

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WISCONSIN DELLS - PORTAGE

BARABOO RIVER BRGS B-11-0137, -0138

IH 90

COLUMBIA COUNTY

STATE PROJECT NUMBER
1014-00-69

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1014-00-69	_____	_____
6130-02-60	_____	_____

ORDER OF SHEETS

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

TOTAL SHEETS = 26

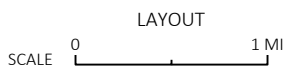
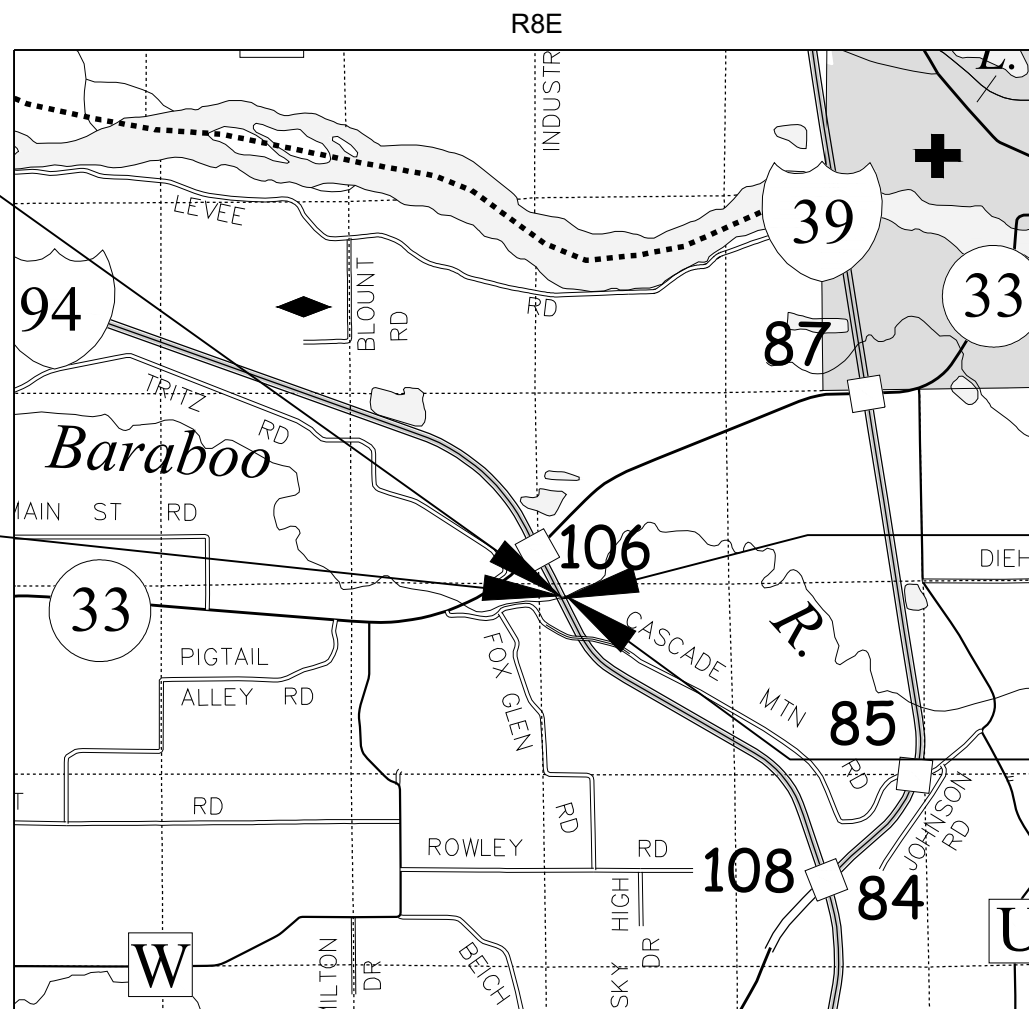


B-11-0138, MISC. REPAIRS
STA 873+93 - 875+53.49

BEGIN PROJECT
STA 873+93.63
X: 521378.54
Y: 383277.58

B-11-0137, MISC. REPAIRS
STA 874+05.13 - 875+82.51

END PROJECT
STA 875+82.51



TOTAL NET LENGTH OF CENTERLINE = 0.0 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), COLUMBIA 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 12A.

DESIGN DESIGNATION 1014-00-39

A.A.D.T. (2022)	=	37,600
A.A.D.T. (2042)	=	44,240
D.H.V.	=	
D.D.	=	58/42
T.	=	22.4%
DESIGN SPEED	=	70 MPH
ESALS	=	NA

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

300'EB'
95.36
E
FO
G
SAN
SS
T
W
⊕
⊖

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	SW REGION
Surveyor	JOSH SCHOENMANN
Designer	STEVEN PORTER, PE
Project Manager	SW REGION
Regional Examiner	ALEX HAGEN, PE
Regional Supervisor	

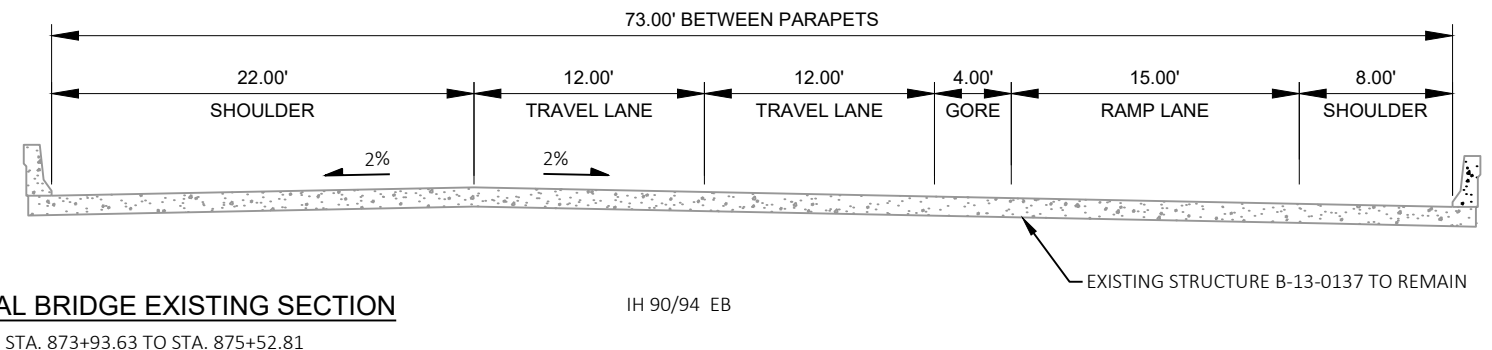
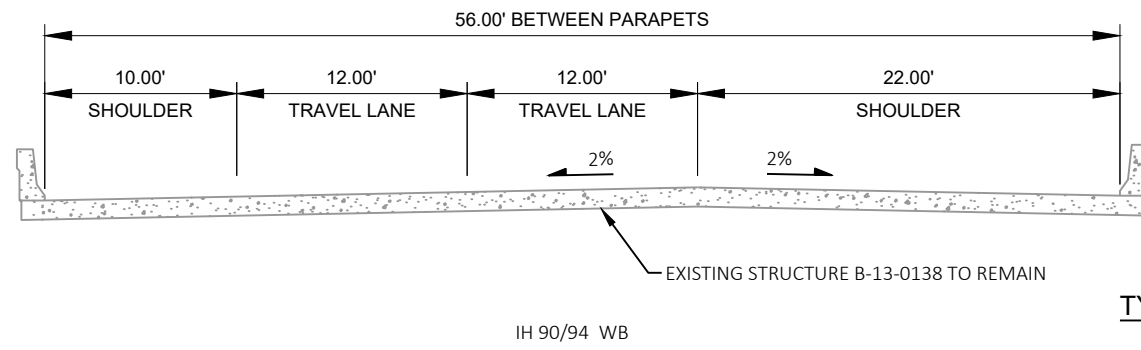
APPROVED FOR THE DEPARTMENT
DATE: 10/28/2021 *Steven Porter*
(Signature)

E

PROJECT ID: 1014-00-69

WITH: 6130-02-60

COUNTY: COLUMBIA



TYPICAL BRIDGE EXISTING SECTION

STA. 873+93.63 TO STA. 875+52.81
(LOOKING SOUTH)

ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
CONSTRUCTION DETAILS
TRAFFIC CONTROL

ABBREVIATIONS

ABUT	ABUTMENT	LT	LEFT
A.D.T.	AVERAGE DAILY TRAFFIC	ML	MATCH LINE
AP	ACCESS POINT	MAX.	MAXIMUM
B.F.	BACK FACE	MIN.	MINIMUM
B.M.	BENCH MARK	NORM.	NORMAL
B.O.P.	BEGIN OF PROJECT	O.H.	OVER HEAD POWER LINE
CL	CENTER LINE	PT	POINT
CTR.	CENTER	PC	POINT OF CURVATURE
CY	CUBIC YARD	PI	POINT OF INTERSECTION
CP	CULVERT PIPE	PT	POINT OF TANGENCY
C&G	CURB AND GUTTER	PL	PROPERTY LINE
D.H.V.	DESIGN HOURLY VOLUME	PB	PULL BOX
DIA.	DIAMETER	RAD.	RADIUS
DIM.	DIMENSION	RL	REFERENCE LINE
EL	ELEVATION	REQ'D	REQUIRED
EW	END WALL	RT	RIGHT
EBS	EXCAVATION BELOW SUBGRADE	RHF	RIGHT HAND FORWARD
E.O.P.	END OF PROJECT	R/W	RIGHT OF WAY
EXC.	EXCAVATION	STA.	STATION
EXIST	EXISTING	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE SUPERELEVATION STRUCTURE
F.F.	FRONT FACE	SE	DESIGN SPEED
FL	FLOW LINE	STR.	STRUCTURE
HT	HEIGHT	TLE	TEMPORARY LIMITED EASEMENT
CWT	HUNDREDWEIGHT	TYP.	TYPICAL
INL	INLET	V.	DESIGN SPEED
INV	INVERT		

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

ALL EROSION CONTROL FEATURES ARE SHOWN AT SUGGESTED LOCATIONS IN THE PLANS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE DNR.

UTILITY CONTACTS

<p>ALLIANT ENERGY - ELECTRICITY & GAS/PETROLEUM MICHAEL BROLIN 4902 NORTH BILTMORE LN MADISON, WI, 53713 PHONE: (608) 458-4871 EMAIL: MICHAELBROLIN@ALLIANTENERGY.COM</p>	<p>ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION MIKE OLSEN 801 O'KEEFE RD P.O. BOX 6113 DE PERE, WI, 54115-6113 PHONE: (920) 338-6582 EMAIL: MOLSSEN@ATCLLC.COM</p>
<p>AT&T LEGACY - COMMUNICATION LINE KENNETH COLWELL 222 W JACKSON WOODSTOCK, IL, 60098 PHONE: (312) 734-2223 EMAIL: KC1298@ATT.COM</p>	<p>NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM JASON GOULD 8101 BIRCHWOOD CT., SUITE F JOHNSTON, IA, 50131 PHONE: (402) 530-2011 EMAIL: JASON.GOULD@NNGCO.COM</p>

REGION CONTACTS

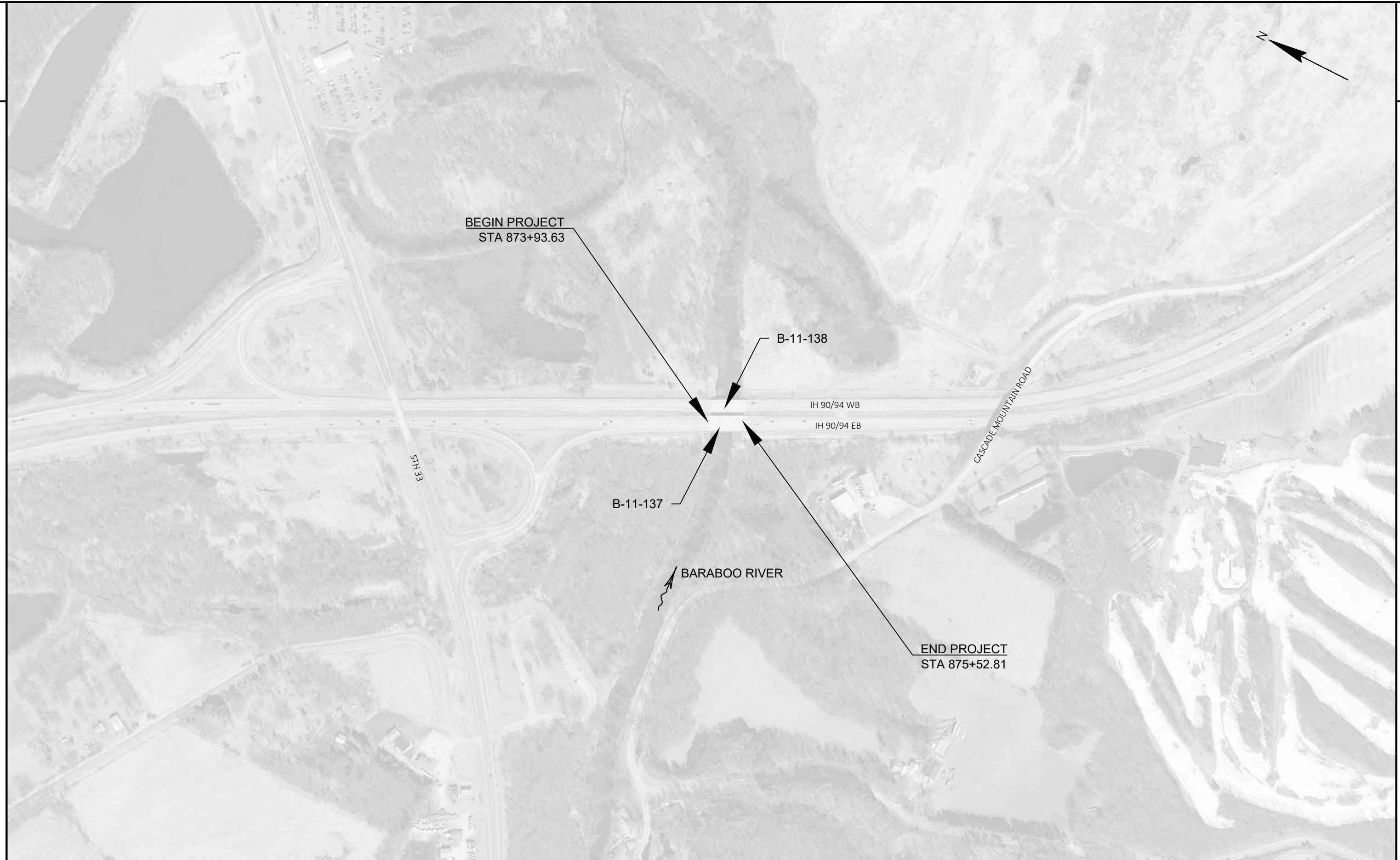
STEVEN PORTER, PE
2101 WRIGHT ST.
MADISON, WI, 53704
PHONE: (608) 243-3366
EMAIL: STEVE.PORTER@DOT.WI.GOV

DNR CONTACT

ERIC HEGGELUND
3911 FISH HATCHERY RD.
FITCHBURG, WI, 53711
PHONE: (608) 275-3301
EMAIL: ERIC.HEGGELUND@WISCONSIN.GOV

Dial **811** or (800)242-8511

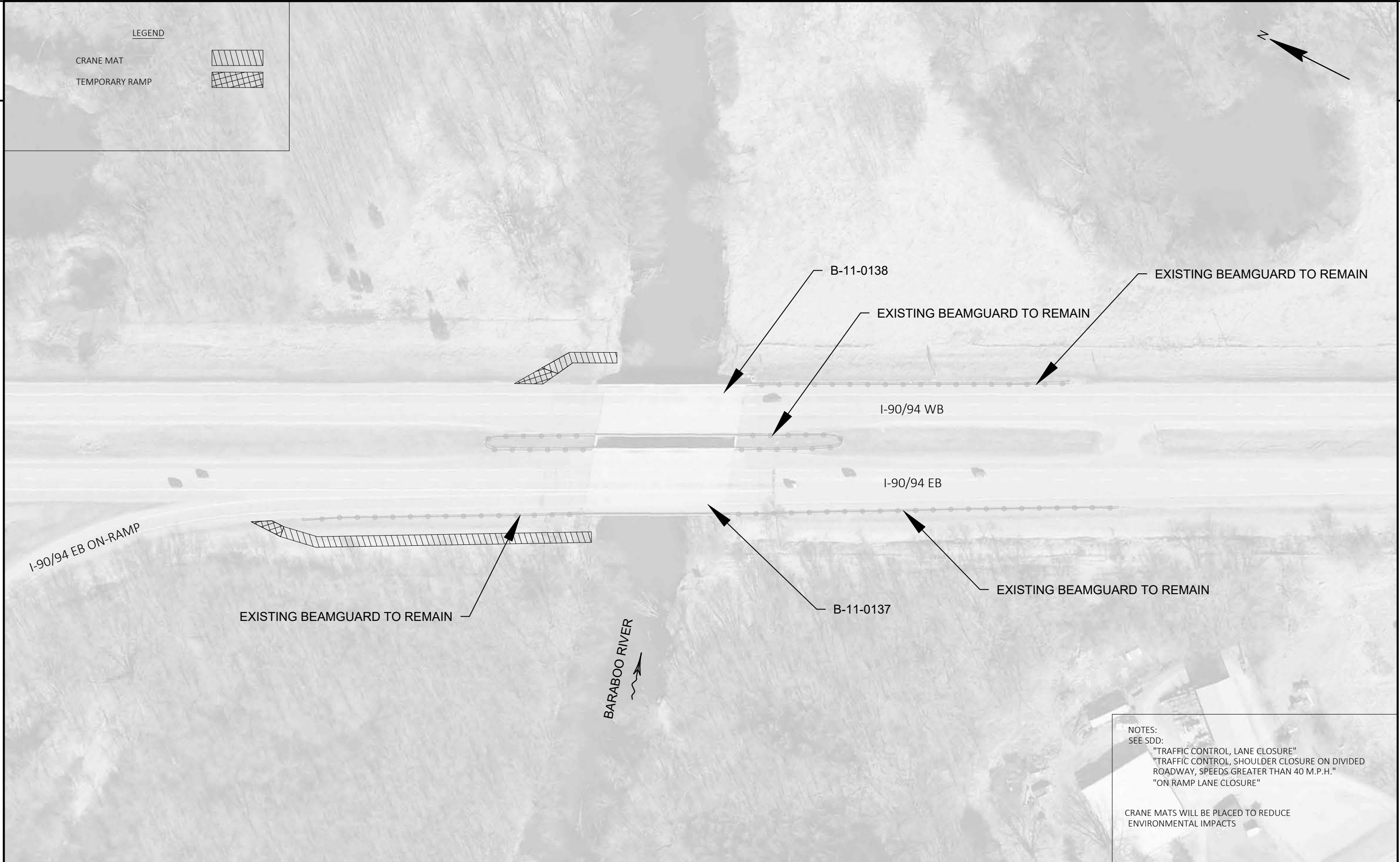
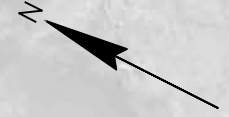
www.DiggersHotline.com



