4-INCH (WHITE)
MW8	MARKING LINE EPOXY 8-INCH (WHITE)
MY4	MARKING LINE EPOXY 4-INCH (YELLOW)
SLW18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
YS4-12.5	MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5' SEG, 37.5' GAP)



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PAVEMENT MARKING PLAN	SHEET 77	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-024501-PM.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 10/30/2023 2:15 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT



LEGEND

- TYPE III BARRICADE WITH SIGN
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- (B) PLACE TRAFFIC CONTROL SIGNS PER "DETAIL B" IN SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
- (C) PLACE TRAFFIC CONTROL SIGNS PER "DETAIL C" IN SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
- (E) PLACE TRAFFIC CONTROL SIGNS PER "DETAIL E" IN SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
- (4) PLACE TRAFFIC CONTROL SIGNS PER "DETAIL 4" IN SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

GENERAL NOTES

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR GENERAL NOTES AND SIGN SPACING REQUIREMENTS.

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OR SEQUENCE OF OPERATION.

VEHICLE DETOUR SIGNS WILL BE INSTALLED AND MAINTAINED BY FOND DU LAC COUNTY HIGHWAY DEPARTMENT.

MAP SHOWN IS NOT TO SCALE.

PCMS MESSAGES

	7 DAYS PRIOR TO PROJECT STARTUP	
LOCATION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
CTH VV EB	ROAD CLOSED BEGINS	{DAY} {DATE XX}
CTH VV WB	ROAD CLOSED BEGINS	{DAY} {DATE XX}

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	TRAFFIC CONTROL: OVERVIEW	SHEET 78	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-025100-TC.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

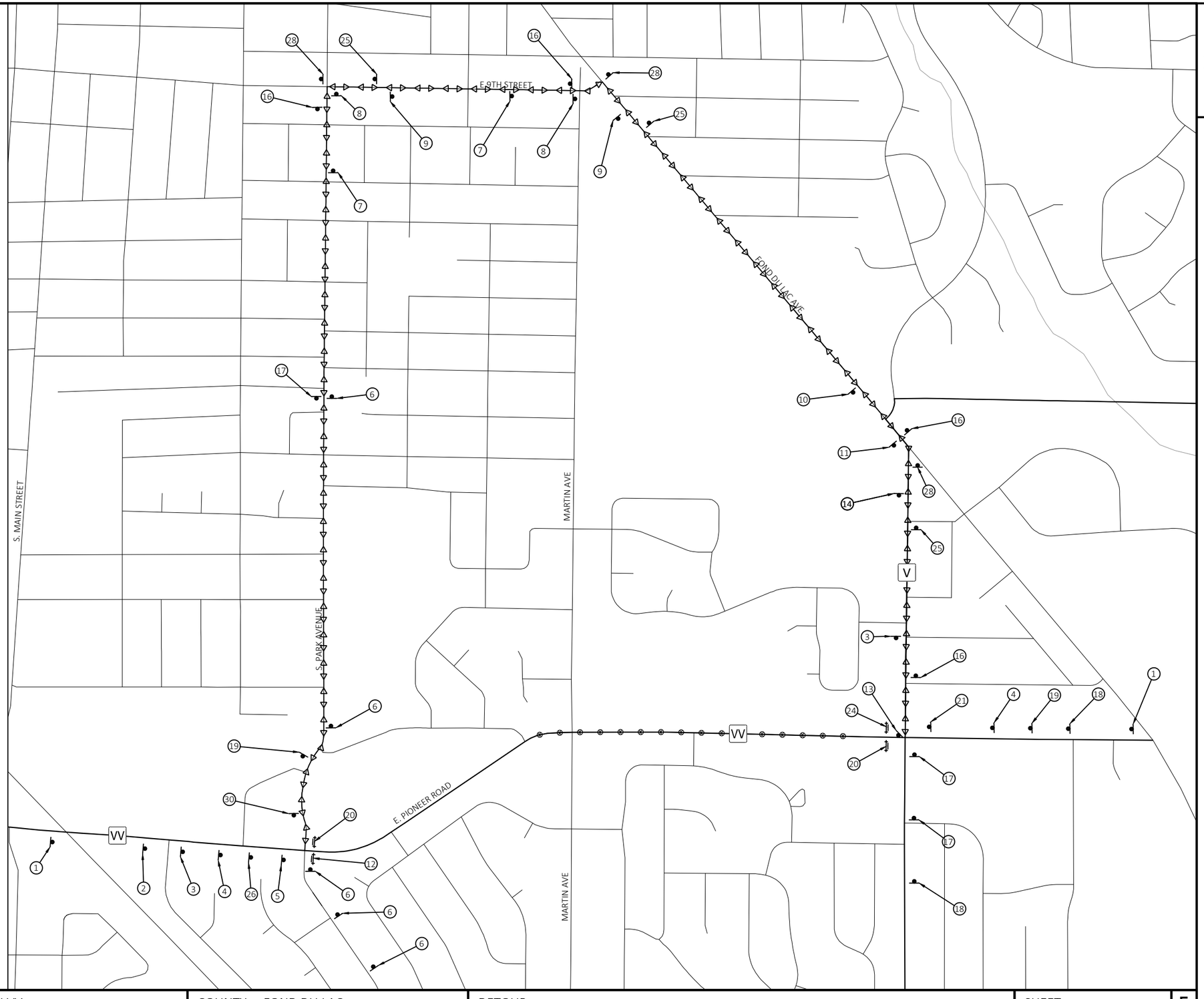
2

INFORMATION ONLY

VEHICLE DETOUR SIGNS WILL BE INSTALLED AND MAINTAINED BY FOND DU LAC COUNTY HIGHWAY DEPARTMENT.

LEGEND

- SIGN LOCATION
- TYPE III BARRICADE WITH SIGN
- PROPOSED DETOUR ROUTE
- WORK AREA



2

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	DETOUR	SHEET 79	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-027001-DT.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

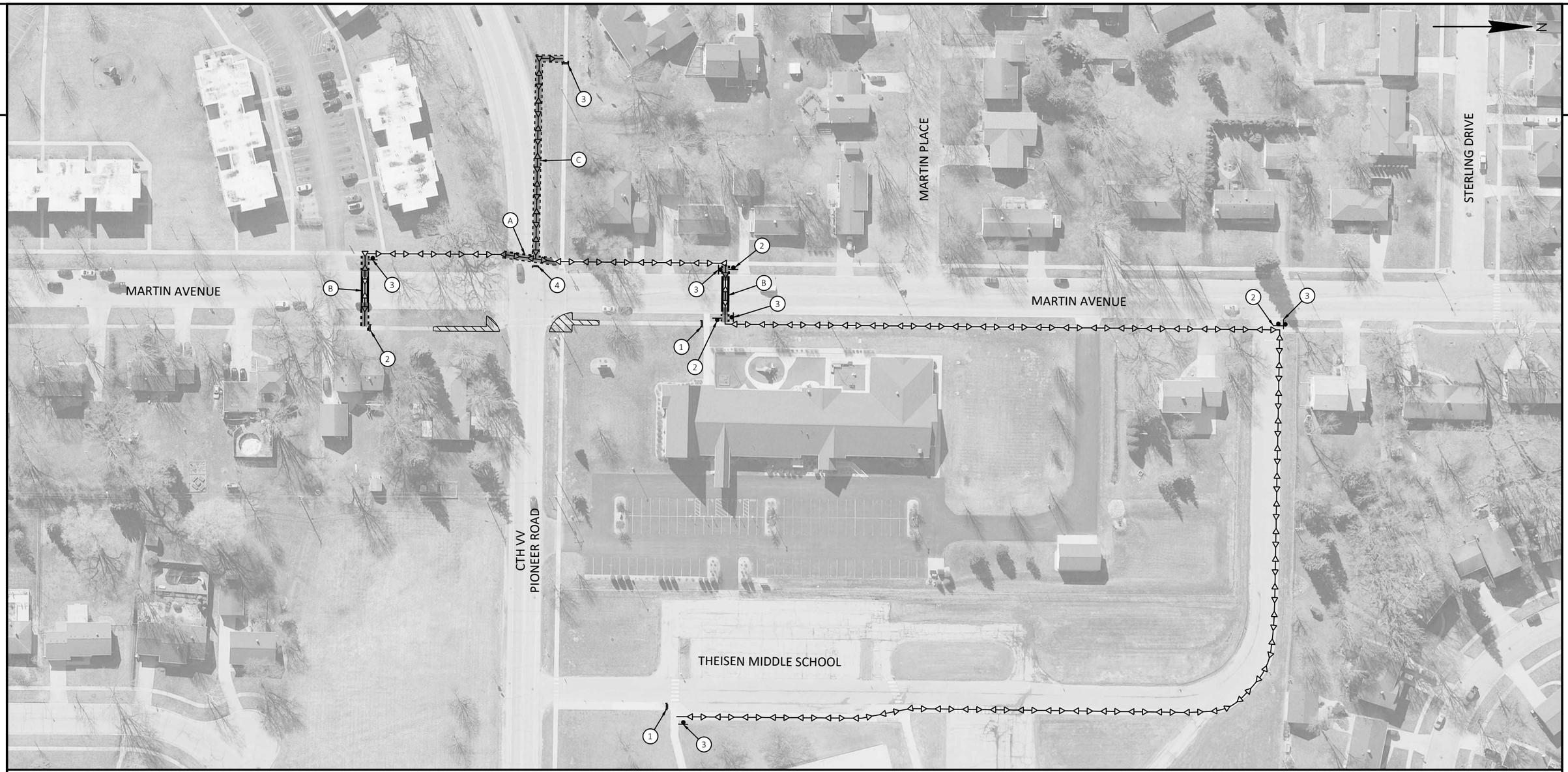
WISDOT/CADDS SHEET 42

2

① ROAD CLOSED AHEAD W20-3A 48"X48"	② EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" DETOUR AHEAD W20-2A 48"X48"	③ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" MO5-1L 21"X21"	④ ROAD CLOSED 500 FT W20-3D 48"X48"	⑤ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	⑥ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	⑦ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" MO5-1R 21"X21"	⑧ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	⑨ DETOUR M4-8 24"X12" EAST COUNTY VV	⑩ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" M5-2R 21"X21"
⑪ DETOUR M4-8 24"X12" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24" M6-2 21"X21"	⑫ M4-9L 30"X24" DETOUR TYPE III BARRICADE	⑬ COVER EXISTING SIGNS	⑭ MODIFY EXISTING SIGNS FROM JCT COUNTY VV TO EAST M3-2 24"X12" COUNTY VV MO5-1L 21"X21"	⑮ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	⑯ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24"	⑰ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	⑱ WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" DETOUR AHEAD W20-2A 48"X48"	⑲ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO5-1R 21"X21"	⑳ R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC TYPE III BARRICADE
㉑ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	㉒ DETOUR AHEAD W20-2A 48"X48"	㉓ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	㉔ M4-9R 30"X24" DETOUR TYPE III BARRICADE	㉕ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO5-1L 21"X21"	㉖ CO FAIRGROUNDS D1-2 66"X30"	㉗ END DETOUR M4-8A 24"X18" EAST M3-2 24"X12" COUNTY VV M1-5A 24"X24"	㉘ DETOUR M4-8 24"X12" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24" MO6-1 21"X21"	㉙ FROM COUNTY M TO NORTH M3-1 24"X12" COUNTY M MO6-1 21"X21"	㉚ END DETOUR M4-8A 24"X18" WEST M3-4 24"X12" COUNTY VV M1-5A 24"X24"

2

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	DETOUR - DETAIL 1	SHEET 80	E



LEGEND

- SIGN LOCATION
- TYPE II BARRICADE WITH SIGN AND ONE WARNING LIGHT TYPE A
- PROPOSED DETOUR ROUTE
- WORK AREA
- (A) TEMPORARY CROSSWALK ACROSS PIONEER ROAD WITHIN WORK ZONE.
- (B) TEMPORARY CROSSWALK ACROSS MARTIN AVENUE OUTSIDE WORK ZONE.
- (C) TEMPORARY PEDESTRIAN SURFACE ASPHALT WITH TEMPORARY PEDESTRIAN BARRICADE.

SIDEWALK CLOSED	M4-60L	M4-60R	M4-60D
R9-9 24"X12"	30"X24"	30"X24"	30"X24"
(1)	(2)	(3)	(4)

GENERAL NOTES - PEDESTRIAN ACCOMMODATIONS

REFER TO SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILS.

TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE PROJECT. TEMPORARY CROSSWALKS SHALL BE PROVIDED AT ALL TIMES FOR A MINIMUM OF ONE NORTH-SOUTH LEG OF THE INDICATED INTERSECTIONS AS DIRECTED BY THE FIELD ENGINEER.

POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

FURNISH AND INSTALL TEMPORARY CURB RAMPS WHEN EXISTING OR FINISHED CURB RAMPS ARE NOT IN PLACE.

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OR SEQUENCE OF OPERATION.
MAP SHOWN IS NOT TO SCALE.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PEDESTRIAN DETOUR - EAST MARTIN AVENUE CURB RAMPS CLOSED	SHEET 81	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-027011-DT.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS
WISDOT/CADDS SHEET 42

2

2

N

MARTIN AVENUE

MARTIN AVENUE

MARTIN PLACE

STERLING DRIVE

CTH VV
PIONEER ROAD

THEISEN MIDDLE SCHOOL

LEGEND

- SIGN LOCATION
- TYPE II BARRICADE WITH SIGN AND ONE WARNING LIGHT TYPE A
- PROPOSED DETOUR ROUTE
- WORK AREA
- (A) TEMPORARY CROSSWALK ACROSS PIONEER ROAD WITHIN WORK ZONE.
- (B) TEMPORARY CROSSWALK ACROSS MARTIN AVENUE OUTSIDE WORK ZONE.
- (C) TEMPORARY PEDESTRIAN SURFACE ASPHALT WITH TEMPORARY PEDESTRIAN BARRICADE.

SIDEWALK CLOSED	M4-60L	M4-60R	M4-60D
R9-9 24"X12"	30"X24"	30"X24"	30"X24"
(1)	(2)	(3)	(4)

GENERAL NOTES - PEDESTRIAN ACCOMMODATIONS

REFER TO SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILS.

TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE PROJECT. TEMPORARY CROSSWALKS SHALL BE PROVIDED AT ALL TIMES FOR A MINIMUM OF ONE NORTH-SOUTH LEG OF THE INDICATED INTERSECTIONS AS DIRECTED BY THE FIELD ENGINEER.

POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

FURNISH AND INSTALL TEMPORARY CURB RAMPS WHEN EXISTING OR FINISHED CURB RAMPS ARE NOT IN PLACE.

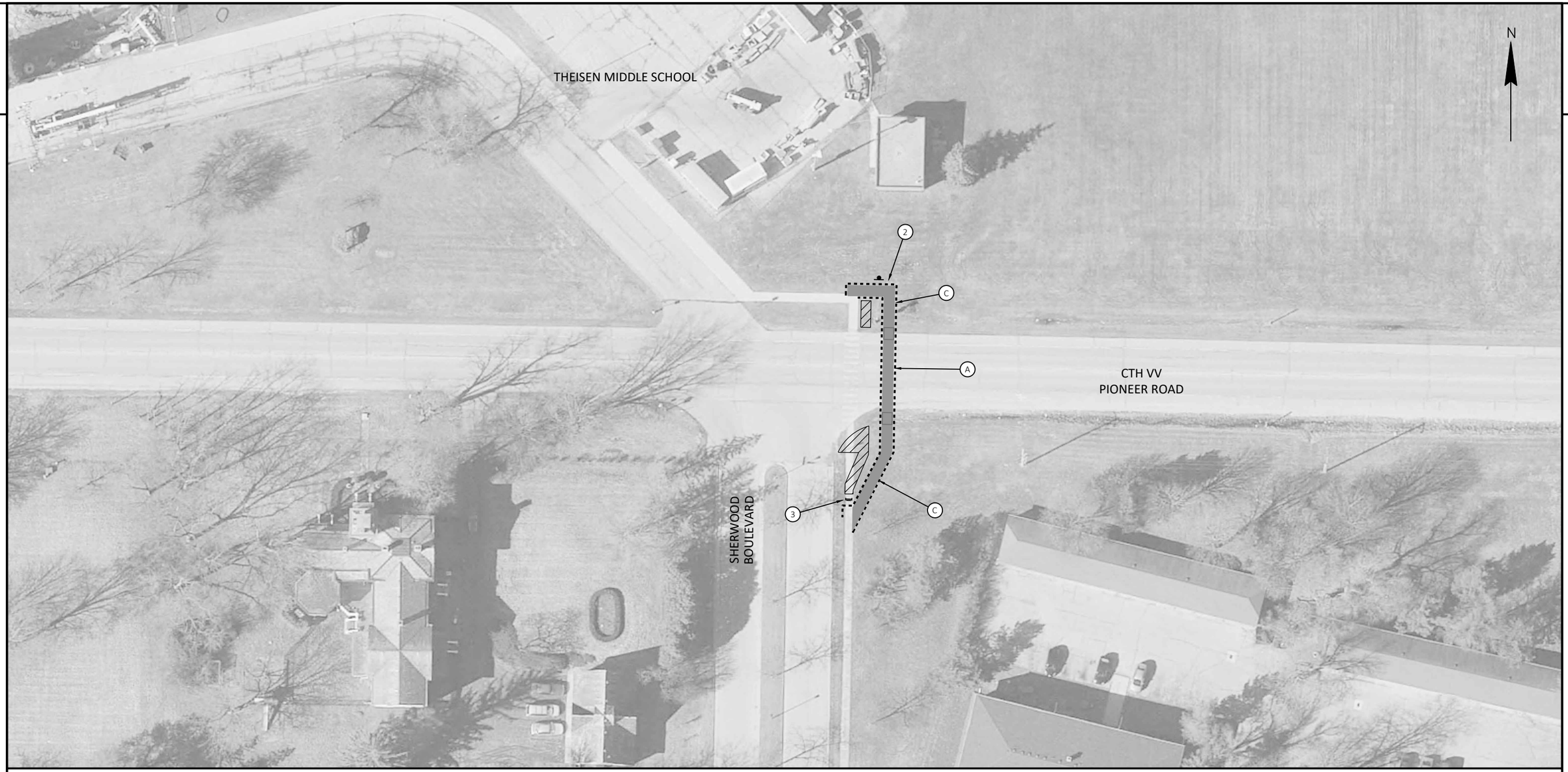
DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OR SEQUENCE OF OPERATION.
MAP SHOWN IS NOT TO SCALE.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PEDESTRIAN DETOUR - WEST MARTIN AVENUE CURB RAMPS CLOSED	SHEET 82	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-027011-DT.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

WISDOT/CADDS SHEET 42



LEGEND

- SIGN LOCATION
- TYPE II BARRICADE WITH SIGN AND ONE WARNING LIGHT TYPE A
- PROPOSED DETOUR ROUTE
- WORK AREA
- (A) TEMPORARY CROSSWALK ACROSS PIONEER ROAD WITHIN WORK ZONE.
- (B) TEMPORARY CROSSWALK ACROSS MARTIN AVENUE OUTSIDE WORK ZONE.
- (C) TEMPORARY PEDESTRIAN SURFACE ASPHALT WITH TEMPORARY PEDESTRIAN BARRICADE.



R9-9
24"X12"
(1)

M4-60L
30"X24"
(2)

M4-60R
30"X24"
(3)

M4-60D
30"X24"
(4)

GENERAL NOTES - PEDESTRIAN ACCOMMODATIONS

REFER TO SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILS.

TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE PROJECT. TEMPORARY CROSSWALKS SHALL BE PROVIDED AT ALL TIMES FOR A MINIMUM OF ONE NORTH-SOUTH LEG OF THE INDICATED INTERSECTIONS AS DIRECTED BY THE FIELD ENGINEER.

POST MOUNTED SIGNS LOCATED NEAR OR ADJACENT TO THE SIDEWALK SHALL HAVE A 7-FT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE EXISTING OR NEW SIDEWALK.

FURNISH AND INSTALL TEMPORARY CURB RAMPS WHEN EXISTING OR FINISHED CURB RAMPS ARE NOT IN PLACE.

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON FIELD CONDITIONS AND THE CONTRACTOR'S METHODS OR SEQUENCE OF OPERATION.

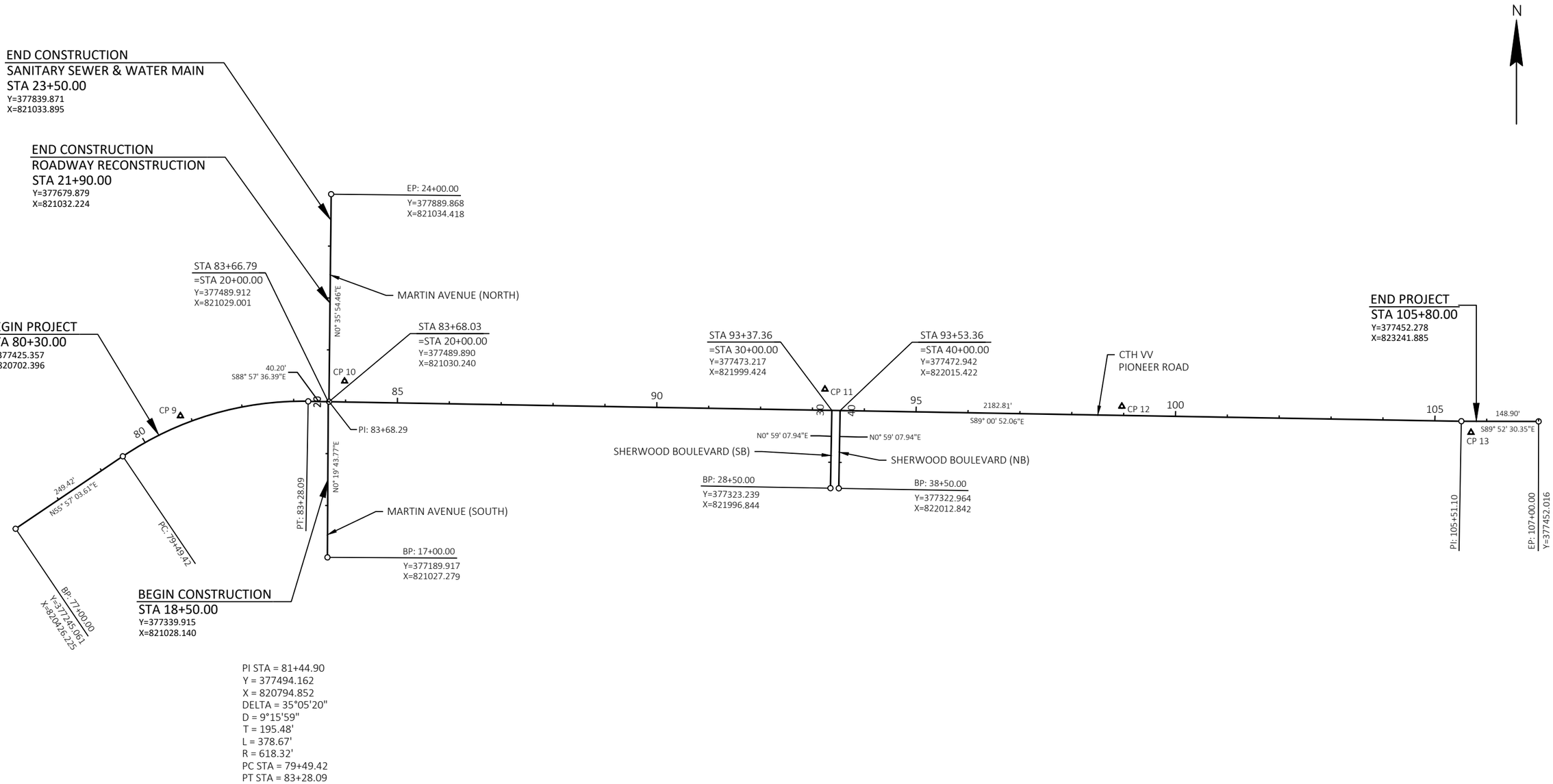
MAP SHOWN IS NOT TO SCALE.

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PEDESTRIAN DETOUR - SHERWOOD BOULEVARD CURB RAMP CLOSED	SHEET 83	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-027011-DT.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : NTS

2



PI STA = 81+44.90
Y = 377494.162
X = 820794.852
DELTA = 35°05'20"
D = 9°15'59"
T = 195.48'
L = 378.67'
R = 618.32'
PC STA = 79+49.42
PT STA = 83+28.09

CONTROL POINT TABLE

POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
9	MAG NAIL IN ASPHALT, NORTH SIDE OF CTH VV, 100' EAST OF OLD PIONEER ROAD (EAST)	377462.6190	820743.8390	808.58
10	MAG NAIL IN SIDEWALK JOINT, NORTHEAST CORNER OF CTH VV AND MARTIN AVENUE	377529.3420	821060.3590	808.75
11	MAG NAIL IN CONCRETE JOINT, NORTH SIDE OF CTH VV, EAST SIDE OF EAST THEISEN SCHOOL DRIVEWAY	377513.9570	821986.1510	819.36
12	MAG NAIL IN ASPHALT, NORTH SIDE OF CTH VV, 100' WEST OF DRIVEWAY TO #W5371	377481.0140	822558.4920	819.67
13	MAG NAIL IN ASPHALT FLUME, SOUTH SIDE OF CTH VV, WEST OF DRIVEWAY TO #W5324	377430.6650	823231.5960	820.12

Estimate Of Quantities

4831-05-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	12.000	12.000
0004	203.0100	Removing Small Pipe Culverts	EACH	11.000	11.000
0006	203.0216.S	Abatement of Asbestos Containing Material (project) 001. 4831-05-71	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	1,155.000	1,155.000
0010	204.0150	Removing Curb & Gutter	LF	475.000	475.000
0012	204.0155	Removing Concrete Sidewalk	SY	570.000	570.000
0014	204.0195	Removing Concrete Bases	EACH	9.000	9.000
0016	204.0210	Removing Manholes	EACH	5.000	5.000
0018	204.0220	Removing Inlets	EACH	7.000	7.000
0020	204.0245	Removing Storm Sewer (size) 001. 6-Inch	LF	116.000	116.000
0022	204.0245	Removing Storm Sewer (size) 002. 12-Inch	LF	130.000	130.000
0024	204.0245	Removing Storm Sewer (size) 003. 15-Inch	LF	104.000	104.000
0026	204.0245	Removing Storm Sewer (size) 004. 24-Inch	LF	534.000	534.000
0028	204.0245	Removing Storm Sewer (size) 005. 42-Inch	LF	34.000	34.000
0030	204.0245	Removing Storm Sewer (size) 006. 46x72-Inch	LF	52.000	52.000
0032	205.0100	Excavation Common	CY	15,835.000	15,835.000
0034	213.0100	Finishing Roadway (project) 001. 4831-05-71	EACH	1.000	1.000
0036	305.0110	Base Aggregate Dense 3/4-Inch	TON	455.000	455.000
0038	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,390.000	8,390.000
0040	305.0130	Base Aggregate Dense 3-Inch	TON	14,515.000	14,515.000
0042	415.0080	Concrete Pavement 8-Inch	SY	411.000	411.000
0044	415.4100	Concrete Pavement Joint Filling	SY	467.000	467.000
0046	416.0610	Drilled Tie Bars	EACH	40.000	40.000
0048	416.0620	Drilled Dowel Bars	EACH	22.000	22.000
0050	455.0605	Tack Coat	GAL	725.000	725.000
0052	460.2000	Incentive Density HMA Pavement	DOL	2,820.000	2,820.000
0054	460.6223	HMA Pavement 3 MT 58-28 S	TON	2,840.000	2,840.000
0056	460.6224	HMA Pavement 4 MT 58-28 S	TON	1,620.000	1,620.000
0058	465.0105	Asphaltic Surface	TON	425.000	425.000
0060	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	43.000	43.000
0062	465.0315	Asphaltic Flumes	SY	10.000	10.000
0064	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000
0066	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0068	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	205.000	205.000
0070	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	5,275.000	5,275.000
0072	602.0405	Concrete Sidewalk 4-Inch	SF	12,175.000	12,175.000
0074	602.0415	Concrete Sidewalk 6-Inch	SF	760.000	760.000
0076	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	140.000	140.000
0078	602.0810	Concrete Driveway 6-Inch	SY	560.000	560.000
0080	602.0820	Concrete Driveway 8-Inch	SY	535.000	535.000
0082	606.0200	Riprap Medium	CY	15.000	15.000
0084	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	1,394.000	1,394.000
0086	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	474.000	474.000
0088	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	591.000	591.000
0090	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	449.000	449.000
0092	608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	8.000	8.000
0094	608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	346.000	346.000
0096	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	61.000	61.000
0098	611.0530	Manhole Covers Type J	EACH	18.000	18.000
0100	611.0612	Inlet Covers Type C	EACH	4.000	4.000

4831-05-71

Line	Item	Item Description	Unit	Total	Qty
0102	611.0624	Inlet Covers Type H	EACH	14.000	14.000
0104	611.0639	Inlet Covers Type H-S	EACH	6.000	6.000
0106	611.0642	Inlet Covers Type MS	EACH	6.000	6.000
0108	611.0645	Inlet Covers Type MS-A	EACH	2.000	2.000
0110	611.1230	Catch Basins 2x3-FT	EACH	20.000	20.000
0112	611.2004	Manholes 4-FT Diameter	EACH	5.000	5.000
0114	611.2005	Manholes 5-FT Diameter	EACH	7.000	7.000
0116	611.2006	Manholes 6-FT Diameter	EACH	3.000	3.000
0118	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0120	611.2009	Manholes 9-FT Diameter	EACH	2.000	2.000
0122	611.3003	Inlets 3-FT Diameter	EACH	4.000	4.000
0124	611.3901	Inlets Median 1 Grate	EACH	6.000	6.000
0126	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0128	611.9850.S	Pipe Grates (size) 001. 24-Inch	EACH	1.000	1.000
0130	618.0100	Maintenance and Repair of Haul Roads (project) 001. 4831-05-71	EACH	1.000	1.000
0132	619.1000	Mobilization	EACH	1.000	1.000
0134	624.0100	Water	MGAL	327.000	327.000
0136	625.0100	Topsoil	SY	12,760.000	12,760.000
0138	628.1504	Silt Fence	LF	1,285.000	1,285.000
0140	628.1520	Silt Fence Maintenance	LF	1,285.000	1,285.000
0142	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0144	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0146	628.2006	Erosion Mat Urban Class I Type A	SY	12,760.000	12,760.000
0148	628.7005	Inlet Protection Type A	EACH	13.000	13.000
0150	628.7010	Inlet Protection Type B	EACH	13.000	13.000
0152	628.7015	Inlet Protection Type C	EACH	20.000	20.000
0154	628.7020	Inlet Protection Type D	EACH	10.000	10.000
0156	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0158	628.7560	Tracking Pads	EACH	2.000	2.000
0160	628.7570	Rock Bags	EACH	145.000	145.000
0162	629.0210	Fertilizer Type B	CWT	8.000	8.000
0164	630.0140	Seeding Mixture No. 40	LB	230.000	230.000
0166	630.0500	Seed Water	MGAL	285.000	285.000
0168	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	2.000	2.000
0170	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	22.000	22.000
0172	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0174	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	2.000	2.000
0176	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000	2.000
0178	637.2210	Signs Type II Reflective H	SF	101.180	101.180
0180	637.2215	Signs Type II Reflective H Folding	SF	20.720	20.720
0182	637.2230	Signs Type II Reflective F	SF	52.640	52.640
0184	638.2102	Moving Signs Type II	EACH	11.000	11.000
0186	638.2602	Removing Signs Type II	EACH	21.000	21.000
0188	638.3000	Removing Small Sign Supports	EACH	22.000	22.000
0190	638.4000	Moving Small Sign Supports	EACH	7.000	7.000
0192	642.5001	Field Office Type B	EACH	1.000	1.000
0194	643.0300	Traffic Control Drums	DAY	15,200.000	15,200.000
0196	643.0410	Traffic Control Barricades Type II	DAY	1,216.000	1,216.000
0198	643.0420	Traffic Control Barricades Type III	DAY	1,520.000	1,520.000
0200	643.0705	Traffic Control Warning Lights Type A	DAY	4,256.000	4,256.000

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Line	Item	Item Description	Unit	Total	Qty
0202	643.0900	Traffic Control Signs	DAY	4,256.000	4,256.000
0204	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0206	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	149.000	149.000
0208	643.5000	Traffic Control	EACH	1.000	1.000
0210	644.1410	Temporary Pedestrian Surface Asphalt	SF	3,450.000	3,450.000
0212	644.1601	Temporary Pedestrian Curb Ramp	DAY	1,520.000	1,520.000
0214	644.1810	Temporary Pedestrian Barricade	LF	1,310.000	1,310.000
0216	645.0120	Geotextile Type HR	SY	45.000	45.000
0218	646.1005	Marking Line Paint 4-Inch	LF	10.000	10.000
0220	646.1020	Marking Line Epoxy 4-Inch	LF	11,920.000	11,920.000
0222	646.3005	Marking Line Paint 8-Inch	LF	10.000	10.000
0224	646.3020	Marking Line Epoxy 8-Inch	LF	355.000	355.000
0226	646.5005	Marking Arrow Paint	EACH	4.000	4.000
0228	646.5020	Marking Arrow Epoxy	EACH	21.000	21.000
0230	646.6120	Marking Stop Line Epoxy 18-Inch	LF	95.000	95.000
0232	646.7120	Marking Diagonal Epoxy 12-Inch	LF	140.000	140.000
0234	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	580.000	580.000
0236	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0238	646.9000	Marking Removal Line 4-Inch	LF	300.000	300.000
0240	650.4000	Construction Staking Storm Sewer	EACH	55.000	55.000
0242	650.4500	Construction Staking Subgrade	LF	2,950.000	2,950.000
0244	650.5000	Construction Staking Base	LF	2,850.000	2,850.000
0246	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	5,265.000	5,265.000
0248	650.7000	Construction Staking Concrete Pavement	LF	100.000	100.000
0250	650.9000	Construction Staking Curb Ramps	EACH	12.000	12.000
0252	650.9500	Construction Staking Sidewalk (project) 001. 4831-05-71	EACH	1.000	1.000
0254	650.9911	Construction Staking Supplemental Control (project) 001. 4831-05-71	EACH	1.000	1.000
0256	650.9920	Construction Staking Slope Stakes	LF	2,950.000	2,950.000
0258	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	5,386.000	5,386.000
0260	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	835.000	835.000
0262	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	623.000	623.000
0264	652.0800	Conduit Loop Detector	LF	1,446.000	1,446.000
0266	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	6.000	6.000
0268	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	21.000	21.000
0270	654.0101	Concrete Bases Type 1	EACH	12.000	12.000
0272	654.0105	Concrete Bases Type 5	EACH	12.000	12.000
0274	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0276	655.0230	Cable Traffic Signal 5-14 AWG	LF	807.000	807.000
0278	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,670.000	2,670.000
0280	655.0320	Cable Type UF 2-10 AWG Grounded	LF	715.000	715.000
0282	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,432.000	1,432.000
0284	655.0610	Electrical Wire Lighting 12 AWG	LF	5,077.000	5,077.000
0286	655.0615	Electrical Wire Lighting 10 AWG	LF	2,639.000	2,639.000
0288	655.0625	Electrical Wire Lighting 6 AWG	LF	7,917.000	7,917.000
0290	655.0700	Loop Detector Lead In Cable	LF	3,965.000	3,965.000
0292	655.0800	Loop Detector Wire	LF	3,342.000	3,342.000
0294	656.0201	Electrical Service Meter Breaker Pedestal (location) 001. CTH VV & Martin Ave	EACH	1.000	1.000
0296	657.0100	Pedestal Bases	EACH	12.000	12.000
0298	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	12.000	12.000
0300	657.0322	Poles Type 5-Aluminum	EACH	12.000	12.000

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Line	Item	Item Description	Unit	Total	Qty
0302	657.0350	Poles Type 10	EACH	4.000	4.000
0304	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	4.000	4.000
0306	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	8.000	8.000
0308	657.0525	Monotube Arms 25-FT	EACH	3.000	3.000
0310	657.0530	Monotube Arms 30-FT	EACH	1.000	1.000
0312	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	12.000	12.000
0314	657.0806	Luminaire Arms Steel 6-FT	EACH	4.000	4.000
0316	658.0173	Traffic Signal Face 3S 12-Inch	EACH	16.000	16.000
0318	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0320	658.5070	Signal Mounting Hardware (location) 001. CTH VV & Martin Avenue	EACH	1.000	1.000
0322	659.1115	Luminaires Utility LED A	EACH	16.000	16.000
0324	673.0105	Communication Vault Type 1	EACH	1.000	1.000
0326	673.0200	Tracer Wire Marker Posts	EACH	3.000	3.000
0328	690.0150	Sawing Asphalt	LF	685.000	685.000
0330	690.0250	Sawing Concrete	LF	330.000	330.000
0332	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0334	740.0440	Incentive IRI Ride	DOL	1,932.000	1,932.000
0336	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0338	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000
0340	SPV.0060	Special 001. Moving Solar Powered Sign & Support	EACH	2.000	2.000
0342	SPV.0060	Special 002. Rectangular Rapid Flashing Beacon System (STA 93+86, RT)	EACH	1.000	1.000
0344	SPV.0060	Special 003. Rectangular Rapid Flashing Beacon System (STA 93+94, LT)	EACH	1.000	1.000
0346	SPV.0060	Special 004. Removing Flashing Beacon & Base	EACH	1.000	1.000
0348	SPV.0060	Special 101. Connect to Existing Storm Sewer Structure	EACH	1.000	1.000
0350	SPV.0060	Special 102. Bulkhead Pipe	EACH	2.000	2.000
0352	SPV.0060	Special 103. Storm Sewer Cap 8-Inch	EACH	1.000	1.000
0354	SPV.0060	Special 208. Furnish & Install Traffic Signal Cabinet and Controller Black	EACH	1.000	1.000
0356	SPV.0060	Special 209. Furnish & Install APS System (CTH VV & Martin Avenue)	EACH	1.000	1.000
0358	SPV.0060	Special 210. Salvage & Reinstall GPS EVP System (CTH VV & Martin Avenue)	EACH	1.000	1.000
0360	SPV.0060	Special 211. Salvage Traffic Signals (CTH VV & Martin Avenue)	EACH	1.000	1.000
0362	SPV.0060	Special 301. Removing Sanitary Sewer Manholes	EACH	6.000	6.000
0364	SPV.0060	Special 302. Connect to Existing Sanitary Sewer Manhole	EACH	1.000	1.000
0366	SPV.0060	Special 303. Connect to Existing Sanitary Sewer Pipe	EACH	3.000	3.000
0368	SPV.0060	Special 304. Sanitary Sewer Manholes 4-FT Diameter with Casting	EACH	4.000	4.000
0370	SPV.0060	Special 305. Adjusting Sanitary Sewer Manholes	EACH	2.000	2.000
0372	SPV.0060	Special 401. Removing Hydrant	EACH	4.000	4.000
0374	SPV.0060	Special 402. Relocate Hydrant	EACH	1.000	1.000
0376	SPV.0060	Special 403. Temporary Blow Off 2-Inch	EACH	8.000	8.000
0378	SPV.0060	Special 404. Water Service Corp, Stop, Box Saddle and Union 1¼-Inch	EACH	10.000	10.000
0380	SPV.0060	Special 405. Water Gate Valve 4-Inch	EACH	2.000	2.000
0382	SPV.0060	Special 406. Water Gate Valve 6-Inch	EACH	6.000	6.000
0384	SPV.0060	Special 407. Water Gate Valve 8-Inch	EACH	1.000	1.000
0386	SPV.0060	Special 408. Water Gate Valve 10-Inch	EACH	2.000	2.000
0388	SPV.0060	Special 409. Water Gate Valve 12-Inch	EACH	7.000	7.000
0390	SPV.0060	Special 410. Water Tee 8x8-Inch	EACH	1.000	1.000
0392	SPV.0060	Special 411. Water Tee 10x6-Inch	EACH	1.000	1.000
0394	SPV.0060	Special 412. Water Tee 10x10-Inch	EACH	2.000	2.000
0396	SPV.0060	Special 413. Water Tee 12x4-Inch	EACH	2.000	2.000
0398	SPV.0060	Special 414. Water Tee 12x6-Inch	EACH	5.000	5.000
0400	SPV.0060	Special 415. Water Tee 12x12-Inch	EACH	2.000	2.000

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Line	Item	Item Description	Unit	Total	Qty
0402	SPV.0060	Special 416. Water Cross 12x10-Inch	EACH	1.000	1.000
0404	SPV.0060	Special 417. Water Cross 12x12-Inch	EACH	1.000	1.000
0406	SPV.0060	Special 418. Water 11.25 Deg Bend 6-Inch	EACH	1.000	1.000
0408	SPV.0060	Special 419. Water 11.25 Deg Bend 12-Inch	EACH	2.000	2.000
0410	SPV.0060	Special 420. Water 22.5 Deg Bend 4-Inch	EACH	2.000	2.000
0412	SPV.0060	Special 421. Water 22.5 Deg Bend 6-Inch	EACH	2.000	2.000
0414	SPV.0060	Special 422. Water 22.5 Deg Bend 12-Inch	EACH	1.000	1.000
0416	SPV.0060	Special 423. Water 45 Deg Bend 12-Inch	EACH	7.000	7.000
0418	SPV.0060	Special 424. Water 90 Deg Bend 8-Inch	EACH	1.000	1.000
0420	SPV.0060	Special 425. Water 90 Deg Bend 10-Inch	EACH	2.000	2.000
0422	SPV.0060	Special 426. Water Reducer 12x8-Inch	EACH	1.000	1.000
0424	SPV.0060	Special 427. Connect to Existing 4-Inch Water Main	EACH	2.000	2.000
0426	SPV.0060	Special 428. Connect to Existing 6-Inch Water Main	EACH	2.000	2.000
0428	SPV.0060	Special 429. Connect to Existing 8-Inch Water Main	EACH	1.000	1.000
0430	SPV.0060	Special 430. Connect to Existing 10-Inch Water Main	EACH	2.000	2.000
0432	SPV.0060	Special 431. Connect to Existing 12-Inch Water Main	EACH	4.000	4.000
0434	SPV.0060	Special 432. Water Plug 8-Inch	EACH	1.000	1.000
0436	SPV.0060	Special 433. Water Plug 10-Inch	EACH	2.000	2.000
0438	SPV.0060	Special 434. Water Plug 12-Inch	EACH	1.000	1.000
0440	SPV.0060	Special 435. Water Cap 8-Inch	EACH	1.000	1.000
0442	SPV.0060	Special 436. Water Cap 10-Inch	EACH	2.000	2.000
0444	SPV.0060	Special 437. Water Cap 12-Inch	EACH	2.000	2.000
0446	SPV.0060	Special 438. Water Hydrant	EACH	4.000	4.000
0448	SPV.0060	Special 439. Abandon Water Main	EACH	1.000	1.000
0450	SPV.0075	Special 001. Street Sweeping	HRS	44.000	44.000
0452	SPV.0090	Special 101. Storm Sewer Lateral	LF	22.000	22.000
0454	SPV.0090	Special 301. Removing Sanitary Sewer Pipe Non-Asbestos	LF	400.000	400.000
0456	SPV.0090	Special 302. Removing Sanitary Sewer Pipe Asbestos	LF	760.000	760.000
0458	SPV.0090	Special 303. Sanitary Sewer PVC 8-Inch	LF	1,138.000	1,138.000
0460	SPV.0090	Special 304. Sanitary Sewer Lateral PVC 6-Inch	LF	185.000	185.000
0462	SPV.0090	Special 401. Water Main PVC 4-Inch	LF	92.000	92.000
0464	SPV.0090	Special 402. Water Main PVC 6-Inch	LF	175.000	175.000
0466	SPV.0090	Special 403. Water Main PVC 8-Inch	LF	33.000	33.000
0468	SPV.0090	Special 404. Water Main PVC 10-Inch	LF	287.000	287.000
0470	SPV.0090	Special 405. Water Main PVC 12-Inch	LF	2,479.000	2,479.000
0472	SPV.0090	Special 406. Water Service Pipe PE 1¼-Inch	LF	453.000	453.000

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GRUBBING

STATION - STATION	201.0205 STA
CATEGORY CODE 0010	
83+00-86+00	3
90+00-93+00	3
98+00-103+00	5
104+00-105+00	1
PROJECT TOTAL	**12**

REMOVING ITEMS

STATION - STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY
CATEGORY CODE 0010				
81+54-83+35	LT	--	--	97
84+00-89+14	LT + RT	275	--	169
89+14-92+57	RT	--	--	6
92+57-93+86	LT	203	--	71
103+70-105+80	LT+RT	124	6	1
18+50-21+90	LT+RT	553	459	195
39+40-39+76	RT	--	--	15
CATEGORY CODE 0010 SUBTOTALS		1,155	465	554
CATEGORY CODE 0020				
21+84	RT	--	--	11
22+81	LT	--	10	5
CATEGORY CODE 0020 SUBTOTALS		--	10	16
PROJECT TOTALS		**1,155**	**475**	**570**

REMOVING STORM SEWER ITEMS

STATION - STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER 6-INCH LF	204.0245.02 REMOVING STORM SEWER 12-INCH LF	204.0245.03 REMOVING STORM SEWER 15-INCH LF	204.0245.04 REMOVING STORM SEWER 24-INCH LF	204.0245.05 REMOVING STORM SEWER 42-INCH LF	204.0245.06 REMOVING STORM SEWER 46x72-INCH LF
CATEGORY CODE 0010										
83+77 - 87+90	LT & RT	--	4	--	--	--	--	454	--	--
85+62 - 85+70	LT & RT	--	--	1	--	32	--	--	--	--
86+77 - 86+93	LT	--	--	1	--	9	31	--	--	--
87+06	LT	1	--	--	--	--	--	--	--	--
87+47 - 89+25	LT	1	--	--	--	--	--	--	--	--
89+21	LT	1	--	--	--	--	--	--	--	--
96+14 - 96+17	RT	--	--	--	21	--	--	--	--	--
98+46	RT	1	--	--	--	--	--	--	--	--
99+38	RT	1	--	--	--	--	--	--	--	--
100+06	LT	1	--	--	--	--	--	--	--	--
100+90	LT	1	--	--	--	--	--	--	--	--
101+86 - 102+05	RT	--	--	--	--	--	29	--	--	--
101+96 - 102+12	LT & RT	--	1	--	--	--	--	--	34	52
102+40	LT	1	--	--	--	--	--	--	--	--
102+57	RT	1	--	--	--	--	--	--	--	--
103+91	LT	1	--	--	--	--	--	--	--	--
104+92	LT	1	--	--	--	--	--	--	--	--
105+57 - 105+73	RT	--	--	--	--	--	--	33	--	--
19+39 - 20+54	LT & RT	--	--	3	31	89	44	--	--	--
20+16 - 20+62	RT	--	--	--	--	--	--	47	--	--
39+58	LT & RT	--	--	2	64	--	--	--	--	--
PROJECT TOTALS		**11**	**5**	**7**	**116**	**130**	**104**	**534**	**34**	**52**

BASE AGGREGATE DENSE AND WATER ITEMS

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	624.0100 WATER MGAL	COMMENTS
CATEGORY CODE 0010						
80+30 - 105+80	LT & RT	455	8,135	12,634	297	--
18+50 - 19+51	LT & RT	--	191	--	3	--
UNDISTRIBUTED EBS		--	--	1,740	24	--
CATEGORY CODE 0010 SUBTOTALS		455	8,326	14,374	324	
CATEGORY CODE 0020						
21+90 - 23+50	LT & RT	--	64	141	3	SEWER TRENCH
CATEGORY CODE 0020 SUBTOTALS		--	64	141	3	
PROJECT TOTALS		**455**	**8,390**	**14,515**	**327**	

BASE AGGREGATE DENSE 3/4-INCH WEIGHT CALCULATIONS BASED ON 2.1 TONS/CY.
BASE AGGREGATE DENSE 1 1/4-INCH WEIGHT CALCULATIONS BASED ON 2.0 TONS/CY.
BASE AGGREGATE DENSE 3-INCH WEIGHT CALCULATIONS BASED ON 2.2 TONS/CY.

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.30	MASS ORDINATE +/- (14)	WASTE
DIVISION 1										
CTH VV	80+30/105+80	CTH VV	13,700	753	1,581	12,119	1,697	2,206	9,913	9,913
MARTIN AVENUE (SOUTH)	18+50/19+78	MARTIN AVENUE (SOUTH)	494	0	147	347	0	0	347	347
MARTIN AVENUE (NORTH)	20+22/21+90	MARTIN AVENUE (NORTH)	669	0	136	533	2	3	530	530
SHERWOOD BOULEVARD (SB)	29+40/29+78	SHERWOOD BOULEVARD (SB)	107	0	24	83	0	0	83	83
SHERWOOD BOULEVARD (NB)	39+40/39+78	SHERWOOD BOULEVARD (NB)	112	0	23	89	0	0	89	89
DIVISION 1 SUBTOTAL			15,082	753	1,911	13,171	1,699	2,209	10,962	10,962
GRAND TOTAL			15,082	753	1,911	13,171	1,699	2,209	10,962	10,962
TOTAL COMMON EXC			15,835							

NOTES:
(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.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BASE AGGREGATE DENSE 3-INCH.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) NOT USED
(7) NOT USED
(8) NOT USED
(9) NOT USED
(10) NOT USED
(11) NOT USED
(12) NOT USED
(13) EXPANDED FILL FACTOR = 1.30. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(14) 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.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.4100 CONCRETE PAVEMENT JOINT FILLING SY
CATEGORY CODE 0010			
19+00-19+57	LT+RT	411	467
PROJECT TOTALS		**411**	**467**

DRILLED TIE BARS AND DRILLED DOWEL BARS

STATION - STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
CATEGORY CODE 0010			
105+80	LT+RT	6	--
18+50	LT+RT	6	22
21+90	LT+RT	6	--
39+40	LT+RT	12	--
CATEGORY CODE 0010 SUBTOTALS		30	22
CATEGORY CODE 0020			
22+81	--	10	--
CATEGORY CODE 0020 SUBTOTALS		10	--
PROJECT TOTALS		**40**	**22**

3

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	COMMENTS
CATEGORY CODE 0010						
80+30-105+80	LT & RT	715	2,800	1,595	425	--
CATEGORY CODE 0010 SUBTOTALS		715	2,800	1,595	425	
CATEGORY CODE 0020						
21+90-23+50	LT & RT	10	40	25	--	SEWER TRENCH
CATEGORY CODE 0020 SUBTOTALS		10	40	25	--	
PROJECT TOTALS		**725**	**2,840**	**1,620**	**425**	

HMA PAVEMENT WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.
TACK COAT CALCULATIONS BASED ON 0.050 GAL/SY
ASPHALTIC SURFACE WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.

DRIVEWAY ITEMS

STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	602.0810 CONCRETE DRIVEWAY 6-INCH SY	602.0820 CONCRETE DRIVEWAY 8-INCH SY
CATEGORY CODE 0010				
85+05	RT	--	58	--
86+15	LT	8	--	54
87+06	LT	5	--	34
87+70	LT	--	--	99
88+98	LT	--	--	120
91+92	RT	2	16	--
92+94	LT	--	--	228
98+45	RT	--	22	--
99+38	RT	3	28	--
100+03	LT	2	22	--
100+85	LT	5	40	--
102+43	LT	6	50	--
102+52	RT	12	50	--
103+83	LT	--	166	--
104+92	LT	--	34	--
21+09	LT	--	50	--
21+44	LT	--	24	--
PROJECT TOTALS		**43**	**560**	**535**

ITEMS FOR GRAVEL DRIVEWAYS SHOWN UNDER THE BASE AGGREGATE DENSE TABLE

ASPHALTIC FLUMES

STATION	LOCATION	465.0315 SY
CATEGRORY CODE 0010		
81+43	LT	5
81+43	RT	5
PROJECT TOTAL		**10**

3

CONCRETE CURB AND GUTTER ITEMS

LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
CATEGORY CODE 0010			
81+43, LT - 21+90, LT	--	364	364
81+43, RT - 19+51, LT	--	213	213
19+51, LT - 18+50, LT	102	--	--
21+90, RT - 105+80, LT	--	2,349	2,349
18+50, RT - 19+51, RT	103	--	--
19+51, RT - 29+40, LT	--	966	966
39+40, LT - 39+53, LT	--	141	141
39+40, RT - 105+80, RT	--	1,232	1,232
CATEGORY CODE 0010 SUBTOTALS	205	5,265	5,265
CATEGORY CODE 0020			
22+81, LT	--	10	--
CATEGORY CODE 0020 SUBTOTALS	--	10	--
PROJECT TOTALS	**205**	**5,275**	**5,265**

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
CATEGORY CODE 0010				
81+54-81+67	LT	100	--	--
84+09-105+80	LT & RT	10,610	121	40
19+00-21+90	LT & RT	1,305	639	100
CATEGORY CODE 0010 SUBTOTALS		12,015	760	140
CATEGORY CODE 0020				
21+85	RT	115	--	--
22+81	LT	45	--	--
CATEGORY CODE 0020 SUBTOTALS		160	--	--
PROJECT TOTALS		**12,175**	**760**	**140**

*CURB RAMPS TO BE PAID FOR AS CONCRETE SIDEWALK 6-INCH

RIPRAP AND GEOTEXTILE FABRIC ITEMS

STATION - STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
CATEGORY CODE 0010			
81+30	LT & RT	4	16
102+02	LT	6	20
UNDISTRIBUTED		5	9
PROJECT TOTALS		**15**	**45**

3

STORM SEWER PIPES

FROM	-	TO	LOCATION	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0348 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	SPV.0090.101 STORM SEWER LATERAL LF
CATEGORY CODE 0010											
100	-	99	MARTIN-NORTH	--	--	8	--	--	--	--	--
100.1	-	100	MARTIN-NORTH	31	--	--	--	--	--	--	--
100.2	-	100	MARTIN-NORTH	11	--	--	--	--	--	--	--
100.3	-	100.2	CTH VV	--	--	--	--	--	--	--	22
101	-	100	MARTIN-NORTH	--	--	--	40	--	--	--	--
101.1	-	101	MARTIN-SOUTH	65	--	--	--	--	--	--	--
101.2	-	101.1	MARTIN-SOUTH	30	--	--	--	--	--	--	--
101.3	-	101.1	MARTIN-SOUTH	12	--	--	--	--	--	--	--
102	-	101	CTH VV	--	--	--	38	--	--	--	--
102.1	-	102	CTH VV	10	--	--	--	--	--	--	--
102.2	-	102	CTH VV	38	--	--	--	--	--	--	--
103	-	102	CTH VV	--	--	--	156	--	--	--	--
103.1	-	103	CTH VV	59	--	--	--	--	--	--	--
104	-	103	CTH VV	--	--	--	107	--	--	--	--
104.1	-	104	CTH VV	10	--	--	--	--	--	--	--
104.2	-	104.1	CTH VV	31	--	--	--	--	--	--	--
104.3	-	104	CTH VV	38	--	--	--	--	--	--	--
104.4	-	104.3	CTH VV	22	--	--	--	--	--	--	--
105	-	104	CTH VV	--	--	--	93	--	--	--	--
105.1	-	105	CTH VV	--	--	60	--	--	--	--	--
106	-	105	CTH VV	--	--	152	--	--	--	--	--
106.1	-	106	CTH VV	10	--	--	--	--	--	--	--
106.2	-	106.1	CTH VV	42	--	--	--	--	--	--	--
106.3	-	106	CTH VV	38	--	--	--	--	--	--	--
106.4	-	106.3	CTH VV	22	--	--	--	--	--	--	--
107	-	106	CTH VV	--	394	--	--	--	--	--	--
107.1	-	107	SHERWOOD-SB	58	--	--	--	--	--	--	--
107.2	-	107.1	CTH VV	58	--	--	--	--	--	--	--
107.3	-	107.1	MARTIN-SOUTH	42	--	--	--	--	--	--	--
108	-	107	CTH VV	90	--	--	--	--	--	--	--
108.1	-	108	CTH VV	10	--	--	--	--	--	--	--
108.2	-	108	CTH VV	38	--	--	--	--	--	--	--
108.3	-	108.1	CTH VV	49	--	--	--	--	--	--	--
203	-	203.1	CTH VV	--	--	--	--	--	55	--	--
204	-	203	CTH VV	--	80	--	--	--	--	--	--
204.1	-	204	CTH VV	24	--	--	--	--	--	--	--
204.2	-	204	CTH VV	24	--	--	--	--	--	--	--
205	-	204	CTH VV	261	--	--	--	--	--	--	--
205.1	-	205	CTH VV	46	--	--	--	--	--	--	--
301	-	203	CTH VV	--	--	--	--	--	241	--	--
			SHEET SUBTOTALS	**1,169**	**474**	**220**	**434**	**--**	**296**	**--**	**22**

STORM SEWER PIPES - CONTINUED

FROM		TO	LOCATION	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0348 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	SPV.0090.101 STORM SEWER LATERAL LF
CATEGORY CODE 0010											
301	-	300	CTH VV	--	--	--	--	--	--	61	--
302	-	301	CTH VV	--	--	--	--	--	50	--	--
303	-	302	CTH VV	--	--	8	--	--	--	--	--
304	-	302	CTH VV	--	--	--	--	8	--	--	--
400	-	401	CTH VV	--	--	159	--	--	--	--	--
401	-	402	CTH VV	--	--	95	--	--	--	--	--
401.1	-	401	CTH VV	55	--	--	--	--	--	--	--
401.2	-	401	CTH VV	47	--	--	--	--	--	--	--
402	-	403	CTH VV	--	--	109	--	--	--	--	--
402.1	-	402	CTH VV	60	--	--	--	--	--	--	--
403	-	301	CTH VV	--	--	--	15	--	--	--	--
403.1	-	403	CTH VV	24	--	--	--	--	--	--	--
403.2	-	403.1	CTH VV	5	--	--	--	--	--	--	--
403.3	-	403	CTH VV	24	--	--	--	--	--	--	--
403.4	-	403.3	CTH VV	10	--	--	--	--	--	--	--
			SHEET SUBTOTALS	**225**	**--**	**371**	**15**	**8**	**50**	**61**	**--**
			PROJECT TOTALS	**1,394**	**474**	**591**	**449**	**8**	**346**	**61**	**22**

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0645 INLET COVERS TYPE MS-A EACH	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	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2009 MANHOLES 9-FT DIAMETER EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.9850.S PIPE GRATES 24-INCH EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.101 CONNECT TO EXISTING STORM SEWER STRUCTURE EACH	SPV.0060.102 BULKHEAD PIPE EACH
CATEGORY CODE 0010																									
99	20+62.36	8.67' RT	MARTIN-NORTH	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
100	20+54.36	8.66' RT	MARTIN-NORTH	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
100.1	20+54.36	22.50' LT	MARTIN-NORTH	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
100.2	20+54.36	19.50' RT	MARTIN-NORTH	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
101	83+76.59	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--
101.1	19+48.95	11.00' RT	MARTIN-SOUTH	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
101.2	19+48.95	18.50' LT	MARTIN-SOUTH	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
101.3	19+48.95	22.50' RT	MARTIN-SOUTH	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
102	84+14.46	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
102.1	84+14.46	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
102.2	84+16.86	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
103	85+70.00	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
103.1	85+70.00	45.00' RT	CTH VV	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	1	--	--
104	86+77.00	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
104.1	86+77.00	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--
			SHEET SUBTOTALS	**1**	**--**	**6**	**--**	**5**	**2**	**1**	**--**	**7**	**1**	**4**	**1**	**--**	**--**	**--**	**1**	**--**	**--**	**15**	**--**	**--**

*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

STORM SEWER STRUCTURES - CONTINUED

STRUCTURE	STATION	OFFSET*	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0645 INLET COVERS TYPE MS-A EACH	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	611.2007 MANHOLES 7-FT DIAMETER EACH	611.2009 MANHOLES 9-FT DIAMETER EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.9850.S PIPE GRATES 24-INCH EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.101 CONNECT TO EXISTING STORM SEWER STRUCTURE EACH	SPV.0060.102 BULKHEAD PIPE EACH
CATEGORY CODE 0010																								
104.2	86+92.51	50.00' LT	CTH VV	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
104.3	86+77.00	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
104.4	86+77.00	45.00' RT	CTH VV	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	1	--	--
105	87+70.04	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--
105.1	87+90.09	43.00' RT	CTH VV	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
106	89+22.00	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--
106.1	89+22.00	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
106.2	89+22.00	65.00' LT	CTH VV	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--	1	--	--
106.3	89+22.00	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
106.4	89+22.00	45.00' RT	CTH VV	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	1	--	--
107	93+16.41	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
107.1	29+55.70	20.94' LT	SHERWOOD-SB	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
107.2	39+56.07	21.01' RT	SHERWOOD-NB	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
107.3	92+75.00	39.25' RT	CTH VV	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--
108	94+06.00	14.00' LT	CTH VV	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
108.1	94+06.00	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
108.2	94+06.00	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
108.3	94+37.50	61.00' LT	CTH VV	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--	1	--	--
203	99+55.00	0	CTH VV	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	1
203.1	99+55.00	55.00' LT	CTH VV	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1
204	98+75.00	0	CTH VV	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
204.1	98+75.00	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
204.2	98+75.00	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
205	96+14.00	0	CTH VV	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--
205.1	96+14.00	46.00' RT	CTH VV	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--
300	102+01.43	60.77' LT	CTH VV	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--
301	101+96.19	0	CTH VV	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--
302	102+08.13	49.00' RT	CTH VV	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--	--
303	102+00.00	49.00' RT	CTH VV	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	1	--	1	--	--
304	102+12.04	55.98' RT	CTH VV	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
400	105+73.48	0.18' RT	CTH VV	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
401	104+15.00	0	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--
401.1	104+15.00	55.00' LT	CTH VV	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--
401.2	104+25.00	45.50' RT	CTH VV	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	--	1	--	--
402	103+20.00	0	CTH VV	--	--	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	--	--
402.1	103+20.00	60.00' LT	CTH VV	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--
403	102+11.00	0	CTH VV	--	--	1	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	--	--
403.1	102+11.00	23.50' LT	CTH VV	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
403.2	102+16.00	23.50' LT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
403.3	102+11.00	23.50' RT	CTH VV	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
403.4	102+21.00	23.50' RT	CTH VV	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--	--
			SHEET SUBTOTALS	**3**	**1**	**12**	**4**	**9**	**4**	**5**	**2**	**13**	**4**	**3**	**2**	**1**	**2**	**4**	**5**	**1**	**1**	**40**	**1**	**2**
			PROJECT TOTALS	**4**	**1**	**18**	**4**	**14**	**6**	**6**	**2**	**20**	**5**	**7**	**3**	**1**	**2**	**4**	**6**	**1**	**1**	**55**	**1**	**2**

*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

RESTORATION ITEMS

STATION - STATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL
CATEGORY CODE 0010					
80+30,LT - 21+90, LT	758	758	0.48	13.6	17.0
80+30, RT - 18+50, LT	824	824	0.52	14.8	18.5
21+90, RT - 105+80 LT	4,902	4,902	3.09	88.2	110.1
18+50, RT - 29+40 , LT	1,711	1,711	1.08	30.8	38.4
39+53, LT	14	14	0.01	0.2	0.3
39+40, RT - 105+80, RT	1,986	1,986	1.25	35.8	44.6
UNDISTRIBUTED	2,551	2,551	1.56	46.3	55.7
CATEGORY CODE 0010 SUBTOTALS	12,746	12,746	7.99	229.7	284.6
CATEGORY CODE 0020					
22+81, LT	11	11	0.01	0.2	0.3
UNDISTRIBUTED	3	3	--	0.1	0.1
CATEGORY CODE 0020 SUBTOTALS	14	14	0.01	0.3	0.4
PROJECT TOTALS	**12,760**	**12,760**	**8.00**	**230.0**	**285.0**

NOTES: DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A BODY OF WATER OR WETLAND

EROSION CONTROL ITEMS

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH
CATEGORY CODE 0010												
PROJECT 4831-05-71		--	--	5	3	--	--	--	--	--	2	--
80+30	LT & RT	--	--	--	--	--	--	--	--	--	--	30
81+76	LT	--	--	--	--	--	--	--	--	--	--	15
83+94	LT	--	--	--	--	--	--	1	--	--	--	--
84+03	RT	--	--	--	--	--	--	1	--	--	--	--
84+15	LT & RT	--	--	--	--	--	--	2	--	--	--	--
85+70	RT	--	--	--	--	1	1	--	--	--	--	--
86+28	RT	--	--	--	--	--	--	--	--	--	--	15
86+77	LT & RT	--	--	--	--	1	1	1	--	--	--	--
88+00	RT	--	--	--	--	--	--	--	--	--	--	15
89+22	LT & RT	--	--	--	--	2	2	2	--	--	--	--
89+27 - 92+55	LT	329	329	--	--	--	--	--	--	--	--	--
91+13	LT	--	--	--	--	--	--	--	--	--	--	9
904+06	LT & RT	--	--	--	--	--	--	2	--	--	--	--
94+25 - 102+25	LT	697	697	--	--	--	--	--	--	--	--	--
94+38	LT	--	--	--	--	1	1	--	--	--	--	--
96+14	RT	--	--	--	--	1	1	--	--	--	--	--
97+73	LT	--	--	--	--	--	--	--	--	--	--	9
98+75	LT & RT	--	--	--	--	--	--	2	--	--	--	--
102+00	RT	--	--	--	--	1	1	--	--	--	--	--
102+02	LT & RT	--	--	--	--	--	--	--	--	6	--	9
102+13	LT & RT	--	--	--	--	--	--	--	4	--	--	--
103+20	LT	--	--	--	--	1	1	--	--	--	--	--
104+15	LT	--	--	--	--	1	1	--	--	--	--	--
104+25	RT	--	--	--	--	1	1	--	--	--	--	--
105+00	RT	--	--	--	--	--	--	--	--	--	--	15
19+40	LT	--	--	--	--	--	--	1	--	--	--	--
19+49	LT	--	--	--	--	--	--	1	--	--	--	--
19+49	RT	--	--	--	--	--	--	--	1	--	--	--
20+54	LT	--	--	--	--	--	--	1	--	--	--	--
20+54	RT	--	--	--	--	--	--	--	1	--	--	--
23+83	LT & RT	--	--	--	--	--	--	2	--	--	--	--
39+55	LT & RT	--	--	--	--	--	--	--	2	--	--	--
UNDISTRIBUTED		259	259	--	--	3	3	4	2	2	--	28
PROJECT TOTALS		**1,285**	**1,285**	**5**	**3**	**13**	**13**	**20**	**10**	**8**	**2**	**145**

SIGNING ITEMS

SIGN NUMBER	EXISTING STATION	EXISTING LOCATION	PROPOSED STATION	PROPOSED LOCATION	ROADWAY	SIGN CODE	SIZE	634.0612 POSTS WOOD 4X6X12 EACH	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	634.0618 POSTS WOOD 4X6X18 EACH	634.0620 POSTS WOOD 4X6X20 EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.001 MOVING SOLAR POWERED SIGN & SUPPORT EACH	SPV.0060.002 RECTANGULAR RAPID FLASHING BEACON STA 93+86, RT EACH	SPV.0060.003 RECTANGULAR RAPID FLASHING BEACON STA 93+94, LT EACH	SPV.0060.004 REMOVING FLASHING BEACON & BASE EACH	COMMENTS
CATEGORY CODE 0010																								
101	80+95	RT	80+70	RT	CTH VV	W3-3	36X36	--	--	1	--	--	--	--	9.00	--	1	1	--	--	--	--	--	--
102	80+84	LT	80+79	LT	CTH VV	--	---	--	--	--	--	2	--	--	--	1	--	2	--	--	--	--	--	FOND DU LAC INFORMATION SIGN
103	81+63	RT	81+61	RT	CTH VV	--	---	--	--	--	2	--	--	--	--	1	--	2	--	--	--	--	--	FOND DU LAC INFORMATION SIGN
104	81+61	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
105	82+52	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
106	--	--	83+00	LT	CTH VV	R7-1L	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
107	--	--	83+00	RT	CTH VV	R7-1R	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
108	83+16	RT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
109	--	--	83+24	RT	CTH VV	S1-1	30X30	--	--	--	--	--	--	--	4.69	--	--	--	--	--	--	--	--	MOUNT TO TRAFFIC SIGNAL
						S16-7L	24X12	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	
						R1-1F	30X30	--	--	--	--	--	--	5.18	--	--	--	--	--	--	--	--	--	
110	--	--	84+12	LT	CTH VV	S1-1	30X30	--	--	--	--	--	--	--	4.69	--	--	--	--	--	--	--	--	MOUNT TO TRAFFIC SIGNAL
						S16-7L	24X12	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	
						R1-1F	30X30	--	--	--	--	--	--	5.18	--	--	--	--	--	--	--	--	--	
111	84+16	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
112	--	--	84+37	LT	CTH VV	R7-1R	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
113	--	--	84+35	RT	CTH VV	R7-1L	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
201	--	--	85+75	LT	CTH VV	D1-1	72X12	2	--	--	--	--	6.00	--	--	--	--	--	--	--	--	--	--	CO FAIRGROUNDS (RIGHT)
202	85+76	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
203	85+90	RT	86+95	RT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	1	1	--	--	--	--	--	--
204	--	LT	86+75	LT	CTH VV	R2-1	24X30	--	--	1	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--
						S5-2	24X30	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	
205	86+93	LT	86+94	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
206	--	--	87+35	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
207	87+50	RT	87+55	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	MOVE SOLAR POWERED SIGN
208	88+80	LT	88+72	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
SHEET SUBTOTALS								**2**	**6**	**2**	**2**	**2**	**34.00**	**10.36**	**22.38**	**4**	**7**	**9**	**2**	**1**	**--**	**--**	**--**	

SIGNING ITEMS - CONTINUED

SIGN NUMBER	EXISTING STATION	EXISTING LOCATION	PROPOSED STATION	PROPOSED LOCATION	ROADWAY	SIGN CODE	SIZE	634.0612 POSTS WOOD 4X6X12 EACH	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	634.0618 POSTS WOOD 4X6X18 EACH	634.0620 POSTS WOOD 4X6X20 EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.001 MOVING SOLAR POWERED SIGN & SUPPORT EACH	SPV.0060.002 RECTANGULAR RAPID FLASHING BEACON STA 93+86, RT EACH	SPV.0060.003 RECTANGULAR RAPID FLASHING BEACON STA 93+94, LT EACH	SPV.0060.004 REMOVING FLASHING BEACON & BASE EACH	COMMENTS
CATEGORY CODE 0010																								
209	89+13	RT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
210	89+16	LT	89+18	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
211	89+16	LT	89+18	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
212	89+16	LT	89+16	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
213	90+08	RT	89+95	RT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	1	1	--	--	--	--	--	--
214	90+08	LT	90+35	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	1	1	--	--	--	--	--	--
215	--	--	90+90	RT	CTH VV	S1-1 S16-9P	30X30 30X18	-- --	-- --	1 --	-- --	-- --	-- --	-- --	4.69 3.75	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--
301	--	--	92+75	RT	CTH VV	R7-1R	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
302	92+89	RT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
303	92+85	LT	92+68	LT	CTH VV	R6-2R	24X30	--	1	--	--	--	5.00	--	--	--	1	1	--	--	--	--	--	--
304	93+34	LT	93+25	LT	CTH VV	R6-2L	24X30	--	1	--	--	--	5.00	--	--	--	1	1	--	--	--	--	--	--
305	--	--	93+45	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
306	39+62	RT	39+51	RT	SHERWOOD BOULEVARD	R1-1	30X30	--	1	--	--	--	5.18	--	--	--	1	1	--	--	--	--	--	--
307	93+90	LT	93+80	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
308	--	--	93+86	RT	CTH VV	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
309	--	--	93+94	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
310	93+96	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--
311	--	--	94+10	RT	CTH VV	R7-1L	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
312	95+95	LT	96+00	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	1	1	--	--	--	--	--	--
313	95+93	RT	97+10	RT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	1	1	--	--	--	--	--	--
314	--	--	96+50	RT	CTH VV	S1-1 S16-9P	30X30 30X18	-- --	-- --	1 --	-- --	-- --	-- --	-- --	4.69 3.75	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--
SHEET SUBTOTALS								--	10	2	--	--	36.18	--	16.88	4	10	9	4	--	1	1	1	

SIGNING ITEMS - CONTINUED

SIGN NUMBER	EXISTING STATION	EXISTING LOCATION	PROPOSED STATION	PROPOSED LOCATION	ROADWAY	SIGN CODE	SIZE	634.0612 POSTS WOOD 4X6X12 EACH	634.0614 POSTS WOOD 4X6X14 EACH	634.0616 POSTS WOOD 4X6X16 EACH	634.0618 POSTS WOOD 4X6X18 EACH	634.0620 POSTS WOOD 4X6X20 EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.001 MOVING SOLAR POWERED SIGN & SUPPORT EACH	SPV.0060.002 RECTANGULAR RAPID FLASHING BEACON STA 93+86, RT EACH	SPV.0060.003 RECTANGULAR RAPID FLASHING BEACON STA 93+94, LT EACH	SPV.0060.004 REMOVING FLASHING BEACON & BASE EACH	COMMENTS
CATEGORY CODE 0010																								
401	97+60	LT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
402	98+44	LT	98+45	LT	CTH VV	--	---	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	MOVE SOLAR POWERED SIGN
403	--	--	99+15	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
404	99+84	RT	--	--	CTH VV	--	---	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--
405	--	--	99+85	RT	CTH VV	R2-1	24X30	--	--	1	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--
						S5-2	24X30	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	
406	--	--	100+10	RT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
407	--	--	102+15	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
501	--	--	103+10	RT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
502	103+94	RT	103+95	RT	CTH VV	--	---	--	--	1	--	--	--	--	--	1	--	1	--	--	--	--	--	--
503	--	--	105+15	LT	CTH VV	R7-1D	18X24	--	1	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--
504	105+23	RT	105+35	RT	CTH VV	--	---	--	1	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
601	19+53	RT	19+43	RT	MARTIN AVENUE	--	---	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--
602	--	--	19+56	RT	MARTIN AVENUE	S1-1	30X30	--	--	--	--	--	--	--	4.69	--	--	--	--	--	--	--	--	MOUNT TO TRAFFIC SIGNAL
						S16-7L	24X12	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	
						R1-1F	30X30	--	--	--	--	--	--	5.18	--	--	--	--	--	--	--	--	--	
603	19+58	RT	--	--	MARTIN AVENUE	--	---	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
604	20+43	LT	20+53	LT	MARTIN AVENUE	S1-1	30X30	--	--	--	--	--	--	--	4.69	--	1	--	--	--	--	--	--	MOUNT TO TRAFFIC SIGNAL
						S16-7L	24X12	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	
						R1-1F	30X30	--	--	--	--	--	--	5.18	--	--	--	--	--	--	--	--	--	
SHEET SUBTOTALS								**--**	**6**	**2**	**--**	**--**	**25.00**	**10.36**	**13.38**	**3**	**4**	**4**	**1**	**1**	**--**	**--**	**--**	
PROJECT TOTALS								**2**	**22**	**6**	**2**	**2**	**101.18**	**20.72**	**52.64**	**11**	**21**	**22**	**7**	**2**	**1**	**1**	**1**	

3

TRAFFIC CONTROL ITEMS

		643.0300 TRAFFIC CONTROL DRUMS		643.0410 TRAFFIC CONTROL BARRICADES TYPE II		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS		643.1050 TRAFFIC CONTROL SIGNS PCMS			643.5000 TRAFFIC CONTROL
	NUMBER OF DAYS IN SERVICE	*NO. REQ'D*	TOTAL DAY	*NO. REQ'D*	TOTAL DAY	*NO. REQ'D*	TOTAL DAY	*NO. REQ'D*	TOTAL DAY	*NO. REQ'D*	TOTAL DAY	*NO. REQ'D*	*NO. DAYS*	TOTAL DAY	EACH
CATEGORY CODE 0010															
PROJECT 4831-05-71	152	*50*	7,600	--	--	*10*	1,520	*20*	3,040	*13*	1,976	*2*	*7*	14	1
PEDESTRIAN ACCOMODATIONS	152	*50*	7,600	*8*	1,216	--	--	*8*	1,216	*15*	2,280	--	--	--	--
PROJECT TOTALS			**15,200**		**1,216**		**1,520**		**4,256**		**4,256**			**14**	**1**

TEMPORARY PEDESTRIAN ACCOMMODATION ITEMS

LOCATION	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	COMMENTS
CATEGORY CODE 0010					
83+35 LT & RT	--	715	304	690	CTH VV CROSSING
84+01 LT & RT	--	1,435	304	217	CTH VV CROSSING
94+02 LT & RT	--	1,010	304	294	CTH VV CROSSING
18+38 LT & RT	77	160	304	73	MARTIN AVE CROSSING
22+03 LT & RT	72	130	304	36	MARTIN AVE CROSSING
PROJECT TOTALS	**149**	**3,450**	**1,520**	**1,310**	

3

PAVEMENT MARKING ITEMS

STATION - STATION	LOCATION	646.1005 MARKING LINE PAINT 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.3005 MARKING LINE PAINT 8-INCH WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.5005 MARKING ARROW PAINT WHITE EACH	646.5020 MARKING ARROW EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE LF	646.8220 MARKING ISLAND NOSE EPOXY YELLOW EACH
CATEGORY CODE 0010												
80+07 - 83+50	LT & RT	--	608	1,242	--	99	--	2	26	80	96	1
84+00 - 107+00	LT & RT	10	4,232	5,525	10	100	4	16	25	60	310	1
19+00 - 20+00	LT & RT	--	--	113	--	56	--	1	22	--	90	--
20+00 - 23+50	LT & RT	--	--	200	--	100	--	2	22	--	84	--
			4,840	7,080								
PROJECT TOTALS		**10**	**11,920**		**10**	**355**	**4**	**21**	**95**	**140**	**580**	**2**

MARKING REMOVAL LINE 4-INCH

STATION - STATION	LOCATION	646.9000 LF
CATEGORY CODE 0010		
105+82 - 106+55	LT & RT	300
	PROJECT TOTAL	**300**

3

CONSTRUCTION STAKING ITEMS

STATION - STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500 CONSTRUCTION STAKING SIDEWALK EACH	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
CATEGORY CODE 0010							
PROJECT 4831-05-71	--	--	--	--	1	1	--
80+30 - 105+80	2,550	2,550	--	12	--	--	2,550
18+50 - 19+50	340	240	100	--	--	--	340
29+40 - 30+00	60	60	--	--	--	--	60
PROJECT TOTALS	**2,950**	**2,850**	**100**	**12**	**1**	**1**	**2,950**

STAKING ITEMS FOR STORM SEWER AND CURB & GUTTER SHOWN ELSEWHERE

STORM SEWER CAP 8-INCH

STATION	LOCATION	SPV.0060.103 EACH
CATEGORY CODE 0010		
39+57	RT	1
PROJECT TOTAL		**1**

STREET SWEEPING

LOCATION	SPV.0075.001 HRS
CATEGORY CODE 0010	
PROJECT 4831-05-71	44
PROJECT TOTAL	**44**

SAWING PAVEMENT ITEMS

STATION - STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010				
80+30	LT+RT	36	--	--
81+54	LT	--	5	--
85+05	RT	--	23	--
86+15	LT	33	--	--
87+06	LT	18	--	--
87+70	LT	--	33	--
88+98	LT	--	38	--
91+35	RT	--	4	--
91+92	RT	12	--	--
92+94	LT	--	49	--
99+38	RT	14	--	--
100+3	LT	11	--	--
100+85	LT	24	--	--
102+43	LT	38	--	--
102+52	RT	28	--	--
103+83	LT	--	32	--
105+22-105+80	LT+RT	55	10	--
18+50	LT+RT	--	39	--
19+00-19+07	LT+RT	--	8	--
20+75	RT	--	5	--
21+09	LT	--	22	--
21+44	LT	--	10	--
21+90	LT+RT	26	9	--
29+40	LT+RT	19	5	--
39+40	LT+RT	20	9	--
CATEGORY CODE 0010 SUBTOTALS		334	301	
CATEGORY CODE 0020				
21+84	--	--	15	SEWER TRENCH
21+90-23+50	--	351	14	SEWER TRENCH
CATEGORY CODE 0020 SUBTOTALS		351	29	
PROJECT TOTALS		**685**	**330**	

3

3

REMOVING SANITARY SEWER ITEMS

STATION - STATION	LOCATION	SPV.0060.301 REMOVING SANITARY SEWER MANHOLES EACH	SPV.0090.301 REMOVING SANITARY SEWER PIPE NON-ASBESTOS LF	SPV.0090.302 REMOVING SANITARY SEWER PIPE ASBESTOS LF
CATEGORY CODE 0020				
83+70 - 89+57	RT	5	--	594
87+65 - 87+77	RT	--	--	38
89+46	LT & RT	--	61	--
18+74 - 20+01	LT & RT	1	--	128
20+01 - 23+38	RT	--	339	--
PROJECT TOTALS		**6**	**400**	**760**

SANITARY SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.302 CONNECT TO EXISTING SANITARY SEWER MANHOLE EACH	SPV.0060.303 CONNECT TO EXISTING SANITARY SEWER PIPE EACH	SPV.0060.304 SANITARY SWER MANHOLES 4-FT DIAMETER WITH CASTING EACH	SPV.0060.305 ADJUSTING SANITARY SEWER MANHOLES EACH
CATEGORY CODE 0020							
500	23+38.41	1.91' RT	MARTIN	1	--	--	--
501	83+70.00	10.00' RT	CTH VV	--	--	1	--
502	18+79.39	8.94' LT	MARTIN	--	--	1	--
503	18+74.39	8.93' LT	MARTIN	--	1	--	--
508	102+25.03	26.01' LT	CTH VV	--	--	--	1
509	104+70.13	21.76' LT	CTH VV	--	--	--	1
602	87+64.61	10.00' RT	CTH VV	--	--	1	--
602.1	87+77.17	45.00' RT	CTH VV	--	1	--	--
603	89+46.11	10.00' RT	CTH VV	--	--	1	--
603.1	89+45.62	50.00' LT	CTH VV	--	1	--	--
		PROJECT TOTALS		**1**	**3**	**4**	**2**

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

SANITARY SEWER PVC 8-INCH

FROM	-	TO	LOCATION	SPV.0090.303 LF
CATEGORY CODE 0020				
500	-	501	MARTIN	348
501	-	502	MARTIN	111
502	-	503	MARTIN	5
501	-	602	CTH VV	395
602	-	602.1	CTH VV	37
602	-	603	CTH VV	182
603	-	603.1	CTH VV	60
			PROJECT TOTAL	**1138**

SANITARY SEWER LATERAL PVC 6-INCH

STATION	LOCATION	HOUSE NUMBER	SPV.0090.304 LF
CATEGORY CODE 0020			
19+12	RT	428	48
20+95	LT	864	35
21+57	LT	858	35
21+80	RT	855	32
22+81	LT	852	35
	PROJECT TOTAL		**185**

WATER LATERAL ITEMS

STATION	LOCATION	HOUSE NUMBER	SPV.0060.404 WATER SERVICE CORP, STOP, BOX SADDLE AND UNION 1 1/4-INCH EACH	SPV.0090.406 WATER SERVICE PE 1 1/4-INCH LF
CATEGORY CODE 0020				
98+15	RT	W5388	1	40
99+00	RT	582	1	40
99+48	RT	620	1	43
100+25	LT	W5371	1	60
101+25	LT	W5367	1	60
102+75	LT	W5355	1	60
103+38	LT	W5343	1	61
20+88	LT	864	1	23
21+56	LT	858	1	23
21+74	RT	855	1	43
	PROJECT TOTALS		**10**	**453**

WATER MAIN ITEMS

STATION - STATION	LOCATION	SPV.0060.401 REMOVING HYDRANT EACH	SPV.0060.402 RELOCATE HYDRANT EACH	SPV.0060.403 TEMPORARY BLOW OFF 2-INCH Each	SPV.0090.401 WATER MAIN PVC 4-INCH LF	SPV.0090.402 WATER MAIN PVC 6-INCH LF	SPV.0090.403 WATER MAIN PVC 8-INCH LF	SPV.0090.404 WATER MAIN PVC 10-INCH LF	SPV.0090.405 WATER MAIN PVC 12-INCH LF	SPV.0060.405 WATER GATE VALVE 4-INCH EACH	SPV.0060.406 WATER GATE VALVE 6-INCH EACH	SPV.0060.407 WATER GATE VALVE 8-INCH EACH	SPV.0060.408 WATER GATE VALVE 10-INCH EACH	SPV.0060.409 WATER GATE VALVE 12-INCH EACH
CATEGORY CODE 0020														
81+00 - 105+00	LT & RT	4	1	8	92	175	33	287	2,479	2	6	1	2	7
PROJECT TOTALS		**4**	**1**	**8**	**92**	**175**	**33**	**287**	**2,479**	**2**	**6**	**1**	**2**	**7**

3

WATER MAIN ITEMS

STATION - STATION	LOCATION	SPV.0060.410 WATER TEE 8X8-INCH EACH	SPV.0060.411 WATER TEE 10X6-INCH EACH	SPV.0060.412 WATER TEE 10X10-INCH EACH	SPV.0060.413 WATER TEE 12X4-INCH EACH	SPV.0060.414 WATER TEE 12X6-INCH EACH	SPV.0060.415 WATER TEE 12X12-INCH EACH	SPV.0060.416 WATER CROSS 12X10-INCH EACH	SPV.0060.417 WATER CROSS 12X12-INCH EACH	SPV.0060.418 WATER 11.25 DEG BEND 6-INCH EACH	SPV.0060.419 WATER 11.25 DEG BEND 12-INCH EACH	SPV.0060.420 WATER 22.5 DEG BEND 4-INCH EACH	SPV.0060.421 WATER 22.5 DEG BEND 6-INCH EACH	SPV.0060.422 WATER 22.5 DEG BEND 12-INCH EACH	SPV.0060.423 WATER 45 DEG BEND 12-INCH EACH	SPV.0060.424 WATER 90 DEG BEND 8-INCH EACH	SPV.0060.425 WATER 90 DEG BEND 10-INCH EACH	SPV.0060.426 WATER REDUCER 12X8-INCH EACH
CATEGORY CODE 0020																		
81+00 - 105+00	LT & RT	1	1	2	2	5	2	1	1	1	2	2	2	1	7	1	2	1
PROJECT TOTALS		**1**	**1**	**2**	**2**	**5**	**2**	**1**	**1**	**1**	**2**	**2**	**2**	**1**	**7**	**1**	**2**	**1**

WATER MAIN ITEMS

STATION - STATION	LOCATION	SPV.0060.427 CONNECT TO EXISTING 4-INCH WATER MAIN EACH	SPV.0060.428 CONNECT TO EXISTING 6-INCH WATER MAIN EACH	SPV.0060.429 CONNECT TO EXISTING 8-INCH WATER MAIN EACH	SPV.0060.430 CONNECT TO EXISTING 10-INCH WATER MAIN EACH	SPV.0060.431 CONNECT TO EXISTING 12-INCH WATER MAIN EACH	SPV.0060.432 WATER PLUG 8-INCH EACH	SPV.0060.433 WATER PLUG 10-INCH EACH	SPV.0060.434 WATER PLUG 12-INCH EACH	SPV.0060.435 WATER CAP 8-INCH EACH	SPV.0060.436 WATER CAP 10-INCH EACH	SPV.0060.437 WATER CAP 12-INCH EACH	SPV.0060.438 WATER HYDRANT EACH	SPV.0060.439 ABANDON WATER MAIN EACH
CATEGORY CODE 0020														
81+00 - 105+00	LT & RT	2	2	1	2	4	1	2	1	1	2	2	4	1
PROJECT TOTALS		**2**	**2**	**1**	**2**	**4**	**1**	**2**	**1**	**1**	**2**	**2**	**4**	**1**

