

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
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	<del>Structure Plans</del>
Section No.	8	<del>Computer Earthwork Data</del>
Section No.	9	Cross Sections

TOTAL SHEETS = 136

PROJECT ID:

5939-00-70

02

COUNTY:

IOWA

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

## PLAN OF PROPOSED IMPROVEMENT

### COBB - AVOCA

USH 18 TO KENNEDY STREET

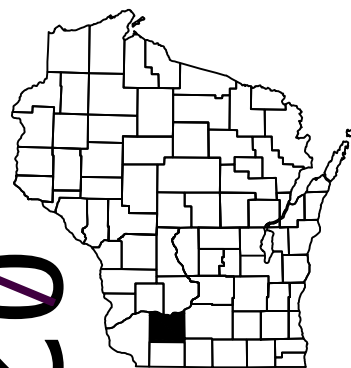
STH 80

IOWA COUNTY

STATE PROJECT NUMBER

5939-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5939-00-70		



DESIGN DESIGNATION

A.A.D.T.	2023	=	1,710
A.A.D.T.	2043	=	1,710
D.H.V.		=	230
D.D.		=	60/40
T.		=	19.7%
DESIGN SPEED		=	40 - 60 MPH
ESALS		=	630,000

CONVENTIONAL SYMBOLS

PLAN

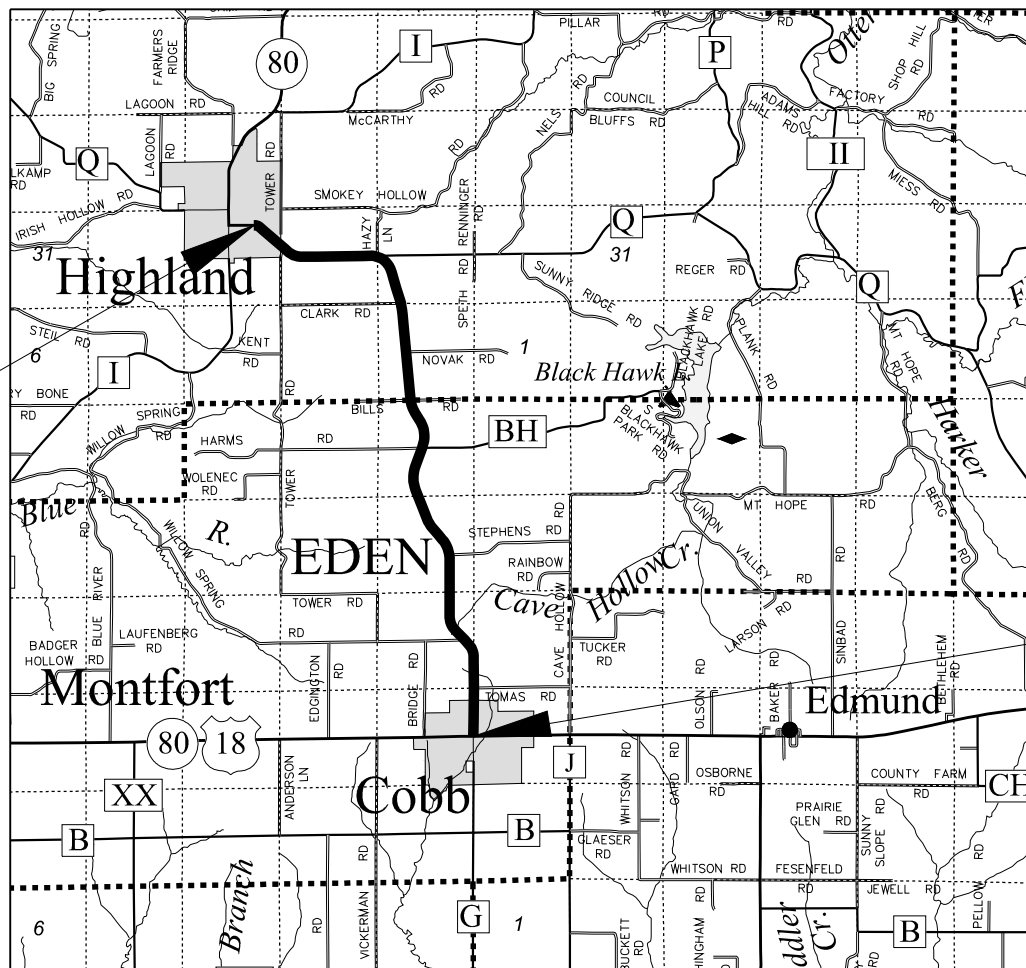
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE

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

END PROJECT  
STA 351+50.00 'WB'

BEGIN PROJECT  
STA 0+24.49 'WB'  
Y= 156,234.67  
X= 325,838.03



LAYOUT  
SCALE 0 2 MI  
TOTAL NET LENGTH OF CENTERLINE = 6.652 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), IOWA 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  
VILLAGE OF COBB  
*Robert Ruel*  
Date: 7-6-22  
Signature and Title of Official

ORIGINAL PLANS PREPARED BY  
**KL Engineering**  
[A] Better Experience



DATE: 07-05-2022  
*Joshua P. Melby*  
(Professional Engineer Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	KL ENGINEERING
Surveyor	KL ENGINEERING
Designer	JOSH KOEBERNICK, P.E.
Project Manager	SW REGION
Regional Examiner	MARC SCHWEIGER, P.E.
Regional Supervisor	

APPROVED FOR THE DEPARTMENT  
DATE: 07-14-2022  
**Josh Koebernick**  
(Signature)

E

**UTILITY CONTACTS**

**ELECTRICITY**

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MINERAL POINT, WI 53565-1000  
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(608) 341-9623 (M)  
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**GAS/PETROLEUM**

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**COMMUNICATIONS**

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**COMMUNICATIONS**

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CALVIN.KLADE@FTR.COM

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COBB, WI 53526  
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MGFLANAGAN@CHARTER.NET

**WATER**

VILLAGE OF COBB  
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COBB, WI 53526  
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MGFLANAGAN@CHARTER.NET

**WATER**

VILLAGE OF HIGHLAND  
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P.O. BOX 284  
HIGHLAND, WI 53543  
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THEBGEN@VILLAGEOFHIGHLAND.NET



**STANDARD ABBREVIATIONS**

- BAD BASE AGGREGATE DENSE
- BM BENCH MARK
- BLDG. BUILDING
- CTR CENTER
- C/L CENTERLINE
- C.E. COMMERCIAL ENTRANCE
- CONC. CONCRETE
- CSW CONCRETE SIDEWALK
- CMCP CORRUGATED METAL CULVERT PIPE
- CP CULVERT PIPE
- CPCS CULVERT PIPE CORRUGATED STEEL
- CPRC CULVERT PIPE REINFORCED CONCRETE
- CPRCHE CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CONSTRUCTION PERMIT
- CPT EASTBOUND
- EB ELECTRIC
- ELEC INVERT ELEVATION
- IE EXISTING
- EX FIBER OPTIC
- FO FIELD ENTRANCE
- F.E. GAS
- GAS HMA
- HMA HOT MIX ASPHALT
- HSE. HOUSE
- LHF LEFT HAND FORWARD
- MH MANHOLE
- MAX. MAXIMUM
- MIN. MINIMUM
- NOR. NORMAL
- NTS NOT TO SCALE
- PLE PERMANENT LIMITED EASEMENT
- P.E. PRIVATE ENTRANCE
- P.L. PROPERTY LINE
- PROP. PROPOSED
- PRW PROPOSED RIGHT-OF-WAY
- RAD RADIUS
- R/L REFERENCE LINE
- RCCP REINFORCED CONCRETE CULVERT PIPE
- REQ'D. REQUIRED
- RHF RIGHT HAND FORWARD
- RW RIGHT-OF-WAY LINE
- SAN SANITARY SEWER
- SHLD SHOULDER
- SW SIDEWALK
- SF SQUARE FEET
- SY SQUARE YARD
- S.D.D. STANDARD DETAIL DRAWING
- STA STATION
- SS STORM SEWER
- TEL TELEPHONE
- TLE TEMPORARY LIMITED EASEMENT
- TYP TYPICAL
- WAT WATER
- WB WESTBOUND

**GENERAL NOTES**

ALL RADII DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

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

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS AND PLAN SHEETS ARE APPROXIMATE.

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

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.

THE EXACT LOCATIONS OF PRIVATE ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR AS SHOWN ON THE PLANS.

SIDEWALK AND CURB & GUTTER REPLACEMENT SHOULD BE TO THE NEAREST JOINT. LIMITS ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE ENGINEER. MATCH EXISTING SIDEWALK WIDTH.

PROTECT INLETS WITH PROPER INLET PROTECTION AT LOCATIONS EXHIBITING RISK OF BEING IMPACTED BY CONSTRUCTION OPERATIONS AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THE OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

PLACE TOPSOIL IN ALL GRADED AREAS AS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED. SEED AND FERTILIZE ALL AREAS 5 DAYS AFTER PLACEMENT OF TOPSOIL.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY, OR FLOODPLAIN OF ANY WATERWAY.

SAWCUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM "TRAFFIC CONTROL COVERING SIGNS TYPE 2".

4 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 4 FEET, 5 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 5 FEET AND 6 FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT 6 FEET.

FOR ALL CURB RAMPS, REFER TO THE STANDARD DETAIL DRAWINGS FOR THE RAMP TAPER DIMENSIONS. SIDEWALK WIDTHS ARE DIMENSIONED IN THE PLAN.

THE CONTRACTOR WILL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT THE PEDESTRIAN ACCESS.

**HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSE THICKNESSES AS FOLLOWS:**

ROADWAY	TOTAL PAVEMENT THICKNESS	LOWER LAYER THICKNESS & TYPE	UPPER LAYER THICKNESS & TYPE
STH 80 (OVERLAY)	3.50"	1.75" (4 LT 58-28 S)	1.75" (4 LT 58-28 S)
STH 80 (CULVERT REPLACEMENTS)	5.25"	3" (ASPHALTIC SURFACE)	2.25" (ASPHALTIC SURFACE)

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 - 0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 28.79 ACRES  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.59 ACRES

**ORDER OF DETAIL SHEETS**

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- CURB RAMP DETAILS (Includes Erosion Control)
- TRAFFIC CONTROL PLAN
- DETOUR PLAN
- ALTERNATE ROUTE
- PEDESTRIAN DETOUR PLAN

**ALIGNMENT IDENTIFIERS**

- 'CG' CTH G
- 'WB' STH 80

**DNR LIAISON**

DEPARTMENT OF NATURAL RESOURCES  
ERIC HEGGELUND  
3911 FISH HATCHERY ROAD  
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ERIC.HEGGELUND@WISCONSIN.GOV

**WISDOT**

WISDOT SOUTHWEST REGION (MADISON)  
JOSH KOEBERNICK, P.E.  
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JOSHUA.KOEBERNICK@DOT.WI.GOV

**CONSULTANT**

KL ENGINEERING, INC.  
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JMELBY@KLENGINEERING.COM

PROJECT NO: 5939-00-70

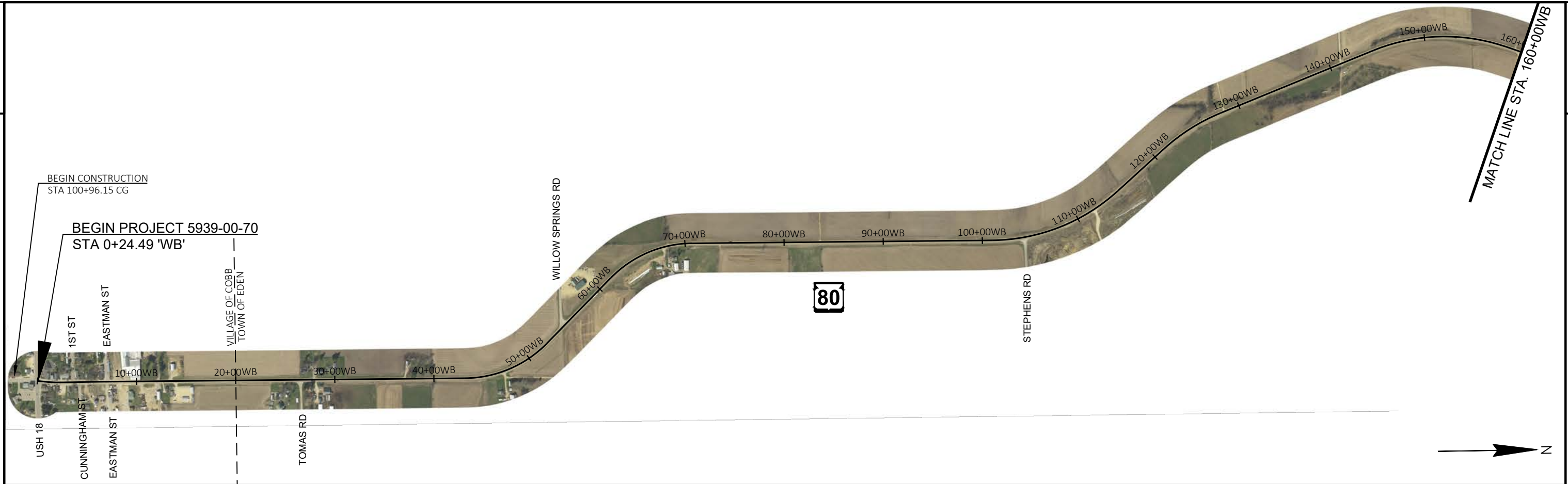
HWY: STH 80

COUNTY: IOWA

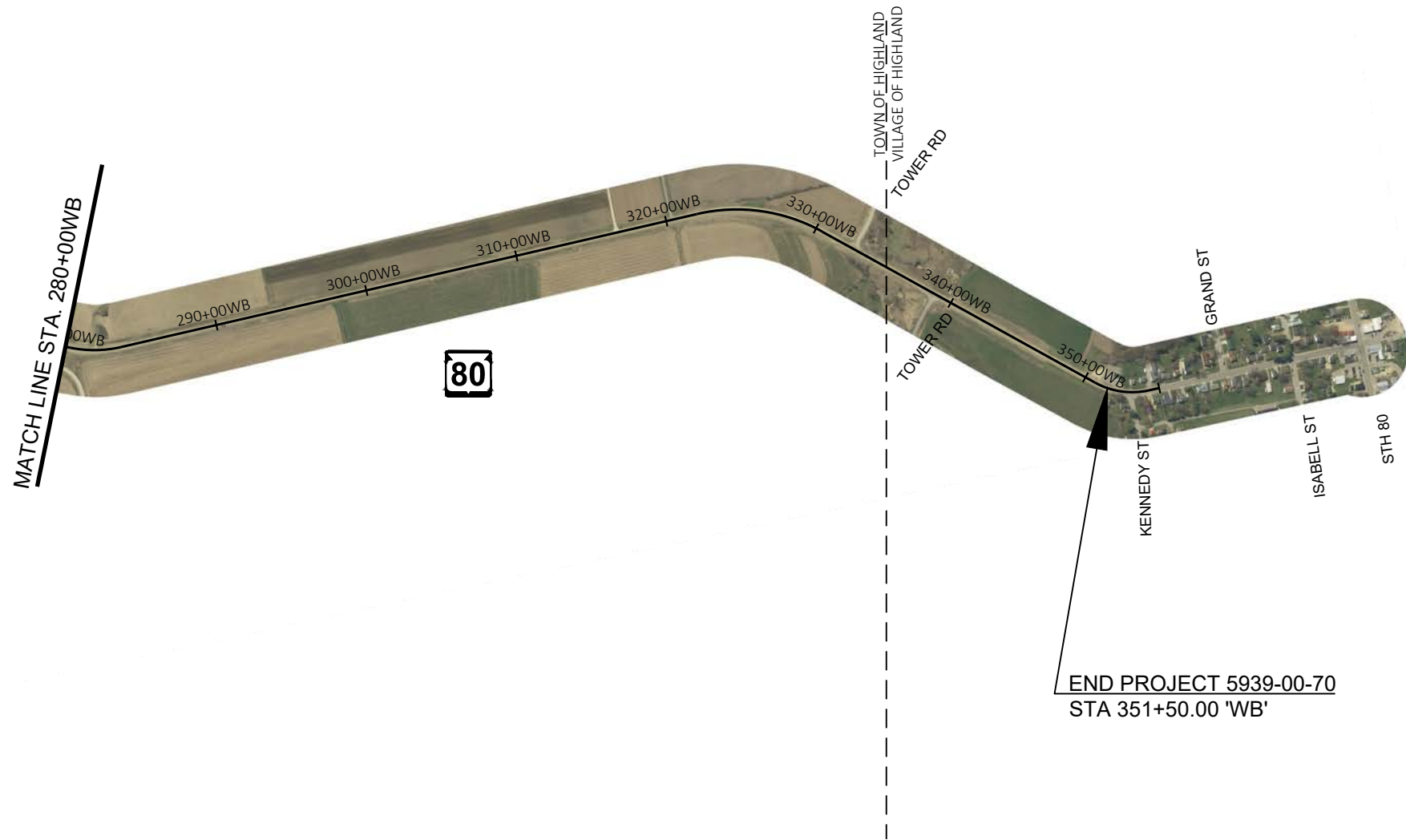
GENERAL NOTES

SHEET

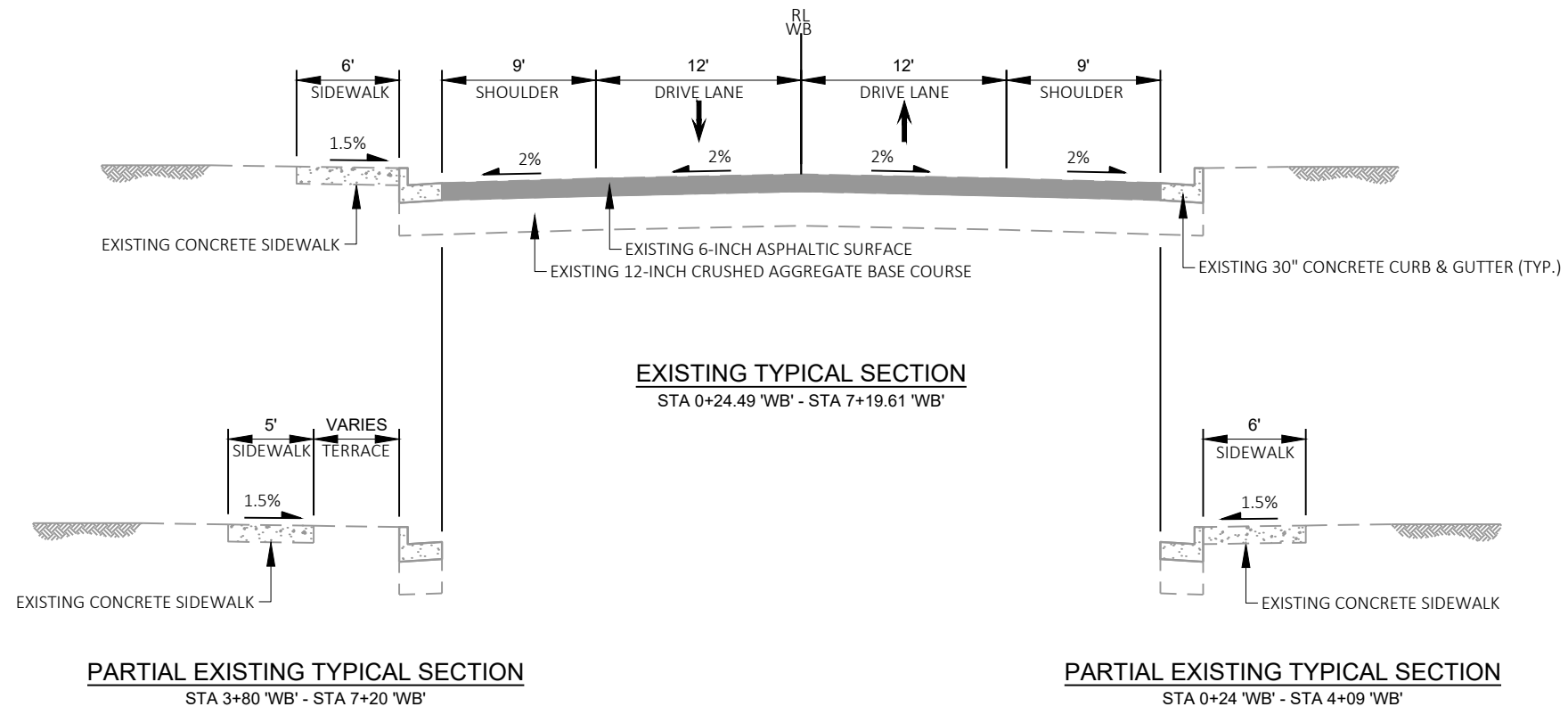
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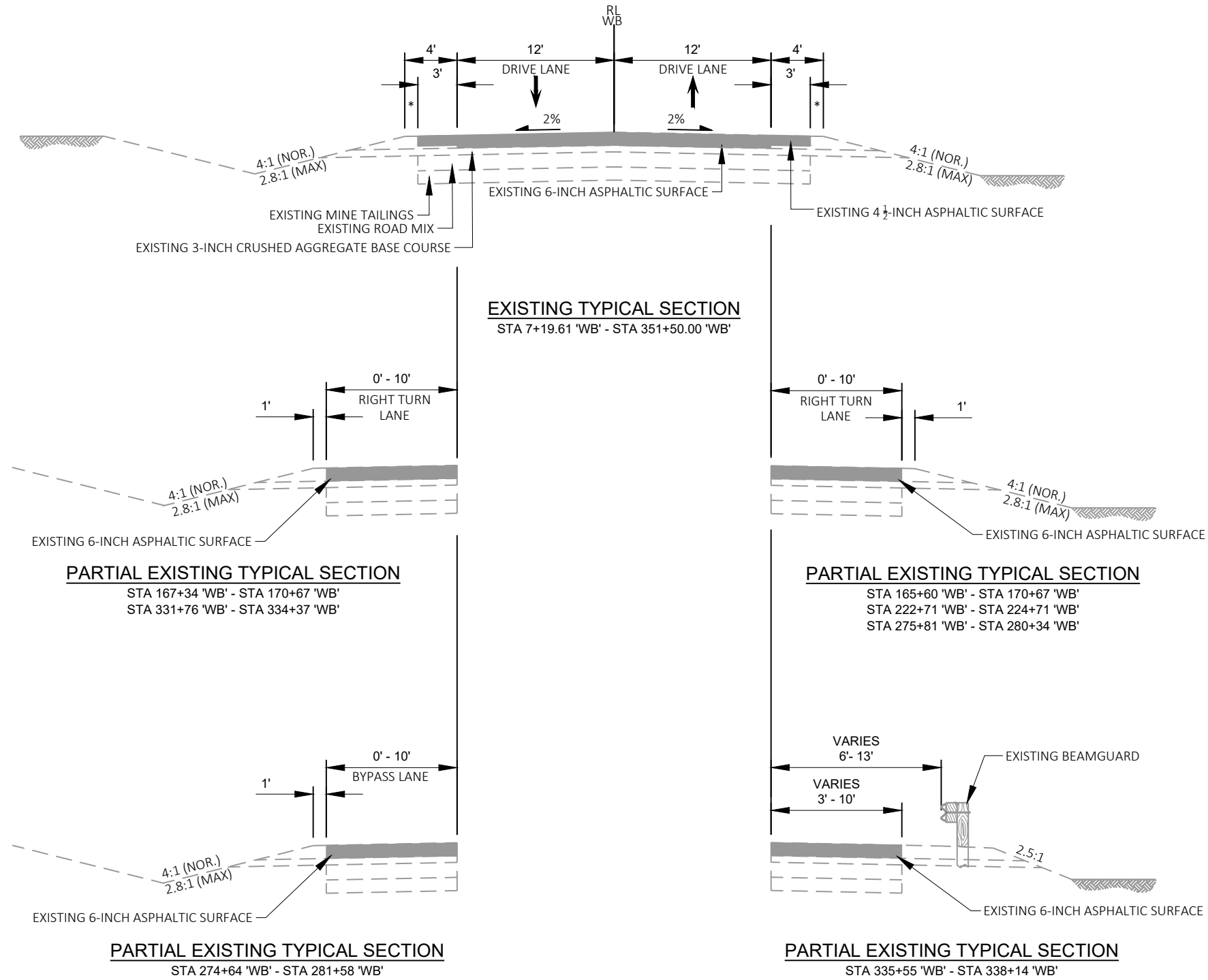


PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	PROJECT OVERVIEW	SHEET	E
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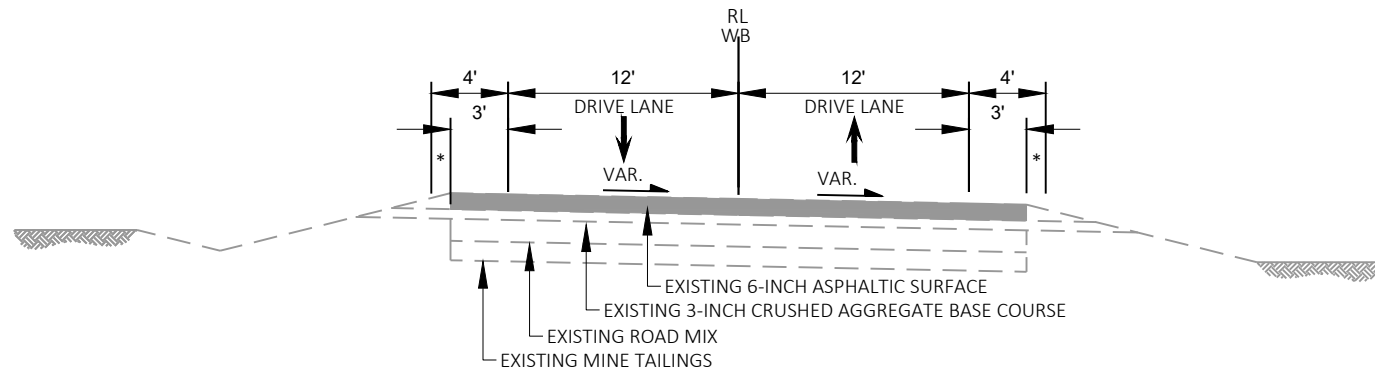




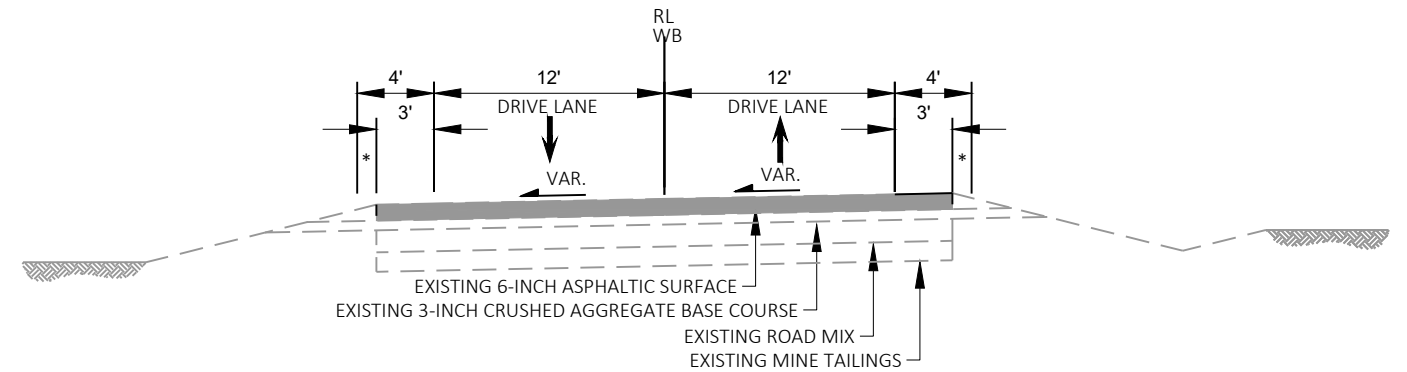




\* 1-FT TO 6-FT GRAVEL SHOULDER IN VARIOUS LOCATIONS. FIELD VERIFICATION REQUIRED



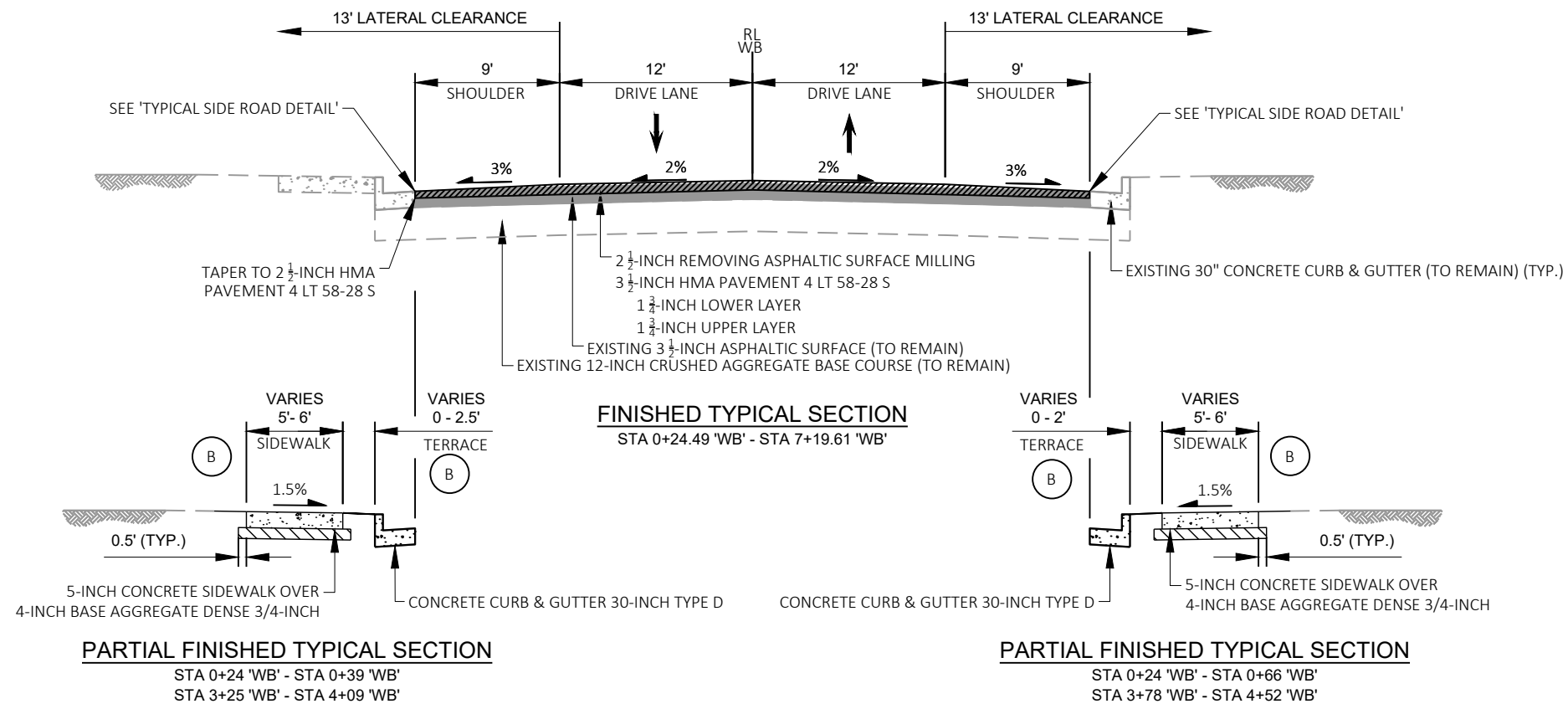
**EXISTING TYPICAL SECTION**  
SUPERELEVATED



\* 1-FT TO 6-FT GRAVEL SHOULDER IN VARIOUS LOCATIONS. FIELD VERIFICATION REQUIRED  
**EXISTING TYPICAL SECTION**  
SUPERELEVATED

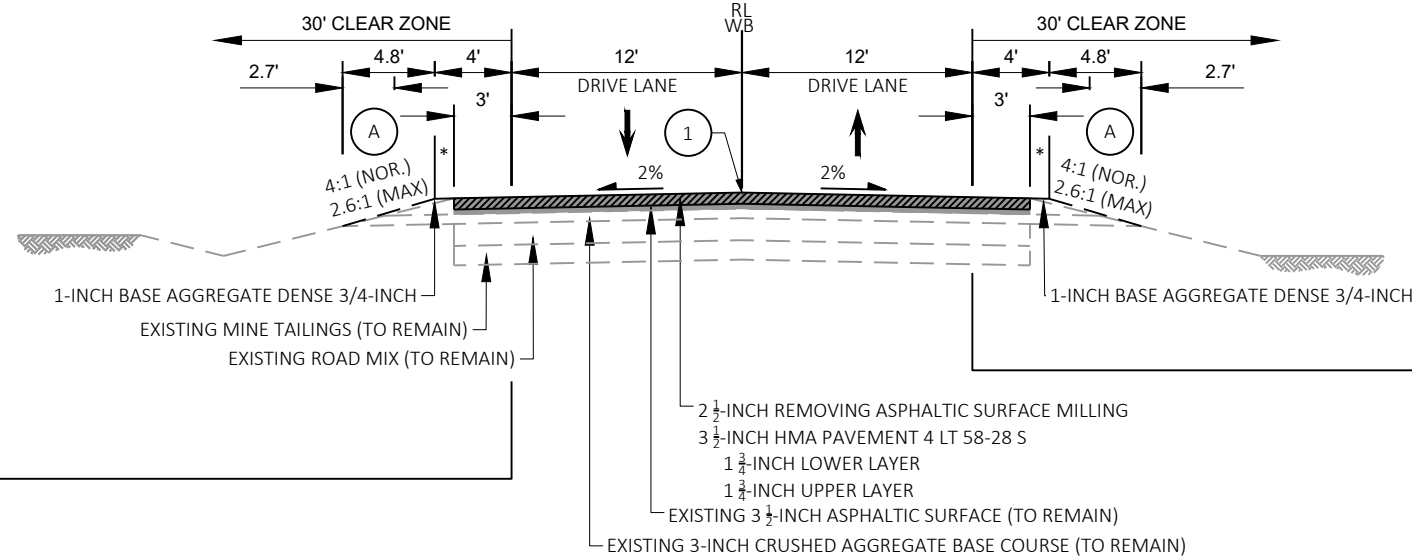
\* 1-FT TO 6-FT GRAVEL SHOULDER IN VARIOUS LOCATIONS. FIELD VERIFICATION REQUIRED

LEGEND	
(A)	FERTILIZER TYPE B & SEEDING MIX #30
(B)	TOPSOIL, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A & SEEDING MIXTURE NO. 40
(1)	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
(2)	STEEL PLATE BEAM GUARD CLASS & STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (SEE PLAN SHEETS FOR LOCATIONS)

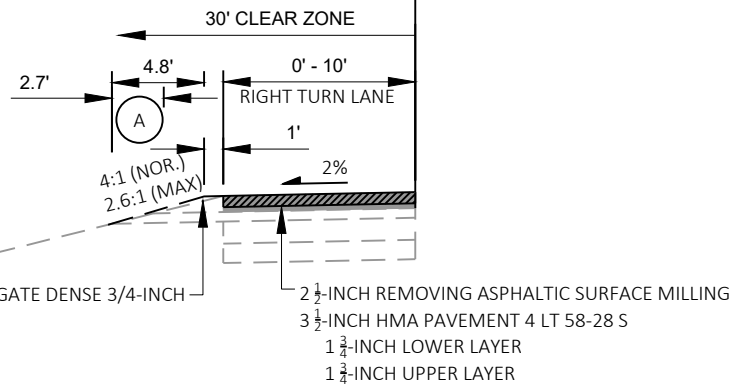




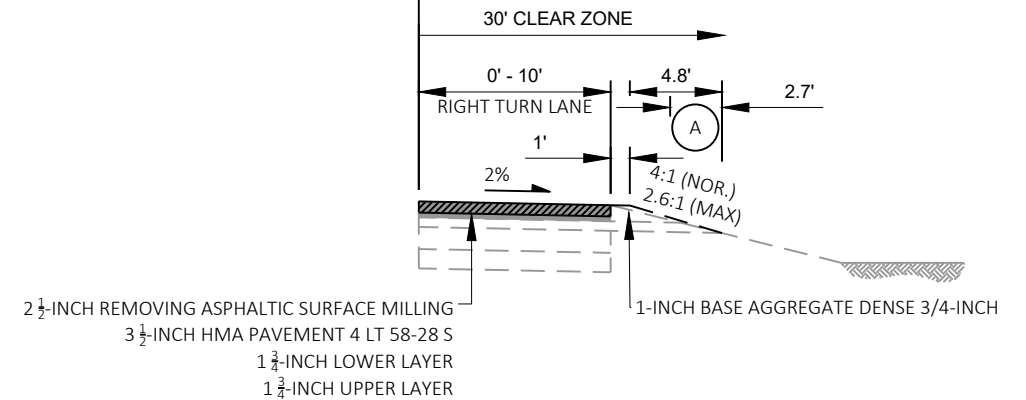
\* 1-FT TO 6-FT GRAVEL SHOULDER IN VARIOUS LOCATIONS. FIELD VERIFICATION REQUIRED



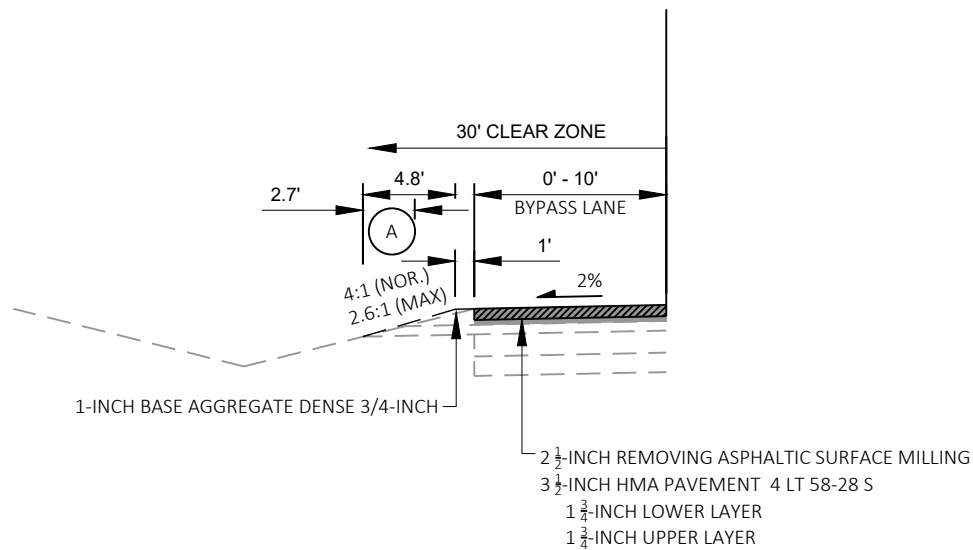
**FINISHED TYPICAL SECTION**  
STA 7+19.61 'WB' - STA 351+50.00 'WB'



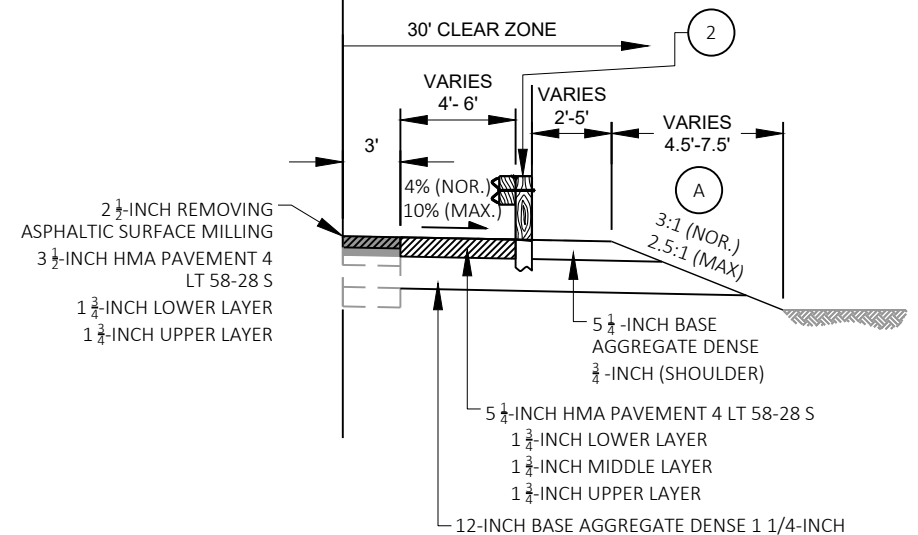
**PARTIAL FINISHED TYPICAL SECTION**  
STA 167+34 'WB' - STA 170+67 'WB'  
STA 331+76 'WB' - STA 334+37 'WB'



**PARTIAL FINISHED TYPICAL SECTION**  
STA 165+60 'WB' - STA 170+67 'WB'  
STA 222+71 'WB' - STA 224+71 'WB'  
STA 275+81 'WB' - STA 280+34 'WB'

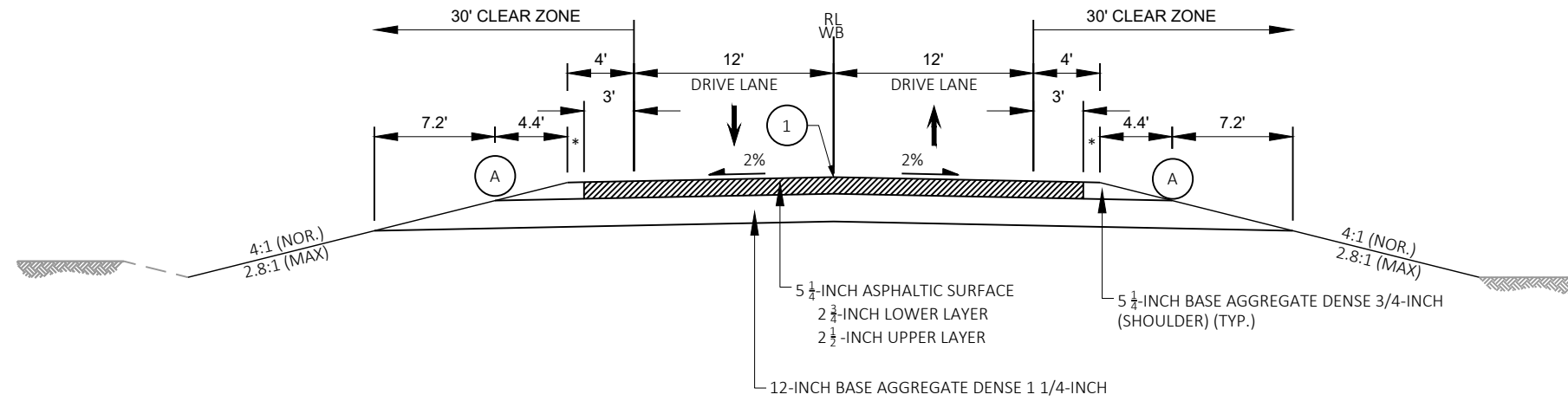


**PARTIAL FINISHED TYPICAL SECTION**  
STA 274+64 'WB' - STA 281+58 'WB'



**PARTIAL FINISHED TYPICAL SECTION**  
STA 332+93.66 'WB' - STA 336+24.25 'WB'

LEGEND	
(A)	FERTILIZER TYPE B & SEEDING MIX #30
(B)	TOPSOIL, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A & SEEDING MIXTURE NO. 40
(1)	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
(2)	STEEL PLATE BEAM GUARD CLASS & STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (SEE PLAN SHEETS FOR LOCATIONS)

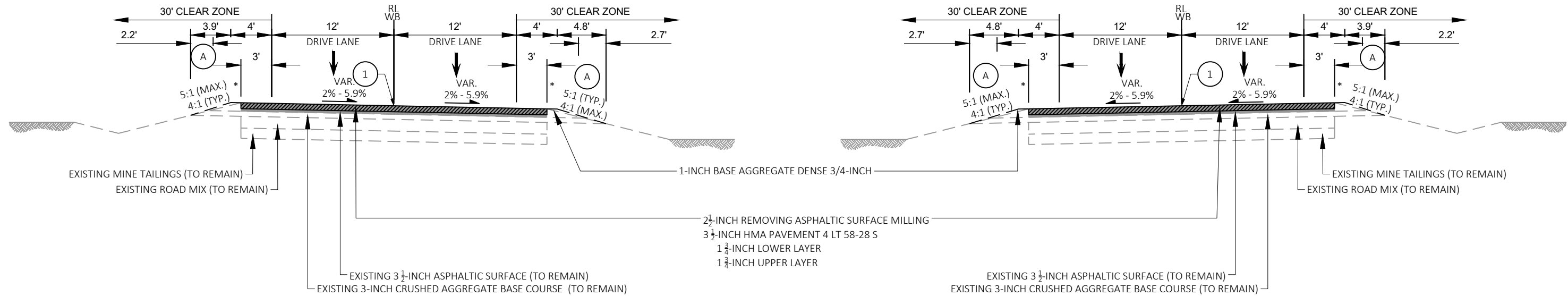


- LEGEND**
- (A) FERTILIZER TYPE B & SEEDING MIX #30
  - (B) TOPSOIL, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A & SEEDING MIXTURE NO. 40
  - (1) ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
  - (2) STEEL PLATE BEAM GUARD CLASS & STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (SEE PLAN SHEETS FOR LOCATIONS)

**FINISHED TYPICAL SECTION**

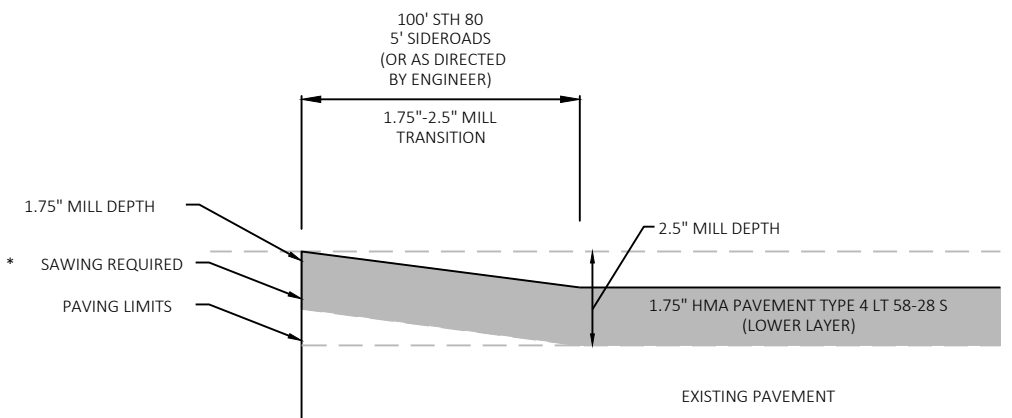
- CULVERT REPLACEMENT**
- STA. 22+37.90 'WB' - STA. 22+58.27 'WB'
  - STA. 33+92.36 'WB' - STA. 34+12.54 'WB'
  - STA. 45+05.45 'WB' - STA. 45+33.29 'WB'
  - STA. 62+52.46 'WB' - STA. 62+72.47 'WB'
  - STA. 80+92.01 'WB' - STA. 81+12.01 'WB'
  - STA. 103+65.31 'WB' - STA. 103+85.62 'WB'
  - STA. 136+85.21 'WB' - STA. 137+05.21 'WB'
  - STA. 209+12.96 'WB' - STA. 209+32.96 'WB'
  - STA. 241+02.31 'WB' - STA. 241+22.32 'WB'
  - STA. 248+76.66 'WB' - STA. 248+96.67 'WB'
  - STA. 280+19.50 'WB' - STA. 280+78.72 'WB'
  - STA. 299+05.82 'WB' - STA. 299+25.83 'WB'
  - STA. 307+53.01 'WB' - STA. 307+73.02 'WB'
  - STA. 314+19.67 'WB' - STA. 314+39.67 'WB'

\* 1-FT TO 6-FT GRAVEL SHOULDER IN VARIOUS LOCATIONS. FIELD VERIFICATION REQUIRED



**FINISHED TYPICAL SECTION**  
SUPERELEVATED

**FINISHED TYPICAL SECTION**  
SUPERELEVATED

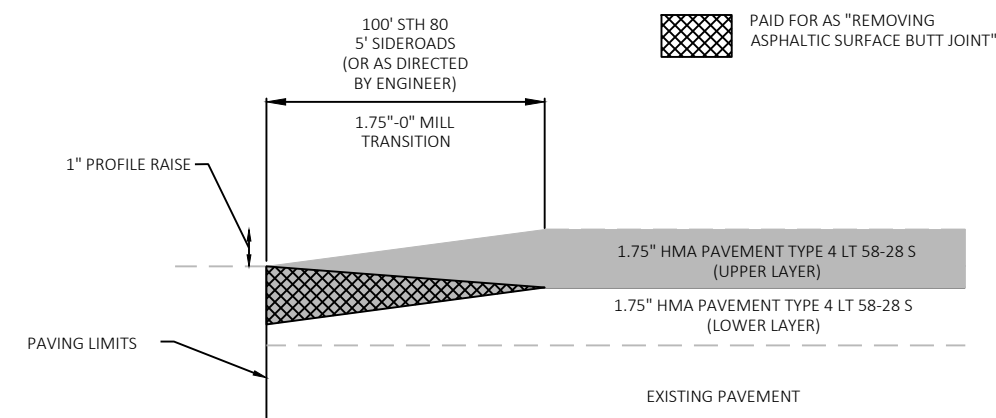


MILL AND REMOVE 2.5" OF EXISTING SURFACE, EXCEPT IN TRANSITION AREA  
 MILL AND REMOVE 1.75" TO 2.5" OF EXISTING SURFACE IN TRANSITION AREA  
 OVERLAY 1.75" HMA PAVEMENT TYPE 4 LT 58-28 S (LOWER LAYER)

\* SAWING IS INCIDENTAL TO 'REMOVING ASPHALTIC SURFACE BUTT JOINT' ITEM

**STH 80 JOINT TRANSITION DETAIL: LOWER LAYER**

REQUIRED AT BEGIN AND END OF PROJECT  
 (EXACT LOCATION AND LENGTH TO BE DETERMINED BY THE ENGINEER)



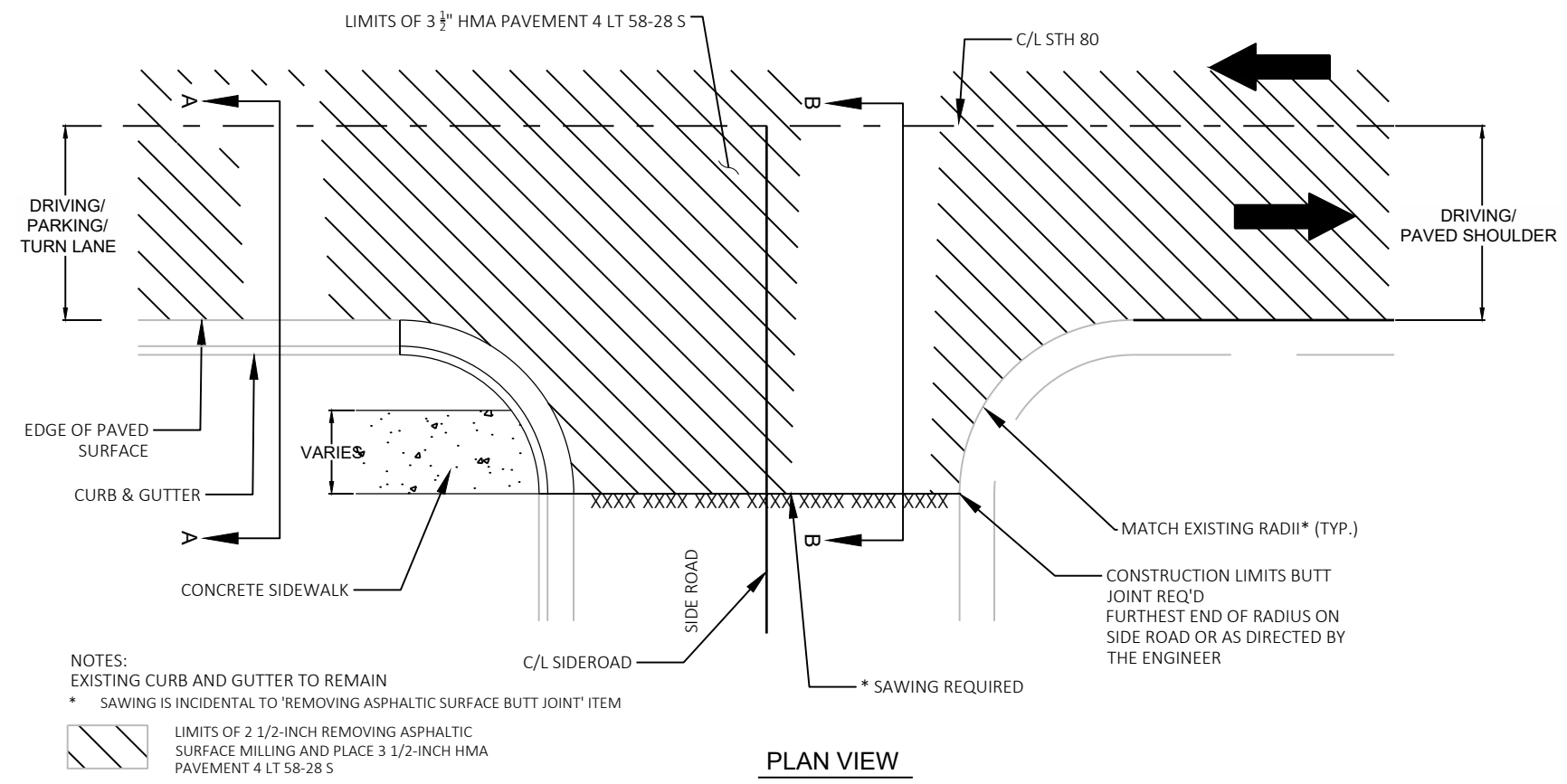
**STH 80 MAINLINE REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL: UPPER LAYER**

REQUIRED AT BEGIN AND END OF PROJECT  
 (EXACT LOCATION AND LENGTH TO BE DETERMINED BY THE ENGINEER)

**REMOVING ASPHALTIC SURFACE BUTT JOINT**

**URBAN DETAIL**

**RURAL DETAIL**



NOTES:  
 EXISTING CURB AND GUTTER TO REMAIN  
 \* SAWING IS INCIDENTAL TO 'REMOVING ASPHALTIC SURFACE BUTT JOINT' ITEM

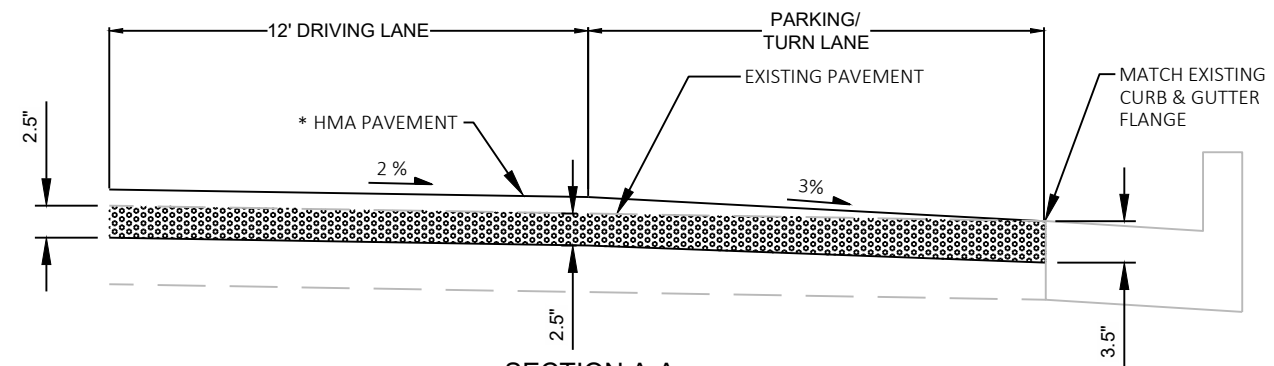
LIMITS OF 2 1/2-INCH REMOVING ASPHALTIC SURFACE MILLING AND PLACE 3 1/2-INCH HMA PAVEMENT 4 LT 58-28 S

**PLAN VIEW**

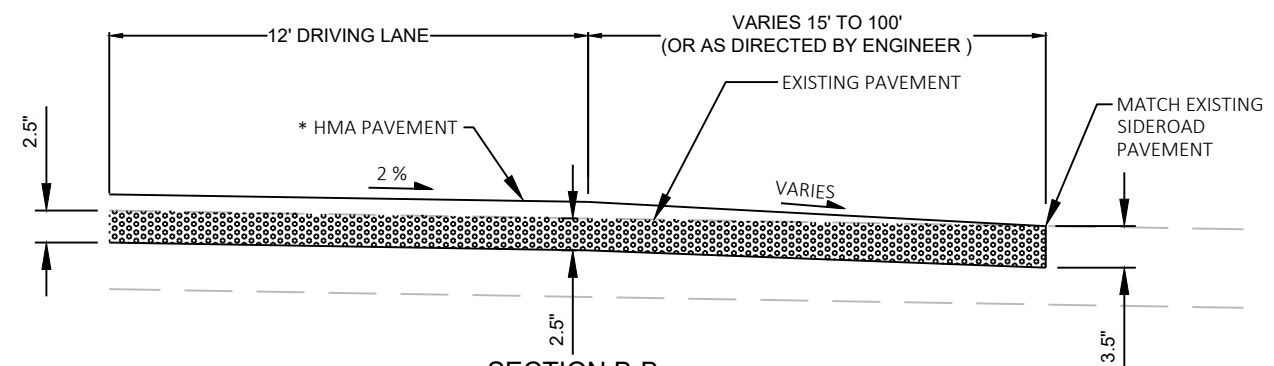
**TYPICAL SIDE ROAD DETAIL**

2 1/2-INCH REMOVING ASPHALTIC SURFACE MILLING

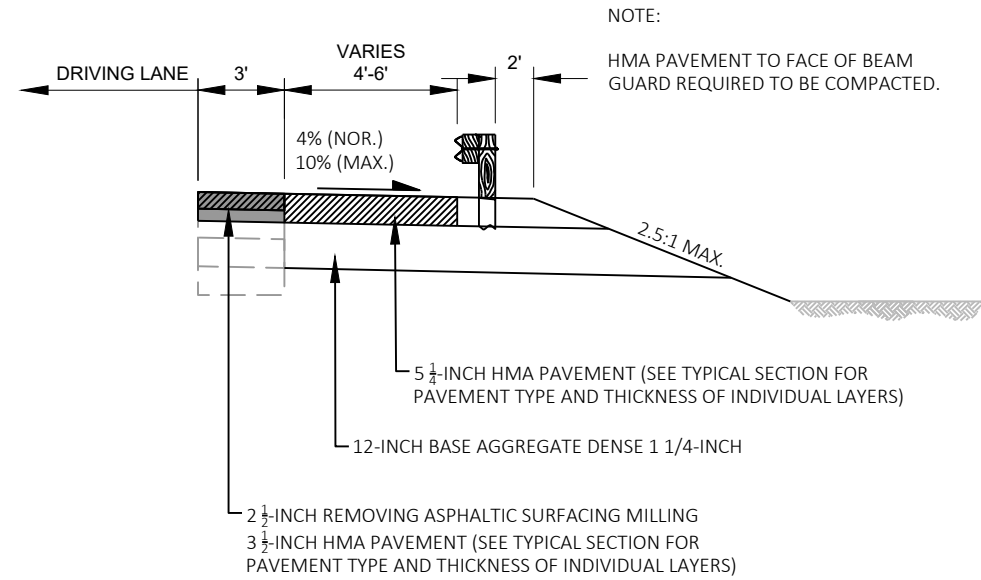
\* SEE TYPICAL SECTIONS FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS



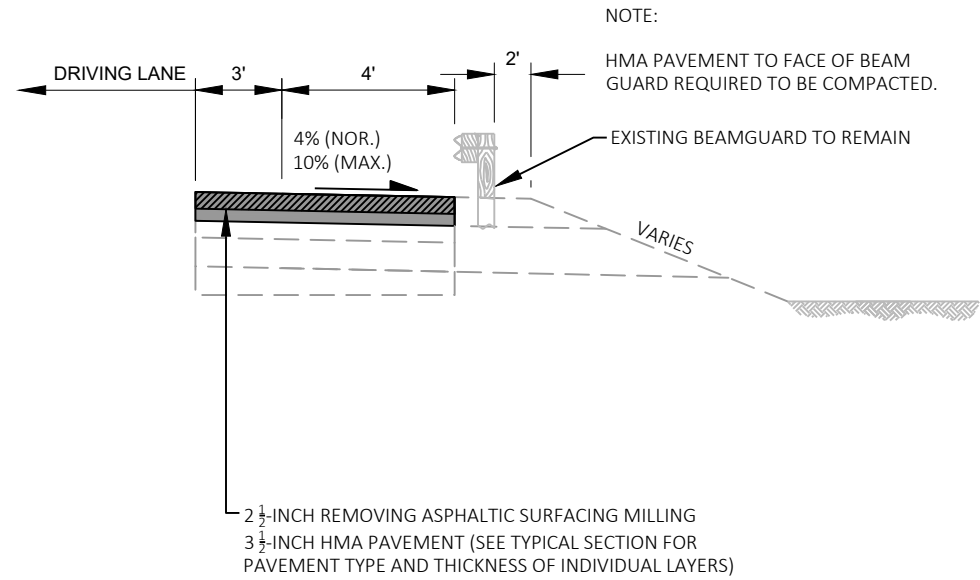
**SECTION A-A**



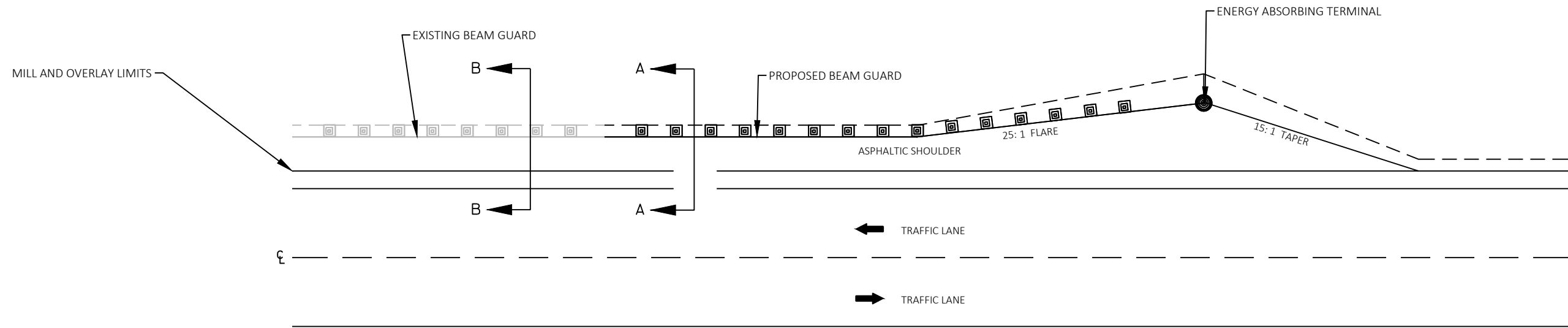
**SECTION B-B**



SECTION A-A

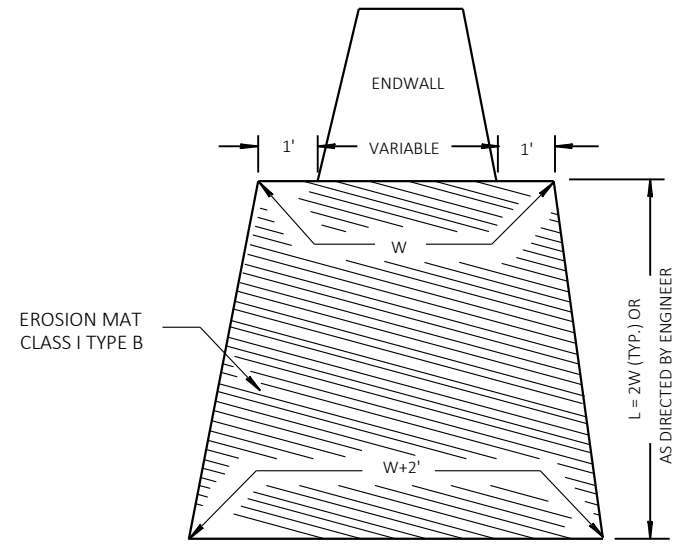


SECTION B-B



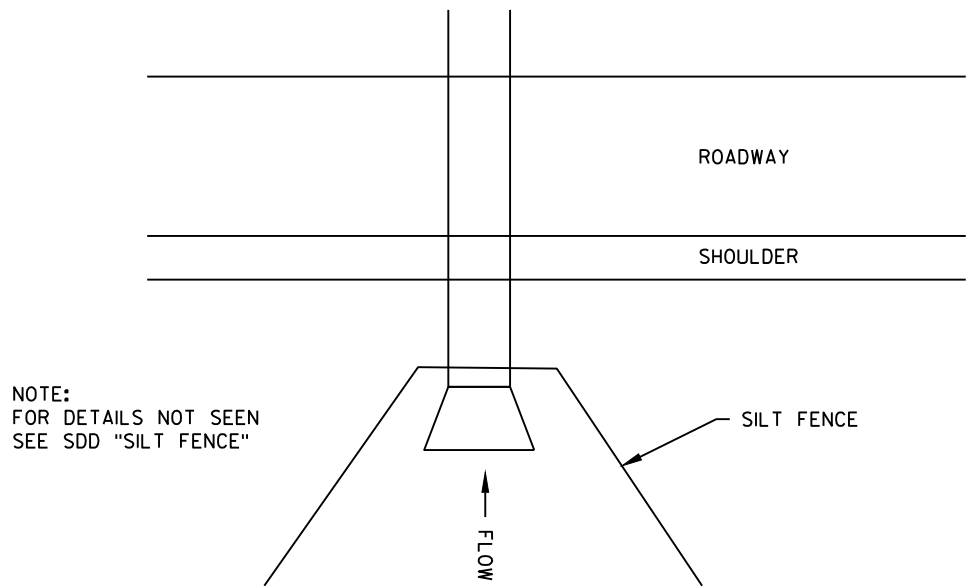
DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL



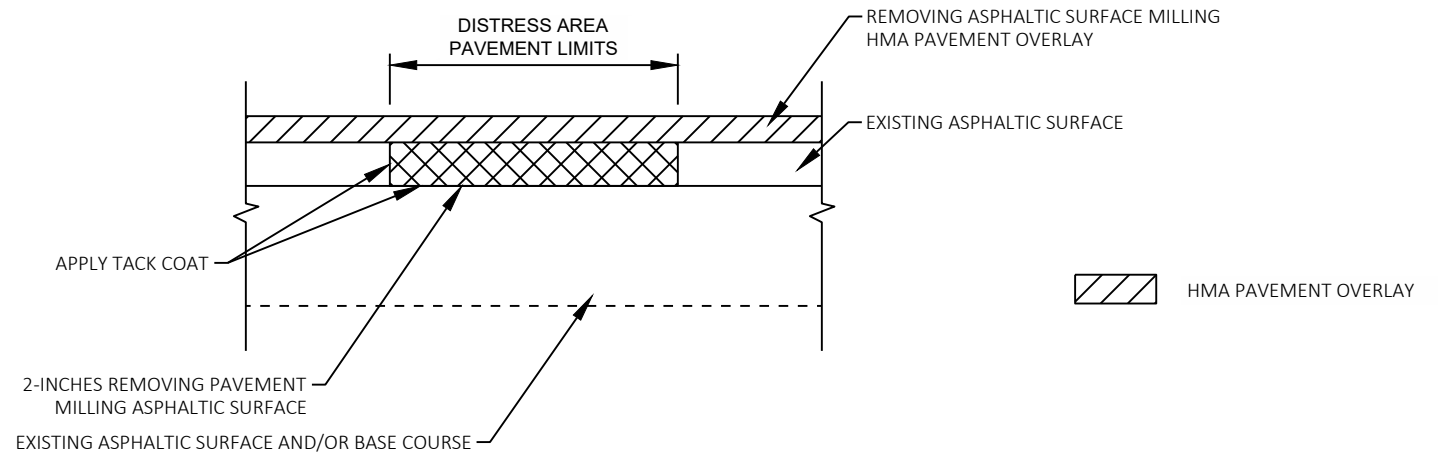


**EROSION MAT TREATMENT AT CULVERTS**

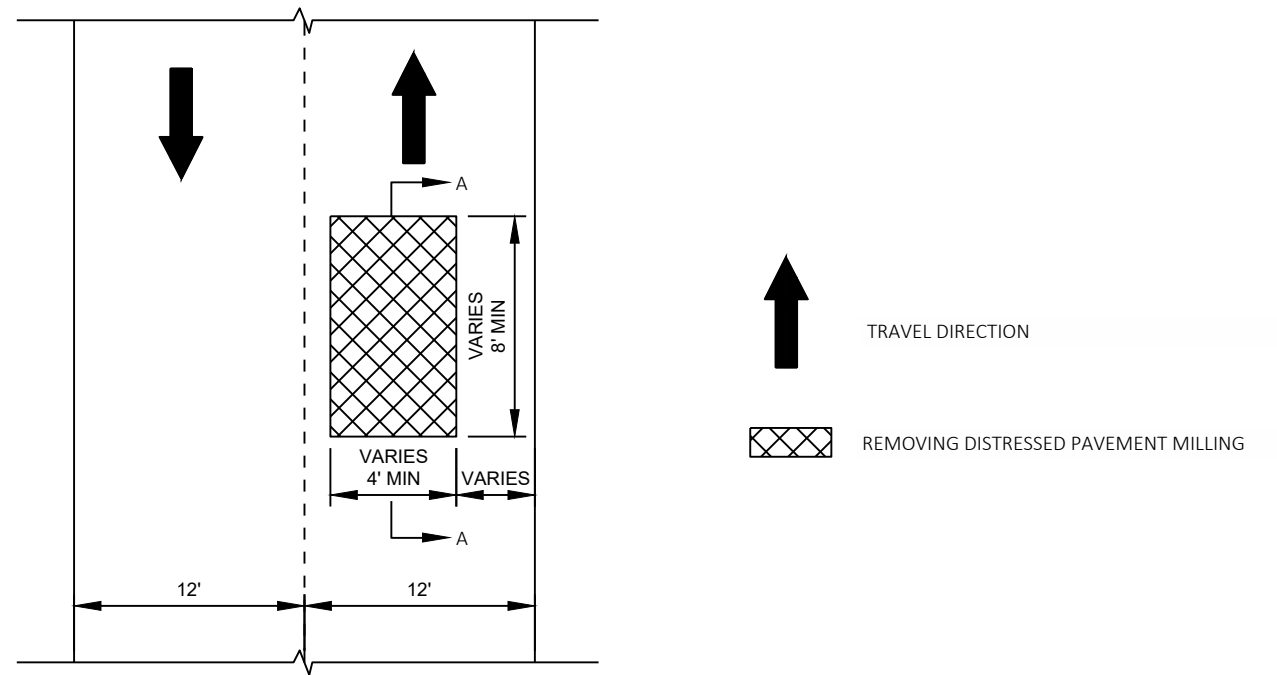
- LOCATION:
- |                 |                 |
|-----------------|-----------------|
| STA 22+80 'WB'  | STA 209+23 'WB' |
| STA 34+43 'WB'  | STA 241+18 'WB' |
| STA 45+15 'WB'  | STA 248+71 'WB' |
| STA 45+23 'WB'  | STA 280+07 'WB' |
| STA 62+82 'WB'  | STA 280+09 'WB' |
| STA 66+38 'WB'  | STA 299+05 'WB' |
| STA 80+92 'WB'  | STA 307+25 'WB' |
| STA 103+95 'WB' | STA 314+55 'WB' |
| STA 137+16 'WB' |                 |



**TYPICAL SILT FENCE DETAIL AT PIPE INLET**  
(SEE EROSION CONTROL PLAN FOR LOCATIONS)



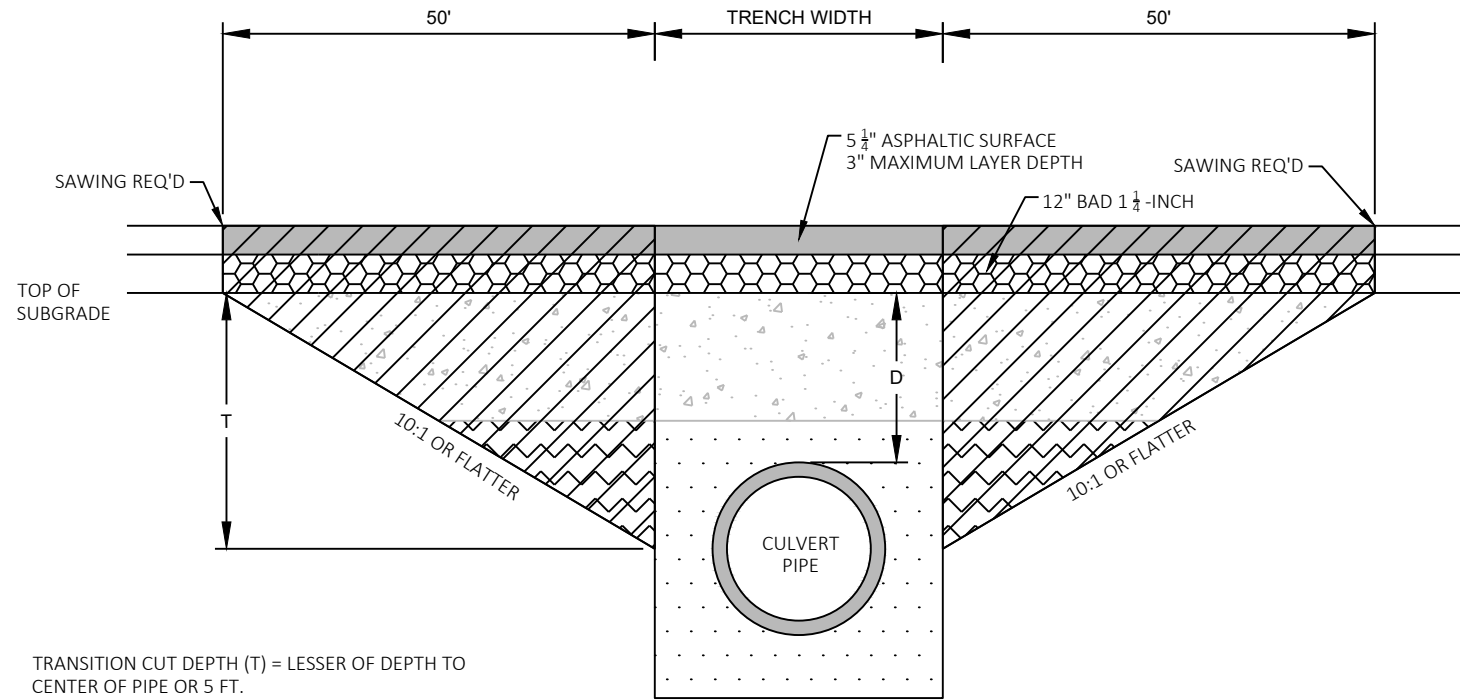
**SECTION A-A**



**PLAN VIEW**

**REMOVING DISTRESSED PAVEMENT MILLING DETAIL**







EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD



TRANSITION CUT DEPTH (T) = LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.  
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

DEPTH D < 6 FT

LEGEND

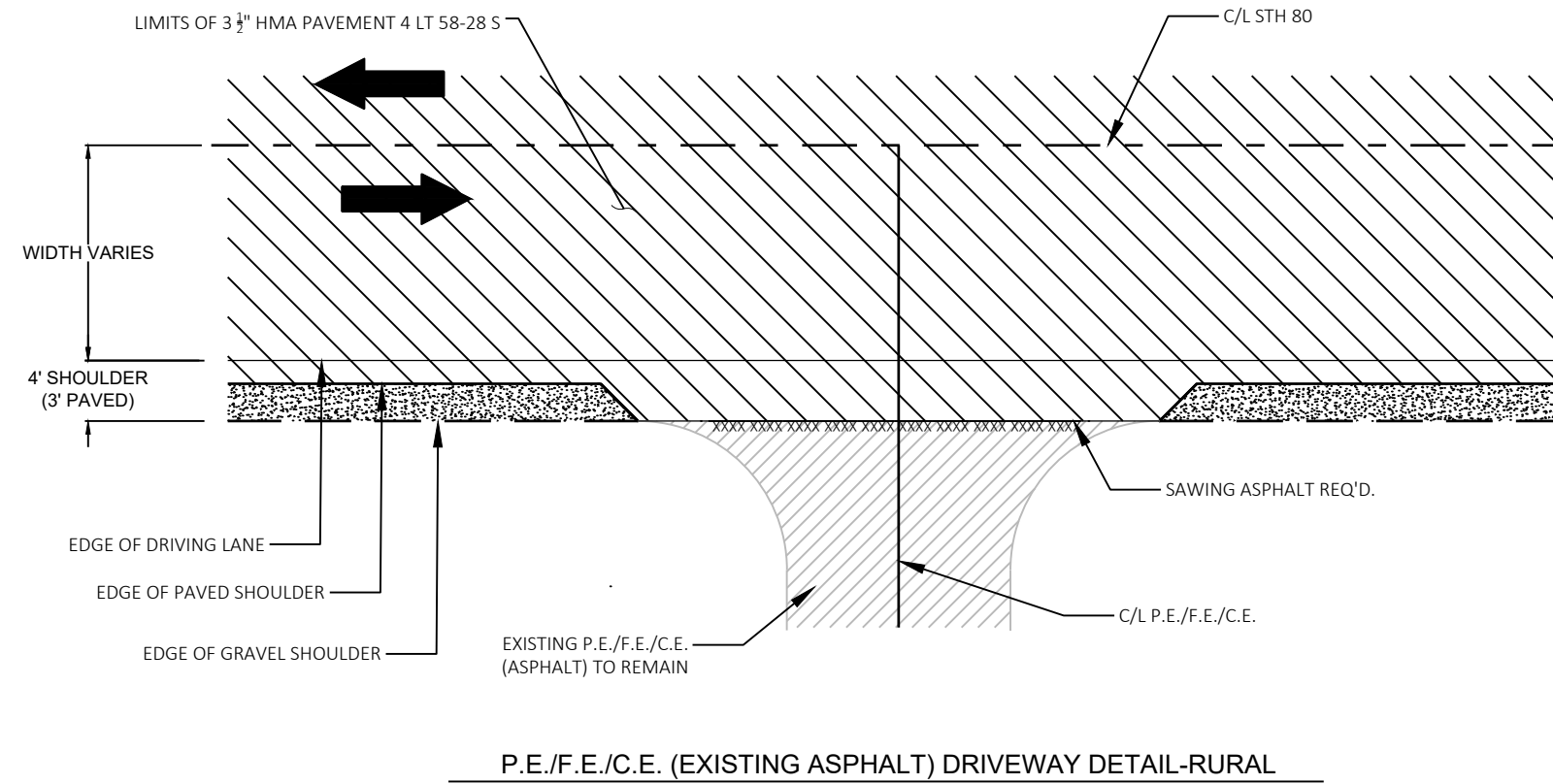
-  PROPOSED SURFACE
-  PROPOSED BASE
-  TRENCH BACKFILL
-  TRENCH OR FOUNDATION BACKFILL
-  FOUNDATION BACKFILL
-  TRANSITION CUT

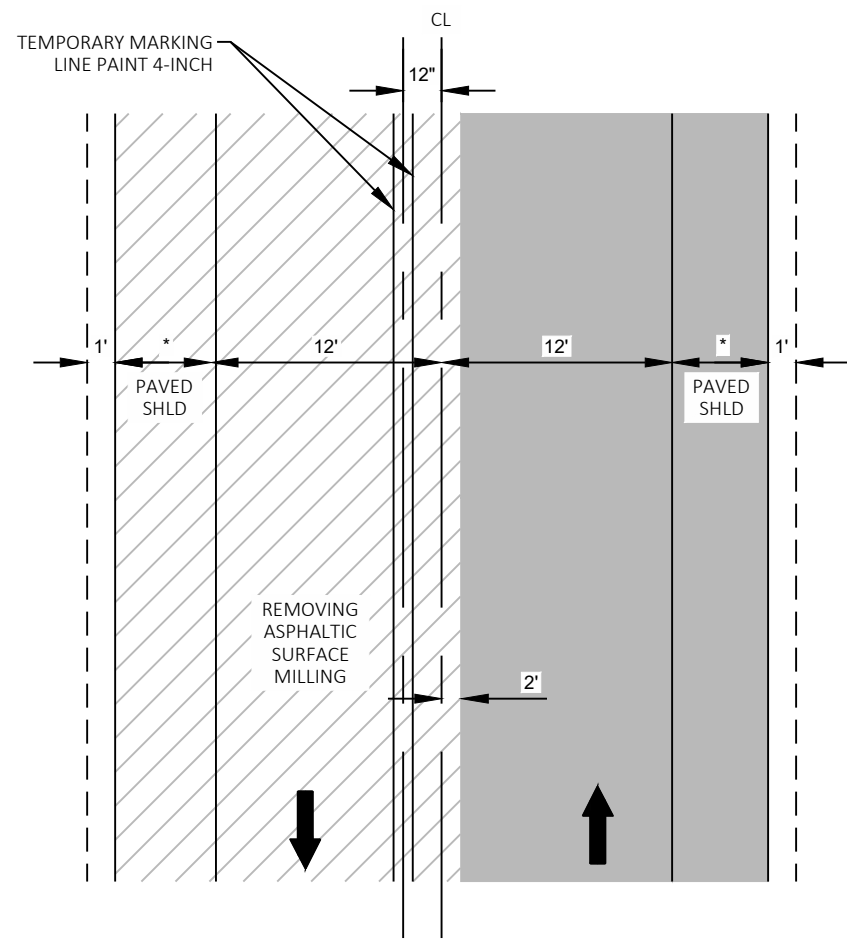
NOTES

- TRANSITION CUT IS INCIDENTAL TO CULVERT PIPE ITEM.
- TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
- BACKFILL TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
- PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.
- COMPLETE CULVERT PIPE TRANSITION PRIOR TO ASPHALTIC SURFACE MILLING OPERATIONS.

CULVERT PIPE TRANSITION

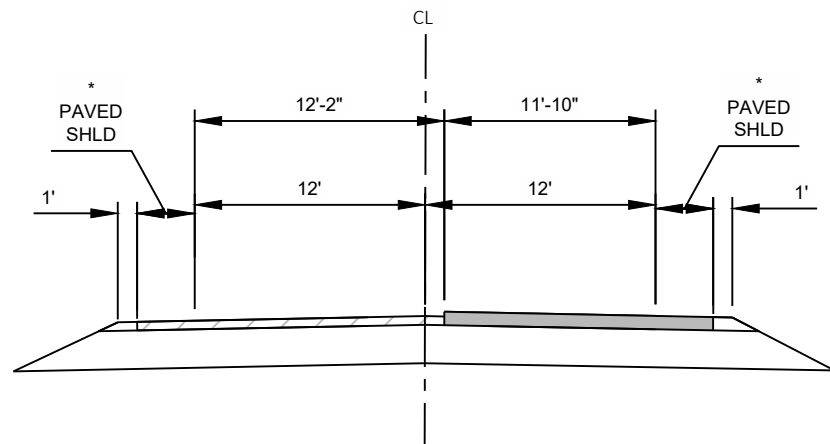
ROUTE	STA (CL)	APPROX. DEPTH D (FT)	PIPE DIA (IN)	REMARKS
STH 80	STA. 22+80	3.1	24	NEW CPCS
STH 80	STA. 34+43	0.7	24	NEW CPCS
STH 80	STA. 45+16	1.4	24	NEW CPCS
STH 80	STA. 45+23	1.3	24	NEW CPCS
STH 80	STA. 62+82	5.2	24	NEW CPCS
STH 80	STA. 80+92	2.4	24	NEW CPCS
STH 80	STA. 103+95	5.7	24	NEW CPCS
STH 80	STA. 137+16	4.1	24	NEW CPCS
STH 80	STA. 209+23	2.1	24	NEW CPCS
STH 80	STA. 241+18	5.4	24	NEW CPCS
STH 80	STA. 248+71	5.1	24	NEW CPCS
STH 80	STA. 280+07	4.6	24	NEW CPCS
STH 80	STA. 280+09	4.5	24	NEW CPCS
STH 80	STA. 299+05	0.3	24	NEW CPCS
STH 80	STA. 307+25	4.7	24	NEW CPCS
STH 80	STA. 314+55	2.8	24	NEW CPCS





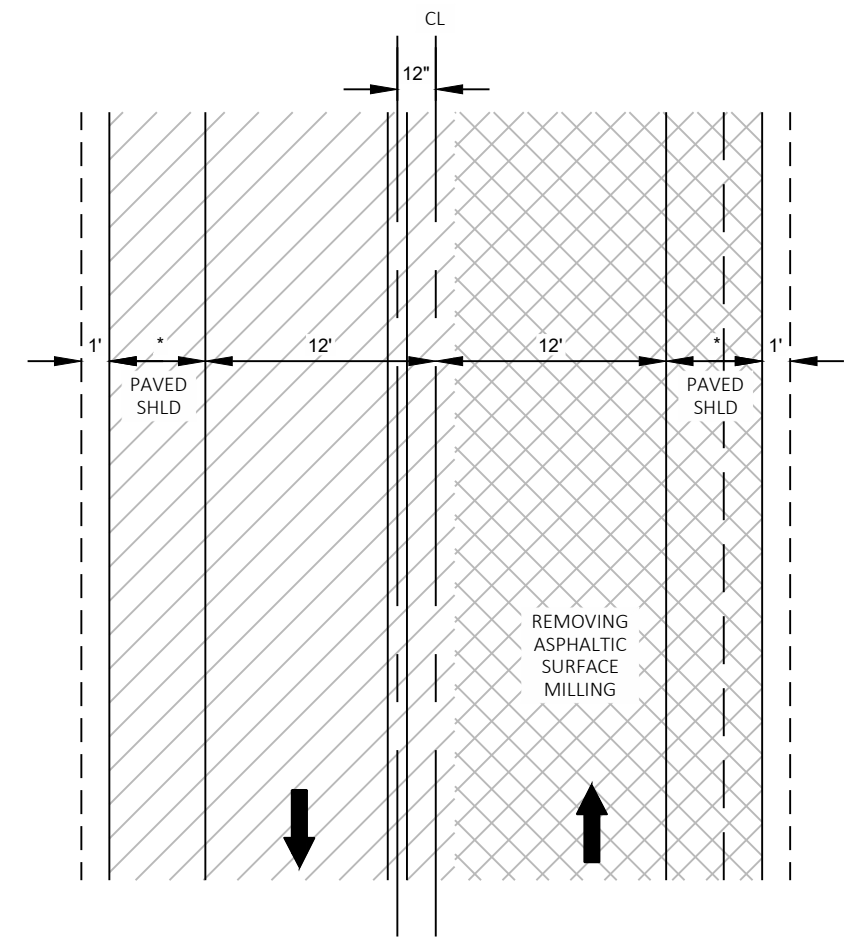
PLAN VIEW

- EXISTING ASPHALTIC SURFACE TO REMAIN
- FIRST PASS 1.75" HMA PAVEMENT 4 LT 58-28 S
- \* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



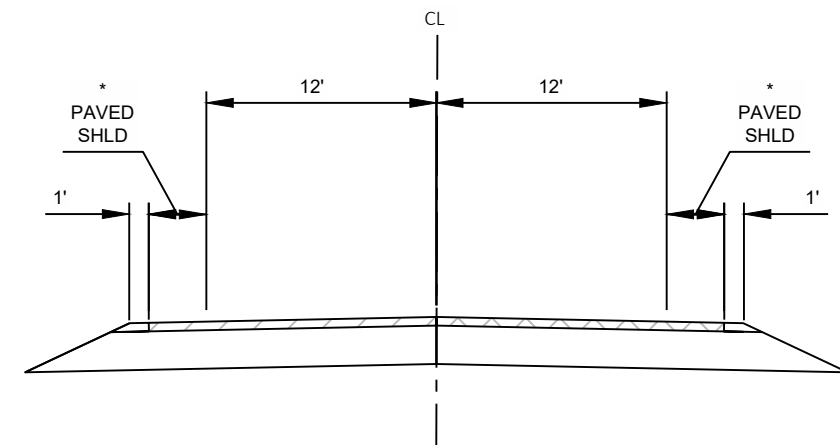
CROSS SECTION VIEW  
FIRST PASS DETAIL  
(LOWER LAYER)

\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



PLAN VIEW

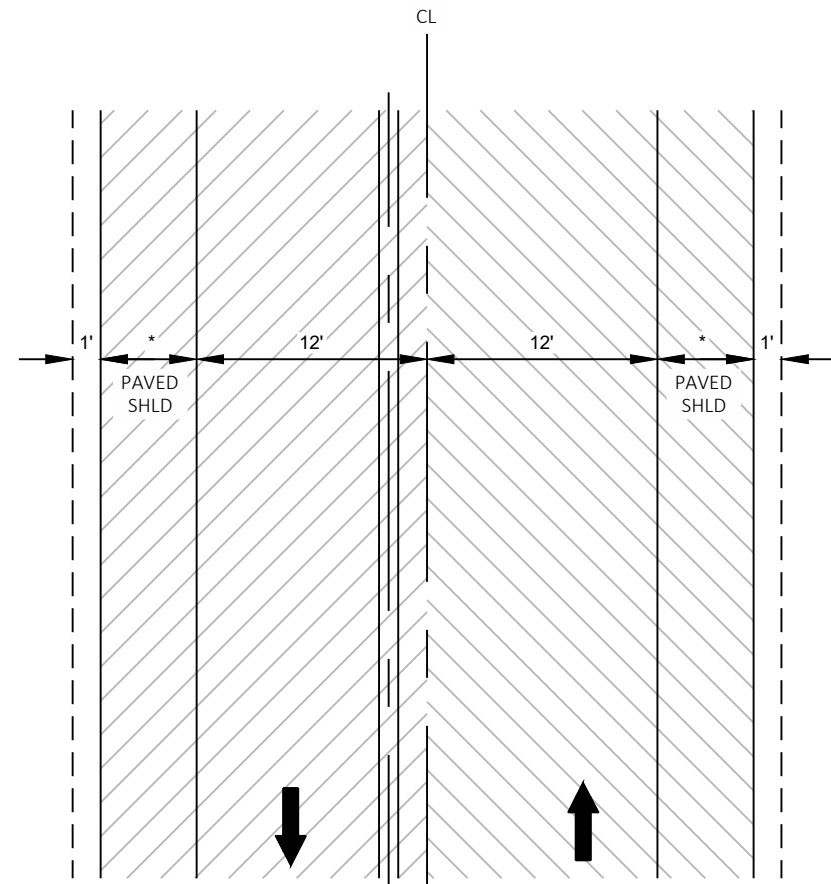
- EXISTING ASPHALTIC SURFACE TO REMAIN
- FIRST PASS 1.75" HMA PAVEMENT 4 LT 58-28 S
- SECOND PASS 1.75" HMA PAVEMENT 4 LT 58-28 S
- \* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



CROSS SECTION VIEW  
SECOND PASS DETAIL  
(LOWER LAYER)

\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS

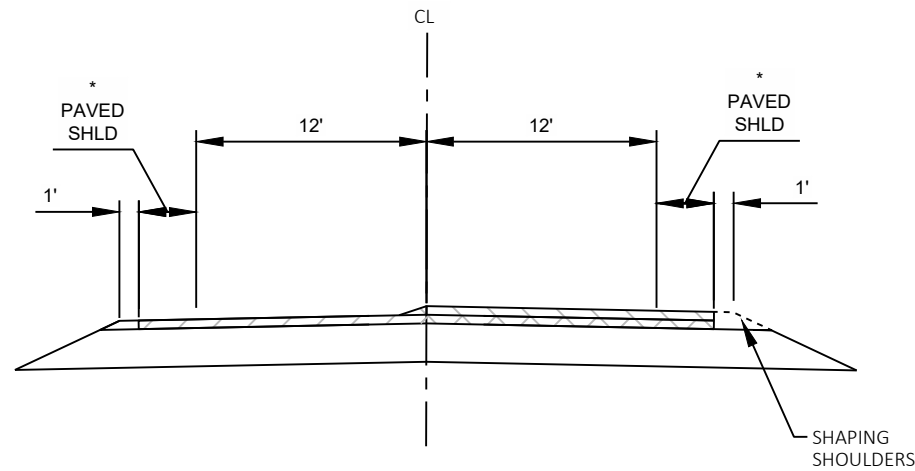




PLAN VIEW

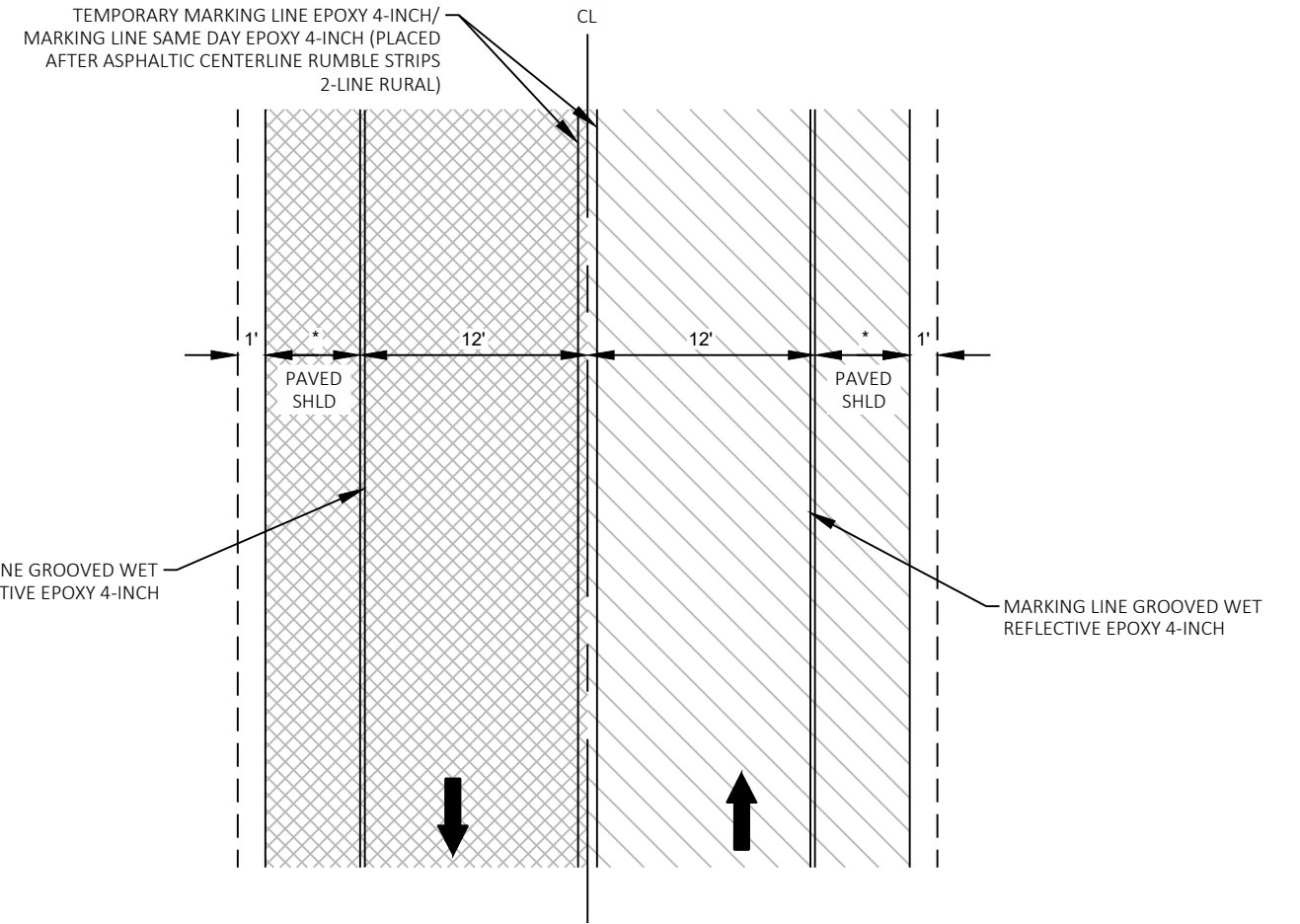
- EXISTING ASPHALTIC SURFACE TO REMAIN
- FIRST PASS 1.75" HMA PAVEMENT 4 LT 58-28 S
- SECOND PASS 1.75" HMA PAVEMENT 4LT 58-28 S
- THIRD PASS 1.75" HMA PAVEMENT 4LT 58-28 S

\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



CROSS SECTION VIEW  
THIRD PASS DETAIL  
(UPPER LAYER)

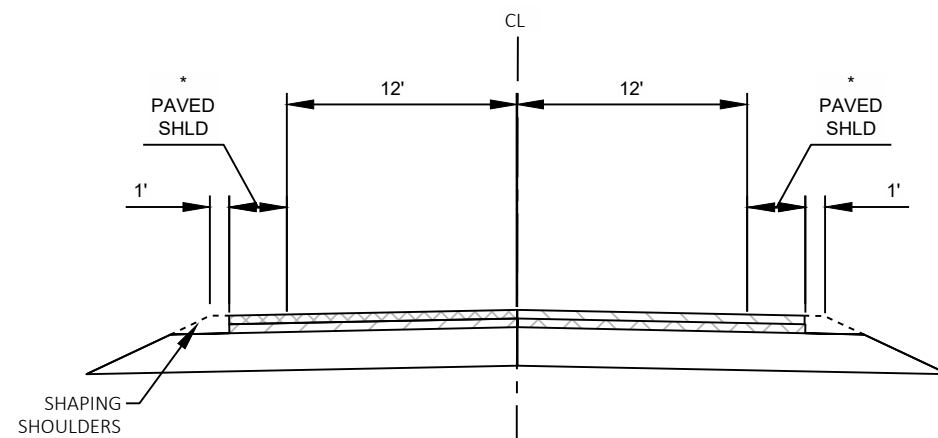
\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



PLAN VIEW

- EXISTING ASPHALTIC SURFACE TO REMAIN
- FIRST PASS 1.75" HMA PAVEMENT 4 LT 58-28 S
- SECOND PASS 1.75" HMA PAVEMENT 4LT 58-28 S
- THIRD PASS 1.75" HMA PAVEMENT 4LT 58-28 S
- FOURTH PASS 1.75" HMA PAVEMENT 4LT 58-28 S

\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS



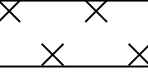
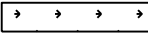


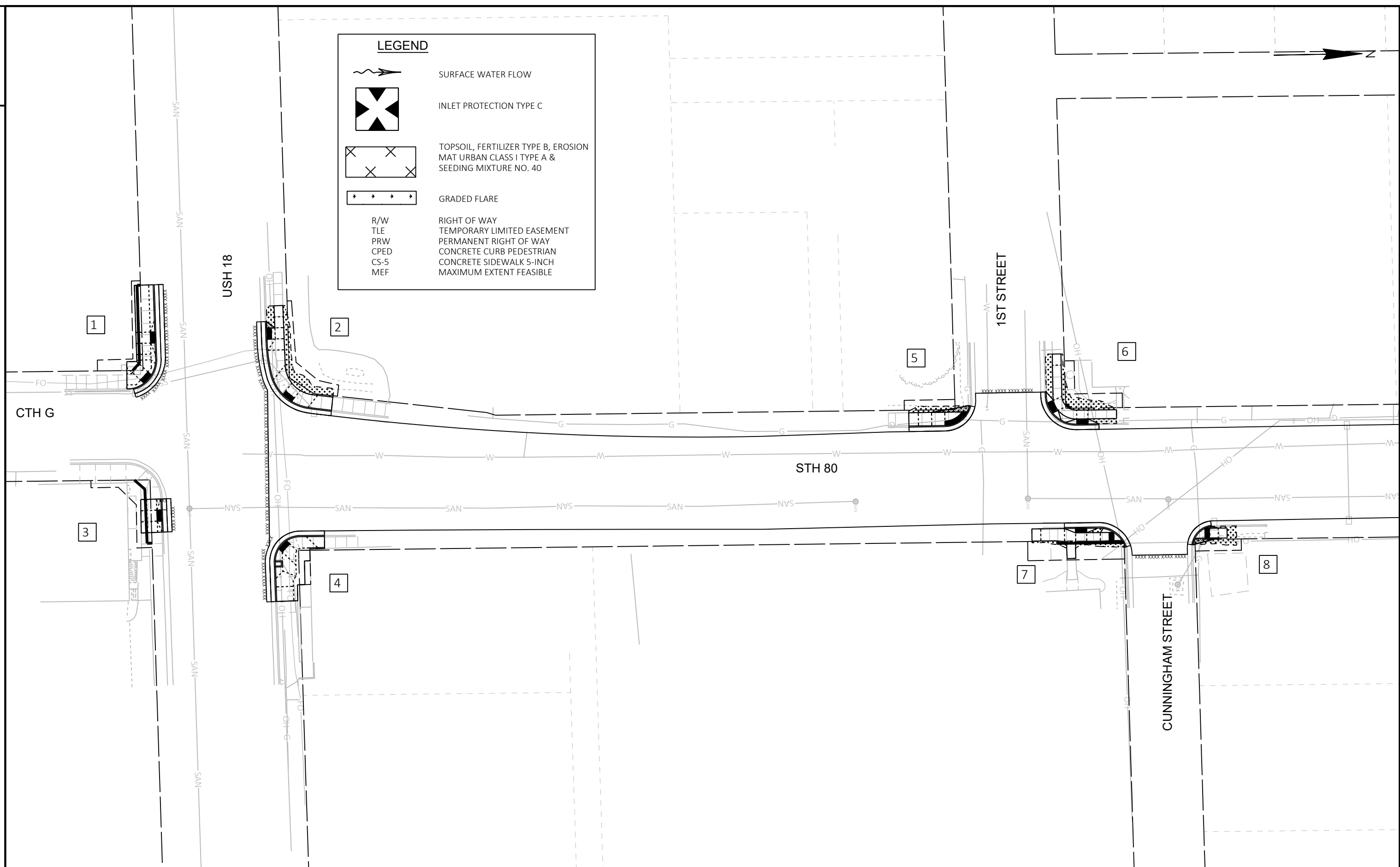
CROSS SECTION VIEW  
FOURTH PASS DETAIL  
(UPPER LAYER)

\* PAVED SHOULDER WIDTH VARIES BASED ON TYPICAL SECTIONS

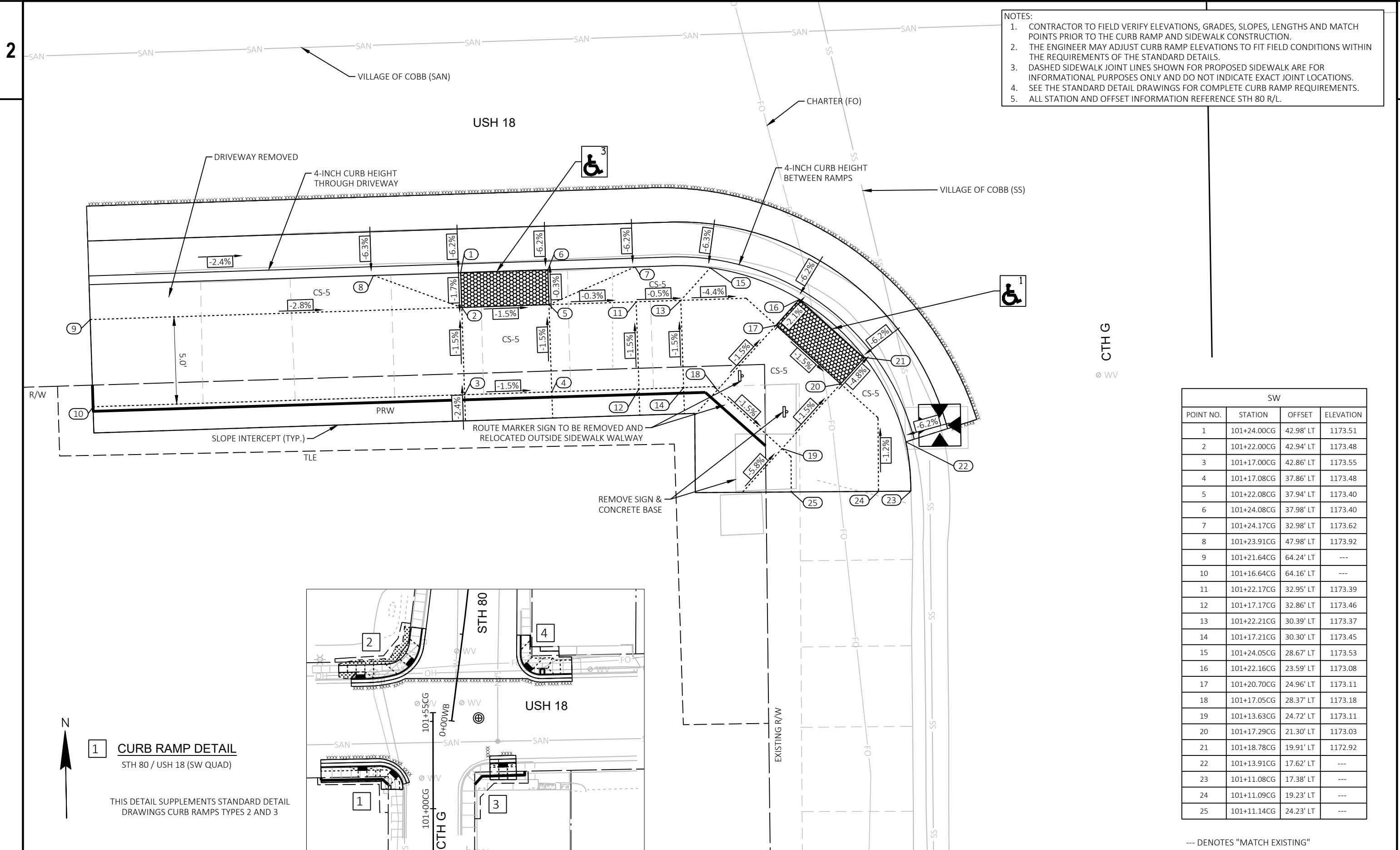
SEE THE FOLLOWING S.D.D. FOR ADDITIONAL DETAILS:  
S.D.D. PAVEMENT MARKING, MAINLINE AND TURN LANES  
S.D.D. STOP LINE AND CROSSWALK PAVEMENT MARKING  
S.D.D. PAVEMENT MARKING

**LEGEND**

-  SURFACE WATER FLOW
-  INLET PROTECTION TYPE C
-  TOPSOIL, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A & SEEDING MIXTURE NO. 40
-  GRADED FLARE
- R/W RIGHT OF WAY
- TLE TEMPORARY LIMITED EASEMENT
- PRW PERMANENT RIGHT OF WAY
- CPED CONCRETE CURB PEDESTRIAN
- CS-5 CONCRETE SIDEWALK 5-INCH MAXIMUM EXTENT FEASIBLE
- MEF



PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	CONSTRUCTION DETAILS - CURB RAMP DETAIL - OVERVIEW	SHEET	<b>E</b>
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- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  3. DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.

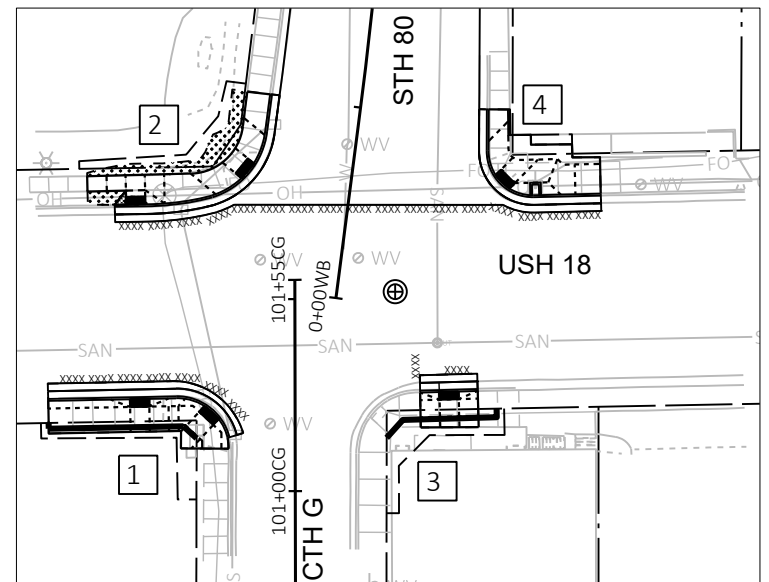
SW			
POINT NO.	STATION	OFFSET	ELEVATION
1	101+24.00CG	42.98' LT	1173.51
2	101+22.00CG	42.94' LT	1173.48
3	101+17.00CG	42.86' LT	1173.55
4	101+17.08CG	37.86' LT	1173.48
5	101+22.08CG	37.94' LT	1173.40
6	101+24.08CG	37.98' LT	1173.40
7	101+24.17CG	32.98' LT	1173.62
8	101+23.91CG	47.98' LT	1173.92
9	101+21.64CG	64.24' LT	---
10	101+16.64CG	64.16' LT	---
11	101+22.17CG	32.95' LT	1173.39
12	101+17.17CG	32.86' LT	1173.46
13	101+22.21CG	30.39' LT	1173.37
14	101+17.21CG	30.30' LT	1173.45
15	101+24.05CG	28.67' LT	1173.53
16	101+22.16CG	23.59' LT	1173.08
17	101+20.70CG	24.96' LT	1173.11
18	101+17.05CG	28.37' LT	1173.18
19	101+13.63CG	24.72' LT	1173.11
20	101+17.29CG	21.30' LT	1173.03
21	101+18.78CG	19.91' LT	1172.92
22	101+13.91CG	17.62' LT	---
23	101+11.08CG	17.38' LT	---
24	101+11.09CG	19.23' LT	---
25	101+11.14CG	24.23' LT	---

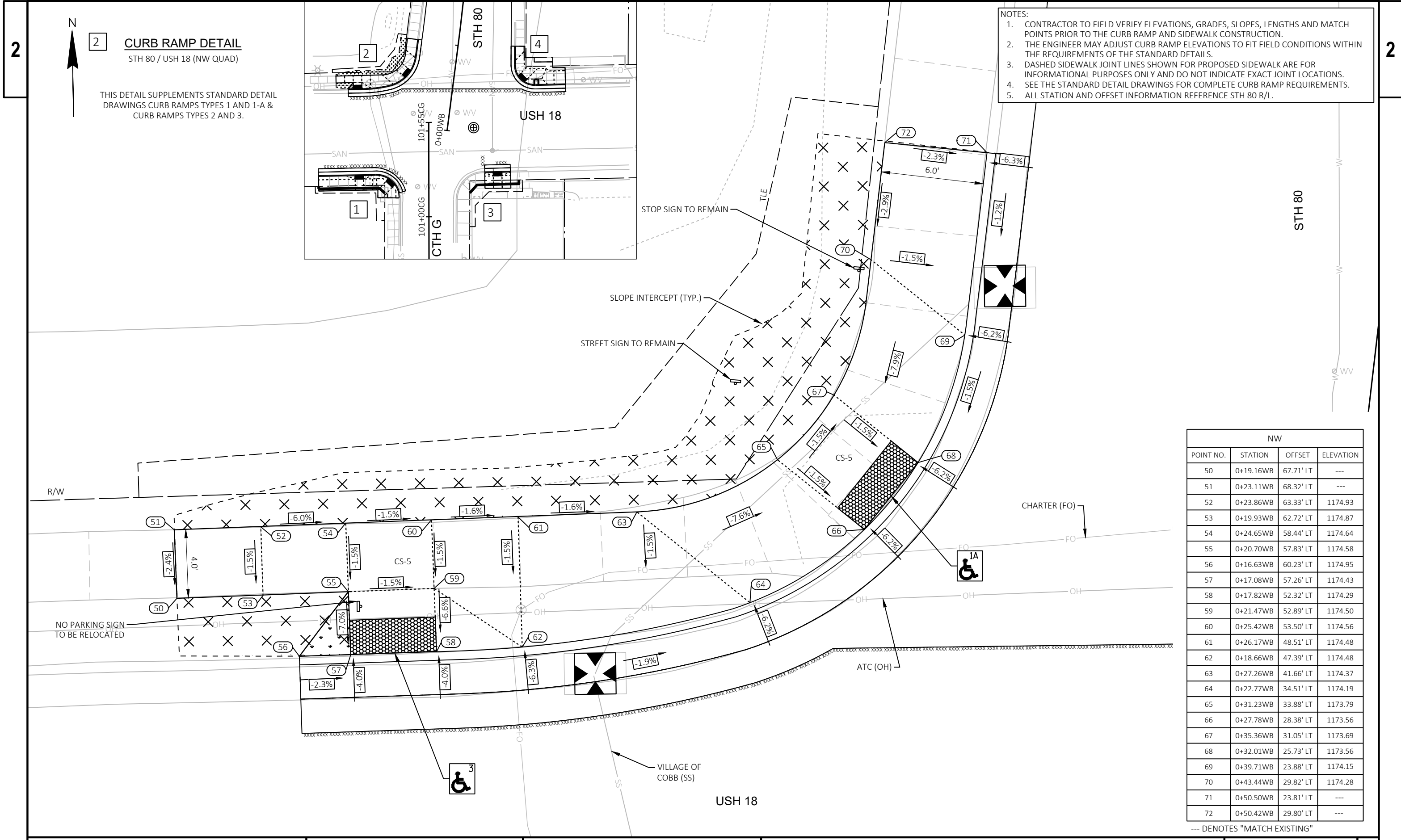
--- DENOTES "MATCH EXISTING"

**1 CURB RAMP DETAIL**

STH 80 / USH 18 (SW QUAD)

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 2 AND 3





- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  3. DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.

**2 CURB RAMP DETAIL**  
 STH 80 / USH 18 (NW QUAD)

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1-A & CURB RAMPS TYPES 2 AND 3.

NW			
POINT NO.	STATION	OFFSET	ELEVATION
50	0+19.16WB	67.71' LT	---
51	0+23.11WB	68.32' LT	---
52	0+23.86WB	63.33' LT	1174.93
53	0+19.93WB	62.72' LT	1174.87
54	0+24.65WB	58.44' LT	1174.64
55	0+20.70WB	57.83' LT	1174.58
56	0+16.63WB	60.23' LT	1174.95
57	0+17.08WB	57.26' LT	1174.43
58	0+17.82WB	52.32' LT	1174.29
59	0+21.47WB	52.89' LT	1174.50
60	0+25.42WB	53.50' LT	1174.56
61	0+26.17WB	48.51' LT	1174.48
62	0+18.66WB	47.39' LT	1174.48
63	0+27.26WB	41.66' LT	1174.37
64	0+22.77WB	34.51' LT	1174.19
65	0+31.23WB	33.88' LT	1173.79
66	0+27.78WB	28.38' LT	1173.56
67	0+35.36WB	31.05' LT	1173.69
68	0+32.01WB	25.73' LT	1173.56
69	0+39.71WB	23.88' LT	1174.15
70	0+43.44WB	29.82' LT	1174.28
71	0+50.50WB	23.81' LT	---
72	0+50.42WB	29.80' LT	---

--- DENOTES "MATCH EXISTING"

SAN SAN SAN SAN

VILLAGE OF COBB (SAN)



### 3 CURB RAMP DETAIL

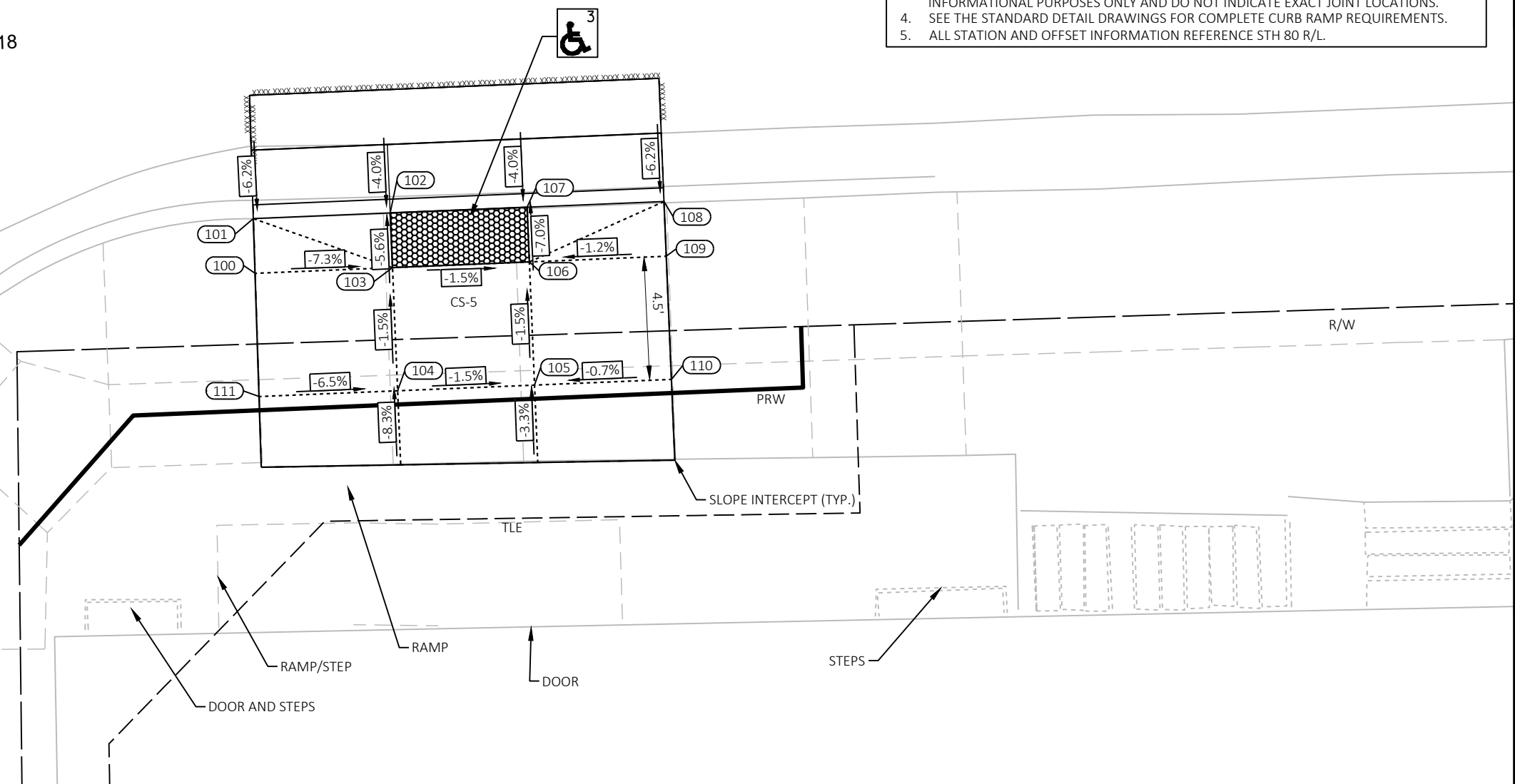
STH 80 / USH 18 (SE QUAD)

THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 2 AND 3.

USH 18

CTHG

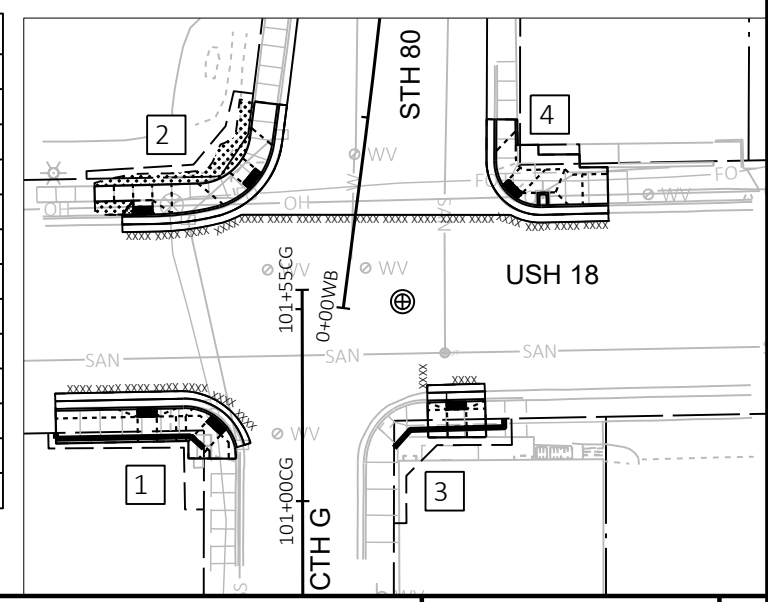
EXISTING TYPE 1 TO REMAIN (MEF)



- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  3. DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.

SE			
POINT NO.	STATION	OFFSET	ELEVATION
100	101+23.59CG	32.60' RT	---
101	101+25.59CG	32.56' RT	---
102	101+25.72CG	37.56' RT	1172.05
103	101+23.72CG	37.61' RT	1172.19
104	101+19.22CG	37.73' RT	1172.26
105	101+19.35CG	42.73' RT	1172.18
106	101+23.85CG	42.61' RT	1172.11
107	101+25.85CG	42.56' RT	1171.94
108	101+25.98CG	47.56' RT	---
109	101+23.98CG	47.61' RT	---
110	101+19.48CG	47.73' RT	---
111	101+19.09CG	32.68' RT	---

--- DENOTES "MATCH EXISTING"

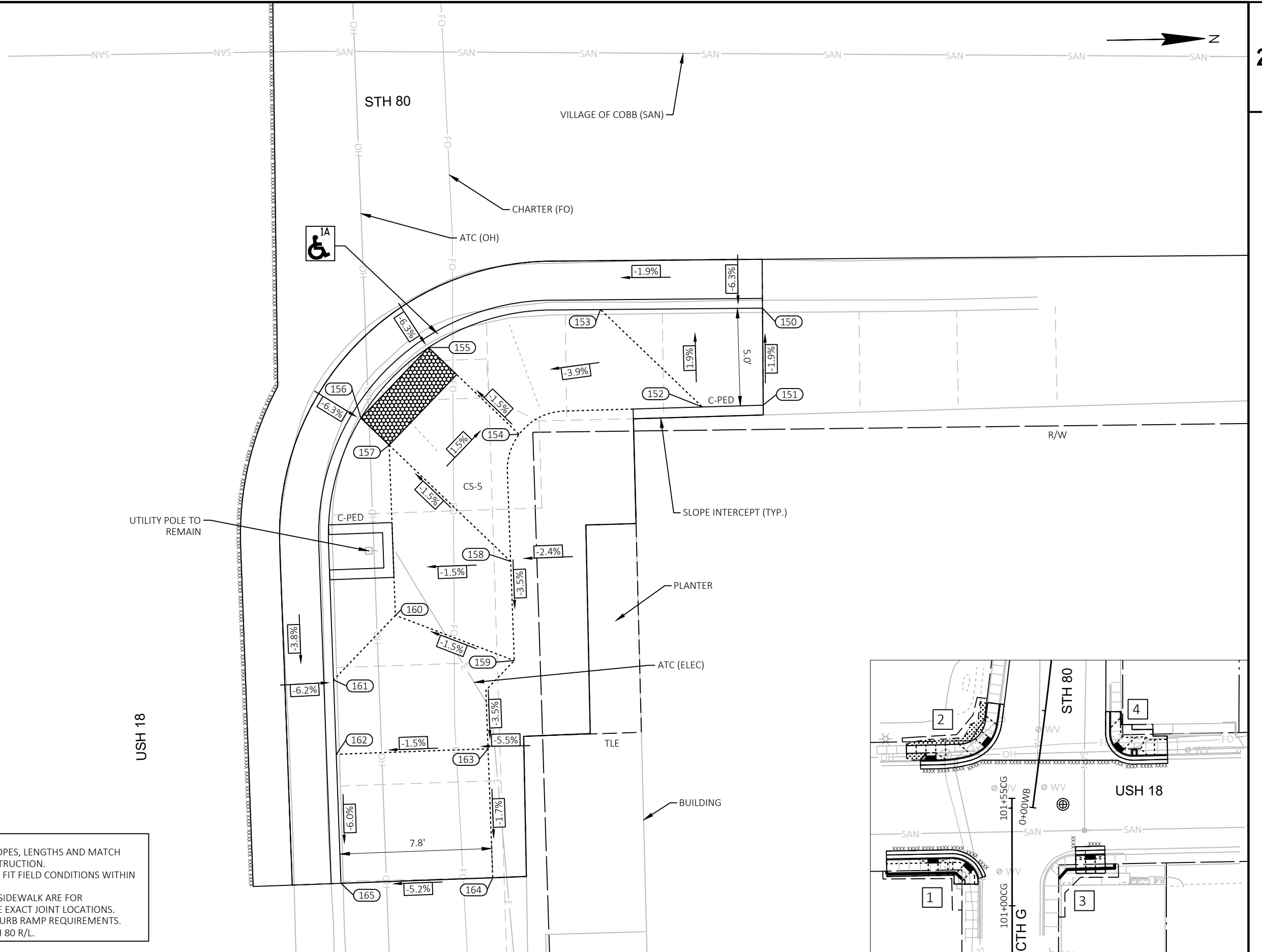


### 4 CURB RAMP DETAIL STH 80 / USH 18 (NE QUAD)

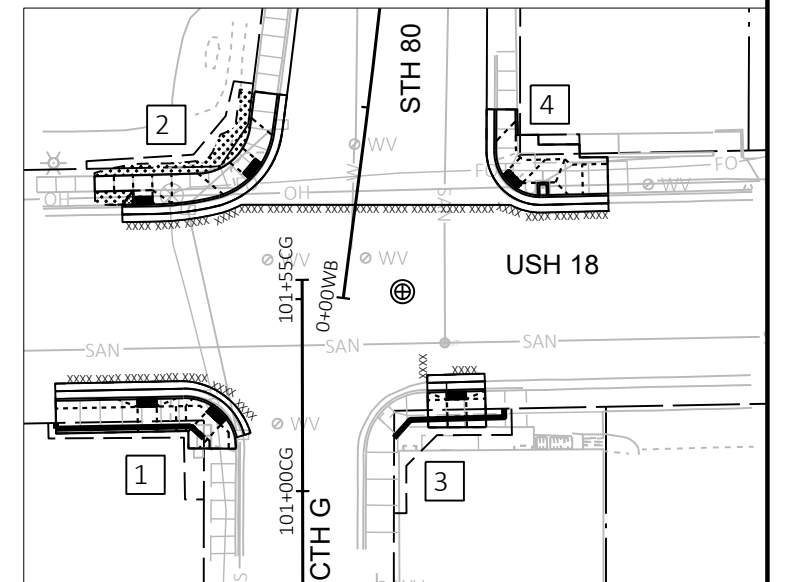
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 1 AND 1-A.

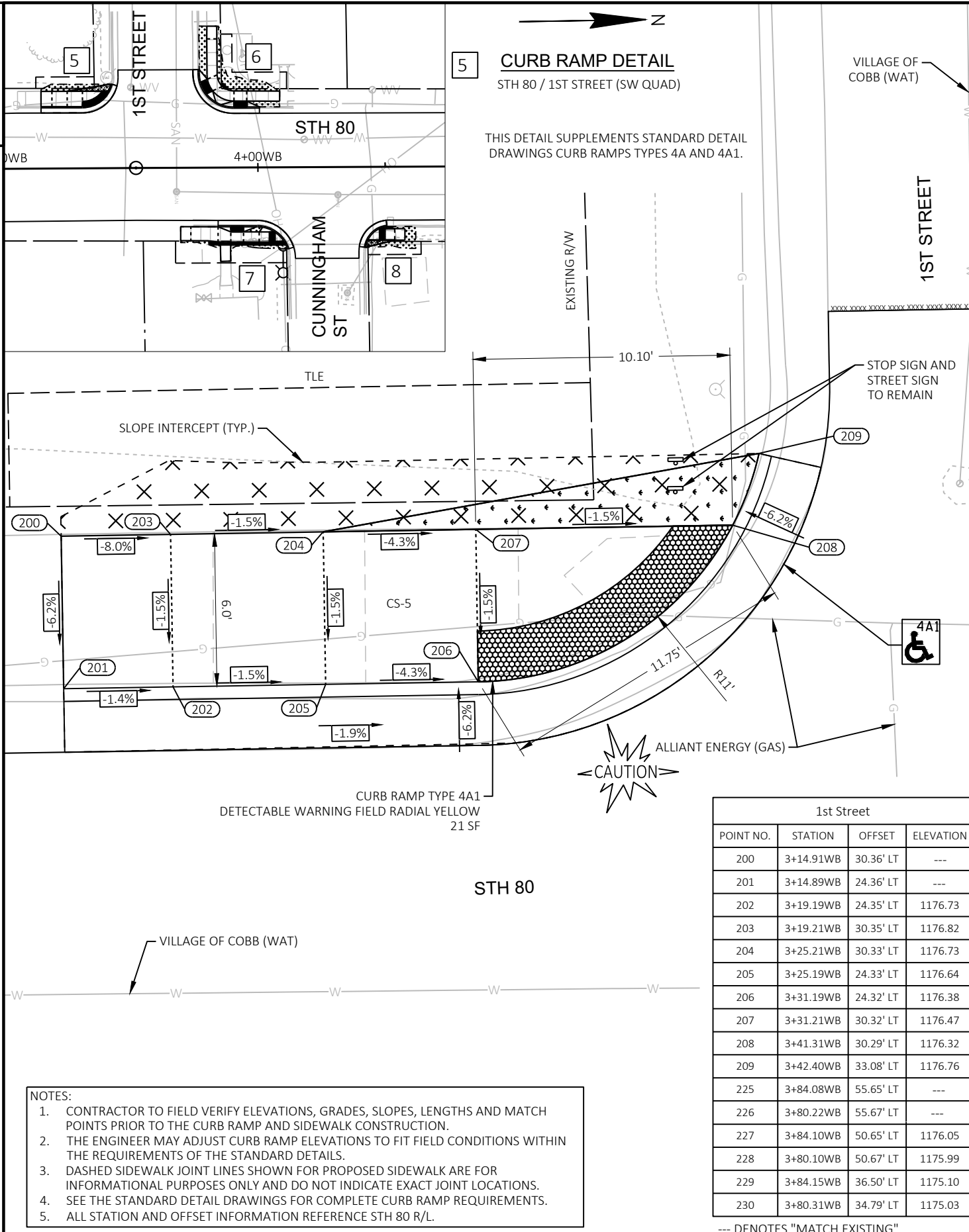
NE			
POINT NO.	STATION	OFFSET	ELEVATION
150	0+53.67WB	33.17' RT	---
151	0+54.22WB	38.11' RT	---
152	0+51.23WB	38.55' RT	1173.30
153	0+45.61WB	34.18' RT	1173.22
154	0+42.23WB	41.01' RT	1172.66
155	0+37.11WB	37.13' RT	1172.86
156	0+34.09WB	41.12' RT	1172.49
157	0+35.68WB	42.33' RT	1172.52
158	0+42.55WB	47.52' RT	1172.59
159	0+43.32WB	52.54' RT	1172.43
160	0+37.01WB	50.95' RT	1172.41
161	0+34.24WB	54.60' RT	1172.39
162	0+34.82WB	58.37' RT	1172.03
163	0+42.51WB	57.18' RT	1172.24
164	0+43.52WB	63.71' RT	---
165	0+35.83WB	64.90' RT	---

--- DENOTES "MATCH EXISTING"



- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  3. DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.





**5 CURB RAMP DETAIL**  
STH 80 / 1ST STREET (SW QUAD)

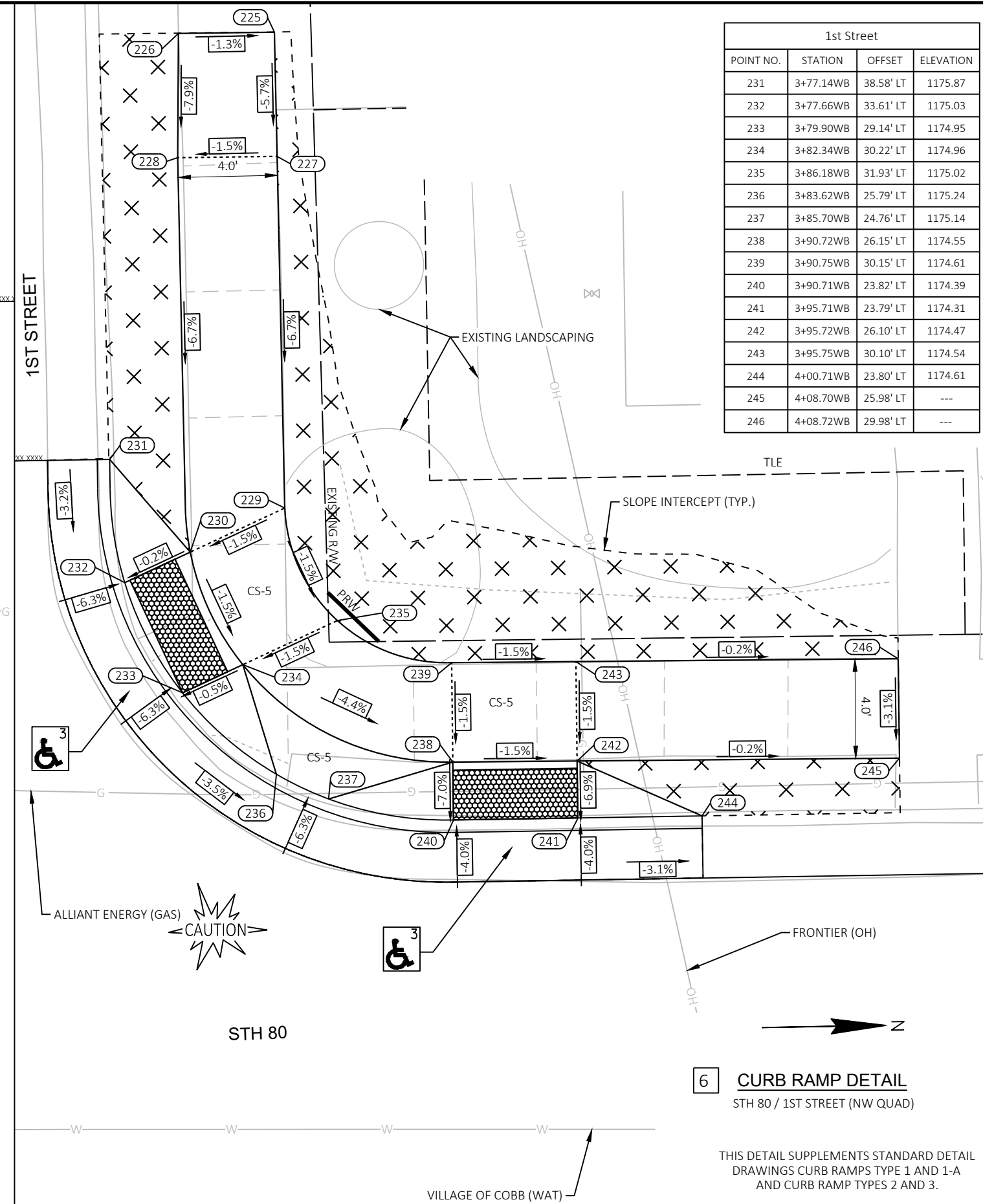
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 4A AND 4A1.

1st Street			
POINT NO.	STATION	OFFSET	ELEVATION
231	3+77.14WB	38.58' LT	1175.87
232	3+77.66WB	33.61' LT	1175.03
233	3+79.90WB	29.14' LT	1174.95
234	3+82.34WB	30.22' LT	1174.96
235	3+86.18WB	31.93' LT	1175.02
236	3+83.62WB	25.79' LT	1175.24
237	3+85.70WB	24.76' LT	1175.14
238	3+90.72WB	26.15' LT	1174.55
239	3+90.75WB	30.15' LT	1174.61
240	3+90.71WB	23.82' LT	1174.39
241	3+95.71WB	23.79' LT	1174.31
242	3+95.72WB	26.10' LT	1174.47
243	3+95.75WB	30.10' LT	1174.54
244	4+00.71WB	23.80' LT	1174.61
245	4+08.70WB	25.98' LT	---
246	4+08.72WB	29.98' LT	---

1st Street			
POINT NO.	STATION	OFFSET	ELEVATION
200	3+14.91WB	30.36' LT	---
201	3+14.89WB	24.36' LT	---
202	3+19.19WB	24.35' LT	1176.73
203	3+19.21WB	30.35' LT	1176.82
204	3+25.21WB	30.33' LT	1176.73
205	3+25.19WB	24.33' LT	1176.64
206	3+31.19WB	24.32' LT	1176.38
207	3+31.21WB	30.32' LT	1176.47
208	3+41.31WB	30.29' LT	1176.32
209	3+42.40WB	33.08' LT	1176.76
225	3+84.08WB	55.65' LT	---
226	3+80.22WB	55.67' LT	---
227	3+84.10WB	50.65' LT	1176.05
228	3+80.10WB	50.67' LT	1175.99
229	3+84.15WB	36.50' LT	1175.10
230	3+80.31WB	34.79' LT	1175.03

--- DENOTES "MATCH EXISTING"

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  - THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  - DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  - ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.



**6 CURB RAMP DETAIL**  
STH 80 / 1ST STREET (NW QUAD)

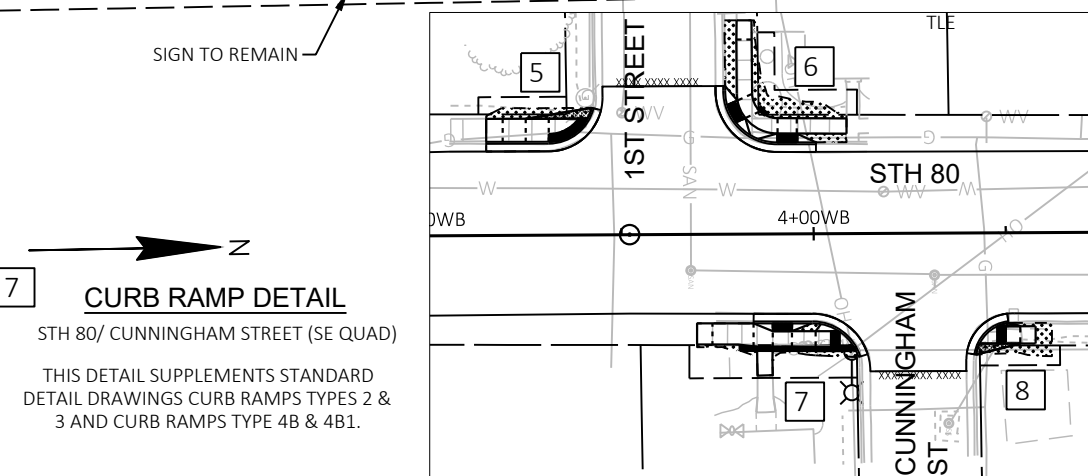
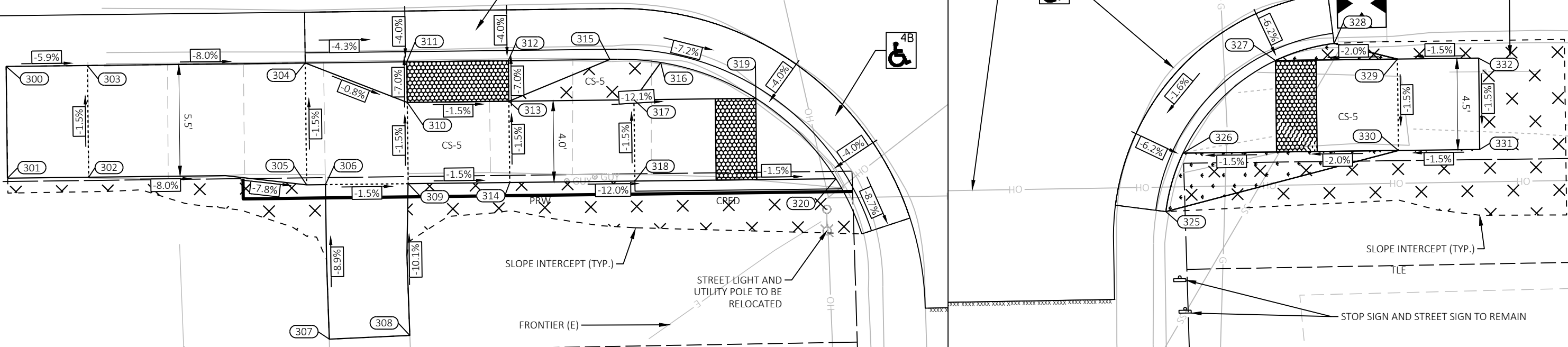
THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPE 1 AND 1-A AND CURB RAMP TYPES 2 AND 3.

Cunningham			
POINT NO.	STATION	OFFSET	ELEVATION
300	3+69.53WB	23.17' RT	---
301	3+69.50WB	28.67' RT	---
302	3+73.50WB	28.70' RT	1174.65
303	3+73.53WB	23.20' RT	1174.57
304	3+84.26WB	23.27' RT	1173.71
305	3+84.22WB	29.27' RT	1173.80
306	3+85.14WB	29.28' RT	1173.79
307	3+85.20WB	36.89' RT	---
308	3+89.16WB	36.77' RT	---
309	3+89.22WB	29.30' RT	1173.72
310	3+89.24WB	25.30' RT	1173.66
311	3+89.26WB	23.30' RT	1173.52
312	3+94.26WB	23.34' RT	1173.45
313	3+94.24WB	25.34' RT	1173.59
314	3+94.22WB	29.34' RT	1173.65

Cunningham			
POINT NO.	STATION	OFFSET	ELEVATION
315	3+99.26WB	23.37' RT	1173.80
316	4+01.75WB	23.57' RT	1173.62
317	4+00.40WB	25.38' RT	1172.85
318	4+00.38WB	29.38' RT	1172.91
319	4+06.40WB	25.41' RT	1172.13
320	4+10.27WB	29.44' RT	1172.14
325	4+42.16WB	31.64' RT	1171.93
326	4+43.05WB	28.77' RT	1171.89
327	4+47.69WB	24.30' RT	1172.01
328	4+50.59WB	23.51' RT	1172.41
329	4+53.69WB	24.34' RT	1172.12
330	4+53.66WB	28.84' RT	1172.05
331	4+57.66WB	28.86' RT	1172.11
332	4+57.69WB	24.37' RT	1172.18

--- DENOTES "MATCH EXISTING"

**8 CURB RAMP DETAIL**  
 STH 80/ CUNNINGHAM STREET (NE QUAD)  
 THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPE 4B AND 4B1.



**7 CURB RAMP DETAIL**  
 STH 80/ CUNNINGHAM STREET (SE QUAD)  
 THIS DETAIL SUPPLEMENTS STANDARD DETAIL DRAWINGS CURB RAMPS TYPES 2 & 3 AND CURB RAMPS TYPE 4B & 4B1.








- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO THE CURB RAMP AND SIDEWALK CONSTRUCTION.
  2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
  3. DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 80 R/L.

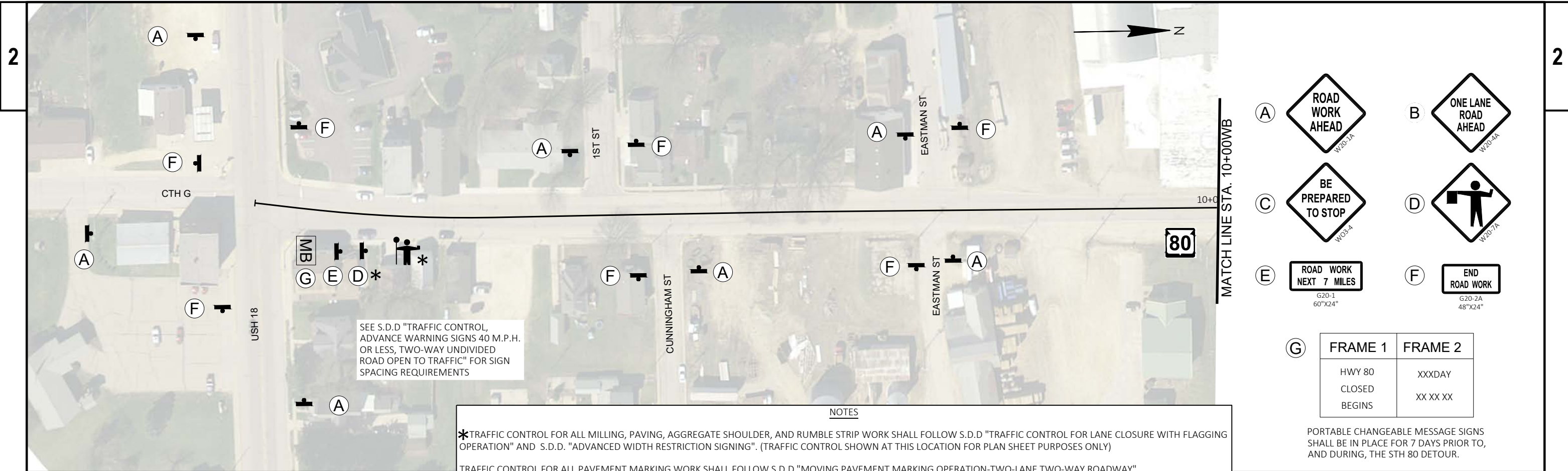


GENERAL NOTES FOR TRAFFIC CONTROL

- 1) THE EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER.
- 3) ALL SIGNS ARE 48" X 48" UNLESS NOTED.
- 4) "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- 5) ALL TYPE II BARRICADES SHALL BE 4' WIDE AND ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
- 6) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT UNLESS OTHERWISE NOTED OR DIRECTED BY ENGINEER.
- 7) EXISTING AND ADVANCE WARNING TRAFFIC SIGNS MAY REQUIRE RELOCATION DURING CONSTRUCTION STAGING, INCIDENTAL TO THE CONTRACT.
- 8) MAINTAIN LOCAL ACCESS AT ALL TIMES UNLESS OTHERWISE NOTED IN THE TRAFFIC CONTROL PLANS.

TRAFFIC CONTROL LEGEND

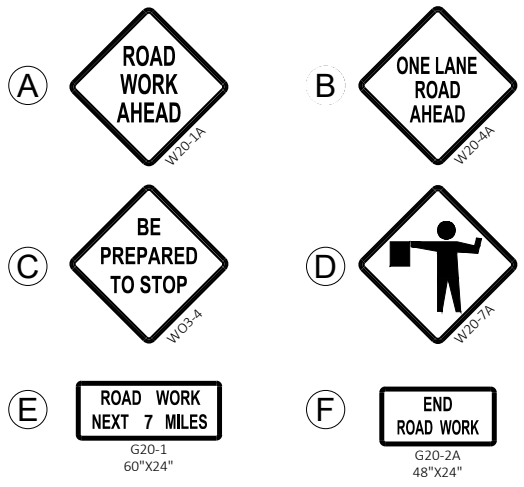
	TRAFFIC CONTROL BARRICADE TYPE III		WORK AREA
	TRAFFIC CONTROL BARRICADE TYPE III WITH ATTACHED SIGN AND TRAFFIC CONTROL WARNING LIGHT TYPE A		
	TRAFFIC CONTROL SIGNS (ON EXISTING SUPPORT)		FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
	TRAFFIC CONTROL SIGNS (ON PERMANENT SUPPORT)		
	TRAFFIC CONTROL SIGNS PCMS		



SEE S.D.D "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING REQUIREMENTS

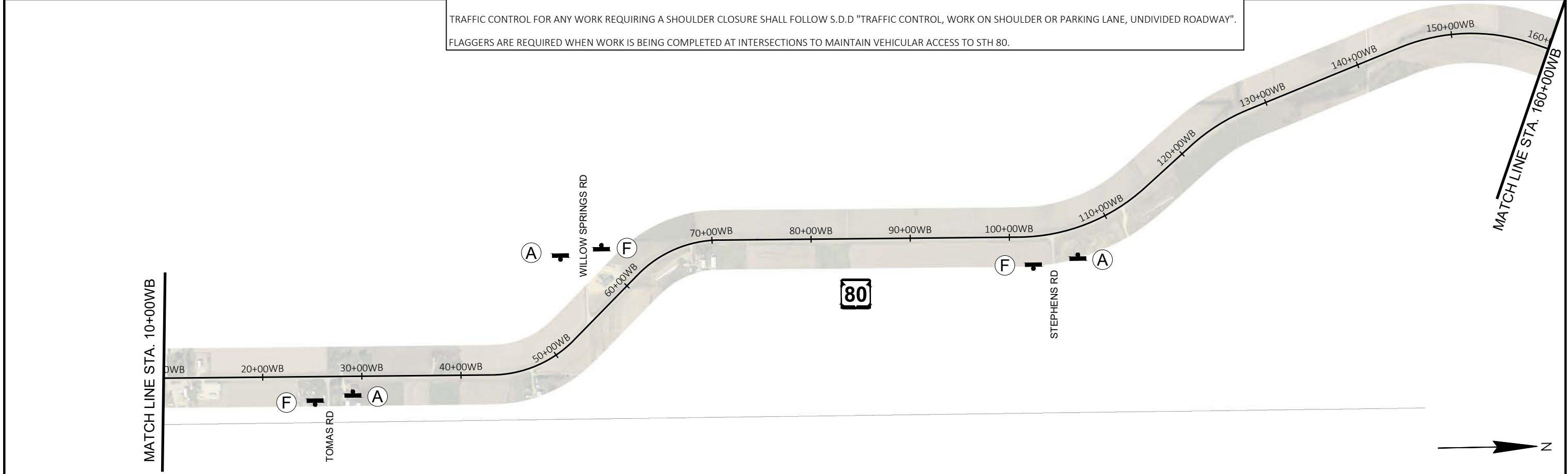
**NOTES**

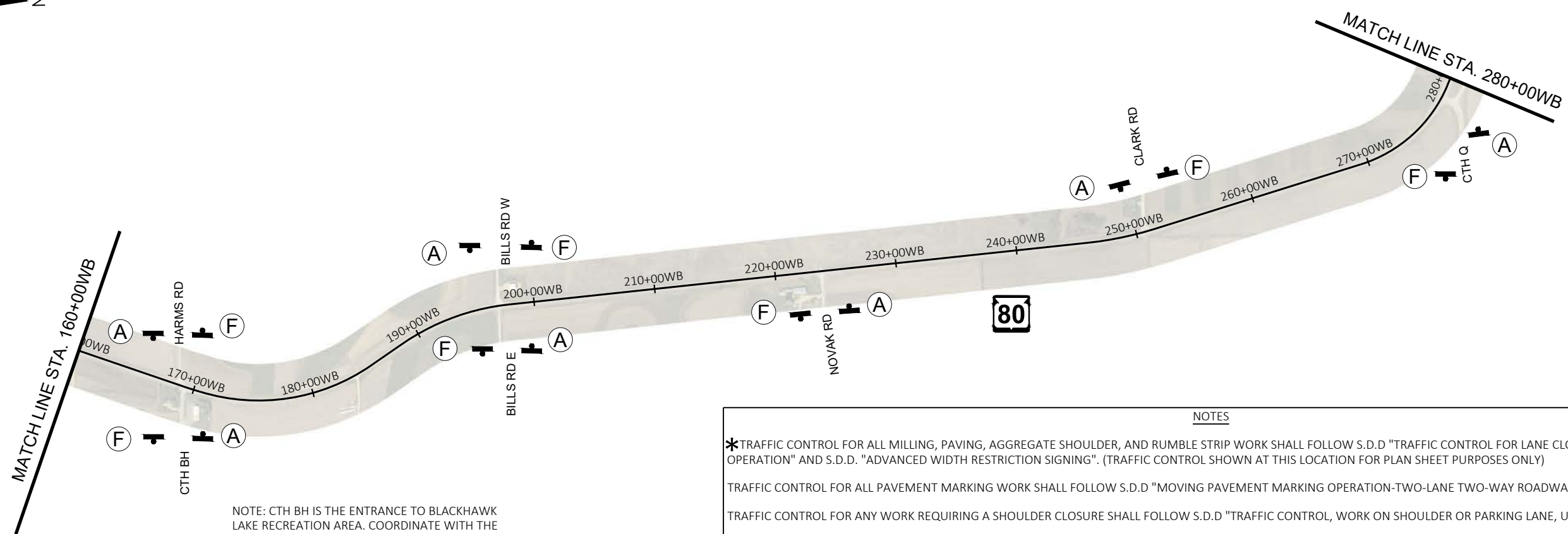
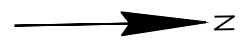
- \*TRAFFIC CONTROL FOR ALL MILLING, PAVING, AGGREGATE SHOULDER, AND RUMBLE STRIP WORK SHALL FOLLOW S.D.D "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" AND S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING". (TRAFFIC CONTROL SHOWN AT THIS LOCATION FOR PLAN SHEET PURPOSES ONLY)
- TRAFFIC CONTROL FOR ALL PAVEMENT MARKING WORK SHALL FOLLOW S.D.D "MOVING PAVEMENT MARKING OPERATION-TWO-LANE TWO-WAY ROADWAY".
- TRAFFIC CONTROL FOR ANY WORK REQUIRING A SHOULDER CLOSURE SHALL FOLLOW S.D.D "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".
- FLAGGERS ARE REQUIRED WHEN WORK IS BEING COMPLETED AT INTERSECTIONS TO MAINTAIN VEHICULAR ACCESS TO STH 80.



G	FRAME 1	FRAME 2
	HWY 80 CLOSED BEGINS	XXXDAY XX XX XX

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, AND DURING, THE STH 80 DETOUR.





NOTE: CTH BH IS THE ENTRANCE TO BLACKHAWK LAKE RECREATION AREA. COORDINATE WITH THE PARK OFFICE FOR ANY INTERRUPTION IN ACCESS

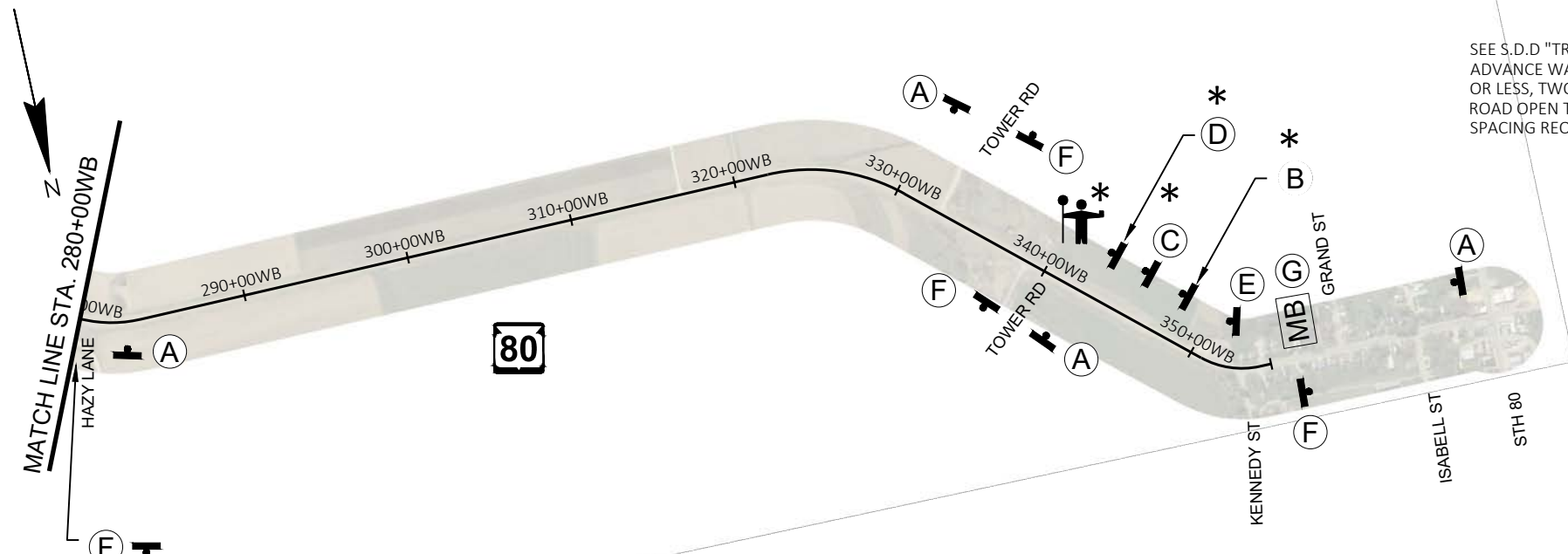
**NOTES**

\*TRAFFIC CONTROL FOR ALL MILLING, PAVING, AGGREGATE SHOULDER, AND RUMBLE STRIP WORK SHALL FOLLOW S.D.D "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" AND S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING". (TRAFFIC CONTROL SHOWN AT THIS LOCATION FOR PLAN SHEET PURPOSES ONLY)

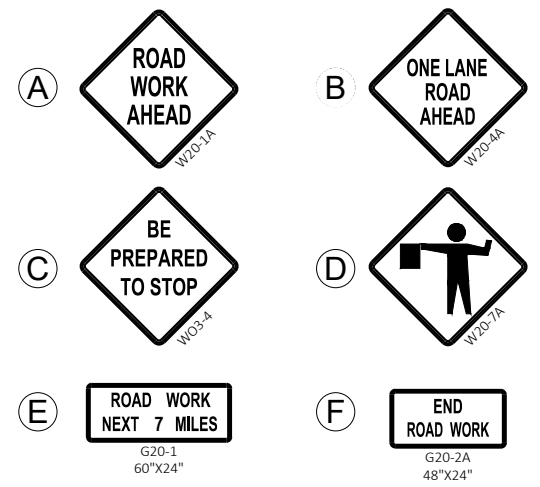
TRAFFIC CONTROL FOR ALL PAVEMENT MARKING WORK SHALL FOLLOW S.D.D "MOVING PAVEMENT MARKING OPERATION-TWO-LANE TWO-WAY ROADWAY".

TRAFFIC CONTROL FOR ANY WORK REQUIRING A SHOULDER CLOSURE SHALL FOLLOW S.D.D "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".

FLAGGERS ARE REQUIRED WHEN WORK IS BEING COMPLETED AT INTERSECTIONS TO MAINTAIN VEHICULAR ACCESS TO STH 80.



SEE S.D.D "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR SIGN SPACING REQUIREMENTS



G	
FRAME 1	FRAME 2
HWY 80	XXDAY
CLOSED	XX XX XX
BEGINS	

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, AND DURING, THE STH 80 DETOUR.

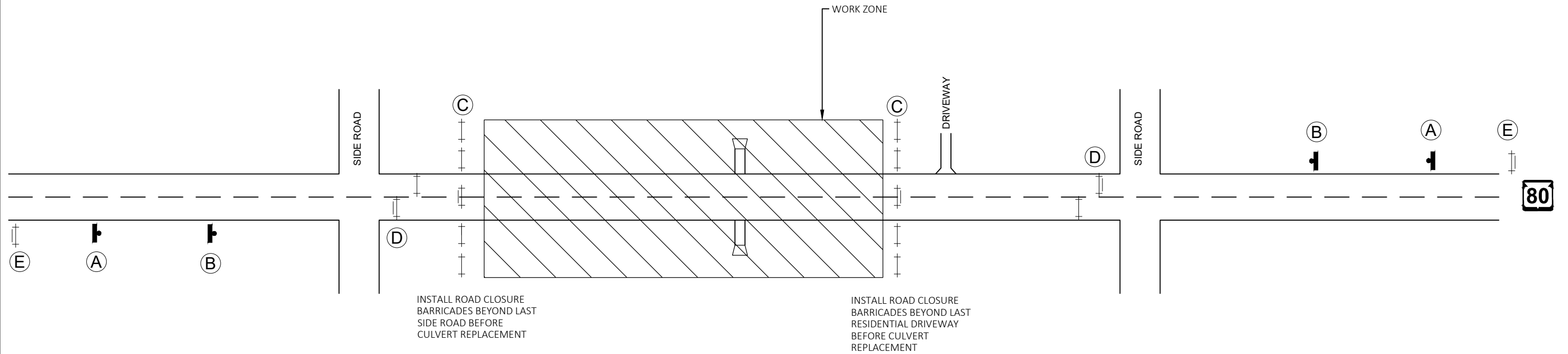
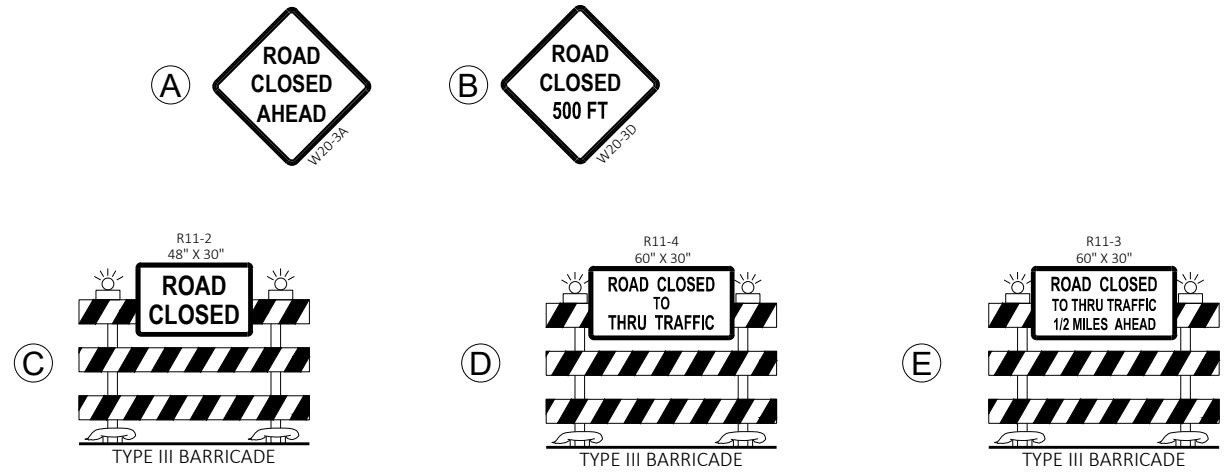
NOTES

TRAFFIC CONTROL FOR THE ROAD CLOSURE SHALL FOLLOW S.D.D "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

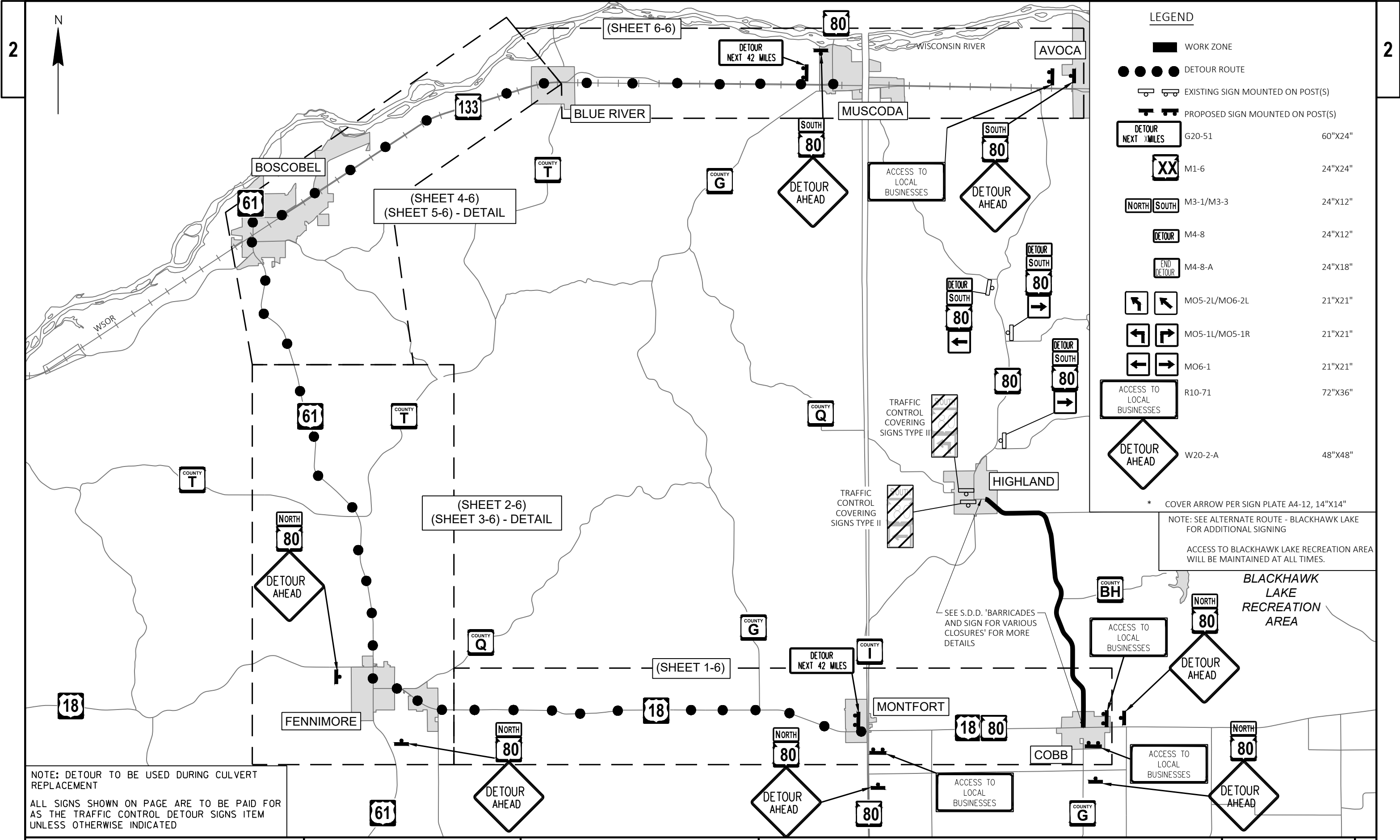
THIS DETAIL SHEET SHALL BE USED IN CONJUNCTION WITH THE DETOUR SIGNING DETAIL ONLY WHEN CULVERT PIPE WORK IS BEING COMPLETED.

VALID FOR THE CULVERTS LOCATED AT STA:

- 22+80 'WB'
- 34+43 'WB'
- 45+15 'WB'
- 45+23 'WB'
- 62+82 'WB'
- 80+92 'WB'
- 103+95 'WB'
- 137+16 'WB'
- 209+23 'WB'
- 241+18 'WB'
- 248+71 'WB'
- 280+07 'WB'
- 280+09 'WB'
- 299+05 'WB'
- 307+25 'WB'
- 314+55 'WB'



TYPICAL ROAD CLOSURE



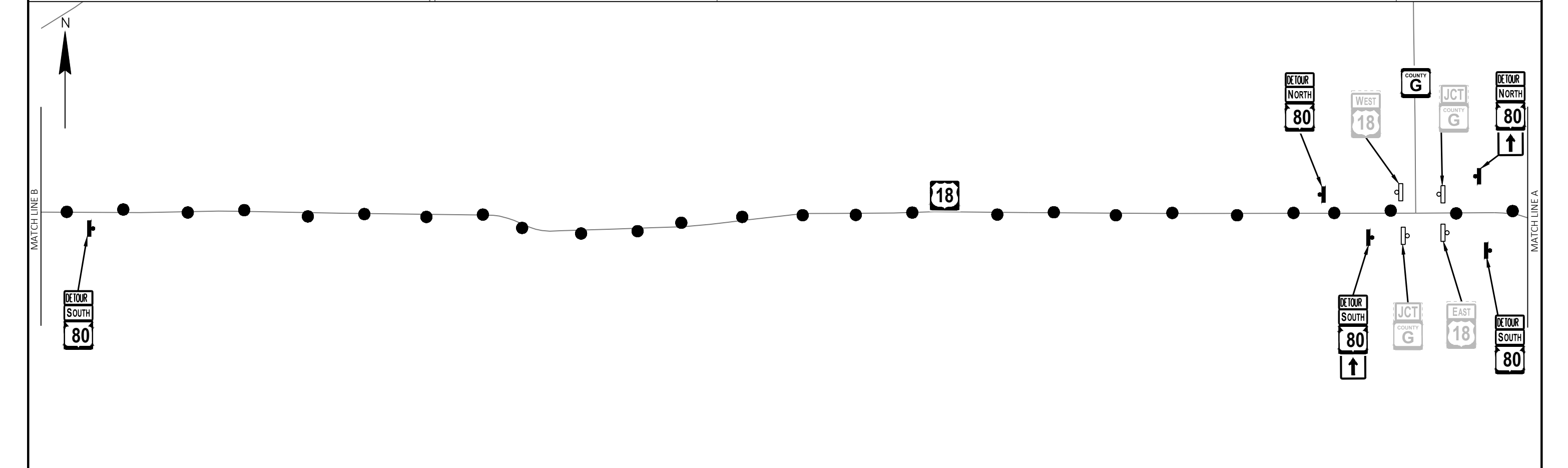
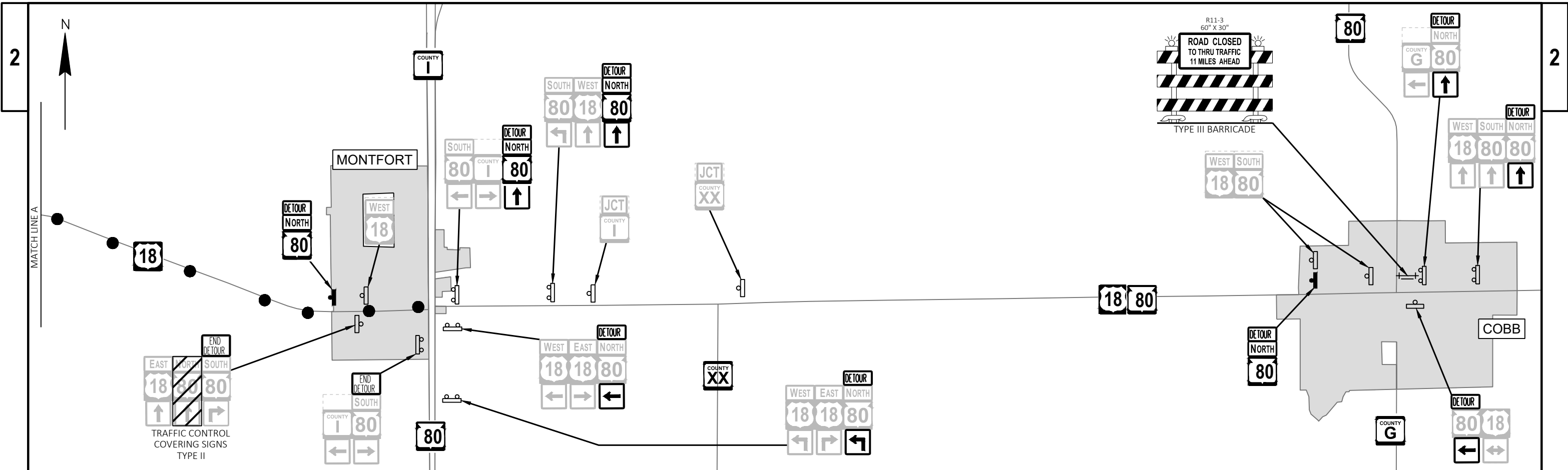
**LEGEND**

- WORK ZONE
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)

DETOUR NEXT X MILES	G20-51	60"X24"
XX	M1-6	24"X24"
NORTH SOUTH	M3-1/M3-3	24"X12"
DETOUR	M4-8	24"X12"
END DETOUR	M4-8-A	24"X18"
↖ ↗	MO5-2L/MO6-2L	21"X21"
↙ ↘	MO5-1L/MO5-1R	21"X21"
← →	MO6-1	21"X21"
ACCESS TO LOCAL BUSINESSES	R10-71	72"X36"
DETOUR AHEAD	W20-2-A	48"X48"

\* COVER ARROW PER SIGN PLATE A4-12, 14"X14"  
 NOTE: SEE ALTERNATE ROUTE - BLACKHAWK LAKE FOR ADDITIONAL SIGNING  
 ACCESS TO BLACKHAWK LAKE RECREATION AREA WILL BE MAINTAINED AT ALL TIMES.

NOTE: DETOUR TO BE USED DURING CULVERT REPLACEMENT  
 ALL SIGNS SHOWN ON PAGE ARE TO BE PAID FOR AS THE TRAFFIC CONTROL DETOUR SIGNS ITEM UNLESS OTHERWISE INDICATED



PROJECT NO: 5939-00-70

HWY: STH 80

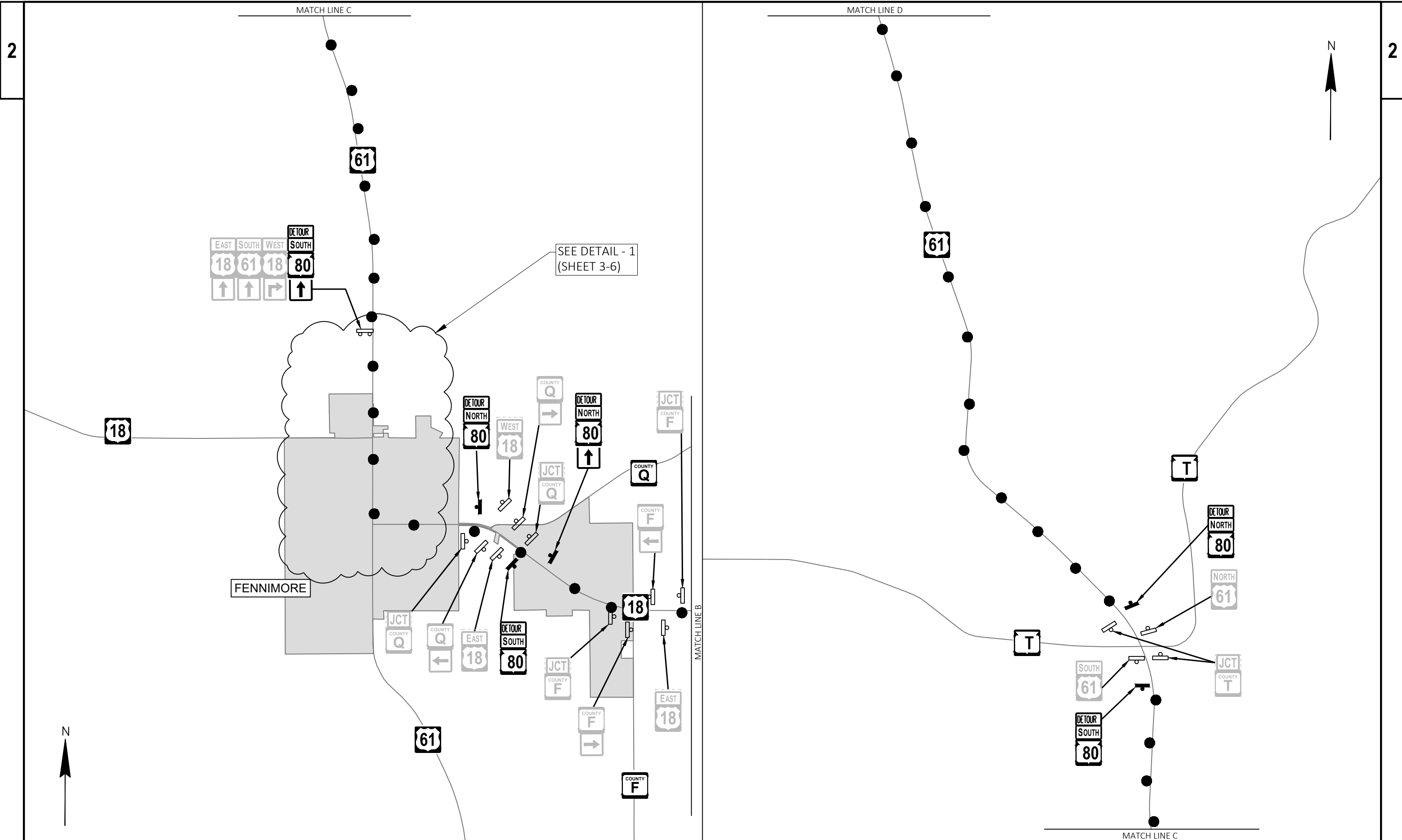
COUNTY: IOWA

TRAFFIC CONTROL - DETOUR ROUTE

(SHEET 1 - 6)

SHEET

E

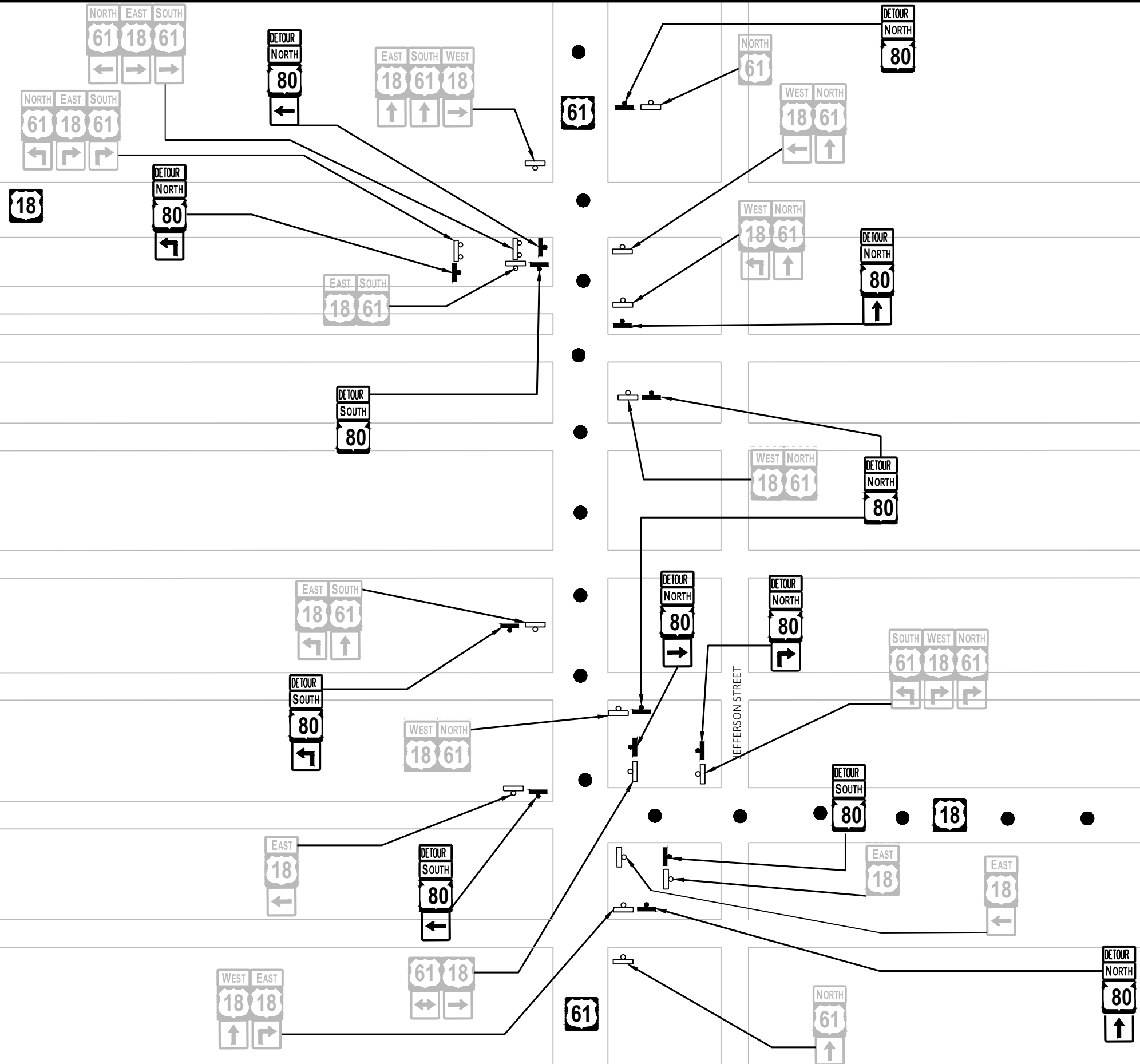


NOTE: NOT ALL SIDE ROADS SHOWN FOR CLARITY PURPOSES

2



2



PROJECT NO: 5939-00-70

HWY: STH 80

COUNTY: IOWA

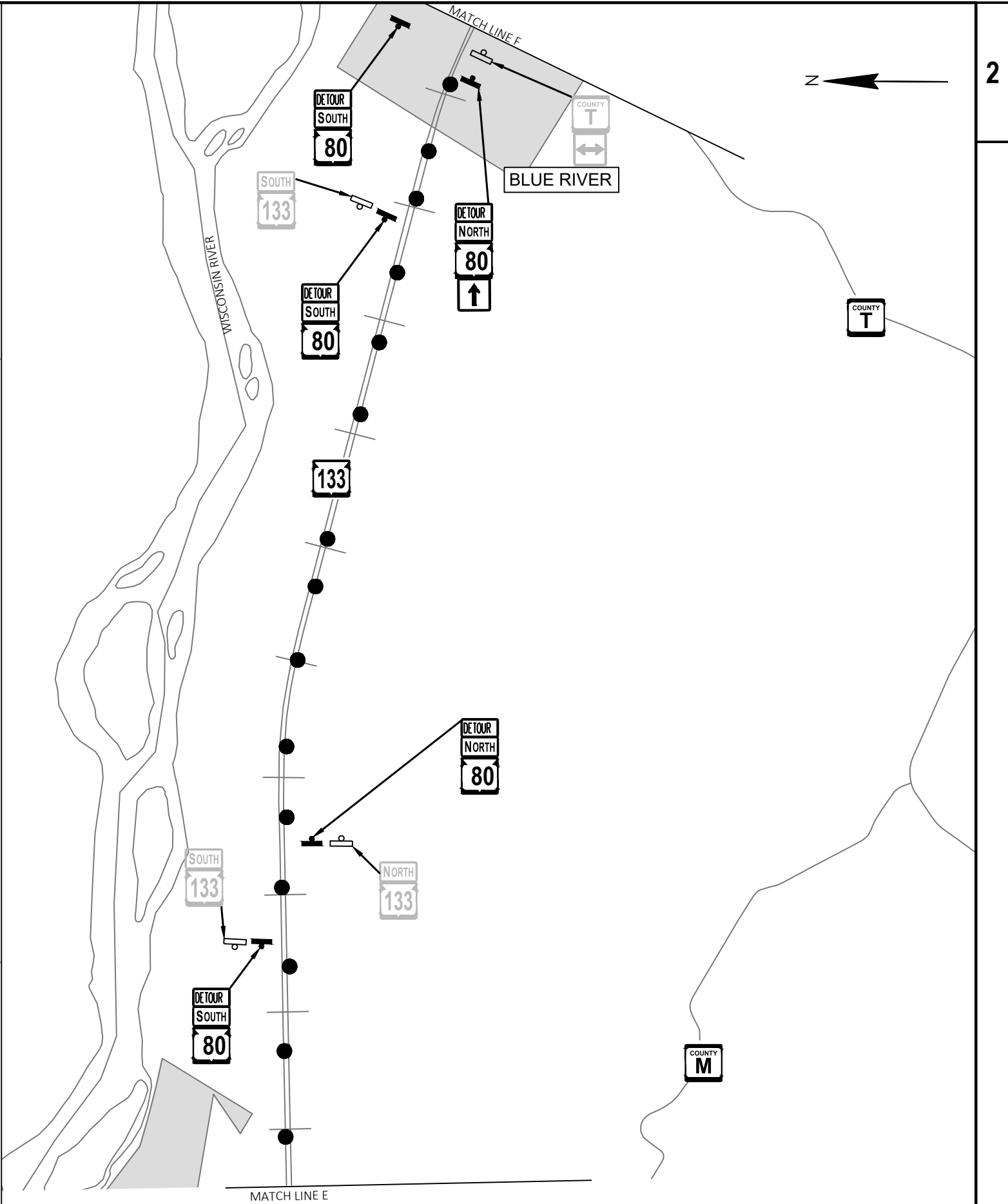
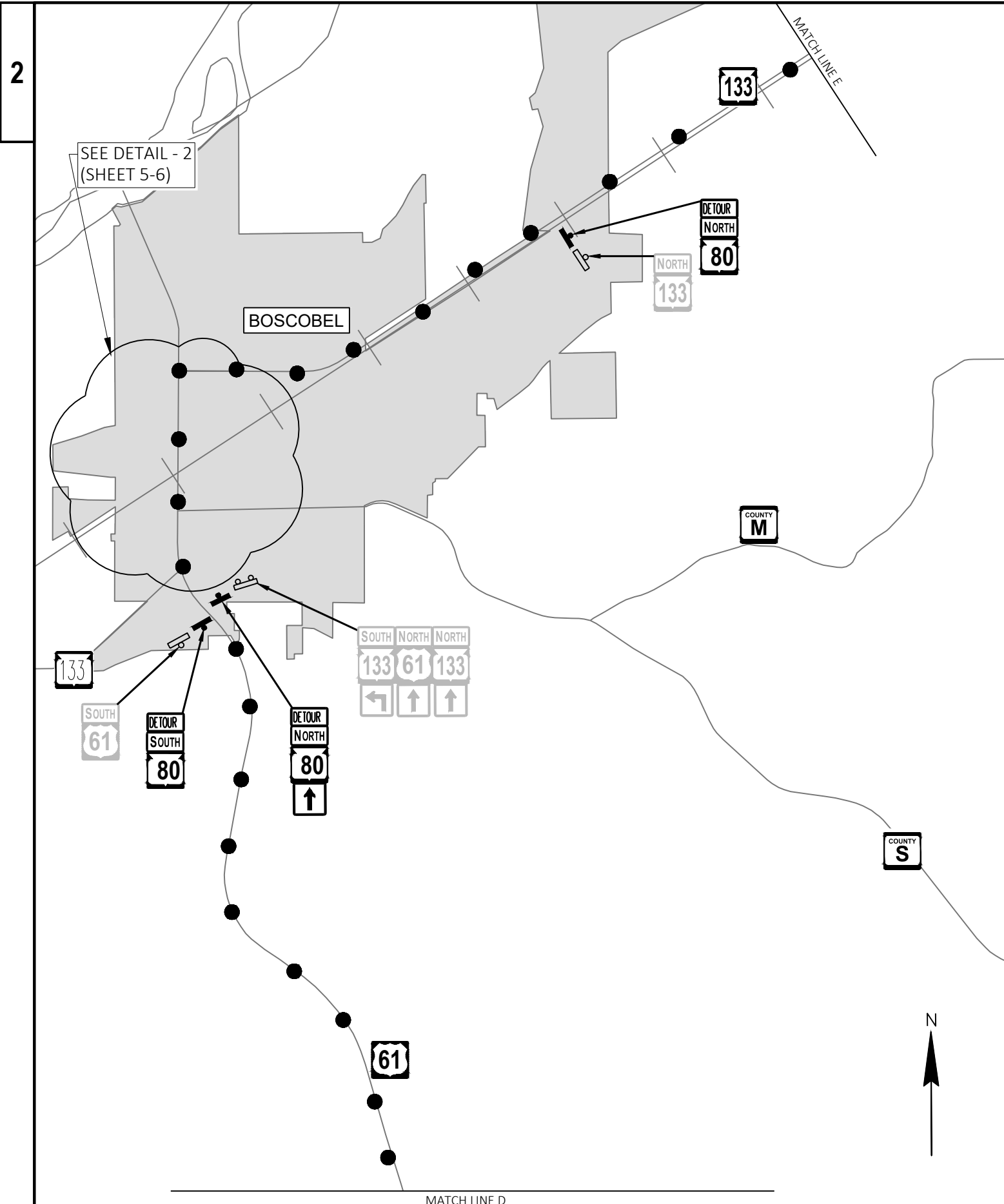
TRAFFIC CONTROL - DETOUR ROUTE -- DETAIL 1

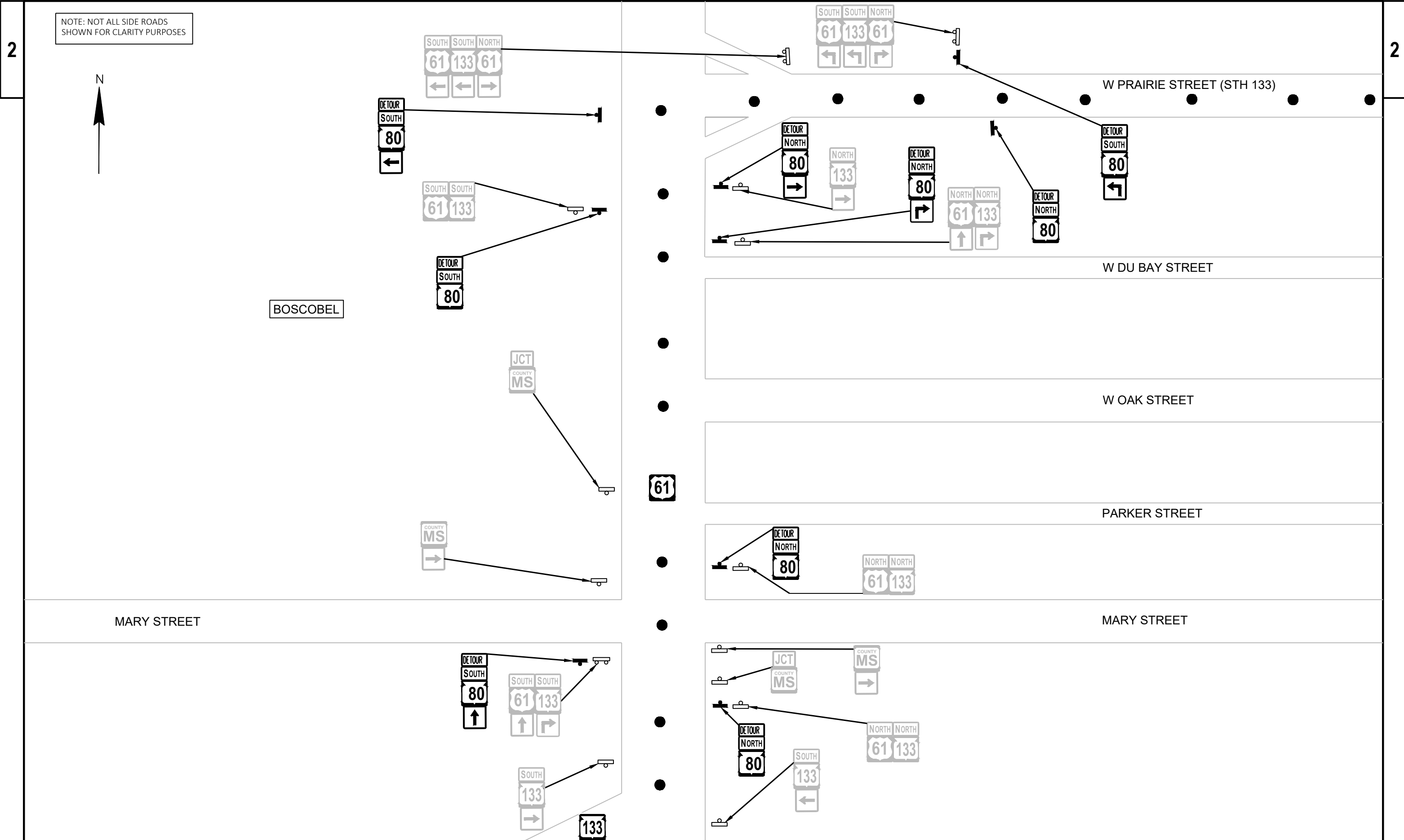
(SHEET 3 - 6)

SHEET

E







NOTE: NOT ALL SIDE ROADS SHOWN FOR CLARITY PURPOSES



BOSCOBEL

MARY STREET

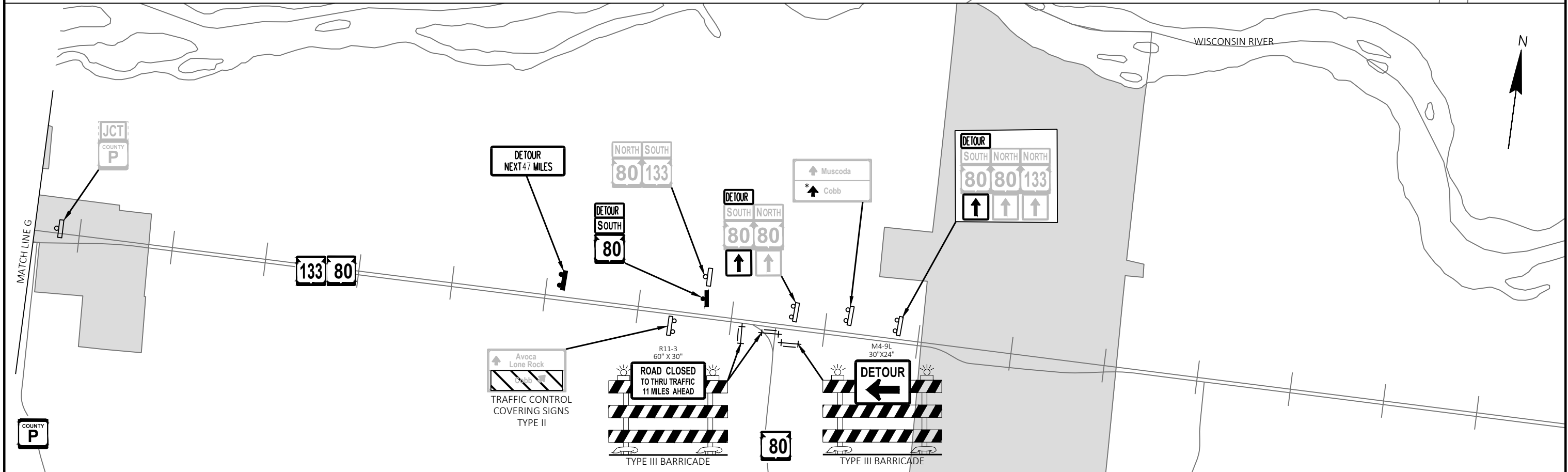
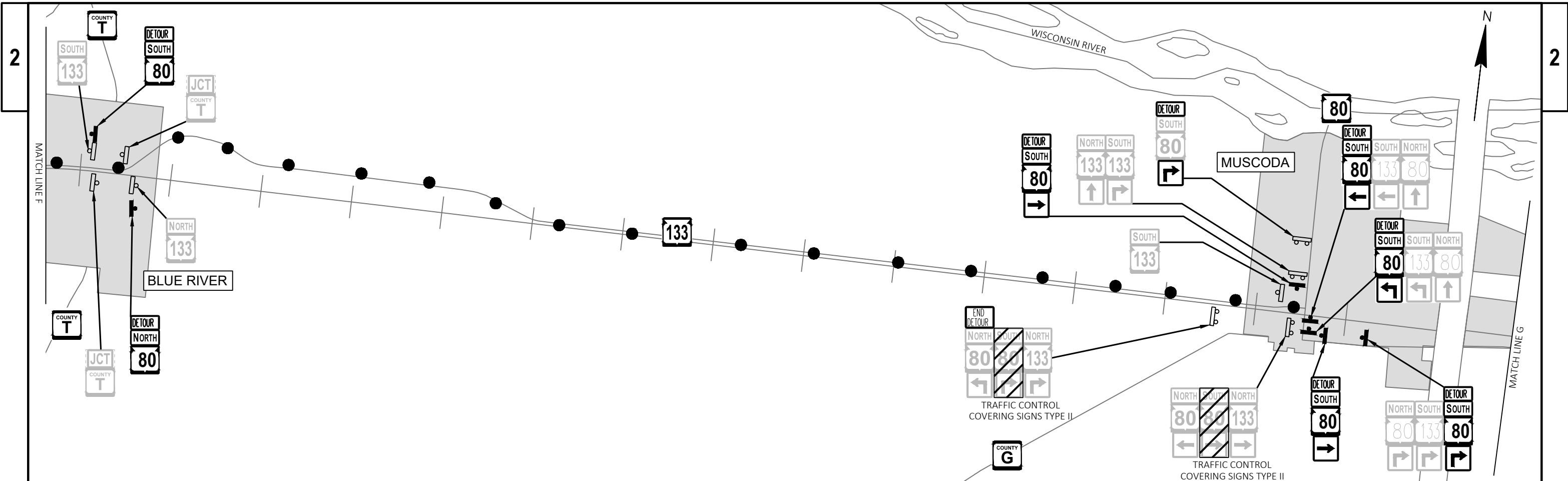
W PRAIRIE STREET (STH 133)

W DU BAY STREET

W OAK STREET

PARKER STREET

MARY STREET



PROJECT NO: 5939-00-70

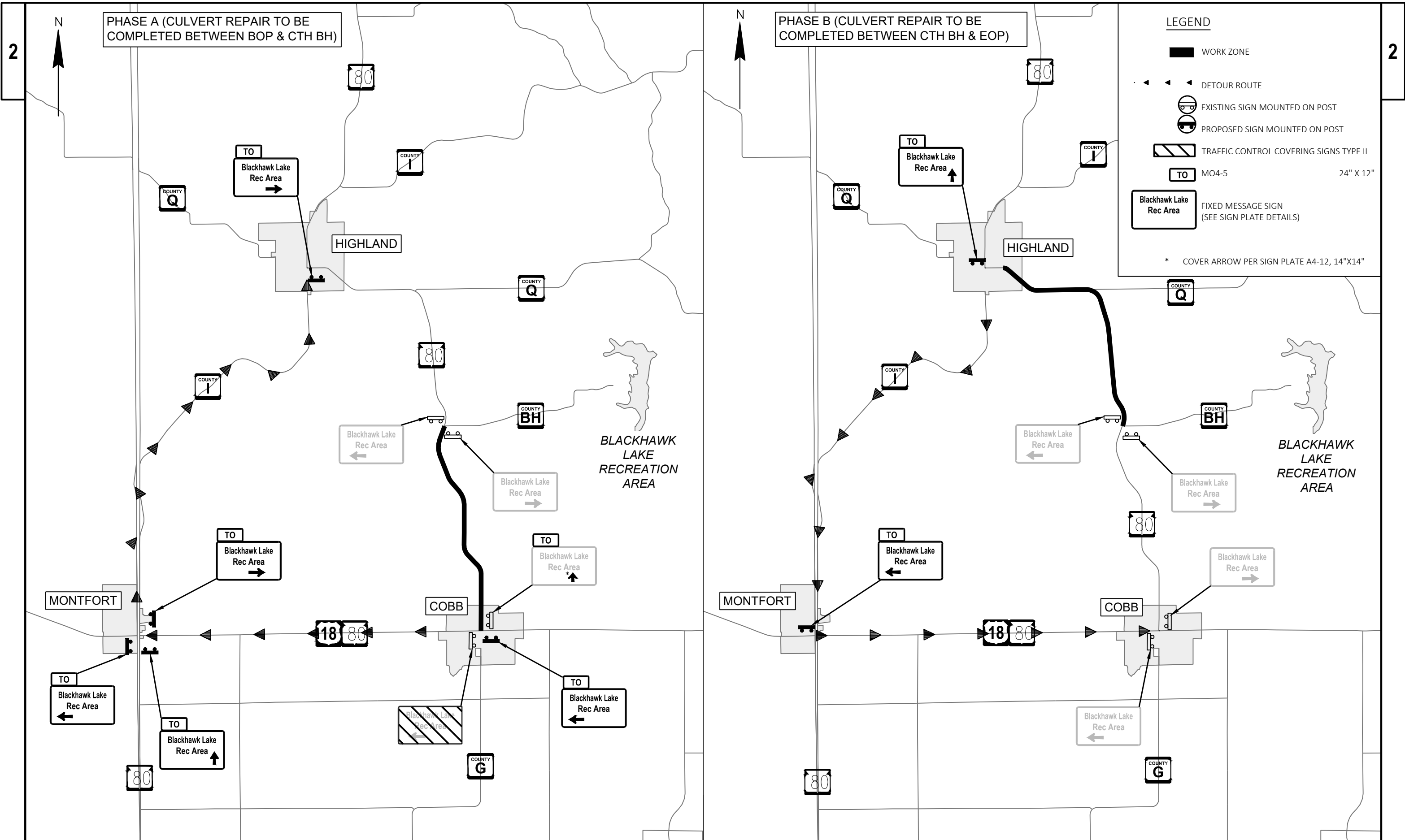
HWY: STH 80

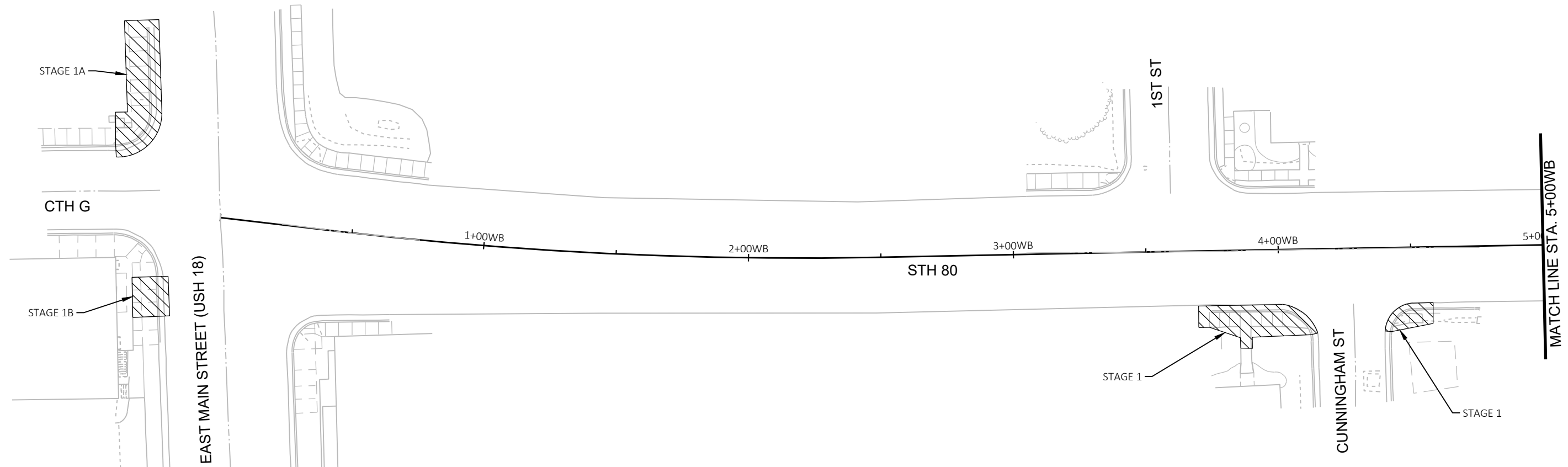
COUNTY: IOWA

TRAFFIC CONTROL - DETOUR ROUTE

(SHEET 6 - 6) SHEET

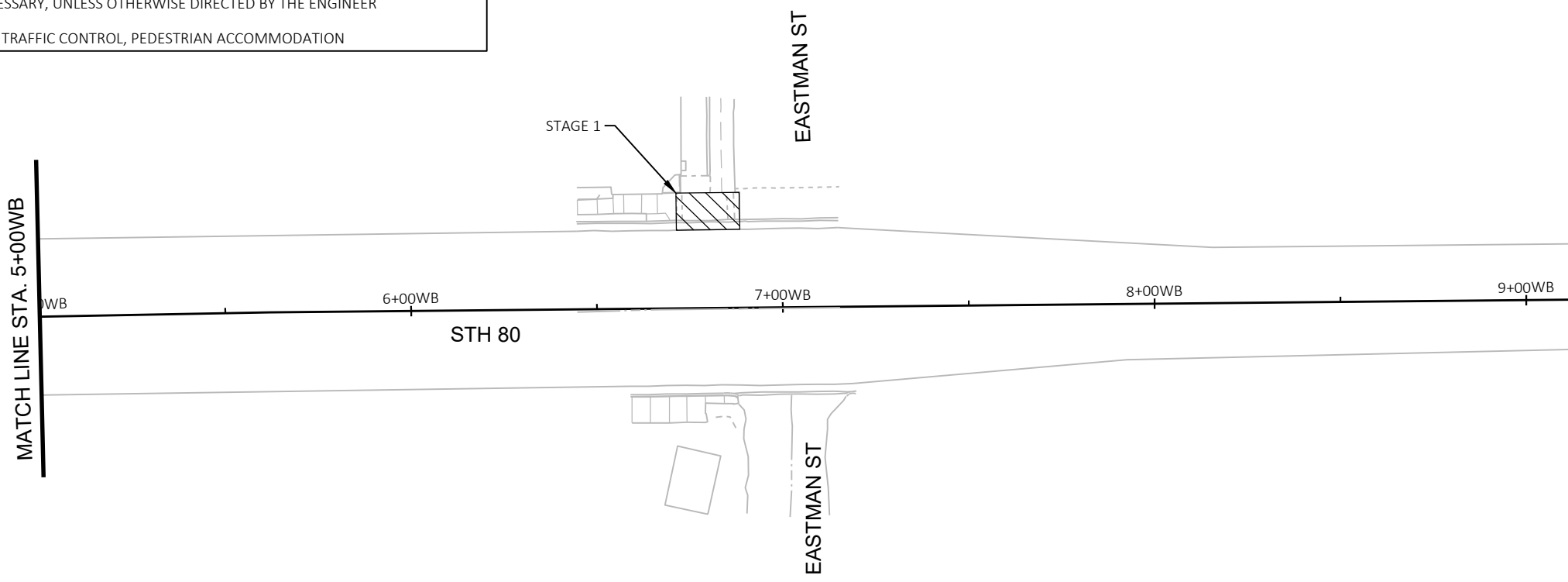
E





**NOTES - STAGE 1:**  
 REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER

- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



**STAGE 1 - STH 80**

**CONSTRUCTION OPERATIONS - STAGE 1:**

- CONSTRUCT CUNNINGHAM STREET CURB RAMPS
- CONSTRUCT EASTMAN STREET (WEST) CURB RECONSTRUCT & SIDEWALK REPLACEMENT

**CONSTRUCTION OPERATIONS - STAGE 1A:**

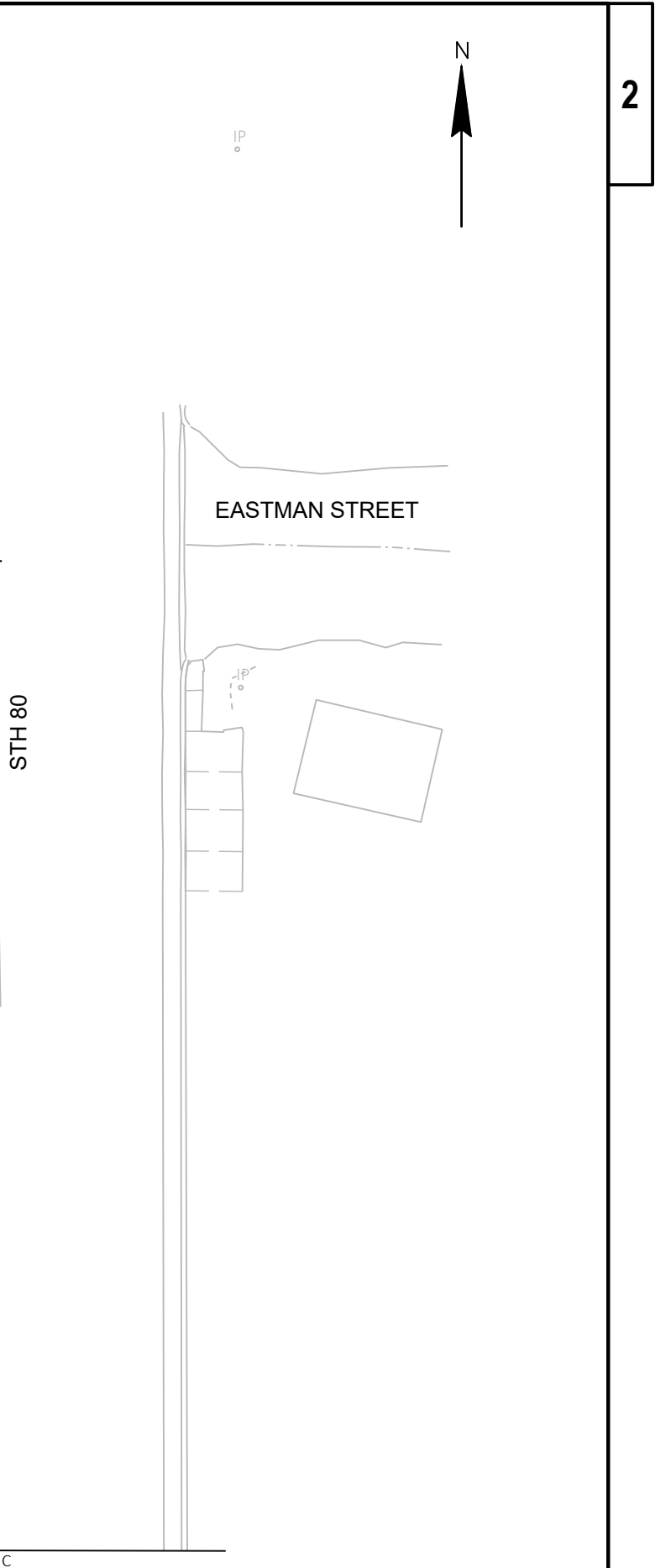
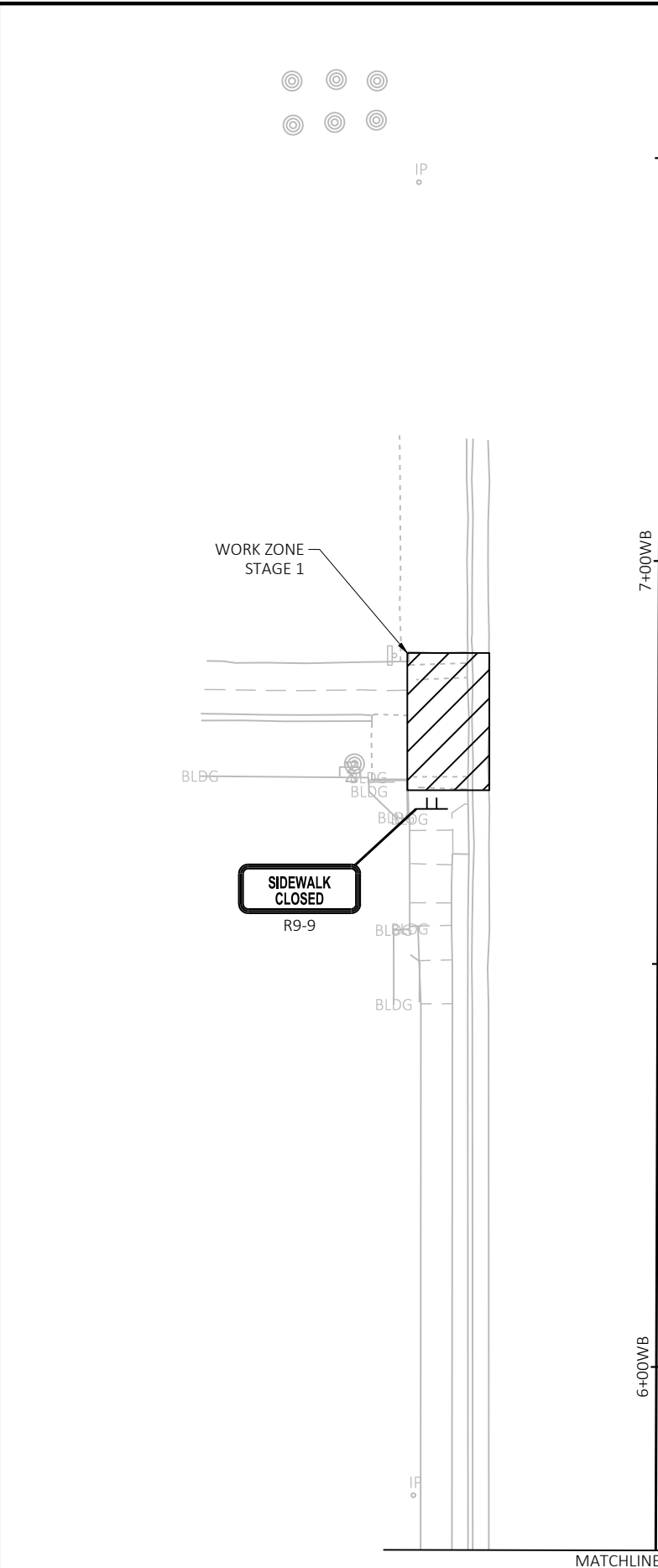
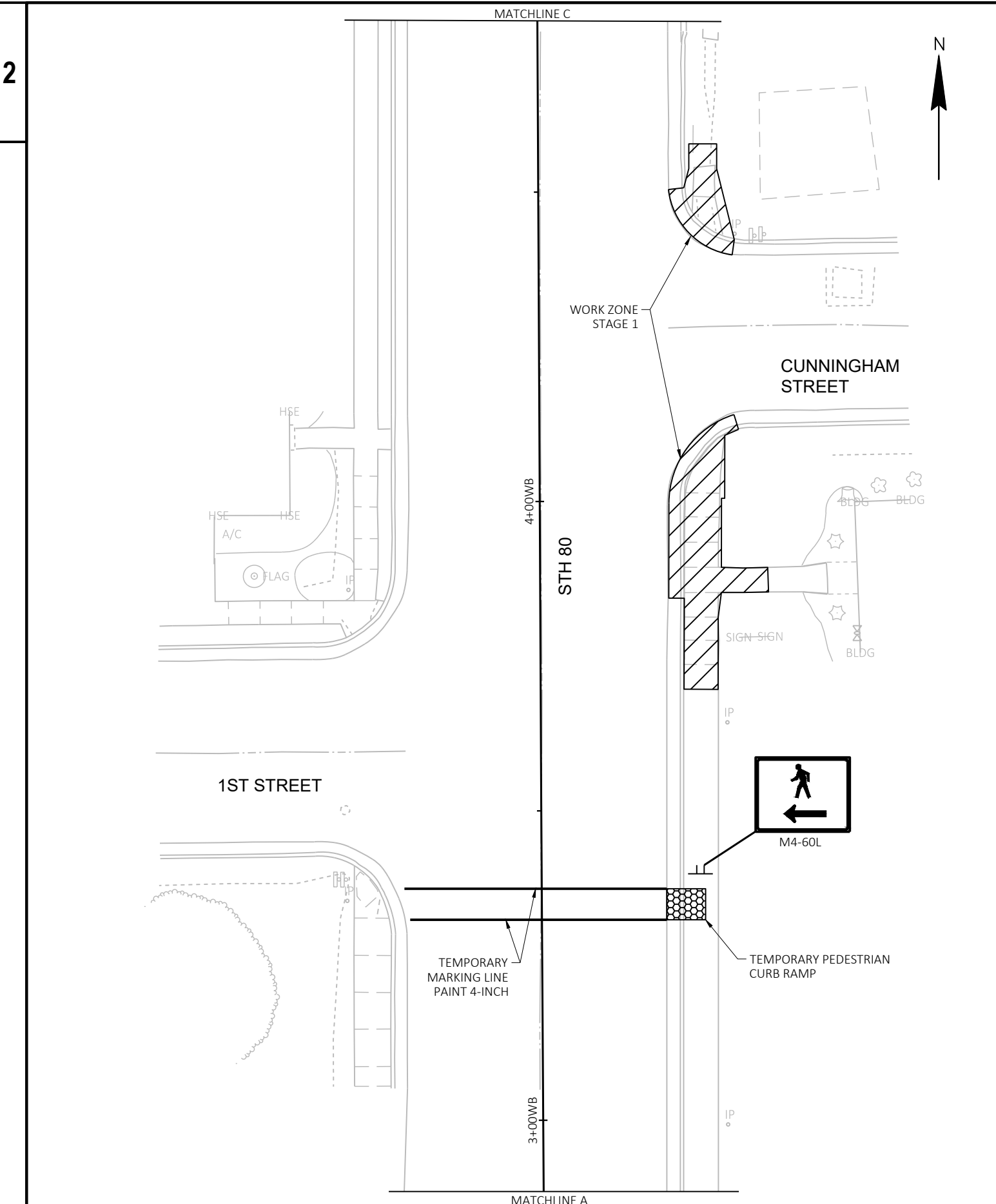
- CONSTRUCT CTH G (SW) CURB RAMPS

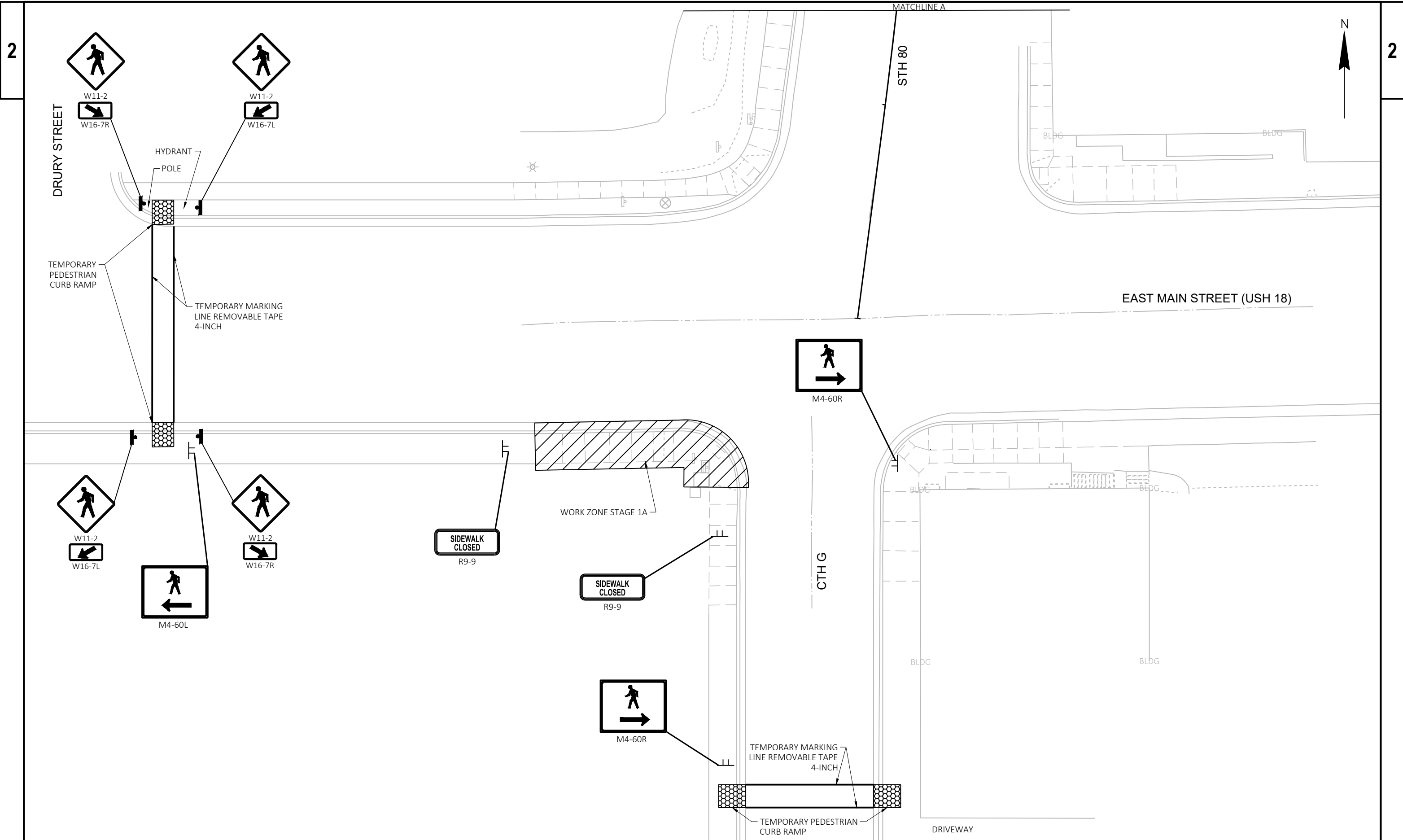
**CONSTRUCTION OPERATIONS - STAGE 1B:**

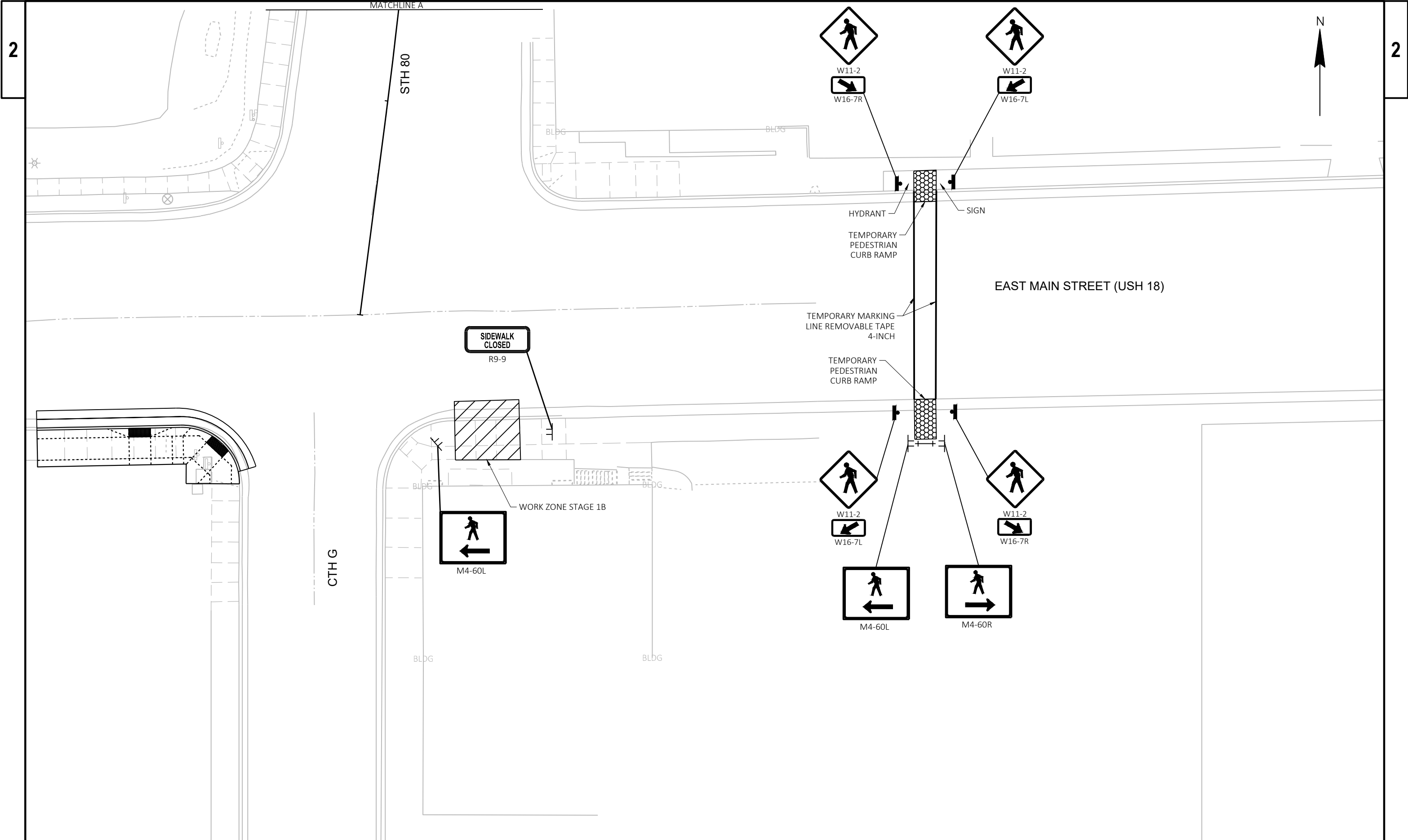
- CONSTRUCT CTH G (SE) CURB RAMPS

**PEDESTRIAN ACCOMMODATIONS:**

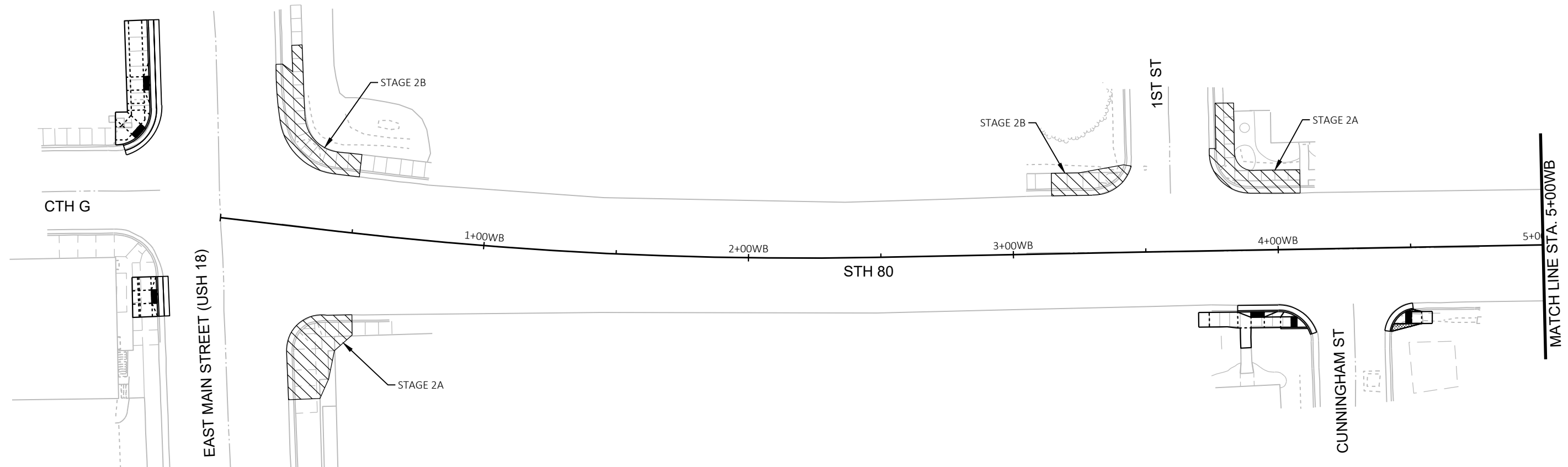
- MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SIDEWALK SURFACE FOR ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 80 THROUGH THE WORK ZONE DURING CURB RAMP REPLACEMENT.
- THE CONTRACTOR WILL ONLY BE ALLOWED TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME.





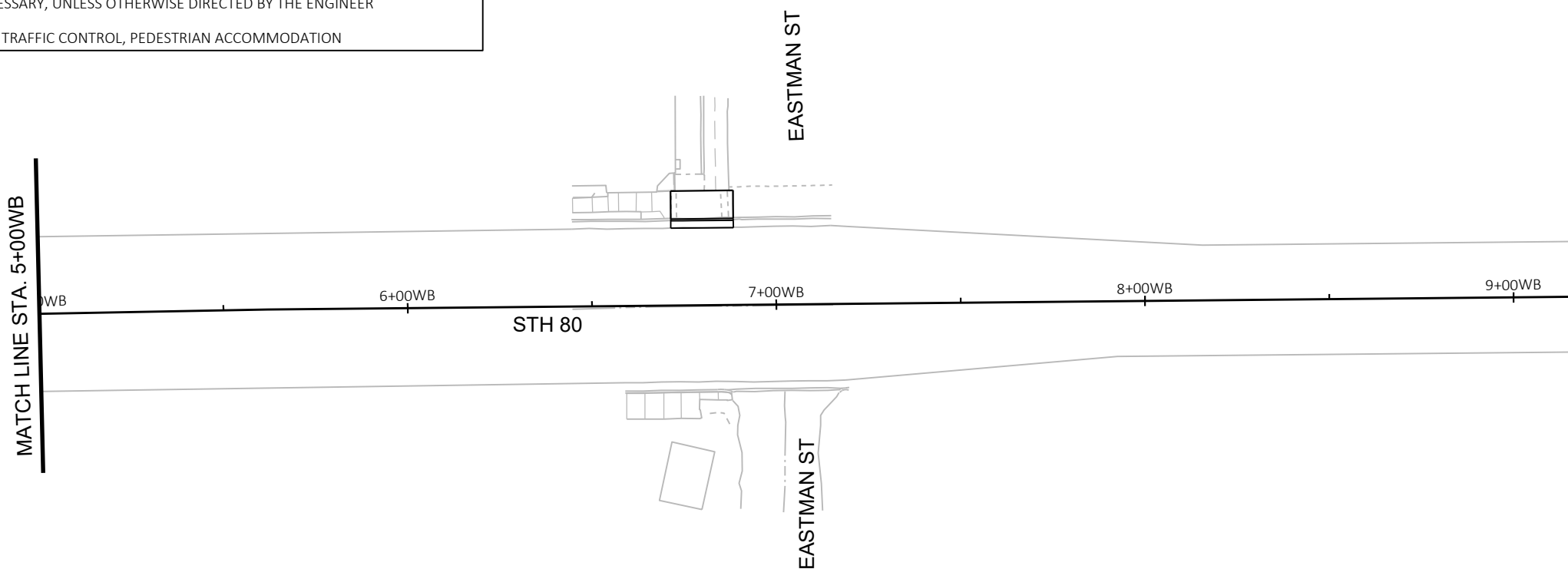






NOTES - STAGE 2:  
 REFER TO THE FOLLOWING STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES, AS WELL AS OTHER STANDARD DETAIL DRAWINGS AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER

- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



**STAGE 2 - STH 80**

**CONSTRUCTION OPERATIONS - STAGE 2A:**

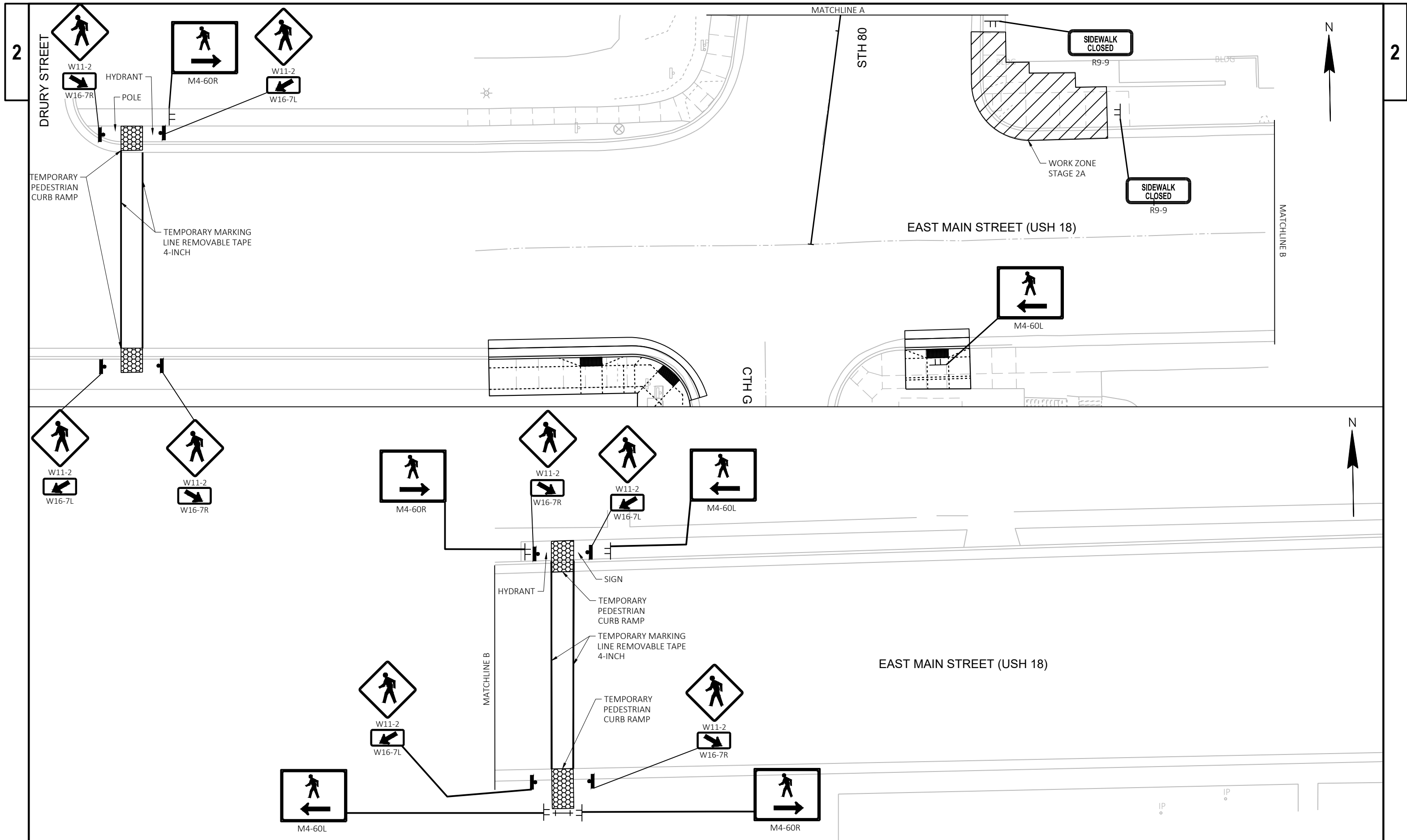
- CONSTRUCT USH 18/STH 80 (NE) CURB RAMPS
- CONSTRUCT 1ST STREET (NW) CURB RAMPS

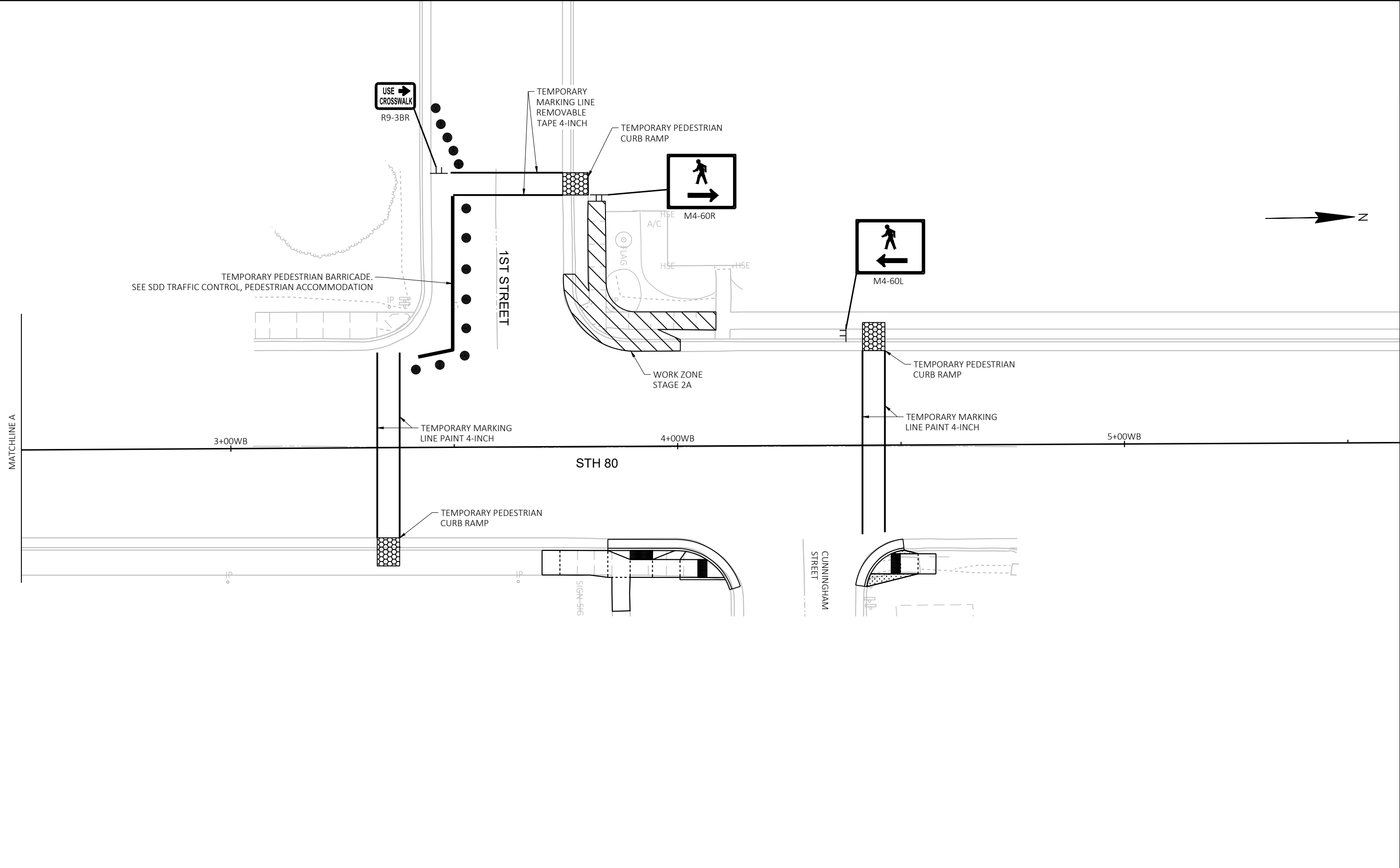
**CONSTRUCTION OPERATIONS - STAGE 2B:**

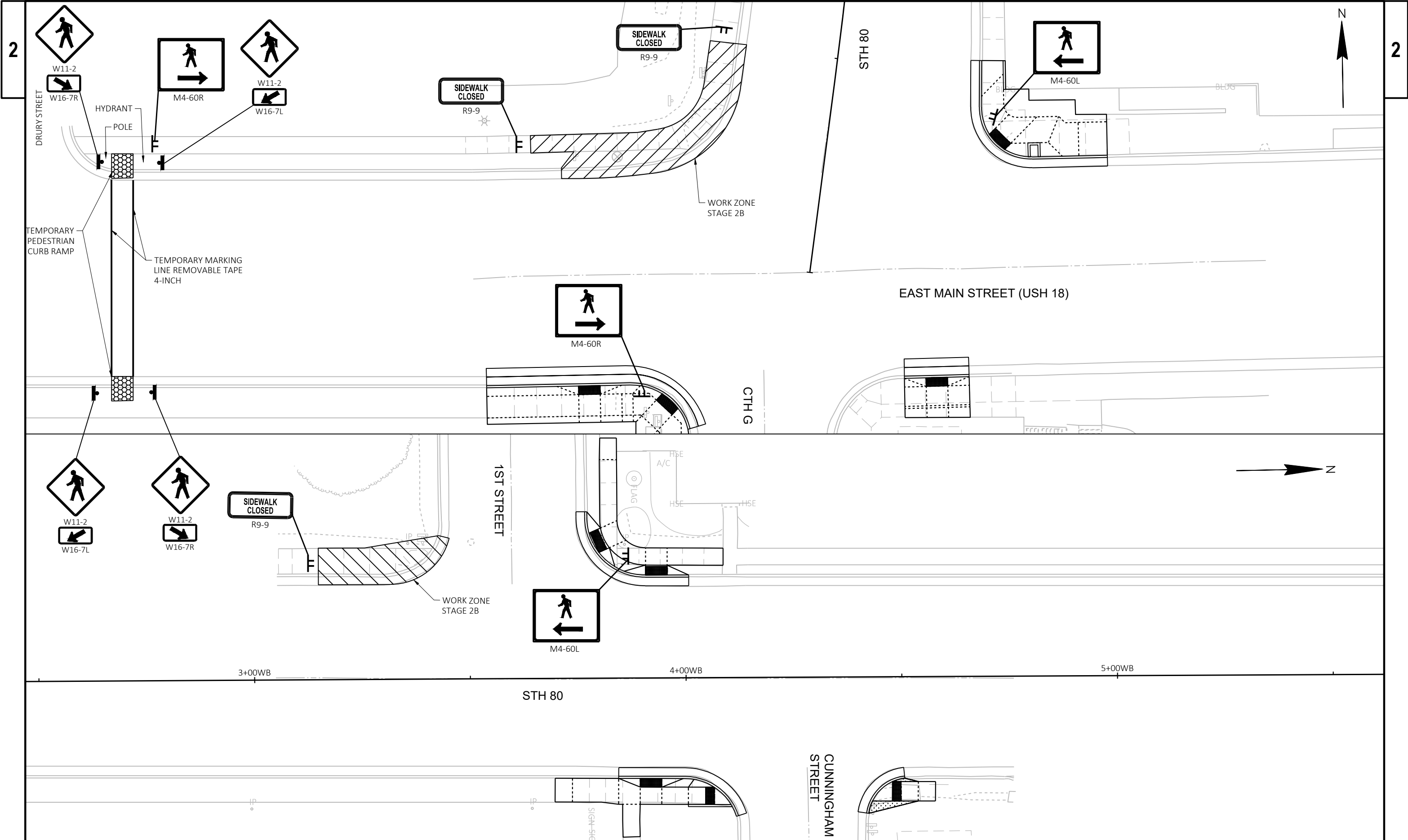
- CONSTRUCT USH 18/STH 80 (NW) CURB RAMPS
- CONSTRUCT 1ST STREET (SW) CURB RAMPS

**PEDESTRIAN ACCOMMODATIONS:**

- MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SIDEWALK SURFACE FOR ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 80 THROUGH THE WORK ZONE DURING CURB RAMP REPLACEMENT.
- THE CONTRACTOR WILL ONLY BE ALLOWED TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME.







PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	TRAFFIC CONTROL - PEDESTRIAN DETOUR STAGE 2B	SHEET	<b>E</b>
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Estimate Of Quantities

5939-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	16.000	16.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,200.000	1,200.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	123,800.000	123,800.000
0008	204.0150	Removing Curb & Gutter	LF	300.000	300.000
0010	204.0155	Removing Concrete Sidewalk	SY	230.000	230.000
0012	204.0165	Removing Guardrail	LF	53.000	53.000
0014	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5939-00-70	EACH	1.000	1.000
0016	213.0100	Finishing Roadway (project) 01. 5939-00-70	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,000.000	2,000.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	6,000.000	6,000.000
0022	455.0605	Tack Coat	GAL	19,700.000	19,700.000
0024	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0026	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	3.000	3.000
0028	460.2000	Incentive Density HMA Pavement	DOL	220.000	220.000
0030	460.2005	Incentive Density PWL HMA Pavement	DOL	18,370.000	18,370.000
0032	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	17,560.000	17,560.000
0034	460.2010	Incentive Air Voids HMA Pavement	DOL	24,321.000	24,321.000
0036	460.5224	HMA Pavement 4 LT 58-28 S	TON	24,400.000	24,400.000
0038	465.0105	Asphaltic Surface	TON	2,000.000	2,000.000
0040	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	30,450.000	30,450.000
0042	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	34.000	34.000
0044	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	1,165.000	1,165.000
0046	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	300.000	300.000
0048	601.0600	Concrete Curb Pedestrian	LF	25.000	25.000
0050	602.0410	Concrete Sidewalk 5-Inch	SF	2,200.000	2,200.000
0052	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	108.000	108.000
0054	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	21.000	21.000
0056	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0058	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0060	611.8120.S	Cover Plates Temporary	EACH	6.000	6.000
0062	614.0010	Barrier System Grading Shaping Finishing	EACH	1.000	1.000
0064	614.0305	Steel Plate Beam Guard Class A	LF	188.000	188.000
0066	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	1.000	1.000
0068	616.0700.S	Fence Safety	LF	200.000	200.000
0070	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5939-00-70	EACH	1.000	1.000
0072	619.1000	Mobilization	EACH	1.000	1.000
0074	624.0100	Water	MGAL	74.000	74.000
0076	625.0100	Topsoil	SY	100.000	100.000
0078	625.0500	Salvaged Topsoil	SY	4,600.000	4,600.000
0080	628.1504	Silt Fence	LF	4,200.000	4,200.000
0082	628.1520	Silt Fence Maintenance	LF	13,700.000	13,700.000
0084	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0086	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0088	628.2004	Erosion Mat Class I Type B	SY	4,800.000	4,800.000
0090	628.2006	Erosion Mat Urban Class I Type A	SY	100.000	100.000
0092	628.7015	Inlet Protection Type C	EACH	9.000	9.000
0094	628.7504	Temporary Ditch Checks	LF	15.000	15.000
0096	628.7555	Culvert Pipe Checks	EACH	65.000	65.000
0098	629.0210	Fertilizer Type B	CWT	1.000	1.000

Estimate Of Quantities

5939-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	630.0130	Seeding Mixture No. 30	LB	85.000	85.000
0102	630.0140	Seeding Mixture No. 40	LB	2.000	2.000
0104	630.0500	Seed Water	MGAL	390.000	390.000
0106	633.5200	Markers Culvert End	EACH	34.000	34.000
0108	642.5001	Field Office Type B	EACH	1.000	1.000
0110	643.0300	Traffic Control Drums	DAY	1,600.000	1,600.000
0112	643.0420	Traffic Control Barricades Type III	DAY	900.000	900.000
0114	643.0705	Traffic Control Warning Lights Type A	DAY	1,300.000	1,300.000
0116	643.0900	Traffic Control Signs	DAY	26,970.000	26,970.000
0118	643.0920	Traffic Control Covering Signs Type II	EACH	19.000	19.000
0120	643.1000	Traffic Control Signs Fixed Message	SF	97.000	97.000
0122	643.1050	Traffic Control Signs PCMS	DAY	130.000	130.000
0124	643.5000	Traffic Control	EACH	1.000	1.000
0126	644.1601	Temporary Pedestrian Curb Ramp	DAY	80.000	80.000
0128	644.1810	Temporary Pedestrian Barricade	LF	40.000	40.000
0130	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	67,400.000	67,400.000
0132	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	70,300.000	70,300.000
0134	646.6120	Marking Stop Line Epoxy 18-Inch	LF	22.000	22.000
0136	646.8120	Marking Curb Epoxy	LF	230.000	230.000
0138	649.0105	Temporary Marking Line Paint 4-Inch	LF	111,570.000	111,570.000
0140	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	55,700.000	55,700.000
0142	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	340.000	340.000
0144	649.0820	Temporary Marking Stop Line Epoxy 18-Inch	LF	22.000	22.000
0146	650.4500	Construction Staking Subgrade	LF	330.000	330.000
0148	650.5000	Construction Staking Base	LF	35,125.000	35,125.000
0150	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	300.000	300.000
0152	650.6000	Construction Staking Pipe Culverts	EACH	16.000	16.000
0154	650.8000	Construction Staking Resurfacing Reference	LF	35,125.000	35,125.000
0156	650.9000	Construction Staking Curb Ramps	EACH	12.000	12.000
0158	650.9910	Construction Staking Supplemental Control (project) 01. 5939-00-70	LS	1.000	1.000
0160	650.9920	Construction Staking Slope Stakes	LF	330.000	330.000
0162	690.0150	Sawing Asphalt	LF	1,420.000	1,420.000
0164	690.0250	Sawing Concrete	LF	250.000	250.000
0166	740.0440	Incentive IRI Ride	DOL	13,304.000	13,304.000
0168	SPV.0060	Special 01. Adjusting Water Valve Boxes	EACH	4.000	4.000
0170	SPV.0060	Special 02. Landmark Reference Monuments Special	EACH	3.000	3.000
0172	SPV.0060	Special 03. Unbury and Adjusting Water Valve Boxes	EACH	1.000	1.000
0174	SPV.0165	Special 01. Shotcrete Surface Repair	SF	135.000	135.000
0176	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	3,720.000	3,720.000

**REMOVING SMALL PIPE CULVERTS**

203.0100

CATEGORY	STATION	(EA)	NOTES
0010	22+80 WB	1	24 INCH CMCP
	34+43 WB	1	24 INCH CMCP
	45+15 WB	1	24 INCH CMCP
	45+23 WB	1	24 INCH CMCP
	62+82 WB	1	24 INCH CMCP
	80+92 WB	1	24 INCH CMCP
	103+95 WB	1	24 INCH CMCP
	137+16 WB	1	24 INCH CMCP
	209+23 WB	1	24 INCH CMCP
	241+18 WB	1	24 INCH CMCP
	248+71 WB	1	24 INCH CMCP
	280+07 WB	1	24 INCH CMCP
	280+09 WB	1	24 INCH CMCP
	299+05 WB	1	24 INCH CMCP
	307+25 WB	1	24 INCH CMCP
	314+55 WB	1	24 INCH CMCP
<b>CAT 0010 SUBTOTAL</b>		16	
<b>PROJECT 5939-00-70 TOTAL</b>		16	

**REMOVING ASPHALTIC SURFACE BUTT JOINTS**

204.0115

CATEGORY	LOCATION	STATION TO STATION	(SY)
0010	STH 80	0+25 - 1+25 'WB'	568
	1ST ST	--	19
	CUNNINGHAM ST	--	16
	TOMAS RD	--	15
	WILLOW SPRINGS RD	--	18
	STEPHENS RD	--	15
	HARMS RD	--	15
	CTH BH	--	17
	BILLS RD W	--	17
	NOVAK RD	--	15
	CLARK RD	--	16
	CTH Q	--	28
	TOWER RD	--	15
	TOWER RD	--	15
	STH 80	350+50 - 351+50 'WB'	413
<b>CAT 0010 SUBTOTAL</b>			1,200
<b>PROJECT 5939-00-70 TOTAL</b>			1,200

**REMOVING ASPHALTIC SURFACE MILLING**

204.0120

CATEGORY	LOCATION	STATION TO STATION	(SY)
0010	CTH G	101+14 'CG' - 101+55 'CG'	20
	USH 18 - EASTMAN ST	0+24 'WB' - 7+20 'WB'	1,843
	EASTMAN ST - TOMAS RD	7+20 'WB' - 27+00 'WB'	6,708
	TOMAS RD - STEPHENS RD	27+00 'WB' - 105+00 'WB'	26,791
	STEPHENS RD - CTH BH	105+00 'WB' - 170+67 'WB'	22,163
	CTH BH - CTH Q	170+67 'WB' - 279+74 'WB'	38,555
	CTH Q - KENNEDY ST	279+74 'WB' - 351+50 'WB'	26,100
<b>CAT 0010 SUBTOTAL</b>			122,180
0020	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	1,620
<b>CAT 0020 SUBTOTAL</b>			1,620
<b>PROJECT 5939-00-70 TOTAL</b>			123,800

**REMOVING CURB & GUTTER**

204.0150

CATEGORY	LOCATION		(LF)
0010	STH 80 / USH 18	NW QUADRANT	59
	STH 80 / USH 18	SW QUADRANT	52
	STH 80 / USH 18	NE QUADRANT	47
	STH 80 / USH 18	SE QUADRANT	15
	STH 80 / 1ST ST	NW QUADRANT	33
	STH 80 / 1ST ST	SW QUADRANT	32
	STH 80 / CUNNINGHAM ST	NE QUADRANT	13
	STH 80 / CUNNINGHAM ST	SE QUADRANT	32
	STH 80 / EASTMAN ST	WEST	17
<b>CAT 0010 SUBTOTAL</b>			300
<b>PROJECT 5939-00-70 TOTAL</b>			300

REMOVING CONCRETE SIDEWALK

204.0155

CATEGORY	LOCATION	(SY)
0010		
	STH 80 / USH 18	NW QUADRANT 34
	STH 80 / USH 18	SW QUADRANT 47
	STH 80 / USH 18	NE QUADRANT 43
	STH 80 / USH 18	SE QUADRANT 15
	STH 80 / 1ST ST	NW QUADRANT 23
	STH 80 / 1ST ST	SW QUADRANT 15
	STH 80 / CUNNINGHAM ST	NE QUADRANT 5
	STH 80 / CUNNINGHAM ST	SE QUADRANT 31
	STH 80 / EASTMAN ST	WEST 17
<b>CAT 0010 SUBTOTAL</b>		<b>230</b>
<b>PROJECT 5939-00-70 TOTAL</b>		<b>230</b>

REMOVING GUARDRAIL

204.0165

CATEGORY	LOCATION	STATION TO STATION	OFFSET	(LF)
0010				
	CTH Q - KENNEDY ST	335+71 - 336+24 'WB'	RT	53
<b>CAT 0010 SUBTOTAL</b>				<b>53</b>
<b>PROJECT 5939-00-70 TOTAL</b>				<b>53</b>

BASE AGGREGATE DENSE

305.0110 305.0120 624.0100

CATEGORY	LOCATION	STATION TO STATION	3/4-INCH (TON)	1 1/4-INCH (TON)	WATER (MGAL)
0010					
	CTH G	101+14 'CG' - 101+55 'CG'	19	-	0.2
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	61	-	0.6
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	46	372	4.2
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	194	1,876	20.7
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	110	372	4.8
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	348	1,157	15.2
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	652	2,143	28.3
	UDISTRIBUTED		570	80	-
<b>CAT 0010 SUBTOTAL</b>			<b>2,000</b>	<b>6,000</b>	<b>74</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>2,000</b>	<b>6,000</b>	<b>74</b>



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HMA ITEMS

CATEGORY	LOCATION	STATION TO STATION	455.0605 460.5224		REMARKS
			TACK COAT (GAL)	HMA PAVEMENT 4 LT 58-28 S (TON)	
0010	CTH G	101+14 'CG' - 101+55 'CG'	2	23	-
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	256	378	-
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	937	1,332	-
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	3,749	5,268	-
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	3,101	4,361	-
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	5,396	7,574	-
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	3,660	5,134	-
		UNDISTRIBUTED	2,369	-	TO BE USED FOR DISTRESSED PAVEMENT AREAS
		<b>CAT 0010 SUBTOTAL</b>	<b>19,470</b>	<b>24,070</b>	
0020	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	230	330	-
		<b>CAT 0020 SUBTOTAL</b>	<b>230</b>	<b>330</b>	
<b>PROJECT 5939-00-70 TOTAL</b>			<b>19,700</b>	<b>24,400</b>	

ASPHALTIC SURFACE

CATEGORY	LOCATION	STATION TO STATION	465.0105 465.0475		REMARKS
			ASPHALTIC SURFACE (TON)	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL (LF)	
0010	CTH G	101+14 'CG' - 101+55 'CG'	-	-	-
	USH 18 - EASTMAN ST	0+24 'WB' - 7+20 'WB'	-	-	-
	EASTMAN ST - TOMAS RD	7+20 'WB' - 27+00 'WB'	102	1,750	-
	TOMAS RD - STEPHENS RD	27+00 'WB' - 105+00 'WB'	536	6,979	-
	STEPHENS RD - CTH BH	105+00 'WB' - 170+67 'WB'	107	6,066	-
	CTH BH - CTH Q	170+67 'WB' - 279+74 'WB'	311	9,326	-
	CTH Q - KENNEDY ST	279+74 'WB' - 351+50 'WB'	494	6,329	-
		UNDISTRIBUTED	451	-	TO BE USED FOR DISTRESSED PAVEMENT AREAS
		<b>CAT 0010 SUBTOTAL</b>	<b>2,000</b>	<b>30,450</b>	
<b>PROJECT 5939-00-70 TOTAL</b>			<b>2,000</b>	<b>30,450</b>	

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PWL Mixture Use Table								
Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	Density Acceptance
PAVED SHOULDERS AT CURB RAMP, LT AND RT	101+15 - 101+30 'G'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	3	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
PAVED SHOULDERS AT CURB RAMP, LT AND RT	0+12 - 0+33 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	3	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	0+24 - 21+96 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1135	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
PARKING LANES, LT AND RT	0+24 - 7+20 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	293	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
PAVED SHOULDERS, LT AND RT	3+31 - 4+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	23	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
PAVED SHOULDERS, LT AND RT	7+20 - 21+96 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	205	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	21+96 - 23+00 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3FT SHOULDERS, LT AND RT	21+96 - 23+00 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	23+00 - 33+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	550	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	23+00 - 33+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	189	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	33+50 - 34+54 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3FT PAVED SHOULDERS, LT AND RT	33+50 - 34+54 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	34+54 - 44+63 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	527	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	34+54 - 44+63 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	132	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	44+63 - 45+75 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	59	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3FT PAVED SHOULDERS, LT AND RT	44+63 - 45+75 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	15	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	45+75 - 62+10 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	855	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	45+75 - 62+10 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	315	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	62+10 - 63+14 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	62+10 - 63+14 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	63+14 - 80+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	908	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	63+14 - 80+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	228	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	80+50 - 81+54 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	80+50 - 81+54 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	81+54 - 103+23 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1134	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	81+54 - 103+23 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	284	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	103+23 - 104+28 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	56	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	103+23 - 104+28 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	26	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	104+28 - 136+43 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1681	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	104+28 - 136+43 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	491	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	136+43 - 137+47 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	136+43 - 137+47 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	137+47 - 208+71 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	3724	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	137+47 - 208+71 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1221	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.

PROJECT NO: 5939-00-70

HWY: STH 80

COUNTY: IOWA

MISCELLANEOUS QUANTITIES

SHEET

E

FILE NAME:

ORIGINATOR: KL ENGINEERING, INC.

ORIG. DATE:

REV. DATE:

PRINT DATE: July 13, 2022

PWL Mixture Use Table								
Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	Density Acceptance
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	208+71 - 209+75 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	208+71 - 209+75 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	209+75 - 240+60 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1613	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	209+75 - 240+60 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	480	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	240+60 - 241+64 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	240+60 - 241+64 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	241+64 - 248+35 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	351	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	241+64 - 248+35 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	88	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	248+35 - 249+39 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	248+35 - 249+39 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	249+39 - 279+74 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1587	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	249+39 - 279+74 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	638	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	279+74 - 281+23 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	78	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	279+74 - 281+23 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	42	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	281+23 - 298+64 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	912	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	281+23 - 298+64 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	230	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	298+64 - 299+68 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	298+64 - 299+68 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	299+68 - 307+11 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	389	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	299+68 - 307+11 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	100	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	307+11 - 308+15 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	307+11 - 308+15 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	308+15 - 313+78 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	295	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	308+15 - 313+78 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	74	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
CULVERT REPLACEMENT 12FT DRIVING LANES, LT AND RT	313+78 - 314+82 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	55	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
CULVERT REPLACEMENT 3 FT PAVED SHOULDERS, LT AND RT	313+78 - 314+82 'WB'	UPPER AND LOWER LAYERS	ASPHALTIC SURFACE	HMA PAVEMENT 4 LT 58-28 S	14	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.
12 FT DRIVING LANES, LT AND RT	314+82 - 351+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	1911	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
3 FT PAVED SHOULDERS, LT AND RT	314+82 - 351+50 'WB'	UPPER AND LOWER LAYERS	EXISTING MILLED SURFACE	HMA PAVEMENT 4 LT 58-28 S	717	3.5"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive.

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CULVERT PIPES

													521.3124	521.1024	633.5200
CATEGORY	ROADWAY	INLET			OUTLET			SKEW	SLOPE %	PIPE THICKNESS STEEL (IN)	CULVERT PIPE CORRUGATED STEEL 24-INCH (LF)	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	MARKERS CULVERT END (EACH)		
		STATION	OFFSET	** ELEVATION	STATION	OFFSET	** ELEVATION								
0010	STH 80	22+48	27.1' LT	1185.33	22+49	34.3' RT	1182.08	0°	5.24	0.064	62	2	2		
	STH 80	34+03	24.8' LT	1,190.47	34+02	25.4' RT	1,191.67	0°	2.40	0.064	50	2	2		
	STH 80	45+14	30.8' LT	1,197.70	45+17	34.9' RT	1,196.77	3° RHF	1.41	0.064	66	2	2		
	STH 80	45+22	30.9' LT	1,197.75	45+25	35.0' RT	1,196.73	2° RHF	1.55	0.064	66	2	2		
	STH 80	62+62	39.2' LT	1,194.84	62+62	40.5' RT	1,191.21	0°	4.54	0.064	80	2	2		
	STH 80	66+28	28.2' LT	1,196.47	66+24	36.9' RT	1,192.37	--	--	--	--	2	2		
	STH 80	81+02	24.3' LT	1,199.53	81+02	36.9' RT	1,197.45	0°	3.35	0.064	62	2	2		
	STH 80	103+69	39.0' RT	1,187.62	103+84	48.5' LT	1,178.15	10° RHF	10.52	0.064	90	2	2		
	STH 80	136+95	30.2' RT	1,186.72	136+96	47.9' LT	1,182.40	1° LHF	5.54	0.064	78	2	2		
	STH 80	209+23	23.2' RT	1,204.77	209+22	32.3' LT	1,198.94	1° RHF	10.60	0.064	55	2	2		
	STH 80	241+11	31.7' RT	1,221.02	241+14	50.3' LT	1,213.75	2° LHF	8.87	0.064	82	2	2		
	STH 80	248+85	36.5' RT	1,222.51	248+89	53.5' LT	1,216.59	2° LHF	6.43	0.064	92	2	2		
	STH 80	280+16	35.0' RT	1,205.73	280+46	38.9' LT	1,201.80	21° LHF	4.91	0.064	80	2	2		
	STH 80	280+90	63.9' RT	1,206.06	280+52	39.6' LT	1,202.01	21° RHF	3.68	0.064	110	2	2		
	STH 80	299+16	24.9' RT	1,195.29	299+16	31.9' LT	1,193.83	0°	2.52	0.064	58	2	2		
	STH 80	307+62	36.9' RT	1,172.18	307+64	35.0' LT	1,169.44	1° LHF	3.81	0.064	72	2	2		
	STH 80	314+30	29.0' RT	1,179.86	314+30	32.5' LT	1,176.08	0°	6.10	0.064	62	2	2		
CATEGORY 0010 SUBTOTAL											1,165	34	34		
<b>PROJECT 5939-00-70 TOTAL</b>											<b>1,165</b>	<b>34</b>	<b>34</b>		

\*\* MATCH EXISTING PIPE ELEVATION AND SLOPE

CONCRETE CURB & GUTTER

CATEGORY	LOCATION	601.0411 601.0600		
		CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	CONCRETE CURB PEDESTRIAN (LF)	
0010	STH 80 / USH 18	NW QUADRANT	59	-
	STH 80 / USH 18	SW QUADRANT	52	-
	STH 80 / USH 18	NE QUADRANT	47	15
	STH 80 / USH 18	SE QUADRANT	15	-
	STH 80 / 1st St	NW QUADRANT	33	-
	STH 80 / 1st St	SW QUADRANT	32	-
	STH 80 / Cunningham St	NE QUADRANT	13	-
	STH 80 / Cunningham St	SE QUADRANT	32	10
	STH 80 / Eastman St	WEST	17	-
CAT 0010 SUBTOTAL			300	25
<b>PROJECT 5939-00-70 TOTAL</b>			<b>300</b>	<b>25</b>

CONCRETE SIDEWALK

CATEGORY	LOCATION	602.0410 602.0505 602.0605			
		CONCRETE SIDEWALK 5-INCH (SF)	CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW (SF)	
0010	STH 80 / USH 18	NW QUADRANT	379	20	--
	STH 80 / USH 18	SW QUADRANT	419	20	--
	STH 80 / USH 18	NE QUADRANT	394	10	--
	STH 80 / USH 18	SE QUADRANT	143	10	--
	STH 80 / 1ST ST	NW QUADRANT	270	20	--
	STH 80 / 1ST ST	SW QUADRANT	144	--	21
	STH 80 / CUNNINGHAM ST	NE QUADRANT	63	10	--
	STH 80 / CUNNINGHAM ST	SE QUADRANT	255	18	--
	STH 80 / EASTMAN ST	WEST	133	--	--
CAT 0010 SUBTOTAL			2,200	108	21
<b>PROJECT 5939-00-70 TOTAL</b>			<b>2,200</b>	<b>108</b>	<b>21</b>

BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	LOCATION	STATION TO STATION	OFFSET	FOR INFORMATION ONLY, ITEMS PAID UNDER ITEM 614.0010					614.0010 (EACH)
				EXCAVATION COMMON (CY)	BORROW (CY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE B (CWT)	SEEDING MIXTURE NO. 30 (LB)	
0010	STH 80	332+94 - 336+24 'WB'	RT	18	50	306	0.1	6	1
<b>PROJECT 5939-00-70 TOTAL</b>									

STEEL PLATE BEAM GUARD

CATEGORY	LOCATION	STATION TO STATION	614.0305	614.0370
			CLASS A (LF)	ENERGY ABSORBING TERMINAL (EACH)
0010	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	188	1
<b>CAT 0010 SUBTOTAL</b>			188	1
<b>PROJECT 5939-00-70 TOTAL</b>			188	1

EROSION CONTROL

CATEGORY	LOCATION	STATION TO STATION	628.1504	628.1520	628.2004	628.2006	628.7015	628.7504	628.7555
			SILT FENCE (LF)	SILT FENCE MAINTENANCE (LF)	EROSION MAT CLASS I TYPE B (SY)	EROSION MAT URBAN CLASS I TYPE A (SY)	INLET PROTECTION TYPE C (EACH)	TEMPORARY DITCH CHECKS (LF)	CULVERT PIPE CHECKS (EACH)
0010	CTH G	101+14 'CG' - 101+55 'CG'	-	-	-	-	1	-	-
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	-	-	18	74	5	-	-
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	205	683	186	-	1	-	3
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	1,044	3,480	1,147	-	-	-	21
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	225	750	286	-	-	-	3
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	656	2,187	781	-	-	-	9
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	1,155	3,850	1,344	-	-	12	15
	UNDISTRIBUTED		915	2,750	1,038	26	2	3	14
<b>CAT 0010 SUBTOTAL</b>			4,200	13,700	4,800	100	9	15	65
<b>PROJECT 5939-00-70 TOTAL</b>			4,200	13,700	4,800	100	9	15	65

MOBILIZATIONS

CATEGORY	LOCATION	628.1905	628.1910
		EROSION CONTROL (EACH)	EMERGENCY EROSION CONTROL (EACH)
0010	PROJECT 5939-00-70	5	4
<b>PROJECT 5939-00-70 TOTAL</b>		5	4

**FENCE SAFETY**

CATEGORY	LOCATION	STATION TO STATION	(LF)
0010	UNDISTRIBUTED		200
<b>PROJECT 5939-00-70 TOTAL</b>			<b>200</b>

**LANDSCAPING**

CATEGORY	LOCATION	STATION TO STATION	625.0100	625.0500	629.0210	630.0130	630.0140	630.0500
			TOPSOIL (SY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE B (CWT)	SEEDING MIXTURE NO. 30 (LB)	SEEDING MIXTURE NO. 40 (LB)	SEED WATER (MGAL)
0010	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	74	18	0.02	1	1	8
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	-	176	0.03	3	-	15
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	-	1,082	0.19	19	-	91
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	-	277	0.05	5	-	23
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	-	753	0.14	14	-	63
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	-	1,298	0.23	23	-	109
	UNDISTRIBUTED		26	996	0.17	20	1	80
<b>CAT 0010 SUBTOTAL</b>			<b>100</b>	<b>4,600</b>	<b>1</b>	<b>85</b>	<b>2</b>	<b>390</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>100</b>	<b>4,600</b>	<b>1</b>	<b>85</b>	<b>2</b>	<b>390</b>

**TRAFFIC CONTROL**

CATEGORY	LOCATION	DAYS	*643.0300	643.0420	643.0705	*643.0900	FOR INFORMATION ONLY, ITEM PAID UNDER ITEM 643.0920		643.0920	643.1000	643.1050
			DRUMS (DAY)	BARRICADES TYPE III (DAY)	WARNING LIGHTS TYPE A (DAY)	SIGNS (DAY)	NUMBER OF CYCLES	NUMBER OF SIGNS	COVERING SIGNS TYPE II (EACH)	FIXED MESSAGE (SF)	SIGNS PCMS (DAY)
0010	STAGE 1	63	-	-	-	5,418	-	-	-	-	-
	STAGE 2	31	-	-	-	4,991	-	-	-	-	-
	DETOUR	63	630	882	1260	15,876	1	17	17	-	126
	ALTERNATE ROUTE	63	-	-	-	567	1	2	2	97	-
	UNDISTRIBUTED	-	270	18	40	48	-	-	-	-	4
<b>PROJECT 5939-00-70 TOTAL</b>			<b>900</b>	<b>900</b>	<b>1,300</b>	<b>26,900</b>			<b>19</b>	<b>97</b>	<b>130</b>

\*ADDITIONAL QUANTITIES FOUND IN "TEMPORARY PEDESTRIAN ACCOMODATION"

**TEMPORARY PEDESTRIAN ACCOMODATION**

CATEGORY	LOCATION	*643.0900	*643.0300	644.1601	644.1810	**649.0105	649.0150
		TRAFFIC CONTROL SIGNS (DAY)	TRAFFIC CONTROL DRUMS (DAY)	TEMPORARY PEDESTRIAN CURB RAMP (DAY)	TEMPORARY PEDESTRIAN BARRICADE (LF)	TEMPORARY MARKING LINE PAINT 4-INCH (LF)	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (LF)
0010	PEDESTRIAN DETOUR STAGE 1	27	385	35	-	87	193
	PEDESTRIAN DETOUR STAGE 2	43	315	45	40	183	147
<b>PROJECT 5939-00-70 TOTAL</b>		<b>70</b>	<b>700</b>	<b>80</b>	<b>40</b>	<b>270</b>	<b>340</b>

\*ADDITIONAL QUANTITIES FOUND IN "TRAFFIC CONTROL"

\*\*ADDITIONAL QUANTITIES FOUND IN "TEMPORARY PAVEMENT MARKING"

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PAVEMENT MARKING

CATEGORY	LOCATION	STATION TO STATION	646.1040	646.4520	646.6120	646.8120	REMARKS
			MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (LF)	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (LF)	MARKING STOP LINE EPOXY 18-INCH (LF)	MARKING CURB EPOXY (LF)	
0010	CTH G	101+14 'CG' - 101+55 'CG'	-	-	-	52	REPLACE IN KIND
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	-	1,395	22	178	-
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	3,813	3,883	-	-	-
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	15,295	15,538	-	-	-
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	12,737	13,030	-	-	-
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	21,237	21,804	-	-	-
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	14,318	14,650	-	-	-
<b>CAT 0010 SUBTOTAL</b>			<b>67,400</b>	<b>70,300</b>	<b>22</b>	<b>230</b>	
<b>PROJECT 5939-00-70 TOTAL</b>			<b>67,400</b>	<b>70,300</b>	<b>22</b>	<b>230</b>	

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TEMPORARY MARKING

CATEGORY	LOCATION	STATION TO STATION	*649.0105	649.0120	649.0820
			LINE PAINT 4-INCH YELLOW (LF)	LINE EPOXY 4-INCH YELLOW (LF)	STOP LINE EPOXY 18-INCH (LF)
0010	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	0	0	22
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	2,790	1,405	-
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	7,766	3,893	-
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	31,076	15,548	-
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	26,060	13,040	-
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	43,608	21,814	-
<b>CAT 0010 SUBTOTAL</b>			<b>111,300</b>	<b>55,700</b>	<b>22</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>111,300</b>	<b>55,700</b>	<b>22</b>

\*ADDITIONAL QUANTITIES FOUND IN "TEMPORARY PEDESTRIAN ACCOMODATION"

SAWING

CATEGORY	LOCATION	STATION TO STATION	690.0150	690.0250
			ASPHALT (LF)	CONCRETE (LF)
0010	CTH G	101+14 'CG' - 101+55 'CG'	80	113
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	62	137
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	60	-
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	338	-
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	60	-
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	180	-
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	640	-
<b>CAT 0010 SUBTOTAL</b>			<b>1,420</b>	<b>250</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>1,420</b>	<b>250</b>

CONSTRUCTION STAKING

CATEGORY	LOCATION	STATION TO STATION	650.4500	650.5000	650.5500	650.6000	650.8000	650.9000	650.9910	650.9920
			SUBGRADE (LF)	BASE (LF)	CURB GUTTER AND CURB & GUTTER (LF)	PIPE CULVERTS (EACH)	RESURFACING REFERENCE (LF)	CURB RAMPS (EACH)	SUPPLEMENTAL CONTROL (5939-00-70) (EACH)	SLOPE STAKES (LF)
0010	CTH G	101+14 'CG' - 101+55 'CG'	-	-	67	-	-	3	-	-
	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	-	695	233	-	695	9	-	-
	EASTMAN ST - TOMAS RD	7+20 'WB' - 26+59 'WB'	-	1,939	-	1	1,939	-	-	-
	TOMAS RD - STEPHENS RD	26+59 'WB' - 104+23 'WB'	-	7,764	-	6	7,764	-	-	-
	STEPHENS RD - CTH BH	104+23 'WB' - 169+33 'WB'	-	6,510	-	1	6,510	-	-	-
	CTH BH - CTH Q	169+33 'WB' - 278+30 'WB'	-	10,897	-	3	10,897	-	-	-
	CTH Q - KENNEDY ST	278+30 'WB' - 351+50 'WB'	330	7,320	-	5	7,320	-	-	330
UNDISTRIBUTED			-	-	-	-	-	-	1	-
<b>CAT 0010 SUBTOTAL</b>			<b>330</b>	<b>35,125</b>	<b>300</b>	<b>16</b>	<b>35,125</b>	<b>12</b>	<b>1</b>	<b>330</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>330</b>	<b>35,125</b>	<b>300</b>	<b>16</b>	<b>35,125</b>	<b>12</b>	<b>1</b>	<b>330</b>

LANDMARK REFERENCE MONUMENTS SPECIAL

SPV.0060.02

CATEGORY	LOCATION	STATION	OFFSET	DESCRIPTION	(EACH)
0010	EASTMAN ST - TOMAS RD	26+52 'WB'	1.7' LT	T-6-N R-1-E NE SECTION 26	1
	CTH Q - KENNEDY ST	280+71 'WB'	57.5' RT	T-7-N R-1-E EAST SECTION 34	1
	CTH Q - KENNEDY ST	307+08 'WB'	0.3' LT	T-7-N R-1-E SECTION 34	1
<b>PROJECT 5939-00-70 TOTAL</b>					<b>3</b>

SHOTCRETE SURFACE REPAIR

SPV.0165.01

CATEGORY	LOCATION	STATION TO STATION	(SF)
0010	CATTLE PASS - NW WING	334+25 'WB'	32
	CATTLE PASS - NE WING	334+25 'WB'	30
	CATTLE PASS - SW WING	334+25 'WB'	36
	CATTLE PASS - SE WING	334+25 'WB'	37
<b>CAT 0010 SUBTOTAL</b>			<b>135</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>135</b>

REMOVING DISTRESSED PAVEMENT MILLING

SPV.0180.01

CATEGORY	LOCATION	STATION TO STATION	(SY)
0010	UNDISTRIBUTED		3720
<b>CAT 0010 SUBTOTAL</b>			<b>3,720</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>3,720</b>

MANHOLE COVERS TYPE J

611.0530

CATEGORY	LOCATION	STATION TO STATION	(EACH)
0020	EASTMAN ST - TOMAS RD	9+01 'WB'	1
<b>CAT 0010 SUBTOTAL</b>			<b>1</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>1</b>

ADJUSTING ITEMS

CATEGORY	LOCATION	STATION TO STATION	611.8110 ADJUSTING MANHOLE COVERS (EACH)	611.8120.S COVER PLATES TEMPORARY (EACH)	SPV.0060.01 ADJUSTING WATER VALVE BOXES (EACH)	SPV.0060.03 UNBURY AND ADJUSTING WATER VALVE BOXES (EACH)
0020	USH 18 - EASTMAN ST	0+25 'WB' - 7+20 'WB'	6	6	4	1
<b>CAT 0020 SUBTOTAL</b>			<b>6</b>	<b>6</b>	<b>4</b>	<b>1</b>
<b>PROJECT 5939-00-70 TOTAL</b>			<b>6</b>	<b>6</b>	<b>4</b>	<b>1</b>



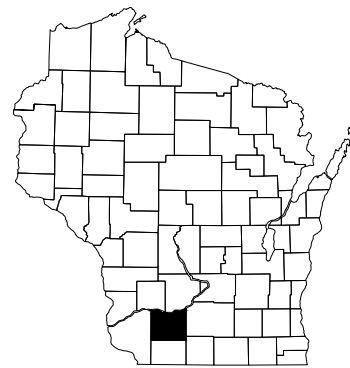
# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION TRANSPORTATION PROJECT PLAT TITLE SHEET

## 5939-00-20

## COBB - AVOCA

(USH 18 TO KENNEDY STREET)

## STH 80 IOWA COUNTY



### CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	●
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETTIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		SIGN	
NEW R/W LINE	---	SIGN		OFF-PREMISE SIGN	
EXISTING R/W OR HE LINE	---	ELECTRIC POLE		COMPENSABLE	
PROPERTY LINE	---	TELEPHONE POLE		NON-COMPENSABLE	
LOT, TIE & OTHER MINOR LINES	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
SLOPE INTERCEPT	---	ACCESS RESTRICTED BY ACQUISITION			
CORPORATE LIMITS	---	NO ACCESS (BY STATUTORY AUTHORITY)			
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	NO ACCESS (NEW HIGHWAY)			
TEMPORARY LIMITED EASEMENT AREA	---	PARCEL NUMBER (25)		UTILITY NUMBER (40)	
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---	PARALLEL OFFSETS			
TRANSMISSION STRUCTURES	---				
BUILDING					
BRIDGE					

### CONVENTIONAL ABBREVIATIONS

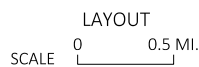
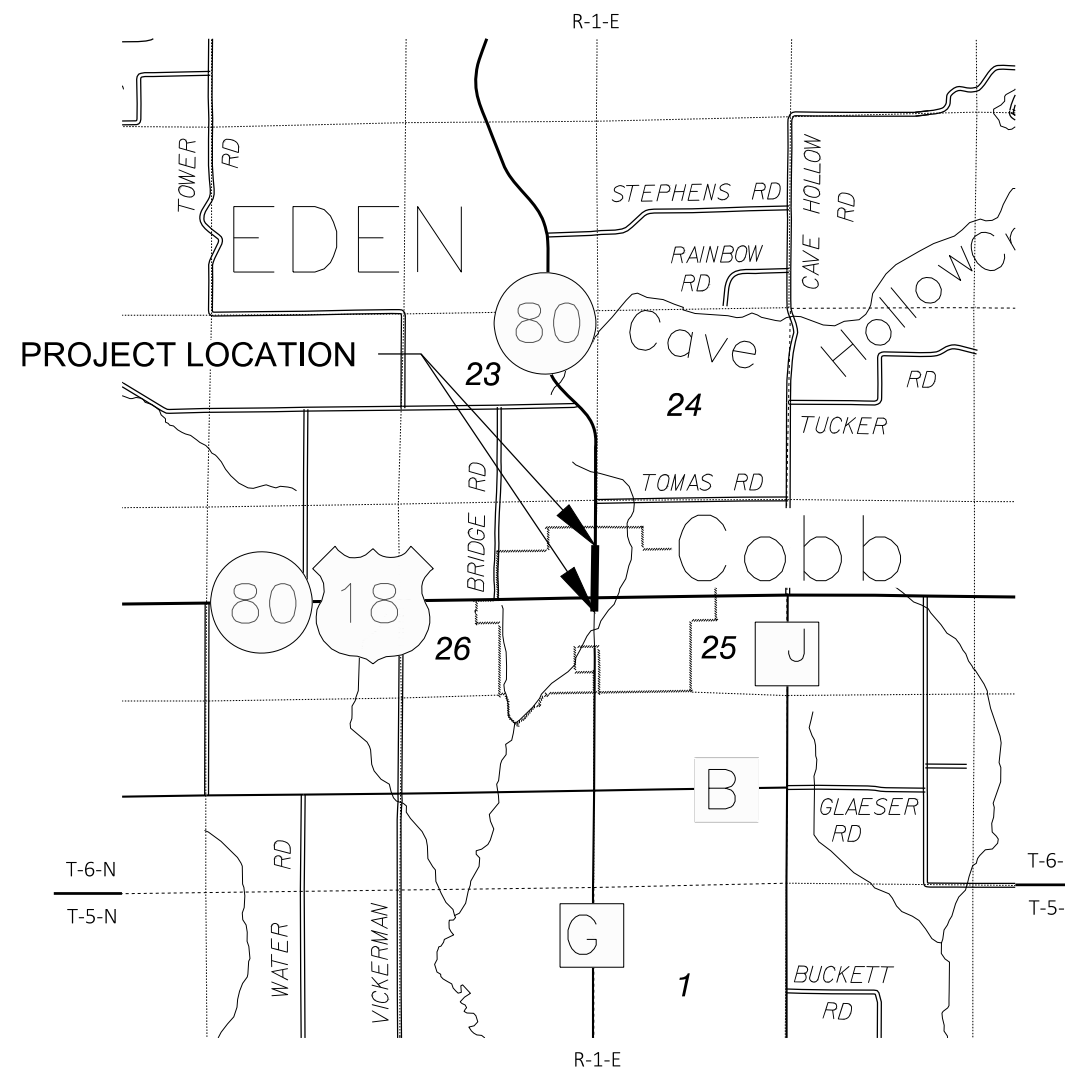
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS (100')	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT	RDE
CENTERLINE	C/L	EASEMENT	
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	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	TLE
GAS VALVE	GV	EASEMENT	
GRID NORTH	GN	TRANSPORTATION PROJECT	TPP
HIGHWAY EASEMENT	HE	PLAT	
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETTIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

### CURVE DATA

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

### CONVENTIONAL UTILITY SYMBOLS

---	WATER
---	GAS
---	TELEPHONE
---	OVERHEAD
---	TRANSMISSION LINES
---	ELECTRIC
---	CABLE TELEVISION
---	FIBER OPTIC
---	SANITARY SEWER
---	STORM SEWER



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5939-00-20.

### NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), IOWA COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), 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, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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 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 (TLE)S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

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

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

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

PROJECT NUMBER: 5939-00-20 - 4.01  
SHEET: 2 OF 3  
AMENDMENT NO:

# TRANSPORTATION PROJECT PLAT NO: 5939-00-20 - 4.01

THAT PART OF LOT 1, BLOCK 1, THE SCHOOL HOUSE LOT, BLOCK 6 AND LOT 72, BLOCK 7, DANVILLE'S ADDITION LOCATED IN THE SW 1/4 OF SECTION 26; AND PART OF THE NW 1/4 OF SECTION 25; PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 26; AND PART OF LOT 1 CERTIFIED SURVEY MAP NO. 864, RECORDED IN VOLUME 6, PAGE 67 AS DOCUMENT NUMBER 277420, LOT 4, BLOCK 1, LOTS 7 AND 12, BLOCK 4 OF THE ORIGINAL PLAT VILLAGE OF COBB LOCATED IN THE SE 1/4 OF THE NE 1/4 OF SECTION 26; ALL IN TOWN 6 NORTH, RANGE 1 EAST, VILLAGE OF COBB, IOWA COUNTY, WISCONSIN.

RELOCATION ORDER: STH 80, COBB - AVOCA, USH 18 TO KENNEDY STREET, IOWA COUNTY.

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMST IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCONSIN), IOWA COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN 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 3/4" X 24" IRON REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

FOUND IRONS ARE 1" IRON PIPES UNLESS OTHERWISE NOTED.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 3.

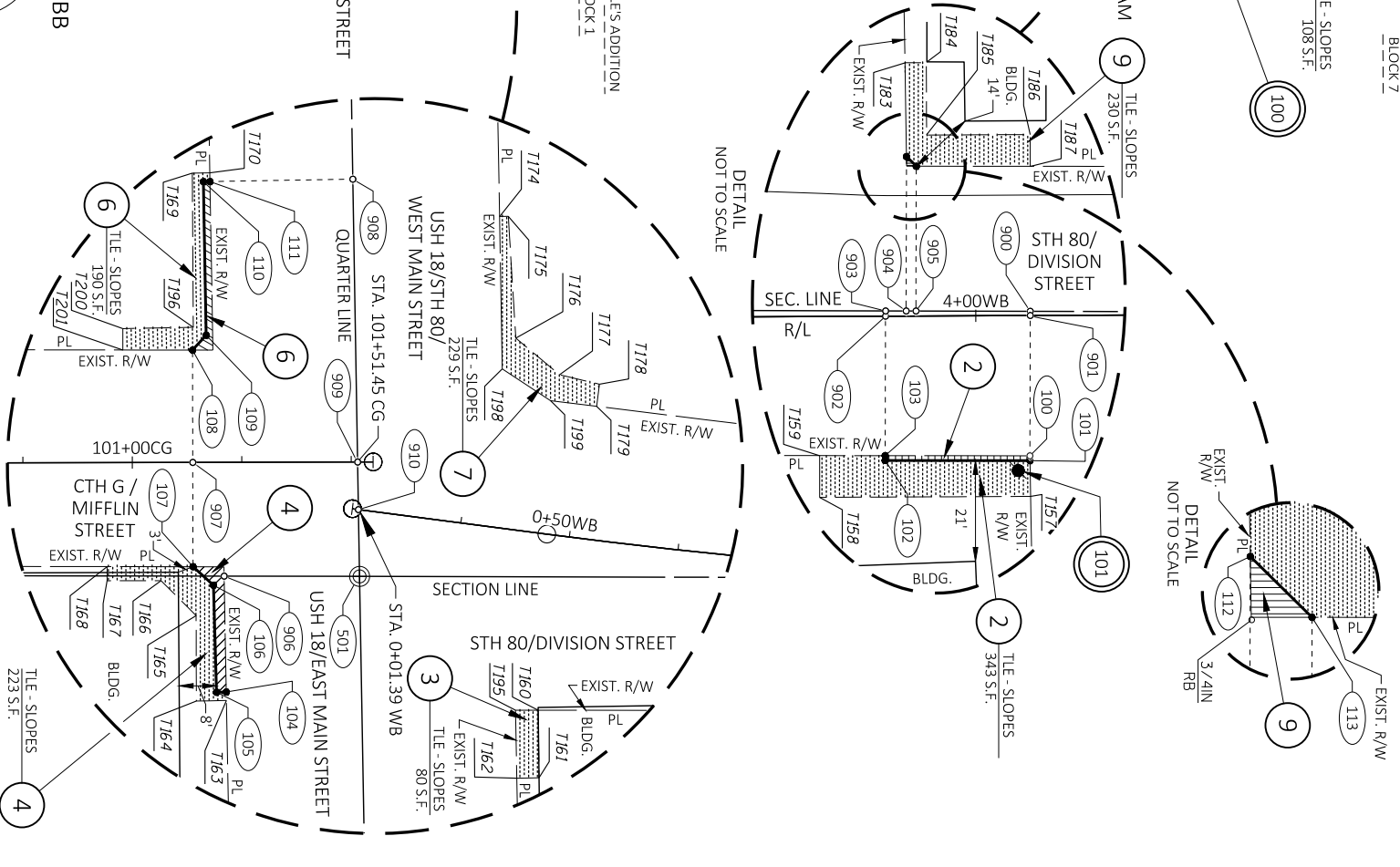
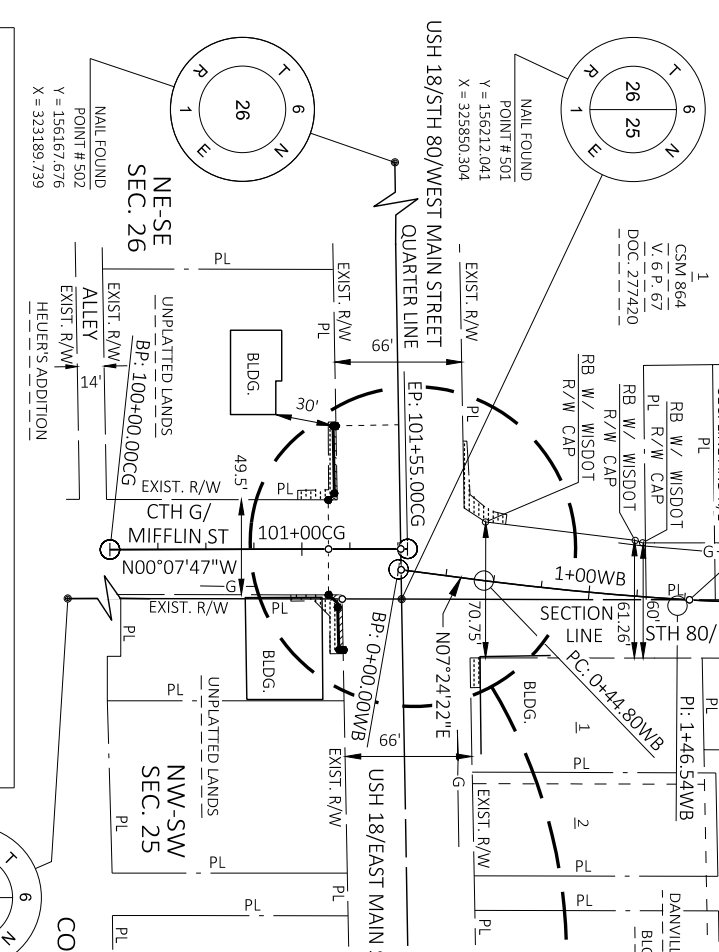
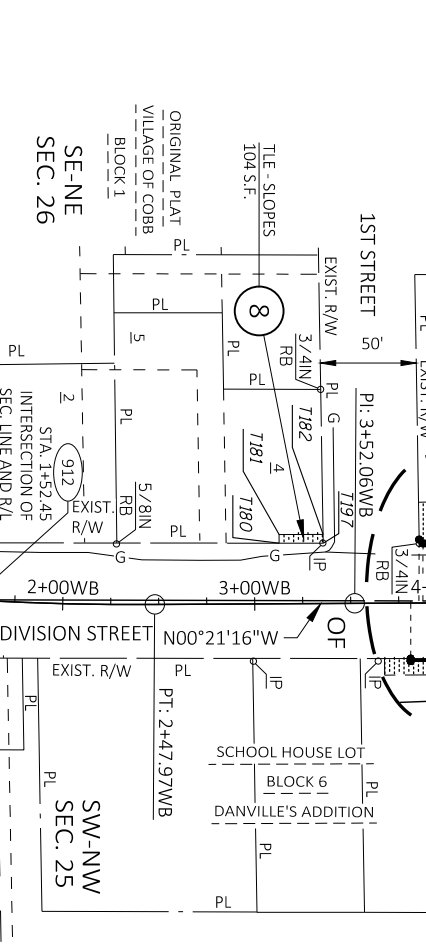
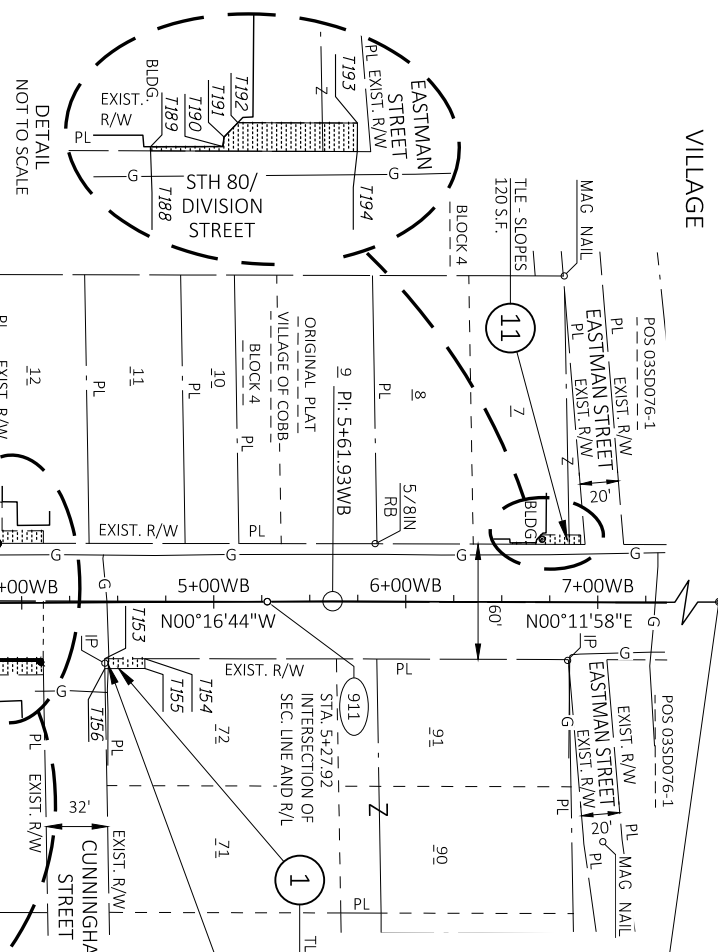
FOR TABLES AND ALIGNMENT DATA REFER TO EXTENSION SHEET, RECORDED AS SHEET 3 OF 3.



ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN IOWA COUNTY, WISCONSIN AT 5:13:30 P.M. ON September 11, 2020 AS DOCUMENT # 276266 AND FILED IN P.L. Cobb R. Register 10.5.10.7

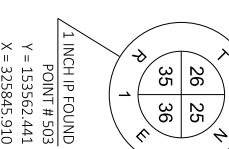
REGISTERED FOR REGISTER OF DEEDS PROJECT NUMBER 5939-00-20-4.01 SHEET NUMBER 1 OF 3 AMENDMENT NO.

SIGNATURE: *Dave L. Edger*  
DATE: 8/12/20



### UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
100	ALLIANT ENERGY (GAS)	RELEASE OF RIGHTS
101	ALLIANT ENERGY (ELECTRIC)	RELEASE OF RIGHTS



### UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
100	ALLIANT ENERGY (GAS)	RELEASE OF RIGHTS
101	ALLIANT ENERGY (ELECTRIC)	RELEASE OF RIGHTS

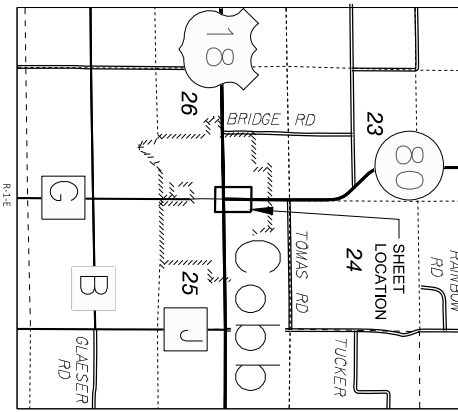
## SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT. ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. TILES DO NOT IMPACT BUILDINGS.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED	EXISTING	TOTAL	TILE S.F.
1	111 EASTMAN STREET, LLC	TILE	...	...	108	...
2	RONALD N. WALKER	FEE/TILE	30	...	343	...
3	RANDALL J. ZELEN AND BILLIE JEAN ZELEN	TILE	...	...	80	...
4	SHAIRI L. JOHNSON AND JASON W. FISHER	FEE/TILE	78	...	223	...
6	N AND S PROPERTIES, LLC	FEE/TILE	64	...	199	...
7	ROYAL BANK - COBB	TILE	...	...	229	...
8	RICHARD E. STARR AND DAWN R. STARR	TILE	...	...	104	...
9	DENNIS L. HORN AND GERALYN R. NOVINSKI AS TO A LIFE ESTATE; DENNIS HORN JR., DONOHI ANNE POLKINSHORN AND DANIEL NOVINSKI, AS JOINT TENANTS, AS TO THE REMAINDER	FEE/TILE	2	...	230	...
11	211 DIVISION STREET, LLC	TILE	...	...	120	...

## LOCATION SKETCH

NOT TO SCALE

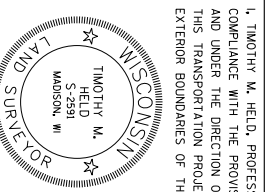


1. TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: *Timothy M. Held* DATE: 08/12/20  
PRINT NAME: TIMOTHY M. HELD  
REGISTRATION NUMBER: S-2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DEPARTMENT.

SIGNATURE: *Cory Schlegel* DATE: 9/8/2020  
PRINT NAME: COREY SCHLEGEL



# TRANSPORTATION PROJECT PLAT NO: 5939-00-20 - 4.01 EXTENSION SHEET

RELOCATION ORDER: STH 80, COBB - AVOCA, USH 18 TO KENNEDY STREET, IOWA COUNTY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN IOWA COUNTY AS SHEET 2 OF 3.

NOTE:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (MISCRS), IOWA COUNTY, MAD 83(2011) IN U.S SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

## SHEET 3 OF 3 COURSE TABLES, OFFSET TABLES AND ALIGNMENT DATA

FROM POINT	TO POINT	BEARING	DISTANCE
500	501	S00° 08' 42"W	2649.70'
500	911	S00° 08' 42"W	2124.33'
911	900	S00° 08' 42"W	116.63'
900	905	S00° 08' 42"W	23.66'
905	904	S00° 08' 42"W	2.04'
904	903	S00° 08' 42"W	4.27'
903	912	S00° 08' 42"W	228.81'
912	501	S00° 08' 42"W	149.94'
501	502	S89° 02' 41"W	2660.93'
501	910	S89° 02' 41"W	15.25'
910	909	S89° 02' 41"W	10.88'
909	908	S89° 02' 41"W	64.65'
908	502	S89° 02' 41"W	2570.15'
501	503	S00° 05' 42"W	2649.60'
501	906	S00° 05' 42"W	30.93'
906	503	S00° 05' 42"W	2618.67'
900	901	S89° 51' 18"E	0.86'
901	100	S89° 51' 18"E	28.08'
100	101	N89° 00' 02"E	1.00'
101	102	S00° 03' 41"W	30.00'
102	103	N89° 56' 19"W	1.00'
103	902	N89° 51' 18"W	28.91'
902	903	N89° 51' 18"W	1.08'
903	904	N00° 08' 42"E	4.27'
904	112	N89° 51' 18"W	32.01'
112	113	N44° 33' 26"E	2.85'
113	905	S89° 51' 18"E	30.02'
905	900	N00° 08' 42"E	23.68'
501	906	S00° 05' 42"W	30.93'
906	104	N88° 55' 20"E	26.49'
104	105	S01° 04' 40"E	2.23'
105	106	S88° 22' 22"W	24.46'
106	107	S42° 06' 05"W	6.30'
107	907	S89° 52' 13"W	23.84'
907	108	S89° 52' 13"W	25.66'
108	109	N47° 41' 22"W	4.61'
109	110	S88° 59' 34"W	35.09'
110	111	N01° 00' 26"W	1.50'
111	908	N00° 57' 19"W	32.65'
908	909	N89° 02' 41"E	64.65'
909	910	N89° 02' 41"E	10.88'
910	501	N89° 02' 41"E	15.25'

Point No.	Station	Offset
100	4+11.07 WB	29.08'
101	4+11.08 WB	30.08'
102	3+80.88 WB	30.11'
103	3+81.09 WB	28.91'
104	10+121.34 CG	52.49'
105	10+119.11 CG	52.53'
106	10+118.47 CG	28.07'
107	10+113.81 CG	23.84'
108	10+113.81 CG	23.66'
109	10+116.92 CG	29.07'
110	10+116.38 CG	64.15'
111	10+117.88 CG	64.18'
112	3+85.81 WB	33.07'
113	3+87.84 WB	31.06'
900	4+11.29 WB	0.86'
901	4+11.29 WB	0.00'
902	3+82.30 WB	0.00'
903	3+82.31 WB	1.08'
904	3+85.58 WB	1.05'
905	3+87.62 WB	1.04'
906	10+120.90 CG	26.01'
907	10+113.81 CG	0.00'
908	10+150.52 CG	64.65'
909	10+151.45 CG	0.00'
910	0+1.39 WB	0.00'
911	5+27.92 WB	0.00'
912	1+52.45 WB	0.00'

Point No.	Station	Offset
T153	4+43.08 WB	29.27'
T154	4+64.00 WB	29.40'
T155	4+64.00 WB	34.50'
T156	4+43.14 WB	34.50'
T157	4+11.18 WB	37.50'
T158	3+67.48 WB	37.49'
T159	3+67.51 WB	28.84'
T160	0+47.95 WB	40.16'
T161	0+50.02 WB	55.45'
T162	0+45.19 WB	56.19'
T163	10+121.37 CG	54.42'
T164	10+114.50 CG	54.53'
T165	10+114.50 CG	35.00'
T166	10+106.50 CG	27.00'
T167	100+94.18 CG	27.00'
T168	100+94.18 CG	23.76'
T169	10+113.85 CG	66.12'
T170	10+117.85 CG	66.18'
T174	0+24.74 WB	70.58'
T175	0+26.72 WB	70.88'
T176	0+32.00 WB	43.50'
T177	0+43.00 WB	36.50'
T178	0+52.50 WB	35.50'
T179	0+52.50 WB	30.41'
T180	3+13.00 WB	31.55'
T181	3+13.00 WB	36.00'
T182	3+35.82 WB	36.00'
T183	3+85.59 WB	52.50'
T184	3+90.00 WB	52.50'
T185	3+90.00 WB	37.50'
T186	4+11.47 WB	37.50'
T187	4+11.43 WB	30.92'
T188	6+55.38 WB	30.09'
T189	6+55.38 WB	30.80'
T190	6+67.85 WB	30.87'
T191	6+68.04 WB	32.52'
T192	6+70.42 WB	35.00'
T193	6+91.00 WB	35.00'
T194	6+91.00 WB	30.10'
T195	0+42.91 WB	40.82'
T196	10+114.01 CG	25.66'
T197	3+35.87 WB	31.39'
T198	0+29.84 WB	36.14'
T199	0+41.71 WB	30.36'
T200	100+97.90 CG	25.73'
T201	100+97.90 CG	30.62'

### ALIGNMENT DATA

STH 80  
 BP = 0+00.00WB  
 Y = 156210.404  
 X = 325834.874

PC STA = 1+46.54WB  
 Y = 156355.722  
 X = 325853.763  
 DELTA = 7°45'38"LT  
 D = 3°49'11" L = 107.64'  
 T = 101.74'  
 L = 203.17'  
 R = 1500.00'  
 PC STA = 0+44.80WB  
 LCB = N01°28'12"E  
 PT STA = 2+47.97WB  
 L = 95.52'

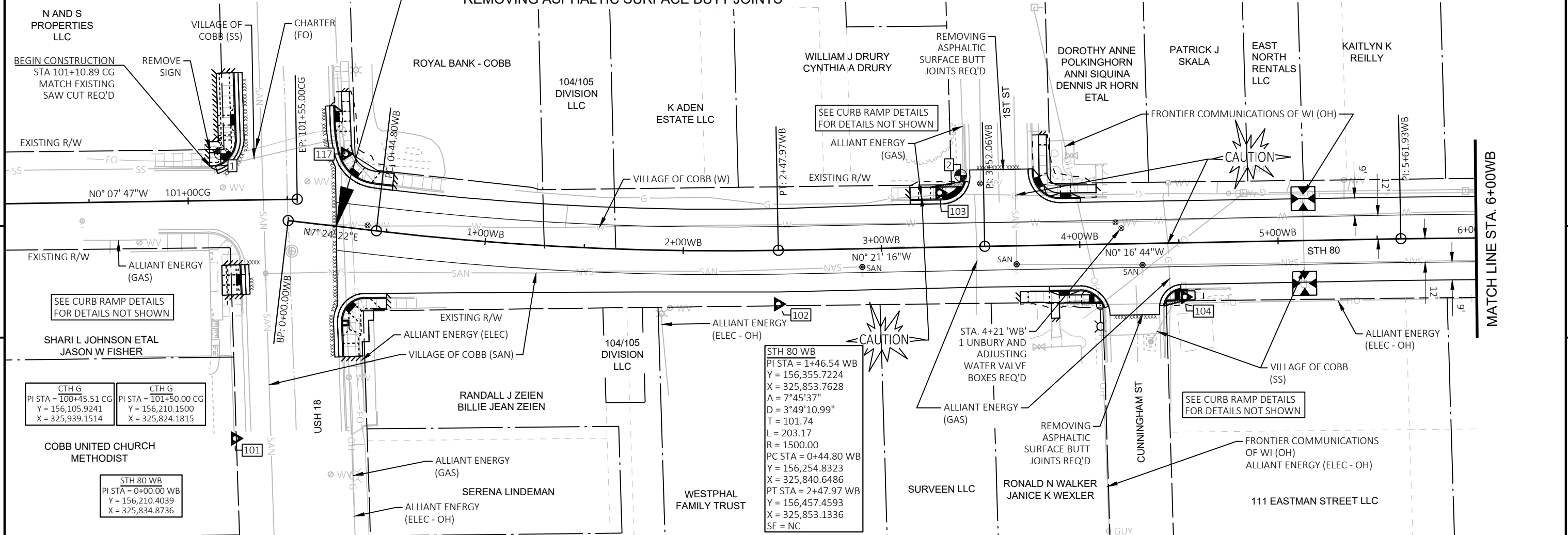
PC STA 0+44.80WB TO 912  
 R = 1500.00'  
 LCH = 107.62'  
 LCB = N05°21'01"E  
 L = 107.64'

P=3+52.06WB  
 Y=156561.552  
 X=325852.490  
 DELTA=00°04'32" RT

P=5+61.93WB  
 Y=156771.419  
 X=325851.468  
 DELTA=00°28'42" RT

MIFLIN STREET  
 BP = 100+00.00CG  
 Y = 156060.153  
 X = 325824.521  
 EP = 101+55.00CG  
 Y = 156215.150  
 X = 325824.170

BEGIN PROJECT 5939-00-70  
 STA 0+24.49 'WB'  
 MATCH EXISTING  
 SEE CONSTRUCTION DETAIL  
 "REMOVING ASPHALTIC SURFACE BUTT JOINTS"



CTH G	CTH G
PI STA = 100+45.51 CG Y = 156,105.9241 X = 325,939.1514	PI STA = 101+50.00 CG Y = 156,210.1500 X = 325,824.1815

STH 80 WB
PI STA = 0+00.00 WB Y = 156,210.4039 X = 325,834.8736

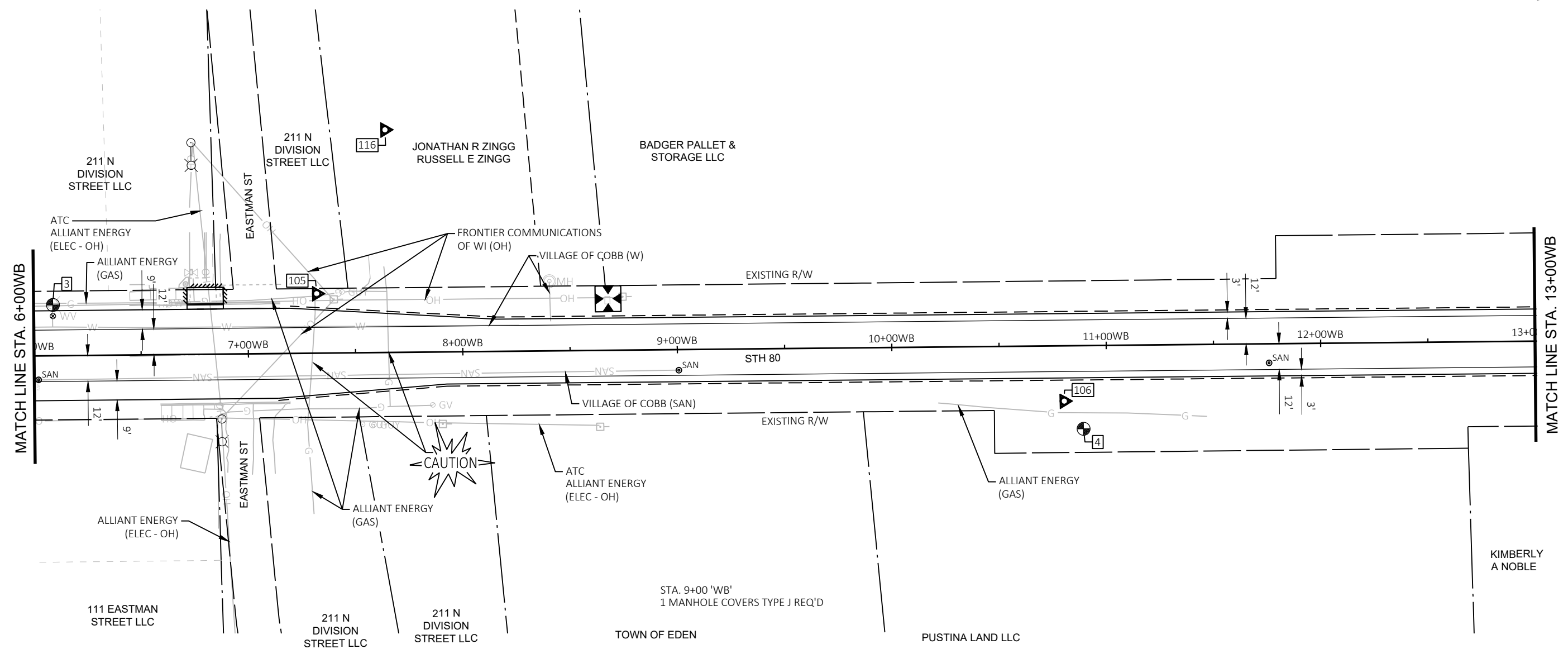
STH 80 WB
PI STA = 1+46.54 WB Y = 156,355.7224 X = 325,853.7628 Δ = 7°45'37" D = 3°49'10.99" T = 101.74 L = 203.17 R = 1500.00 PC STA = 0+44.80 WB Y = 156,254.8323 X = 325,840.6486 PT STA = 2+47.97 WB Y = 156,457.4593 X = 325,853.1336 SE = NC

BENCHMARK AND CONTROL POINT INFORMATION

POINT NO.	TYPE	Y	X	ELEVATION	DESCRIPTION
1	BM	156,176.69	325,800.68	1,174.70	CUT SQ NE COR METAL BASE FINGERSON'S SERVICE SGN
2	BM	156,549.80	325,816.66	1,178.84	CUT X WSW FLANGE BOLT HYD
101	CP	156,182.34	325,944.38	1,169.73	CUT X IN CONC S/W
102	CP	156,457.02	325,880.27	1,177.40	CUT X IN CONC S/W
103	CP	156,539.15	325,825.22	1,176.83	CUT X IN CONC S/W
104	CP	156,662.19	325,879.44	1,171.74	CUT X IN CONC S/W
117	CP	156,239.87	325,801.64	1,174.41	CUT X IN CONC S/W

LEGEND

- SURFACE WATER FLOW
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- ADJUSTING MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SAWING ASPHALT
- INLET PROTECTION TYPE C



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BENCHMARK AND CONTROL POINT INFORMATION					
POINT NO.	TYPE	Y	X	ELEVATION	DESCRIPTION
3	BM	156,818.59	325,828.02	1,176.01	CUT X NE FLANGE BOLT HYD
4	BM	157,298.38	325,892.11	1,177.98	RR SPIKE PPOL (NO #)
105	CP	156,941.68	325,824.39	1,178.38	5/8IN RB KL CAP
106	CP	157,289.55	325,879.10	1,178.11	5/8IN RB KL CAP
114	CP	156,909.26	326,045.17	1,174.56	MAG NAIL
115	CP	156,936.09	326,309.96	1,165.63	6IN NAIL
116	CP	156,974.51	325,748.46	1,180.32	6IN NAIL

LEGEND	
	SURFACE WATER FLOW
	SILT FENCE
	EROSION MAT CLASS I TYPE B
	ADJUSTING MANHOLE COVERS
	ADJUSTING WATER VALVE BOXES
	TEMPORARY DITCH CHECKS
	CULVERT PIPE CHECKS
	SAWING ASPHALT
	INLET PROTECTION TYPE C

NOTE: UTILITIES WERE ONLY SURVEYED WITHIN THE AREA OF CULVERT REPLACEMENT. UTILITIES MAY EXTEND BEYOND LIMITS OF SURVEY SHOWN.

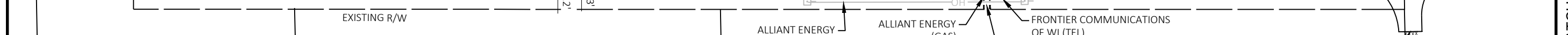
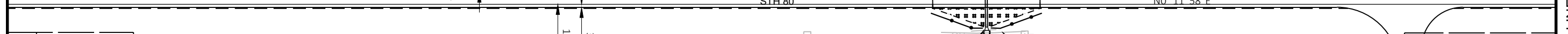
LANELL L WAGNER  
ROBERT L WAGNER

LANELL L WAGNER  
ROBERT L WAGNER

MEGAN E MEUER

MATCH LINE STA. 13+00WB

MATCH LINE STA. 28+00WB



PREMIER  
COOPERATIVE

STA. 22+80 'WB', SKEW 0°  
1 EACH REMOVING SMALL PIPE CULVERTS  
62 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
2 MARKERS CULVERT END REQ'D.  
SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

CONNIE J GARD

CONNIE J GARD

JAMESON D PUSTINA  
MEGAN S PUSTINA

KRISTOPHER A  
MEUER  
KATHLEEN J MEUER

5

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GLEN E TOMAS  
JO ANN TOMAS

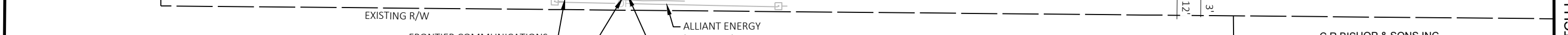
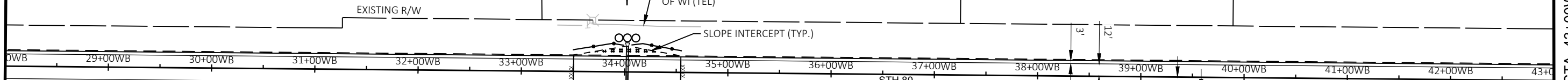
TRAVIS R MUELLER  
LAURIE A MUELLER  
TYLER H MUELLER

ROGER D MUELLER

KEATON HILDRETH

MATCH LINE STA. 28+00WB

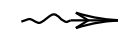

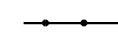



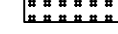

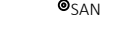
MATCH LINE STA. 43+00WB



KRISTOPHER A MEUER  
KATHLEEN J MEUER

STA. 34+43 'WB', SKEW 0°  
1 EACH REMOVING SMALL PIPE CULVERTS  
50 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
2 MARKERS CULVERT END REQ'D.  
SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

LEGEND

-  SURFACE WATER FLOW
-  TEMPORARY DITCH CHECKS
-  SILTY FENCE
-  CULVERT PIPE CHECKS
-  EROSION MAT CLASS I TYPE B
-  SAWING ASPHALT
-  ADJUSTING MANHOLE COVERS
-  INLET PROTECTION TYPE C
-  ADJUSTING WATER VALVE BOXES

PROJECT NO: 5939-00-70

HWY: STH 80

COUNTY: IOWA

PLAN SHEETS

SHEET

E

TRAVIS R MUELLER  
LAURIE A MUELLER  
TYLER H MUELLER

STA. 45+15 'WB', SKEW 3° RHF  
STA. 45+23 'WB', SKEW 2° RHF  
2 EACH REMOVING SMALL PIPE CULVERTS  
2-66 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
4 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D  
4 MARKERS CULVERT END REQ'D.  
SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D  
WILLOW SPRINGS RD  
BRIAN C PETE  
SHONDA K PETE

ROBERT F EGGERS  
KAREN M EGGERS

STH 80 WB  
PI STA = 47+98.54 WB  
Y = 161,008.0007  
X = 325,866.2150  
Δ = 44°58'55"  
D = 4°53'49.47"  
T = 484.41  
L = 918.55  
R = 1170.00  
PC STA = 43+14.13 WB  
Y = 160,523.5902  
X = 325,864.5288  
PT STA = 52+32.67 WB  
Y = 161,351.8308  
X = 325,524.9859  
SE = 5.9%

WAYNE B GRIMM  
JANICE S GRIMM

WAYNE B GRIMM  
JANICE S GRIMM

BRADLEY J NORBY

STA. 62+82 'WB', SKEW 0°  
1 EACH REMOVING SMALL PIPE CULVERTS  
80 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
2 MARKERS CULVERT END REQ'D.  
SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

STA. 66+38 'WB'  
2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
2 MARKERS CULVERT END REQ'D.

JEFFERY J RUZICKA

MONEYPENNY LAND LLC

MONEYPENNY LAND LLC

ROBERT F EGGERS  
KAREN M EGGERS

FRONTIER COMMUNICATIONS OF WI (TEL)  
ALLIANT ENERGY (ELEC - OH)  
FRONTIER COMMUNICATIONS OF WI (FO)

FRONTIER COMMUNICATIONS OF WI (TEL)  
ALLIANT ENERGY (GAS)  
EROSION MAT TREATMENT AT CULVERTS (SEE DETAIL)

STH 80 WB  
PI STA = 66+39.44 WB  
Y = 162,348.0954  
X = 324,531.7895  
Δ = 45°08'09"  
D = 4°56'21.45"  
T = 482.10  
L = 913.81  
R = 1160.00  
PC STA = 61+57.34 WB  
Y = 162,006.7917  
X = 324,872.2767  
PT STA = 70+71.15 WB  
Y = 162,830.1917  
X = 324,533.5097  
SE = 5.9%

BRADLEY J NORBY

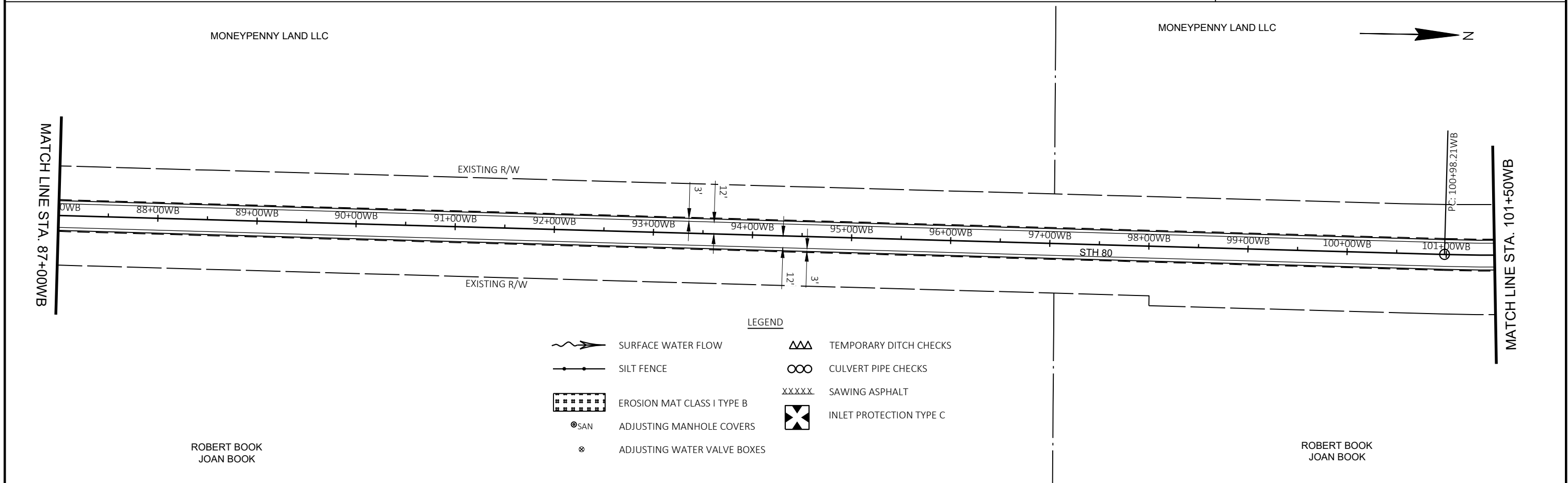
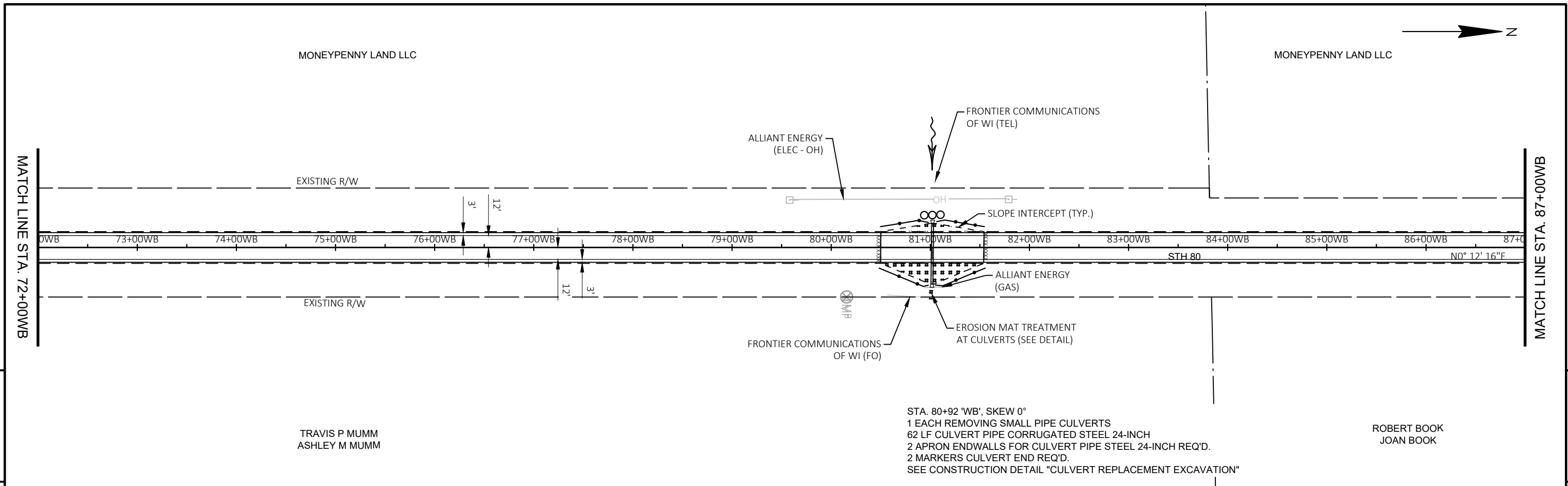
BRADLEY J NORBY

- LEGEND**
- SURFACE WATER FLOW
  - SILT FENCE
  - EROSION MAT CLASS I TYPE B
  - ADJUSTING MANHOLE COVERS
  - ADJUSTING WATER VALVE BOXES
  - TEMPORARY DITCH CHECKS
  - CULVERT PIPE CHECKS
  - SAWING ASPHALT
  - INLET PROTECTION TYPE C

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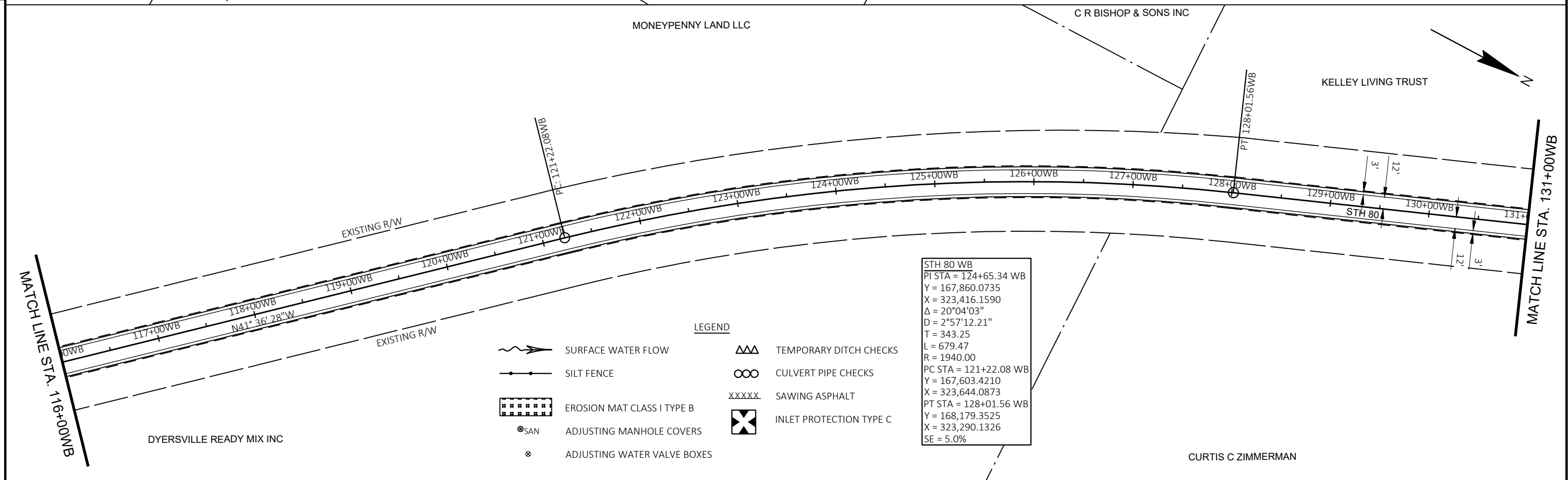
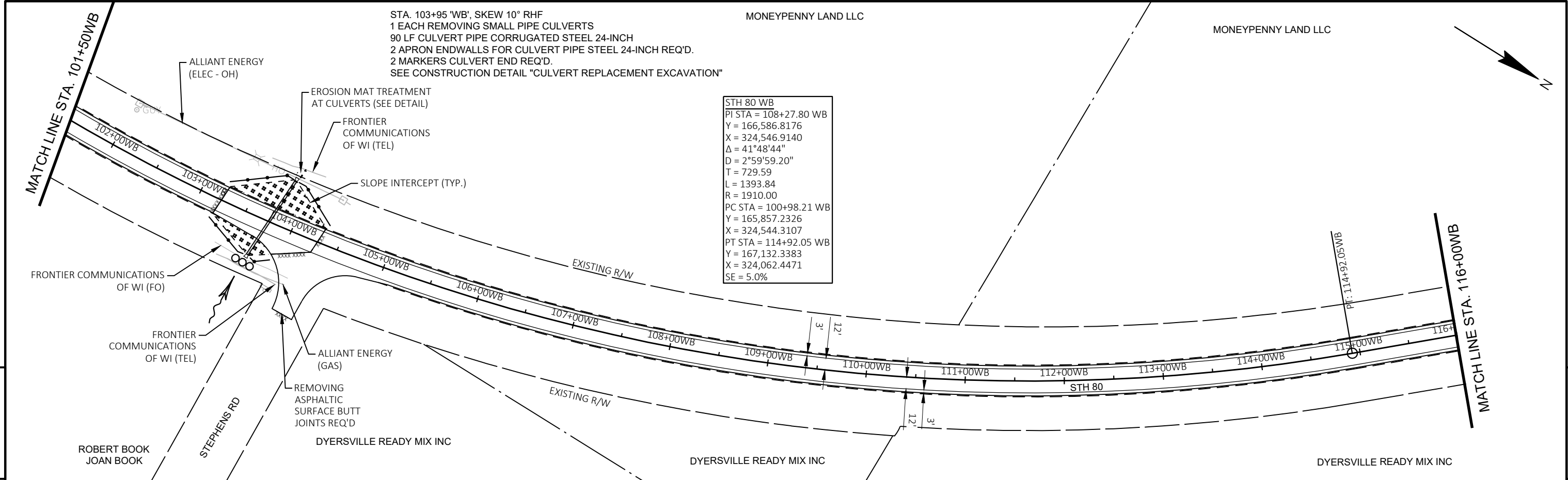
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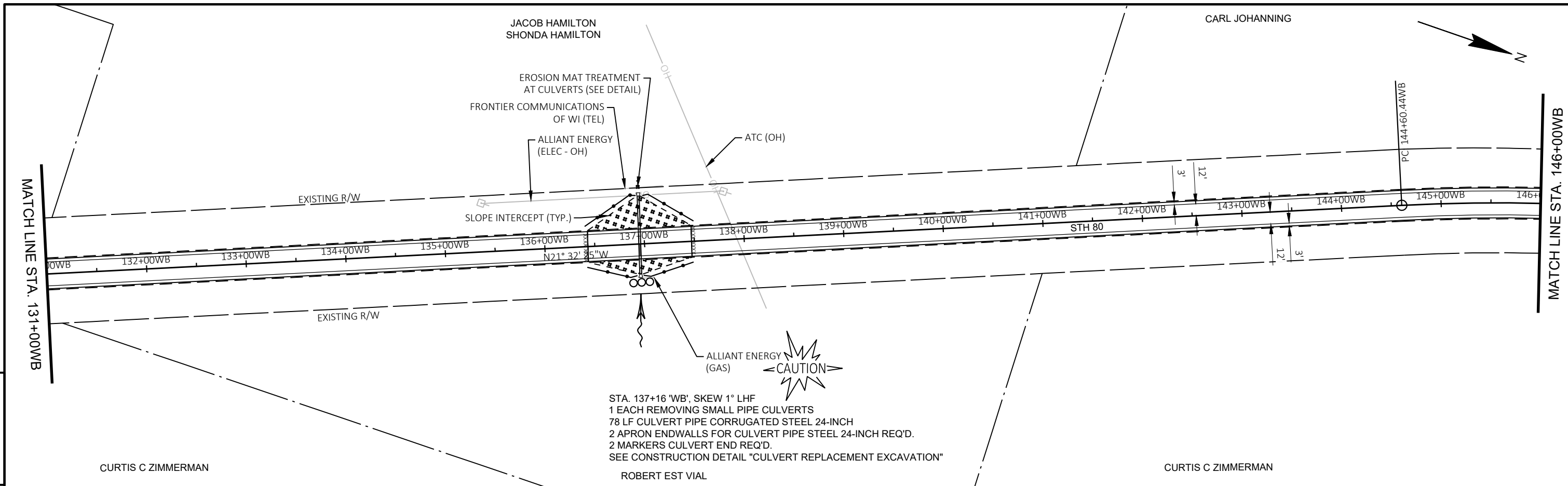


PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	PLAN SHEETS	SHEET	E
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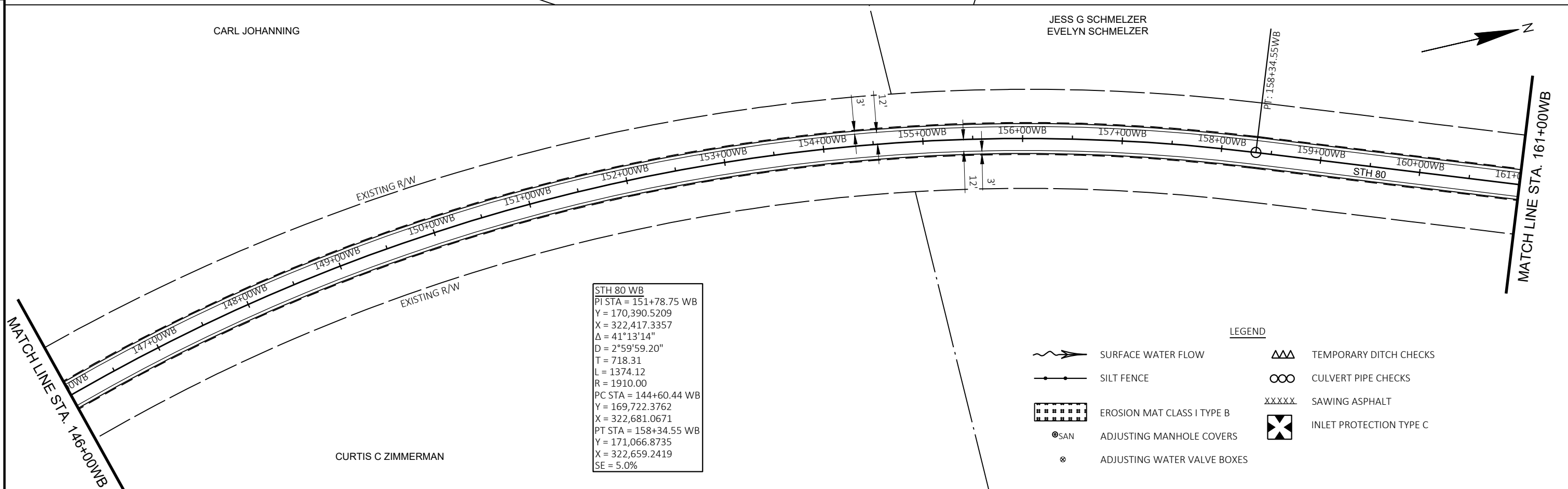




PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	PLAN SHEETS	SHEET	E
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STA. 137+16 "WB", SKEW 1° LHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 78 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"  
 ROBERT EST VIAL

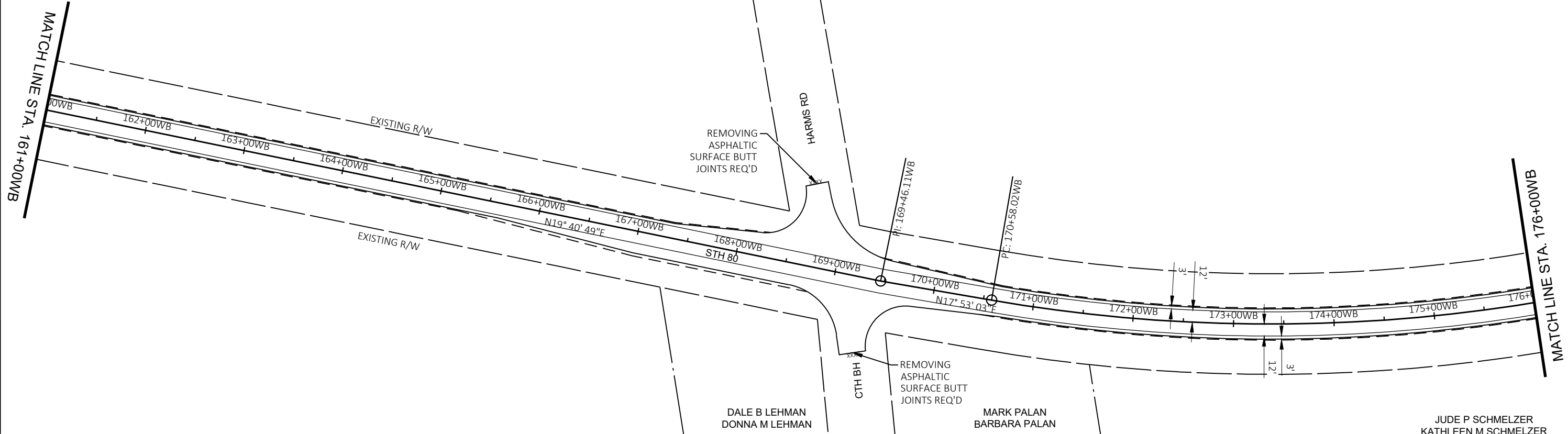


STH 80 WB	
PI STA =	151+78.75 WB
Y =	170,390.5209
X =	322,417.3357
Δ =	41°13'14"
D =	2°59'59.20"
T =	718.31
L =	1374.12
R =	1910.00
PC STA =	144+60.44 WB
Y =	169,722.3762
X =	322,681.0671
PT STA =	158+34.55 WB
Y =	171,066.8735
X =	322,659.2419
SE =	5.0%

LEGEND	
	SURFACE WATER FLOW
	SILT FENCE
	EROSION MAT CLASS I TYPE B
	ADJUSTING MANHOLE COVERS
	ADJUSTING WATER VALVE BOXES
	TEMPORARY DITCH CHECKS
	CULVERT PIPE CHECKS
	SAWING ASPHALT
	INLET PROTECTION TYPE C

JESS G SCHMELZER  
EVELYN SCHMELZER

THOMAS D NOVAK  
STACIE E NOVAK



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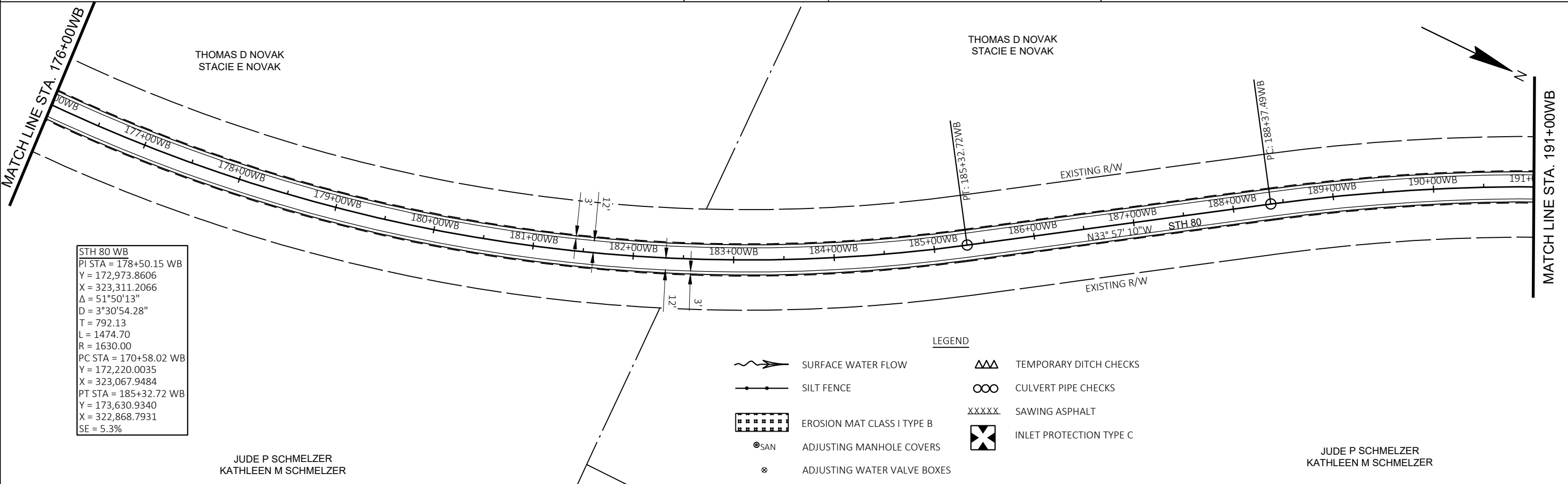
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THOMAS D NOVAK  
STACIE E NOVAK

THOMAS D NOVAK  
STACIE E NOVAK

JUDE P SCHMELZER  
KATHLEEN M SCHMELZER

JUDE P SCHMELZER  
KATHLEEN M SCHMELZER



STH 80 WB  
 PI STA = 178+50.15 WB  
 Y = 172,973.8606  
 X = 323,311.2066  
 Δ = 51°50'13"  
 D = 3°30'54.28"  
 T = 792.13  
 L = 1474.70  
 R = 1630.00  
 PC STA = 170+58.02 WB  
 Y = 172,220.0035  
 X = 323,067.9484  
 PT STA = 185+32.72 WB  
 Y = 173,630.9340  
 X = 322,868.7931  
 SE = 5.3%

JUDE P SCHMELZER  
KATHLEEN M SCHMELZER

**LEGEND**

	SURFACE WATER FLOW		TEMPORARY DITCH CHECKS
	SILT FENCE		CULVERT PIPE CHECKS
	EROSION MAT CLASS I TYPE B		SAWING ASPHALT
	ADJUSTING MANHOLE COVERS		INLET PROTECTION TYPE C
	ADJUSTING WATER VALVE BOXES		

STH 80 WB  
 PI STA = 193+24.86 WB  
 Y = 174,288.0091  
 X = 322,426.3783  
 $\Delta = 28^{\circ}37'44''$   
 D = 2°59'59.20"  
 T = 487.37  
 L = 954.37  
 R = 1910.00  
 PC STA = 188+37.49 WB  
 Y = 173,883.7388  
 X = 322,698.5772  
 PT STA = 197+91.86 WB  
 Y = 174,773.2739  
 X = 322,381.1586  
 SE = 5.0%

THOMAS D NOVAK  
STACIE E NOVAK

BENISH FAMILY TRUST

BENISH FAMILY TRUST



REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D

BILLS RD

PI: 197+91.86WB

EXISTING R/W

EXISTING R/W

STH 80

MATCH LINE STA. 206+00WB

MATCH LINE STA. 191+00WB

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JUDE P SCHMELZER  
KATHLEEN M SCHMELZERC

JOHN BENISH JR  
KATHRYN ANN BENISH

BENISH FAMILY TRUST

BENISH FAMILY TRUST



EROSION MAT TREATMENT AT CULVERTS (SEE DETAIL)

ALLIANT ENERGY (ELEC - OH)

FRONTIER COMMUNICATIONS OF WI (TEL)

SLOPE INTERCEPT (TYP.)

EXISTING R/W

EXISTING R/W

STH 80

MATCH LINE STA. 221+00WB

MATCH LINE STA. 206+00WB

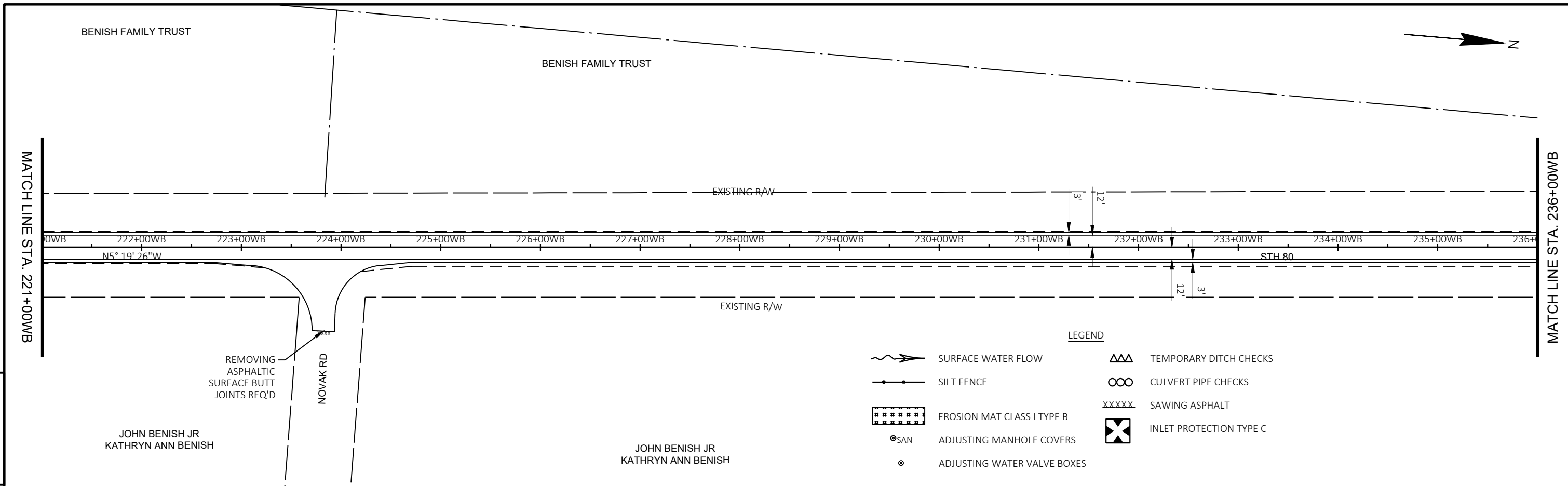
STA. 209+23 'WB', SKEW 1° RHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 55 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

JOHN BENISH JR  
KATHRYN ANN BENISH

JOHN BENISH JR  
KATHRYN ANN BENISH

LEGEND

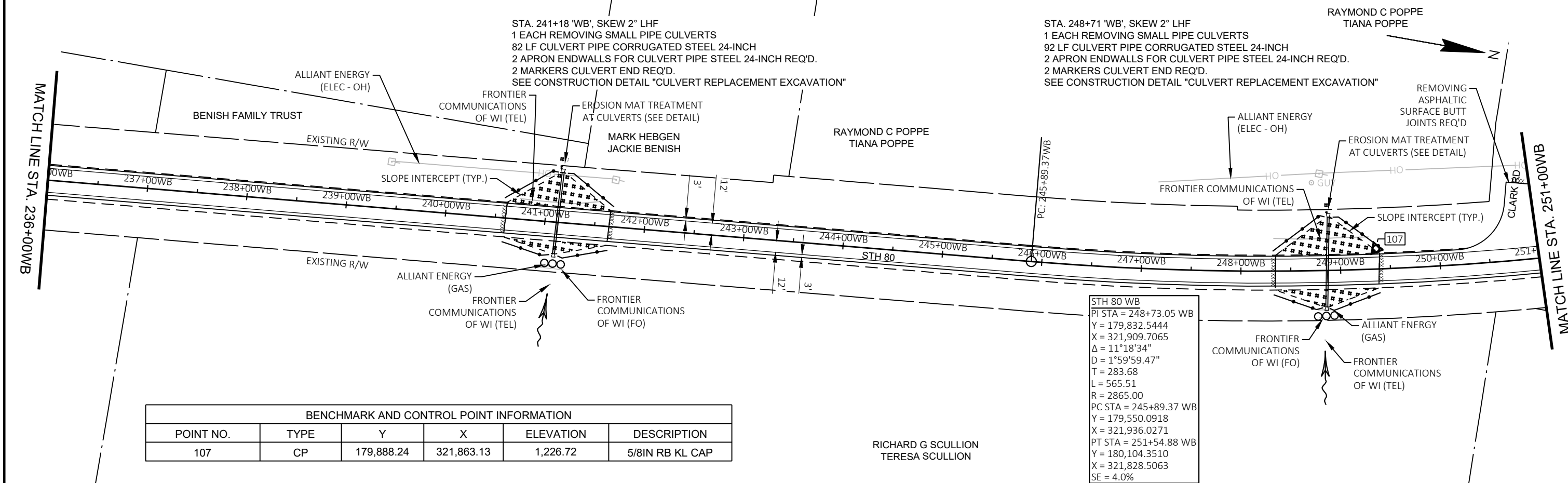
- SURFACE WATER FLOW
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- ADJUSTING MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SAWING ASPHALT
- INLET PROTECTION TYPE C



5

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- LEGEND**
- SURFACE WATER FLOW
  - TEMPORARY DITCH CHECKS
  - SILT FENCE
  - CULVERT PIPE CHECKS
  - EROSION MAT CLASS I TYPE B
  - SAWING ASPHALT
  - ADJUSTING MANHOLE COVERS
  - INLET PROTECTION TYPE C
  - ADJUSTING WATER VALVE BOXES



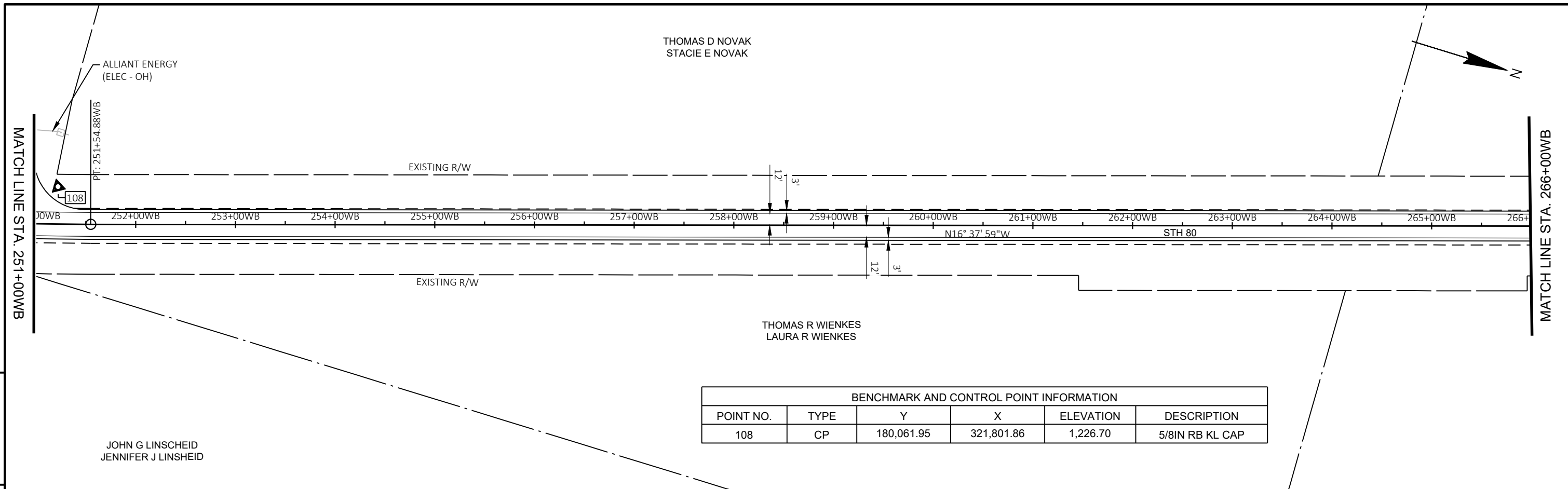
STA. 241+18 'WB', SKEW 2° LHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 82 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

STA. 248+71 'WB', SKEW 2° LHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 92 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

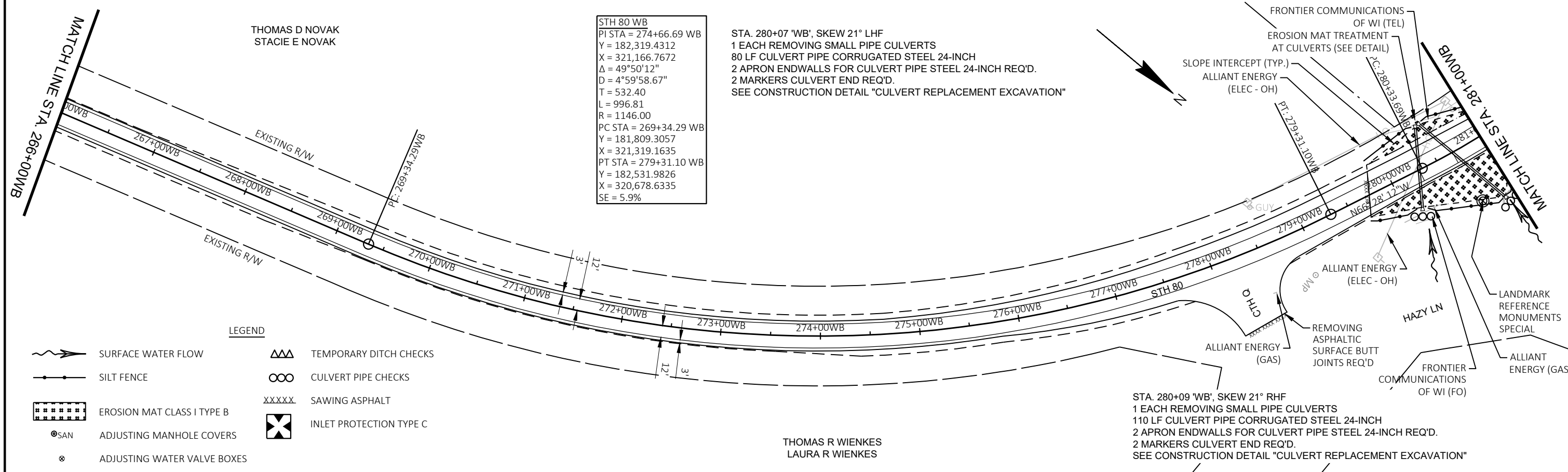
STH 80 WB  
 PI STA = 248+73.05 WB  
 Y = 179,832.5444  
 X = 321,909.7065  
 $\Delta = 11^\circ 18' 34''$   
 $D = 1^\circ 59' 59.47''$   
 T = 283.68  
 L = 565.51  
 R = 2865.00  
 PC STA = 245+89.37 WB  
 Y = 179,550.0918  
 X = 321,936.0271  
 PT STA = 251+54.88 WB  
 Y = 180,104.3510  
 X = 321,828.5063  
 SE = 4.0%

BENCHMARK AND CONTROL POINT INFORMATION					
POINT NO.	TYPE	Y	X	ELEVATION	DESCRIPTION
107	CP	179,888.24	321,863.13	1,226.72	5/8IN RB KL CAP

RICHARD G SCULLION  
 TERESA SCULLION



BENCHMARK AND CONTROL POINT INFORMATION					
POINT NO.	TYPE	Y	X	ELEVATION	DESCRIPTION
108	CP	180,061.95	321,801.86	1,226.70	5/8IN RB KL CAP



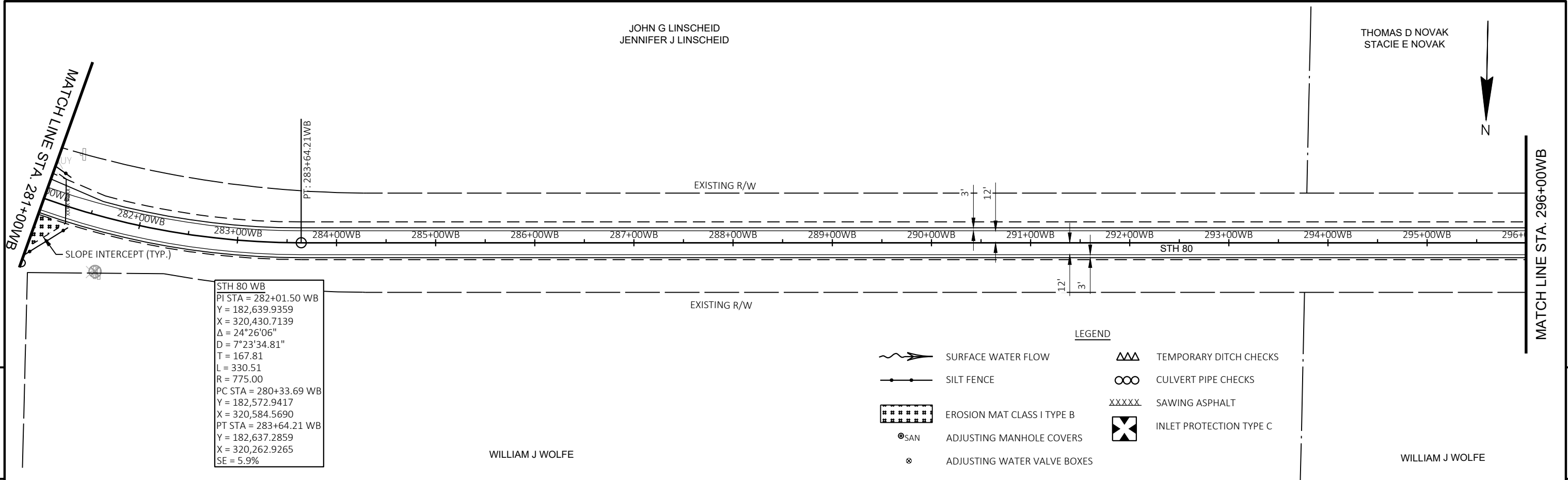
**STH 80 WB**  
 PI STA = 274+66.69 WB  
 Y = 182,319.4312  
 X = 321,166.7672  
 $\Delta = 49^{\circ}50'12''$   
 $D = 4^{\circ}59'58.67''$   
 T = 532.40  
 L = 996.81  
 R = 1146.00  
 PC STA = 269+34.29 WB  
 Y = 181,809.3057  
 X = 321,319.1635  
 PT STA = 279+31.10 WB  
 Y = 182,531.9826  
 X = 320,678.6335  
 SE = 5.9%

STA. 280+07 'WB', SKEW 21° LHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 80 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

STA. 280+09 'WB', SKEW 21° RHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 110 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

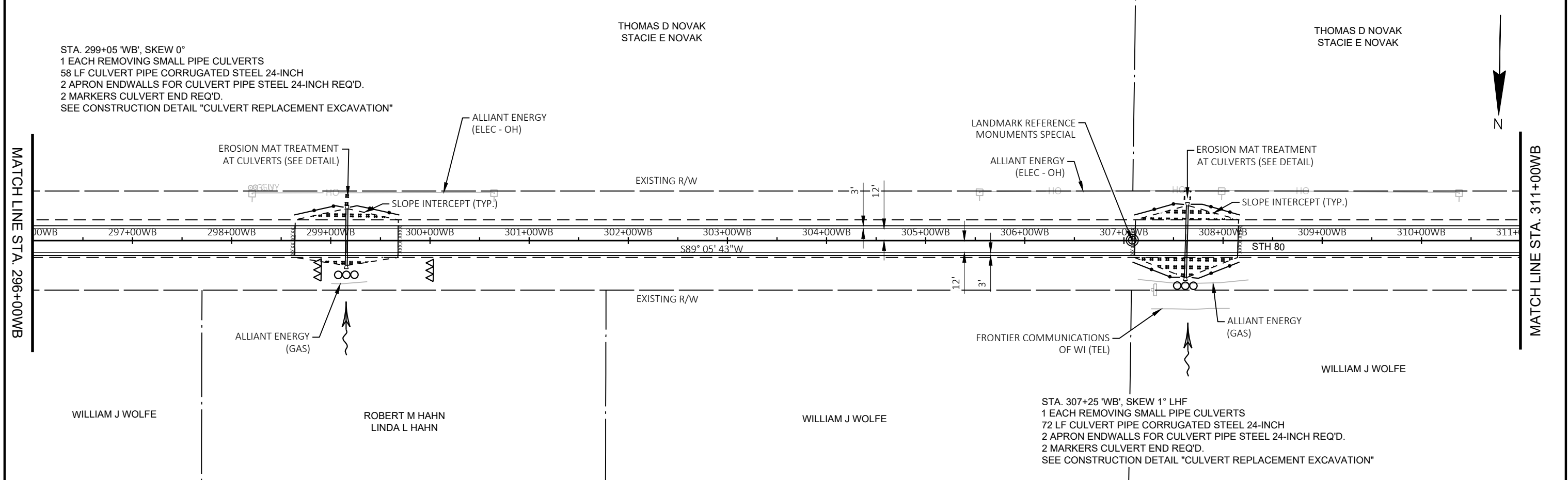
JOHN G LINSCHIED  
JENNIFER J LINSCHIED

THOMAS D NOVAK  
STACIE E NOVAK



5

5



WILLIAM J WOLFE

ROBERT M HAHN  
LINDA L HAHN

WILLIAM J WOLFE

WILLIAM J WOLFE

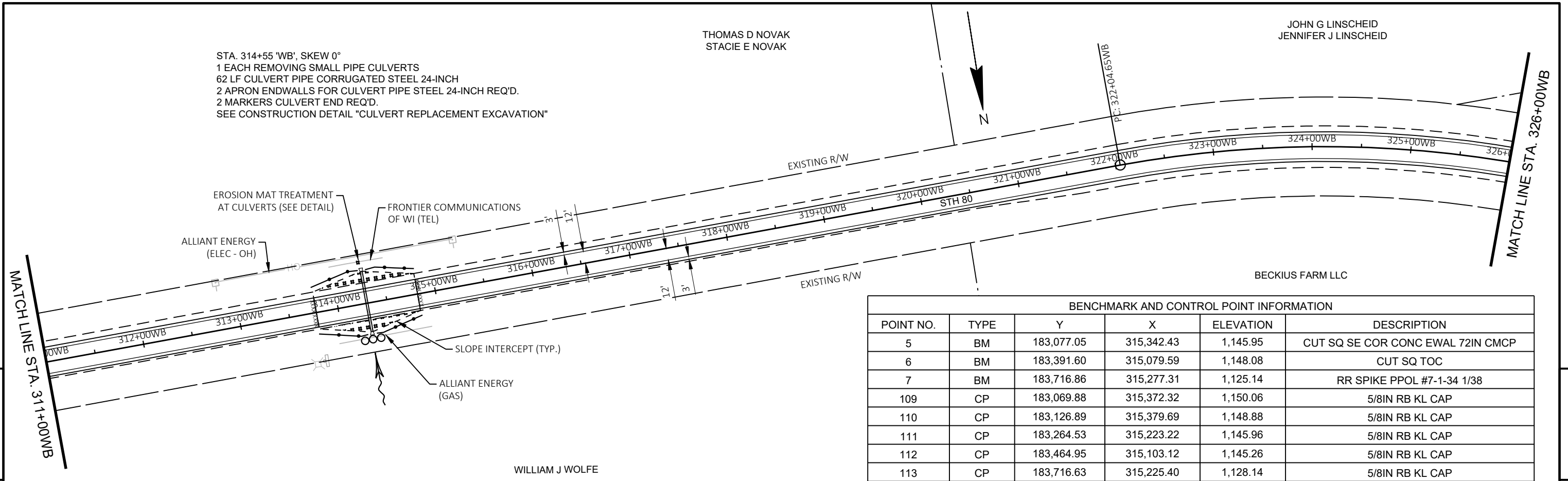
STA. 307+25 'WB', SKEW 1° LHF  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 72 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

PROJECT NO: 5939-00-70	HWY: STH 80	COUNTY: IOWA	PLAN SHEETS	SHEET	E
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STA. 314+55 'WB', SKEW 0°  
 1 EACH REMOVING SMALL PIPE CULVERTS  
 62 LF CULVERT PIPE CORRUGATED STEEL 24-INCH  
 2 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH REQ'D.  
 2 MARKERS CULVERT END REQ'D.  
 SEE CONSTRUCTION DETAIL "CULVERT REPLACEMENT EXCAVATION"

THOMAS D NOVAK  
 STACIE E NOVAK

JOHN G LINSCHIED  
 JENNIFER J LINSCHIED

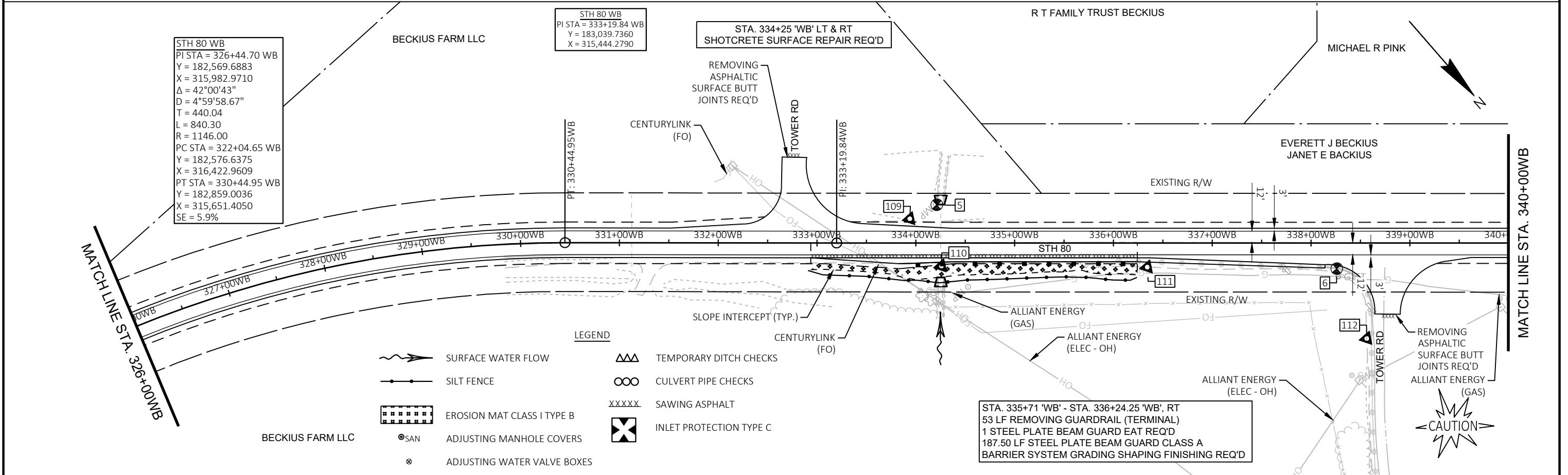


BENCHMARK AND CONTROL POINT INFORMATION					
POINT NO.	TYPE	Y	X	ELEVATION	DESCRIPTION
5	BM	183,077.05	315,342.43	1,145.95	CUT SQ SE COR CONC EWAL 72IN CMCP
6	BM	183,391.60	315,079.59	1,148.08	CUT SQ TOC
7	BM	183,716.86	315,277.31	1,125.14	RR SPIKE PPOL #7-1-34 1/38
109	CP	183,069.88	315,372.32	1,150.06	5/8IN RB KL CAP
110	CP	183,126.89	315,379.69	1,148.88	5/8IN RB KL CAP
111	CP	183,264.53	315,223.22	1,145.96	5/8IN RB KL CAP
112	CP	183,464.95	315,103.12	1,145.26	5/8IN RB KL CAP
113	CP	183,716.63	315,225.40	1,128.14	5/8IN RB KL CAP

STH 80 WB  
 PI STA = 326+44.70 WB  
 Y = 182,569.6883  
 X = 315,982.9710  
 Δ = 42°00'43"  
 D = 4°59'58.67"  
 T = 440.04  
 L = 840.30  
 R = 1146.00  
 PC STA = 322+04.65 WB  
 Y = 182,576.6375  
 X = 316,422.9609  
 PT STA = 330+44.95 WB  
 Y = 182,859.0036  
 X = 315,651.4050  
 SE = 5.9%

STH 80 WB  
 PI STA = 333+19.84 WB  
 Y = 183,039.7360  
 X = 315,444.2790

STA. 334+25 'WB' LT & RT  
 SHOTCRETE SURFACE REPAIR REQ'D



LEGEND

	SURFACE WATER FLOW		TEMPORARY DITCH CHECKS
	SILT FENCE		CULVERT PIPE CHECKS
	EROSION MAT CLASS I TYPE B		SAWING ASPHALT
	ADJUSTING MANHOLE COVERS		INLET PROTECTION TYPE C
	ADJUSTING WATER VALVE BOXES		

STA. 335+71 'WB' - STA. 336+24.25 'WB', RT  
 53 LF REMOVING GUARDRAIL (TERMINAL)  
 1 STEEL PLATE BEAM GUARD EAT REQ'D  
 187.50 LF STEEL PLATE BEAM GUARD CLASS A  
 BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D



MICHAEL R PINK

MATCH LINE STA. 340+00WB

EVERETT J BECKIUS  
JANET E BECKIUS

ABRAHAN BRIZUELA  
HERNANDEZ  
KAREN BRIZUELA

STH 80 WB  
PI STA = 352+58.33 WB  
Y = 184,312.4856  
X = 313,982.1484  
 $\Delta = 41^\circ 20' 35''$   
D = 11' 27' 32.96"  
T = 188.65  
L = 360.79  
R = 500.00  
PC STA = 350+69.68 WB  
Y = 184,188.6233  
X = 314,124.4410  
PT STA = 354+30.46 WB  
Y = 184,311.4836  
X = 313,793.5004  
SE = 5.9%

STH 80 WB  
PI STA = 355+00.00 WB  
Y = 184,311.1143  
X = 313,723.9657

ANDREW D GOTTSCHALL

EXISTING R/W

EXISTING R/W

END PROJECT 5939-00-70  
STA 351+50.00 'WB'  
MATCH EXISTING  
SEE CONSTRUCTION DETAIL  
"REMOVING ASPHALTIC  
SURFACE BUTT JOINTS"

WILLIAM J WOLFE

LEGEND

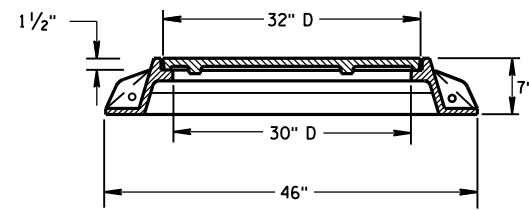
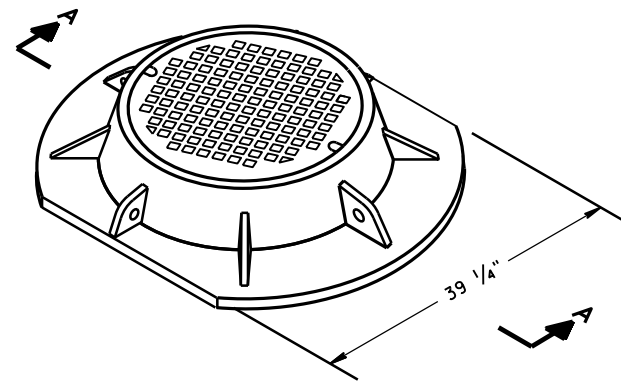
- SURFACE WATER FLOW
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- SAN ADJUSTING MANHOLE COVERS
- ADJUSTING WATER VALVE BOXES
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SAWING ASPHALT
- INLET PROTECTION TYPE C

5

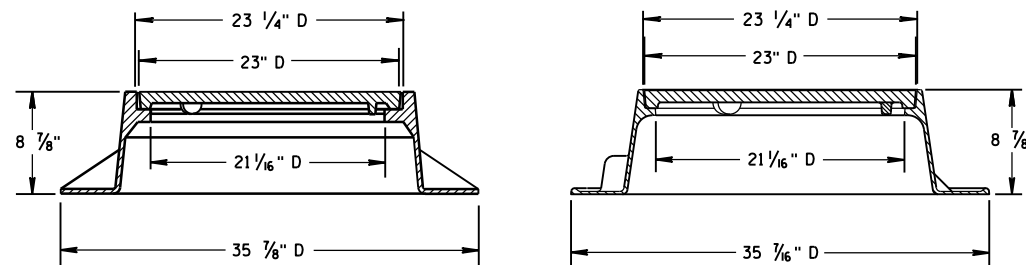
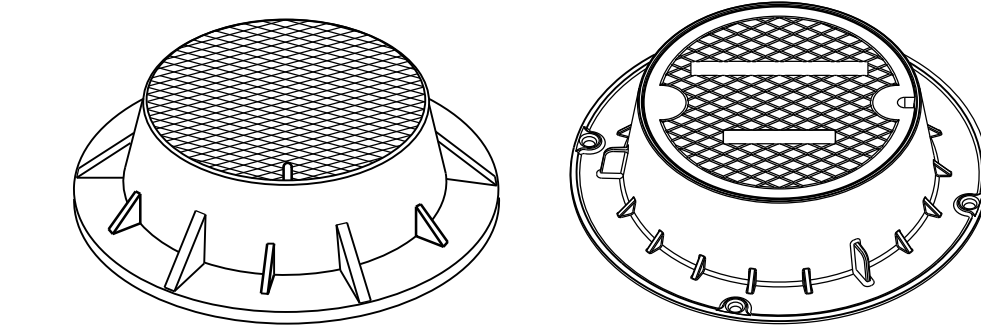
5

## Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C08-21B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-21C	PAVEMENT MARKING (TURN LANES)
15C08-21D	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-07A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-07A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-07C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



SECTION A-A  
TYPE "K"



TYPE "J"

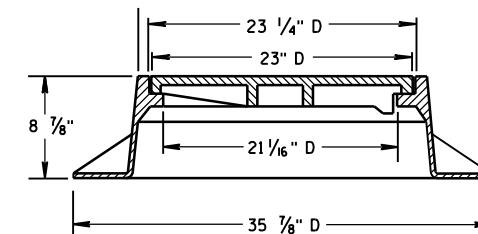
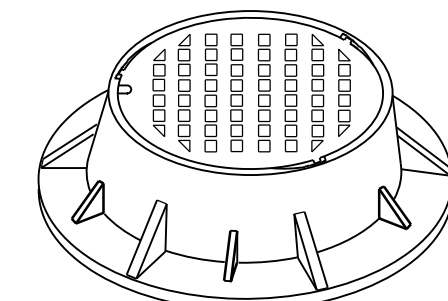
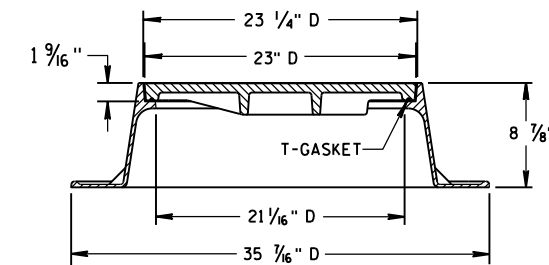
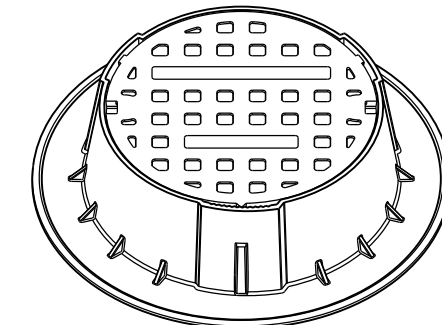
NOTE: EITHER CASTING IS ACCEPTABLE

**GENERAL NOTES**

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

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

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



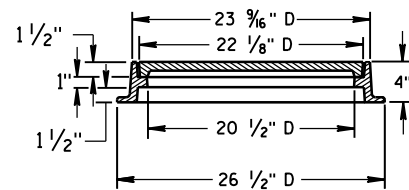
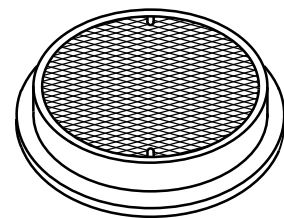
TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

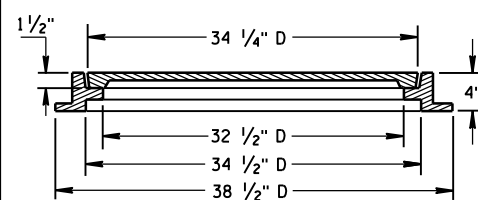
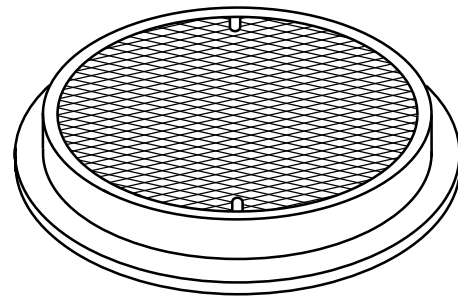
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

NOTE: EITHER CASTING IS ACCEPTABLE

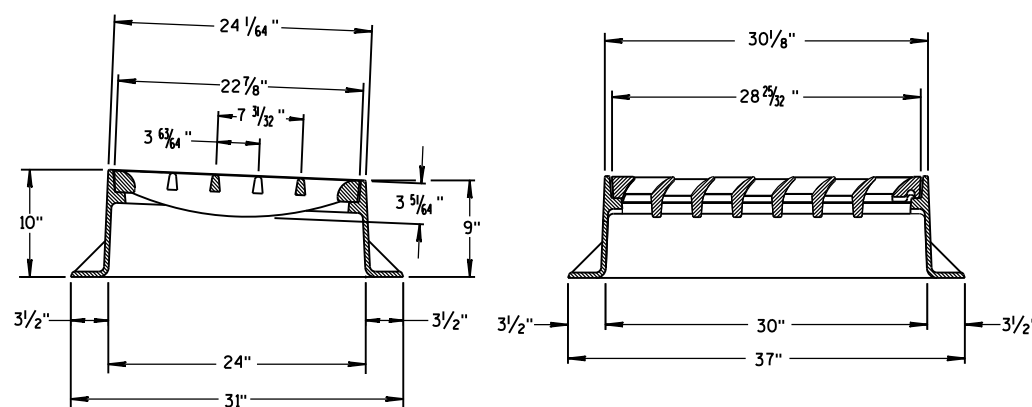
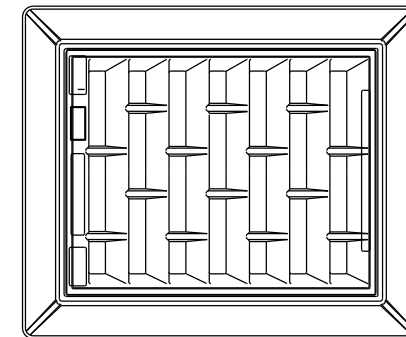
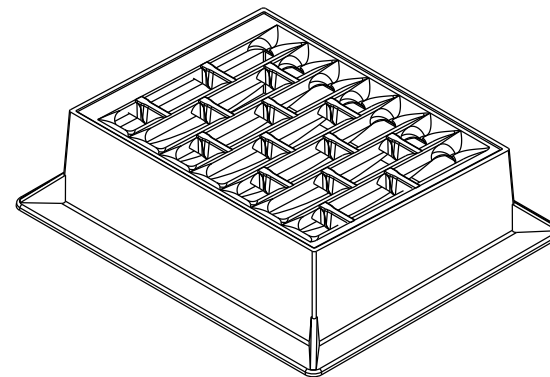
6



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

6

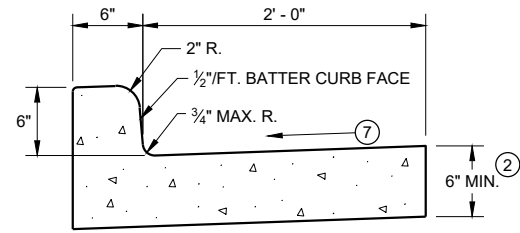
S.D.D. 8 A 5-19d

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

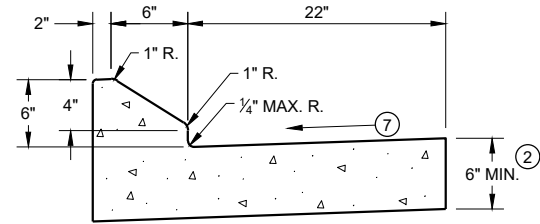
INLET COVER TYPE BW  
MANHOLE COVERS, TYPE K,  
J, J-S, L & M

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

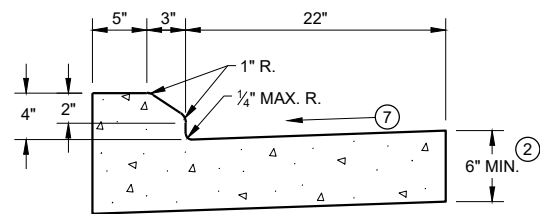
APPROVED  
11/27/2013 DATE /S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER  
FHWA



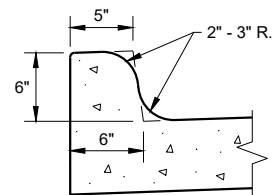
TYPES A<sup>①</sup> & D



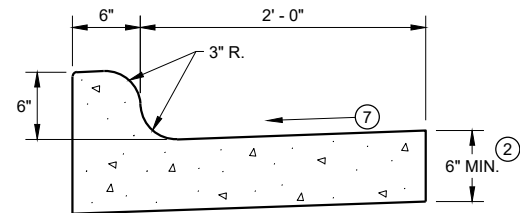
6" SLOPED CURB TYPES G<sup>①</sup> & J



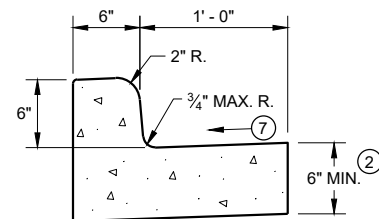
4" SLOPED CURB TYPES G<sup>①</sup> & J



TYPES K<sup>①</sup> & L  
(OPTIONAL CURB SHAPE)

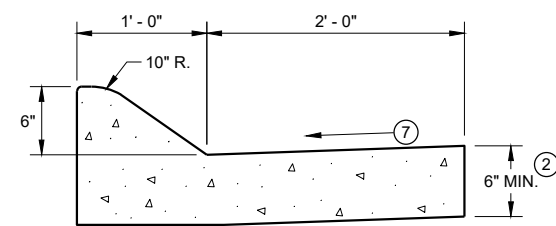


TYPES K<sup>①</sup> & L  
CONCRETE CURB AND GUTTER 30"

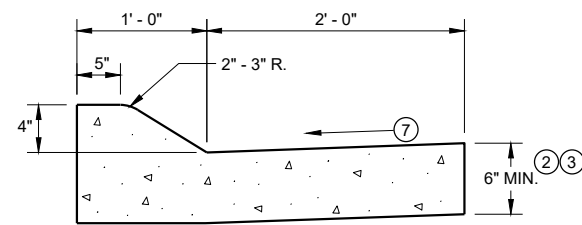


TYPES A<sup>①</sup> & D

CONCRETE CURB AND GUTTER 18"

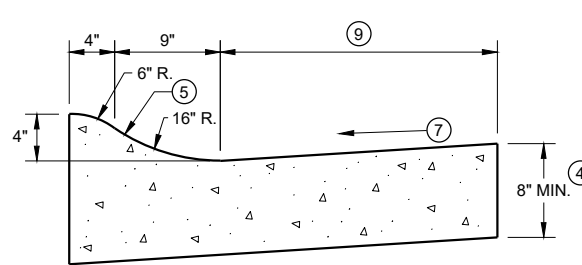


6" SLOPED CURB TYPES A<sup>①</sup> & D



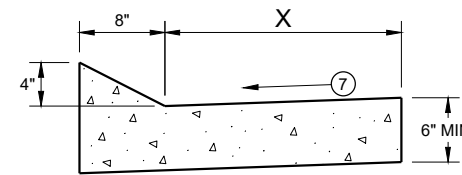
4" SLOPED CURB TYPES A<sup>①</sup> & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R<sup>①</sup> & T

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

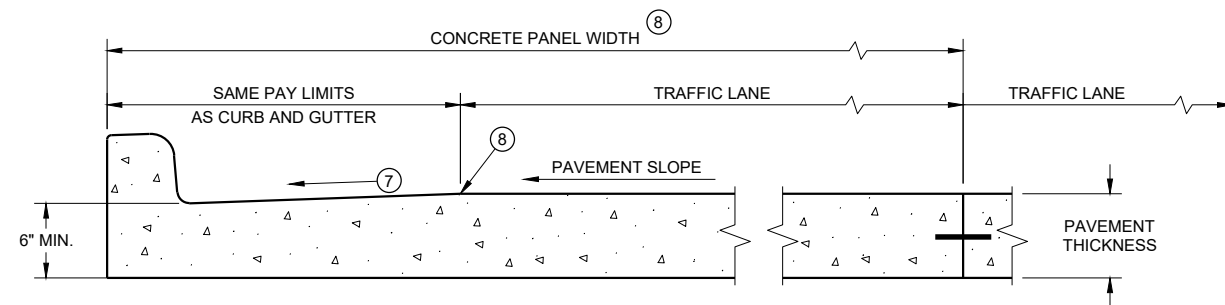


TYPES TBT & TBTT<sup>①</sup>

CONCRETE CURB AND GUTTER

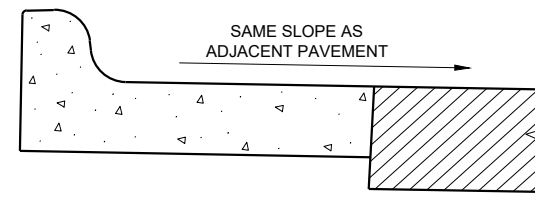
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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<sup>⑥</sup>  
(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.

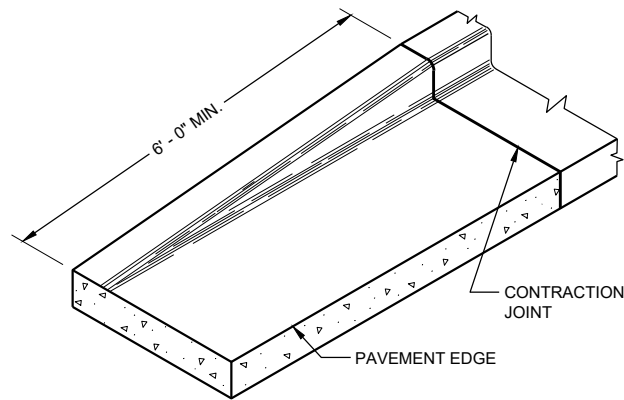
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

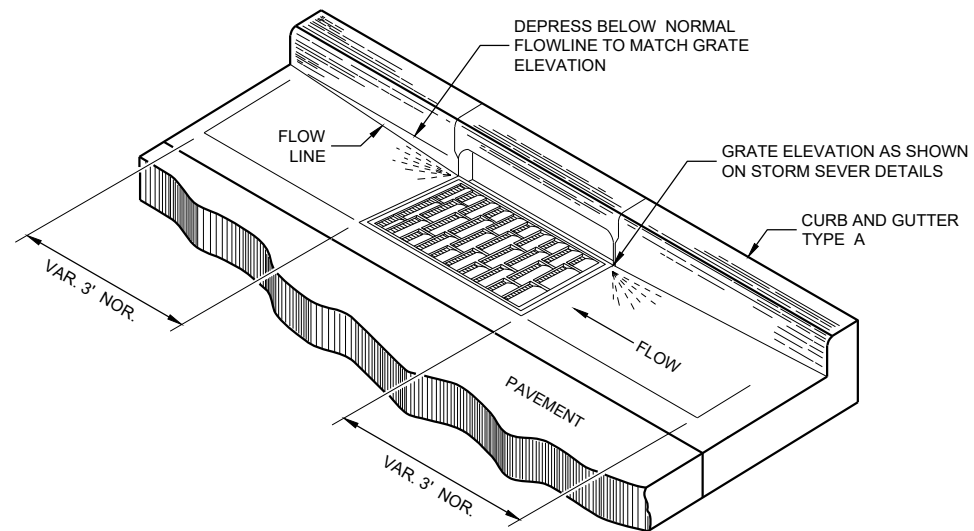
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH 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

6

6



**END SECTION CURB AND GUTTER**



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

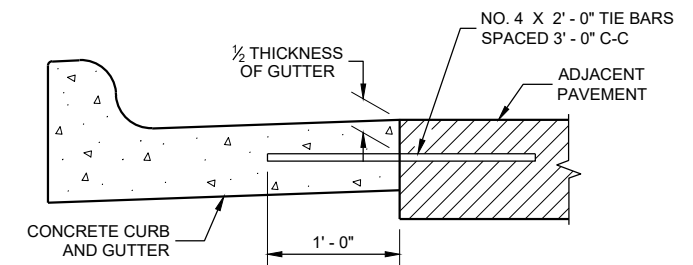
**GENERAL NOTES**

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

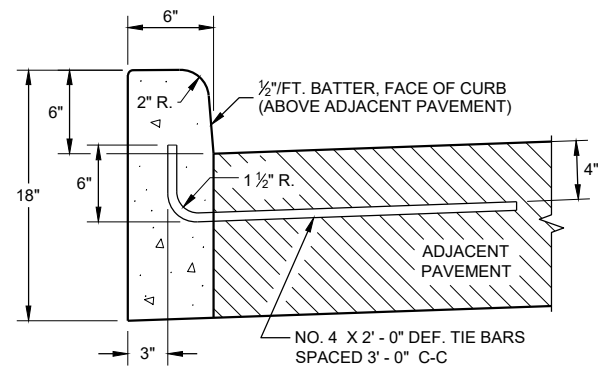
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

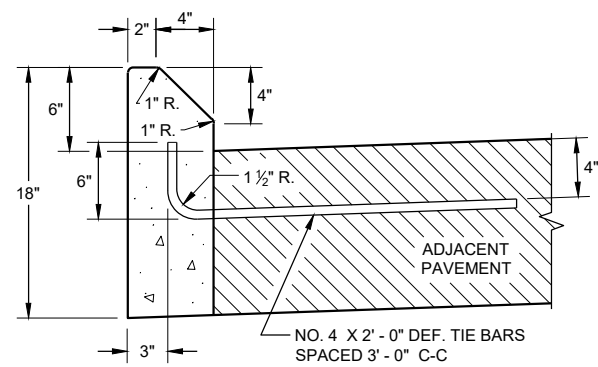
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



**TYPICAL TIE BAR LOCATION** ①

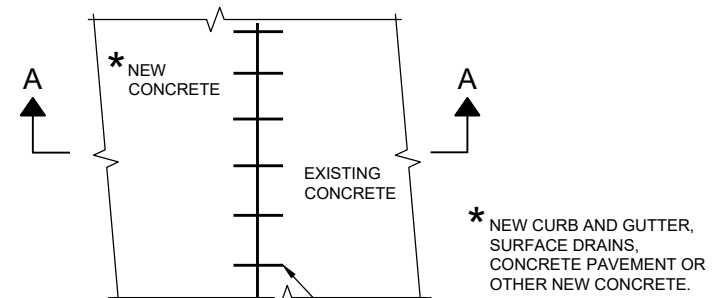


**TYPES A ① & D**

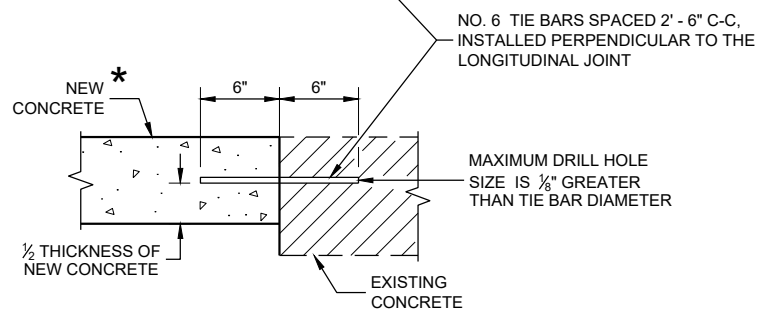


**TYPES G ① & J**

**CONCRETE CURB**

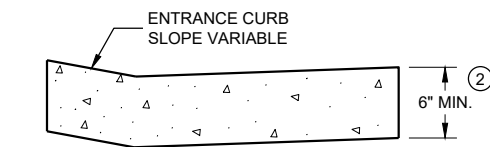


**PLAN VIEW**



**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**



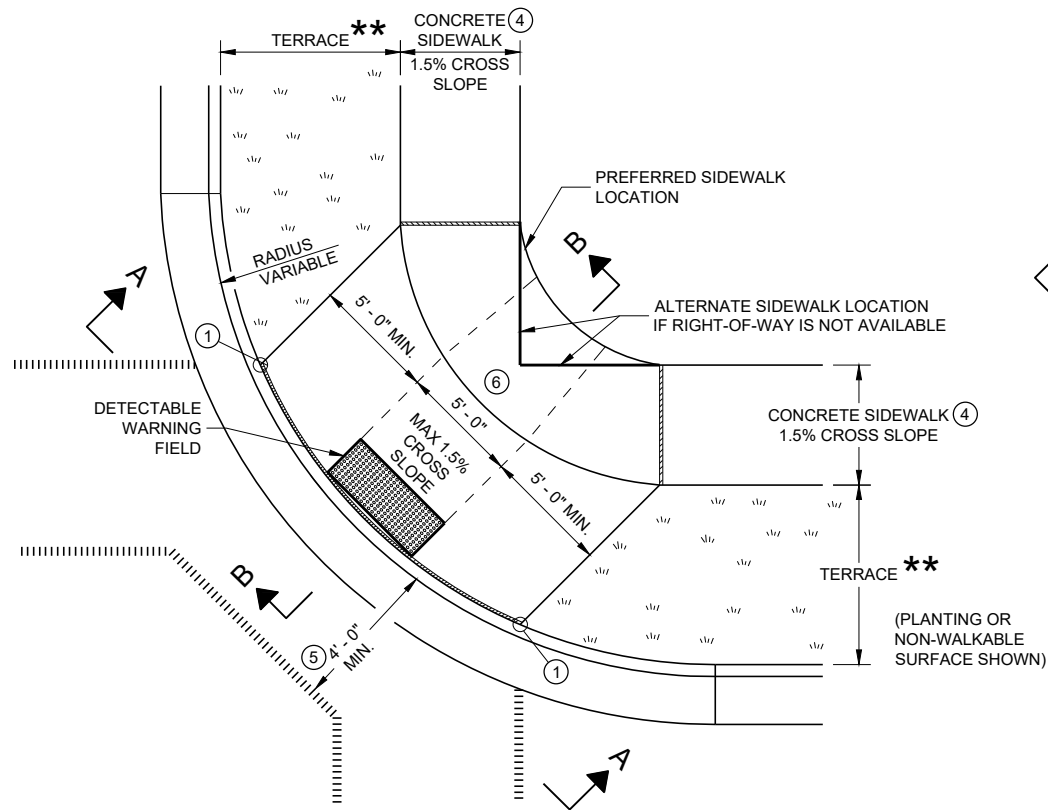
**DRIVEWAY ENTRANCE CURB** ⑨  
(WHEN DIRECTED BY THE ENGINEER)

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

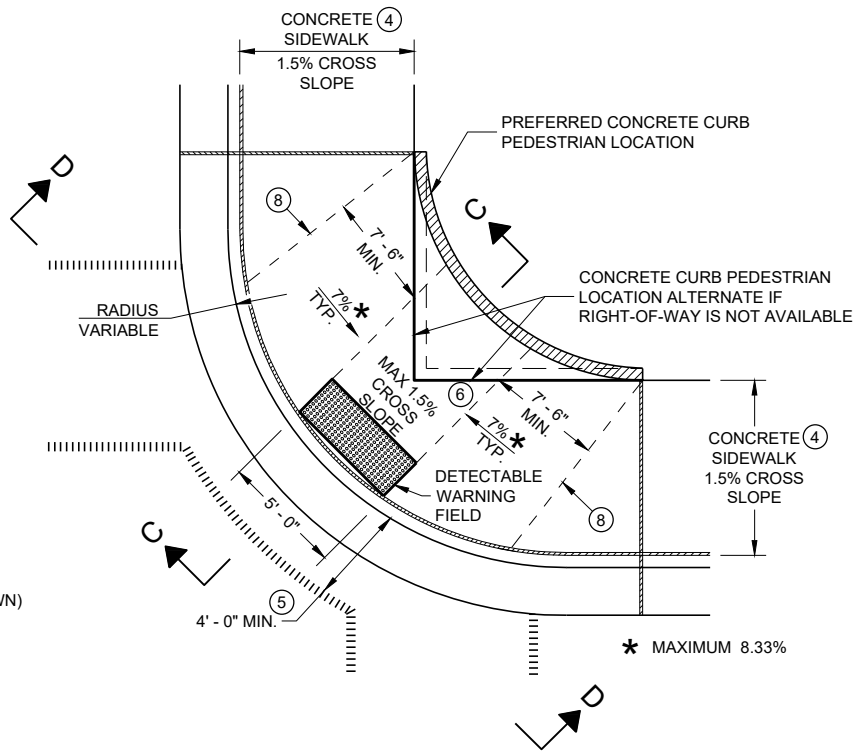
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2021 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

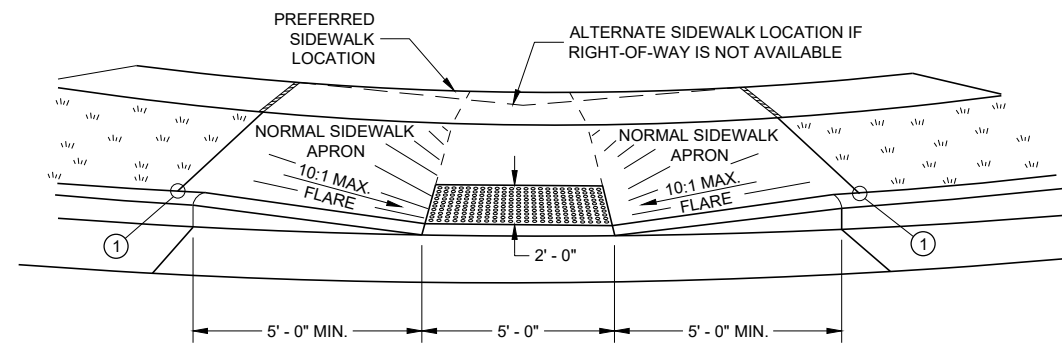
FHWA



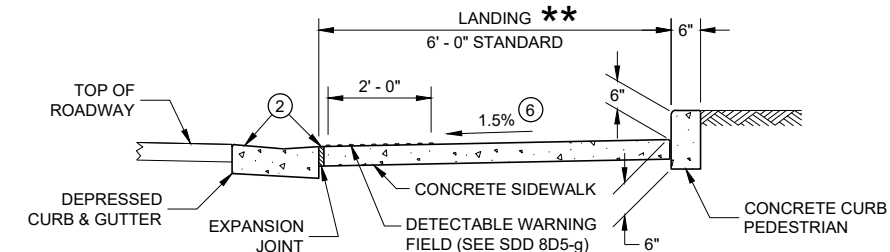
**PLAN VIEW  
CURB RAMP TYPE 1  
(CENTER OF CORNER RADIUS)**



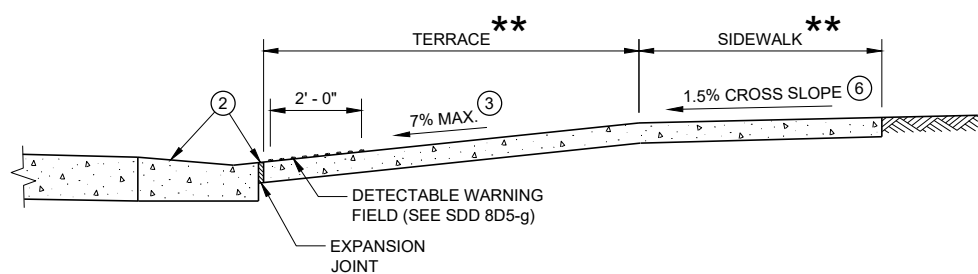
**PLAN VIEW  
CURB RAMP TYPE 1 - A  
(NO TERRACE)**



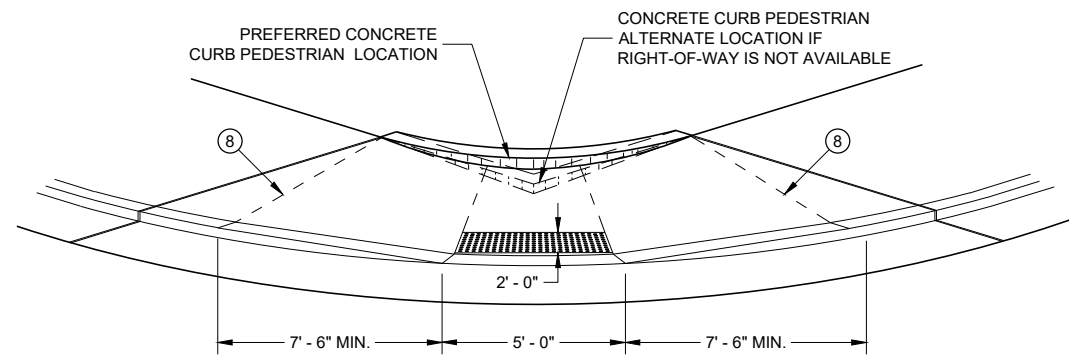
**VIEW A - A FOR TYPE 1**



**SECTION C - C FOR TYPE 1 - A**



**SECTION B - B FOR TYPE 1**



**VIEW D - D FOR TYPE 1 - A**

**GENERAL NOTES**

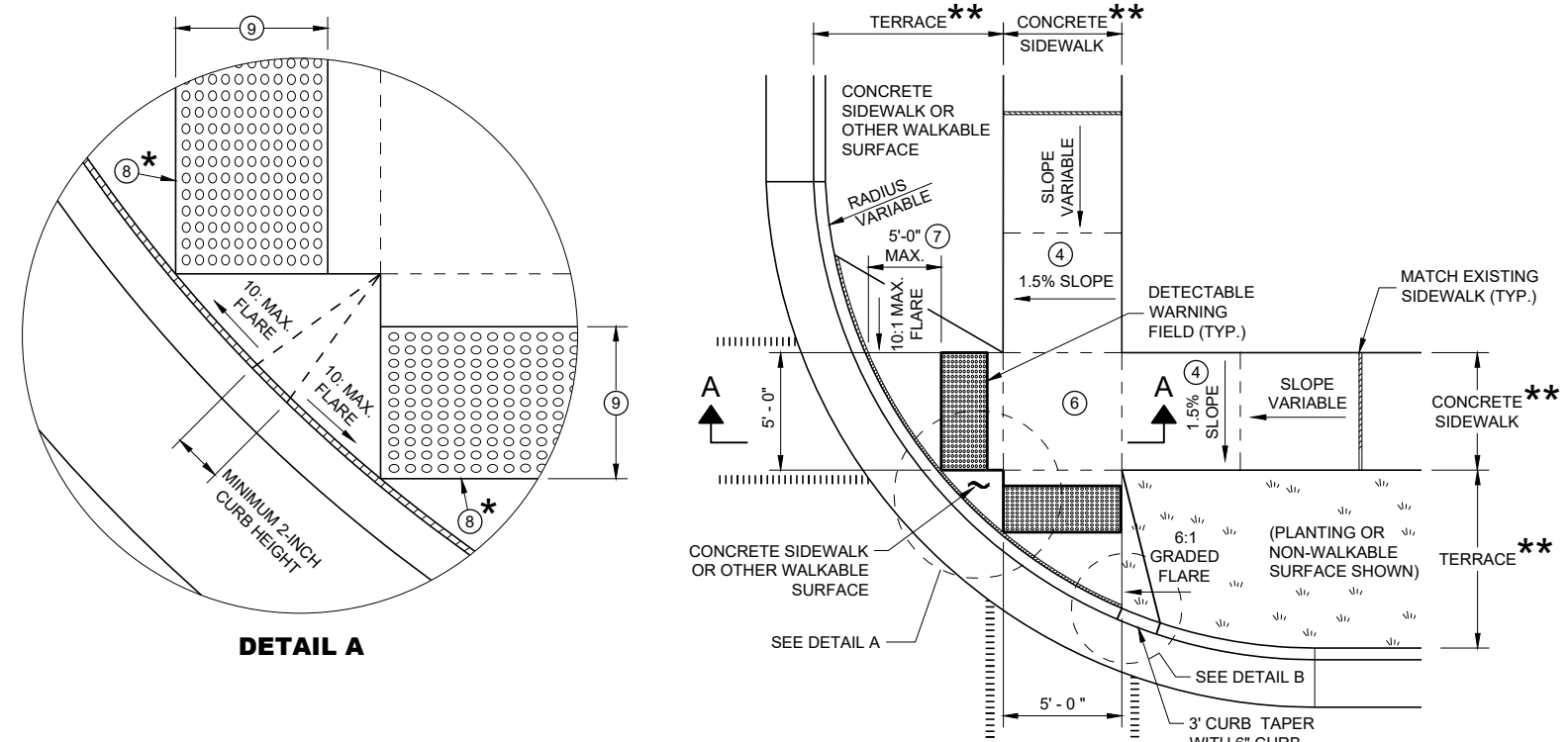
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- WHEN 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 FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE 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 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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.
- 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**

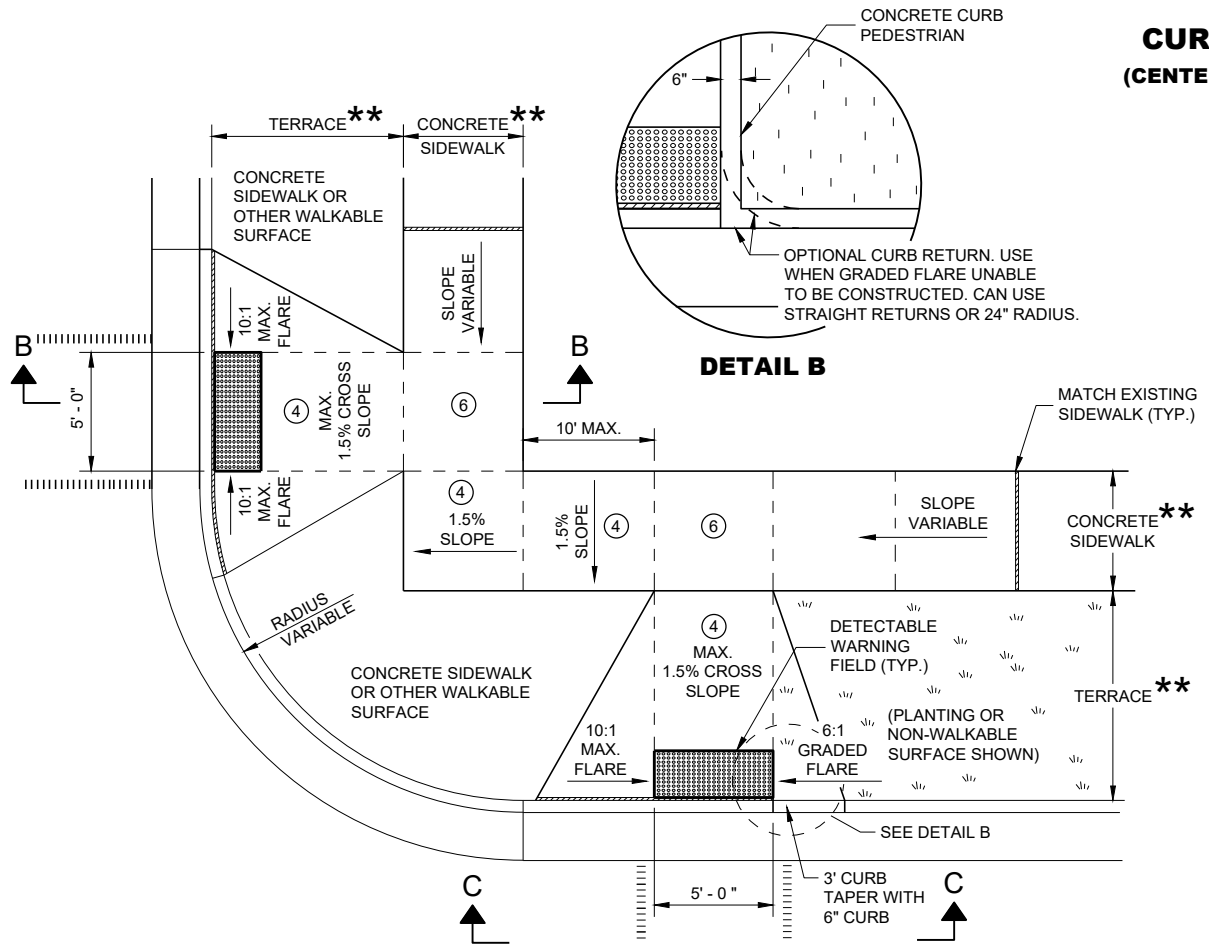
- 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS  
TYPE 1 AND 1-A**

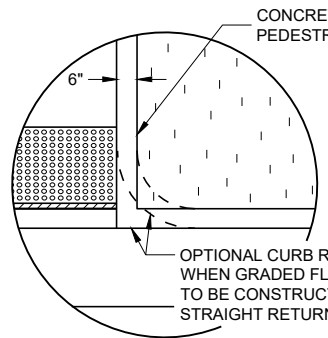
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**PLAN VIEW CURB RAMP TYPE 2 (CENTER OF CORNER RADIUS)**



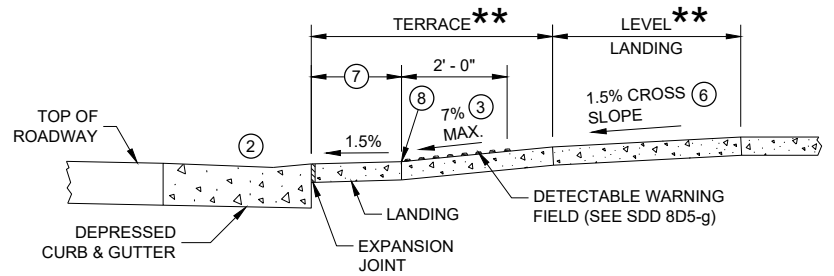
**PLAN VIEW CURB RAMP TYPE 3 (OUTSIDE OF CROSSWALK AREA)**



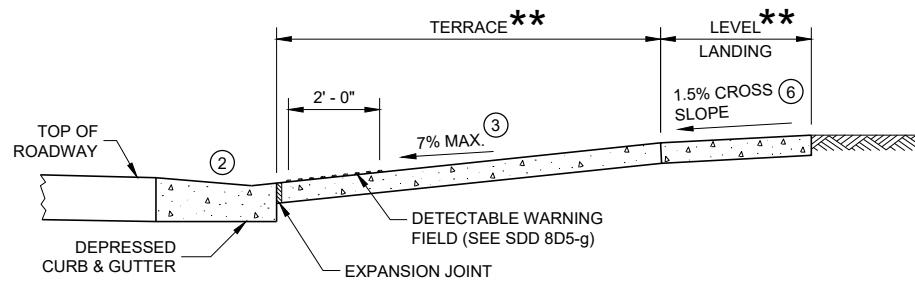
**DETAIL B**

**GENERAL NOTES**

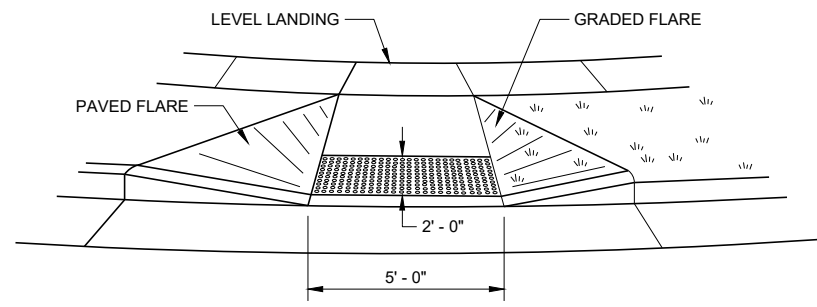
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE 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 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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**



**SECTION B - B FOR TYPE 3**



**VIEW C - C FOR TYPE 3**

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

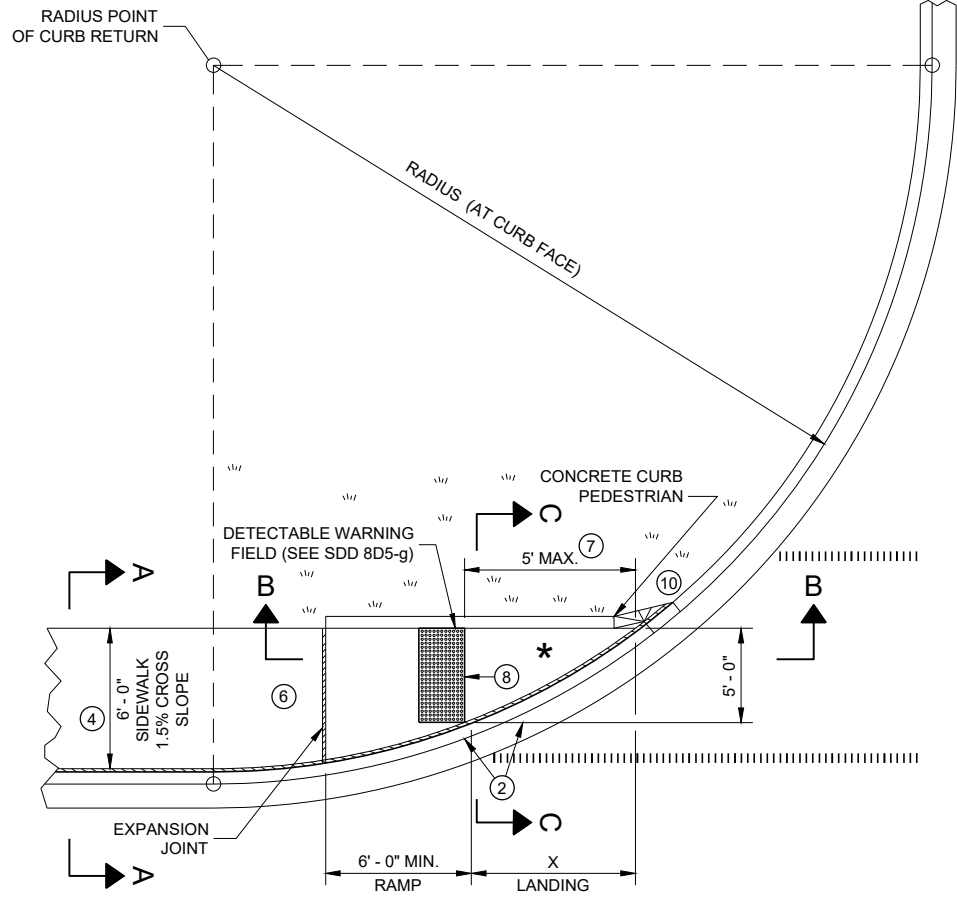
\*\* WIDTH SHOWN ELSEWHERE IN THE PLANS

**LEGEND**

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

**CURB RAMPS TYPE 2 AND 3**

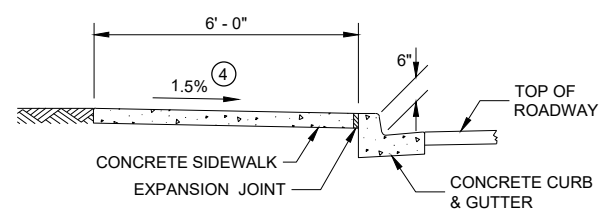
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**PLAN VIEW  
CURB RAMP TYPE 4A**

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



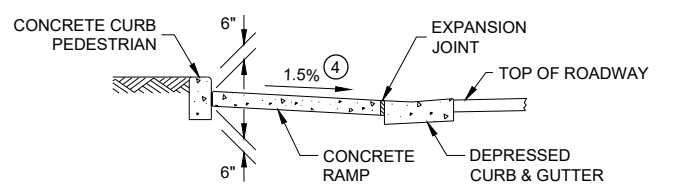
**SECTION A - A FOR TYPE 4A**

**GENERAL NOTES**

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ 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.

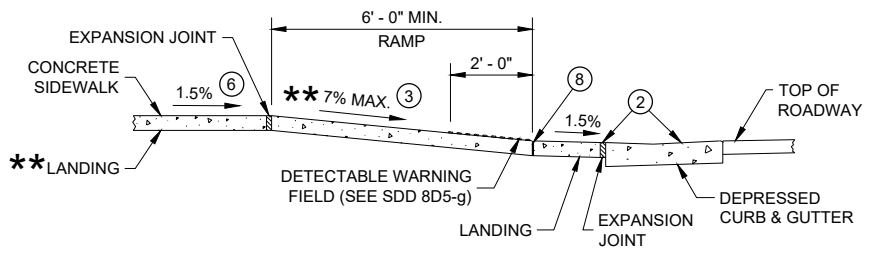
**LEGEND**

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



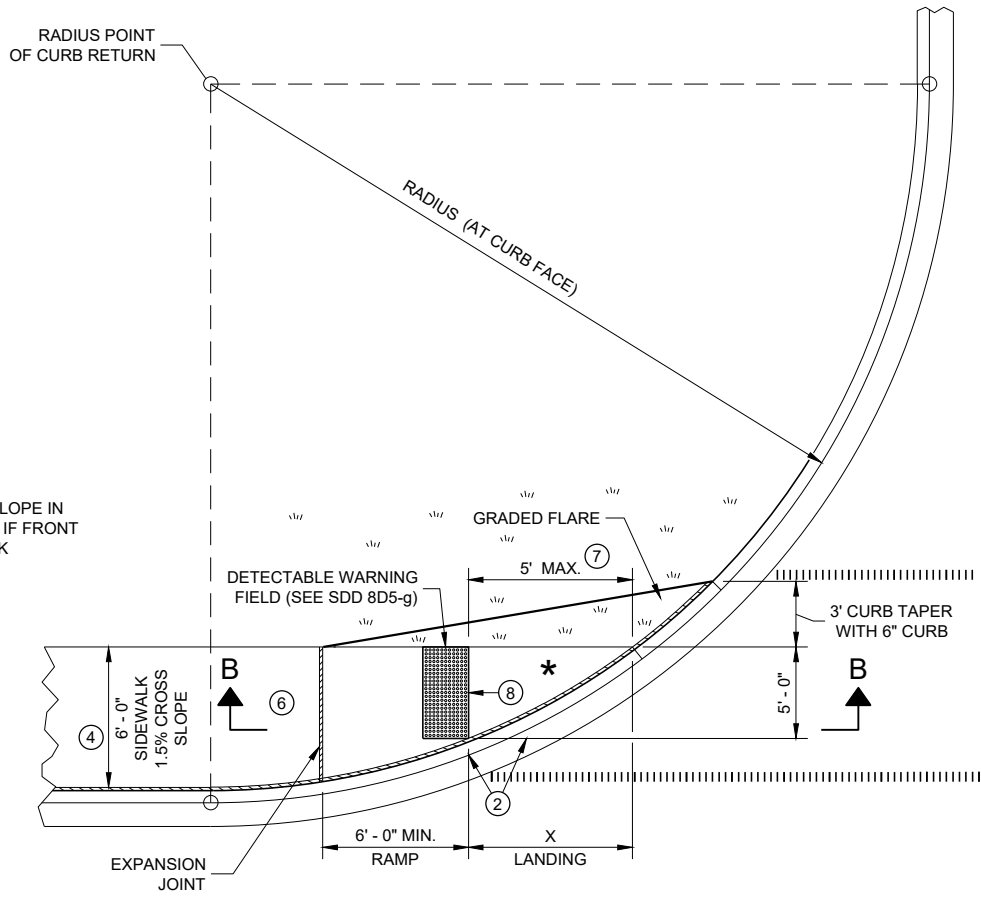
**SECTION C - C FOR TYPE 4A**

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

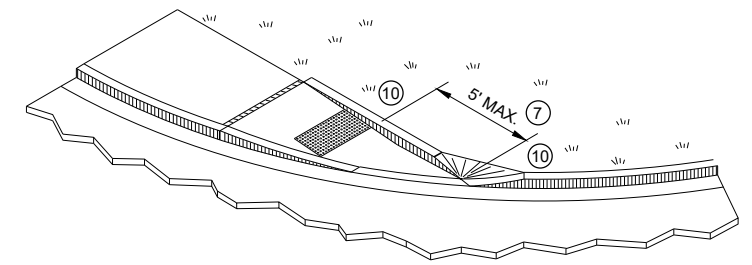


**SECTION B - B FOR  
TYPE 4A AND TYPE 4A1**

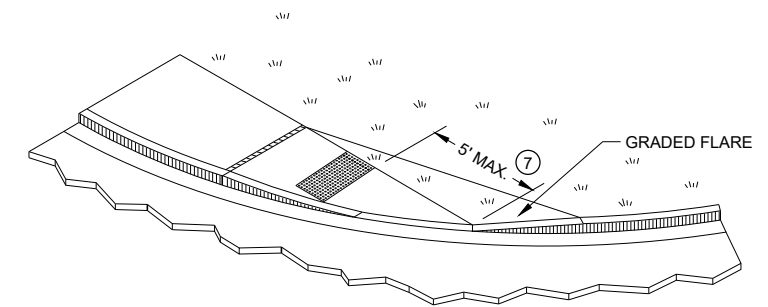
\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



**PLAN VIEW  
CURB RAMP TYPE 4A1**



**ISOMETRIC VIEW FOR TYPE 4A**

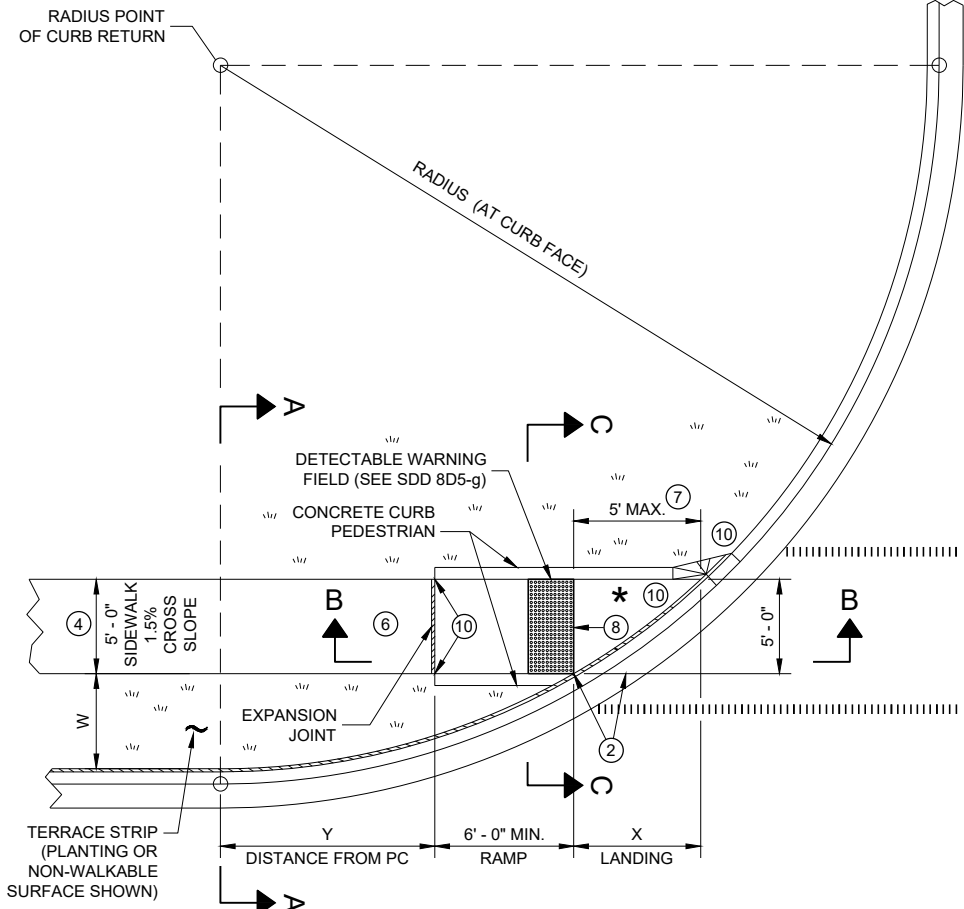


**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS  
TYPE 4A AND 4A1**

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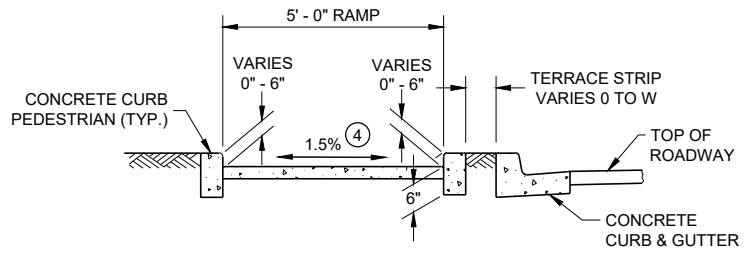
RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' -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

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

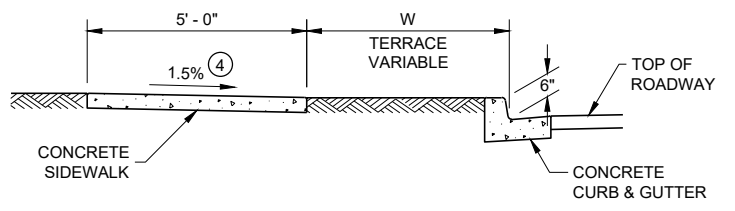
- LEGEND**
- ===== 1/2" EXPANSION JOINT SIDEWALK
  - - - - - CONTRACTION JOINT SIDEWALK
  - ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

**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 1/2 - 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.

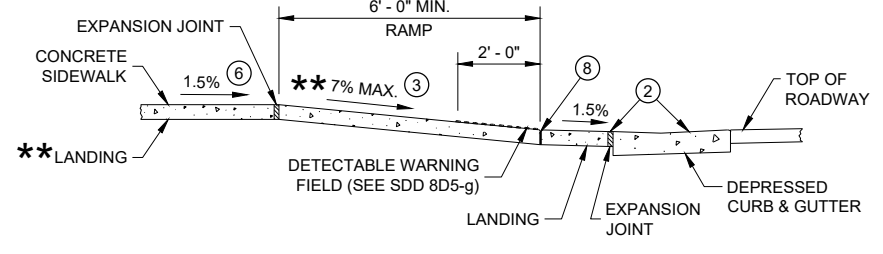


**SECTION C - C FOR TYPE 4B**



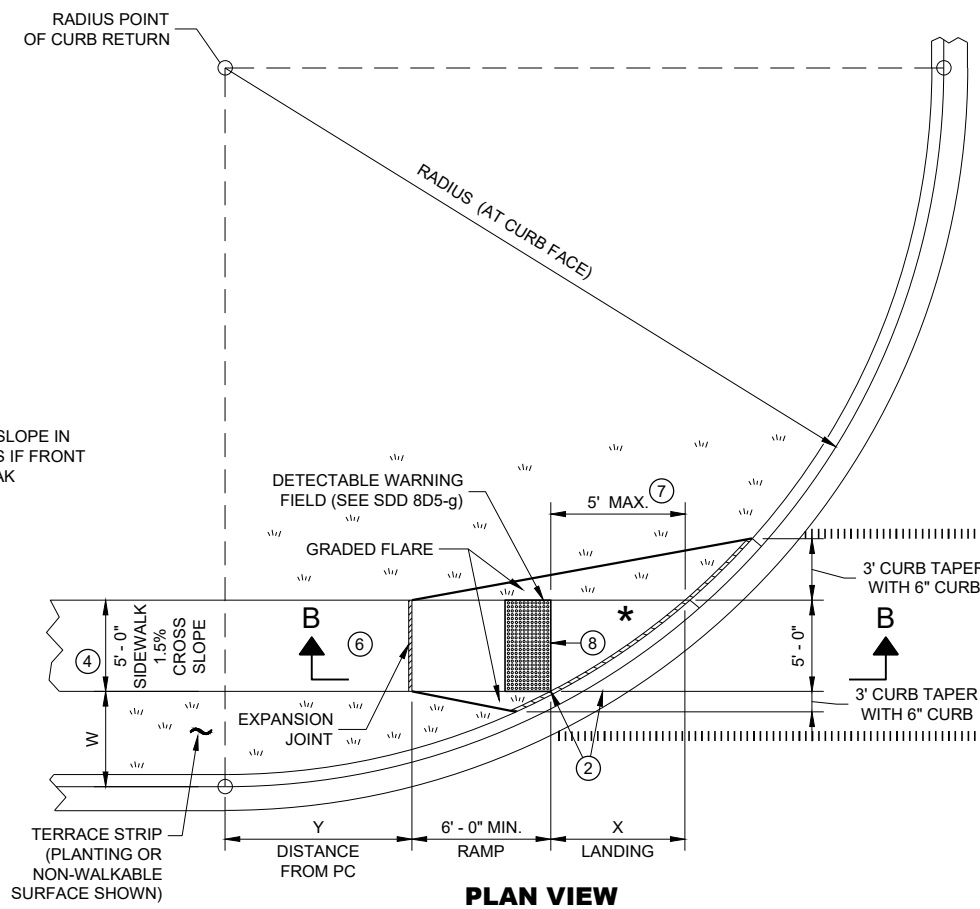
**SECTION A - A FOR TYPE 4B**

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

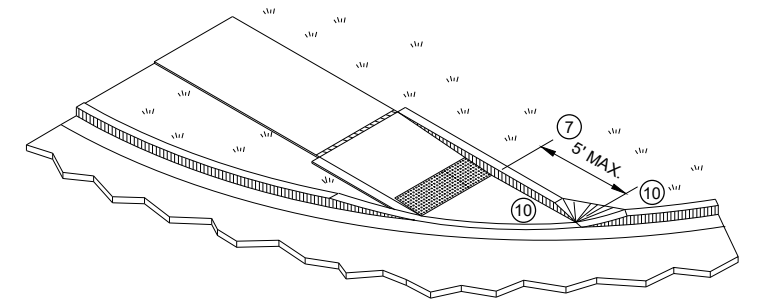


\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

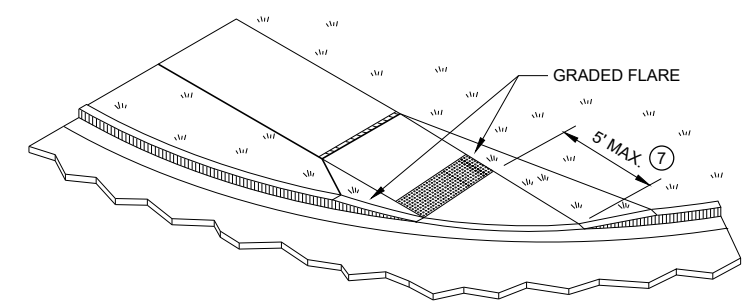
**SECTION B - B FOR TYPE 4B AND TYPE 4B1**



**PLAN VIEW CURB RAMP TYPE 4B1**



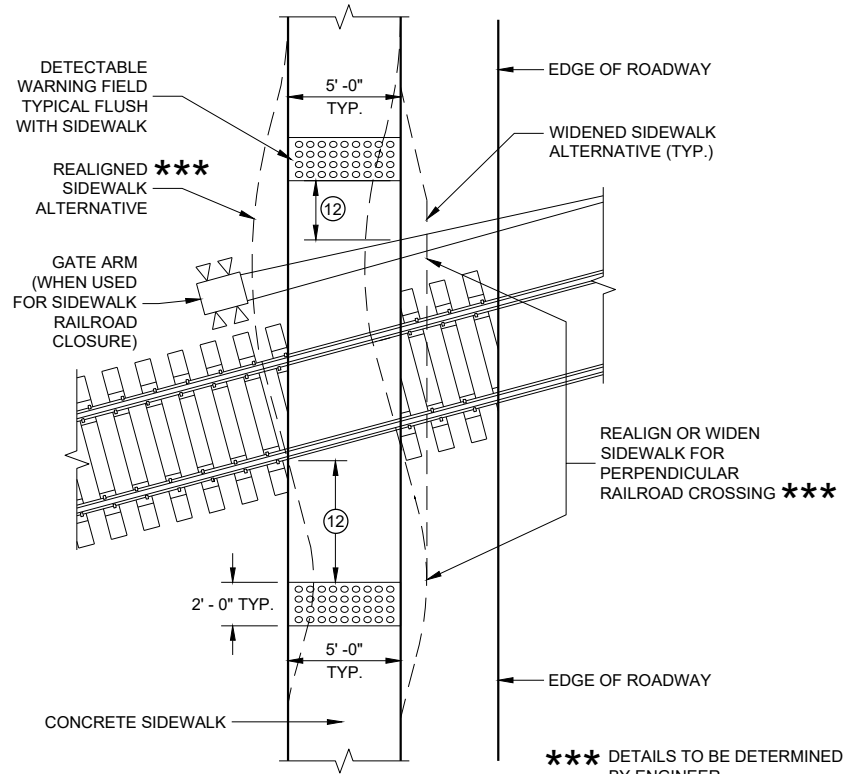
**ISOMETRIC VIEW FOR TYPE 4B**



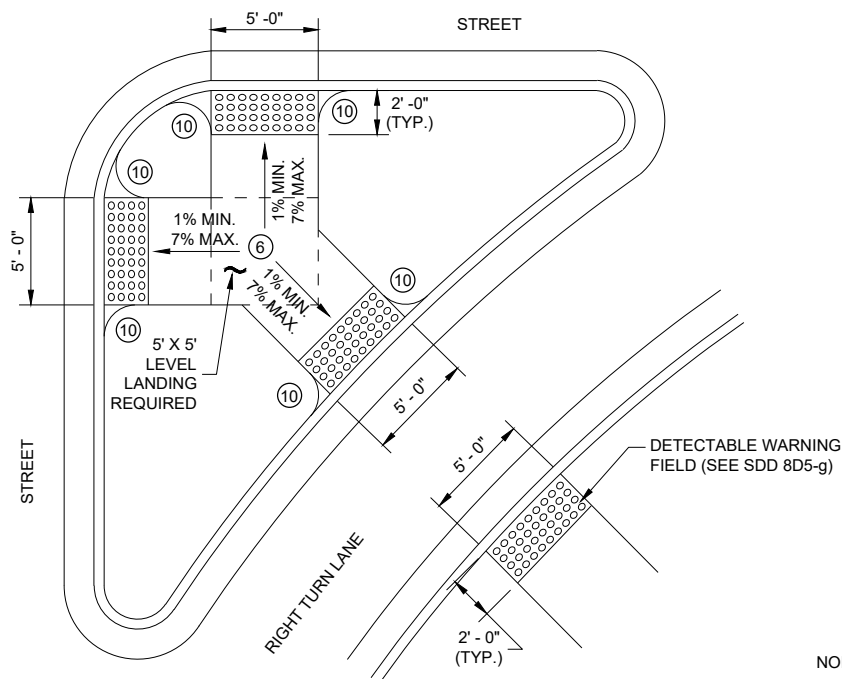
**ISOMETRIC VIEW FOR TYPE 4B1**

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

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

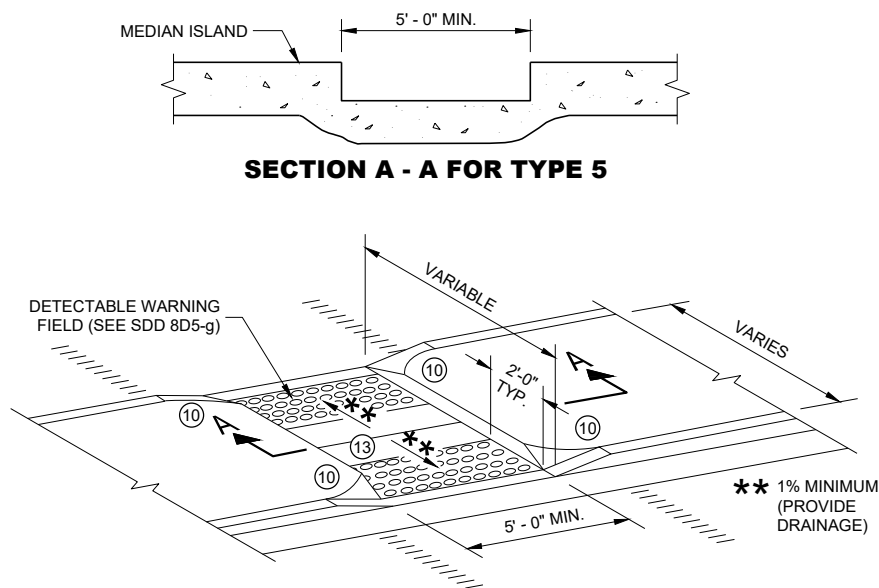


**CURB RAMP TYPE 8**  
**DETECTABLE WARNINGS**  
**AT RAILROAD CROSSING**

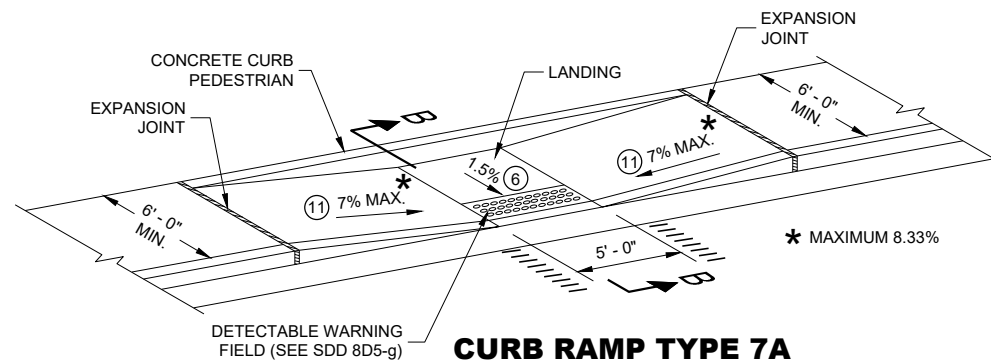


**CURB RAMP TYPE 6**  
**DETECTABLE WARNING AT ISLANDS**

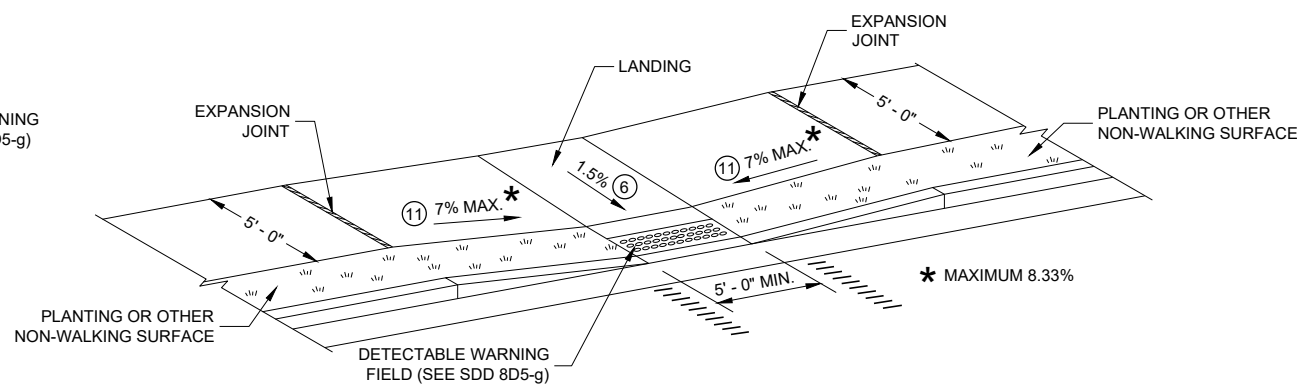
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



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



**CURB RAMP TYPE 7A**  
**MID BLOCK CROSSING**



**CURB RAMP TYPE 7B**  
**MID BLOCK CROSSING**

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

**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.

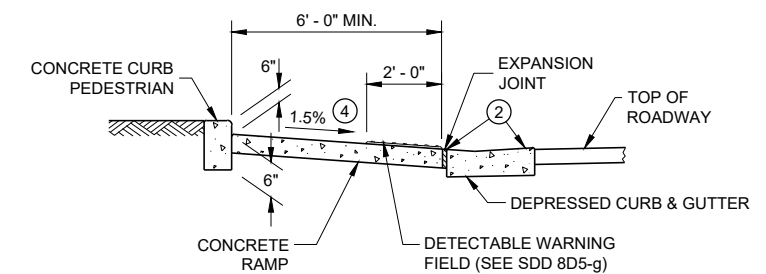
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) 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. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

**LEGEND**

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

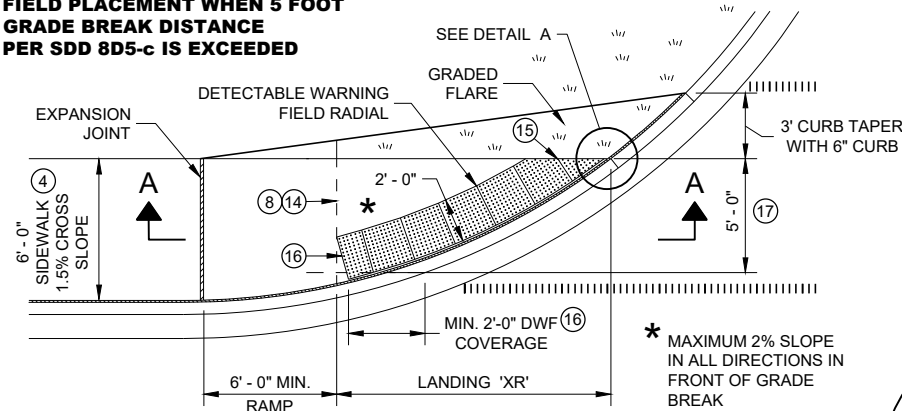


**SECTION B - B FOR TYPE 7A**

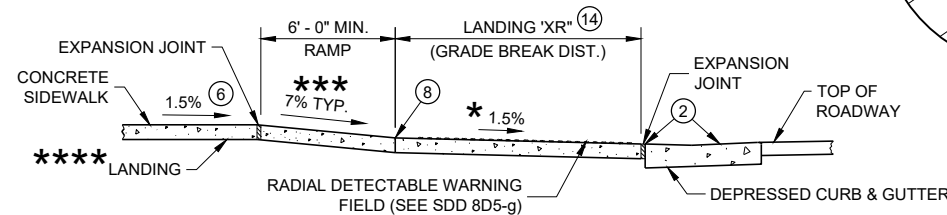
**CURB RAMPS**  
**TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**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)**

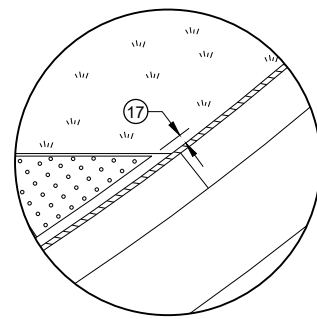


**SECTION A - A FOR TYPE 4A1**

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

\*\*\* MAXIMUM 8.33%

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



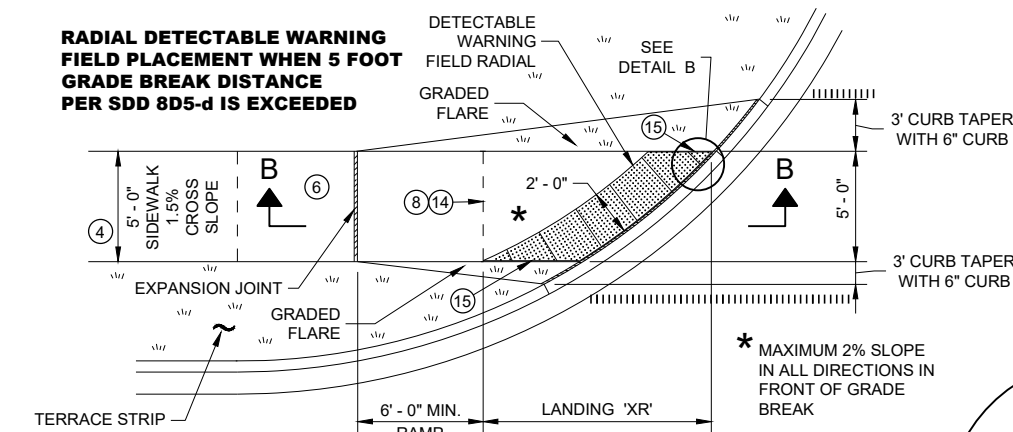
**DETAIL A**

**GENERAL NOTES**

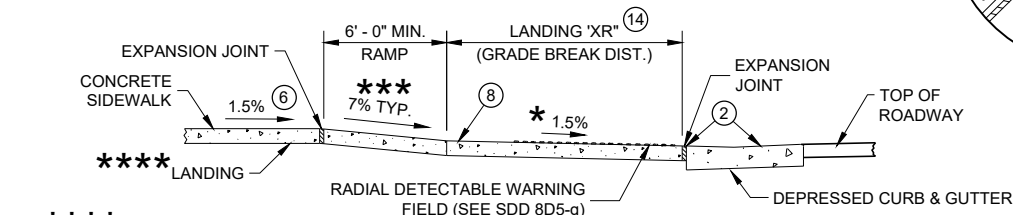
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE 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 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 AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
  - 3 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 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
  - 16 USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
  - 17 A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

6

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**



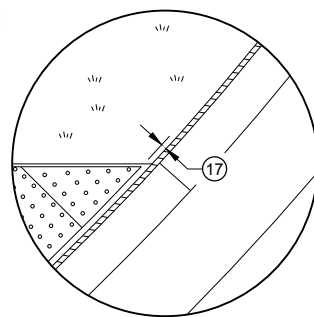
**PLAN VIEW CURB RAMP TYPE 4B1 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**SECTION B - B FOR TYPE 4B1**

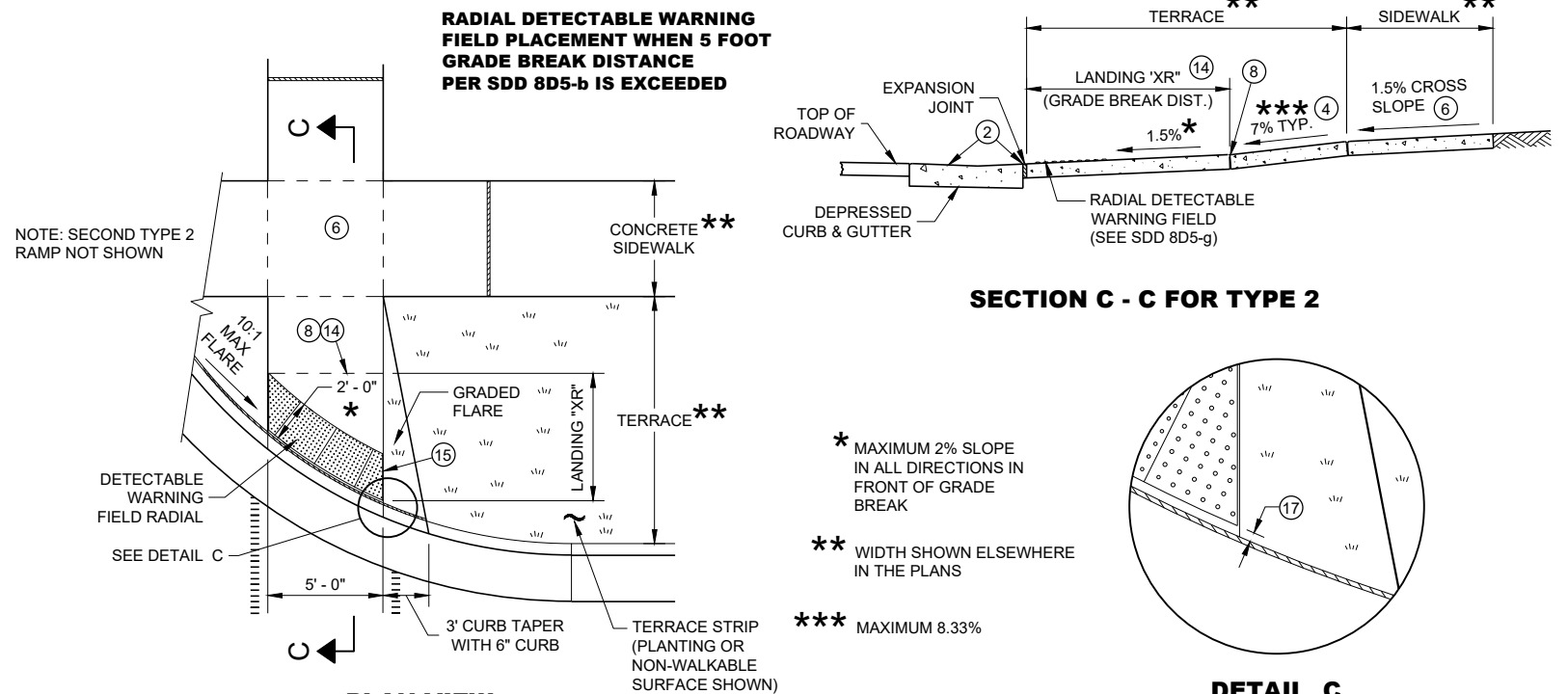
\*\*\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

\*\*\* MAXIMUM 8.33%



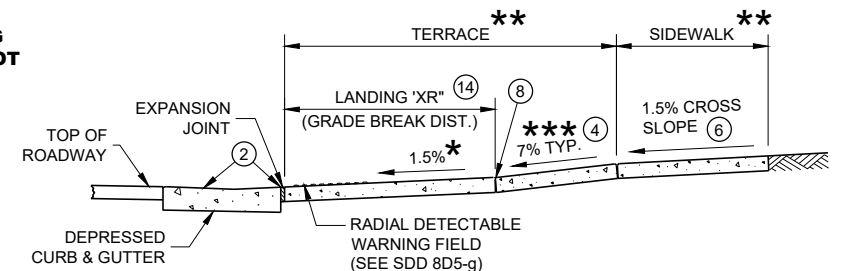
**DETAIL B**

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**



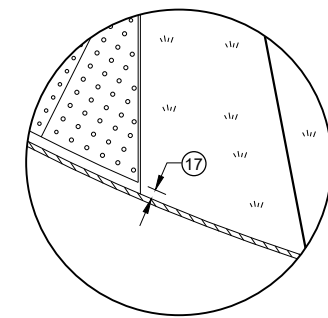
**PLAN VIEW CURB RAMP TYPE 2 (GRADE BREAK DISTANCE GREATER THAN 5 FEET) (ON LINE WITH SIDEWALK)**

NOTE: SECOND TYPE 2 RAMP NOT SHOWN



**SECTION C - C FOR TYPE 2**

- \* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- \*\* WIDTH SHOWN ELSEWHERE IN THE PLANS
- \*\*\* MAXIMUM 8.33%



**DETAIL C**

**CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS**

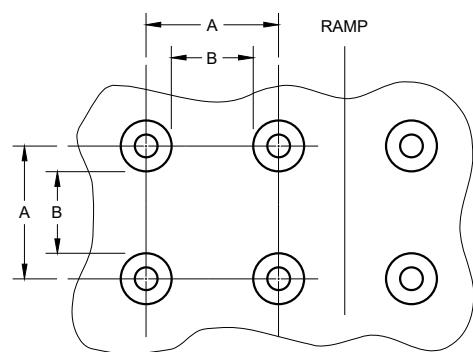
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20f

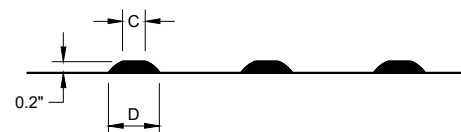
SDD 08D05 - 20f

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

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

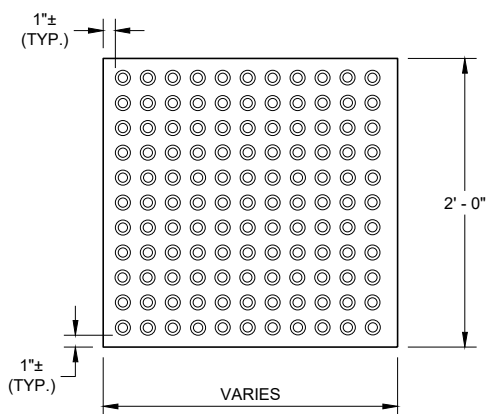


PLAN VIEW

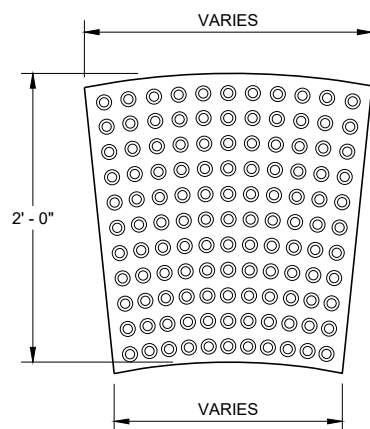


ELEVATION VIEW

**TRUNCATED DOMES  
DETECTABLE WARNING PATTERN DETAIL**

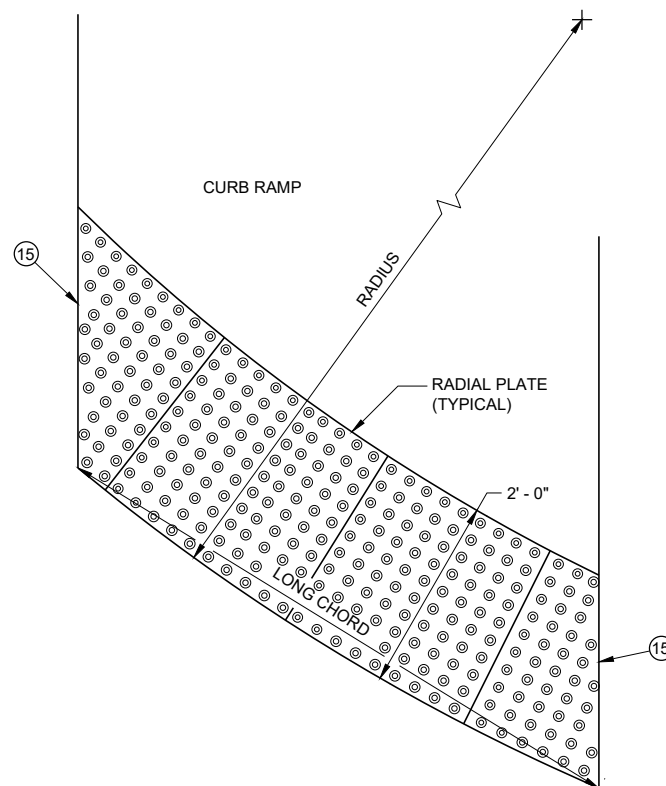


RECTANGULAR  
PLATES

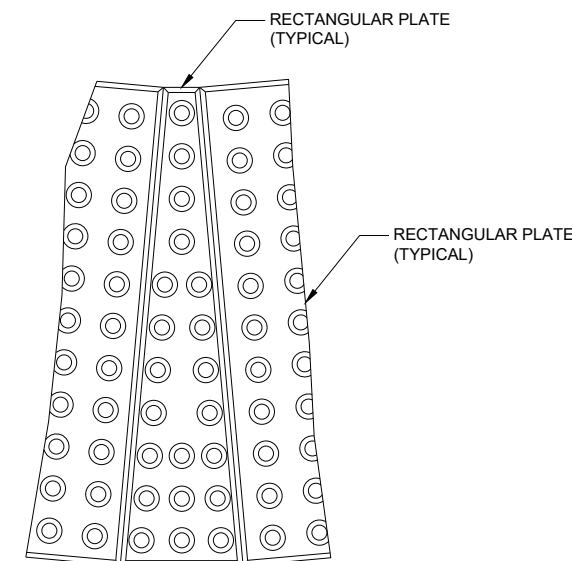


RADIAL  
PLATES

PLAN VIEW  
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW  
RADIAL DETECTABLE  
WARNING FIELD ATTRIBUTES



PLAN VIEW  
RADIAL WEDGE PLATE  
CONNECTION DETAIL

**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 FIELD ARE PROHIBITED.

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

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

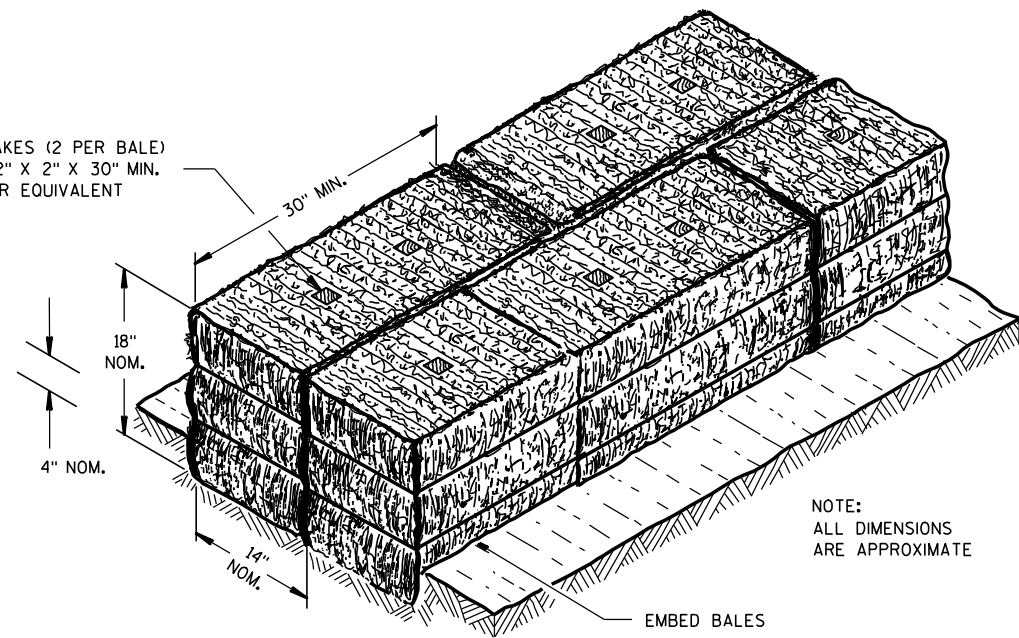
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

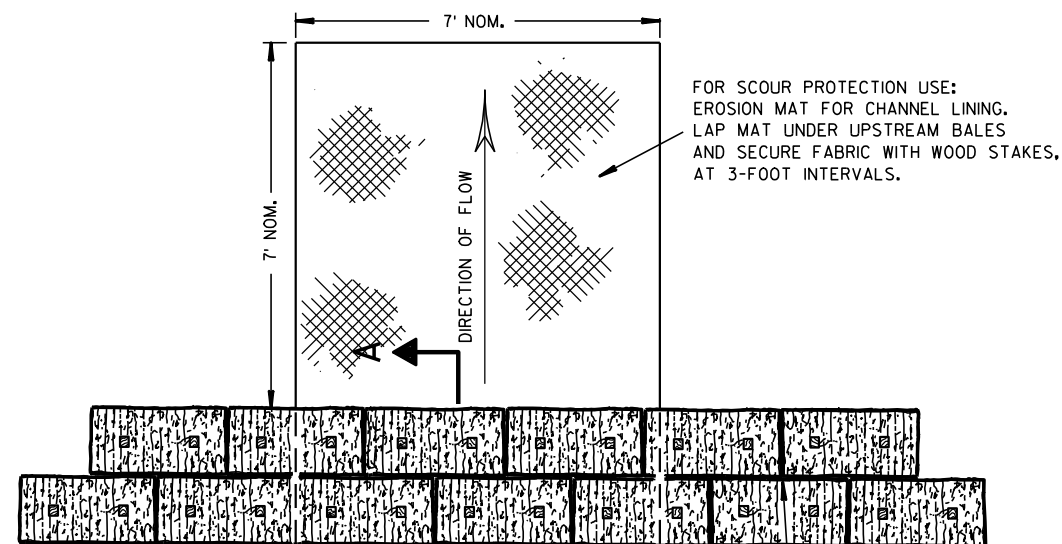
<b>CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
<small>FHWA</small>	

WOOD STAKES (2 PER BALE)  
NOMINAL 2" X 2" X 30" MIN.  
LENGTH OR EQUIVALENT



NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

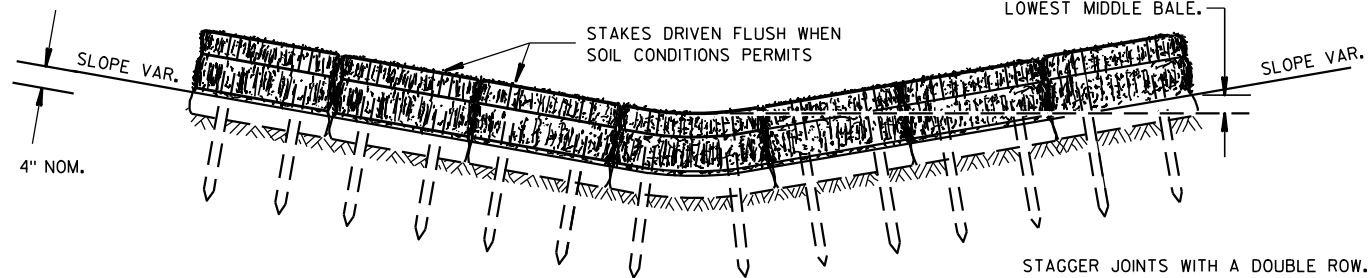
SECTION A-A



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL BE EQUAL TO OR GREATER THAN TOP OF LOWEST MIDDLE BALE.



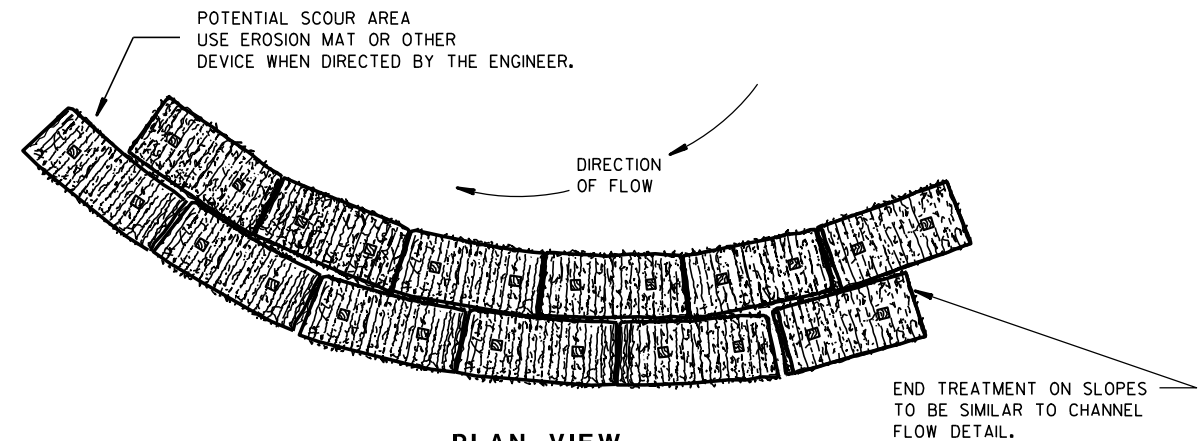
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

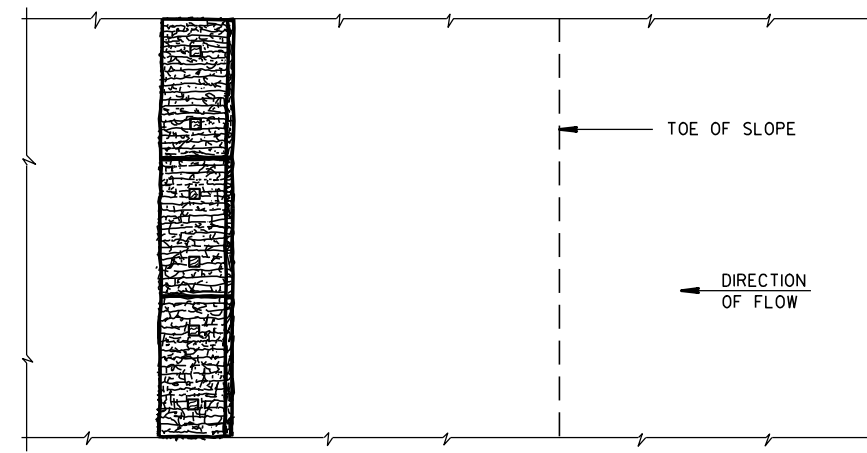
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

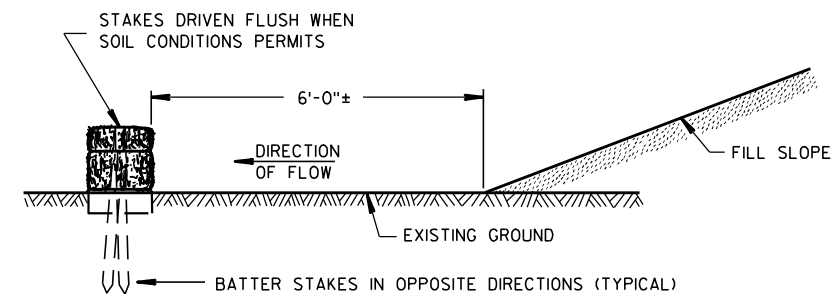


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF  
EROSION BALES / TEMPORARY  
DITCH CHECKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

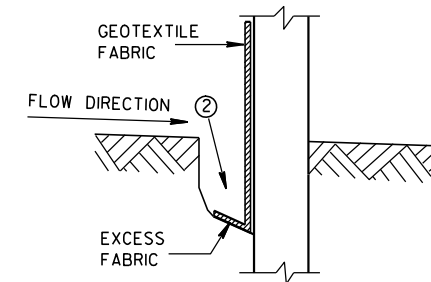


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

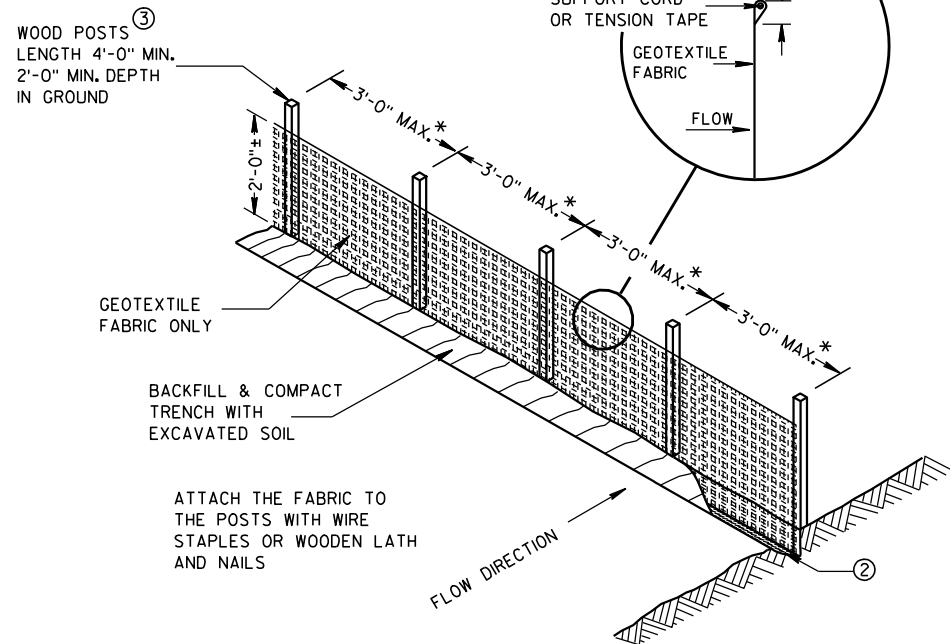
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



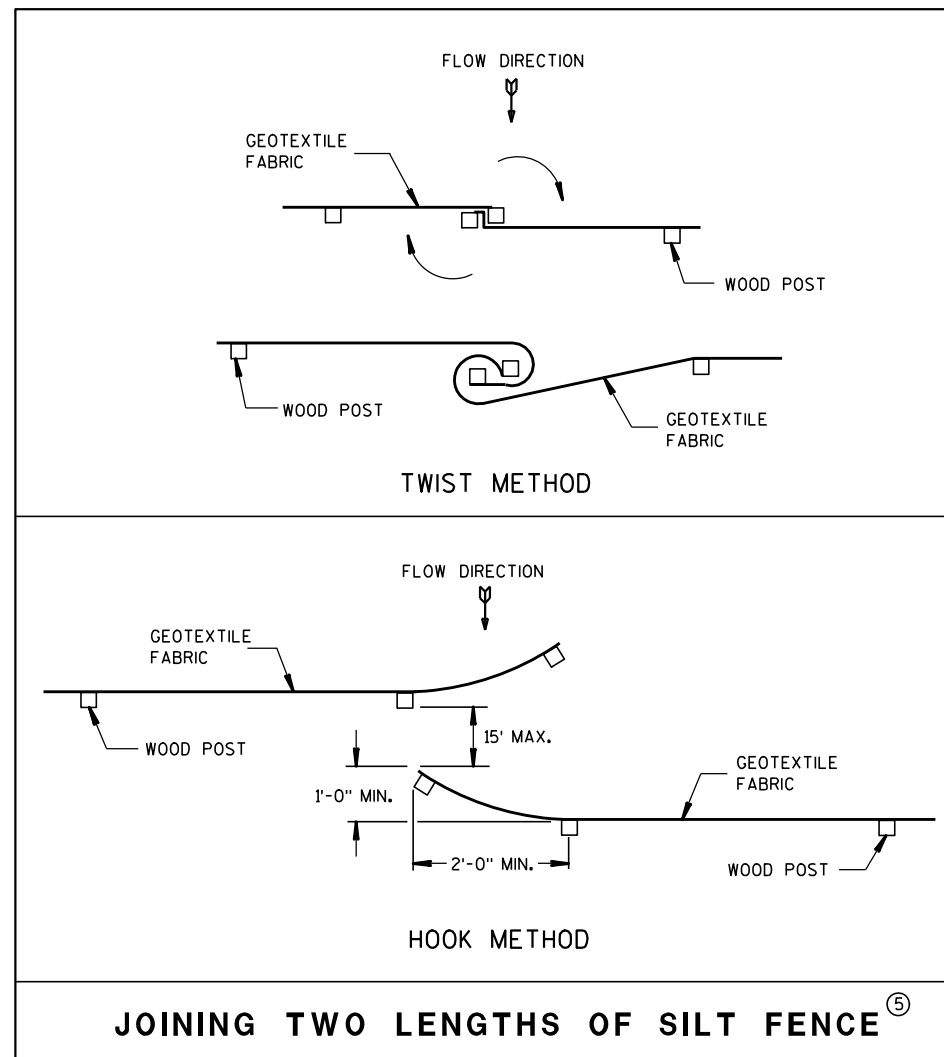
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

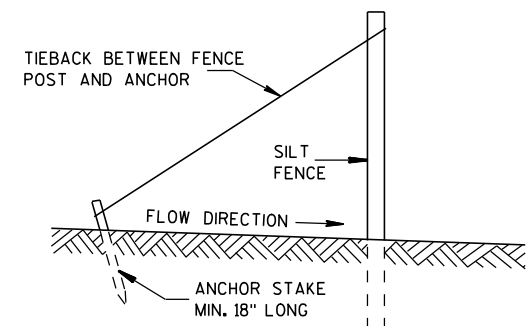


SILT FENCE

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



JOINING TWO LENGTHS OF SILT FENCE ⑤

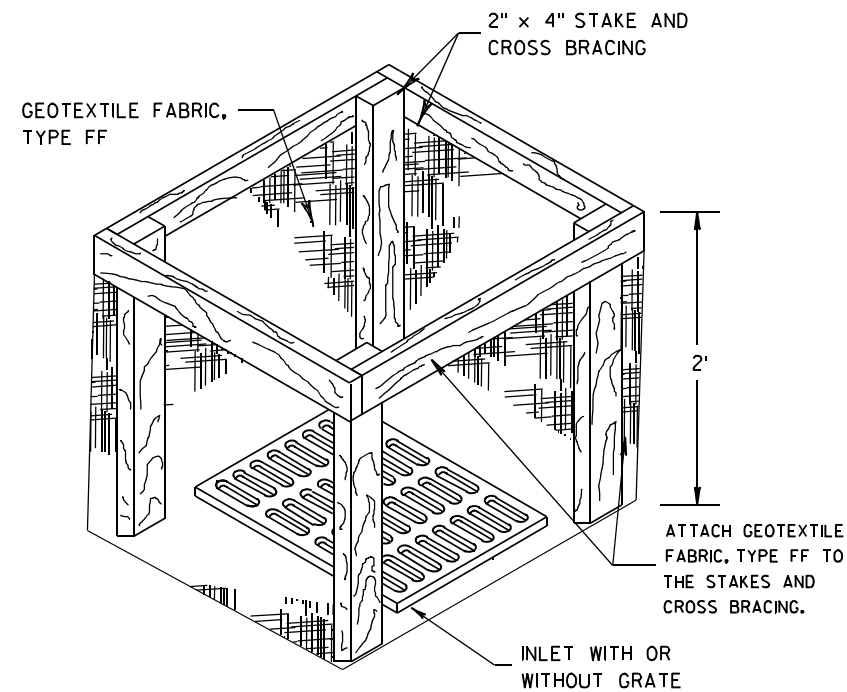
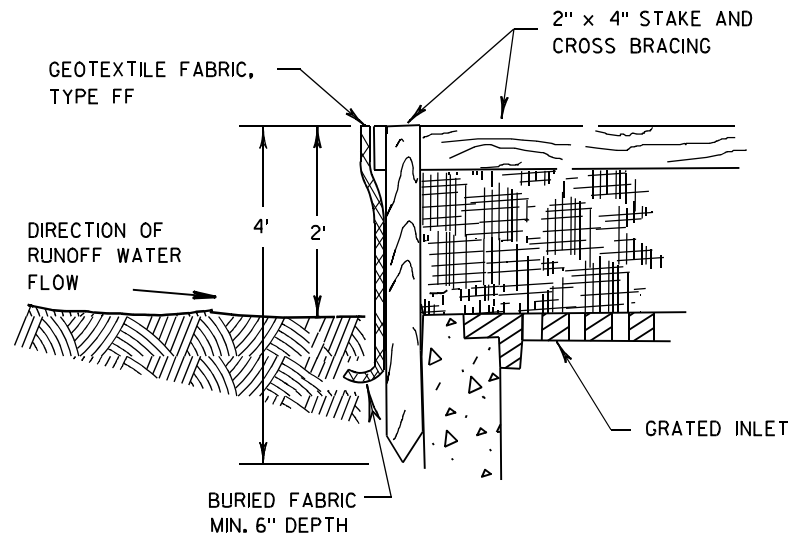


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



**INLET PROTECTION, TYPE A**

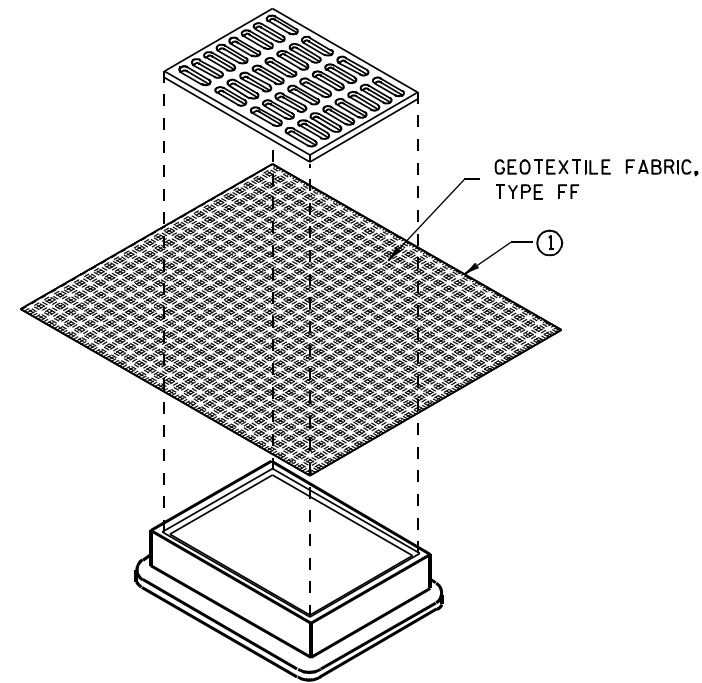
**GENERAL NOTES**

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

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

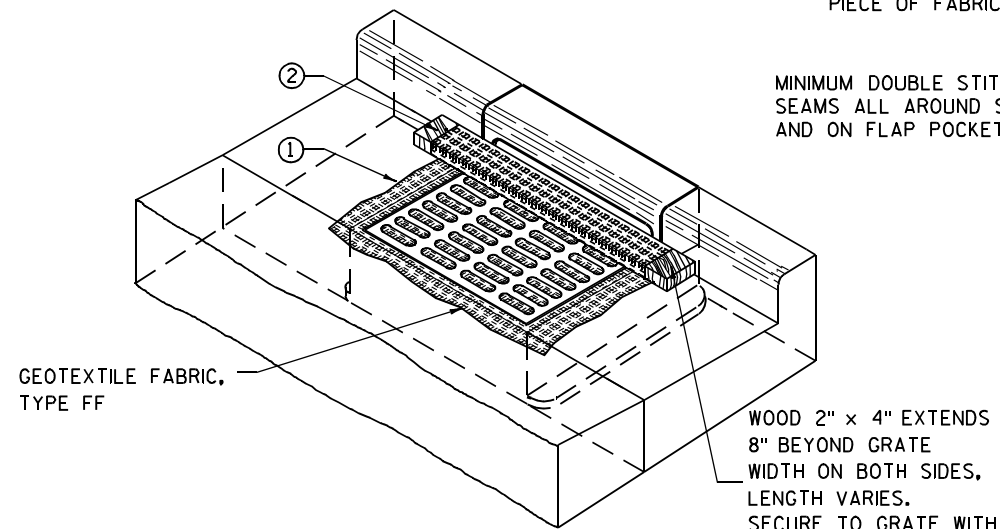
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**INSTALLATION NOTES**

**TYPE B & C**

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

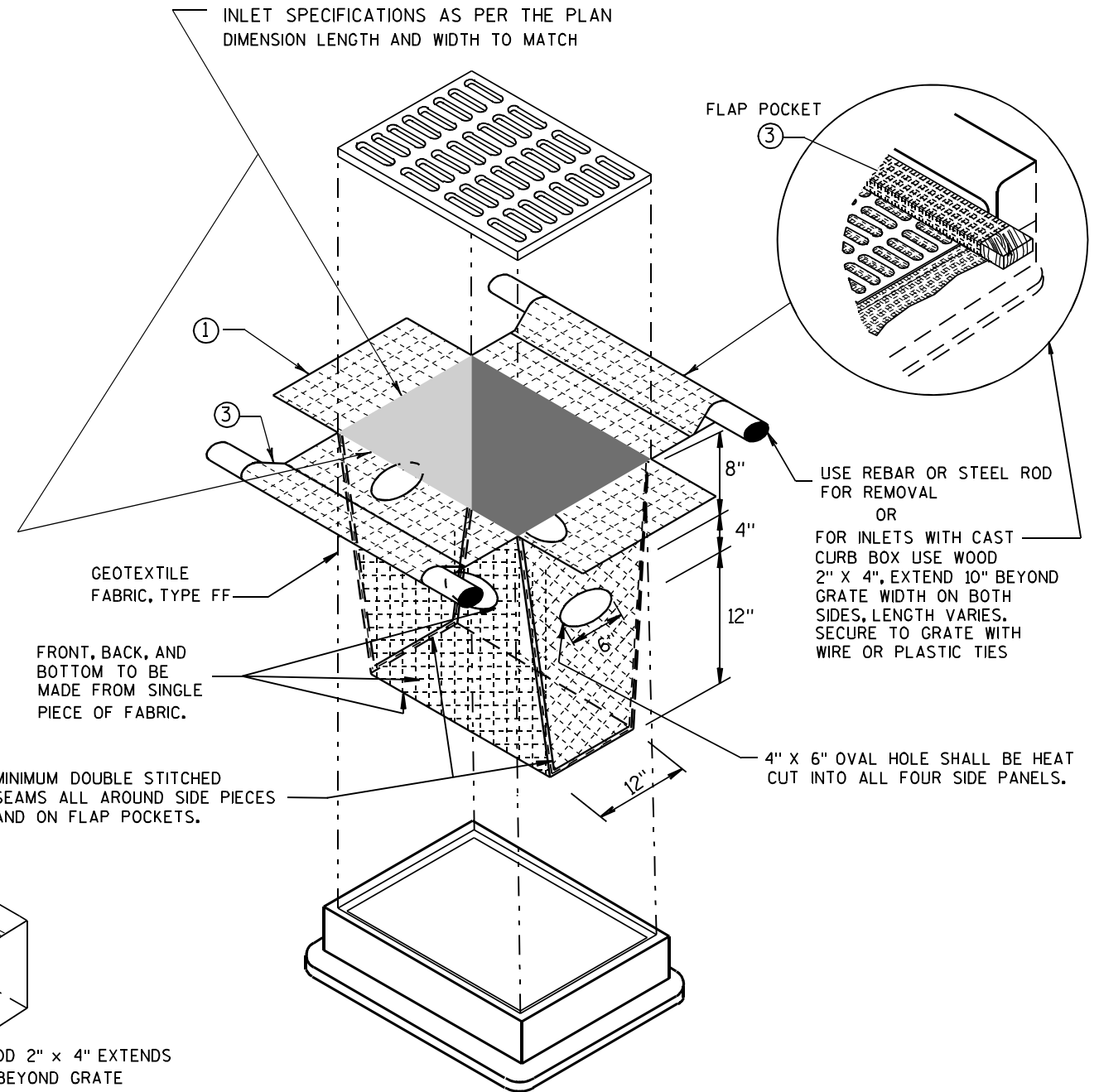
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

**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 D**

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

<b>INLET PROTECTION TYPE A, B, C, AND D</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/S/ Beth Conestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

**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.

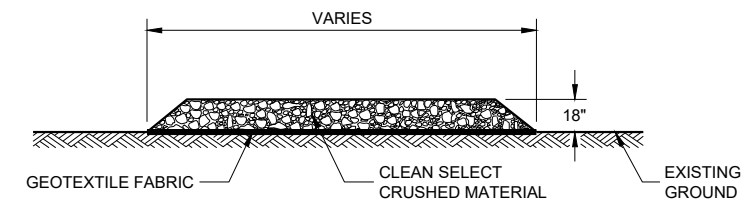
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

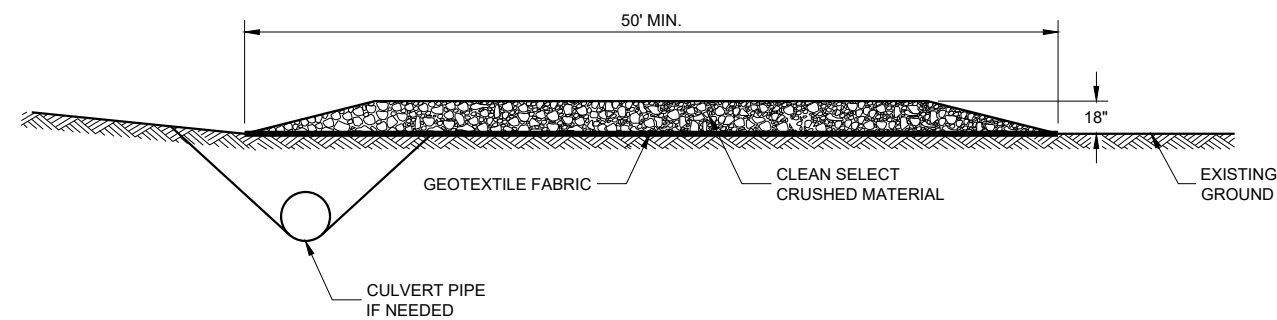
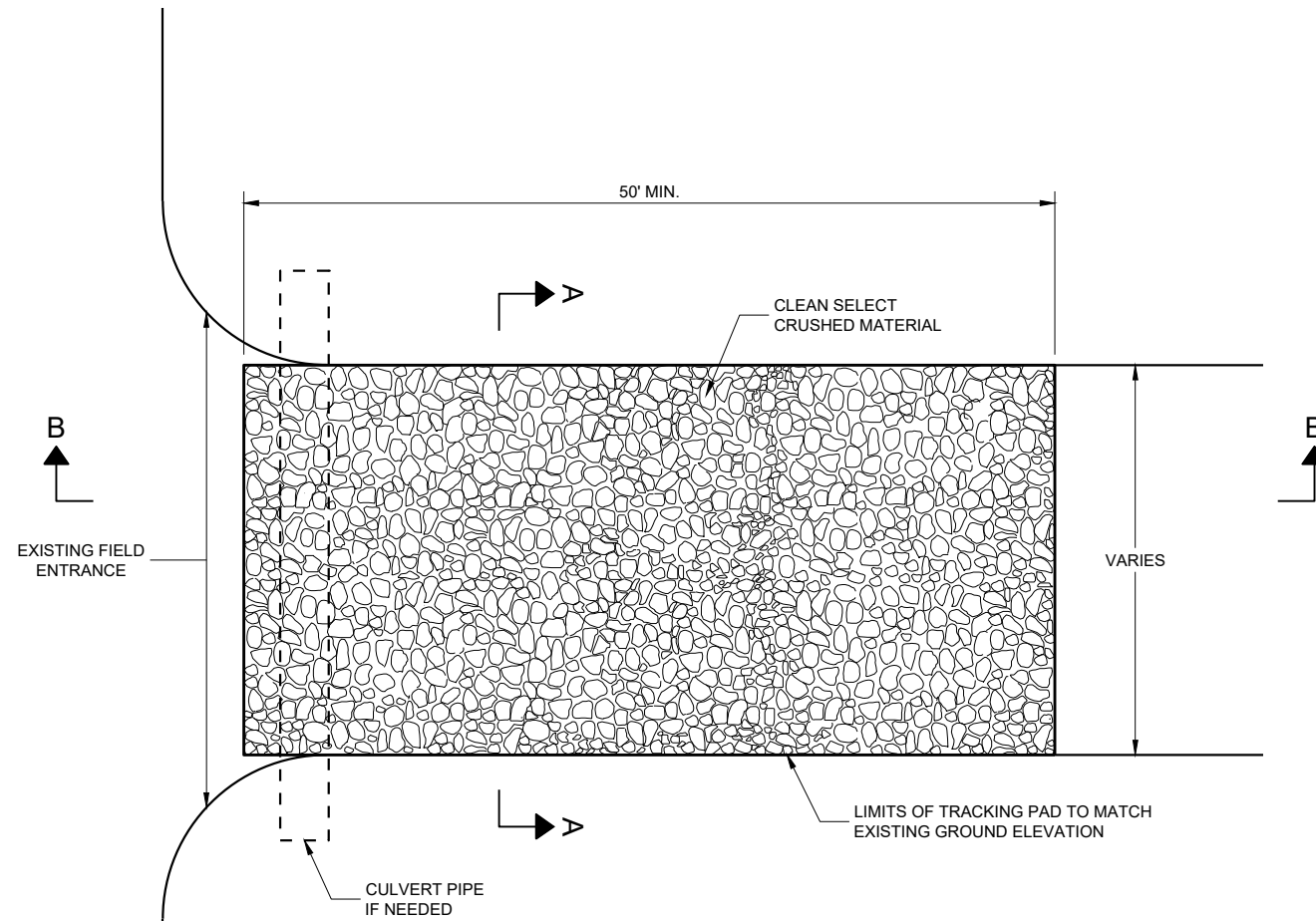
SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

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**



**SECTION B - B**

6

6

SDD 08E14 - 01

SDD 08E14 - 01

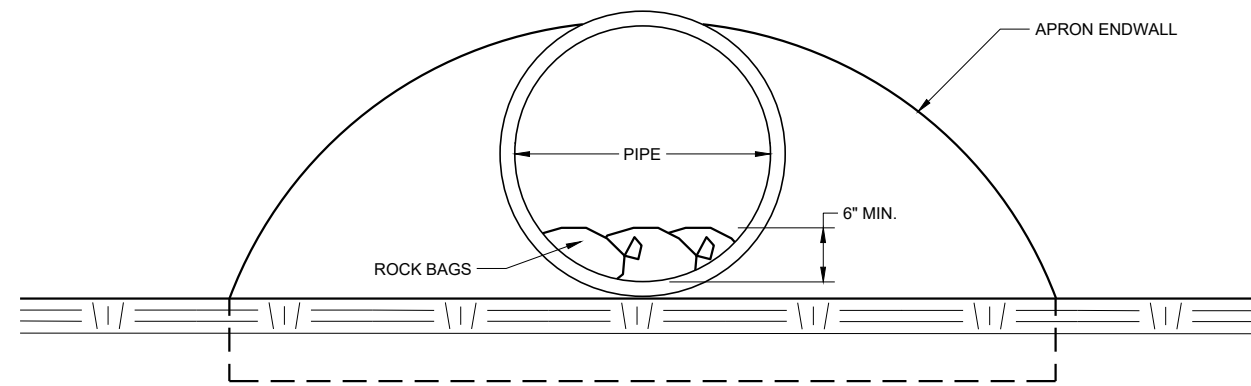
**TRACKING PAD**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

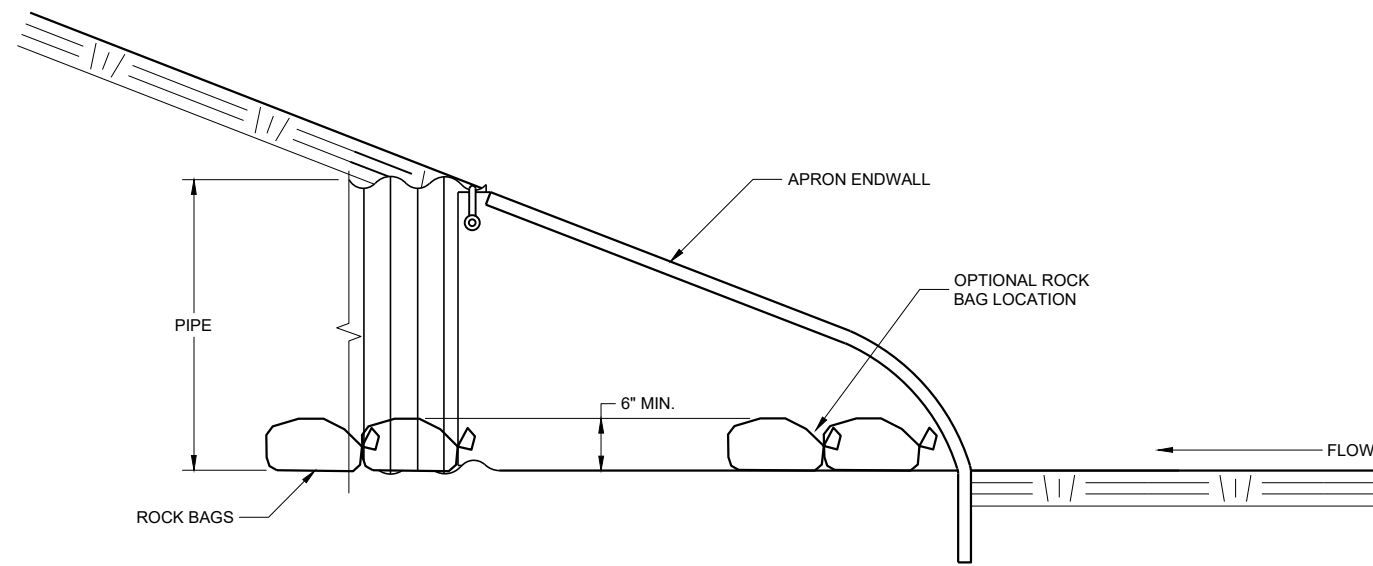
APPROVED  
3/24/2011 /S/ Jerry H. Zogg  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

FHWA





**END VIEW**



**SIDE VIEW**

**CULVERT PIPE CHECK**  
(INSTALL ON INLET END ONLY)

**CULVERT PIPE CHECK**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2019 /S/ Daniel Schave  
DATE EROSION CONTROL ENGINEER

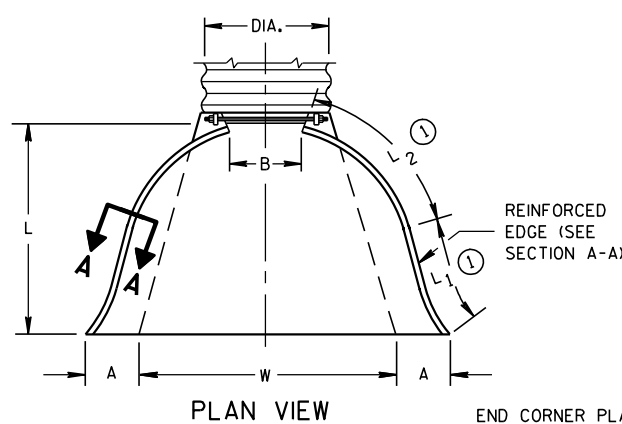
FHWA

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1	L2	W (±2")		
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

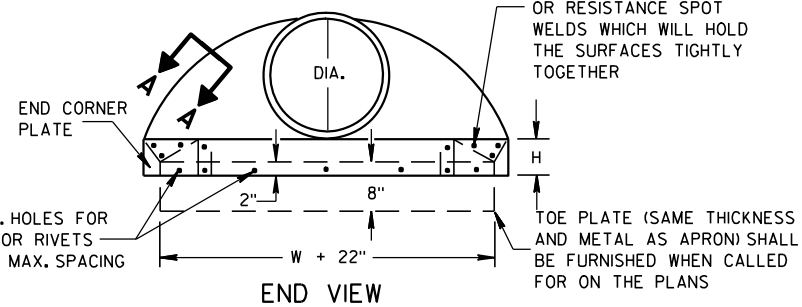
\* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	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 1/2 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	

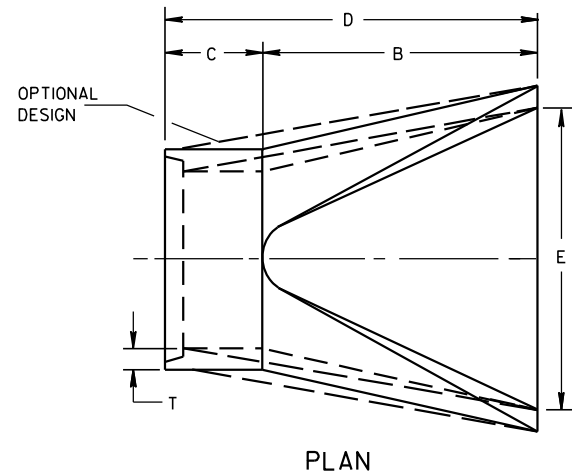
\* MINIMUM  
\*\* MAXIMUM



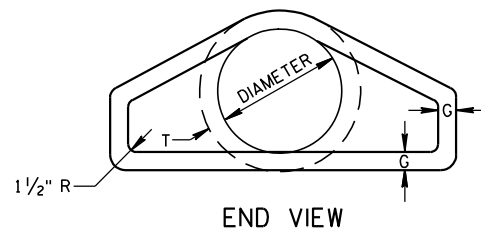
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



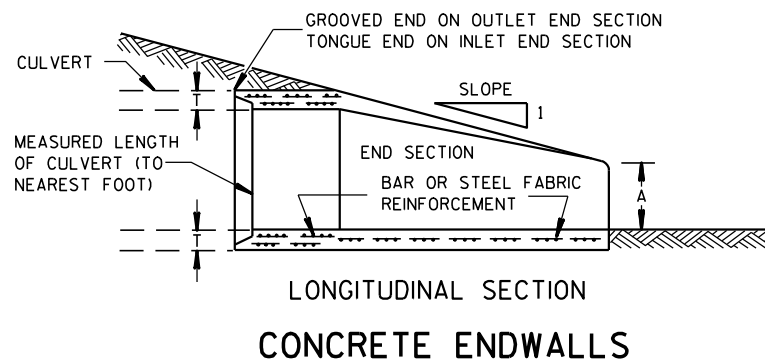
SIDE ELEVATION  
METAL ENDWALLS



PLAN

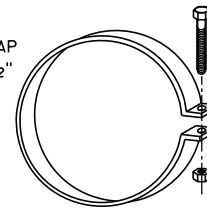


END VIEW

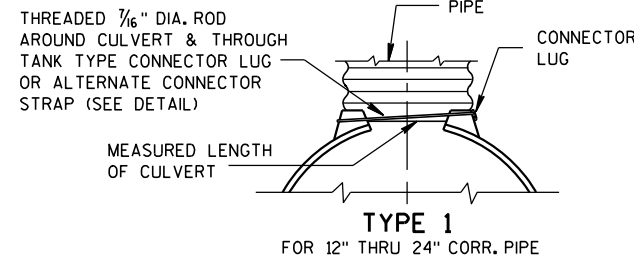


LONGITUDINAL SECTION  
CONCRETE ENDWALLS

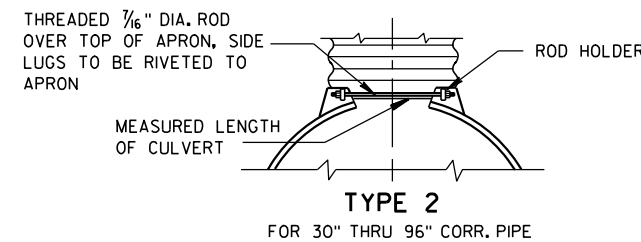
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



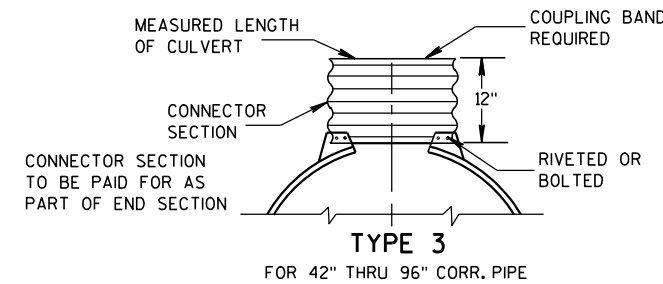
ALTERNATE FOR TYPE 1 CONNECTION  
END SECTION CONNECTOR STRAP



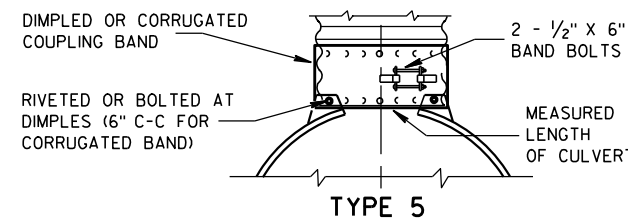
TYPE 1  
FOR 12" THRU 24" CORR. PIPE



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

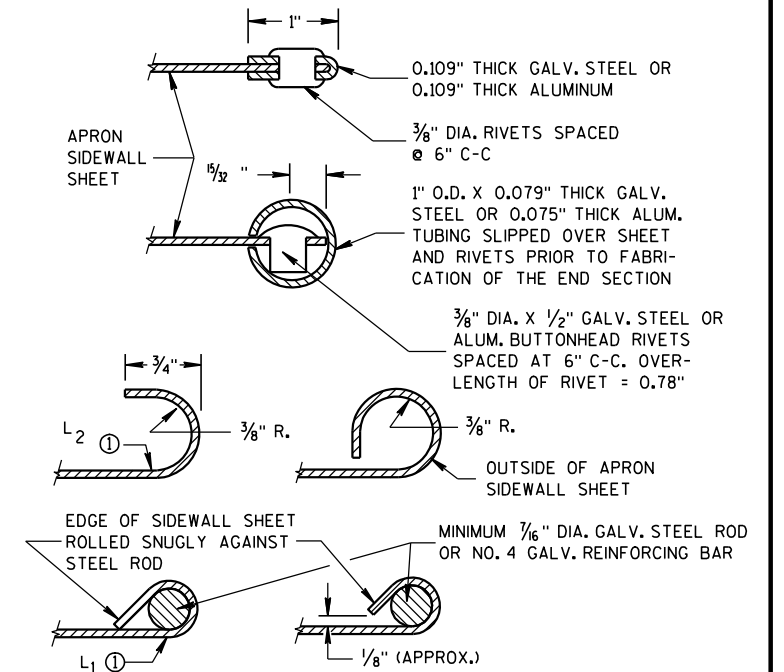
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VICE 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.

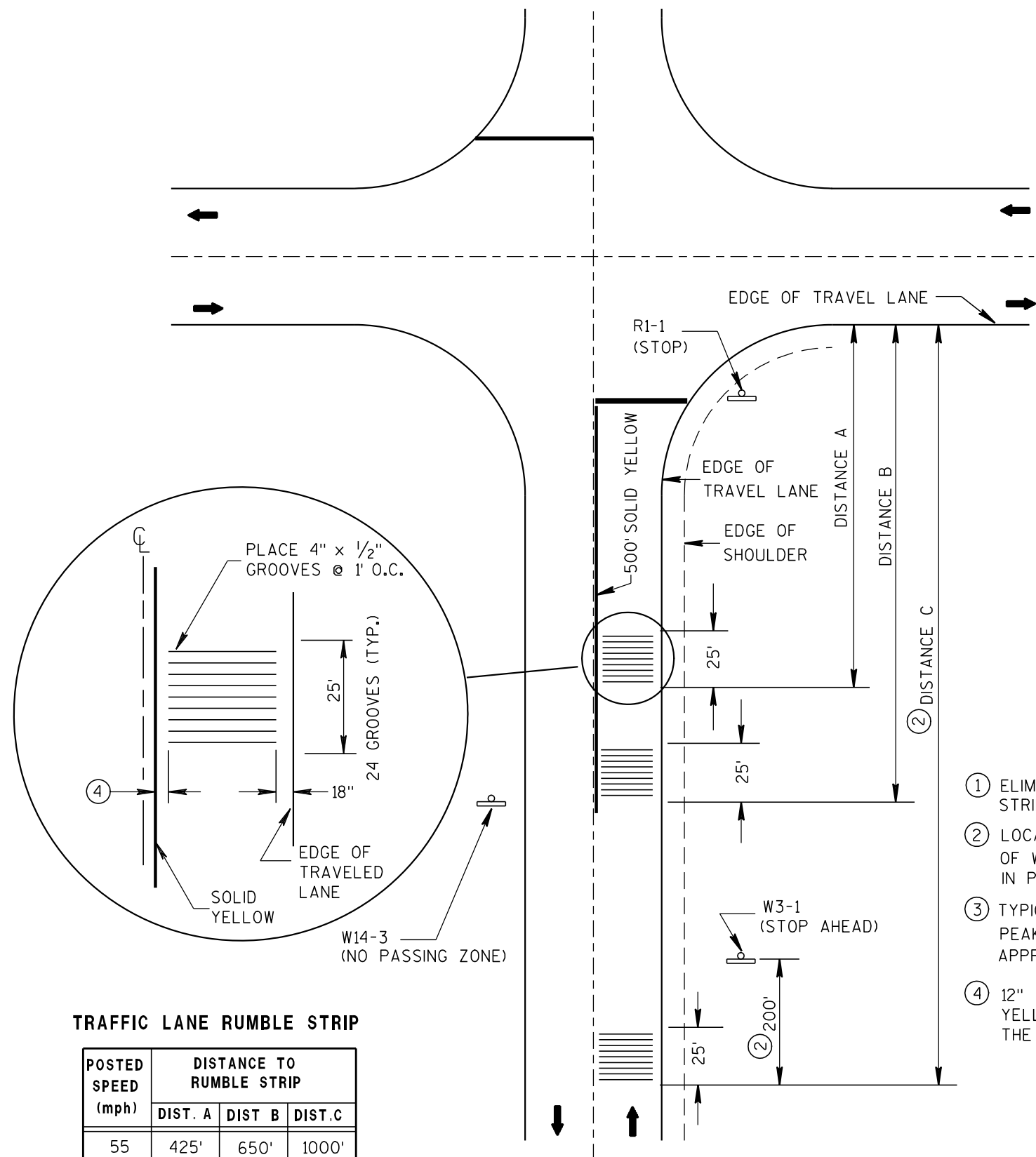
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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 /S/ Rory L. Rhinesmith  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
FHWA



**TRAFFIC LANE RUMBLE STRIP**

POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST. B	DIST. C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	①	550'
35	175'	①	475'
≤ 30	125'	①	425'

ARROW SYMBOL (➔) SHOWS DIRECTION OF TRAVEL

**PLAN VIEW  
RUMBLE STRIP LOCATION**

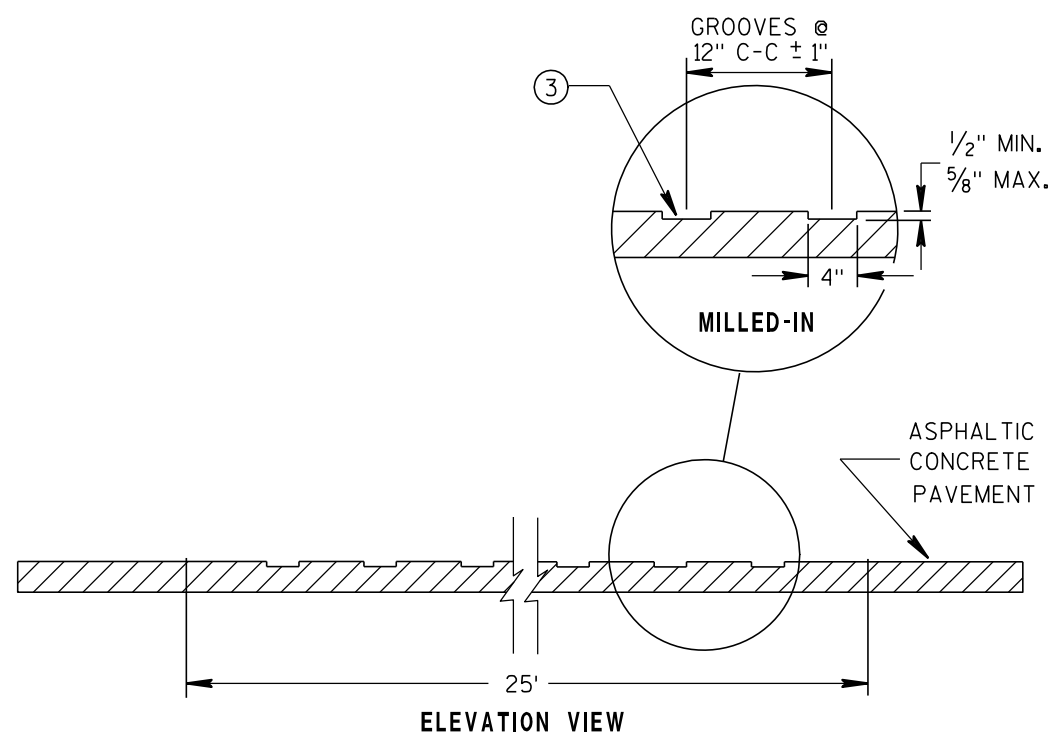
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

**GENERAL NOTES**

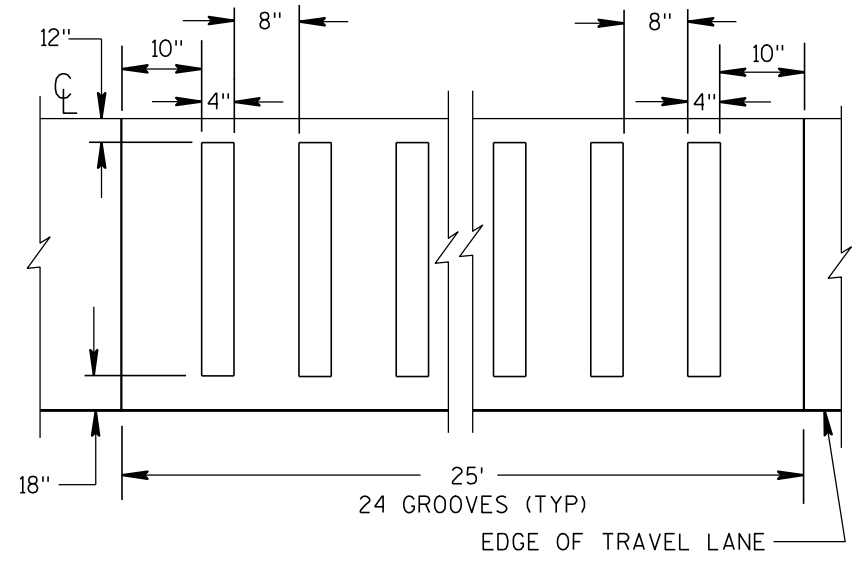
CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



**ELEVATION VIEW**



**PLAN VIEW  
ASPHALTIC PAVEMENT  
MILLED-IN**

<b>ASPHALTIC RUMBLE STRIPS AT INTERSECTION</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/17/2011 DATE	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

**GENERAL NOTES**

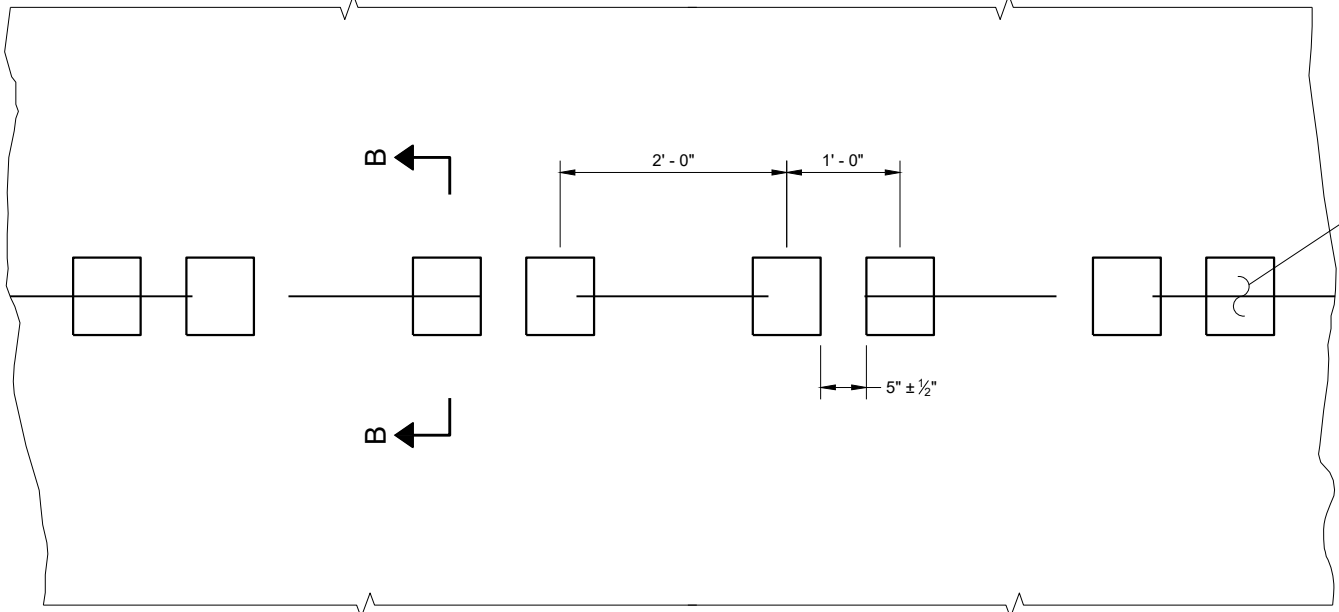
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

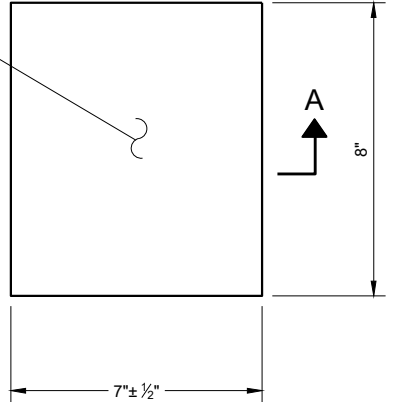
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

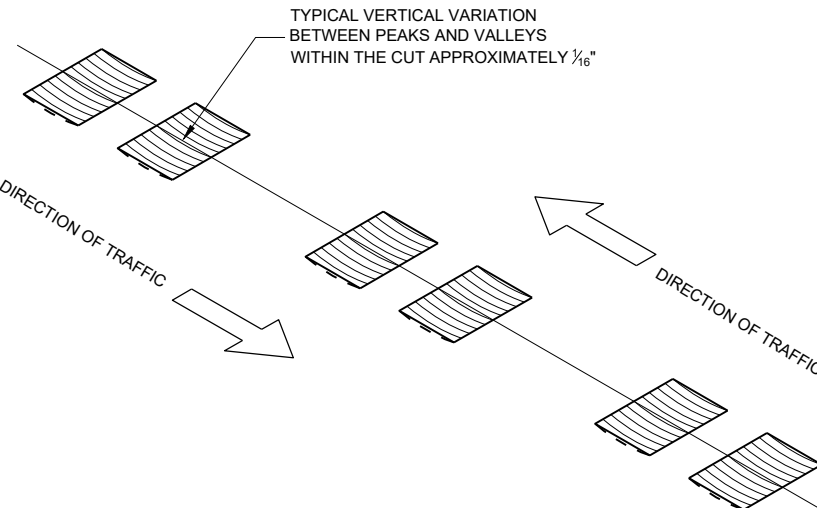
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



**PLAN VIEW  
SHOULDER WITH GROOVES**

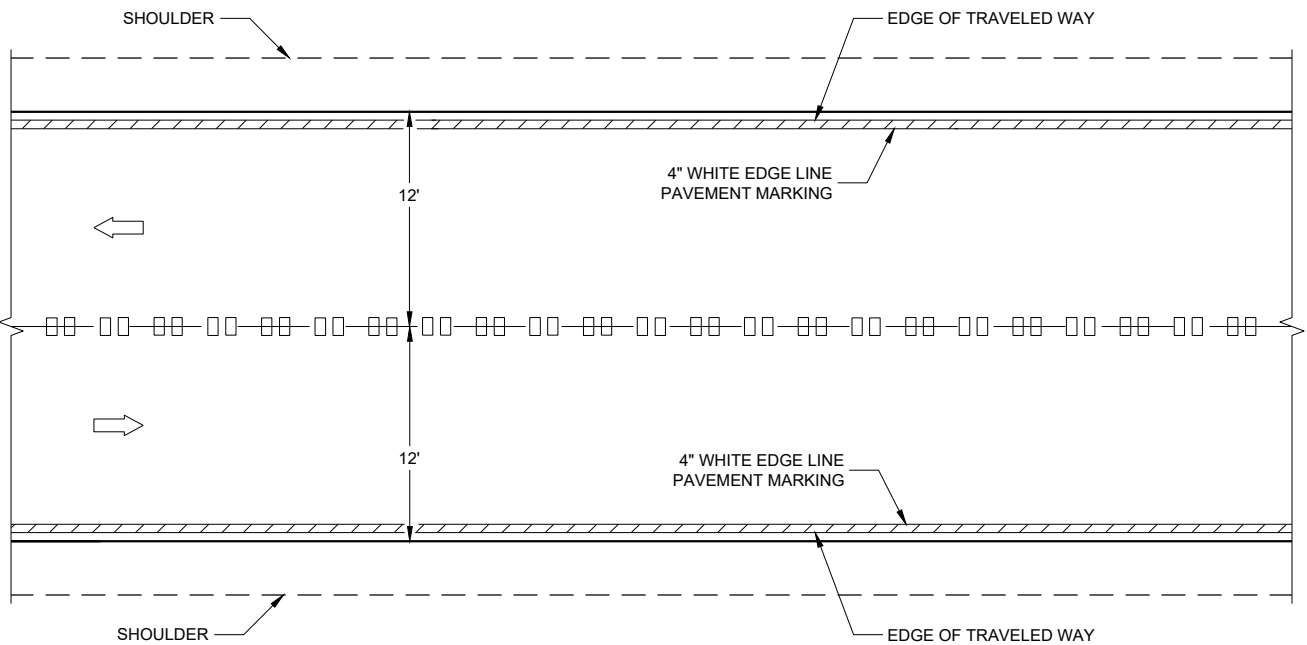


**PLAN VIEW  
(SINGLE GROOVE)**

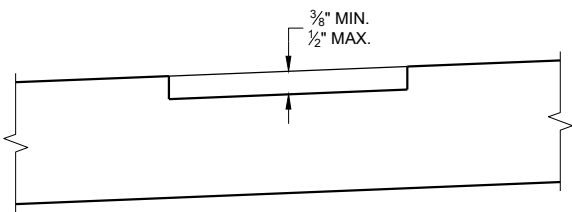


**ISOMETRIC**

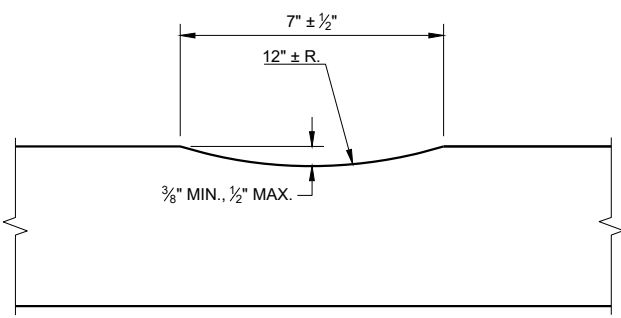
**PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP**



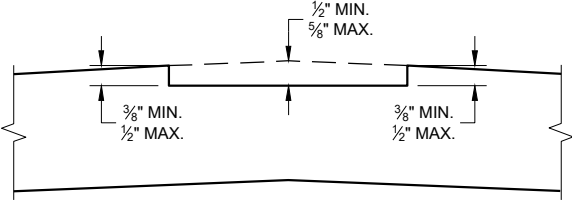
**CENTERLINE GROOVES ON TWO-WAY ROADWAYS**



**SECTION B - B  
SUPERELEVATED ROADWAY**



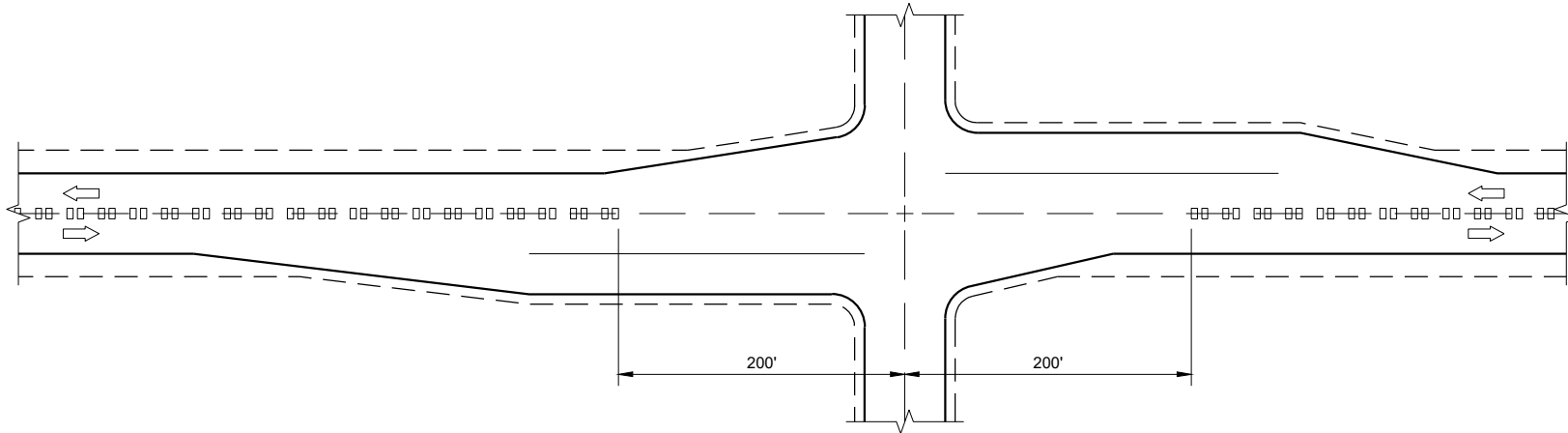
**SECTION A - A**



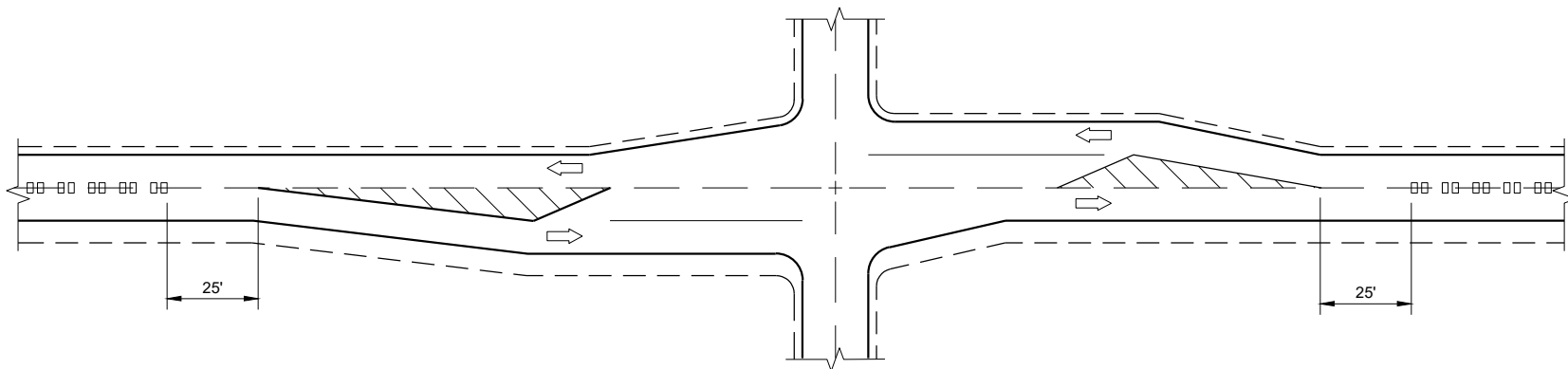
**SECTION B - B  
CROWNED ROADWAY**

**2-LANE RURAL  
CENTER LINE RUMBLE STRIP,  
MILLING**

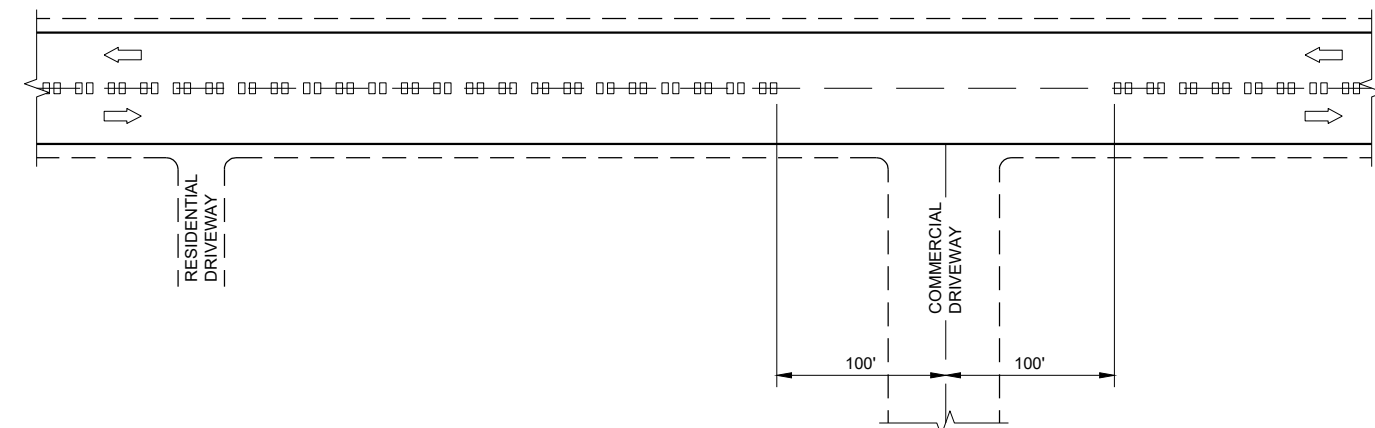
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CENTERLINE GROOVES AT INTERSECTIONS**



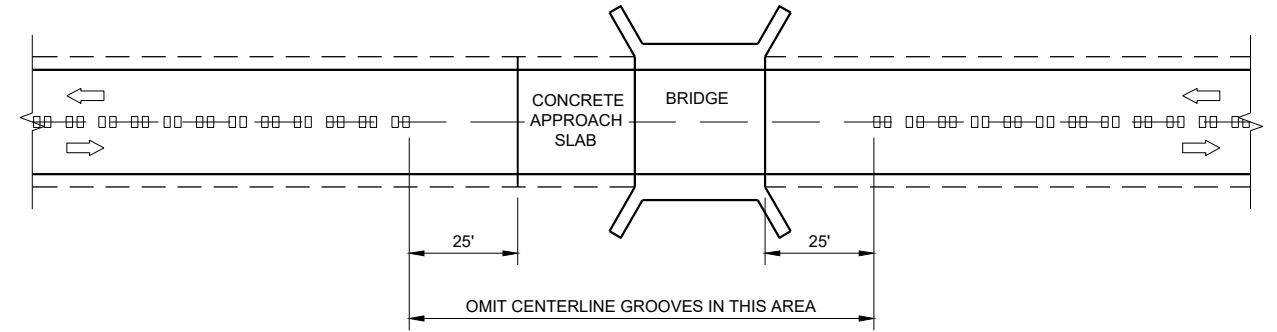
**CENTERLINE GROOVES AT INTERSECTIONS  
(WITH LEFT TURN LANES)**



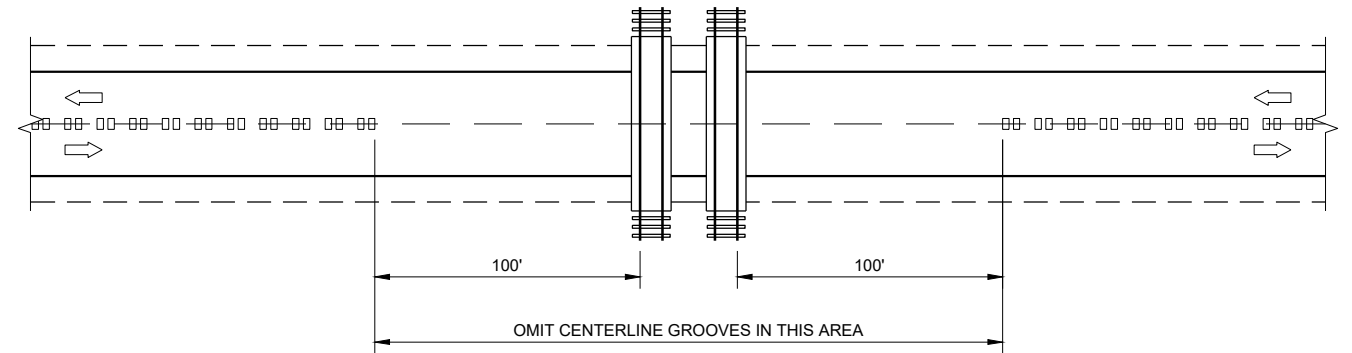
**CENTERLINE GROOVES AT DRIVEWAYS<sup>①</sup>**

**GENERAL NOTES**

- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



**CENTERLINE GROOVES AT BRIDGES**

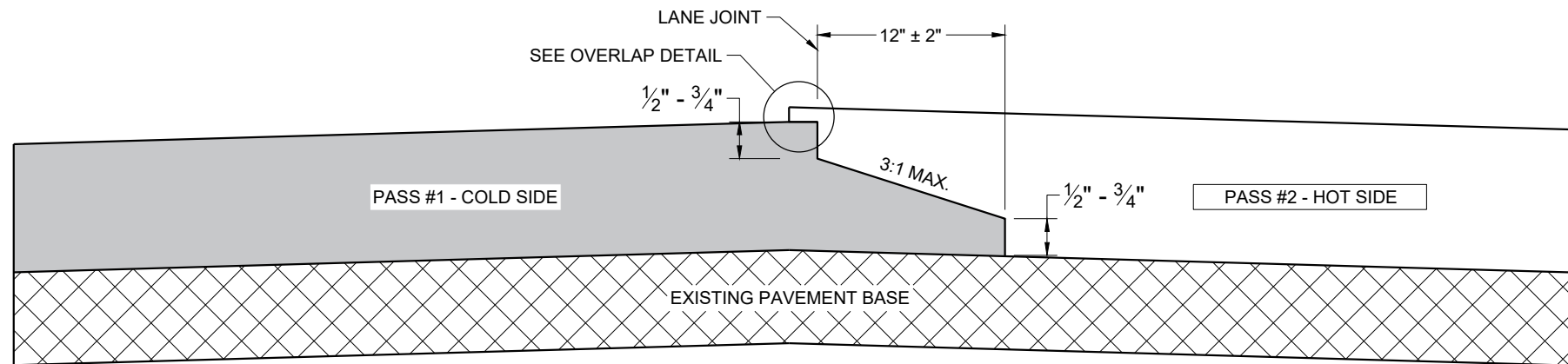


**CENTERLINE GROOVES AT RAILROADS**

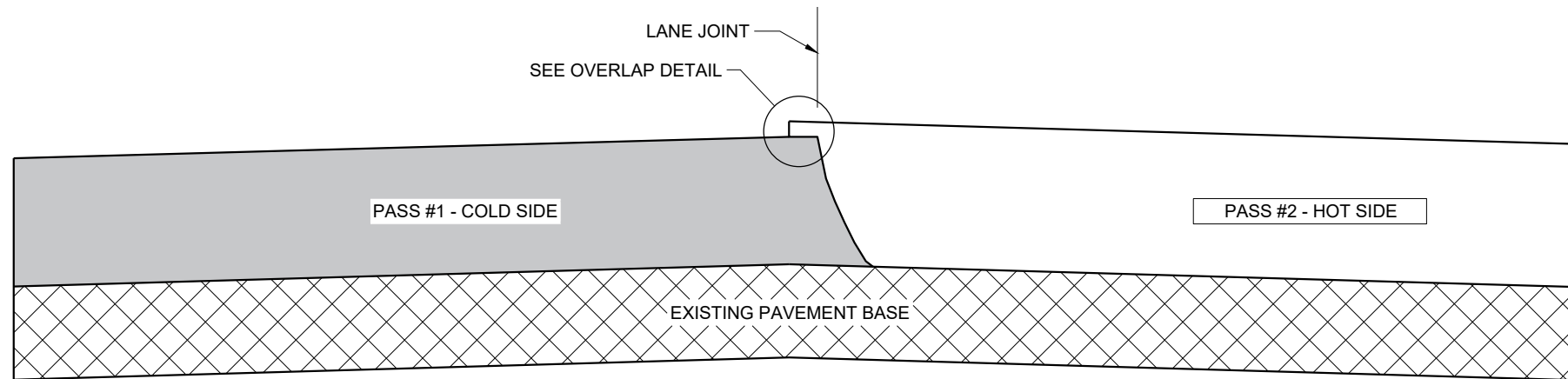
6

6

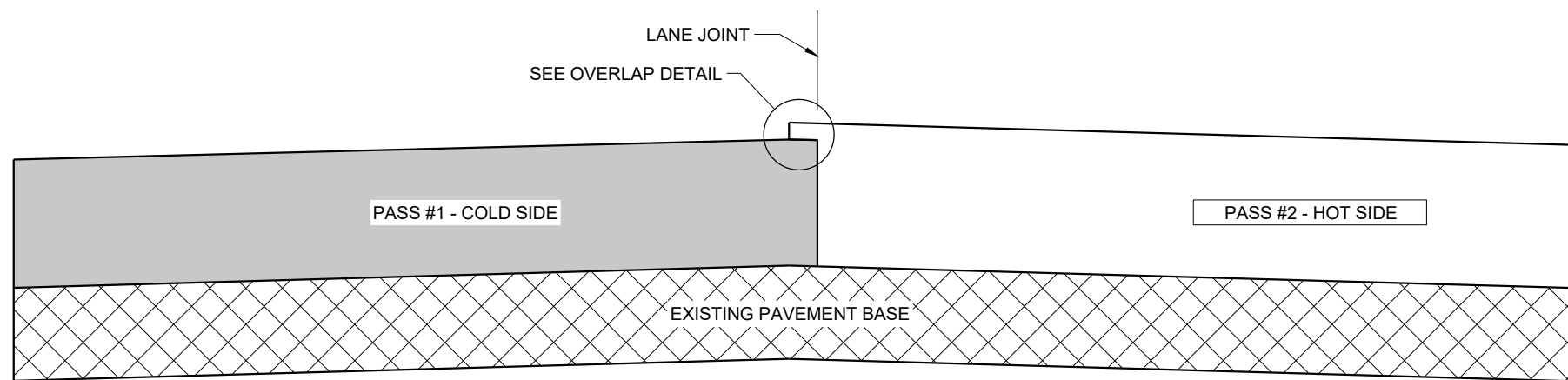
<b>2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/2018 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION  
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT (MILLED)**

**GENERAL NOTES**

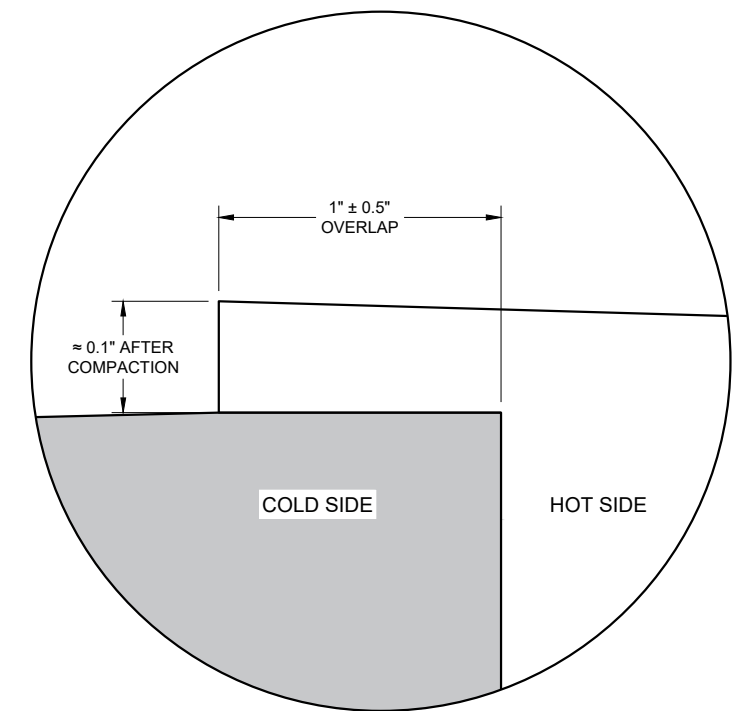
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY  $1" \pm 0.5"$  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)**

6

6

SDD 13C19 - 03

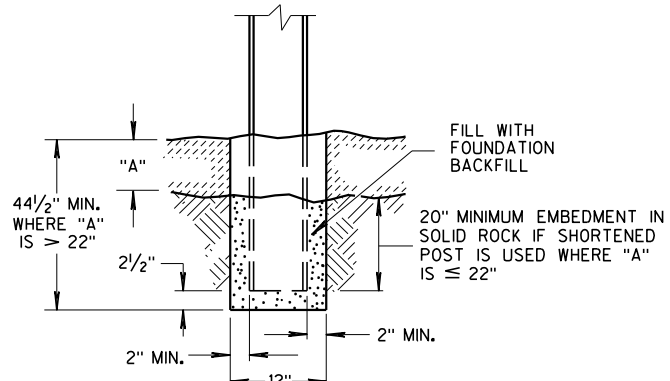
SDD 13C19 - 03

<b>HMA LONGITUDINAL JOINTS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	

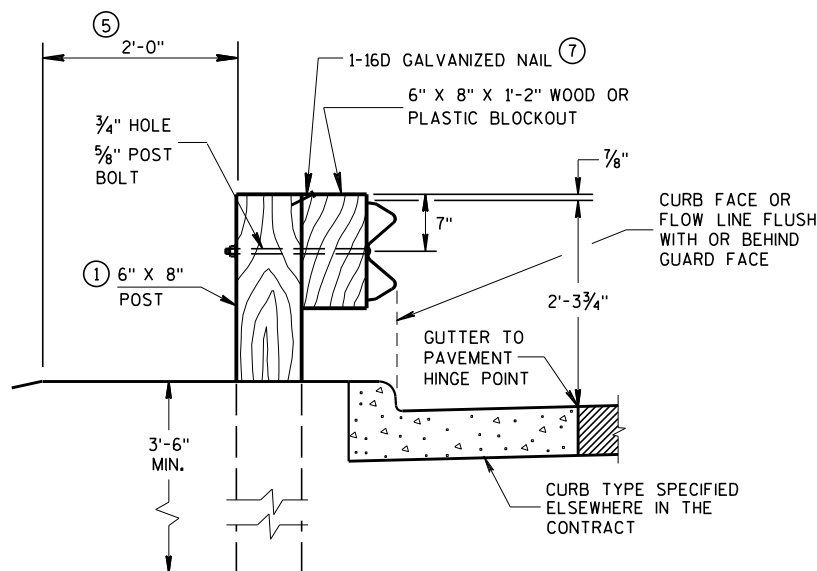
**GENERAL NOTES**

- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.
- ⑦ WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

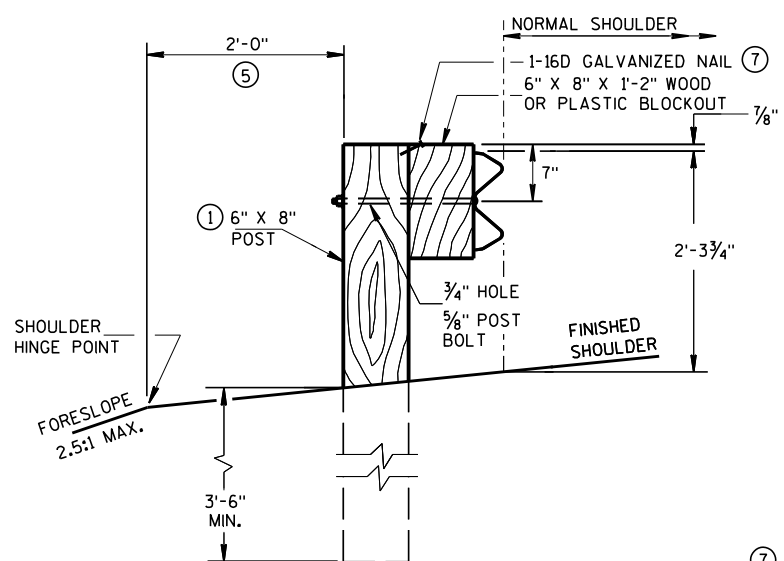
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



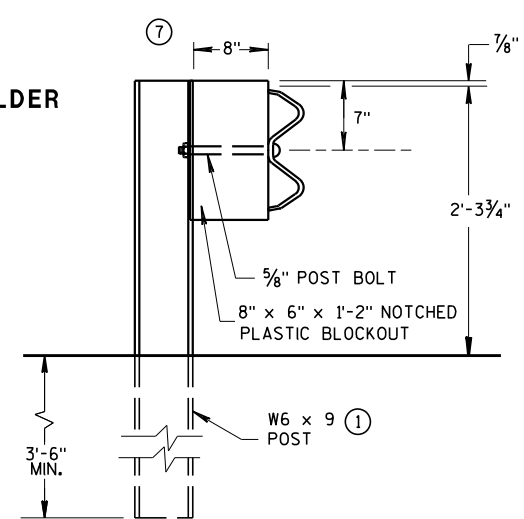
**END VIEW SETTING STEEL OR WOOD POST IN ROCK** ⑥



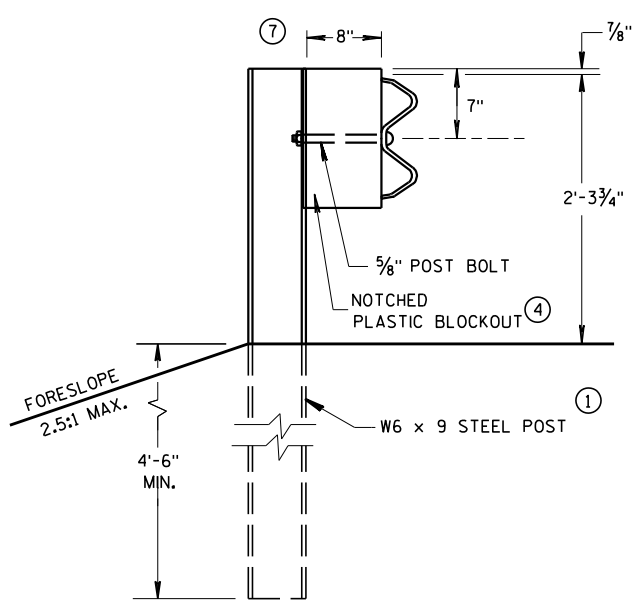
**END VIEW LOCATED ALONG A CURBED ROADWAY**



**END VIEW LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION**

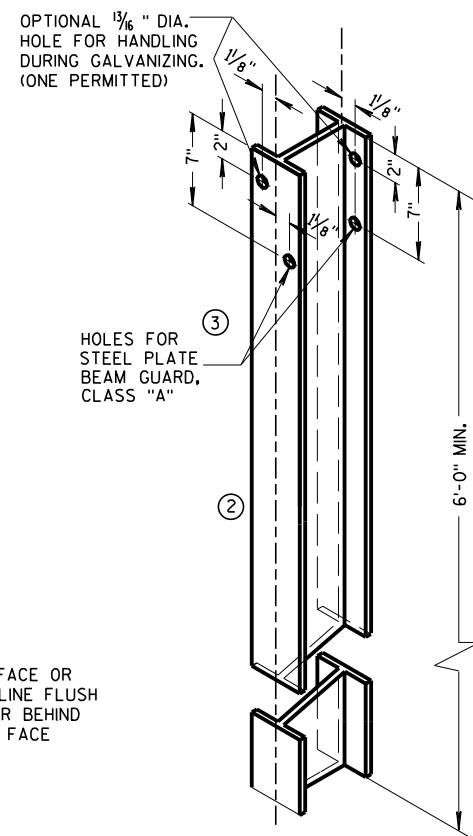


**END VIEW STEEL POST & NOTCHED PLASTIC BLOCKOUT ALTERNATIVE STANDARD INSTALLATION**

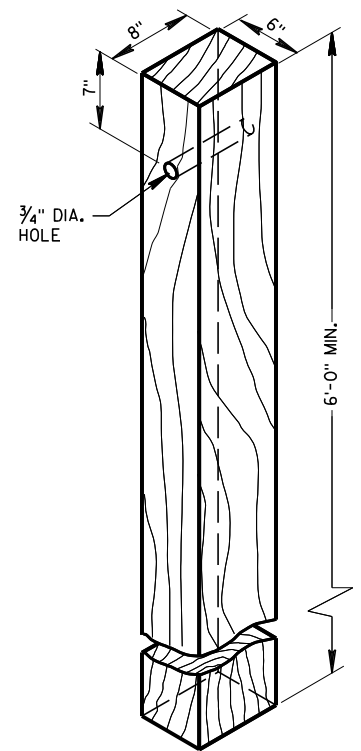


**END VIEW LONGER POST AT HALF POST SPACING W BEAM (LHW)**

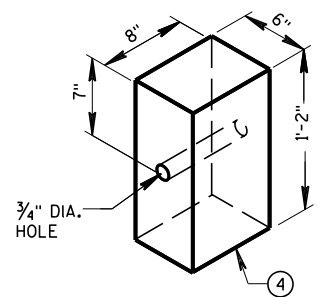
**TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD**



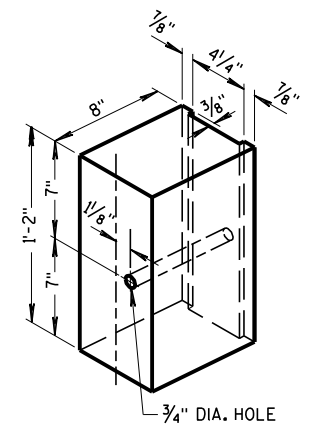
**STEEL POST & HOLE PUNCHING DETAIL (W6 X 9)** ①  
ALL HOLES 1/8" DIAMETER EXCEPT AS NOTED



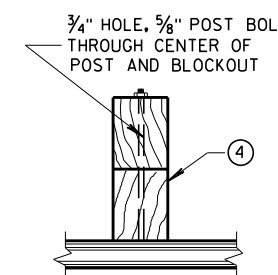
**WOOD POST (6" X 8") NOMINAL**



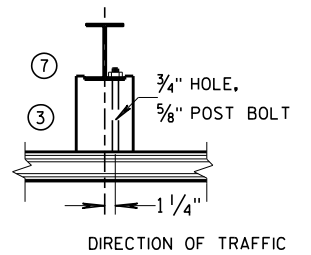
**WOOD OR PLASTIC BLOCKOUT FOR WOOD POSTS**



**TYPICAL NOTCHED PLASTIC BLOCKOUT FOR STEEL POSTS** ①



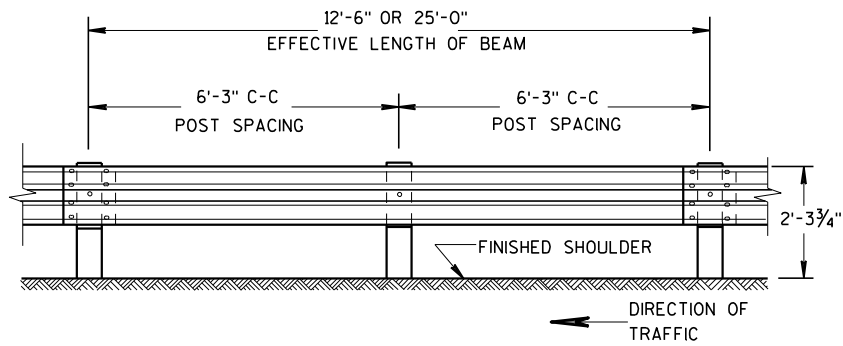
**PLAN VIEW WOOD POST, BLOCKOUT & BEAM**



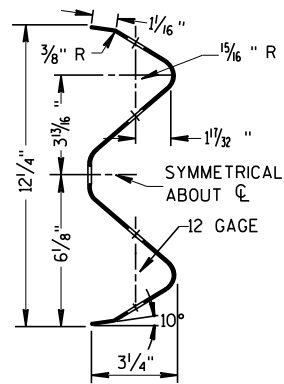
**PLAN VIEW STEEL POST, NOTCHED PLASTIC BLOCKOUT & BEAM**

**STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS**

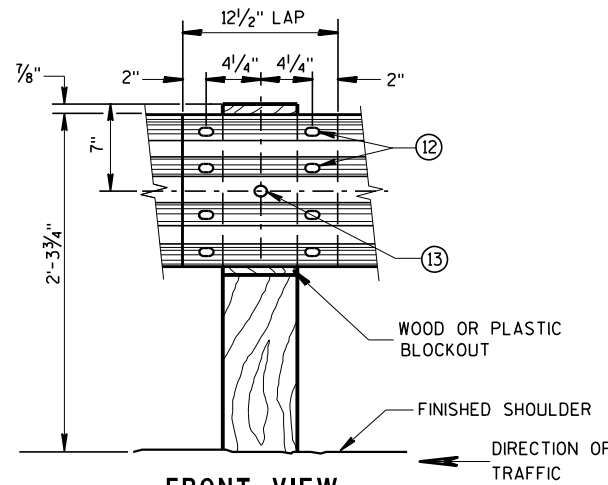
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**FRONT VIEW  
POST SPACING STANDARD INSTALLATION**



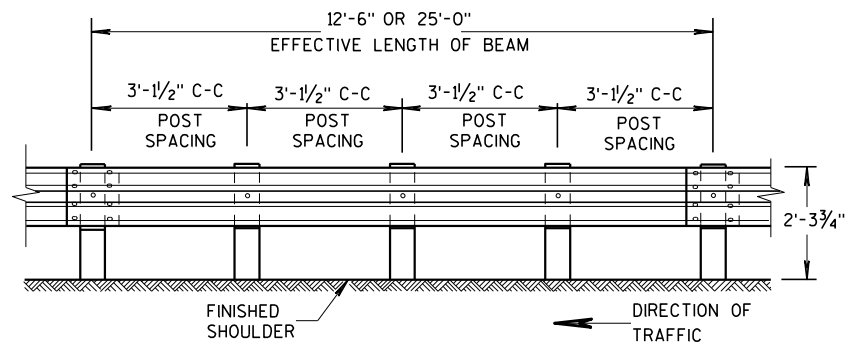
**SECTION THRU W BEAM**



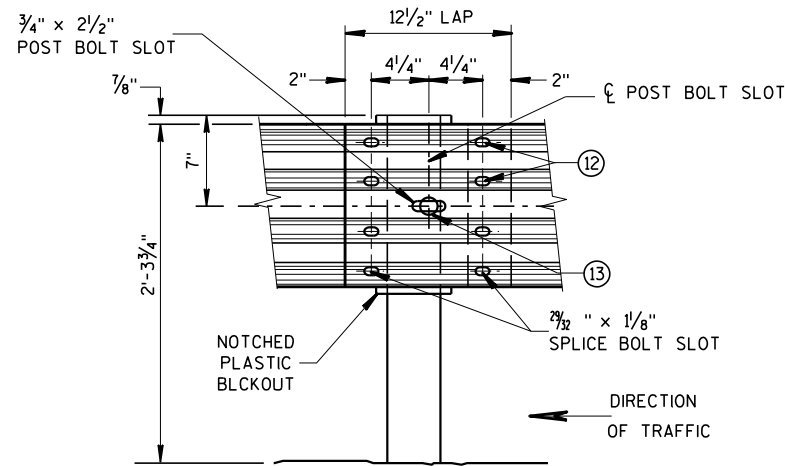
**FRONT VIEW  
BEAM SPLICE AT WOOD POST  
AND POST MOUNTING DETAIL**

**GENERAL NOTES**

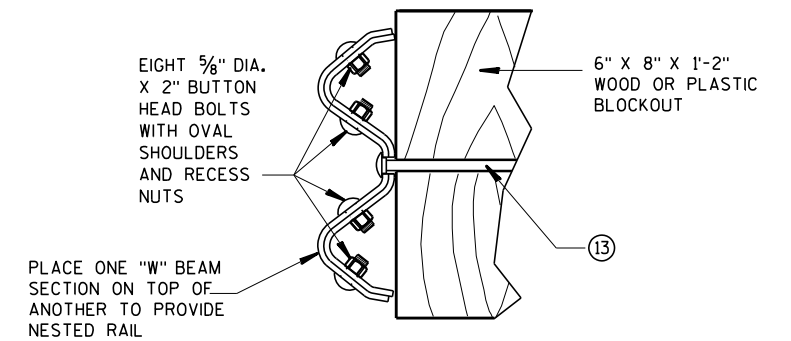
- FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.
  - ⑫ 8 - 5/8"  $\phi$  X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
  - ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.



**FRONT VIEW  
POST SPACING FOR LONGER POST  
AT HALF POST SPACING W BEAM (LHW)**

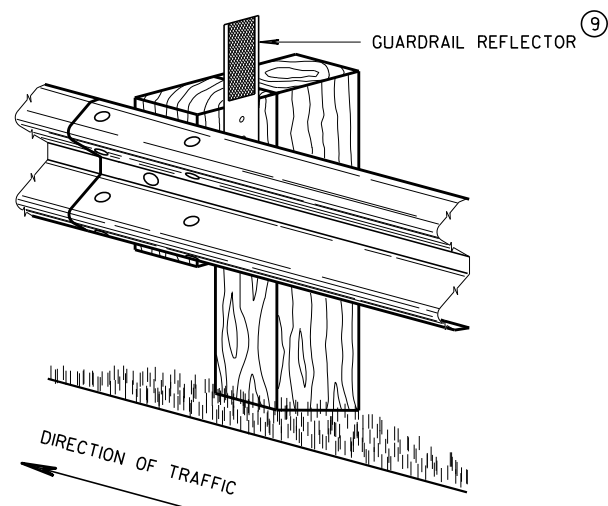


**FRONT VIEW  
BEAM SPLICE AT STEEL POST  
TYPICAL SPLICING DETAILS  
OF STEEL PLATE BEAM GUARD**

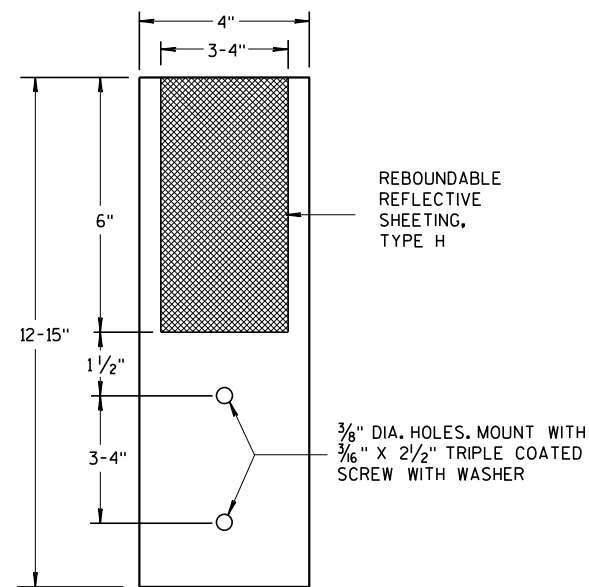


**NESTED W BEAM (NW)**  
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR  
CONSTRUCTING NESTED W BEAM (NW)

\* USE DOUBLE SIDED WHITE GUARDRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



**4" X 12" GUARDRAIL REFLECTOR DETAIL  
AND TYPICAL INSTALLATION \***

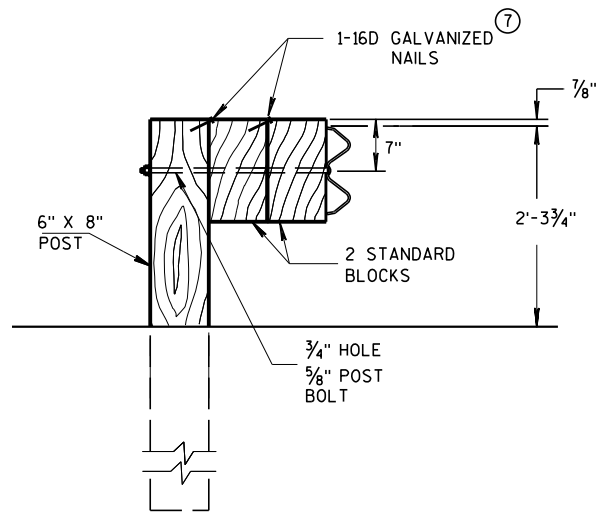


**4" x 12" GUARDRAIL REFLECTOR**

**STEEL PLATE BEAM GUARD,  
CLASS "A",  
INSTALLATION & ELEMENTS**

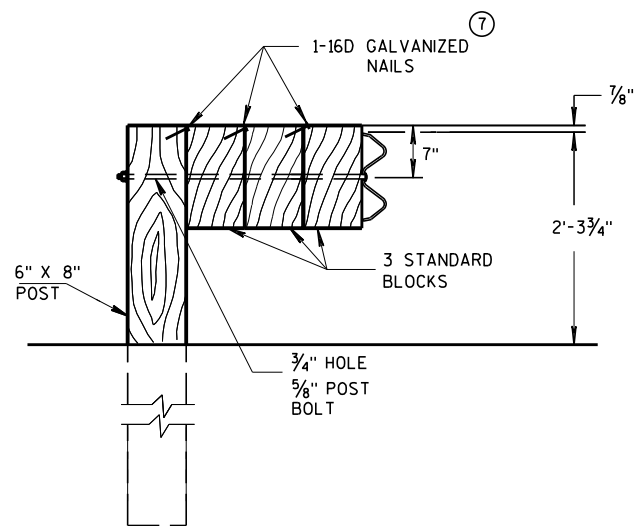
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION





**DETAIL FOR DOUBLE BLOCKS**

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

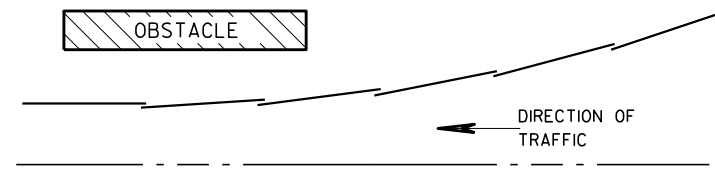


**DETAIL FOR TRIPLE BLOCKS**

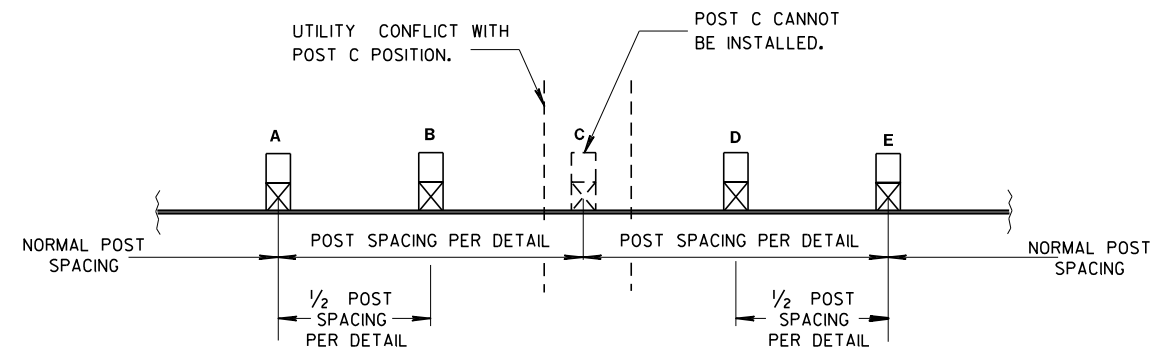
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



**PLAN VIEW  
BEAM LAPPING DETAIL**



**POST DRIVING FOR CONTINUOUS  
UNDERGROUND OBSTRUCTION**

<b>STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION &amp; ELEMENTS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017	/s/ Rodney Taylor
DATE	ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	

**BILL OF MATERIALS**

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

**GENERAL NOTES**

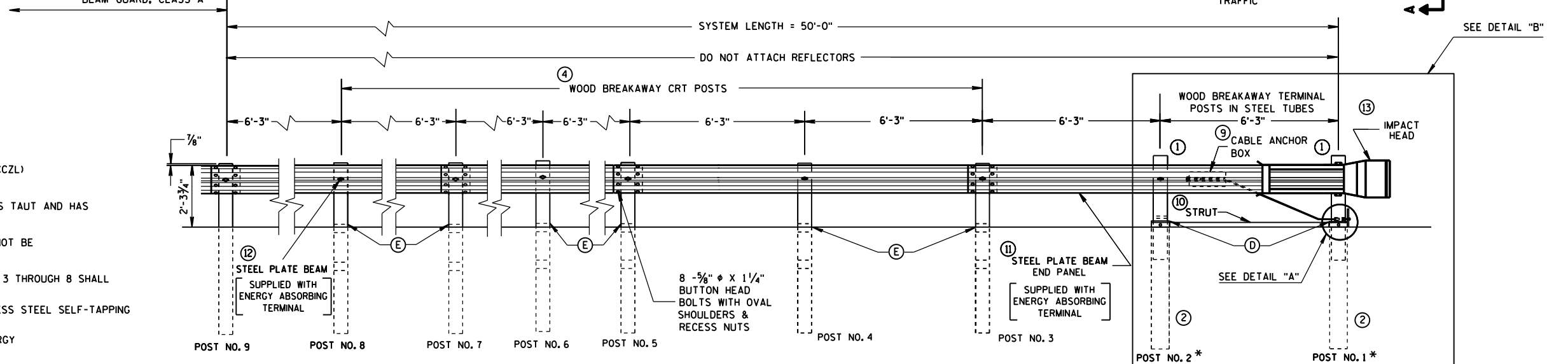
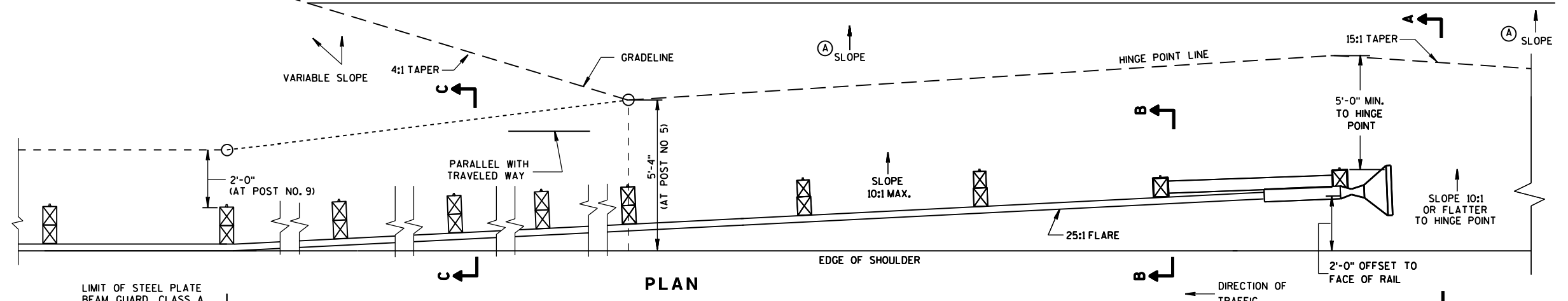
FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.
- (F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.

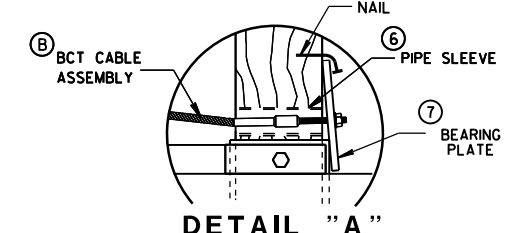
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.  
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

\*DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

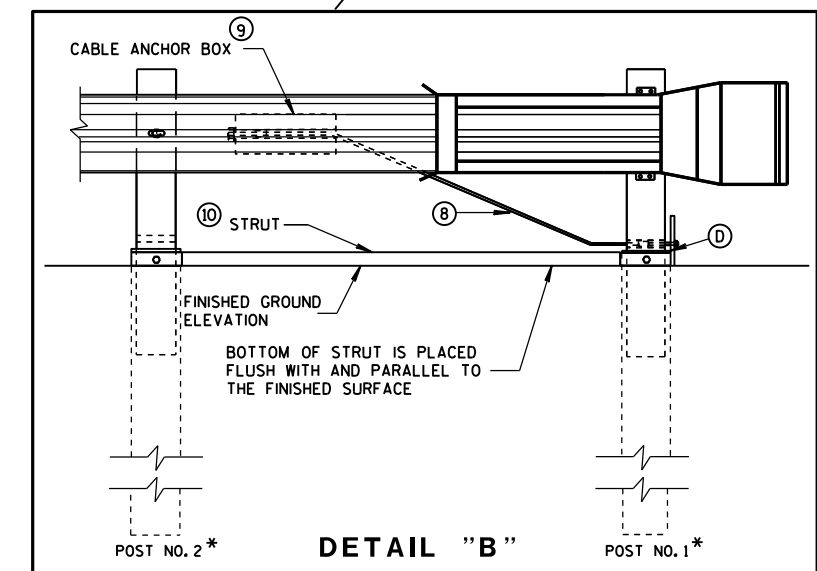
CLEAR ZONE LIMITS, EITHER AS SHOWN ELSEWHERE IN THE PLANS OR, IF NOT SHOWN ELSEWHERE IN THE PLANS, 15 FEET BEYOND THE HINGE POINT LINE



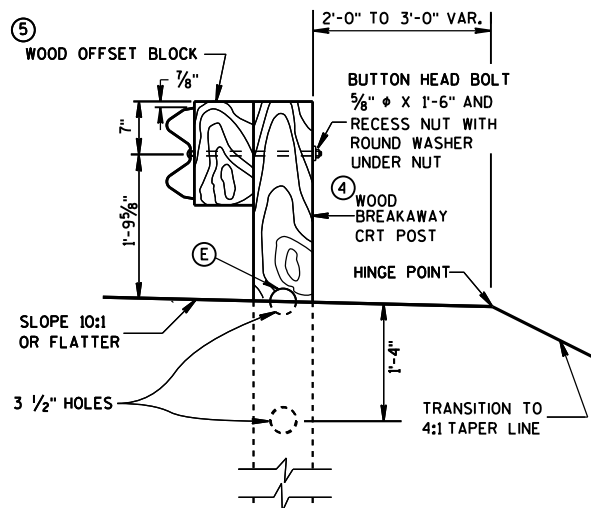
**ELEVATION**



**DETAIL "A"**

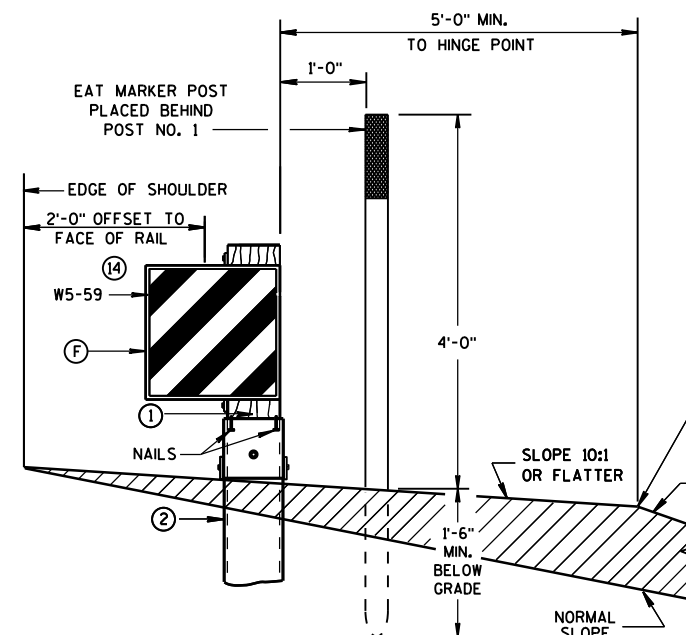


**DETAIL "B"**



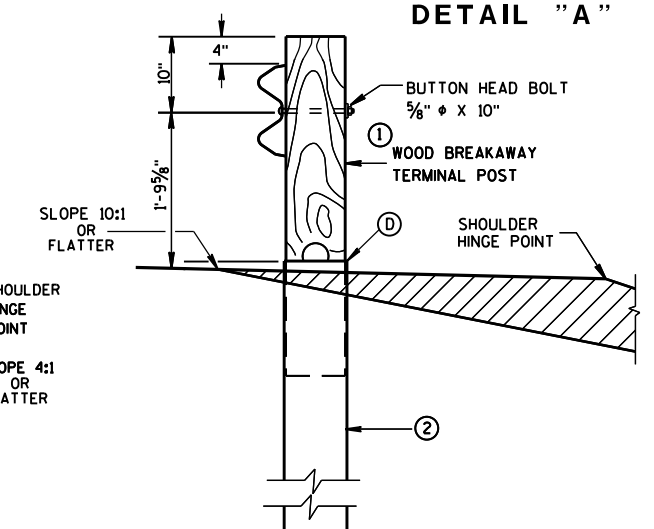
**SECTION C-C**

TYPICAL AT POST NOS. 6, 8



**SECTION A-A**

TYPICAL AT POST NO. 1\*



**SECTION B-B**

TYPICAL AT POST NO. 2\*

**STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL**

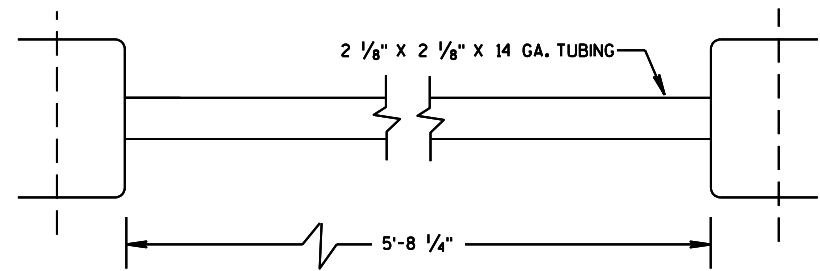
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

6

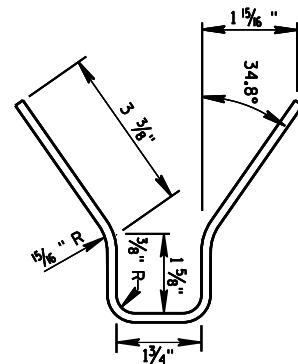
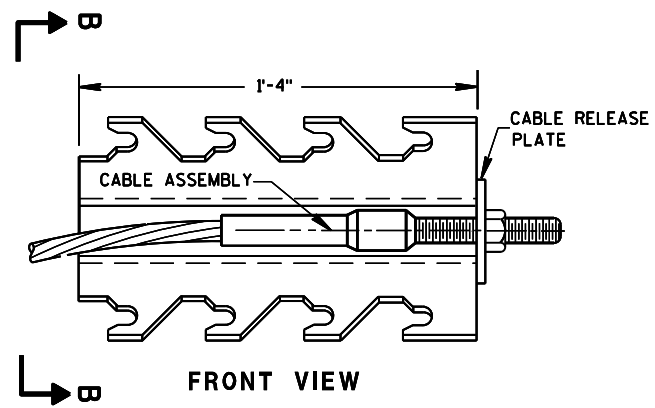
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S.D.D. 14 B 24-9a

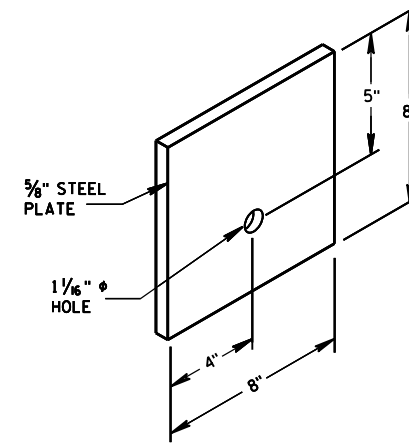
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL



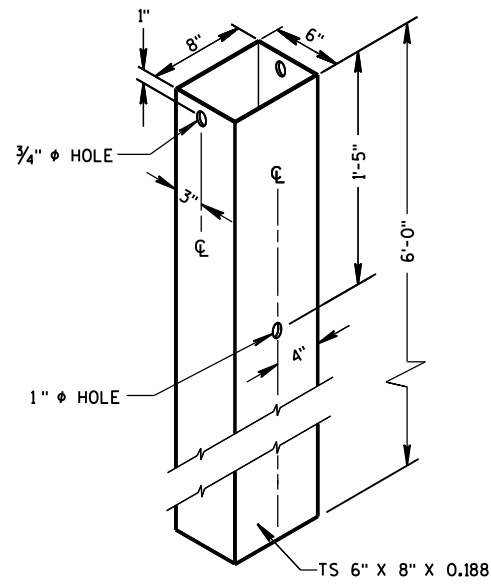
⑨ CABLE ANCHOR BOX



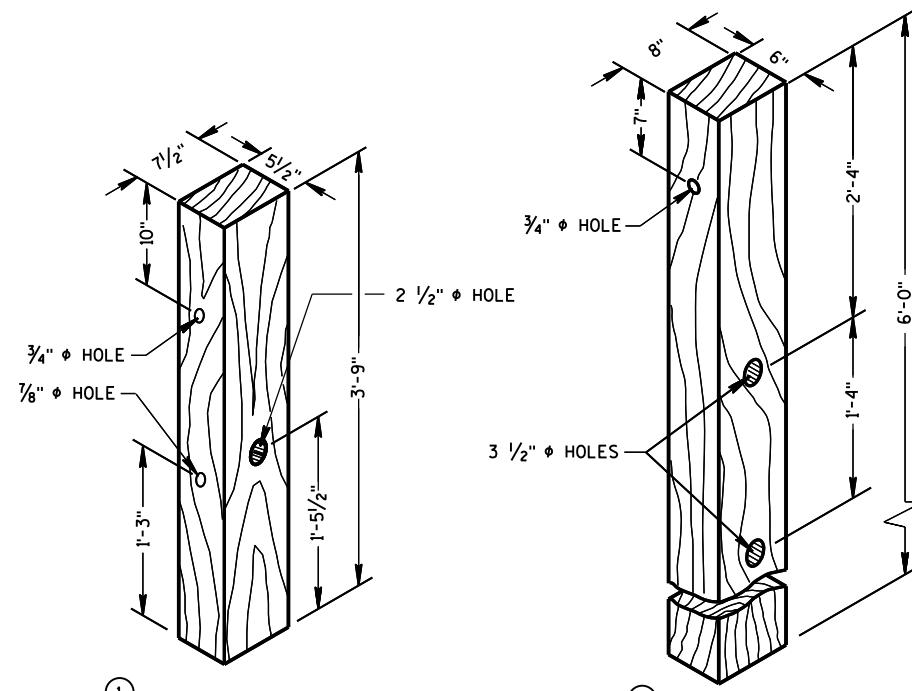
⑦ STEEL BEARING PLATE

6

6



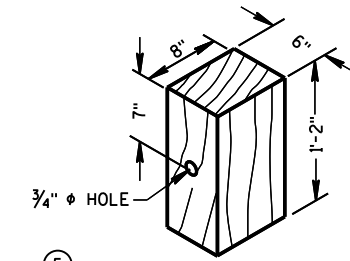
② 72" STEEL TUBE  
(POSTS NO. 1-2)



① TERMINAL POST

④ CRT POST  
(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS



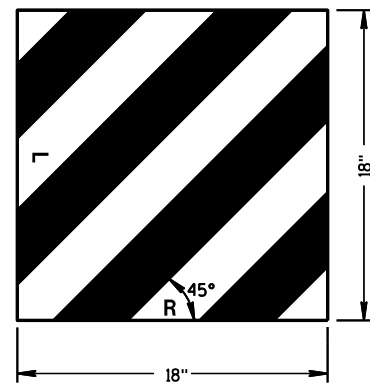
⑤ WOOD OFFSET BLOCK  
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

GENERAL NOTES

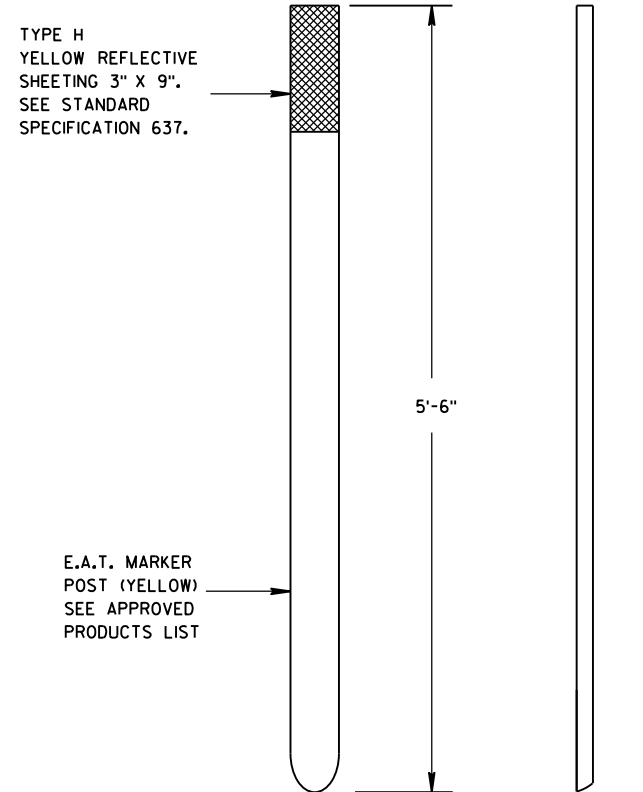
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

6

6



⑭ REFLECTIVE SHEETING DETAILS



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST

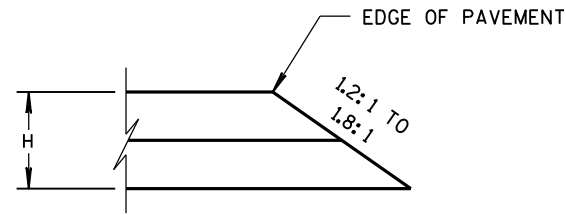
TYPE H  
YELLOW REFLECTIVE  
SHEETING 3" X 9".  
SEE STANDARD  
SPECIFICATION 637.

E.A.T. MARKER  
POST (YELLOW)  
SEE APPROVED  
PRODUCTS LIST

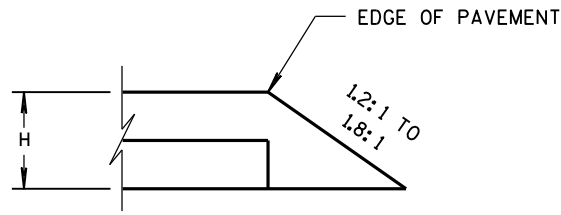
STEEL PLATE BEAM GUARD  
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

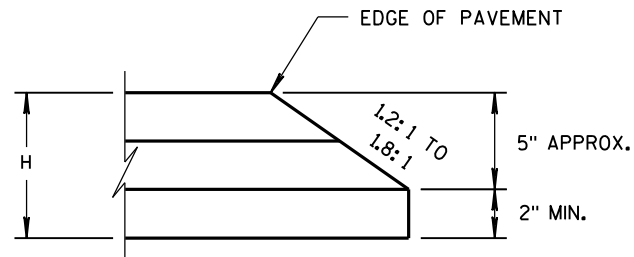
APPROVED  
June 2017 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT  
FHWA UNIT SUPERVISOR



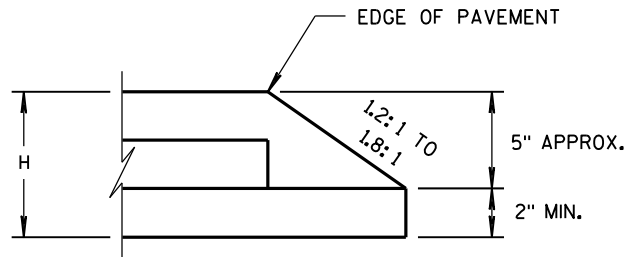
CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER  
FOR H 5" OR LESS

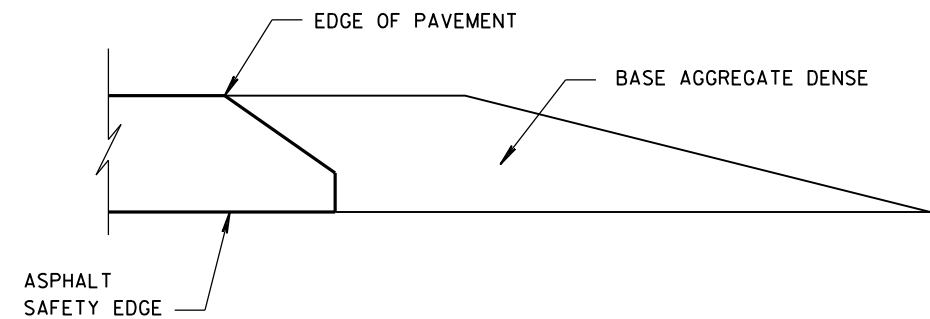


CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER  
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

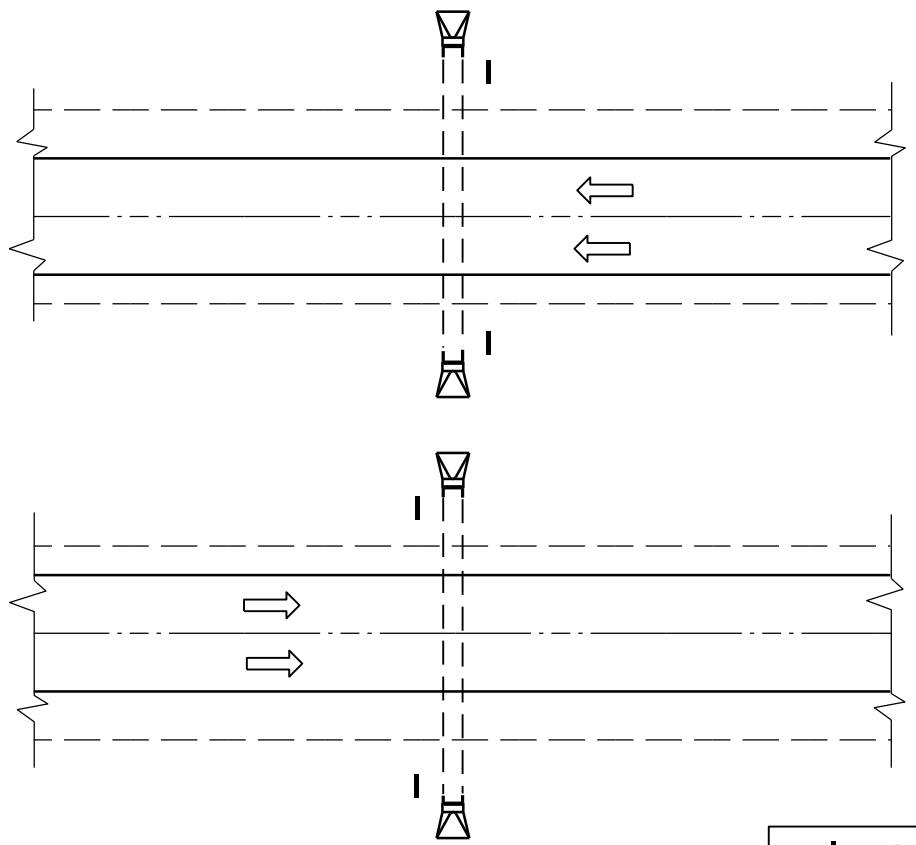
6

6

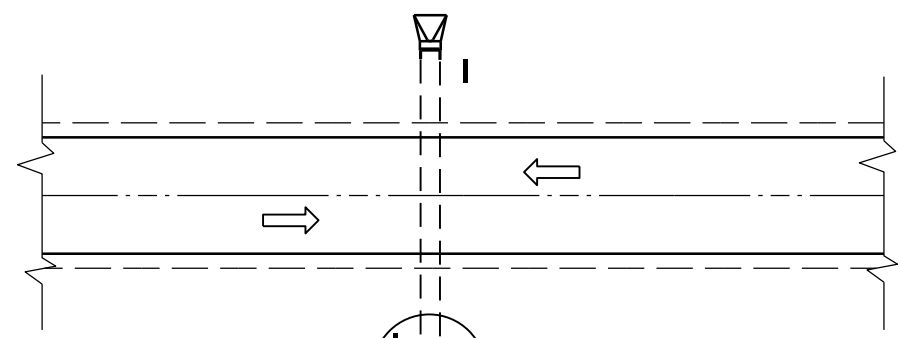
S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

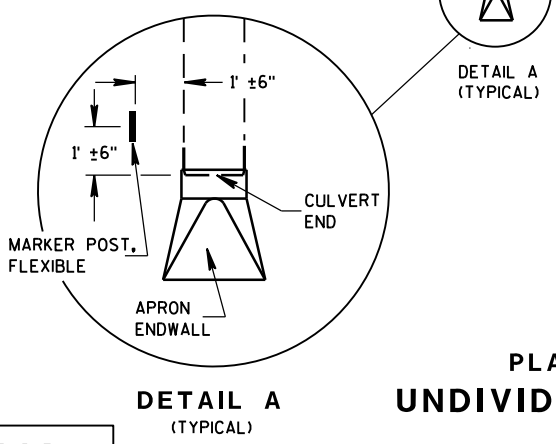
SAFETY EDGE <sub>SM</sub>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



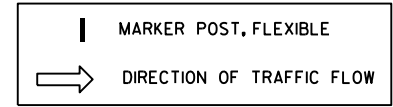
PLAN VIEW  
DIVIDED HIGHWAY



PLAN VIEW  
UNDIVIDED HIGHWAY

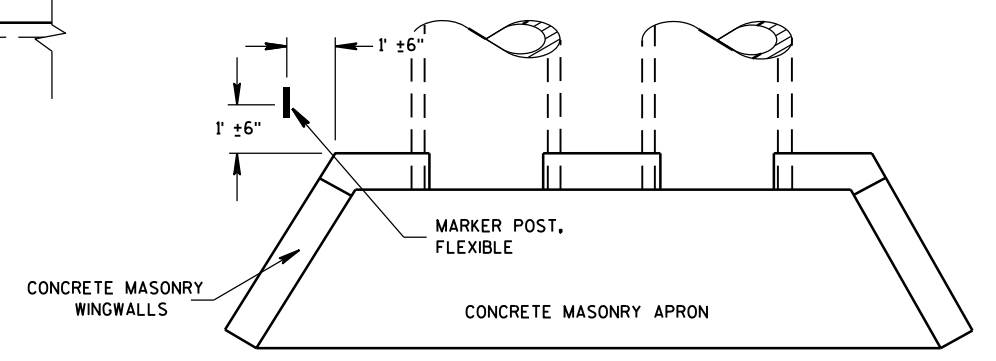


DETAIL A  
(TYPICAL)



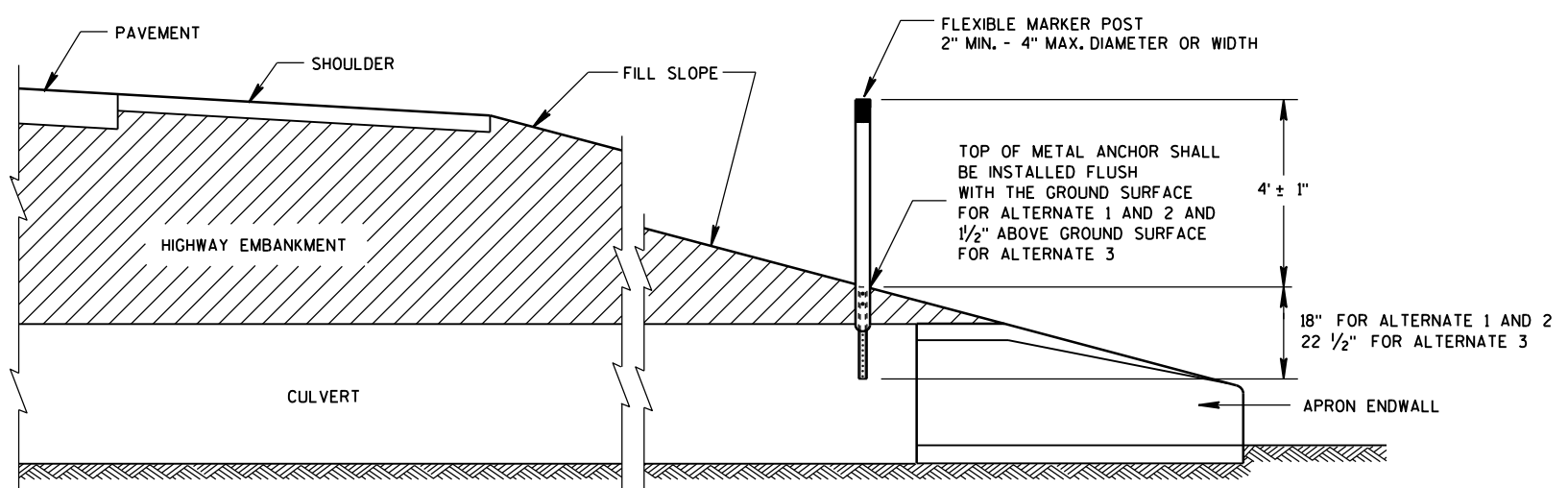
**GENERAL NOTES**

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



PLAN VIEW  
CONCRETE MASONRY ENDWALLS FOR  
CULVERT PIPE AND PIPE ARCH

**FLEXIBLE MARKER POST LOCATION**



CROSS SECTION  
FLEXIBLE MARKER POST

**FLEXIBLE MARKER POST  
FOR CULVERT END**

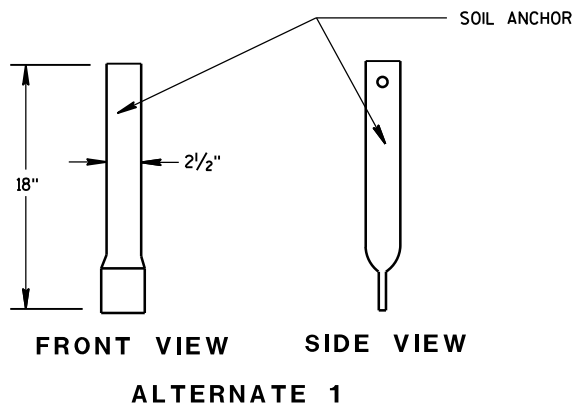
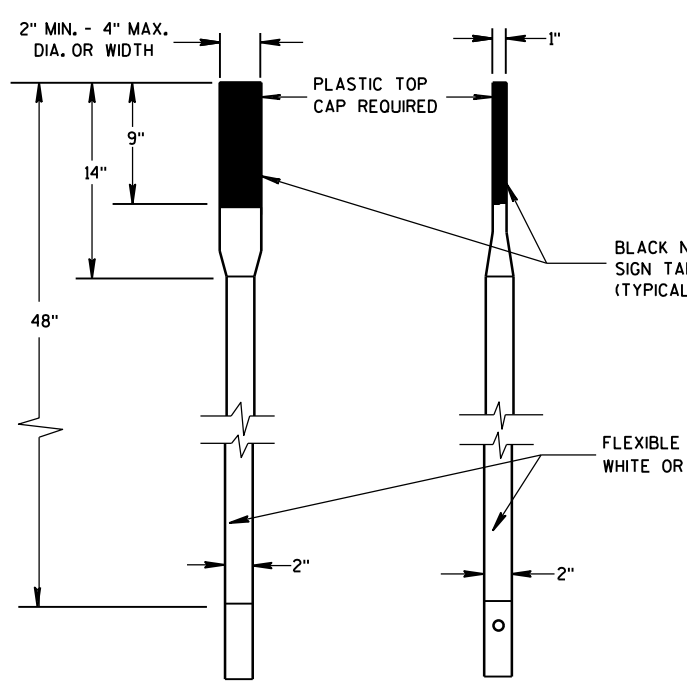
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

6

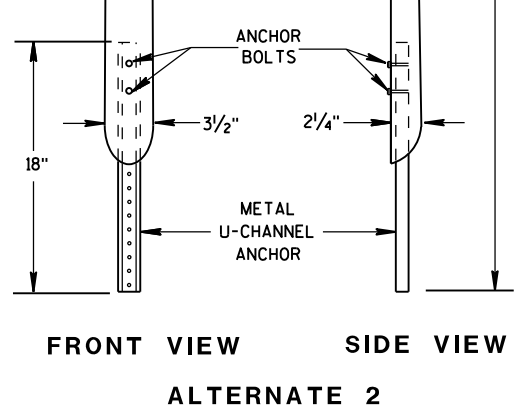
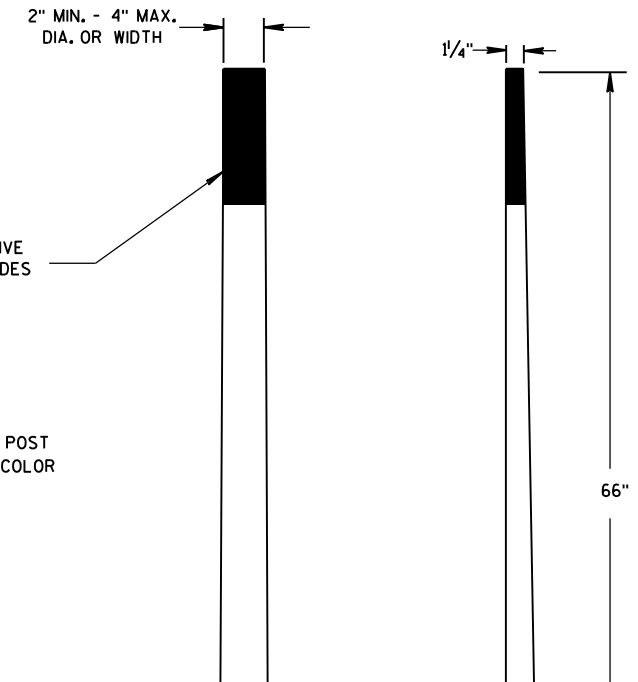
6

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

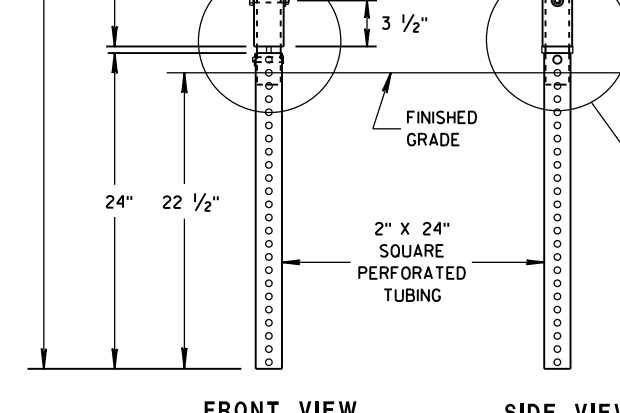
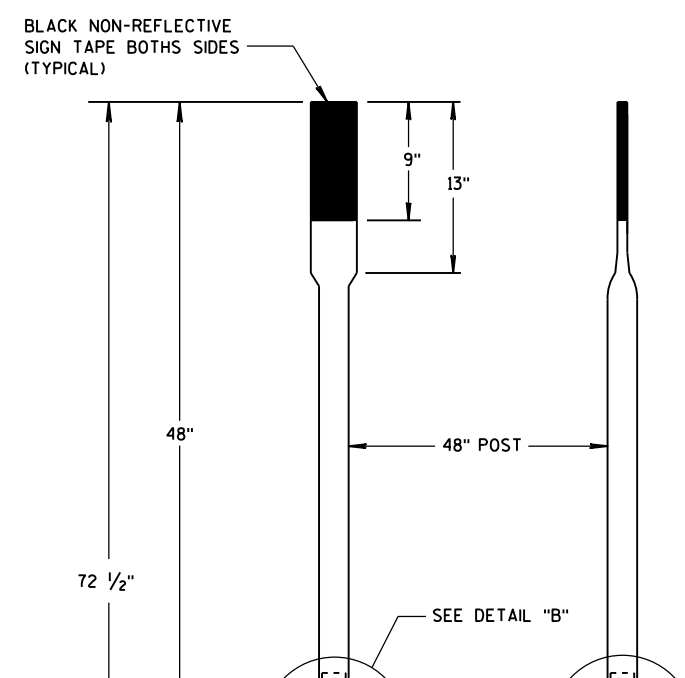
S.D.D. 15 A 3-2a



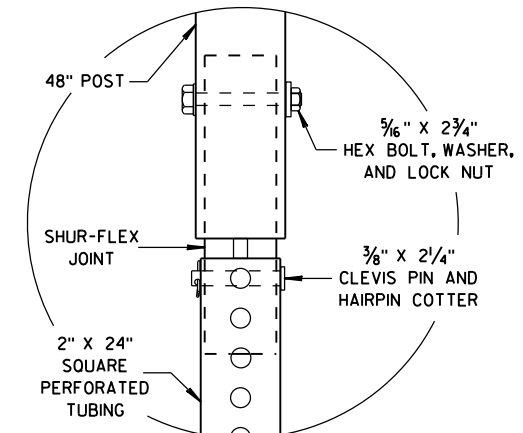
FRONT VIEW SIDE VIEW  
ALTERNATE 1



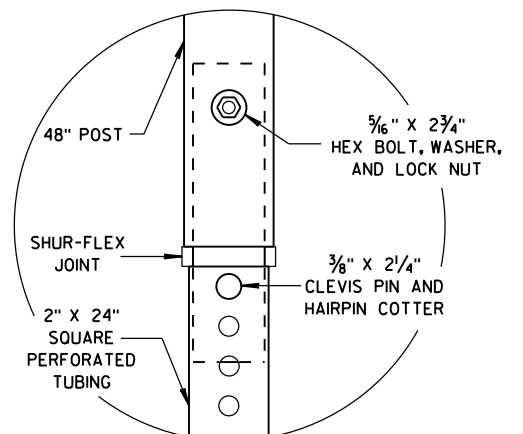
FRONT VIEW SIDE VIEW  
ALTERNATE 2



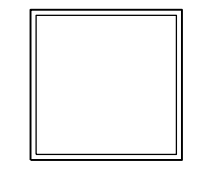
FRONT VIEW SIDE VIEW  
ALTERNATE 3



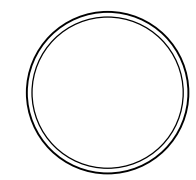
DETAIL B



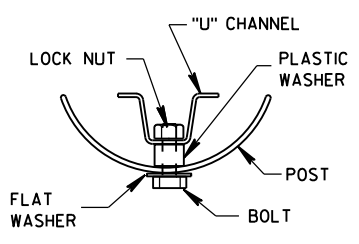
DETAIL C



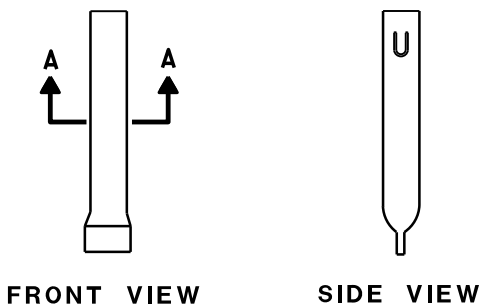
SECTION C-C



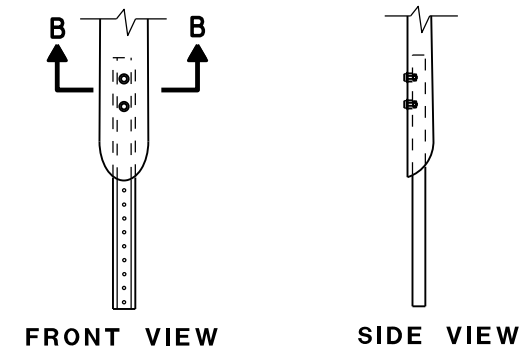
SECTION A-A



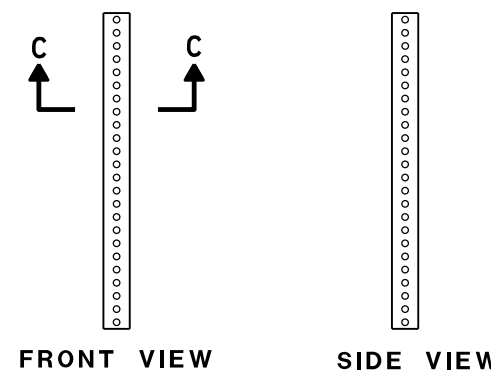
SECTION B-B



FRONT VIEW SIDE VIEW  
ALTERNATE 1



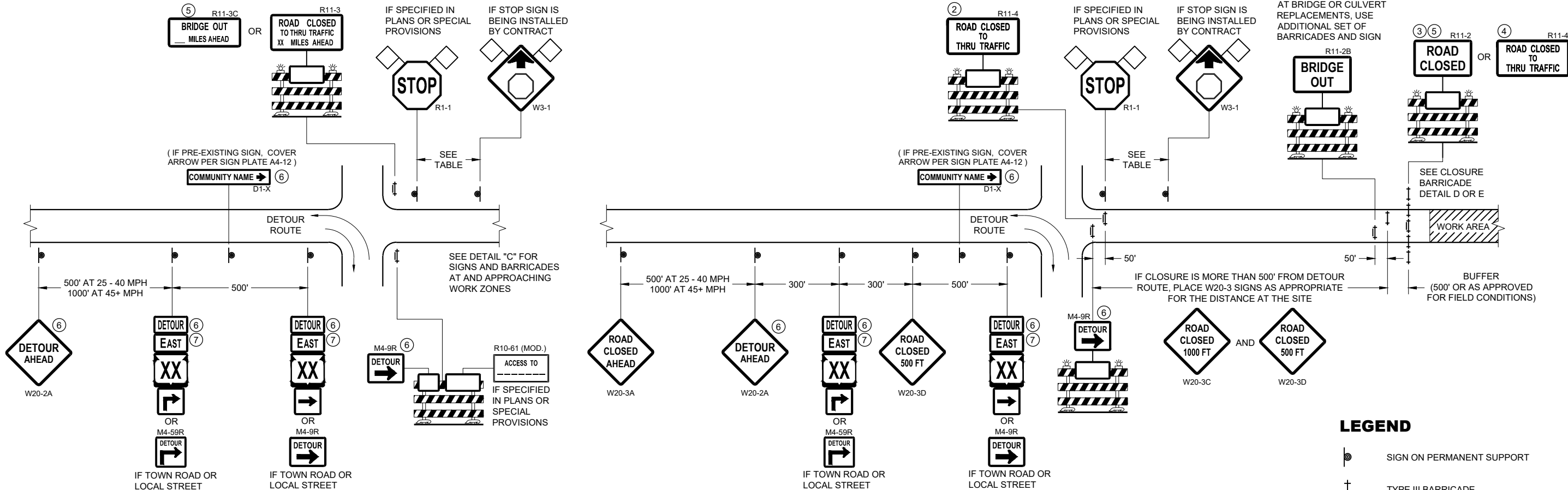
FRONT VIEW SIDE VIEW  
ALTERNATE 2



FRONT VIEW SIDE VIEW  
ALTERNATE 3

**FLEXIBLE MARKER POST ANCHORS**

<b>FLEXIBLE MARKER POST FOR CULVERT END</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



**DETAIL A**  
**MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM  
 DETOUR ROUTE ( 1000 FEET IF URBAN )

**DETAIL B**  
**MAINLINE CLOSURE WITH POSTED DETOUR**

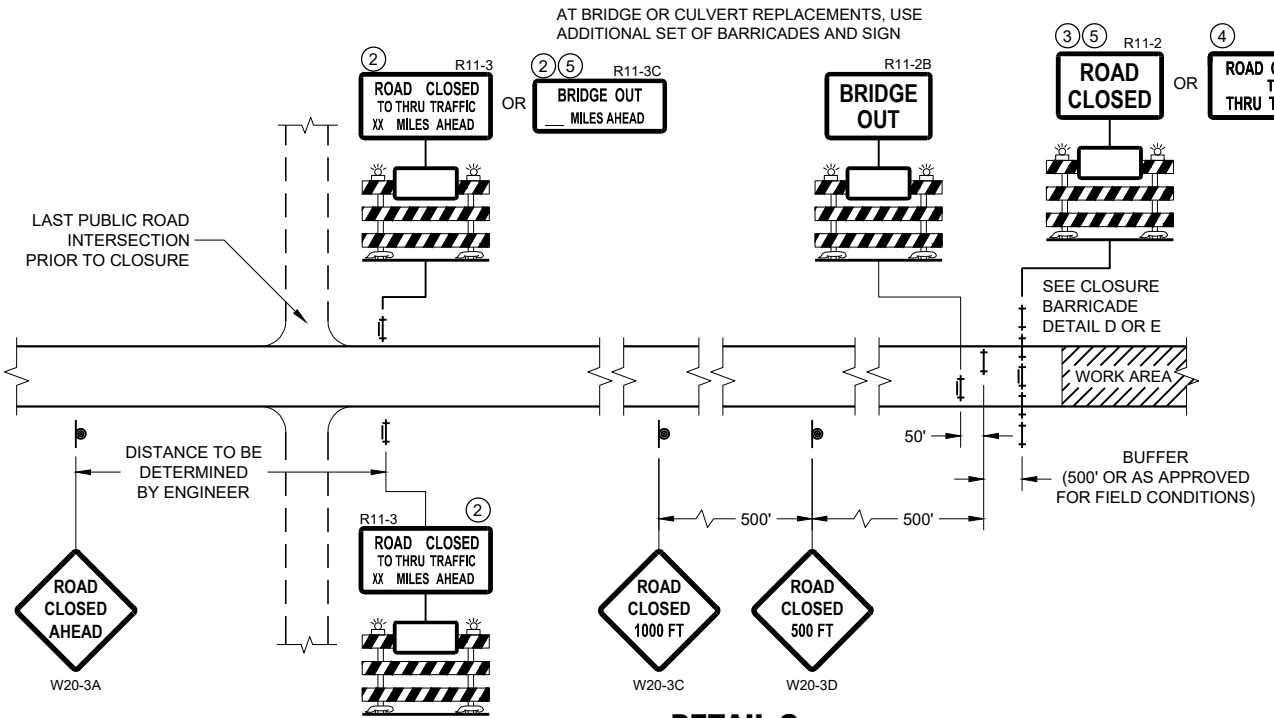
WORK ZONE LESS THAN 1/2 MILE FROM  
 DETOUR ROUTE ( 1000 FEET IF URBAN )

**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)

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

- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1



**DETAIL C**  
**MAINLINE CLOSURE, NO POSTED DETOUR**

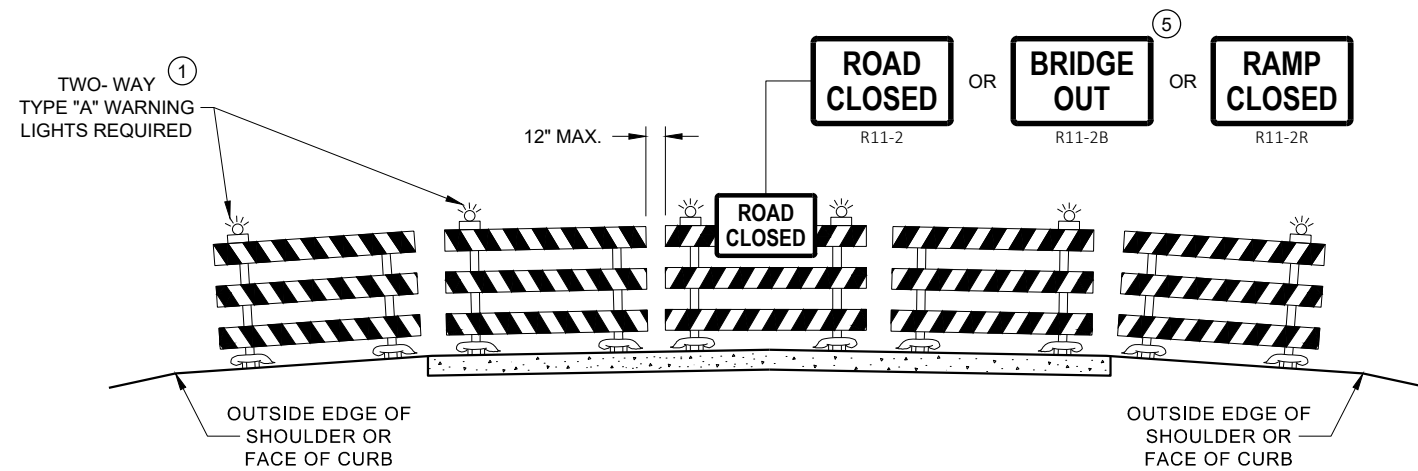
SEE SDD 15C2-SHEET "b"  
 FOR GENERAL NOTES  
 AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS  
 FOR MAINLINE CLOSURES**

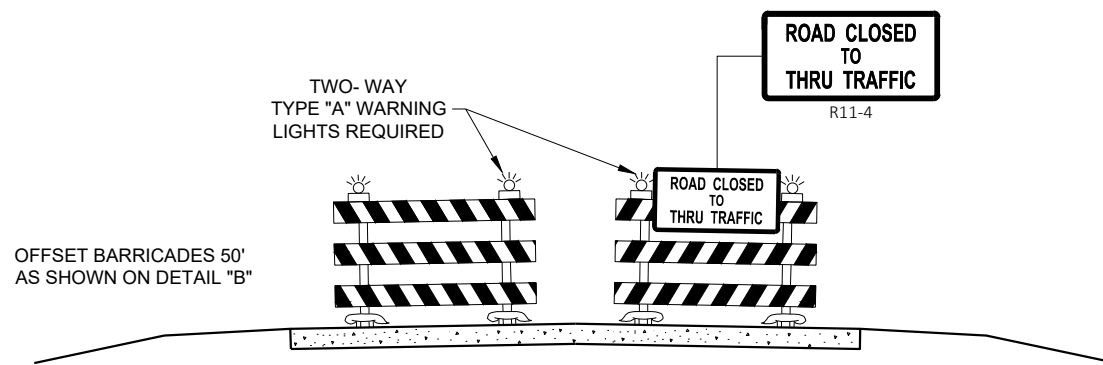
STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

APPROVED  
 February 2020 /S/ Andrew Heidtke  
 DATE DATE WORK ZONE ENGINEER  
 FHWA





**DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW**



**DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

**GENERAL NOTES**

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

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

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

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

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

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

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

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON 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  
February 2020 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER  
FHWA

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 M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
- M05 - 1 OR M06 - 1 OR 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.

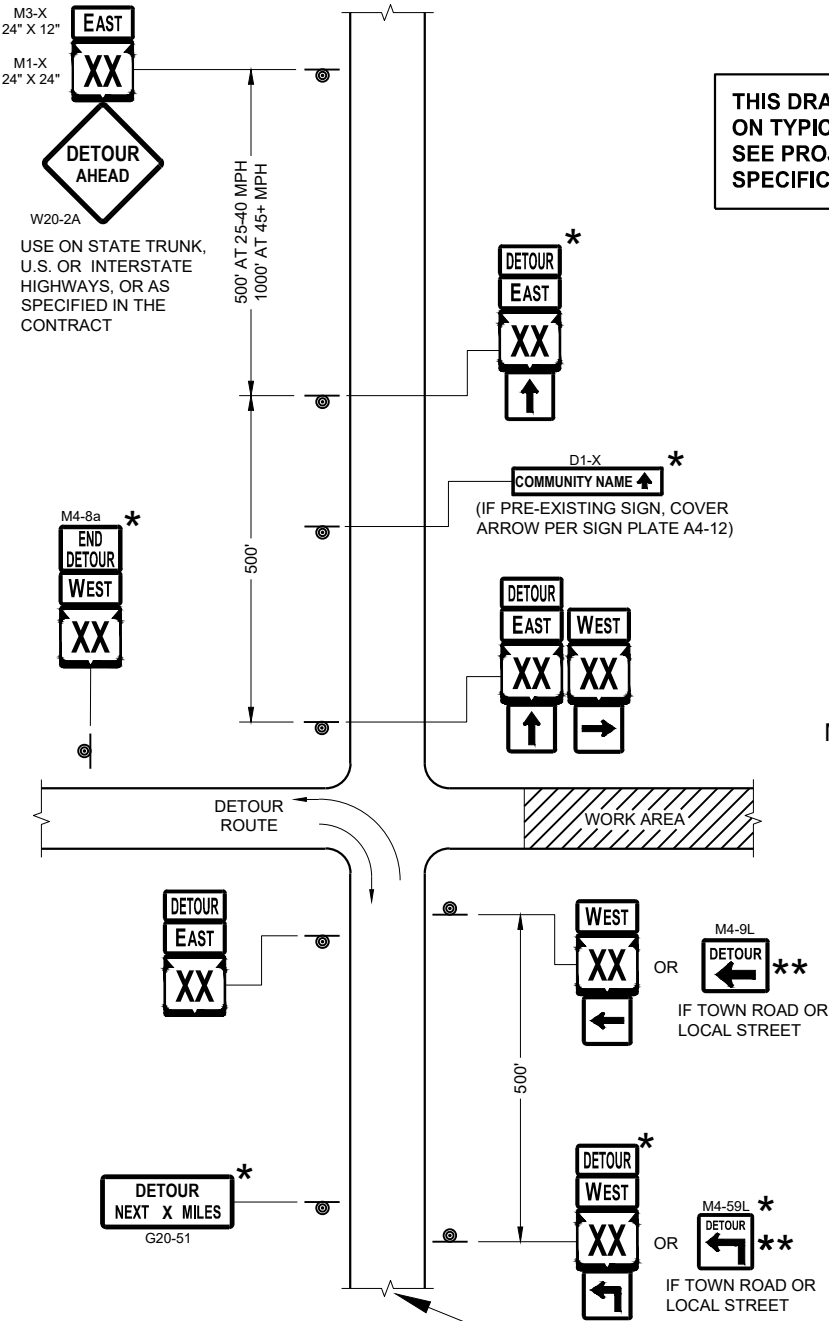
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

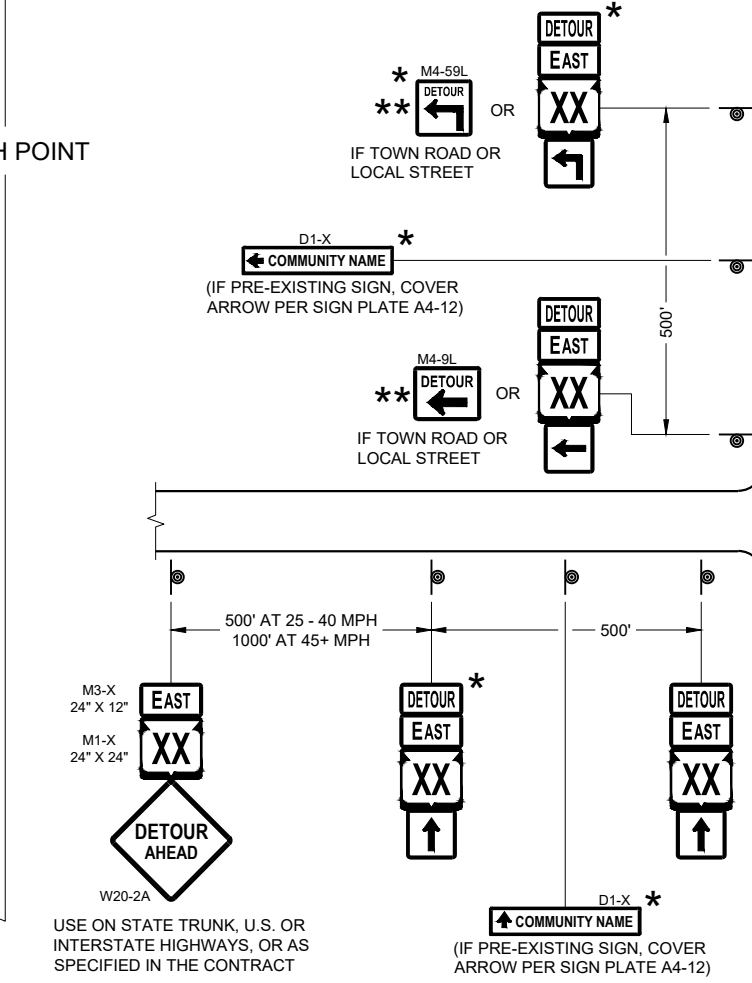
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING 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.

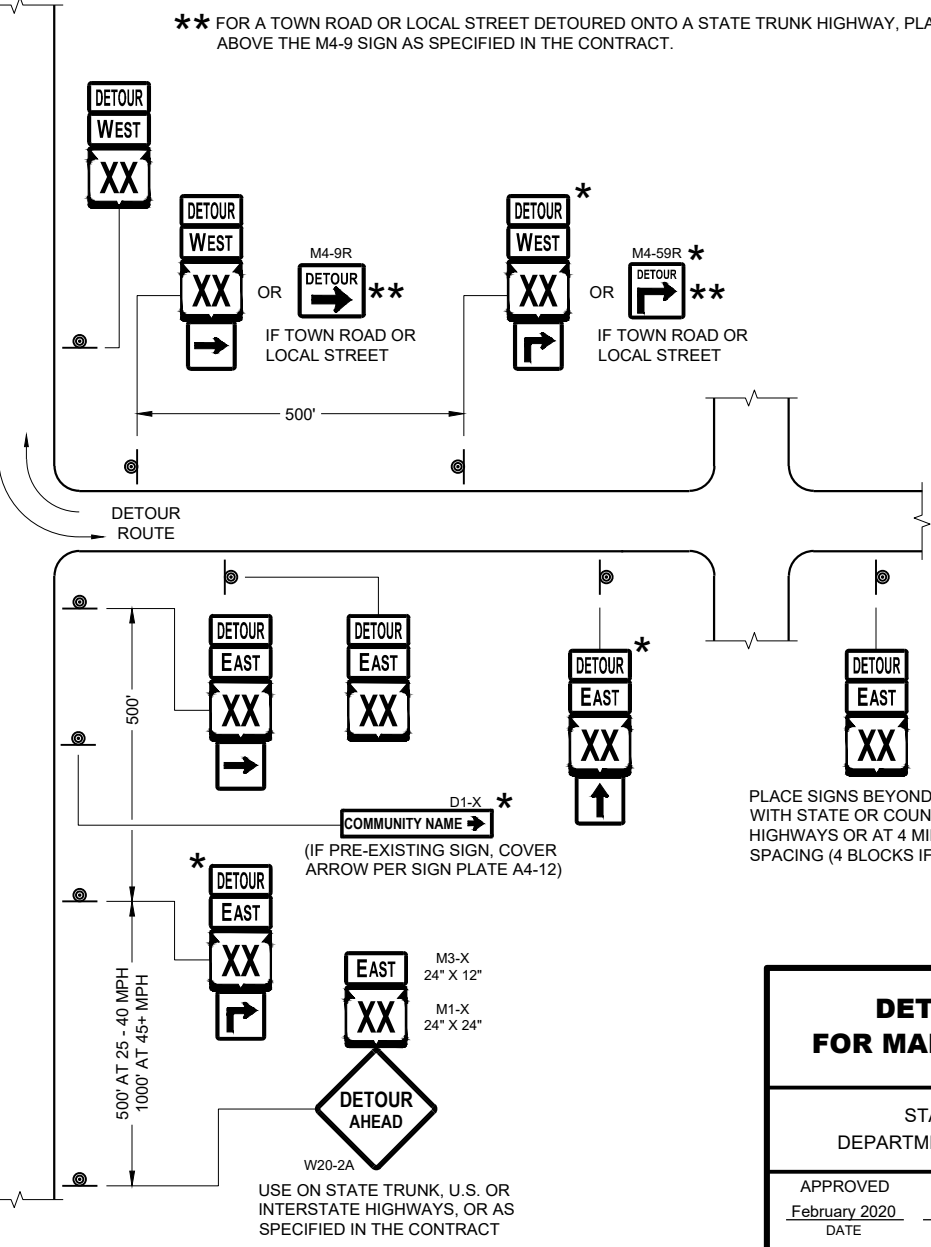
\*\* FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT



**DETAIL F  
DETOUR SIGNING**



PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

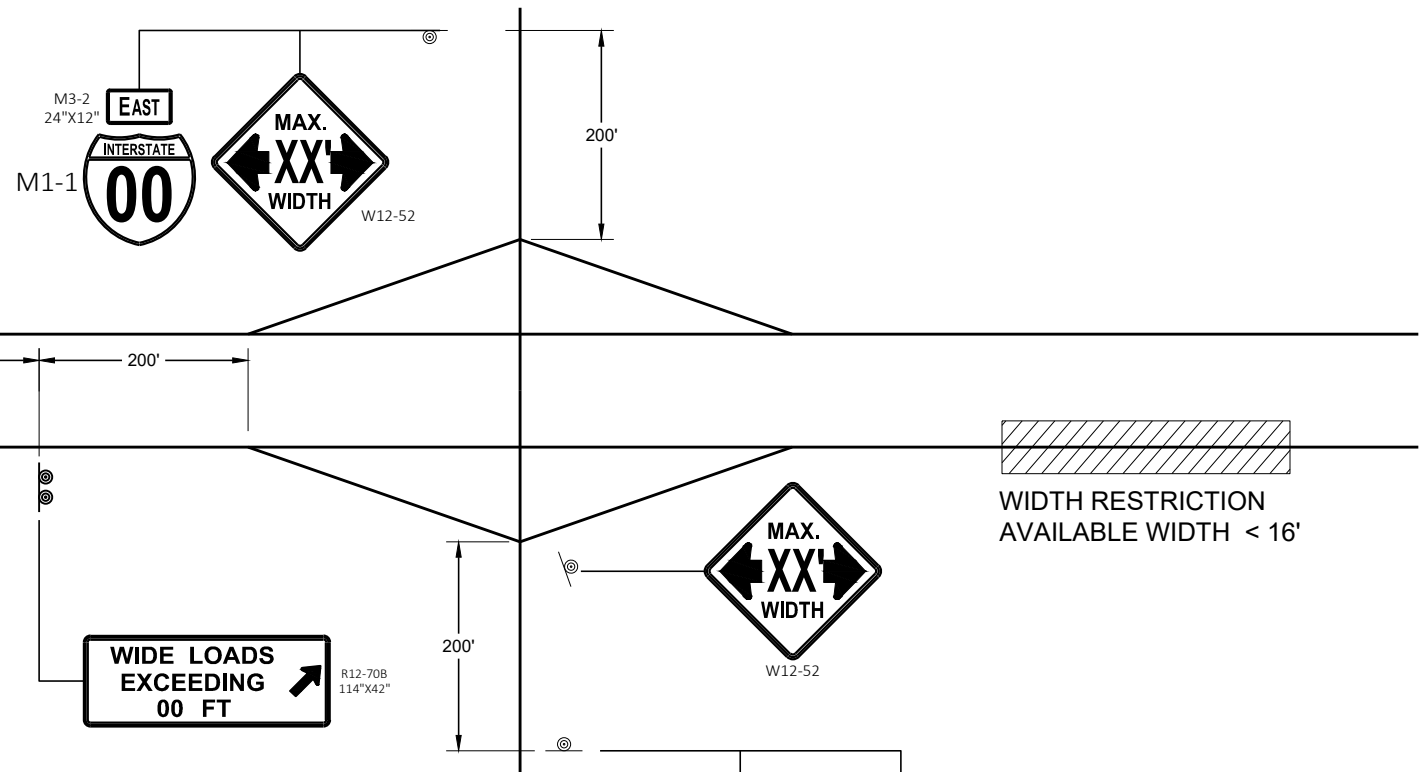
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

**DETOUR SIGNING  
FOR MAINLINE CLOSURES**

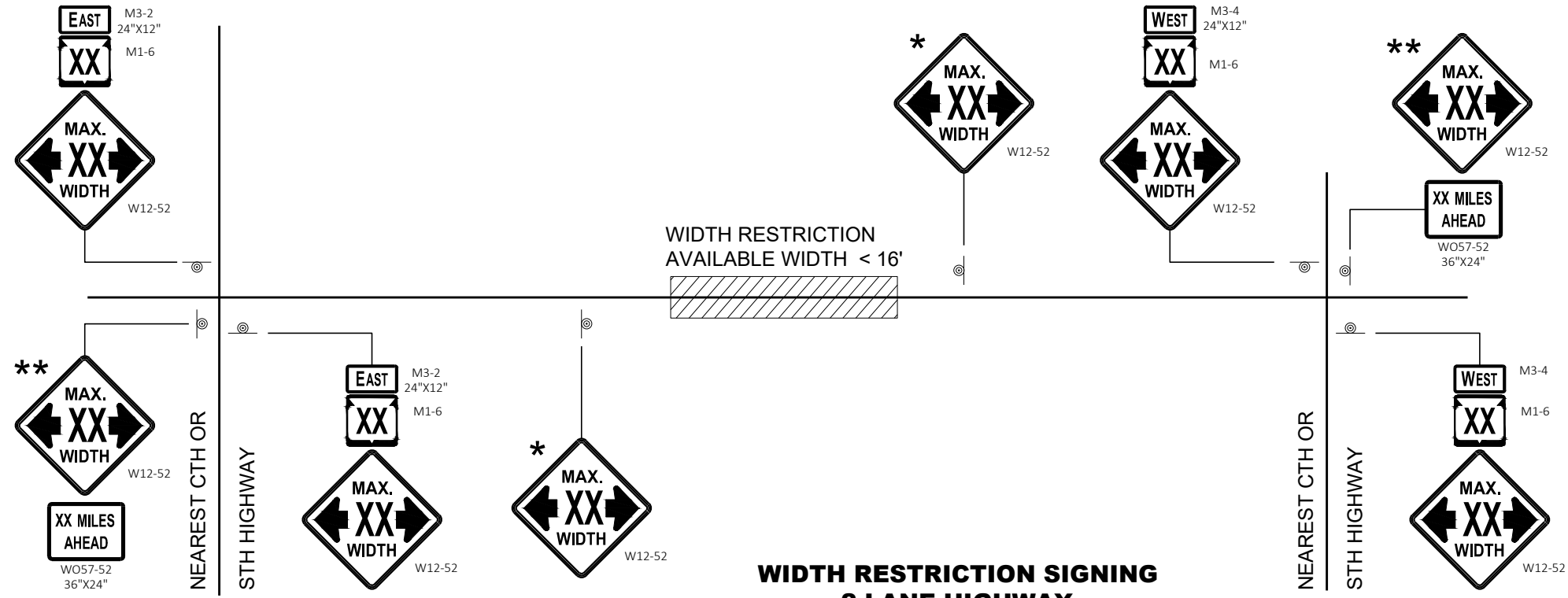
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2020 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER

FHWA



**WIDTH RESTRICTION SIGNING**



**WIDTH RESTRICTION SIGNING  
2 LANE HIGHWAY**

**LEGEND**

⊙ SIGN ON PERMANENT SUPPORT

**GENERAL NOTES**

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A 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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

\* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

\*\* SIGN SHALL BE VISIBLE FROM ROADWAY.

\*\*\* ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

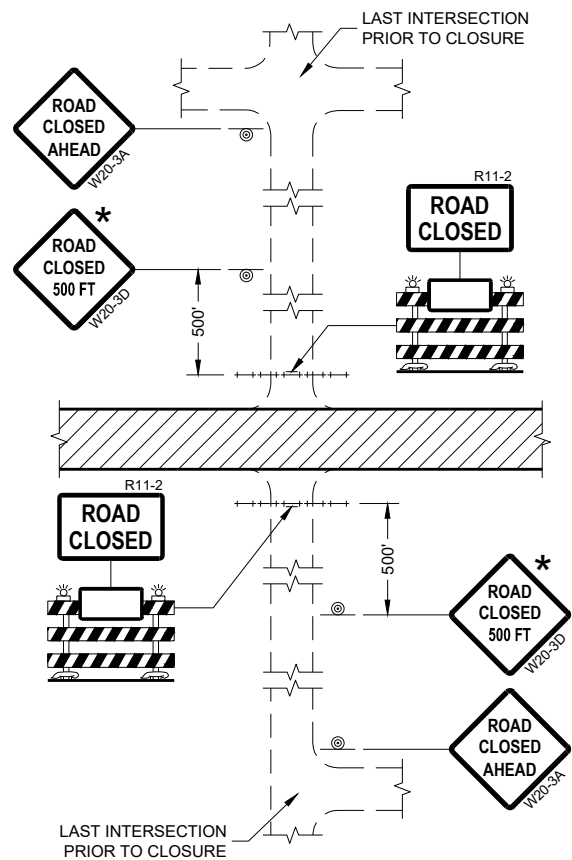


WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

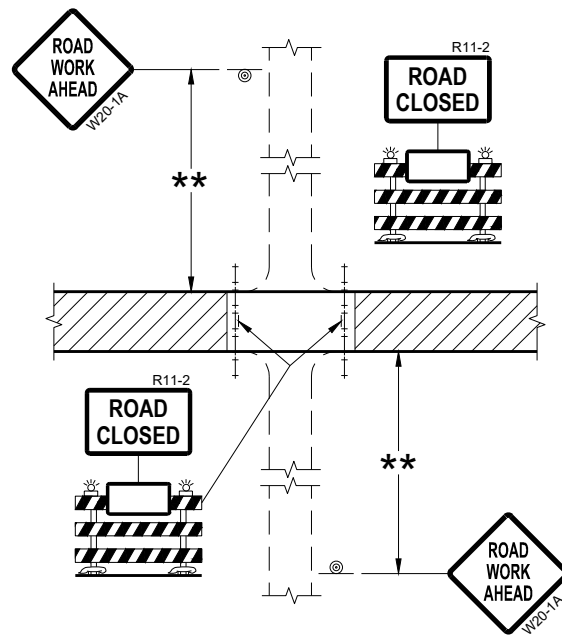
**ADVANCED WIDTH  
RESTRICTION SIGNING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

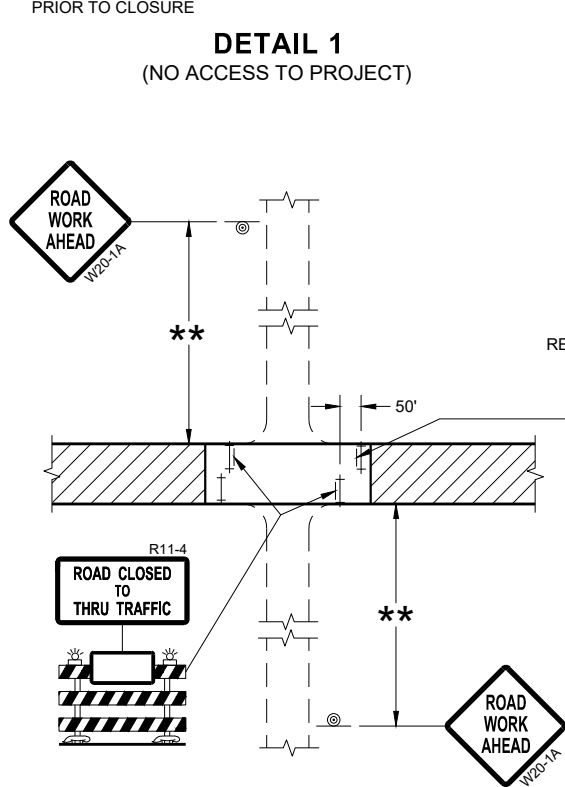
APPROVED  
February 2020 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER  
FHWA



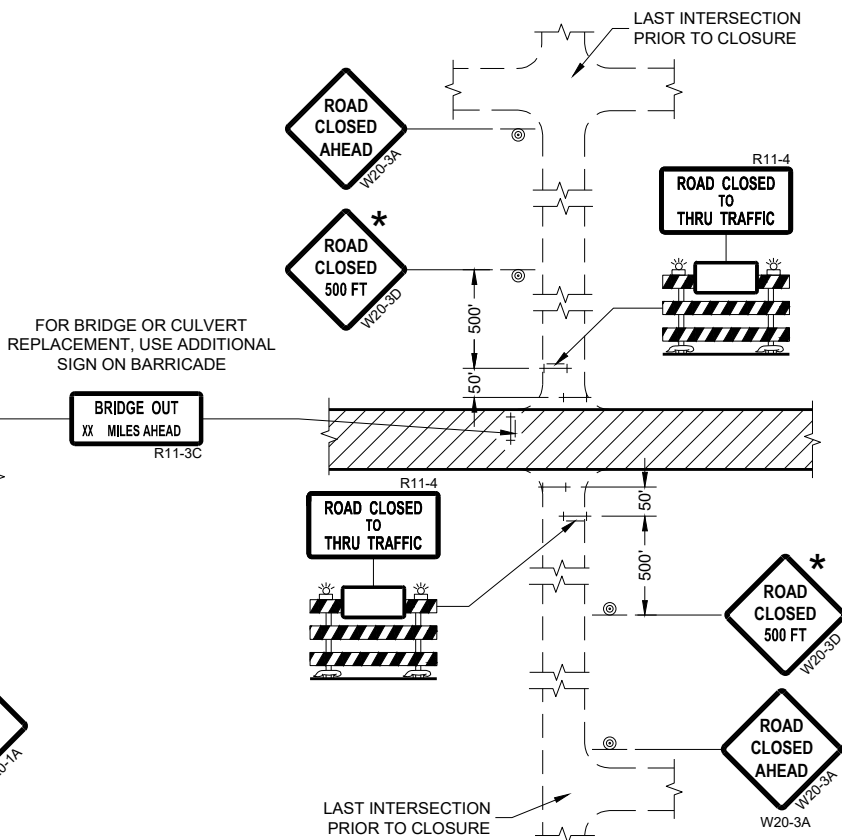
**DETAIL 1**  
(NO ACCESS TO PROJECT)



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



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



**DETAIL 4**  
(CONTRACTOR, LOCAL BUSINESS AND  
RESIDENT 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.

**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 ENGINEER
FHWA	

**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.

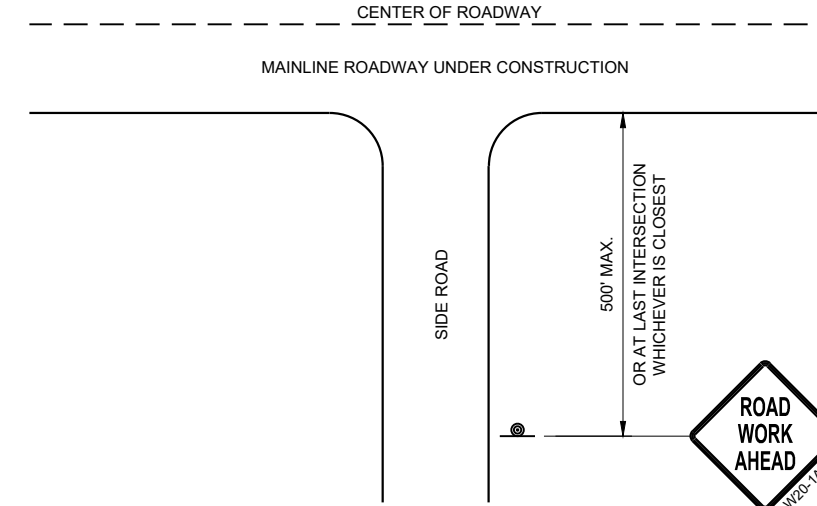
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

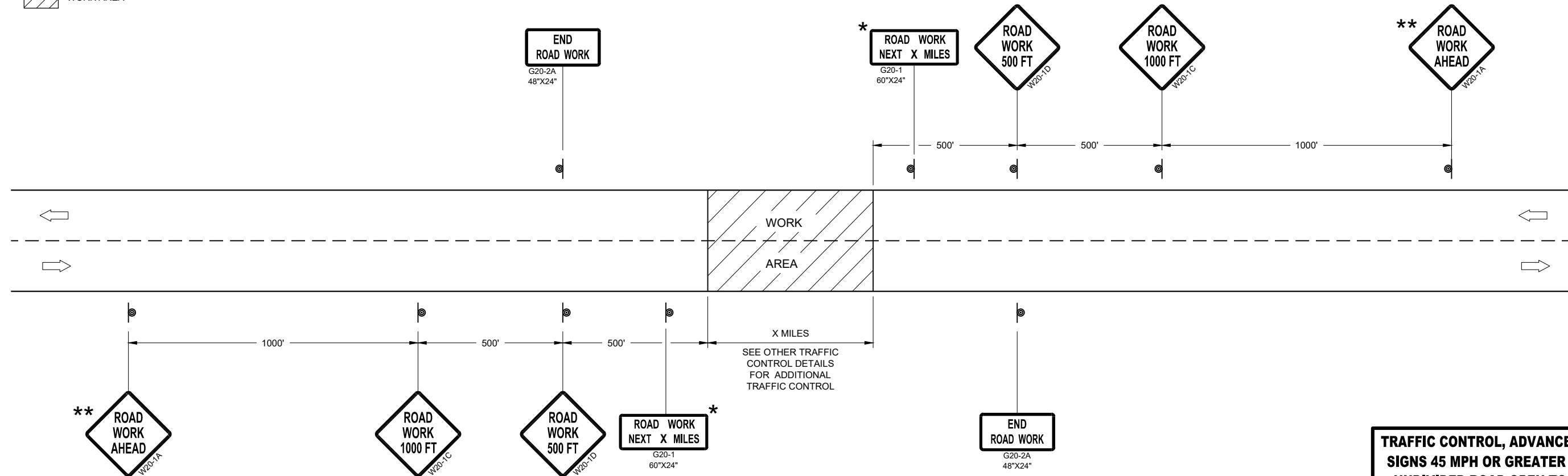
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



**TYPICAL SIDE ROAD APPROACH  
WARNING SIGN DETAIL**



**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER**

**TRAFFIC CONTROL, ADVANCE WARNING  
SIGNS 45 MPH OR GREATER TWO-WAY  
UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE July 2018 /S/ Andrew Heidtke  
WORK ZONE ENGINEER

FHWA

**GENERAL NOTES**

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

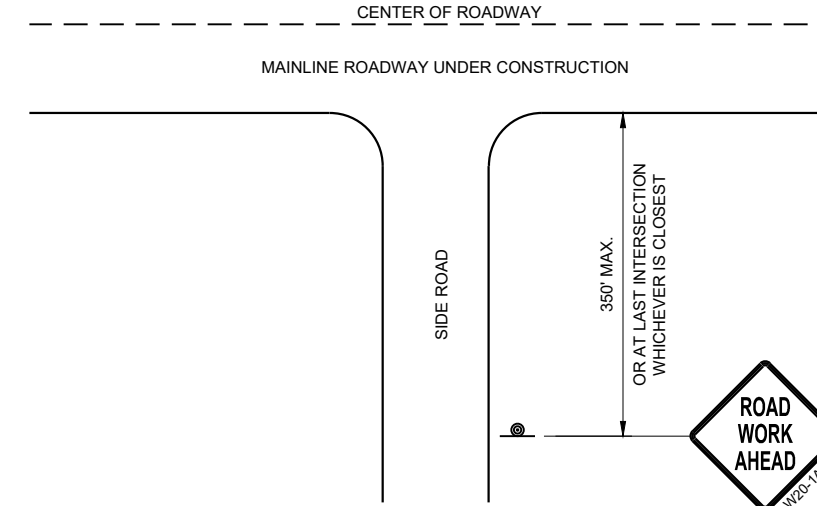
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

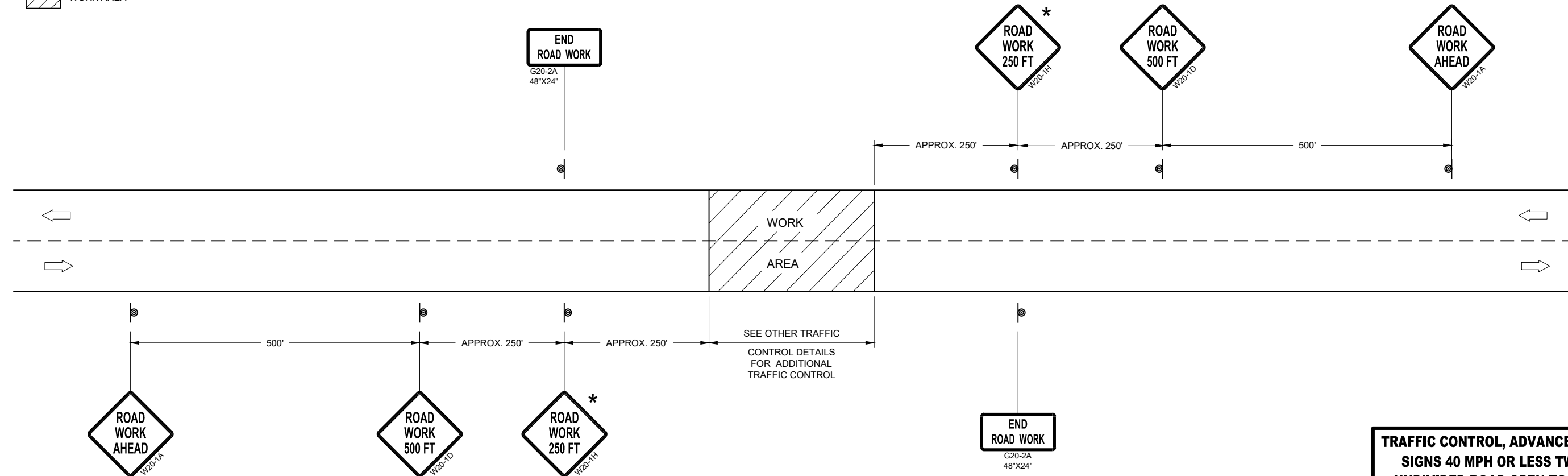
\* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



**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 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER




FHWA

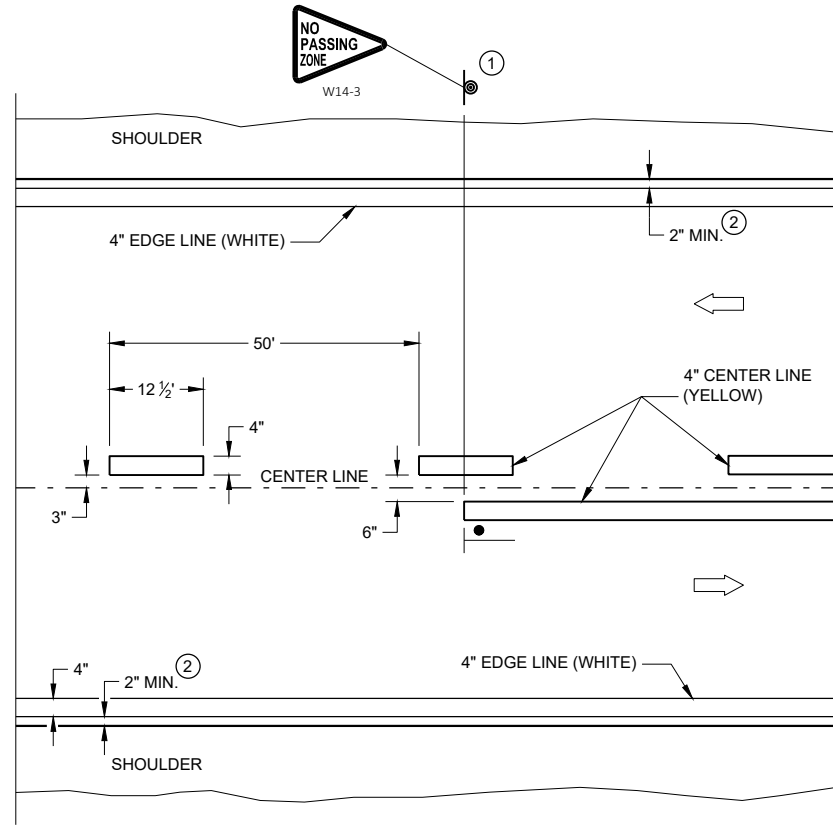
**GENERAL NOTES**

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

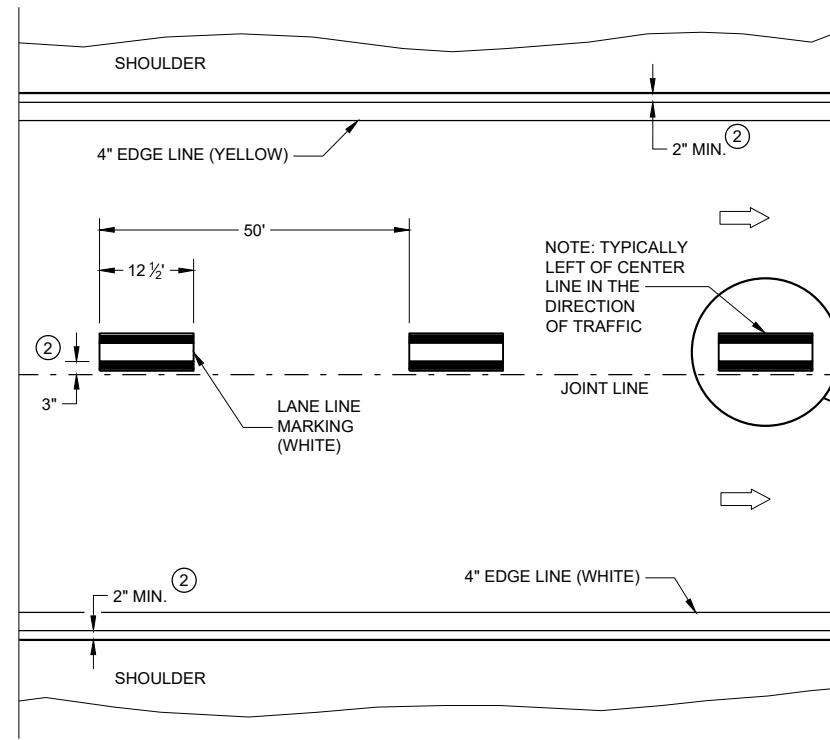
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

**LEGEND**

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

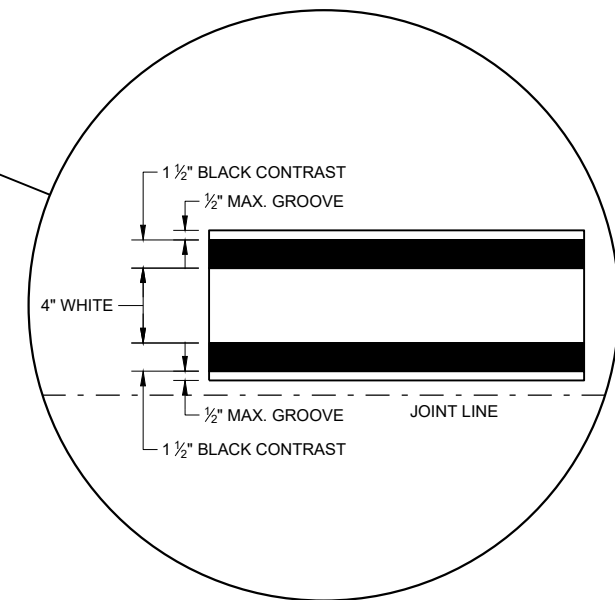


**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**

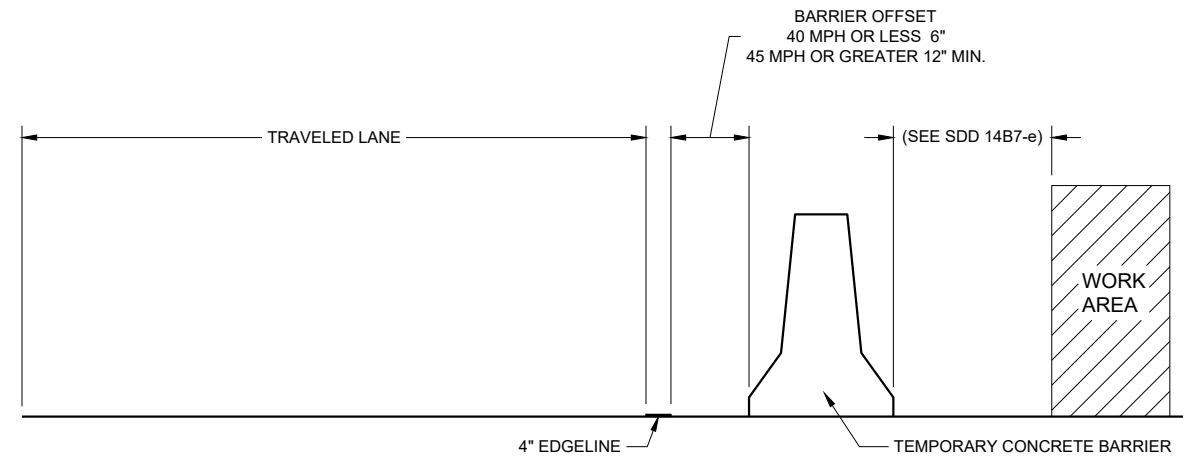
**PERMANENT PAVEMENT MARKING**



**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE: May 2022 /S/ Jeannie Silver  
STATEWIDE SIGNING AND MARKING ENGINEER



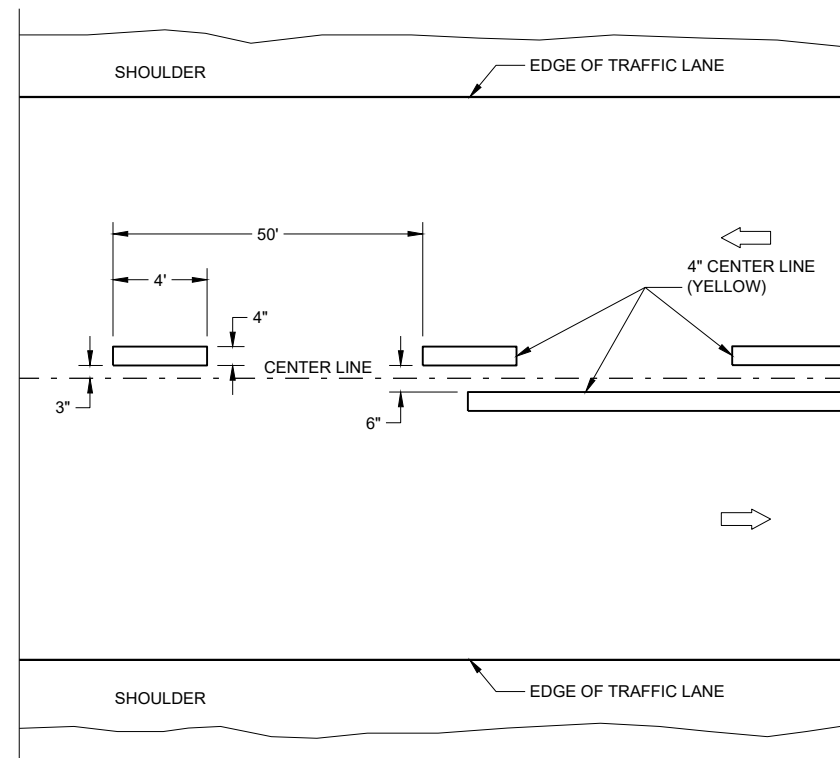
**TEMPORARY BARRIER OFFSET FROM EDGELINE**

**GENERAL NOTES**

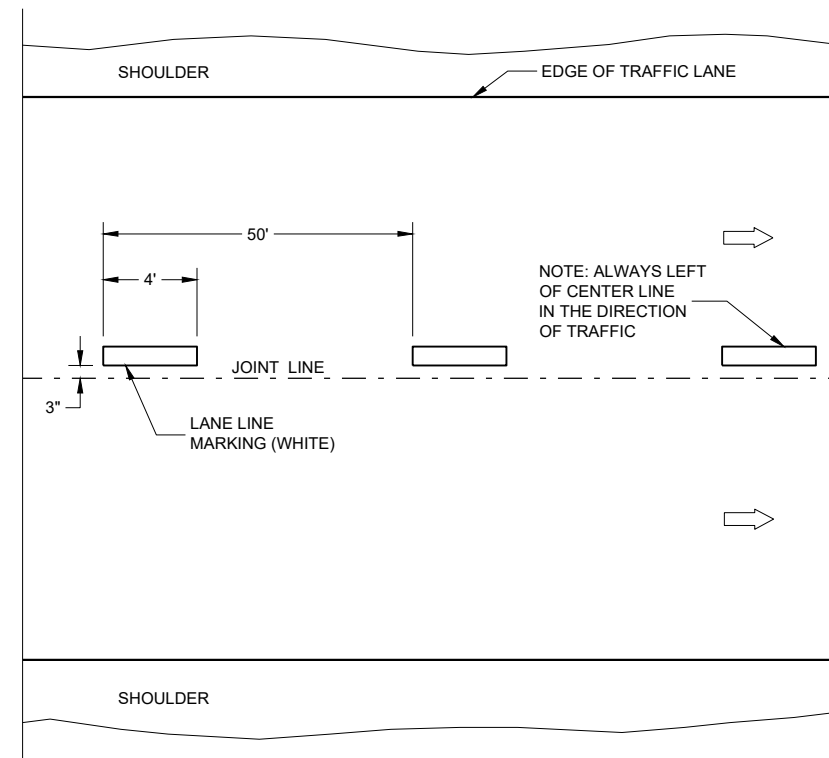
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

**LEGEND**

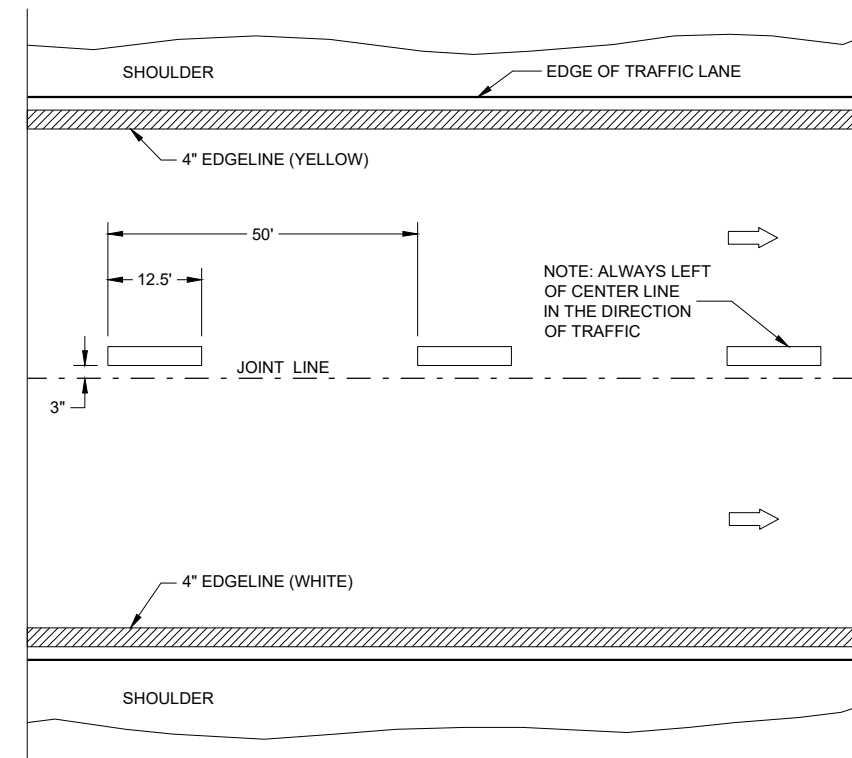
➡ DIRECTION OF TRAFFIC



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**



**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2022 DATE /S/ Jeannie Silver  
STATEWIDE SIGNING AND MARKING ENGINEER

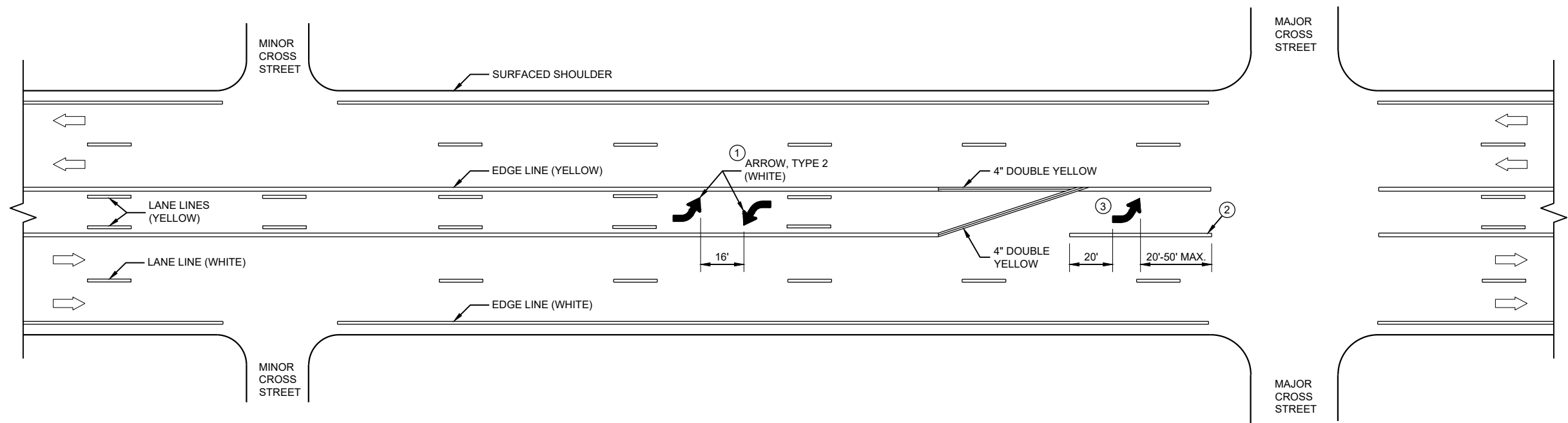
FHWA



**GENERAL NOTES**

- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 8" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC



**TWO WAY LEFT TURN LANE**

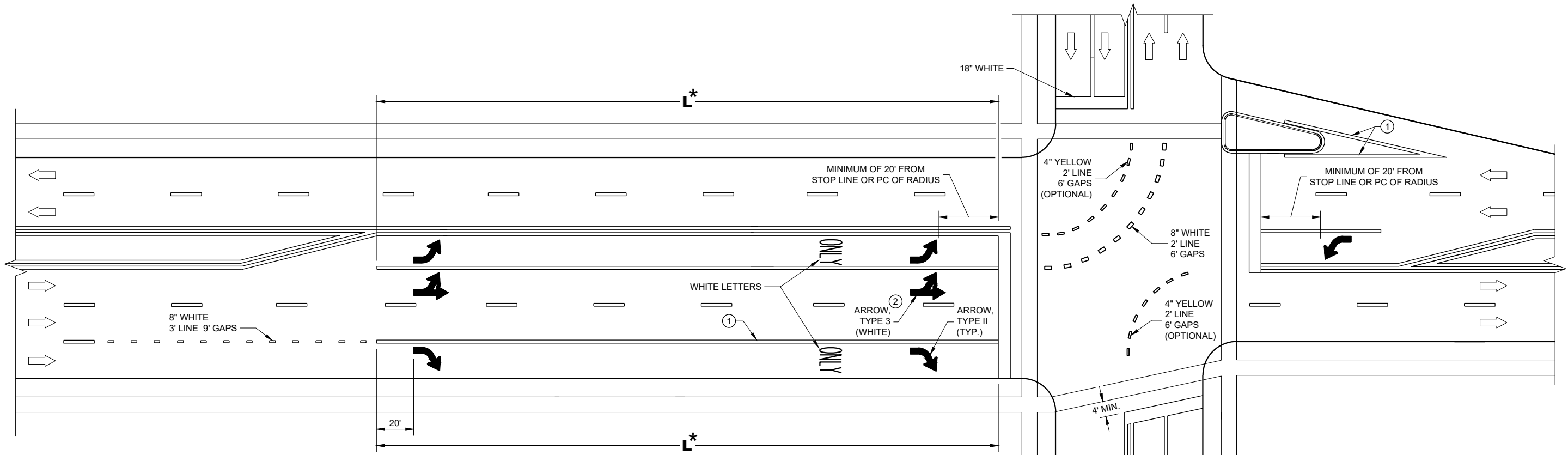
6

6

SDD 15C08 - 21c

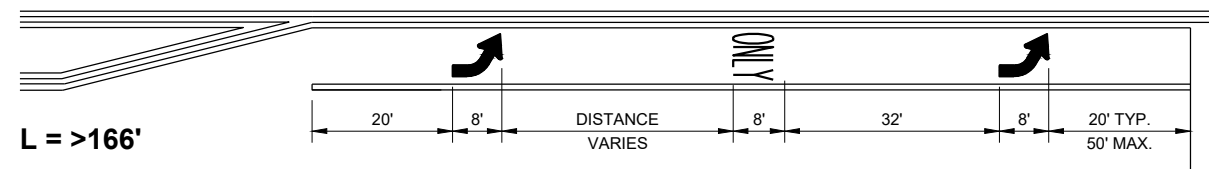
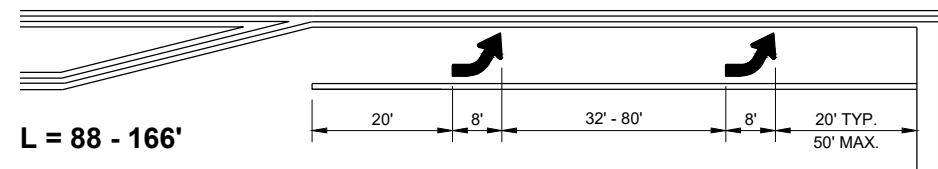
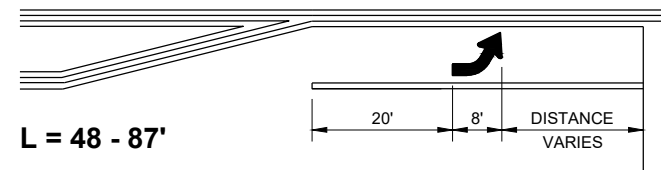
SDD 15C08 - 21c

<p><b>PAVEMENT MARKING (TURN LANES)</b></p>
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>



**TURN LANE OPTIONS**

LENGTH OF TURN BAY (  $L$  ) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



\*(SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

**GENERAL NOTES**

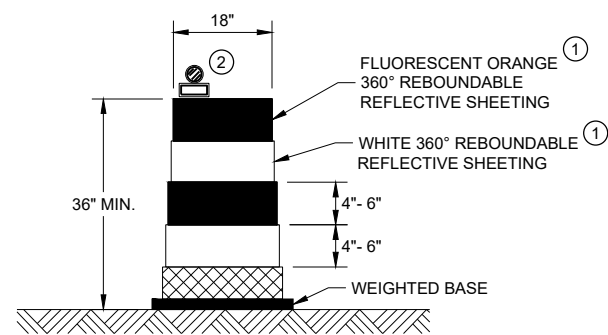
- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

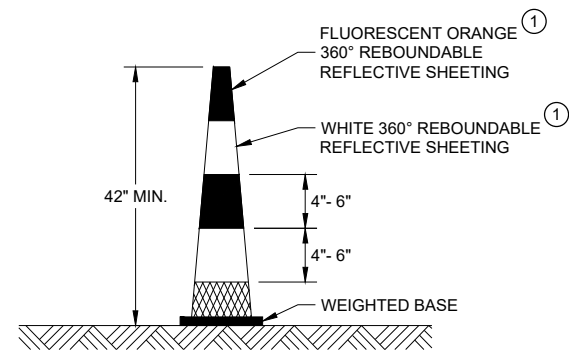
$L$  = LENGTH OF TURN BAY

**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

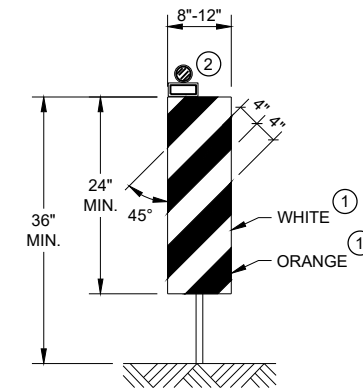


**DRUM**



**42" CONE**

DO NOT USE IN TAPERS  
 1/2 SPACING OF DRUMS

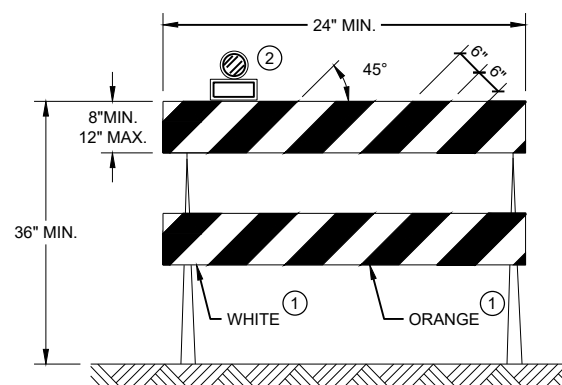


**VERTICAL PANEL**

THE STRIPES SHALL SLOPE DOWNWARD TO  
 THE TRAFFIC SIDE FOR CHANNELIZATION.

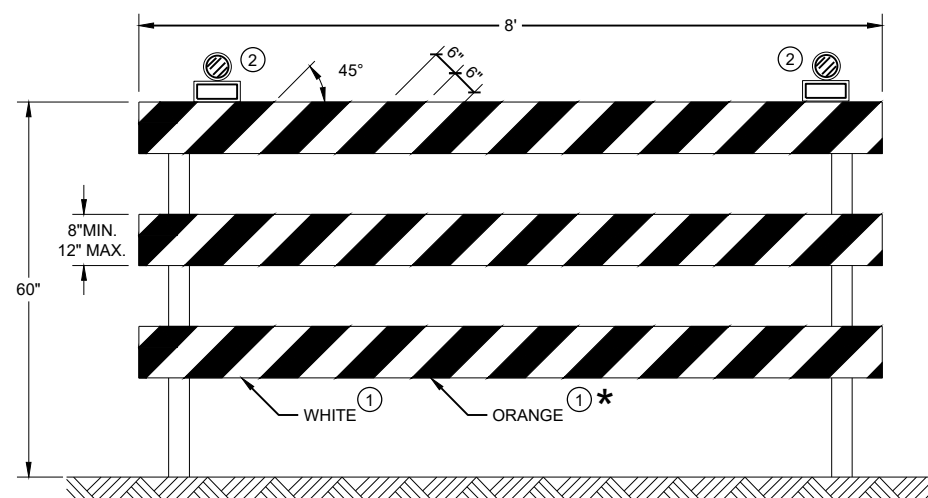
**GENERAL NOTES**

- 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.



**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.

<b>CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

**LEGEND**

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

**GENERAL NOTES**

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

**FLAGGING**

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

**TEMPORARY PORTABLE RUMBLE STRIPS**

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

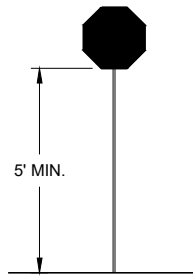
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



**STOP/SLOW PADDLE ON SUPPORT STAFF**

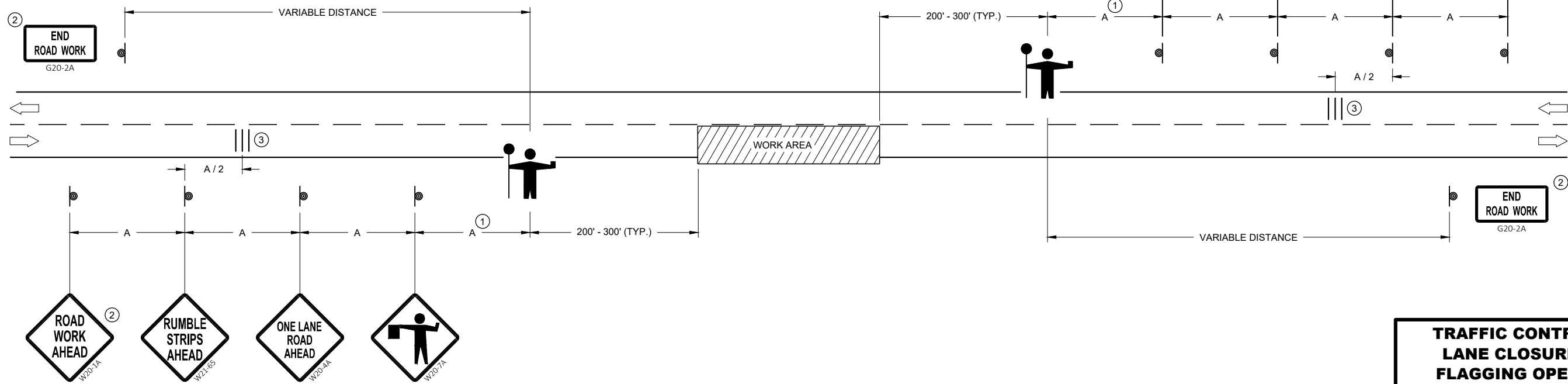
**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W03-4

USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".







**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE: May 2022 /S/ Andrew Heidtke  
WORK ZONE ENGINEER

FHWA

**LEGEND**

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

**GENERAL NOTES**

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

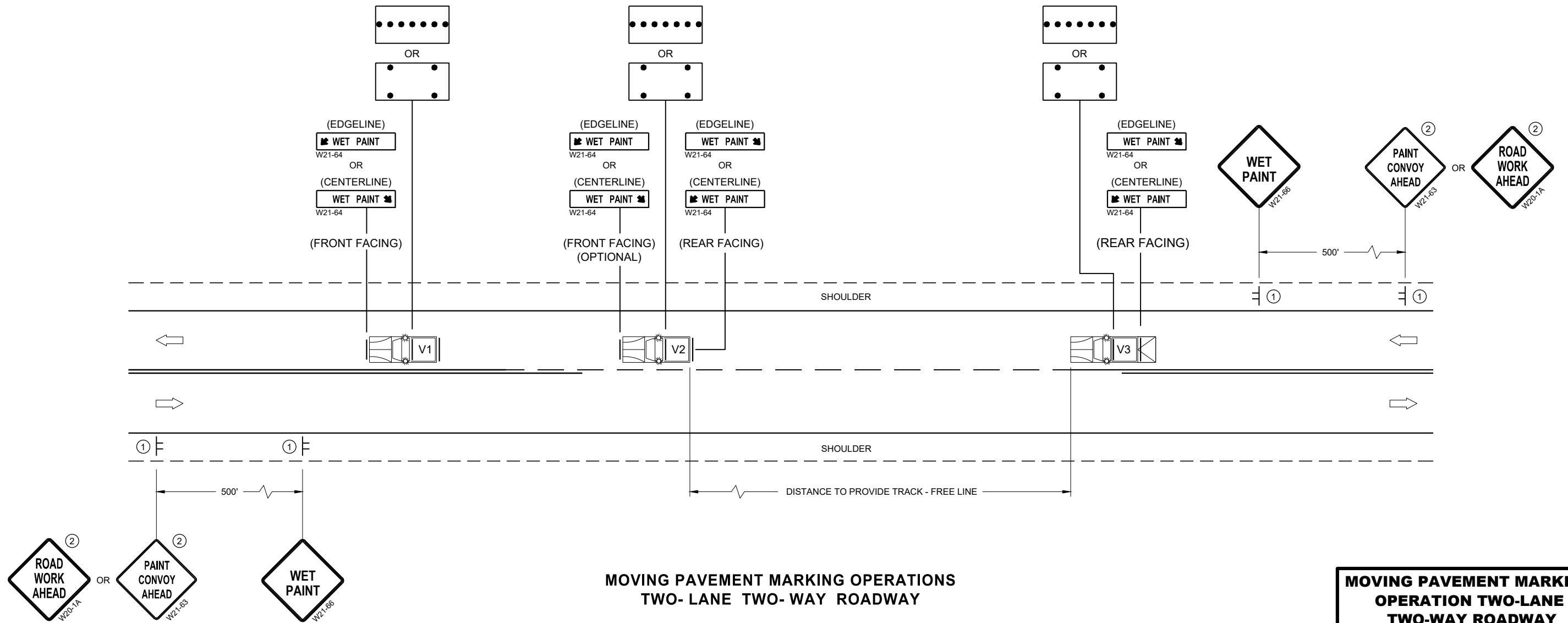
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

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


**MOVING PAVEMENT MARKING OPERATIONS  
TWO-LANE TWO-WAY ROADWAY**

**SDD 15C19 - 06a**

**SDD 15C19 - 06a**

<b>MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

**LEGEND**

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

**GENERAL NOTES**

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

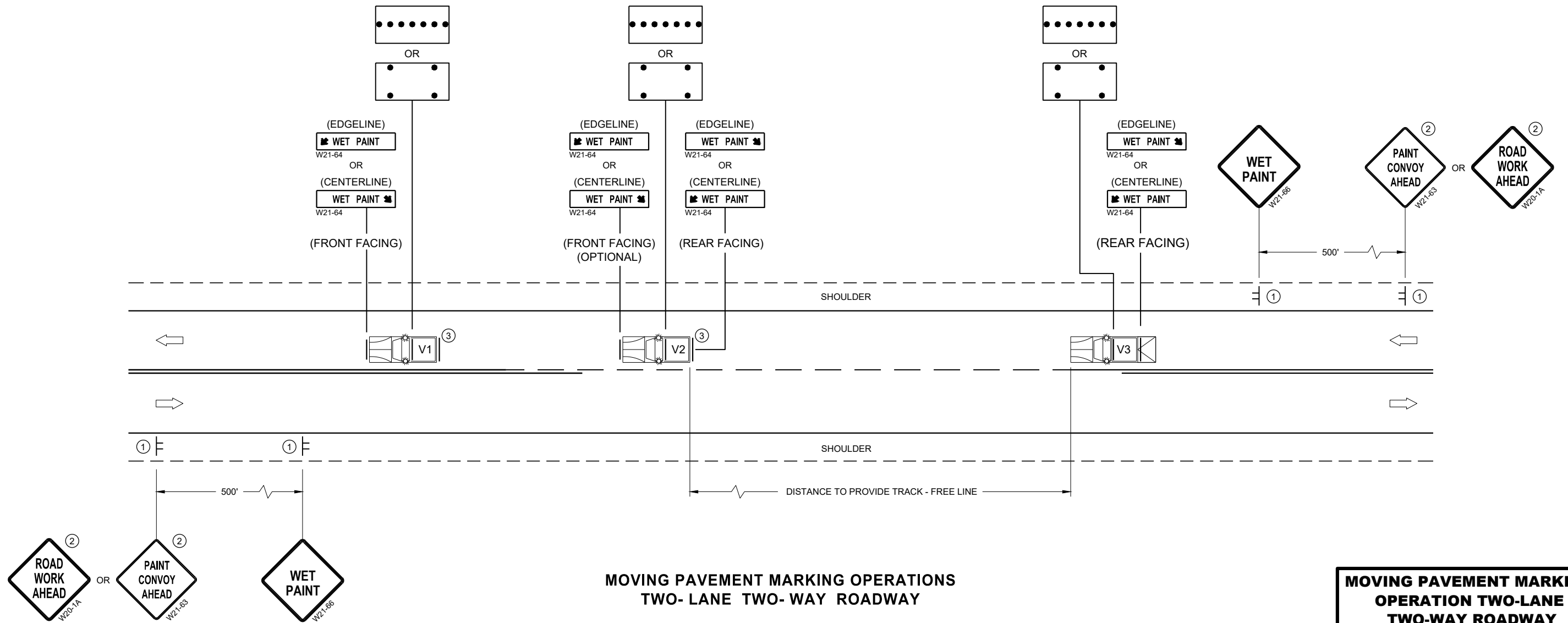
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.

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**MOVING PAVEMENT MARKING OPERATIONS  
TWO-LANE TWO-WAY ROADWAY**

**SDD 15C19 - 07a**

**SDD 15C19 - 07a**

<b>MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

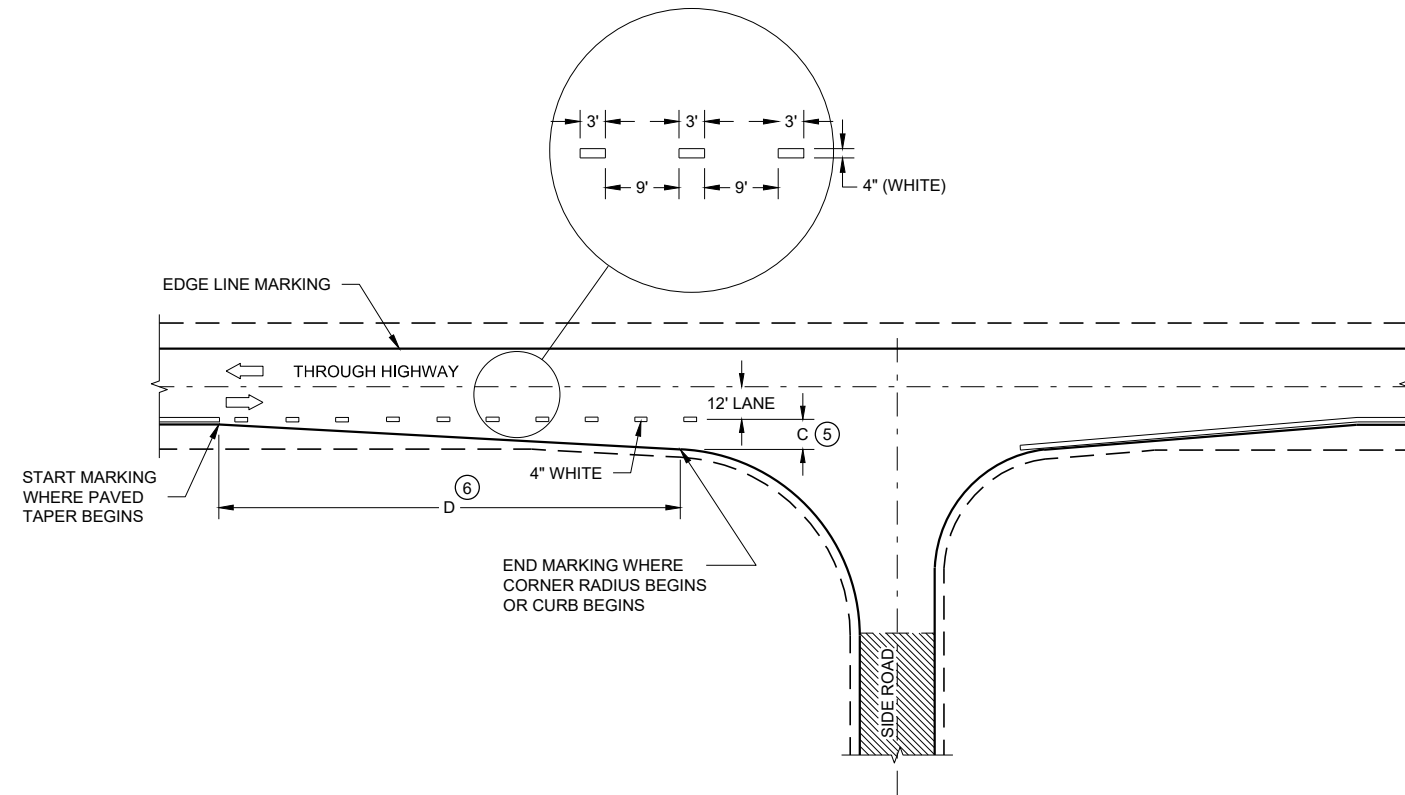
**GENERAL NOTES**

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

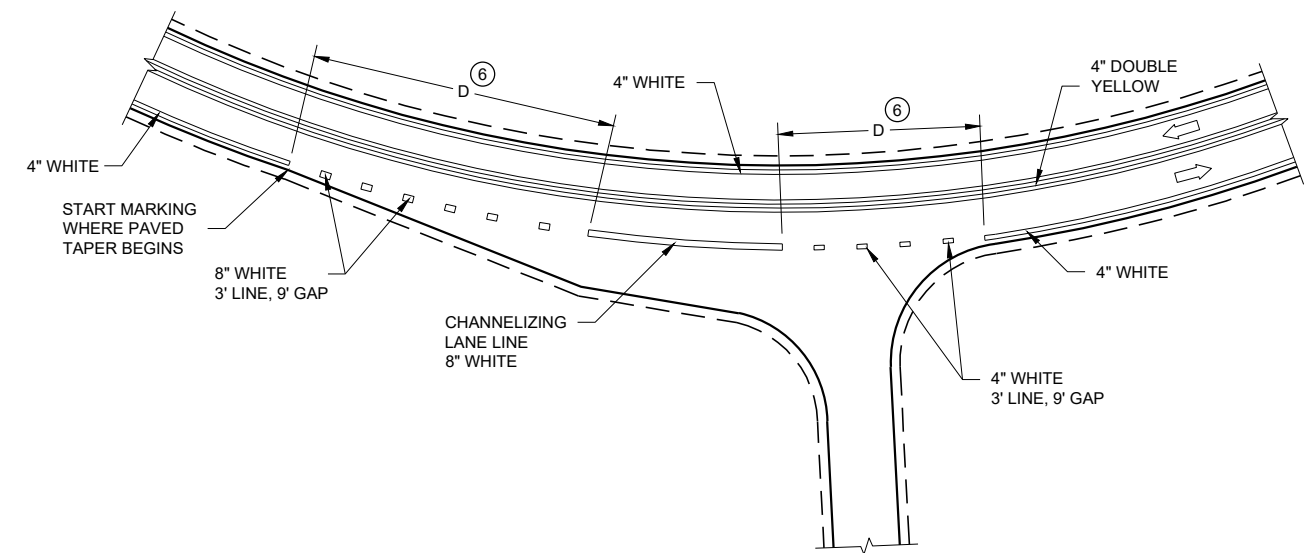
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

**LEGEND**

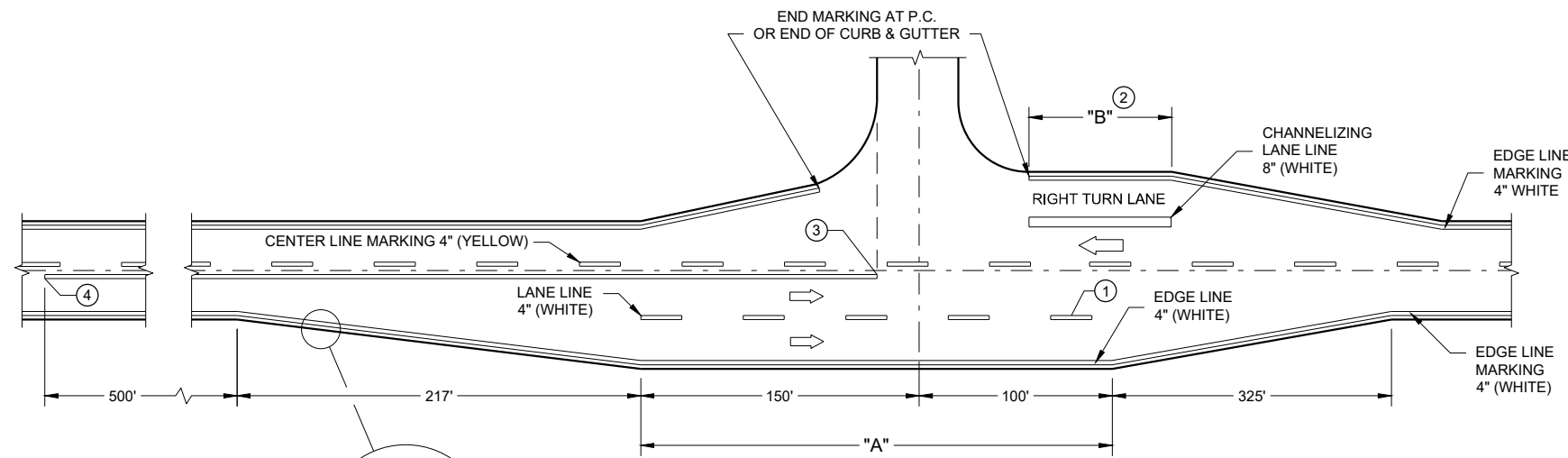
➡ DIRECTION OF TRAVEL



**MINOR INTERSECTION**

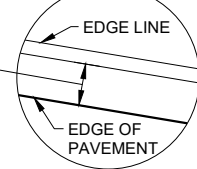


**INTERSECTION ON OUTSIDE OF CURVE**



**MAJOR INTERSECTIONS  
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**





BYPASS LANE PAVED SHOULDER WIDTH (AS SHOWN ELSEWHERE IN PLANS) - PLUS 2 INCHES



**PAVEMENT MARKING  
(INTERSECTIONS)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

**GENERAL NOTES**

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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

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

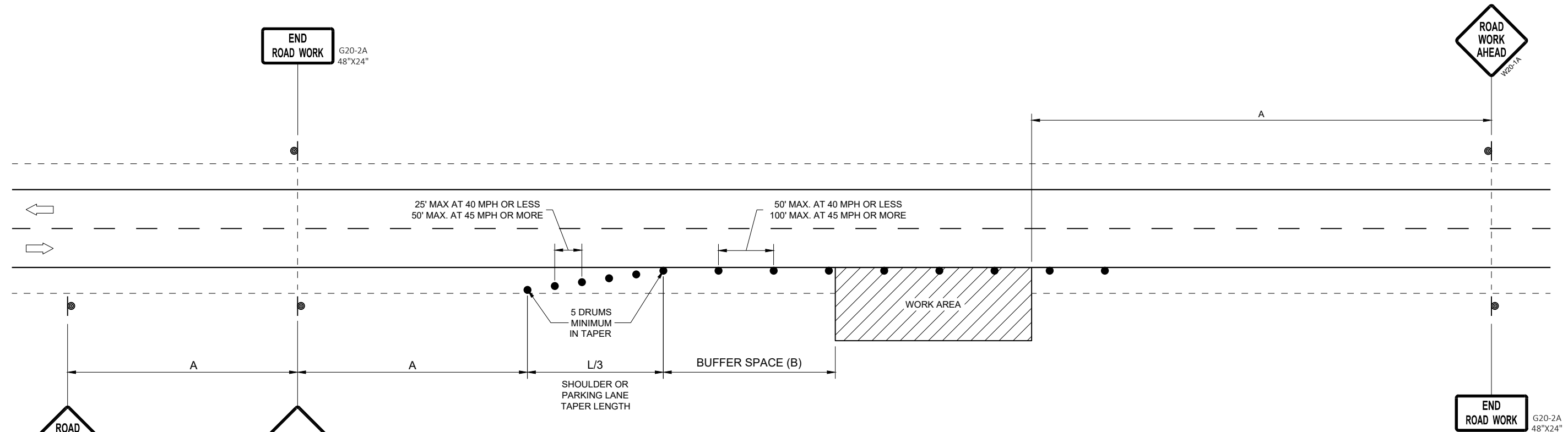
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

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OR  
IF TRAFFIC CONTROL DEVICES  
ENCROACH ONTO TRAVELED WAY, USE



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

**TRAFFIC CONTROL, WORK ON  
SHOULDER OR PARKING LANE,  
UNDIVIDED ROADWAY**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

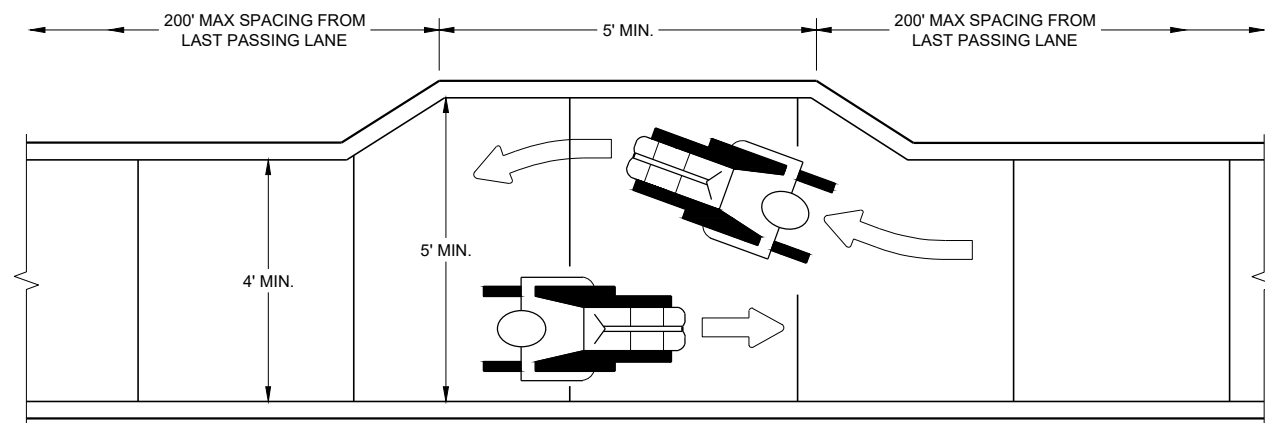
APPROVED  
May 2020 /S/ Andrew Heidtke  
DATE STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER

FHWA

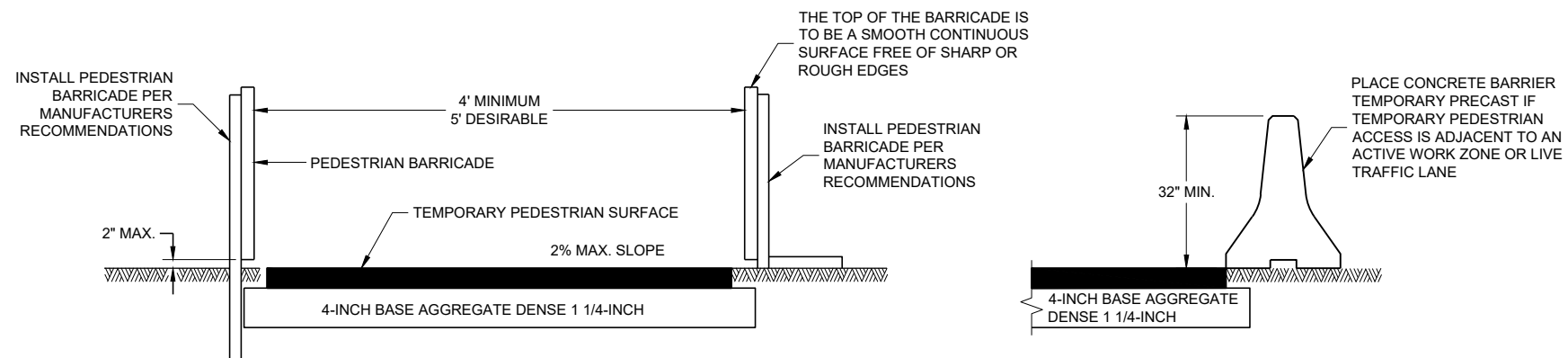
SDD 15D28 - 04

SDD 15D28 - 04





**NARROW SIDEWALK PASSING DETAIL**



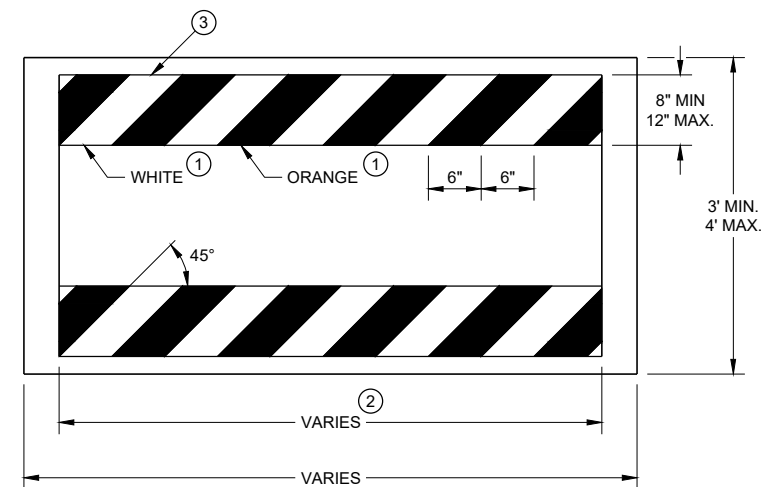
**TEMPORARY PEDESTRIAN ACCESS**

**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.



**TEMPORARY PEDESTRIAN BARRICADE\***

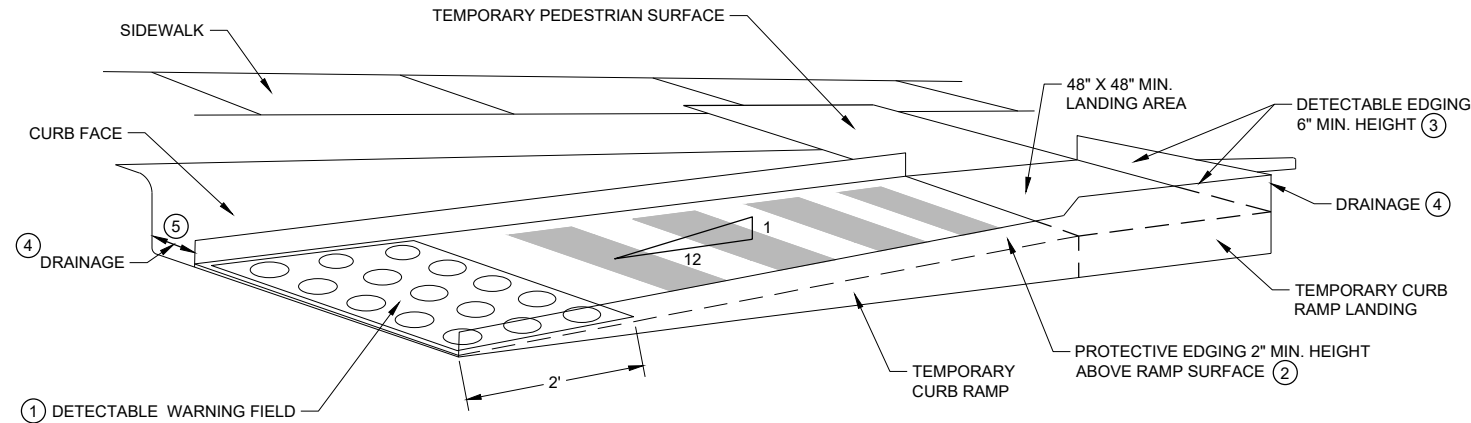
**TRAFFIC CONTROL,  
PEDESTRIAN  
ACCOMMODATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

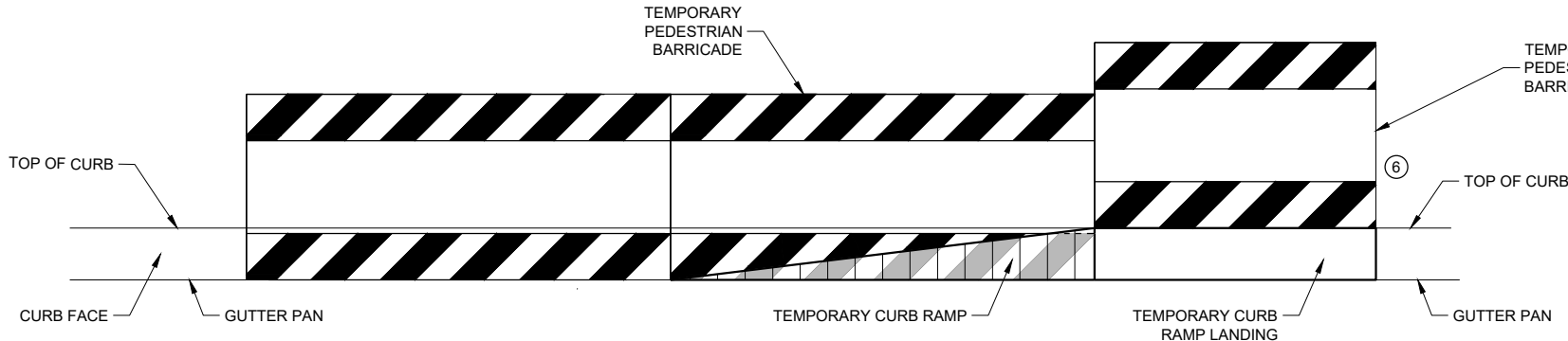
**GENERAL NOTES**

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 1/2" WIDTH.  
 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

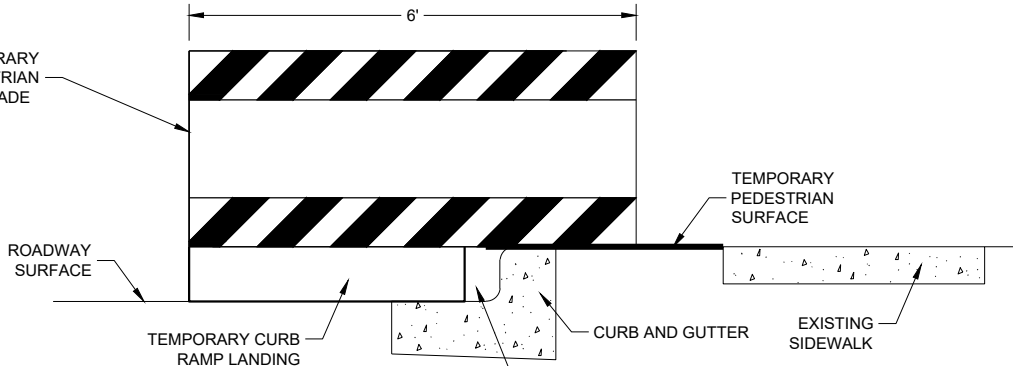
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). 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 6" MINIMUM BETWEEN CURB FACE AND EDGE OF RAMP
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



**PERSPECTIVE VIEW**



**FRONT VIEW**



**SIDE VIEW**

**TEMPORARY CURB RAMP PARALLEL TO CURB**

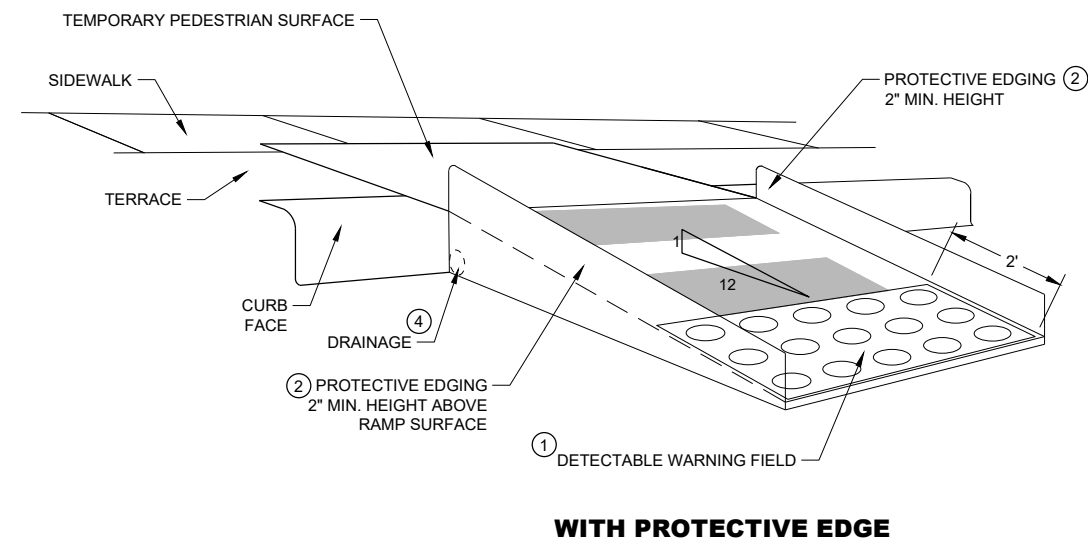
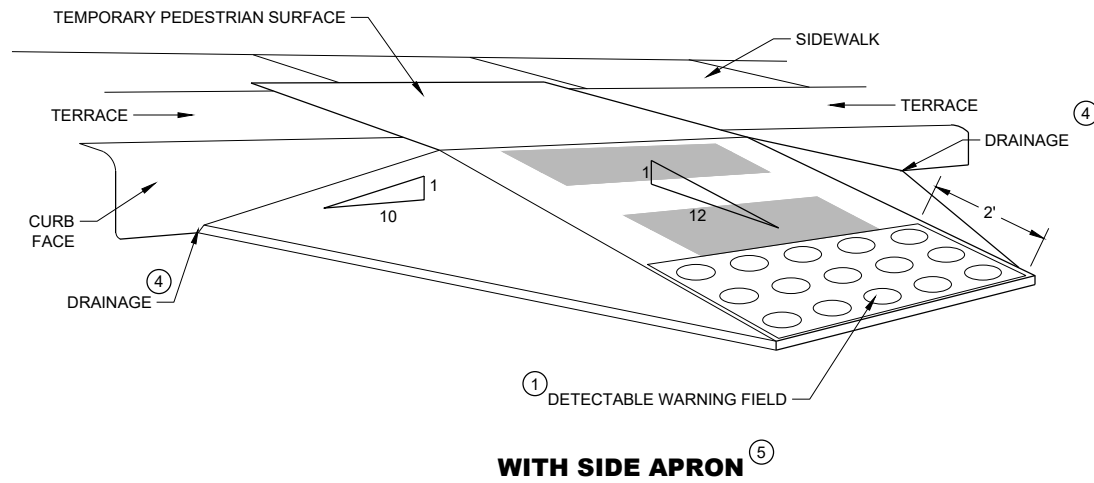
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SDD 15D30 - 07b

SDD 15D30 - 07b

<p><b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b></p>
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>



**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.

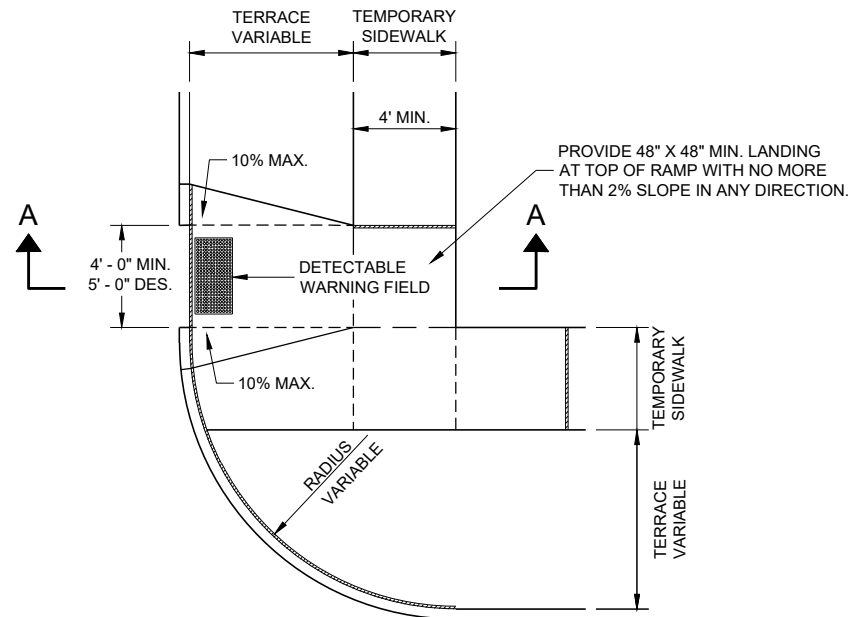
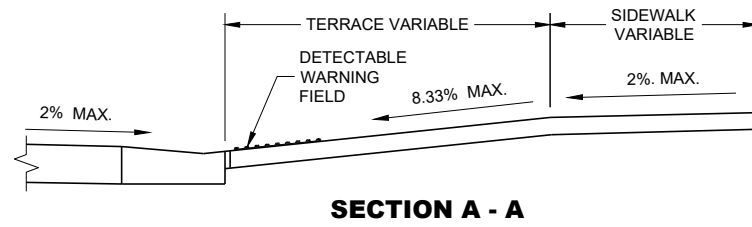
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

- 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.



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

6

6

SDD 15D30 - 07d

SDD 15D30 - 07d

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

**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 RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

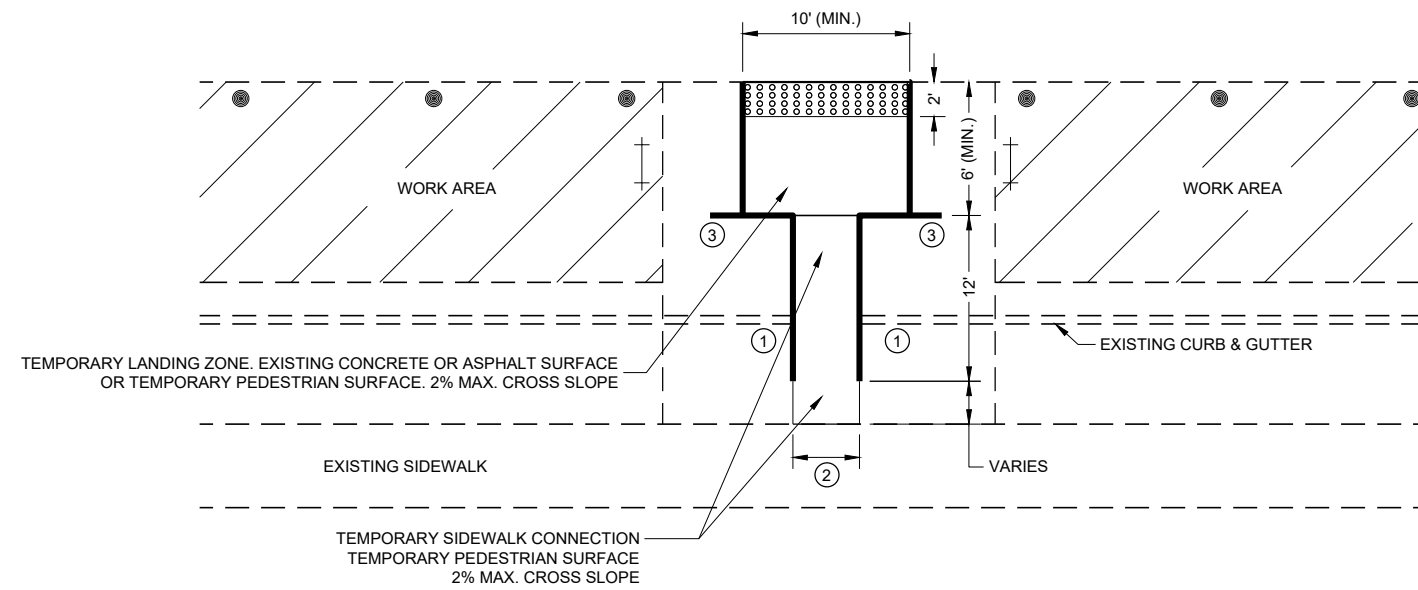
DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

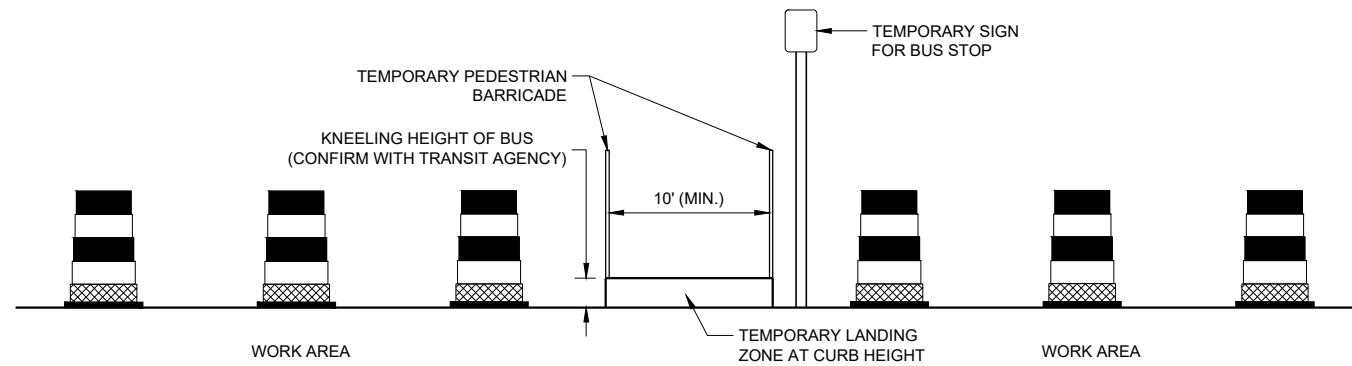
CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

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.



**PLAN VIEW**



**PROFILE VIEW  
TEMPORARY BUS STOP PAD**







**LEGEND**

- TRAFFIC CONTROL DRUM
- ⊥ TYPE III BARRICADE
- ▬ TEMPORARY PEDESTRIAN BARRICADE
- ⊞ TEMPORARY DETECTABLE WARNING FIELD
- ▨ WORK AREA

**TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION**

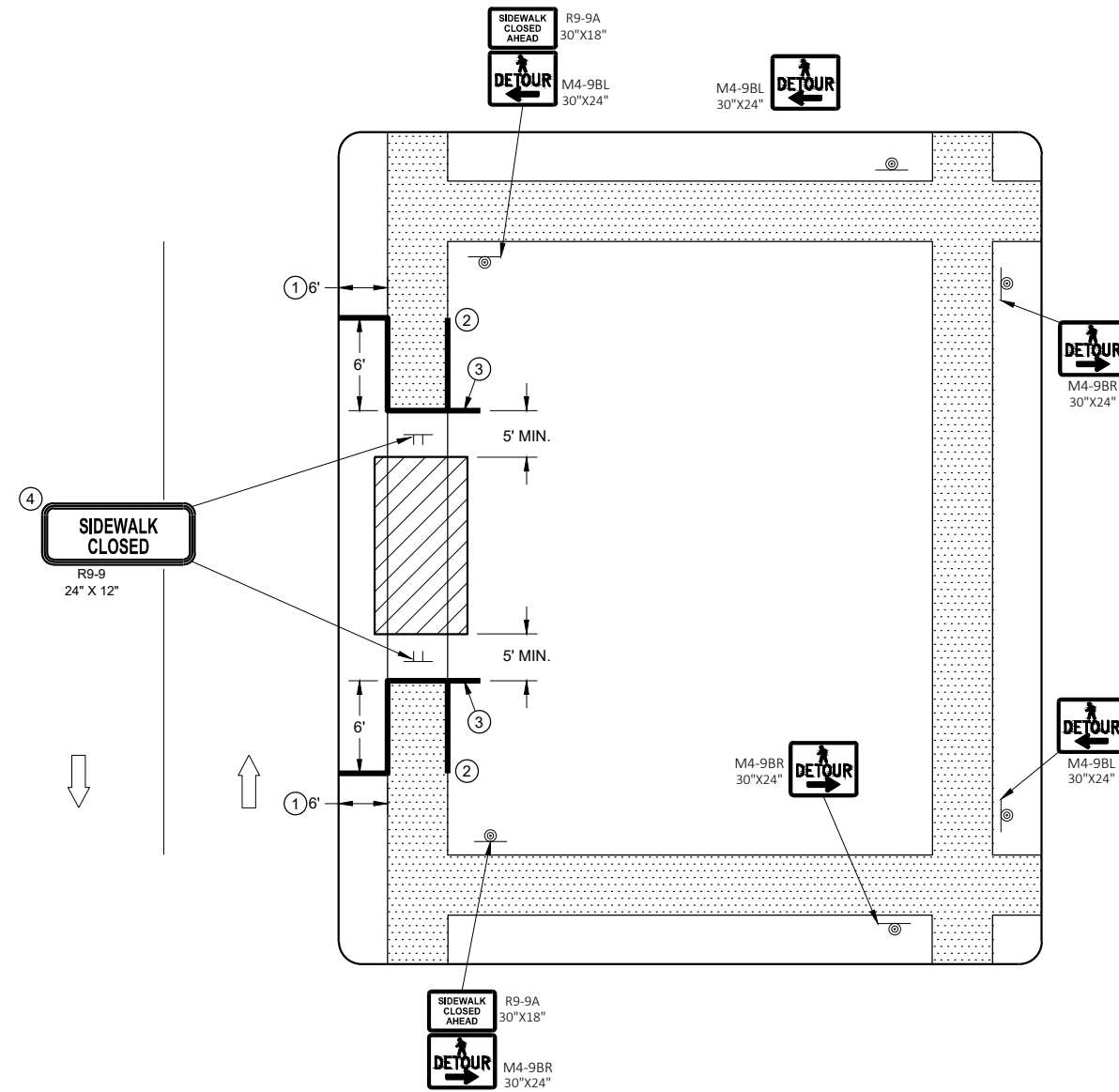
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**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.
- 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 ONLY ON ONE SIDE**

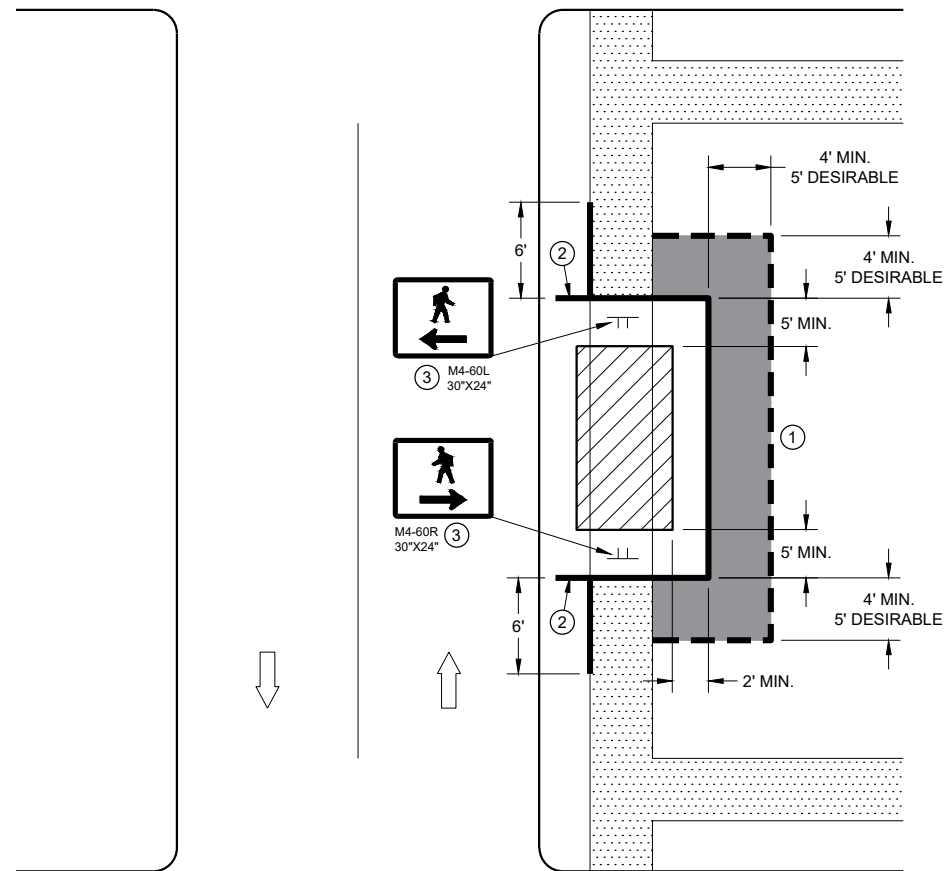
<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

**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.



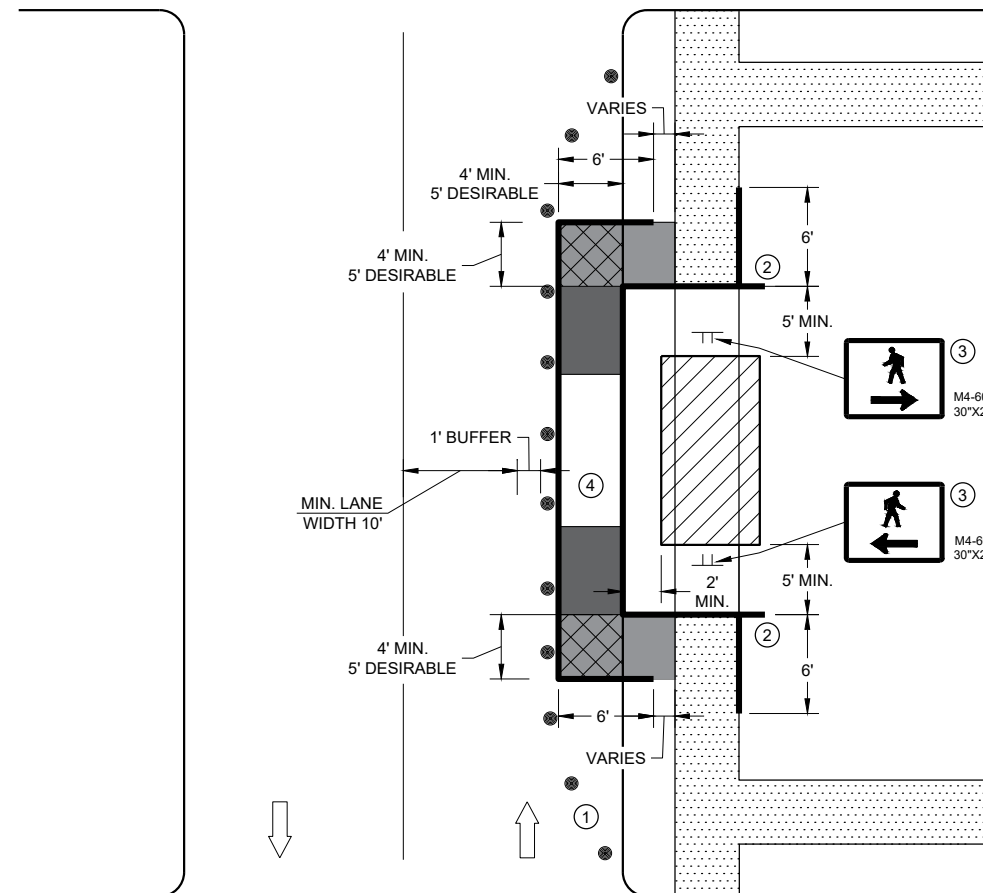
**SIDEWALK DIVERSION  
SINGLE SIDE**

**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 SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



**SIDEWALK DIVERSION, SINGLE SIDE**

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6

6

SDD 15D30 - 07h

SDD 15D30 - 07h



### 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.

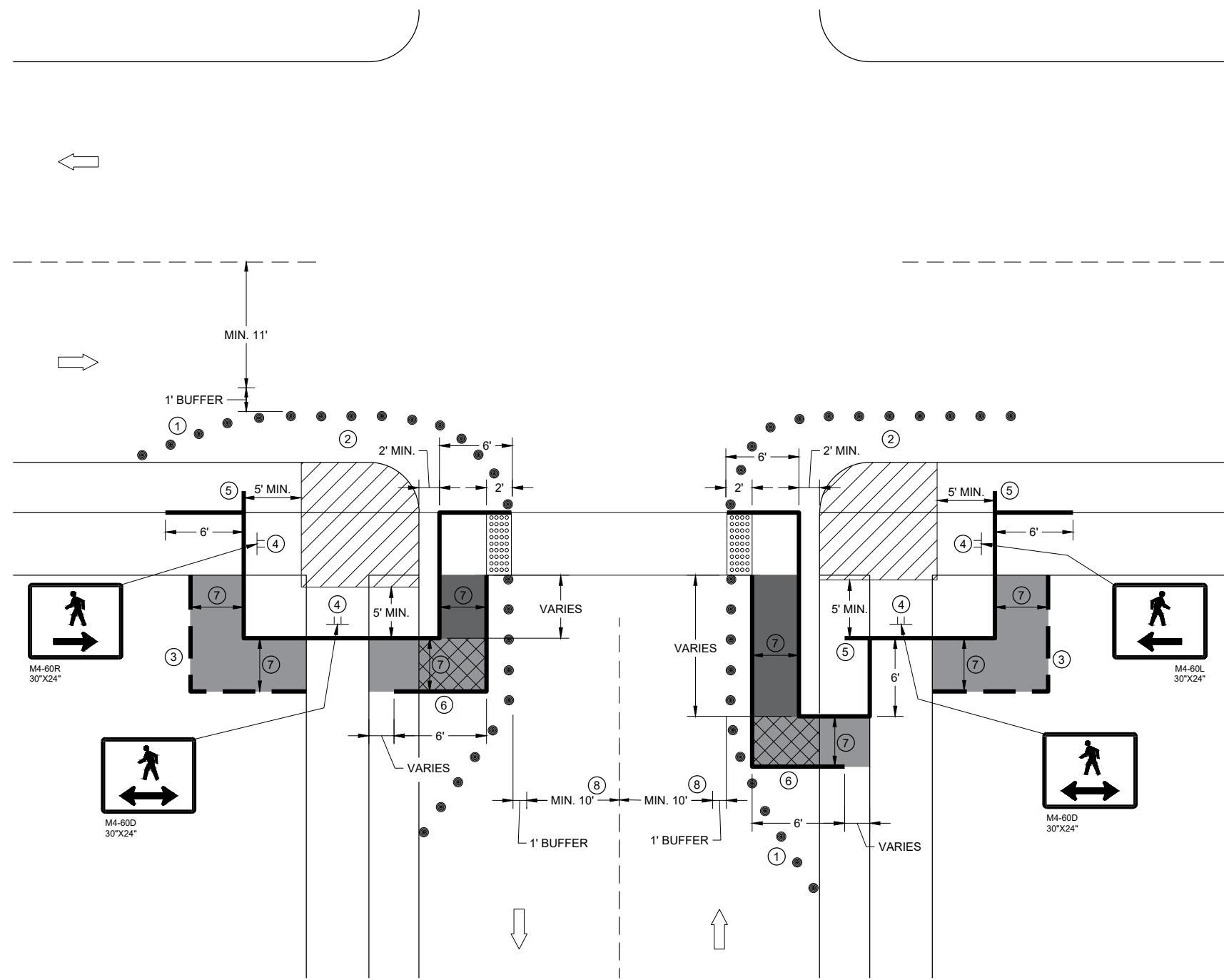
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

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



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL  
SIDEWALK ON SINGLE SIDE**

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6

6

SDD 15D30 - 07i

SDD 15D30 - 07i

**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.

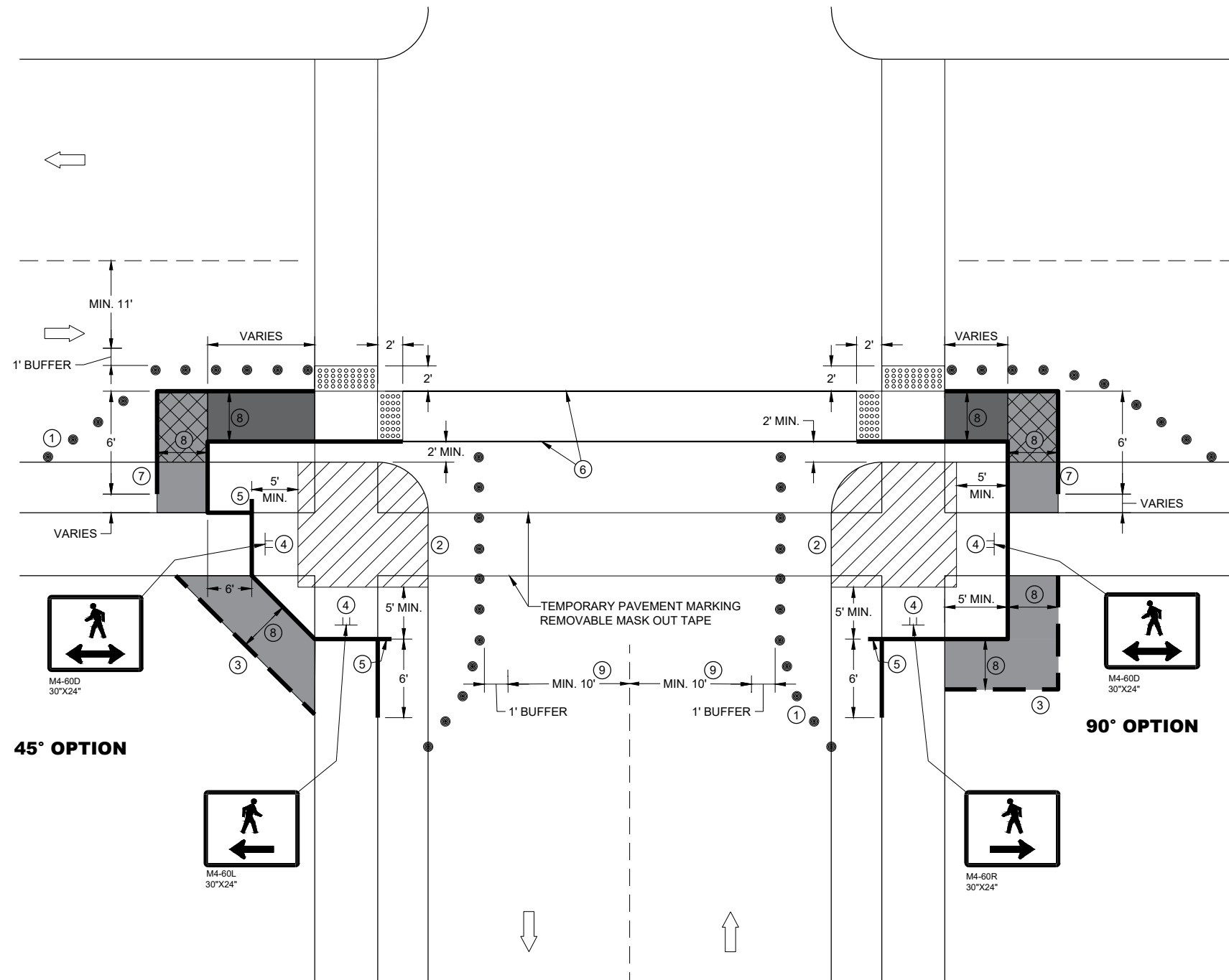
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

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



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL**

**TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

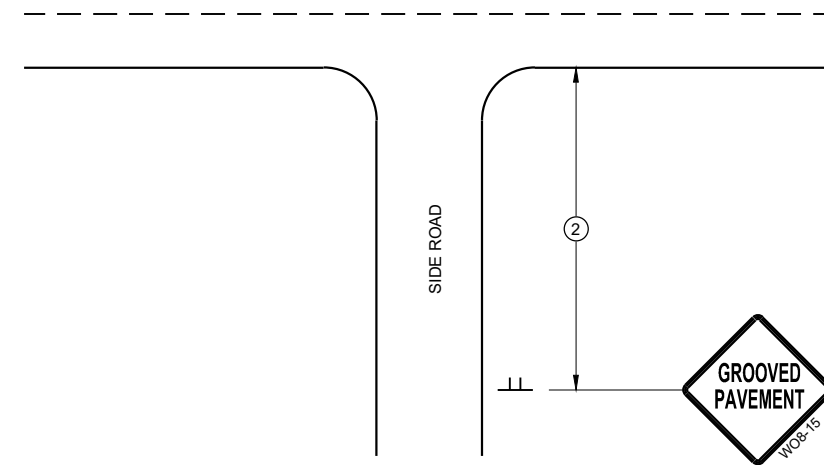
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

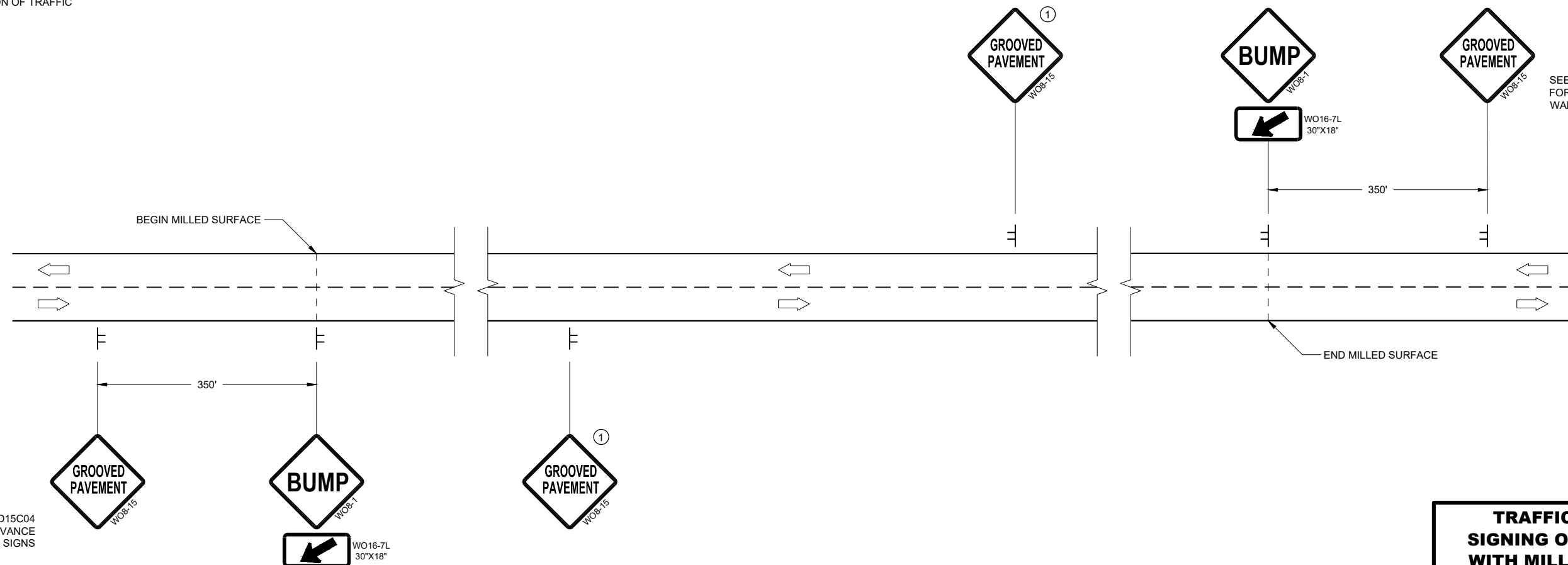
**LEGEND**

⊥ SIGN ON TEMPORARY SUPPORT

⇨ DIRECTION OF TRAFFIC



**TYPICAL SIDE ROAD APPROACH SIGN DETAIL**



SEE SDD15C04 FOR ADVANCE WARNING SIGNS

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

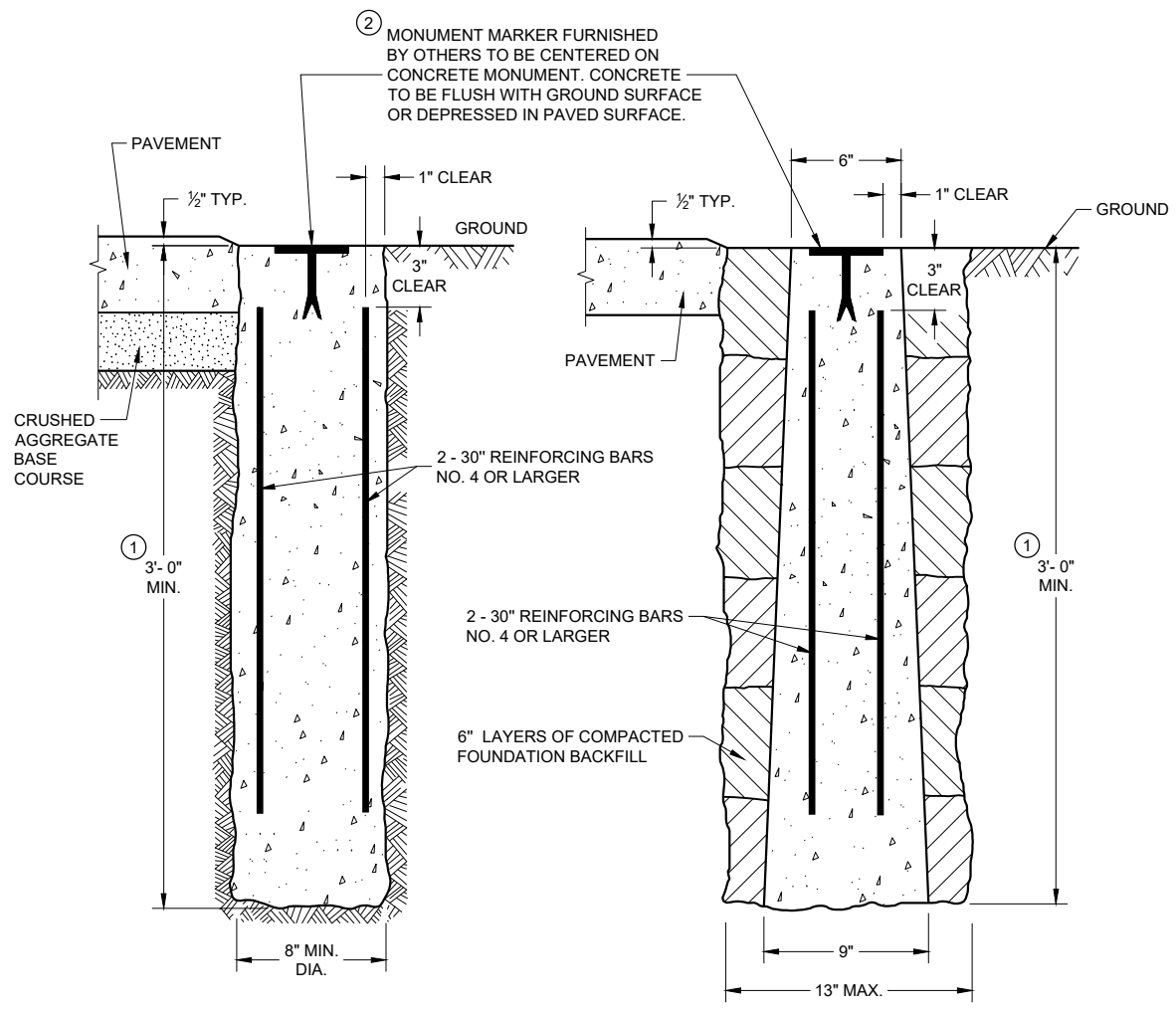
**DETAIL FOR SIGNING ON MILLED SURFACES**

**TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2020 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER

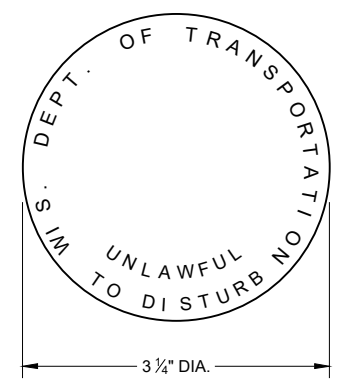
FHWA



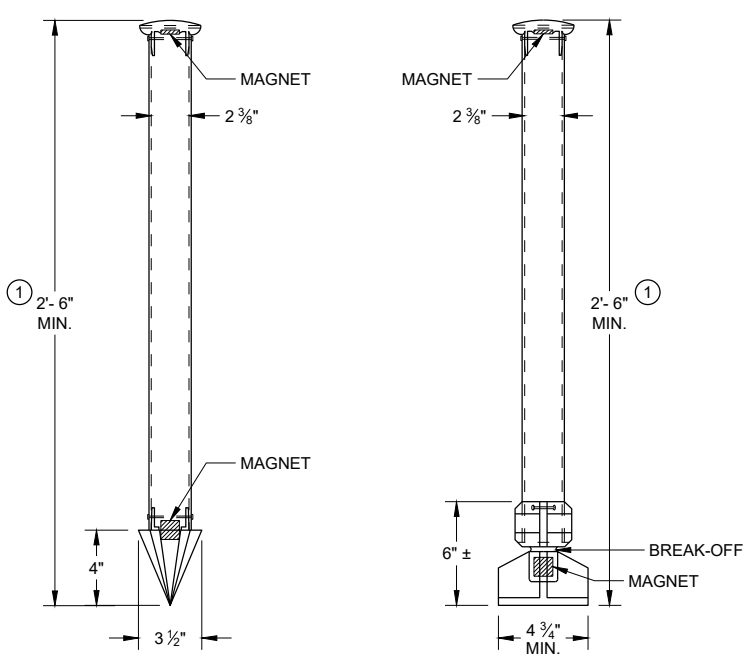
CAST-IN-PLACE

PRECAST

**CONCRETE MONUMENTS  
TYPE A**



② **WIS DOT MONUMENT MARKER LOGO**  
FOR TYPES "A", "C" & "D"



**TYPE C  
DRIVEN MONUMENT**

**TYPE D  
NON-DRIVEN  
BREAK-OFF MONUMENT**

**ALUMINUM MONUMENTS  
(INCLUDES MARKER)**

**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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

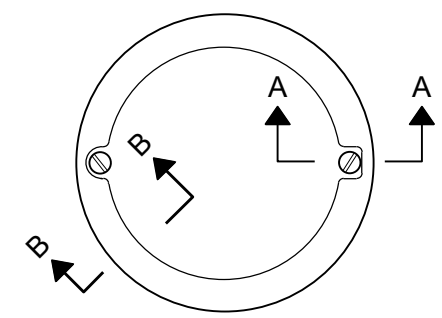
MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

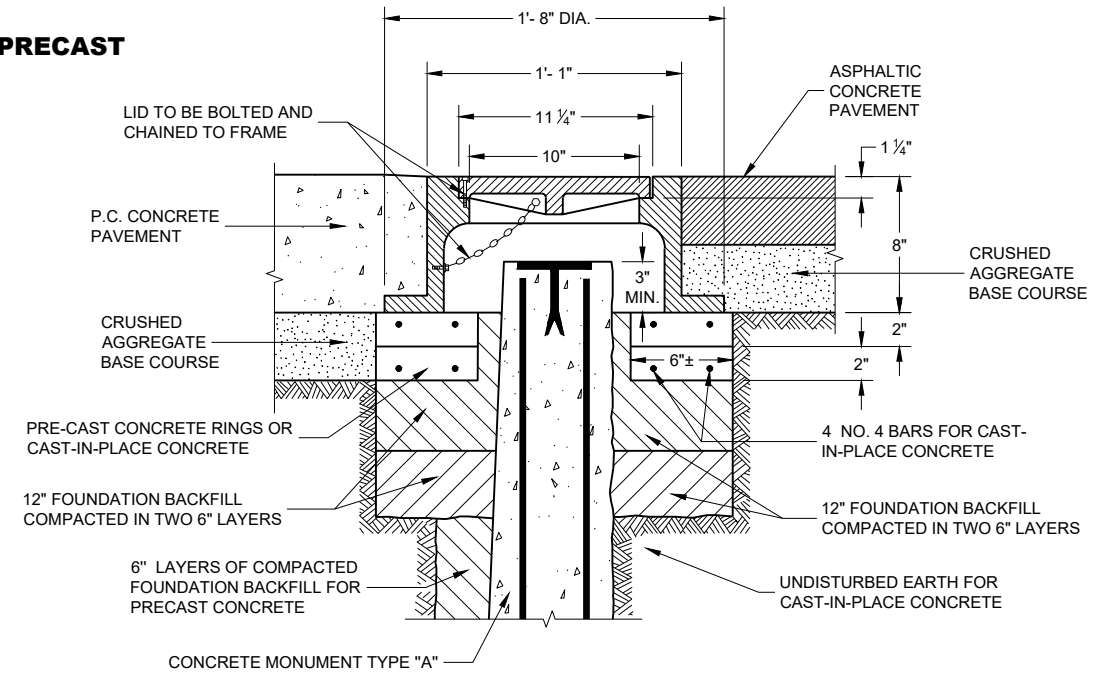
THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

- ① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
- ② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.

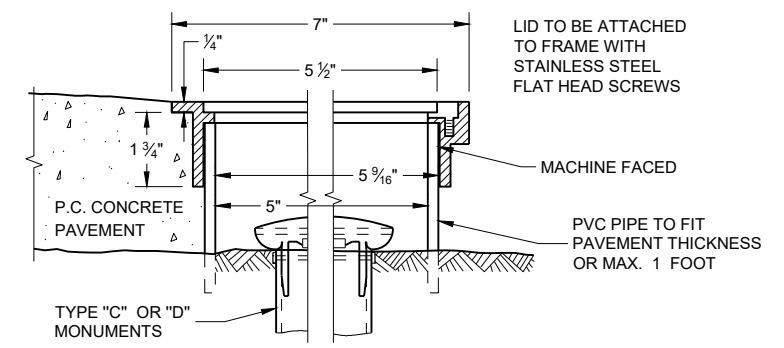


**TOP VIEW**



**CAST IRON MONUMENT COVER**

(APPROXIMATE WEIGHT 95 LBS)



**SECTION B-B SECTION A-A  
ALUMINUM MONUMENT COVER**

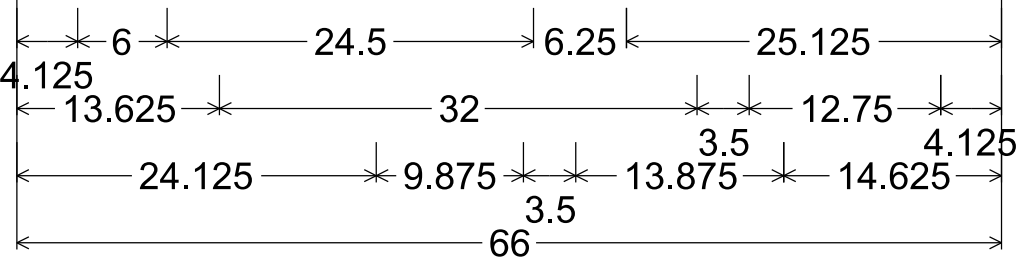
(APPROXIMATE WEIGHT 2 LBS)  
(FOR CONCRETE PAVEMENT ONLY)

**LANDMARK REFERENCE  
MONUMENTS AND COVERS**

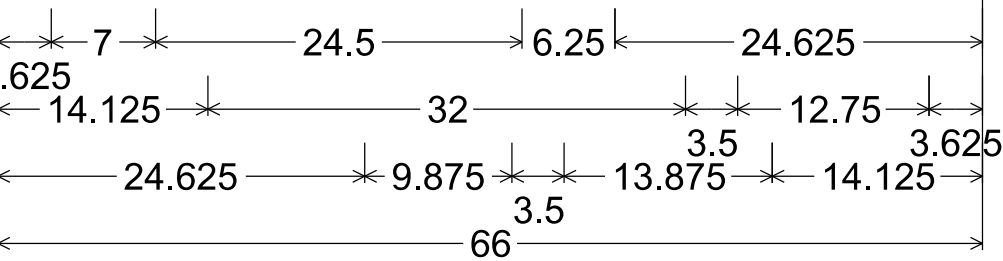
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
March 2018 /S/ Raymond A. Kumapayii  
DATE CHIEF SURVEYING AND MAPPING ENGINEER

FHWA



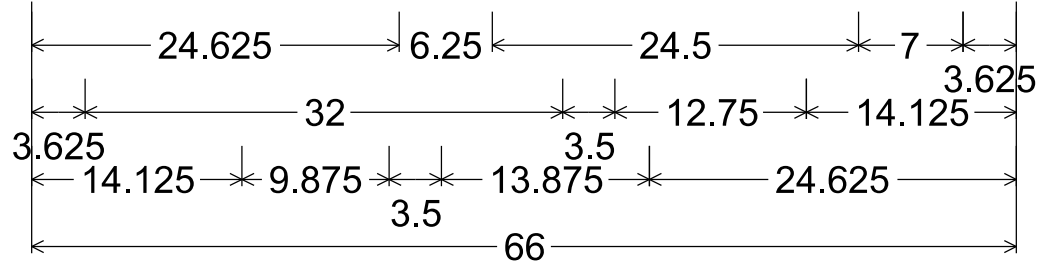
1.250" Radius, 0.625" Border, 0.500" Indent



1.250" Radius, 0.625" Border, 0.500" Indent

NOTES

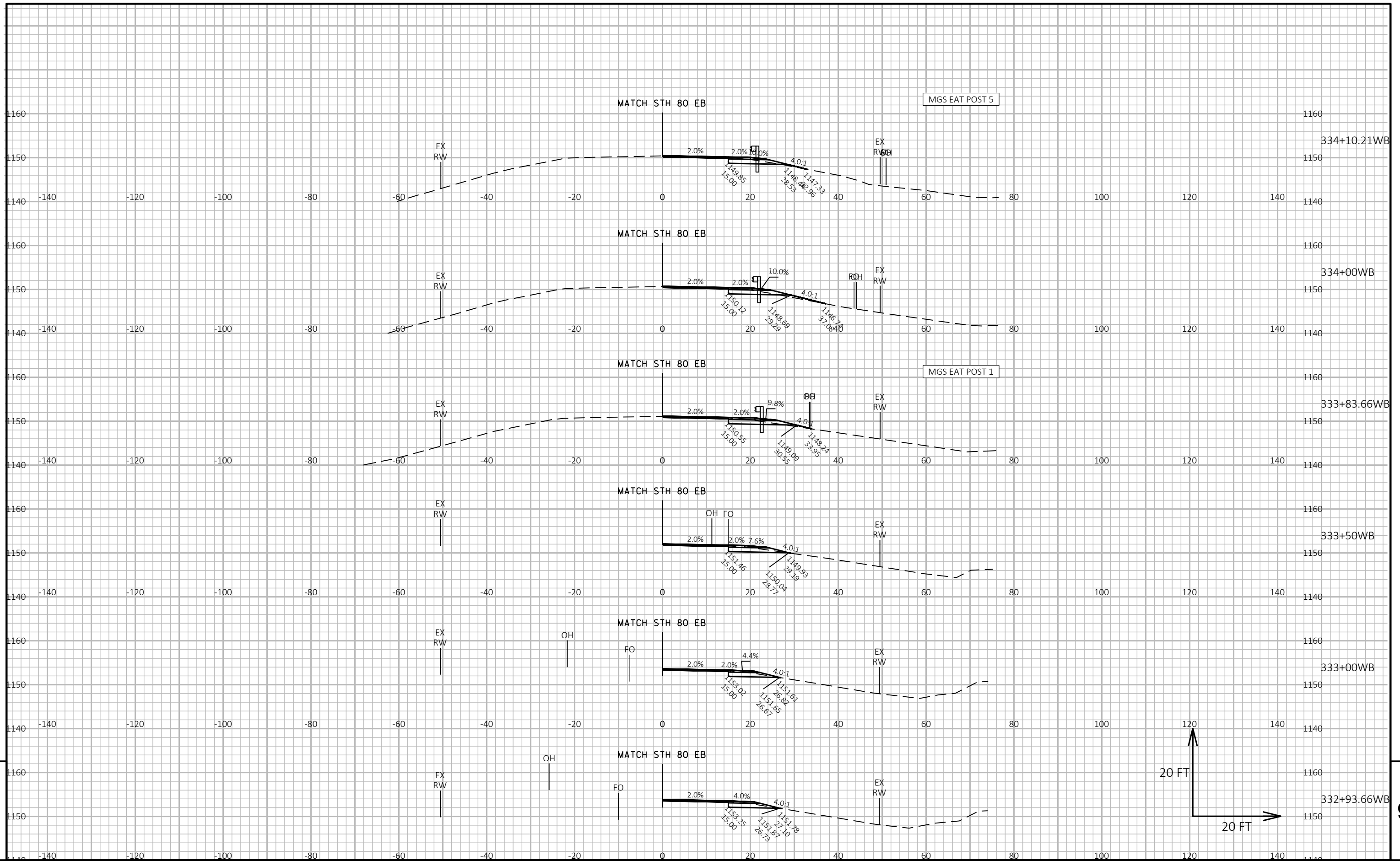
1. Fixed Message Signs - Type II Type F Reflective
2. Color:  
Background - Orange  
Message - Black
3. Message Series - C



1.250" Radius, 0.625" Border, 0.500" Indent

7

7



PROJECT NO: 5939-00-70

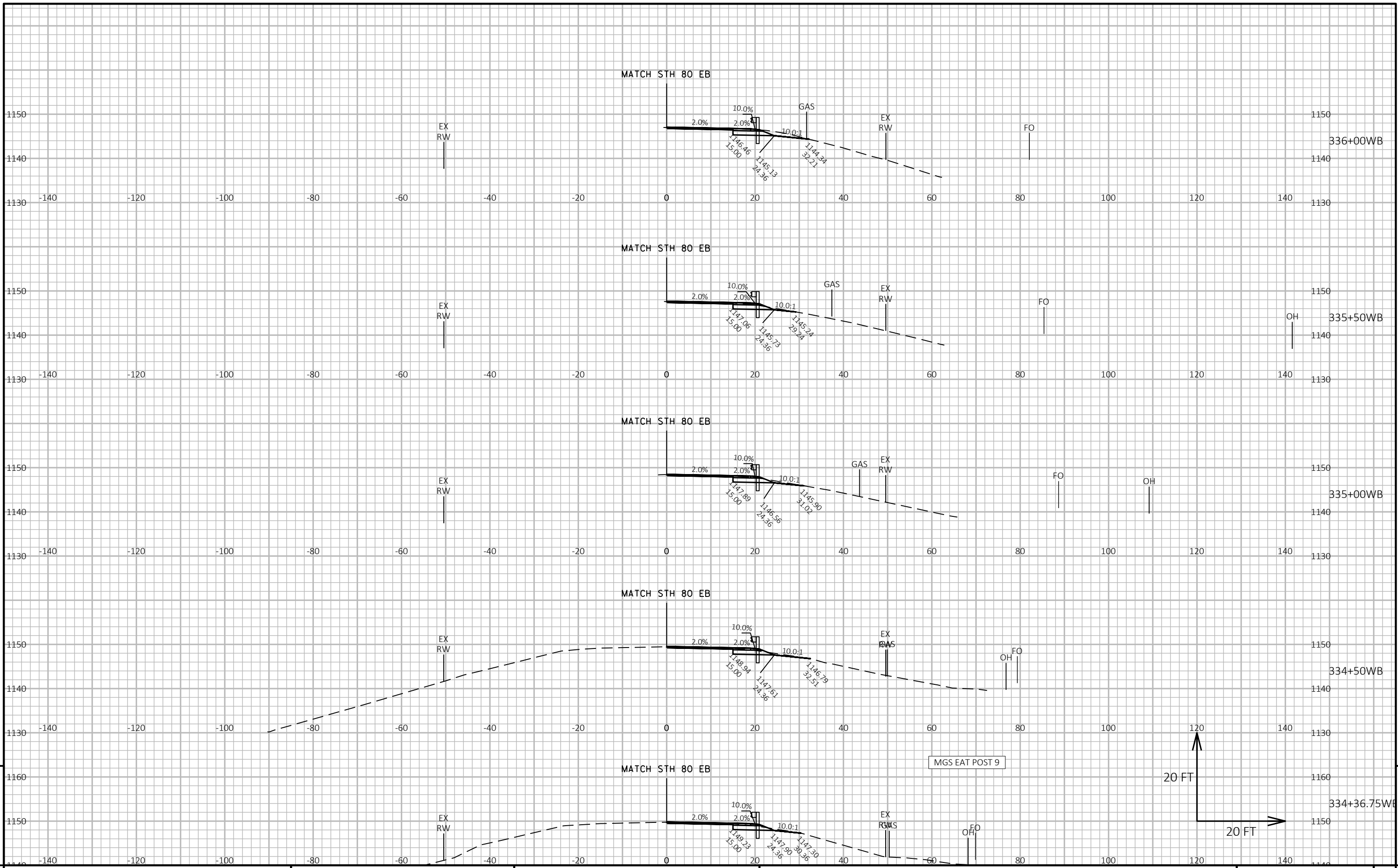
HWY: STH 80

COUNTY: IOWA

CROSS SECTIONS: STH 80

SHEET

9



PROJECT NO: 5939-00-70 HWY: STH 80 COUNTY: IOWA CROSS SECTIONS: STH 80 SHEET 9

FILE NAME: G:\WDOTSW\19054-000 STH 80 IOWA CO\CIVIL 3D\SHEETSPLAN\090201-XS.DWG PLOT DATE: 7/11/2022 5:17 PM PLOT BY: KL ENGINEERING PLOT NAME: PLOT SCALE: 1 IN:20 FT HORZ. / 1 IN:20 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 2



## ***Wisconsin Department of Transportation***

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