PROJECT NO: 1014-00-69	HWY: IH 90	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET	E
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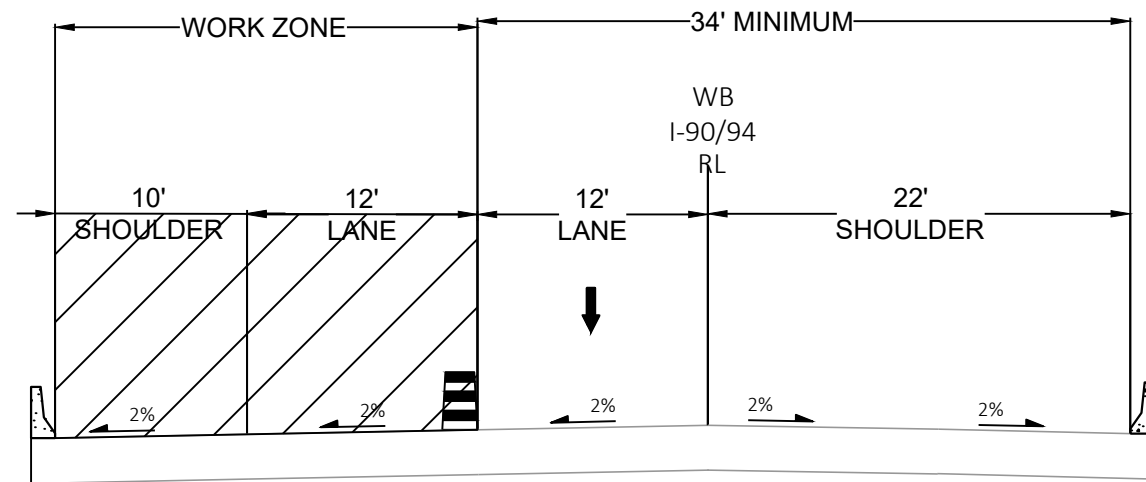
LEGEND

CRANE MAT
TEMPORARY RAMP



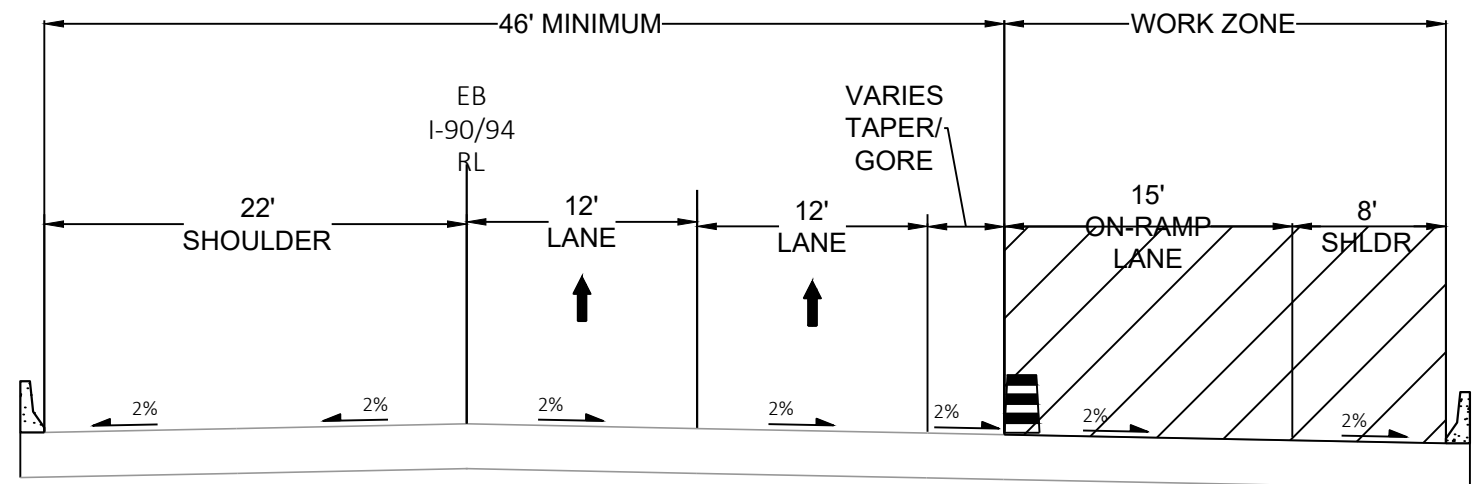
NOTES:
SEE SDD:
"TRAFFIC CONTROL, LANE CLOSURE"
"TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H."
"ON RAMP LANE CLOSURE"

CRANE MATS WILL BE PLACED TO REDUCE ENVIRONMENTAL IMPACTS



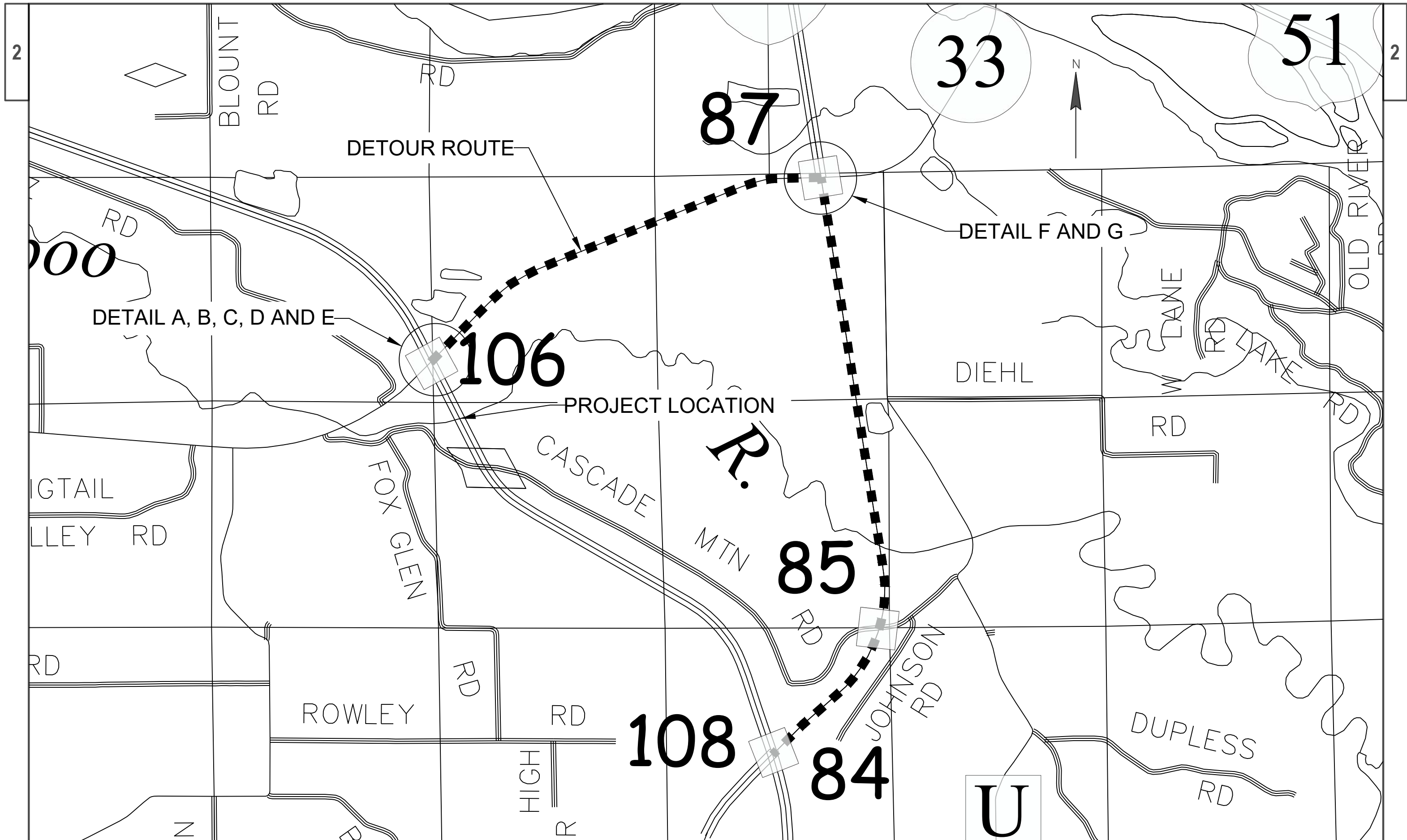
I-90/94 WB CLOSURE

CLOSE WB SHOULDER DURATION OF PROJECT. SINGLE LANE CLOSURE DURING OFF PEAK HOURS FOR EQUIPMENT AND MATERIAL DELIVERY



I-90/94 EB CLOSURE

CLOSE STH 33 TO I-90/94 EB ON-RAMP AND EB SHOULDER



PROJECT NO: 1014-00-69

HWY: IH 90

COUNTY: COLUMBIA

DETAIL OVERVIEW

SHEET

E





PROJECT NO: 1014-00-69	HWY: IH 90	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETAIL B	SHEET	E
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ADJUST THE MESSAGE BOARDS TO FIELD CONDITIONS AND AS THE ENGINEER APPROVES

SEE SDD FOR BARRICADES AND SIGNS FRO VARIOUS CLOSURES; ON RAMP LANE CLOSURE; CHANNELIZING DEVICES DRUMS, CONES BARRICADES, AND VERTICAL PANELS; TRAFFIC CONTROL, LANE CLOSURE; AND TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

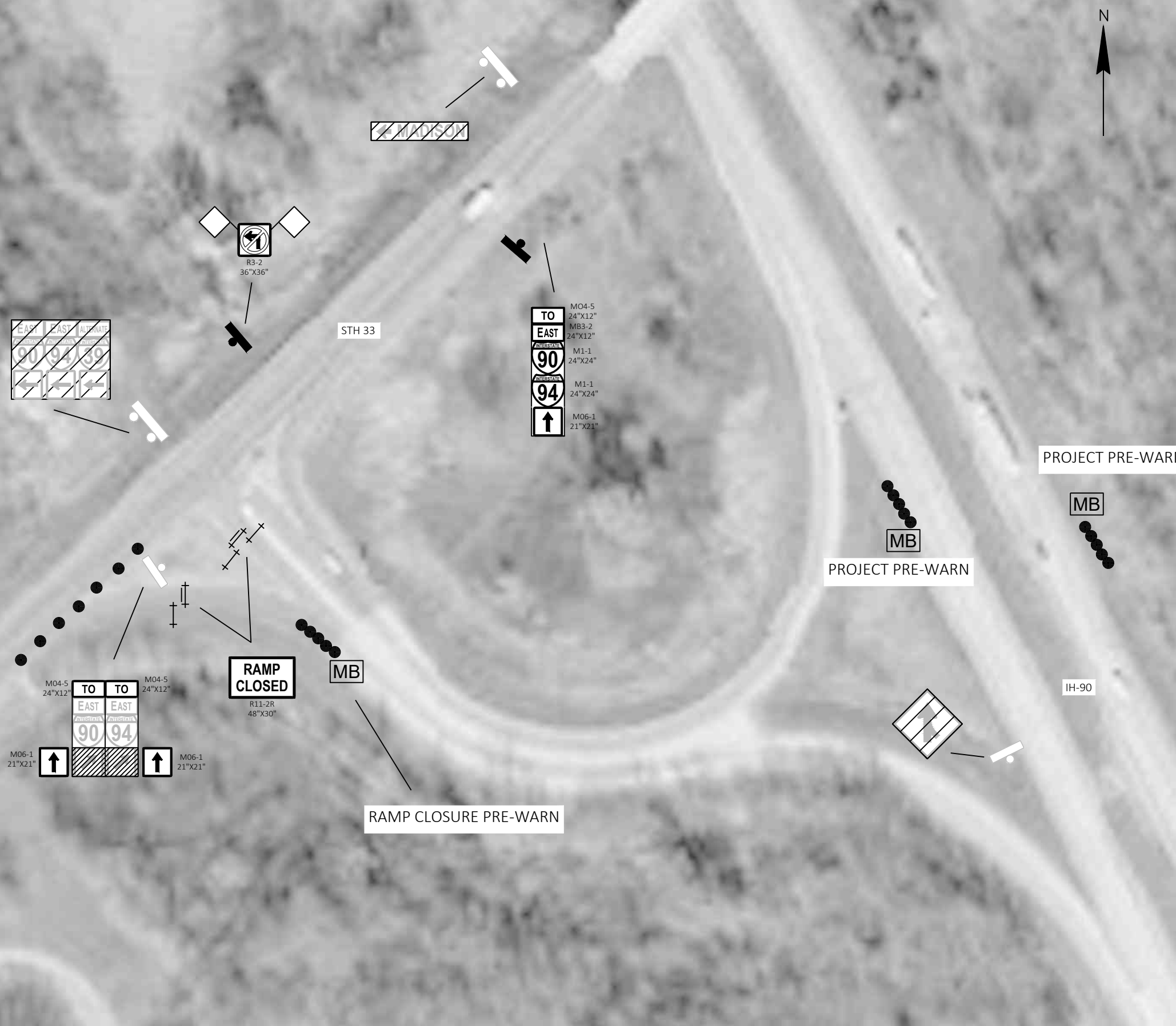
PCMS MESSAGING:

RAMP CLOSURE PRE-WARN
RAMP
CLOSED
BEGINS

{DAY}
{DATE}

PROJECT PRE-WARN
ROAD
WORK
BEGINS

{DAY}
{DATE}



2

2



IH-90

STH 33

R
 ———

TO	M04-5 24"x12"
EAST	MB3-2 24"x12"
90	M1-1 24"x24"
94	M1-1 24"x24"

PROJECT NO: 1014-00-39	HWY: IH 90	COUNTY: COLUMBIA	TRAFFIC CONTROL - DETAIL D	SHEET	E
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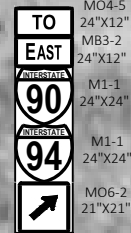
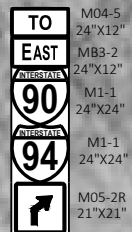
TO M04-5
24"X12"
EAST MB3-2
24"X12"
90 M1-1
24"X24"
94 M1-1
24"X24"
← M05-1L
21"X21"

TO M04-5
24"X12"
EAST MB3-2
24"X12"
90 M1-1
24"X24"
94 M1-1
24"X24"
← M06-1
21"X21"



IH-39

STH 33



Estimate Of Quantities By Plan Sets

1014-00-69

Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1014-00-69	EACH	1.000	1.000
0006	502.4204	Adhesive Anchors No. 4 Bar	EACH	60.000	60.000
0012	502.9000.S	Underwater Substructure Inspection (Structure) 02. B-11-137/138	EACH	1.000	1.000
0014	505.0400	Bar Steel Reinforcement HS Structures	LB	60.000	60.000
0018	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1014-00-69	EACH	1.000	1.000
0022	619.1000	Mobilization	EACH	0.500	0.500
0024	643.0300	Traffic Control Drums	DAY	1,970.000	1,970.000
0026	643.0420	Traffic Control Barricades Type III	DAY	300.000	300.000
0028	643.0705	Traffic Control Warning Lights Type A	DAY	600.000	600.000
0030	643.0715	Traffic Control Warning Lights Type C	DAY	650.000	650.000
0032	643.0800	Traffic Control Arrow Boards	DAY	100.000	100.000
0034	643.0900	Traffic Control Signs	DAY	3,050.000	3,050.000
0036	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	12.000
0038	643.1050	Traffic Control Signs PCMS	DAY	21.000	21.000
0040	643.5000	Traffic Control	EACH	0.500	0.500
0042	645.0120	Geotextile Type HR	SY	53.000	53.000
0044	SPV.0035	Special 01. Scour Repair, Grout	CY	2.000	2.000
0046	SPV.0035	Special 02. Scour Repair, Grout Bags	CY	68.000	68.000
0048	SPV.0035	Special 03. Scour Repair, Grout Mats 4-Inch	CY	28.000	28.000
0050	SPV.0035	Special 04. Structural Grout	CY	2.400	2.400
0058	SPV.0060	Special 03. Underwater Excavation For Structures B-11-137/138	EACH	4.000	4.000
0060	SPV.0060	Special 04. Temporary Access Project 1014-00-69	EACH	1.000	1.000
0062	SPV.0165	Special 01. Preparation Of Pier Surfaces	SF	240.000	240.000
0064	SPV.0165	Special 02. Welded Wire Fabric 6x6 D4/D4 (Grade 60)	SF	240.000	240.000