TRAFFIC SIGNAL REMOVALS

LOCATION / ITEM NUMBER	204.0195 REMOVING CONCRETE BASES EACH
CATEGORY 0010	
CTH VV & MARTIN AVENUE	
CB1	1
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
INTERSECTION TOTAL	**9**
CATEGORY 0010 TOTAL	**9**

TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0101 CONCRETE BASES TYPE 1 EACH	657.0100 PEDESTAL BASES EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH
CATEGORY 0010							
CTH VV & MARTIN AVENUE							
SB1	83+94.9	43.4	RT	1	1	--	1
SB2	84+02.9	39.8	RT	1	1	1	--
SB4	83+36.3	39.8	RT	1	1	1	--
SB5	83+23.7	27.8	RT	1	1	--	1
SB6	83+27.8	34.8	RT	1	1	1	--
SB8	83+27.1	31.3	LT	1	1	1	--
SB9	83+40.8	52.5	LT	1	1	--	1
SB10	83+35.7	37.2	LT	1	1	1	--
SB12	83+99.5	37.2	LT	1	1	1	--
SB13	84+12.8	27.8	LT	1	1	--	1
SB14	84+08.8	32.4	LT	1	1	1	--
SB16	84+09.5	33.2	RT	1	1	1	--
INTERSECTION TOTAL				**12**	**12**	**8**	**4**
CATEGORY 0010 TOTAL				**12**	**12**	**8**	**4**

TRAFFIC SIGNAL CONDUIT

LOCATION	FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CATEGORY 0010					
CTH VV & MARTIN AVENUE					
	CB1	-	PB1	--	33
	PB1	-	SB1	12	--
	PB1	-	SB2	18	--
	PB1	-	PB2	10	--
	PB1	-	PB3	--	100
	PB3	-	SB3	--	13
	PB3	-	SB4	19	--
	PB3	-	PB4	--	80
	PB4	-	SB5	7	--
	PB4	-	SB6	12	--
	PB4	-	PB5	15	--
	PB4	-	PB7	--	110
	PB5	-	PB6	225	--
	PB7	-	SB7	--	6
	PB7	-	SB8	11	--
	PB7	-	PB8	--	84
	PB8	-	SB9	8	--
	PB8	-	SB10	24	--
	PB8	-	PB9	14	--
	PB8	-	PB10	--	100
	PB10	-	SB11	--	8
	PB10	-	SB12	25	--
	PB10	-	PB11	--	92
	PB11	-	SB13	10	--
	PB11	-	SB14	15	--
	PB11	-	PB12	12	--
	PB11	-	PB14	--	112
	PB12	-	PB13	229	--
	PB14	-	SB15	--	7
	PB14	-	SB16	15	--
	PB14	-	CB1	--	90
INTERSECTION TOTAL				**681**	**835**
CATEGORY 0010 TOTAL				**681**	**835**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL HEADS

LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
CATEGORY 0010				
CTH VV & MARTIN AVENUE				
	SB1	11	1	--
		15	1	--
	SB2	8A	--	1
	SB3	16	1	--
	SB4	4B	--	1
	SB5	1	1	--
		9	1	--
	SB6	6A	--	1
	SB7	7	1	--
		8	1	--
		10	1	--
	SB8	4A	--	1
	SB9	12	1	--
		14	1	--
	SB10	2B	--	1
	SB11	13	1	--
	SB12	2A	--	1
	SB13	4	1	--
		6	1	--
	SB14	8B	--	1
	SB15	2	1	--
		3	1	--
		5	1	--
	SB16	6B	--	1
INTERSECTION TOTAL			**16**	**8**
CATEGORY 0010 TOTAL			**16**	**8**

TRAFFIC SIGNAL CABINET AND BASE WORK

LOCATION	656.0201.001 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CTH VV & MARTIN AVENUE) EACH	SPV.0060.208 FURNISH & INSTALL TRAFFIC SIGNAL CABINET AND CONTROLLER BLACK (CTH VV & MARTIN AVENUE) EACH
CATEGORY 0010		
CTH VV & MARTIN AVENUE	1	1
CATEGORY 0010 TOTAL	**1**	**1**

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

LOCATION	FROM	-	TO	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010							
CTH VV & MARTIN AVENUE							
	CB1	-	SB1	61	--	61	--
	CB1	-	SB2	67	--	--	67
	CB1	-	SB3	126	126	--	--
	CB1	-	SB4	132	--	--	132
	CB1	-	SB5	174	--	--	--
	CB1	-	SB6	179	--	--	179
	CB1	-	SB7	243	--	--	--
	CB1	-	SB8	248	--	--	248
	CB1	-	SB9	270	--	--	--
	CB1	-	SB10	286	--	--	286
	CB1	-	SB11	206	--	--	--
	CB1	-	SB12	223	--	--	223
	CB1	-	SB13	147	--	--	--
	CB1	-	SB14	152	--	--	152
	CB1	-	SB15	74	74	--	--
	CB1	-	SB16	82	--	82	82
	SB1	-	SB2	--	--	61	--
	SB2	-	SB3	--	--	126	--
	SB3	-	SB4	--	--	62	--
	SB4	-	SB5	--	--	110	--
	SB5	-	SB6	--	--	49	--
	SB6	-	SB7	--	--	118	--
	SB7	-	SB8	--	--	48	--
	SB8	-	SB9	--	--	106	--
	SB9	-	SB10	--	--	63	--
	SB10	-	SB11	--	--	127	--
	SB11	-	SB12	--	--	64	--
	SB12	-	SB13	--	--	126	--
	SB13	-	SB14	--	--	55	--
	SB14	-	SB15	--	--	122	--
	SB15	-	SB16	--	--	52	--
	SB3	-	SB7	--	174	--	--
	SB7	-	SB11	--	165	--	--
	SB11	-	SB15	--	176	--	--
INTERSECTION TOTAL				**2,670**	**715**	**1,432**	**1,369**
CATEGORY 0010 TOTAL				**2,670**	**715**	**1,432**	**1,369**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

LOCATION	FROM SIGNAL BASE	-	TO SIGNAL HEAD	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010						
CTH VV & MARTIN AVENUE						
	SB1	-	11	24	--	--
		-	15	24	--	--
	SB2	-	8A	20	--	--
		-	BUTTON	--	--	11
	SB3	-	16	55	--	--
		-	LUMINAIRE	--	123	--
	SB4	-	4B	20	--	--
		-	BUTTON	--	--	--
	SB5	-	1	24	--	--
		-	9	24	--	--
	SB6	-	6A	20	--	--
		-	BUTTON	--	--	11
	SB7	-	7	60	--	--
		-	8	60	--	--
		-	10	60	--	--
		-	LUMINAIRE	--	123	--
	SB8	-	4A	20	--	--
		-	BUTTON	--	--	11
	SB9	-	12	24	--	--
		-	14	24	--	--
	SB10	-	2B	20	--	--
		-	BUTTON	--	--	11
	SB11	-	13	55	--	--
		-	LUMINAIRE	--	123	--
	SB12	-	2A	20	--	--
		-	BUTTON	--	--	11
	SB13	-	4	24	--	--
		-	6	24	--	--
	SB14	-	8B	20	--	--
		-	BUTTON	--	--	11
	SB15	-	2	55	--	--
		-	3	55	--	--
		-	5	55	--	--
		-	LUMINAIRE	--	123	--
	SB16	-	6B	20	--	--
		-	BUTTON	--	--	11
INTERSECTION TOTAL				**807**	**492**	**77**
CATEGORY 0010 TOTAL				**807**	**492**	**77**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL PULL BOXES

LOCATION / PULL BOX NUMBER	STATION	OFFSET	L/R	653.0154 PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH	653.0164* PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
CATEGORY 0010					
CTH VV & MARTIN AVENUE					
PB1	83+93.9	55.2	RT	--	1
PB2	83+94.0	64.5	RT	1	--
PB3	83+45.0	56.1	RT	--	1
PB4	83+17.5	27.5	RT	--	1
PB5	83+02.0	27.5	RT	1	--
PB6	80+67.4	26.6	RT	1	--
PB7	83+17.5	27.5	LT	--	1
PB8	83+41.8	60.0	LT	--	1
PB9	83+41.0	73.5	LT	1	--
PB10	83+91.1	60.4	LT	--	1
PB11	84+22.1	27.5	LT	--	1
PB12	84+33.8	27.5	LT	1	--
PB13	86+62.8	27.5	LT	1	--
PB14	84+23.0	27.5	RT	--	1
INTERSECTION TOTAL				**6**	**8**
CATEGORY 0010 TOTAL				**6**	**8**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.001 SIGNAL MOUNTING HARDWARE (CTH VV & MARTIN AVENUE) EACH
CATEGORY 0010	
CTH VV & MARTIN AVENUE	1
CATEGORY 0010 TOTAL	**1**

TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0110 CONCRETE BASES TYPE 10 EACH	657.0350 POLES TYPE 10 EACH	657.0525 MONOTUBE ARMS 25-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	657.0806 LUMINAIRE ARMS STEEL 6-FT EACH	659.1115* LUMINAIRES UTILITY LED A EACH
CATEGORY 0010									
CTH VV & MARTIN AVENUE									
SB3	83+43.5	43.8	RT	1	1	1	--	1	1
SB7	83+22.5	28.4	LT	1	1	--	1	1	1
SB11	83+91.9	52.8	LT	1	1	1	--	1	1
SB15	84+16.8	28.4	RT	1	1	1	--	1	1
INTERSECTION TOTAL				**4**	**4**	**3**	**1**	**4**	**4**
CATEGORY 0010 TOTAL				**4**	**4**	**3**	**1**	**4**	**4**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL LOOP DETECTORS

LOCATION / LOOP NO.	STATION **	OFFSET	L/R	SIZE FT	X	SIZE FT	NO. OF TURNS	INSTALLATION METHOD	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	655.0700* LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010											
CTH VV & MARTIN AVENUE											
11	82+98.7	2.3	RT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	204	122
12	83+26.8	2.2	RT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	204	122
21	86+62.8	12.7	LT	6	X	6	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	48	248	344
22	84+37.8	12.4	LT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	164	105
23	84+09.8	12.5	LT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	164	105
41	83+61.7	77.6	LT	6	X	20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	278	201
42	83+51.5	77.5	LT	6	X	20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	218	201
43	83+61.9	49.6	LT	6	X	20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	278	201
44	83+51.7	49.6	LT	6	X	20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	218	201
51	84+37.9	2.2	LT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	204	105
52	84+09.8	2.2	LT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	204	105
61	80+68.1	9.6	RT	6	X	6	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	54	278	347
62	82+98.3	12.2	RT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	164	122
63	83+26.8	12.5	RT	6	X	20	2	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	164	122
81	83+73.3	68.7	RT	6	X	20	1	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	98	29
82	83+83.6	68.6	RT	6	X	20	1	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	78	29
83	83+73.0	40.7	RT	6	X	20	1	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	98	29
84	83+83.2	40.6	RT	6	X	20	1	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	78	29
INTERSECTION TOTAL									**1,446**	**3,342**	**2,519**
CATEGORY 0010 TOTAL									**1,446**	**3,342**	**2,519**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

LIGHTING PULLBOXES

PULL BOX NUMBER	STATION	OFFSET	R/L	653.0164* PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH	673.0105 COMMUNICATION VAULT TYPE 1 EACH	673.0200 TRACER WIRE MARKER POSTS EACH
ALL ITEMS ARE CATEGORY 0010						
CB 1	84+02	47.9	RT	--	--	--
EXAB 208	105+78	35.0	LT	--	--	1
LPB 100	93+83	28.5	LT	1	--	--
LPB 101	93+82	47.9	RT	1	--	--
LPB 102	93+13	48.4	RT	1	--	--
LPB 103	84+26	27.5	LT	1	--	--
LPB 104	84+27	30.6	RT	1	--	--
LPB 105	83+10	27.5	RT	1	--	--
LPB 106	83+13	27.5	LT	1	--	--
LPB 107	81+44	27.7	LT	1	--	--
ICPB 200	98+79	26.5	LT	1	--	--
ICPB 201	91+78	26.5	LT	1	--	--
CV 1	84+30	27.5	LT	--	1	1
ICPB 202	84+30	30.6	RT	1	--	--
ICPB 203	83+08	27.5	LT	1	--	--
ICPB 204	81+48	27.8	LT	1	--	1
CATEGORY 0010 TOTALS				**13**	**1**	**3**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING UNITS

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP - 6-FT EACH	659.1115 LUMINAIRES UTILITY LED A EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0010									
SL 100	105+10	28.5	LT	1	1	1	1	1	123
SL 101	103+10	28.5	LT	1	1	1	1	1	123
SL 102	101+10	28.5	LT	1	1	1	1	1	123
SL 103	99+19	28.5	LT	1	1	1	1	1	123
SL 104	97+28	28.5	LT	1	1	1	1	1	123
SL 105	95+40	28.5	LT	1	1	1	1	1	123
SL 106	93+47	28.5	LT	1	1	1	1	1	123
SL 107	91+74	28.5	LT	1	1	1	1	1	123
SL 108	89+82	28.5	LT	1	1	1	1	1	123
SL 109	87+91	28.5	LT	1	1	1	1	1	123
SL 110	85+90	28.5	LT	1	1	1	1	1	123
SL 111	81+50	28.7	LT	1	1	1	1	1	123
CATEGORY 0010 TOTALS				**12**	**12**	**12**	**12**	**12**	**1,476**

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH LF	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0010								
EXSL 105	-	EXLPB 103	--	--	--	133	399	EXISTING CONDUIT
EXLPB 103	-	SL 100	77	--	--	88	264	--
SL 100	-	SL 101	201	--	--	211	633	--
SL 101	-	SL 102	201	--	--	211	633	--
SL 102	-	SL 103	191	--	--	201	603	--
SL 103	-	SL 104	192	--	--	202	606	--
SL 104	-	SL 105	188	--	--	198	594	--
SL 105	-	LPB 100	158	--	--	169	507	--
LPB 100	-	LPB 101	--	77	89	--	--	PULL WIRE ONLY
LPB 101	-	LPB 102	--	69	81	--	--	PULL WIRE ONLY
LPB 100	-	SL 106	34	--	--	45	135	--
SL 106	-	SL 107	174	--	--	184	552	--
SL 107	-	SL 108	192	--	--	202	606	--
SL 108	-	SL 109	192	--	--	202	606	--
SL 109	-	SL 110	201	--	--	211	633	--
SL 110	-	LPB 103	165	--	--	177	531	--
LPB 103	-	LPB 104	--	59	71	--	--	PULL WIRE ONLY
LPB 104	-	LPB 105	--	117	129	--	--	PULL WIRE ONLY
LPB 103	-	LPB 106	--	116	128	--	--	PULL WIRE ONLY
LPB 106	-	SL 111	175	--	--	186	558	--
SL 111	-	LPB 107	8	--	--	19	57	--
EXLPB 208	-	ICPB 200	702	--	714	--	--	PULL WIRE ONLY
ICPB 200	-	ICPB 201	702	--	714	--	--	PULL WIRE ONLY
ICPB 201	-	CV 1	750	--	756	--	--	PULL WIRE ONLY
CV 1	-	ICPB 202	--	59	65	--	--	PULL WIRE ONLY
ICPB 202	-	CB 1	34	--	50	--	--	PULL WIRE ONLY
CV 1	-	ICPB 203	--	126	132	--	--	PULL WIRE ONLY
ICPB 203	-	ICPB 204	168	--	180	--	--	PULL WIRE ONLY
CATEGORY 0010 TOTALS			**4,705**	**623**	**3,109**	**2,639**	**7,917**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

MISCELLANEOUS TRAFFIC SIGNALS

LOCATION	SPV.0060.209 FURNISH & INSTALL APS SYSTEM (CTH VV & MARTIN AVENUE) EACH	SPV.0060.210 SALVAGE & REINSTALL GPS EVP SYSTEM (CTH VV & MARTIN AVENUE) EACH	SPV.0060.211 SALVAGE TRAFFIC SIGNALS (CTH VV & MARTIN AVENUE) EACH
CATEGORY 0010			
CTH VV & MARTIN AVENUE	1	1	1
CATEGORY 0010 TOTAL	**1**	**1**	**1**

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL (18 / 23 24 25 26 / 30)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — SIGN
OFF-PREMISE SIGN (I-41 25) — SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) — IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25 — UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	⊠

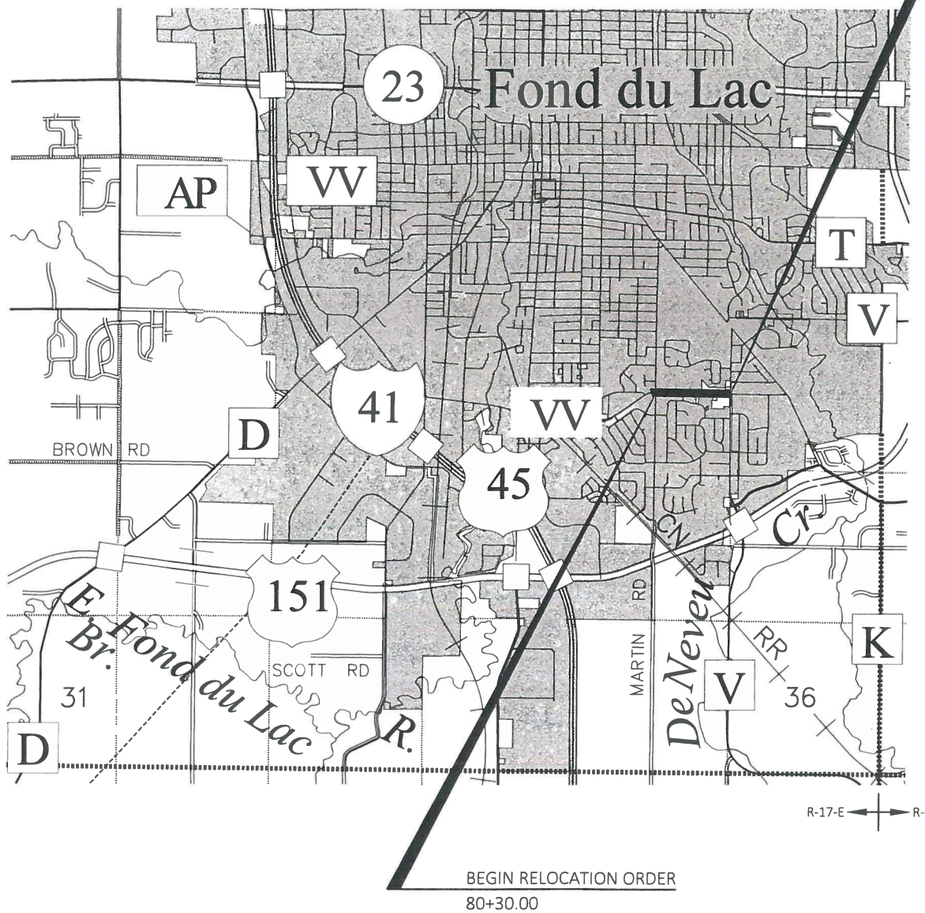
CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

END RELOCATION ORDER
105+86.00
Y 377452.26
X 823247.89
7.65' NORTH AND 414.37' WEST OF THE EAST QUARTER CORNER OF SECTION 23, T15N, R17E



BEGIN RELOCATION ORDER
80+30.00
Y 377425.36
X 820702.40
112.02' SOUTH AND 2288.09' EAST OF THE WEST QUARTER CORNER OF SECTION 23, T15N, R17E

LAYOUT
SCALE 0 — 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.484 MI.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4831-05-00	4.01	8
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT OF WAY REQUIRED FOR

C FOND DU LAC, CTH VV
CTH V TO MARTIN AVENUE

CTH VV	FOND DU LAC COUNTY
CONSTRUCTION PROJECT NUMBER 4831-05-71	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), FOND DU LAC COUNTY, NAD83(1997), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGES.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

ACCEPTED FOR
FOND DU LAC COUNTY
Date 11/9/23 Thomas Janke
THOMAS JANKE, PE
HIGHWAY COMMISSIONER

ORIGINAL PLAT PREPARED BY
GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
85 South Pioneer Road, Suite 300 • Fond du Lac, WI 54935
(920) 924-5720 • Fax (920) 924-5725
11/9/23 Jay W. Panetti
DATE JAY W. PANETTI, PLS

WISCONSIN
JAY W. PANETTI
S-2747
WAUPUN,
WI
LAND SURVEYOR

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: _____ _____ (Signature)

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\RW\DWG\040101-RP.DWG PLOT DATE : 1/19/2023 12:37 PM PLOT BY : JAY PANETTI PLOT NAME :

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED. OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	P.L.E. ACRES PERM.	T.L.E. ACRES TEMP.	TAX KEY NUMBER
1	4.04	MAPLEWOOD COMMONS FAMILY APARTMENTS LLC	FEE, TLE	0.006	0	0.006	0	0.044	FDL-15-17-23-31-002-00
3	4.04	ROBERT J. VAN KIRK IV AND MICHELLE L. VAN KIRK	FEE, TLE	0.020	0	0.020	0	0.038	FDL-15-17-23-24-846-00
4	4.04	MICHAEL J. FENHOUSE AND ZOE L. FENHOUSE	TLE	0	0	0	0	0.018	FDL-15-17-23-24-845-00
6	4.05	CB HOMES SOLUTIONS, LLC	FEE, TLE	0.006	0	0.006	0	0.005	FDL-15-17-23-42-256-00
7	4.05	GOOD SHEPHERD EVANGELICAL LUTHERAN CHURCH	FEE, TLE	0.061	0	0.061	0	0.095	FDL-15-17-23-13-536-00
8	4.05, 4.06, 4.07	FOND DU LAC SCHOOL DISTRICT FOND DU LAC SCHOOL DISTRICT AND CITY OF FOND DU LAC	FEE, PLE, TLE	0.515	0.999	1.514	0.014	0.543	FDL-15-17-23-13-535-00
9	4.06	LLL FRANCESE, LLC	FEE	0.005	0	0.005	0	0	FDL-15-17-23-42-251-00
11	4.07	GERRITT J. OBERBECK	FEE, TLE	0.029	0.057	0.086	0	0.026	T09-15-17-23-04-001-00
12	4.07, 4.08	PIONEER SQUARE, LLC	PLE, TLE	0	0	0	0.011	0.057	FDL-15-17-23-41-001-00
13	4.07	DAVID ALSUP	FEE, TLE	0.049	0.095	0.144	0	0.043	T09-15-17-23-04-008-00
14	4.07	KEVIN S. BRAATZ AND KIMBERLY S. BRAATZ	FEE, PLE, TLE	0.052	0.101	0.153	0.017	0.035	T09-15-17-23-04-010-00
16	4.08	ASHLEY A. MANTHEY	PLE, TLE	0	0	0	0.002	0.044	T09-15-17-23-04-007-02
17	4.08	MARK A. GRAF AND JULIE A. GRAF	PLE, TLE	0	0	0	0.001	0.022	T09-15-17-23-04-007-01
19	4.08	APOSTOLIC CHRISTIAN CHURCH OF FOND DU LAC, INC.	TLE	0	0	0	0	0.008	T09-15-17-23-13-003-00
101	4.04, 4.05, 4.06, 4.07, 4.08	ALLIANT ENERGY	RELEASE OF RIGHTS						
102	4.04, 4.05, 4.06, 4.07	AT&T WISCONSIN	RELEASE OF RIGHTS						
103	4.04, 4.06, 4.07, 4.08	SPECTRUM	RELEASE OF RIGHTS						
104	4.06, 4.07	CITY OF FOND DU LAC	RELEASE OF RIGHTS						

4

4

REVISED: 1/19/2023

SHEET 2 OF 8 SHEETS

REVISION DATE

DATE 1/19/2023

GRID FACTOR

SCALE, FEET 0

HWY: CTH VV

COUNTY: FOND DU LAC

STATE R/W PROJECT NUMBER 4831-05-00

CONSTRUCTION PROJECT NUMBER 4831-05-71

PLAT SHEET 4.02

PS&E SHEET 111

E

FILE NAME : 040102-RP.DWG
LAYOUT NAME - RW 1 IN 100 FT

PLOT DATE : 1/19/2023 12:39 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75

SE-NW

MARTIN PLACE

MARTIN AVENUE

4

3

SW-NE

GN

CITY OF
FOND DU LAC

7

8

CTH VV

EAST PIONEER ROAD

SE-NE

MEQUON AVENUE

CUMBERLYNN DRIVE

CTH V

11

13

14

16

17

4

CTH VV
EAST PIONEER ROAD

T 15 N
23
R 17 E

6

9

SHERWOOD
BOULEVARD

12

19

1

MARTIN AVENUE

NE-SW

MEADOW LANE

NW-SE

WINDSOR AVENUE

SHERWOOD
AVENUE

WINDSOR COURT

T 15 N
23 24
R 17 E

TOWN OF
FOND DU LAC

NE-SE

CTH V

HAWTHORNE DRIVE

KINGSWOOD AVENUE

SHEET 3 OF 8 SHEETS

REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 100 200	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.03
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 112 E

FILE NAME : 040103-RP.DWG
LAYOUT NAME - RW 1 IN 200 FT

PLOT DATE : 1/19/2023 12:40 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 75

COORDINATE TABLE

POINT	NORTH	EAST	POINT	NORTH	EAST
201	377384.7111	820632.8827	401	377425.3568	820702.3962
203	377490.6147	820990.3027	402	377380.6421	820724.7701
204	377489.8850	821030.5010	403	377433.0215	820885.8756
301	377490.4943	820996.9359	404	377423.1569	820887.5157
302	377530.4877	820997.6618	405	377371.6991	820729.2449
303	377532.6984	820875.8678	406	377532.7926	820870.6790
304	377540.6064	820991.2101	407	377537.9550	820870.7329
305	377548.4872	820997.8502	408	377546.6827	820985.8303
310	377389.8866	821029.9271	409	377685.3471	820987.2788
311	377390.1161	820989.9277	410	377685.2218	820999.2781
312	377440.7154	820980.2180	411	377390.1735	820979.9279
313	377440.6074	820990.2175			

BASIS OF EXISTING R/W

ROUTE	BASIS
CTH VV	AHONEN ACRES SECOND ADDITION, GALLOWAY PARK ESTATES
MARTIN AVENUE	AHONEN ACRES SECOND ADDITION, GALLOWAY PARK ESTATES
OLD PIONEER ROAD	AHONEN ACRES SECOND ADDITION, PIONEER OAKS

CURVE TABLE

FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
312	313	568.32'	10.00'	S89°22'53"E	10.00'
203	401	618.32'	298.09'	S77°13'44"W	295.21'
402	403	568.32'	170.04'	N71°59'22"E	169.41'
404	405	558.32'	167.05'	S71°59'22"W	166.43'
303	304	668.32'	115.76'	N86°04'40"E	115.61'
407	408	674.32'	115.57'	N85°39'49"E	115.43'
304	303	668.32'	115.76'	S86°04'40"W	115.61'

CURVE DATA - R/L CURVE C1
PI STA = 81+44.90
Y = 377494.162
X = 820794.852
DELTA = 35°05'20"
D = 9°15'59"
T = 195.48'
L = 378.67'
R = 618.32'
PC STA = 79+49.42
Y = 377384.711
X = 820632.883
PT STA = 83+28.09
Y = 377490.615
X = 820990.303

PARCEL 1 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
114	310	N00°19'44"E	2545.44'
310	311	N89°40'16"W	40.00'
311	312	N10°51'46"W	51.52'
*312	*313	S89°22'53"E	10.00'
313	311	S00°19'44"W	50.49'

*SEE CURVE TABLE

PARCEL 1 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
100	203	S88°57'36"E	2576.42'
*203	*401	S77°13'44"W	295.21'
401	402	S26°34'55"E	50.00'
*402	*403	N71°59'22"E	169.41'
403	404	S09°26'21"E	10.00'
*404	*405	S71°59'22"W	166.43'
405	402	N26°34'55"W	10.00'
114	310	N00°19'44"E	2545.44'
310	311	N89°40'16"W	40.00'
311	411	N89°40'16"W	10.00'
411	312	N00°19'44"E	50.54'
312	311	S10°51'46"E	51.52'

*SEE CURVE TABLE

PARCEL 3 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
100	301	S88°57'36"E	2583.06'
301	302	N01°02'24"E	40.00'
302	303	N88°57'36"W	121.81'
*303	*304	N86°04'40"E	115.61'
304	305	N40°06'58"E	10.31'
305	302	S00°35'58"W	18.00'

*SEE CURVE TABLE

PARCELS 3 & 4 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
100	301	S88°57'36"E	2583.06'
301	302	N01°02'24"E	40.00'
302	303	N88°57'36"W	121.81'
303	406	N88°57'36"W	5.19'
406	407	N00°35'54"E	5.16'
*407	*408	N85°39'49"E	115.43'
408	409	N00°35'54"E	138.67'
409	410	S89°24'06"E	12.00'
410	305	S00°35'54"W	136.74'
305	304	S40°06'58"W	10.31'
*304	*303	S86°04'40"W	115.61'

*SEE CURVE TABLE

SE-NW

BLANKET UTILITY EASEMENT DOC. #157526

ALLIANT ENERGY RELEASE OF RIGHTS 101

15' PUBLIC UTILITY EASEMENT DOC. #365434

30' PUBLIC UTILITY EASEMENT DOC. #365434

1 PIONEER OAKS

9 BLOCK 12 AHONEN ACRES SECOND ADDITION

8

2

TLE FOR DRIVEWAYS AND SLOPES

21+95 45.26'/33.26' TLE (409/410)

4 FDL-15-17-23-24-845-00 MICHAEL J. FENHOUSE AND ZOE L. FENHOUSE

3 FDL-15-17-23-24-846-00 ROBERT J. VAN KIRK IV AND MICHELLE L. VAN KIRK

BEGIN RELOCATION ORDER
80+30.00
Y 377425.36
X 820702.40
112.02' SOUTH AND 2288.09' EAST OF THE WEST QUARTER CORNER OF SECTION 23, T15N, R17E

101 ALLIANT ENERGY RELEASE OF RIGHTS

102 AT&T WISCONSIN RELEASE OF RIGHTS

103 SPECTRUM RELEASE OF RIGHTS

303 82+20.69 50' FEE

406 82+16.27 50' TLE

407 82+17.08 56' TLE

10' PUBLIC UTILITY EASEMENT DOC. #365434

304 83+28.09 50' FEE

408 83+23.05 56' TLE

305 83+34.58 58' FEE

50' 6' TLE PROPOSED R/W

302

MARTIN AVENUE

R/L = QUARTER LINE N00°35'54"E 2658.51'

MATCH LINE SEE SHEET 4.05

88 MAG NAIL FOUND Y 380148.25 X 821058.27

T 15 N R 17 E 14 23

66'

12'

OLD PIONEER ROAD

40'

SLOPE INTERCEPT, TYP.

QUARTER LINE S88°57'36"E 2616.63'

203 PT: 83+28.09

301 R/L S88°57'36"E

PI: 83+68.29 204

100 1" IRON PIPE FOUND Y 377537.37 X 818414.30

T 15 N R 17 E 22 23

GN

C1 R/L CURVE

PC: 79+49.42 401 201

R/L N55°57'04"E

CTH VV EAST PIONEER ROAD

50'

ALLIANT ENERGY RELEASE OF RIGHTS 101

6" UNDERGROUND ELECTRIC EASEMENT DOC. #263987

80+30 50'/60' TLE 402 405

TLE 10'

TLE FOR SLOPES

82+15 50'/60' TLE 403 404

83+18.10 50' FEE 312 313

TLE FOR SLOPES

19+00 50' TLE 411

19+00 40' FEE 311

TLE

QUARTER LINE N00°19'44"E 2645.44' 310

R/L = QUARTER LINE 19

BLOCK A GALLOWAY PARK ESTATES

GRANT OF EASEMENT DOC. #933078

1 FDL-15-17-23-31-002-00 MAPLEWOOD COMMONS FAMILY APARTMENTS LLC

NE-SW

CITY OF FOND DU LAC

MATCH LINE SEE SHEET 4.05

T 15 N R 17 E 23 26

114 MAG NAIL FOUND Y 374844.49 X 821015.32

101 MAG SPIKE FOUND Y 377489.85 X 821030.54 PI: STA 83+68.29 =PI: STA. 20+00.00

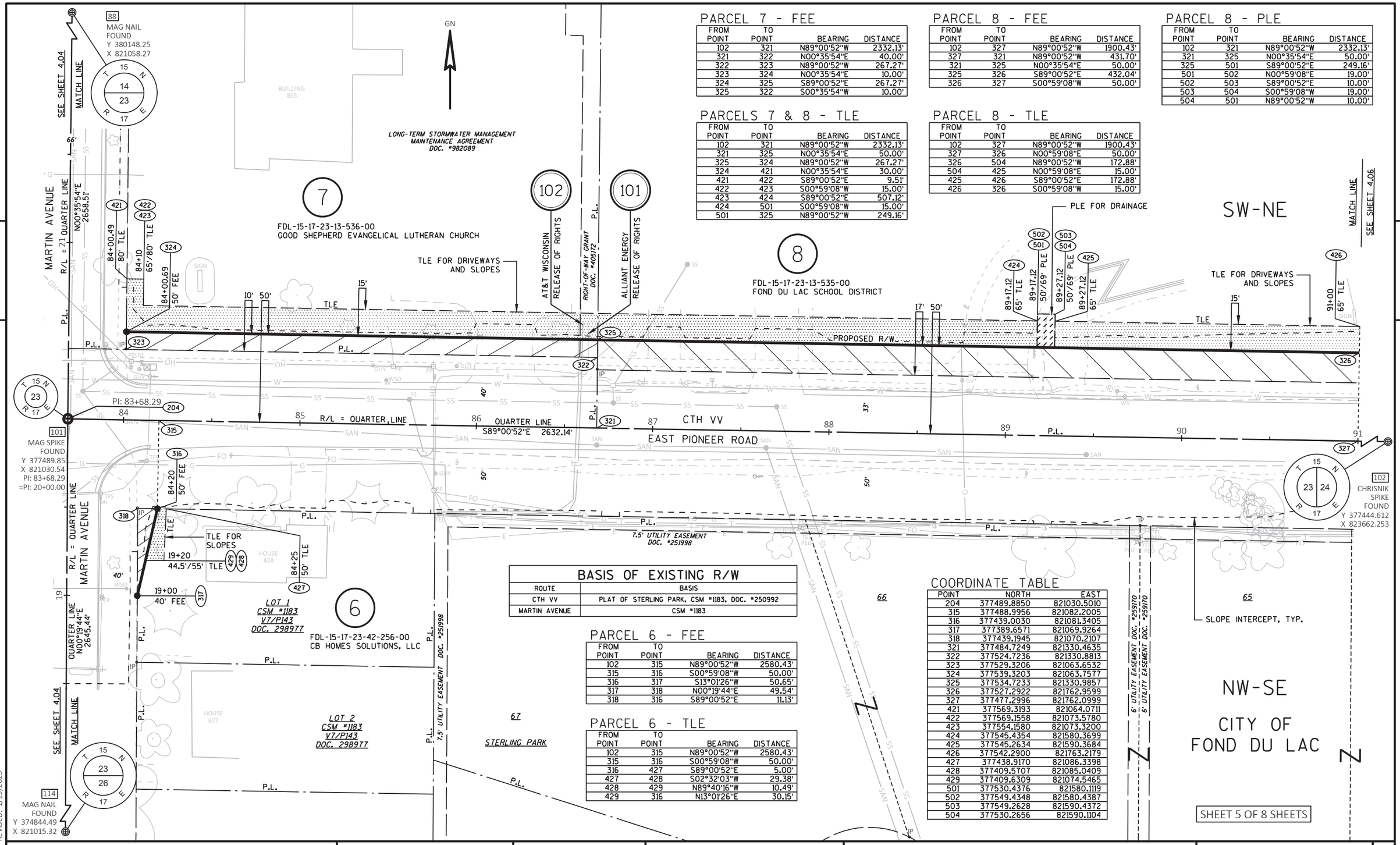
SHEET 4 OF 8 SHEETS

REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 25 50	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.04	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 113	E

FILE NAME : 040104-RP.DWG
LAYOUT NAME - RW 1 IN 50 FT
PLOT DATE : 1/19/2023 12:50 PM
PLOT BY : JAY PANETTI
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 75



PARCEL 7 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
102	321	N89°00'52"W	2332.13'
321	322	N00°35'54"E	40.00'
322	323	N89°00'52"W	267.27'
323	324	N00°35'54"E	10.00'
324	325	S89°00'52"E	267.27'
325	322	S00°35'54"W	10.00'

PARCELS 7 & 8 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	321	N89°00'52"W	2332.13'
321	325	N00°35'54"E	50.00'
325	324	N89°00'52"W	267.27'
324	421	N00°35'54"E	30.00'
421	422	S89°00'52"E	9.51'
422	423	S00°59'08"W	15.00'
423	424	S89°00'52"E	507.12'
424	501	S00°59'08"W	15.00'
501	325	N89°00'52"W	249.16'

PARCEL 8 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
102	327	N89°00'52"W	1900.43'
327	321	N89°00'52"W	431.70'
321	325	N00°35'54"E	50.00'
325	326	S89°00'52"E	432.04'
326	327	S00°59'08"W	50.00'

PARCEL 8 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	327	N89°00'52"W	1900.43'
327	326	N00°59'08"E	50.00'
326	504	N89°00'52"W	172.88'
504	425	N00°59'08"E	15.00'
425	426	S89°00'52"E	172.88'
426	326	S00°59'08"W	15.00'

PARCEL 8 - PLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	321	N89°00'52"W	2332.13'
321	325	N00°35'54"E	50.00'
325	501	S89°00'52"E	249.16'
501	502	N00°59'08"E	19.00'
502	503	S89°00'52"E	10.00'
503	504	S00°59'08"W	19.00'
504	501	N89°00'52"W	10.00'

COORDINATE TABLE

POINT	NORTH	EAST
204	377489.8850	821030.5010
315	377488.9956	821082.2005
316	377439.0030	821081.3405
317	377389.6571	821069.9264
318	377439.1945	821070.2107
321	377484.7249	821330.4635
322	377524.7236	821330.8813
323	377529.3206	821063.6532
324	377539.3203	821063.7577
325	377534.7233	821330.9857
326	377527.2922	821762.9599
327	377477.2996	821762.0999
421	377569.3193	821064.0711
422	377569.1558	821073.5780
423	377554.1580	821073.3200
424	377545.4354	821580.3699
425	377545.2634	821590.3684
426	377542.2900	821763.2179
427	377438.9170	821086.3398
428	377409.5707	821085.0409
429	377409.6309	821074.5465
501	377530.4376	821580.1119
502	377549.4348	821580.4387
503	377549.2628	821590.4372
504	377530.2656	821590.1104

REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 25 50	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.05	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 114	E

FILE NAME : 040105-RP.DWG
LAYOUT NAME - RW 1 IN 50 FT

PLOT DATE : 1/19/2023 12:44 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 75

BASIS OF EXISTING R/W	
ROUTE	BASIS
CTH VV	PLAT OF STERLING PARK
SHERWOOD BOULEVARD	PLAT OF STERLING PARK, V698/P184

COORDINATE TABLE

POINT	NORTH	EAST
326	377527.2922	821762.9599
327	377477.2996	821762.0999
331	377467.2485	822346.3770
332	377517.2474	822346.8714
335	377472.1396	822062.0555
336	377422.1470	822061.1955
337	377392.4032	822046.0412
338	377422.3988	822046.5572
441	377547.2892	821763.3039
442	377537.2469	822347.0692
510	377521.7022	822087.9118
511	377541.6992	822088.2558
512	377541.3552	822108.2529
513	377521.3582	822107.9089

PARCEL 8 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
102	331	N89°00'52"W	1316.07'
331	327	N89°00'52"W	584.36'
327	326	N00°59'08"E	50.00'
326	332	S89°00'52"E	584.00'
332	331	S00°34'00"W	50.00'

PARCEL 8 - PLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	331	N89°00'52"W	1316.07'
331	332	N00°34'00"E	50.00'
332	513	N89°00'52"W	239.00'
513	510	N89°00'52"W	20.00'
510	511	N00°59'08"E	20.00'
511	512	S89°00'52"E	20.00'
512	513	S00°59'08"W	20.00'

PARCEL 8 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	327	N89°00'52"W	1900.43'
327	326	N00°59'08"E	50.00'
326	441	N00°59'08"E	20.00'
441	511	S89°00'52"E	325.00'
511	510	S00°59'08"W	20.00'
510	326	N89°00'52"W	325.00'
102	331	N89°00'52"W	1316.07'
331	332	N00°34'00"E	50.00'
332	513	N89°00'52"W	239.00'
513	512	N00°59'08"E	20.00'
512	442	S89°00'52"E	238.85'
442	332	S00°34'00"W	20.00'

SEE SHEET 4.05
MATCH LINE

8
FDL-15-17-23-13-535-00
FOND DU LAC SCHOOL DISTRICT

104
CITY OF FOND DU LAC
RELEASE OF RIGHTS

PERMANENT EASEMENT FOR WATER TRANSMISSION FACILITIES DOC. #530805

SW-NE

441
91+00
70' TLE
TLE FOR DRIVEWAY AND SLOPES
20'
17'
50'
TLE
PROPOSED R/W
326

511
510
94+25
50'/70' PLE
512
513
94+45
50'/70' PLE
PLE FOR DRAINAGE
PLE
TLE
20'
TLE FOR DRIVEWAY AND SLOPES
442
96+83.85
70' TLE
SIXTEENTH LINE
332
96+84
50' FEE

MATCH LINE
SEE SHEET 4.07

91
327
92
R/L = QUARTER LINE
93
P.L.
STA 93+45.09
=STA 30+00.00
94
335
QUARTER LINE
S89°00'52"E 2632.14'
95
CTH VV
EAST PIONEER ROAD
96
331

101
MAG SPIKE FOUND
Y 377489.85
X 821030.54
PI: 83+68.29

102
CHRISNIK
SPIKE FOUND
Y 377444.612
X 823662.253

50'
33'
P.L.
7.5' UTILITY EASEMENT DOC. #251998
HOUSE 506
SLOPE INTERCEPT, TYP.
40'
80'
29
SHERWOOD BOULEVARD
R/L N00°59'08"E
338
94+00
50' FEE
336
93+85.36
80' FEE
337
ALLIANT ENERGY RELEASE OF RIGHTS
AT&T WISCONSIN RELEASE OF RIGHTS
SPECTRUM RELEASE OF RIGHTS
101
102
103
64
63
62
61
60
STERLING PARK
GARAGE
6' UTILITY EASEMENT DOC. #259170
9
FDL-15-17-23-42-251-00
LLL FRANCESE, LLC
FDL-15-17-23-42-250-00
SIXTEENTH LINE
GN

CITY OF FOND DU LAC NW-SE

PARCEL 9 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
102	335	N89°00'52"W	1600.43'
335	336	S00°59'08"W	50.00'
336	337	S26°59'55"W	33.38'
337	338	N00°59'08"E	30.00'
338	336	S89°00'52"E	14.64'

SHEET 6 OF 8 SHEETS

REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 25 50	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.06	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 115	E

FILE NAME : 040106-RP.DWG
LAYOUT NAME - RW 1 IN 50 FT
PLOT DATE : 1/19/2023 12:51 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:50 FT

PARCEL 14 - PLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	342	N00°59'08"E	50.00'
342	524	N89°00'52"W	107.43'
524	521	N89°00'52"W	25.57'
521	522	N00°59'08"E	25.00'
522	523	S89°00'52"E	25.57'
523	524	S00°59'08"W	25.00'
102	341	N89°00'52"W	680.00'
341	342	N00°59'08"E	50.00'
342	525	N89°00'52"W	5.43'
525	526	N00°59'08"E	15.00'
526	527	S89°00'52"E	5.43'
527	342	S00°59'08"W	15.00'

PARCELS 8, 11, 13 & 14 - FEE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	331	N89°00'52"W	636.07'
331	332	N00°34'00"E	50.00'
332	342	S89°00'52"E	636.44'
342	341	S00°59'08"W	50.00'

PARCEL 14 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	342	N00°59'08"E	50.00'
342	525	N89°00'52"W	5.43'
525	524	N89°00'52"W	102.00'
524	454	N00°59'08"E	15.00'
454	526	S89°00'52"E	102.00'
526	525	S00°59'08"W	15.00'

BASIS OF EXISTING R/W

ROUTE	BASIS
CTH VV	PLAT OF STERLING PARK, CSM #3616, CSM #3984

PARCEL 12 - PLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	462	S23°27'30"W	53.46'
462	541	N88°57'55"W	80.00'
541	542	S00°59'08"W	15.67'
542	543	N89°00'52"W	30.00'
543	544	N00°59'08"E	15.69'
544	541	S88°58'25"E	30.00'

PARCELS 8, 11 & 13 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	331	N89°00'52"W	1316.07'
331	332	N00°34'00"E	50.00'
332	442	N00°34'00"E	20.00'
442	451	S89°00'52"E	296.14'
451	452	S00°59'08"W	5.00'
452	453	S89°00'52"E	207.43'
453	521	S00°59'08"W	15.00'
521	332	N89°00'52"W	503.44'

CITY OF FOND DU LAC

8

FDL-15-17-23-13-535-00
FOND DU LAC SCHOOL DISTRICT
DOC. #473509

CITY OF FOND DU LAC
DOC. #237787

TOWN OF FOND DU LAC

11

T09-15-17-23-04-001-00
GERRITT J. OBERBECK

SE-NE

13

T09-15-17-23-04-008-00
DAVID ALSUP

14

T09-15-17-23-04-010-00
KEVIN S. BRAATZ
AND KIMBERLY S. BRAATZ

104 CITY OF FOND DU LAC RELEASE OF RIGHTS

102 AT&T WISCONSIN RELEASE OF RIGHTS

16.5' RIGHT-OF-WAY GRANT DOC. #246128

40' SANITARY SEWER EASEMENT DOC. #426961

PLE'S FOR DRAINAGE

TLE FOR DRIVEWAY AND SLOPES

TLE FOR DRIVEWAYS AND SLOPES

SEE SHEET 4.06 MATCH LINE

SEE SHEET 4.08 MATCH LINE

SIXTEENTH LINE

96+84 50' FEE

96+83.85 70' TLE

99+80 65'/70' TLE

101+87.43 65' TLE

101+87.43 50'/75' PLE

102+13 50'/75' PLE

102+13 65' TLE

103+15 50'/65' PLE

103+20.43 65' PLE

103+20.43 50' FEE/PLE

PROPOSED R/W

EAST PIONEER ROAD CTH VV

S89°00'52"E 2632.14' QUARTER LINE

R/L = QUARTER LINE

R/W VARIES

7.5' UTILITY EASEMENT DOC. #251998

7.5' PUBLIC UTILITY EASEMENT DOC. #1016898

15' PUBLIC UTILITY EASEMENT DOC. #1016898

SLOPE INTERCEPT. TYP.

TLE FOR SLOPES

PLE FOR DRAINAGE

NONEXCLUSIVE INSTALLATION AND SERVICE AGREEMENT DOC. #1016898

SPECTRUM RELEASE OF RIGHTS

AT&T WISCONSIN RELEASE OF RIGHTS

ALLIANT ENERGY RELEASE OF RIGHTS

100+65 55'/49.20' TLE

101+85 70'/55' TLE

101+90 65'/49.31' PLE

102+20 65'/49.33' PLE

102+25 70'/65' TLE

103+00 55'/49.40' TLE

102+70 65'/55' TLE

CITY OF FOND DU LAC RELEASE OF RIGHTS

60' DRAINAGE AND SEWER EASEMENT DOC. #458261

LOT 1 CSM #3984 V22/P33 DOC. #488583

LOT 1 CSM #3616 V20/P15 DOC. #458261

60 STERLING PARK

GARAGE

BUILDING 582

BUILDING W5388

HOUSE W5367

HOUSE W5355

NE-SE

CITY OF FOND DU LAC

12

FDL-15-17-23-41-001-00
PIONEER SQUARE, LLC

SHEET 7 OF 8 SHEETS

101 MAG SPIKE FOUND
Y 377489.85
X 821030.54
PI: 83+68.29

102 CHRISNIK SPIKE FOUND
Y 377444.612
X 823662.253

COORDINATE TABLE

POINT	NORTH	EAST
331	377467.2485	822346.3770
332	377517.2474	822346.8714
341	377456.3080	822982.3536
342	377506.3006	822983.2136
442	377537.2469	822347.0692
451	377532.1532	822643.1737
452	377527.1539	822643.0877
453	377523.5860	822850.4913
454	377523.1463	822876.0533
461	377456.6595	822961.9224
462	377407.2678	822961.0727
463	377401.6677	822960.9764
464	377402.1837	822930.9808
465	377392.1851	822930.8088
466	377392.9591	822885.8155
467	377387.9599	822885.7295
468	377388.6479	822845.7354
469	377403.6457	822845.9934
470	377405.7097	822726.0112
471	377411.5115	822726.1110
521	377508.5883	822850.2333
522	377533.5846	822850.6633
523	377533.1448	822876.2253
524	377508.1485	822875.7953
525	377506.3941	822977.7802
526	377521.3919	822978.0382
527	377521.2984	822983.4716
541	377408.7125	822881.0857
542	377393.0451	822880.8162
543	377393.5611	822850.8207
544	377409.2499	822851.0906

PARCEL 12 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	461	N89°00'52"W	700.43'
461	462	S00°59'08"W	49.40'
462	463	S00°59'08"W	5.60'
463	464	N89°00'52"W	30.00'
464	465	S00°59'08"W	10.00'
465	466	N89°00'52"W	45.00'
466	467	S00°59'08"E	5.00'
467	468	N89°00'52"W	40.00'
468	469	N00°59'08"E	15.00'
469	470	N89°00'52"W	120.00'
470	471	N00°59'08"E	5.80'
471	462	S88°57'55"E	235.00'

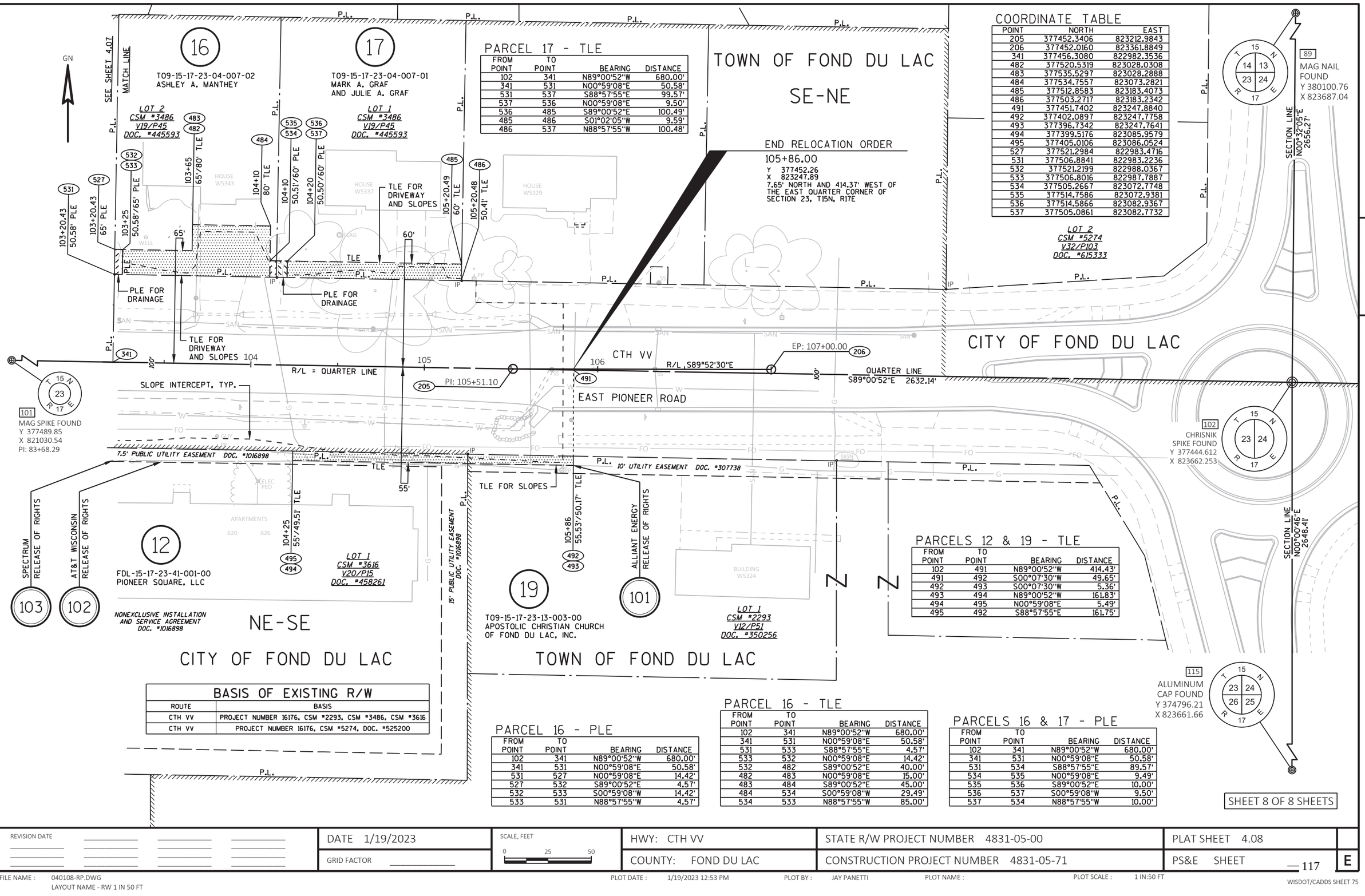
REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 25 50	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.07	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 116	E

FILE NAME : 040107-RP.DWG
LAYOUT NAME - RW 1 IN 50 FT

PLOT DATE : 1/19/2023 12:46 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 75



COORDINATE TABLE

POINT	NORTH	EAST
205	377452.3406	823212.9843
206	377452.0160	823361.8849
341	377456.3080	822982.3536
482	377520.5319	823028.0308
483	377535.5297	823028.2888
484	377534.7557	823073.2821
485	377512.8583	823183.4073
486	377503.2717	823183.2342
491	377451.7402	823247.8840
492	377402.0897	823247.7758
493	377396.7342	823247.7641
494	377399.5176	823085.9579
495	377405.0106	823086.0524
527	377521.2984	822983.4716
531	377506.8841	822983.2236
532	377521.2199	822988.0367
533	377506.8016	822987.7887
534	377505.2667	823072.7748
535	377514.7586	823072.9381
536	377514.5866	823082.9367
537	377505.0861	823082.7732

PARCEL 17 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	531	N00°59'08"E	50.58'
531	537	S88°57'55"E	99.57'
537	536	N00°59'08"E	9.50'
536	485	S89°00'52"E	100.49'
485	486	S01°02'05"W	9.59'
486	537	N88°57'55"W	100.48'

PARCELS 12 & 19 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	491	N89°00'52"W	414.43'
491	492	S00°07'30"W	49.65'
492	493	S00°07'30"W	5.36'
493	494	N89°00'52"W	161.83'
494	495	N00°59'08"E	5.49'
495	492	S88°57'55"E	161.75'

BASIS OF EXISTING R/W

ROUTE	BASIS
CTH VV	PROJECT NUMBER 16176, CSM #2293, CSM #3486, CSM #3616
CTH VV	PROJECT NUMBER 16176, CSM #5274, DOC. #525200

PARCEL 16 - PLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	531	N00°59'08"E	50.58'
531	527	N00°59'08"E	14.42'
527	532	S89°00'52"E	4.57'
532	533	S00°59'08"W	14.42'
533	531	N88°57'55"W	4.57'

PARCEL 16 - TLE

FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	531	N00°59'08"E	50.58'
531	533	S88°57'55"E	4.57'
533	532	N00°59'08"E	14.42'
532	482	S89°00'52"E	40.00'
482	483	N00°59'08"E	15.00'
483	484	S89°00'52"E	45.00'
484	534	S00°59'08"W	29.49'
534	533	N88°57'55"W	85.00'

PARCELS 16 & 17 - PLE

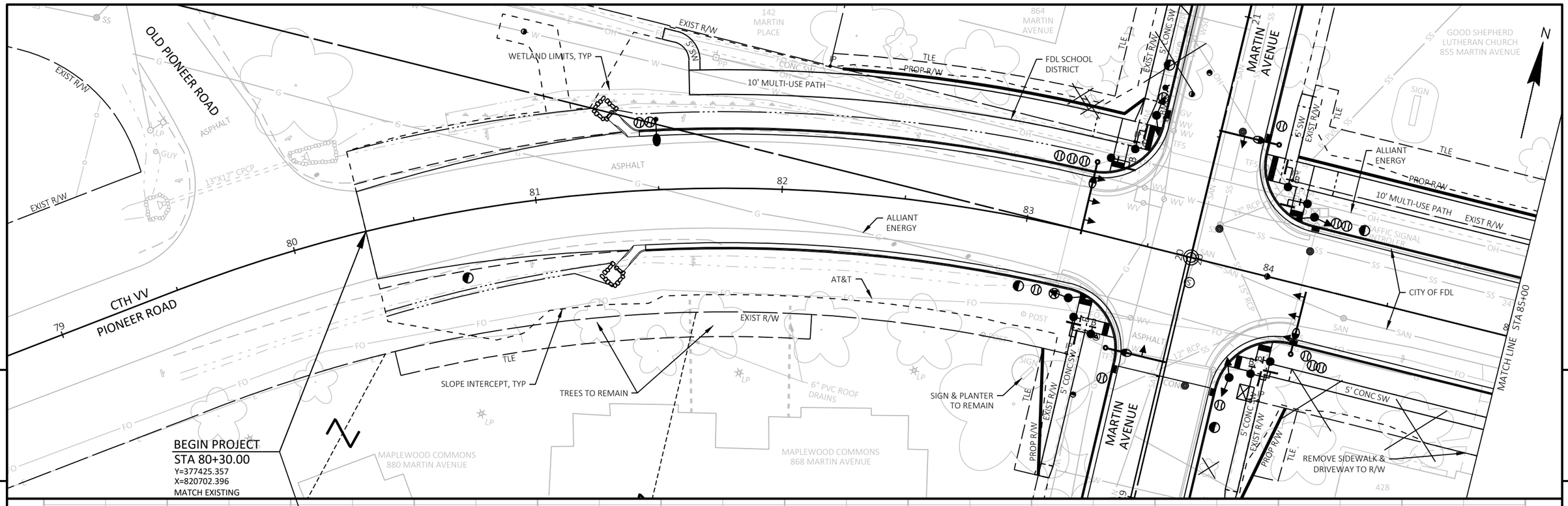
FROM POINT	TO POINT	BEARING	DISTANCE
102	341	N89°00'52"W	680.00'
341	531	N00°59'08"E	50.58'
531	534	S88°57'55"E	89.57'
534	535	N00°59'08"E	9.49'
535	536	S89°00'52"E	10.00'
536	537	S00°59'08"W	9.50'
537	534	N88°57'55"W	10.00'

SHEET 8 OF 8 SHEETS

REVISED: 1/19/2023

REVISION DATE	DATE 1/19/2023	SCALE, FEET 0 25 50	HWY: CTH VV	STATE R/W PROJECT NUMBER 4831-05-00	PLAT SHEET 4.08	
	GRID FACTOR		COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER 4831-05-71	PS&E SHEET 117	E

FILE NAME : 040108-RP.DWG
LAYOUT NAME - RW 1 IN 50 FT
PLOT DATE : 1/19/2023 12:53 PM PLOT BY : JAY PANETTI PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 75

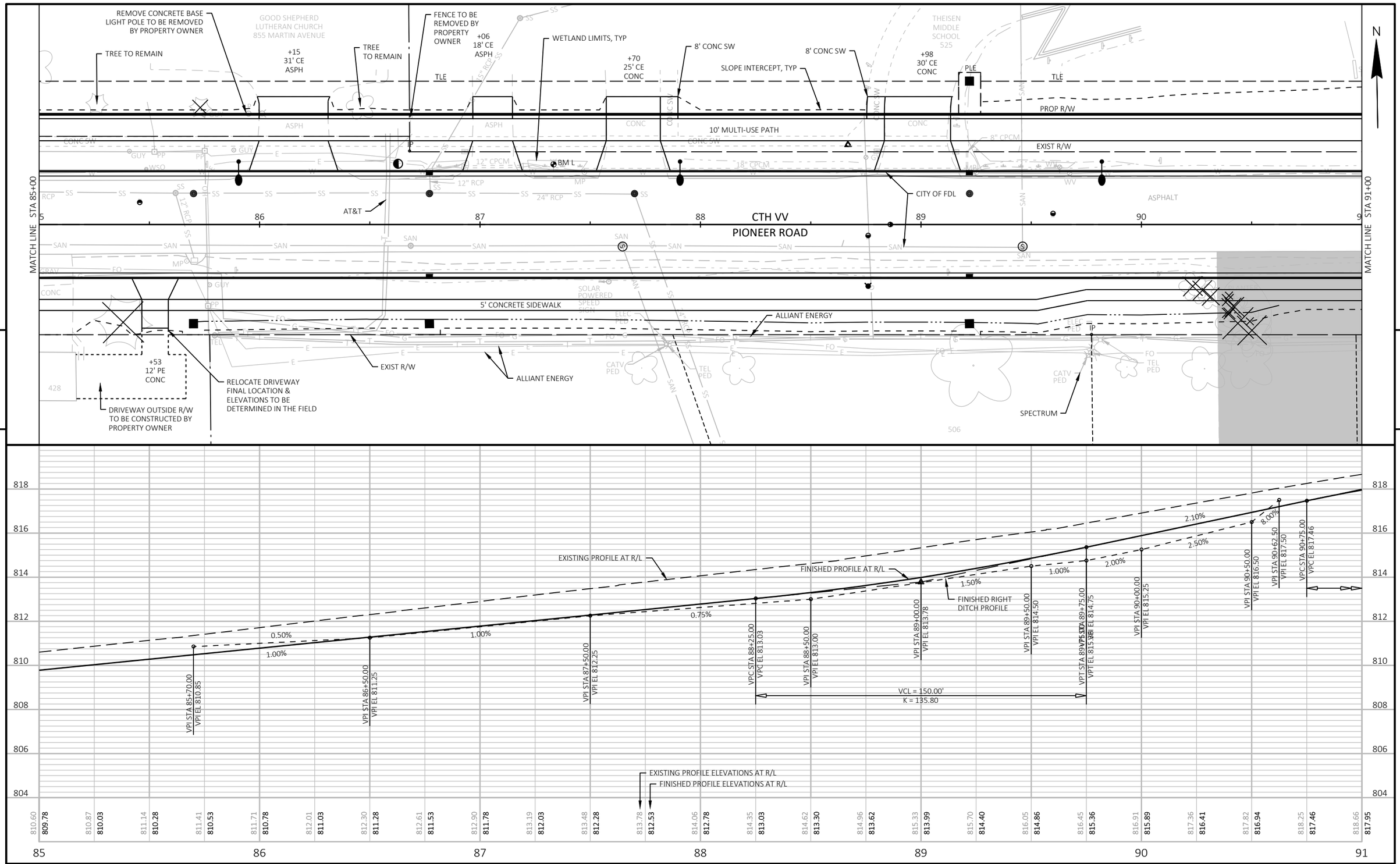


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH VV	SHEET 118 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050101-PP.DWG
LAYOUT NAME - Sheet-01

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

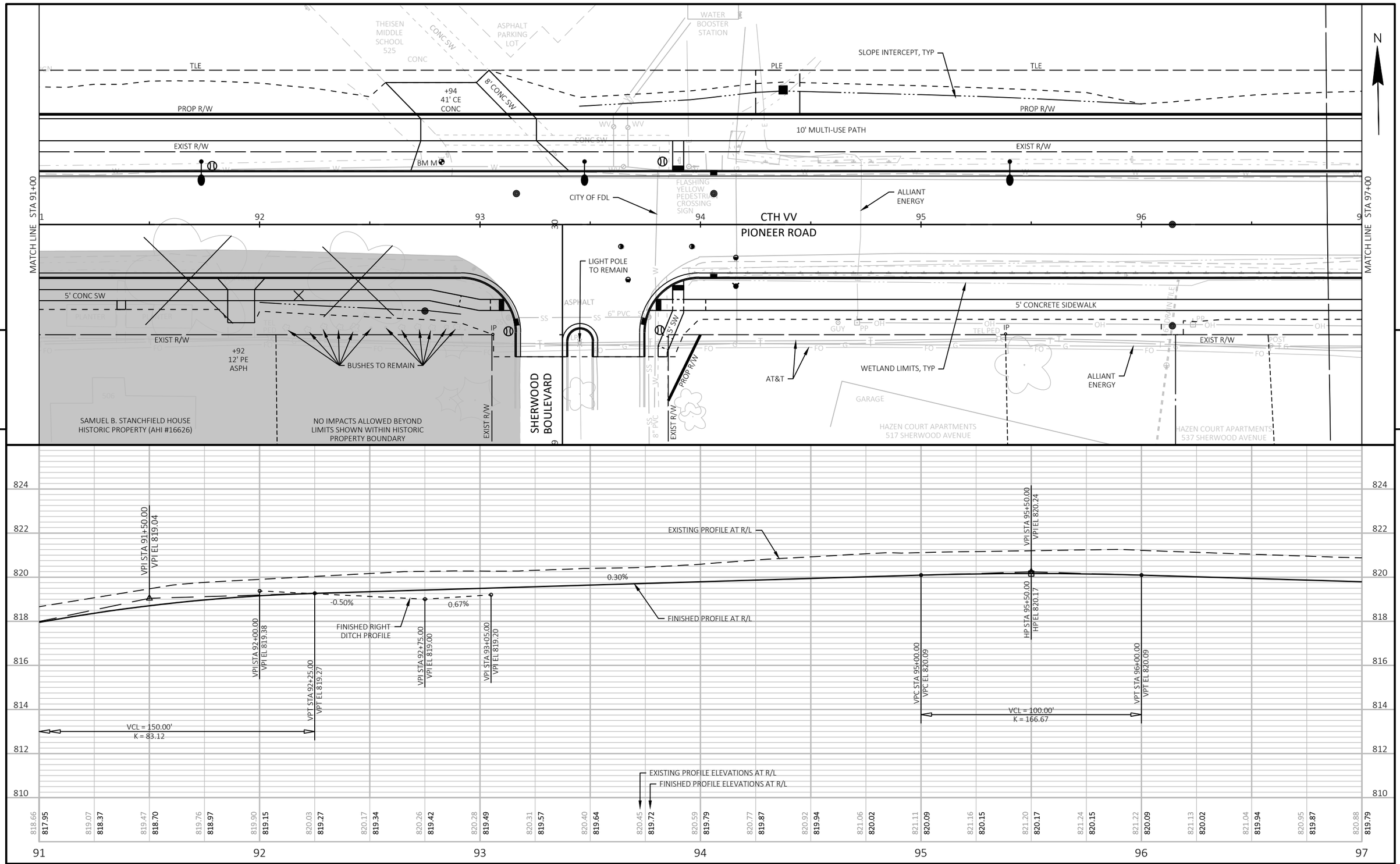


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH VV	SHEET 119	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050101-PP.DWG
LAYOUT NAME - Sheet-02

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



5

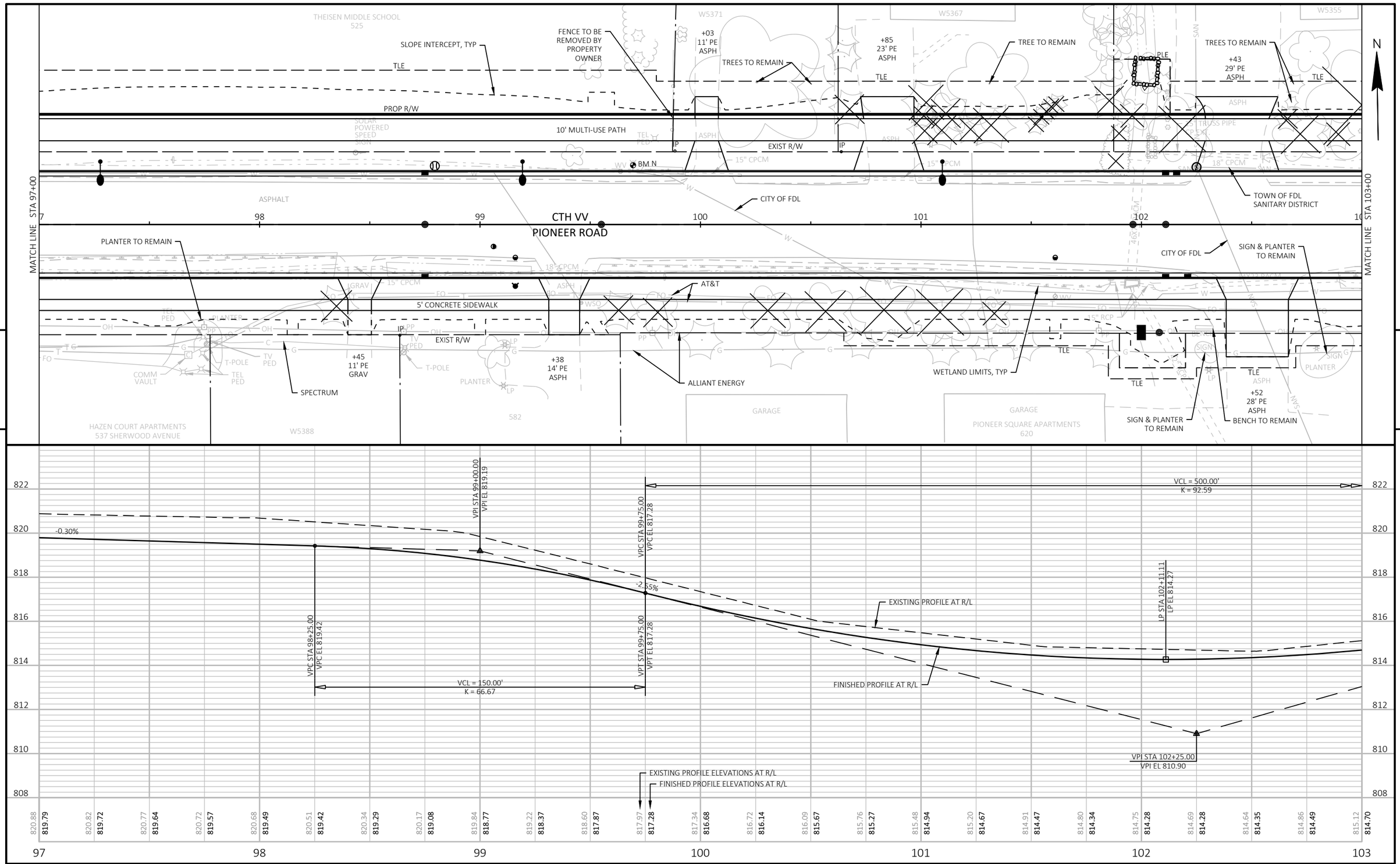
5

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH VV	SHEET 120	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050101-PP.DWG
LAYOUT NAME - Sheet-03

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

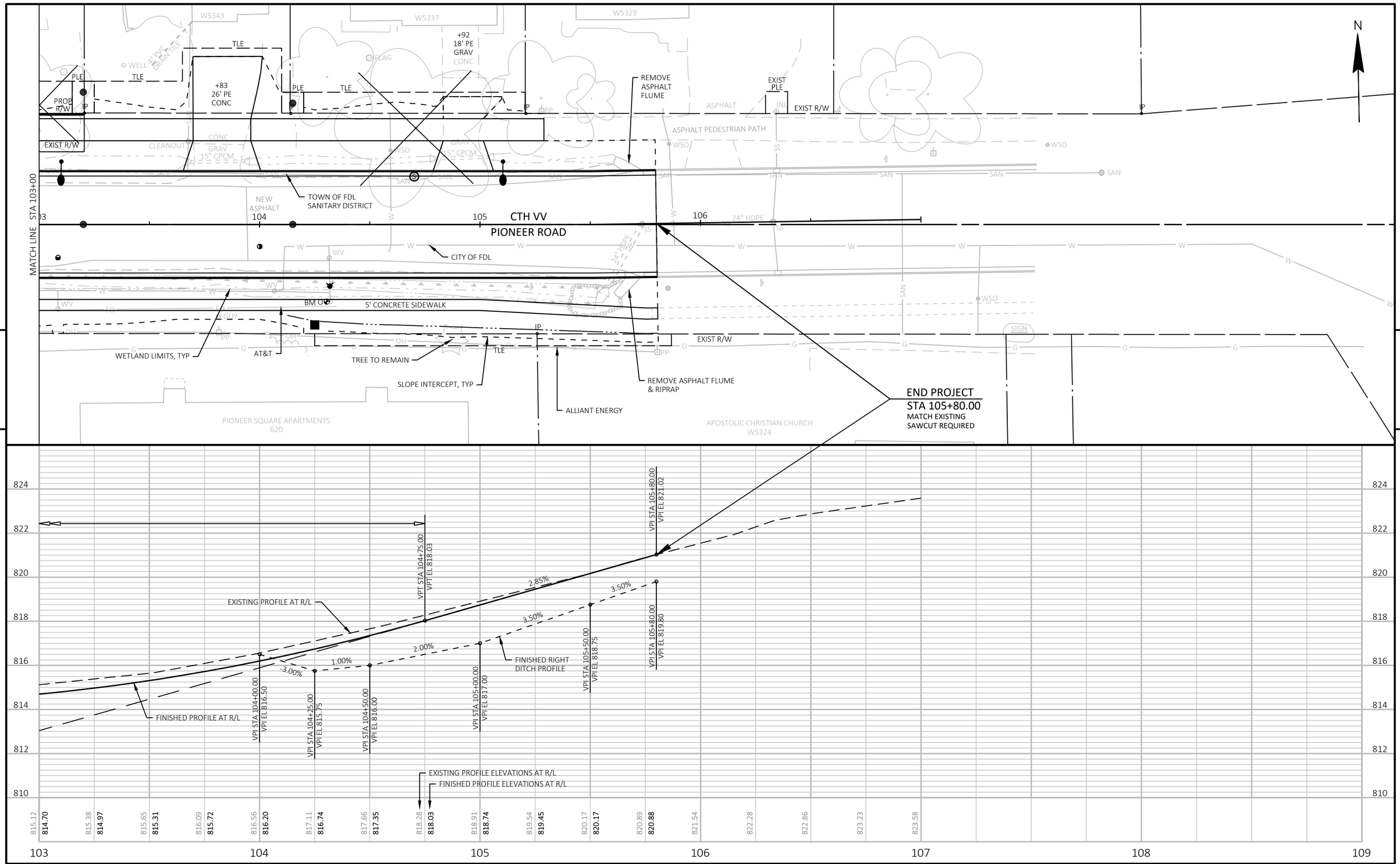


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH VV	SHEET 121	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050101-PP.DWG
LAYOUT NAME - Sheet-04

PLOT DATE : 10/30/2023 2:16 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PLOT: CTH VV	SHEET 122	E

MAPLEWOOD COMMONS
868 MARTIN AVENUE

SIGN & PLANTER
TO REMAIN

EXIST R/W

TLE

PROP R/W

EXIST R/W

5' CONC SW

CTH VV
PIONEER ROAD

EXIST R/W

PROP R/W

10' MULTI-USE PATH

STA 20+00.00
=STA 83+66.79

+09
22' PE
CONC

+44
10' PE
CONC

TLE

TREE
TO REMAIN

SLOPE INTERCEPT, TYP

5' CONC SW

EXIST R/W

ALLIANT
ENERGY

FDL SCHOOL DISTRICT

MARTIN AVENUE

ASPHALT

MARTIN AVENUE

CITY OF FOND DU LAC

18 19 20 21 22 23

CITY OF FOND DU LAC

AT&T

ALLIANT
ENERGY

5' CONC SW

5' CONC SW

EXIST R/W

PROP R/W

TLE

TLE

STA 20+00.00
=STA 83+68.03

EXIST R/W

TREES TO REMAIN

CTH VV
PIONEER ROAD

EXIST R/W

5' CONC SW

10' MULTI-USE PATH

PROP R/W

GOOD SHEPHERD
LUTHERAN CHURCH
855 MARTIN AVENUE

877
MARTIN
AVENUE

428

CONSTRUCTION LIMITS
STA 18+50.00
MATCH EXISTING
SAWCUT REQUIRED

CONSTRUCTION LIMITS
ROADWAY RECONSTRUCTION
STA 21+90.00
MATCH EXISTING
SAWCUT REQUIRED

CONSTRUCTION LIMITS
SANITARY SEWER
& WATER MAIN
STA 23+50.00
MATCH EXISTING
SAWCUT REQUIRED

5 5

VPI STA 18+75.00
VPI EL 811.68

VCL = 50.00'
K = 26.19

VPC STA 19+25.00
VPC EL 809.95

VPT STA 19+75.00
VPT EL 808.70

VPI STA 20+22.00
VPI EL 808.66

VPI STA 21+15.00
VPI EL 808.94

VPI STA 21+90.00
VPI EL 808.42

-2.30%

EXISTING
PROFILE
AT R/L

VPI STA 18+50.00
VPI EL 812.25

FINISHED
PROFILE
AT R/L

-3.46%

-1.55%

0.03%

0.00%

0.30%

-0.70%

VPC STA 18+50.00
VPC EL 812.25

VCL = 50.00'
K = 43.14

VPT STA 19+00.00
VPT EL 810.81

VPI STA 19+50.00
VPI EL 809.08

VPI STA 19+78.00
VPI EL 808.65

VPI STA 20+00.00
VPI EL 808.66

VPC STA 20+65.00
VPC EL 808.79

HP STA 20+94.94
HP EL 808.84

VCL = 100.00'
K = 99.82

VPT STA 21+65.00
VPT EL 808.59

VPI STA 20+00.00
VPI EL 808.66

EXISTING PROFILE ELEVATIONS AT R/L
FINISHED PROFILE ELEVATIONS AT R/L

816 814 812 810 808 806 804 802

813.20 812.77 812.25 **812.25** 811.68 **811.61** 811.10 **810.81** 810.42 **809.95** 809.83 **809.20** 809.30 **808.70** 809.13 **808.66** 808.75 **808.67** 808.71 **808.75** 808.76 **808.82** 808.81 **808.84** 808.77 **808.79** 808.68 **808.68** 808.54 **808.52** 808.33 808.08 807.83 807.56 807.29 807.03 806.71

18 19 20 21 22 23 24

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: MARTIN AVENUE	SHEET 123	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050102-PP.DWG
LAYOUT NAME - Sheet-11

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

SAMUEL B. STANCHFIELD HOUSE
HISTORIC PROPERTY (AHI #16626)

CONSTRUCTION LIMITS
STA 29+40.00
MATCH EXISTING
SAWCUT REQUIRED

SLOPE INTERCEPT, TYP

EXIST R/W

5' CONC SW

CTH VV
PIONEER ROAD

SHERWOOD BOULEVARD

AT&T

STA 30+00.00
=STA 93+37.36

LIGHT POLE
TO REMAIN

CITY OF FDL

STA 40+00.00
=STA 93+53.36

PROP R/W

CONSTRUCTION LIMITS
STA 39+40.00
MATCH EXISTING
SAWCUT REQUIRED

HAZEN COURT APARTMENTS
517 SHERWOOD AVENUE

5' CONCRETE SIDEWALK

WETLAND LIMITS, TYP

ALLIANT
ENERGY

10' MULTI-USE PATH

THEISEN
MIDDLE
SCHOOL
525

ASPHALT
PARKING
LOT

WATER
BOOSTER
STATION

FLASHING
YELLOW
PEDESTRIAN
CROSSING
SIGN

N

5

5

826
824
822
820
818
816
814
812

VPI STA 29+40.00
VPI EL 819.74
VPI STA 29+78.00
VPI EL 819.36
VPI STA 30+00.00
VPI EL 819.60
VPI STA 29+93.00
VPI EL 819.81
-0.99%
3.00%
-3.00%
EXISTING PROFILE AT R/L
FINISHED PROFILE AT R/L

EXISTING PROFILE ELEVATIONS AT R/L
FINISHED PROFILE ELEVATIONS AT R/L
819.79 819.66 **819.64** 819.84 **819.39** 820.36 **819.60** 820.00 819.18

29 30 31

VPI STA 39+40.00
VPI EL 819.93
VPI STA 39+78.00
VPI EL 819.41
VPI STA 40+00.00
VPI EL 819.65
VPI STA 39+98.00
VPI EL 819.86
-1.37%
3.00%
-3.00%
FINISHED PROFILE AT R/L

EXISTING PROFILE ELEVATIONS AT R/L
FINISHED PROFILE ELEVATIONS AT R/L
820.02 819.81 **819.80** 819.89 **819.45** 820.41 **819.65** 820.03 819.14

39 40 41

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	PLAN AND PROFILE: SHERWOOD BOULEVARD	SHEET 124	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-050102-PP.DWG
LAYOUT NAME - Sheet-21

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

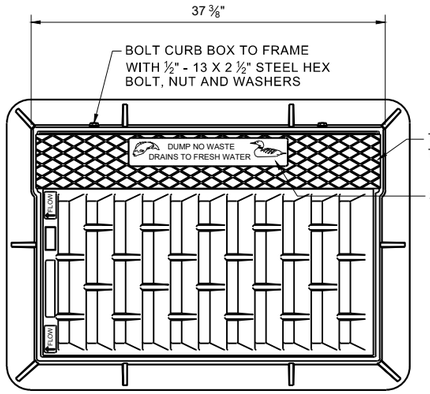
08A05-20A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-20B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-20D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-10	CONCRETE BASE TYPE 10
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09H09-02	COMMUNICATION VAULT TYPE 1
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

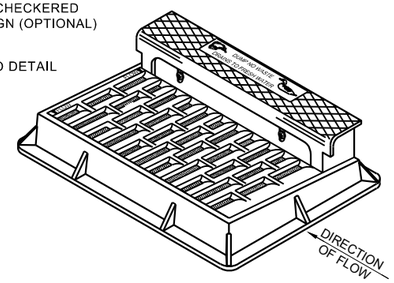
Standard Detail Drawing List

15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

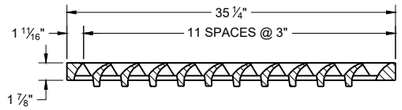
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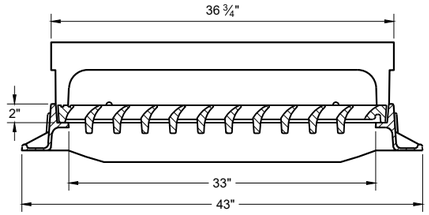


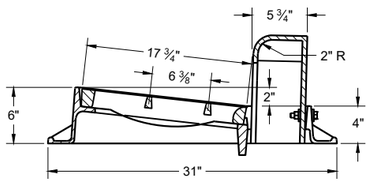
NOTE: EITHER CASTING IS ACCEPTABLE

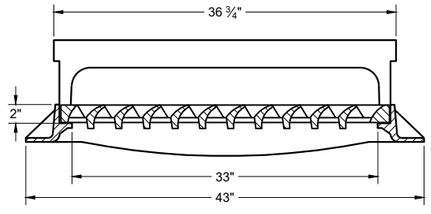


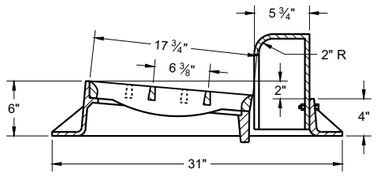
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







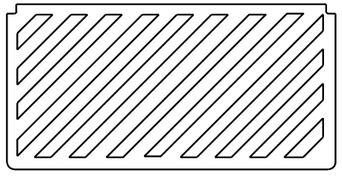




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

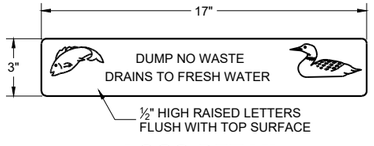
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



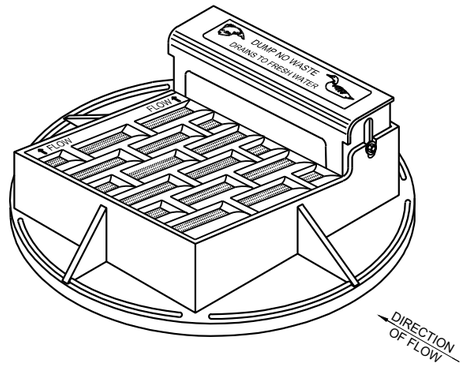
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

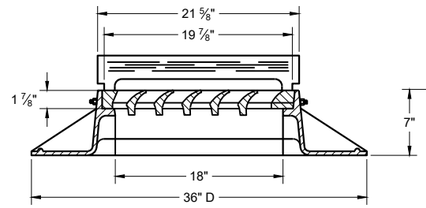


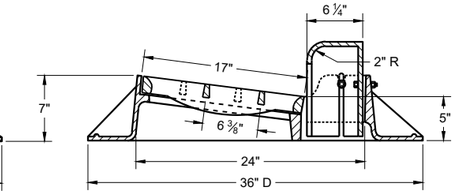
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





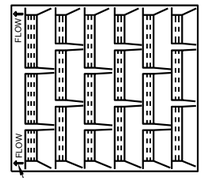
TYPE "A"

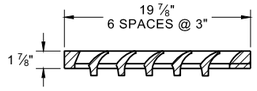
GENERAL NOTES

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.