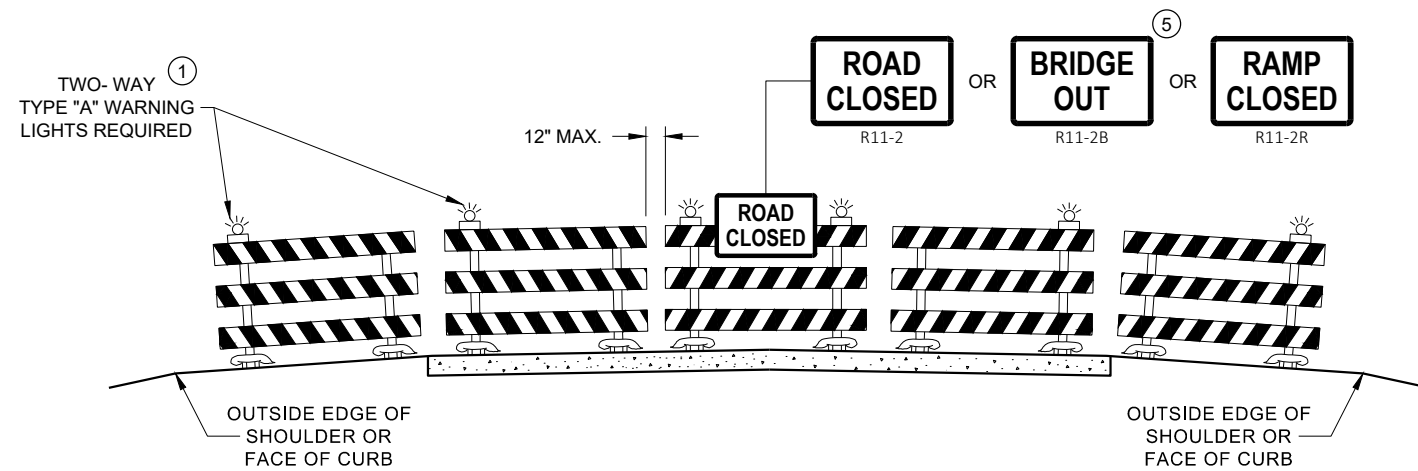
TRAFFIC CONTROL SUMMARY

LOCATION	DURATION	NO.	643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		* 543.0920		643.1050		REMARKS
			TRAFFIC CONTROL DRUMS	DAY	TRAFFIC CONTROL BARRICADES TYPE III	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	
IH 90/94 EB	50	18	935	--	--	--	--	5	250	1	50	4	200	1	1	1	7		SHOULDER CLOSURE
IH 90/94 WB	50	13	685	1	50	2	100	5	250	1	50	5	250	--	--	1	7		SHOULDER/LANE CLOSURE
SHEET DETAIL A	50	--	--	--	--	--	--	--	--	--	--	11	550	2	2	1	7		DETOUR
SHEET DETAIL B	50	--	--	--	--	--	--	--	--	--	--	1	50	1	1	--	--		DETOUR
SHEET DETAIL C	50	7	350	5	250	10	500	3	150	--	--	12	600	4	4	--	--		RAMP CLOSURE/DETOUR
SHEET DETAIL D	50	--	--	--	--	--	--	--	--	--	--	4	200	--	--	--	--		DETOUR
SHEET DETAIL E	50	--	--	--	--	--	--	--	--	--	--	--	--	2	2	--	--		DETOUR
SHEET DETAIL F	50	--	--	--	--	--	--	--	--	--	--	10	500	1	1	--	--		DETOUR
SHEET DETAIL G	50	--	--	--	--	--	--	--	--	--	--	14	700	1	1	--	--		DETOUR
TOTAL 0010			1970	300	600	650	100	3050	12	21									

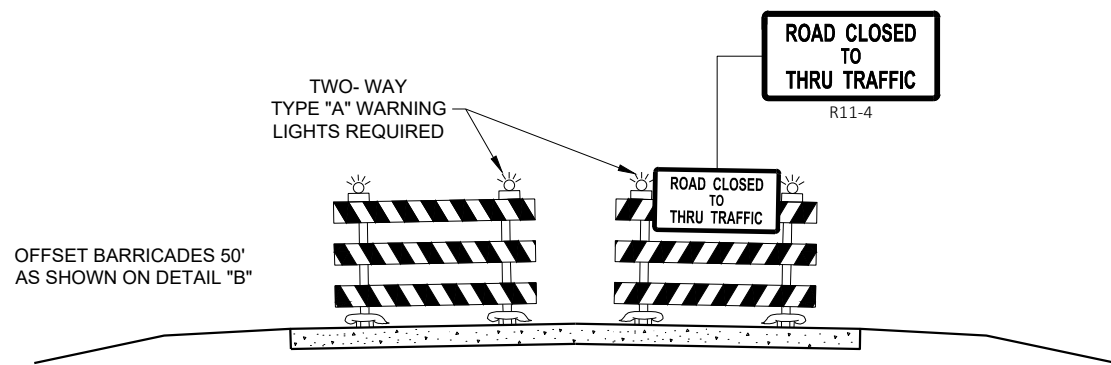
* ONE INSTALLATION CYCLE IS EXPECTED FOR COVERING SIGNS

Standard Detail Drawing List

15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH



**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 TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- TO EAST MO4 - 5
- TO EAST M3 - X
- XX M1 - 6 OR XX M1 - 4 OR XX M1 - 1
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

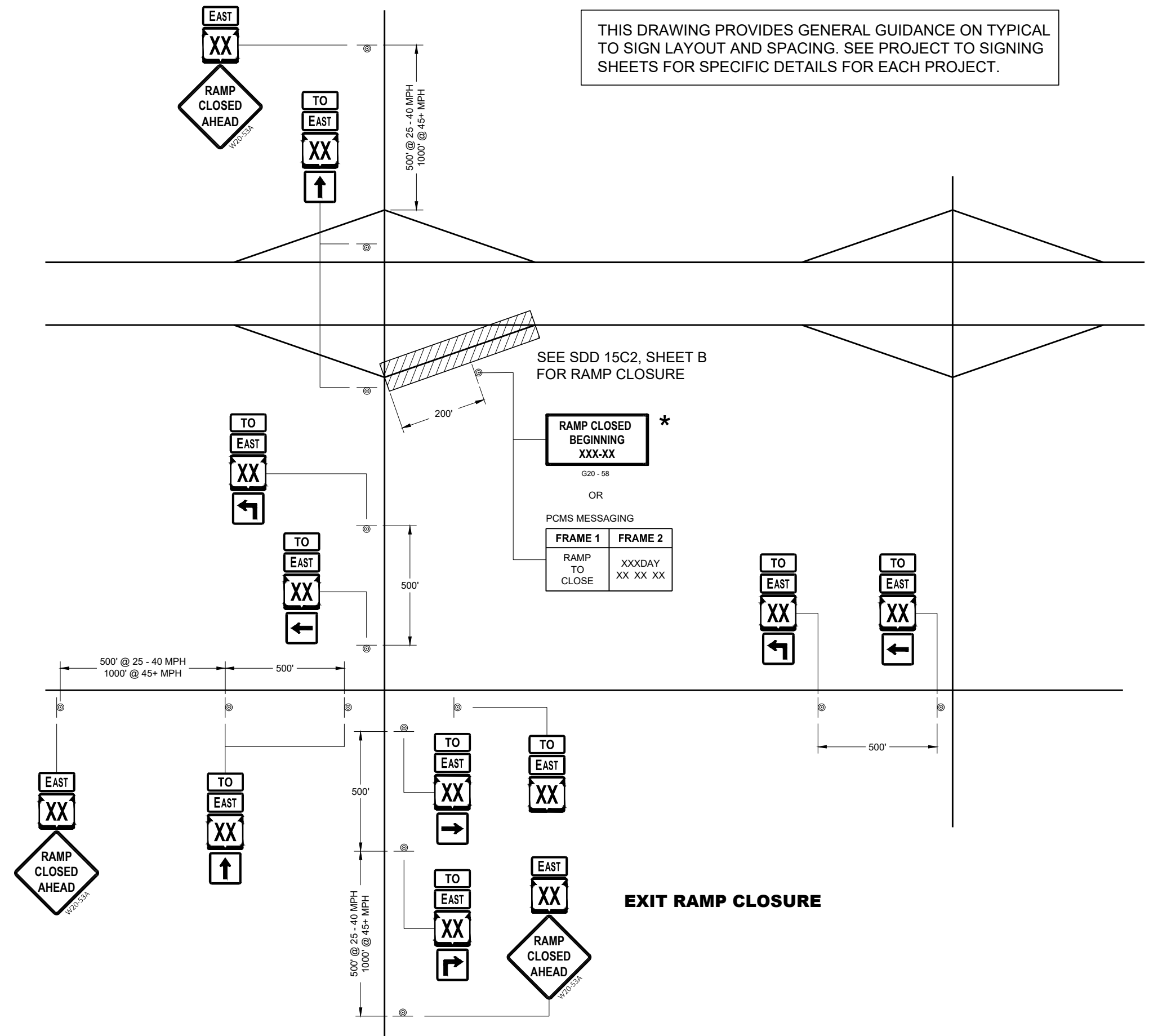
- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 SHALL 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 FOLLOW:
 M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
 MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
 M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
 MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
 W20 - 53A SHALL BE 48" X 48"
- * PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

6

6

SDD 15C02 - 08d

SDD 15C02 - 08d

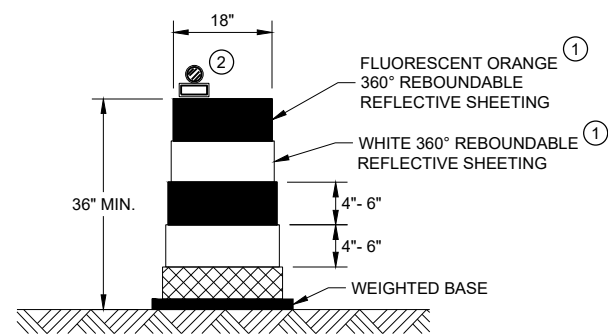


**ON RAMP
LANE CLOSURE**

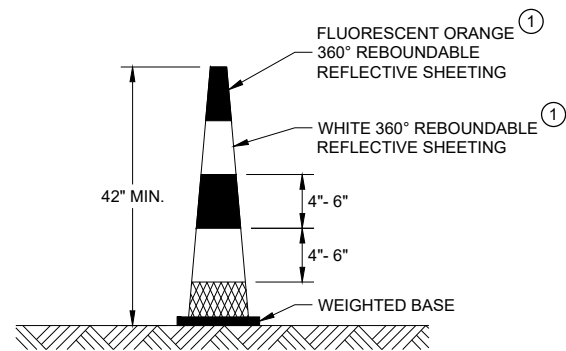
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

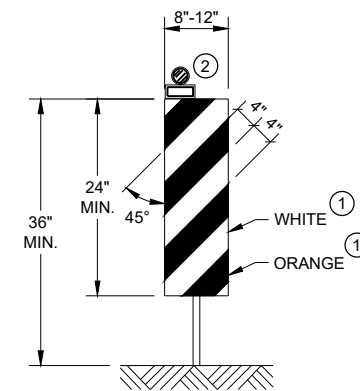


DRUM



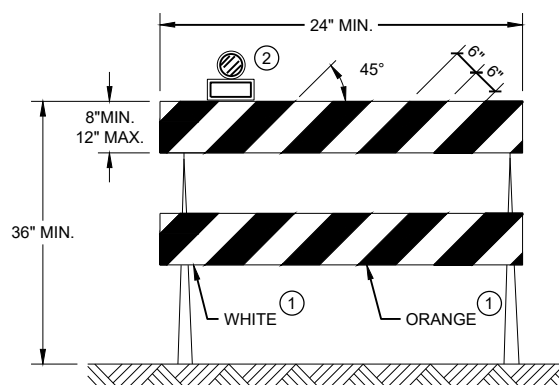
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



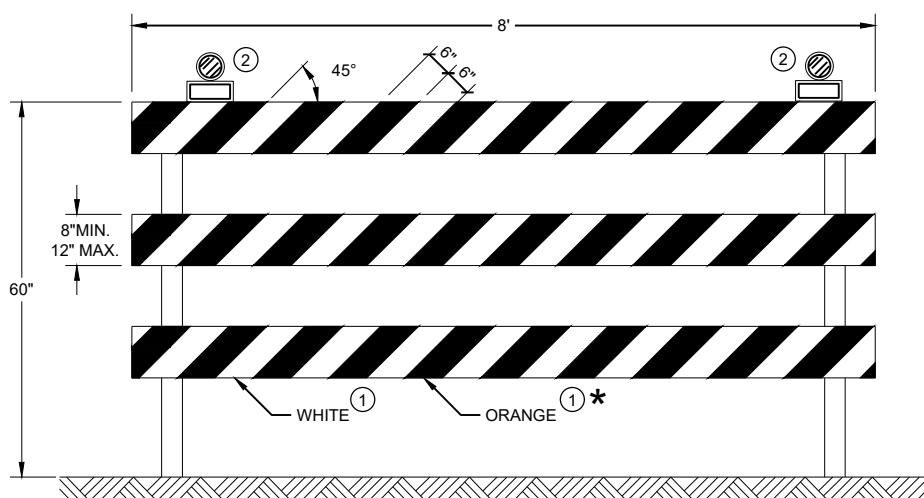
VERTICAL PANEL

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



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 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 AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.










WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

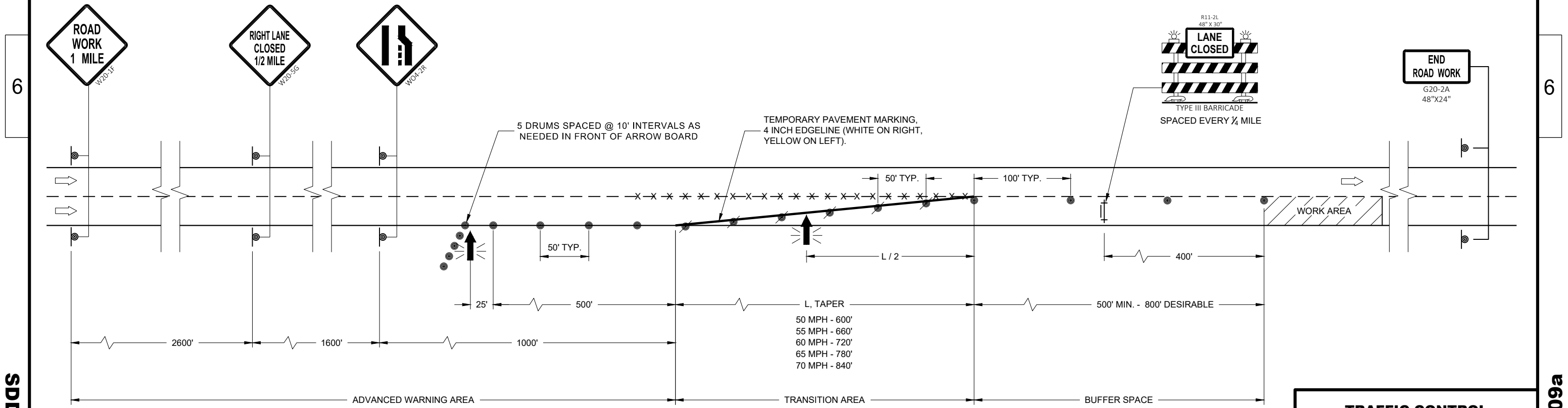
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  REMOVING PAVEMENT MARKINGS
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED August 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

SDD 15D12 - 09a

SDD 15D12 - 09a

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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

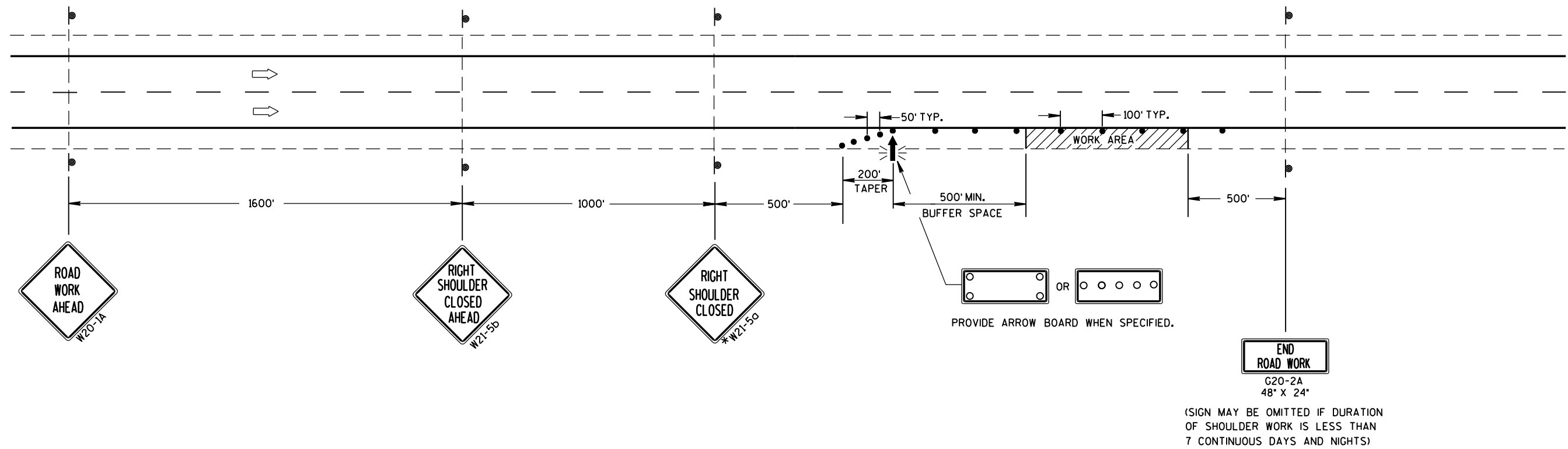
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

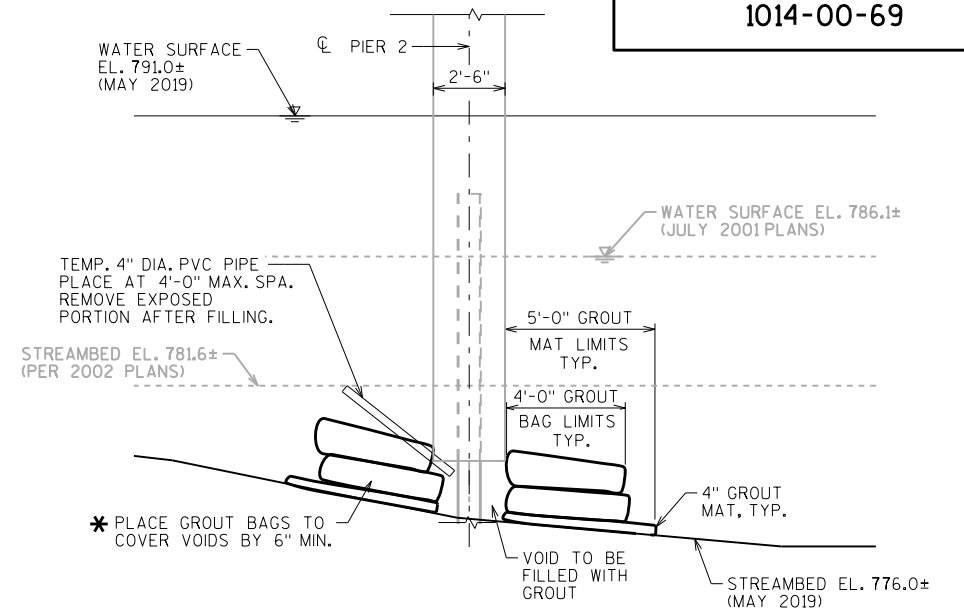
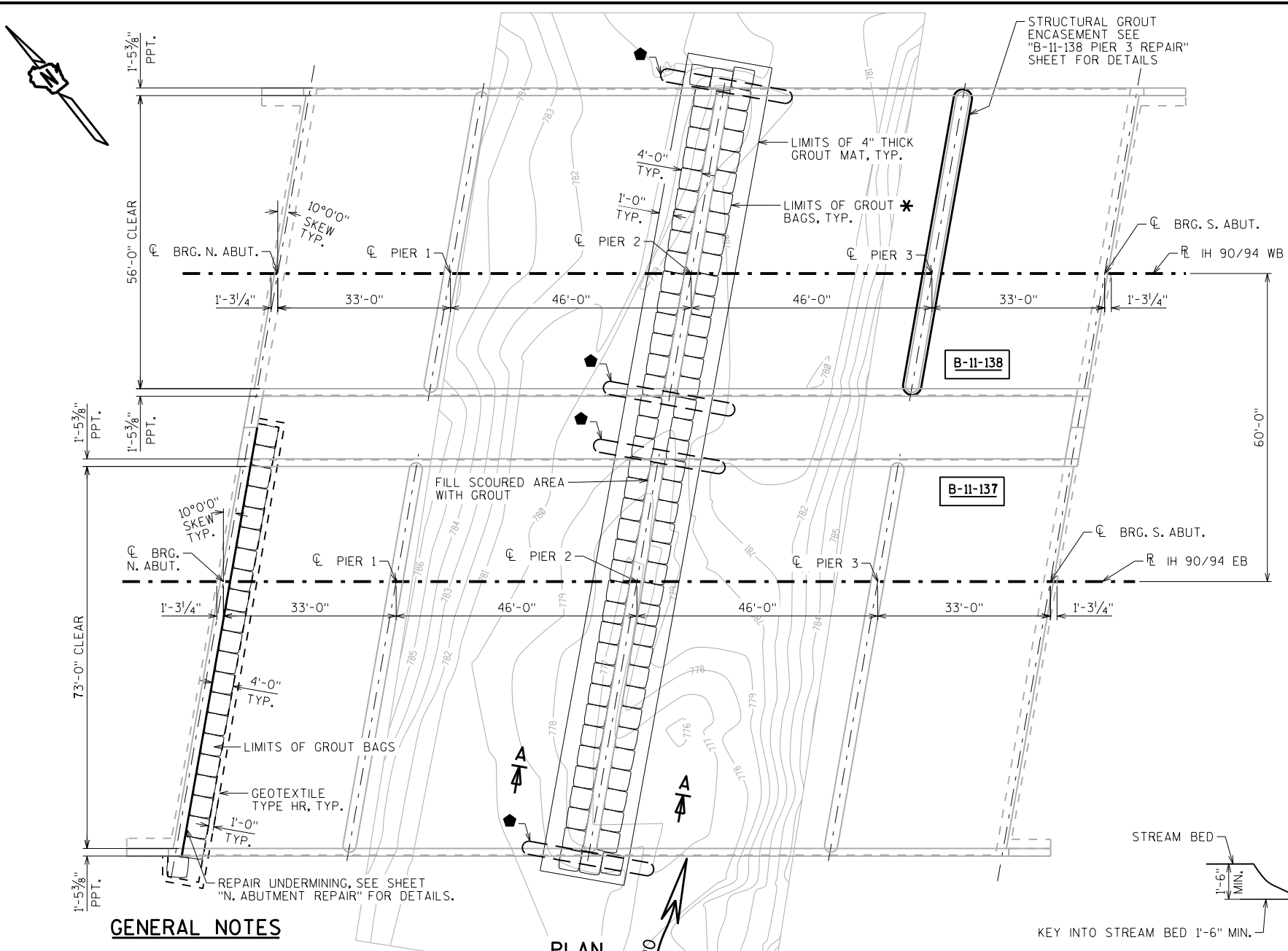
*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-50 SIGN MAY BE OMITTED.

LEGEND

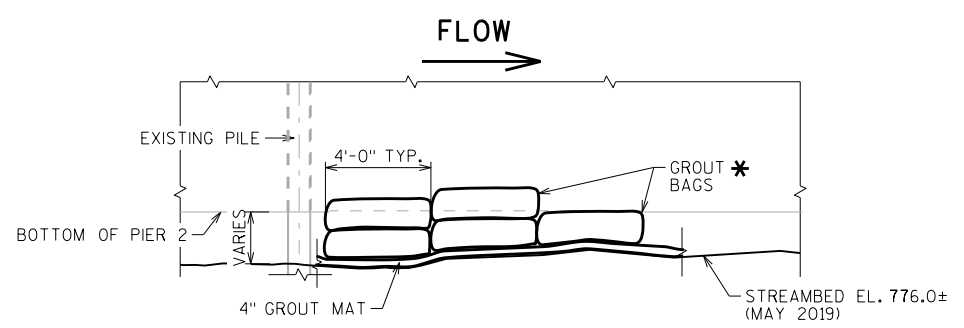
- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡ FLASHING ARROW BOARD
- ▨ WORK AREA



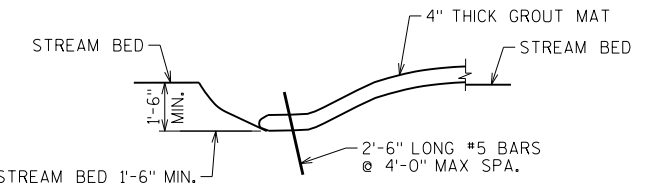
TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/s/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



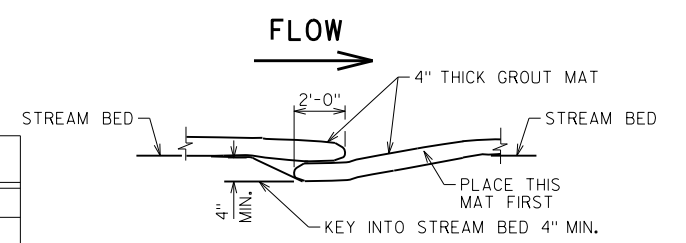
SECTION A-A



PLACEMENT DETAIL



TERMINATION DETAIL



ALTERNATE JOINING DETAIL

LIST OF DRAWINGS

- 1. SCOUR REPAIR
- 2. B-11-137 N. ABUTMENT REPAIR
- 3. B-11-138 PIER 3 REPAIR

STRUCTURE DESIGN CONTACTS:

STACIE WEIS (608) 261-6109
DOMINIQUE BECHLE (608) 261-8205

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

GROUT BAG PLACEMENT LIMITS SHOWN ARE BASED ON RIVER SCAN INFORMATION FROM THE SURVEY MAY 2019.

WATER LEVELS VARY THROUGHOUT THE YEAR AND ARE TO BE VERIFIED PRIOR TO CONSTRUCTION.

GROUT BAGS SHALL BE A MINIMUM OF 4'-0" WIDE X 4'-0" LONG X 1'-0" THICK.

REMOVE OR CUT GROUT TUBE FLUSH WITH TOP OF BAGS AFTER FILLING CAVITY BELOW ABUTMENT AND PIERS WITH GROUT.

GROUT BAGS ARE TO BE PLACED SO THAT THERE IS NO GAP BETWEEN THE BAGS AND THE ABUTMENT OR PIER.

STACK GROUT BAGS AS REQUIRED TO COVER VOIDS BY 6" MIN. JOINTS BETWEEN BAGS IN SUCCESSIVE ROWS AND TIERS SHALL BE STAGGERED, PIN ROWS TOGETHER WITH #5 BARS @ 4'-0" SPACING, INCLUDED IN THE BID ITEM "SCOUR REPAIR, GROUT BAGS".

CLEAN AREA IN FRONT OF BERM AT THE NORTH ABUTMENT OF B-11-137 BEFORE PLACING GEOTEXTILE TYPE HR.

REMOVE MATERIAL THAT CONFLICTS WITH OR COULD DAMAGE GROUT MAT AT PIER 2. CLEANING AND REMOVAL WORK TO BE INCLUDED IN BID ITEM "UNDERWATER EXCAVATION FOR STRUCTURES (B-11-137/138)".

ADJACENT MATS SHALL BE JOINED BY FIELD SEWING OR ZIPPERING BEFORE FILLING THE MATS WITH GROUT, ALTERNATE DETAIL IS ALLOWED AS SHOWN ON THE PLANS.

LIMITS OF THE GROUT MAT ARE DIMENSIONED AND MEASURED ALONG FINISHED SURFACE OF MAT AFTER GROUTING.

BID ITEM "STRUCTURAL GROUT" TO BE USED FOR B-11-138 PIER 3 REPAIR ONLY.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
502.0900.S	UNDERWATER SUBSTRUCTURE INSPECTION B-11-137/138	EACH	1
☆ 502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	60
☆ 505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	60
645.0120	GEOTEXTILE TYPE HR	SY	53
SPV.0035	STRUCTURAL GROUT	CY	2.4
SPV.0035	SCOUR REPAIR, GROUT	CY	2
SPV.0035	SCOUR REPAIR, GROUT BAGS	CY	68
SPV.0035	SCOUR REPAIR, GROUT MATS 4-INCH	CY	28
SPV.0060	UNDERWATER EXCAVATION FOR STRUCTURES (B-11-137/138)	EACH	4
☆ SPV.0165	WELDED WIRE FABRIC 6X6 D4/D4 (GRADE 60)	SF	240
SPV.0165	PREPARATION OF PIER SURFACES	SF	240

☆ ENGINEER TO DETERMINE THE EXTENTS OF THE REPAIR & NUMBER OF BARS NEEDED

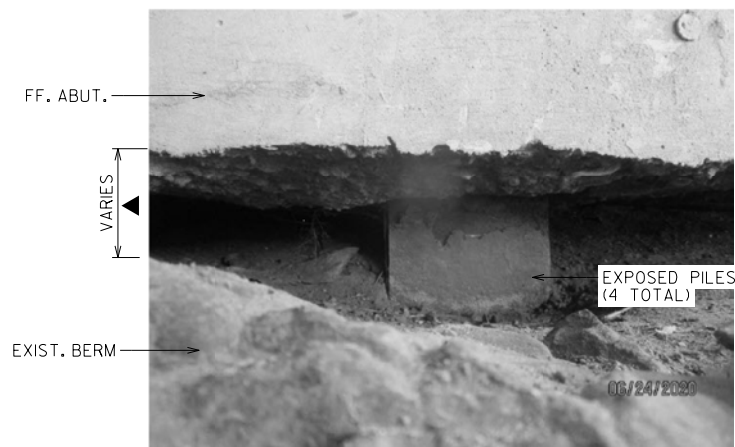
MATERIAL PROPERTIES:
STRUCTURAL GROUT _____ f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT: _____ fy = 60,000 P.S.I.
GRADE 60 _____

NO.	DATE	REVISION	BY
ACCEPTED			12/20/21
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-11-137/138			
IH 90/94 OVER THE BARABOO RIVER			
COUNTY	COLUMBIA	TOWN	CALEDONIA
DESIGN SPEC. REHAB N/A	DESIGNED BY SGN	DESIGNED CK'D. SEW	DRAWN BY SEW
PLANS CK'D. RAC			
SCOUR REPAIR			SHEET 1 OF 3

8

8

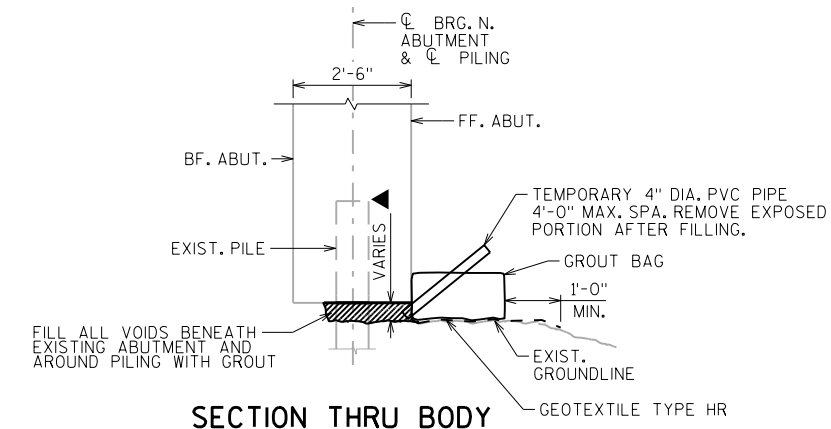
SCALE = 13.00



EXPOSED PILE AT B-11-137 N. ABUT.

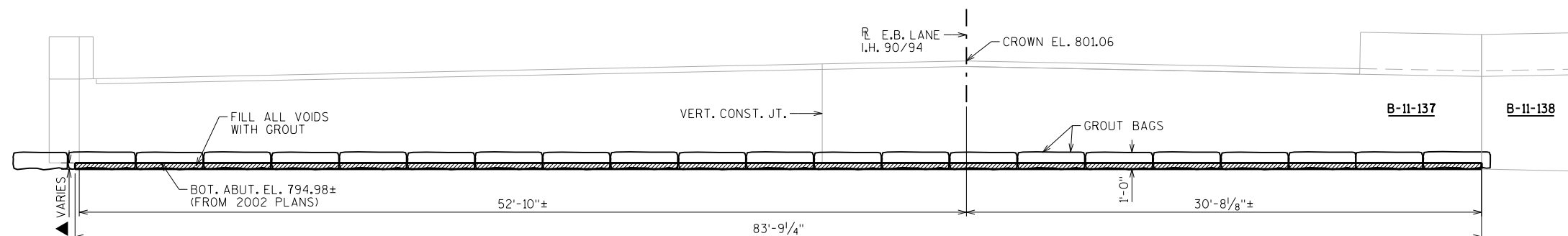


UNDERMINING AT B-11-137 N. ABUT.