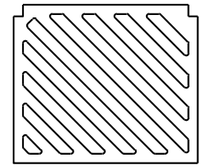
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





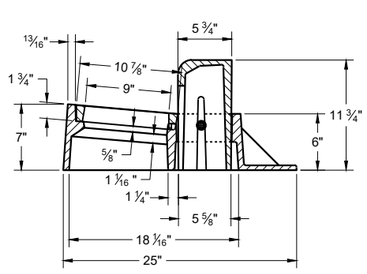
1" DIAGONAL BARS WITH 1 ½" OPENINGS



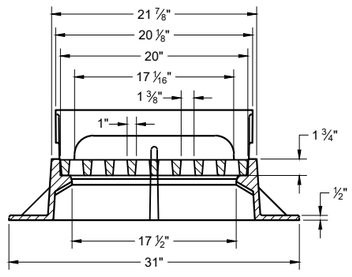
SPECIAL GRATE FOR TYPE "A" COVER

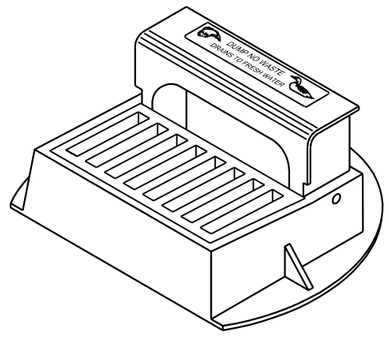
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





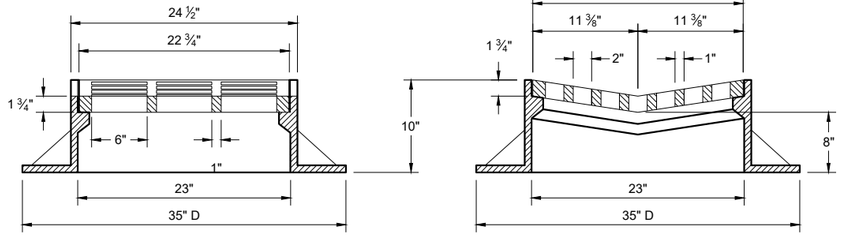
INLET COVERS
TYPES A, H, A-S, H-S AND Z

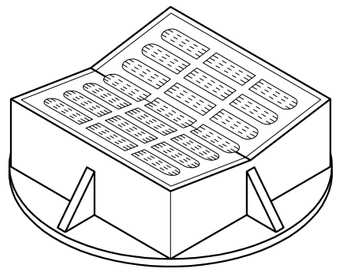
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

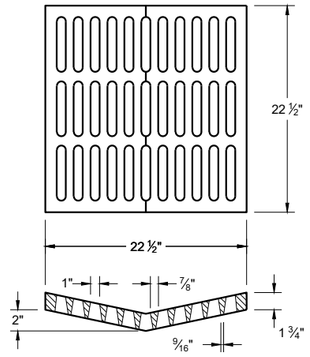
APPROVED
July 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA





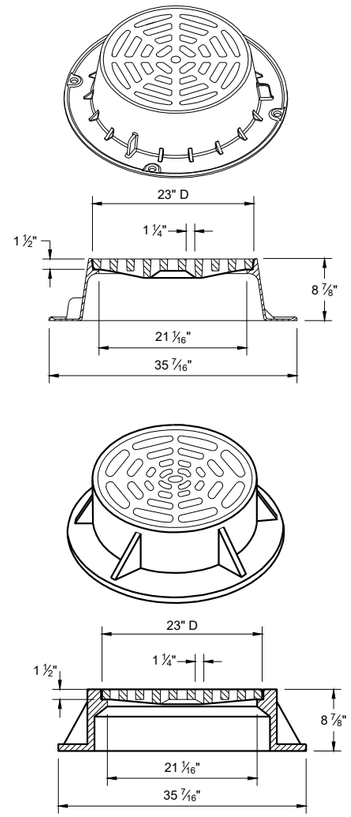


TYPE "B"

ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

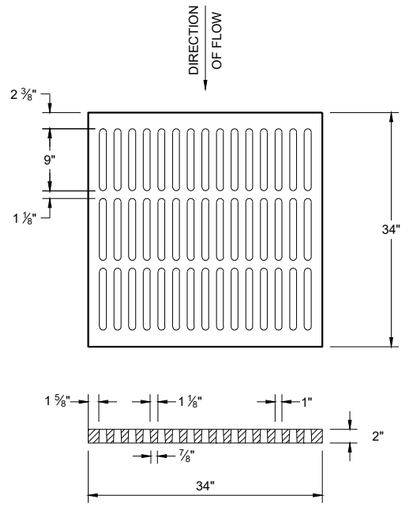
NOTE: EITHER CASTING IS ACCEPTABLE

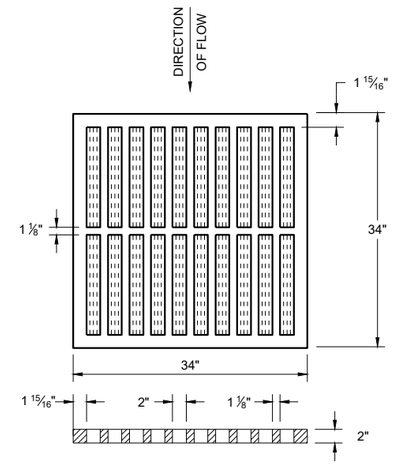
GENERAL NOTES

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"

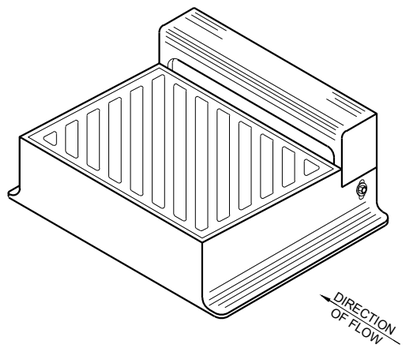
USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

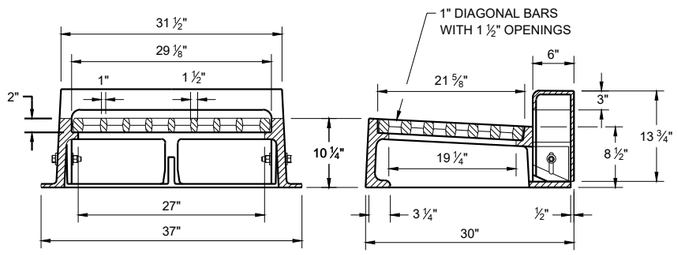
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



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



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 2023 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

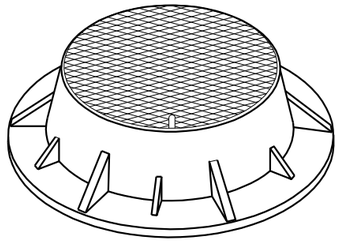
SDD 08A05-20b

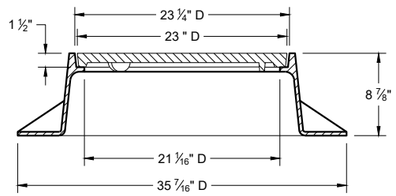
GENERAL NOTES

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.

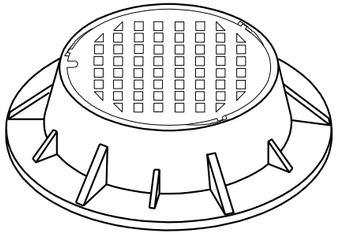
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

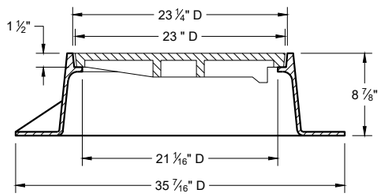




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

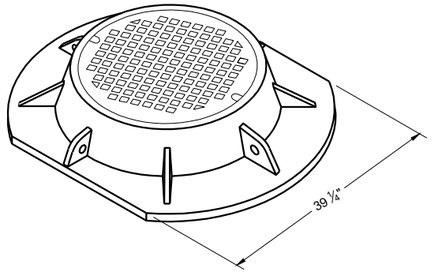


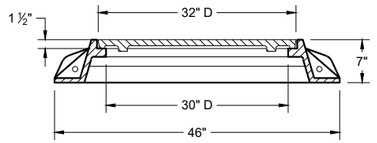


TYPE "J" SPECIAL

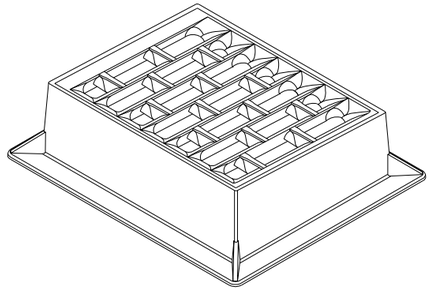
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

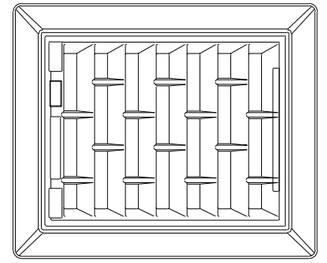
NOTE: EITHER CASTING IS ACCEPTABLE

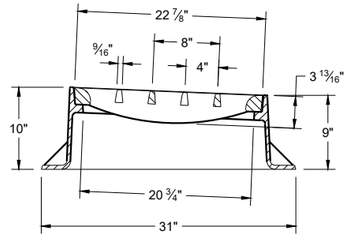


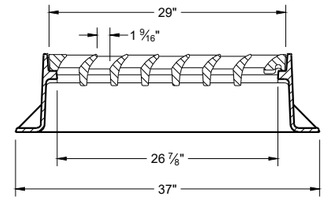


TYPE "K"

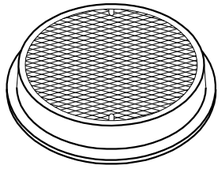


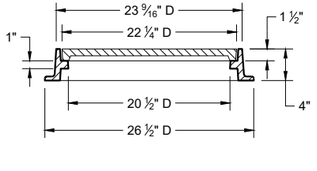




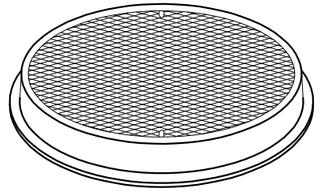


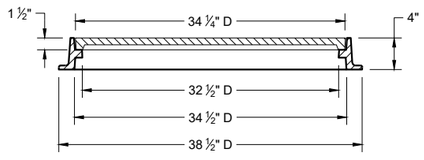
INLET COVER TYPE "BW"





TYPE "L"





TYPE "M"

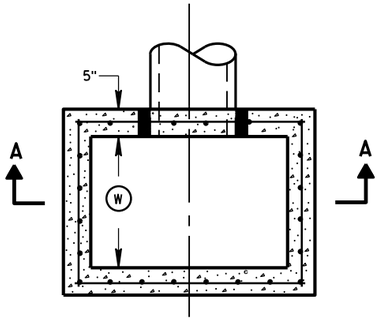
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

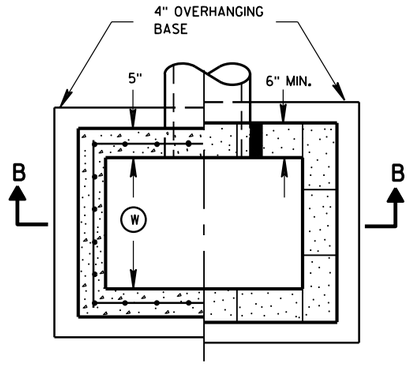
APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

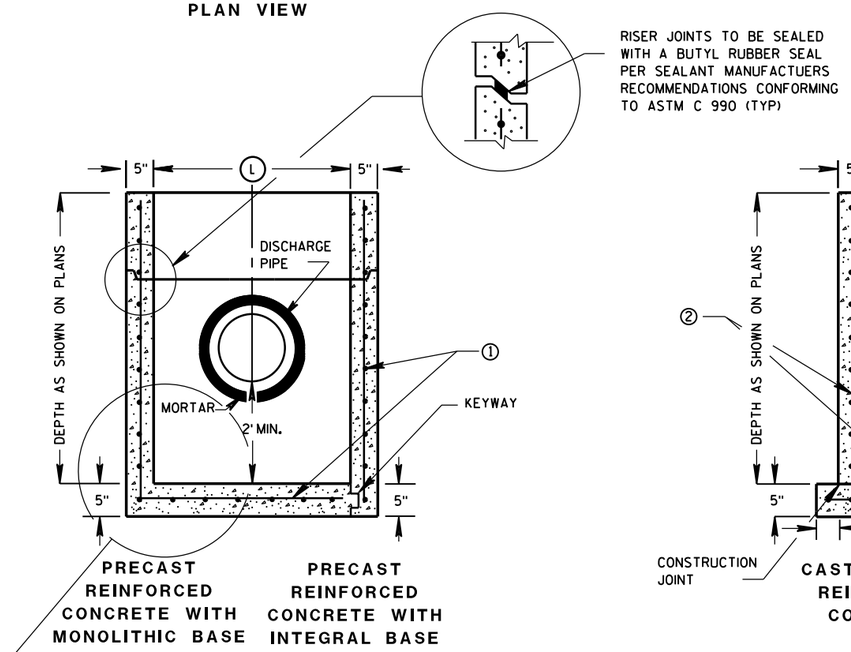
6
SDD 08A05-20d



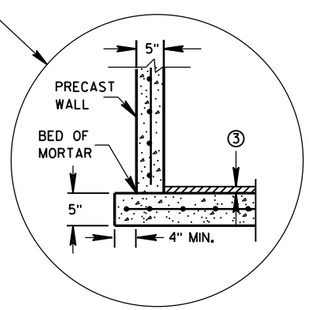
PLAN VIEW



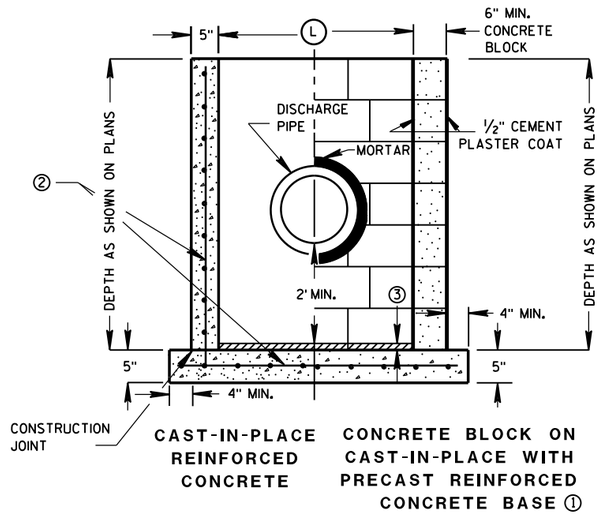
PLAN VIEW



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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

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

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" 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.

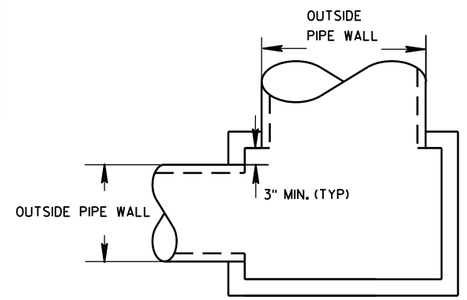
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

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

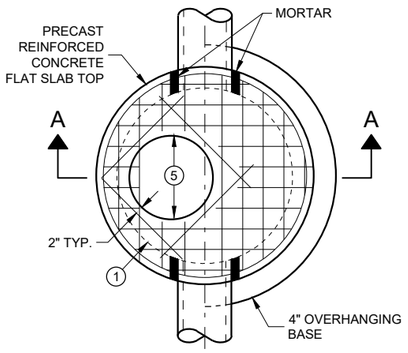
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

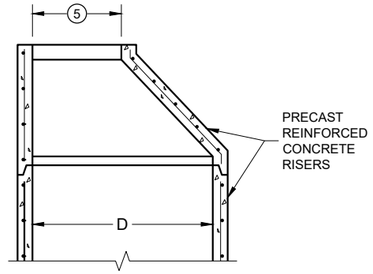
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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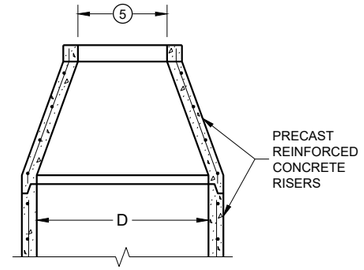
S.D.D. 8 A 9-2



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION 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.

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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. 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 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

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

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

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

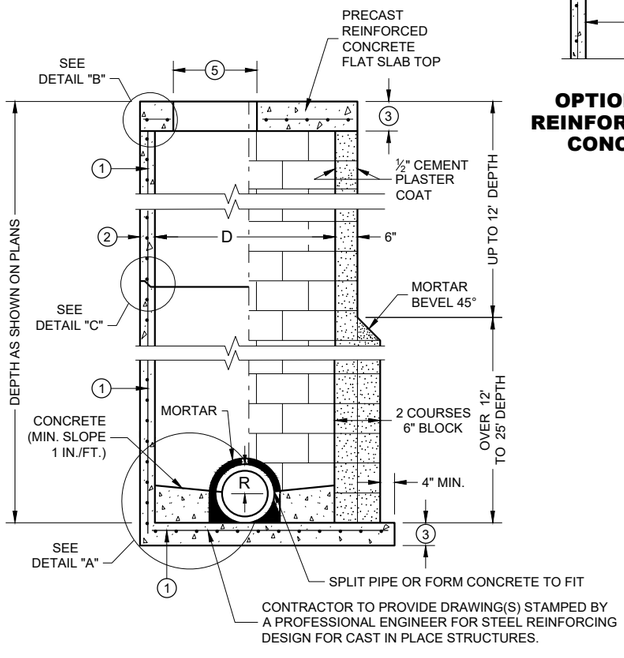
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

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

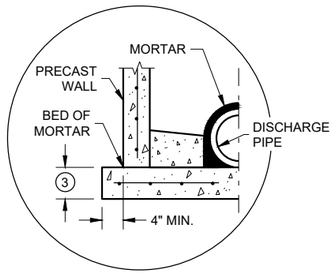
(5) SEE MANHOLE COVER OPENING MATRIX.



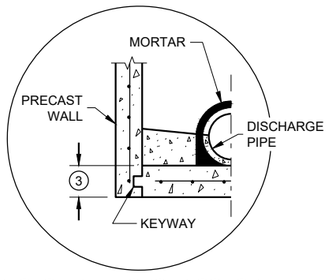
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

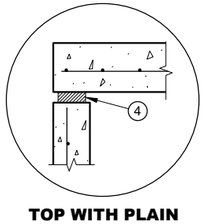


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

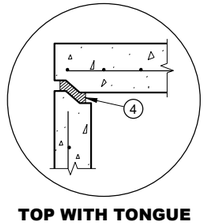


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

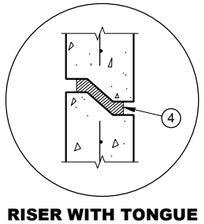


TOP WITH PLAIN END JOINT



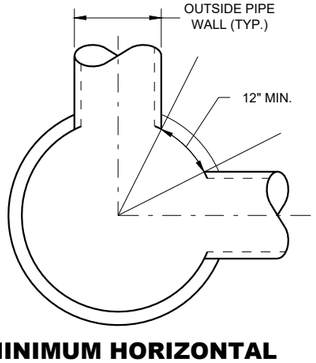
TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"



MINIMUM HORIZONTAL PIPE SEPARATION

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

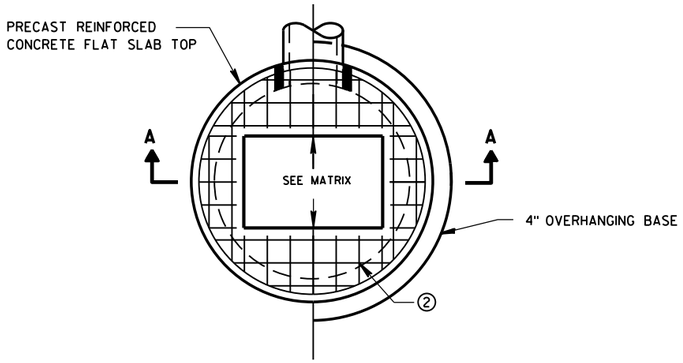
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

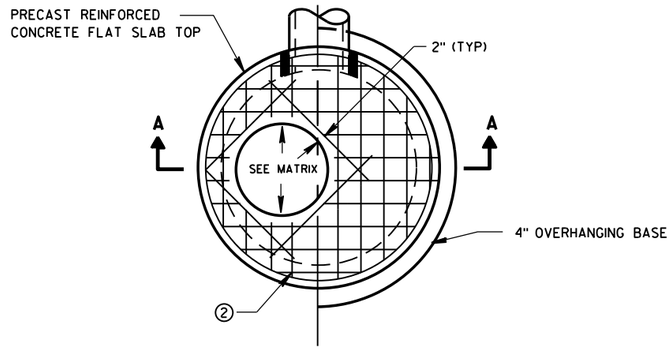
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

6

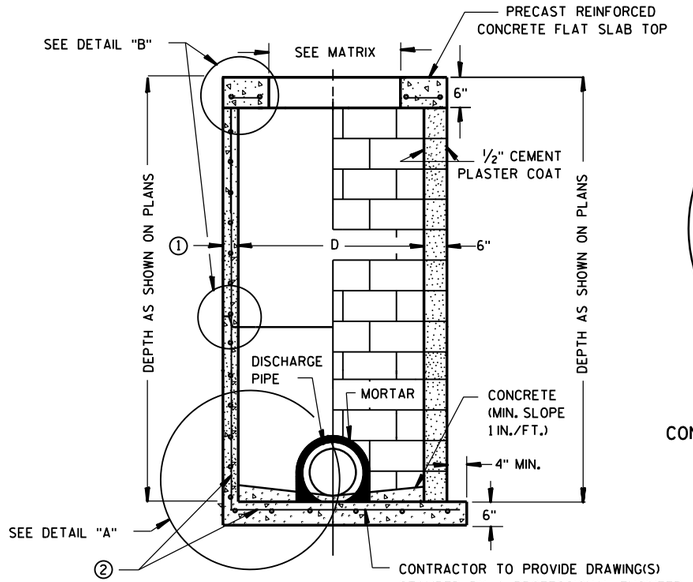
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

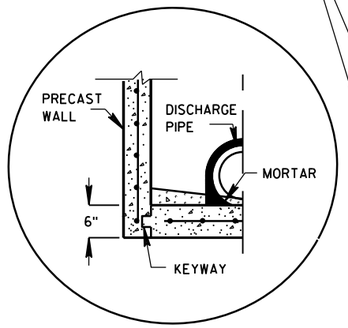


SECTION A-A

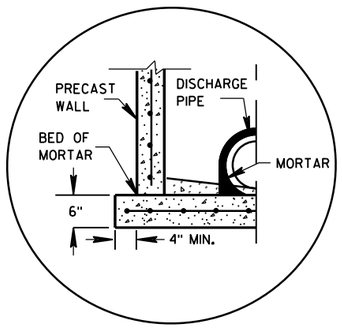
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

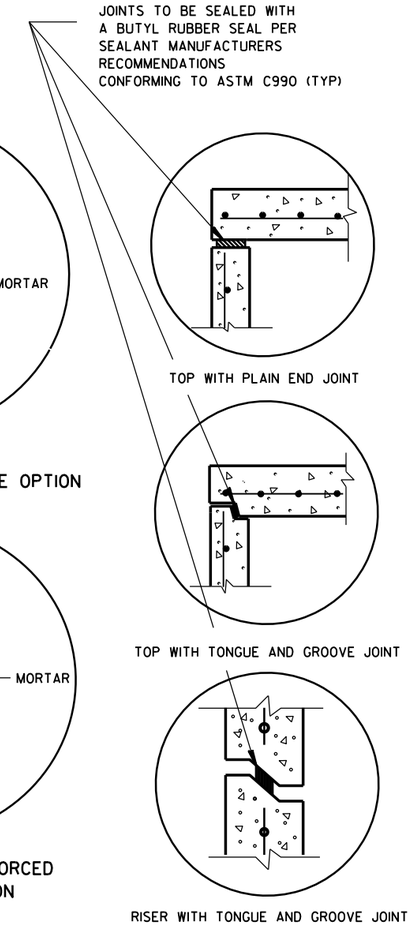


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



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

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

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

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

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

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

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

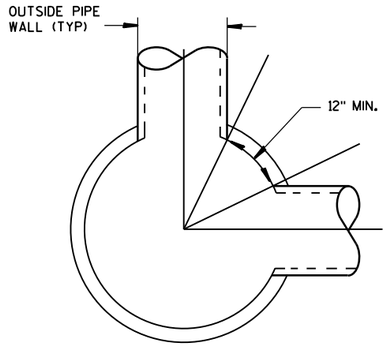
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

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

INLETS 3-FT AND 4-FT DIAMETER

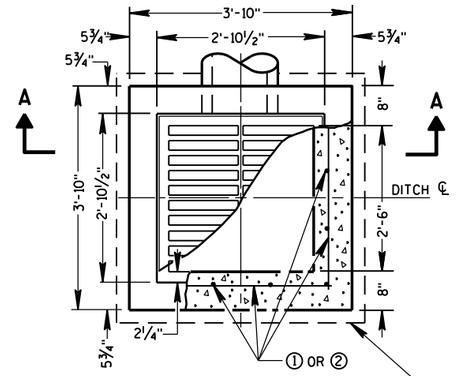
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept.. 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

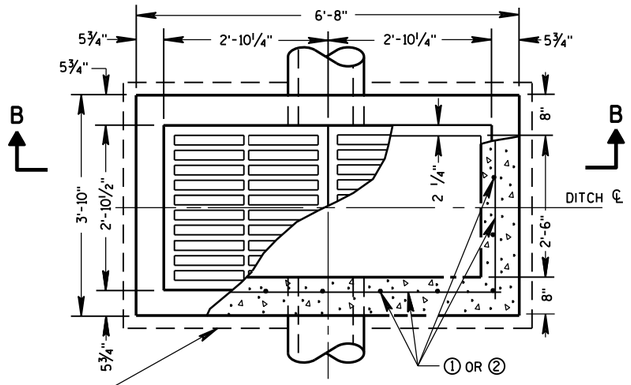
INLETS 3-FT AND 4-FT DIAMETER

6

S.D.D. 8 C 6-2

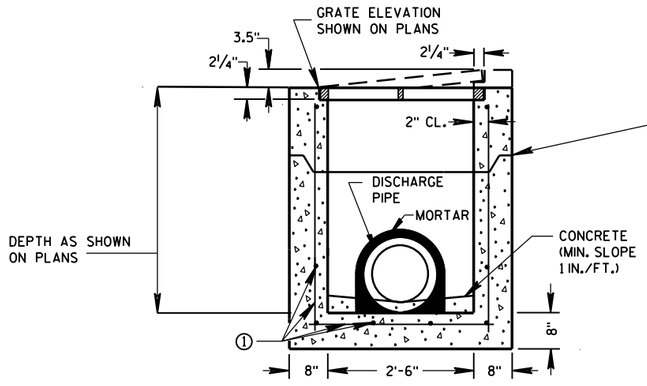


PLAN VIEW

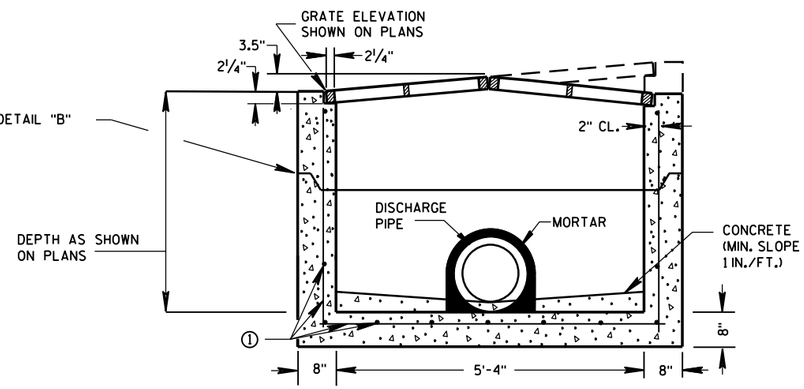


PLAN VIEW

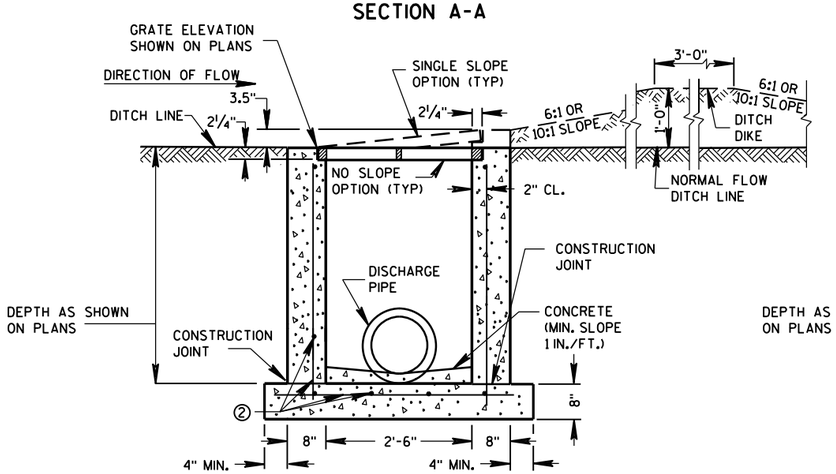
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



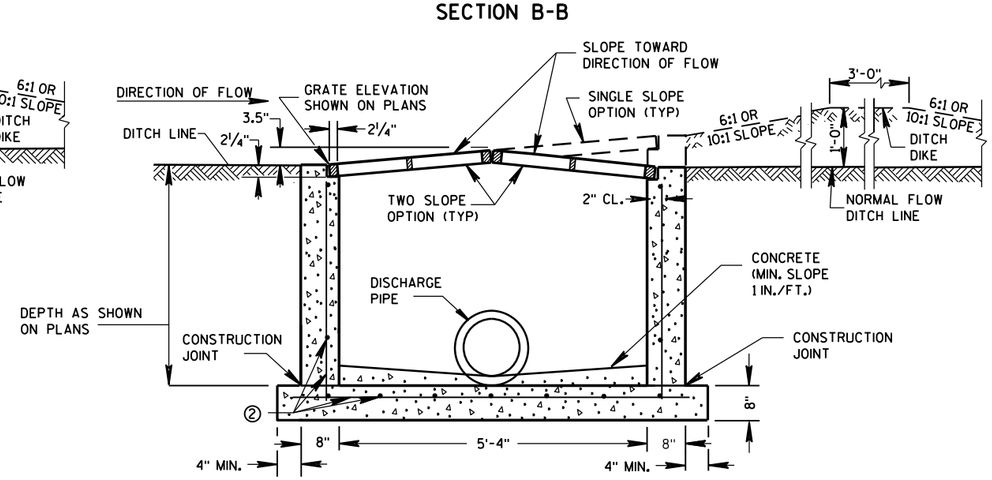
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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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.

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

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

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

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

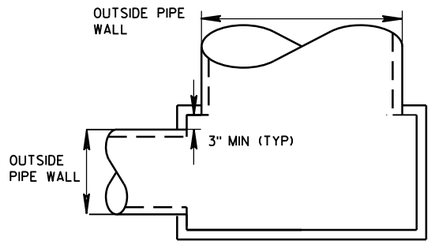
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

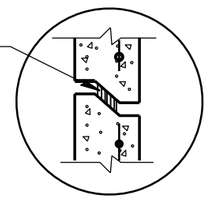
PIPE MATRIX

	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)



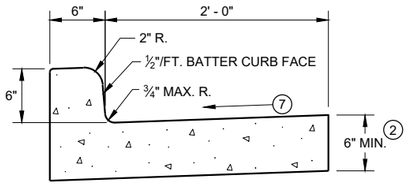
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

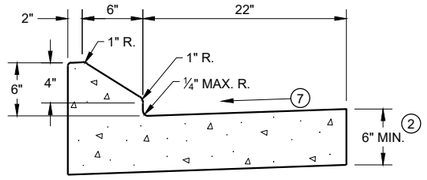
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

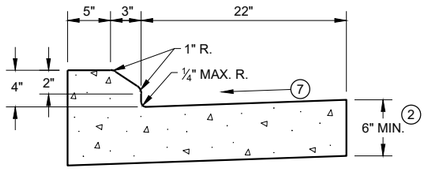
6
S.D.D. 8 C 8-2



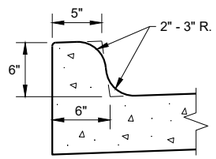
TYPES A (1) & D



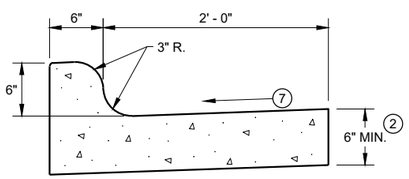
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

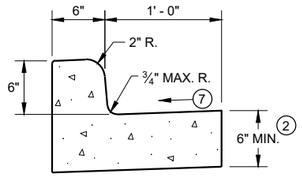


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



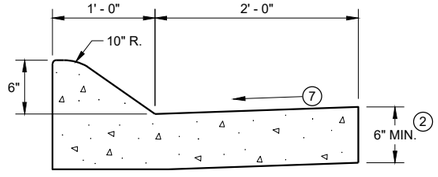
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

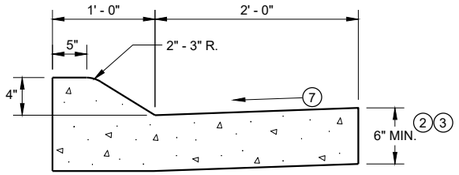


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

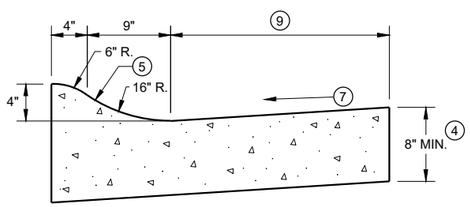


6" SLOPED CURB TYPES A (1) & D



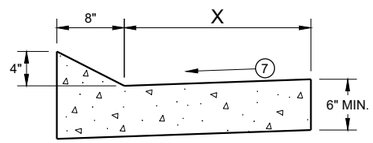
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

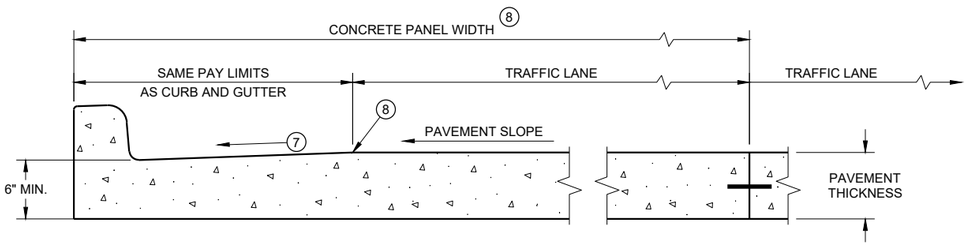


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

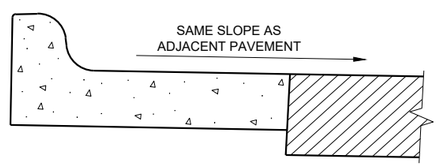
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

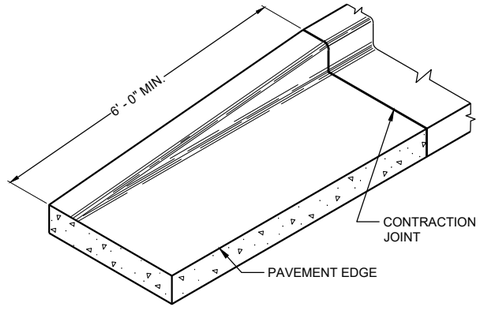
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

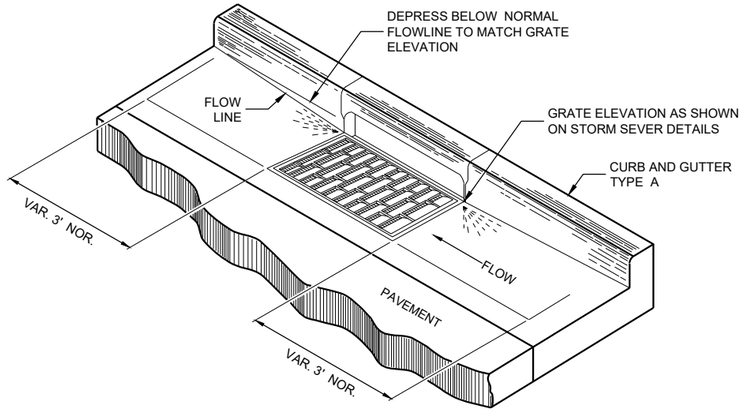
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

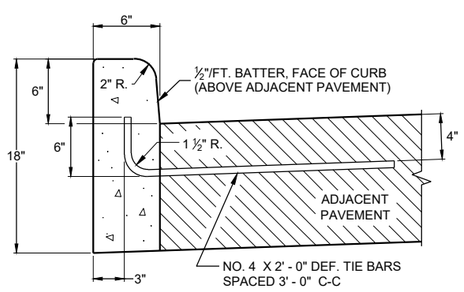
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

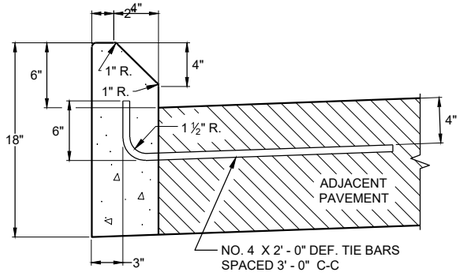
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

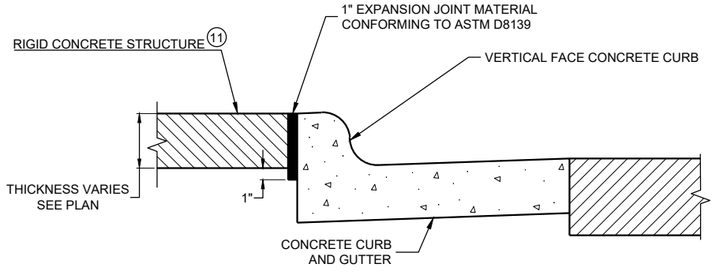


TYPES A (1) & D

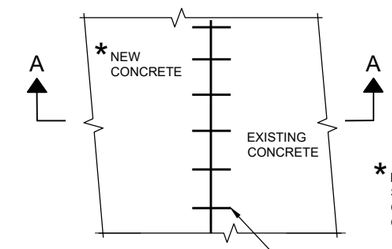


TYPES G (1) & J

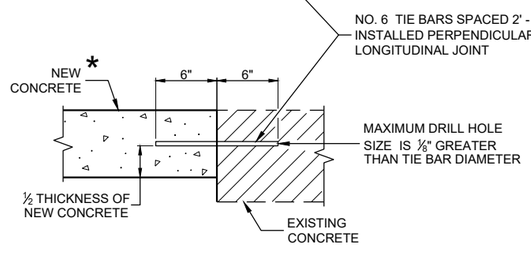
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

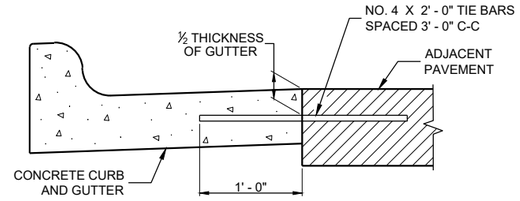


PLAN VIEW

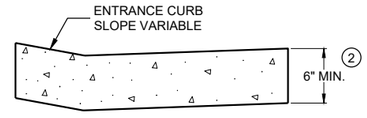


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

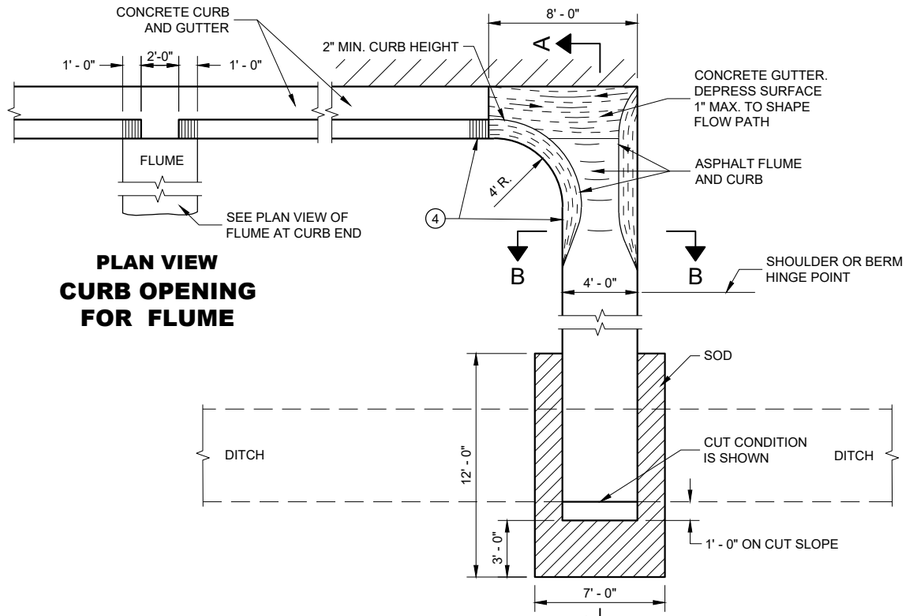
FHWA

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SDD08D01 - 23b

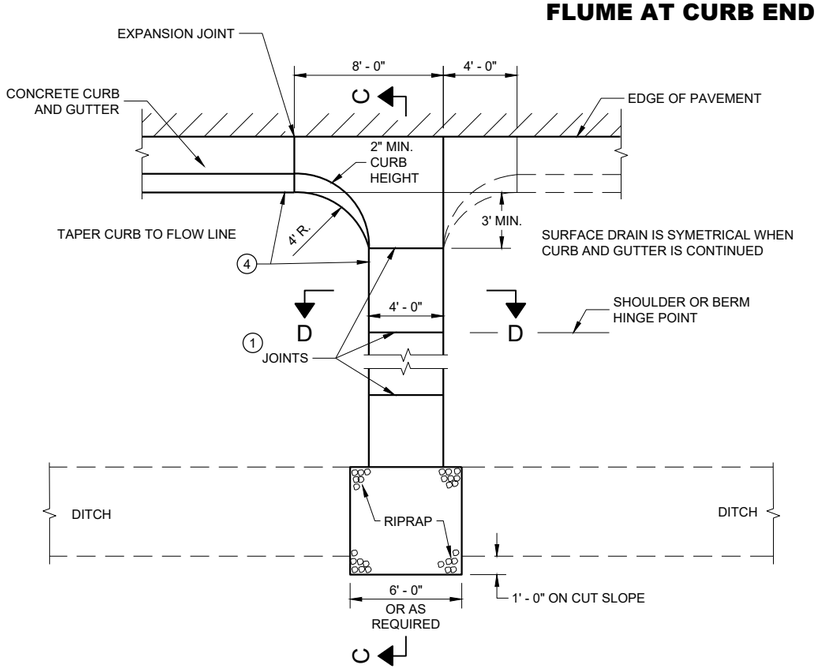
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



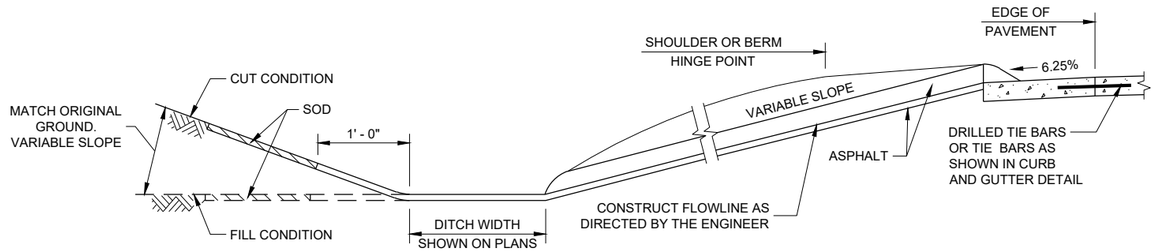
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

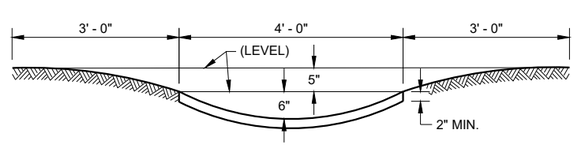
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

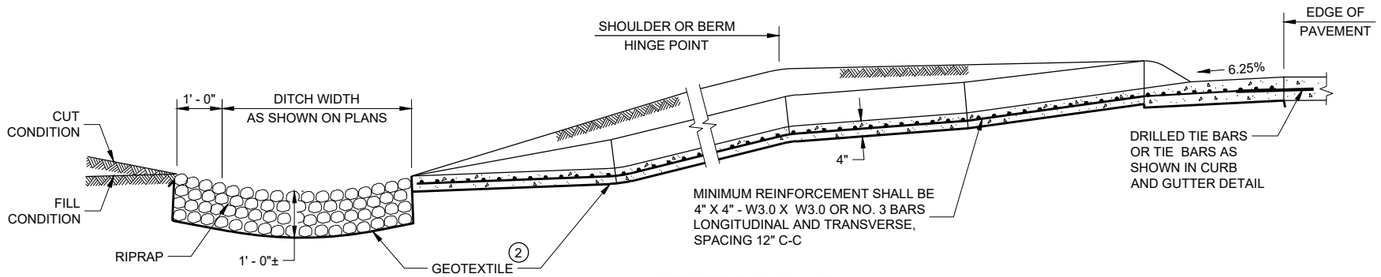
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



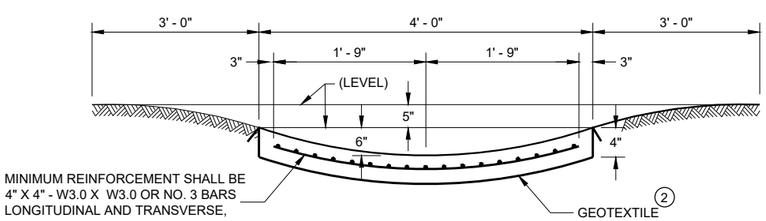
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

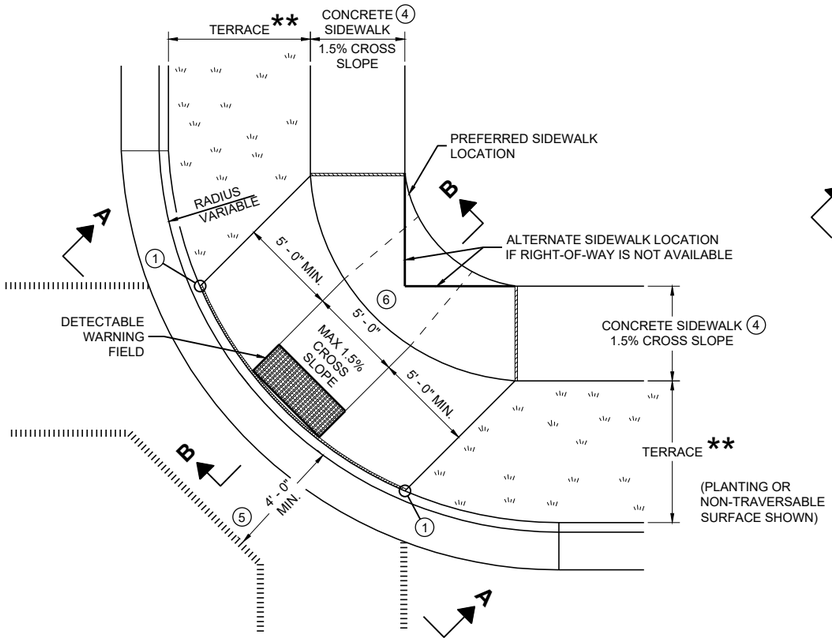
FHWA

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SDD 08D04 - 07

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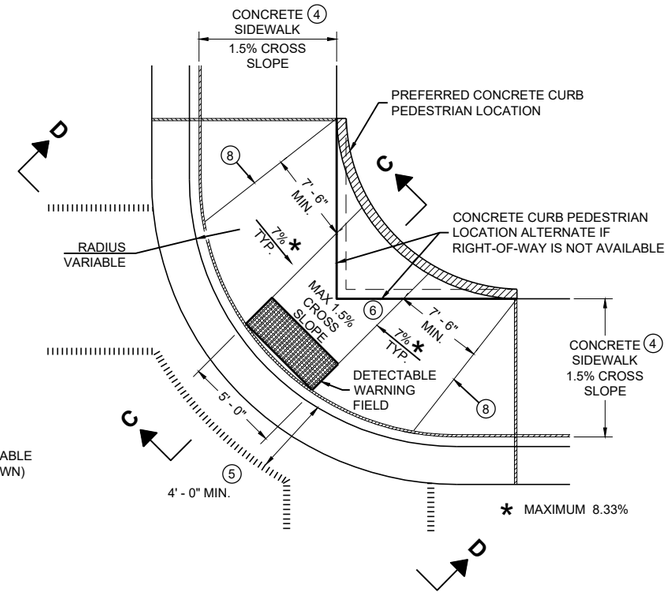
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

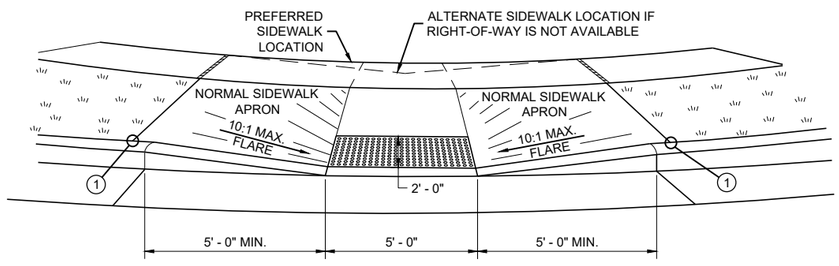
(CENTER OF CORNER RADIUS)



PLAN VIEW

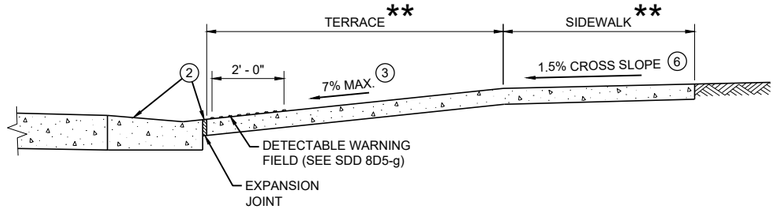
CURB RAMP TYPE 1 - A

(NO TERRACE)

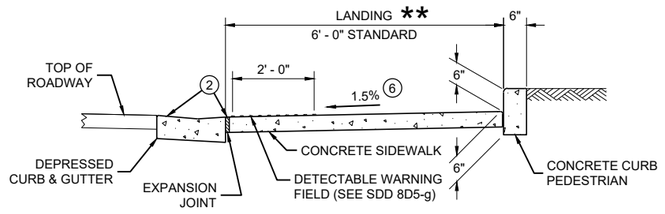


VIEW A - A FOR TYPE 1

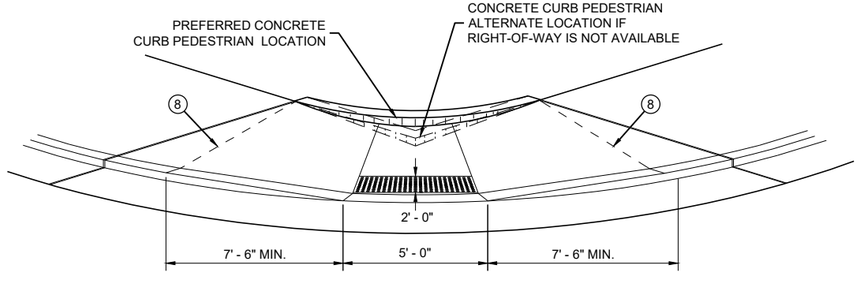
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

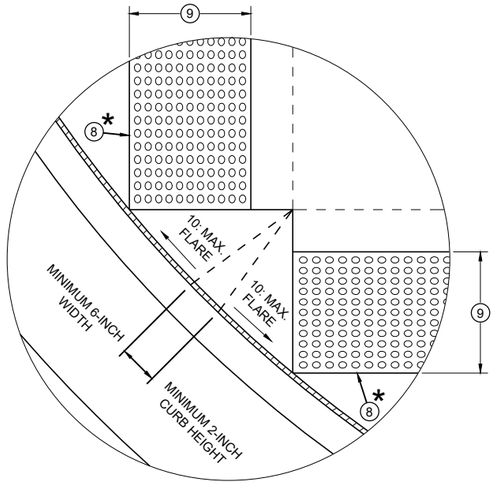
LEGEND

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

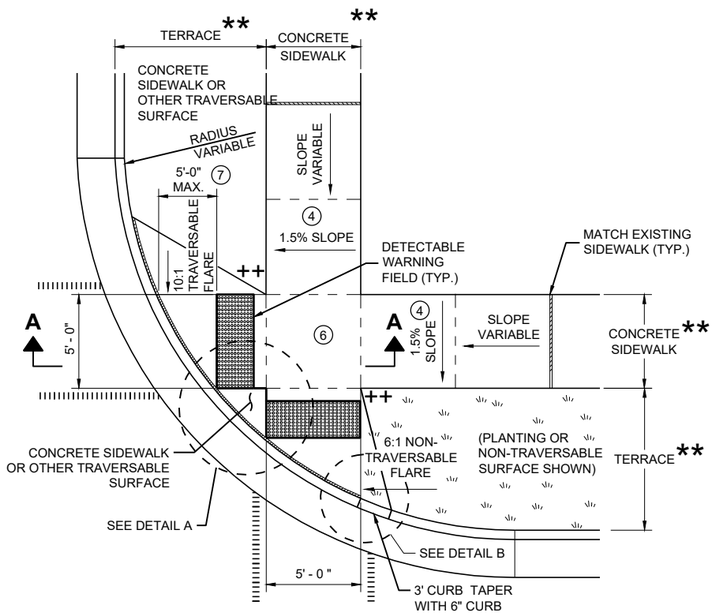
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

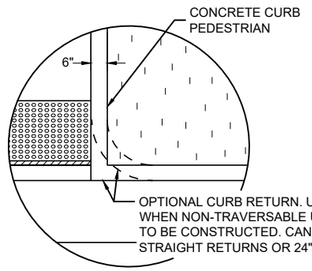
6
SDD 08D05-21a



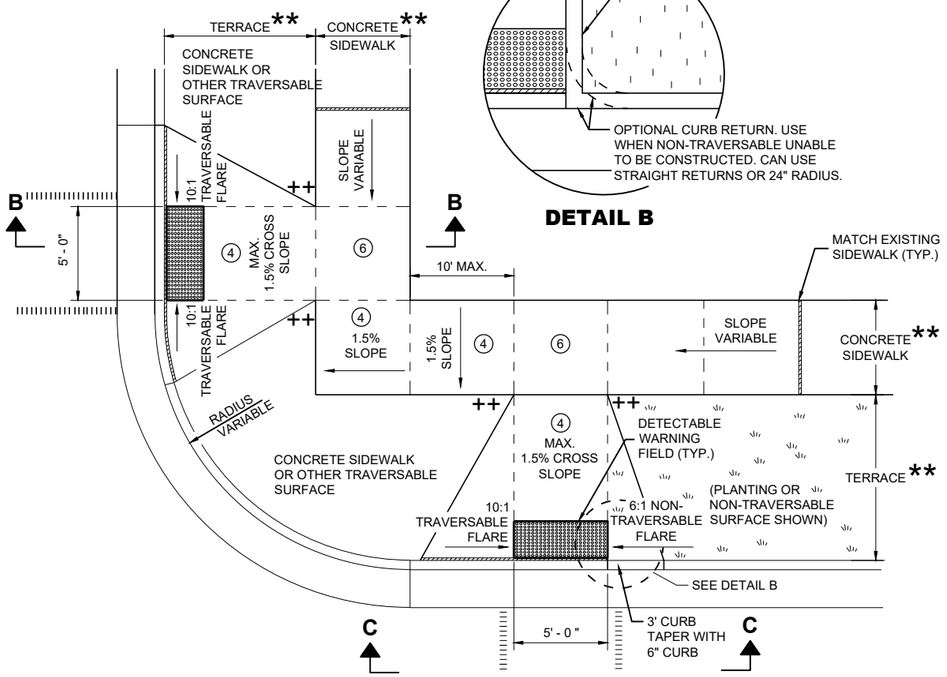
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



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

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

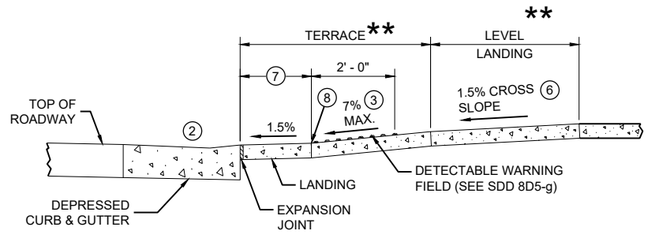
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

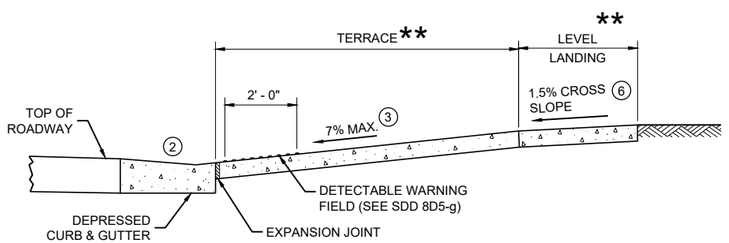


SECTION A - A FOR TYPE 2

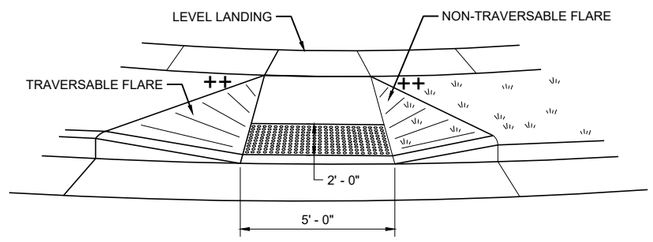
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



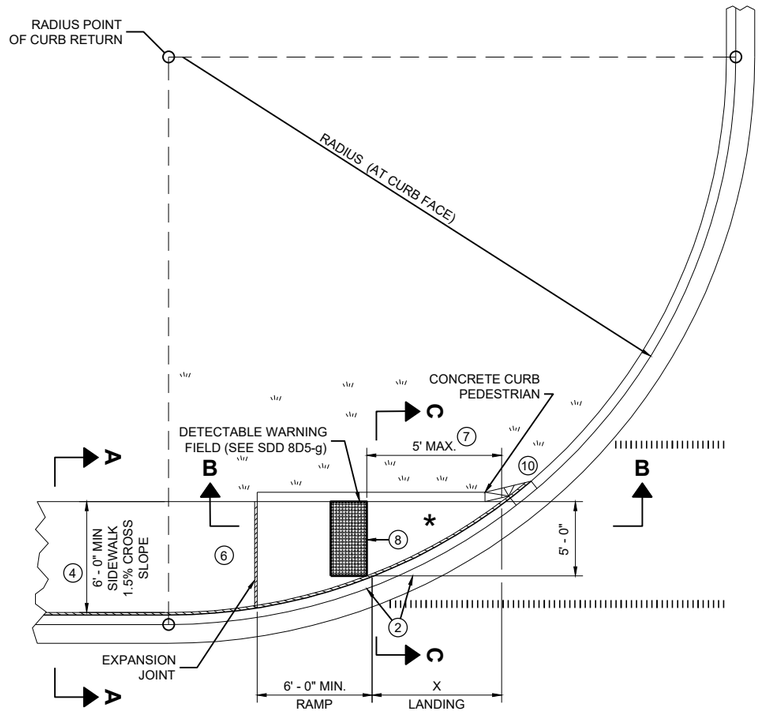
VIEW C - C FOR TYPE 3

LEGEND

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

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

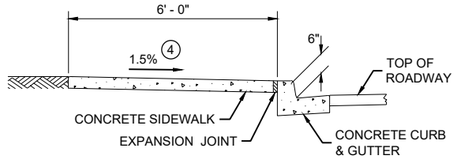


PLAN VIEW

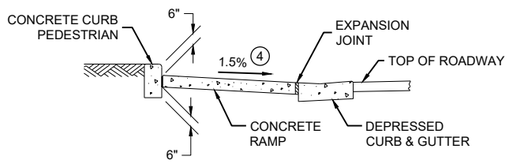
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

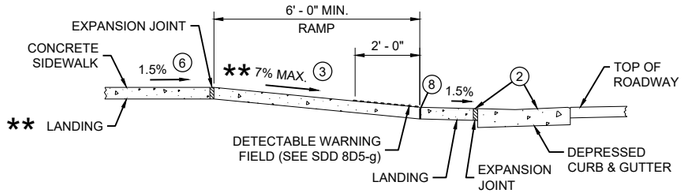
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



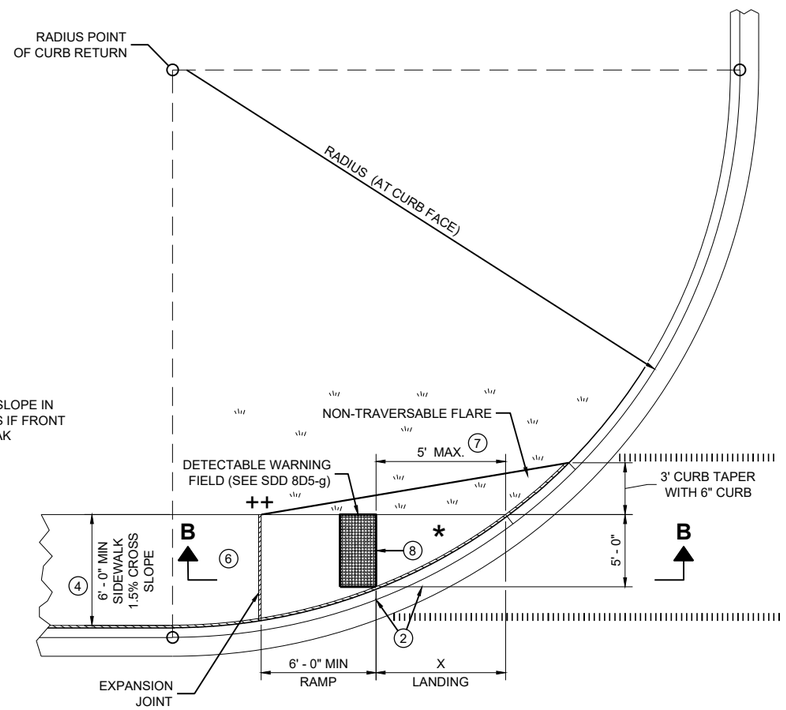
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

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

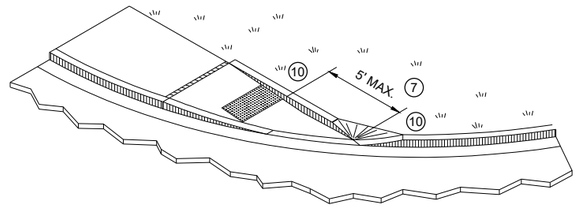
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



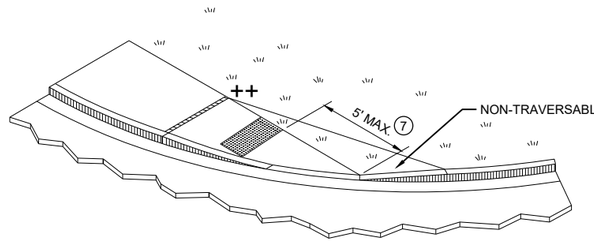
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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

LEGEND

½" EXPANSION JOINT SIDEWALK

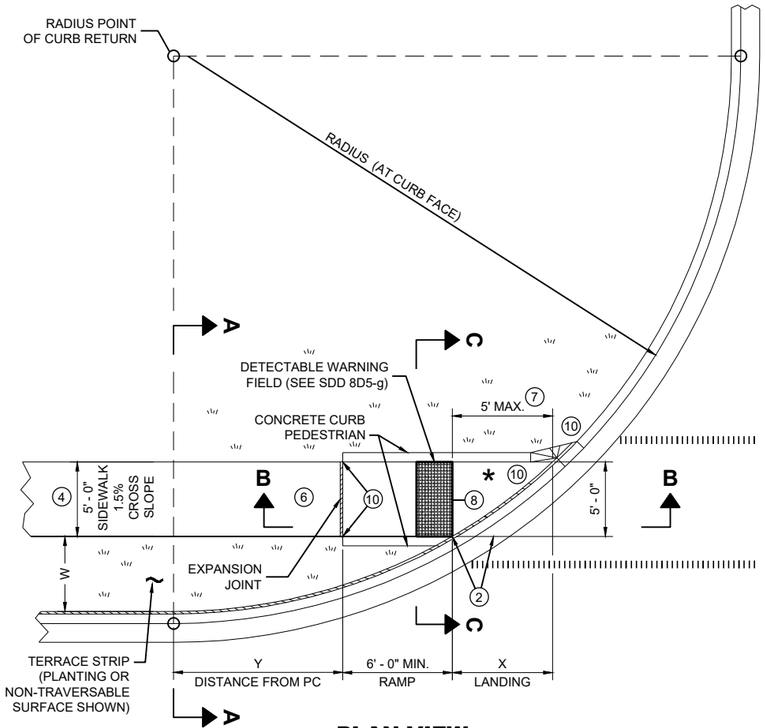
CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

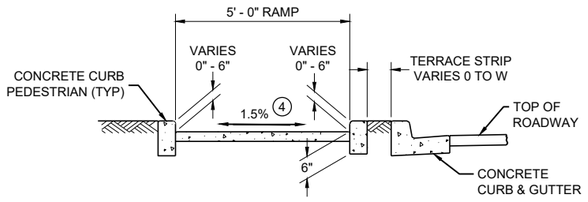
6
SDD 08D05-21c



PLAN VIEW
CURB RAMP TYPE 4B

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

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



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

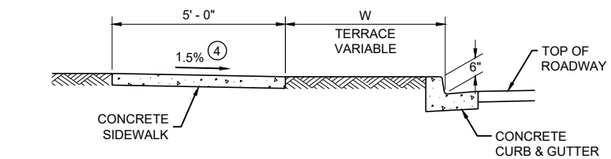
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

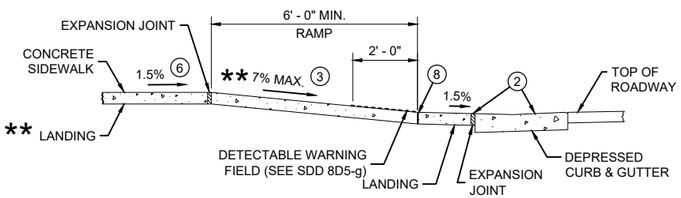
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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

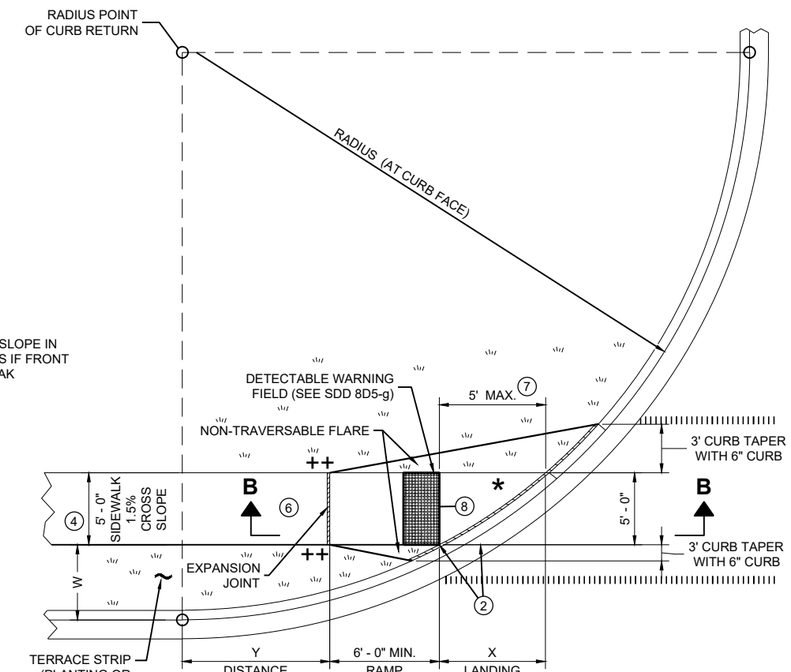


SECTION A - A FOR TYPE 4B



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

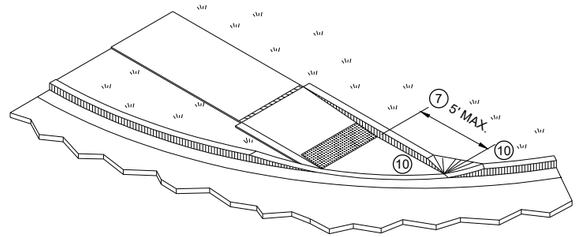
SECTION B - B FOR TYPE 4B AND TYPE 4B1



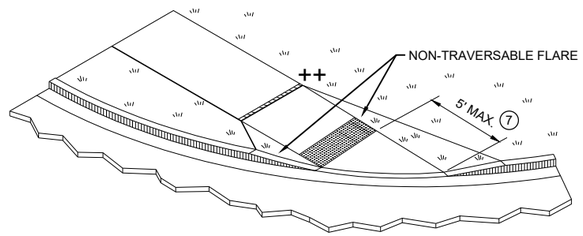
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

PLAN VIEW
CURB RAMP TYPE 4B1



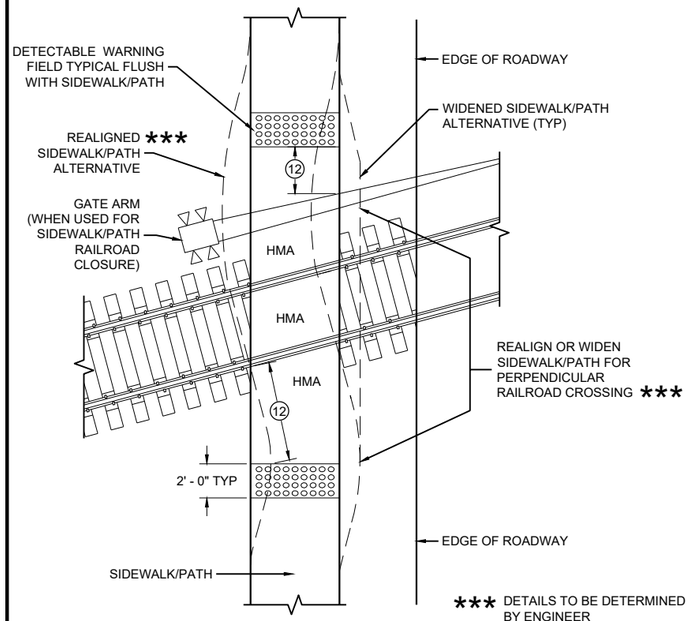
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

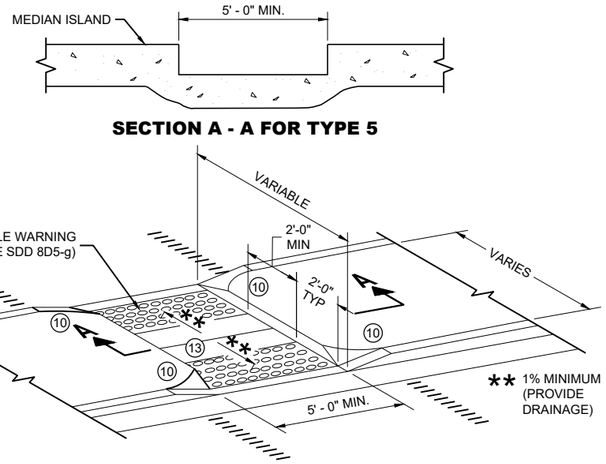
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

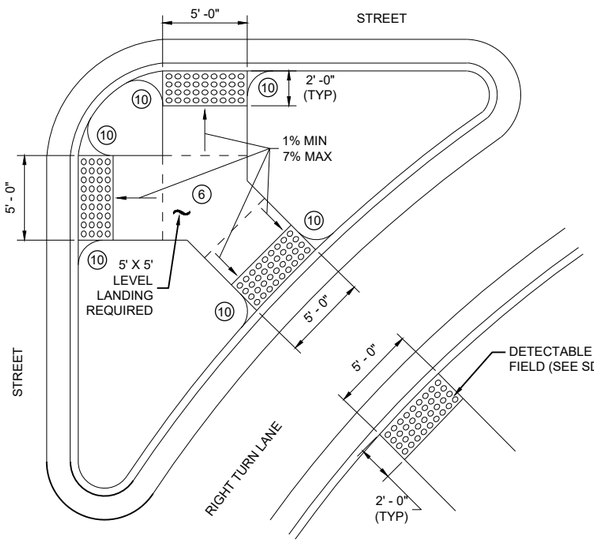
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

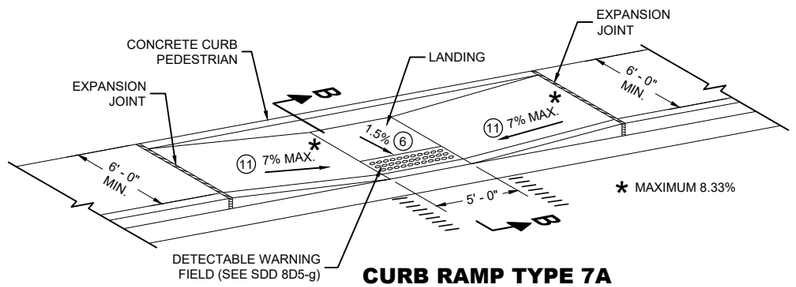
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

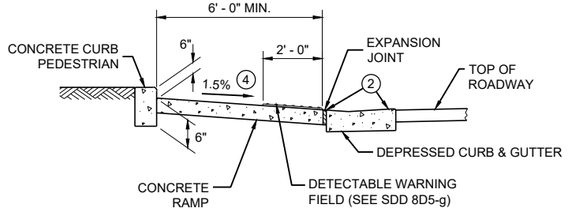
DETECTABLE WARNING AT ISLANDS

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

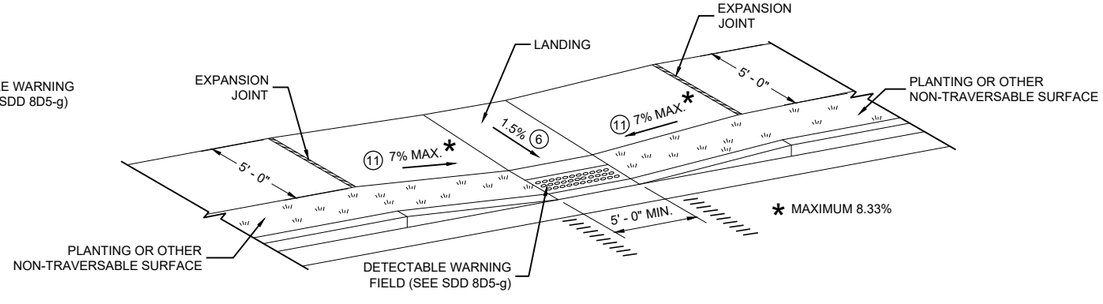


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



SECTION B - B FOR TYPE 7A



CURB RAMP TYPE 7B

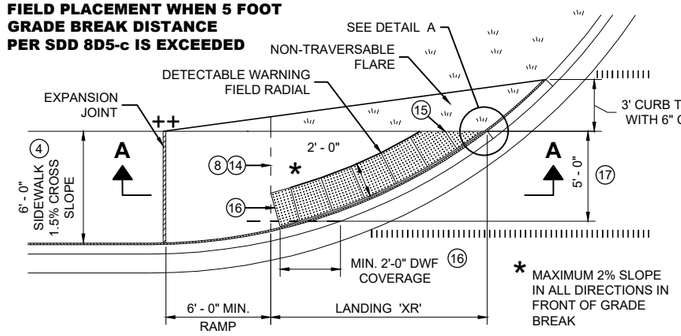
FOR INTERSECTIONS AND MID BLOCK CROSSINGS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

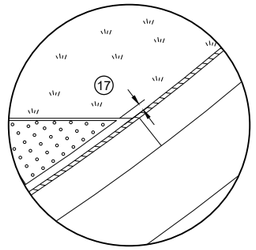
SDD 08D05-21e

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

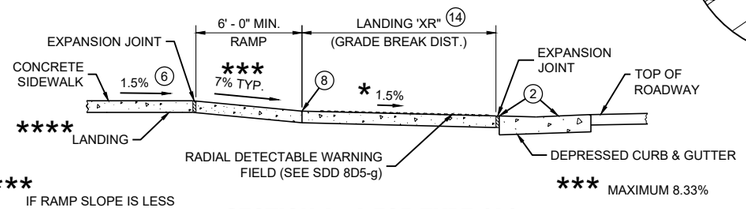


PLAN VIEW

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



DETAIL A

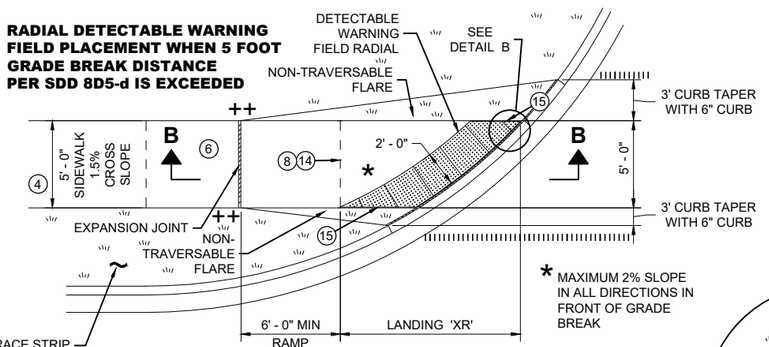


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

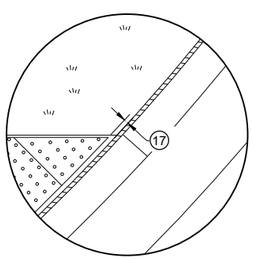
SECTION A - A FOR TYPE 4A1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

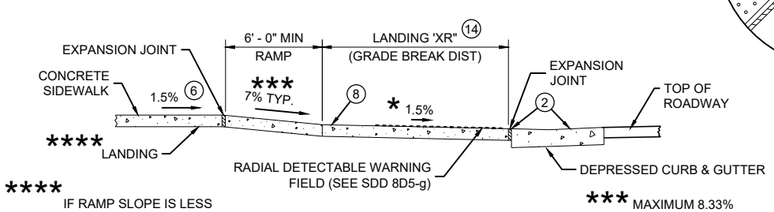


PLAN VIEW

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



DETAIL B



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

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

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

GENERAL NOTES

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

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

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

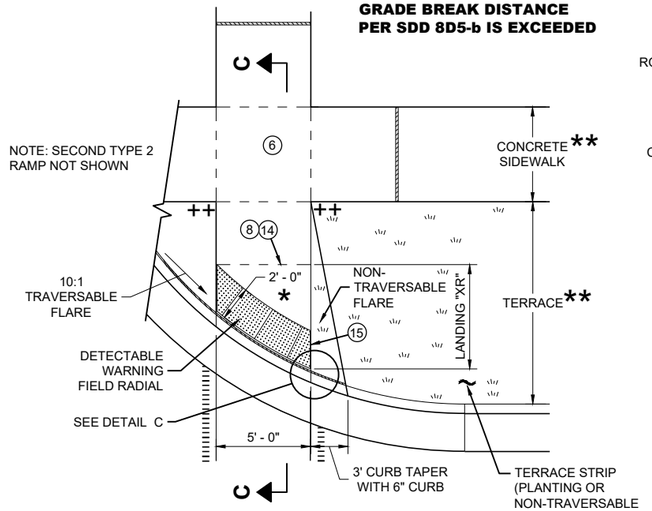
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

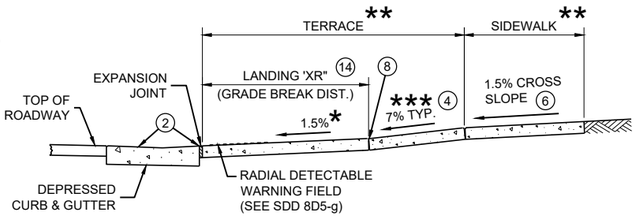
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

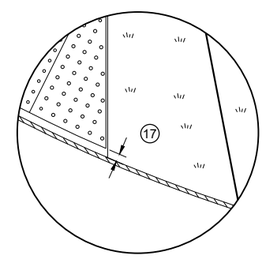


PLAN VIEW

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



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

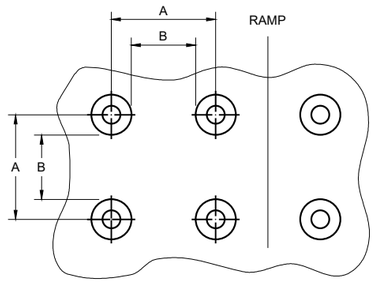
CURB RAMPS
RADIAL DETECTABLE WARNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

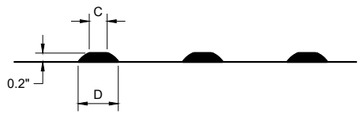
SDD 08D05-21f

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

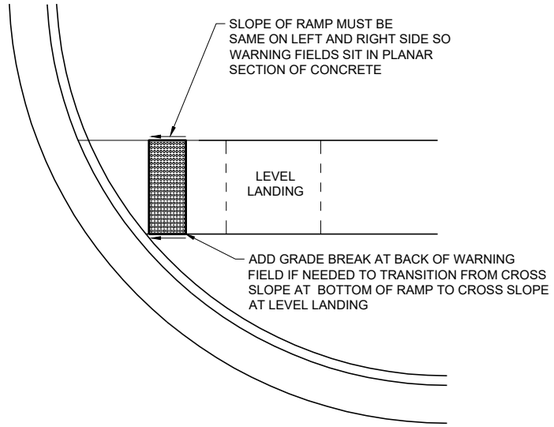
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

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

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

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

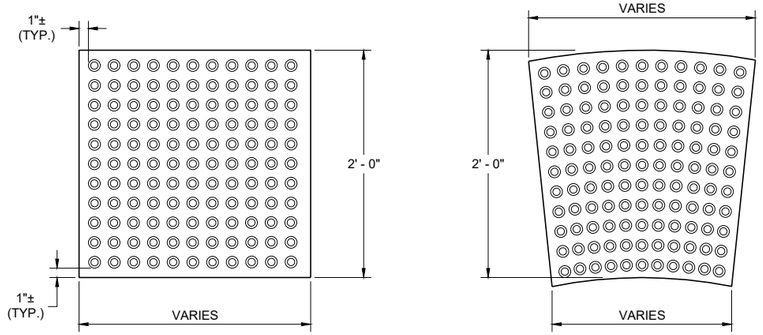
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE.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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

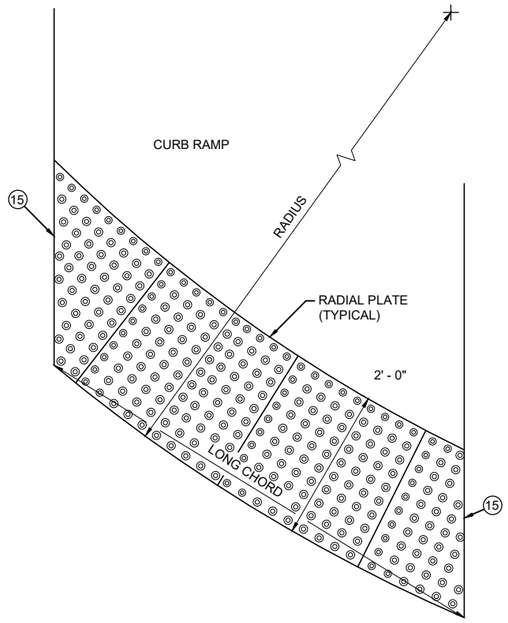
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



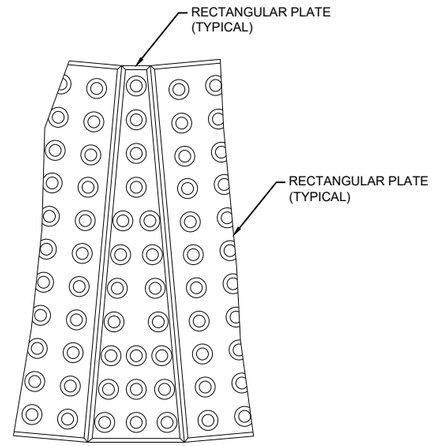
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

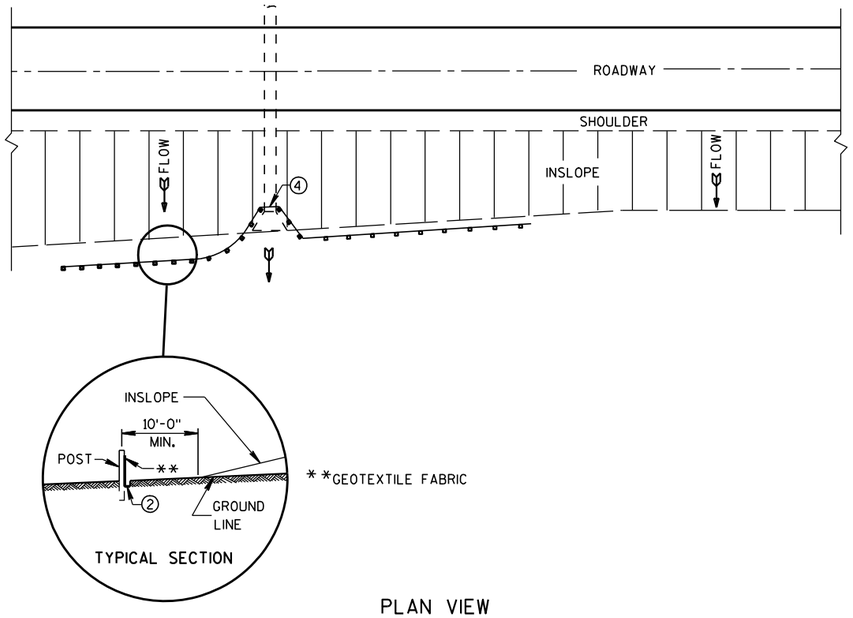
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

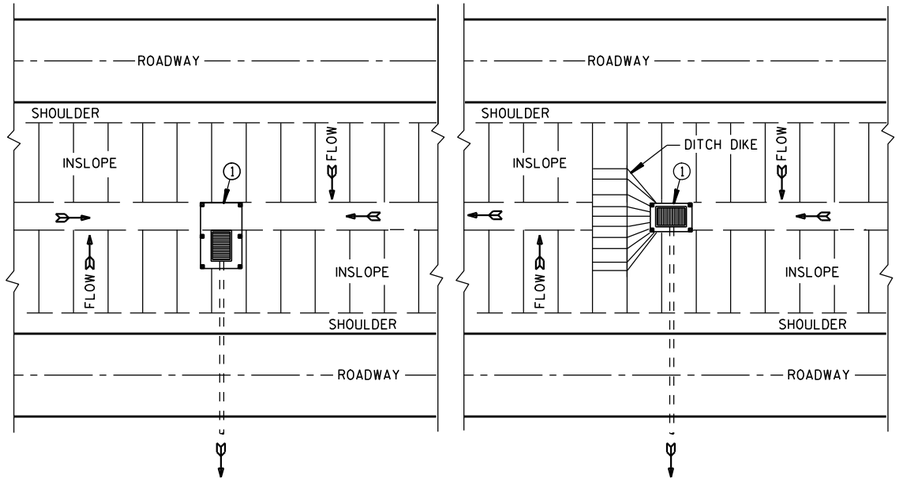
FHWA

6
SDD 08D05-21g



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.

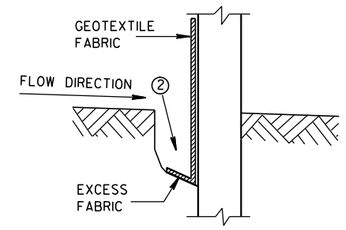
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

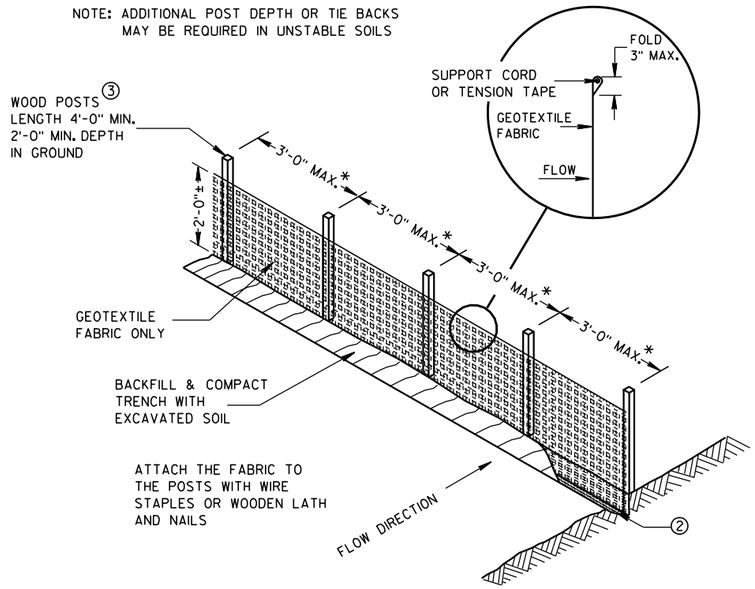
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

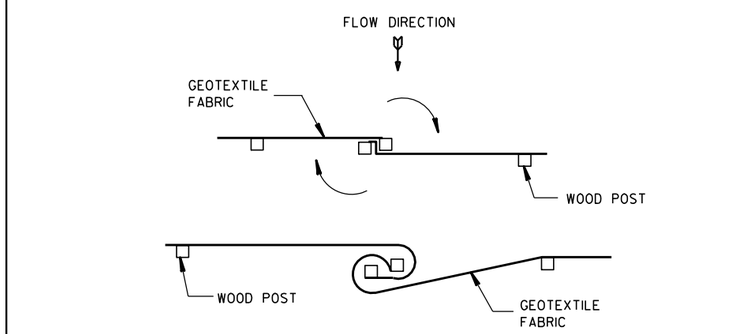
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



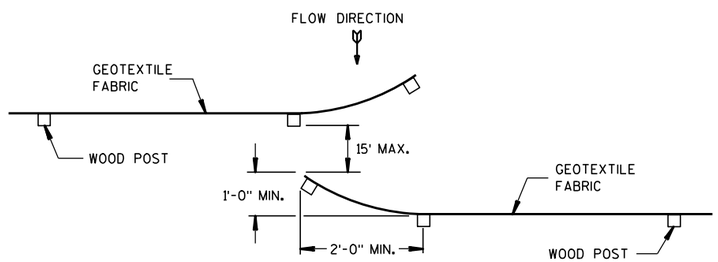
TRENCH DETAIL



SILT FENCE

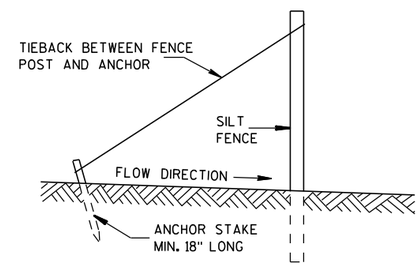


TWIST METHOD



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

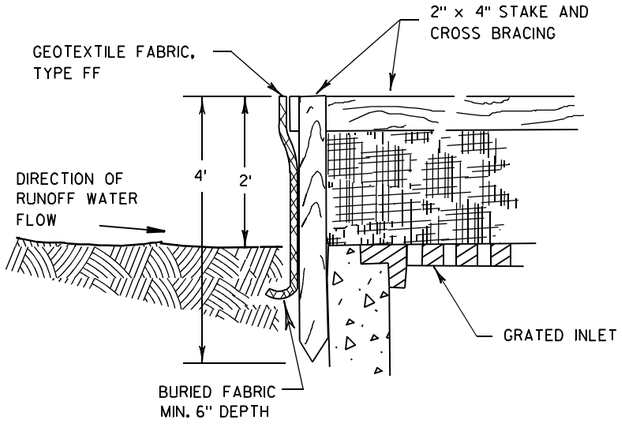
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

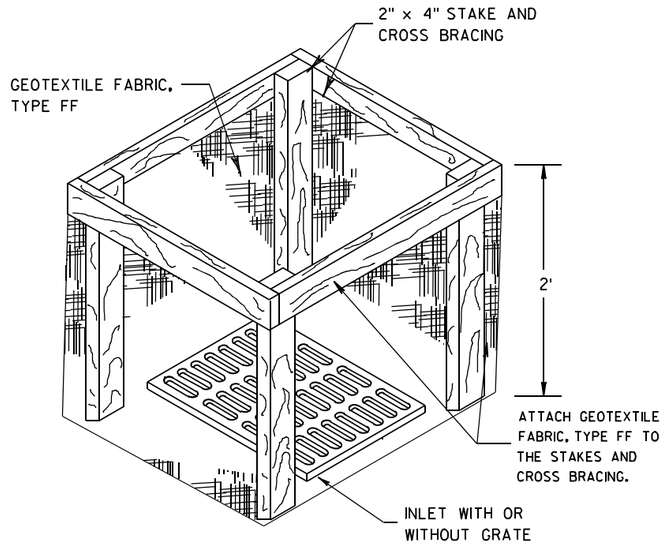
6

S.D.D. 8 E 9-6

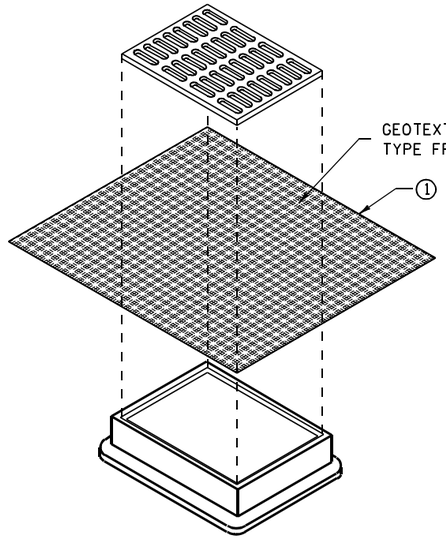
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S.D.D. 8 E 9-6



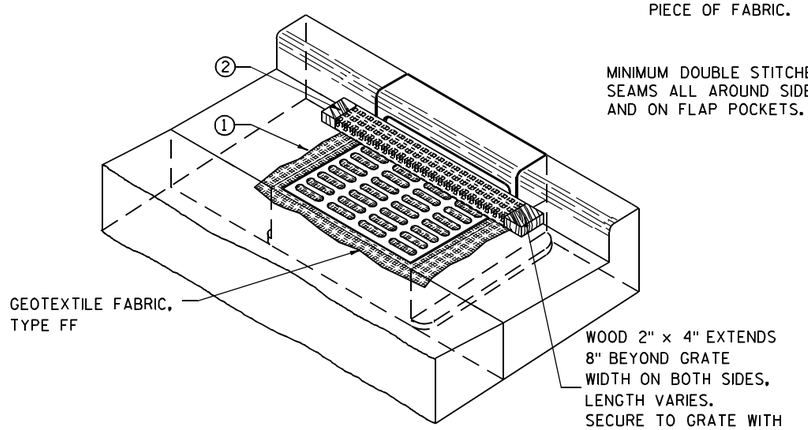


INLET PROTECTION, TYPE A

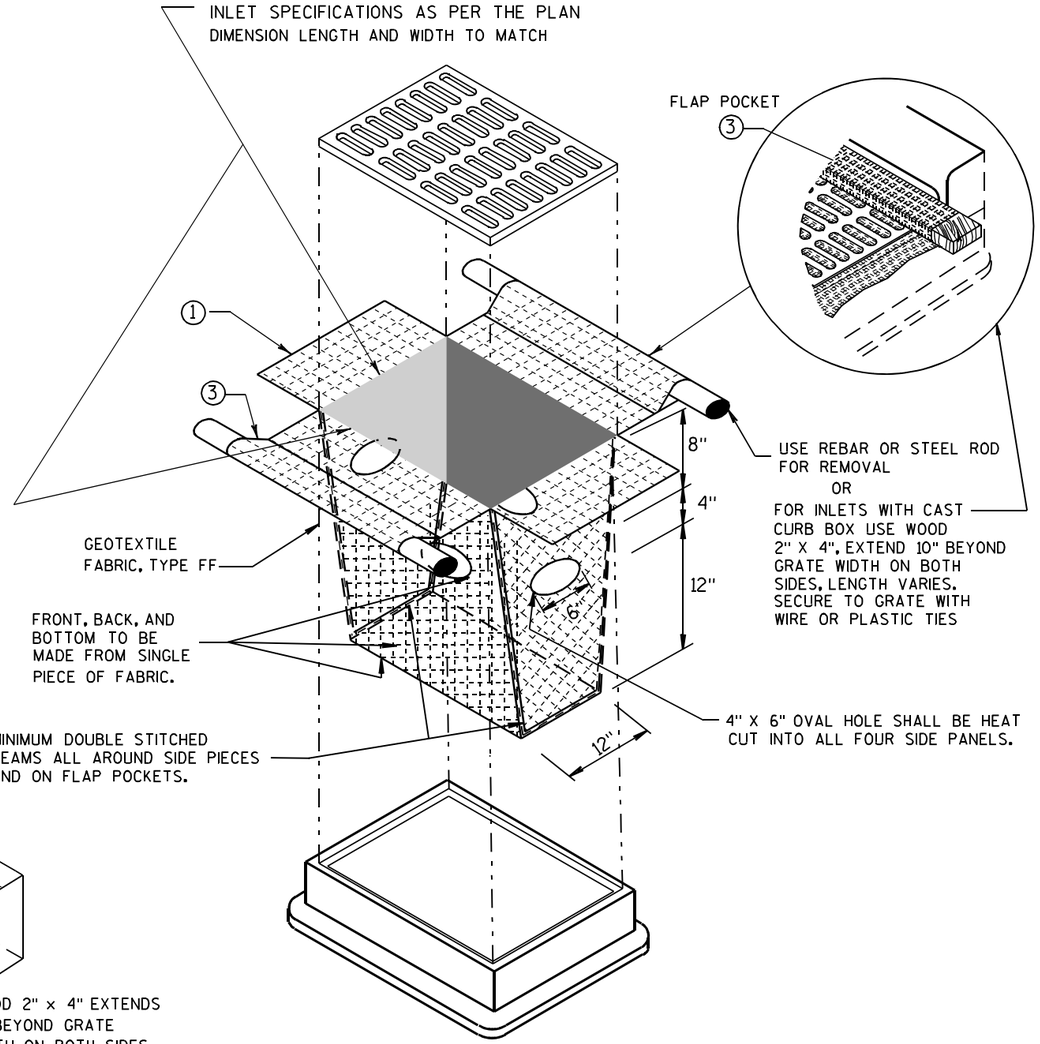


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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

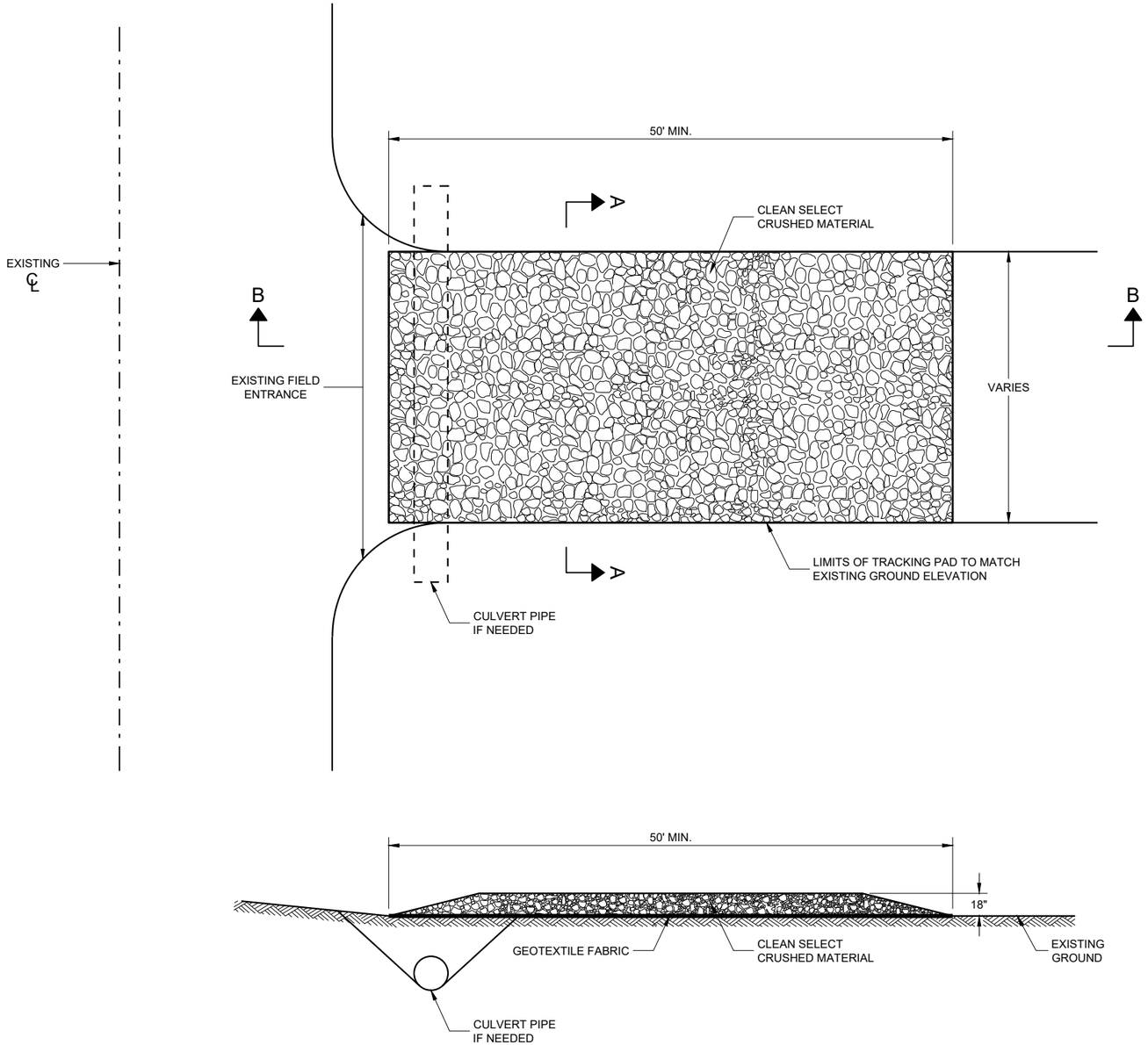
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



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.

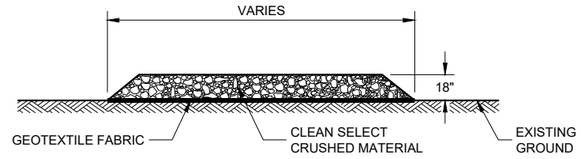
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

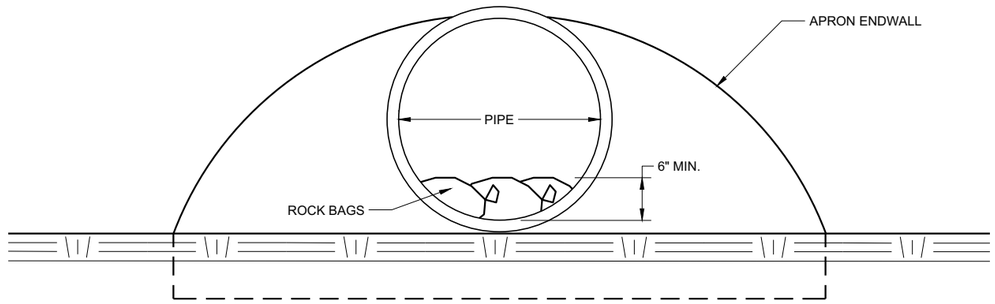
3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

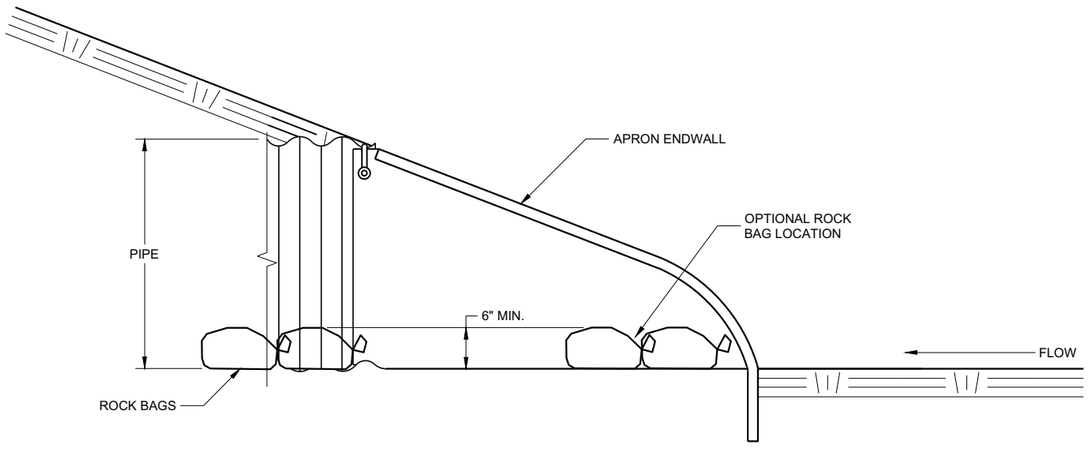
FHWA

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SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

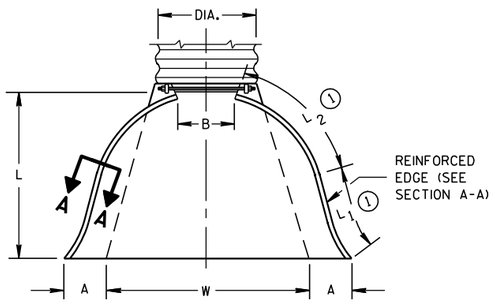
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

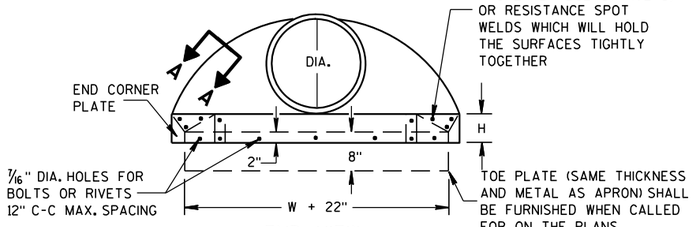
REINFORCED CONCRETE APRON ENDWALLS

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

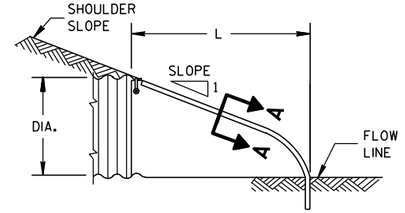
*MINIMUM
**MAXIMUM



PLAN VIEW

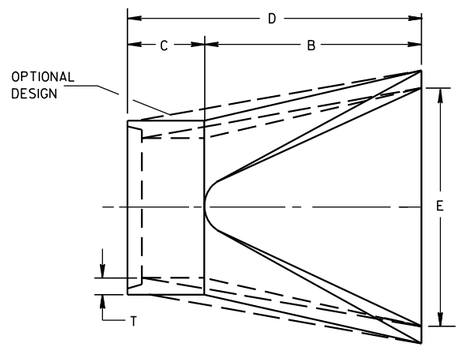


END VIEW

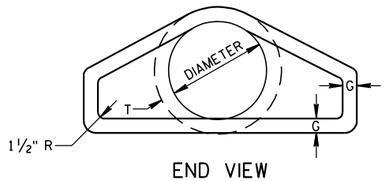


SIDE ELEVATION

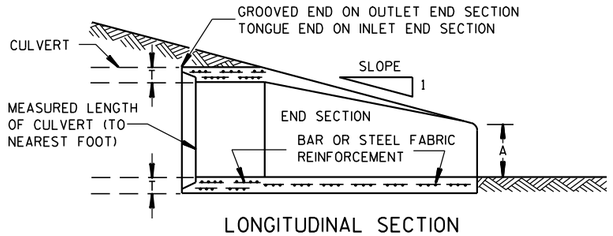
METAL ENDWALLS



PLAN

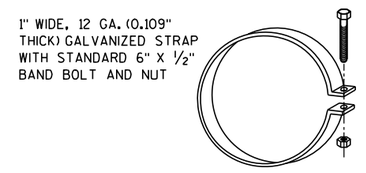


END VIEW



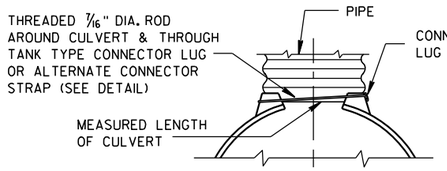
LONGITUDINAL SECTION

CONCRETE ENDWALLS

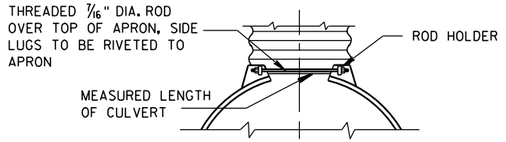


ALTERNATE FOR TYPE 1 CONNECTION

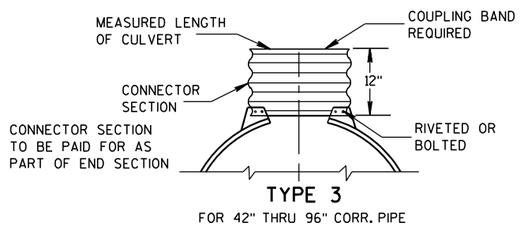
END SECTION CONNECTOR STRAP



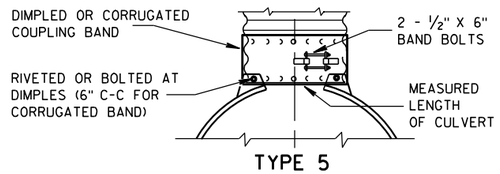
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

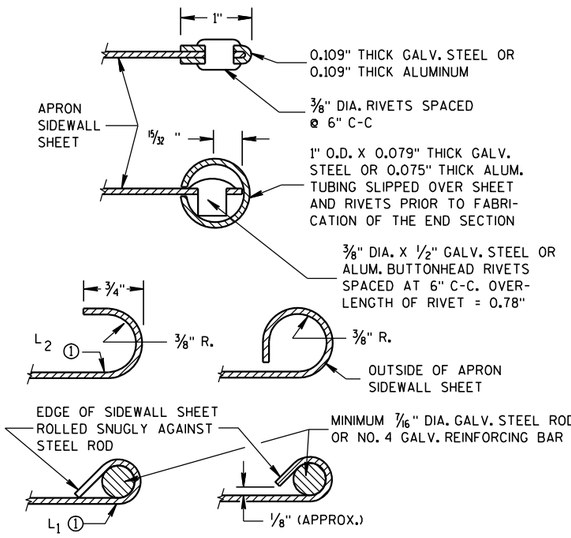
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

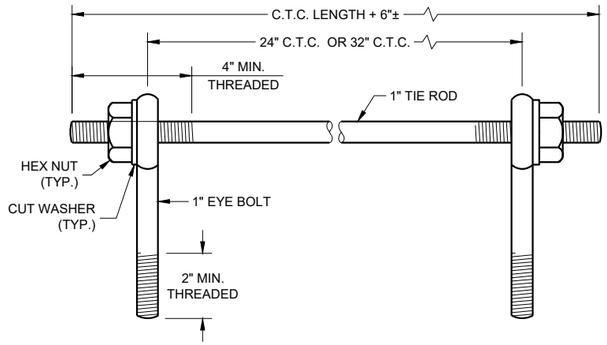
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

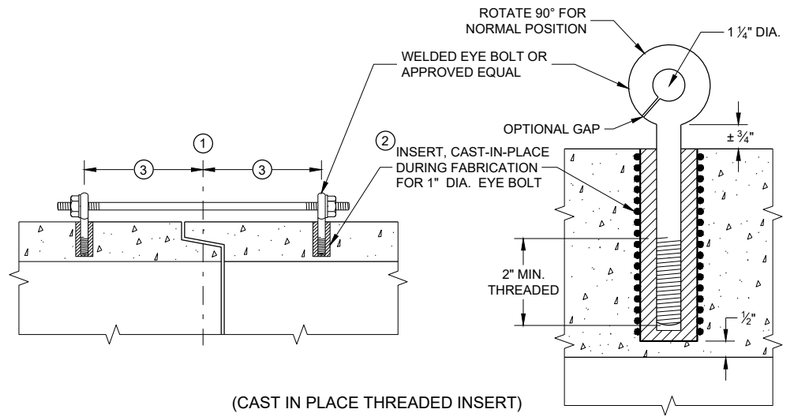
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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) CENTER LINE 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.

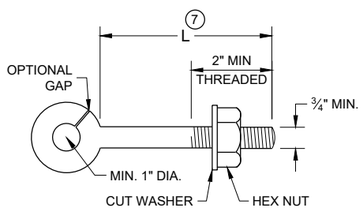
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

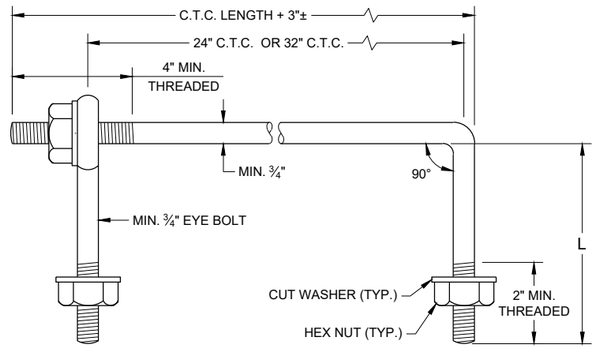
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

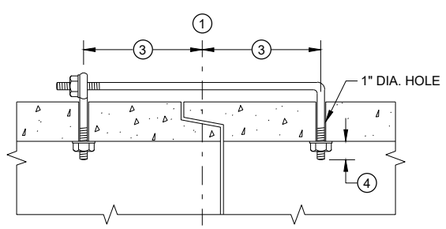


EYE BOLT (7)

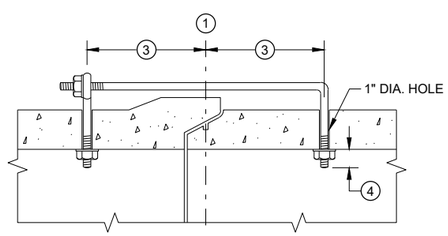
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

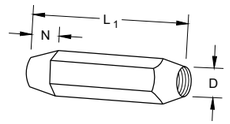
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

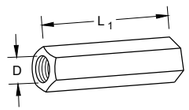
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



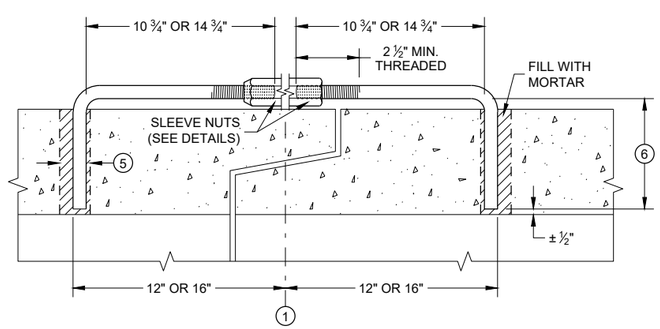
TAPERED



PLAIN

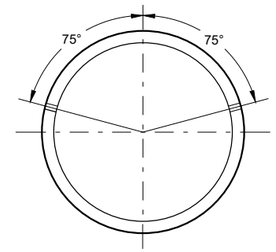
RIGHT AND LEFT THREADS

SLEEVE NUTS



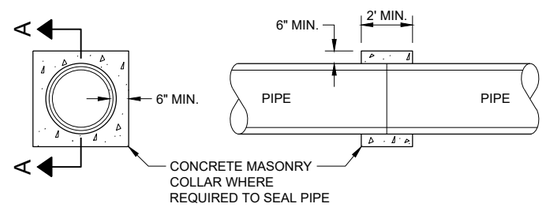
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

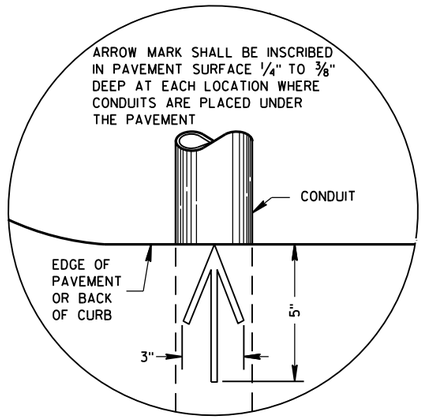
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

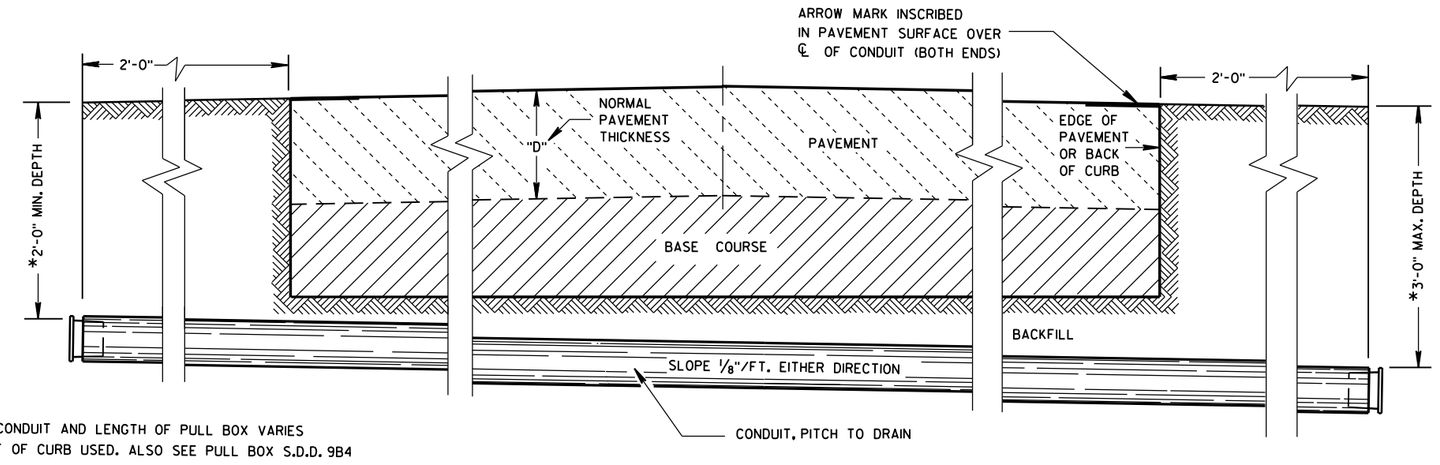
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*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

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.).

TRACER 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.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

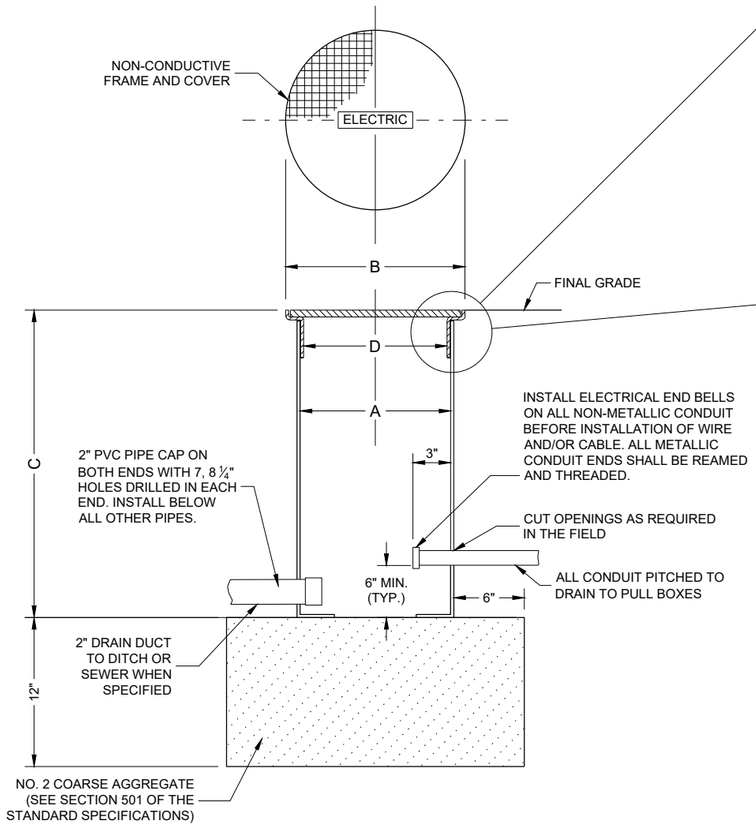
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

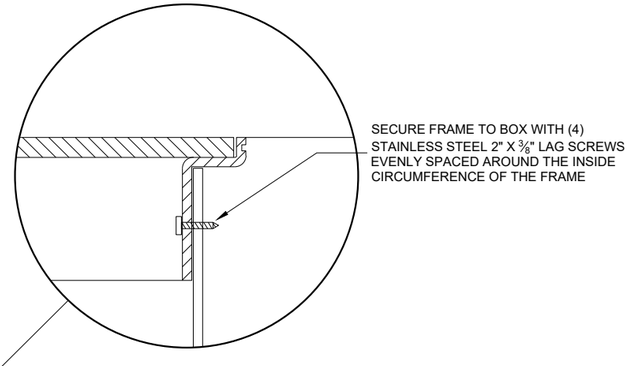
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

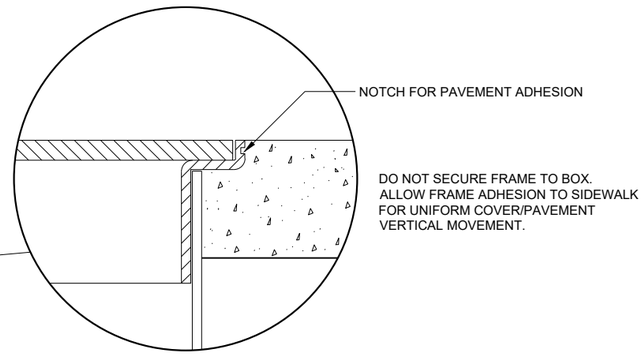
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



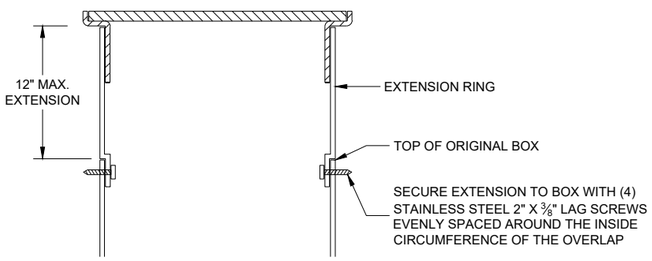
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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 ¼".

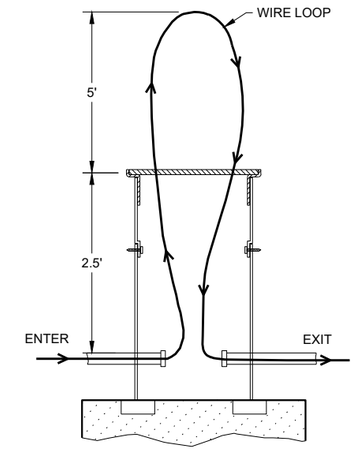
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

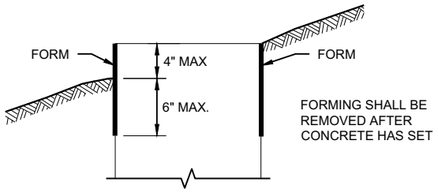
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



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 DRAWINGSHALL 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 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X 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 NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC 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 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES 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.

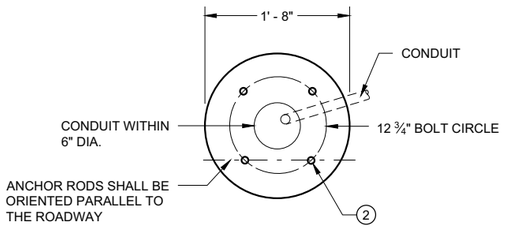
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

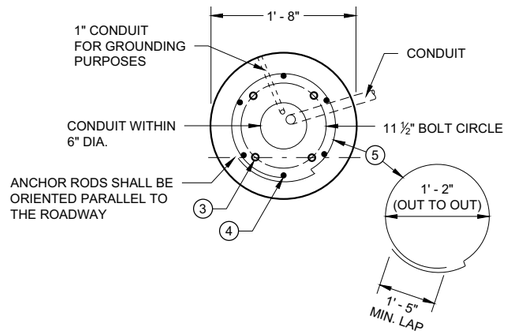
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

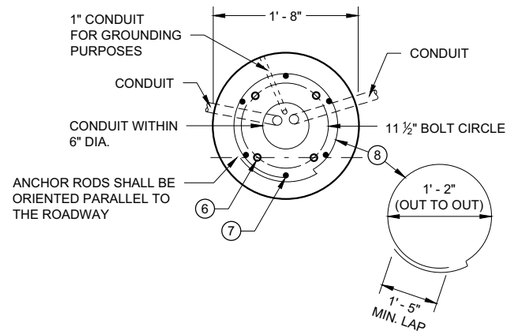
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 OF 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 STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

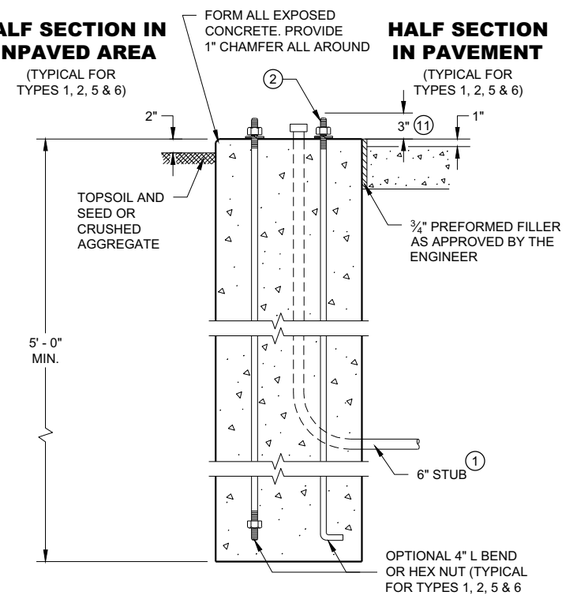
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

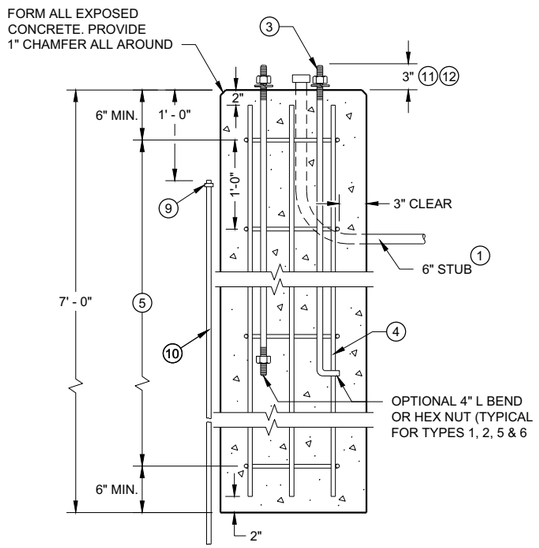
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

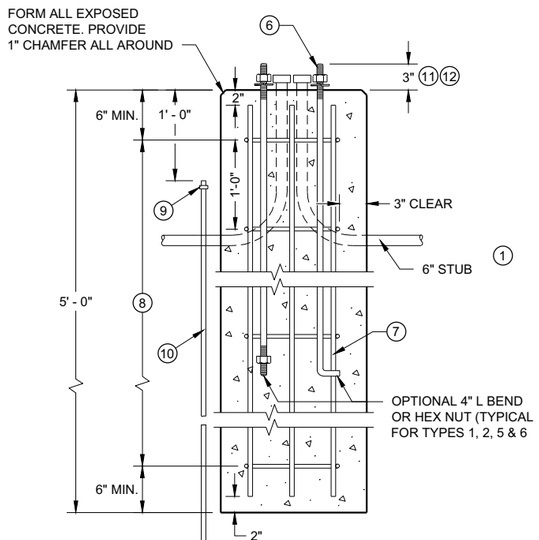
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 152

FHWA

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 531.2.2 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.

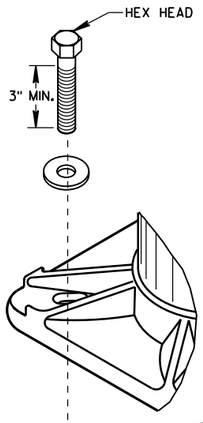
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

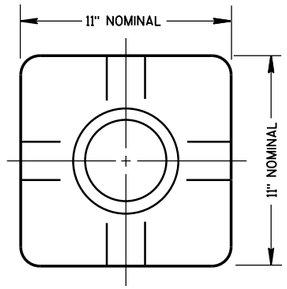
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

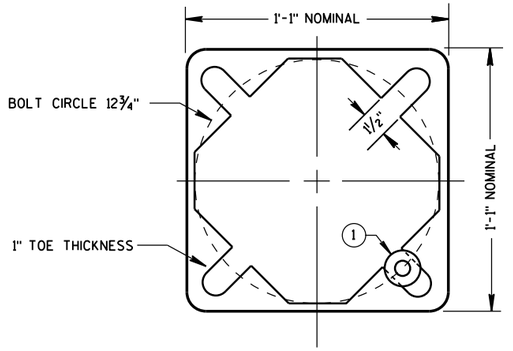
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

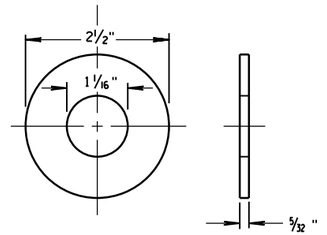




TOP VIEW
(PEDESTAL BASE)

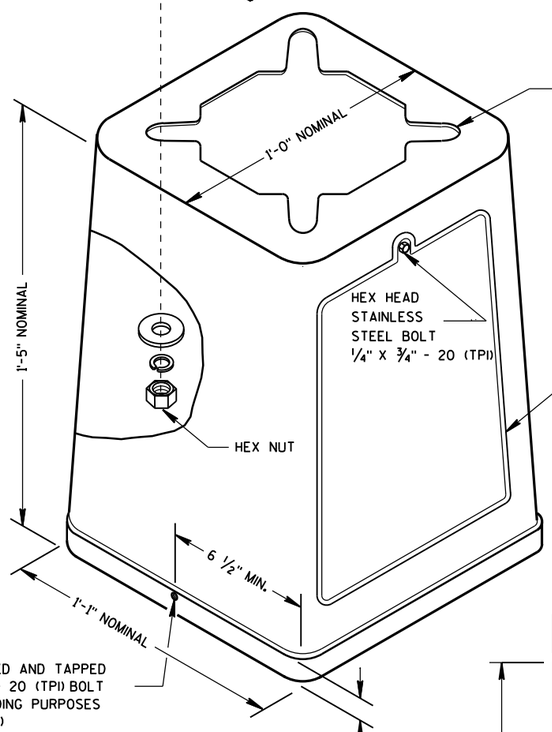


BOTTOM VIEW
(PEDESTAL BASE)

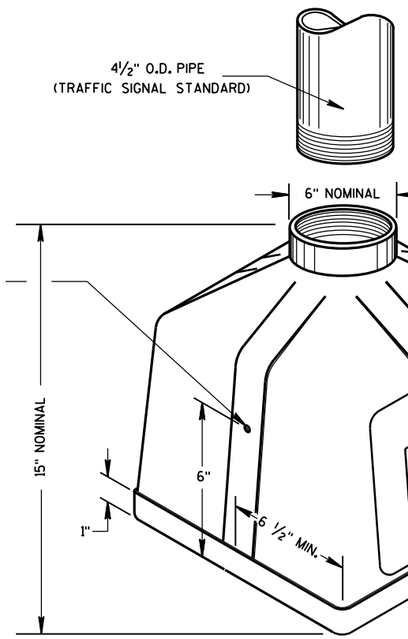


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

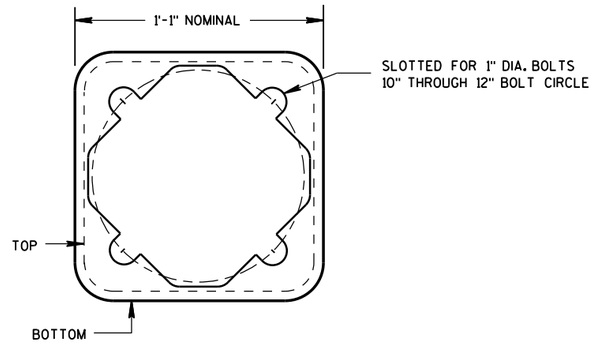


ISOMETRIC VIEW

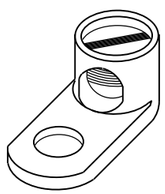


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

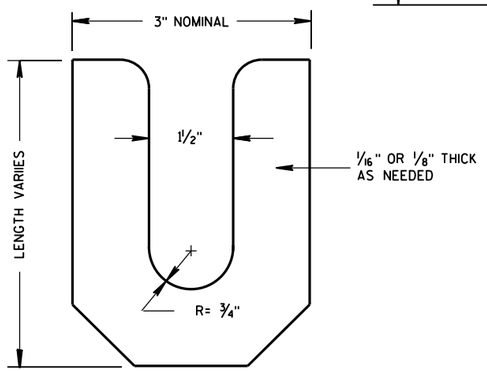


TYPICAL MECHANICAL CONNECTOR LUG

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

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

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

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

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

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

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

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 A THE ENTRANCE OF THE BASE.

(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 (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

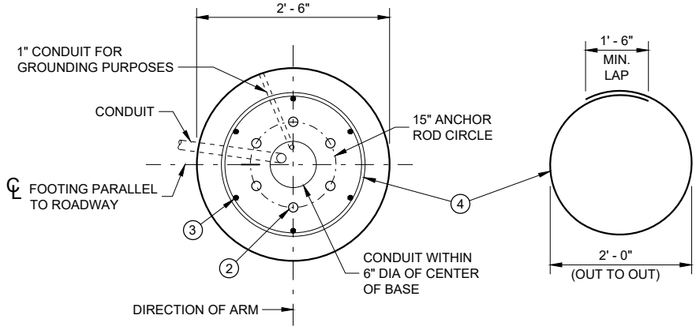
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

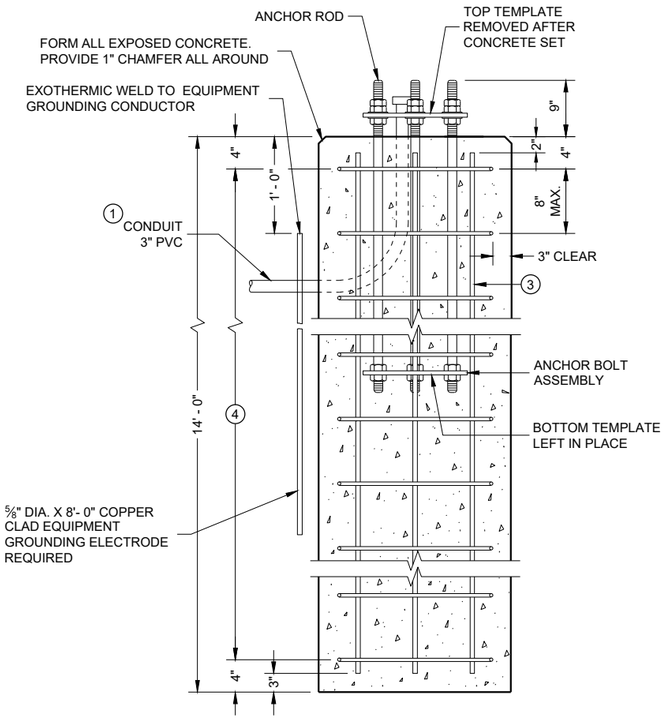
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

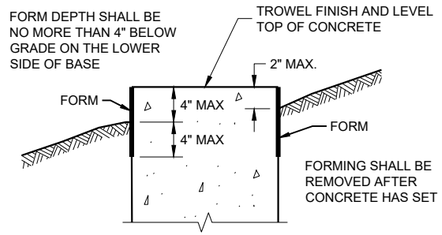
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



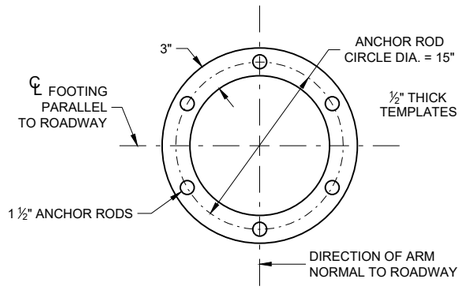


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

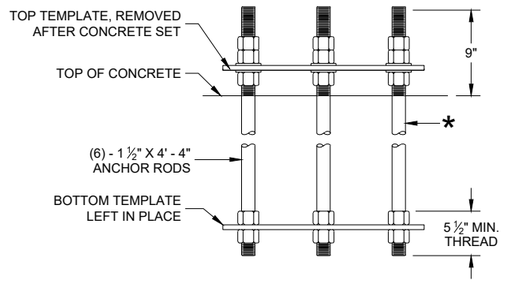
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

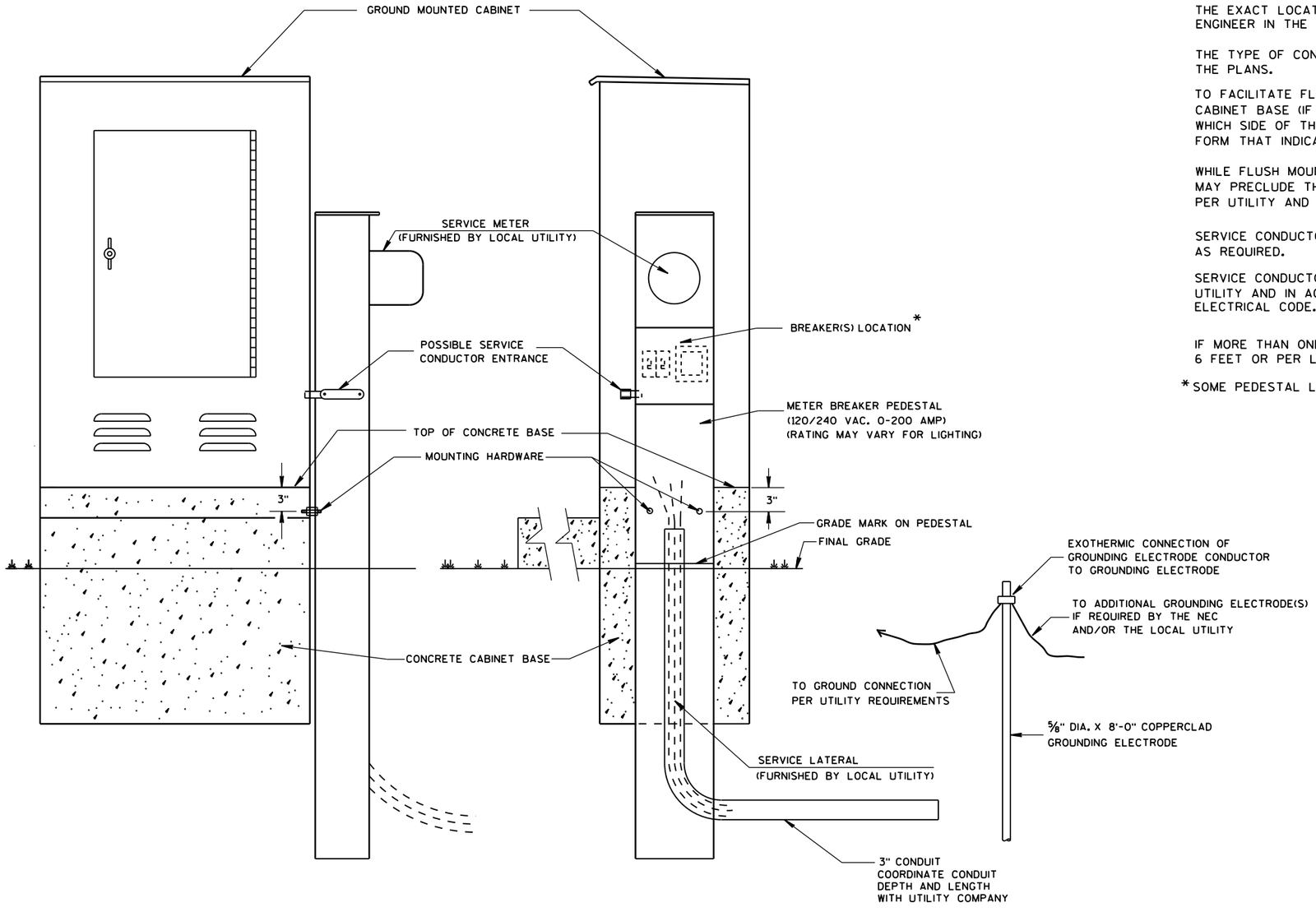
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER

FHWA

6

SDD 09C11 - 10



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.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

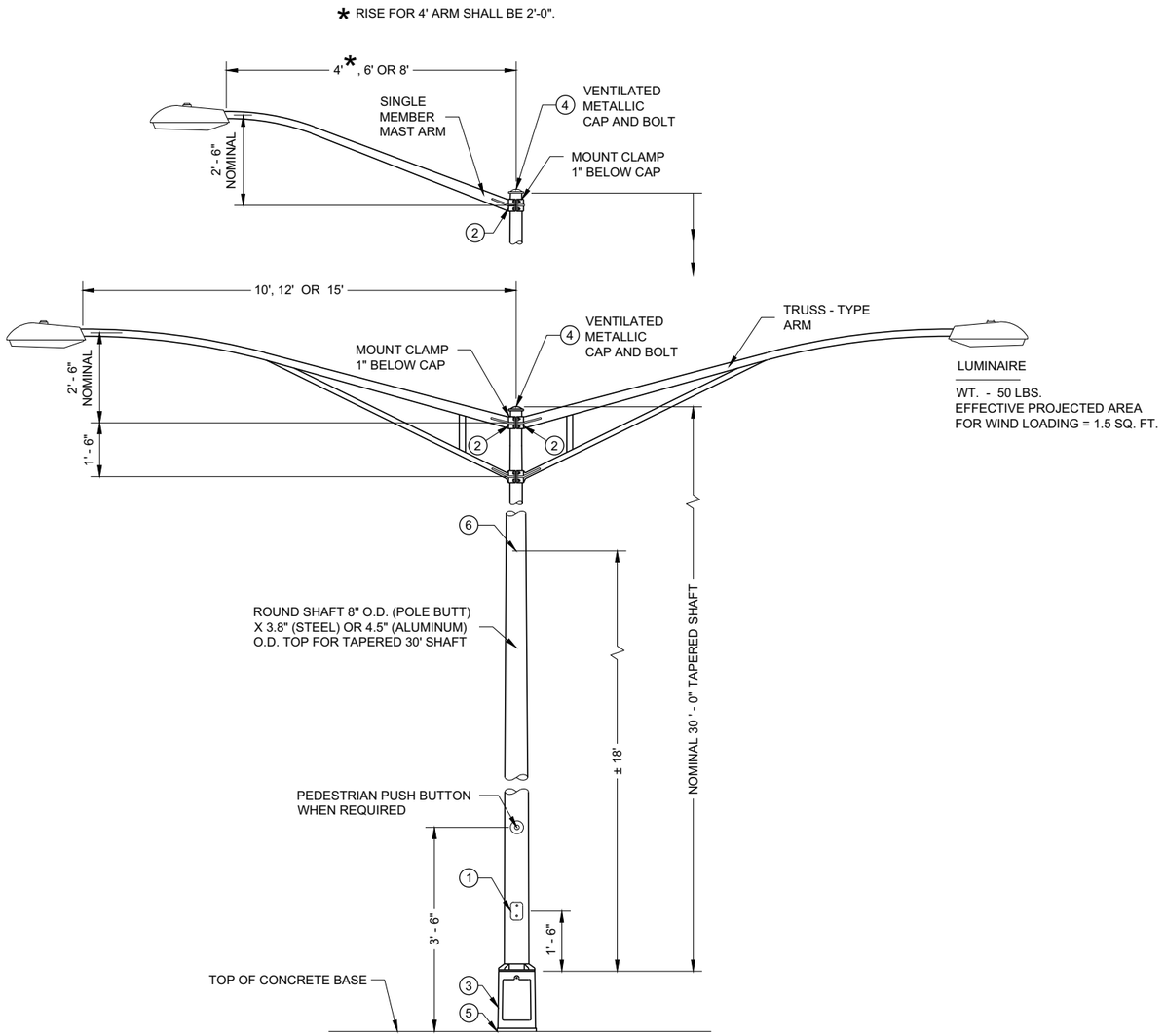
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA



TYPE 5 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.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

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

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST 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 AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

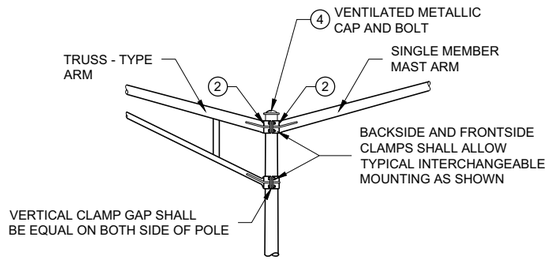
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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 POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

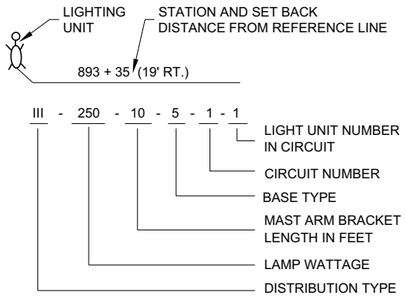
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SDD 09E01 - 15d

GENERAL NOTES

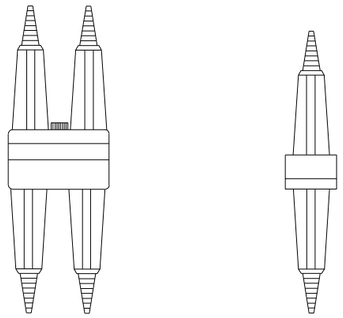
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 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.

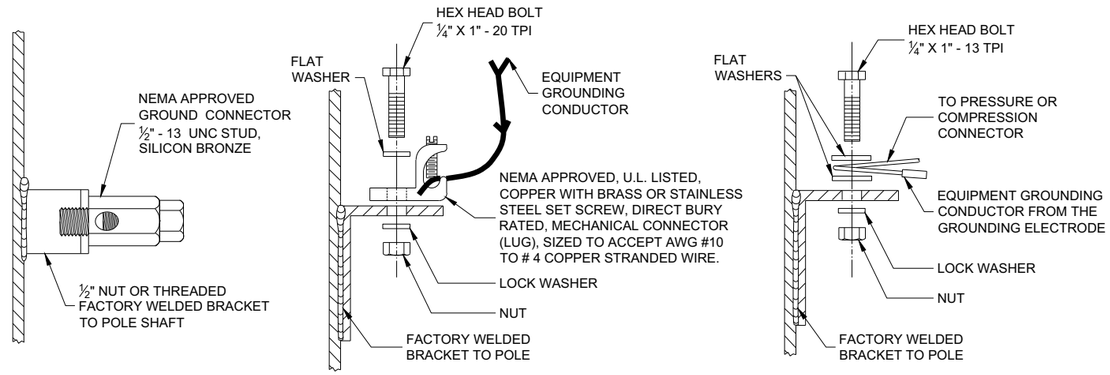


LIGHTING UNIT CODE
(TYPICAL)

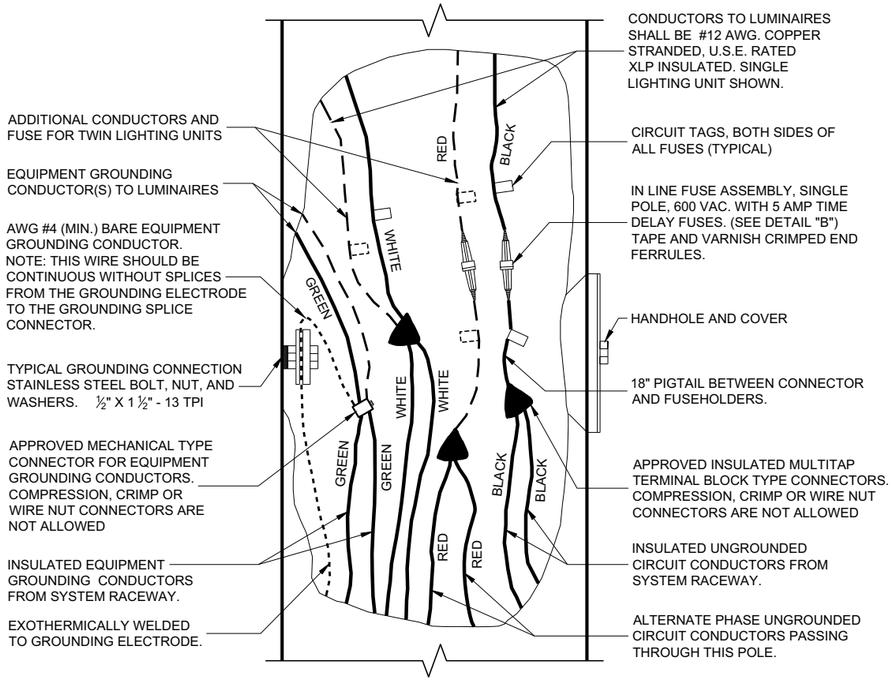


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

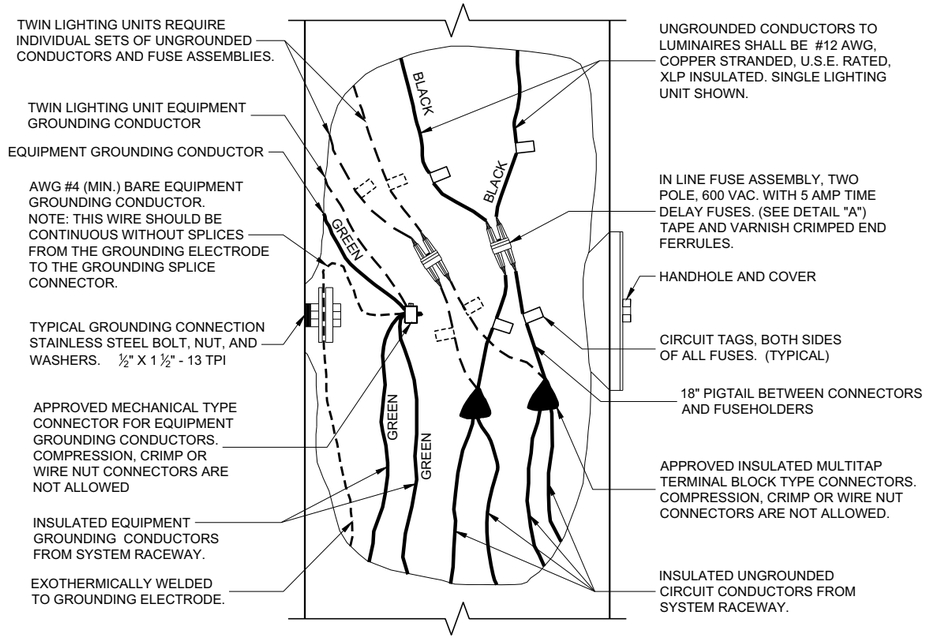
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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



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



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

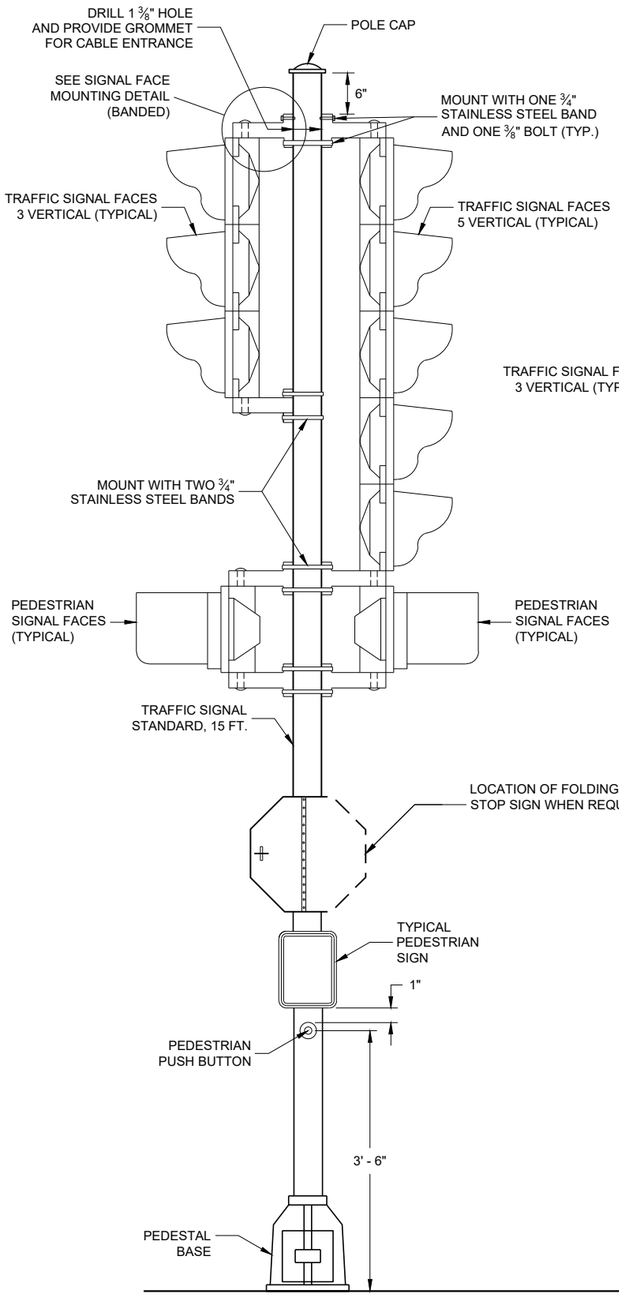
NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

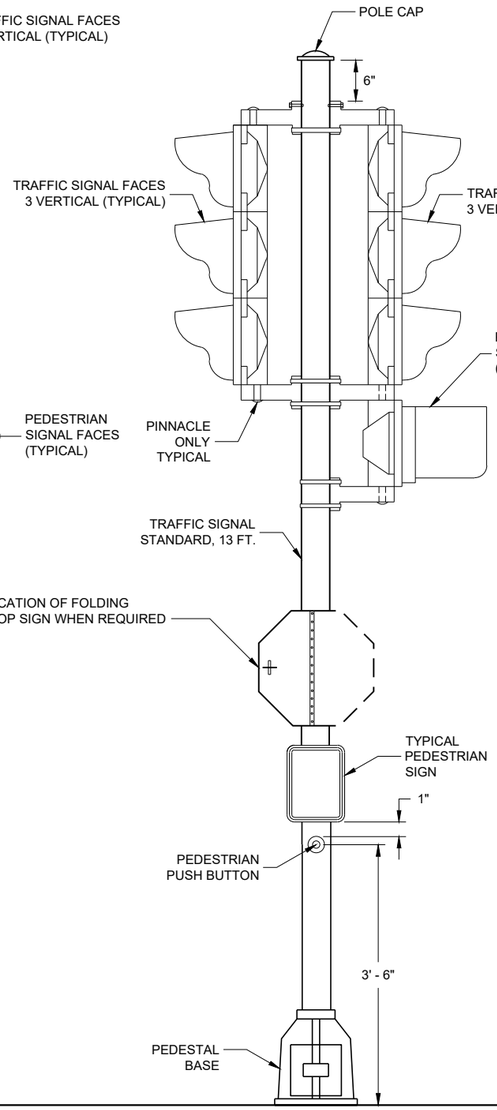
APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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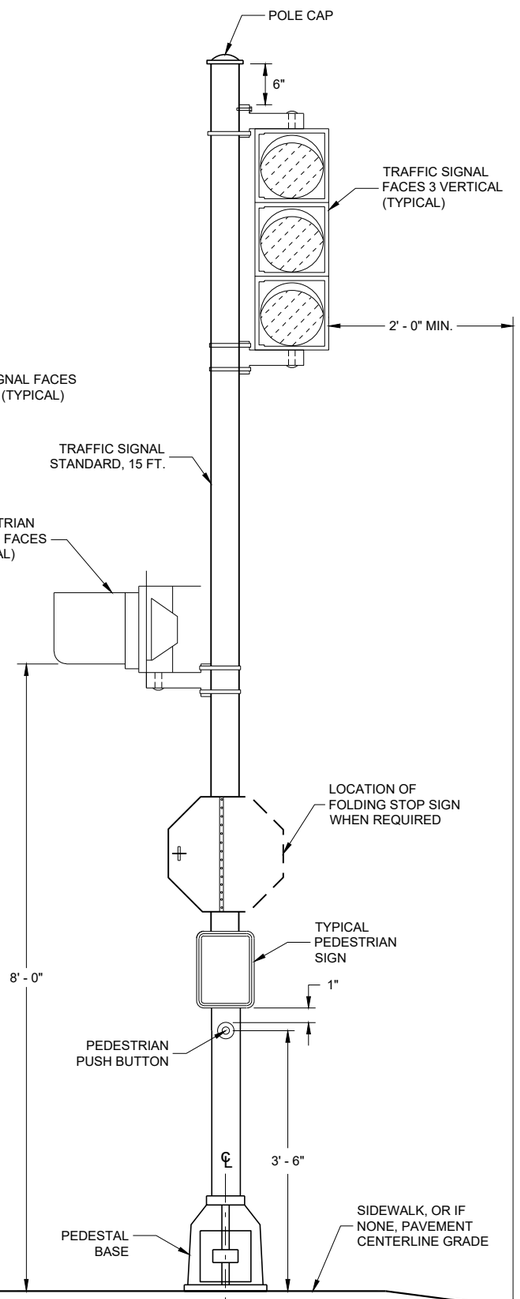
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SDD 09E03 - 06



TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

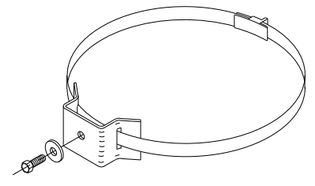
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

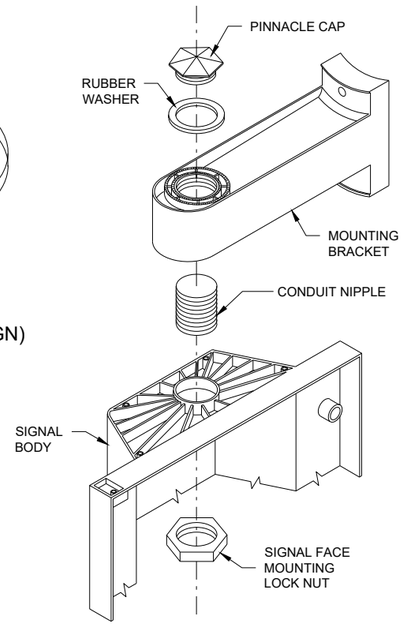
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

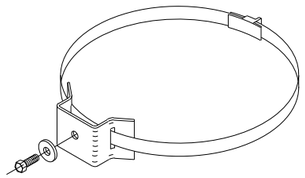
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

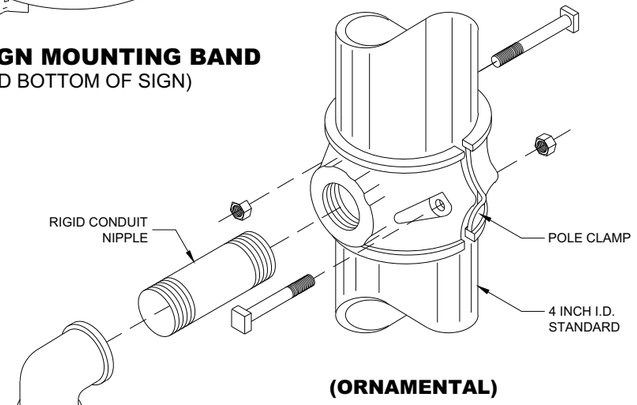
FHWA

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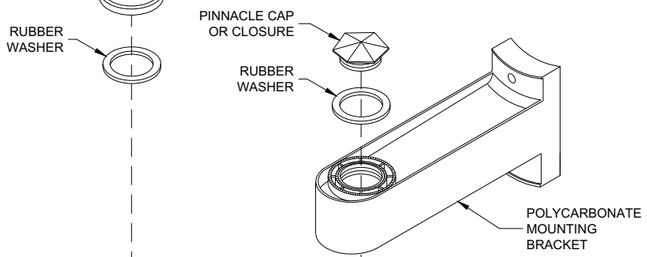
SDD 09E06 - 05



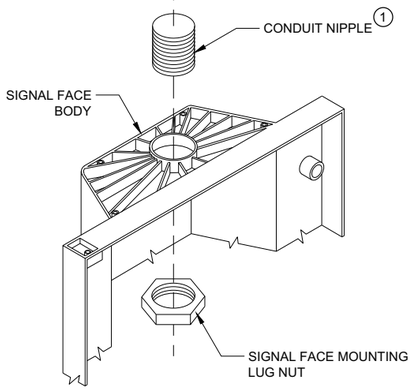
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



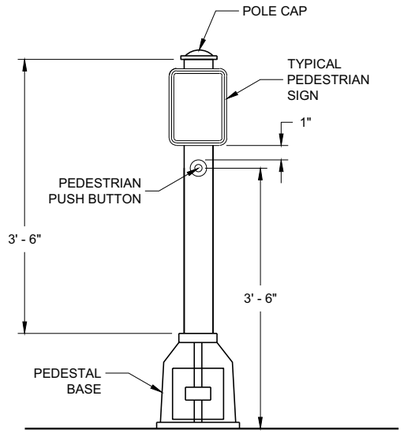
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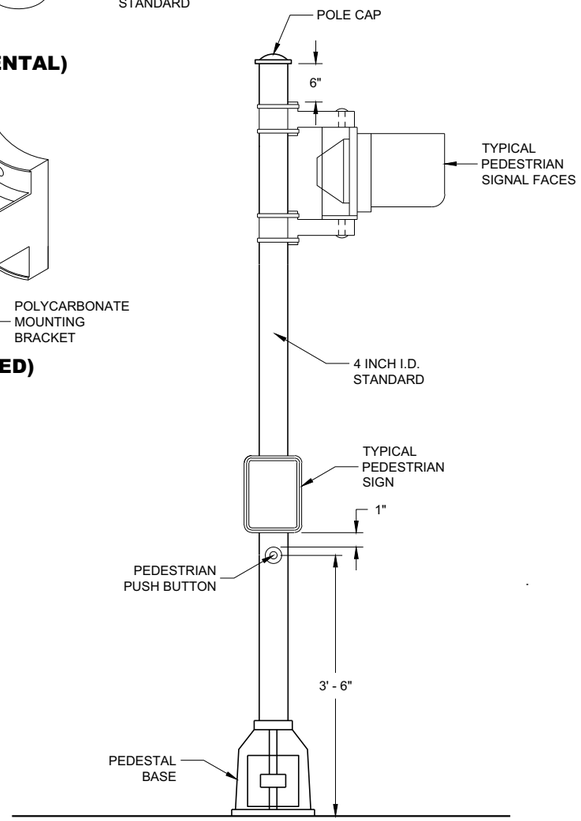
(BANDED)



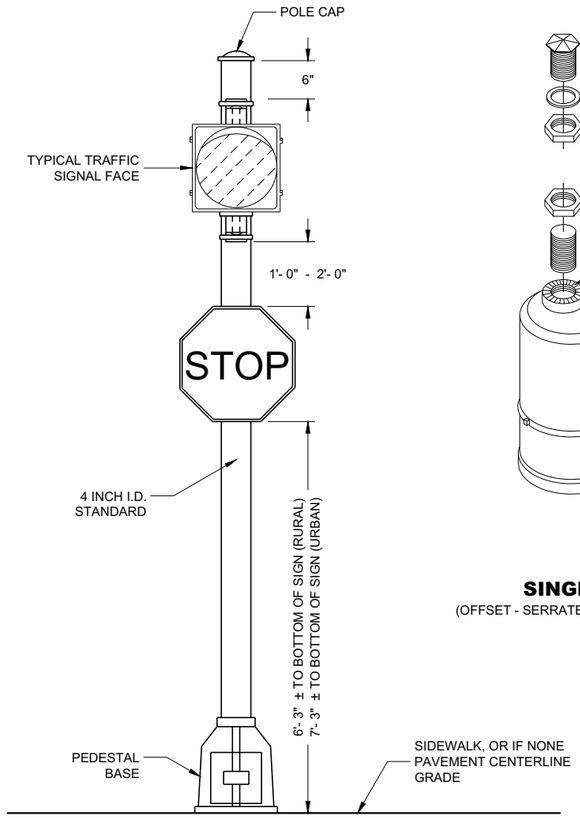
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

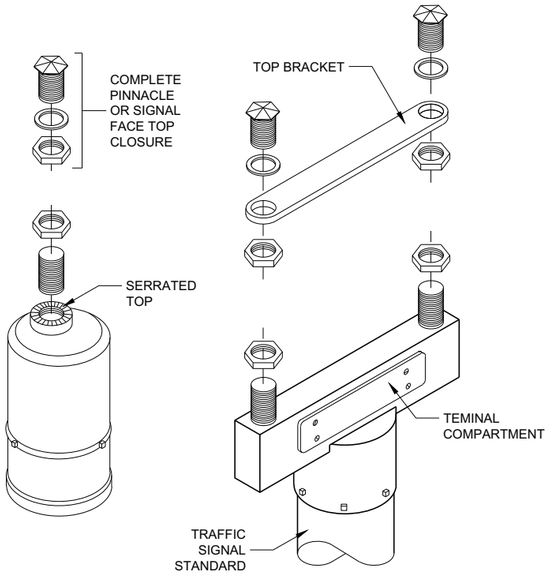
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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

(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

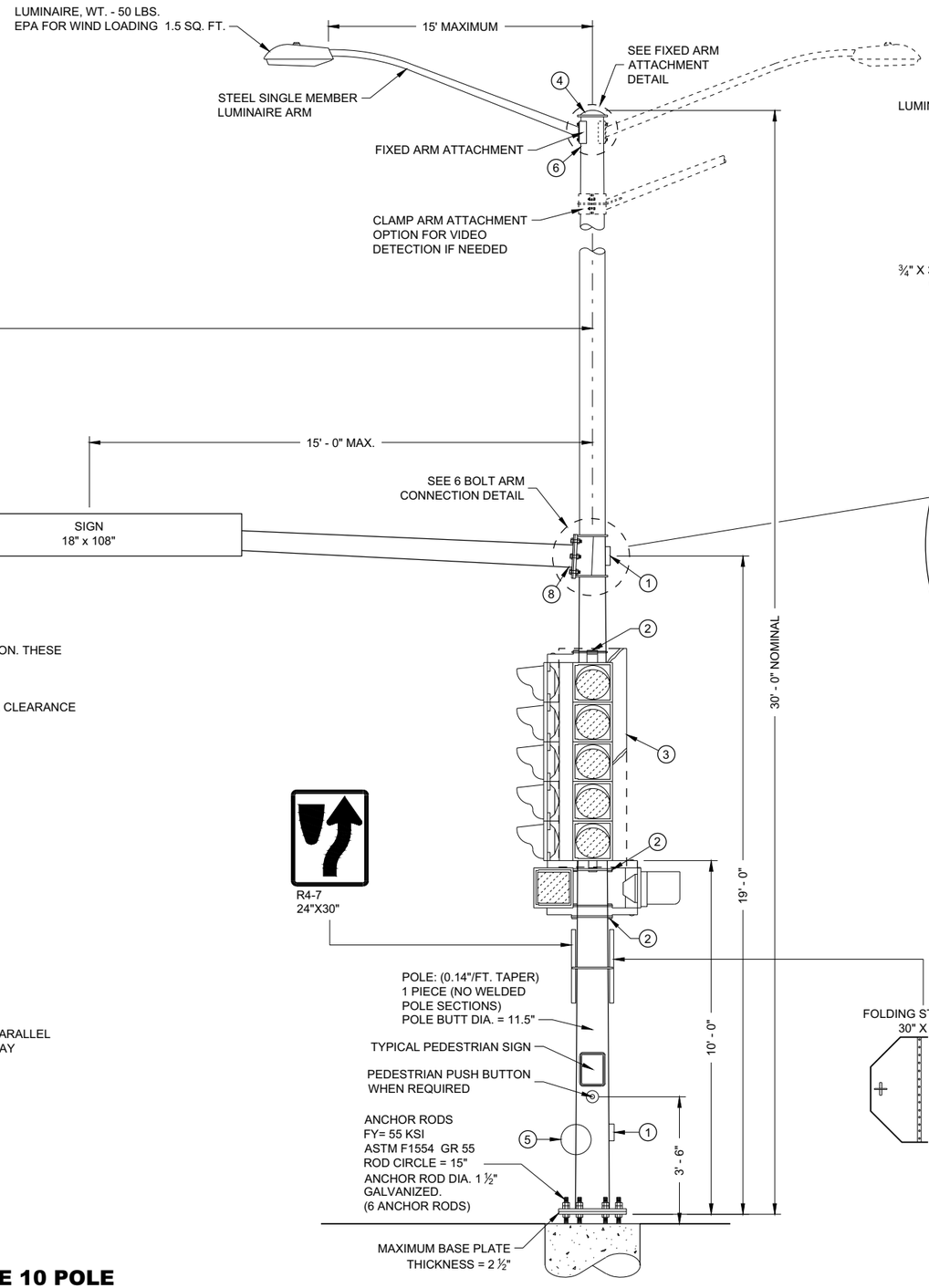
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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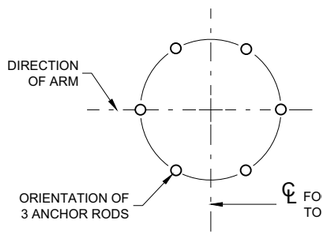
SDD 09E07 - 06

SDD 09E07 - 06

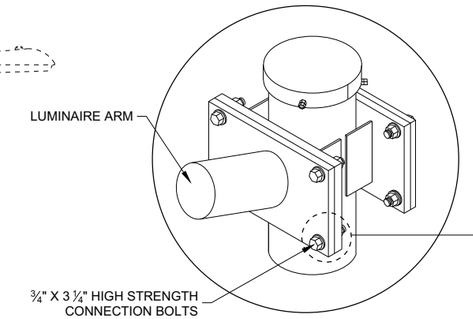


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

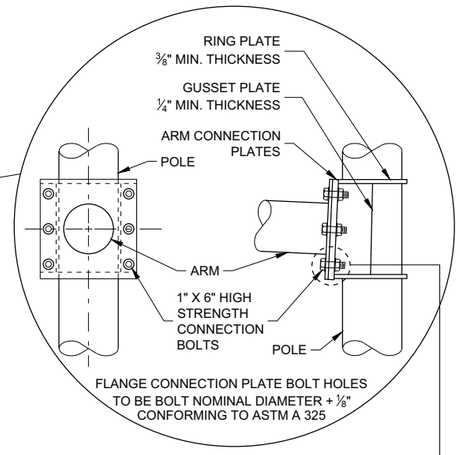
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



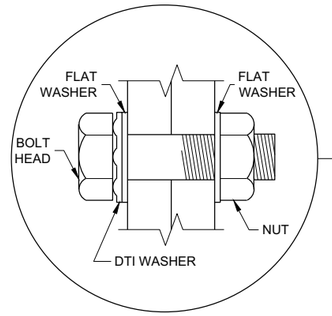
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

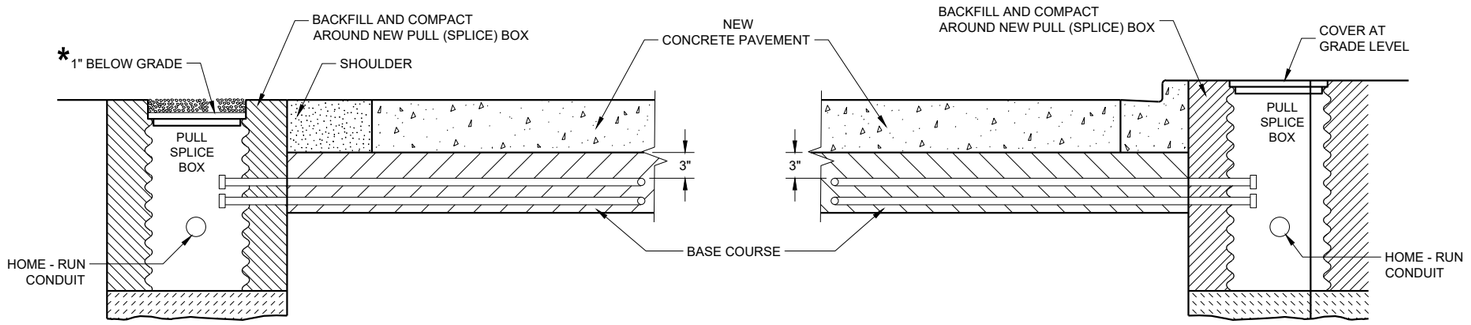
APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09E08 - 09e



SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

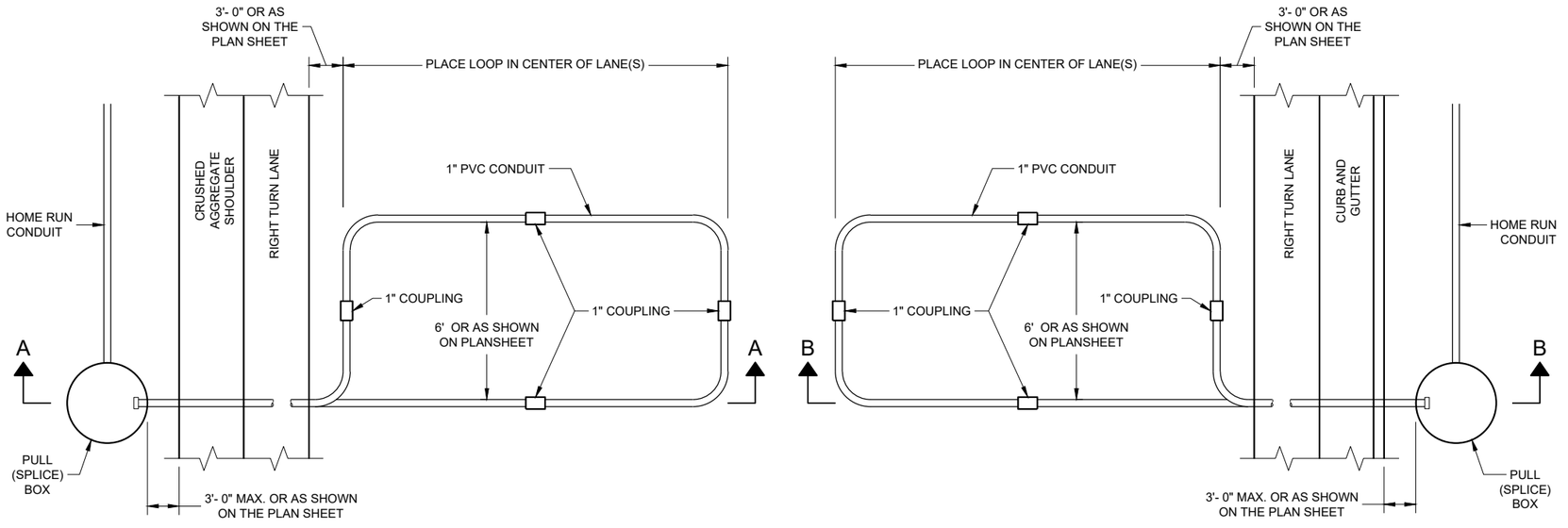
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

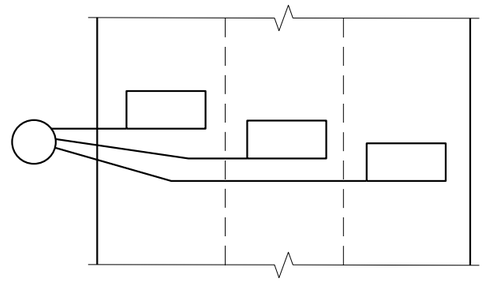
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

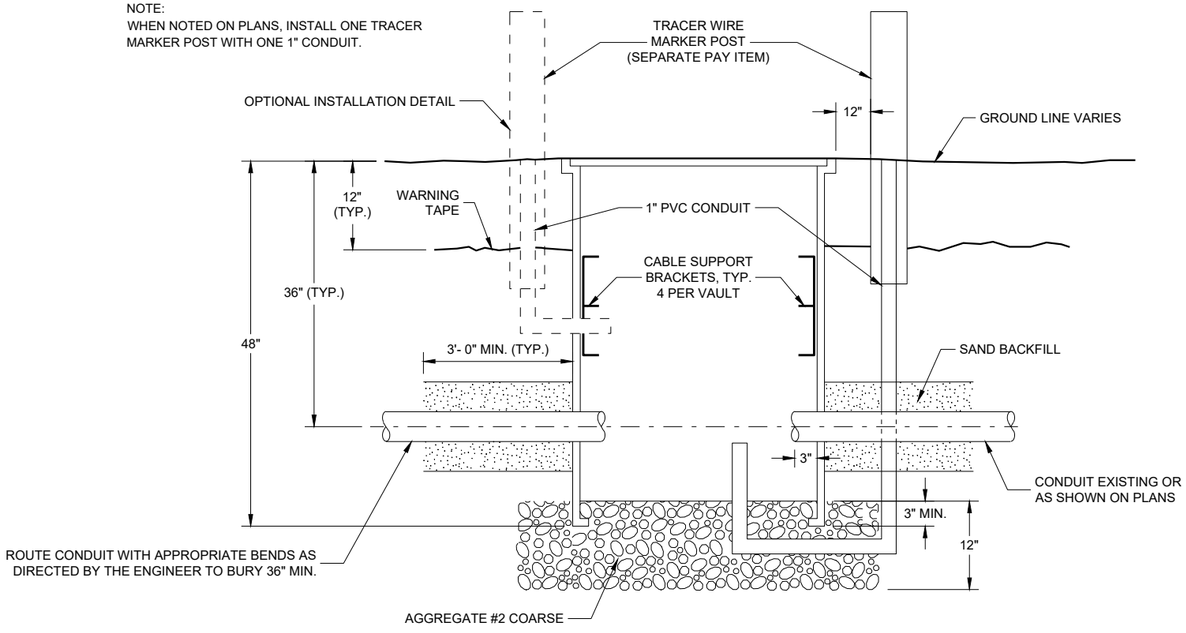
FHWA

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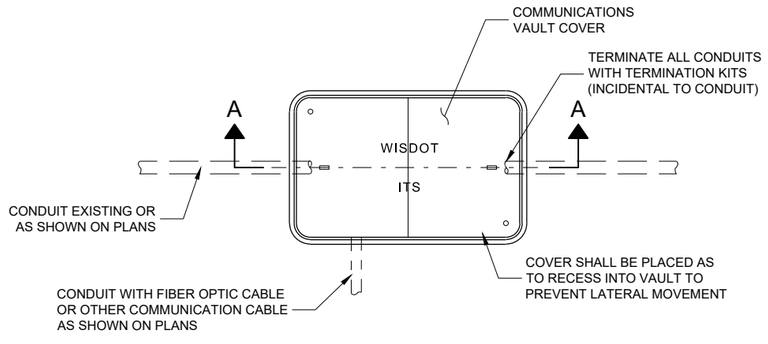
SDD 09F15 - 04b

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SDD 09F15 - 04b



SECTION A - A



PLAN VIEW

COMMUNICATIONS VAULT TYPE 1

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

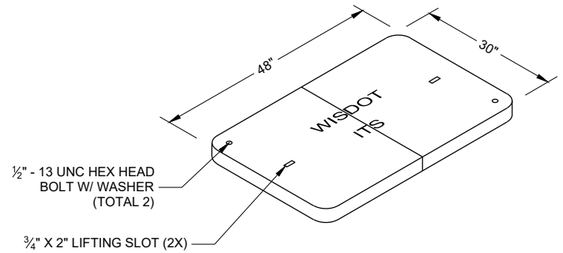
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

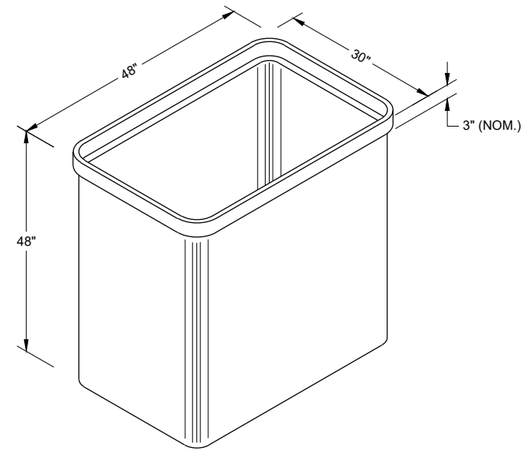
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.