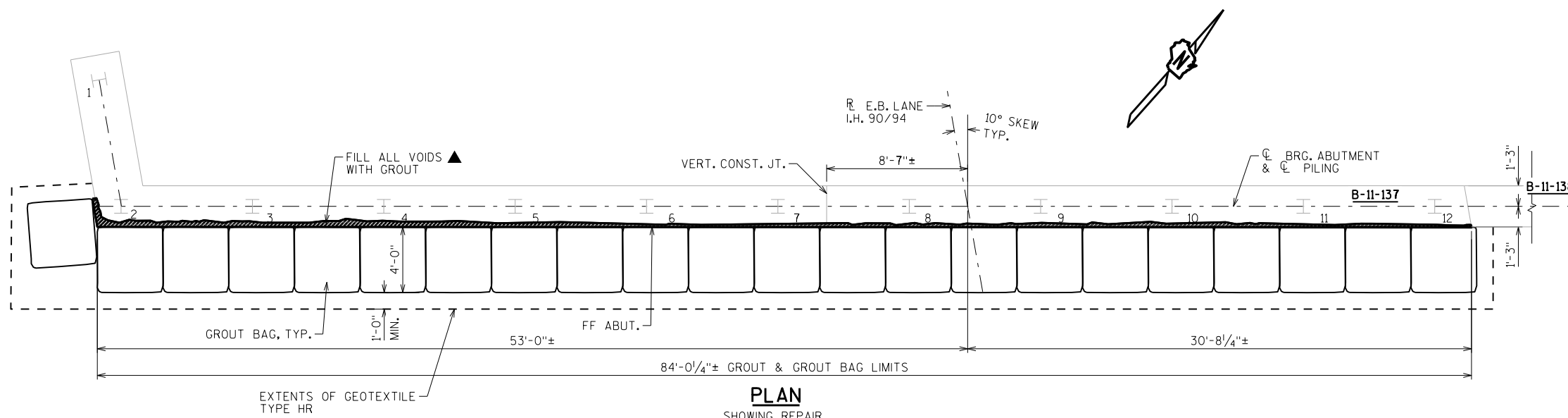


SECTION THRU BODY

**B-11-137 N. ABUT.
EXISTING CONDITIONS**



N. ABUTMENT ELEVATION
LOOKING NORTH

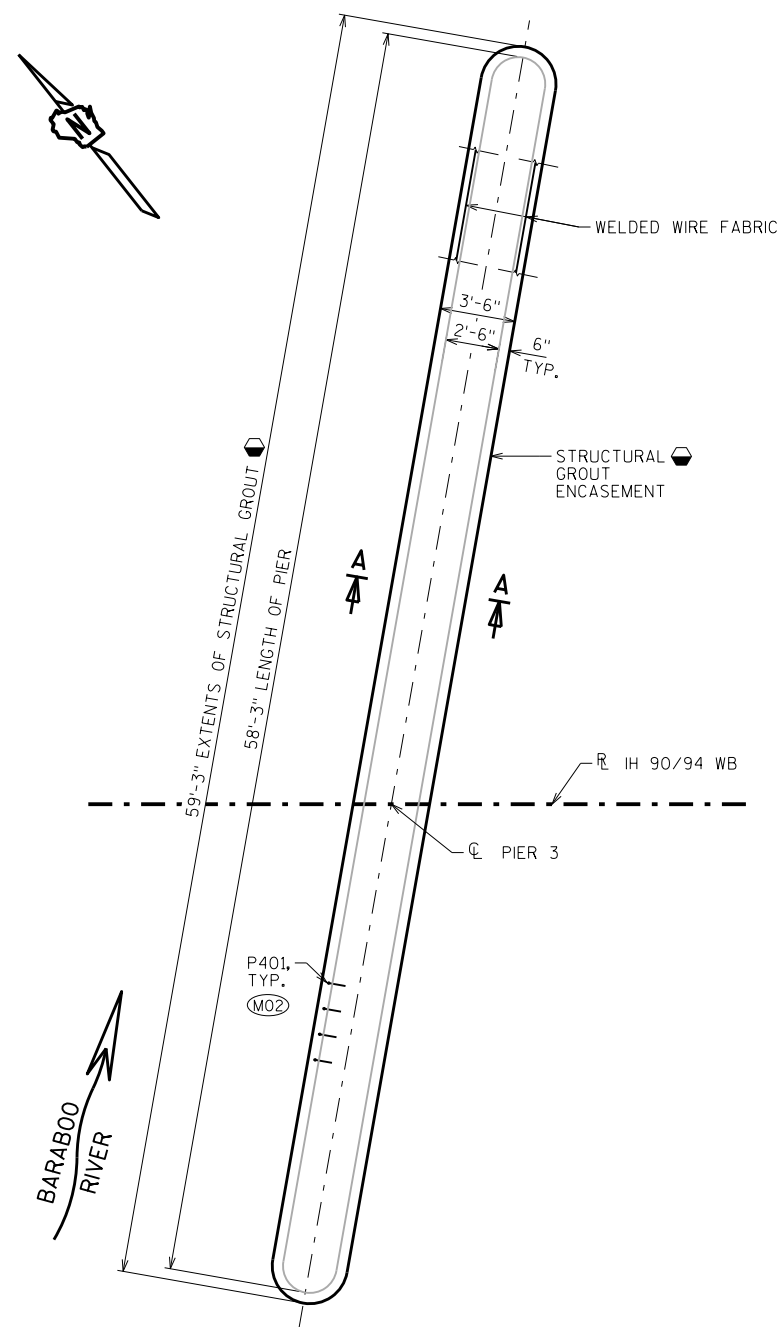


PLAN
SHOWING REPAIR

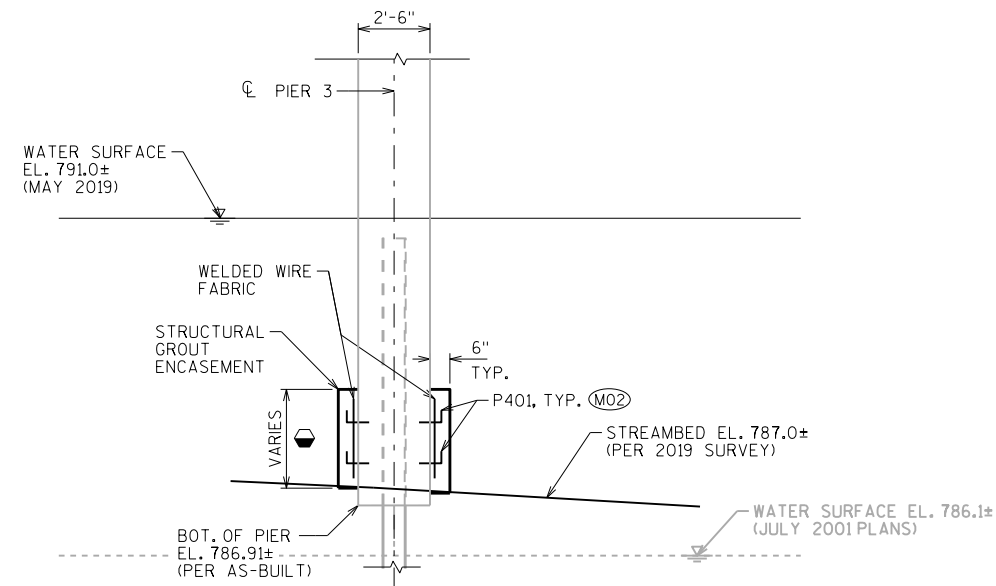
NOTES:

- ELEVATIONS TAKEN FROM 2002 AS-BUILT
- ▲ EXTENTS OF UNDERMINING REPAIR VARIES, UP TO 1'-0" MAX. TO BE VERIFIED BY THE ENGINEER.

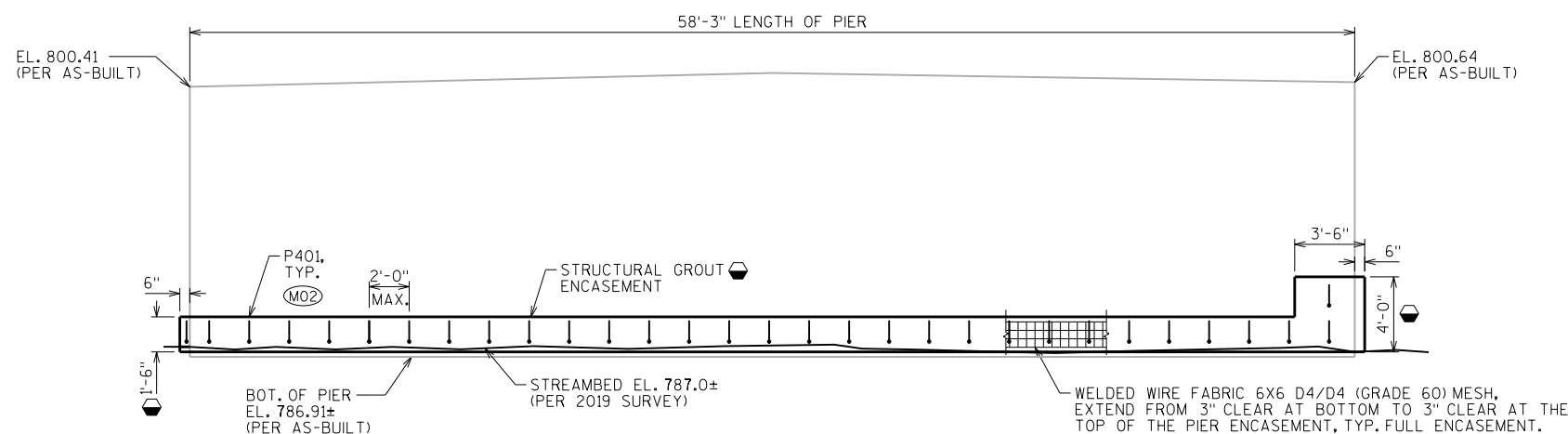
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-137/138			
DRAWN BY		SEW	PLANS CK'D. RAC
B-11-137 N. ABUTMENT REPAIR			SHEET 2



PLAN



SECTION A-A



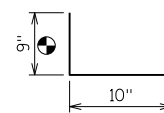
ELEVATION

LOOKING NORTH

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
MO2 P401		60	1'-6"	X		ANCHORS - VERT.



P401

LEG TO BE EMBEDDED

ENCASEMENT HEIGHT VARIES, ENGINEER TO DETERMINE FINAL EXTENTS OF REPAIR

ADHESIVE ANCHORS NO. 4 BAR, EMBED 6" IN SOUND CONCRETE, SPACED AT 2'-0" MAX. ENGINEER TO DETERMINE NUMBER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-137/138			
DRAWN BY		SEW	PLANS CK'D. RAC
B-11-138 PIER 3 REPAIR		SHEET 3	

Notes



Wisconsin Department of Transportation

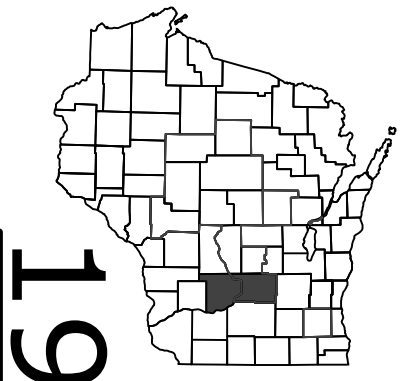
Dedicated people creating transportation solutions through innovation and exceptional service.

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

ORDER OF SHEETS

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

TOTAL SHEETS = 14



DESIGN DESIGNATION 6130-02-30

A.A.D.T.	2022	=	17,110
A.A.D.T.	2042	=	
D.H.V.		=	
D.D.		=	59/41
T.		=	
DESIGN SPEED		=	<25 MPH
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
WISCONSIN DELLS - ADAMS
WISCONSIN RIVER STRUCS B-11-001/104
STH 13
COLUMBIA & SAUK COUNTIES

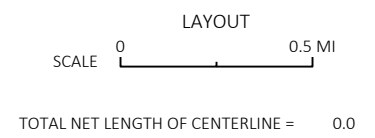
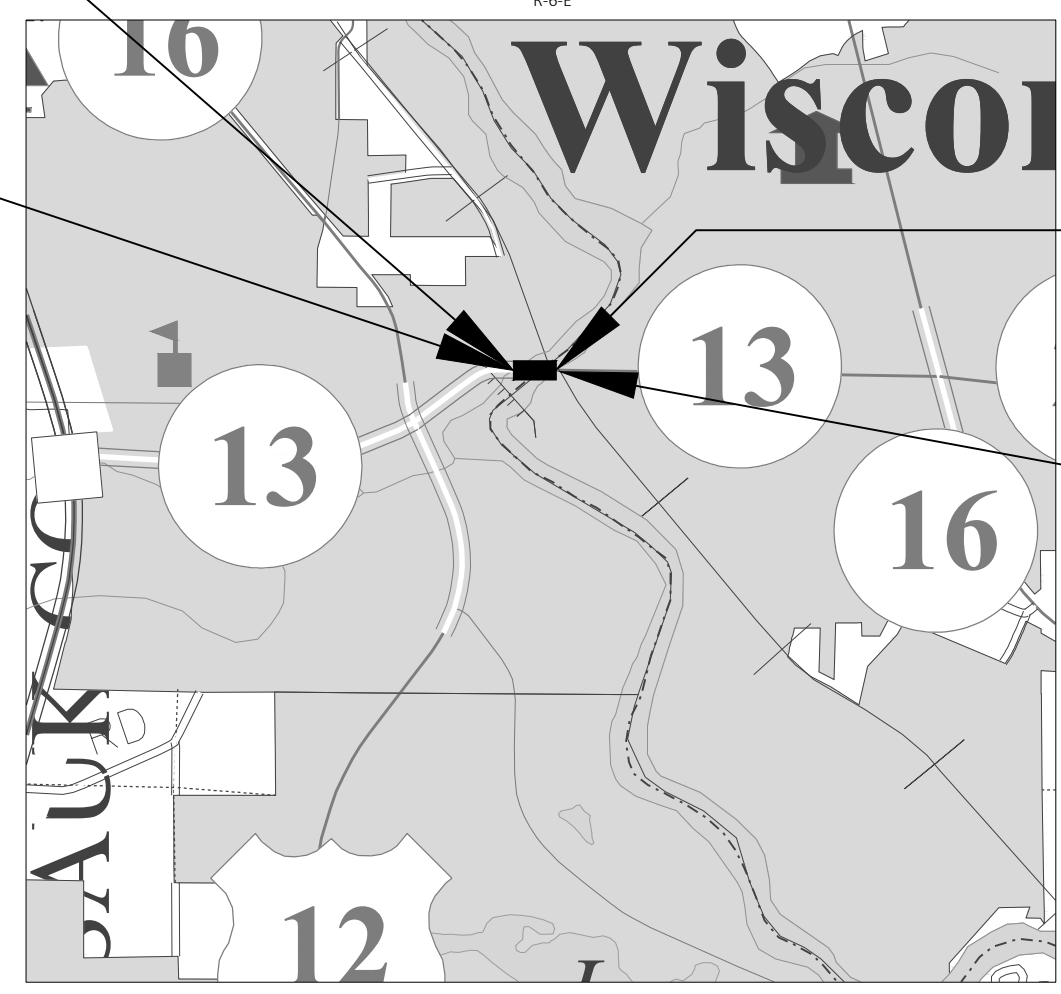
STATE PROJECT NUMBER
6130-02-60

B-11-0001, MISC. REPAIRS
STA 23+92.75 - 29+37.25

BEGIN PROJECT
STA 22+92.75
Y: 294388.63
X: 639760.21

END PROJECT
STA 29+37.25

B-11-0104, MISC. REPAIRS
STA 22+92.75 - 29+37.25



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SAUK 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 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6130-02-60	_____	_____
1014-00-69	_____	_____

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	Surveyor	SW REGION
Designer	JOSH SCHOENMANN	
Project Manager	STEVEN PORTER, PE	
Regional Examiner	SW REGION	
Regional Supervisor	ALEX HAGEN, PE	

APPROVED FOR THE DEPARTMENT
DATE: 10/26/2021 *Steven Porter*
(Signature)

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

ALL EROSION CONTROL FEATURES ARE SHOWN AT SUGGESTED LOCATIONS IN THE PLANS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE DNR.

ABBREVIATIONS

ABUT	ABUTMENT	LT	LEFT
A.D.T.	AVERAGE DAILY TRAFFIC	ML	MATCH LINE
AP	ACCESS POINT	MAX.	MAXIMUM
B.F.	BACK FACE	MIN.	MINIMUM
B.M.	BENCH MARK	NORM.	NORMAL
B.O.P.	BEGIN OF PROJECT	O.H.	OVER HEAD POWER LINE
CL	CENTER LINE	PT	POINT
CTR.	CENTER	PC	POINT OF CURVATURE
CY	CUBIC YARD	PI	POINT OF INTERSECTION
CP	CULVERT PIPE	PT	POINT OF TANGENCY
C&G	CURB AND GUTTER	PL	PROPERTY LINE
D.H.V.	DESIGN HOURLY VOLUME	PB	PULL BOX
DIA.	DIAMETER	RAD.	RADIUS
DIM.	DIMENSION	RL	REFERENCE LINE
EL	ELEVATION	REQ'D	REQUIRED
EW	END WALL	RT	RIGHT
EBS	EXCAVATION BELOW SUBGRADE	RHF	RIGHT HAND FORWARD
E.O.P.	END OF PROJECT	R/W	RIGHT OF WAY
EXC.	EXCAVATION	STA.	STATION
EXIST	EXISTING	SSPRC	STORM SEWER PIPE
F.F.	FRONT FACE		REINFORCED CONCRETE
FL	FLOW LINE	SE	SUPERELEVATION
HT	HEIGHT	STR.	STRUCTURE
CWT	HUNDREDWEIGHT	TLE	TEMPORARY LIMITED EASEMENT
INL	INLET	TYP.	TYPICAL
INV	INVERT	V.	DESIGN SPEED

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRICITY & GAS/PETROLEUM
MICHAEL BROLIN
4902 NORTH BILTMORE LN
MADISON, WI, 53713
PHONE: (608) 458-4871
EMAIL: MICHAELBROLIN@ALLIANTENERGY.COM

ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
MIKE OLSEN
801 O'KEEFE RD
P.O. BOX 6113
DE PERE, WI, 54115-6113
PHONE: (920) 338-6582
EMAIL: MOLSEN@ATCLLC.COM

AT&T LEGACY - COMMUNICATION LINE
KENNETH COLWELL
222 W JACKSON
WOODSTOCK, IL, 60098
PHONE: (312) 734-2223
EMAIL: KC1298@ATT.COM

NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM
JASON GOULD
8101 BIRCHWOOD CT., SUITE F
JOHNSTON, IA, 50131
PHONE: (402) 530-2011
EMAIL: JASON.GOULD@NNGCO.COM

ADAMAS-COLUMBIA ELECTRIC COOPERATIVE - ELECTRICITY
SHAWN PIETRZAK
P.O. BOX 70
FRIENDSHIP, WI 53934
PHONE: (800) 831-8629
EMAIL: SPIETRZAK@ACEWI.COM

CHARTER COMMUNICATIONS - COMMUNICATION LINE
LUKAS LACROSSE
2701 DANIELS ST.
MADISON, WI 53718
PHONE: (608) 709-1562 X41562
EMAIL: LUKAS.LACROSSE@CHARTER.COM

CITY OF WISCONSIN DELLS - WATER, ELECTRICITY, AND SEWER
DAVID HOLZEM
300 LACROSSE ST.
WISCONSIN DELLS, WI 53965
PHONE: (608) 253-2542
EMAIL: DHOLZEM@DELLSCITYGOV.COM

FRONTIER COMMUNICAITONS OF WI LLC - COMMUNICATION LINE
RUSS RYAN
118 DIVISION ST.
PLYMOUTH, WI 53073
PHONE: (920) 583-3275
EMAIL: RUSSELL.W.RYAN@FTR.COM

OAKDALE ELECTRIC COOPERATIVE - ELECTRICITY
ROY BOYLES
P.O. BOX 128
OAKDALE, WI 54649-0128
PHONE: (608) 372-8851
EMAIL: RBOYLES@OAKDALEREC.COM

REEDSBURG UTILITY COMMISSION - COMMUNICATION LINE
KEN LAS
501 UTILITY COURT P.O. BOX 230
REEDSBURG, WI 53959
PHONE: (608) 768-6450
EMAIL: KLAS@RUCLS.NET

ROGERS TELECOM - COMMUNICATION LINE
VICKIE MORAN
4804 N 40TH ST.
SHEBOYGAN, WI 53083
PHONE: (920) 395-7125
EMAIL: VMORAN@GABES.COM

GARY HANSEN
VICKIE MORAN
121 SKYLINE DR. P.O. BOX 87
LAKE DELTON, WI 53940-0087
PHONE: (608) 254-6704
EMAIL: GHANSEN@LAKEDELTON.ORG

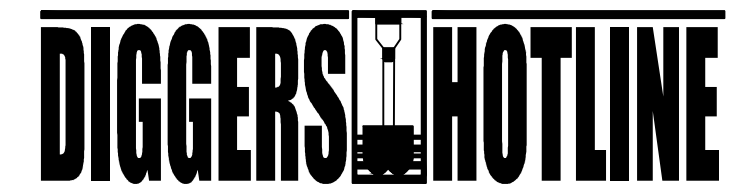
WINDSTREAM KDL, LLC - COMMUNICATOIN LINE
KEVIN PARRIS
1858 WRIGHT ST.
MADISON, WI 53704
PHONE: (608) 819-5016
EMAIL: KEVIN.J.PARRIS@WINDSTREAM.COM

REGION CONTACTS

STEVEN PORTER, PE
2101 WRIGHT ST.
MADISON, WI, 53704
PHONE: (608) 243-3366
EMAIL: STEVE.PORTER@DOT.WI.GOV

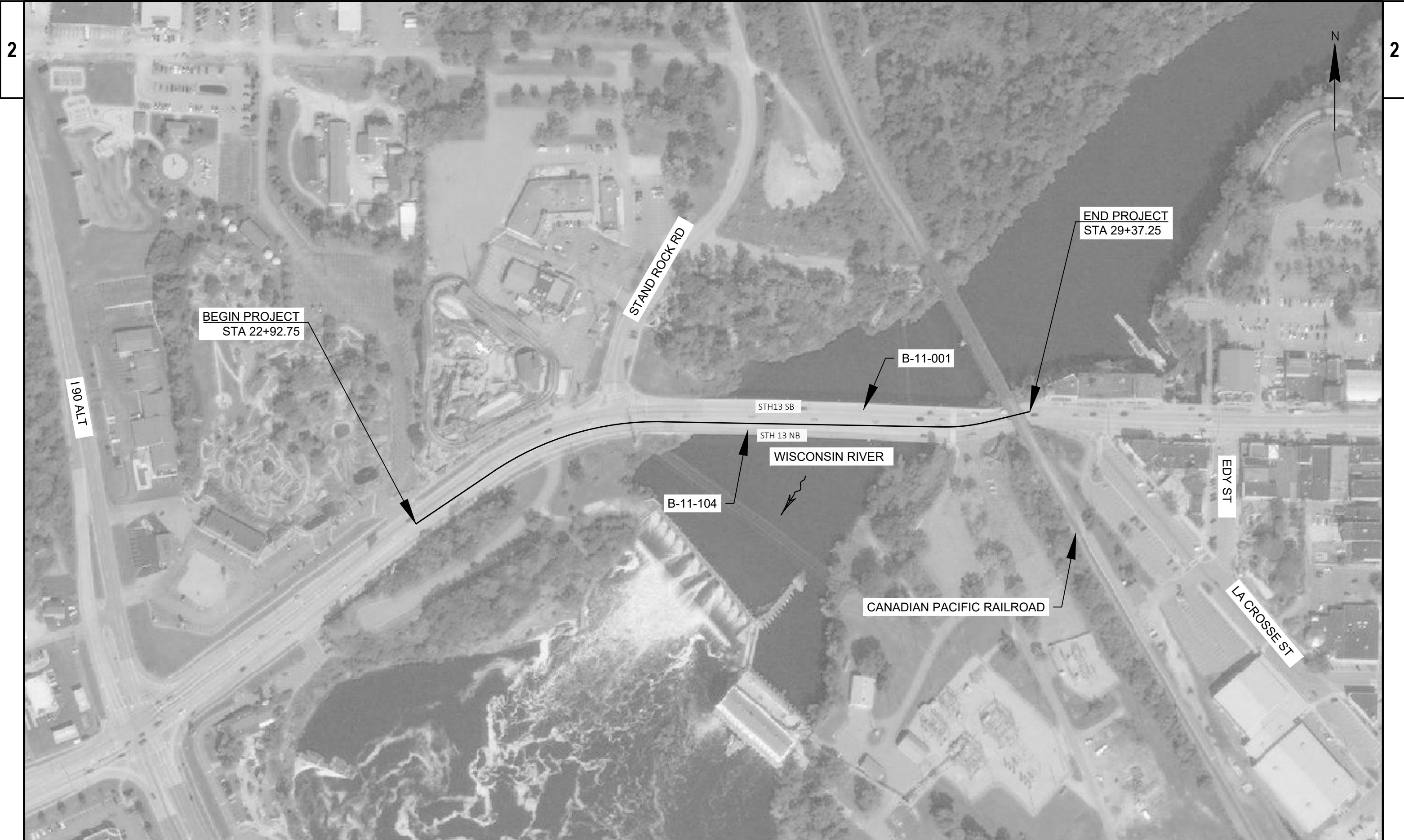
DNR CONTACT

ERIC HEGGELUND
3911 FISH HATCHERY RD.
FITCHBURG, WI, 53711
PHONE: (608) 275-3301
EMAIL: ERIC.HEGGELUND@WISCONSIN.GOV



Dial **811** or (800)242-8511

www.DiggersHotline.com



2

2

PROJECT NO: 6130-02-60	HWY: STH 13	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET	E
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Estimate Of Quantities By Plan Sets

6130-02-60

Line	Item	Item Description	Unit	Total	Qty
0004	213.0100	Finishing Roadway (project) 02. 6130-02-60	EACH	1.000	1.000
0008	502.4205	Adhesive Anchors No. 5 Bar	EACH	8.000	8.000
0010	502.9000.S	Underwater Substructure Inspection (Structure) 01. B-11-0001	EACH	1.000	1.000
0014	505.0400	Bar Steel Reinforcement HS Structures	LB	80.000	80.000
0016	606.0400	Riprap Extra-Heavy	CY	180.000	180.000
0020	618.0100	Maintenance And Repair of Haul Roads (project) 02. 6130-02-60	EACH	1.000	1.000
0022	619.1000	Mobilization	EACH	0.500	0.500
0024	643.0300	Traffic Control Drums	DAY	115.000	115.000
0026	643.0420	Traffic Control Barricades Type III	DAY	5.000	5.000
0028	643.0705	Traffic Control Warning Lights Type A	DAY	10.000	10.000
0030	643.0715	Traffic Control Warning Lights Type C	DAY	25.000	25.000
0032	643.0800	Traffic Control Arrow Boards	DAY	5.000	5.000
0034	643.0900	Traffic Control Signs	DAY	25.000	25.000
0040	643.5000	Traffic Control	EACH	0.500	0.500
0050	SPV.0035	Special 04. Structural Grout	CY	1.100	1.100
0052	SPV.0035	Special 05. Scour Repair Geotextile Bags	CY	80.000	80.000
0054	SPV.0060	Special 01. River Bottom Scanning Survey Structure B-11-1/104	EACH	3.000	3.000
0056	SPV.0060	Special 02. Underwater Excavation For Structures B-11-1/104	EACH	2.000	2.000
0062	SPV.0165	Special 01. Preparation Of Pier Surfaces	SF	50.000	50.000

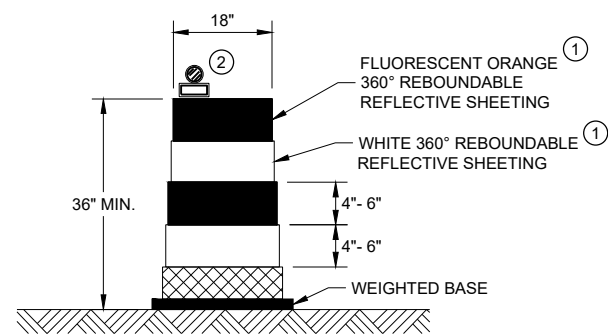
TRAFFIC CONTROL SUMMARY

LOCATION	DURATION	643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		REMARKS
		NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	
		TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL ARROW BOARDS		TRAFFIC CONTROL SIGNS		
STH 13	5	23	115	1	5	2	10	5	25	1	5	5	25	SINGLE LANE FOR MATERIAL DELIVERY
TOTAL 0010			115		5		10		25		5		25	

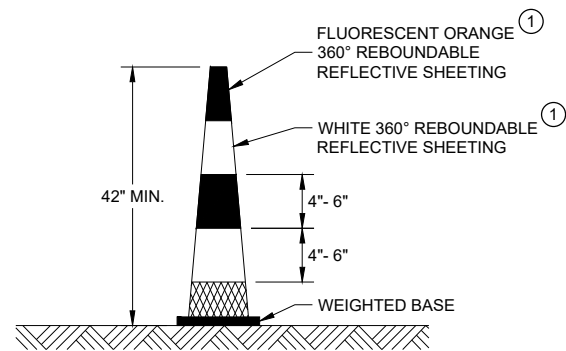
*SEE SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR LAYOUT AND SPACING REQUIREMENTS

Standard Detail Drawing List

15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

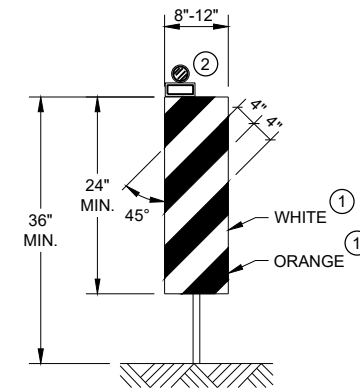


DRUM



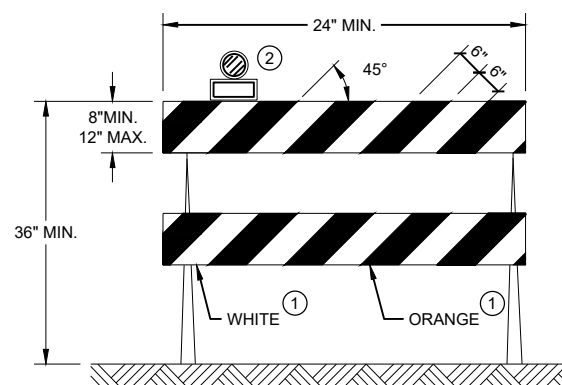
42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS



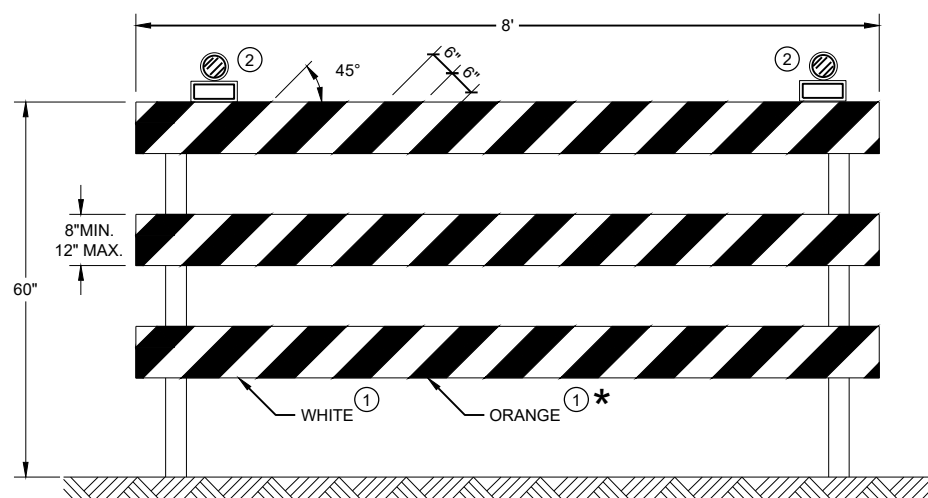
VERTICAL PANEL

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



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.

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.

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

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  FLASHING ARROW BOARD
-  DIRECTION OF TRAFFIC
-  REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
-  WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

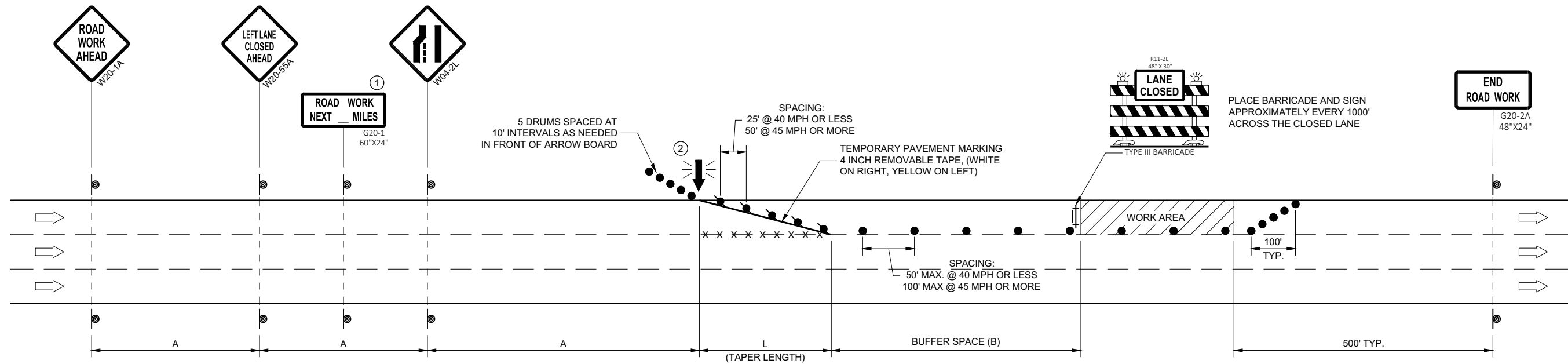
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE 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.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



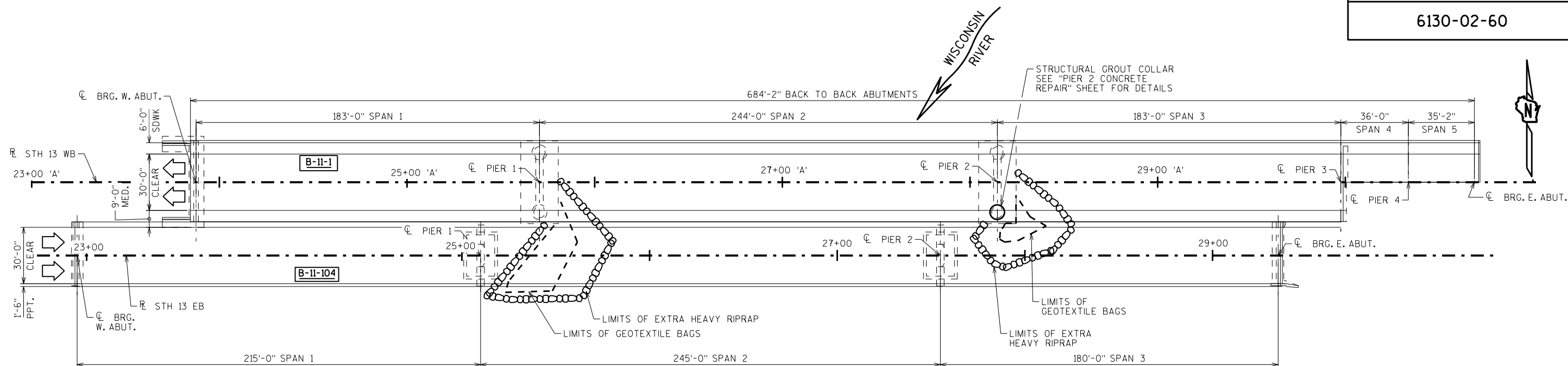
POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

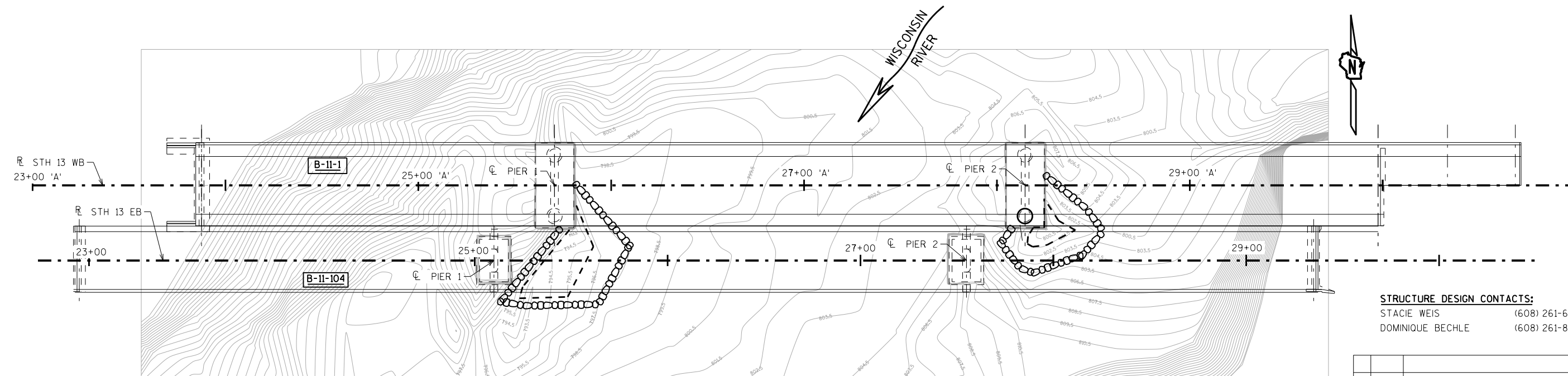
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



PLAN
SHOWING ROADWAY



CONTOUR PLAN
CONTOURS BASED ON OCT. 2018 SURVEY

STRUCTURE DESIGN CONTACTS:
STACIE WEIS (608) 261-6109
DOMINIQUE BECHLE (608) 261-8205

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED
- STREAMBED MUST BE SCANNED PRIOR TO GEOTEXTILE BAG PLACEMENT, PRIOR TO RIPRAP PLACEMENT AND AFTER RIPRAP PLACEMENT, FOR A TOTAL OF 3 SCANS PER SCOUR REPAIR. TO BE INCIDENTAL TO THE BID ITEM "RIVER BOTTOM SCANNING SURVEY STRUCTURE B-11-1/104".
- GEOTEXTILE BAG PLACEMENT LIMITS SHOWN ARE BASED ON RIVER SCAN INFORMATION FROM THE CONTRACTOR SURVEY OCTOBER 29, 2018.
- AFTER COMPLETION OF THE INITIAL SCAN OF THE STREAM BED AND PRIOR TO PLACEMENT OF GEOTEXTILE BAGS, THE FINAL QUANTITY AND EXTENTS OF GEOTEXTILE BAG PLACEMENT SHALL BE DETERMINED BY THE ENGINEER.
- PRIOR TO PLACEMENT OF GEOTEXTILE BAGS AND RIPRAP, DEMONSTRATIVE MEANS AND METHODS OF GEOTEXTILE BAG PLACEMENT IS REQUIRED TO ENSURE GEOTEXTILE BAG WILL BE PLACED WITHOUT DAMAGE TO THE BAGS AND SUBSTRUCTURE.
- AFTER PLACEMENT OF GEOTEXTILE BAGS AND PRIOR TO PLACEMENT OF RIPRAP, THE GEOTEXTILE BAG PLACEMENT SHALL BE APPROVED BY THE ENGINEER.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
502.0900.S	UNDERWATER SUBSTRUCTURE INSPECTION B-11-1	EACH	1
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	8
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	80
606.0400	RIPRAP EXTRA-HEAVY	CY	180
SPV.0035	STRUCTURAL GROUT	CY	1.1
SPV.0035	SCOUR REPAIR GEOTEXTILE BAGS	CY	80
SPV.0060	RIVER BOTTOM SCANNING SURVEY STRUCTURE B-11-1/104	EACH	3
SPV.0060	UNDERWATER EXCAVATION FOR STRUCTURES B-11-1/104	EACH	2
SPV.0165	PREPARATION OF PIER SURFACES	SF	50

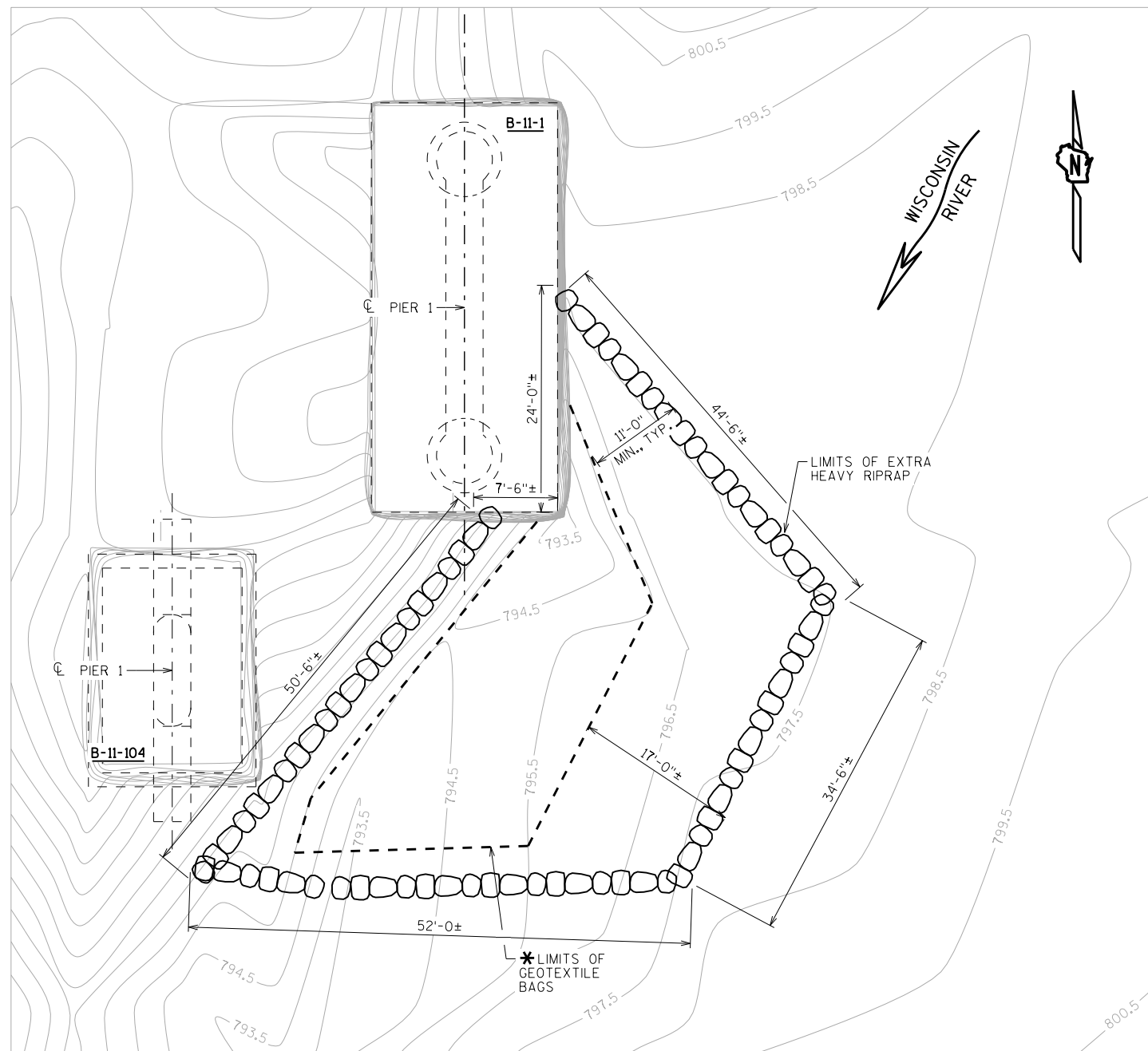
LIST OF DRAWINGS

1. GENERAL PLAN
2. PIER 1 SCOUR REPAIR
3. PIER 2 SCOUR REPAIR
4. PIER 2 COLUMN REPAIR

MATERIAL PROPERTIES:

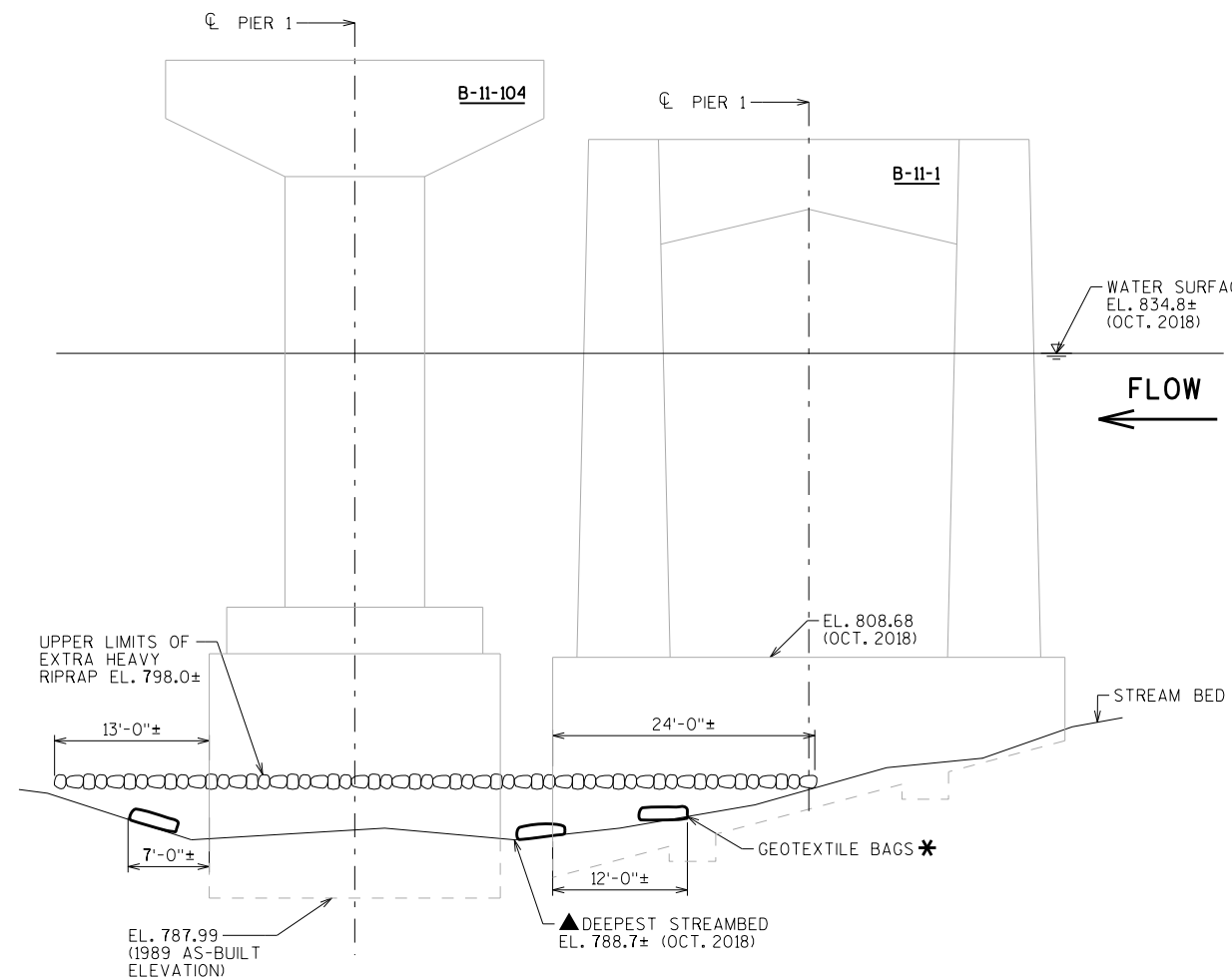
STRUCTURAL GROUT $f'c = 3,500$ P.S.I.
BAR STEEL REINFORCEMENT: GRADE 60 $f_y = 60,000$ P.S.I.

NO.	DATE	REVISION	BY
 ACCEPTED <i>[Signature]</i> ^{DMB} 12/20/21 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-11-1/104			
STH 13 OVER WISCONSIN RIVER			
COUNTY	COLUMBIA	CITY	WISCONSIN DELLS
DESIGN SPEC. REHAB	N/A		
DESIGNED BY	DESIGNED SGN	SEW	PLANS CK'D. RAC
GENERAL PLAN			SHEET 1 OF 4



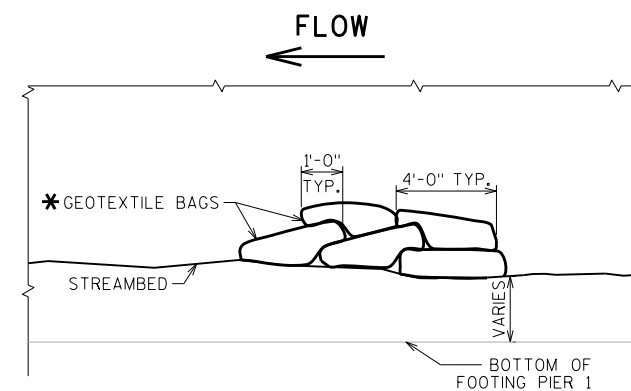
PLAN AT PIER 1

ROADWAY NOT SHOWN FOR CLARITY
PLACEMENT TO FOLLOW CONTOURS



ELEVATION - LOOKING WEST

SEE 'PLACEMENT DETAIL' FOR PLACEMENT
OF GEOTEXTILE BAGS



PLACEMENT DETAIL

* PLACE GEOTEXTILE BAGS CLOSEST TO PIER FIRST. OVERLAP BAGS A MINIMUM 1'-0". PLACE TWO LAYERS AT THE DEEPEST LOCATIONS. RIVERBED MUST BE SCANNED BEFORE AND AFTER PLACEMENT.

NOTES

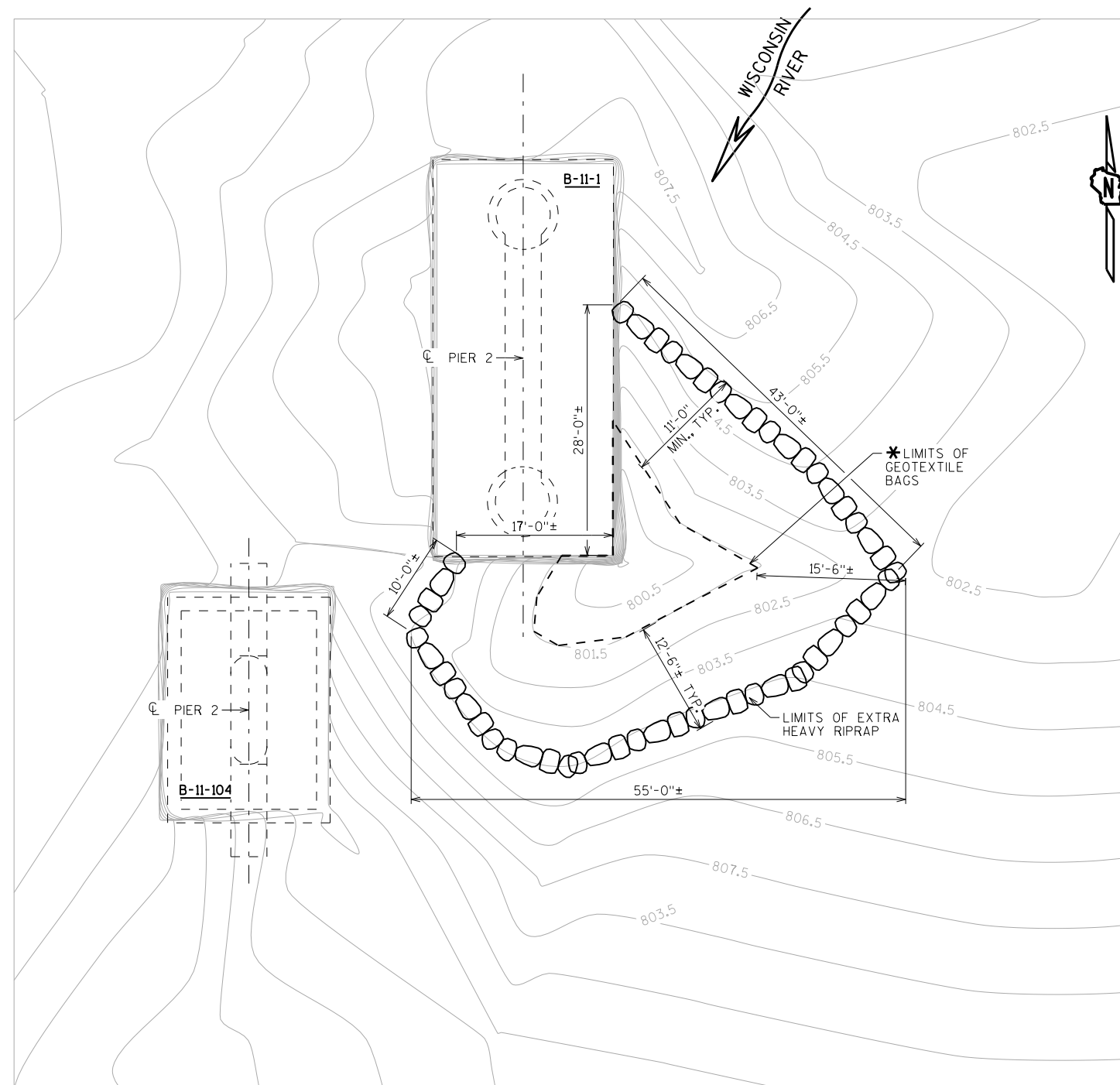
EXTEND RIPRAP A MINIMUM 11'-0" PAST GEOTEXTILE BAGS WHERE POSSIBLE.

GEOTEXTILE BAGS TO BE 4' WIDE X 4' LONG X 2' THICK, FILLED 1'-0" FULL. TO BE HAND SEWN ON SITE.

RIPRAP SHALL NOT BE PLACED HIGHER THAN EL. 798.0, BLEND INTO THE NATURAL STREAMBED.

▲ STREAMBED ELEVATION MAY VARY AT TIME OF PLACEMENT. FINAL QUANTITY AND EXTENTS OF GEOTEXTILE BAG PLACEMENT SHALL BE DETERMINED BY THE ENGINEER BASED ON THE RESULTS OF THE INITIAL RIVER BOTTOM SCAN.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-1/104			
DRAWN BY		SEW	PLANS CK'D. RAC
PIER 1 SCOUR REPAIR			SHEET 2



PLAN AT PIER 2

ROADWAY NOT SHOWN FOR CLARITY
PLACEMENT TO FOLLOW CONTOURS

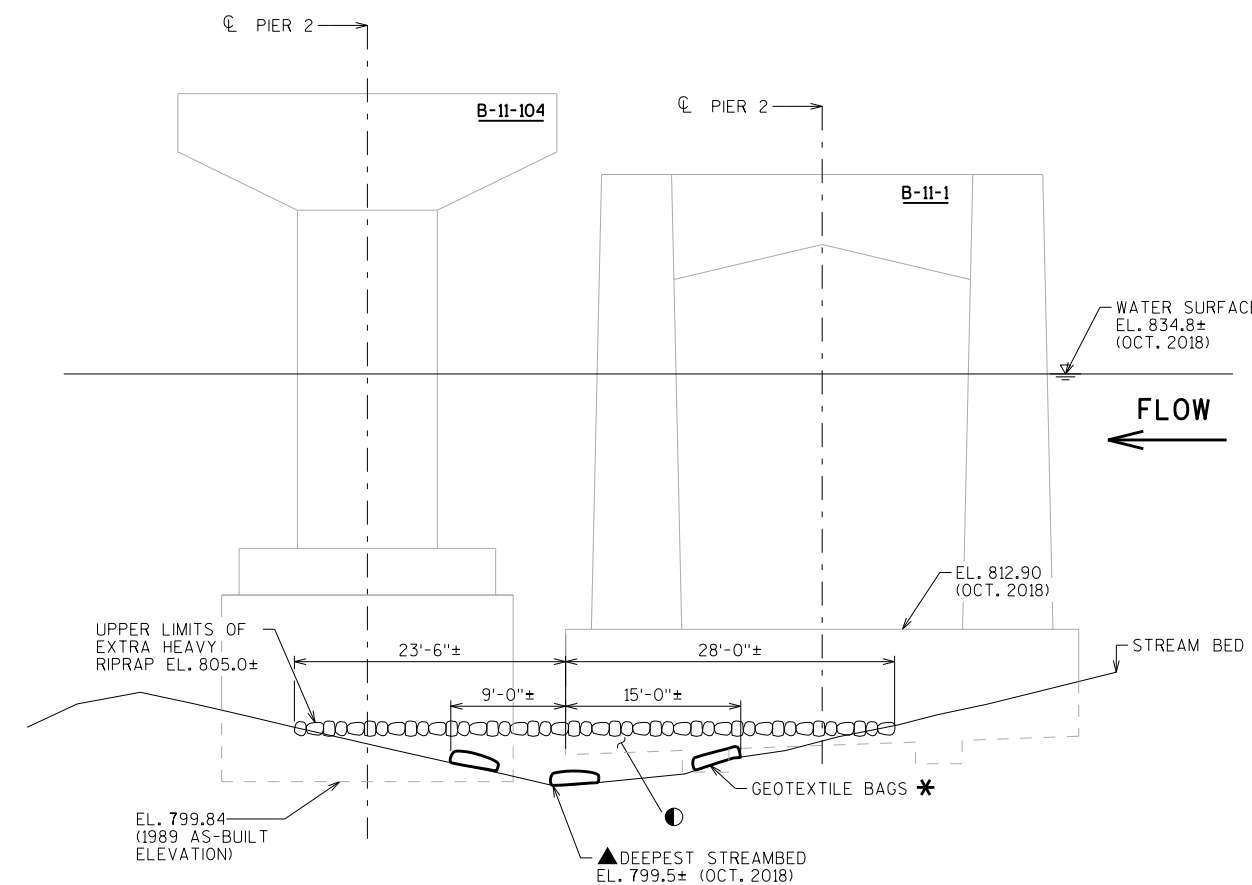
NOTES

EXTEND RIPRAP A MINIMUM 11'-0" PAST GEOTEXTILE BAGS WHERE POSSIBLE.

GEOTEXTILE BAGS TO BE 4' WIDE X 4' LONG X 2' THICK, FILLED 1'-0" FULL.
TO BE HAND SEWN ON SITE.

RIPRAP SHALL NOT BE PLACED HIGHER THAN EL. 805.0, BLEND INTO THE
NATURAL STREAMBED.

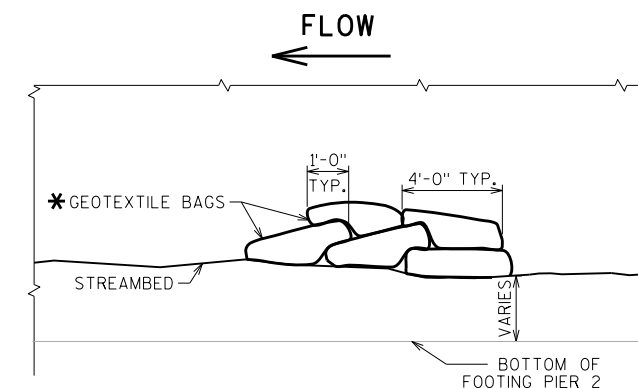
▲ STREAMBED ELEVATION MAY VARY AT TIME OF PLACEMENT. FINAL QUANTITY
AND EXTENTS OF GEOTEXTILE BAG PLACEMENT SHALL BE DETERMINED BY THE
ENGINEER BASED ON THE RESULTS OF THE INITIAL RIVER BOTTOM SCAN.



ELEVATION - LOOKING WEST

SEE 'PLACEMENT DETAIL' FOR PLACEMENT
OF GEOTEXTILE BAGS

● NO UNDERMINING PRESENT, SCOUR HOLE IS DIRECTLY
OFF CORNER OF PIER 2 (B-11-1), SEE 'PLAN AT PIER 2'
FOR CONTOUR DETAILS.



PLACEMENT DETAIL

* PLACE GEOTEXTILE BAGS CLOSEST TO PIER FIRST. OVERLAP BAGS
A MINIMUM 1'-0". PLACE TWO LAYERS AT THE DEEPEST LOCATIONS.
RIVERBED MUST BE SCANNED BEFORE AND AFTER PLACEMENT.

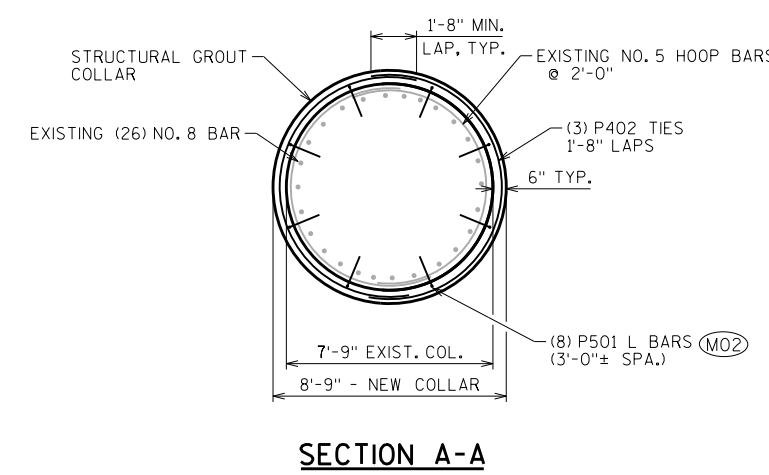
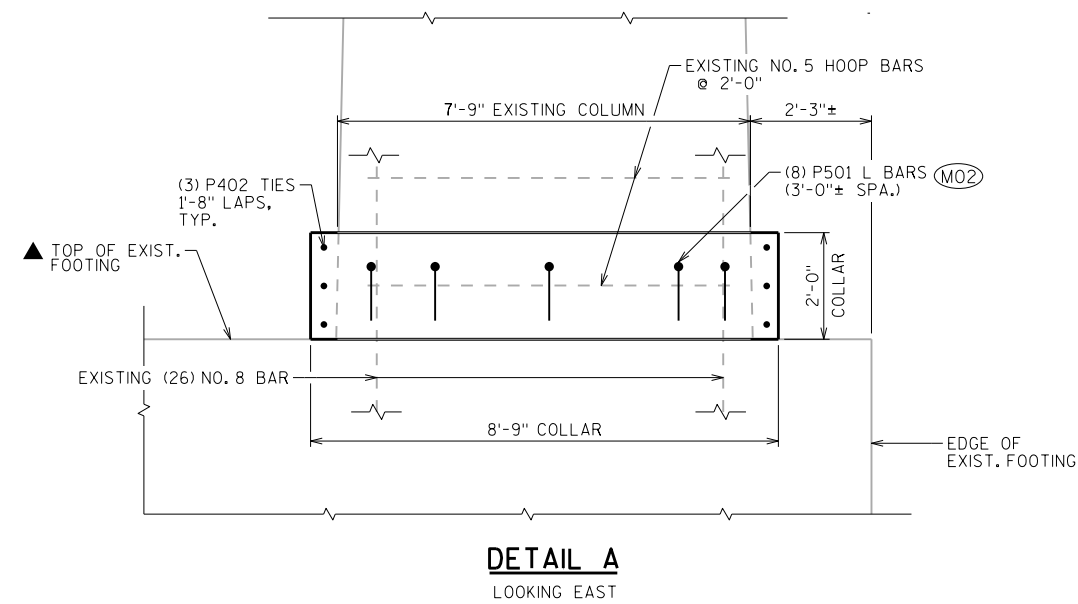
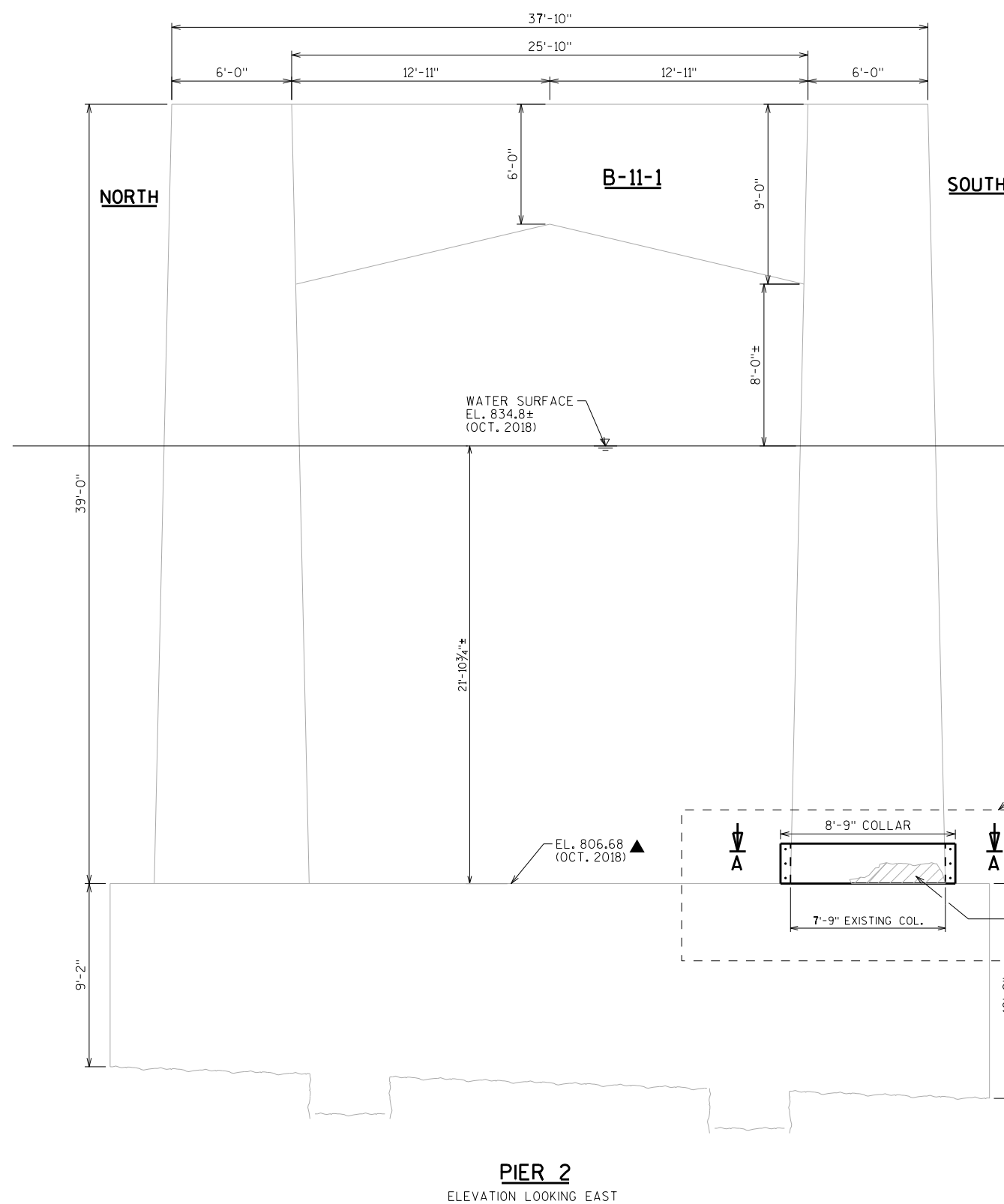
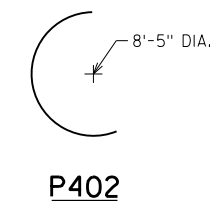
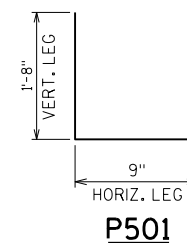
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-1/104			
		DRAWN BY	SEW PLANS CK'D. RAC
PIER 2 SCOUR REPAIR			SHEET 3

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
(MO2) P501		8	2'-4"	X		ADHESIVE ANCHORS - VERT.
P402		6	14'-8"	X		TIES - CONCRETE COLLAR - HORIZ.

(MO2) ADHESIVE ANCHORS NO. 5 BAR, EMBED 6" INTO SOUND CONCRETE. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGING THE EXISTING VERTICAL COLUMN REINFORCEMENT DURING INSTALLATION OF ADHESIVE ANCHORS.



NOTE:
 CLEAN EXISTING EXPOSED REINFORCEMENT PRIOR TO FORMING THE COLLAR. WORK TO BE INCLUDED IN BID ITEM "PREPARATION OF PIER SURFACES"
 ▲ CLEAN DEBRIS OFF THE TOP OF FOOTING PRIOR TO FORMING THE COLLAR. DEBRIS REMOVAL WORK SHALL BE INCLUDED IN BID ITEM "UNDERWATER EXCAVATION FOR STRUCTURES B-11-1/104"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-1/104			
DRAWN BY		SEW	PLANS CK'D. RAC
PIER 2 COLUMN REPAIR			SHEET 4

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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