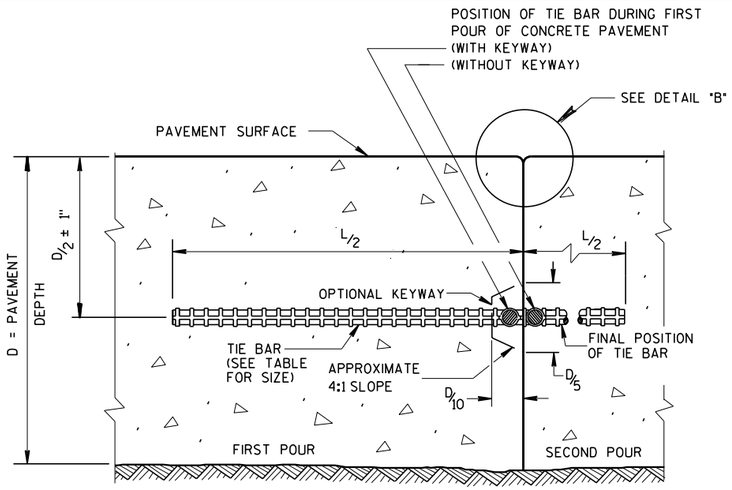
ISOMETRIC VIEW

COMMUNICATION VAULT TYPE 1	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGI

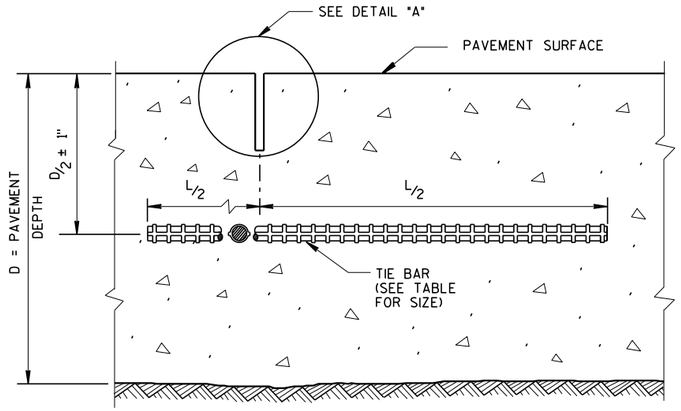
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SDD 09H09 - 02



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

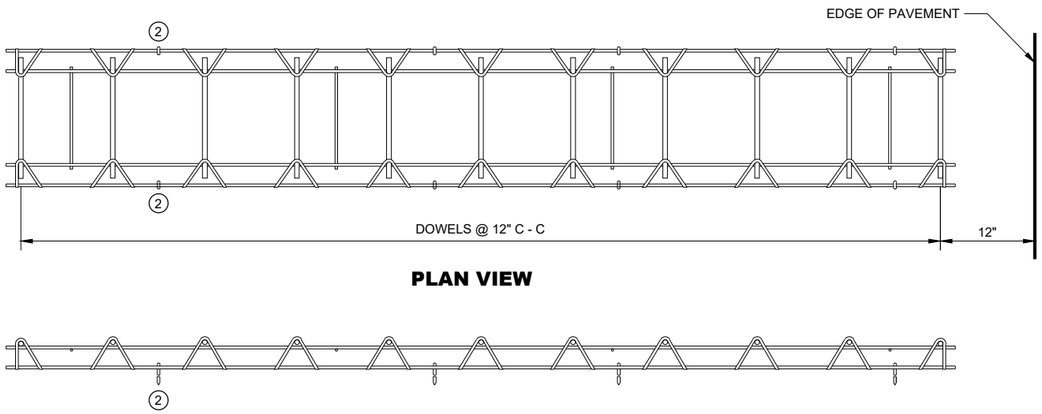
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

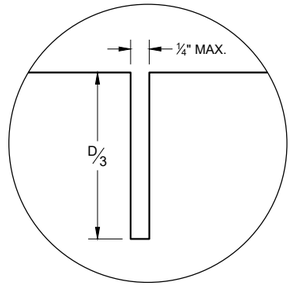
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S.D.D. 13 C 1-19



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

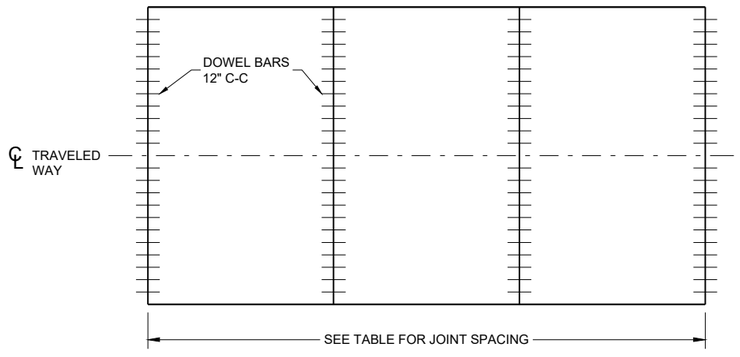
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

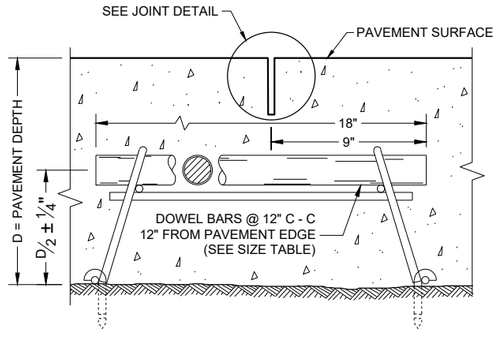
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



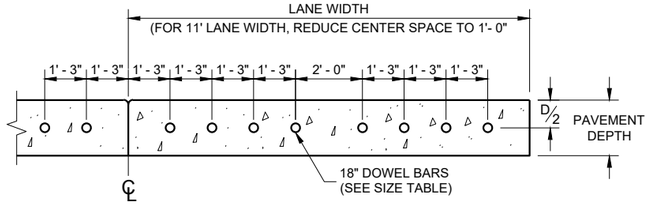
CONTRACTION JOINT LOCATIONS



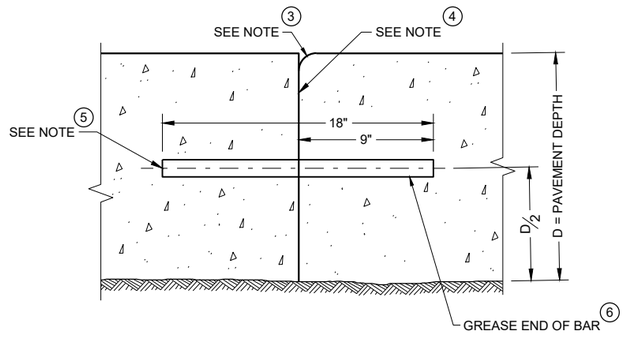
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

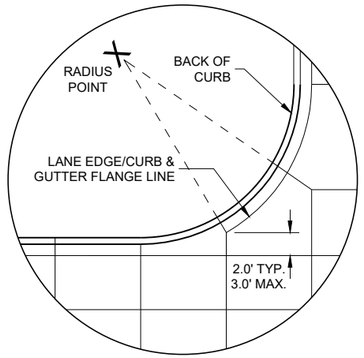
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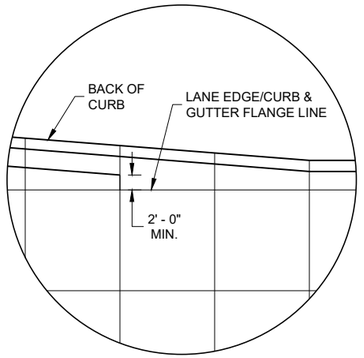
SDD 13C13 - 11

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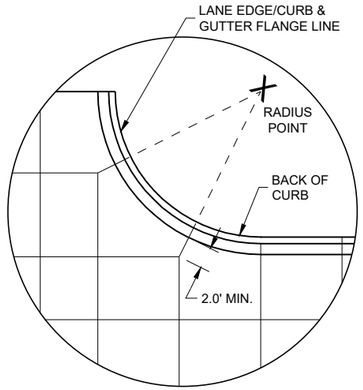
SDD 13C13 - 11



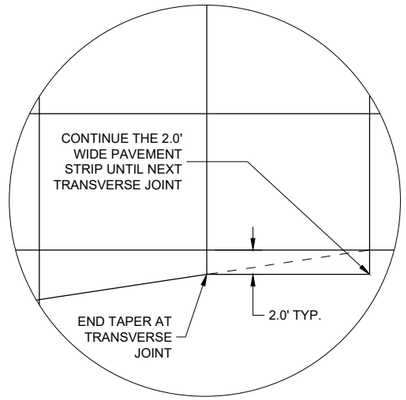
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

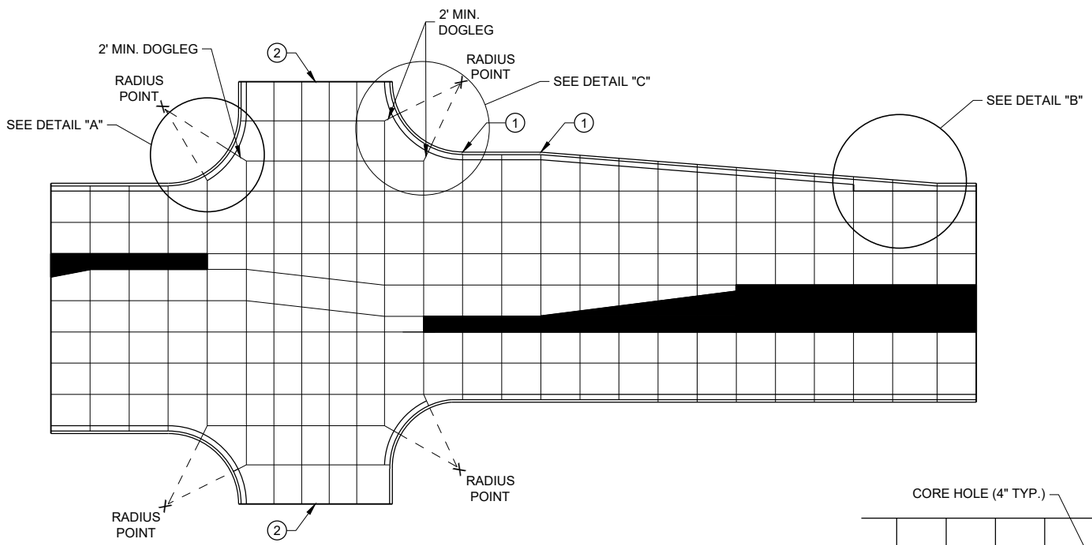
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

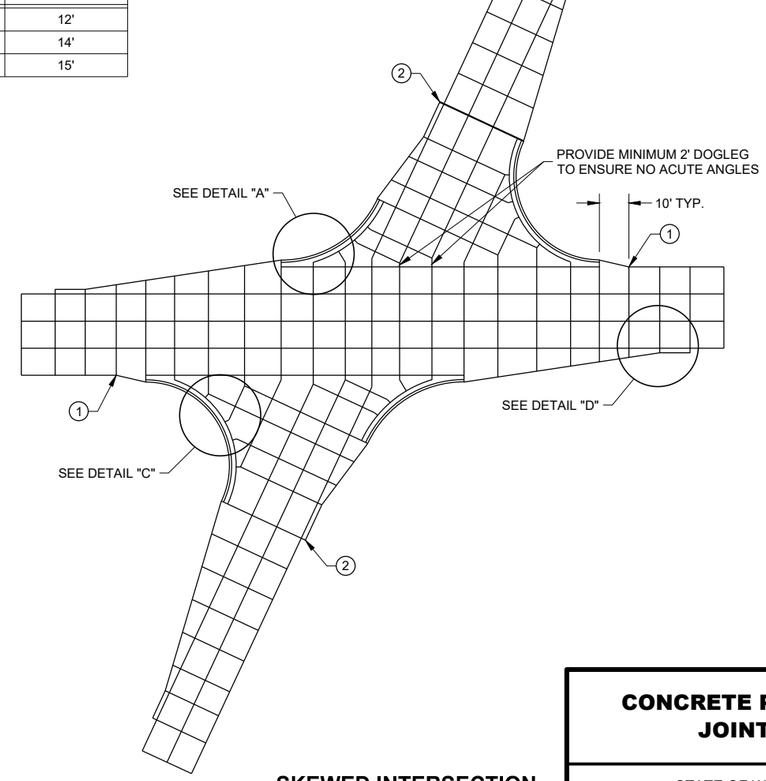
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



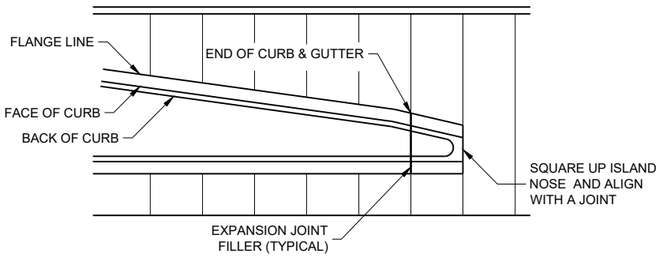
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

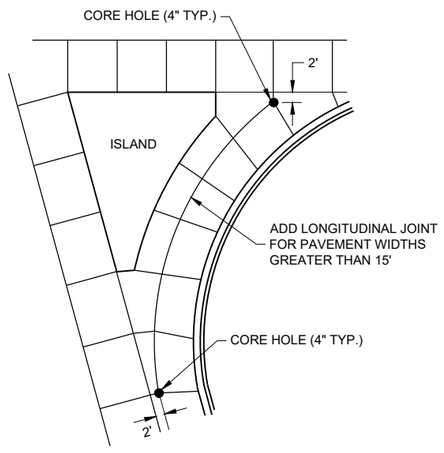
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08a

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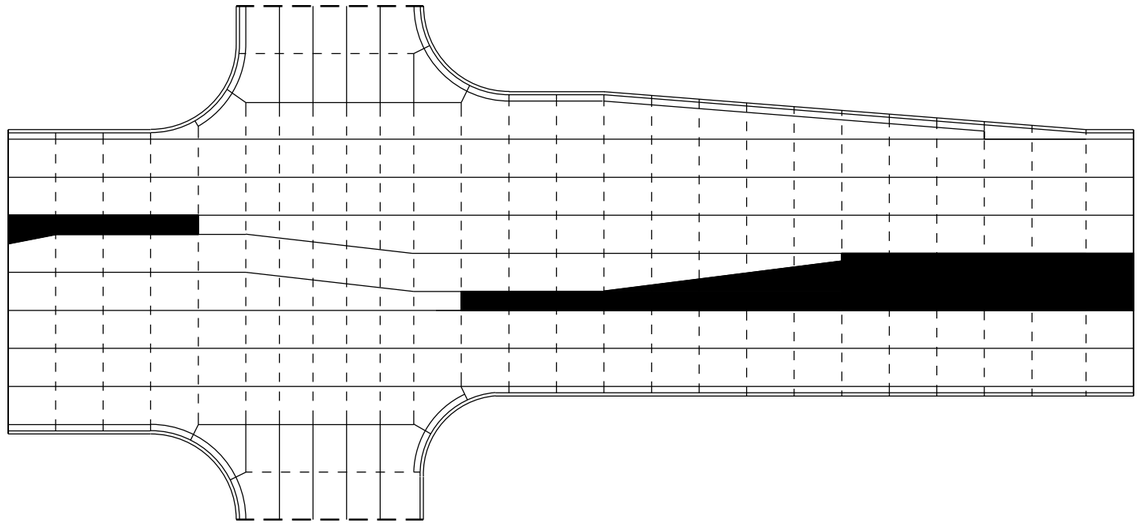
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

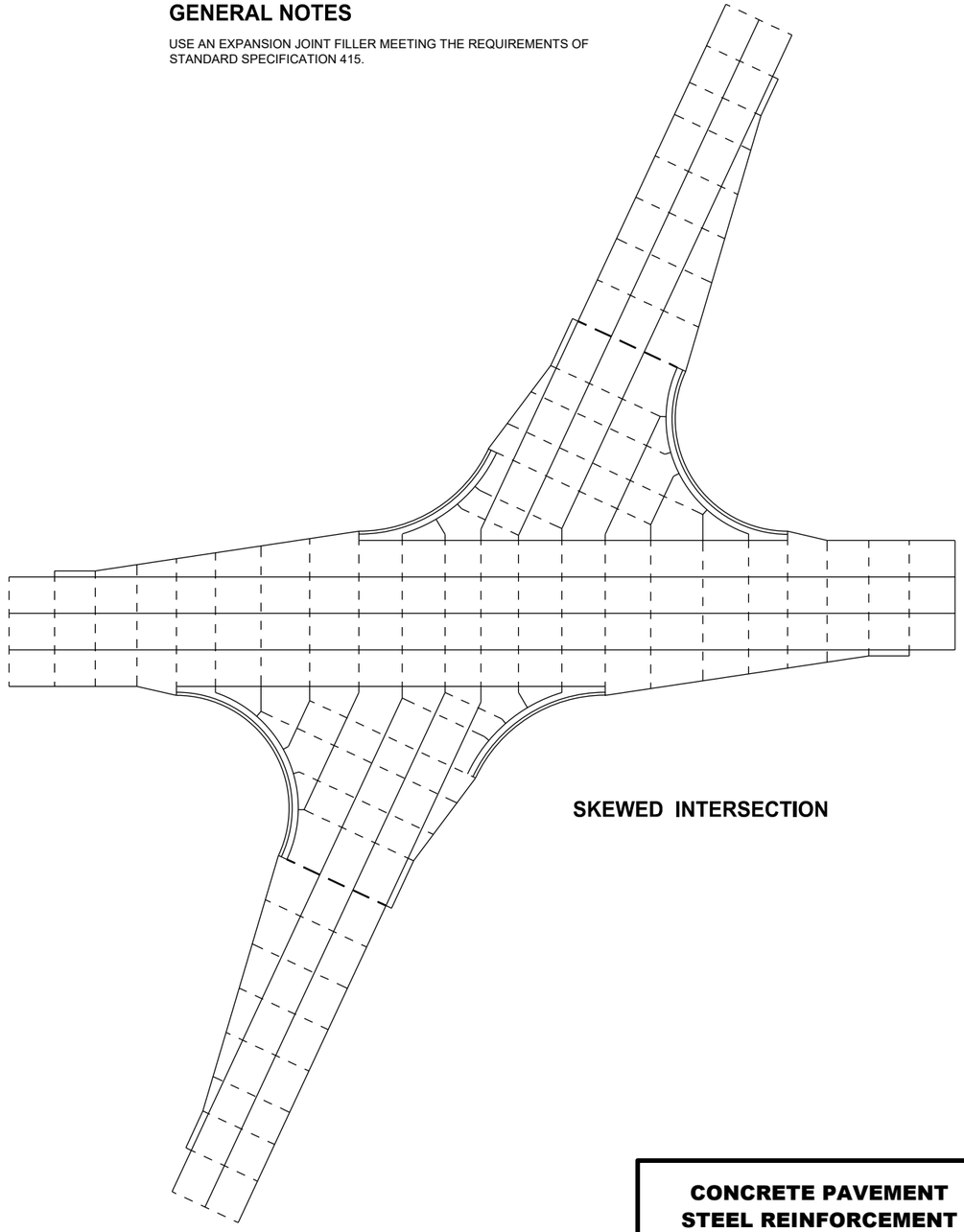
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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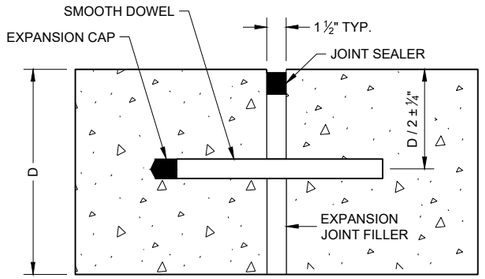
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

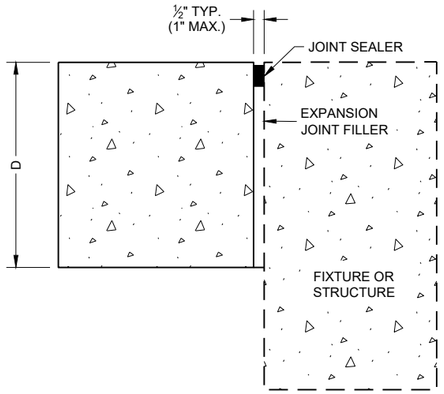
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

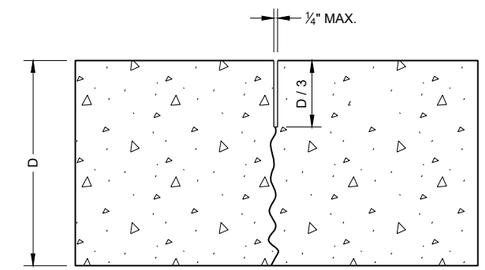
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

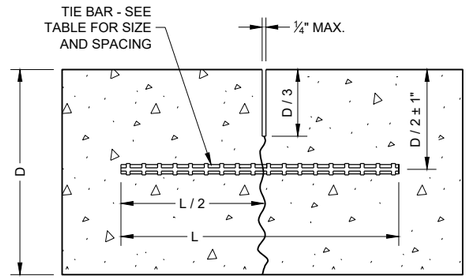
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

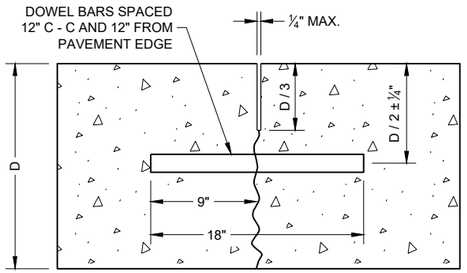
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

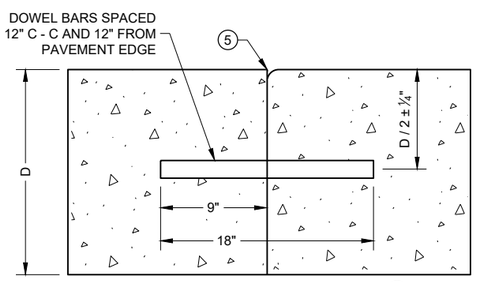


TIED LONGITUDINAL

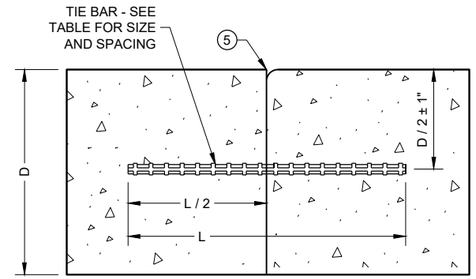


DOWELED TRANSVERSE

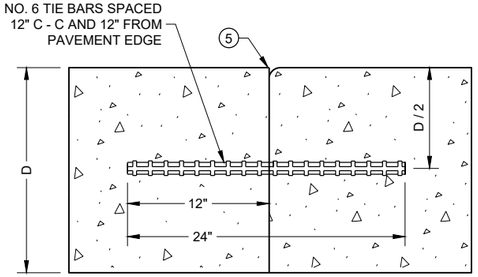
CONTRACTION JOINTS (2)



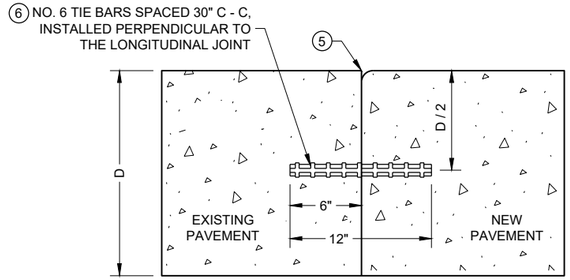
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

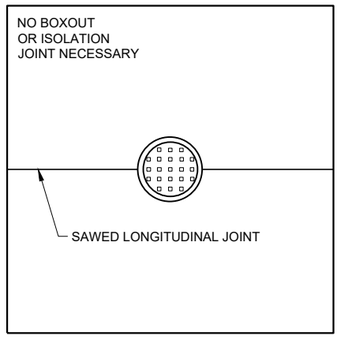
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

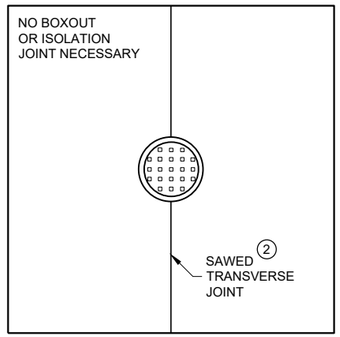
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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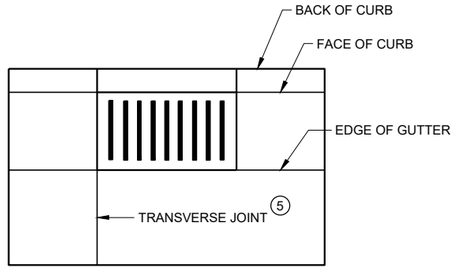
SDD 13C18 - 08c



MANHOLE WITH LONGITUDINAL JOINT



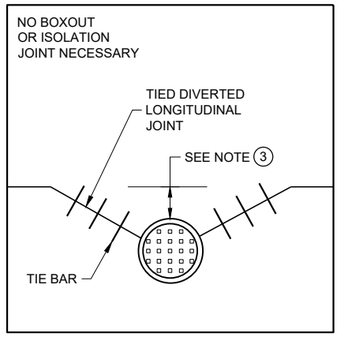
MANHOLE WITH TRANSVERSE JOINT



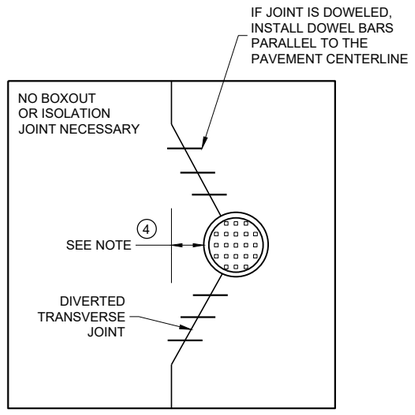
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

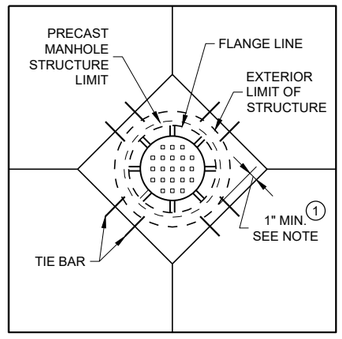
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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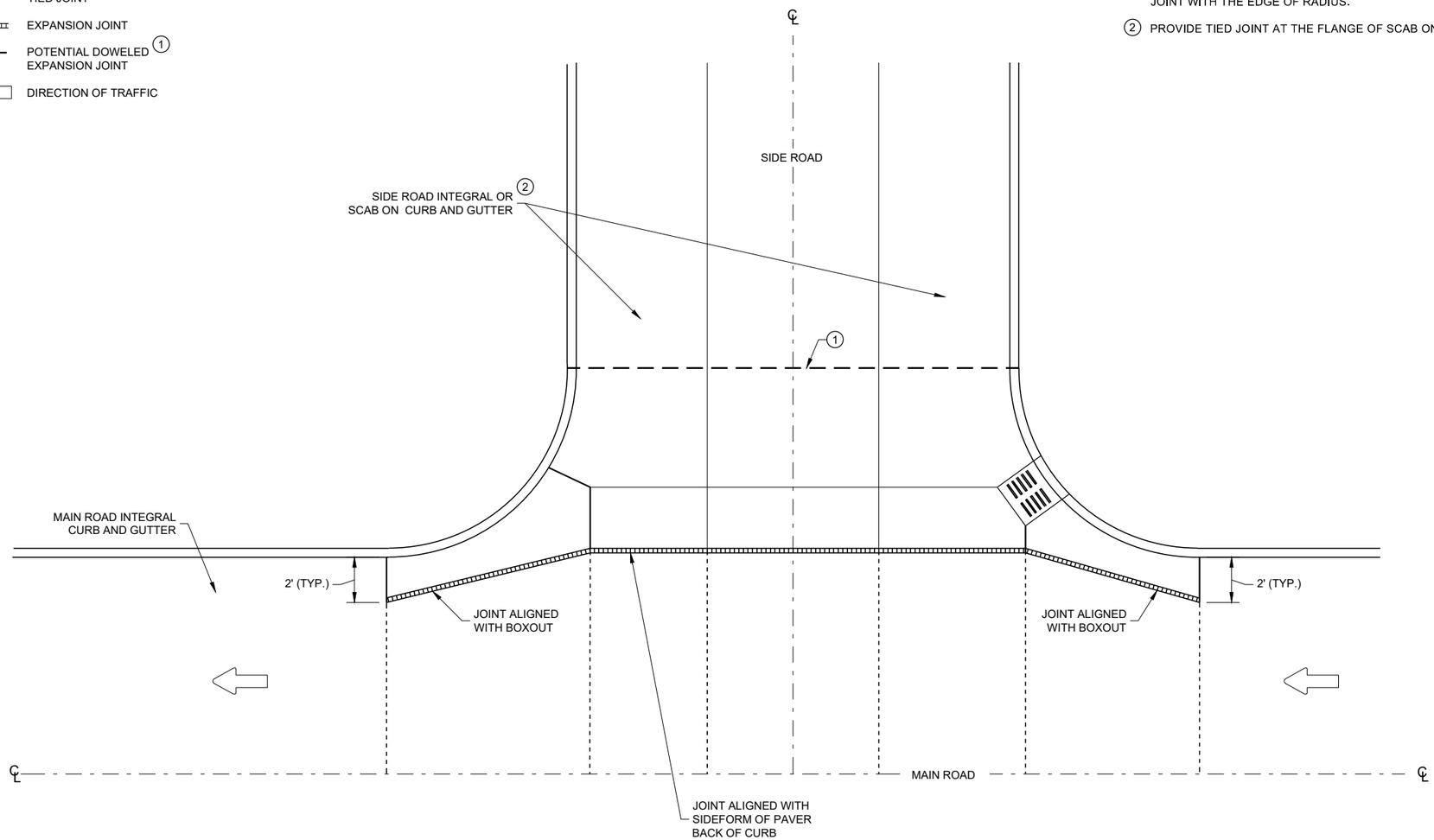
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LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

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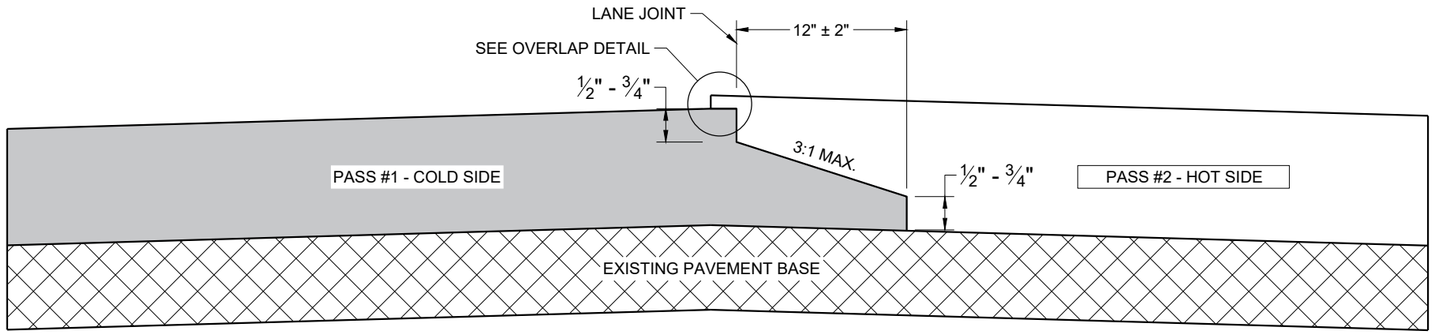
FHWA

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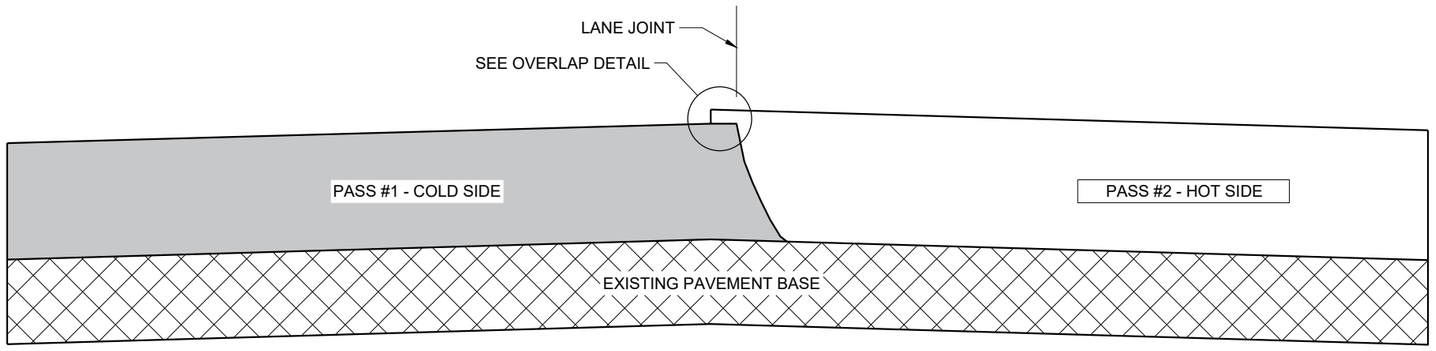
SDD 13C18 - 08f

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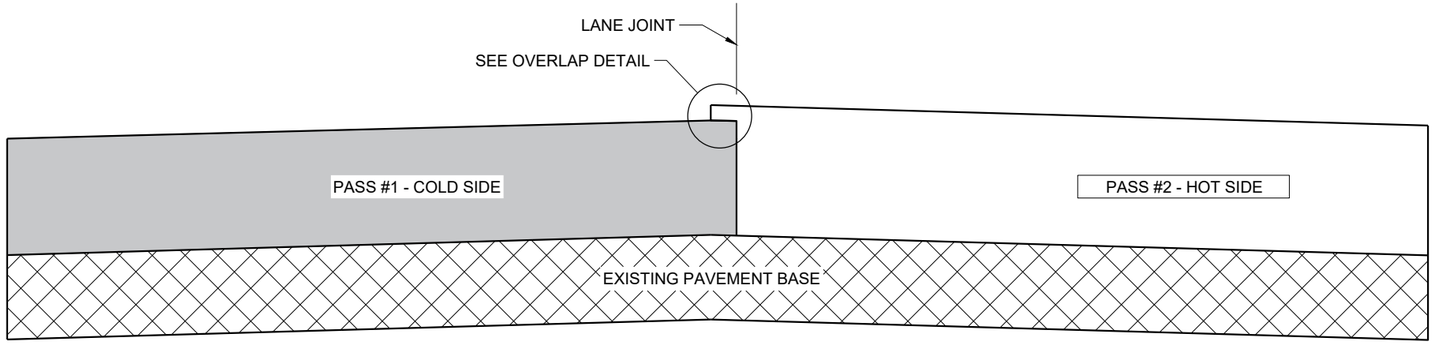
SDD 13C18 - 08f



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

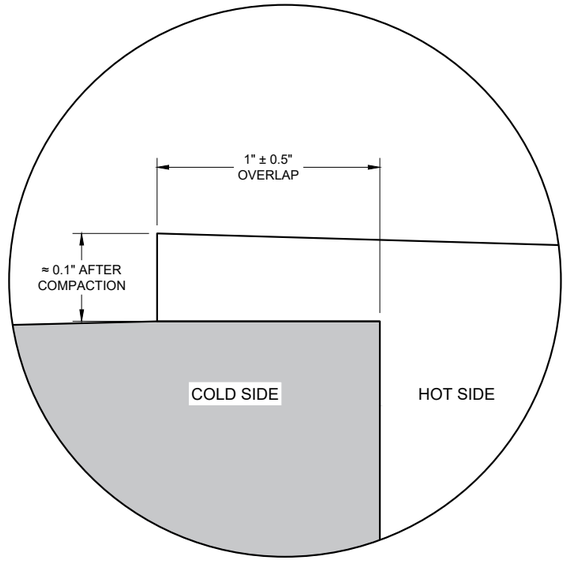
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

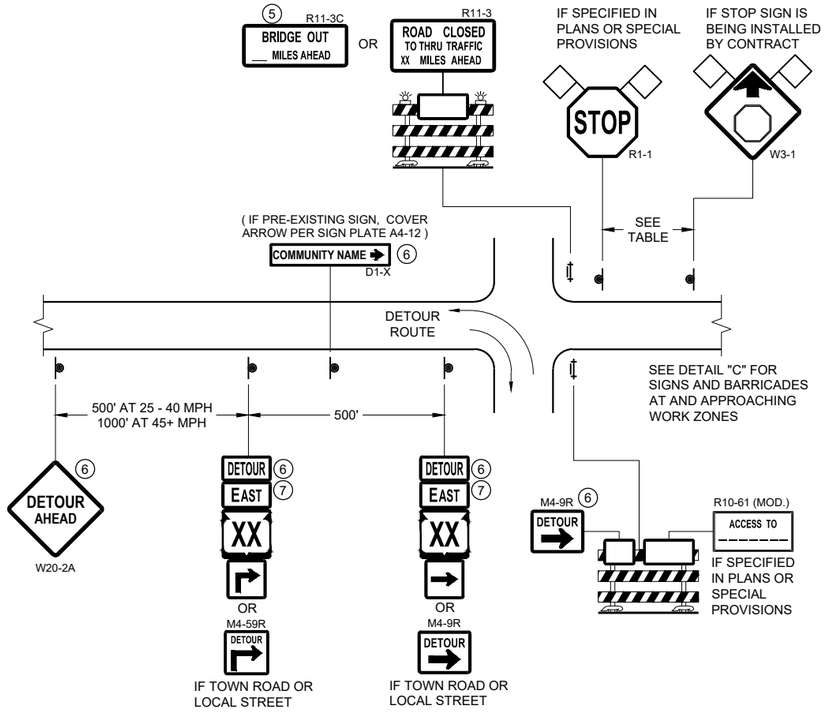
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

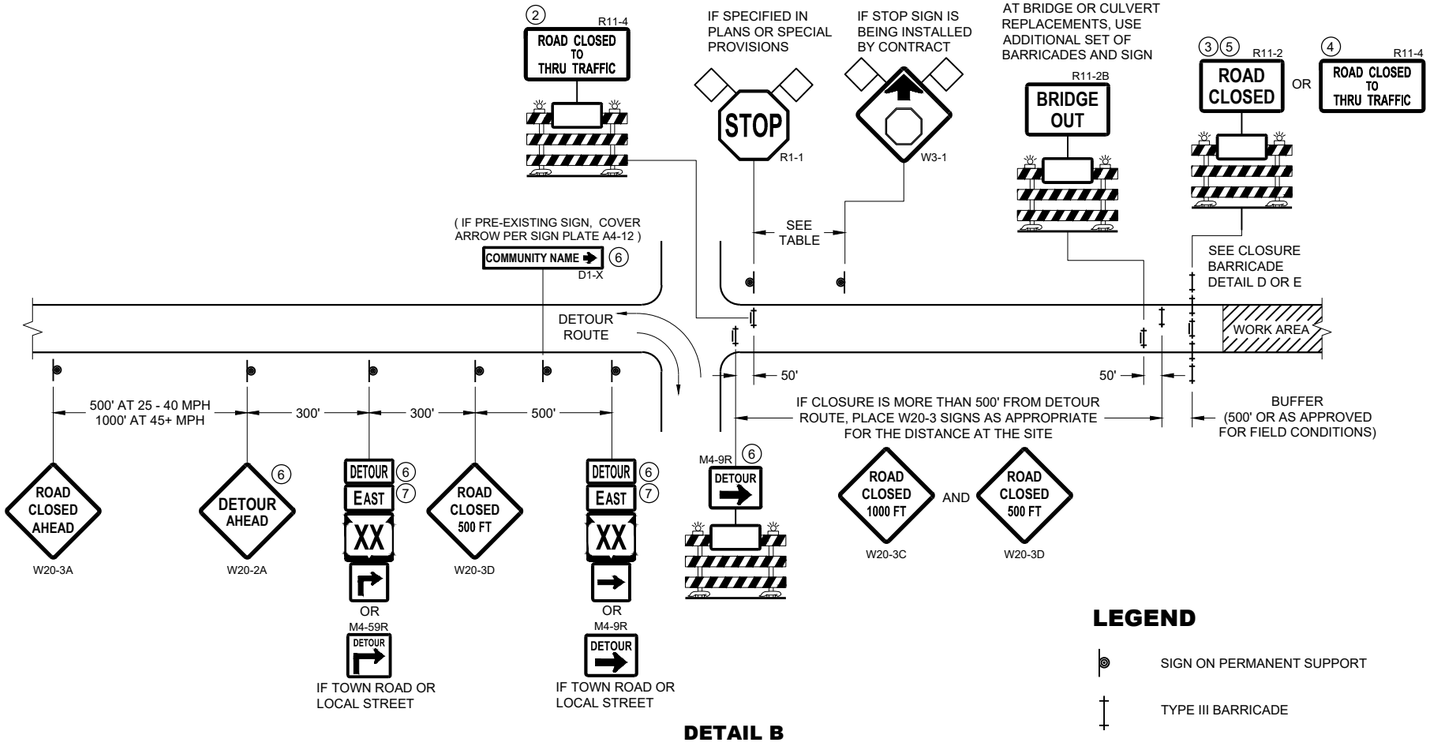
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



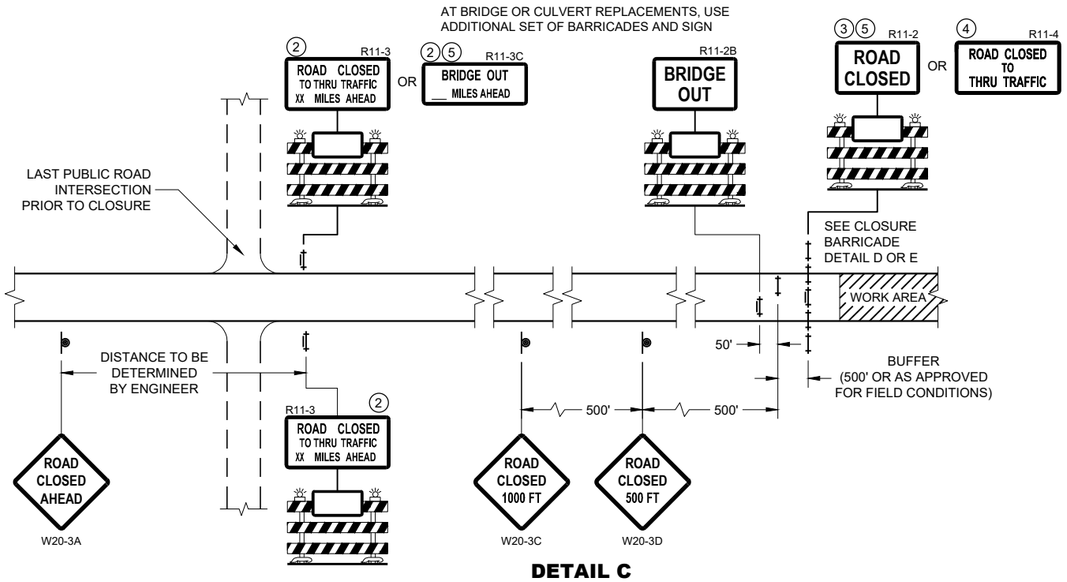
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO 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
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

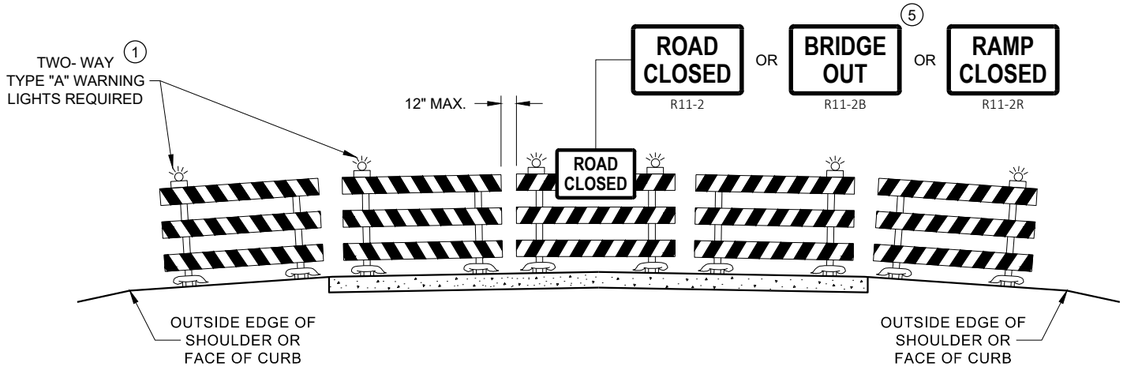
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

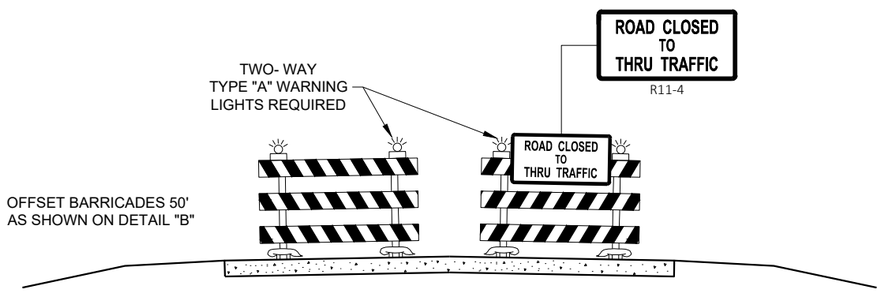
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 09a



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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" X 18" 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)
- 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 AN 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 ROAD 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 VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4
- XX — M1 - 6
- COUNTY / X — M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

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" (36" X 18" 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)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A 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

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX / WEST XX *

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-9L DETOUR ** OR DETOUR EAST XX IF TOWN ROAD OR LOCAL STREET

500'

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

500'

DETOUR EAST XX

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX *

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

EAST XX M3-X 24" X 12" M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

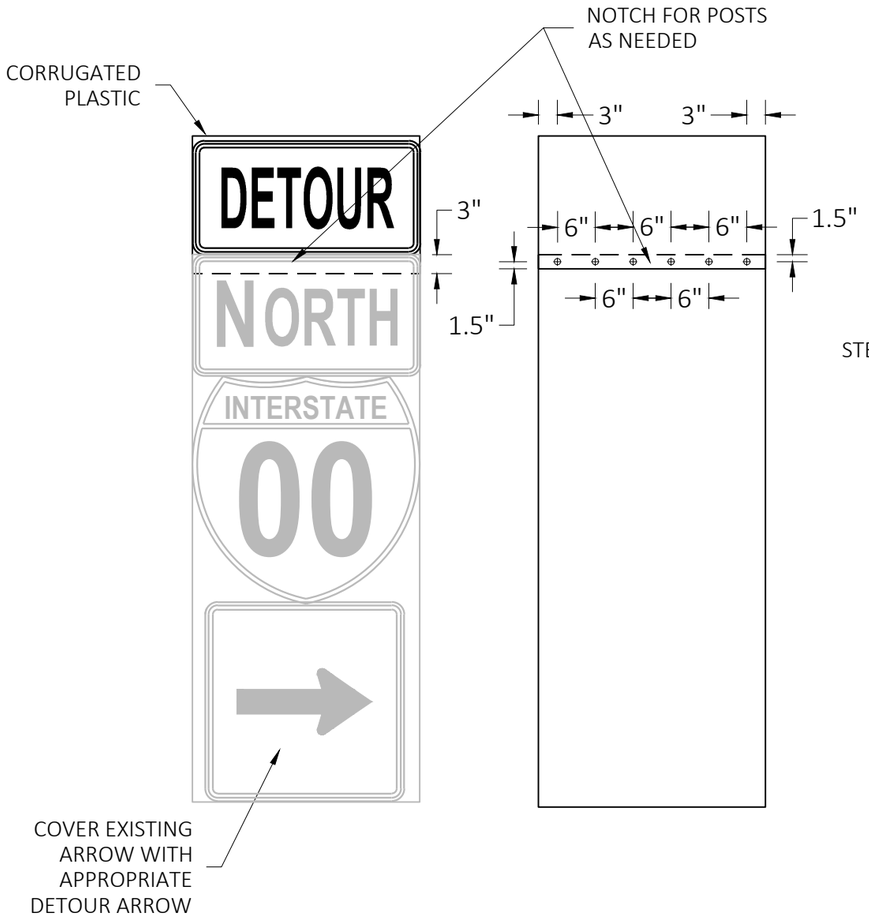
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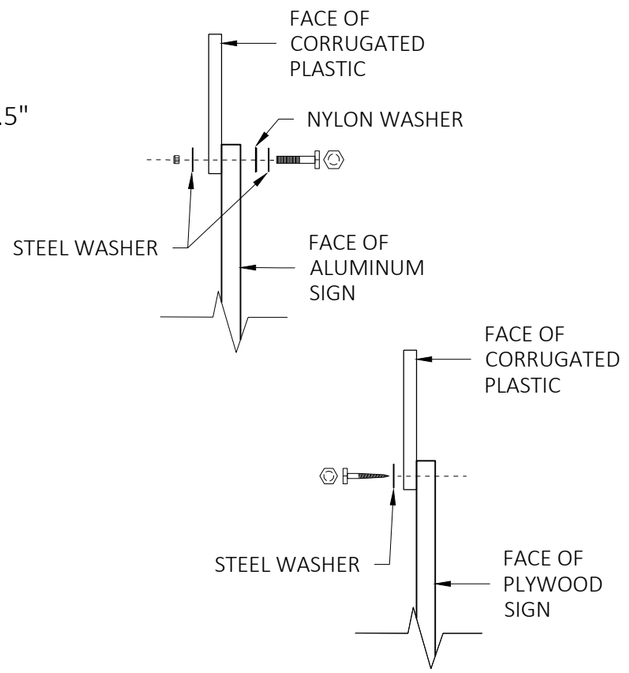
SDD 15C02 - 09c

FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
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

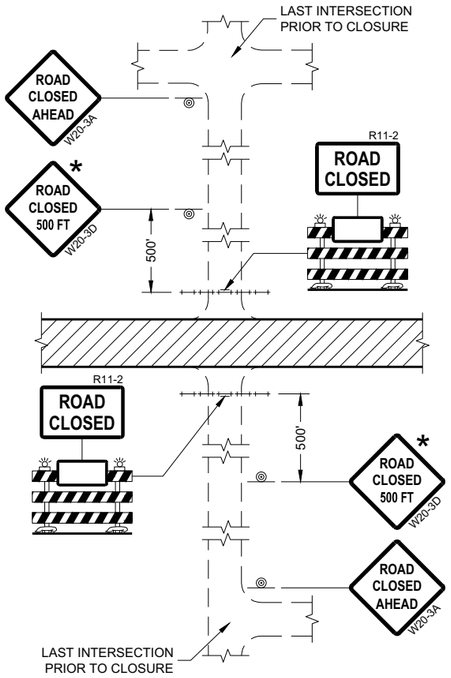
MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

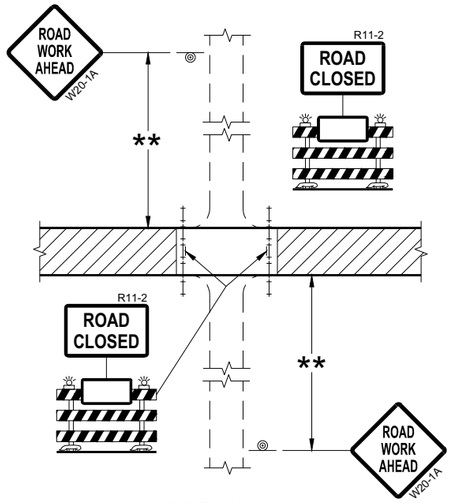
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
SDD 15C02-09h



DETAIL 1
(NO ACCESS TO PROJECT)



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

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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

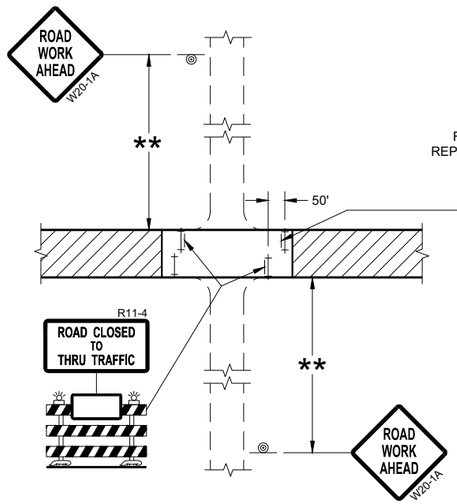
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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

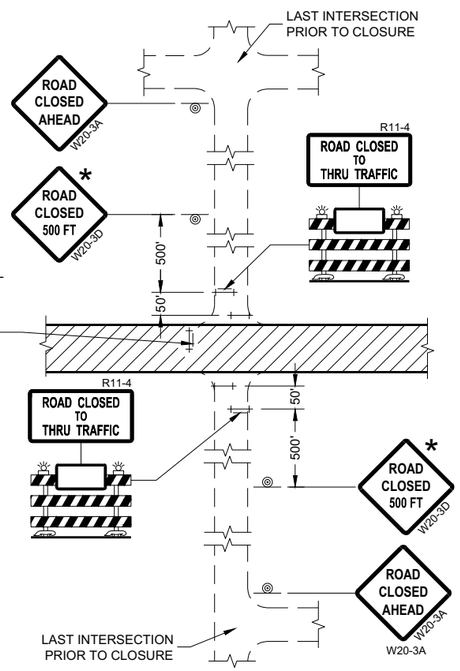
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



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



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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

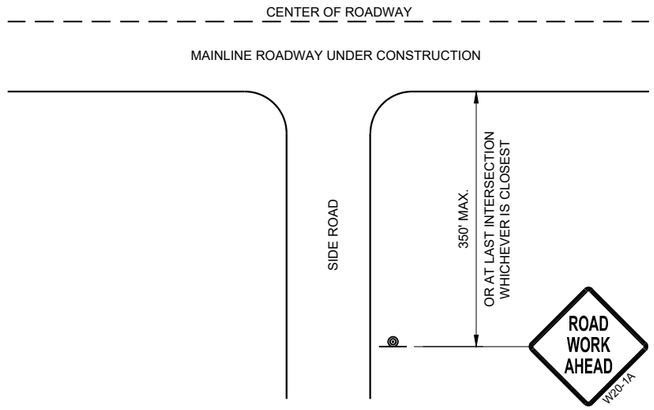
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

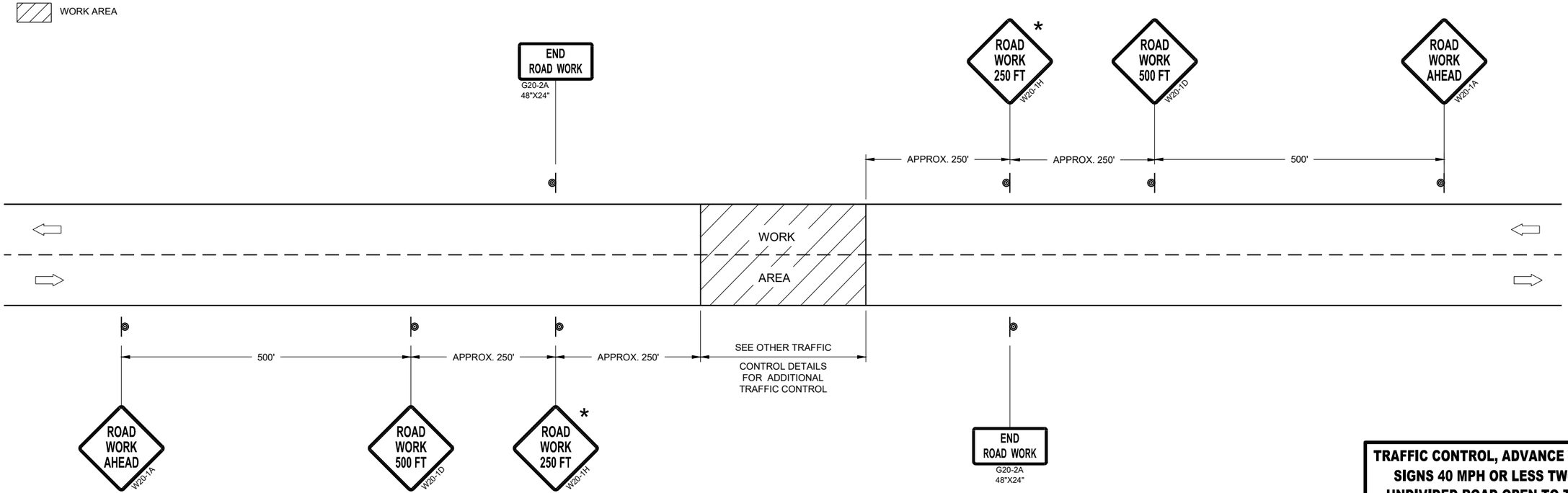
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

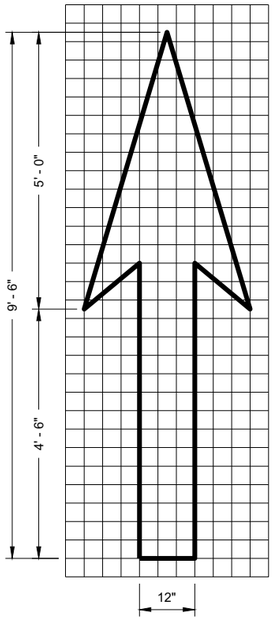
FHWA

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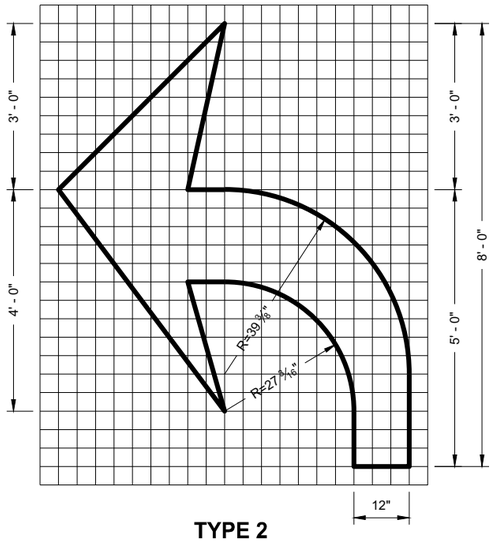
SDD 15C05 - 05

GENERAL NOTES

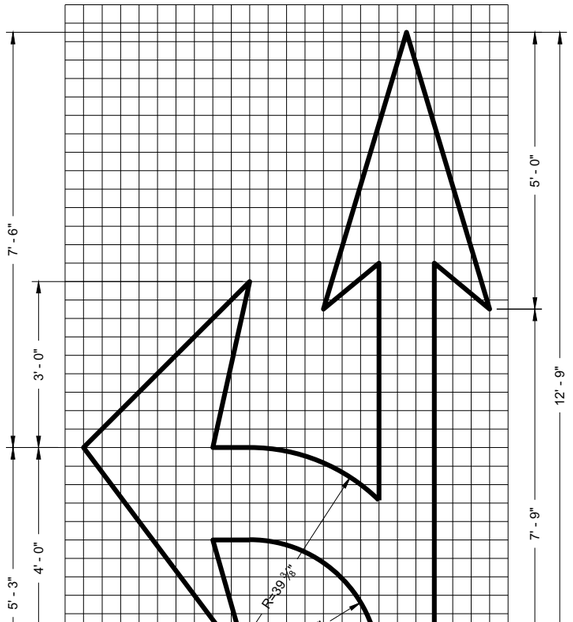
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



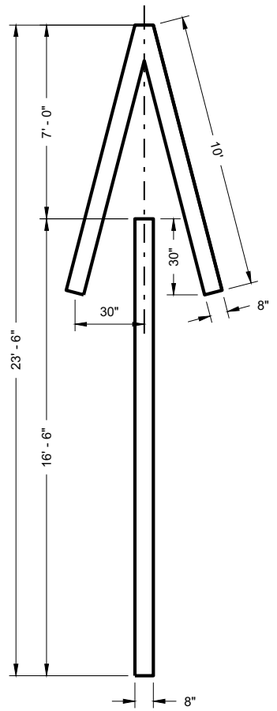
TYPE 1



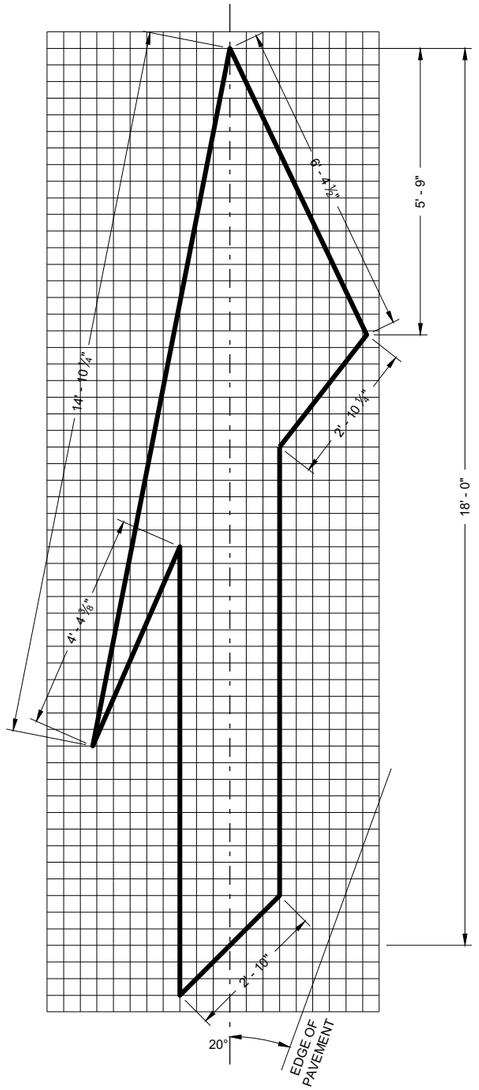
TYPE 2



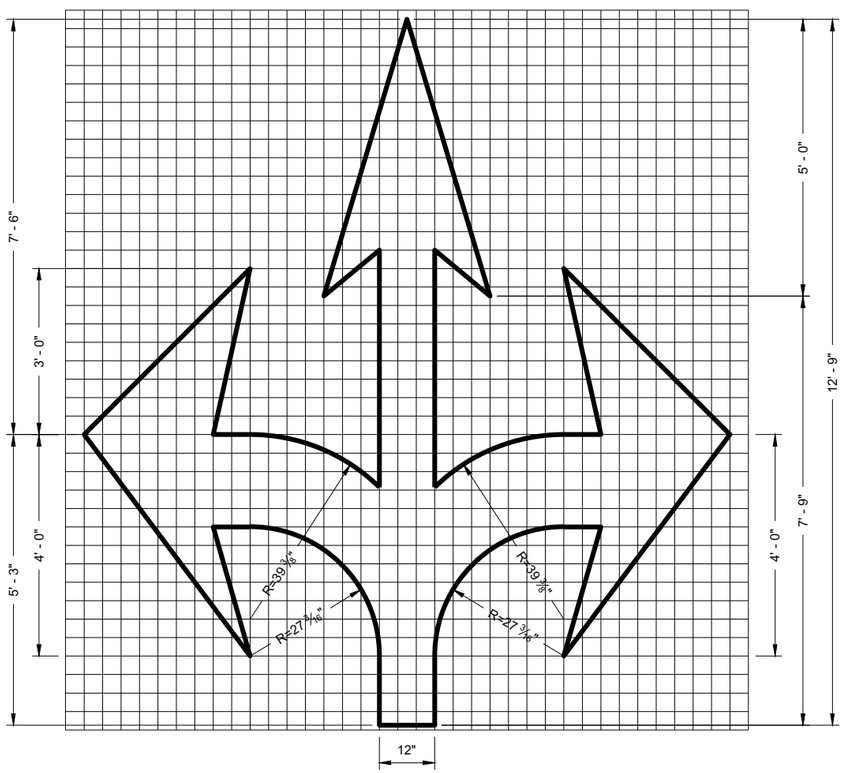
TYPE 3



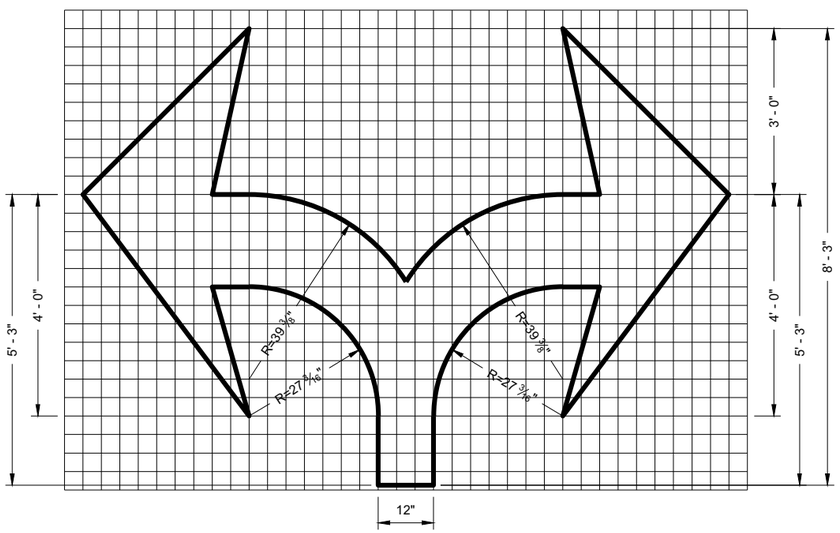
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

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SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

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

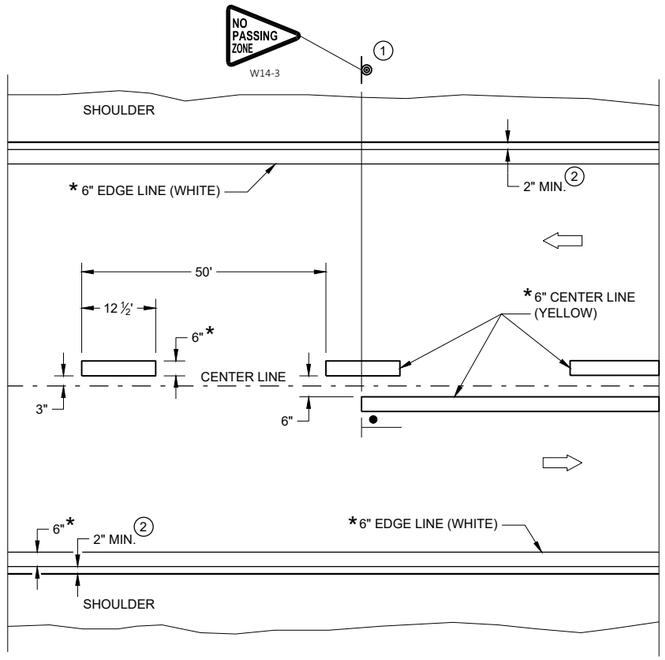
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

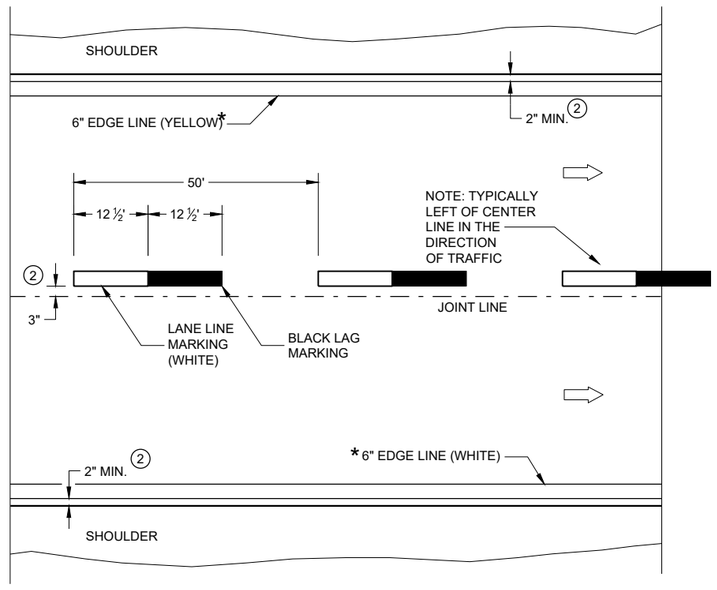
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

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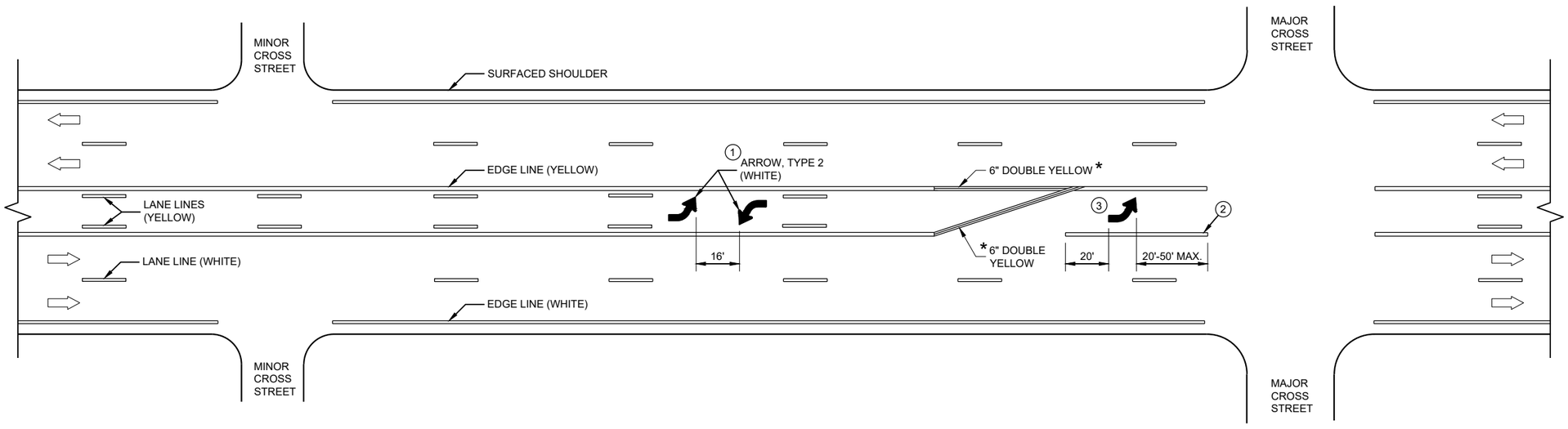
SDD 15C08-23a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

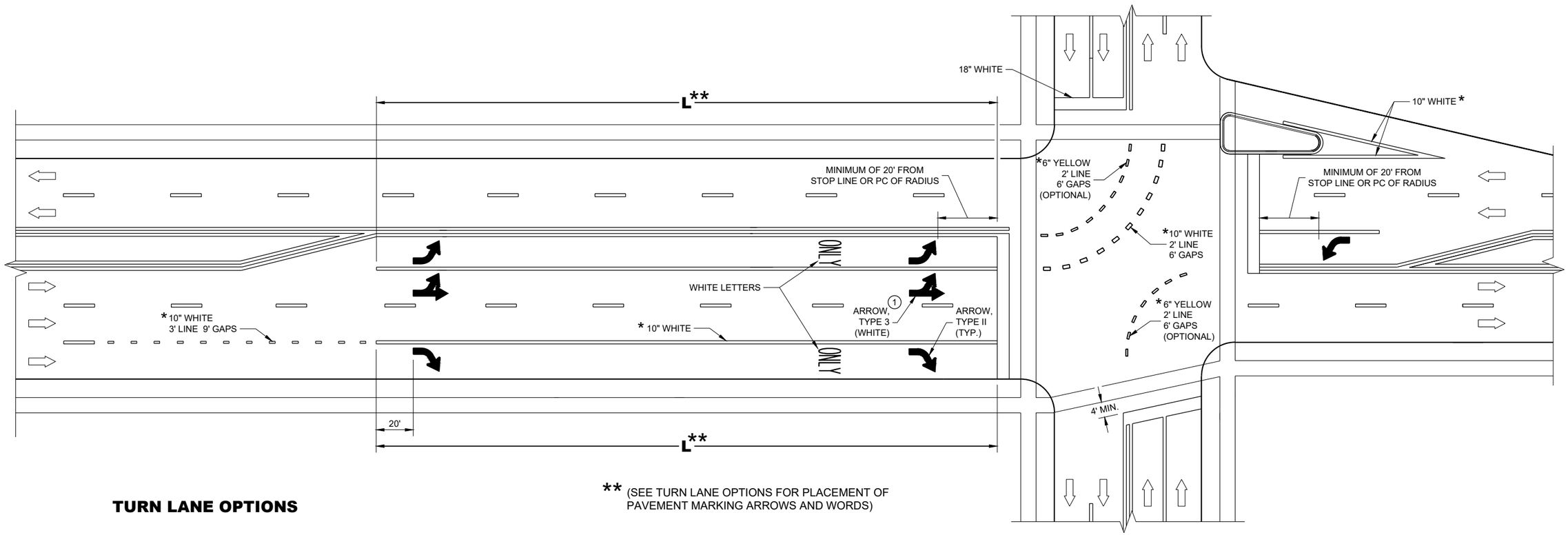
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 179

6

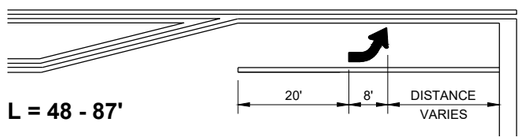
SDD 15C08-23c



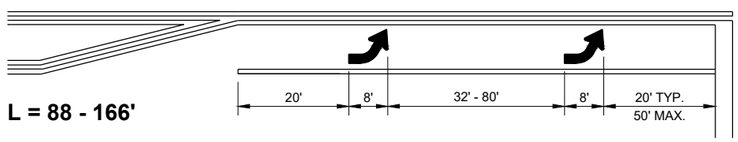
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

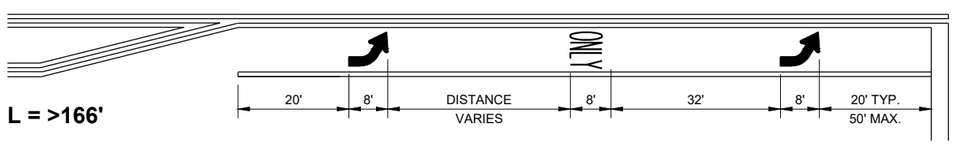
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

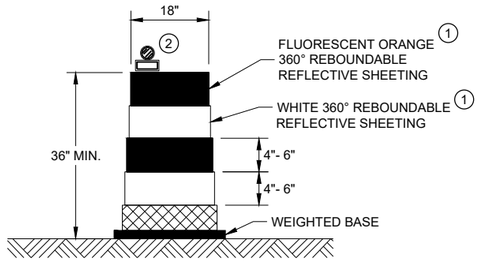
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SDD 15C08-23d

SDD 15C08-23d

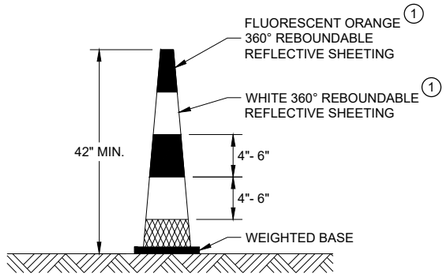
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

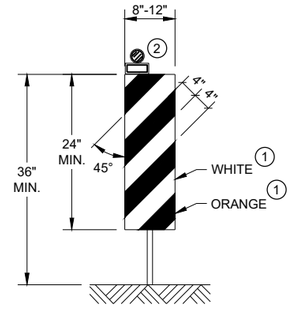
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

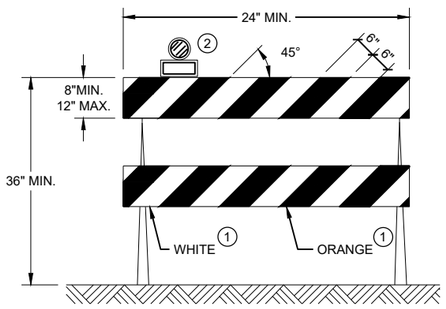
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



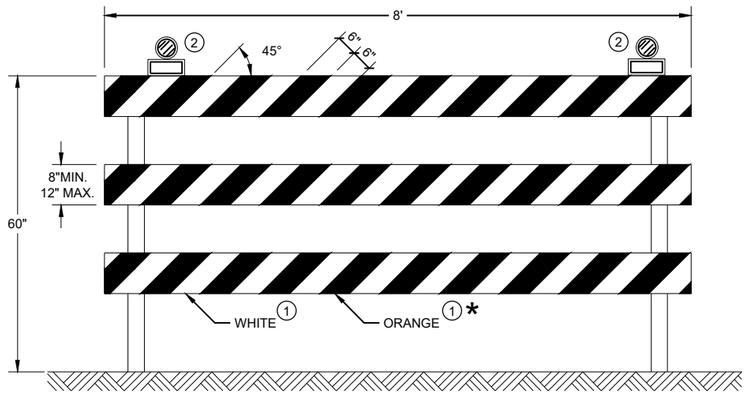
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

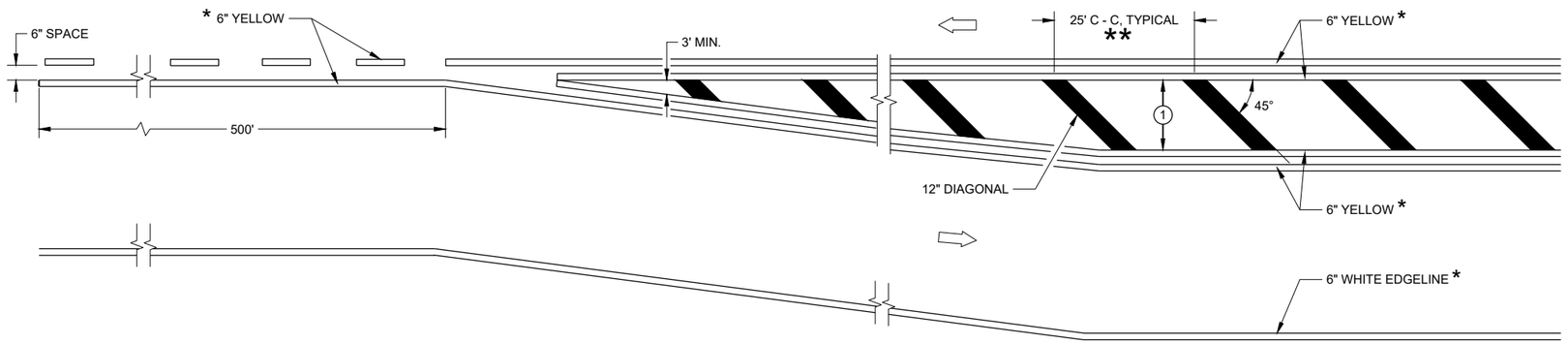
FHWA

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SDD 15C11 - 10b

6

SDD 15C11 - 10b



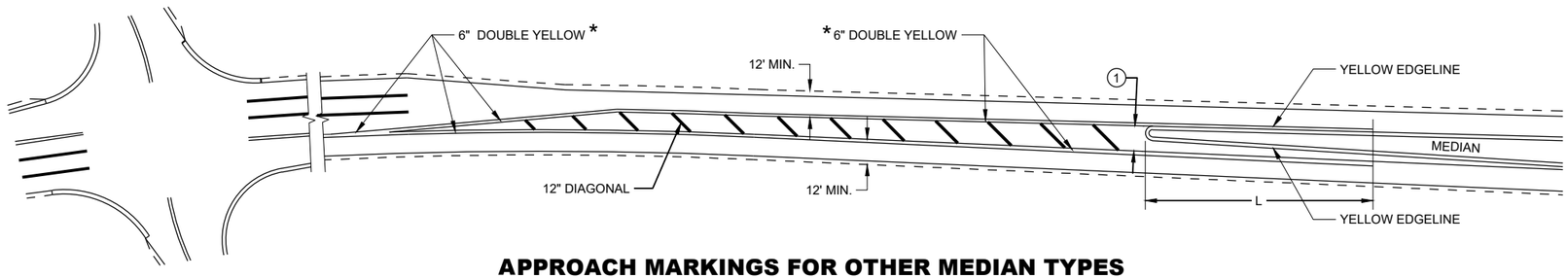
MEDIAN ISLAND DETAIL

GENERAL NOTES

(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

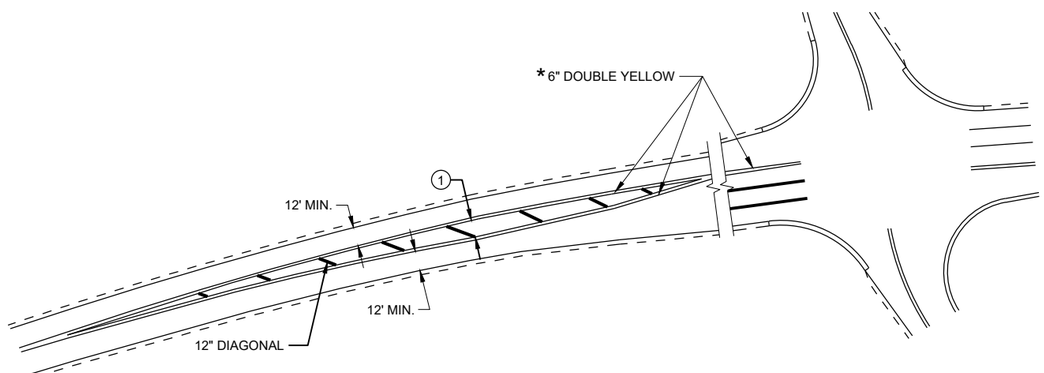
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C18-08a

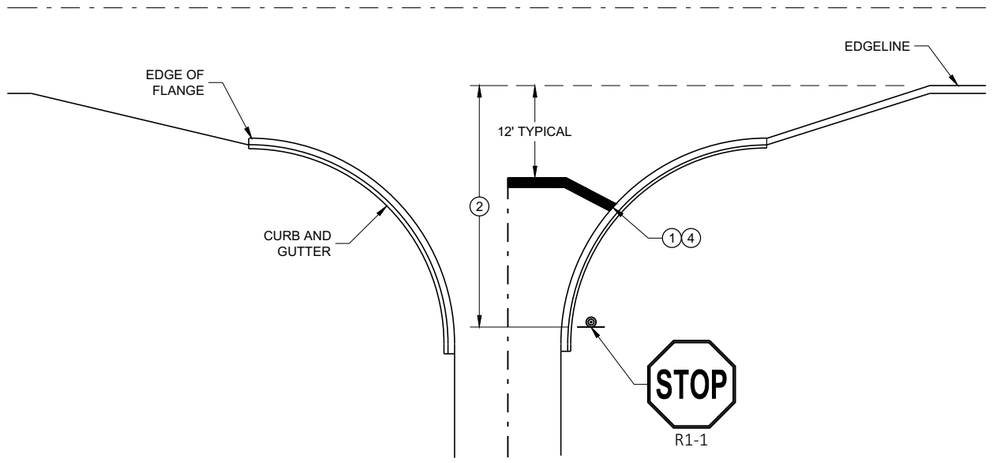
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SDD 15C18-08a

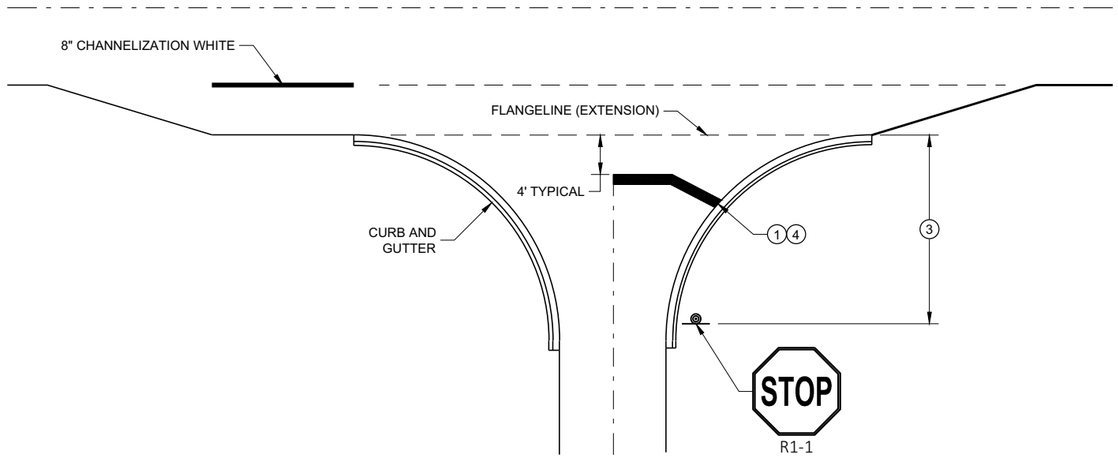
GENERAL NOTES

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

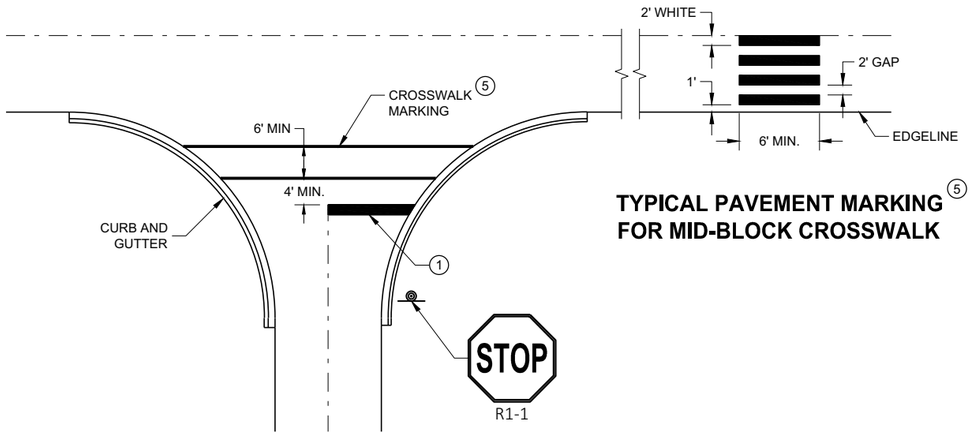
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

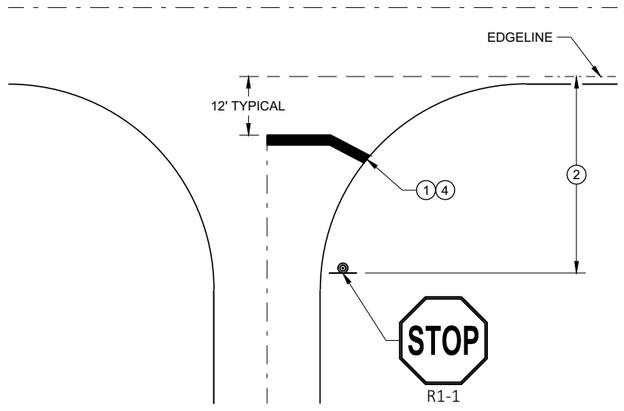


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

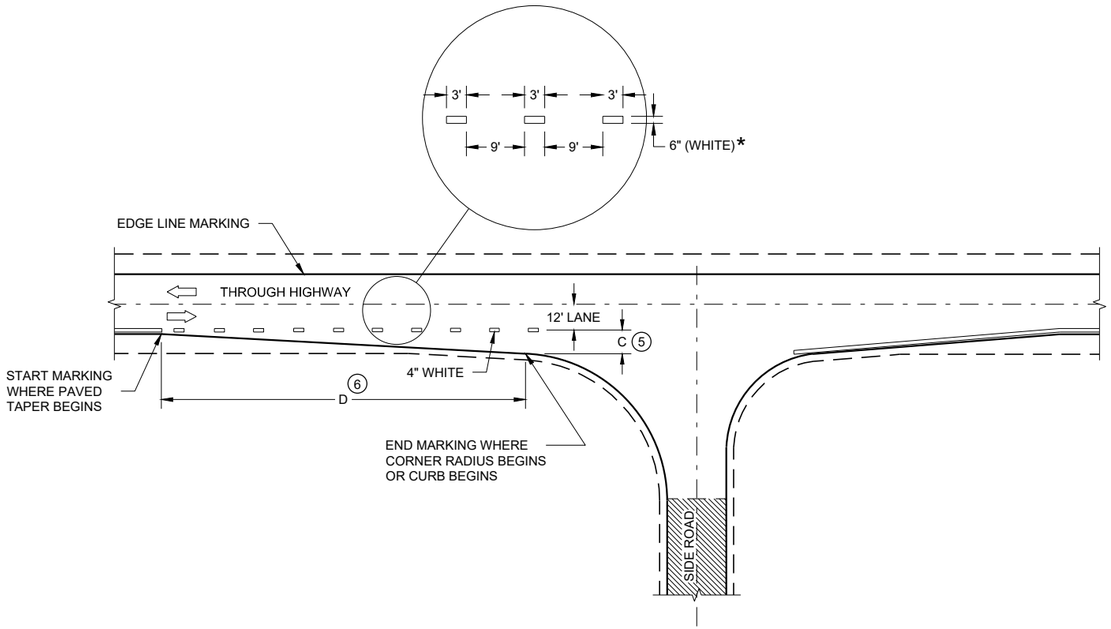
STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04



MINOR INTERSECTION

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

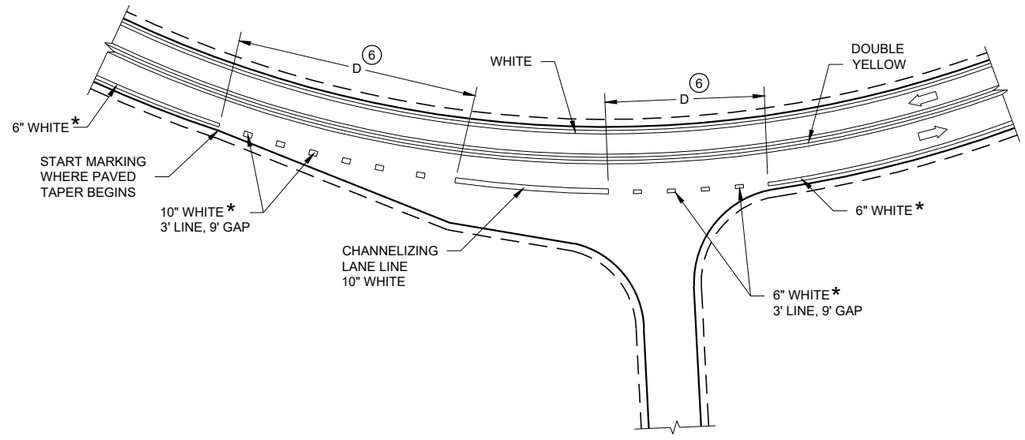
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

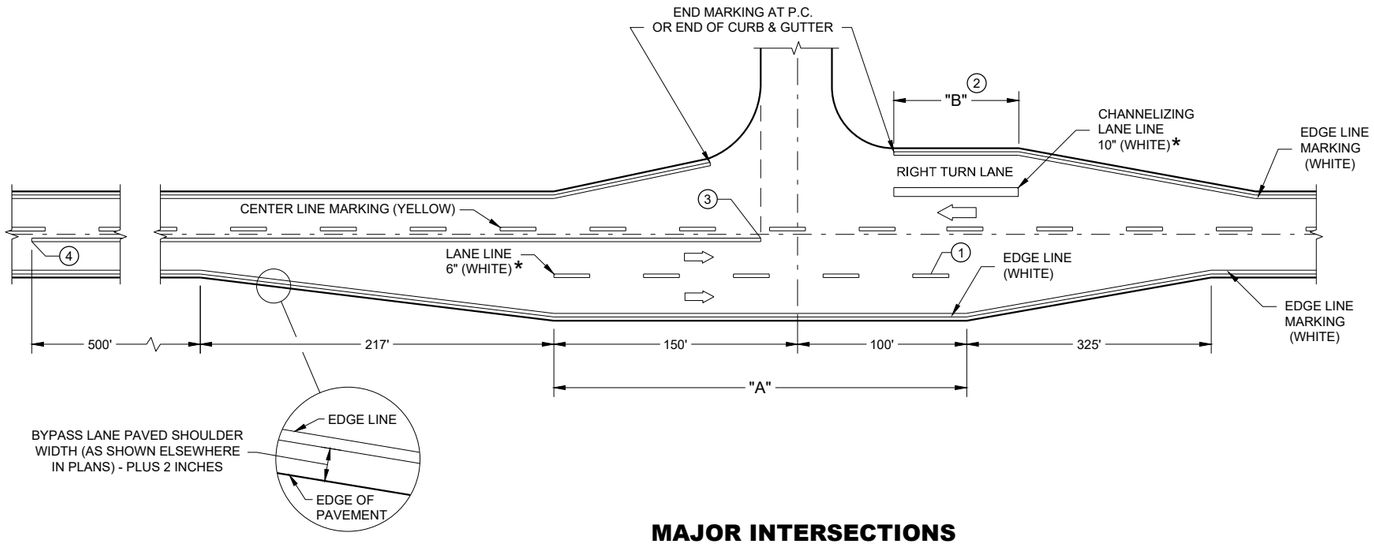
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

SDD 15C35-06a

6

GENERAL NOTES

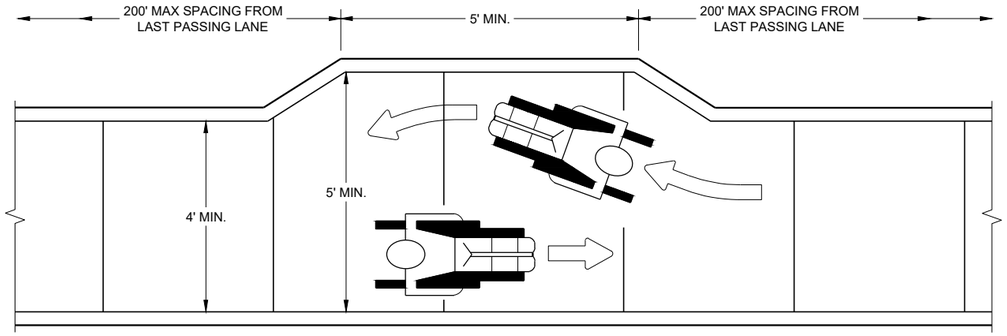
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

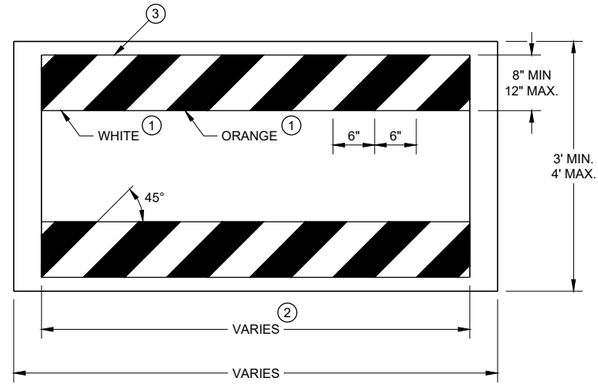
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

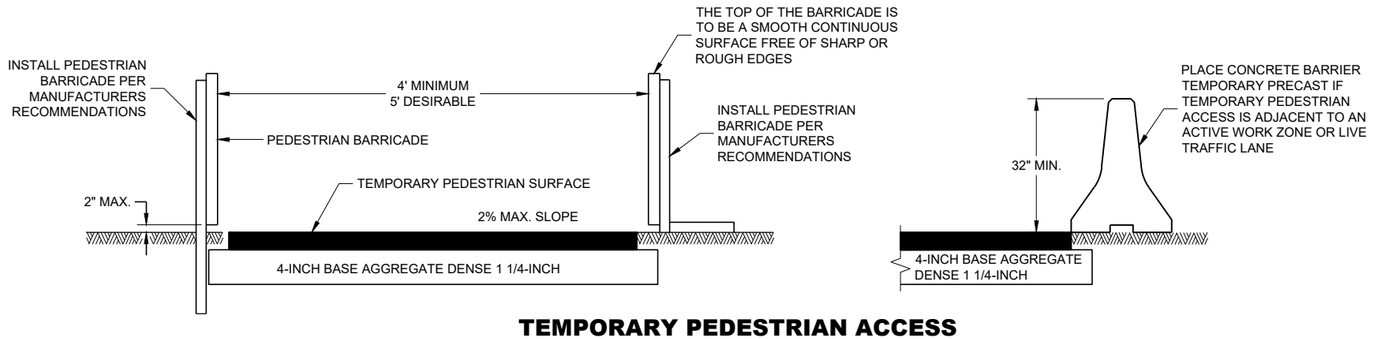
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*

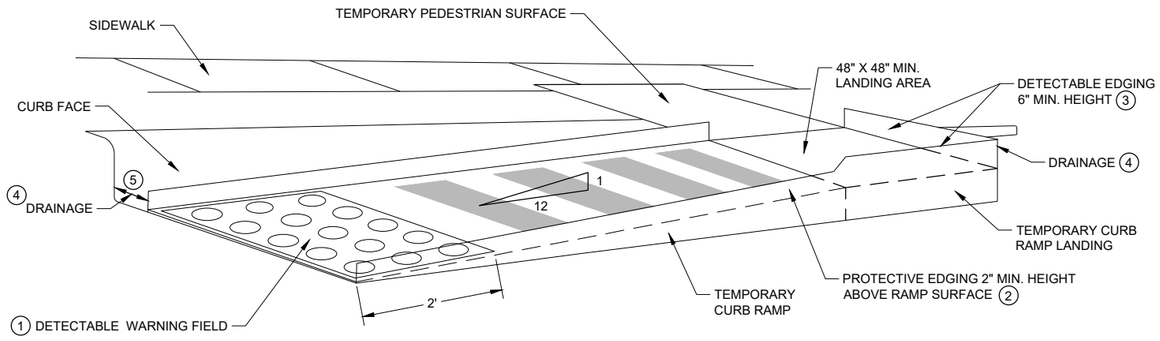


TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

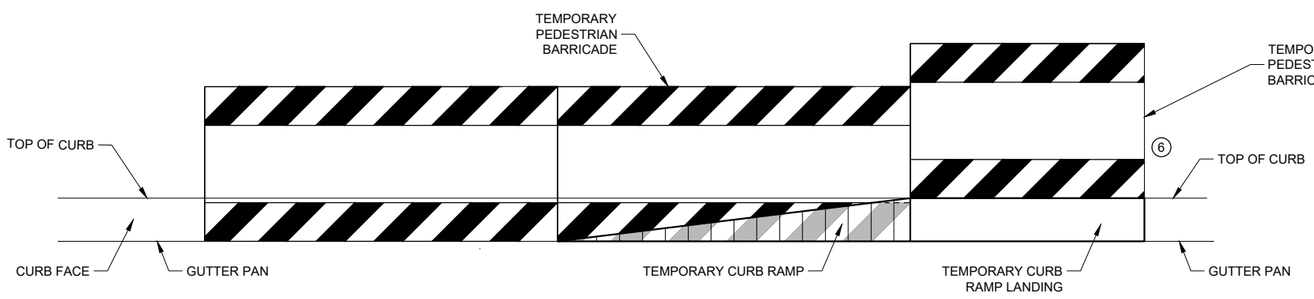
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

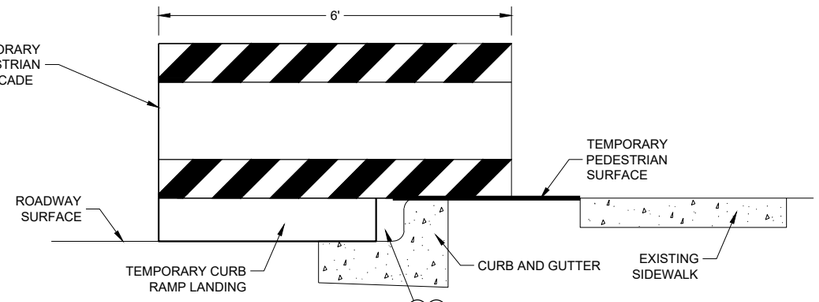
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

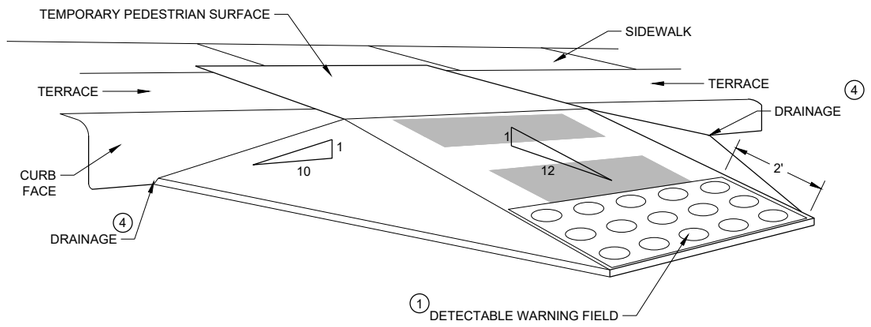
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

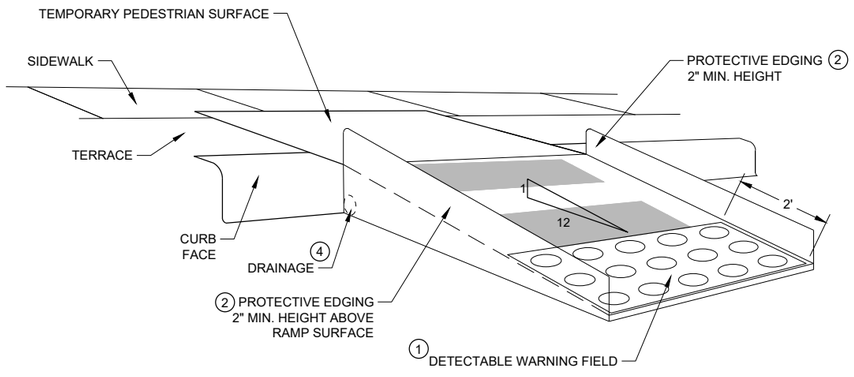
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

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

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

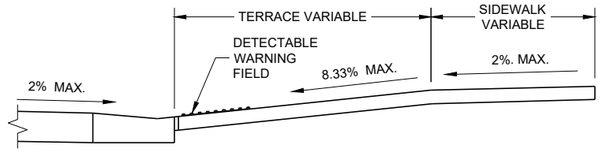
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

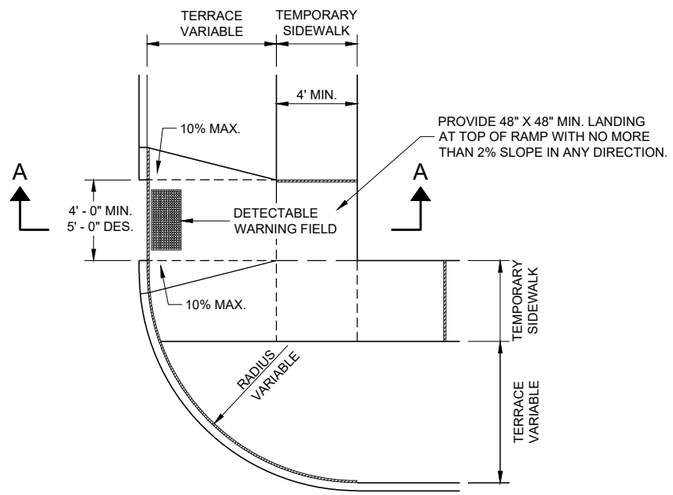
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

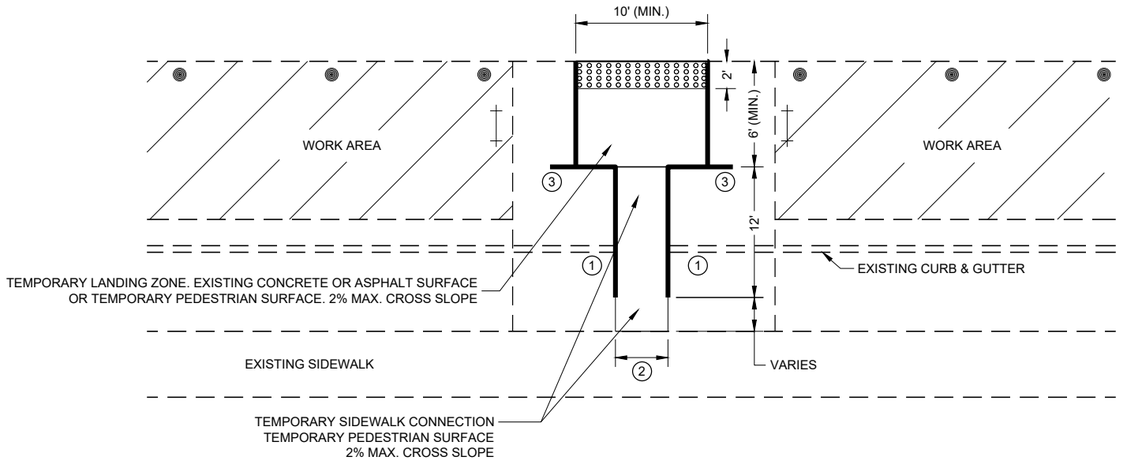
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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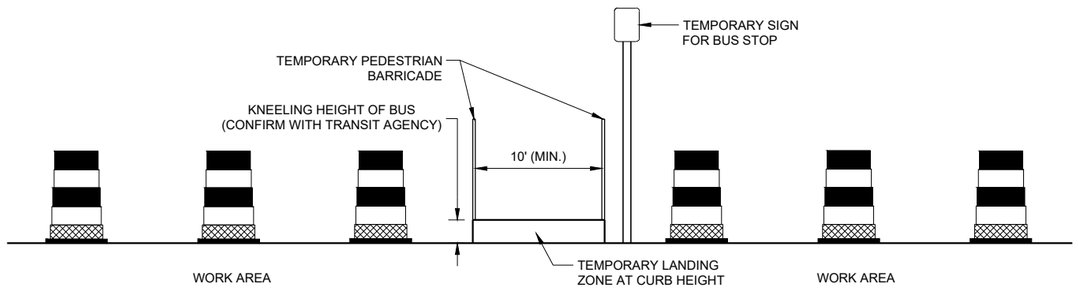
SDD 15D30-09d

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SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

6

SDD 15D30 - 09e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

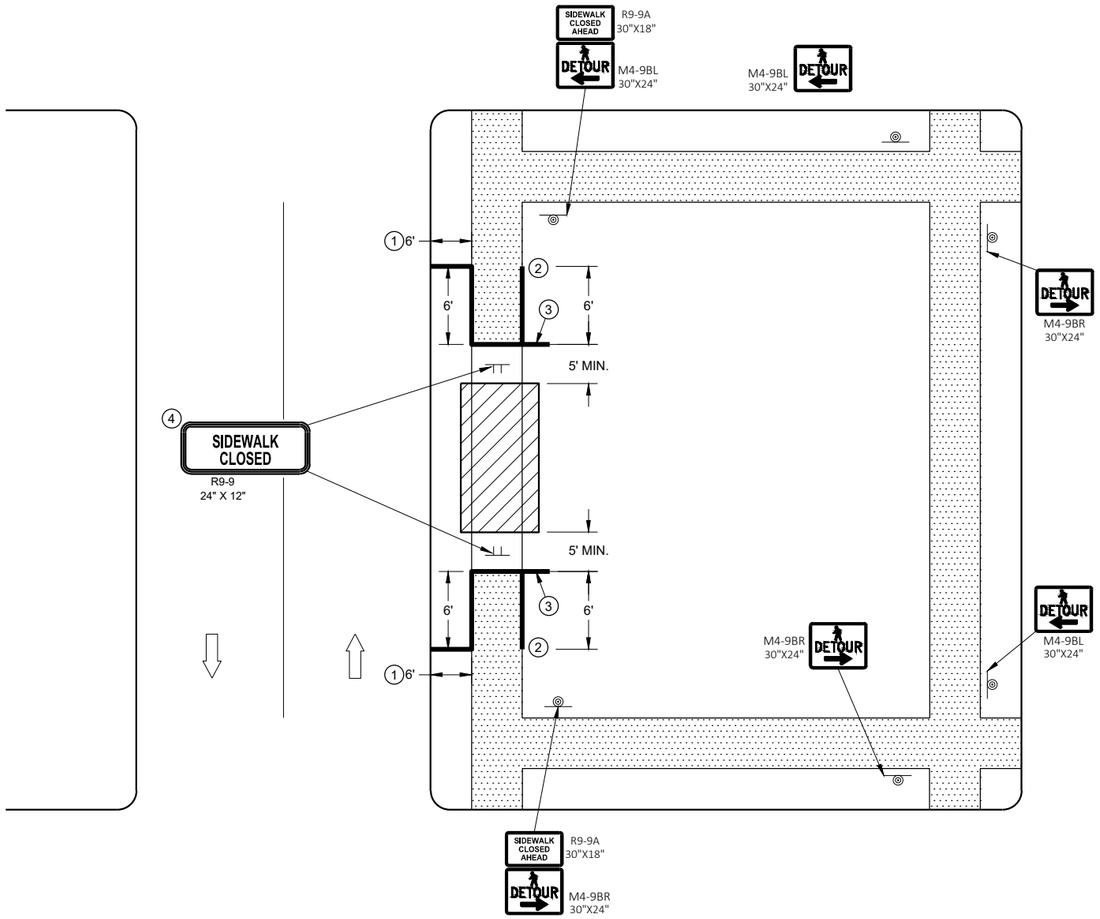
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15D30 - 09e

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

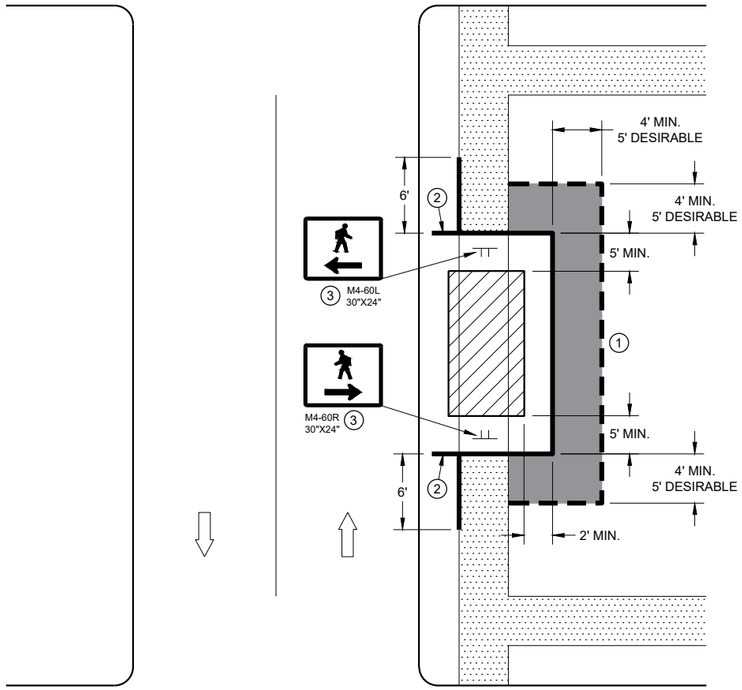
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD15D30 - 09g

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

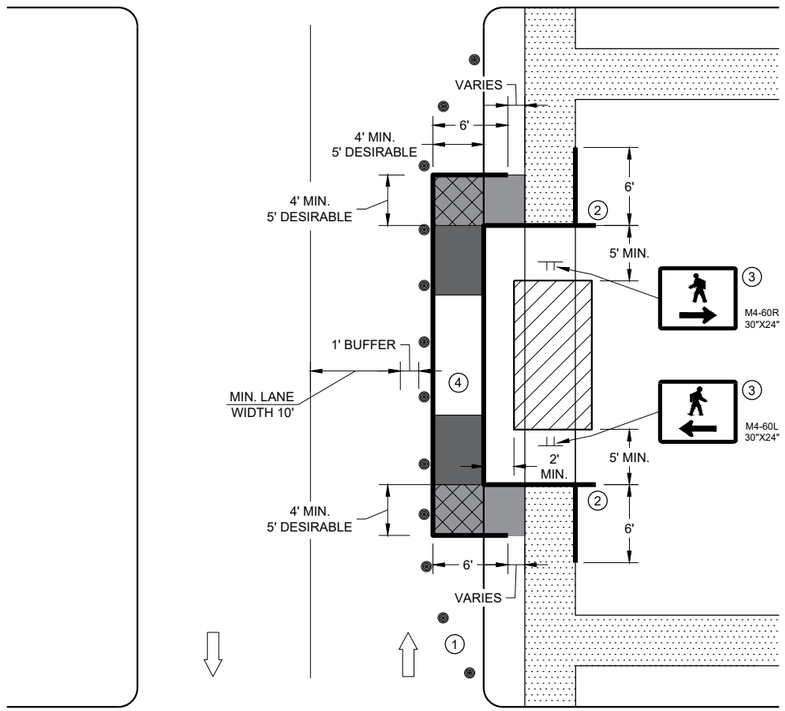
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

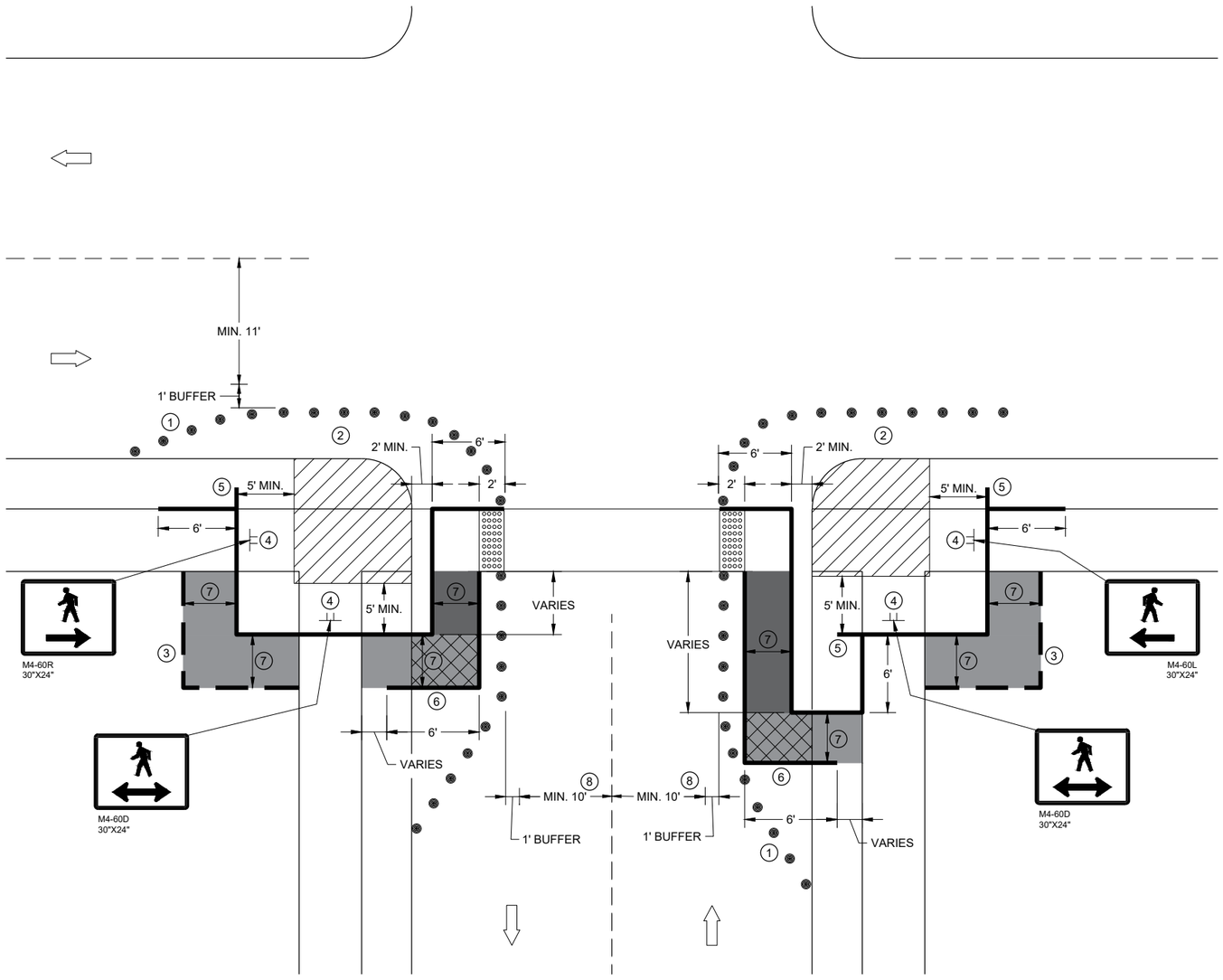
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h

6

SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

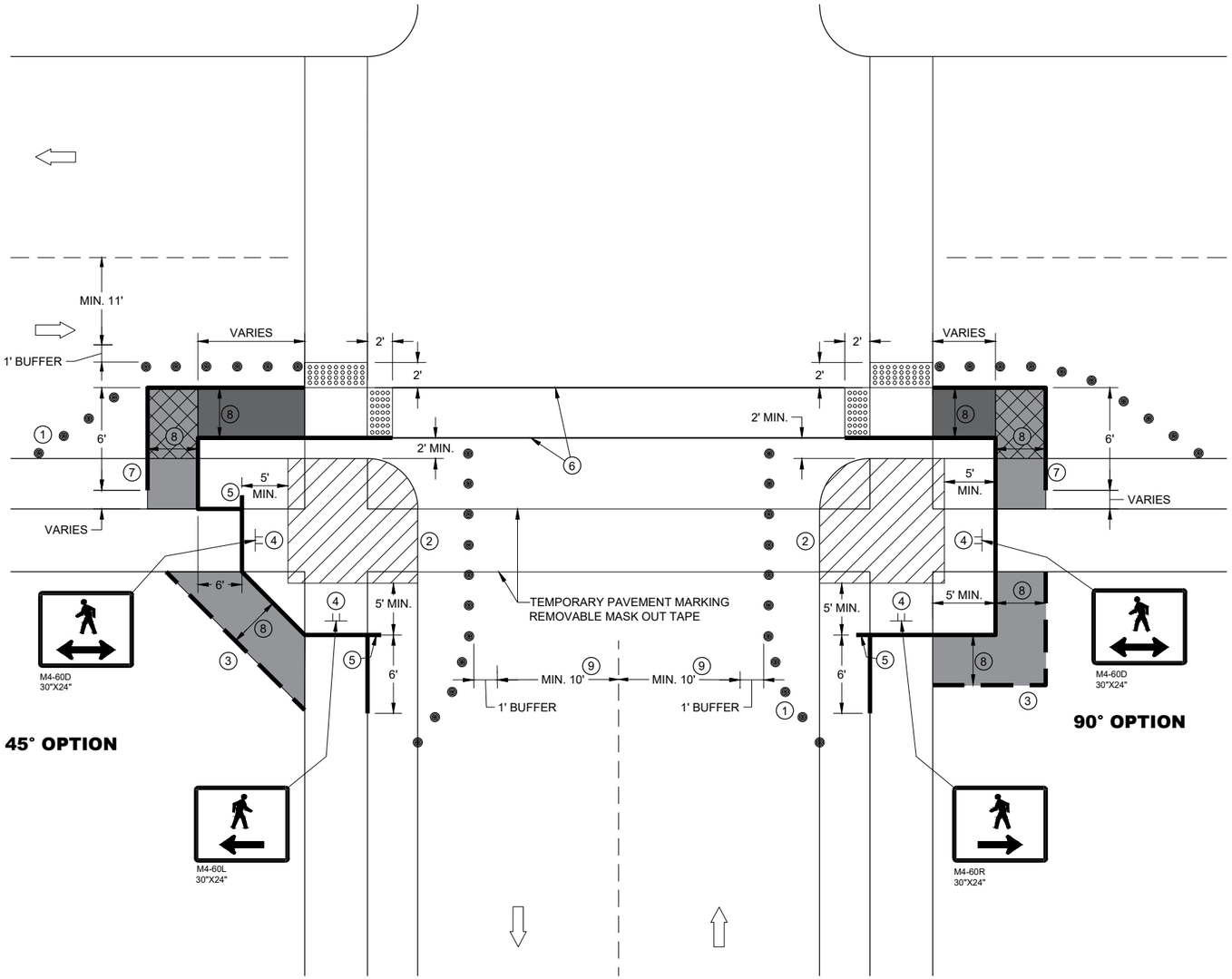
WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

SIGN ON PERMANENT SUPPORT

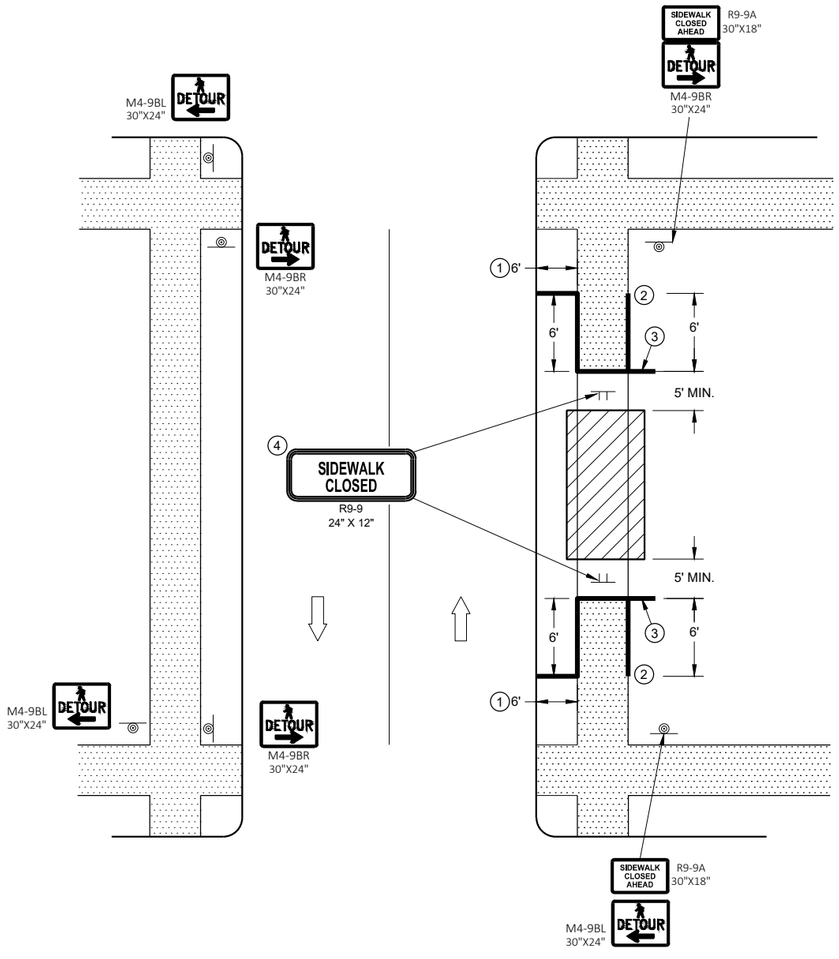
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

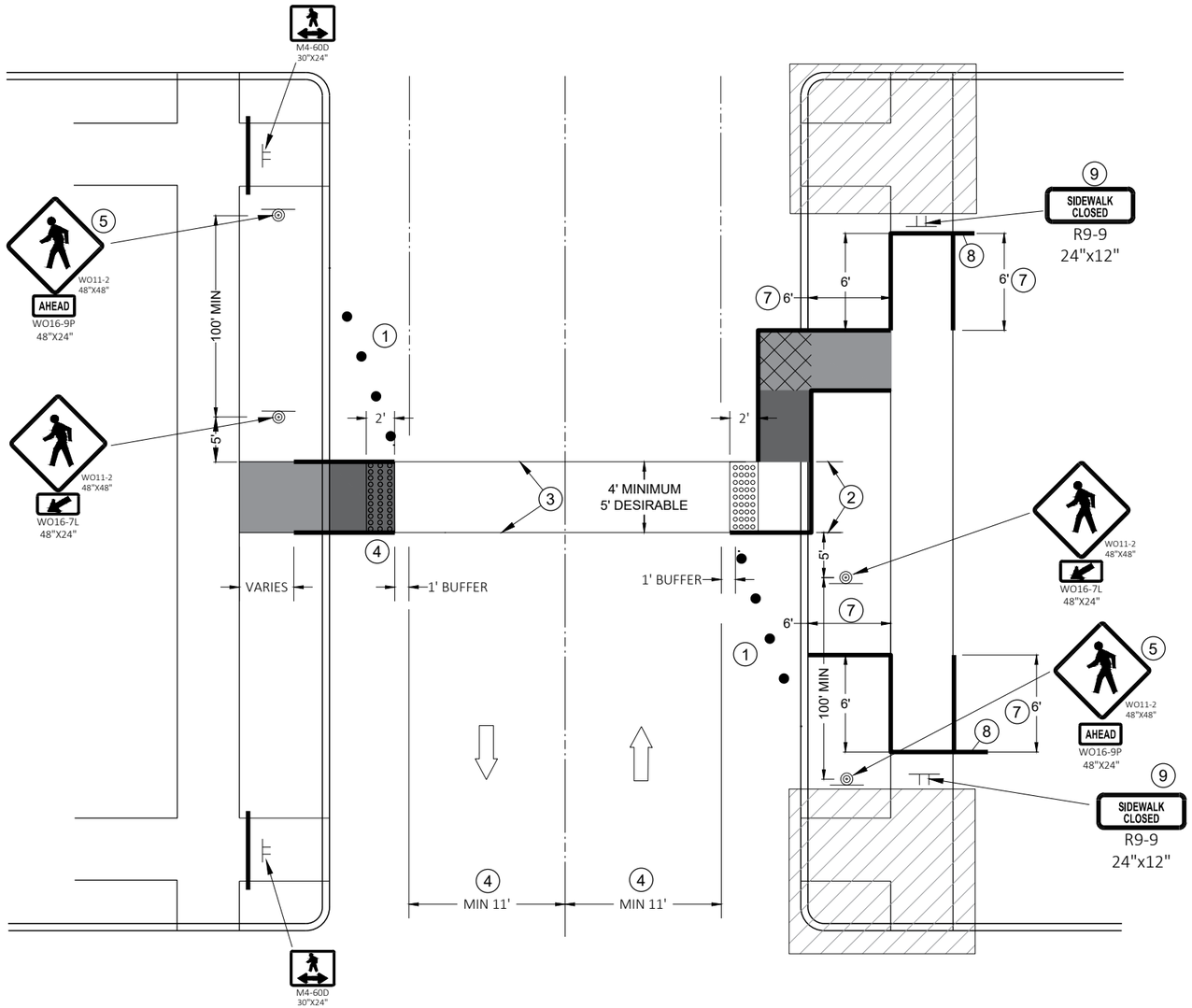
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

6

SDD 15D30 - 09k

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

(1) SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) 4 FEET MINIMUM, 5 FEET DESIRABLE.

(3) WHITE 6" TEMPORARY PAVEMENT MARKING.

(4) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.

(5) IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.

(6) IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.

(7) PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.

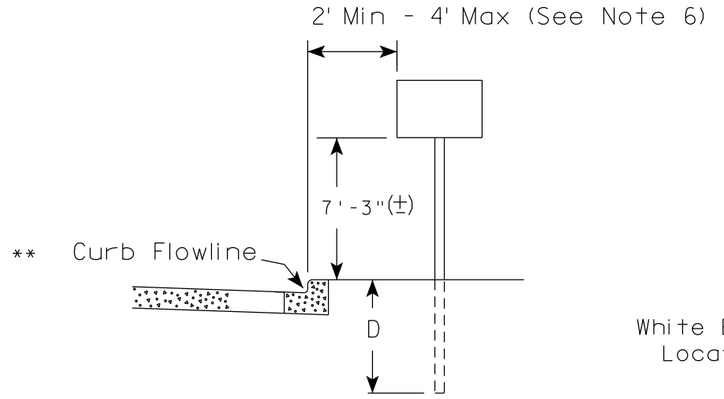
(8) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(9) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

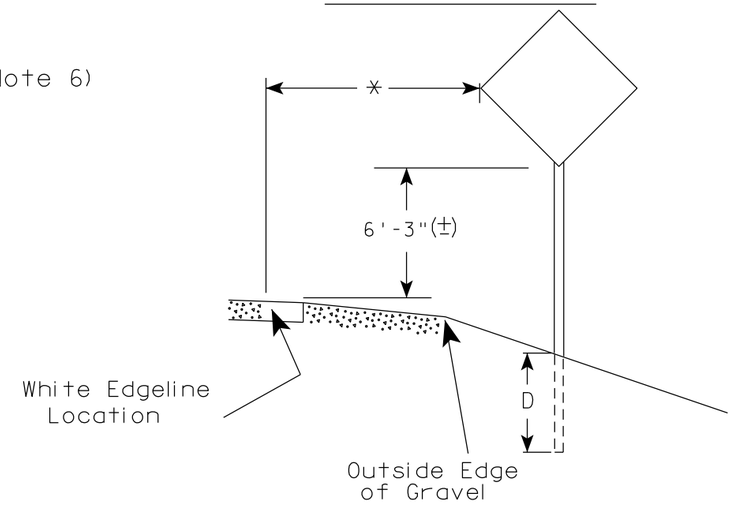
LEGEND

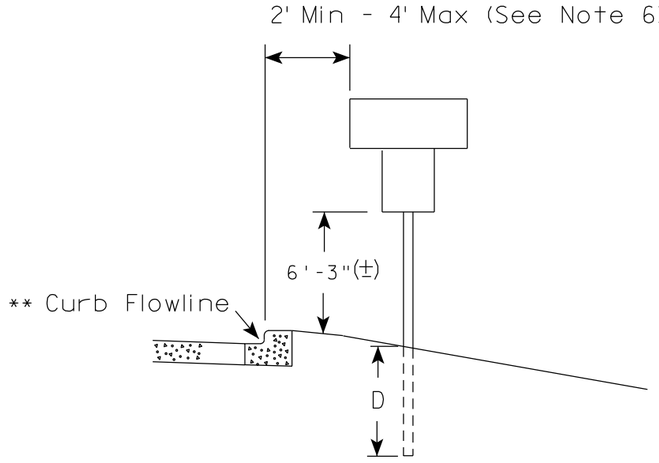
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

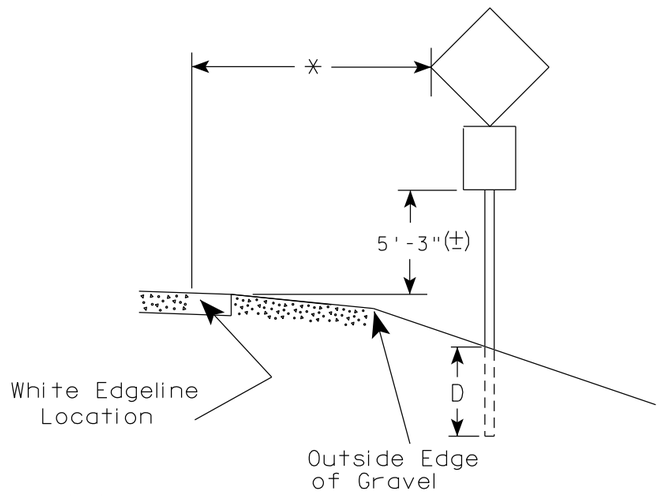
URBAN AREA



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 or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

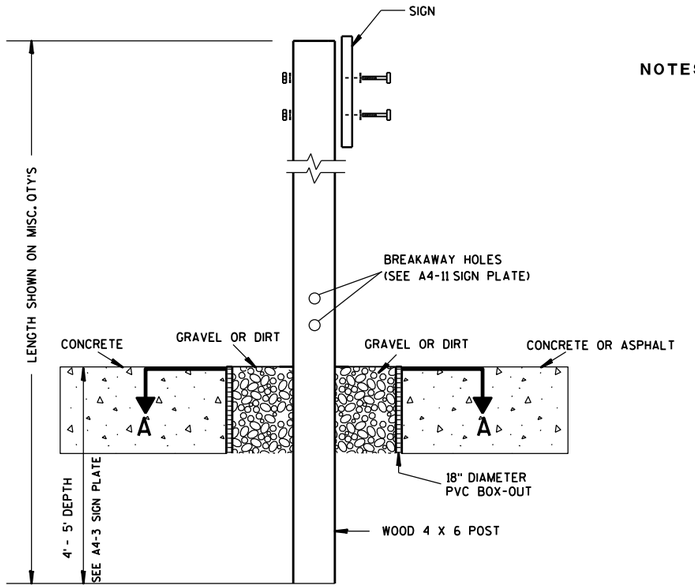
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

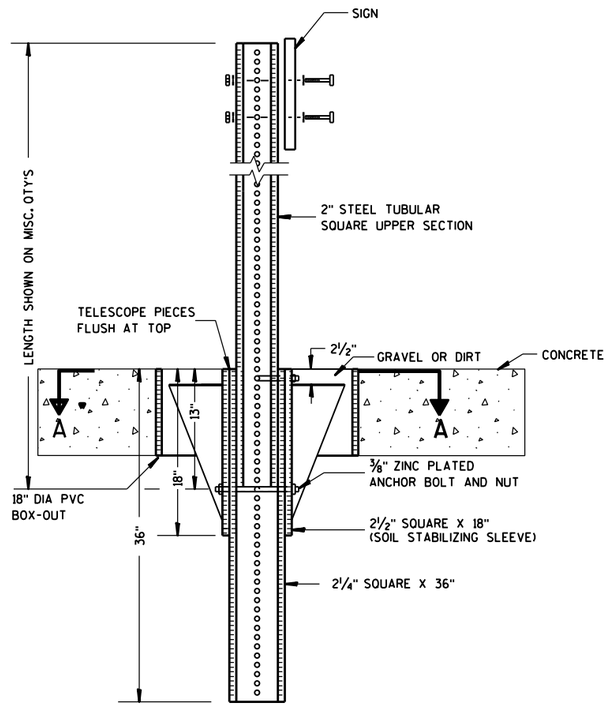
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 197	E



ELEVATION VIEW

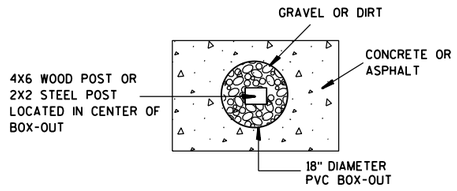
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

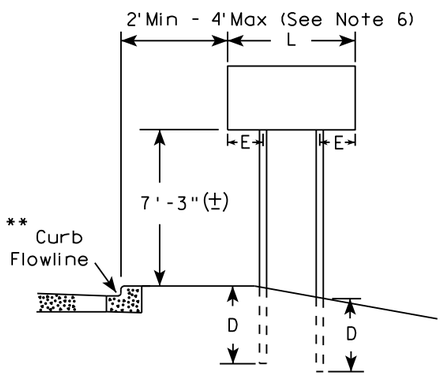
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

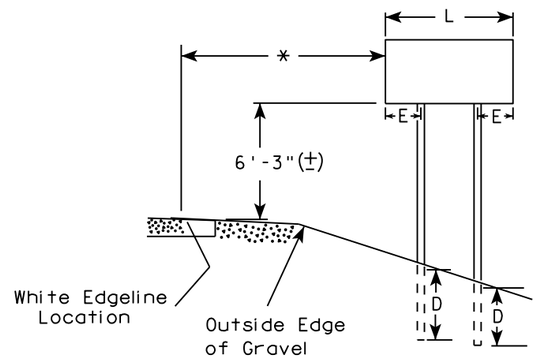
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

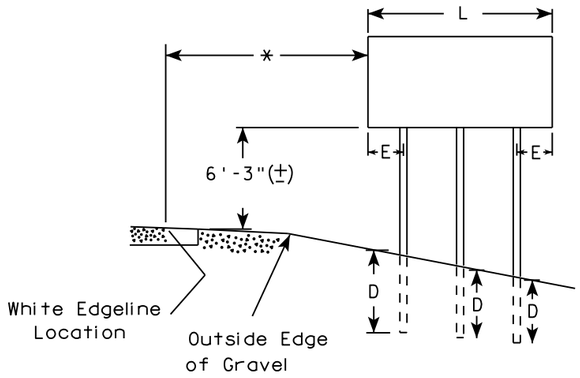
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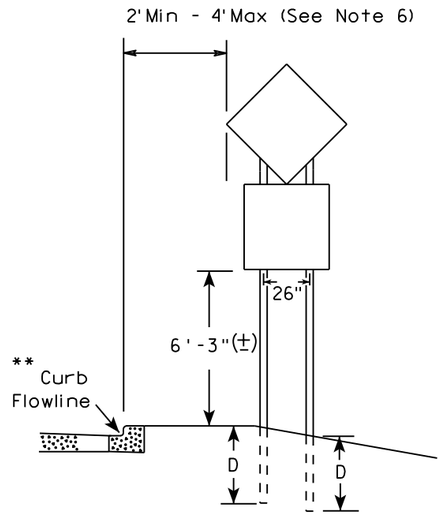
URBAN AREA



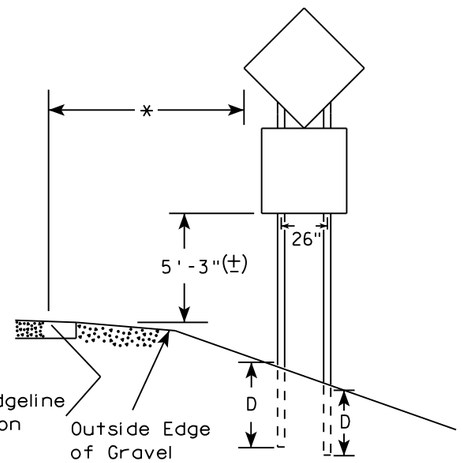
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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. J-Assemblies are considered to be one sign for mounting height.
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 and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

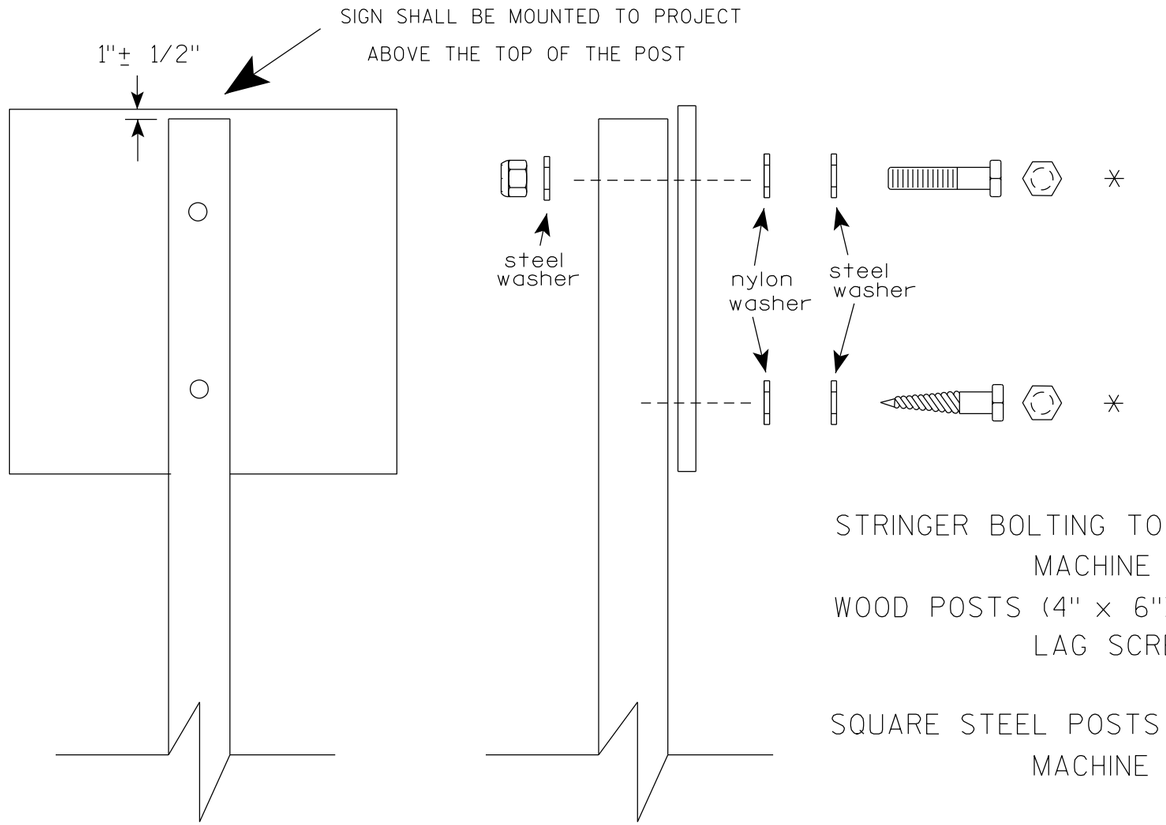
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E



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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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

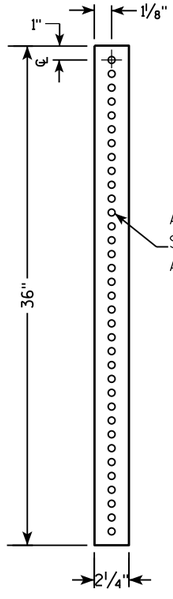
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

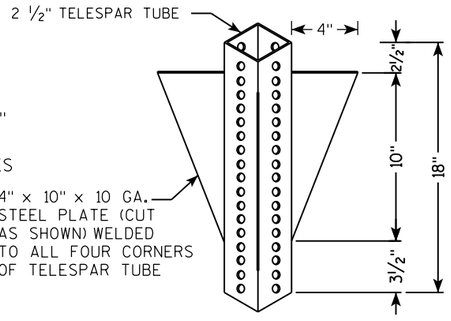
SHEET NO: 200 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

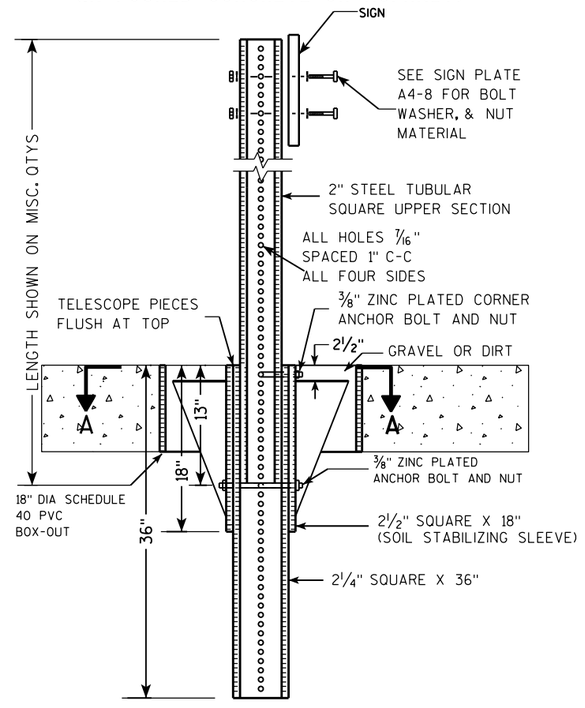
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



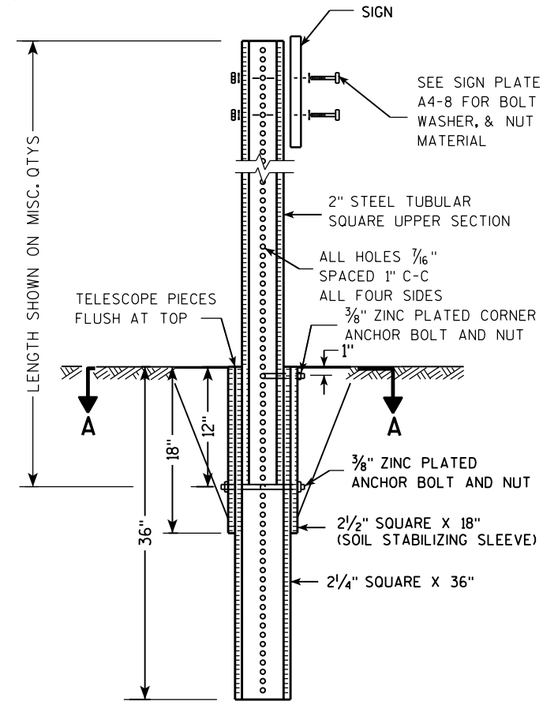
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

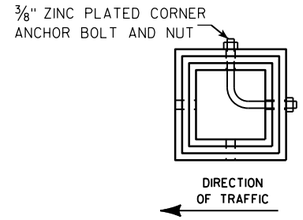


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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).

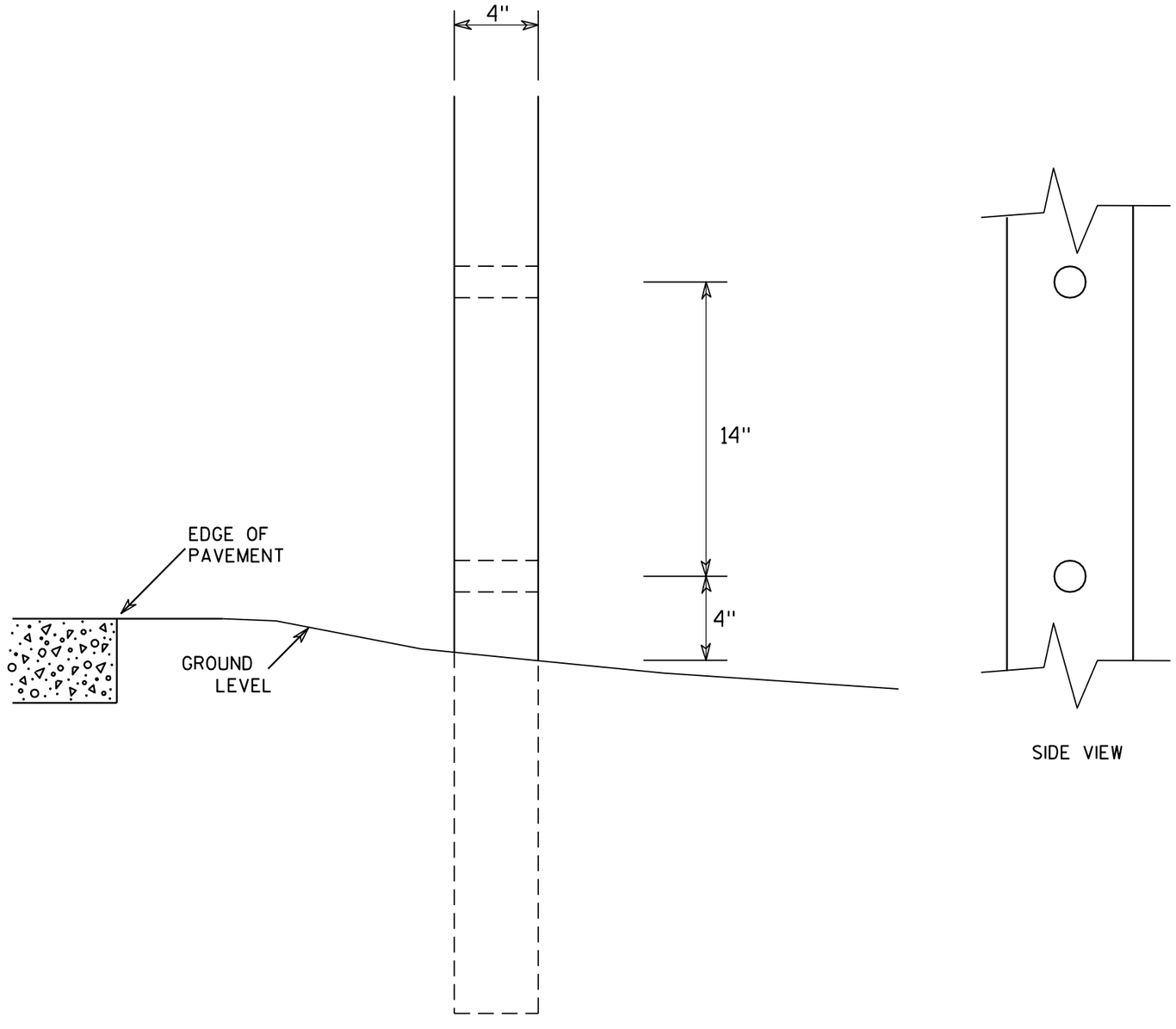
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 201 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

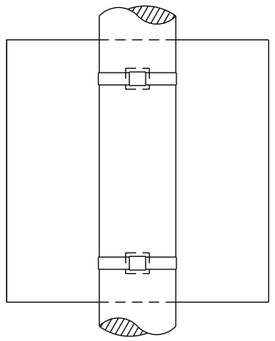
APPROVED Chester J Spang
for State Traffic Engineer

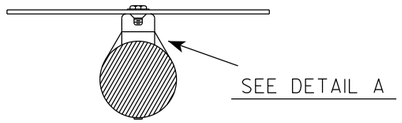
DATE 3/27/97 PLATE NO. A4-11.2

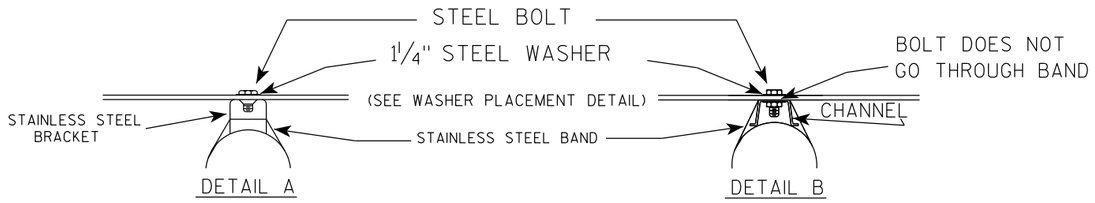
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 202	E

BANDING

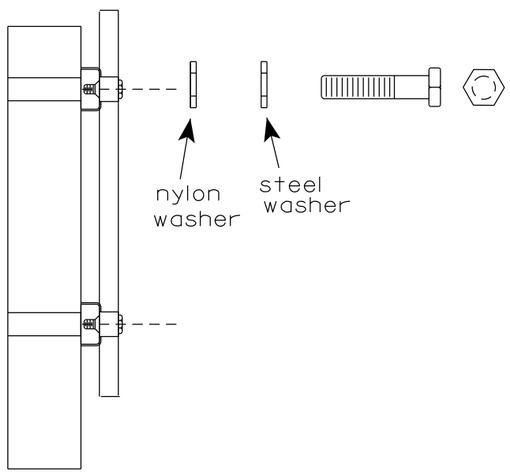
SINGLE SIGN







WASHER PLACEMENT

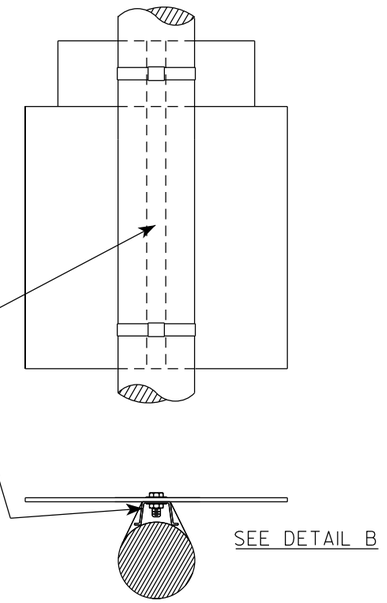


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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 ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

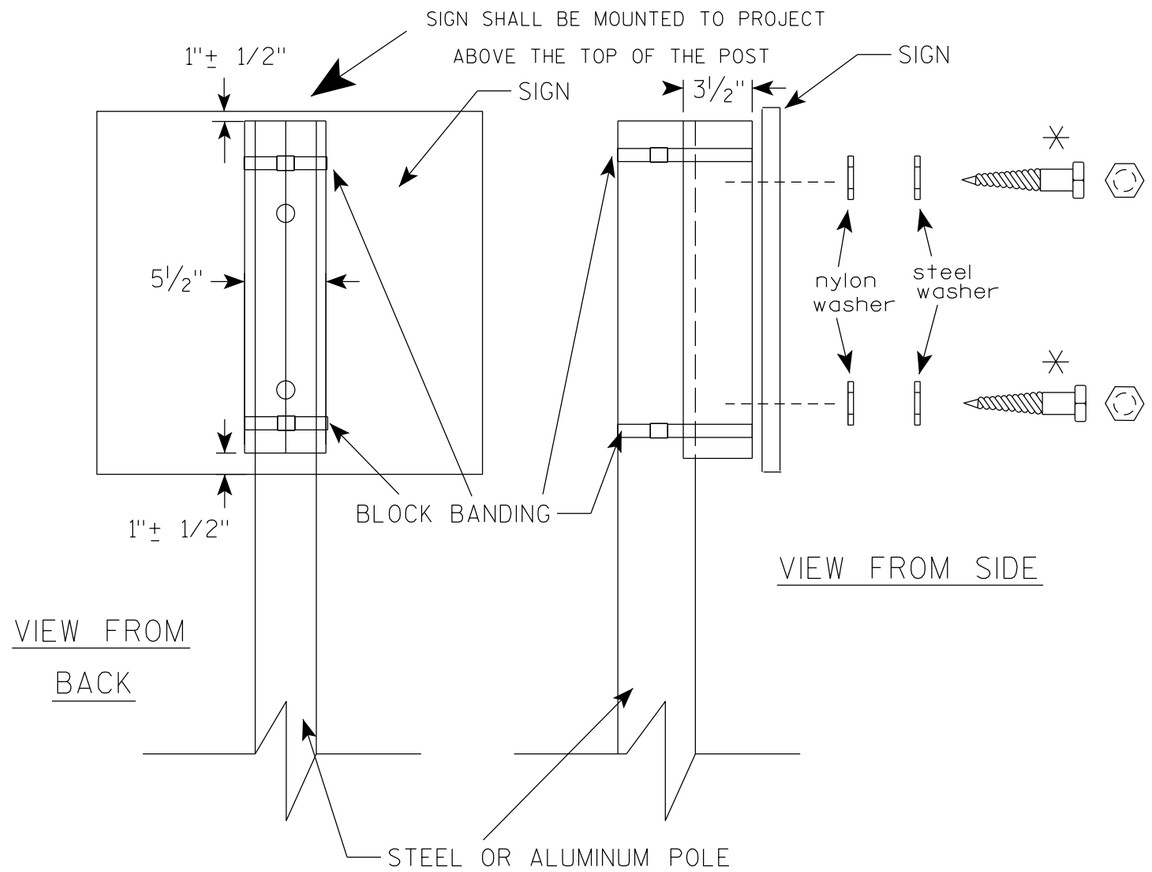
DATE 6/10/19 PLATE NO. A5-9.4

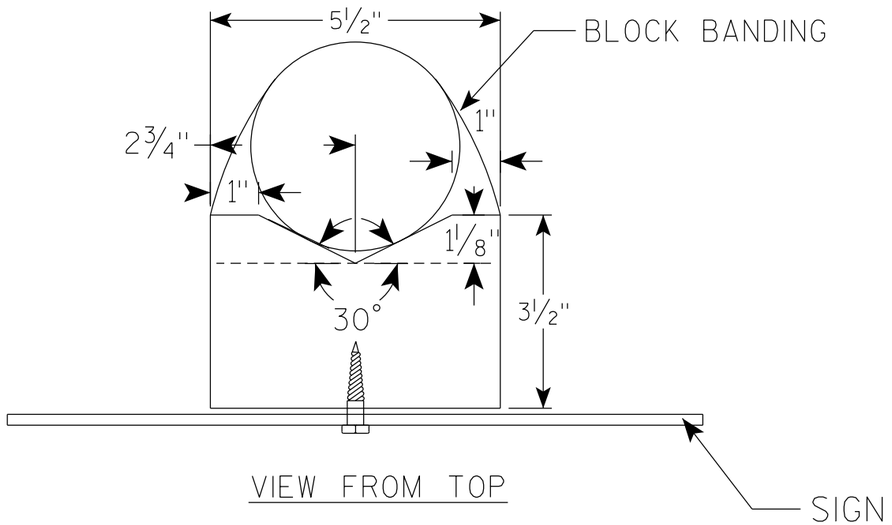
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	E

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7

7





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
   b. 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)

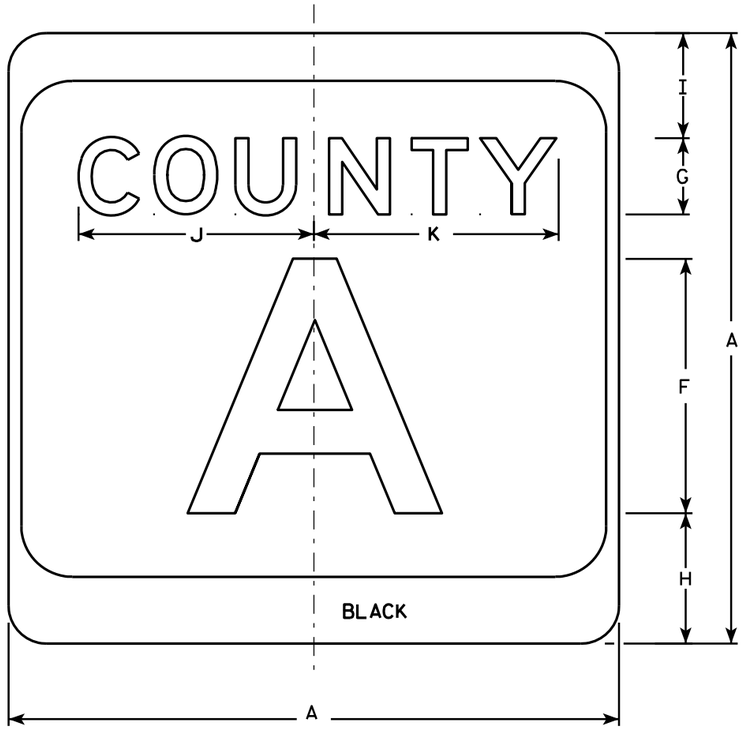
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

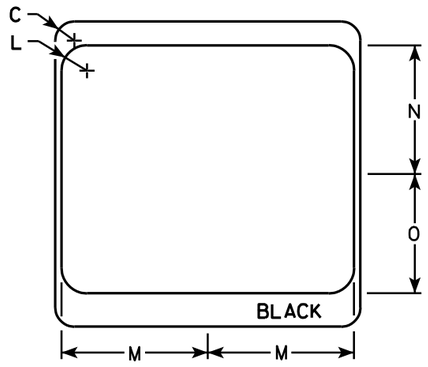
DATE 4/19/2022 PLATE NO. A5-10.3

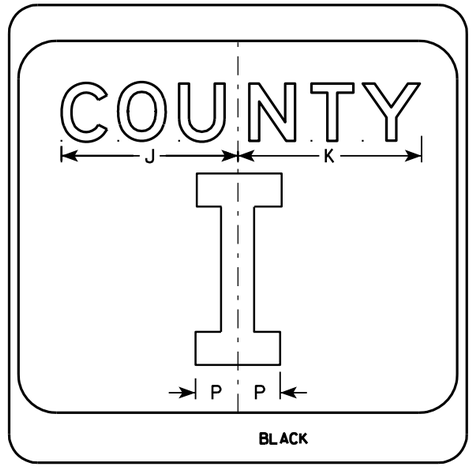
PROJECT NO:

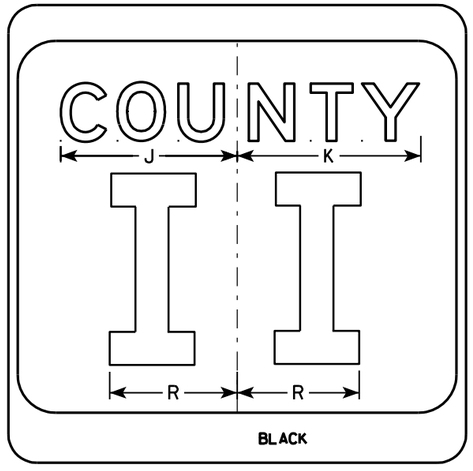
SHEET NO: 204 E



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

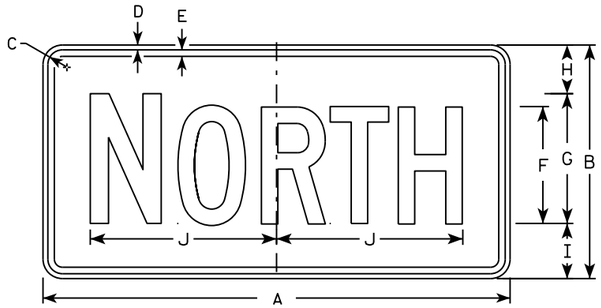
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

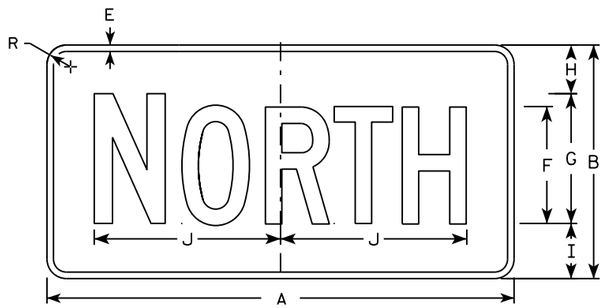
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E



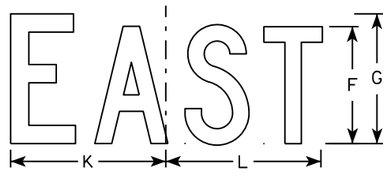
M3-1
MM3-1
MP3-1



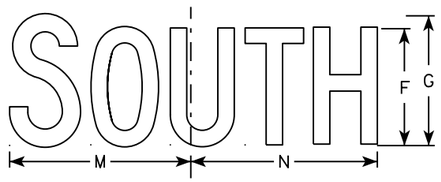
MB3-1
MK3-1
MN3-1



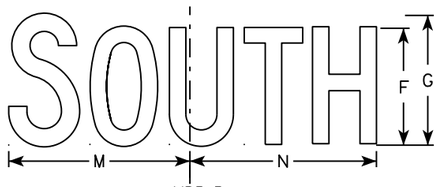
M3-2
MM3-2
MP3-2



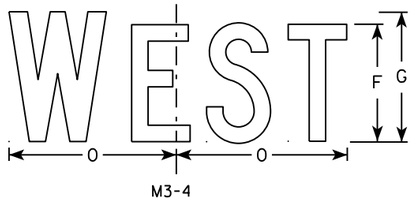
MB3-2
MK3-2
MN3-2



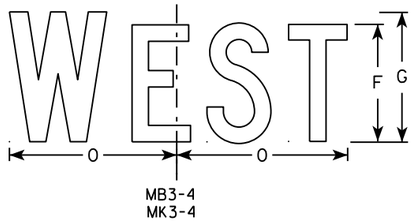
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

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
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

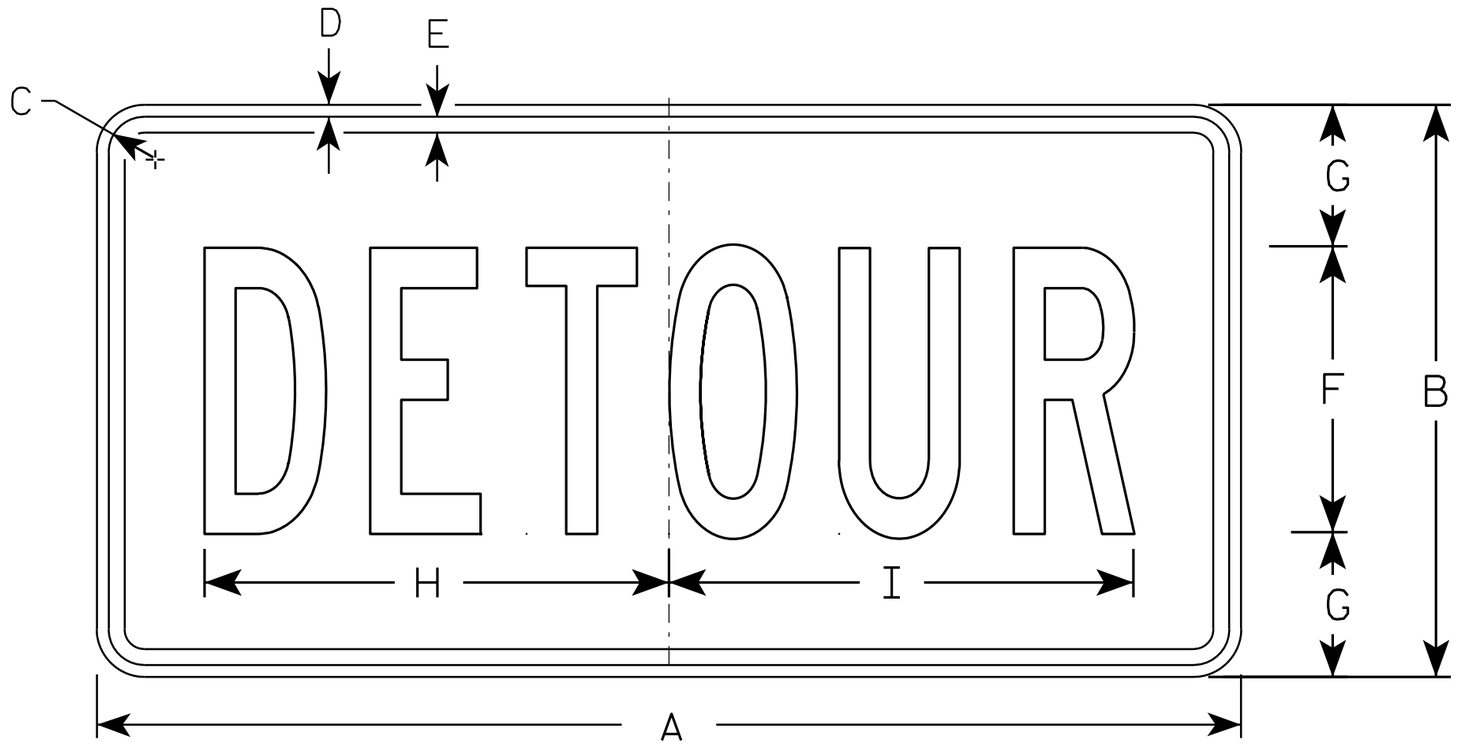
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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																											

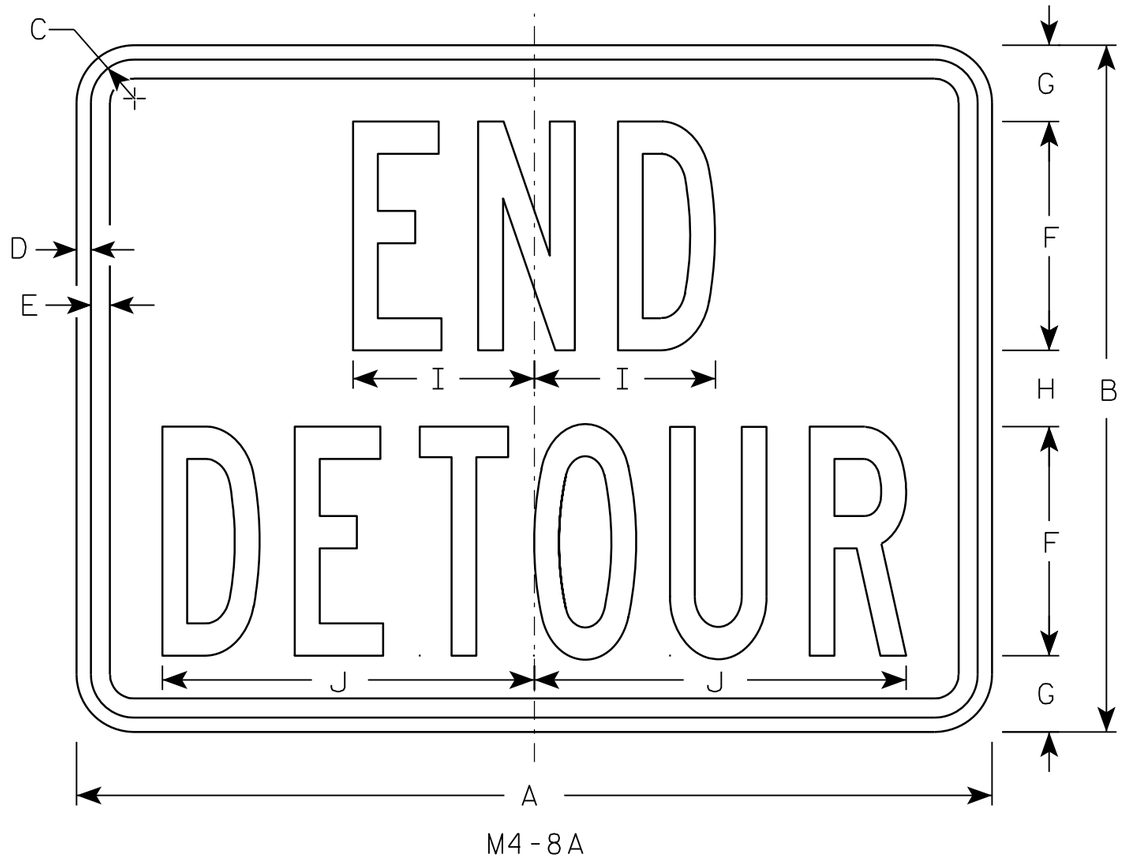
STANDARD SIGN
M4-8

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: 207	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																											

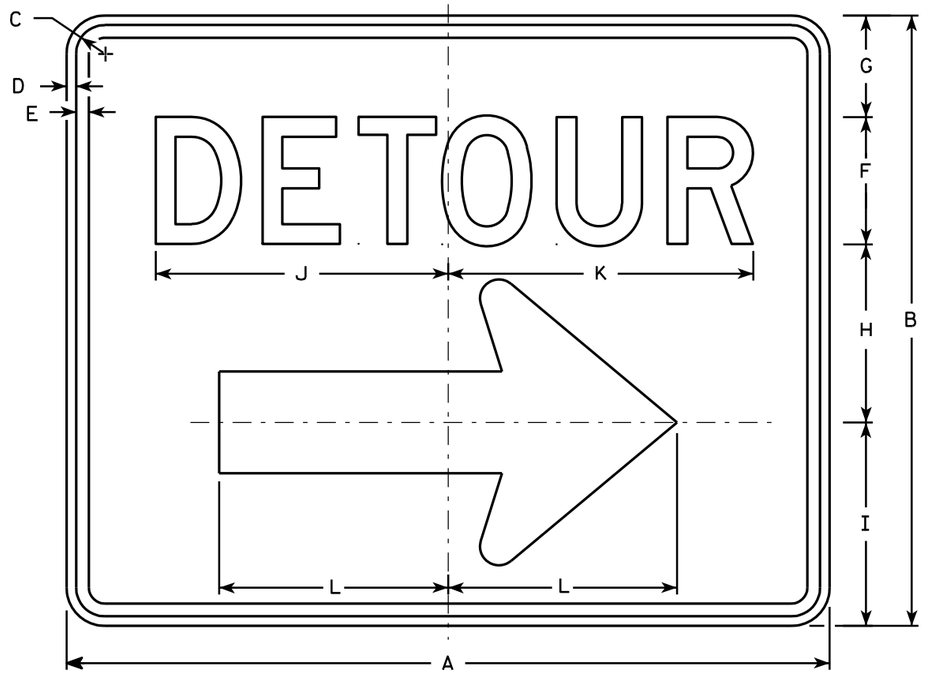
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

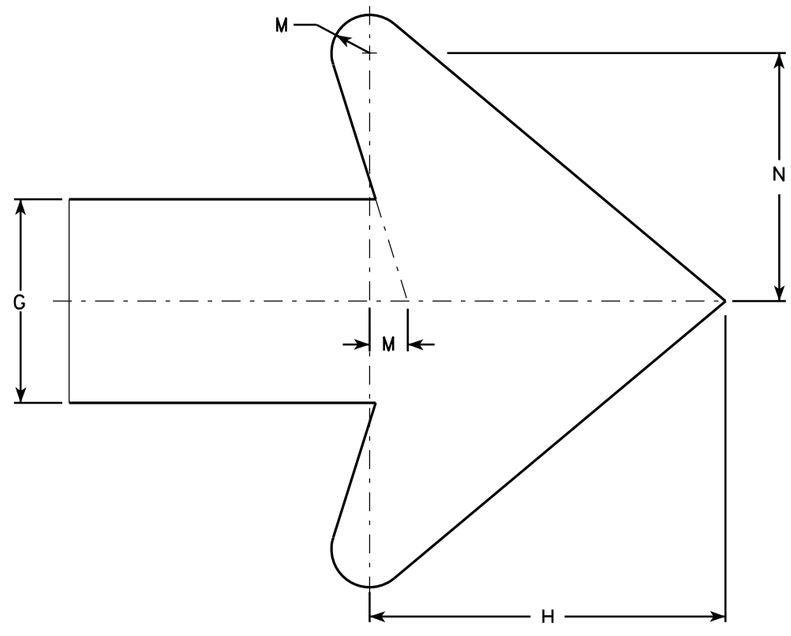
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 208	E



M4-9R

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 - 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. M4-9L is the same as M4-9R except the arrow 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																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

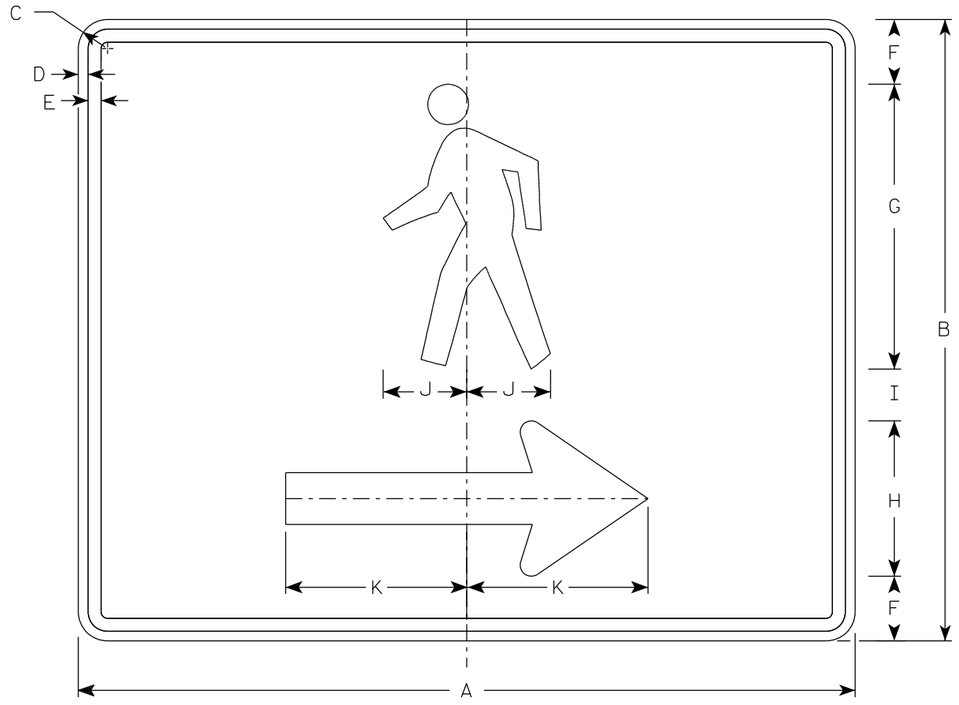
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

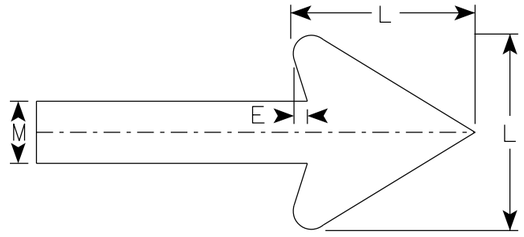
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   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. M4-60L is the same as M4-60R except the arrow 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																											
2	30	24	1 1/8	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

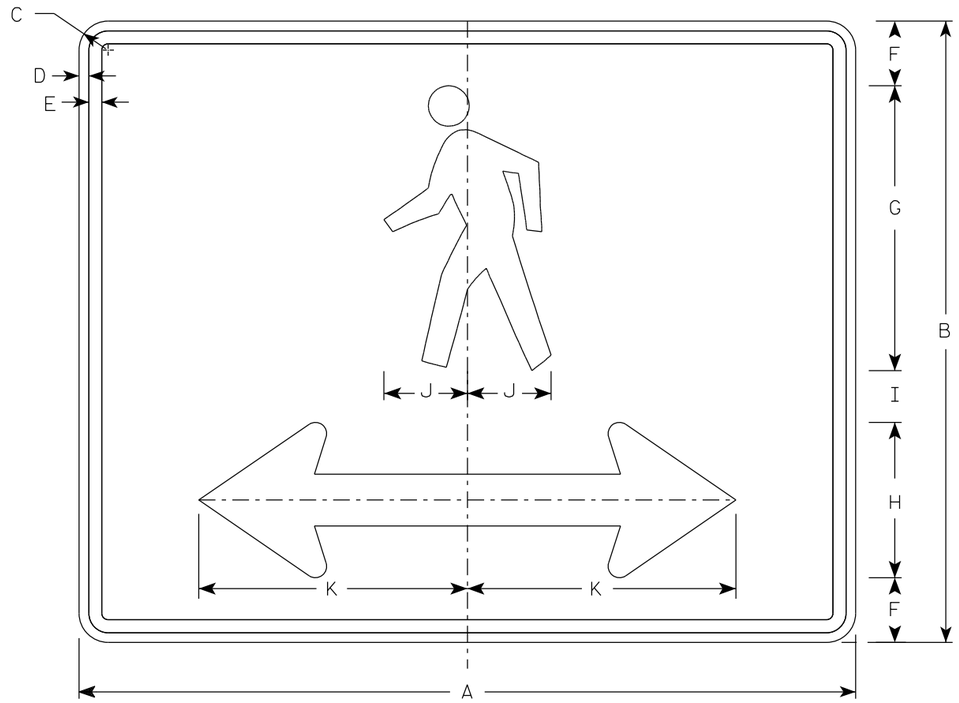
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/16/2021 PLATE NO. M4-60.1

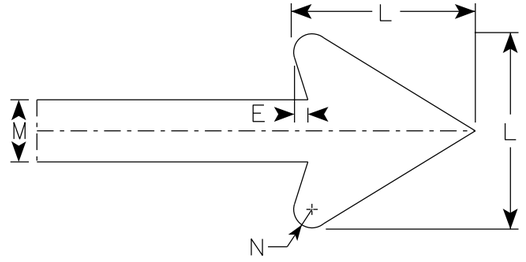
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E



M4-60D

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   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.



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																											
2	30	24	1 1/8	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

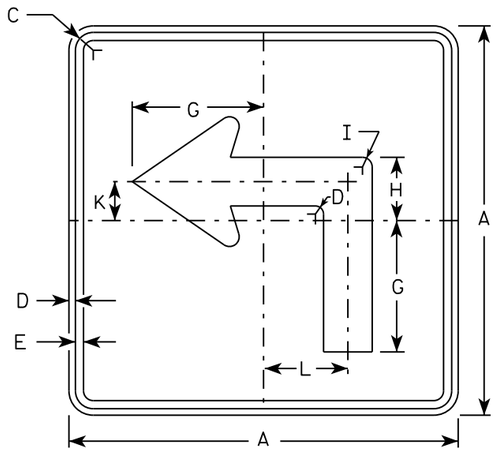
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

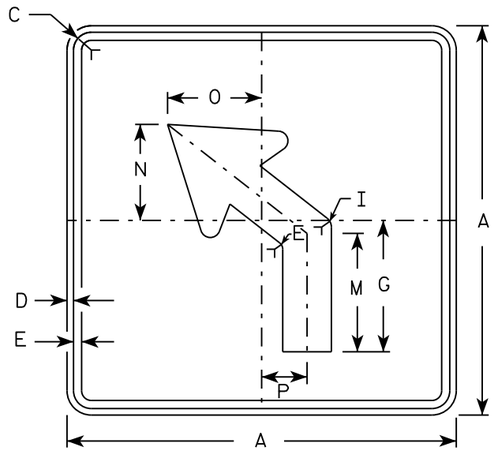
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/2021 PLATE NO. M4-60D.1

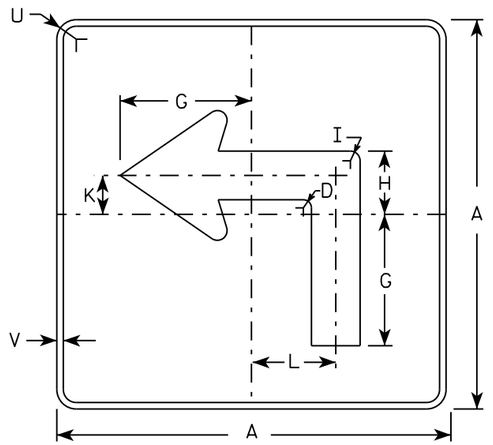
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 211	E



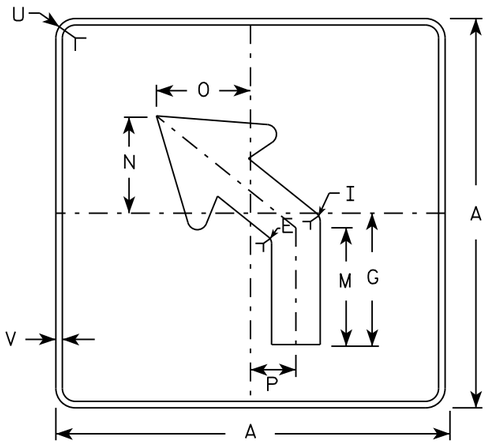
M5-1L
MM5-1L
MO5-1L
MP5-1L



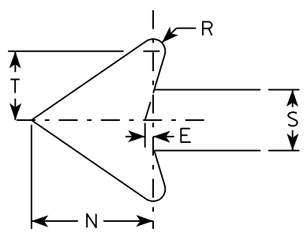
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective 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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   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
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 7/8	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 7/8	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 7/8	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

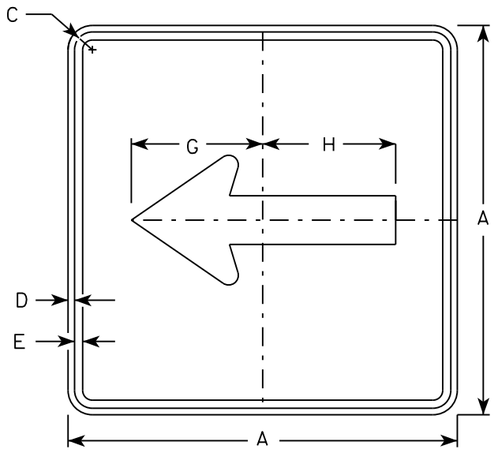
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

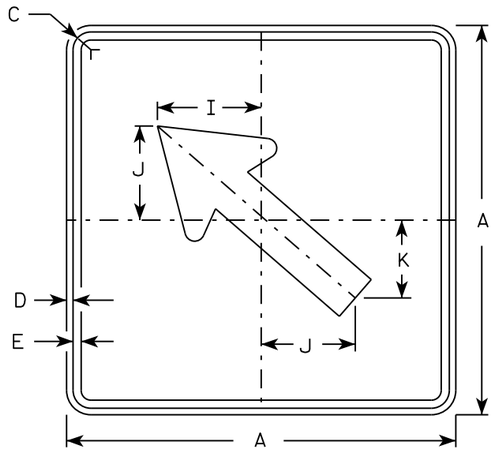
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



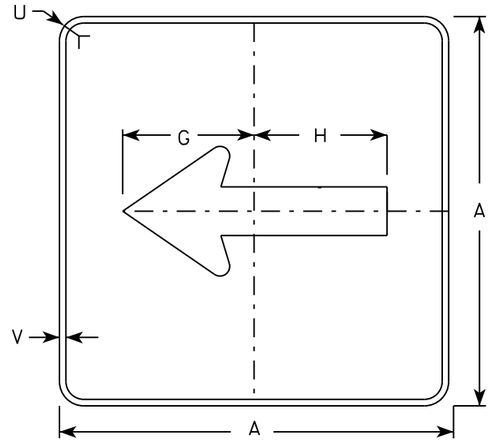
M6-1
MM6-1
MO6-1
MP6-1



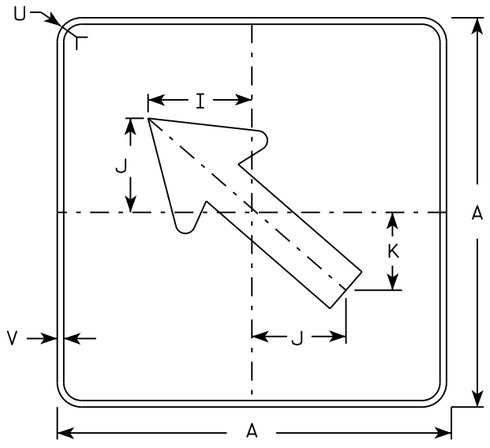
M6-2
MM6-2
MO6-2
MP6-2

NOTES

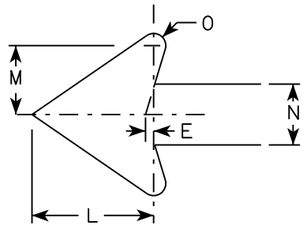
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   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
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

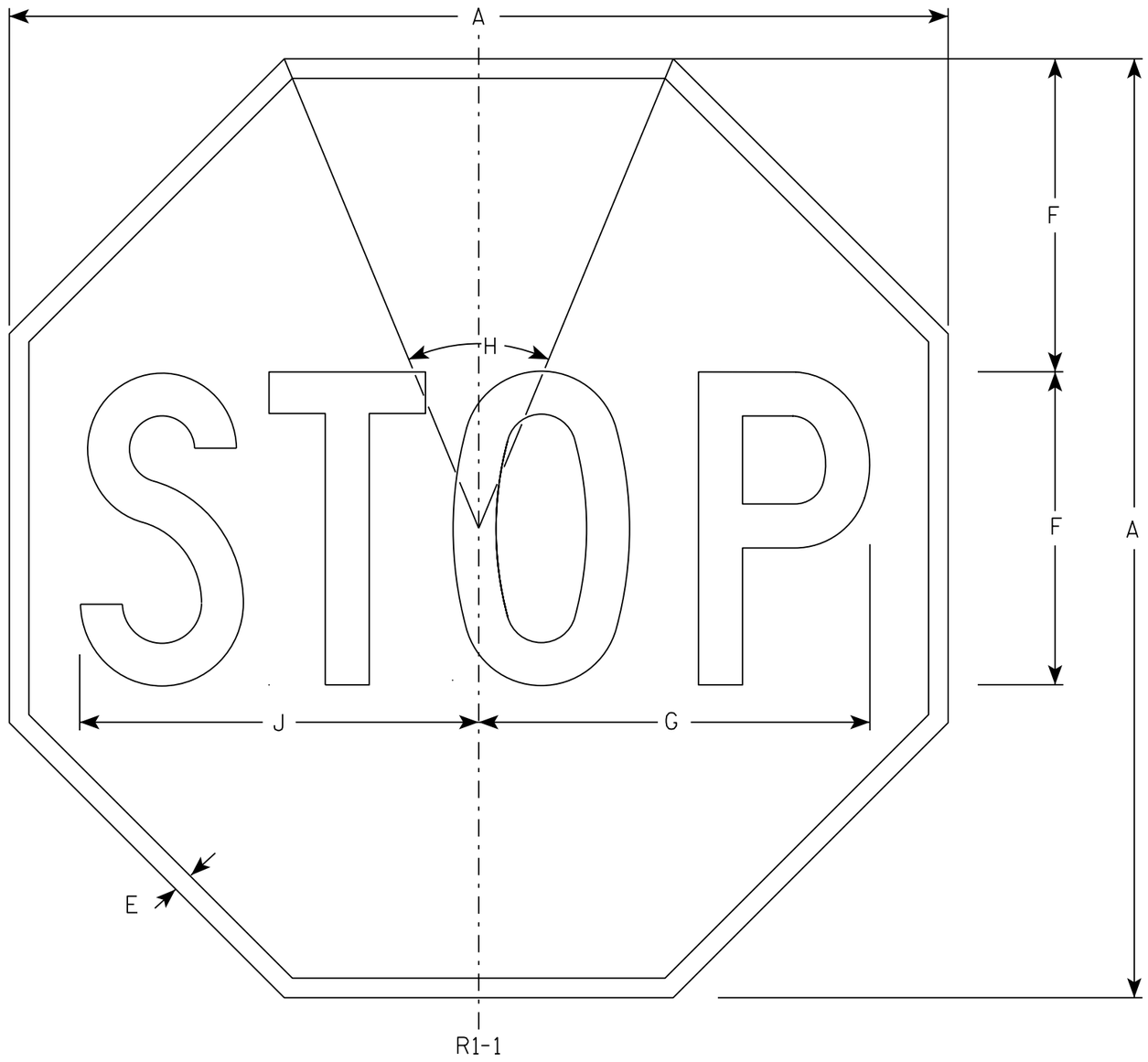
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 213 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

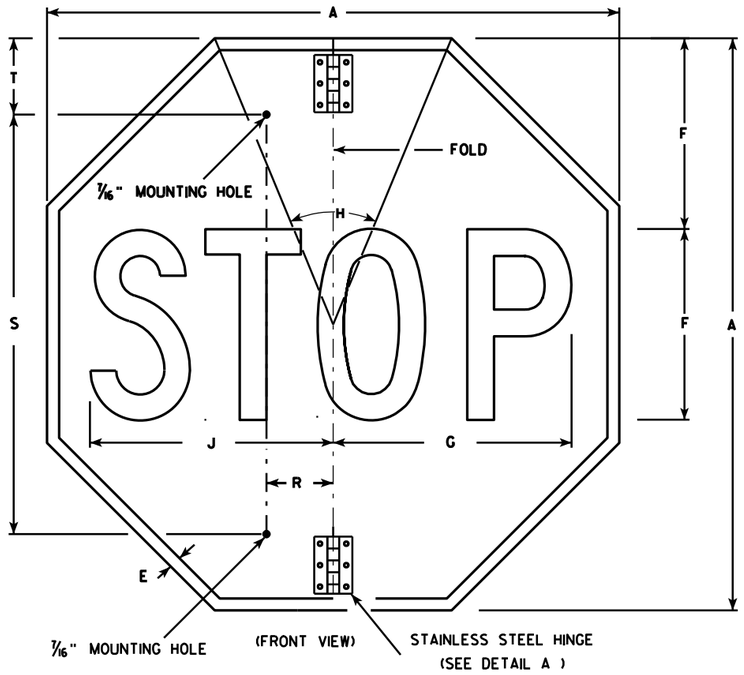
STANDARD SIGN
R1-1

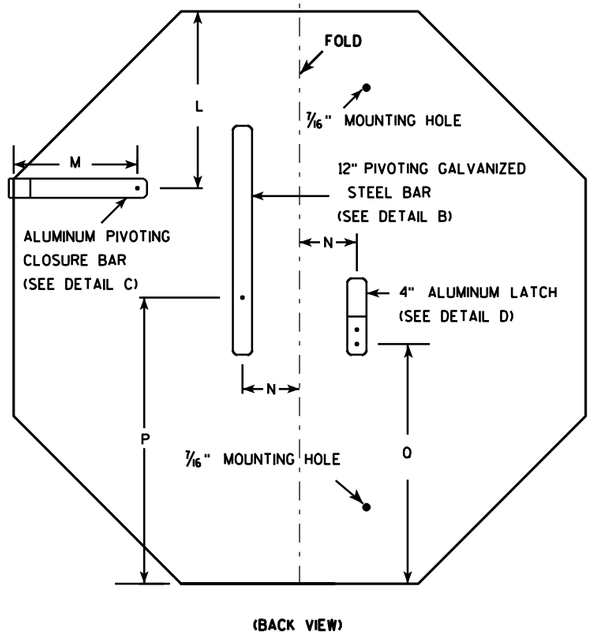
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

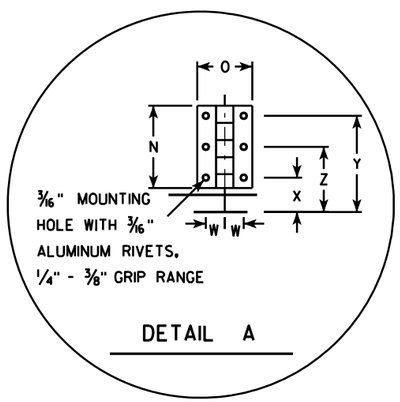
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 214	E



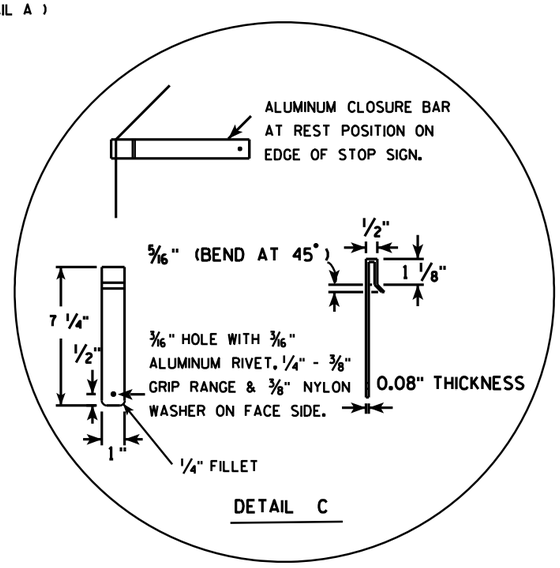


NOTES

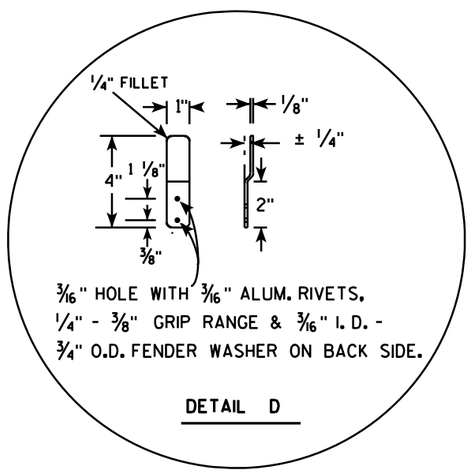
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



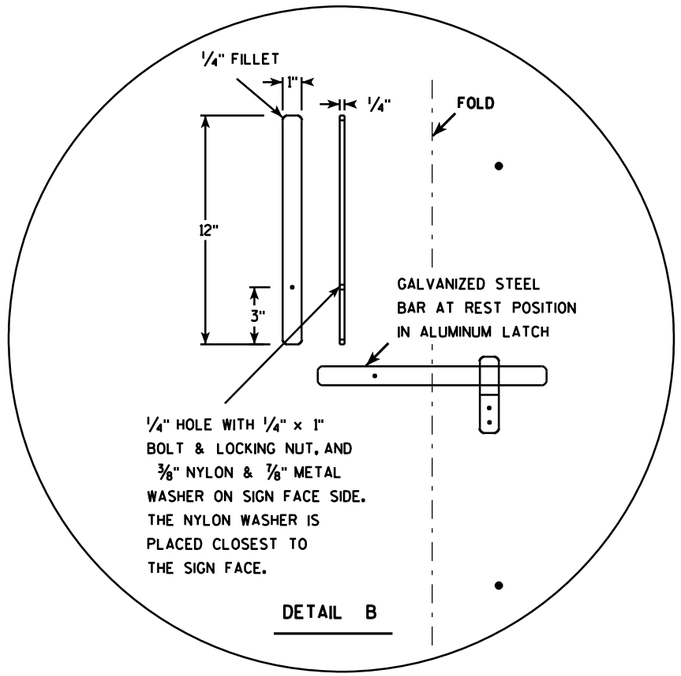
DETAIL A



DETAIL C



DETAIL D



DETAIL B

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																											

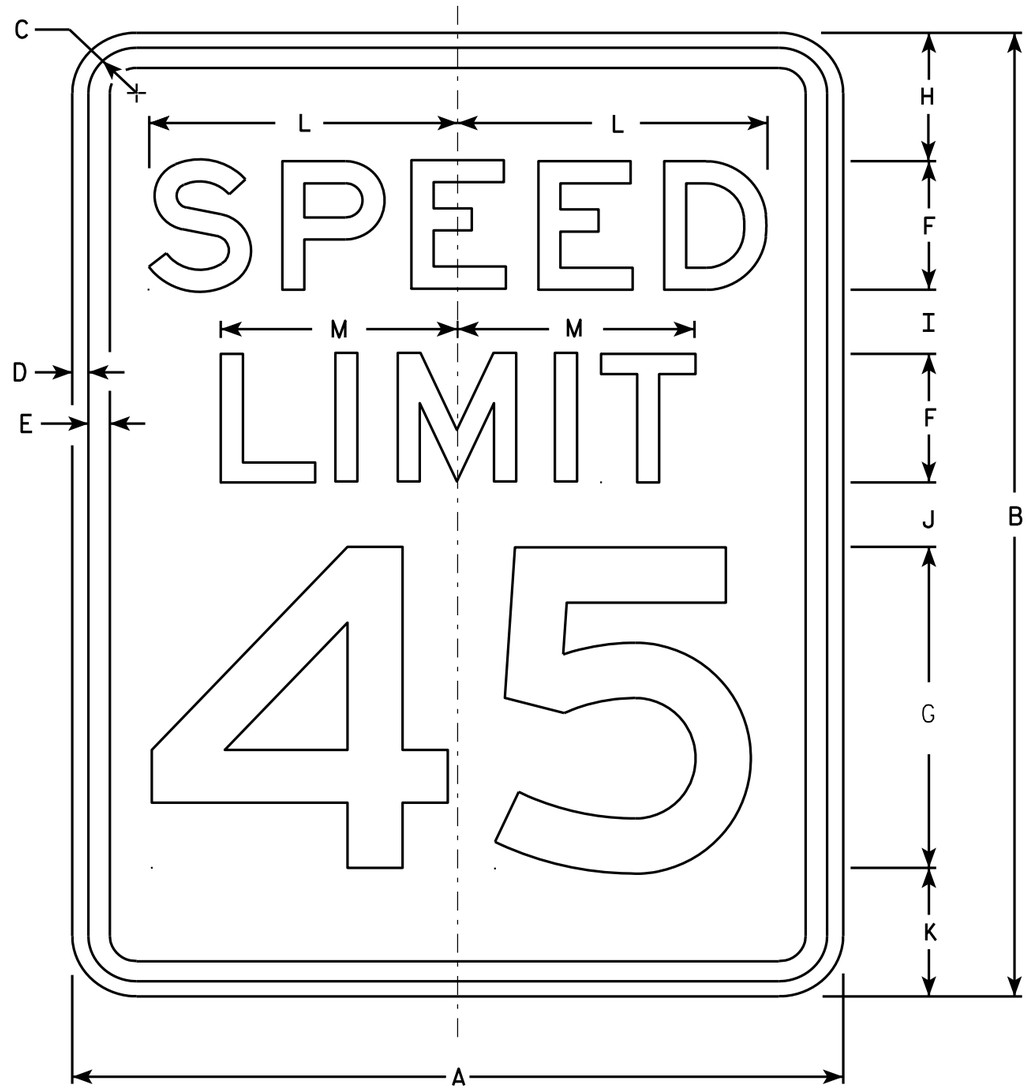
STANDARD SIGN
R1-1F

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: 215 | 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

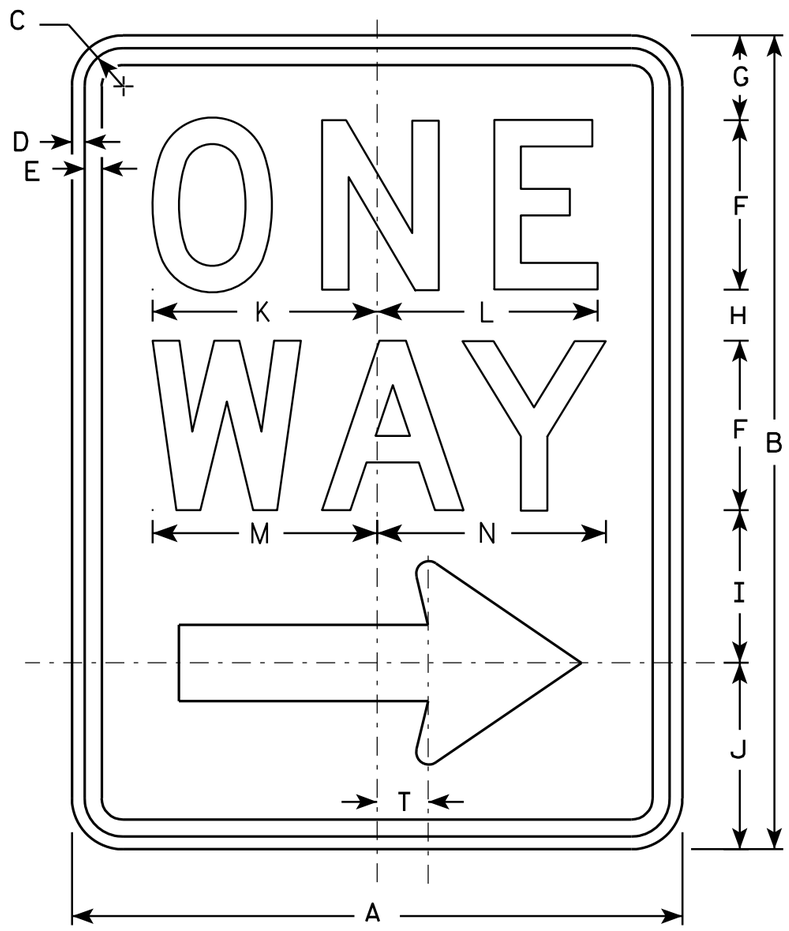
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

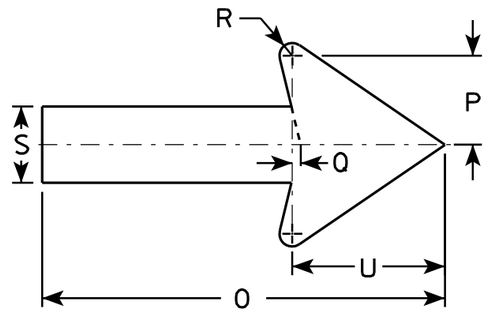
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 216	E



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	O	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																										

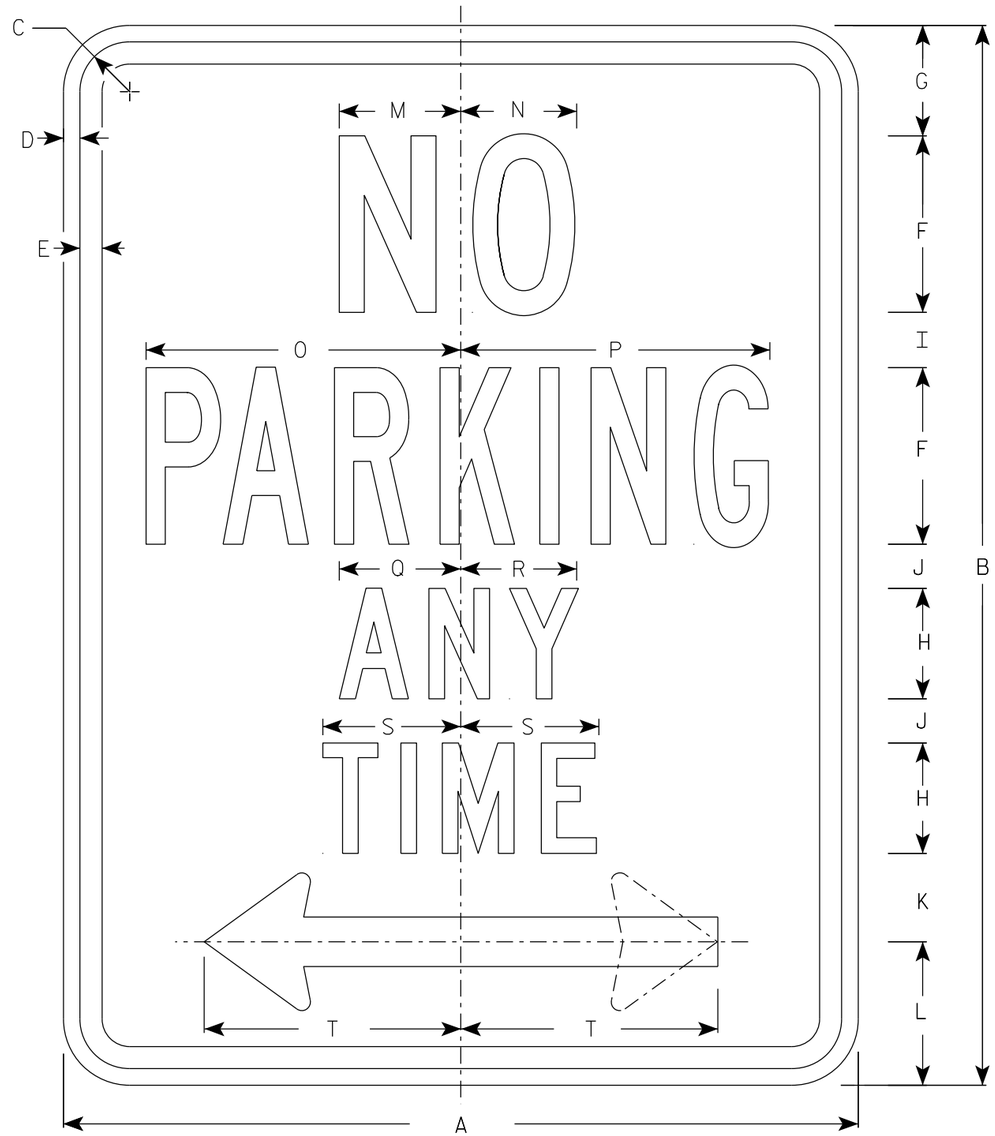
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

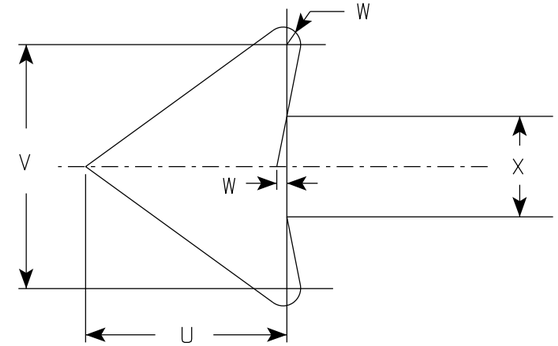
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 217	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. 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																											

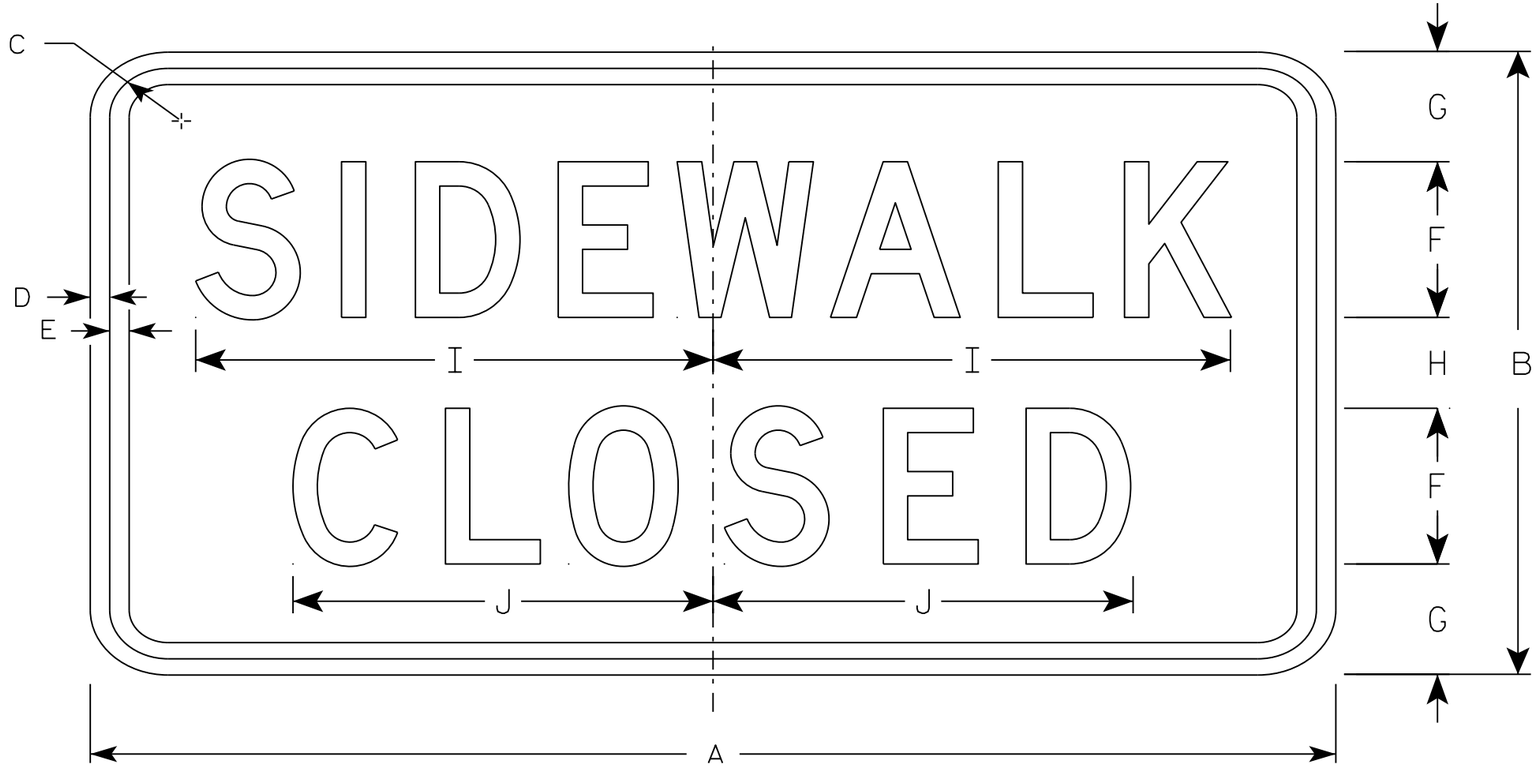
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 218 E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

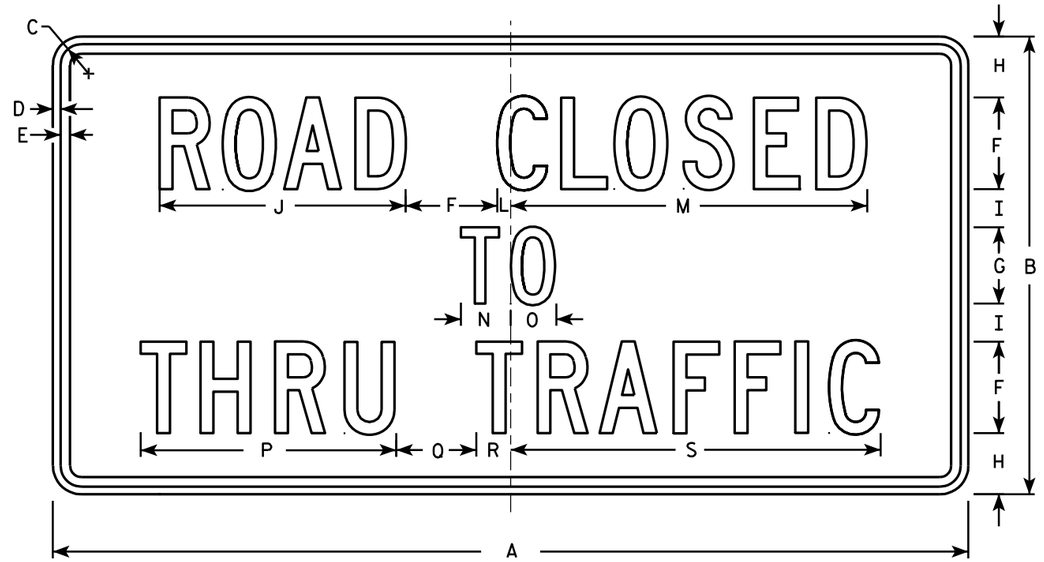
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 219 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R11-4

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.

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	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

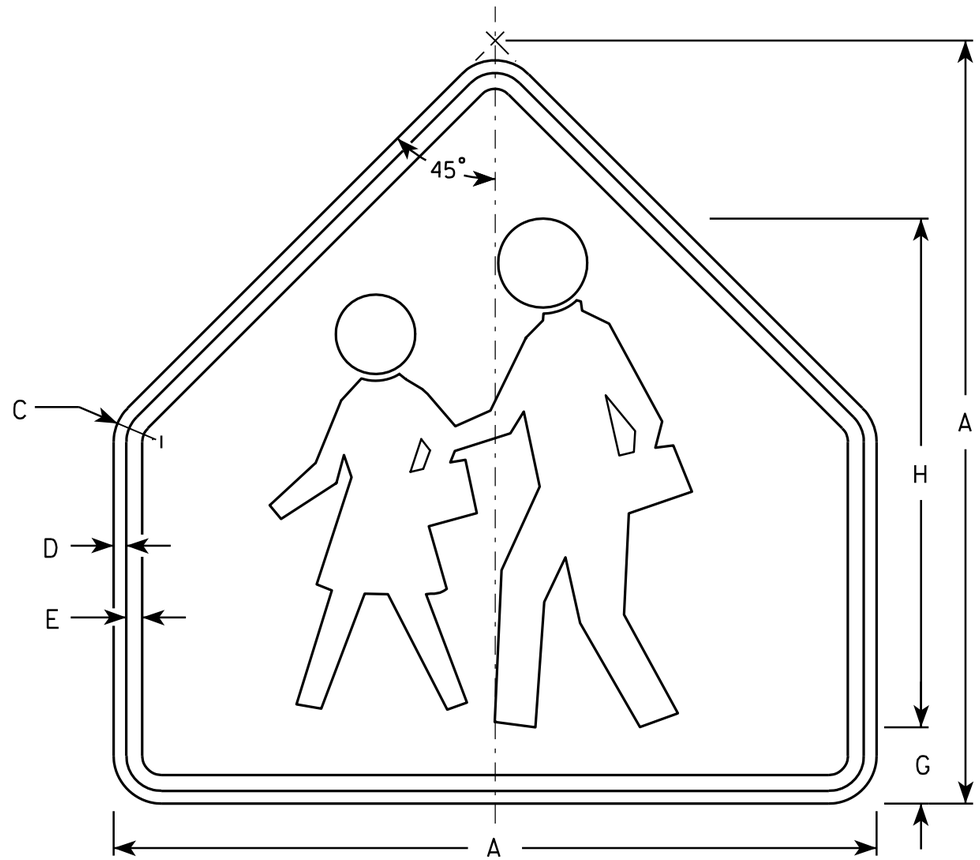
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 220 | E



S1-1

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-Green
   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.

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	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

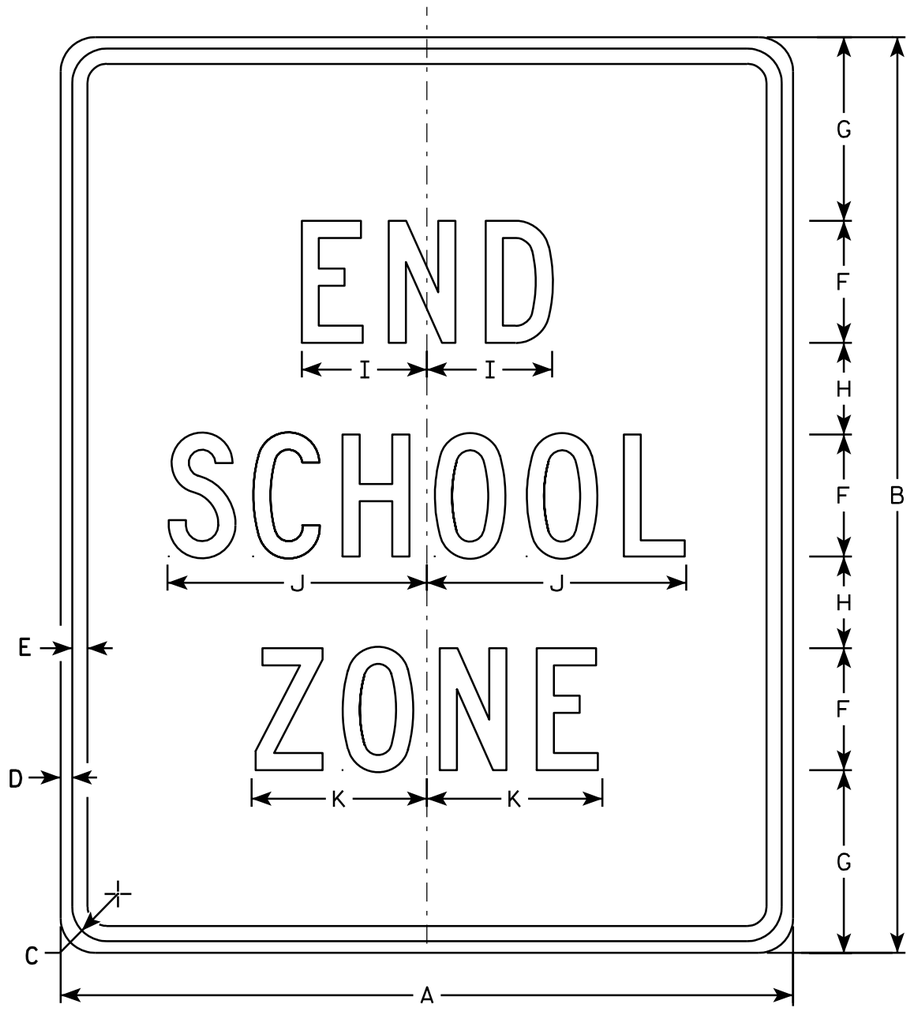
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 221	E



S5-2

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 - 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																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

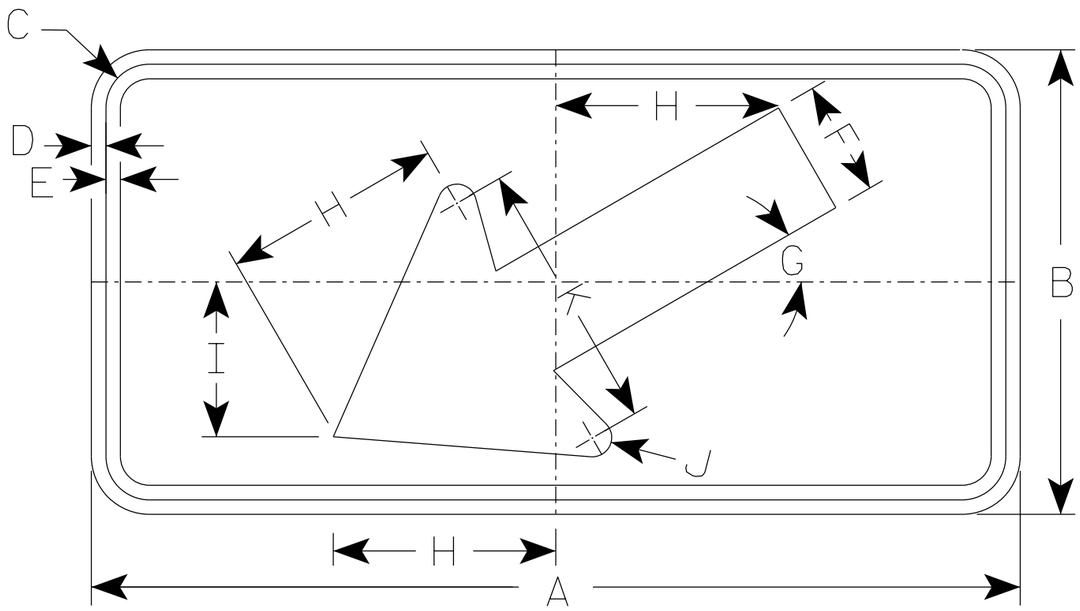
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 222 | E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black
3. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

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	12	1 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

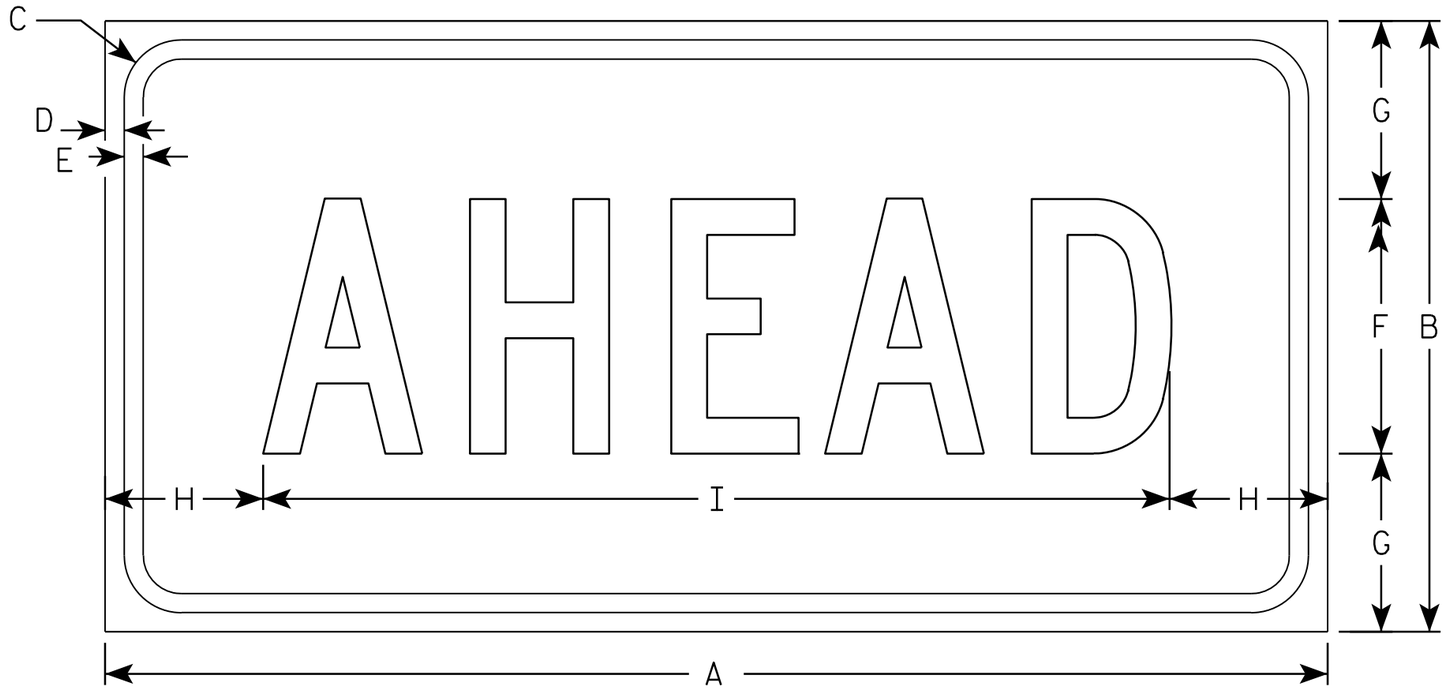
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. S16-7.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 223 E



S16-9P

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-Green
   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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

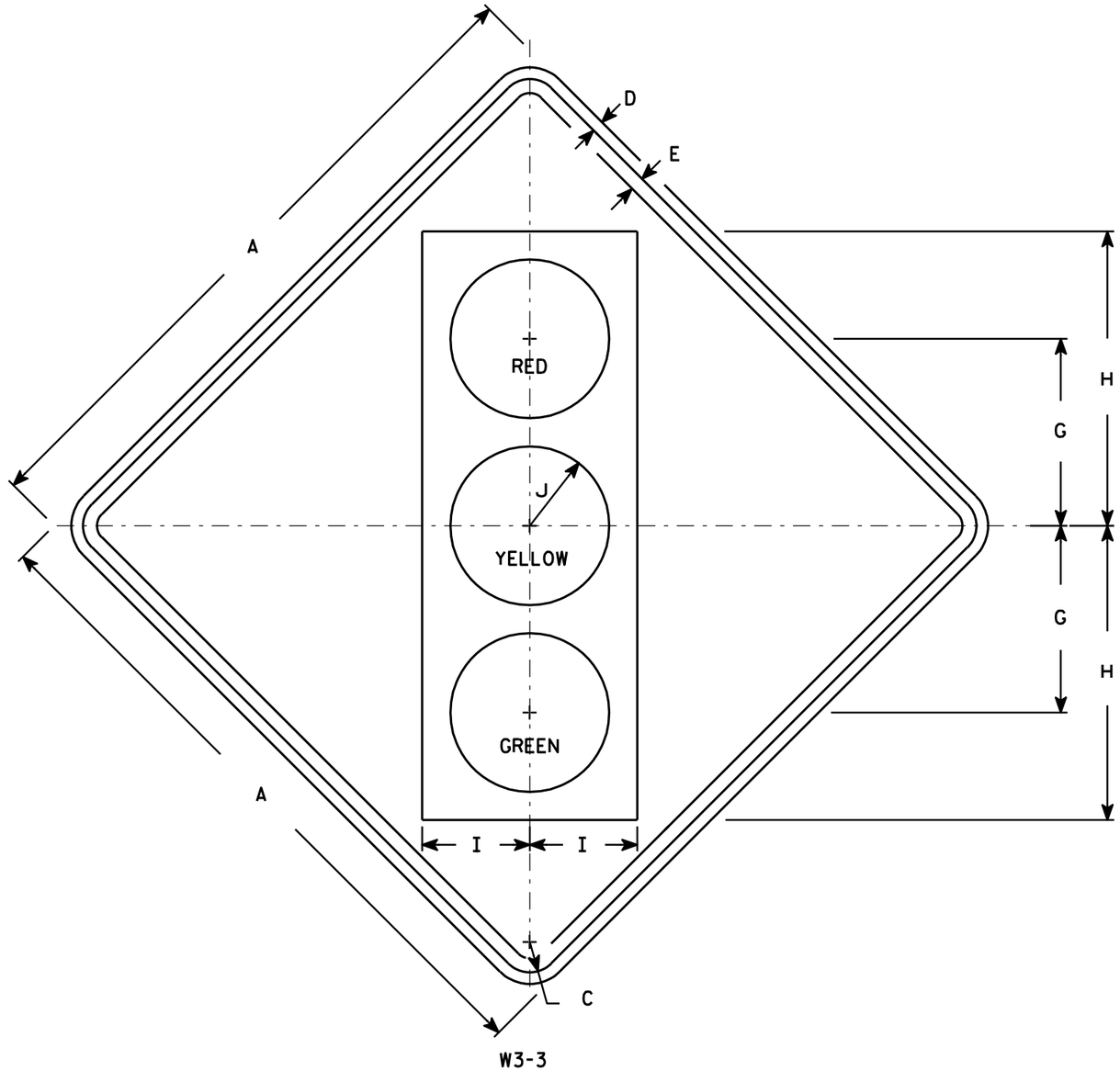
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 224 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\S169P.dgn PLOT DATE : 22-JUL-2013 10:32 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 2.977140:1.000000



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

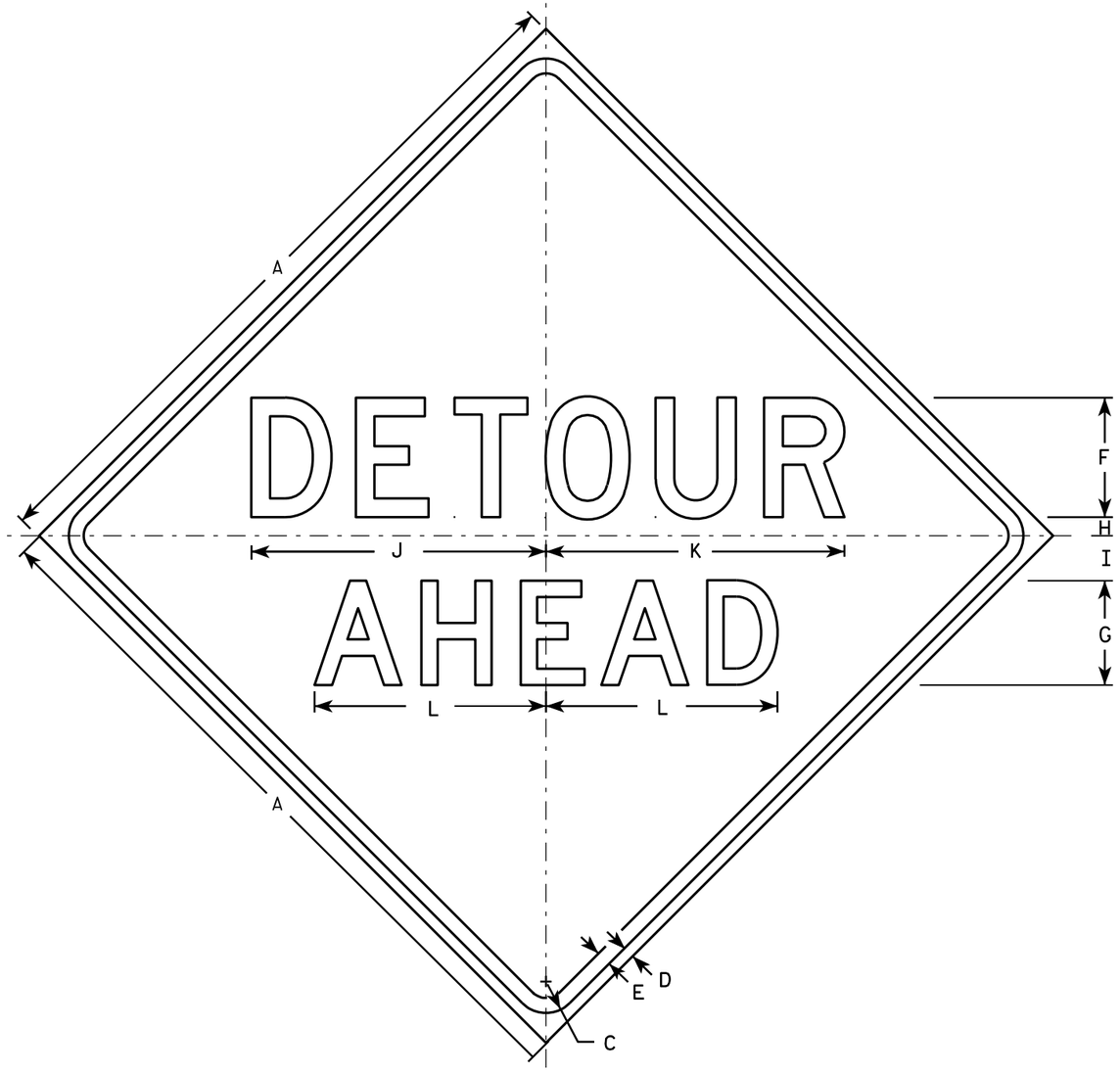
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

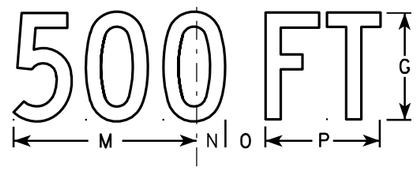
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

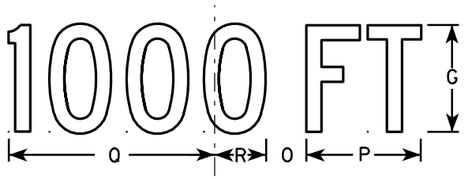
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 225 | E



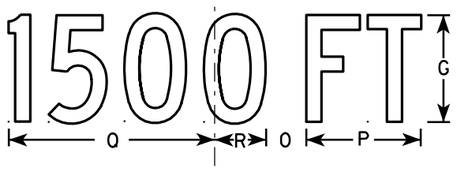
W20-2A



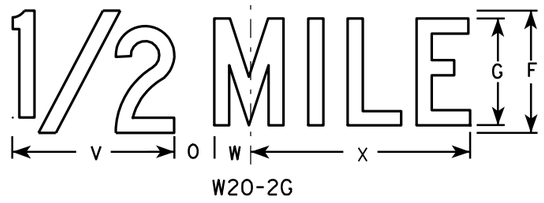
W20-2D



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

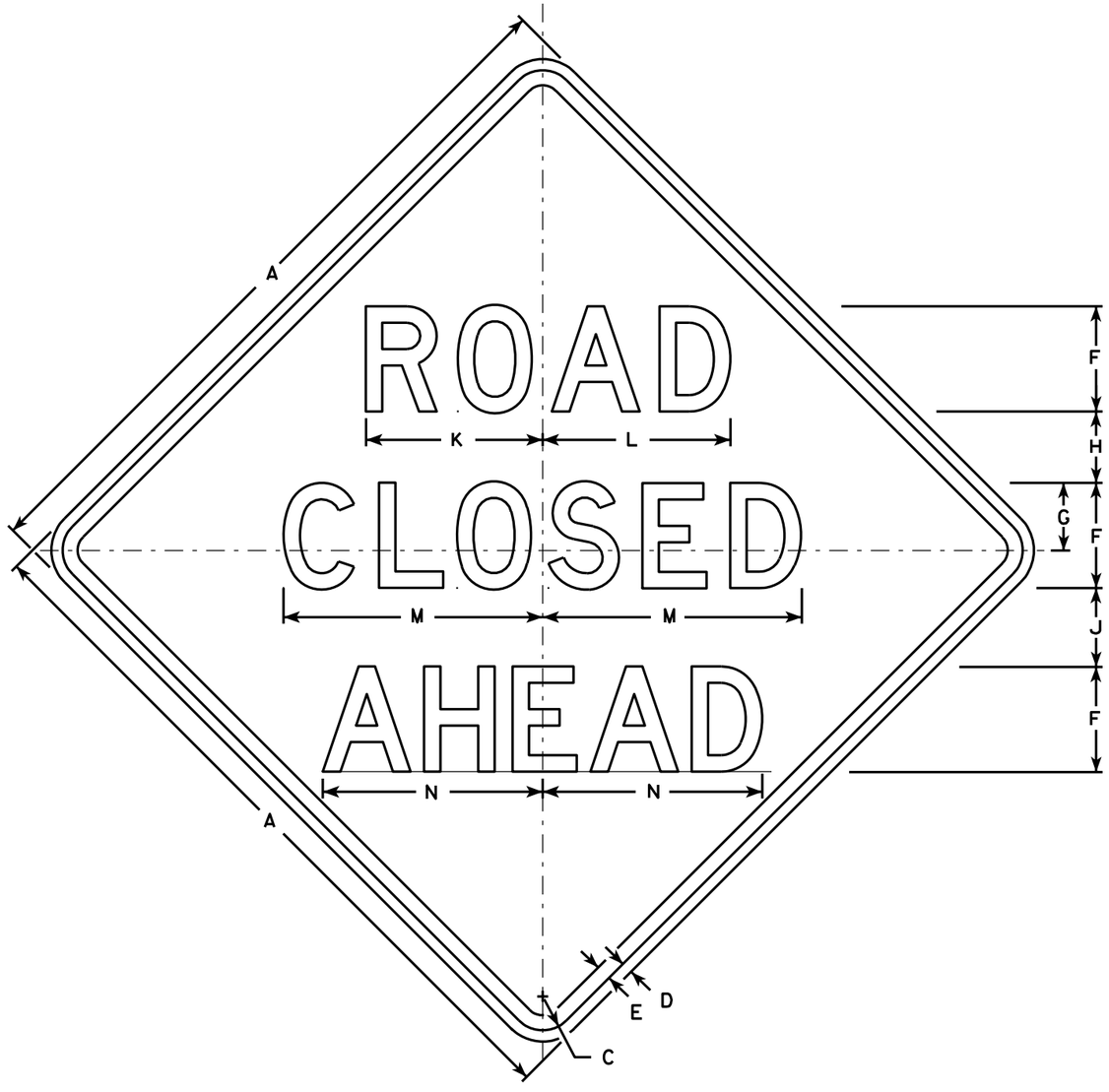
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

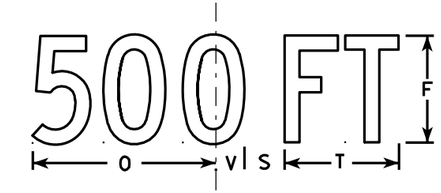
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

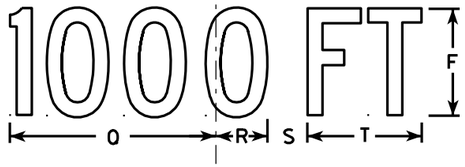
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 226	E



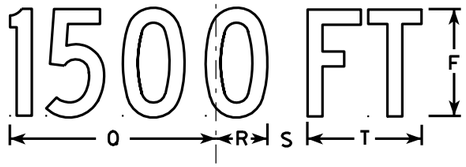
W20-3A



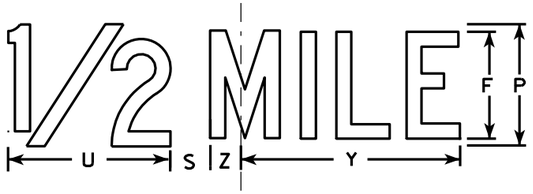
W20-3D



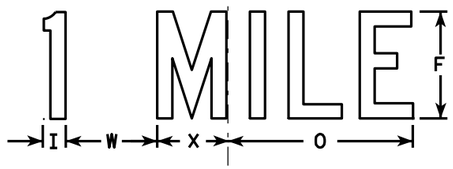
W20-3C



W20-3B



W20-3G



W20-3F

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. Lines 1 and 2 are Series D.
   Line 3 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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

WISDOT/CADDS SHEET 42

7

7

DIVISION 1 - CTH VV

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.30	
				NOTE 1	NOTE 2	NOTE 1		NOTE 3
80+30	0.00	67.77	0.36	0	0	0	0	0
80+50	20.00	74.74	0.96	53	0	53	0	53
81+00	50.00	90.58	1.54	153	2	206	3	203
81+50	50.00	129.60	30.33	204	30	410	42	368
82+00	50.00	134.61	26.50	245	53	655	111	545
82+50	50.00	129.36	19.40	244	43	899	166	733
83+00	50.00	128.47	3.79	239	21	1,138	194	944
83+50	50.00	98.02	0.00	210	4	1,348	199	1,149
84+00	50.00	94.73	0.00	178	0	1,526	199	1,327
84+50	50.00	169.20	0.00	244	0	1,770	199	1,571
85+00	50.00	178.44	0.00	322	0	2,092	199	1,893
85+50	50.00	171.74	0.00	324	0	2,416	199	2,217
86+00	50.00	177.91	0.56	324	1	2,740	200	2,540
86+50	50.00	189.99	0.00	341	1	3,081	202	2,880
87+00	50.00	184.76	2.22	347	2	3,428	204	3,224
87+50	50.00	186.98	3.00	344	5	3,772	211	3,561
88+00	50.00	183.34	4.36	343	7	4,115	220	3,895
88+50	50.00	188.26	5.28	344	9	4,459	231	4,228
89+00	50.00	189.77	5.98	350	10	4,809	244	4,565
89+50	50.00	155.15	18.10	319	22	5,128	273	4,855
90+00	50.00	150.83	13.41	283	29	5,411	311	5,100
90+50	50.00	145.47	19.36	274	30	5,685	350	5,335
91+00	50.00	143.07	27.54	267	43	5,952	406	5,546
91+50	50.00	147.88	31.09	269	54	6,221	476	5,745
92+00	50.00	148.42	29.32	274	56	6,495	549	5,946
92+50	50.00	155.11	10.37	281	37	6,776	597	6,179
93+00	50.00	149.93	5.62	282	15	7,058	616	6,442
93+50	50.00	141.64	1.33	270	6	7,328	624	6,704
94+00	50.00	147.01	9.97	267	10	7,595	637	6,958
94+50	50.00	151.16	10.51	276	19	7,871	662	7,209
95+00	50.00	147.54	17.36	277	26	8,148	696	7,453
95+50	50.00	146.74	19.40	272	34	8,420	740	7,680
96+00	50.00	161.48	11.54	285	29	8,705	777	7,928
96+50	50.00	152.64	17.66	291	27	8,996	813	8,184
97+00	50.00	143.18	19.34	274	34	9,270	857	8,413
97+50	50.00	140.15	29.89	262	46	9,532	917	8,616
98+00	50.00	149.43	24.77	268	51	9,800	983	8,817
98+50	50.00	184.37	21.87	309	43	10,109	1,039	9,070
99+00	50.00	153.58	14.89	313	34	10,422	1,083	9,339
99+50	50.00	157.77	5.21	288	19	10,710	1,108	9,602
100+00	50.00	151.19	4.49	286	9	10,996	1,119	9,877
100+50	50.00	118.44	14.85	250	18	11,246	1,143	10,103
101+00	50.00	133.00	10.44	233	23	11,479	1,173	10,306
101+50	50.00	118.89	19.61	233	28	11,712	1,209	10,503
102+00	50.00	108.51	202.92	211	206	11,923	1,477	10,446
102+50	50.00	142.91	1.20	233	189	12,156	1,723	10,434
103+00	50.00	120.91	26.75	244	26	12,400	1,756	10,644
103+50	50.00	122.20	25.82	225	49	12,625	1,820	10,805
104+00	50.00	141.05	20.36	244	43	12,869	1,876	10,993
104+50	50.00	131.87	28.05	253	45	13,122	1,934	11,188
105+00	50.00	129.68	34.20	242	58	13,364	2,010	11,354
105+50	50.00	103.37	77.60	216	104	13,580	2,145	11,435
105+80	30.00	113.22	6.15	120	47	13,700	2,206	11,494
			TOTAL	13,700	1,697			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
3 - MASS ORDINATE	CUT - (FILL * FILL FACTOR)

DIVISION 1 - MARTIN AVENUE (SOUTH)

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.30	
				NOTE 1	NOTE 3	NOTE 1		NOTE 8
18+50	0.00	57.13	0.01	0	0	0	0	0
18+75	25.00	68.72	0.00	58	0	58	0	58
19+00	25.00	91.14	0.00	74	0	132	0	132
19+25	25.00	110.49	0.00	93	0	225	0	225
19+50	25.00	132.24	0.00	112	0	337	0	337
19+75	25.00	161.82	0.00	136	0	473	0	473
19+78	3.00	220.60	0.00	21	0	494	0	494
			TOTAL	494	0			

DIVISION 1 - MARTIN AVENUE (NORTH)

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.30	
				NOTE 1	NOTE 3	NOTE 1		NOTE 8
20+22	0.00	175.14	0.00	0	0	0	0	0
20+25	3.00	123.84	0.00	17	0	17	0	17
20+50	25.00	126.06	2.20	116	1	133	1	132
20+75	25.00	101.97	0.24	106	1	239	3	236
21+00	25.00	99.61	0.00	93	0	332	3	329
21+25	25.00	102.11	0.07	93	0	425	3	422
21+50	25.00	103.59	0.00	95	0	520	3	517
21+75	25.00	100.33	0.00	94	0	614	3	611
21+90	15.00	96.42	0.14	55	0	669	3	666
			TOTAL	669	2			

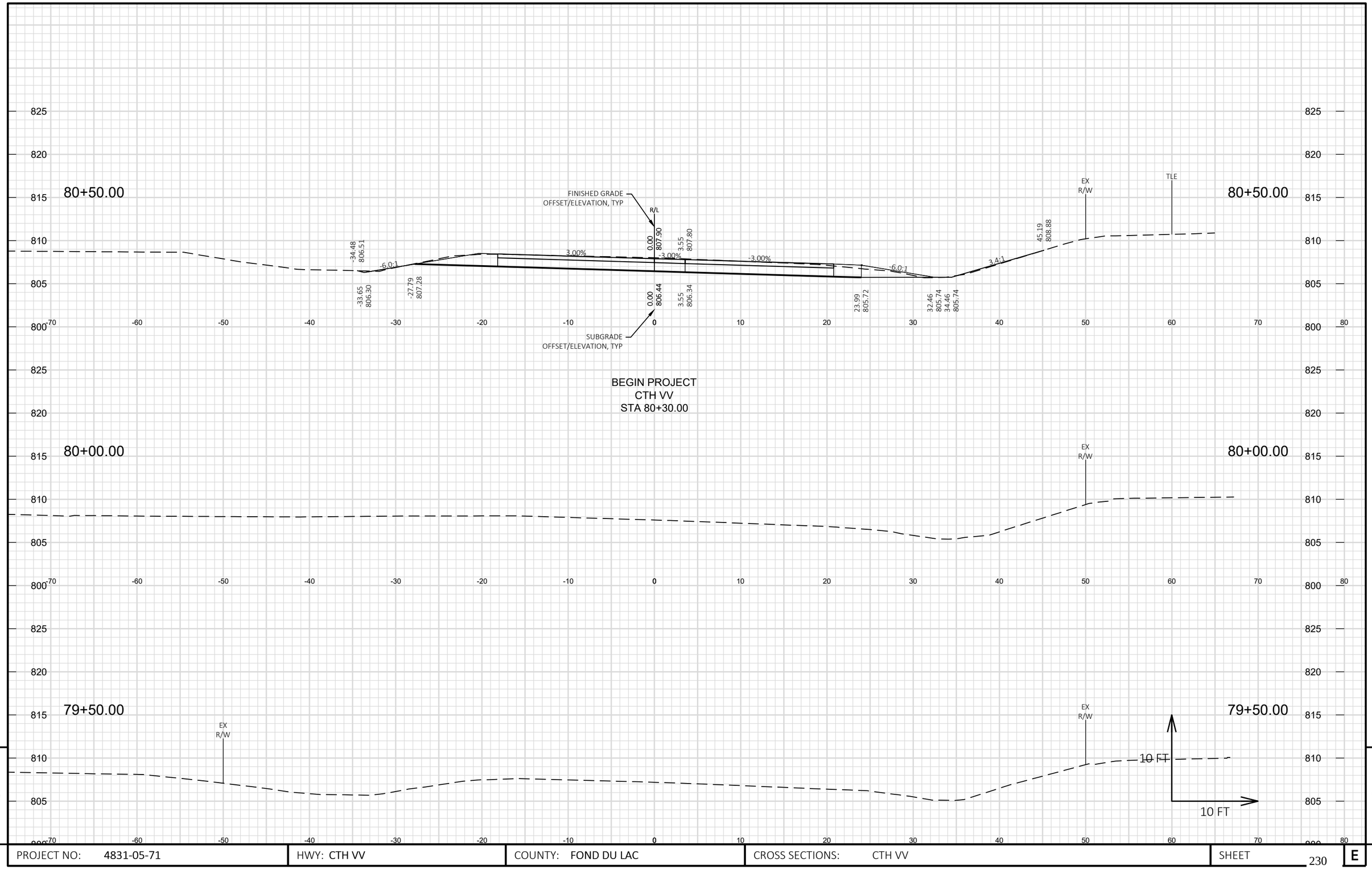
DIVISION 1 - SHERWOOD BOULEVARD (SB)

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.30	
				NOTE 1	NOTE 3	NOTE 1		NOTE 8
29+40	0.00	58.51	0.04	0	0	0	0	0
29+50	10.00	62.56	0.12	22	0	22	0	22
29+75	25.00	95.30	0.00	73	0	95	0	95
29+78	3.00	124.33	0.00	12	0	107	0	107
			TOTAL	107	0			

DIVISION 1 - SHERWOOD BOULEVARD (NB)

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.30	
				NOTE 1	NOTE 3	NOTE 1		NOTE 8
39+40	0.00	54.14	0.42	0	0	0	0	0
39+50	10.00	68.77	0.00	23	0	23	0	23
39+75	25.00	97.27	0.00	77	0	100	0	100
39+78	3.00	126.09	0.00	12	0	112	0	112
			TOTAL	112	0			

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
3 - MASS ORDINATE	CUT - (FILL * FILL FACTOR)



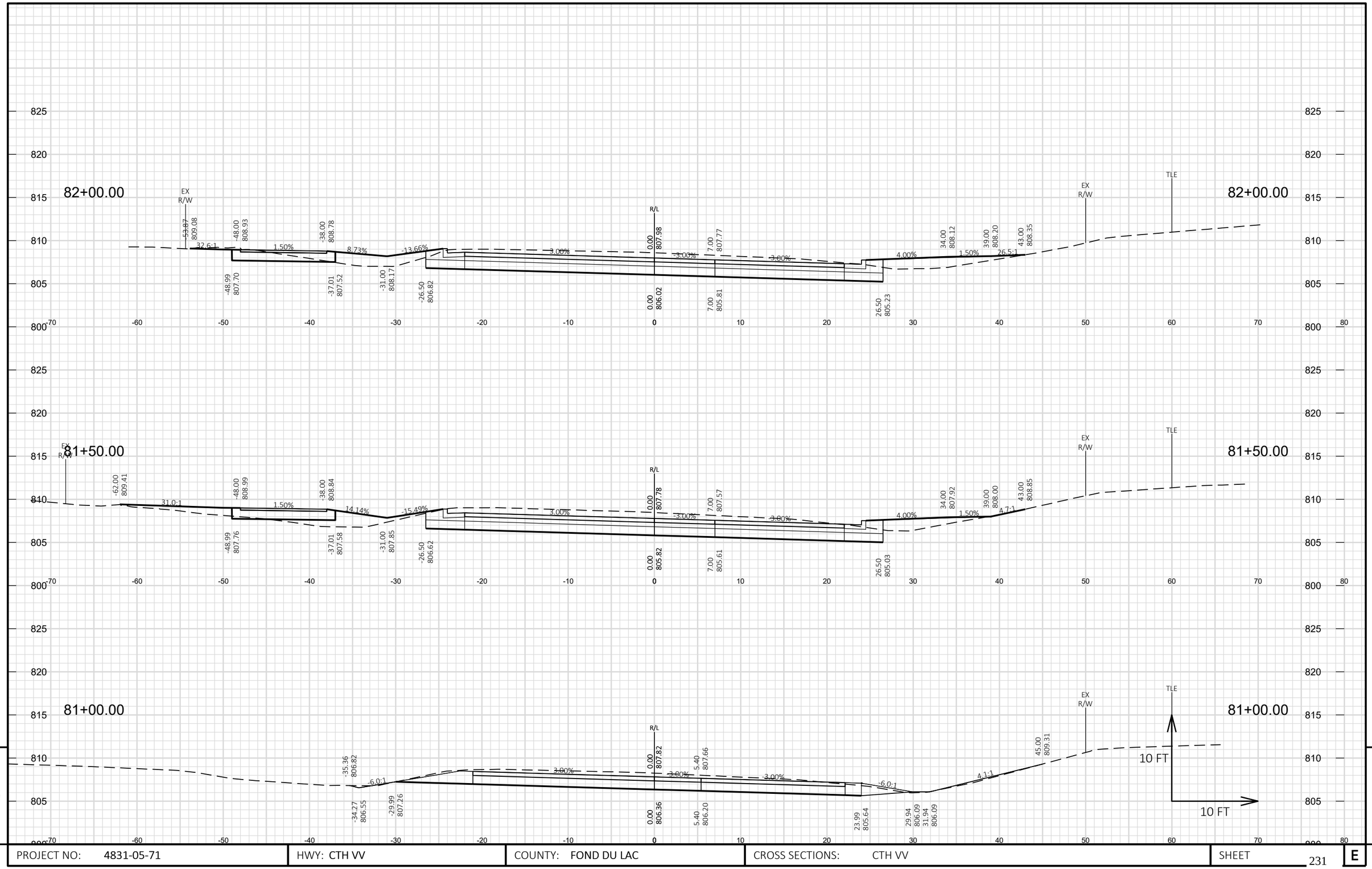
BEGIN PROJECT
CTH VV
STA 80+30.00

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 230 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 100-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

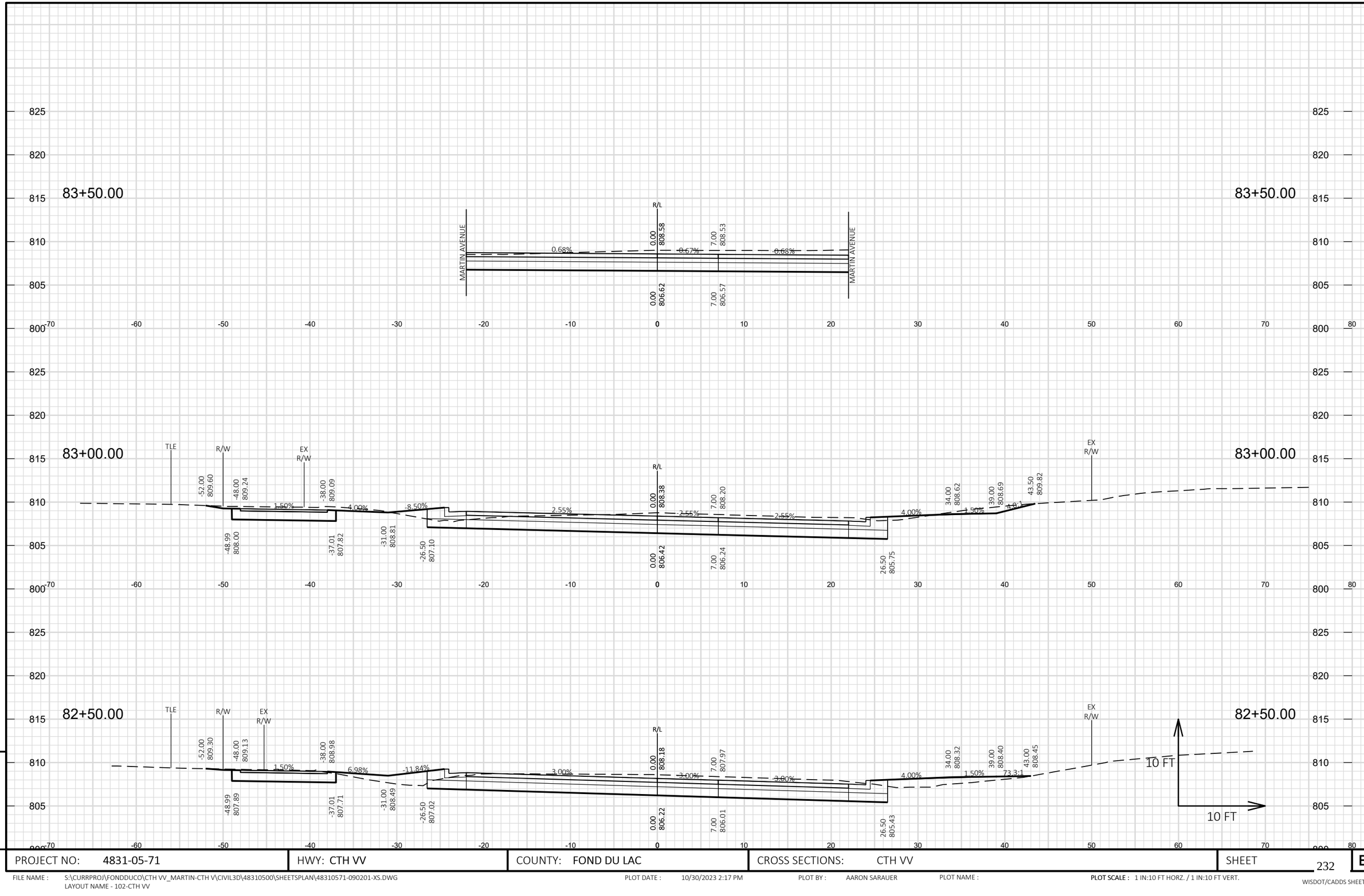
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 231 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 101-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

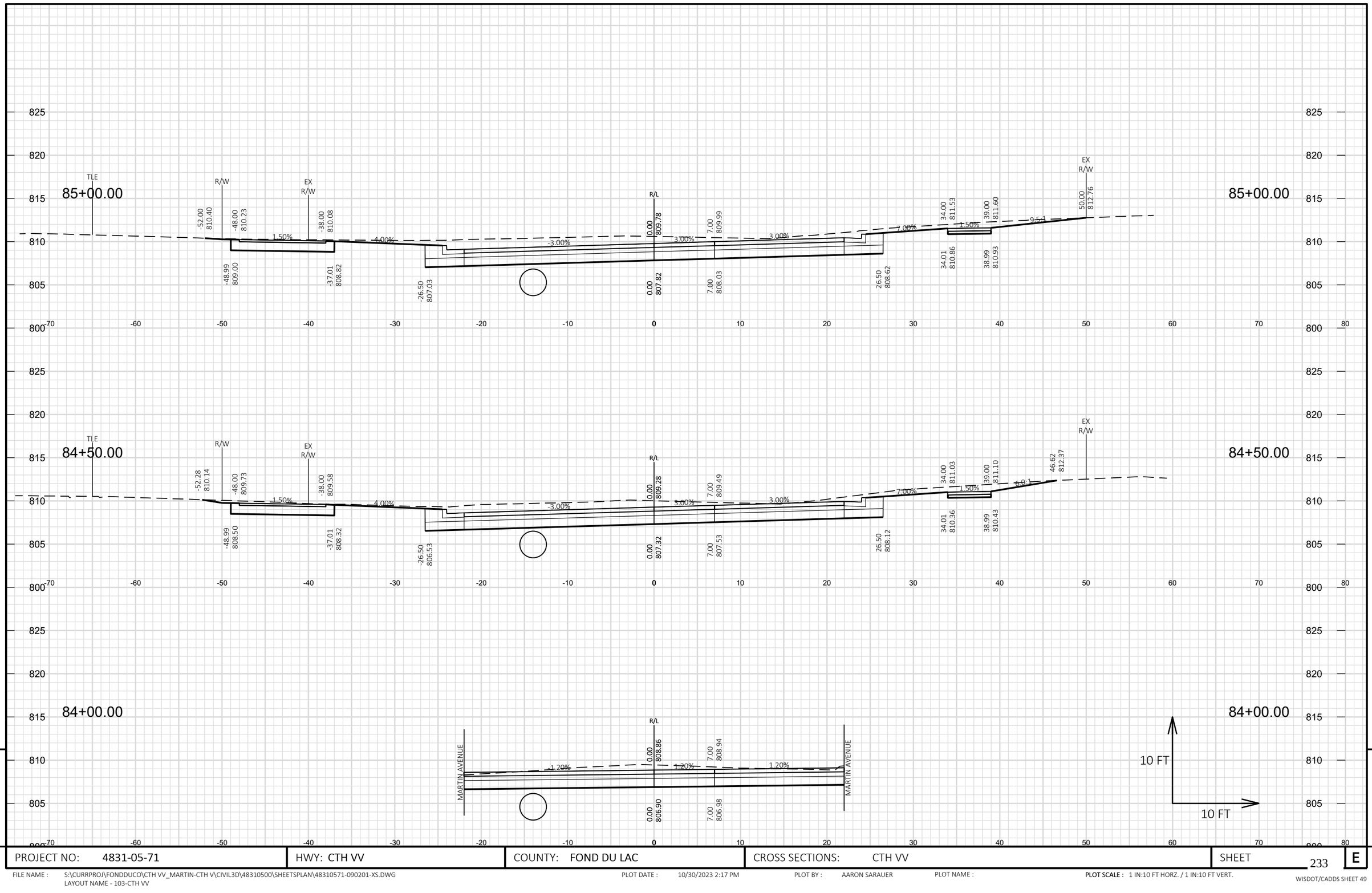
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 232	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 102-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

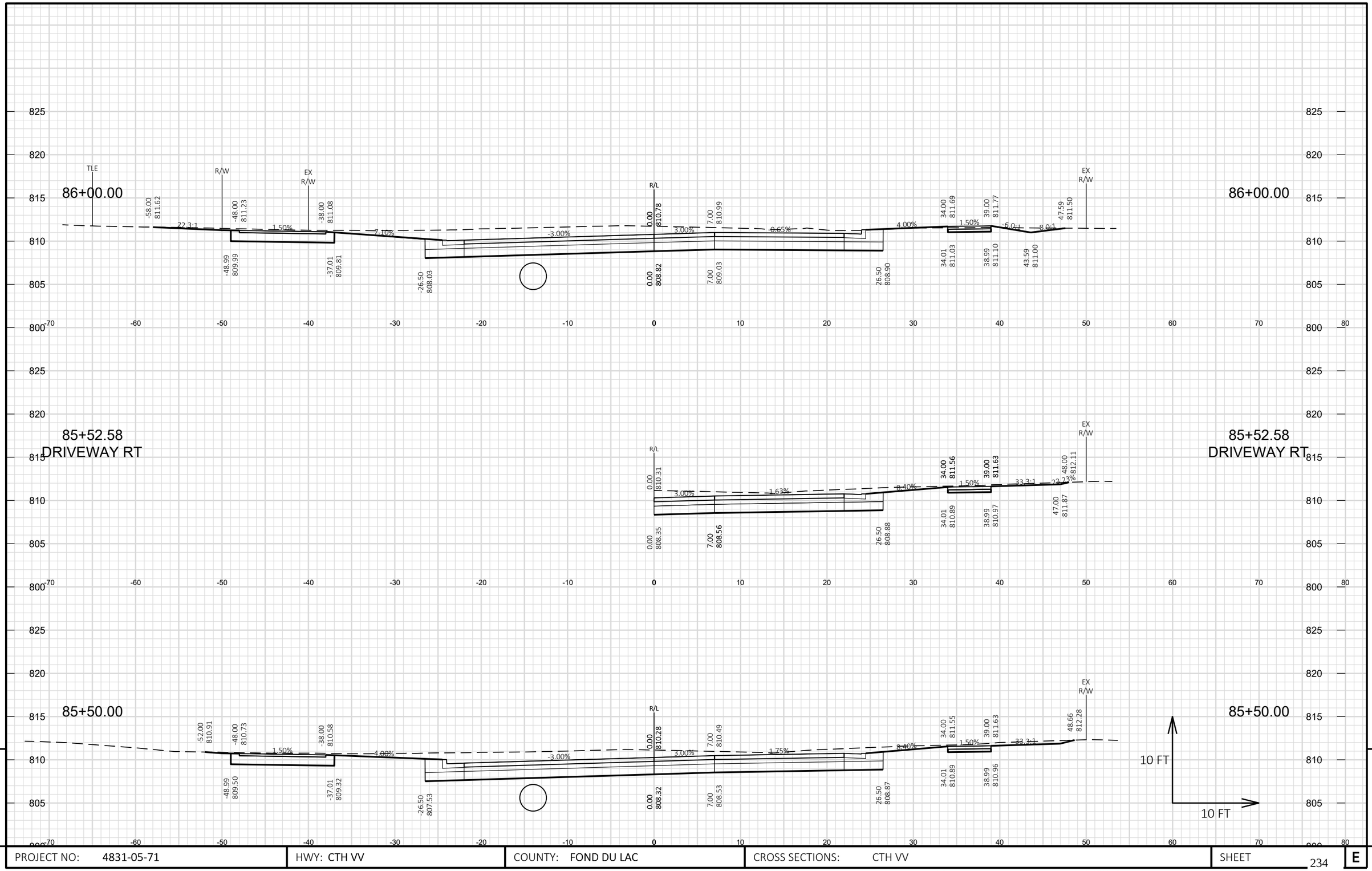
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 233	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 103-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 234	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 104-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

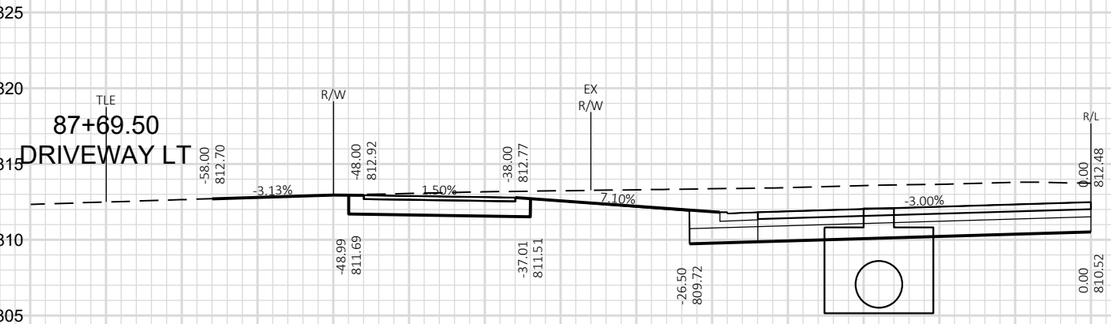
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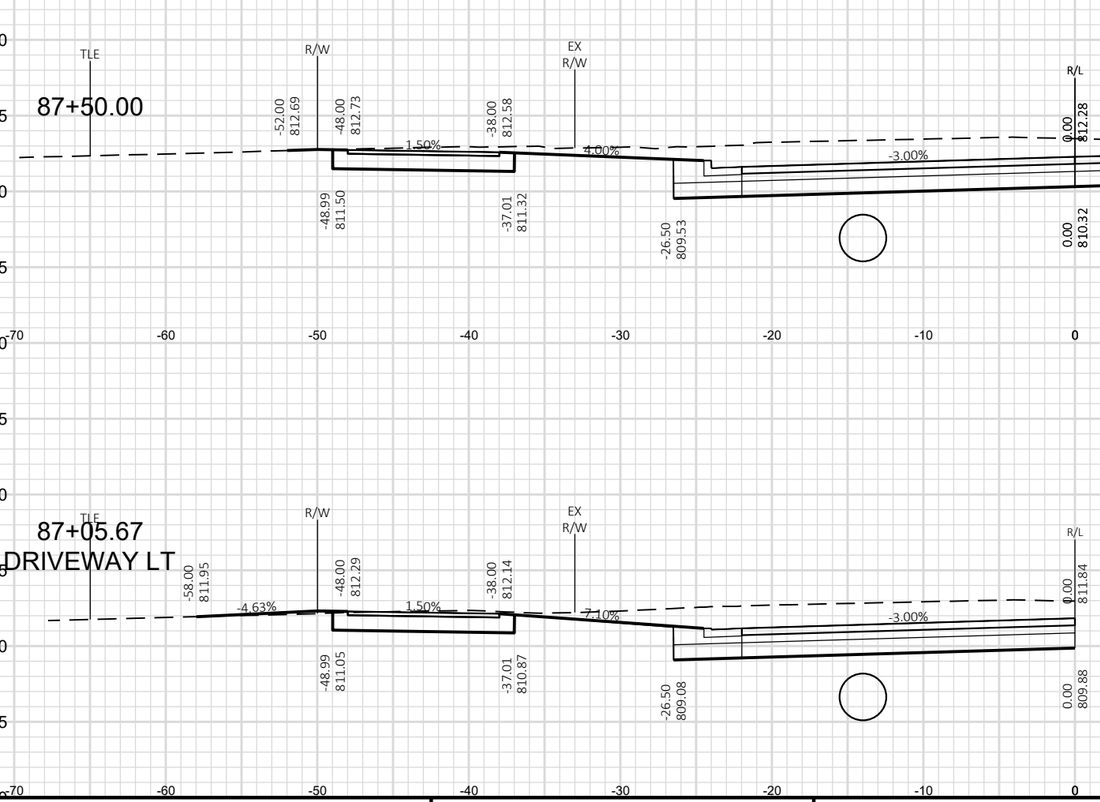
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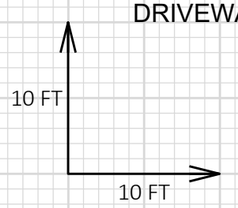
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LAYOUT NAME - 105-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

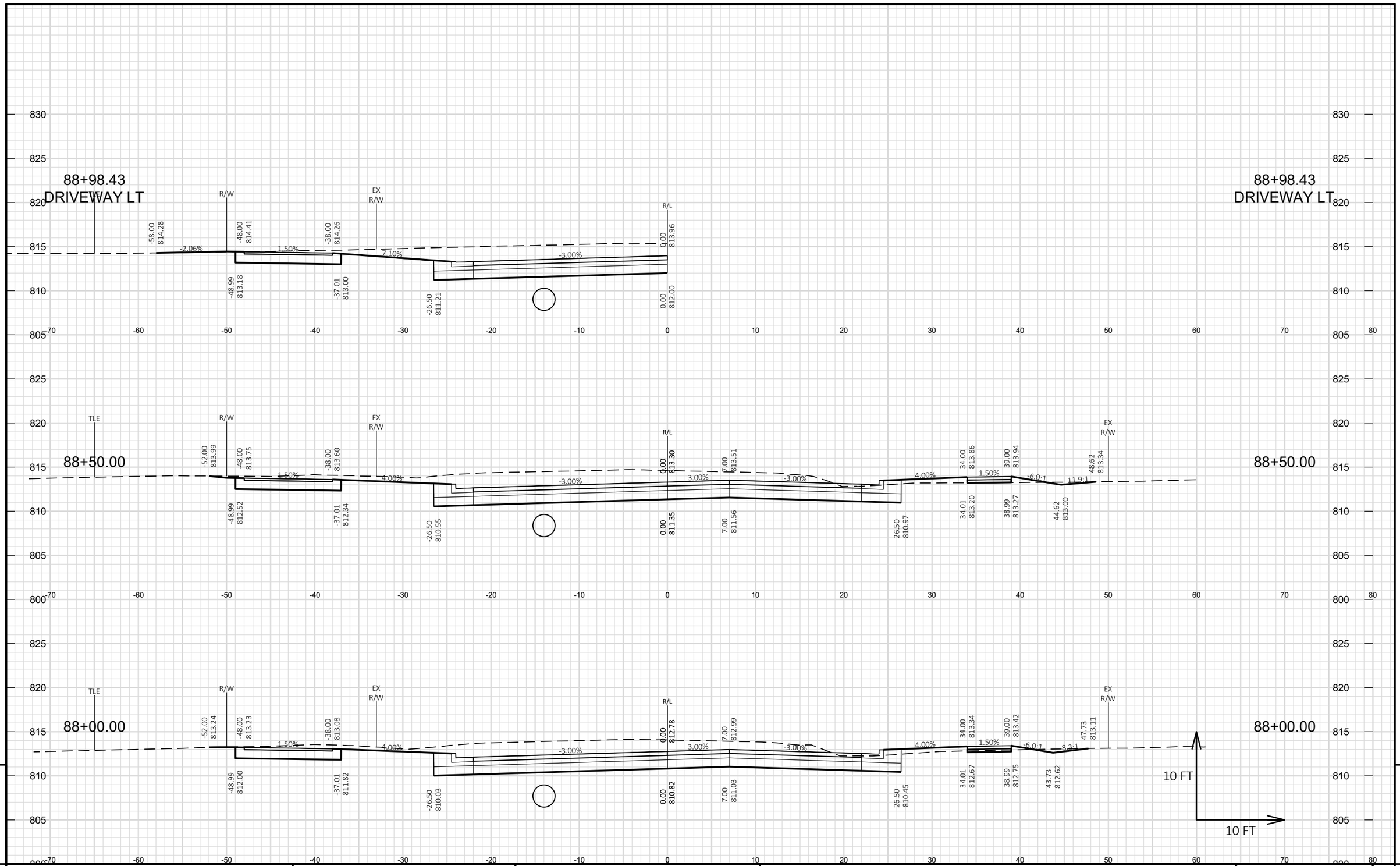
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 236	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 106-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

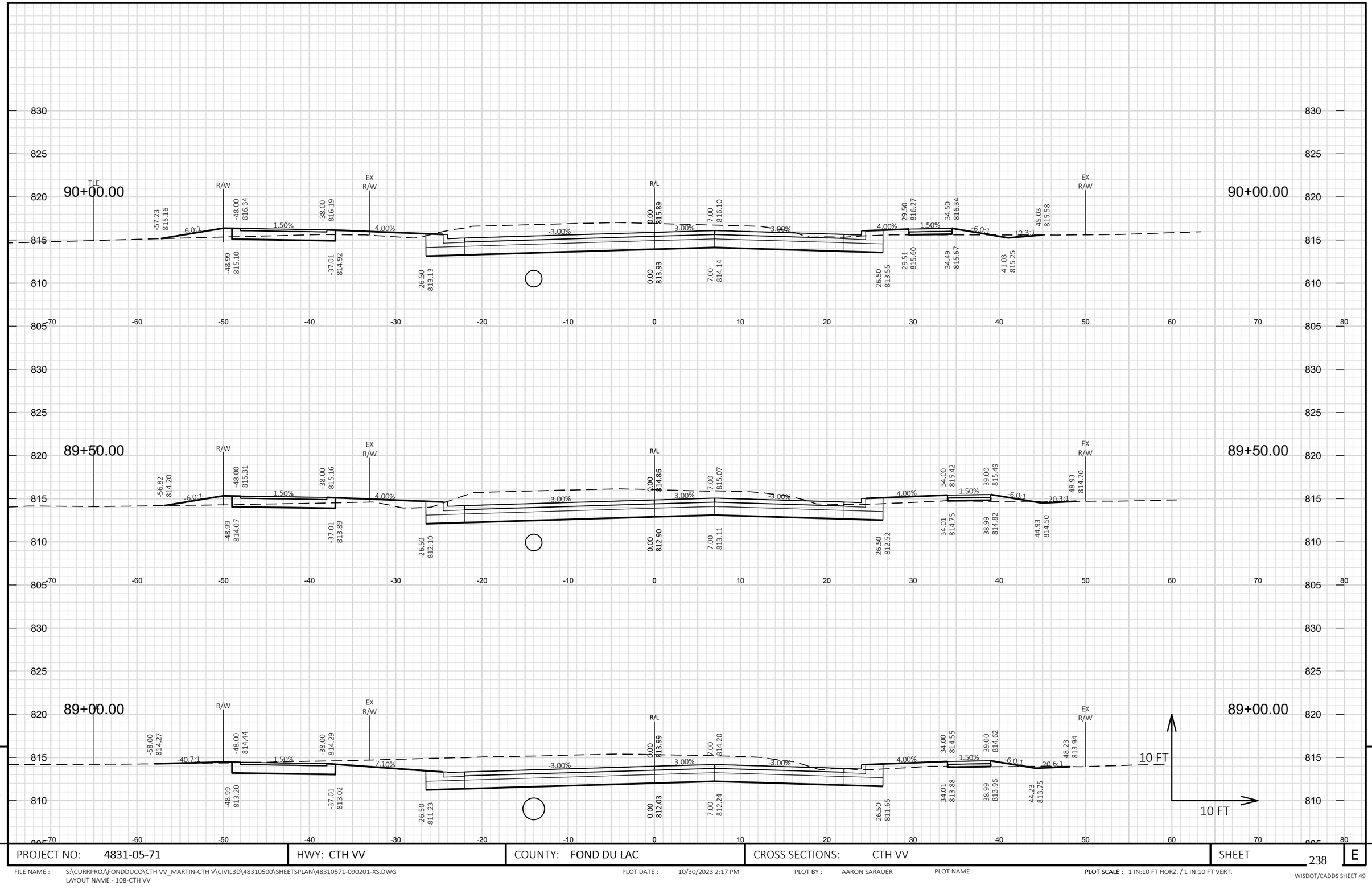
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 237	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 107-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



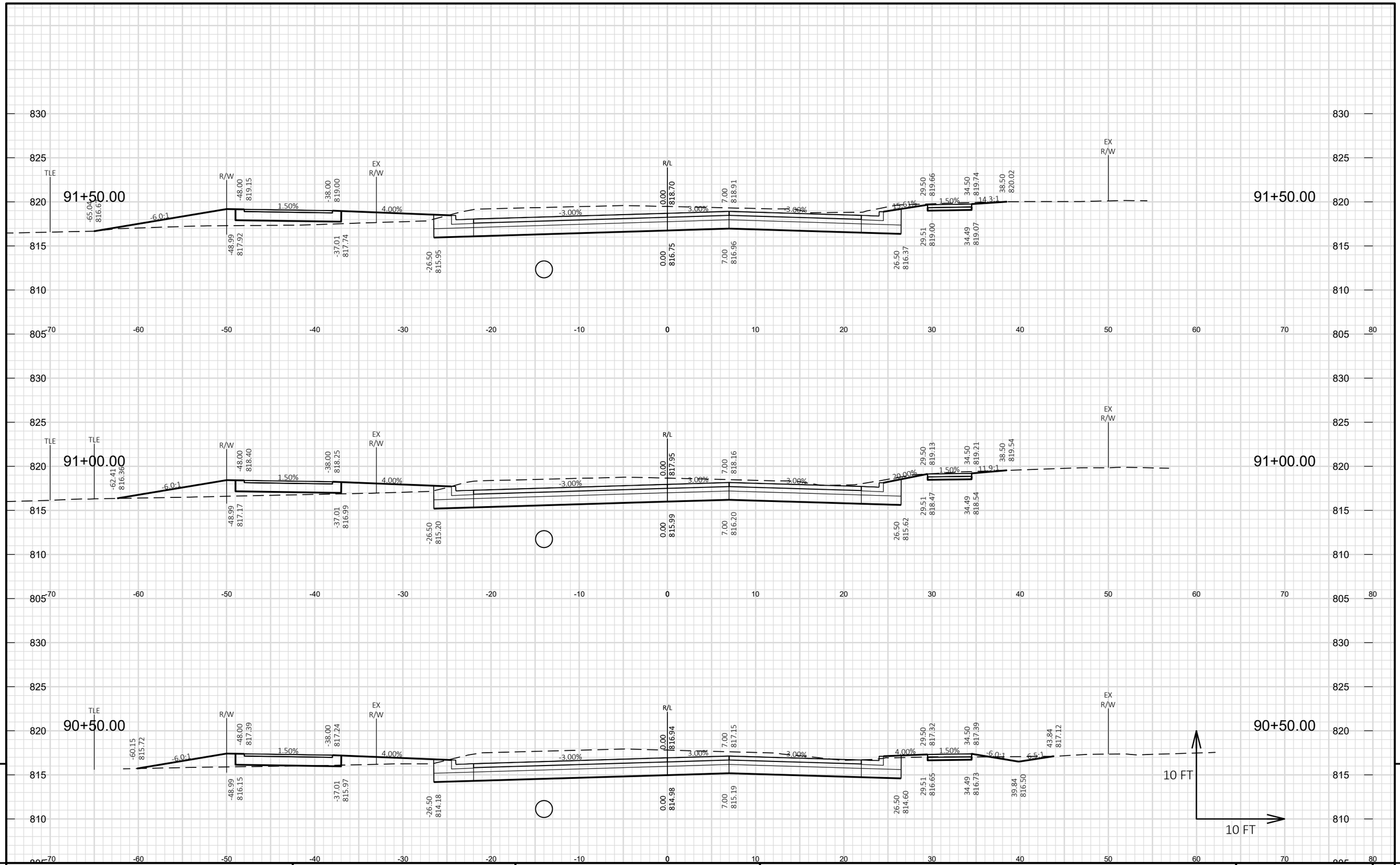
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 238 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 108-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

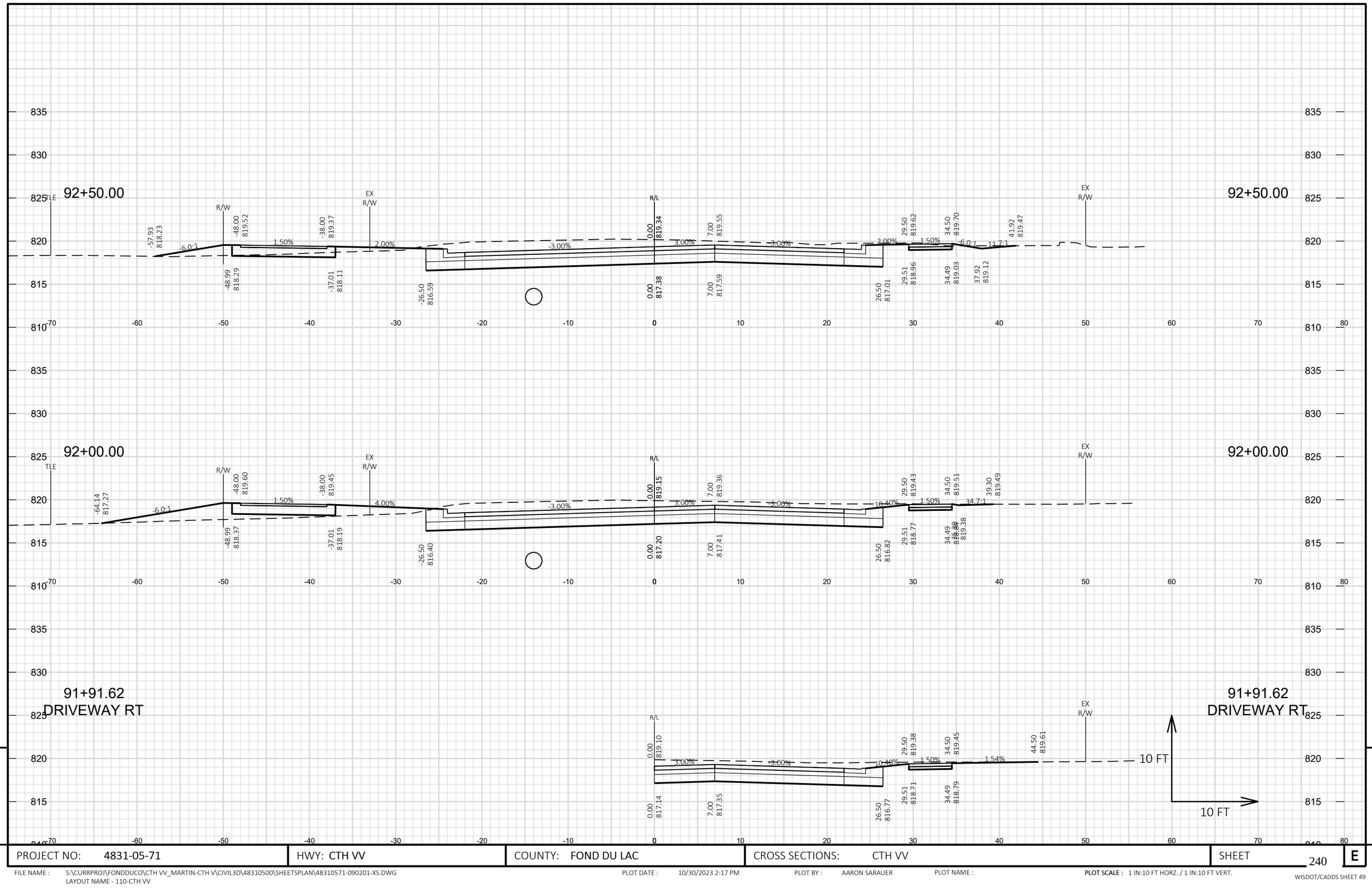
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 239	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 109-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

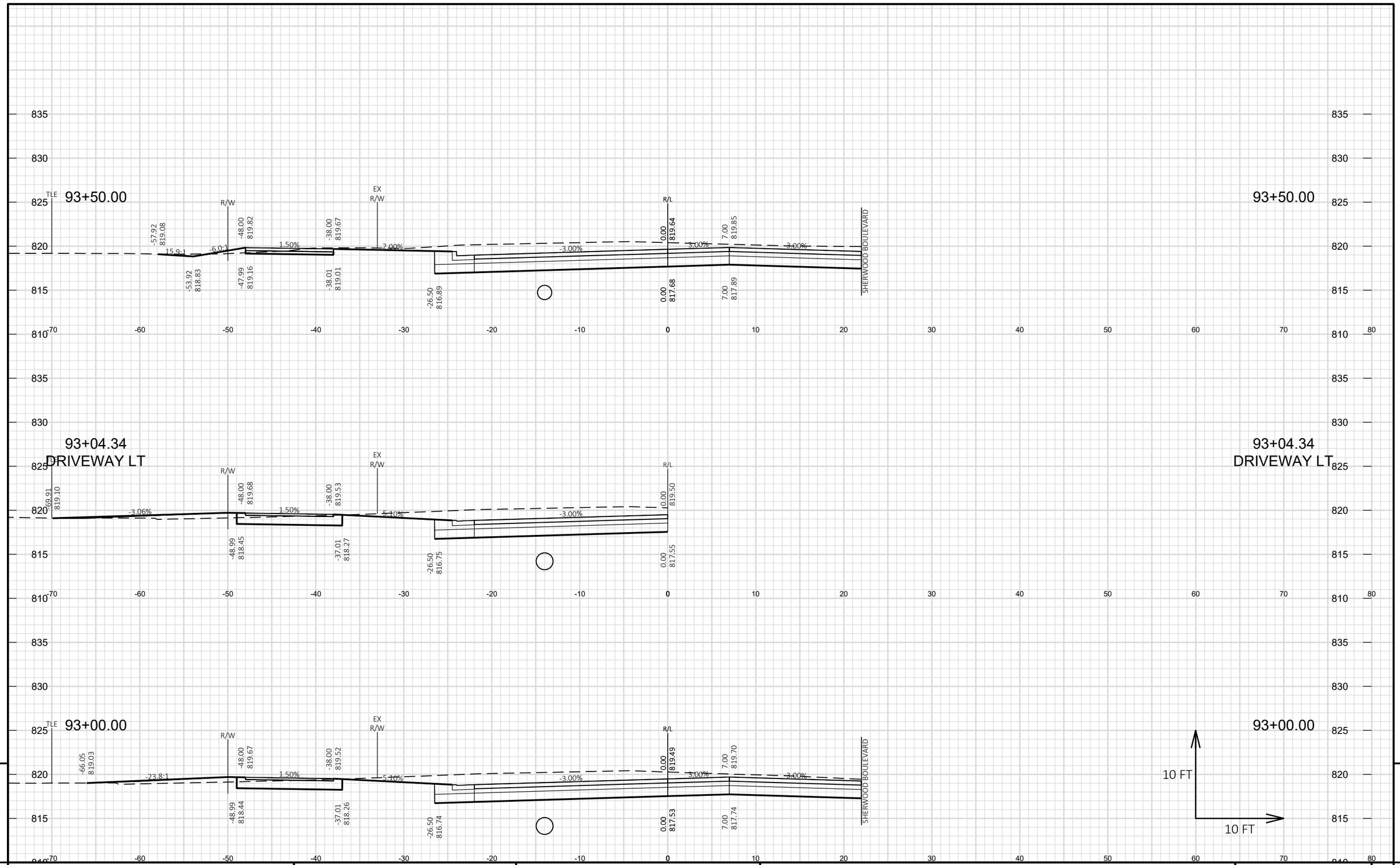
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 240	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 110-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

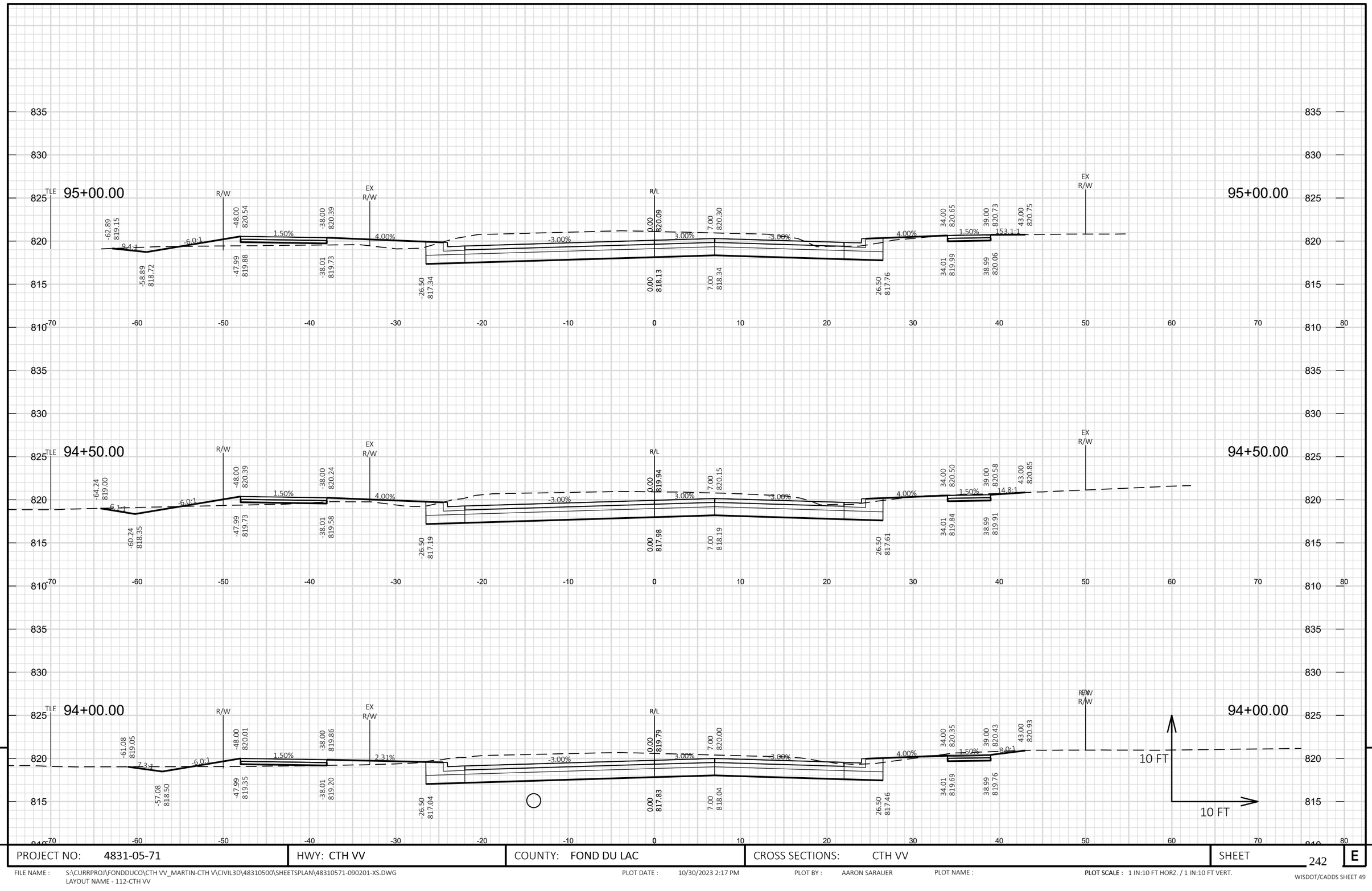
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 241	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 111-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



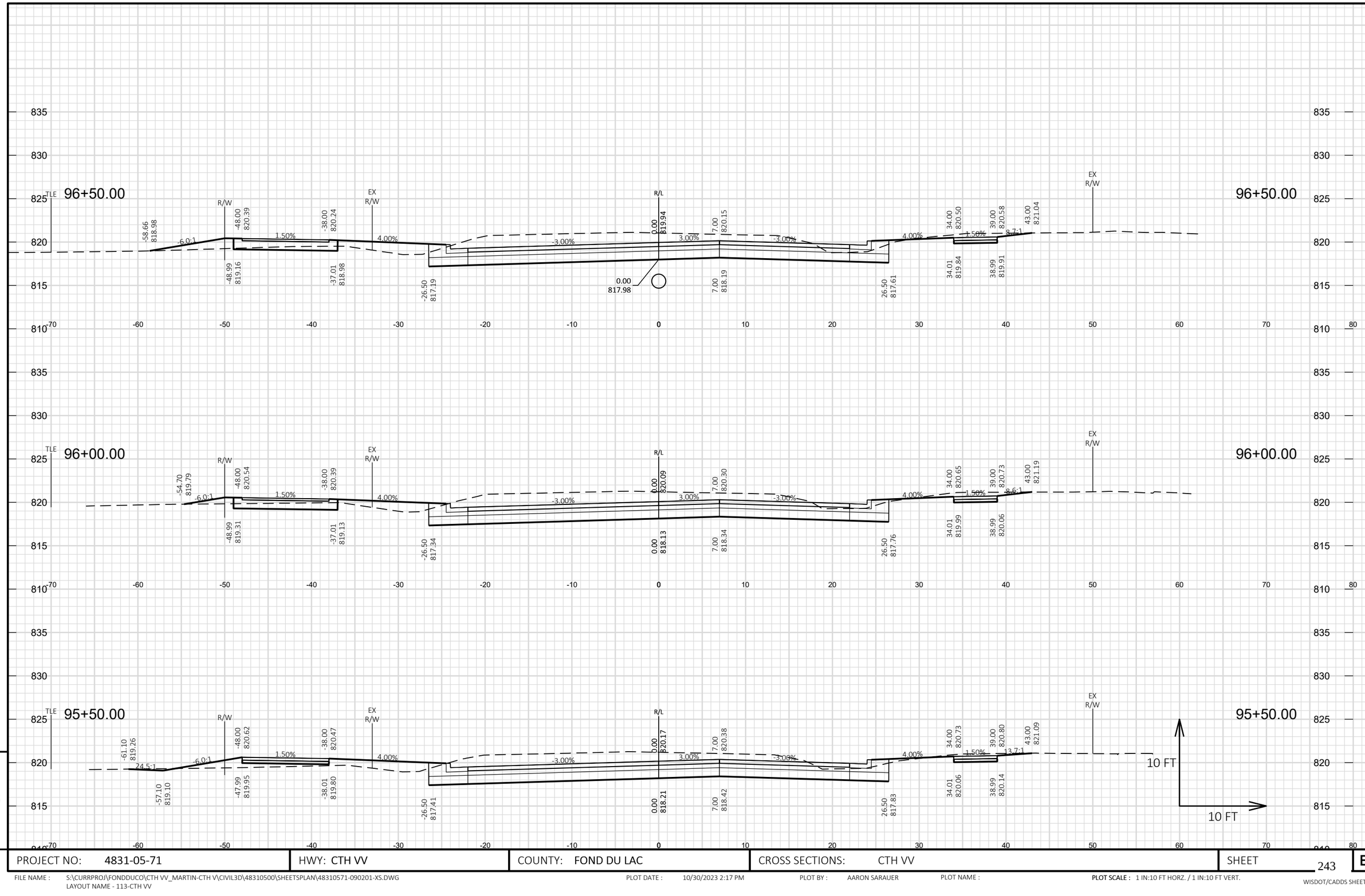
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 242 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 112-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME :

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

WISDOT/CADDS SHEET 49



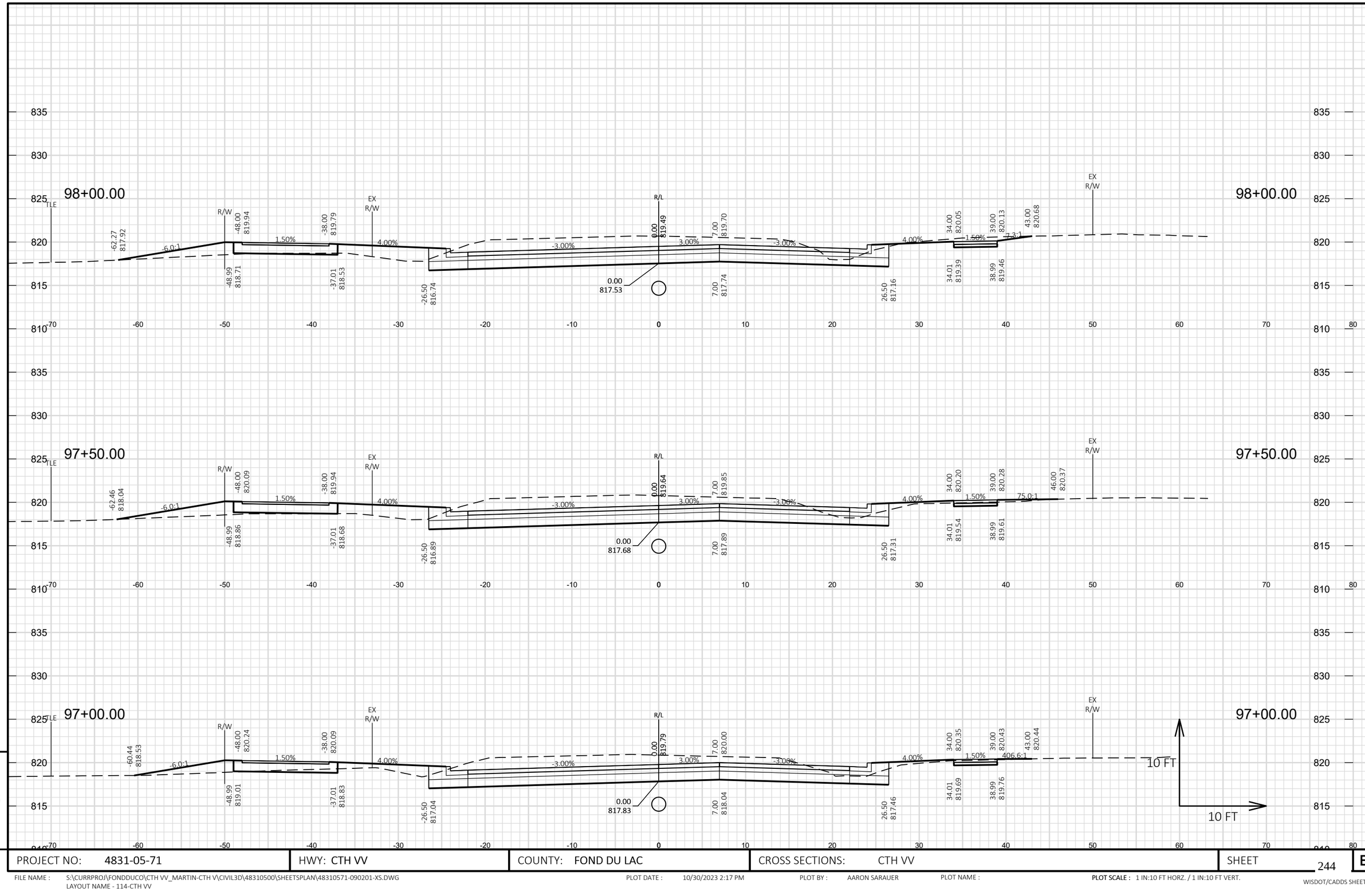
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 243 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 113-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME :

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

WISDOT/CADDS SHEET 49



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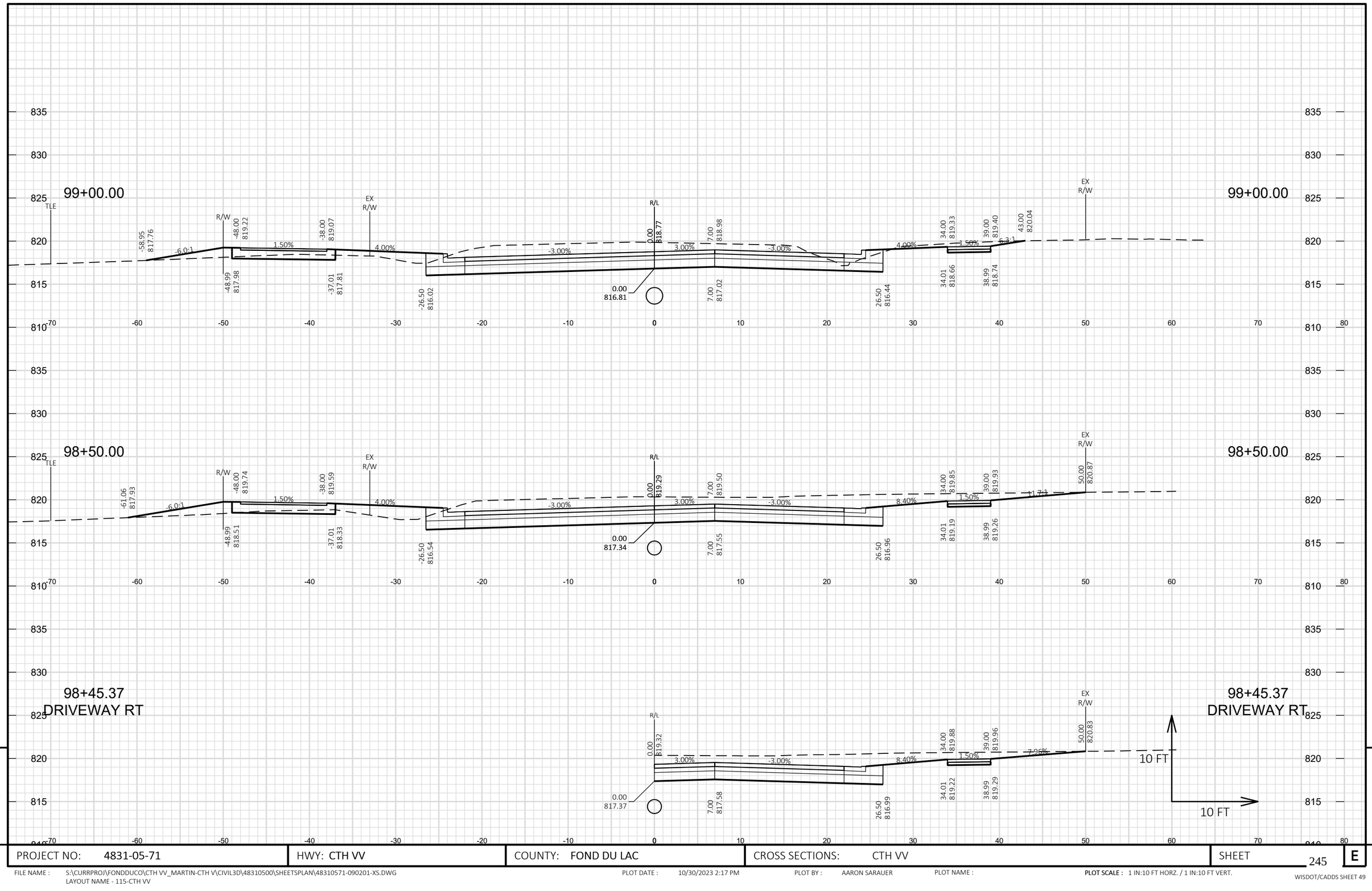
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 244 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 114-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

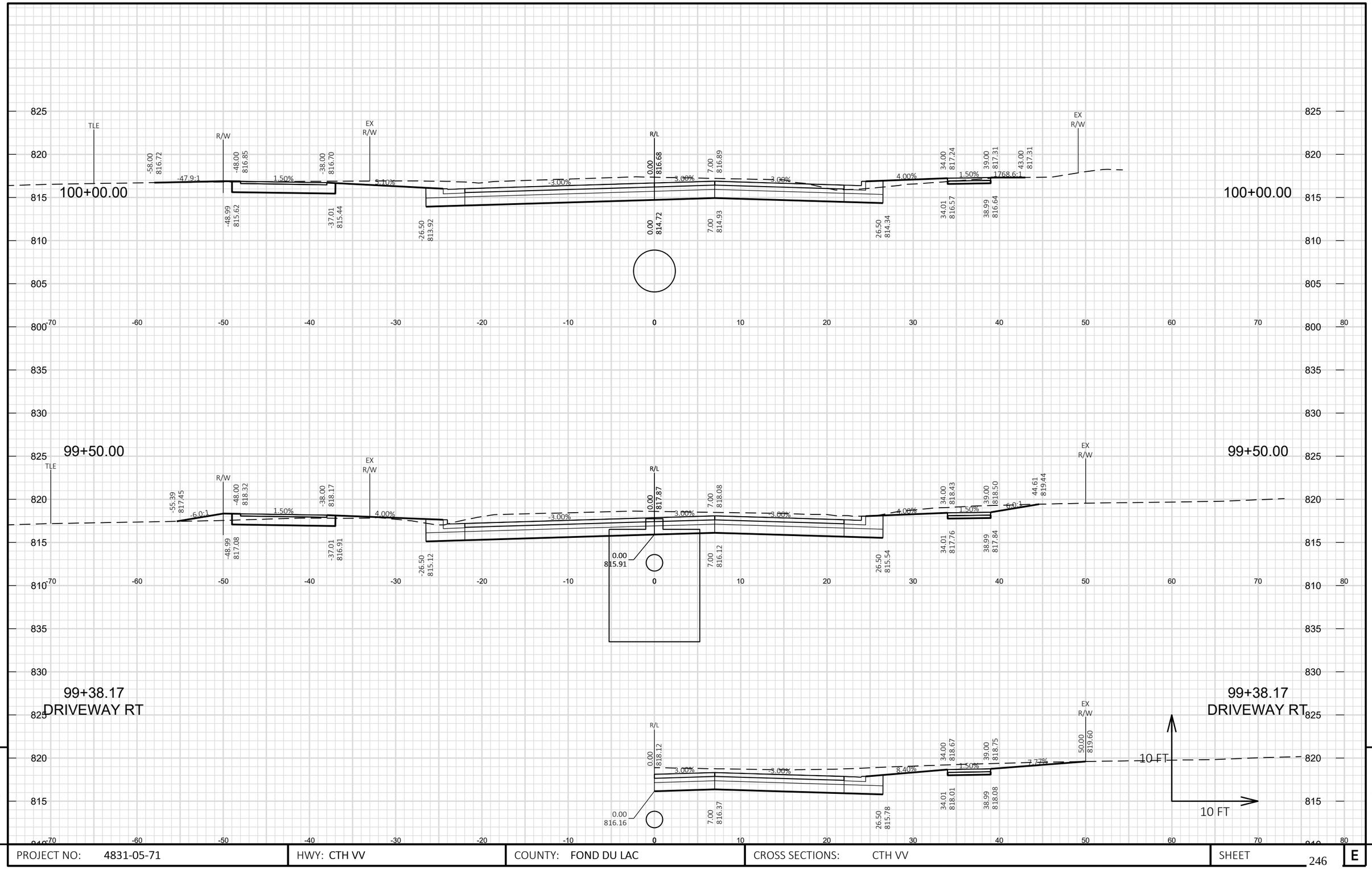
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 245	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 115-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 246	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 116-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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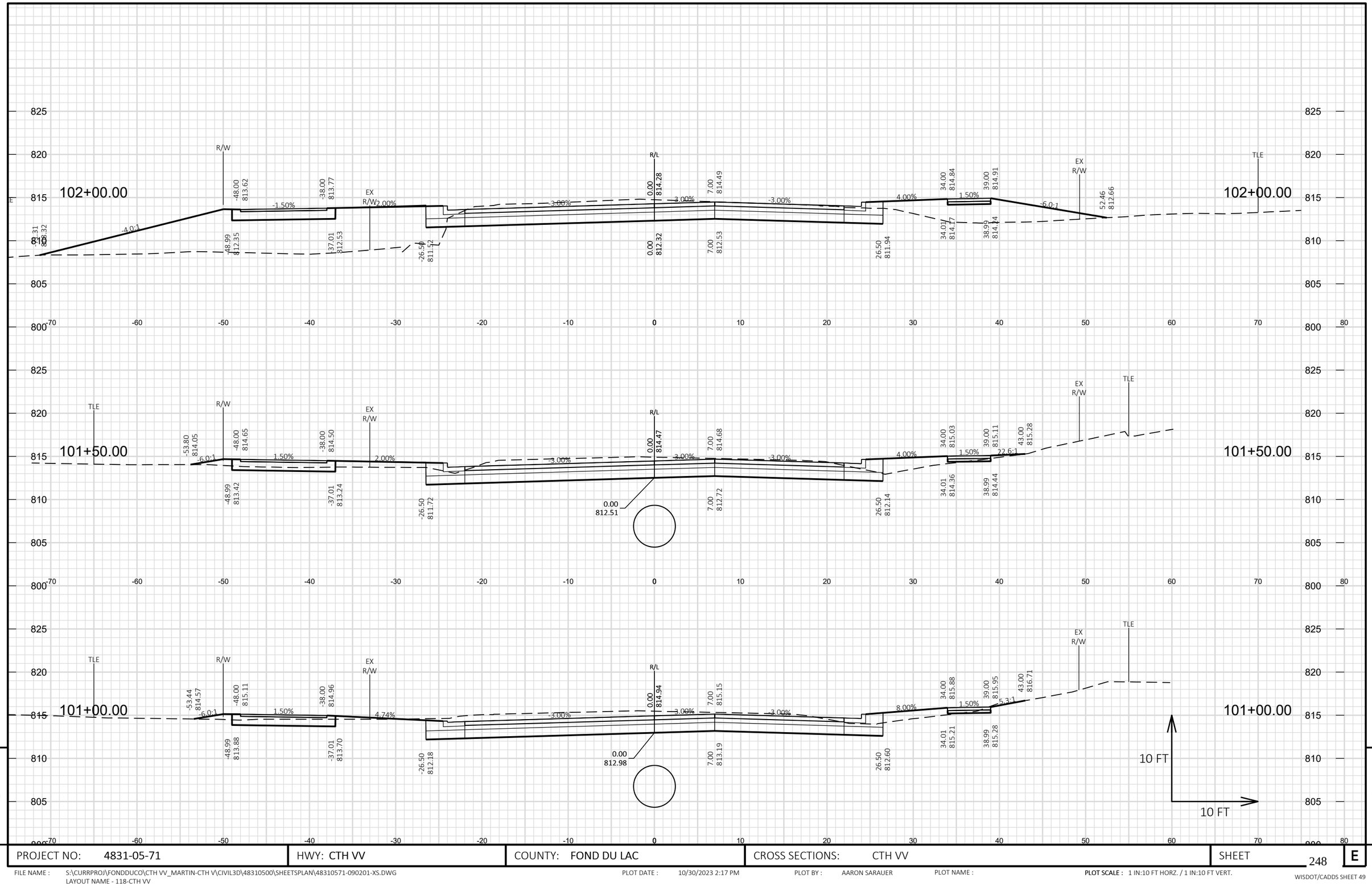
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 247	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 117-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

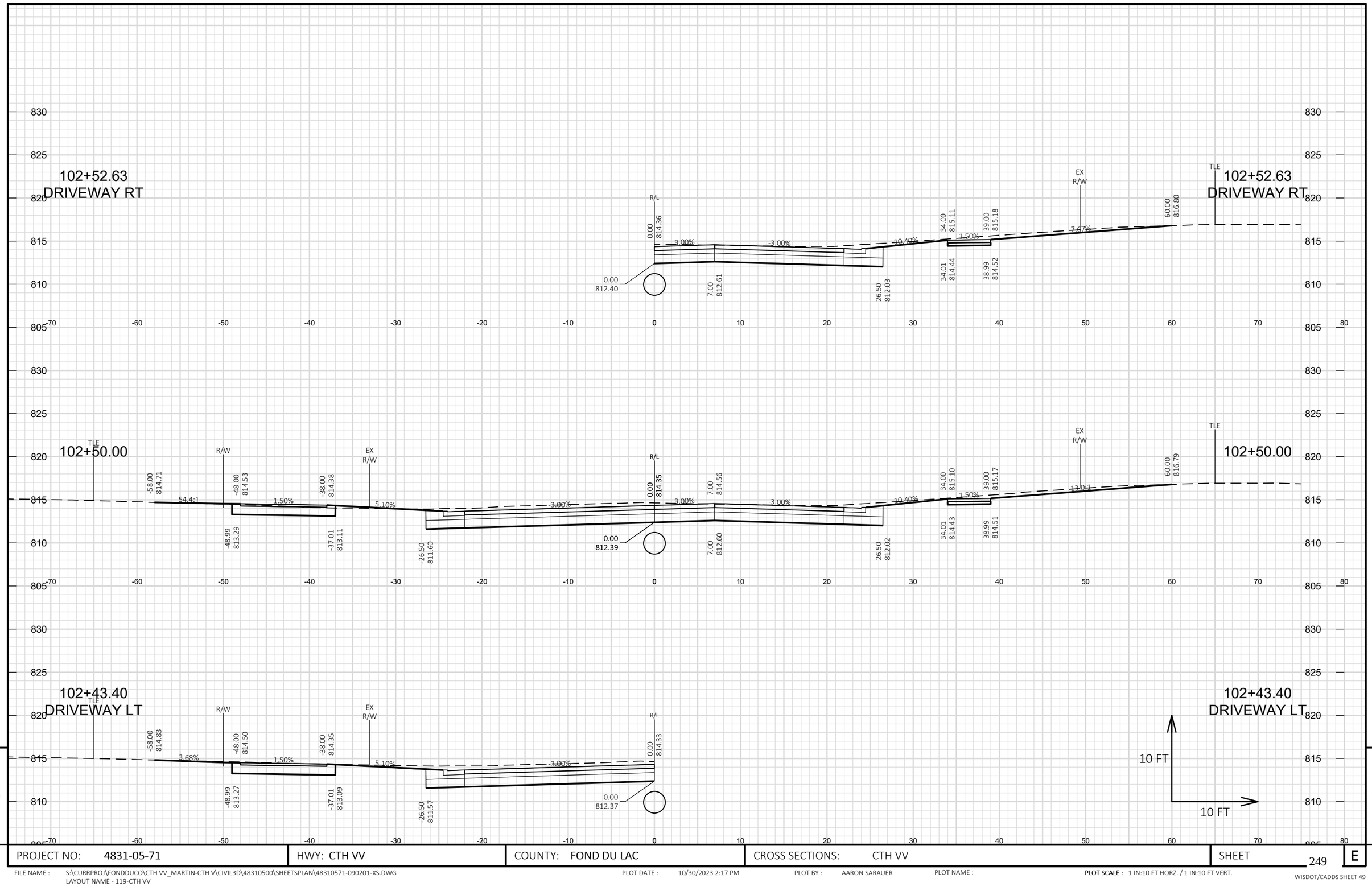


PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 248 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 118-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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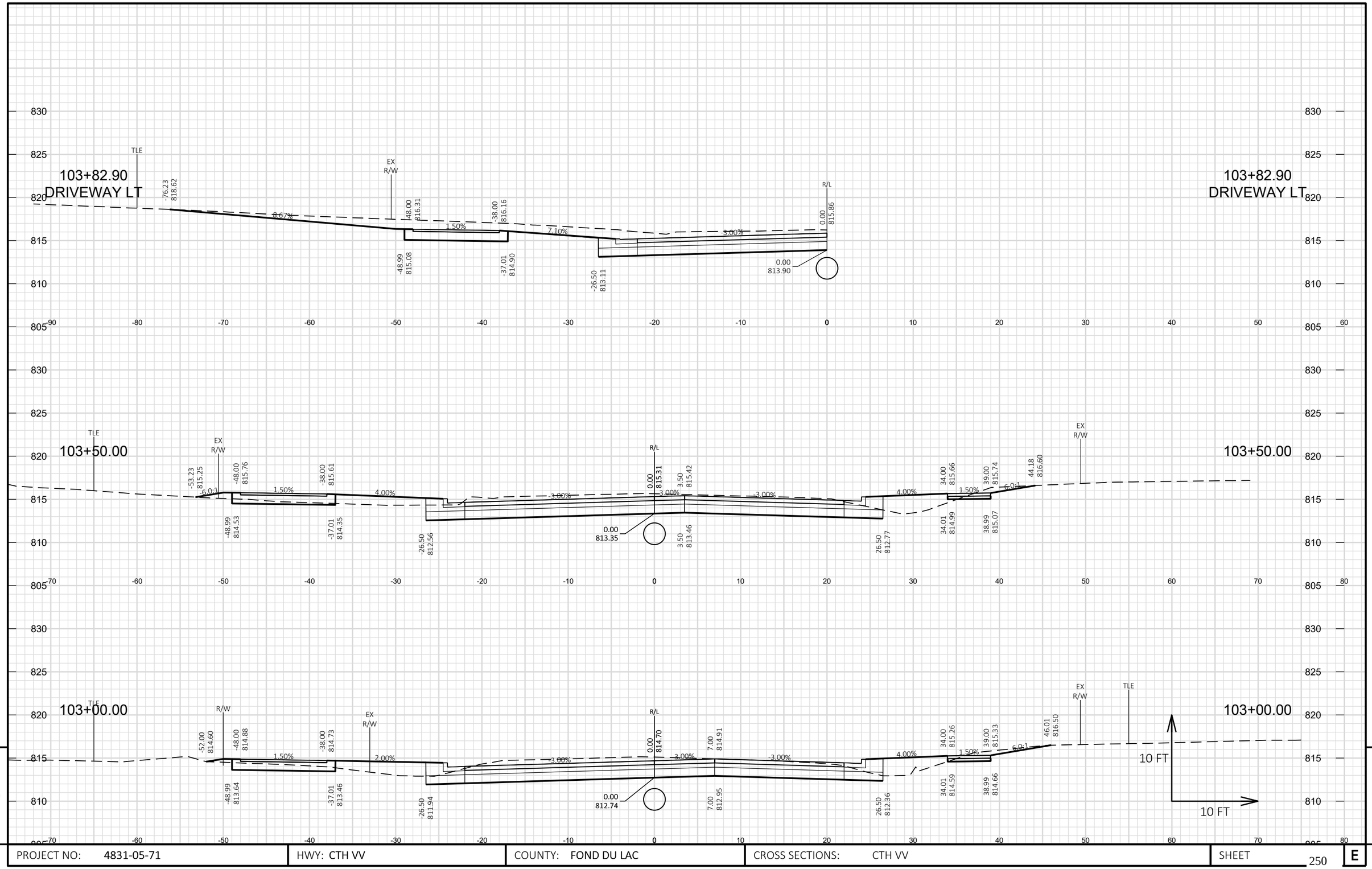
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 249	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 119-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



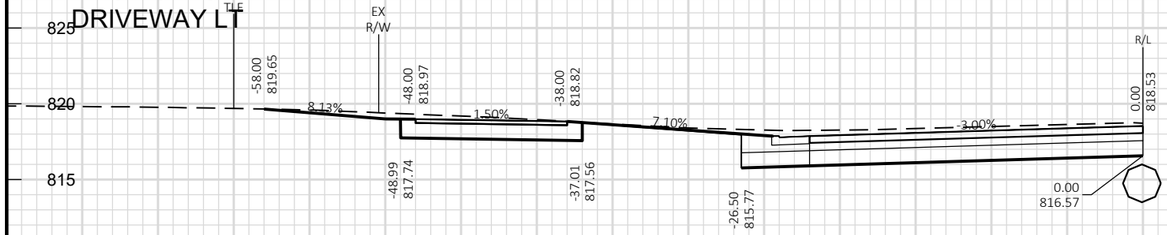
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 250	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 120-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

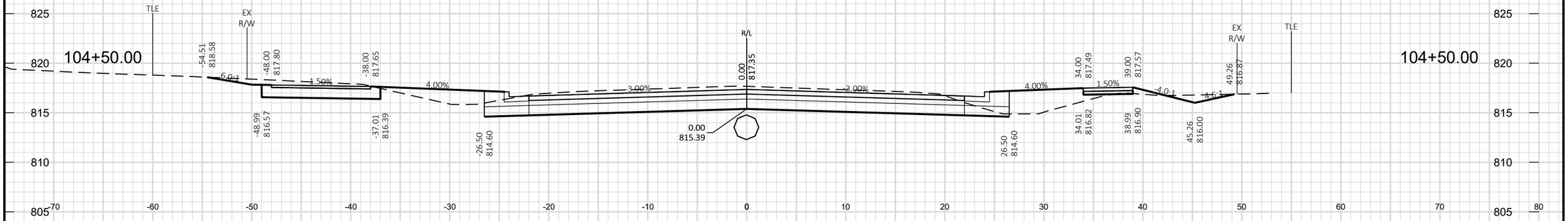
WISDOT/CADDS SHEET 49

104+92.40
DRIVEWAY LT



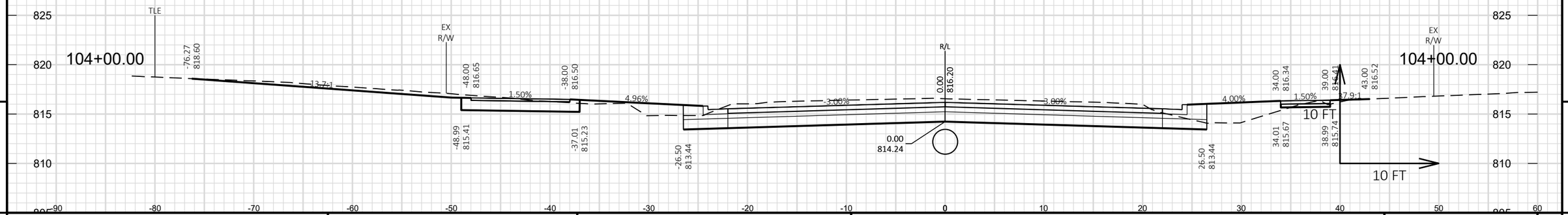
104+92.40
DRIVEWAY LT

104+50.00



104+50.00

104+00.00



104+00.00

9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 251	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 121-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

106+00.00

106+00.00

EX R/W

EX R/W

840 835 830 825 820 815

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

END PROJECT
CTH VV
STA 105+80.00

105+50.00

105+50.00

EX R/W

R/L

EX R/W

TLE

-38.00 820.35

31.8:1

-3.00%

0.00 820.17

-3.00%

4.00%

36.57 820.41

1.50%

41.58 820.48

-4.0:1

52.52 819.34

6.8:1

0.00 818.21

-26.50 817.41

26.50 817.41

36.58 819.74

41.57 819.82

48.52 818.75

840 835 830 825 820 815 810

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

105+00.00

105+00.00

TLE

EX R/W

R/L

EX R/W

TLE

-58.00 819.58

22.5:1

-48.00 819.19

1.50%

-38.00 819.04

7.10%

-3.00%

0.00 818.74

-3.00%

4.00%

34.00 818.88

1.50%

39.01 818.96

-4.0:1

50.83 817.62

6.5:1

10 FT

10 FT

-48.99 817.96

-37.01 817.78

-26.50 815.99

0.00 816.78

26.50 815.99

34.01 818.12

39.00 818.29

46.83 817.00

840 835 830 825 820 815 810

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

9

9

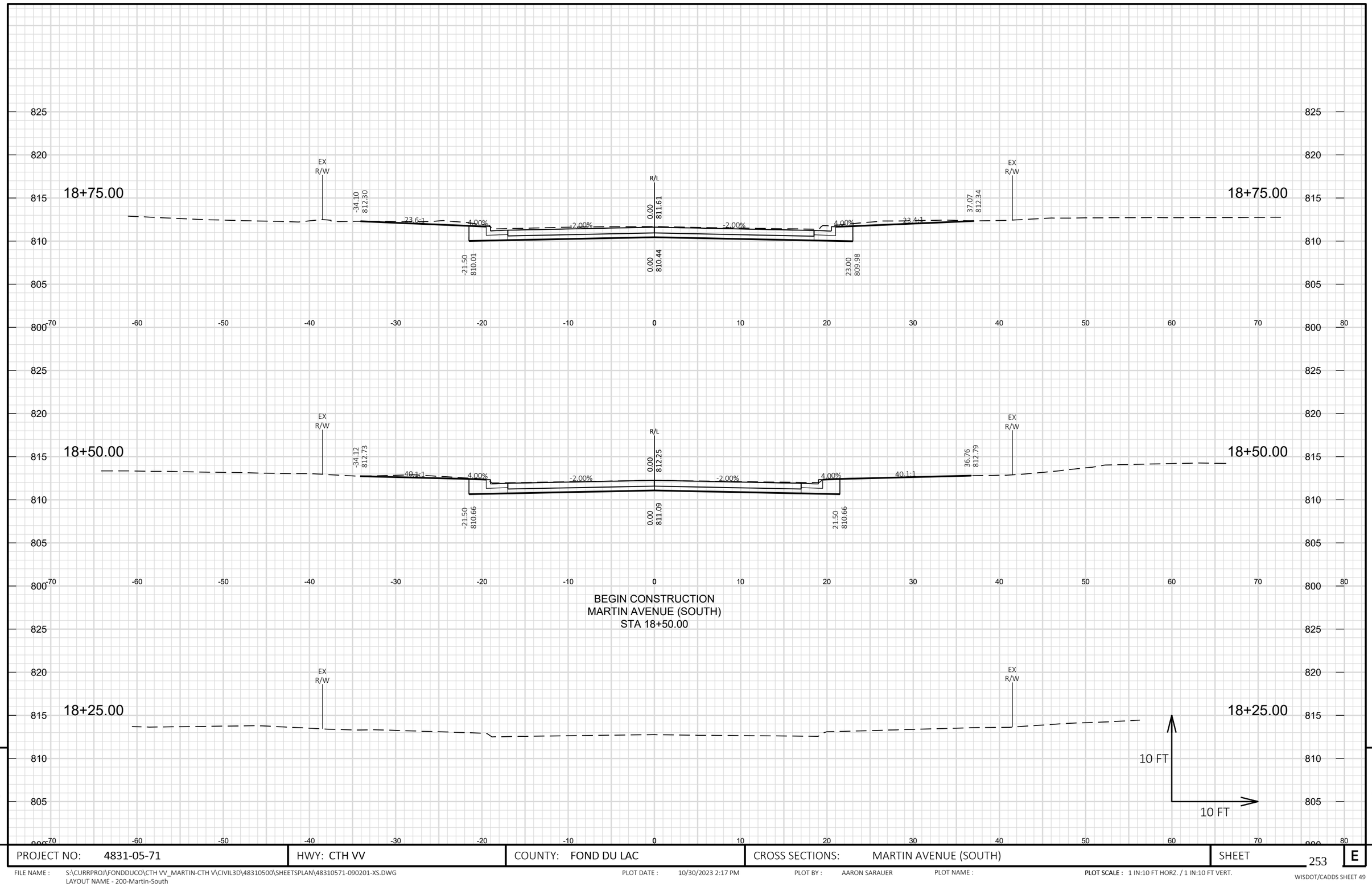
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH VV	SHEET 252	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 122-CTH VV

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME :

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

WISDOT/CADDS SHEET 49



BEGIN CONSTRUCTION
MARTIN AVENUE (SOUTH)
STA 18+50.00

9

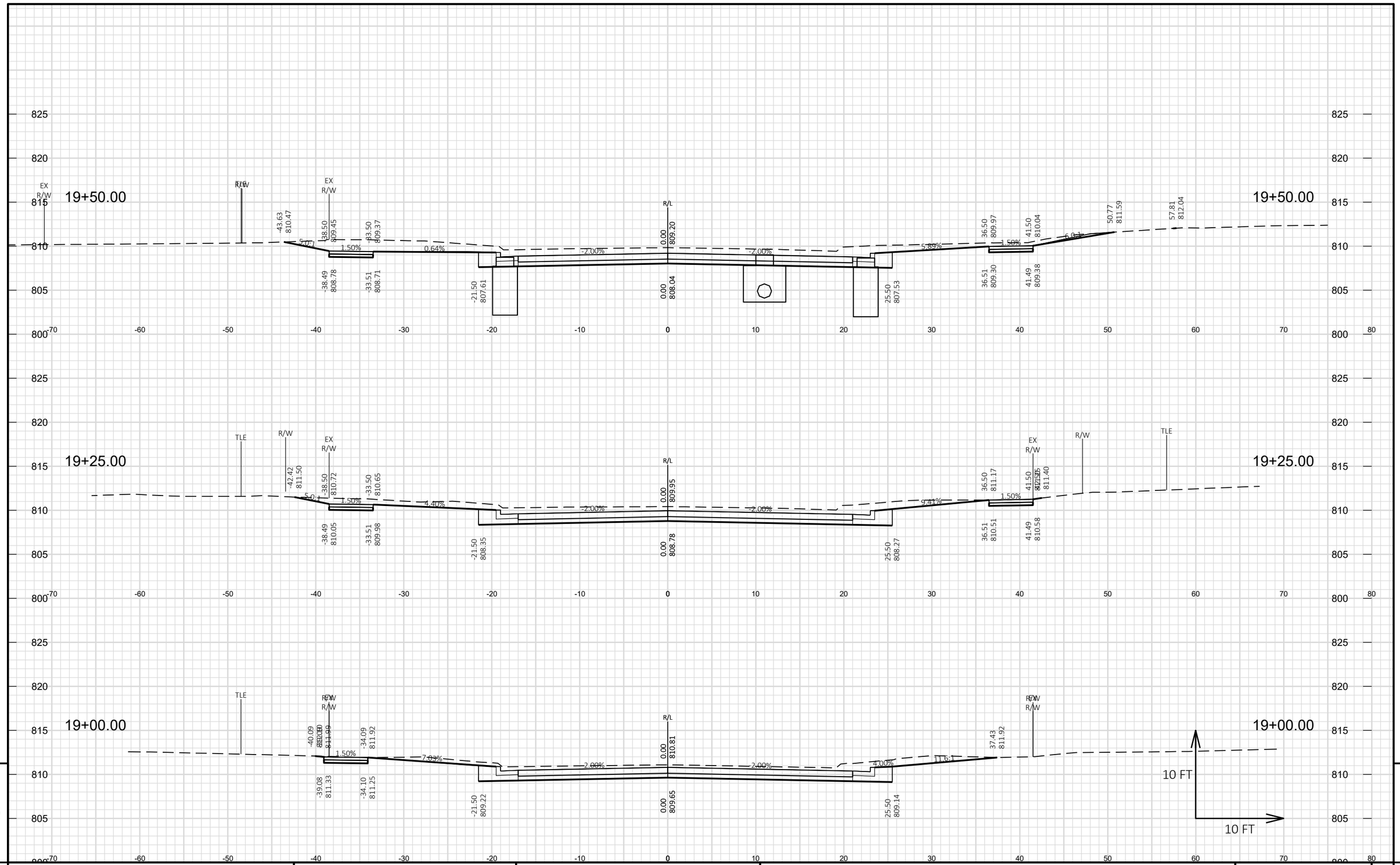
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (SOUTH)	SHEET 253	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 200-Martin-South

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (SOUTH)	SHEET 254	E

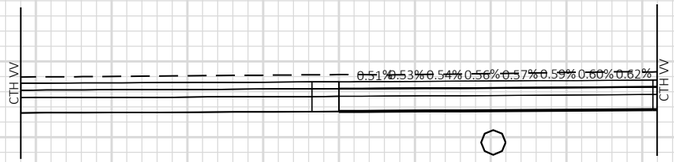
FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 201-Martin-South

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

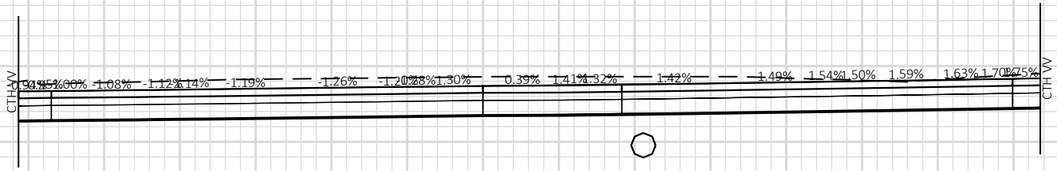
WISDOT/CADDS SHEET 49

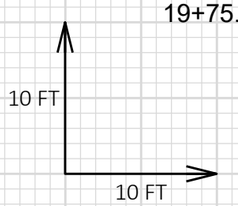
END CONSTRUCTION
MARTIN AVENUE (SOUTH)
STA 20+00.00

20+00.00



19+75.00





9

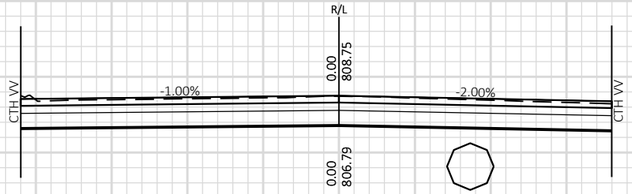
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (SOUTH)	SHEET 255	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 202-Martin-South

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

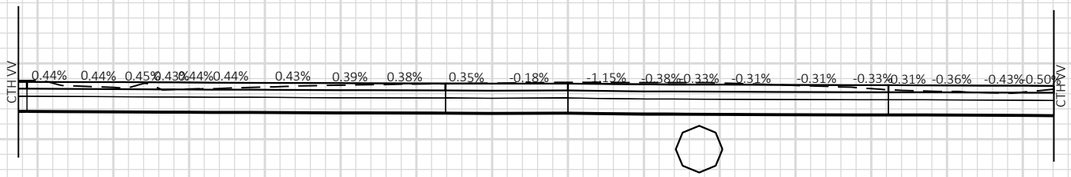
WISDOT/CADDS SHEET 49

20+50.00



20+50.00

20+25.00



20+25.00

20+00.00



20+00.00

10 FT

10 FT

BEGIN CONSTRUCTION
MARTIN AVENUE (NORTH)
STA 20+00.00

9

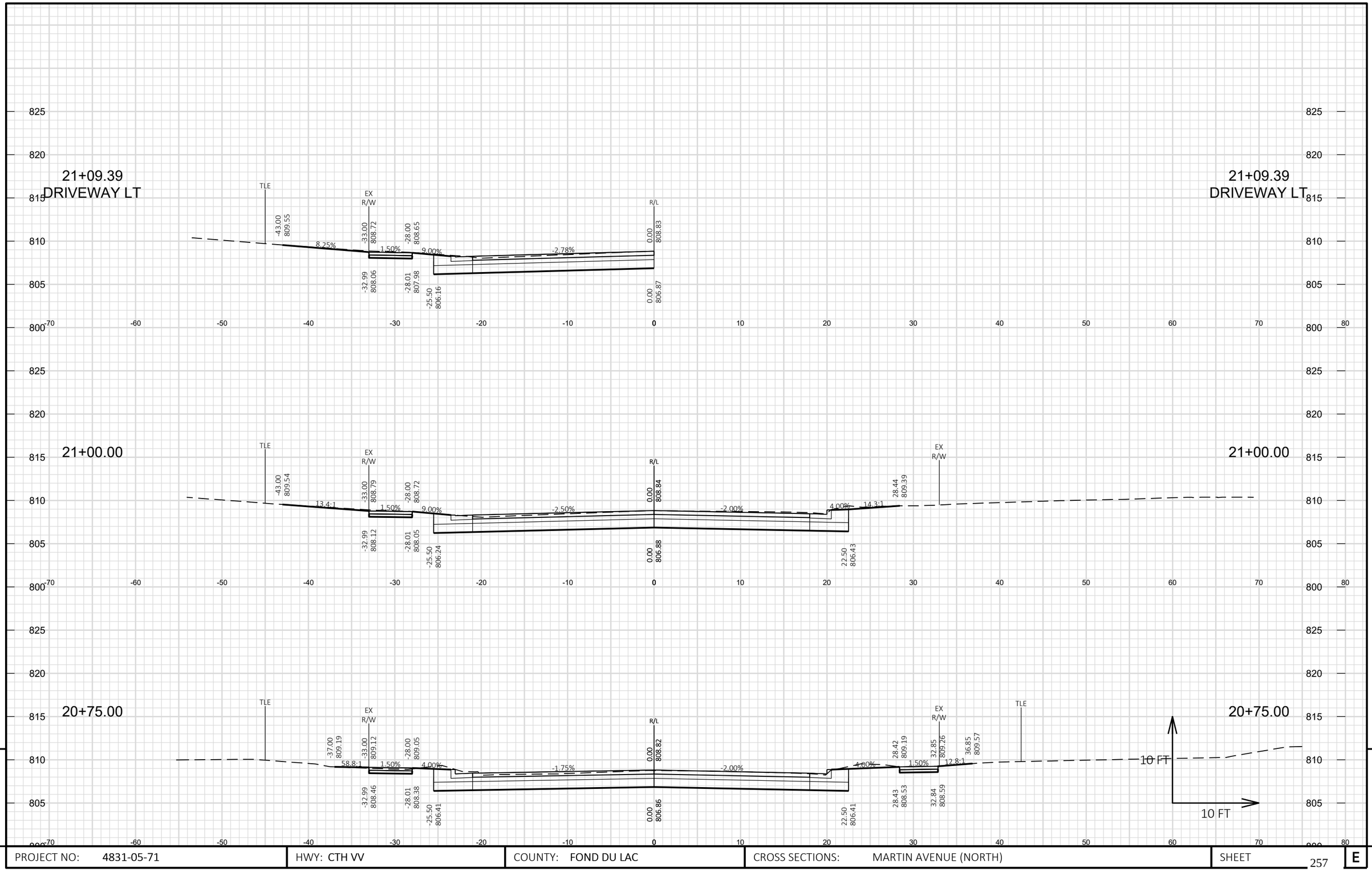
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (NORTH)	SHEET 256	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 300-Martin-North

PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (NORTH)	SHEET 257	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 301-Martin-North

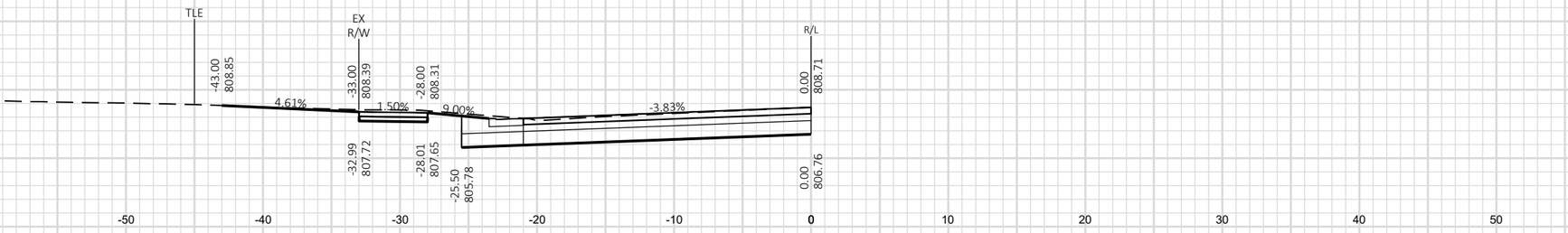
PLOT DATE : 10/30/2023 2:17 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

21+50.00



21+50.00

21+44.44
DRIVEWAY LT

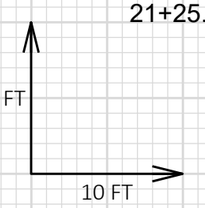


21+44.44
DRIVEWAY LT

21+25.00



21+25.00



9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (NORTH)	SHEET 258	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 302-Martin-North

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

22+00.00

EX R/W

EX R/W

825
820
815
810
805
800

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80

END CONSTRUCTION
MARTIN AVENUE (NORTH)
STA 21+90.00

21+75.00

TLE

EX R/W

R/L

EX R/W

-37.00 808.71
-33.00 808.40
-28.00 808.32
0.00 808.52
28.34 809.05
-32.99 807.73
-28.01 807.66
-23.50 805.48
0.00 806.56
22.50 806.11

13.0:1 1.50% 4.00% -4.63% -2.00% 4.00% 14.9:1

10 FT
10 FT

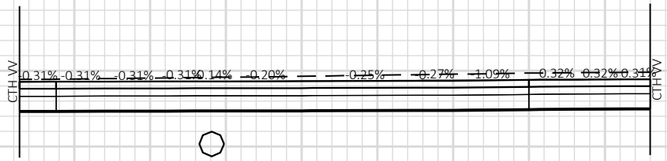
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PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: MARTIN AVENUE (NORTH)	SHEET 259 E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 303-Martin-North

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



29+75.00

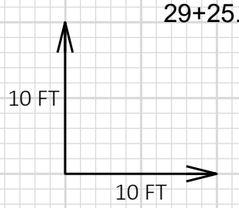


29+50.00

BEGIN CONSTRUCTION
SHERWOOD BOULEVARD (SB)
STA 29+40.00



29+25.00



29+75.00

29+50.00

29+25.00

9

9

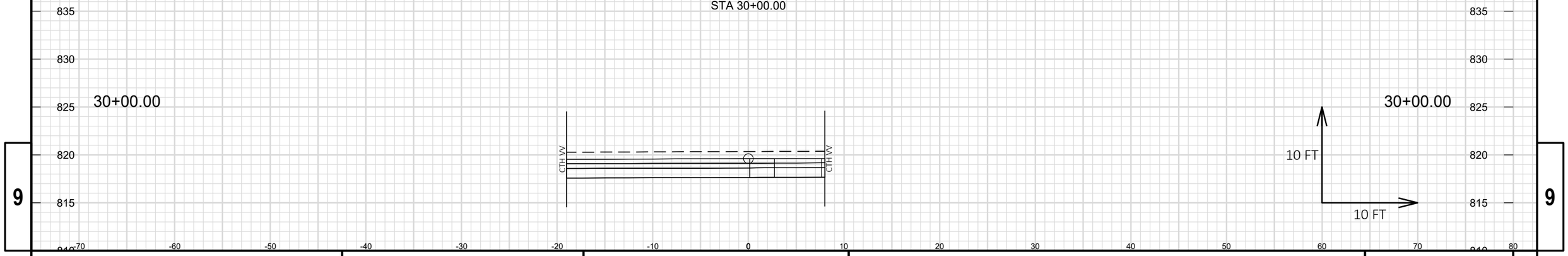
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: SHERWOOD BOULEVARD (SB)	SHEET 260	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 400-Sherwood-SB

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION
SHERWOOD BOULEVARD (SB)
STA 30+00.00



9

9

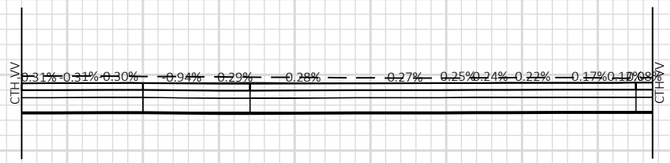
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: SHERWOOD BOULEVARD (SB)	SHEET 261	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 401-Sherwood-SB

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

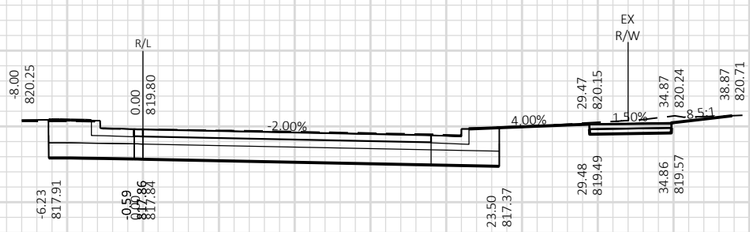
WISDOT/CADDS SHEET 49

39+75.00



39+75.00

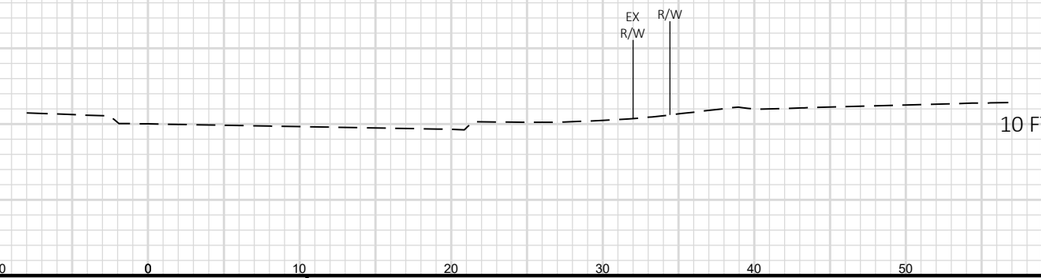
39+50.00



39+50.00

BEGIN CONSTRUCTION
SHERWOOD BOULEVARD (NB)
STA 39+40.00

39+25.00



39+25.00

9

9

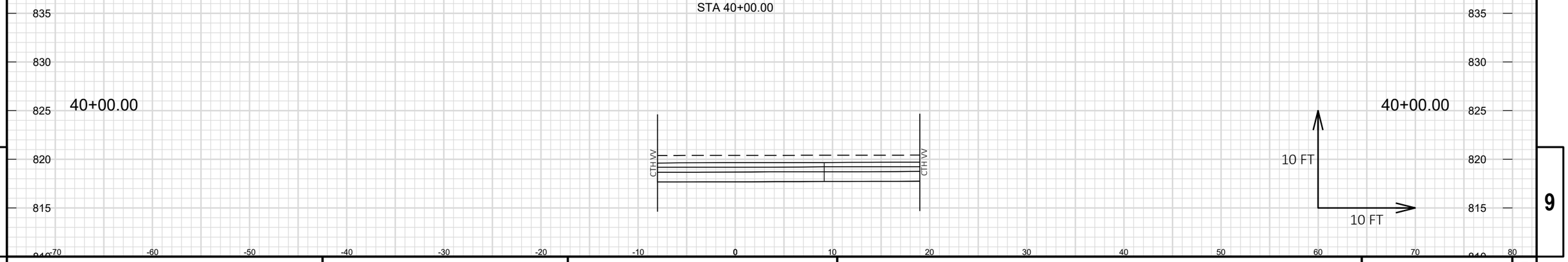
PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: SHERWOOD BOULEVARD (NB)	SHEET 262	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 500-Sherwood-NB

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END CONSTRUCTION
SHERWOOD BOULEVARD (NB)
STA 40+00.00



9

9

PROJECT NO: 4831-05-71	HWY: CTH VV	COUNTY: FOND DU LAC	CROSS SECTIONS: SHERWOOD BOULEVARD (NB)	SHEET 263	E

FILE NAME : S:\CURRPROJ\FONDDUCO\CTH VV_MARTIN-CTH V\CIVIL3D\48310500\SHEETSPLAN\48310571-090201-XS.DWG
LAYOUT NAME - 501-Sherwood-NB

PLOT DATE : 10/30/2023 2:18 PM PLOT BY : AARON SARAUER PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov