

MAD

APRIL 2018

ORDER OF SHEETS

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

TOTAL SHEETS = 76

PROJECT ID: 1390-00-83

WITH: 3080-07-60

COUNTY: JEFFERSON

04

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

JANESVILLE - FORT ATKINSON

ROCK RIVER STRUCTURE, B-28-81

STH 26

JEFFERSON COUNTY

STATE PROJECT NUMBER
1390-00-83

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1390-00-83	_____	_____



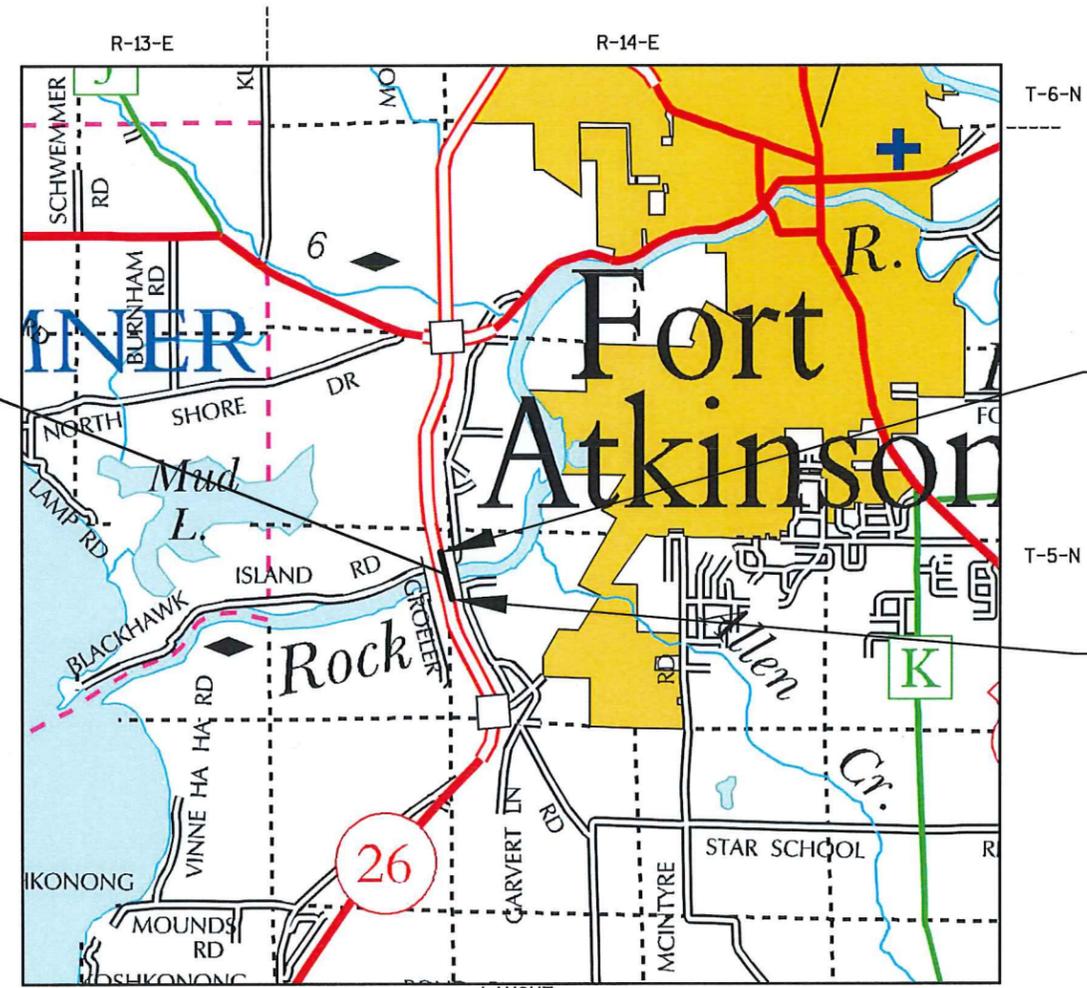
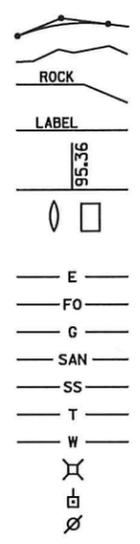
DESIGN DESIGNATION

A.A.D.T. (2015)	=	11,900
A.A.D.T. (2037)	=	17,300
D.H.V. (2037)	=	18.2
D.D.	=	60/40
T.	=	21.6%
DESIGN SPEED	=	70 MPH
ESALS	=	N/A

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



SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.173 MI.

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

END PROJECT STA. 20+35

BEGIN PROJECT
STA. 11+20
Y= 347,782.52
X= 532,460.17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES
Designer	MEGAN SCHERER
Project Manager	JOHN JENKINS
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	JAMES OETTINGER

APPROVED FOR THE DEPARTMENT

DATE: 10/23/17

(Signature)

E

GENERAL NOTES

DIMENSIONS GIVEN FOR EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE AND MEASURED IN THE FIELD FOR MATCHING PURPOSES.

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

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

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

UTILITY CONTACTS

WI. INDEPENDANT NETWORK, LLC - COMMUNICATION LINE
JIM BIRKENHEIER
(715) 838-4007
jbirkenheier@wlns.net

AT&T WISCONSIN - COMMUNICATION LINE
CAROL ANASON
316 W WASHINGTON AVE.
MADISON WI. 53703
(608) 252-2385
ca2624@att.com

DNR CONTACT

LAURA BUB
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
3911 FISH HATCHERY ROAD
MADISON, WI 53711
(608) 275-3485
Laura.Bub@wisconsin.gov

WISDOT CONTACTS

WISDOT PROJECT MANAGER
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2101 WRIGHT ST.
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John.Jenkins@dot.wi.gov

WISDOT PROJECT LEADER
MEGAN SCHERER
2101 WRIGHT ST.
MADISON, WI 53704
(608) 513-4562
megan.scherer@dot.wi.gov

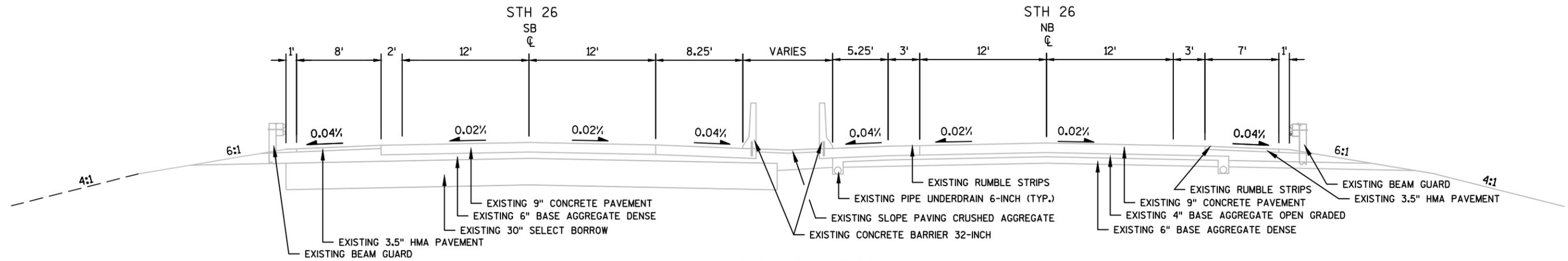


Dial **811** or (800) 242-8511

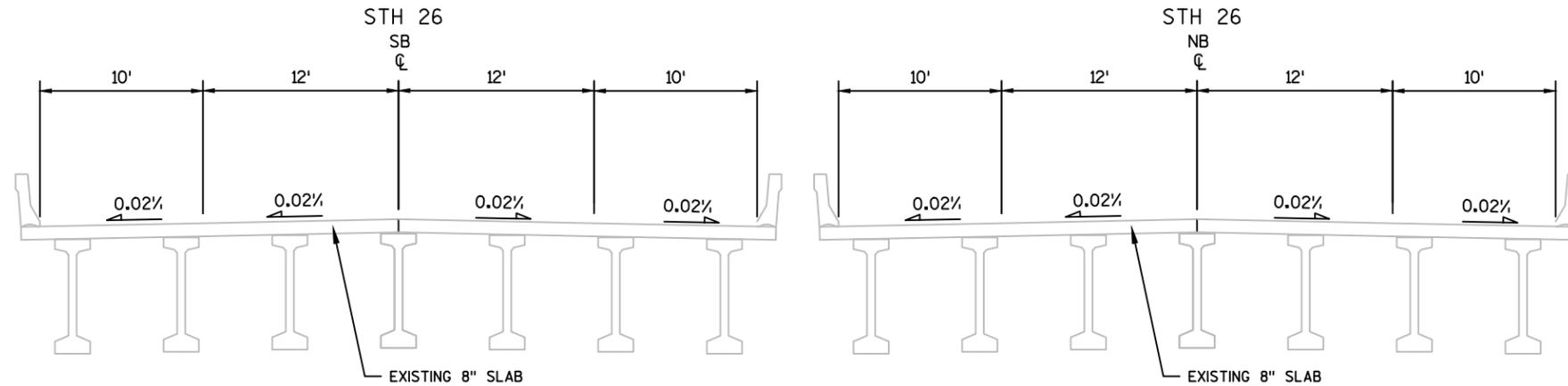
www.DiggersHotline.com

STANDARD ABBREVIATIONS

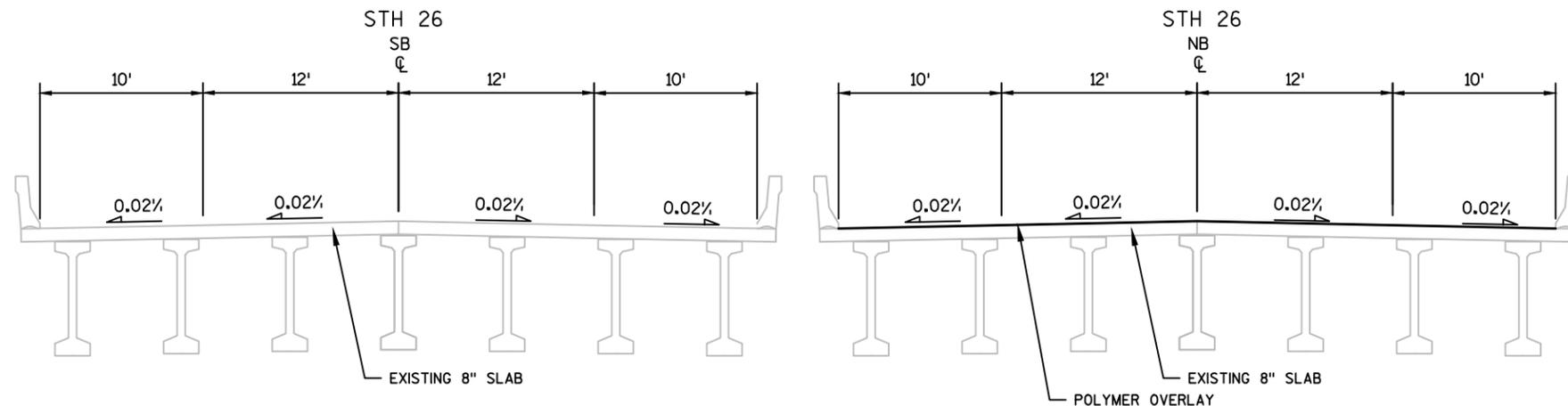
AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
D	CENTRAL ANGLE OR DELTA	V.P.I.	VERTICAL POINT OF INTERSECTION
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	R/L	REFERENCE LINE
C.Y.	CUBIC YARD	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL., ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT (FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST



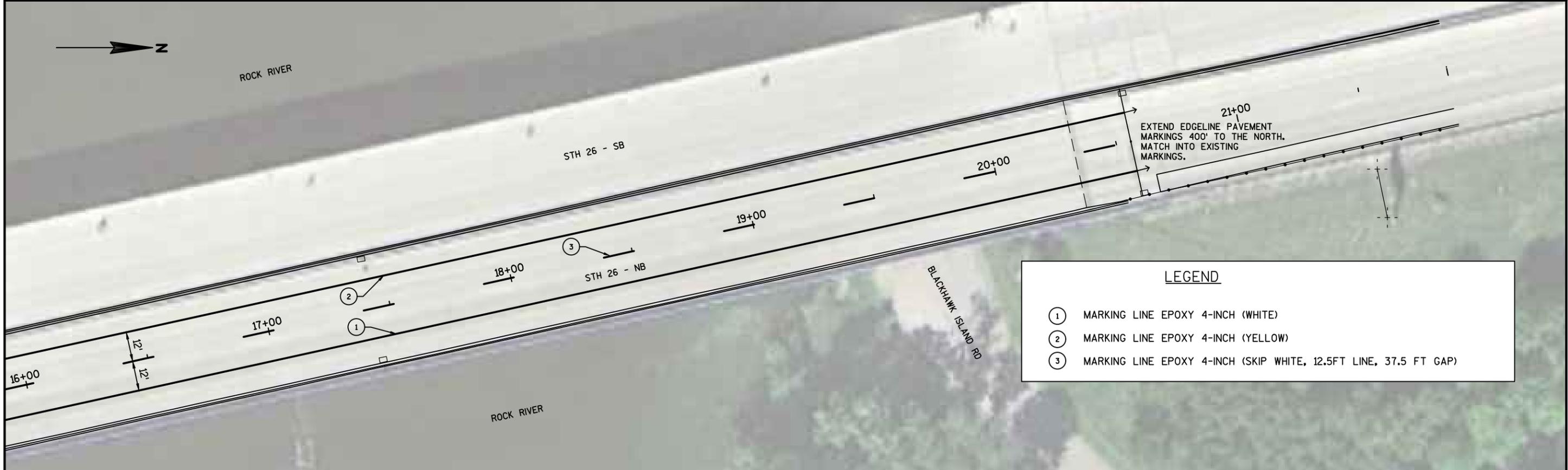
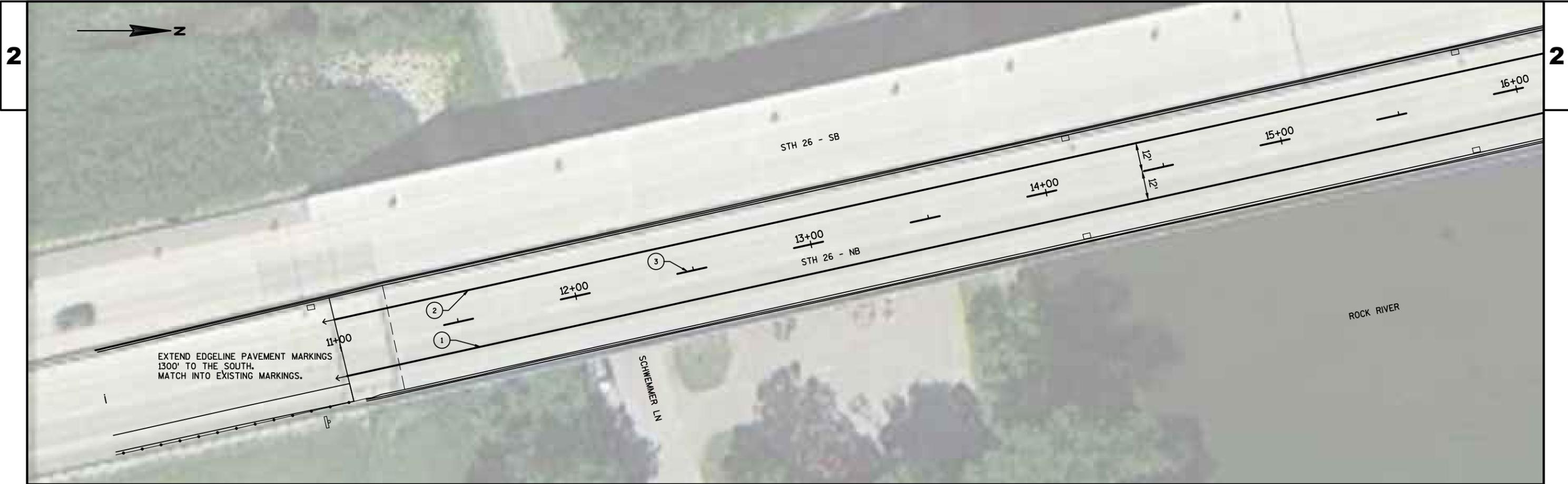
EXISTING TYPICAL SECTION
 STH 26 BYPASS,
 NORTH AND SOUTH OF B-28-81



EXISTING TYPICAL SECTION
 STRUCTURE B-28-81
 STA 11+20 - STA 20+35



FINISHED TYPICAL SECTION
 STRUCTURE B-28-81
 STA 11+20 - STA 20+35



LEGEND	
①	MARKING LINE EPOXY 4-INCH (WHITE)
②	MARKING LINE EPOXY 4-INCH (YELLOW)
③	MARKING LINE EPOXY 4-INCH (SKIP WHITE, 12.5FT LINE, 37.5 FT GAP)

LEGEND

PCMS PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

● TRAFFIC CONTROL DRUM

FIRST MAINTENANCE CROSSOVER
SOUTH OF STRUCTURE B-28-81

STH 26 NB



10' DRUM SPACING

MESSAGE

ROAD WORK	STARTING (DATE)
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STAGE 1A

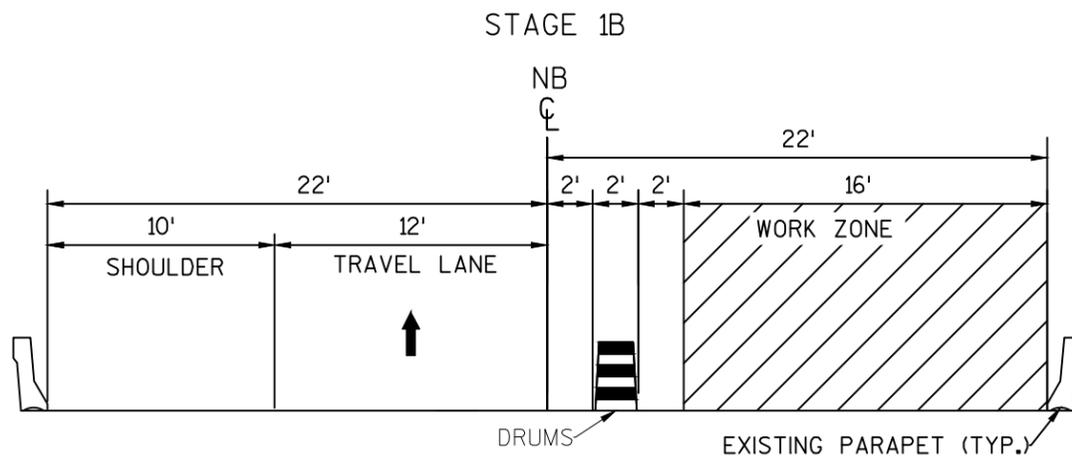
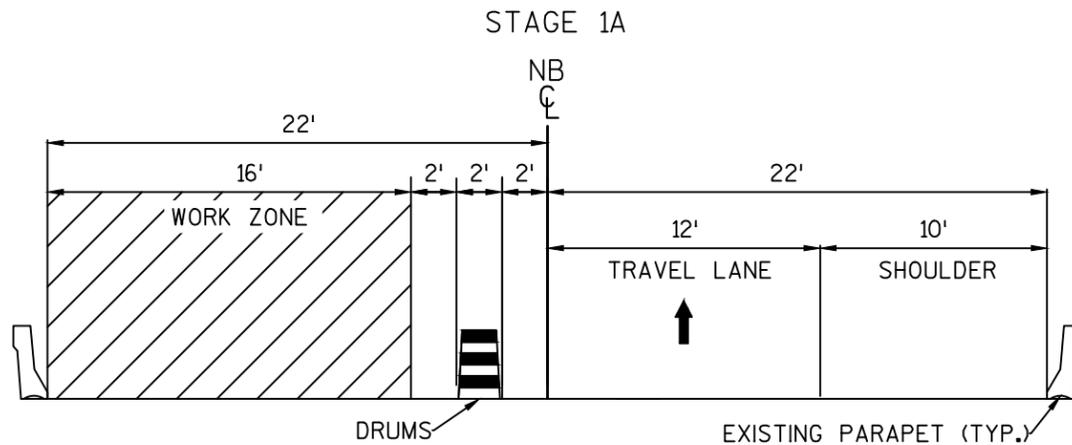
TRAFFIC: LEFT LANE AND SHOULDER WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON THE RIGHT LANE. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 1A (SHEETS 1-5).

CONSTRUCTION: PREPARE LEFT SHOULDER FOR THE ACCOMMODATION OF MAINLINE TRAFFIC. WORK INCLUDES FILLING RUMBLE STRIPS AND PAVEMENT MARKING REMOVAL OF THE LEFT EDGELINE.

STAGE 1B

TRAFFIC: RIGHT LANE AND SHOULDER WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON THE LEFT LANE. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 1B (SHEETS 1-5).

CONSTRUCTION: PREPARE RIGHT SHOULDER FOR THE ACCOMMODATION OF MAINLINE TRAFFIC. WORK INCLUDES FILLING RUMBLE STRIPS AND PAVEMENT MARKING REMOVAL OF THE RIGHT EDGELINE.



STAGE 2A

TRAFFIC: RIGHT LANE, RIGHT SHOULDER, AND PORTION OF LEFT LANE WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON A PORTION OF THE LEFT LANE AND LEFT SHOULDER. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 2A (SHEETS 1-5).

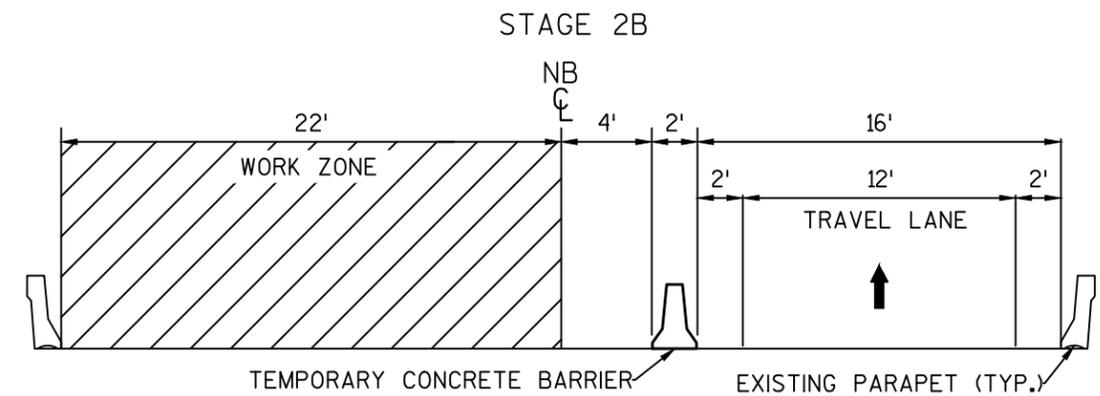
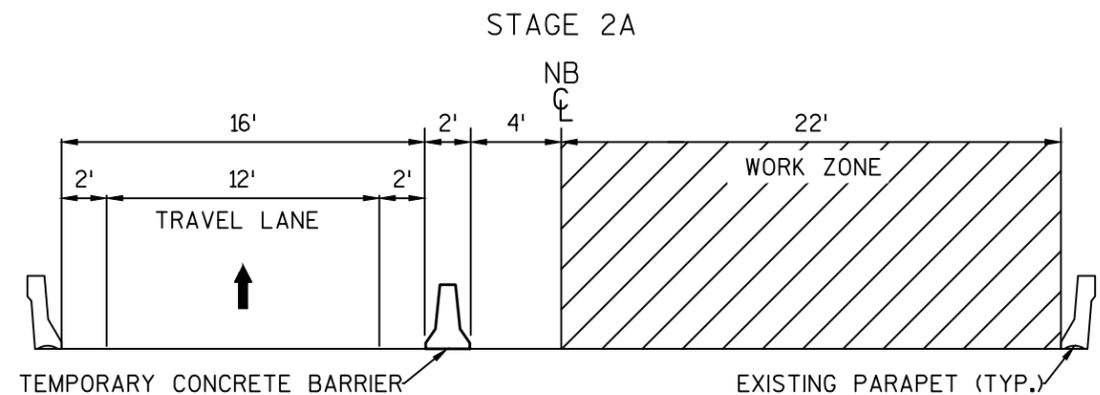
CONSTRUCTION: REPAIR JOINTS ON NB STH 26 RIGHT LANE AT NORTH AND SOUTH ENDS OF BRIDGE. MOVING TO THE NEXT STAGE CANNOT OCCUR UNTIL JOINT REPAIR AND PARAPET CONCRETE HAS ACHIEVED OPENING STRENGTH PER STANDARD SPECIFICATION 502.3.10.

STAGE 2B

TRAFFIC: LEFT LANE, LEFT SHOULDER, AND PORTION OF RIGHT LANE WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON A PORTION OF THE RIGHT LANE AND RIGHT SHOULDER. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 2B (SHEETS 1-5).

CONSTRUCTION: REPAIR JOINTS ON NB STH 26 LEFT LANE AT NORTH AND SOUTH ENDS OF BRIDGE. ALLOW CONCRETE TO CURE FOR AT LEAST 28 CALENDAR DAYS BEFORE MOVING TO THE NEXT STAGE.

DURING CONCRETE CURE TIME: COVER "REDUCED SPEED LIMIT AHEAD" AND "SPEED LIMIT 55" SIGNS (WO3-5 AND R2-1 SHOWN IN TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE). REMOVE AND REPLACE TEMPORARY CONCRETE BARRIER WITH TRAFFIC CONTROL DRUMS (FOLLOW TRAFFIC CONTROL DETAIL - STAGE 3A (SHEETS 4 & 5)).



STAGE 3A

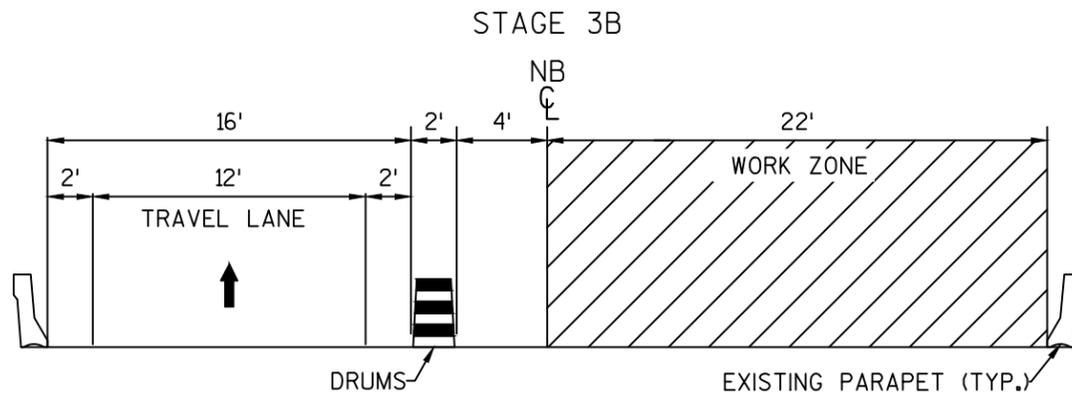
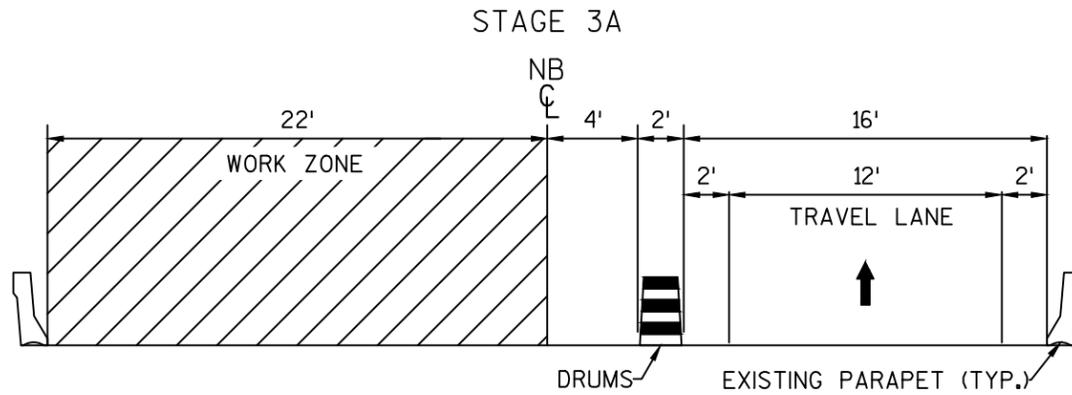
TRAFFIC: LEFT LANE, LEFT SHOULDER, AND PORTION OF RIGHT LANE WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON A PORTION OF THE RIGHT LANE AND RIGHT SHOULDER. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 3A (SHEETS 1-5).

CONSTRUCTION: WORK INCLUDES POLYMER OVERLAY AND COMPLETING JOINT REPAIR (INSTALLING NEOPRENE STRIP SEAL) ON LEFT LANE OF BRIDGE. REMOVE THE CENTERLINE PAVEMENT MARKING ON THE BRIDGE PRIOR TO PLACING THE POLYMER OVERLAY.

STAGE 3B

TRAFFIC: RIGHT LANE, RIGHT SHOULDER, AND PORTION OF LEFT LANE WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON A PORTION OF THE LEFT LANE AND LEFT SHOULDER. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 3B (SHEETS 1-5).

CONSTRUCTION: WORK INCLUDES POLYMER OVERLAY AND COMPLETING JOINT REPAIR (INSTALLING NEOPRENE STRIP SEAL) ON RIGHT LANE OF BRIDGE.



STAGE 4A

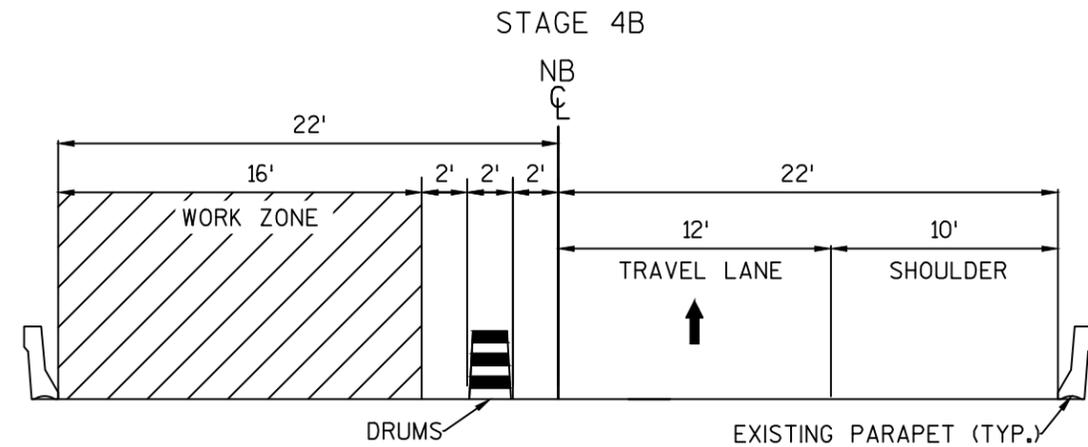
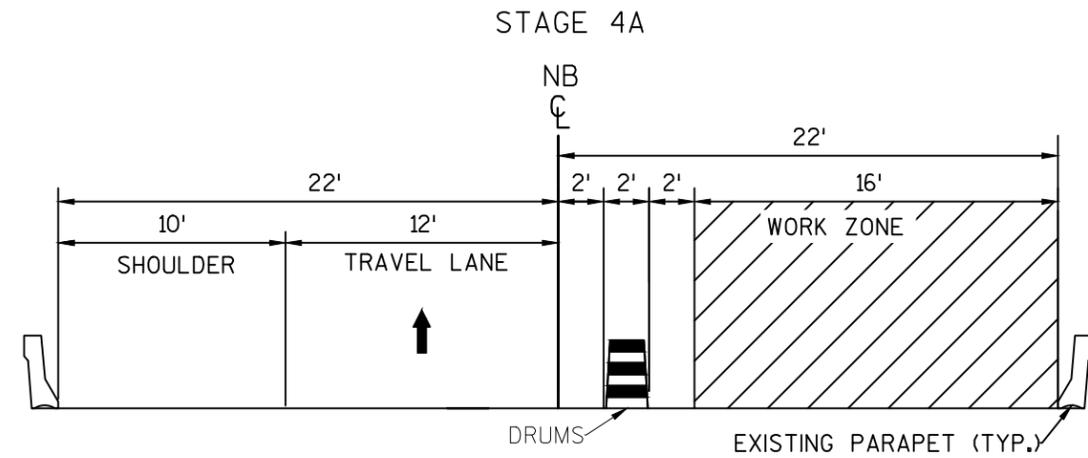
TRAFFIC: RIGHT LANE AND SHOULDER WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON THE LEFT LANE. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 4A (SHEETS 1-5).

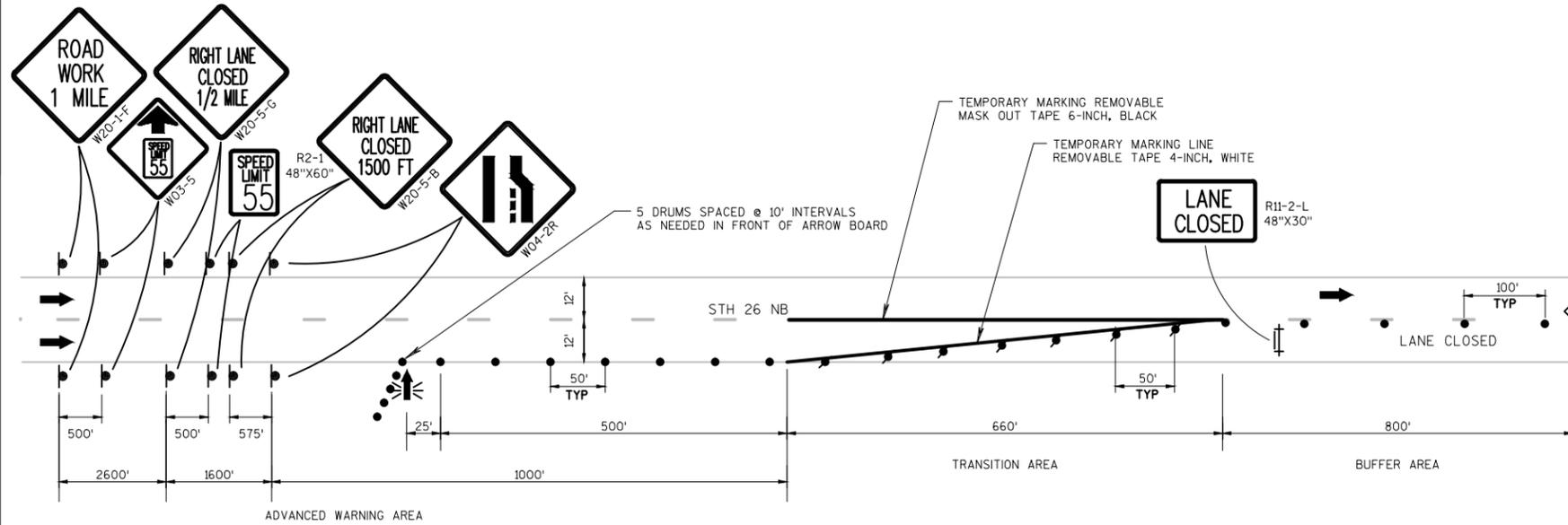
CONSTRUCTION: WORK INCLUDES MILLING RUMBLE STRIPS INTO THE RIGHT SHOULDER AND PLACING PAVEMENT MARKING.

STAGE 4B

TRAFFIC: LEFT LANE AND SHOULDER WILL BE CLOSED TO TRAFFIC. TRAFFIC WILL RUN ON THE RIGHT LANE. FOLLOW THE DETAILS OF THIS DETAIL DRAWING, TRAFFIC CONTROL DETAIL - RIGHT/LEFT LANE CLOSURE, AND TRAFFIC CONTROL DETAIL - STAGE 4B (SHEETS 1-5).

CONSTRUCTION: WORK INCLUDES MILLING RUMBLE STRIPS INTO THE LEFT SHOULDER AND PLACING PAVEMENT MARKING.



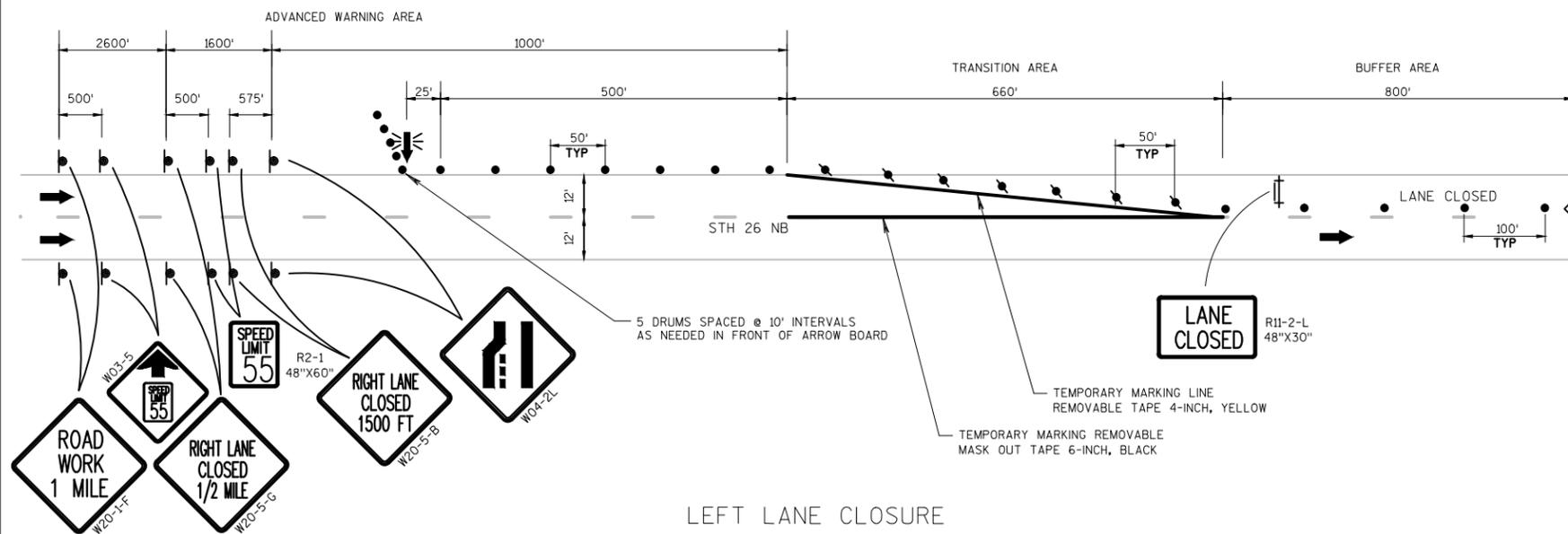


RIGHT LANE CLOSURE

LEGEND

TYPE III BARRICADE WITH SIGN W/ TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	DIRECTION OF TRAFFIC
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	

BUFFER AREA CONTINUES FOR 200' TO EXIT RAMP TAPER SEE TRAFFIC CONTROL DETAIL STAGES 1B, 2A, 3B, AND 4A



LEFT LANE CLOSURE

BUFFER AREA CONTINUES FOR APPROX. 465' TO EXISTING EXIT RAMP TAPER SEE TRAFFIC CONTROL DETAIL STAGES 1A, 2B, 3A, AND 4B

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

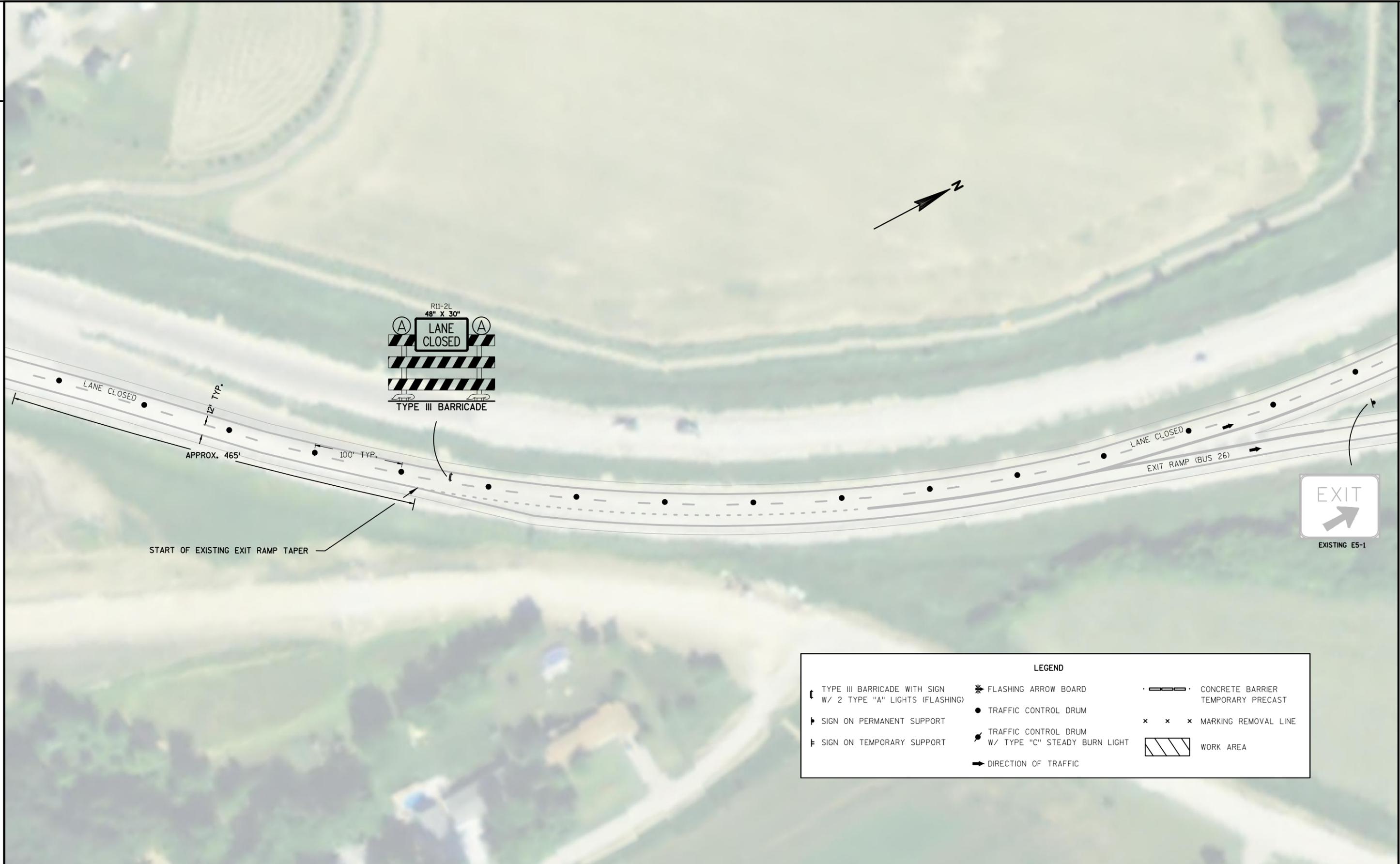
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

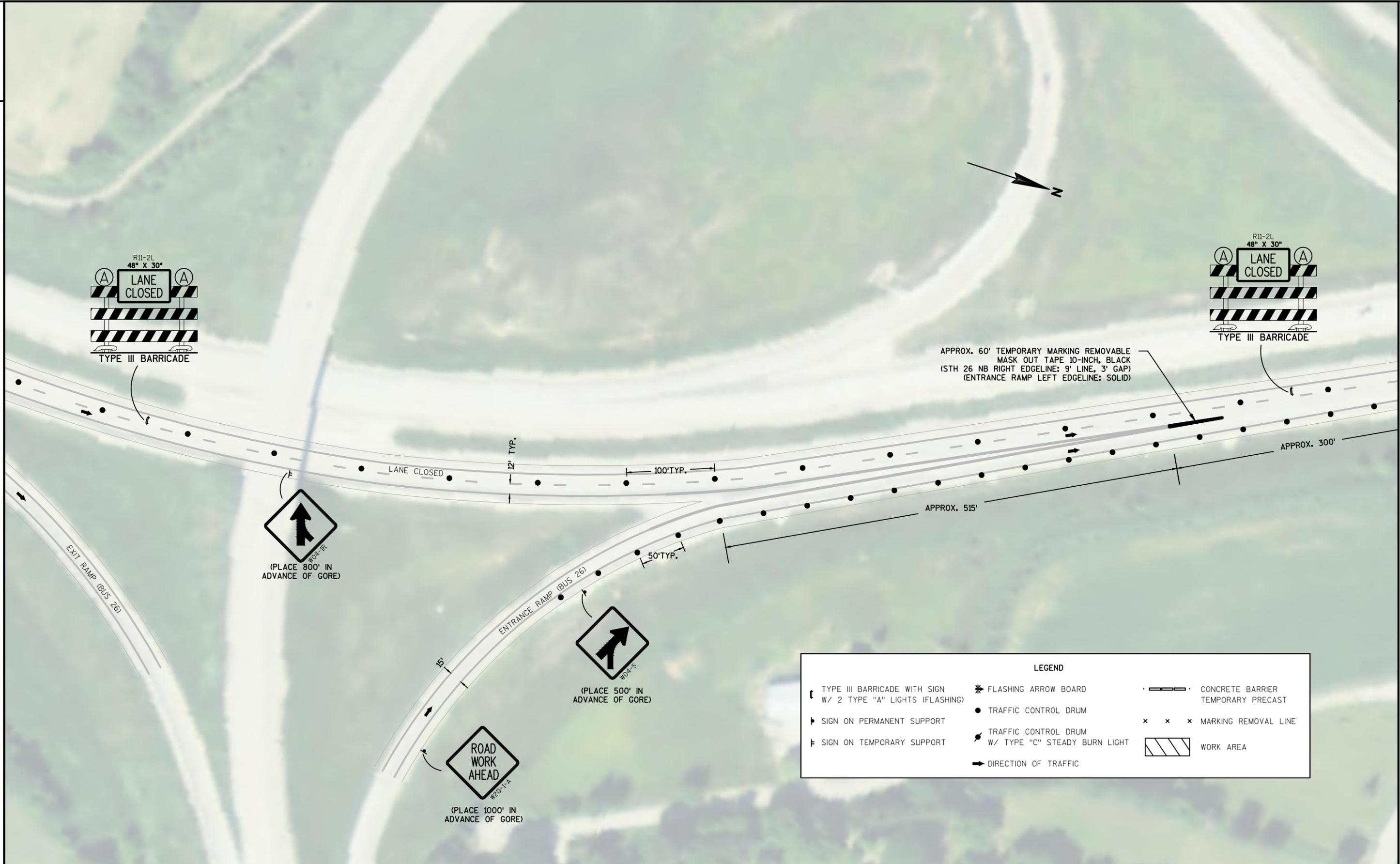
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

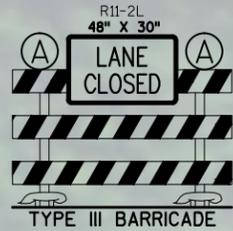
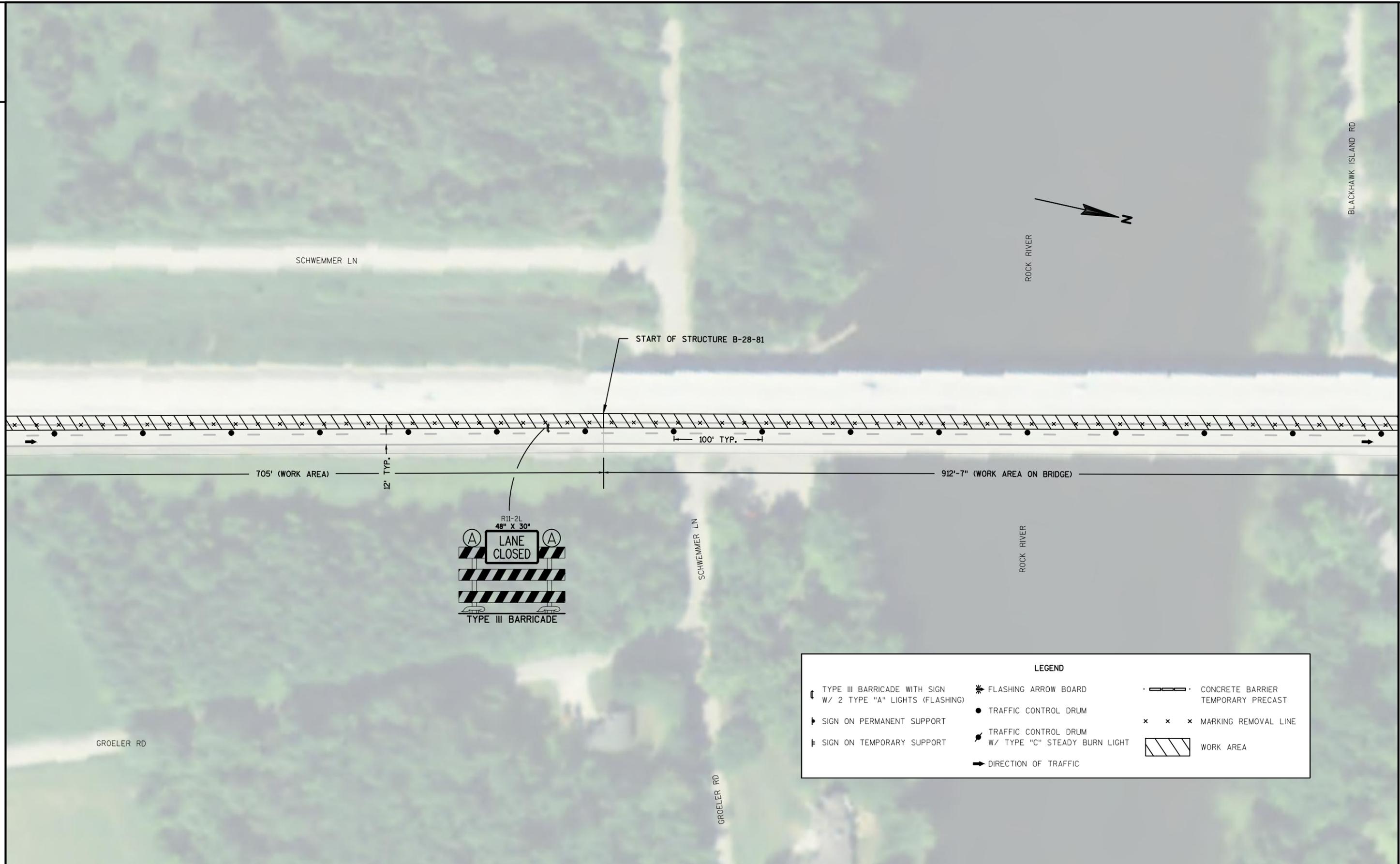
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



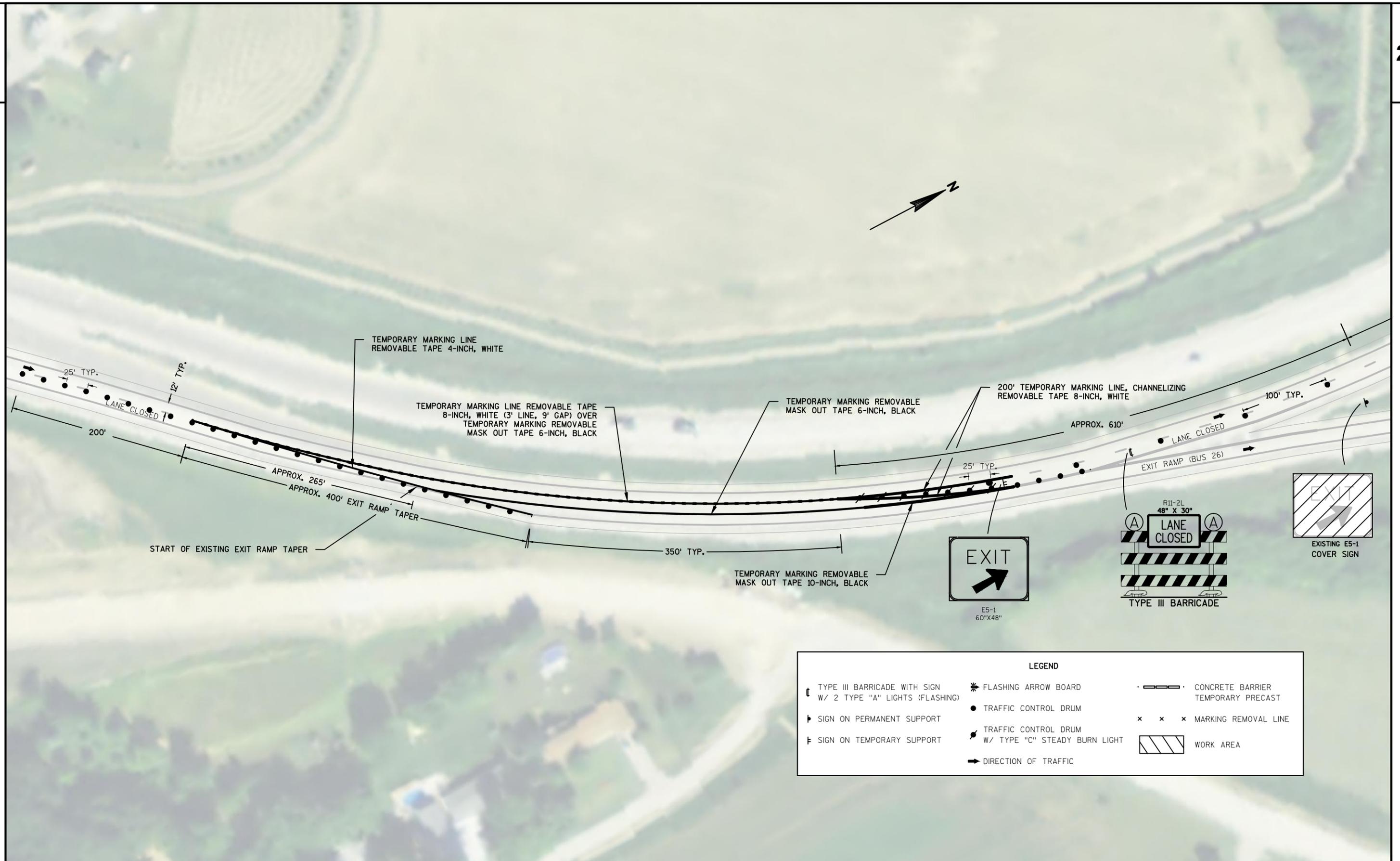




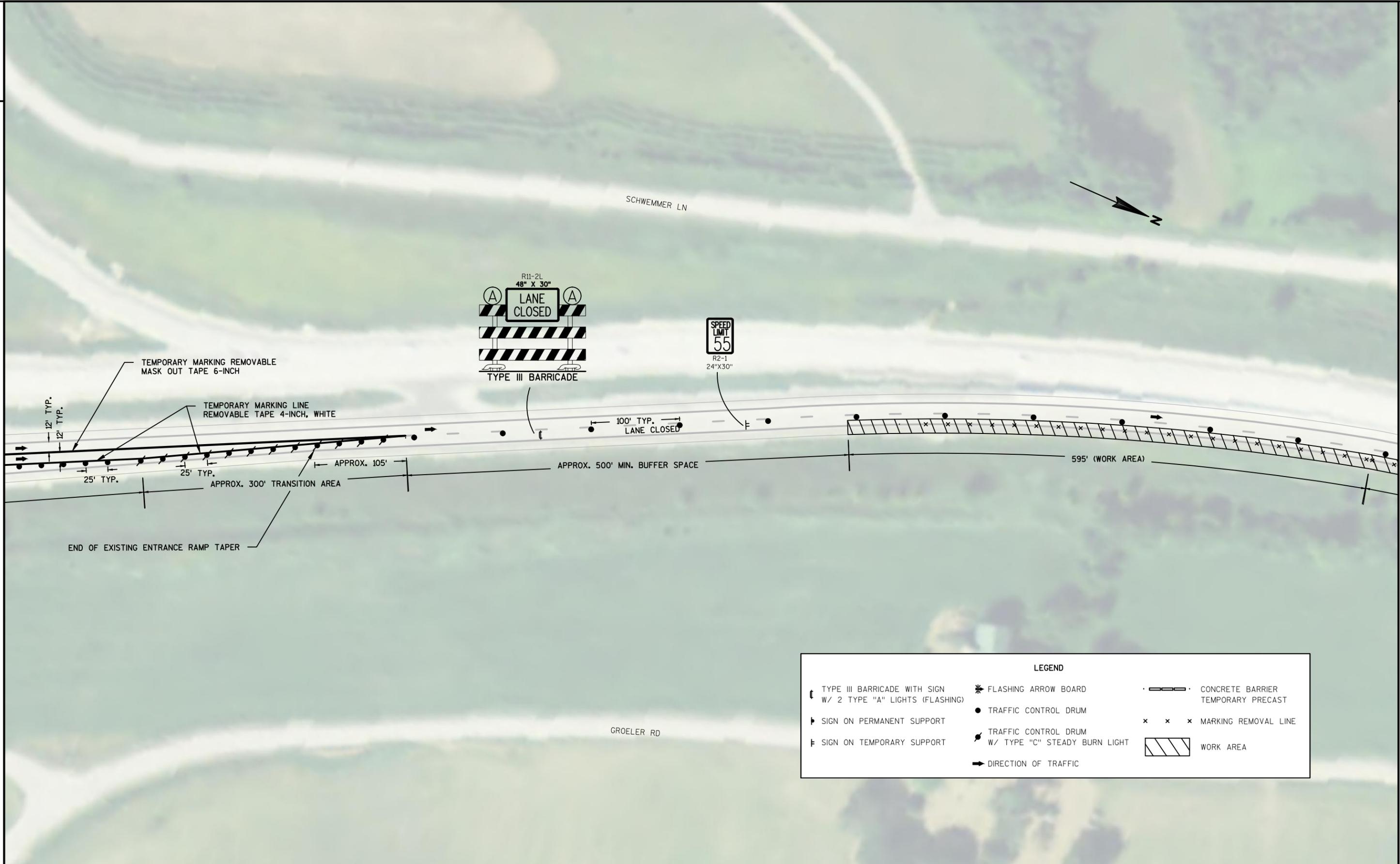
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		



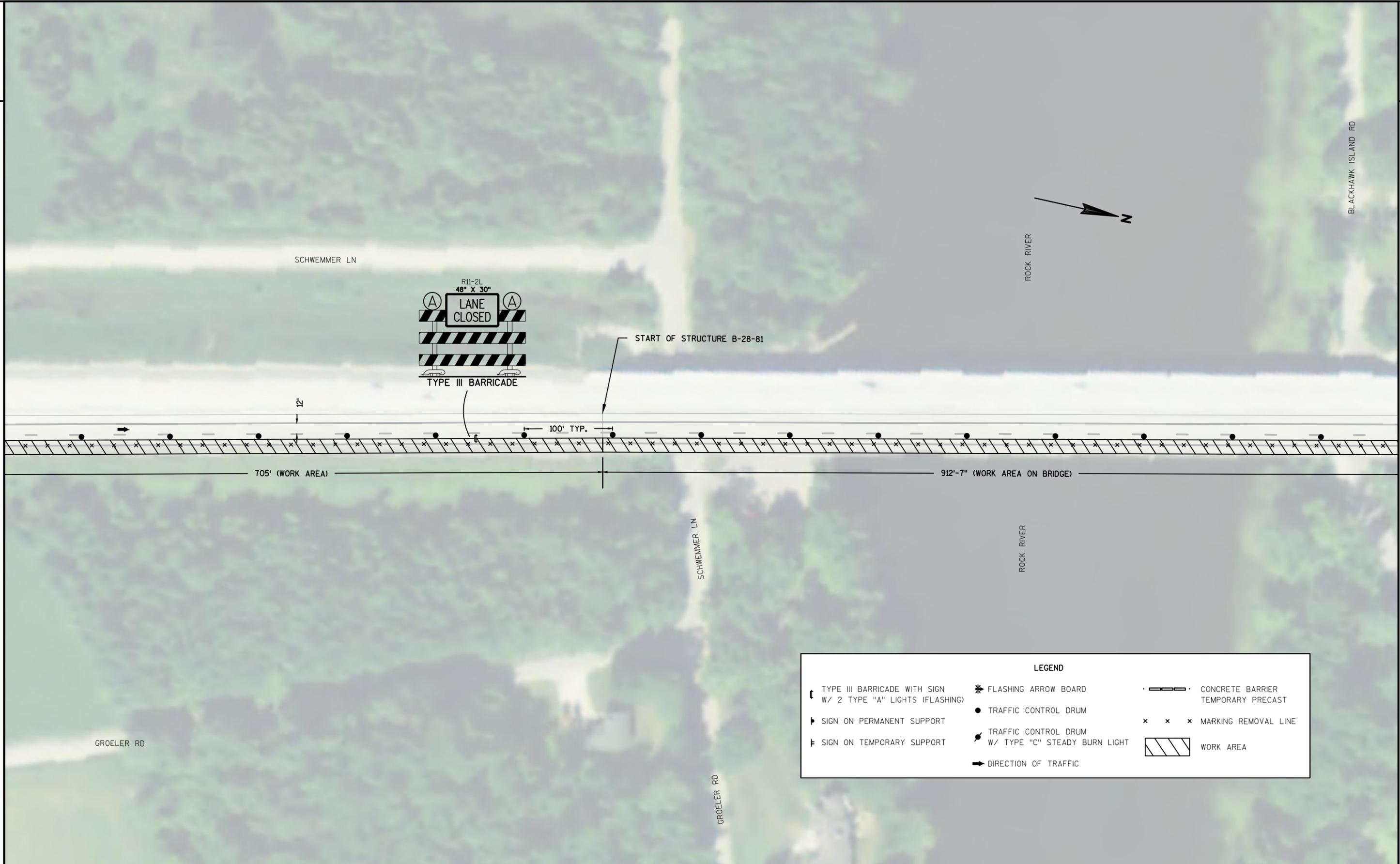
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		



LEGEND		
 TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	 FLASHING ARROW BOARD	 CONCRETE BARRIER TEMPORARY PRECAST
 SIGN ON PERMANENT SUPPORT	 TRAFFIC CONTROL DRUM	 MARKING REMOVAL LINE
 SIGN ON TEMPORARY SUPPORT	 TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	 WORK AREA
 DIRECTION OF TRAFFIC		



LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	

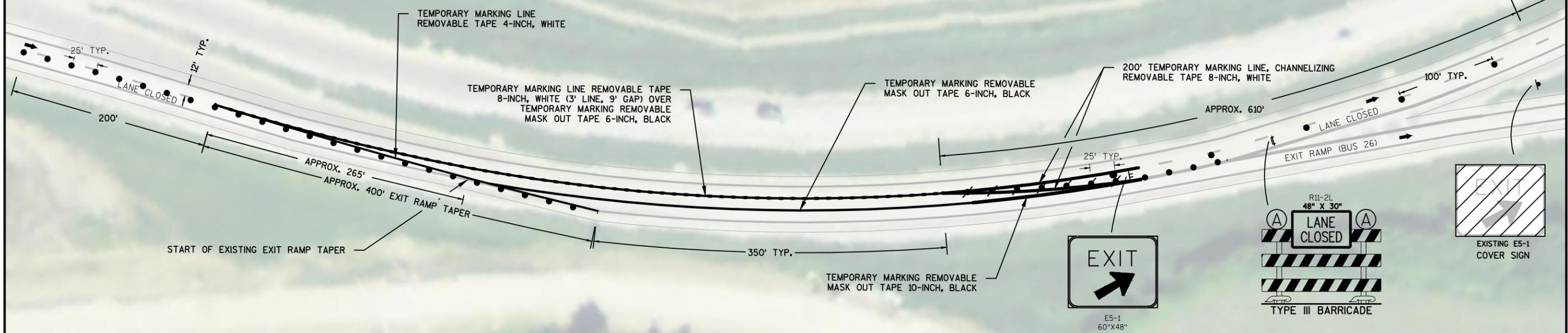


LEGEND		
<ul style="list-style-type: none"> TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING) SIGN ON PERMANENT SUPPORT SIGN ON TEMPORARY SUPPORT 	<ul style="list-style-type: none"> FLASHING ARROW BOARD TRAFFIC CONTROL DRUM TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT DIRECTION OF TRAFFIC 	<ul style="list-style-type: none"> CONCRETE BARRIER TEMPORARY PRECAST MARKING REMOVAL LINE WORK AREA



LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		

NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 2A
 REMAINS IN PLACE FROM STAGE 1B.

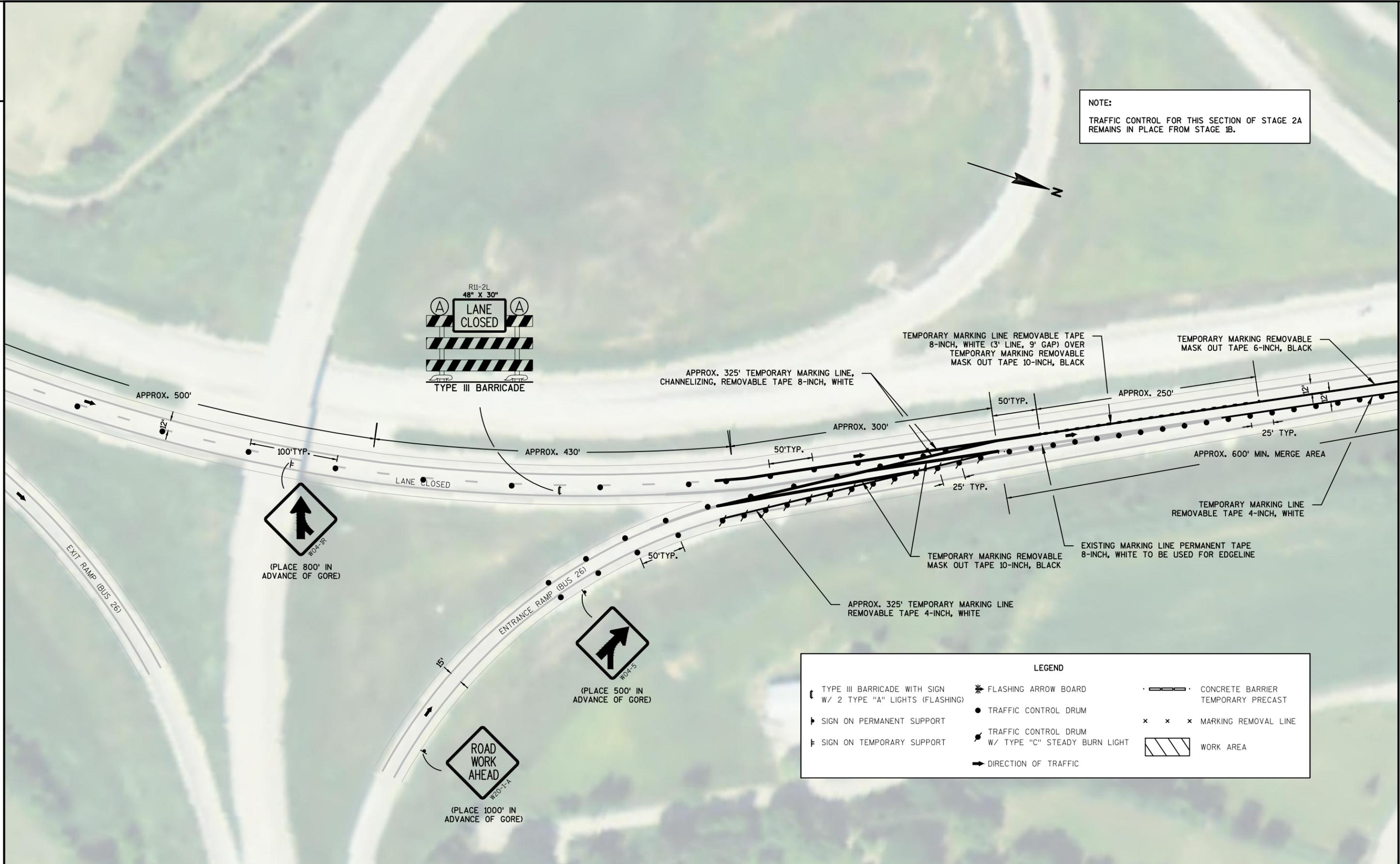


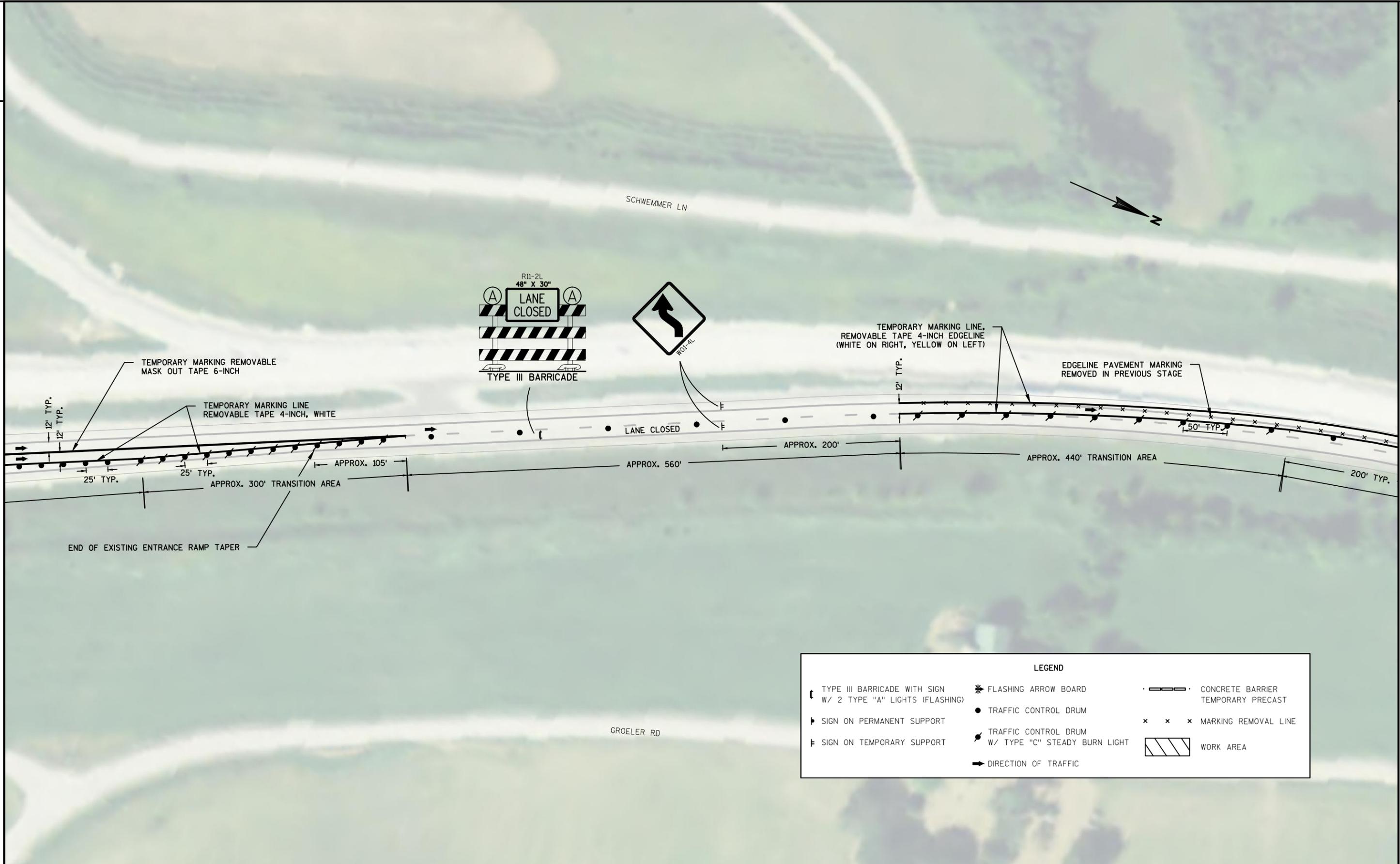
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	DIRECTION OF TRAFFIC	WORK AREA

NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 2A
 REMAINS IN PLACE FROM STAGE 1B.

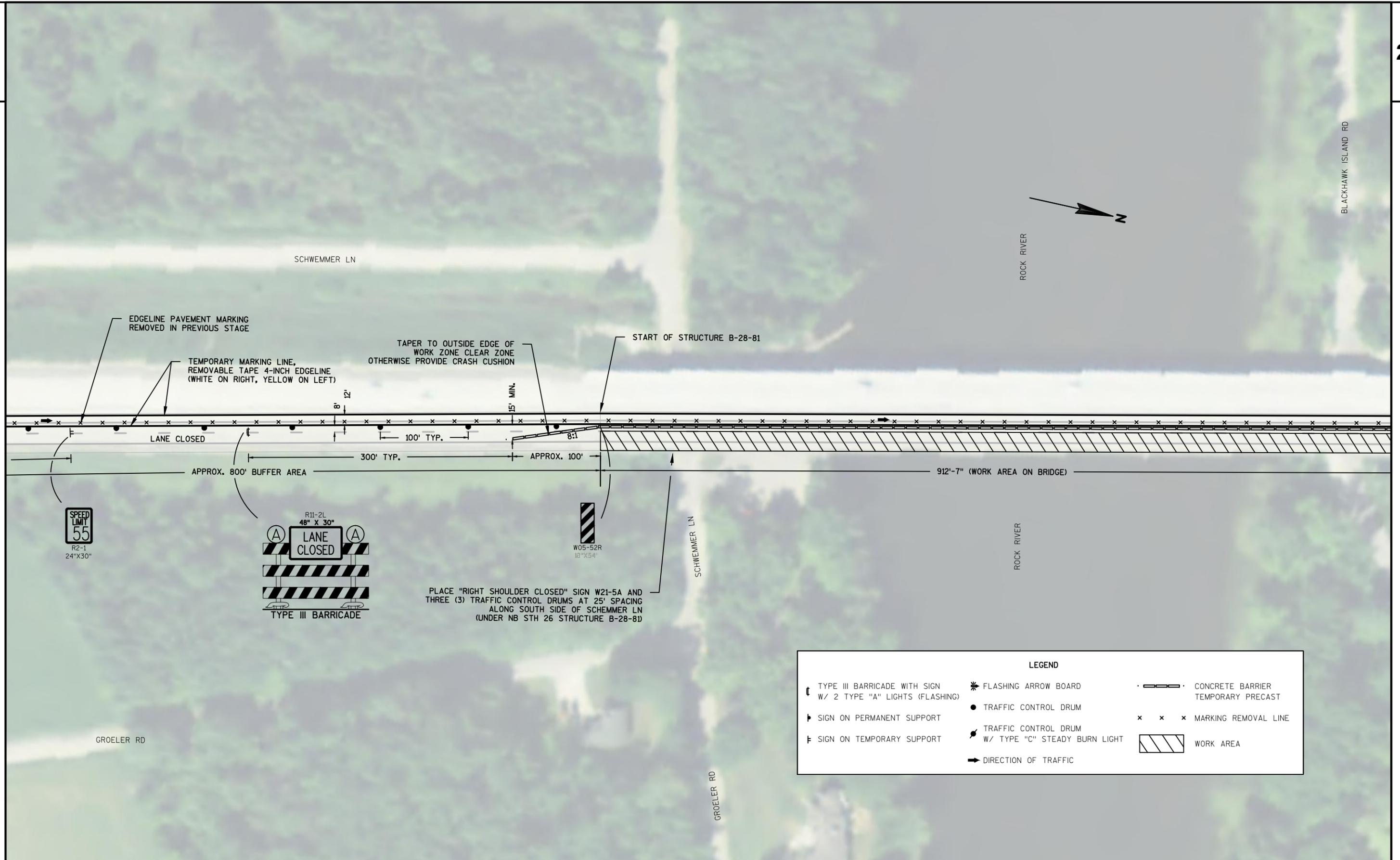


LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	





LEGEND		
⊥ TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⚡ FLASHING ARROW BOARD	▬ CONCRETE BARRIER TEMPORARY PRECAST
⊣ SIGN ON PERMANENT SUPPORT	● TRAFFIC CONTROL DRUM	x x x MARKING REMOVAL LINE
⊥ SIGN ON TEMPORARY SUPPORT	⚡ TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨ WORK AREA
➔ DIRECTION OF TRAFFIC		



EDGE LINE PAVEMENT MARKING REMOVED IN PREVIOUS STAGE

TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH EDGE LINE (WHITE ON RIGHT, YELLOW ON LEFT)

TAPER TO OUTSIDE EDGE OF WORK ZONE CLEAR ZONE OTHERWISE PROVIDE CRASH CUSHION

START OF STRUCTURE B-28-81

LANE CLOSED

APPROX. 800' BUFFER AREA

300' TYP.

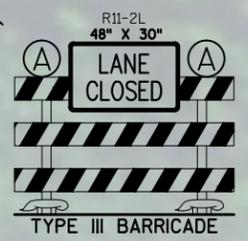
100' TYP.

APPROX. 100'

912'-7" (WORK AREA ON BRIDGE)

SPEED LIMIT 55

R2-1 24"x30"



TYPE III BARRICADE



W05-52R 18"x54"

PLACE "RIGHT SHOULDER CLOSED" SIGN W21-5A AND THREE (3) TRAFFIC CONTROL DRUMS AT 25' SPACING ALONG SOUTH SIDE OF SCHEMMER LN (UNDER NB STH 26 STRUCTURE B-28-81)



ROCK RIVER

BLACKHAWK ISLAND RD

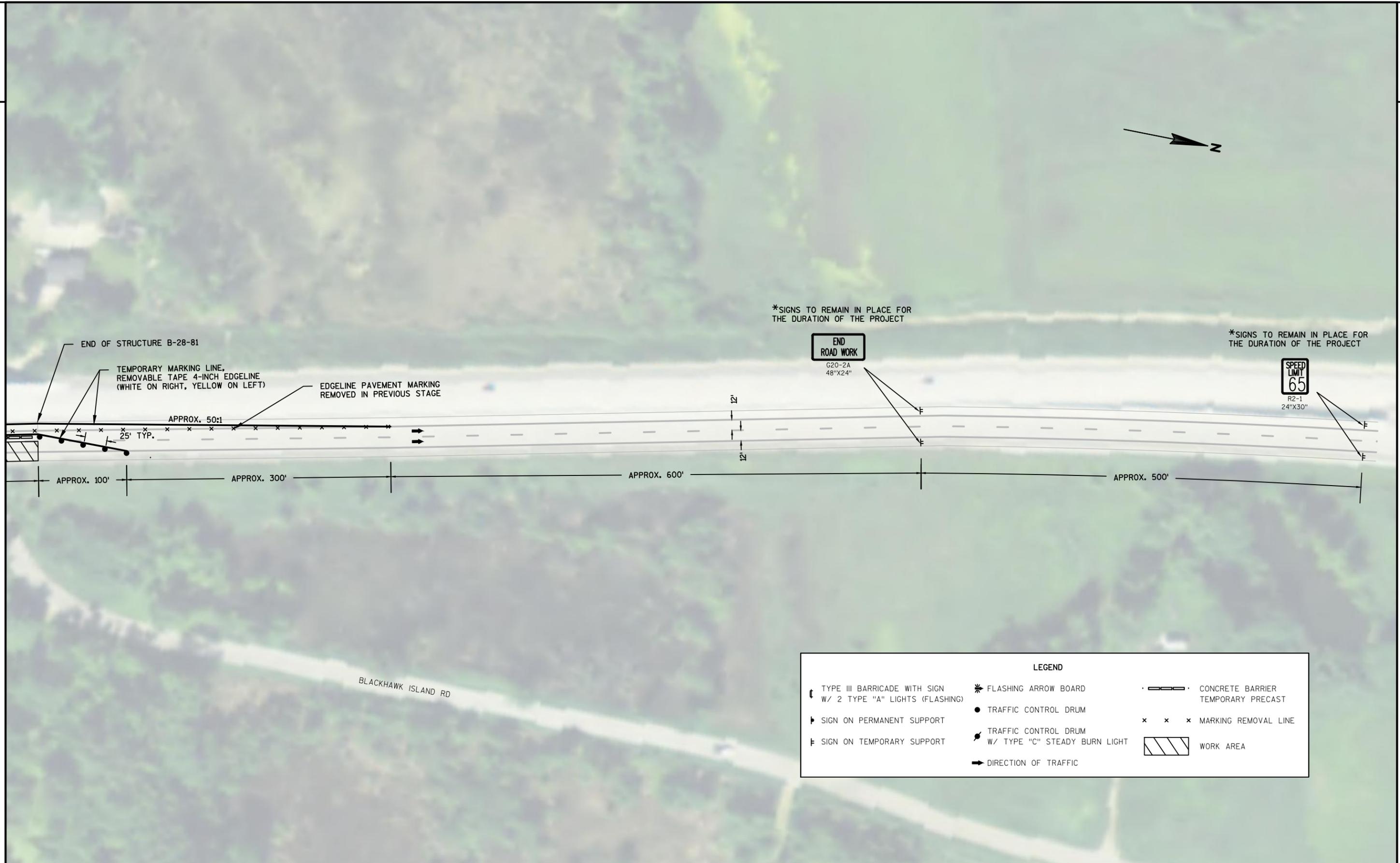
SCHWEMMER LN

ROCK RIVER

GROELER RD

GROELER RD

LEGEND			
	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)		CONCRETE BARRIER TEMPORARY PRECAST
	SIGN ON PERMANENT SUPPORT		TRAFFIC CONTROL DRUM
	SIGN ON TEMPORARY SUPPORT		TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT
	FLASHING ARROW BOARD		MARKING REMOVAL LINE
	DIRECTION OF TRAFFIC		WORK AREA



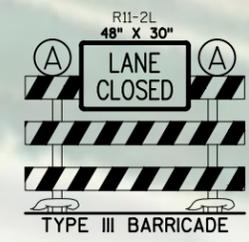
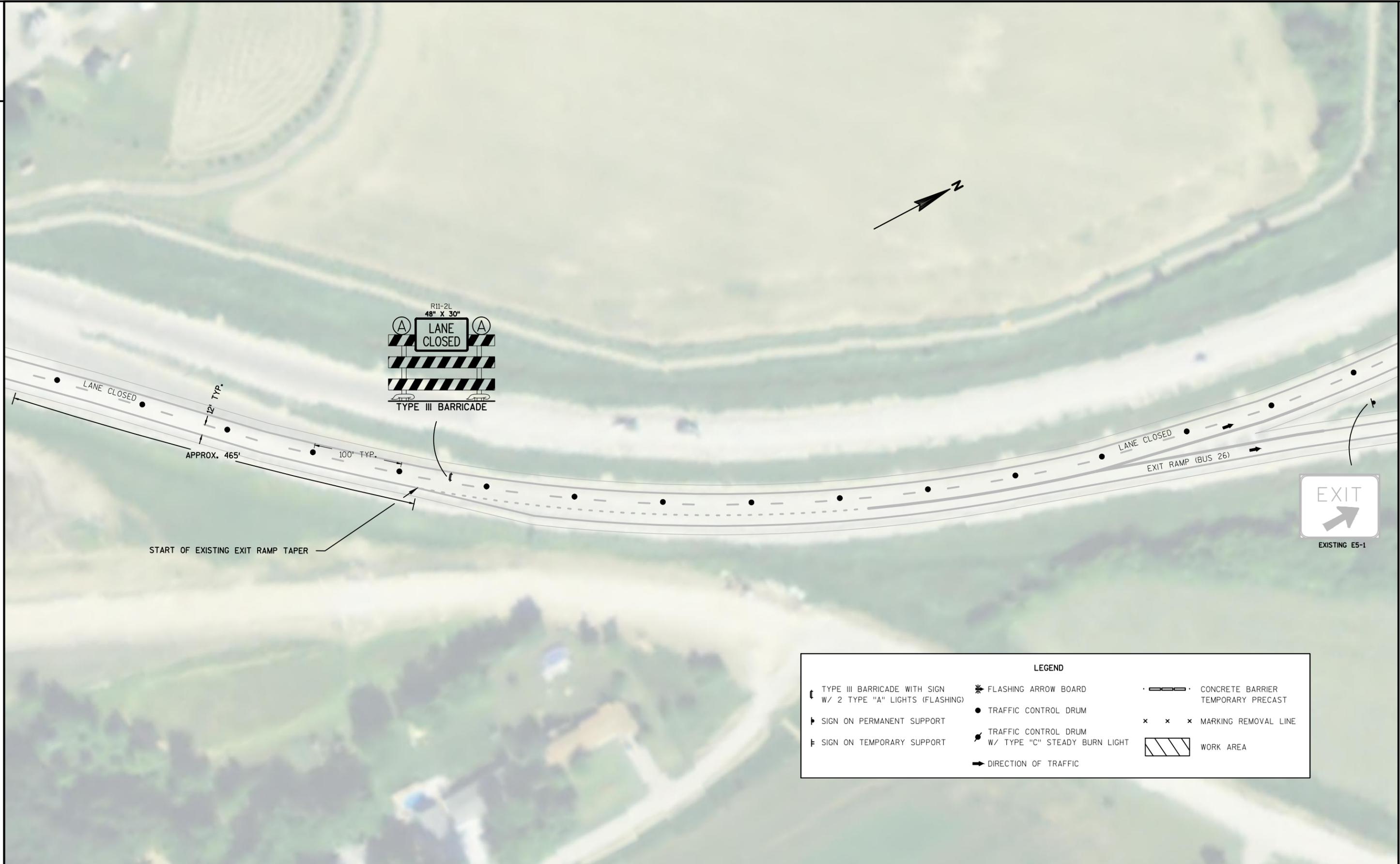
*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

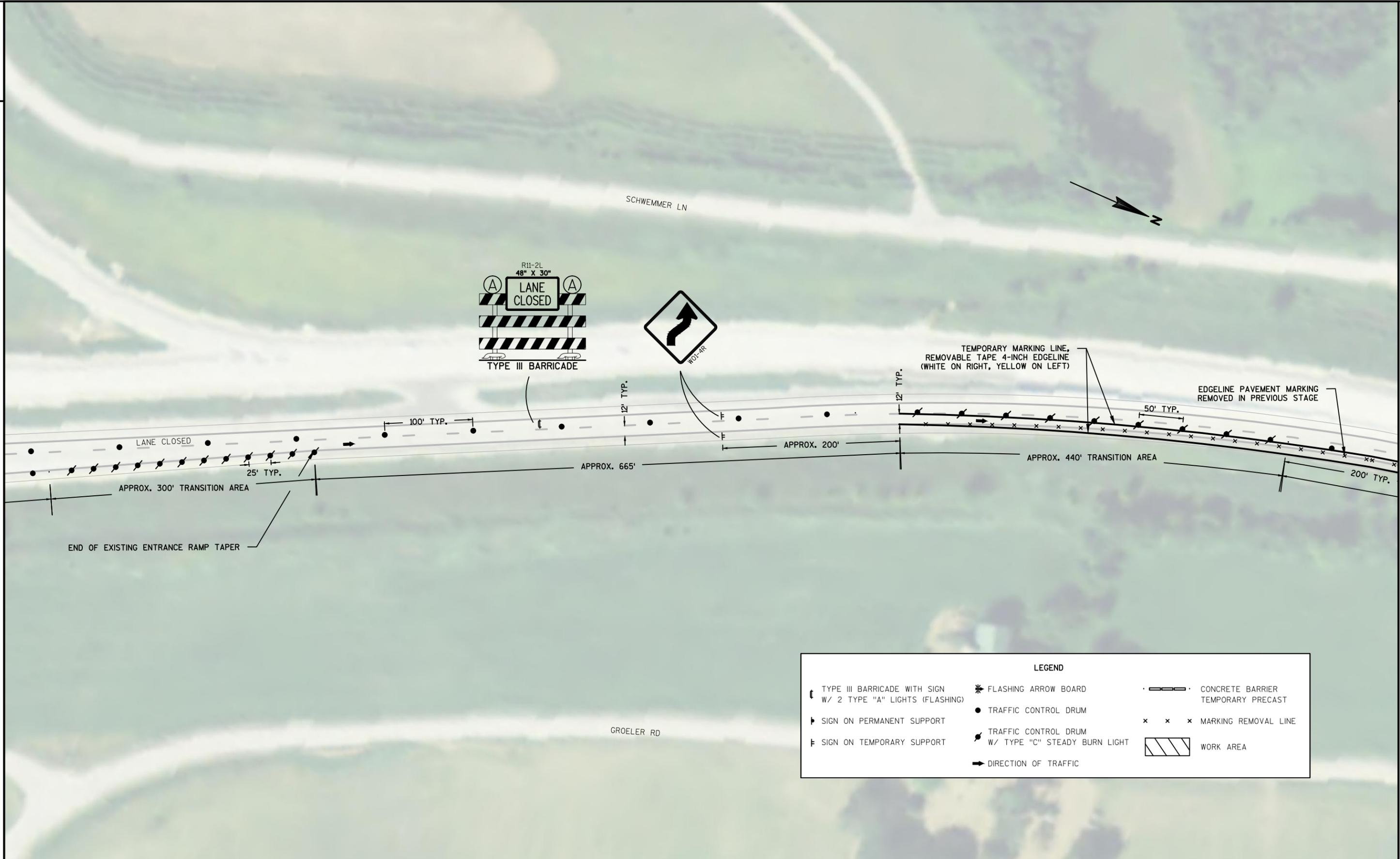
END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT
65
R2-1
24"X30"

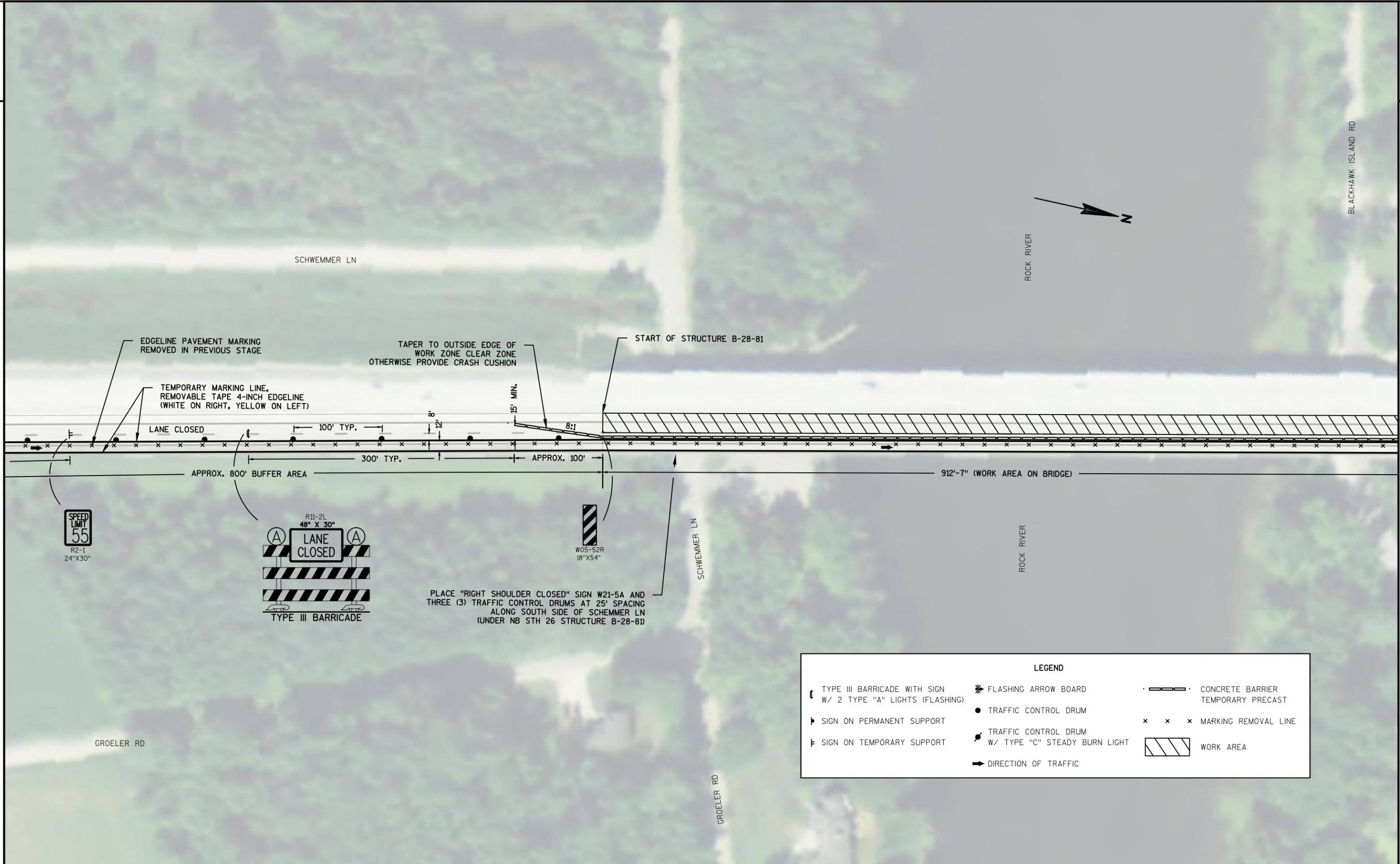
LEGEND			
⊥	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	— · — · — ·	CONCRETE BARRIER TEMPORARY PRECAST
⊣	SIGN ON PERMANENT SUPPORT	x x x	MARKING REMOVAL LINE
⊥	SIGN ON TEMPORARY SUPPORT	▨	WORK AREA
⊛	TRAFFIC CONTROL DRUM	⚡	FLASHING ARROW BOARD
⚡	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	→	DIRECTION OF TRAFFIC



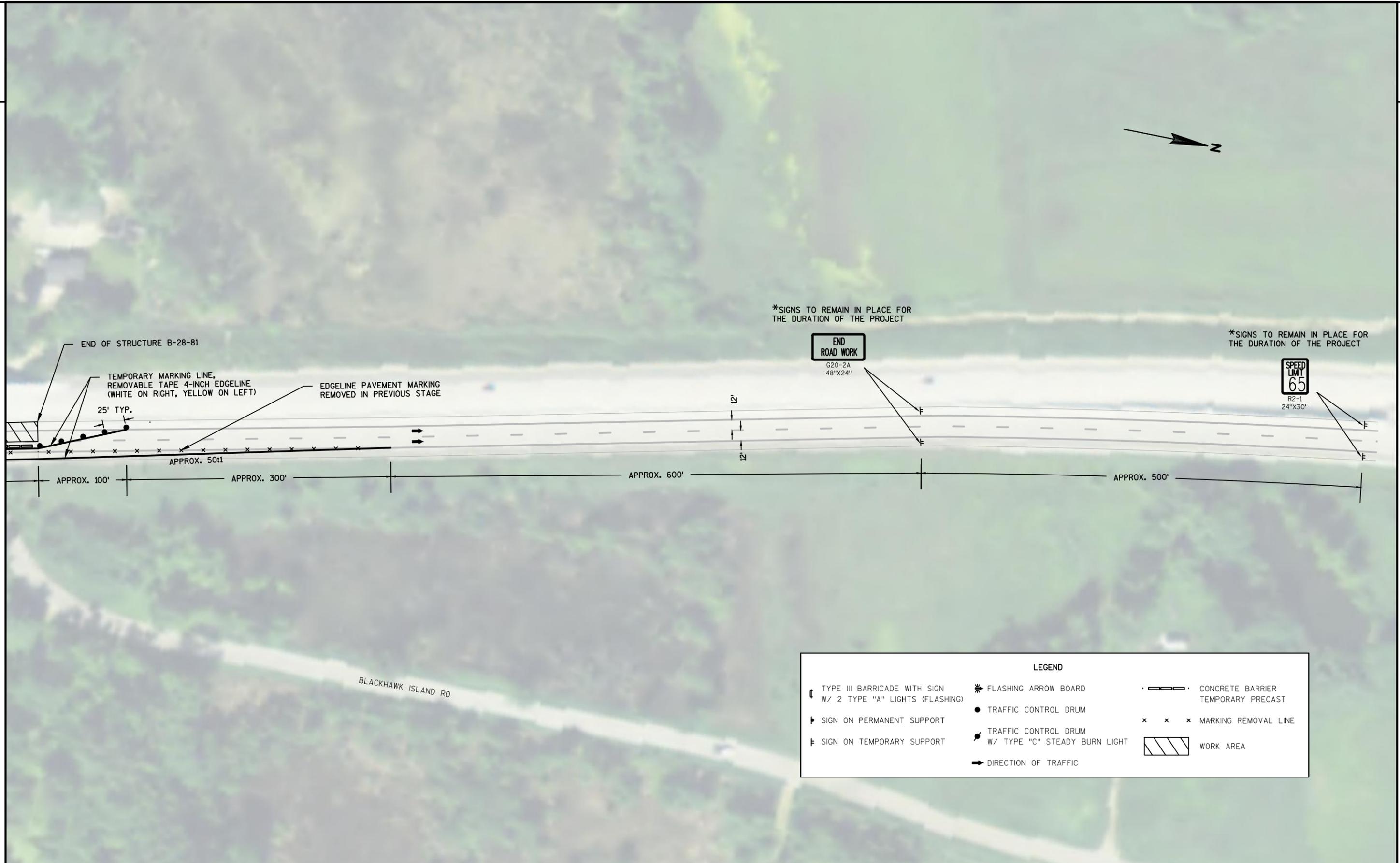
LEGEND		
 TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	 FLASHING ARROW BOARD	 CONCRETE BARRIER TEMPORARY PRECAST
 SIGN ON PERMANENT SUPPORT	 TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	 MARKING REMOVAL LINE
 SIGN ON TEMPORARY SUPPORT	 DIRECTION OF TRAFFIC	 WORK AREA



LEGEND		
† TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	✱ FLASHING ARROW BOARD	— CONCRETE BARRIER TEMPORARY PRECAST
♣ SIGN ON PERMANENT SUPPORT	● TRAFFIC CONTROL DRUM	x x x MARKING REMOVAL LINE
⊢ SIGN ON TEMPORARY SUPPORT	⦿ TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨ WORK AREA
	➔ DIRECTION OF TRAFFIC	

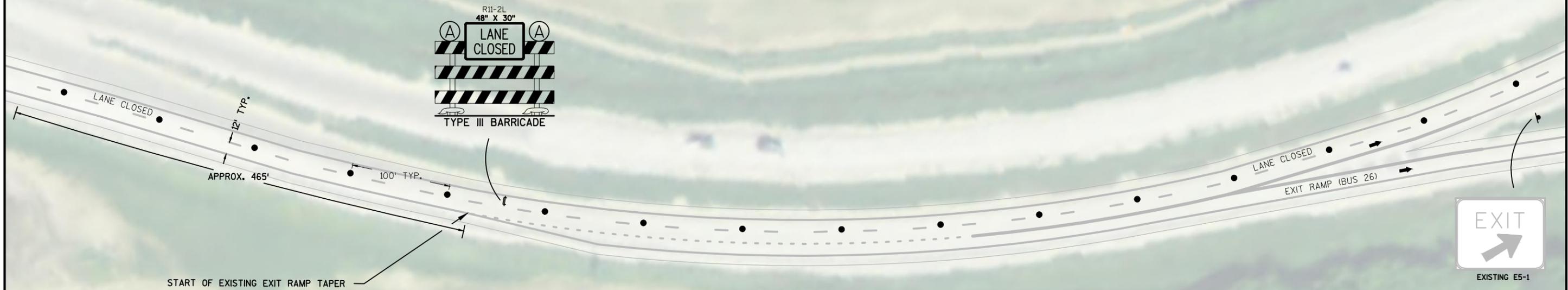
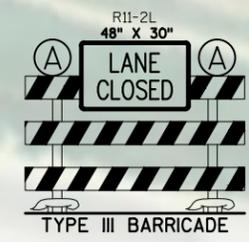


LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



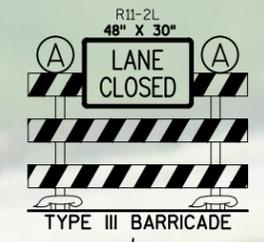
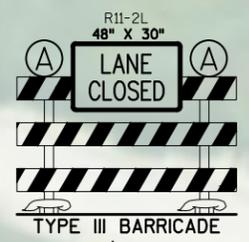
LEGEND		
<ul style="list-style-type: none"> TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING) SIGN ON PERMANENT SUPPORT SIGN ON TEMPORARY SUPPORT 	<ul style="list-style-type: none"> FLASHING ARROW BOARD TRAFFIC CONTROL DRUM TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT DIRECTION OF TRAFFIC 	<ul style="list-style-type: none"> CONCRETE BARRIER TEMPORARY PRECAST MARKING REMOVAL LINE WORK AREA

NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 3A
 REMAINS IN PLACE FROM STAGE 2B.

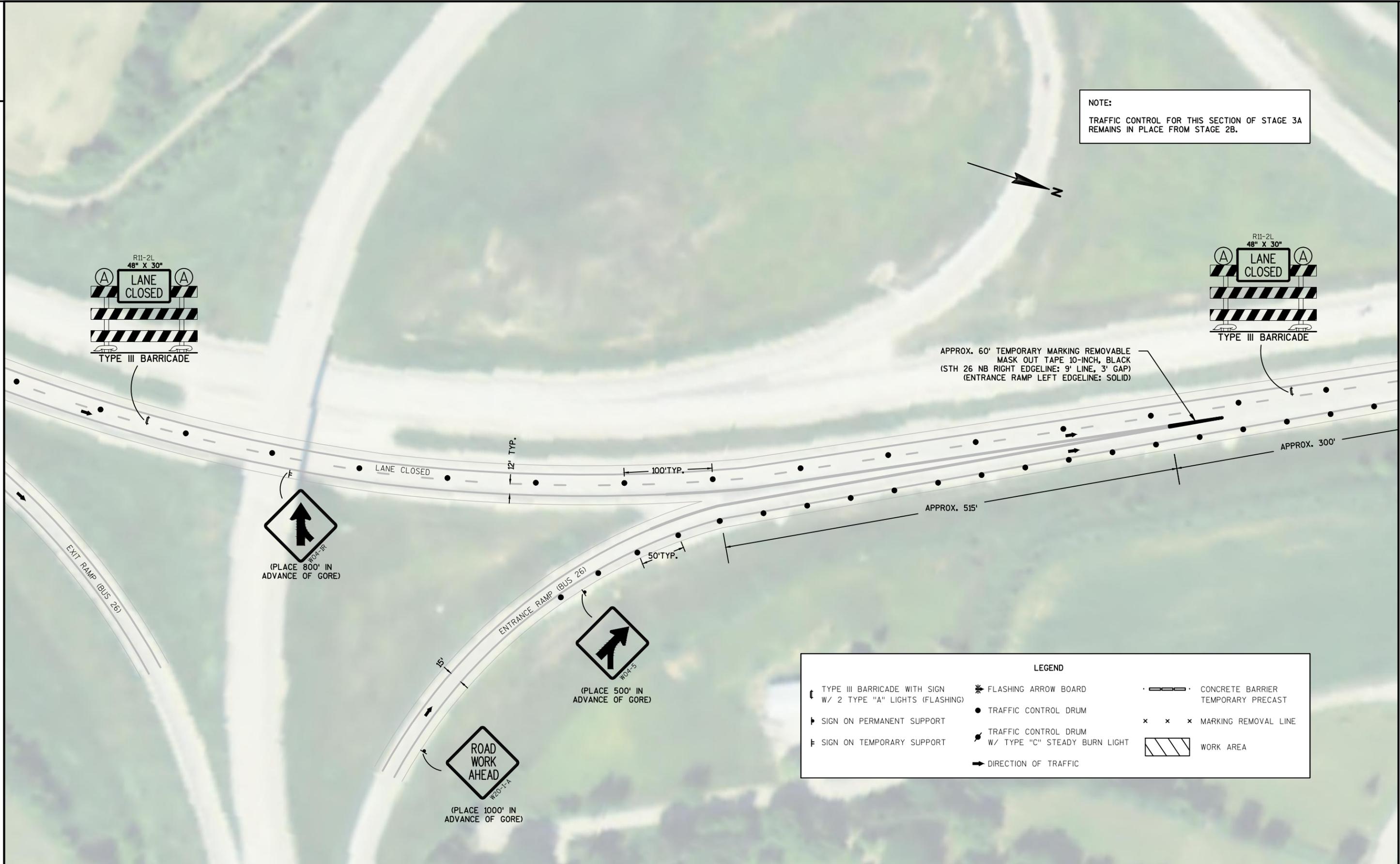


LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	

NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 3A
 REMAINS IN PLACE FROM STAGE 2B.

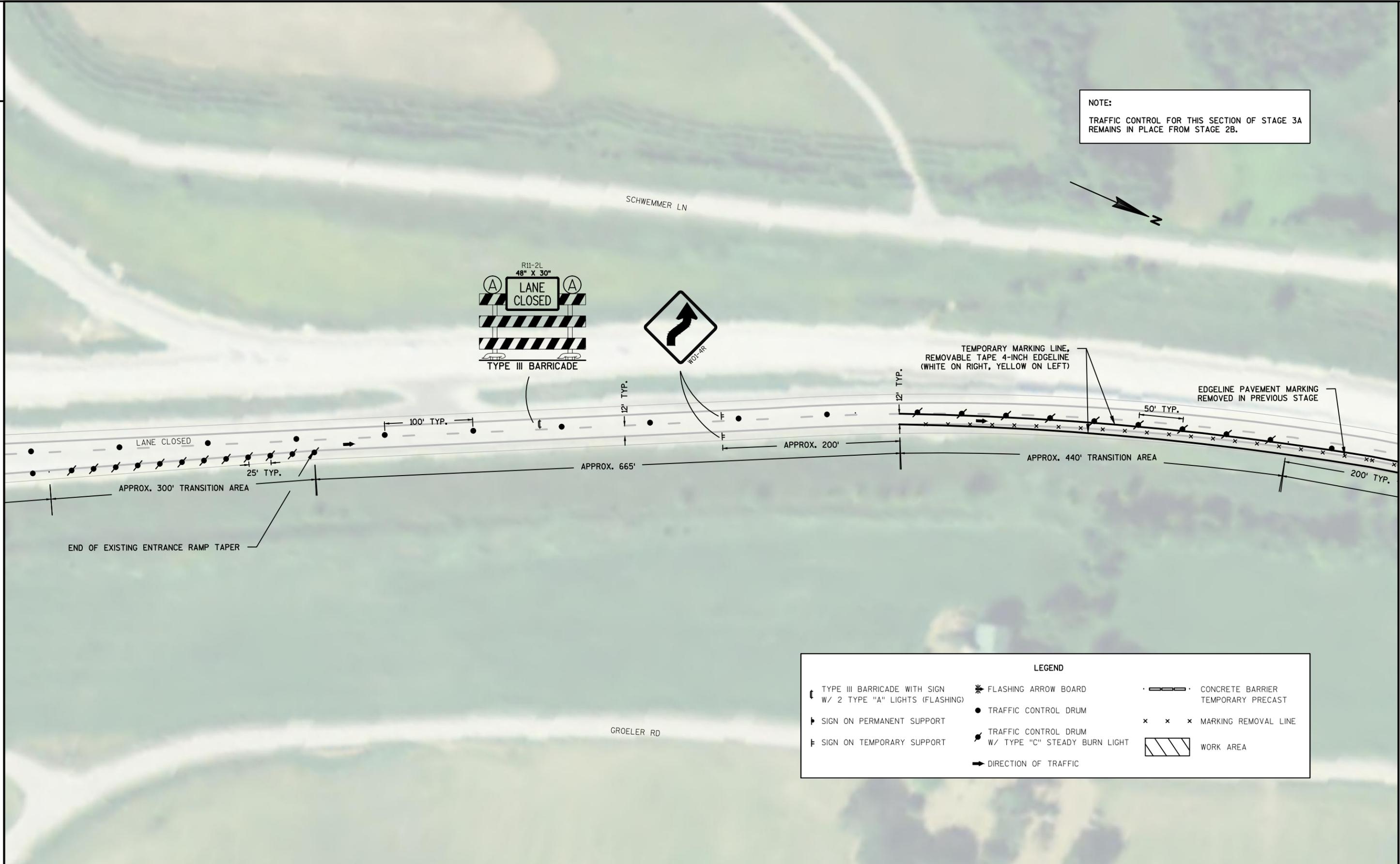


APPROX. 60' TEMPORARY MARKING REMOVABLE
 MASK OUT TAPE 10-INCH, BLACK
 (STH 26 NB RIGHT EDGELINE: 9' LINE, 3' GAP)
 (ENTRANCE RAMP LEFT EDGELINE: SOLID)

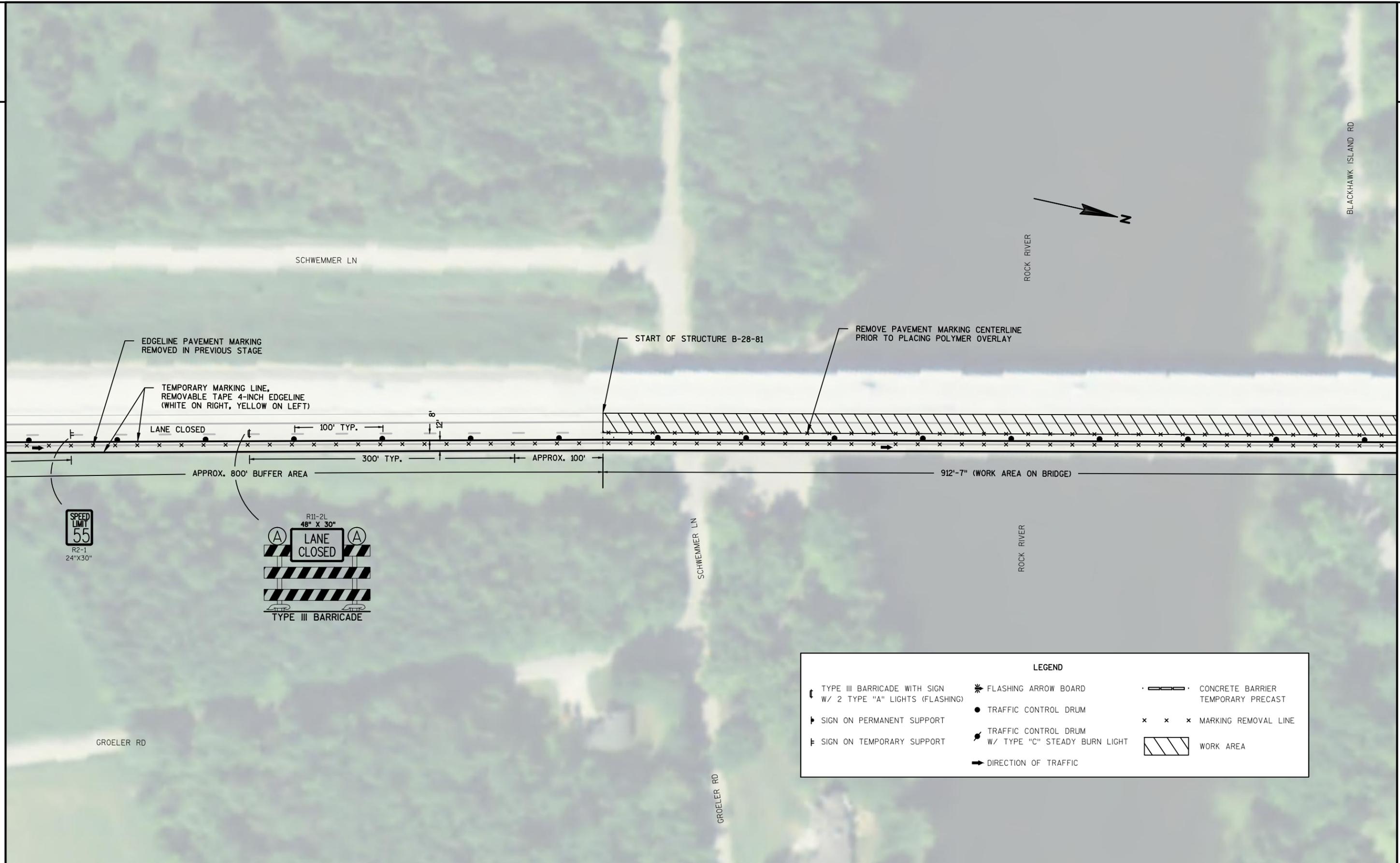


LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	

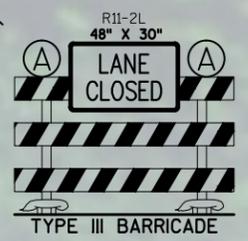
NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 3A
 REMAINS IN PLACE FROM STAGE 2B.



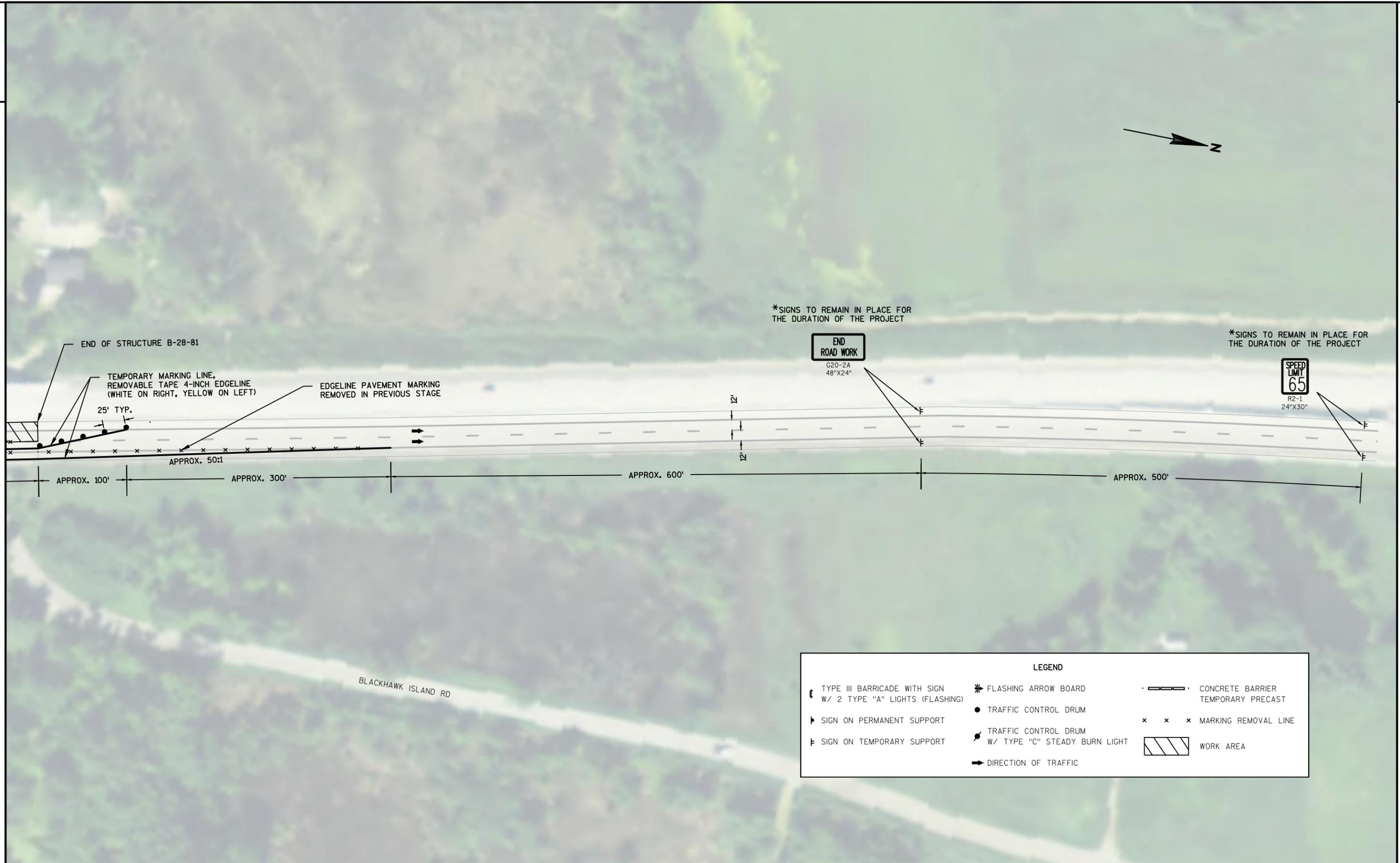
LEGEND		
 TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	 FLASHING ARROW BOARD	 CONCRETE BARRIER TEMPORARY PRECAST
 SIGN ON PERMANENT SUPPORT	 TRAFFIC CONTROL DRUM	 MARKING REMOVAL LINE
 SIGN ON TEMPORARY SUPPORT	 TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	 WORK AREA
 DIRECTION OF TRAFFIC		



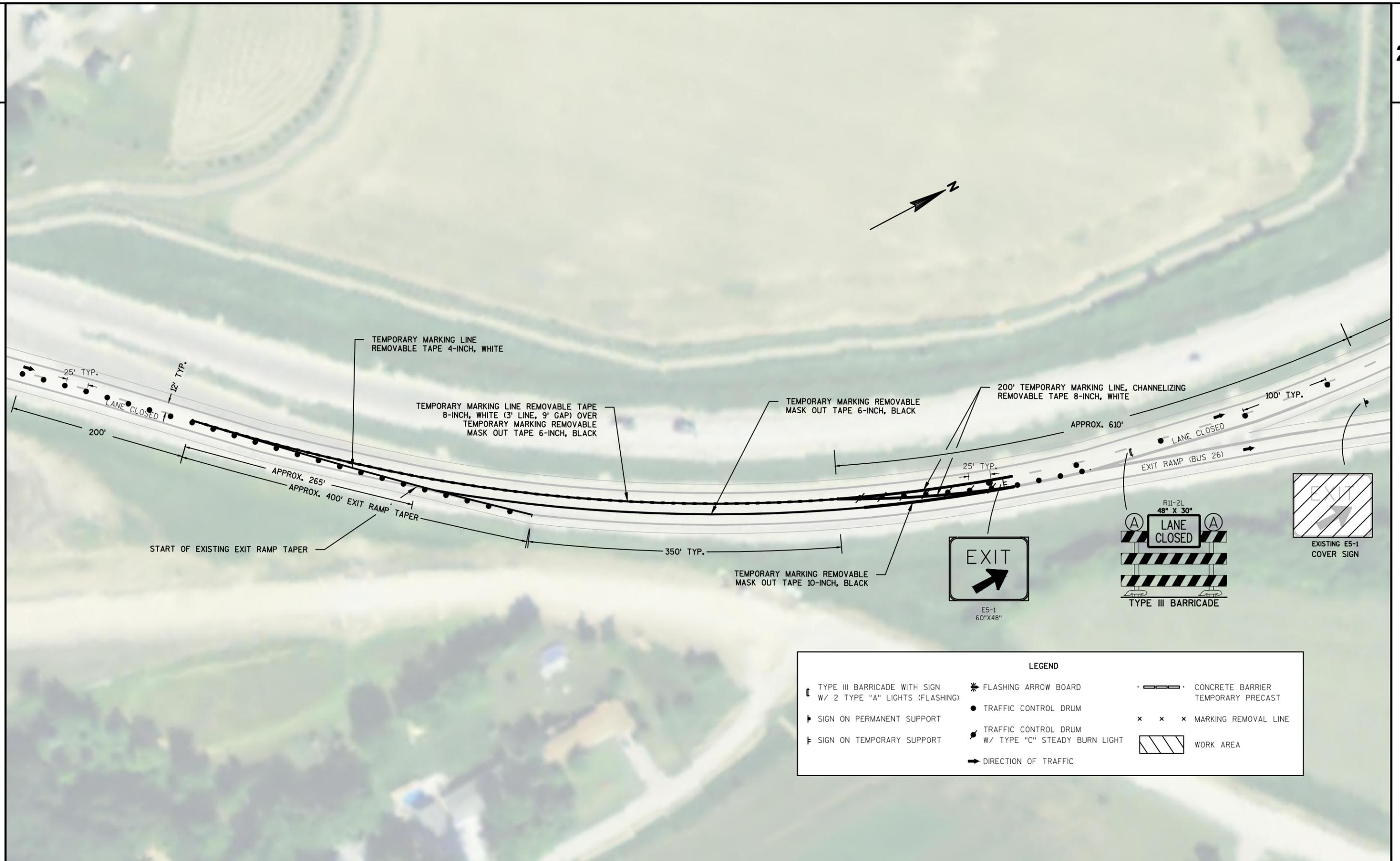
SPEED
LIMIT
55
R2-1
24"x30"



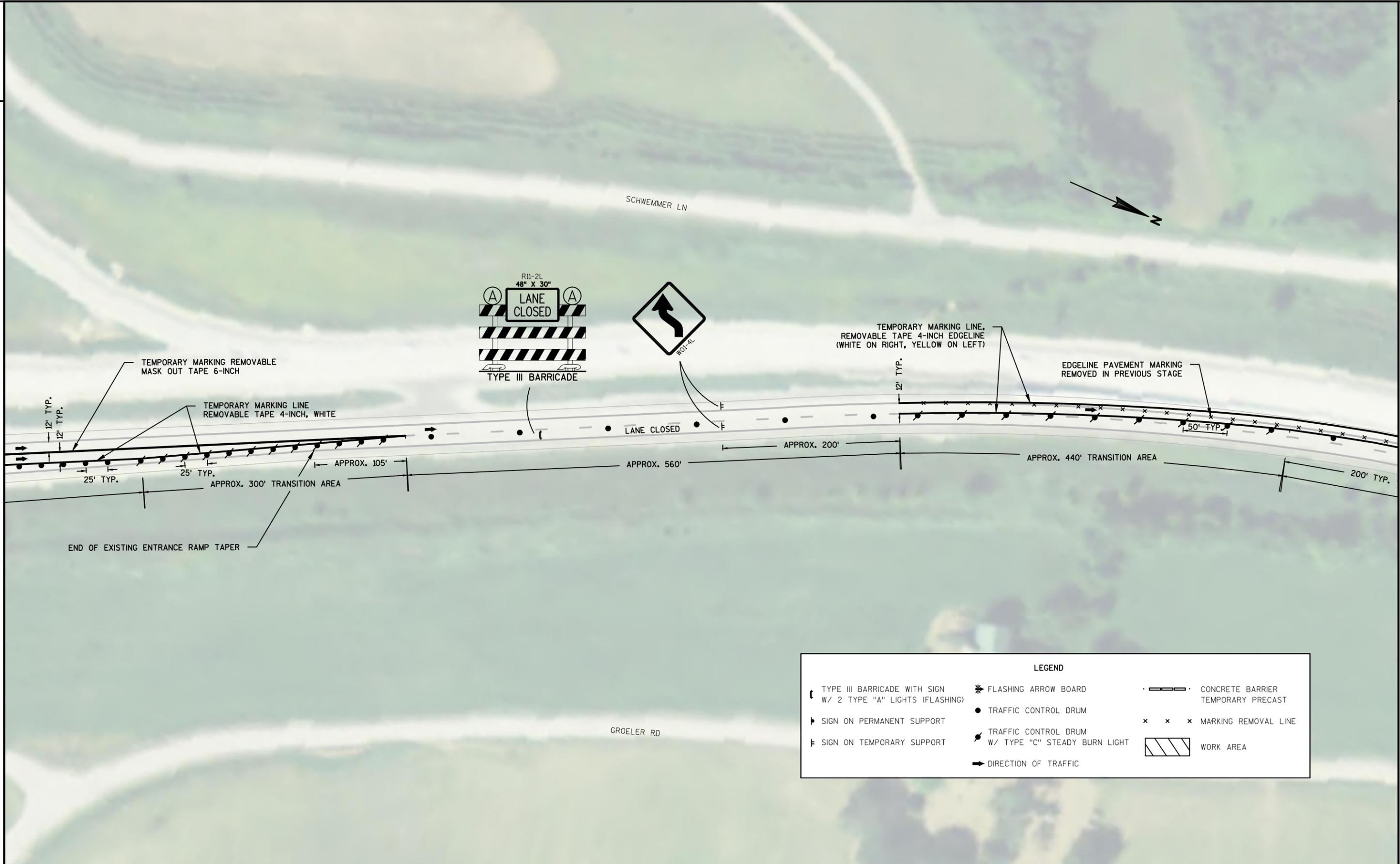
LEGEND		
 TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	 FLASHING ARROW BOARD	 CONCRETE BARRIER TEMPORARY PRECAST
 SIGN ON PERMANENT SUPPORT	 TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	 MARKING REMOVAL LINE
 SIGN ON TEMPORARY SUPPORT	 DIRECTION OF TRAFFIC	 WORK AREA



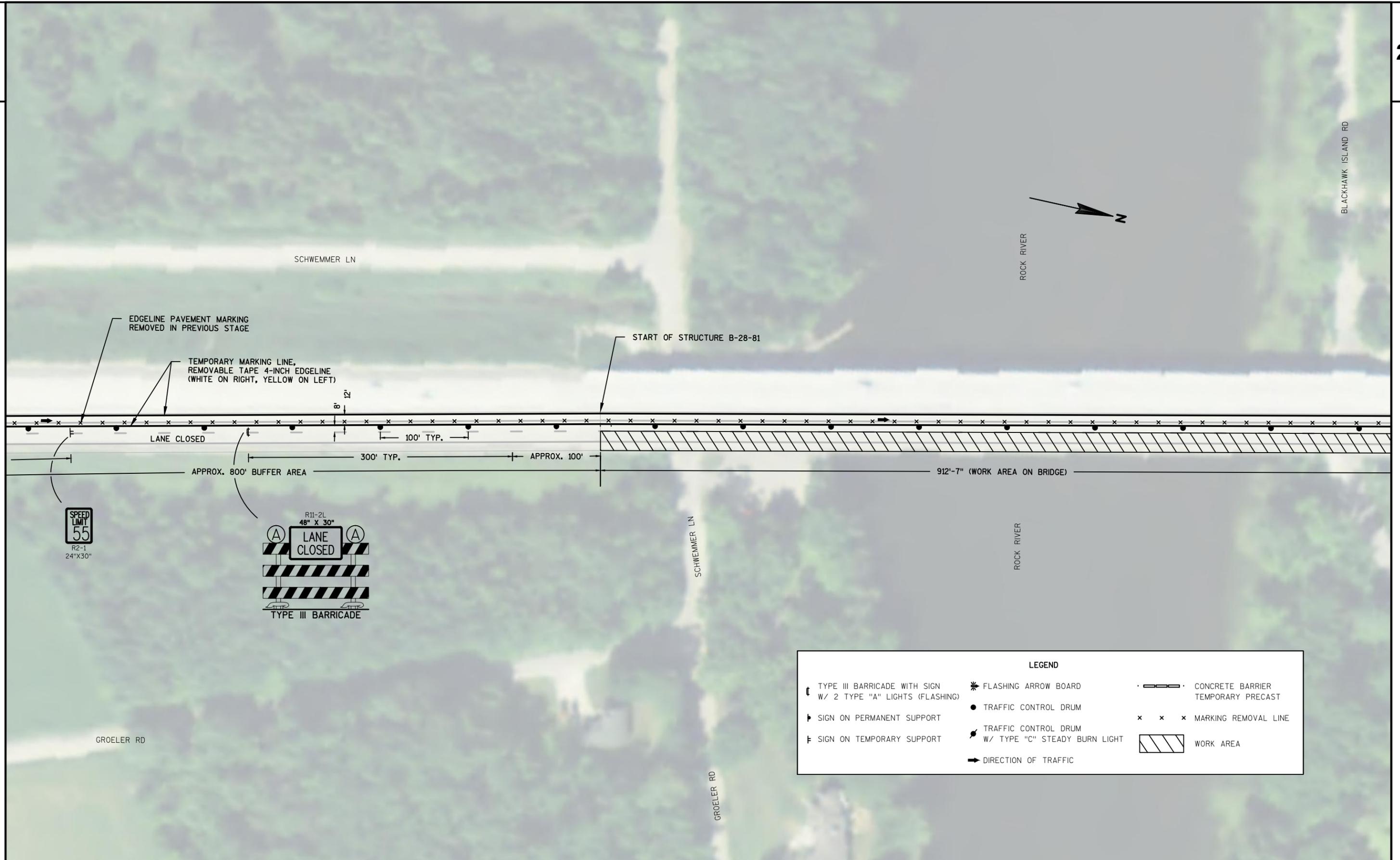
LEGEND					
⊥	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⚡	FLASHING ARROW BOARD	▬	CONCRETE BARRIER TEMPORARY PRECAST
⬇	SIGN ON PERMANENT SUPPORT	●	TRAFFIC CONTROL DRUM	x x x	MARKING REMOVAL LINE
⬆	SIGN ON TEMPORARY SUPPORT	⚡	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨	WORK AREA
➡	DIRECTION OF TRAFFIC				



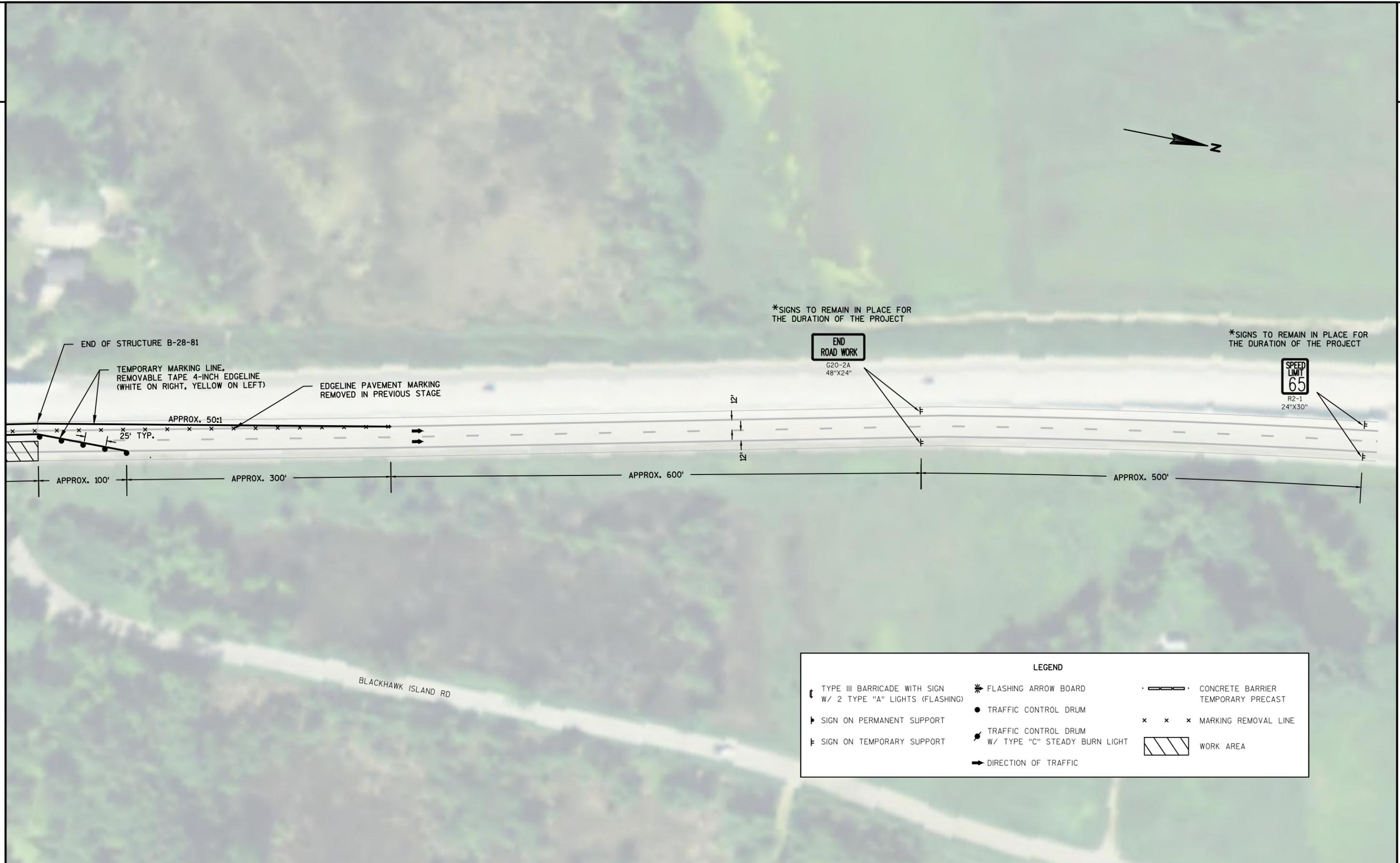
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



LEGEND					
⊥	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⊗	FLASHING ARROW BOARD	—	CONCRETE BARRIER TEMPORARY PRECAST
⊢	SIGN ON PERMANENT SUPPORT	●	TRAFFIC CONTROL DRUM	x x x	MARKING REMOVAL LINE
⊣	SIGN ON TEMPORARY SUPPORT	⦿	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨	WORK AREA
→	DIRECTION OF TRAFFIC				



LEGEND		
☛ TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⚡ FLASHING ARROW BOARD	▬ CONCRETE BARRIER TEMPORARY PRECAST
☛ SIGN ON PERMANENT SUPPORT	● TRAFFIC CONTROL DRUM	x x x MARKING REMOVAL LINE
☛ SIGN ON TEMPORARY SUPPORT	⚡ TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨ WORK AREA
➡ DIRECTION OF TRAFFIC		



*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

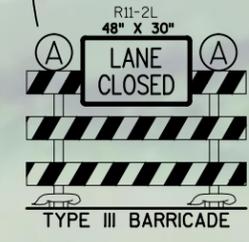
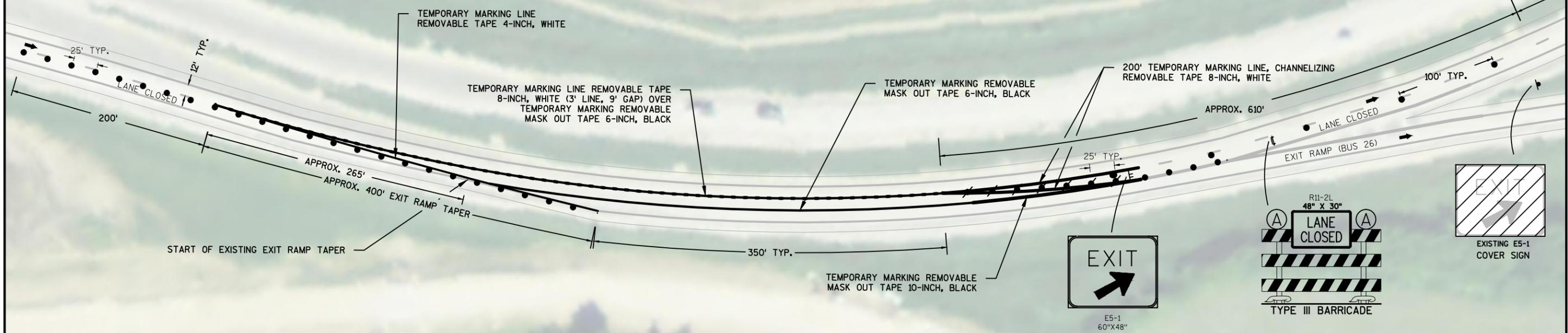
*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT
65
R2-1
24"X30"

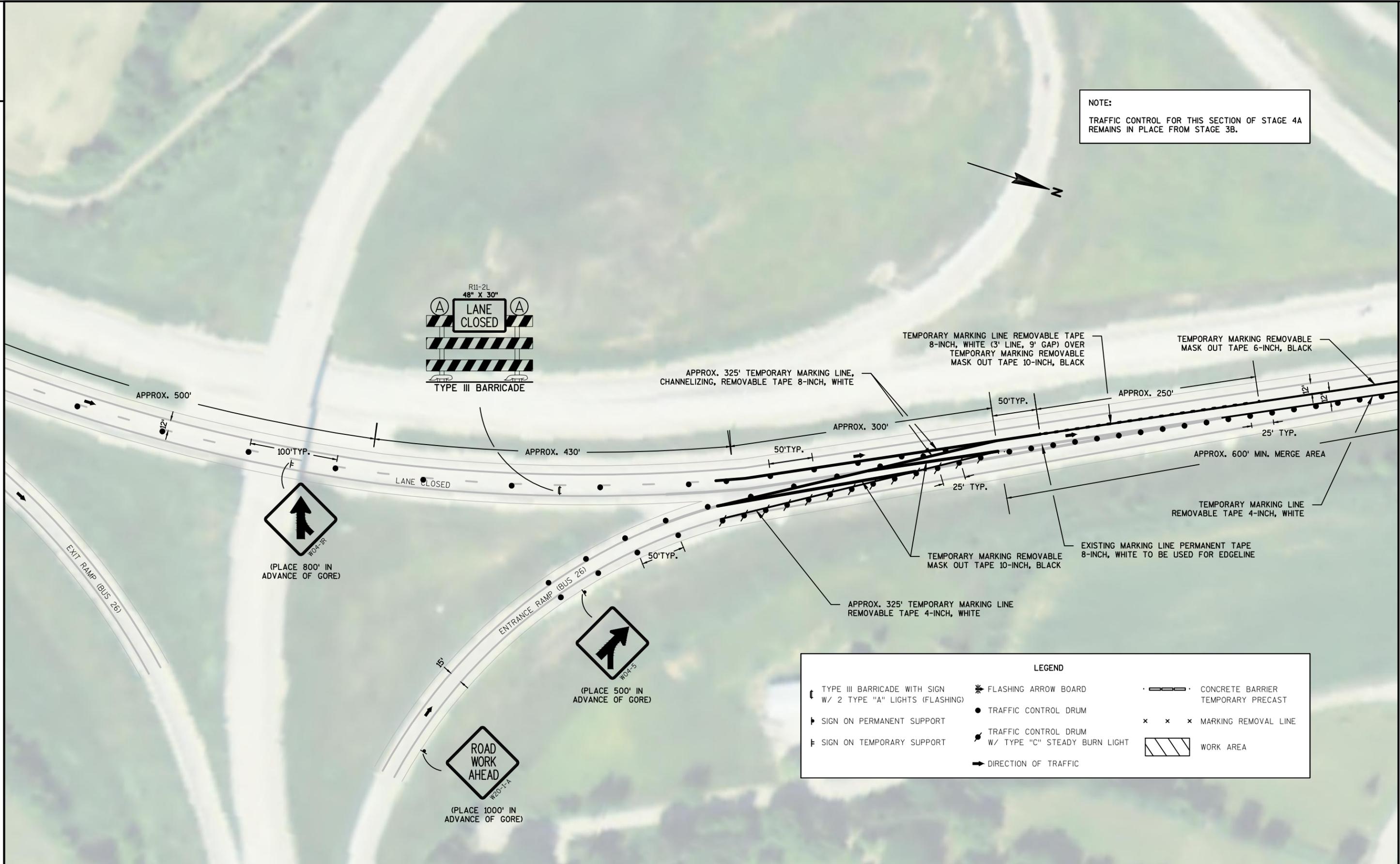
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		

NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 4A
 REMAINS IN PLACE FROM STAGE 3B.

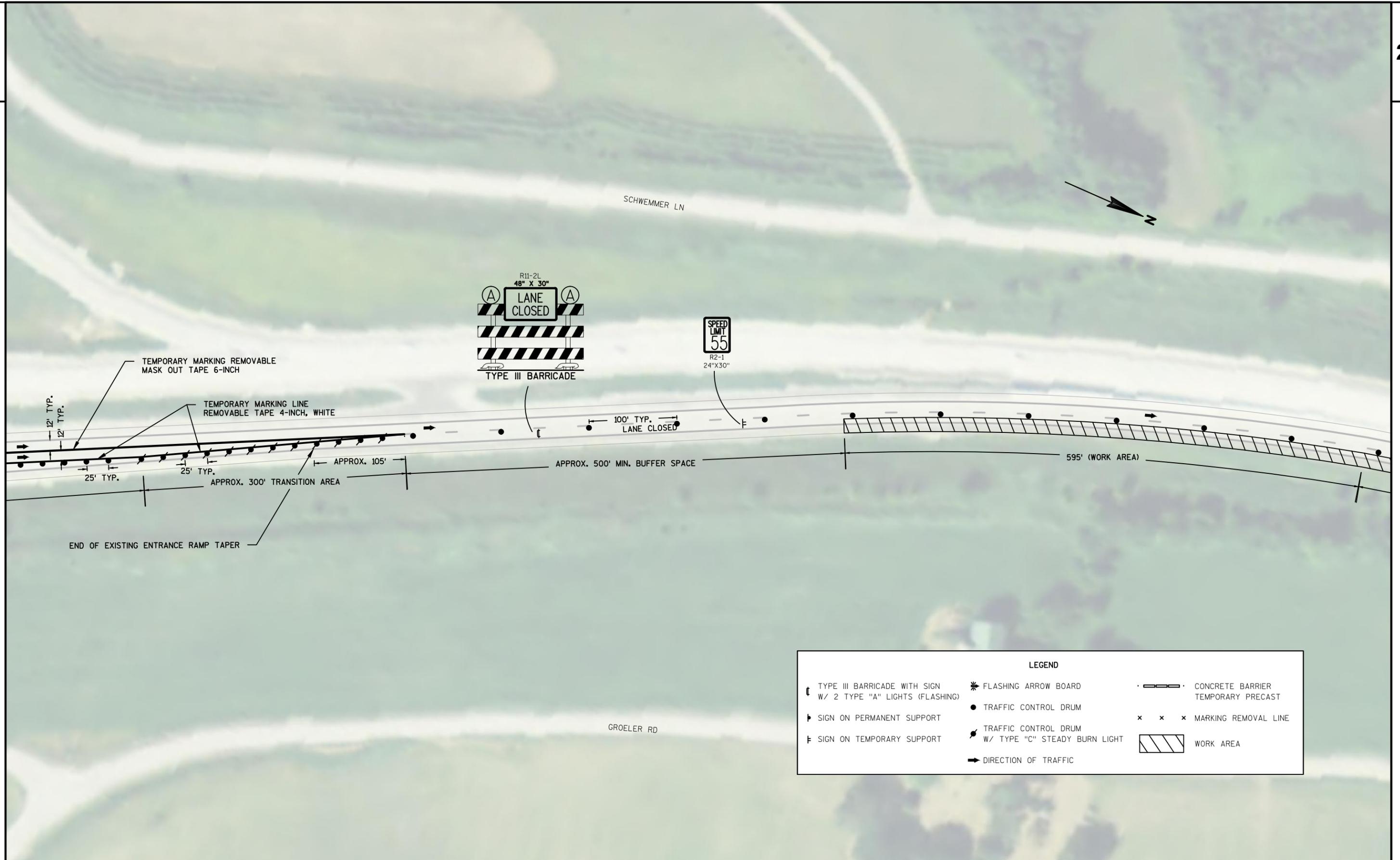


LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		

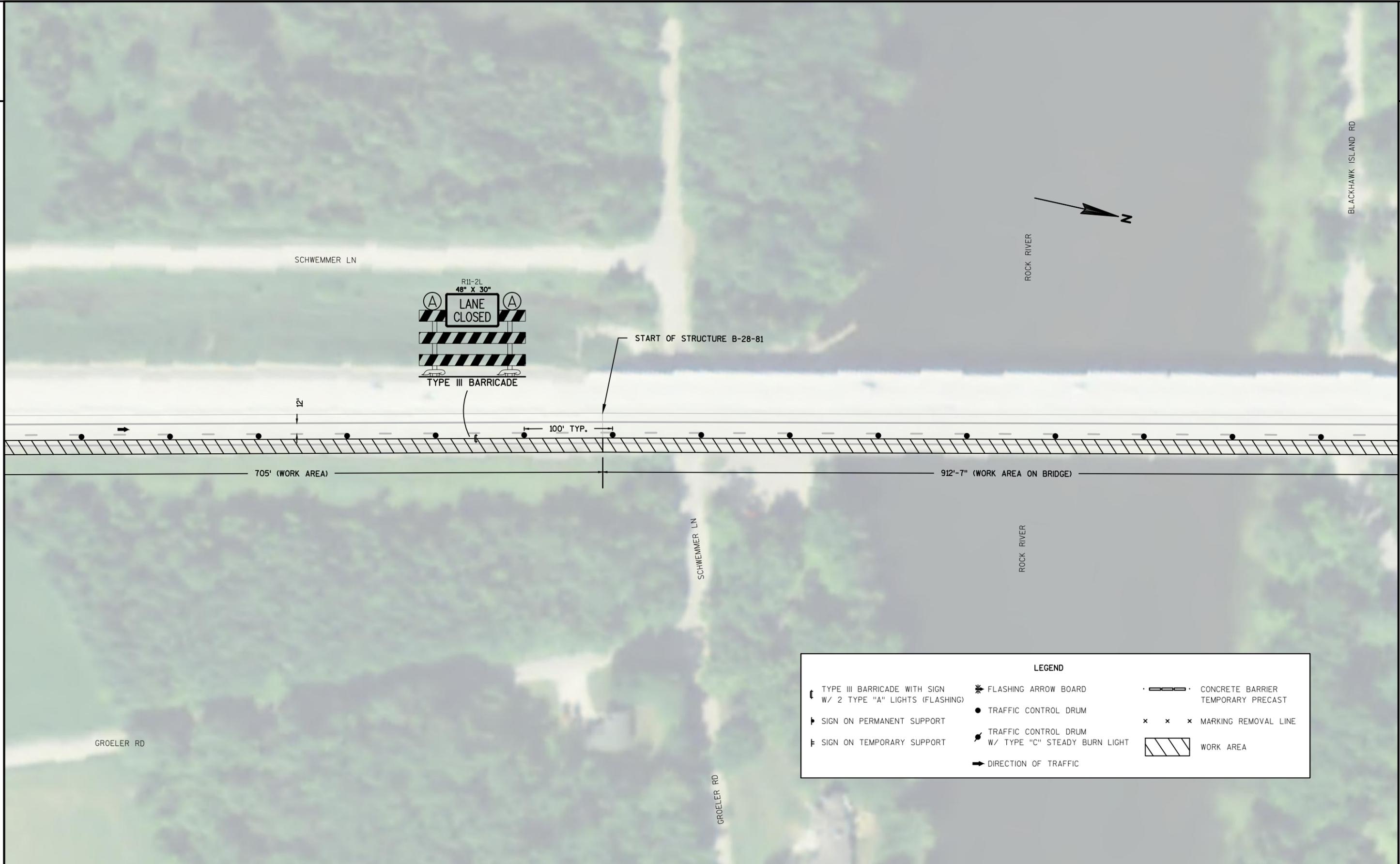
NOTE:
 TRAFFIC CONTROL FOR THIS SECTION OF STAGE 4A
 REMAINS IN PLACE FROM STAGE 3B.



LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



LEGEND		
† TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⚡ FLASHING ARROW BOARD	▬ CONCRETE BARRIER TEMPORARY PRECAST
♣ SIGN ON PERMANENT SUPPORT	● TRAFFIC CONTROL DRUM	x x x MARKING REMOVAL LINE
⦿ SIGN ON TEMPORARY SUPPORT	⦿ TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	▨ WORK AREA
	➔ DIRECTION OF TRAFFIC	



LEGEND			
	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)		CONCRETE BARRIER TEMPORARY PRECAST
	SIGN ON PERMANENT SUPPORT		TRAFFIC CONTROL DRUM
	SIGN ON TEMPORARY SUPPORT		TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT
	FLASHING ARROW BOARD		MARKING REMOVAL LINE
	DIRECTION OF TRAFFIC		WORK AREA



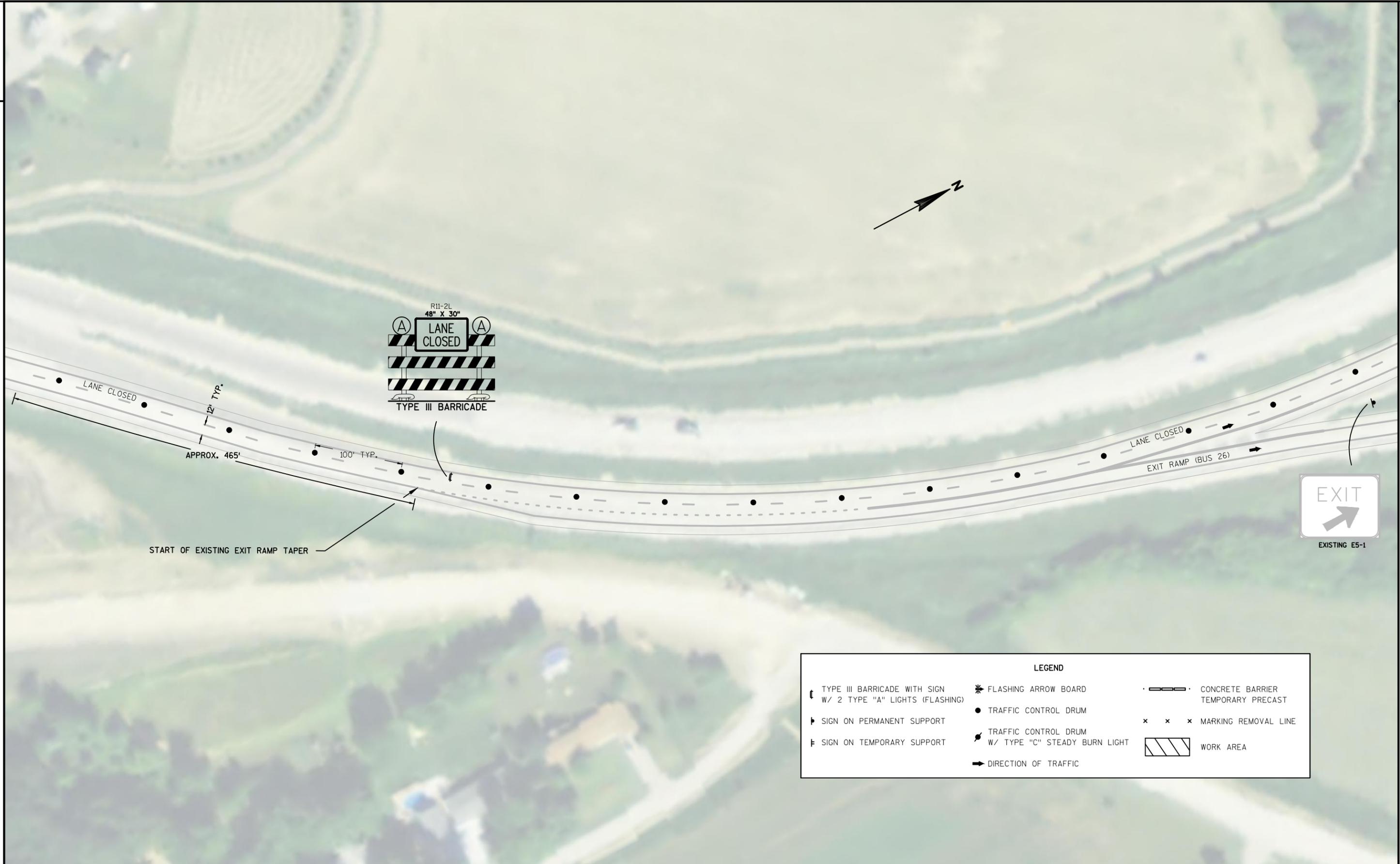
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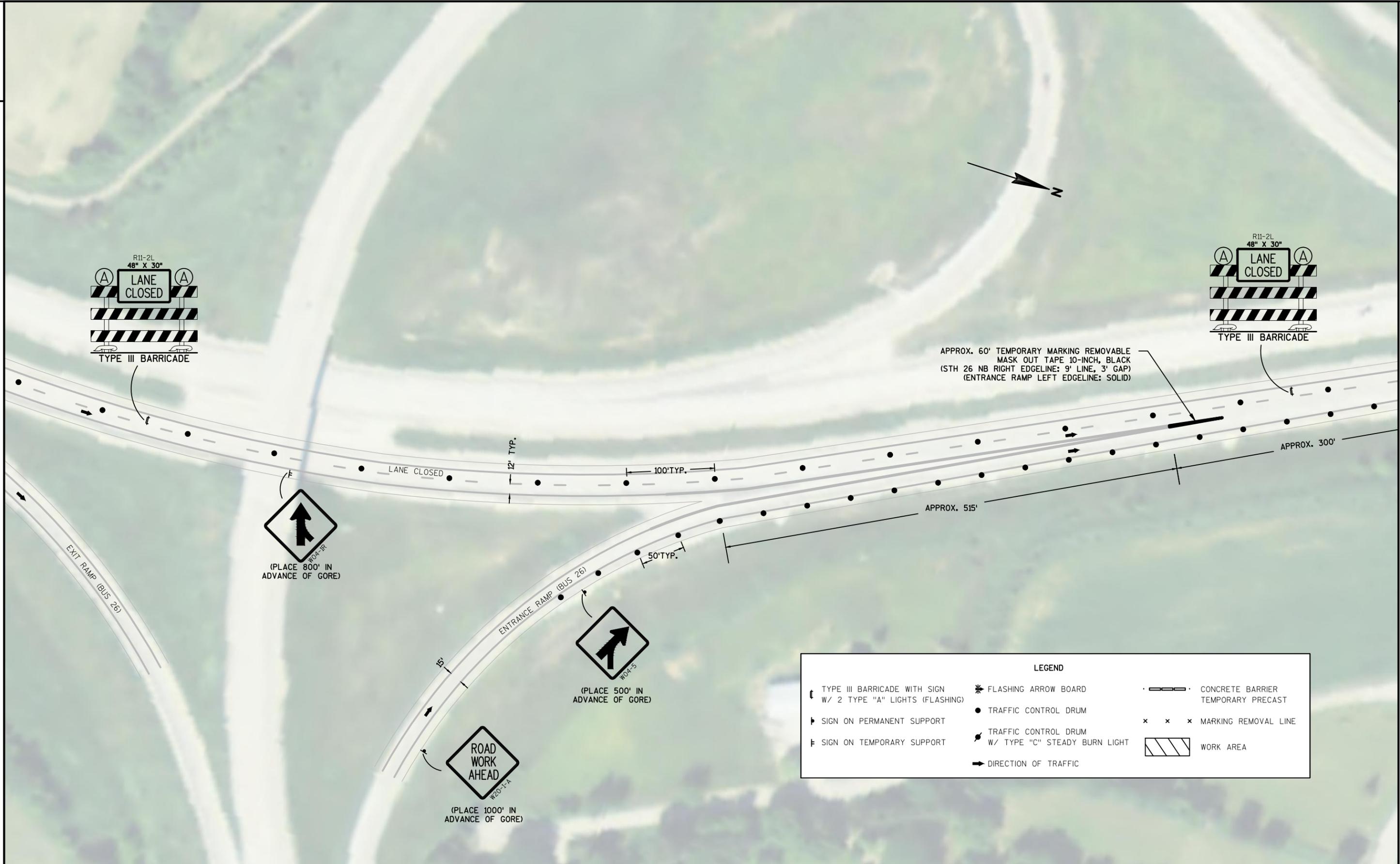
END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT
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24"X30"

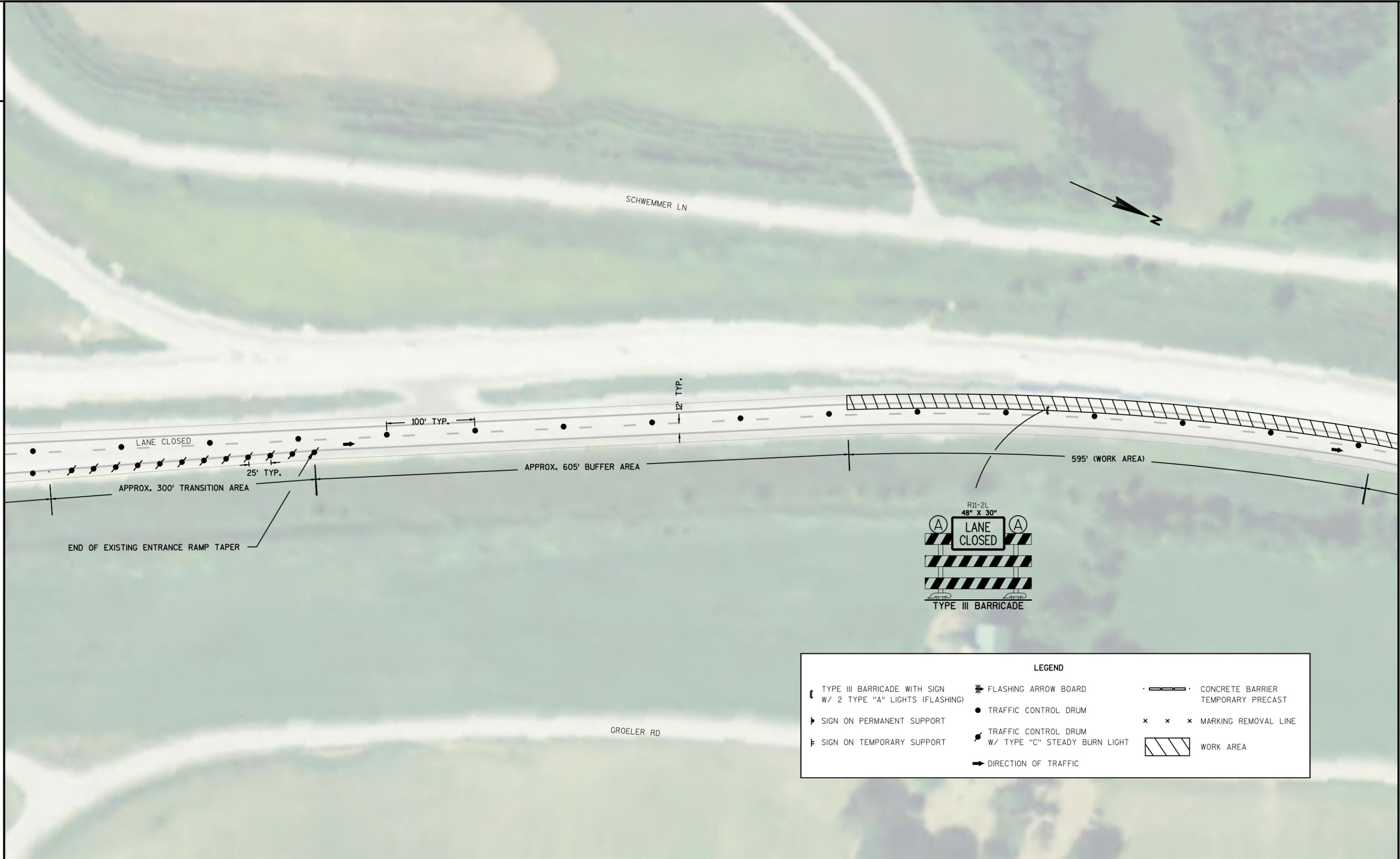
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
DIRECTION OF TRAFFIC		



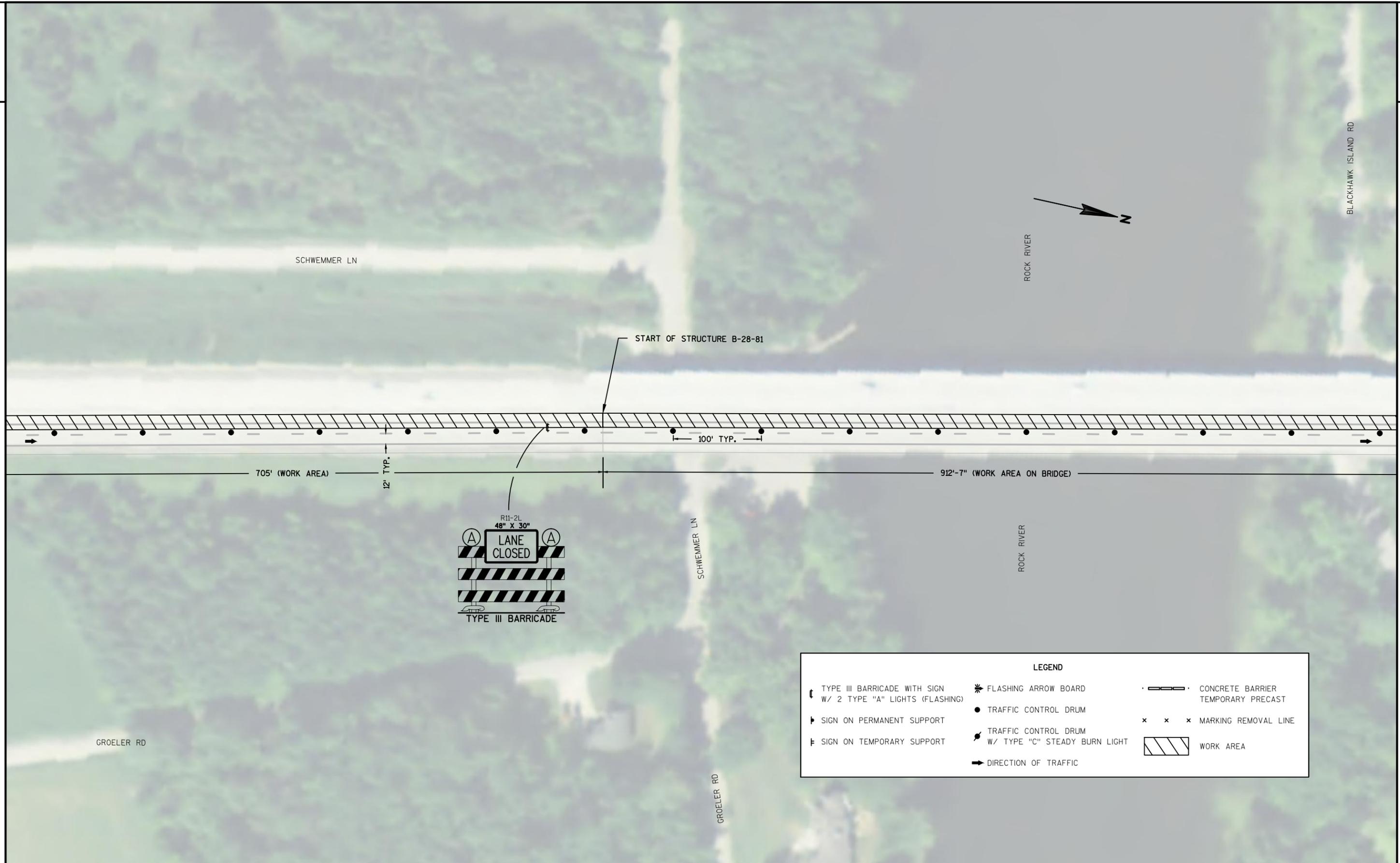
LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



LEGEND		
TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	FLASHING ARROW BOARD	CONCRETE BARRIER TEMPORARY PRECAST
SIGN ON PERMANENT SUPPORT	TRAFFIC CONTROL DRUM	MARKING REMOVAL LINE
SIGN ON TEMPORARY SUPPORT	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	WORK AREA
	DIRECTION OF TRAFFIC	



LEGEND		
 TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	 FLASHING ARROW BOARD	 CONCRETE BARRIER TEMPORARY PRECAST
 SIGN ON PERMANENT SUPPORT	 TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	 MARKING REMOVAL LINE
 SIGN ON TEMPORARY SUPPORT	 DIRECTION OF TRAFFIC	 WORK AREA



LEGEND		



*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

*SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT
65
R2-1
24"X30"

END OF STRUCTURE B-28-81

BLACKHAWK ISLAND RD

LEGEND					
⊥	TYPE III BARRICADE WITH SIGN W/ 2 TYPE "A" LIGHTS (FLASHING)	⚡	FLASHING ARROW BOARD	▬▬▬	CONCRETE BARRIER TEMPORARY PRECAST
●	TRAFFIC CONTROL DRUM	⦿	TRAFFIC CONTROL DRUM W/ TYPE "C" STEADY BURN LIGHT	x x x	MARKING REMOVAL LINE
⊣	SIGN ON PERMANENT SUPPORT	➔	DIRECTION OF TRAFFIC	▨	WORK AREA
⊣	SIGN ON TEMPORARY SUPPORT				

Estimate Of Quantities By Plan Sets

1390-00-83

Line	Item	Item Description	Unit	Total	Qty
0002	203.0225.S	Debris Containment (structure) 01. B-28-81	LS	1.000	1.000
0004	213.0100	Finishing Roadway (project) 01. 1390-00-83	EACH	1.000	1.000
0008	416.1110	Concrete Shoulder Rumble Strips	LF	3,400.000	3,400.000
0010	502.3100	Expansion Device (structure) 01. B-28-81	LS	1.000	1.000
0012	502.4205	Adhesive Anchors No. 5 Bar	EACH	96.000	96.000
0014	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	2,670.000	2,670.000
0016	505.0905	Bar Couplers No. 5	EACH	20.000	20.000
0018	509.1000	Joint Repair	SY	41.000	41.000
0020	509.1500	Concrete Surface Repair	SF	5.000	5.000
0022	509.2500	Concrete Masonry Overlay Decks	CY	15.000	15.000
0024	509.5100.S	Polymer Overlay	SY	4,462.000	4,462.000
0026	603.8000	Concrete Barrier Temporary Precast Delivered	LF	1,013.000	1,013.000
0028	603.8125	Concrete Barrier Temporary Precast Installed	LF	2,026.000	2,026.000
0030	619.1000	Mobilization	EACH	0.690	0.690
0032	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0034	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0036	628.7010	Inlet Protection Type B	EACH	9.000	9.000
0040	642.5001	Field Office Type B	EACH	1.000	1.000
0042	643.0300	Traffic Control Drums	DAY	16,285.000	16,285.000
0046	643.0420	Traffic Control Barricades Type III	DAY	555.000	555.000
0048	643.0705	Traffic Control Warning Lights Type A	DAY	1,110.000	1,110.000
0050	643.0715	Traffic Control Warning Lights Type C	DAY	4,319.000	4,319.000
0052	643.0800	Traffic Control Arrow Boards	DAY	100.000	100.000
0054	643.0900	Traffic Control Signs	DAY	2,918.000	2,918.000
0056	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0058	643.1050	Traffic Control Signs PCMS	DAY	7.000	7.000
0060	643.5000	Traffic Control	EACH	0.500	0.500
0062	646.1020	Marking Line Epoxy 4-Inch	LF	6,139.000	6,139.000
0074	646.9000	Marking Removal Line 4-Inch	LF	6,139.000	6,139.000
0082	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	20,495.000	20,495.000
0084	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	2,702.000	2,702.000
0086	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	7,480.000	7,480.000
0088	649.0970	Temporary Marking Removable Mask Out Tape 10-Inch	LF	1,415.000	1,415.000
0090	SPV.0090	Special 01. Filling Rumble Strips	LF	3,400.000	3,400.000

3

3

FINISHING ROADWAY

CATEGORY	ROADWAY	213.0100 FINISHING ROADWAY (01.1390-00-83) EACH
0010	STH 26 NB	1
TOTAL 0010		1

RUMBLE STRIP ITEMS

CATEGORY	ROADWAY	416.1110 CONCRETE SHOULDER RUMBLE STRIPS LF	SPV.0090.01 FILLING RUMBLE STRIPS LF
0010	STH 26 NB - LT	1700	1700
0010	STH 26 NB - RT	1700	1700
TOTAL 0010		3400	3400

CONCRETE BARRIER ITEMS

CATEGORY	LOCATION	STAGE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF
0010	STH 26 NB - WORK AREA	2A	1013	1013
0010	STH 26 NB - WORK AREA	2B	-	1013
TOTAL 0010			1013	2026

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	ROADWAY	DAY**	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	REMARKS
0010	1A	STH 26 NB	4	145	580	6	24	12	48	26	104	1	4	25	100	
0010	1B	STH 26 NB	2	189	378	5	10	10	20	46	92	1	2	26	52	
0010	2A	STH 26 NB	29	181	5249	5	145	10	290	55	1595	1	29	29	841	
0010	2A	SCHWEMMER LN	29	3	87	-	-	-	-	-	-	-	-	1	29	
0010	2B	STH 26 NB	42	134	5628	6	252	12	504	35	1470	1	42	29	1218	
0010	2B	STH 26 NB	28	9	252	-	-	-	-	-	-	-	-	-	-	CONCRETE CURE TIME
0010	2B	SCHWEMMER LN	42	3	126	-	-	-	-	-	-	-	-	1	42	
0010	3A	STH 26 NB	7	143	1001	6	42	12	84	35	245	1	7	28	196	
0010	3B	STH 26 NB	13	190	2470	5	65	10	130	55	715	1	13	28	364	
0010	4A	STH 26 NB	1	189	189	5	5	10	10	46	46	1	1	26	26	
0010	4B	STH 26 NB	2	145	290	6	12	12	24	26	52	1	2	25	50	
TOTAL 0010				16250	555	1110	4319	100	2918							

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
**INFORMATION ONLY

MOBILIZATION ITEMS

CATEGORY	LOCATION	EACH	619.1000 MOBILIZATION	628.1905 EROSION CONTROL	628.1910 EROSION CONTROL
0010	STH 26 NB	0.69		1	1
TOTAL 0010		0.69		1	1

INLET PROTECTION ITEM

CATEGORY	LOCATION	628.7010 INLET PROTECTION TYPE B EACH
0010	STH 26 NB - LT	4
0010	STH 26 NB - RT	5
TOTAL 0010		9

FIELD OFFICE ITEM

CATEGORY	ROADWAY	642.5001 FIELD OFFICE TYPE B EACH
0010	STH 26 NB	1
TOTAL 0010		1

TRAFFIC CONTROL COVERING SIGNS ITEM

643.0920
TRAFFIC CONTROL
COVERING SIGNS TYPE II

CATEGORY	STAGE	ROADWAY	LOCATION	NO. CYCLES*	NO. SIGNS*	EACH	REMARKS
0010	1A	STH 26 NB-LT	EXIT RAMP	-	-	-	E5-1 UNCOVERED
0010	1B	STH 26 NB-RT	EXIT RAMP	0.50	1	0.50	E5-1 COVERED
0010	2A	STH 26 NB-RT	EXIT RAMP	-	-	-	E5-1 COVERED
0010	2B	STH 26 NB-LT	TC AWA**	0.50	1	0.50	W03-5 COVERED***
0010	2B	STH 26 NB-RT	TC AWA**	0.50	1	0.50	W03-5 COVERED***
0010	2B	STH 26 NB-LT	TC AWA**	0.50	1	0.50	R2-1 COVERED***
0010	2B	STH 26 NB-RT	TC AWA**	0.50	1	0.50	R2-1 COVERED***
0010	2B	STH 26 NB-LT	EXIT RAMP	0.50	1	0.50	E5-1 UNCOVERED
0010	3A	STH 26 NB-LT	TC AWA**	0.50	1	0.50	W03-5 UNCOVERED
0010	3A	STH 26 NB-RT	TC AWA**	0.50	1	0.50	W03-5 UNCOVERED
0010	3A	STH 26 NB-LT	TC AWA**	0.50	1	0.50	R2-1 UNCOVERED
0010	3A	STH 26 NB-RT	TC AWA**	0.50	1	0.50	R2-1 UNCOVERED
0010	3A	STH 26 NB-LT	EXIT RAMP	-	-	-	E5-1 UNCOVERED
0010	3B	STH 26 NB-RT	EXIT RAMP	0.50	1	0.50	E5-1 COVERED
0010	4A	STH 26 NB-RT	EXIT RAMP	-	-	-	E5-1 COVERED
0010	4B	STH 26 NB-LT	EXIT RAMP	0.50	1	0.50	E5-1 UNCOVERED
TOTAL 0010						6	

*INFORMATION ONLY
 **TC AWA = TRAFFIC CONTROL ADVANCED WARNING AREA
 ***DURING CONCRETE CURE TIME (SEE TRAFFIC CONTROL DETAILS FOR MORE INFORMATION)

TEMPORARY PAVEMENT MARKING ITEMS

CATEGORY	STAGE	ROADWAY	LOCATION	649.0150		649.0250	649.0960	649.0970
				TEMPORARY MARKING LINE	TEMPORARY MARKING LINE	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH	
				WHITE LF	YELLOW LF	WHITE LF	BLACK LF	BLACK LF
0010	1A	STH 26 NB - LT	TRAFFIC SHIFT	-	660	-	660	-
0010	1A	STH 26 NB - RT	ENTRANCE RAMP	-	-	-	-	105
0010	1B	STH 26 NB - RT	TRAFFIC SHIFT	660	-	-	660	-
0010	1B	STH 26 NB - RT	EXIT RAMP	400	-	588	1240	170
0010	1B	STH 26 NB - RT	ENTRANCE RAMP	975	-	763	850	380
0010	2A	STH 26 NB	WORK AREA	2260	2560	-	-	-
0010	2B	STH 26 NB - LT	TRAFFIC SHIFT	-	660	-	660	-
0010	2B	STH 26 NB - RT	ENTRANCE RAMP	-	-	-	-	105
0010	2B	STH 26 NB	WORK AREA	2550	2255	-	-	-
0010	3B	STH 26 NB - RT	TRAFFIC SHIFT	660	-	-	660	-
0010	3B	STH 26 NB - RT	EXIT RAMP	400	-	588	1240	170
0010	3B	STH 26 NB - RT	ENTRANCE RAMP	975	-	763	850	380
0010	3B	STH 26 NB	WORK AREA	2260	2560	-	-	-
0010	4B	STH 26 NB - LT	TRAFFIC SHIFT	-	660	-	660	-
0010	4B	STH 26 NB - RT	ENTRANCE RAMP	-	-	-	-	105
TOTAL 0010				11140	9355	2702	7480	1415

TRAFFIC CONTROL

CATEGORY	ROADWAY	EACH
0010	STH 26 NB	0.50
TOTAL 0010		0.50

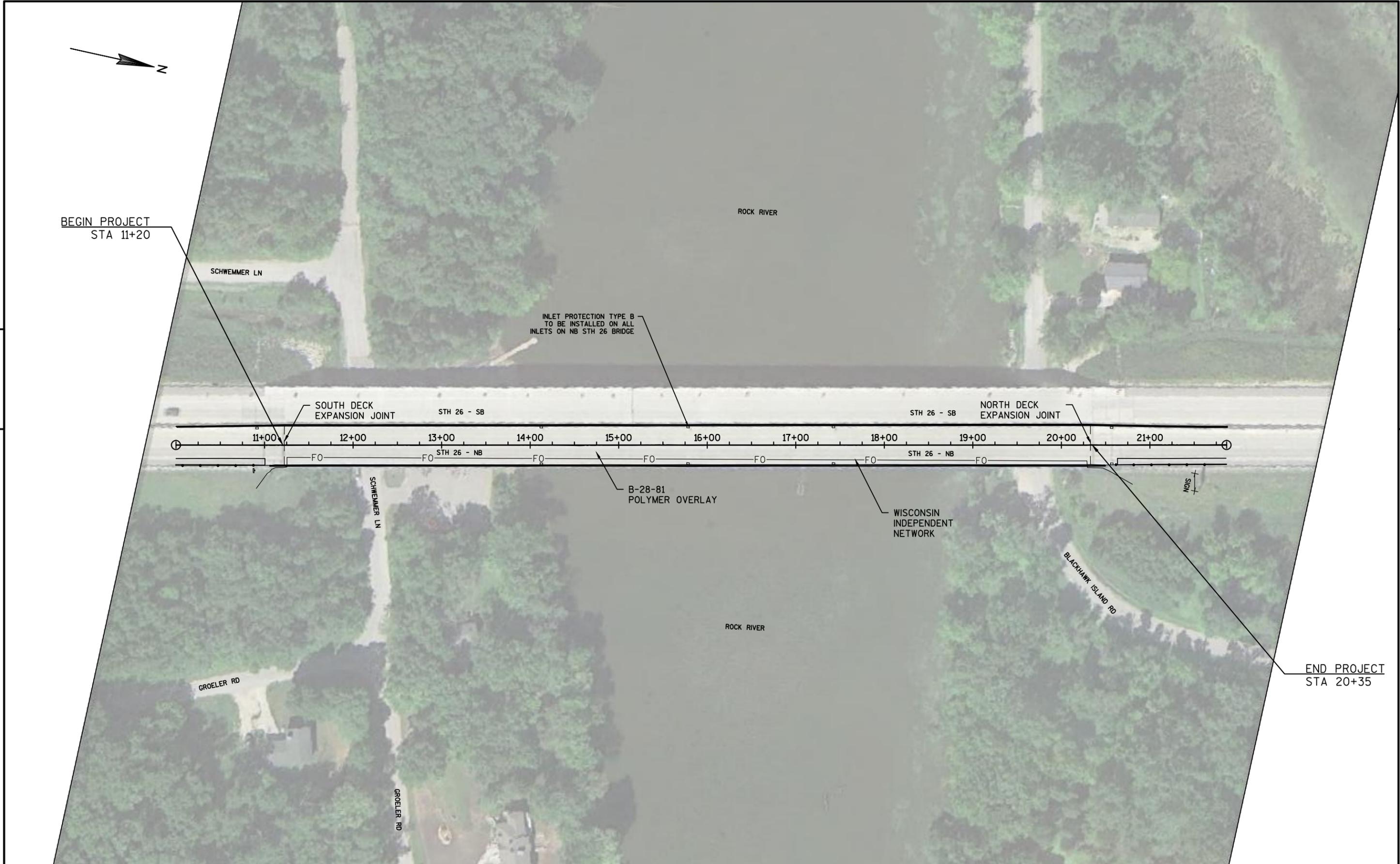
TRAFFIC CONTROL SIGNS PCMS ITEM

CATEGORY	ROADWAY	DAY**	643.0300		643.1050	
			DRUMS	PCMS	SIGNS	PCMS
			EACH**	DAY	EACH**	DAY
0010	STH 26 NB	7	5	35	1	7
TOTAL 0010				35	7	

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
 **INFORMATION ONLY

PAVEMENT MARKING ITEMS

CATEGORY	ROADWAY	LOCATION	646.1020		646.9000	REMARKS
			WHITE LF	YELLOW LF	MARKING LINE REMOVAL LINE 4-INCH	
0010	STH 26 NB - LT	WORK AREA	-	2613	2613	EDGE LINE
0010	STH 26 NB	WORK AREA	913	-	913	CENTERLINE
0010	STH 26 NB - RT	WORK AREA	2613	-	2613	EDGE LINE
TOTAL 0010			3526	2613	6139	



BEGIN PROJECT
STA 11+20

SCHWEMMER LN

ROCK RIVER

INLET PROTECTION TYPE B
TO BE INSTALLED ON ALL
INLETS ON NB STH 26 BRIDGE

SOUTH DECK
EXPANSION JOINT

STH 26 - SB

STH 26 - SB

NORTH DECK
EXPANSION JOINT

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00

FO

FO

FO

FO

FO

FO

FO

FO

STH 26 - NB

STH 26 - NB

B-28-81
POLYMER OVERLAY

WISCONSIN
INDEPENDENT
NETWORK

SCHWEMMER LN

BLACKHAWK ISLAND RD

ROCK RIVER

GROELER RD

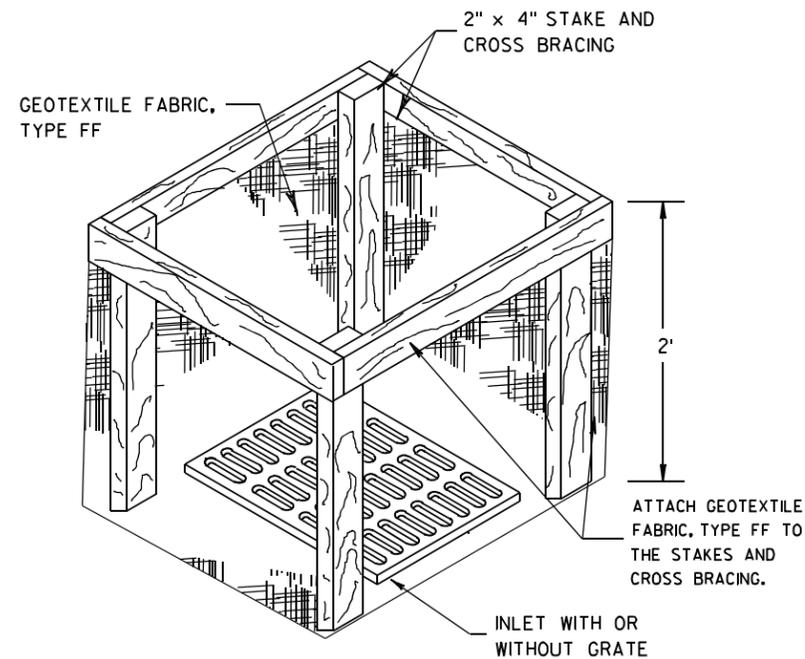
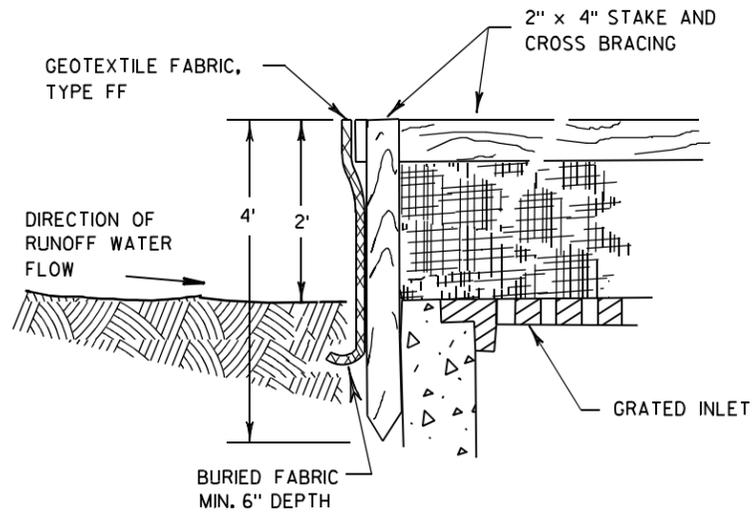
GROELER RD

END PROJECT
STA 20+35

PROJECT NO: 1390-00-83	HWY: STH 26	COUNTY: JEFFERSON	PLAN: STH 26	SHEET	E
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Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-03A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



INLET PROTECTION, TYPE A

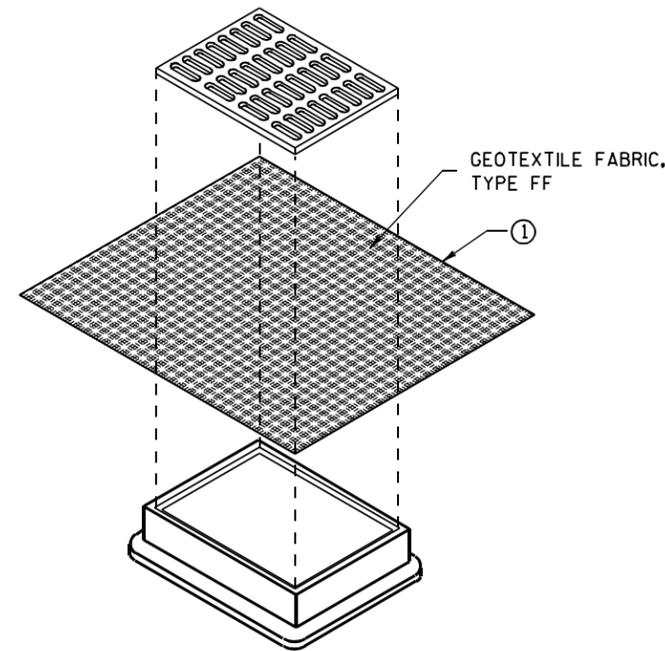
GENERAL NOTES

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.

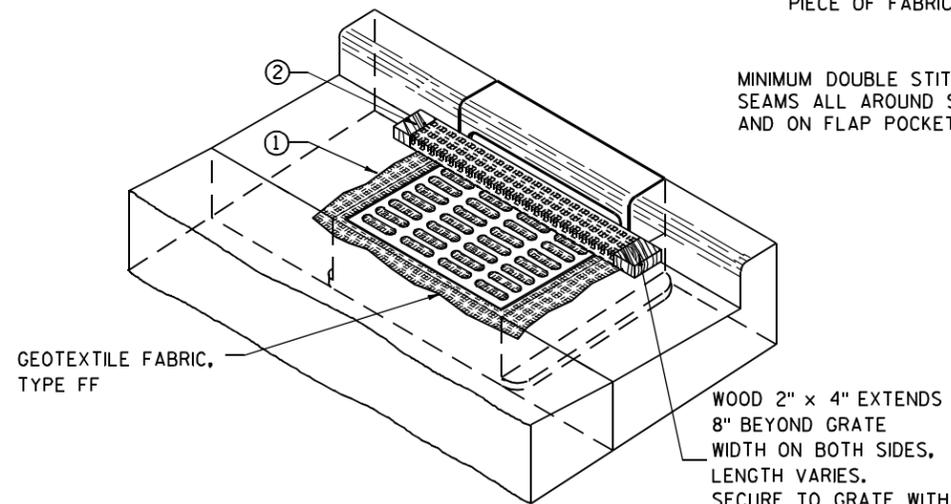
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

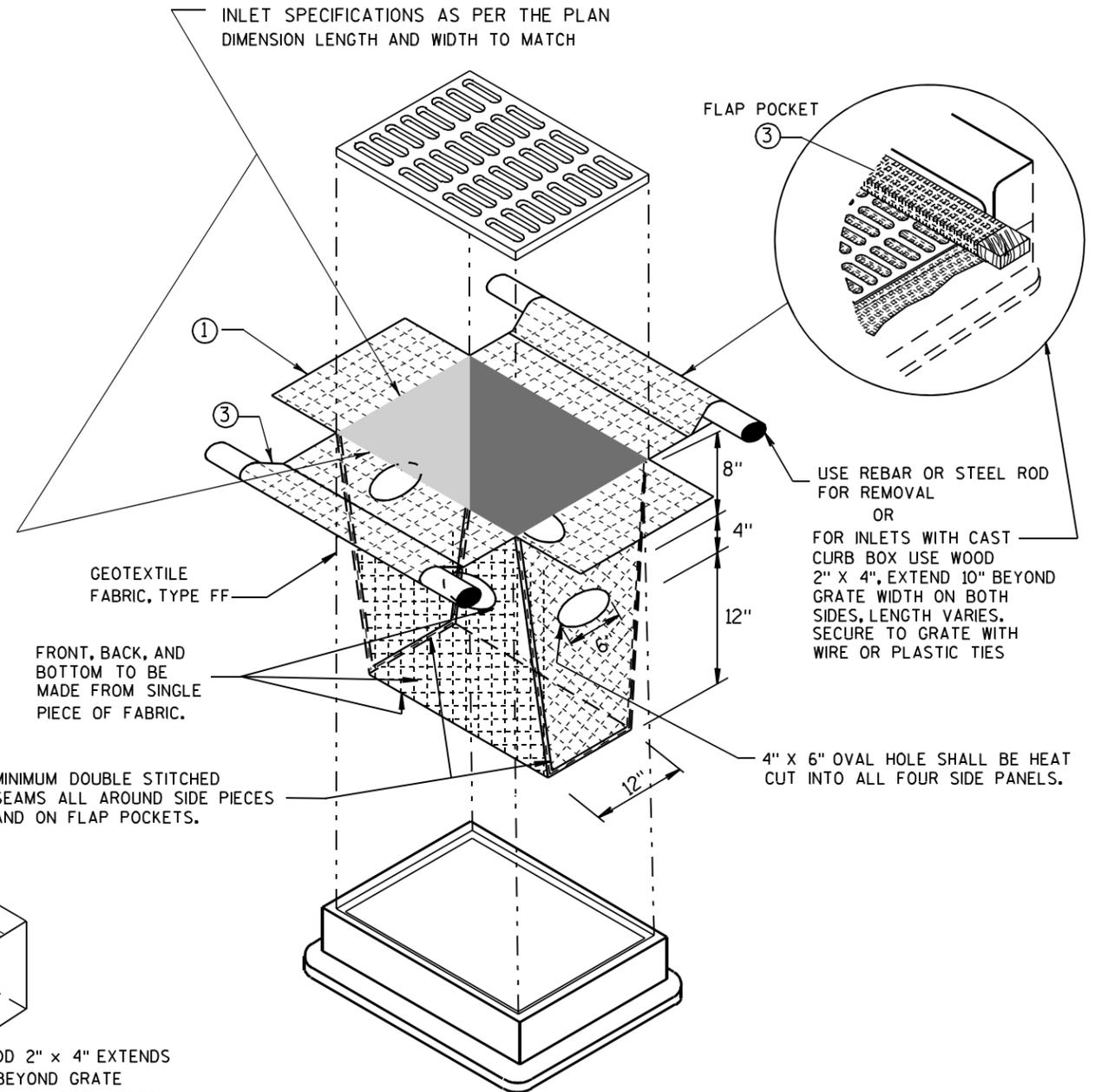
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.

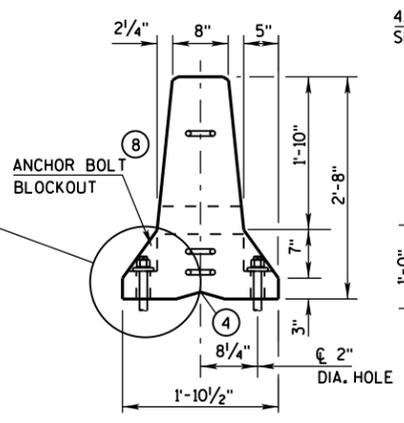
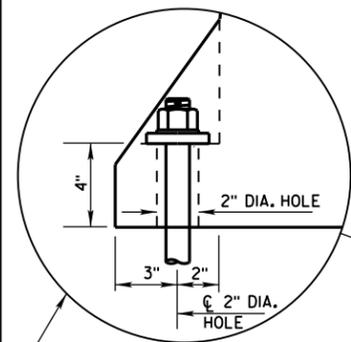
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



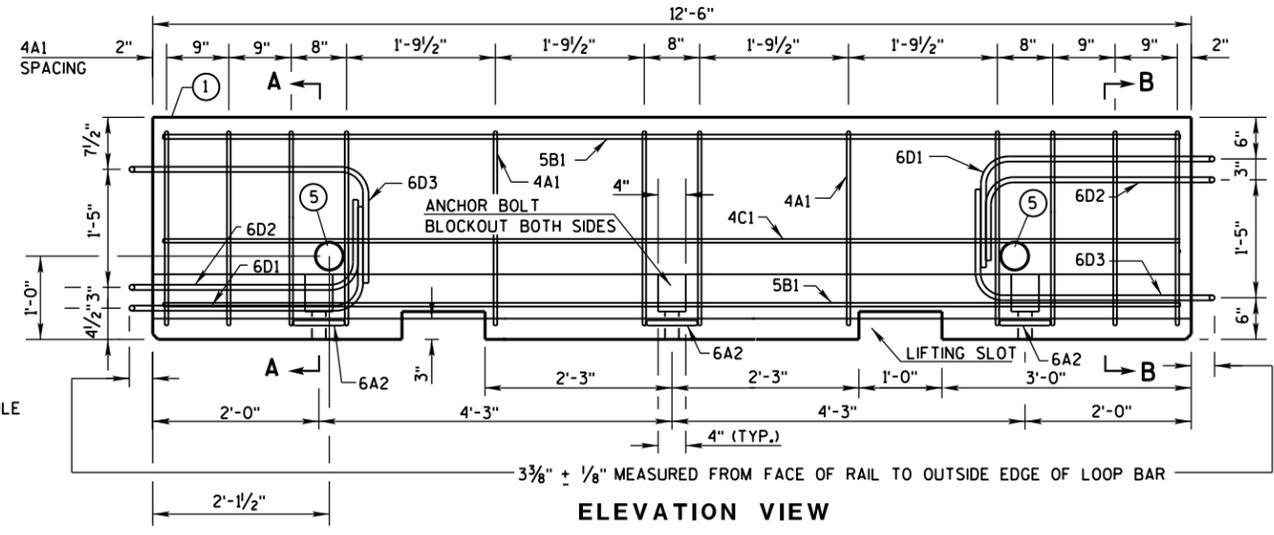
INLET PROTECTION, TYPE D

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

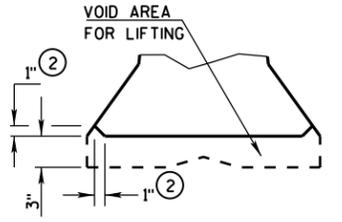
INLET PROTECTION TYPE A, B, C, AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/S/ Beth Conestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



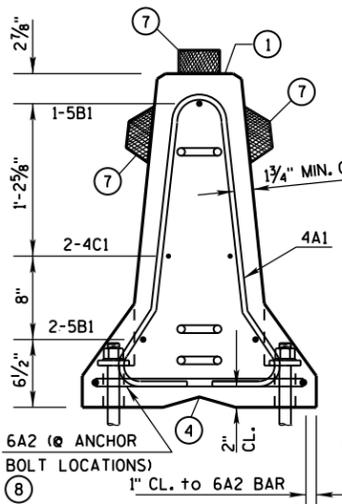
END VIEW



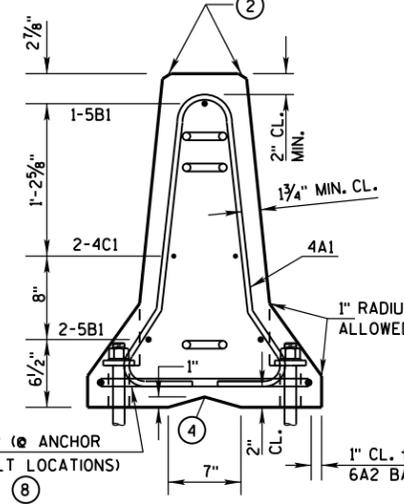
ELEVATION VIEW



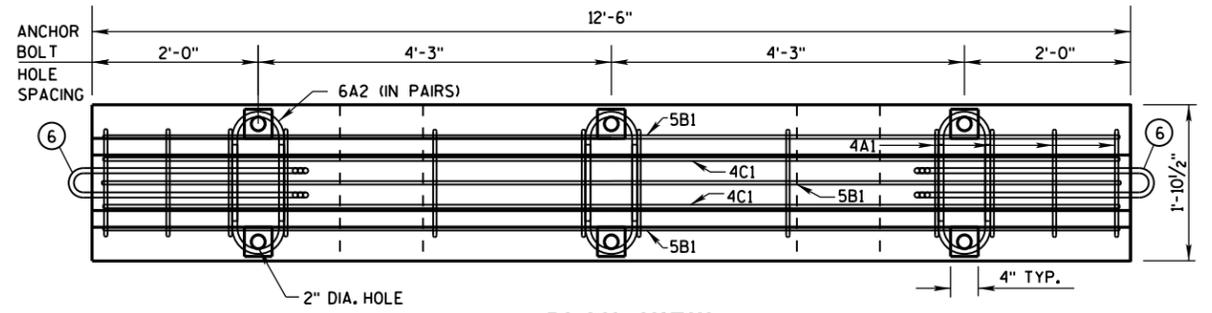
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)



PLAN VIEW

DETAILS OF BARRIER SECTION

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(d) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE 3/4" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-1/2" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN 1/8" OF THE PLAN DIMENSION.

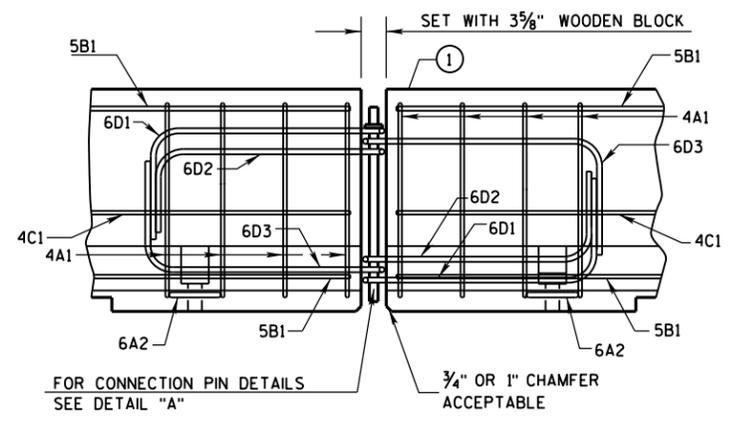
CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

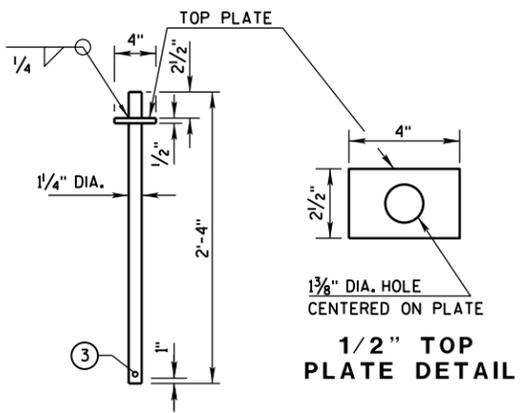
INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A 3/8" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURER'S INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.
- ⑨ 1" CHAMFER OPTIONAL.

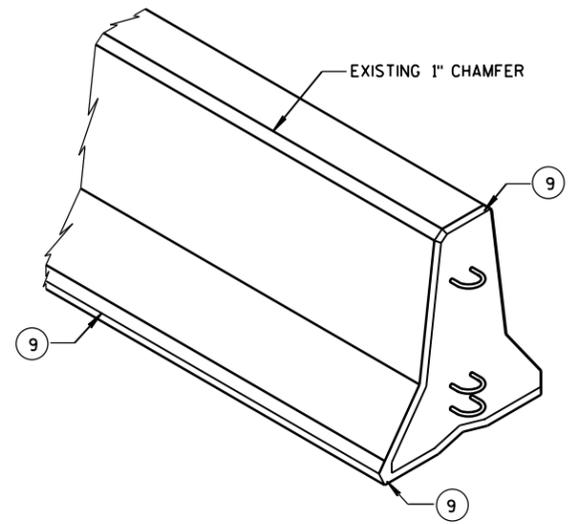
f'c = 4,000 psi



DETAILS OF BARRIER CONNECTION



DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



6

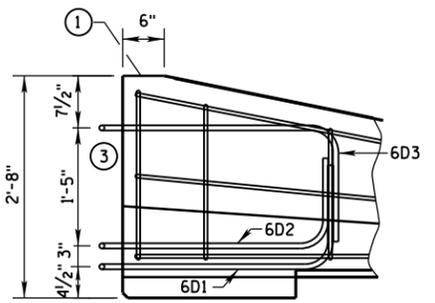
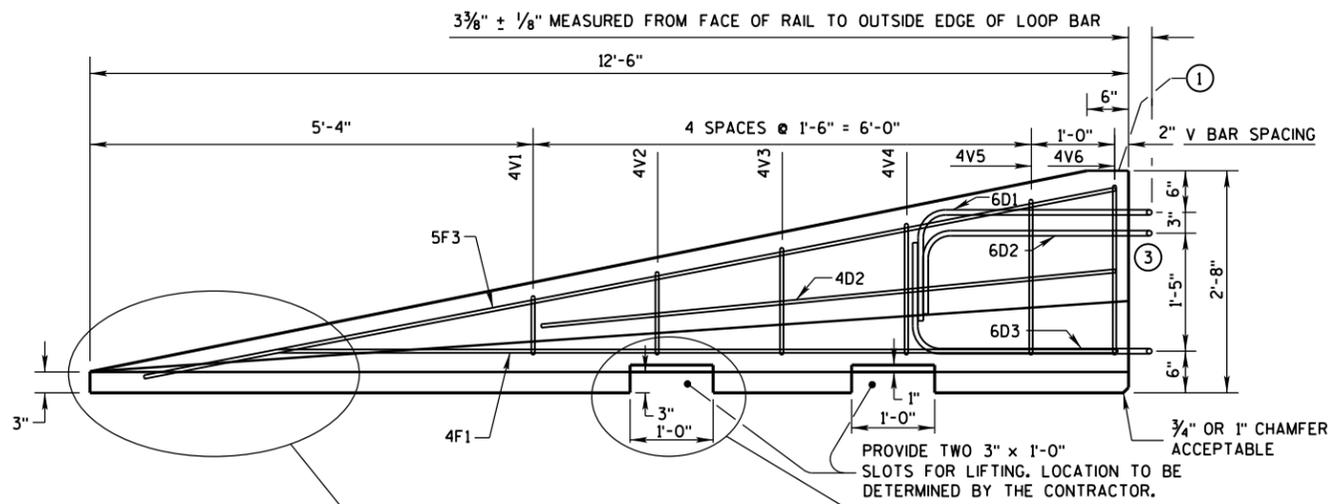
6

S.D.D. 14 B 7-15a

S.D.D. 14 B 7-15a

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

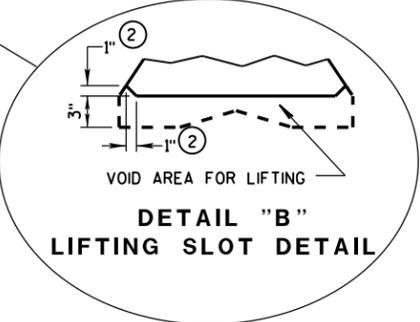
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

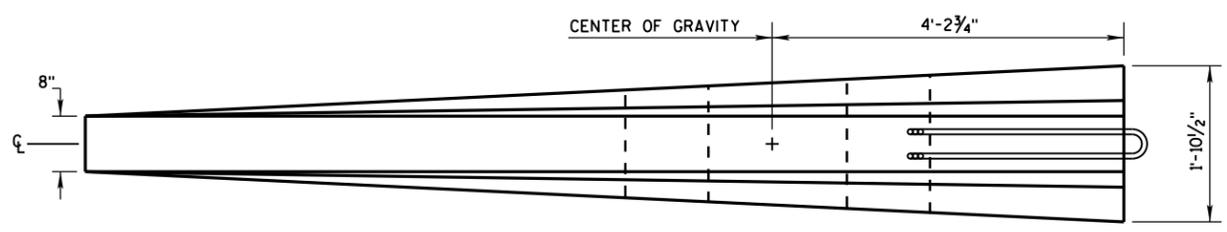
- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

SIDE ELEVATION
 LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END.
 (FOR CONNECTION TO RIGHT END OF BARRIER)

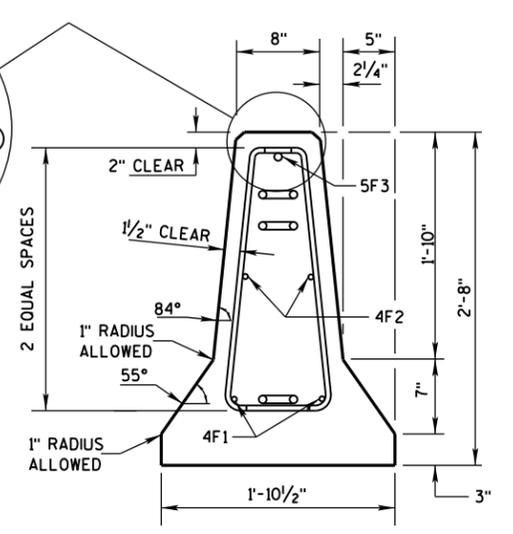
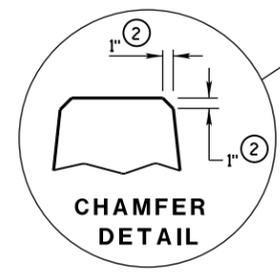


SIDE ELEVATION
 (FOR CONNECTION TO LEFT END OF BARRIER)

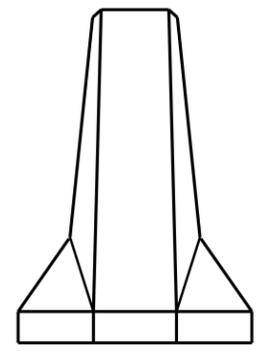
SEE DETAIL "C", BENT BAR DETAIL



PLAN VIEW

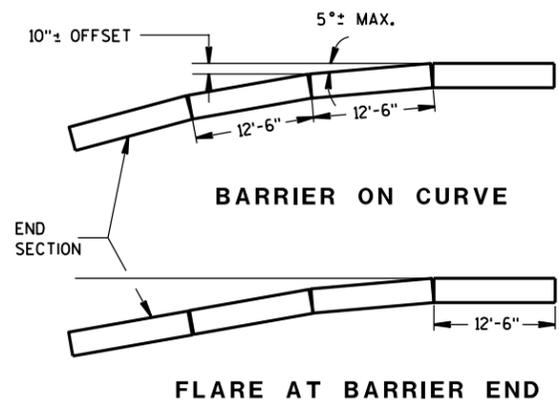


END SECTION



FRONT ELEVATION

DETAILS OF BARRIER TAPER SECTION



POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

**CONCRETE BARRIER
 TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

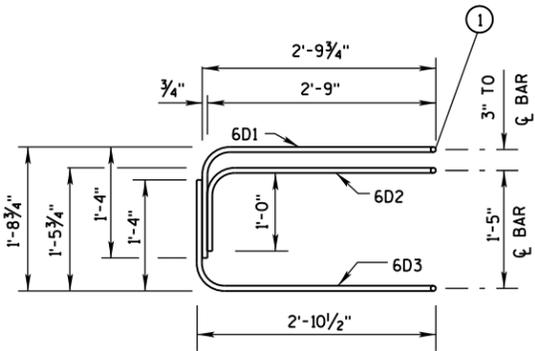
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

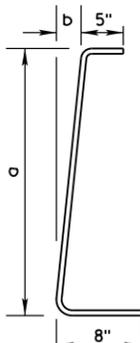
**BARRIER TAPER SECTION
BILL OF MATERIALS**
(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"

LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"

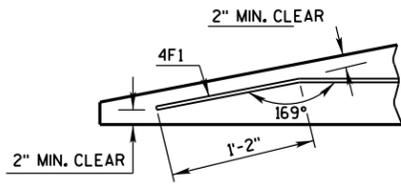


**ELEVATION
LOOP BAR ASSEMBLY**



BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY



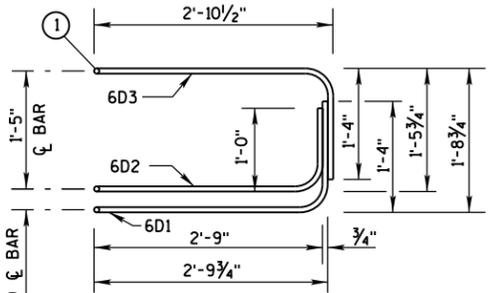
**DETAIL "C"
BENT BAR DETAIL**

TAPER BARRIER SECTION

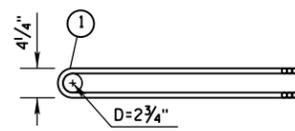
**BARRIER SECTION
BILL OF MATERIALS**
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"

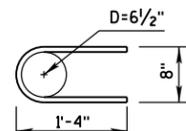
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



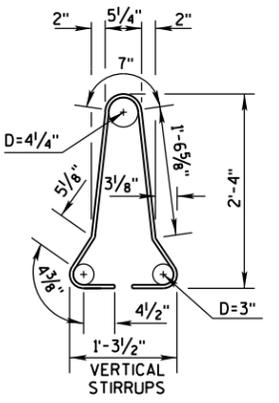
ELEVATION VIEW



**PLAN VIEW
LOOP BAR ASSEMBLY**
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

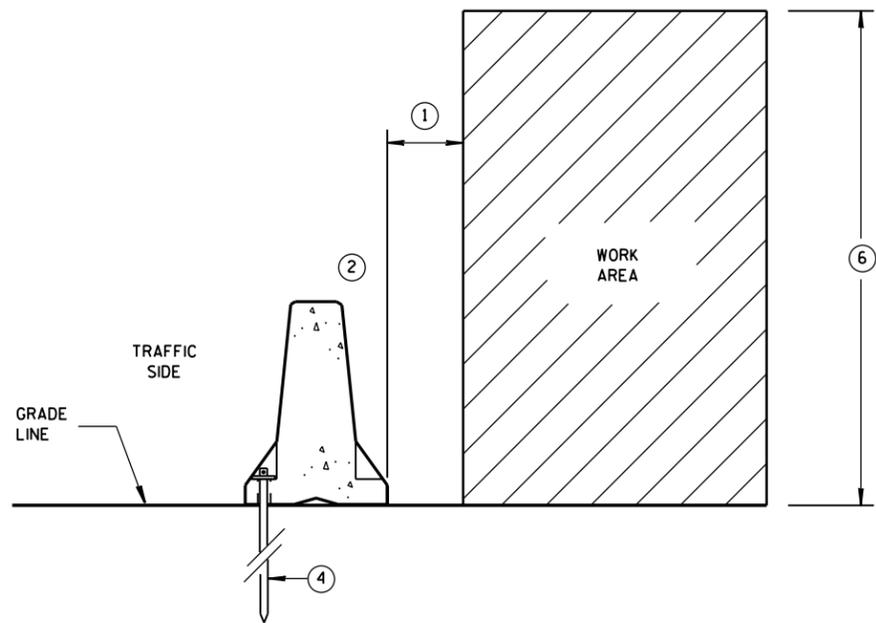
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

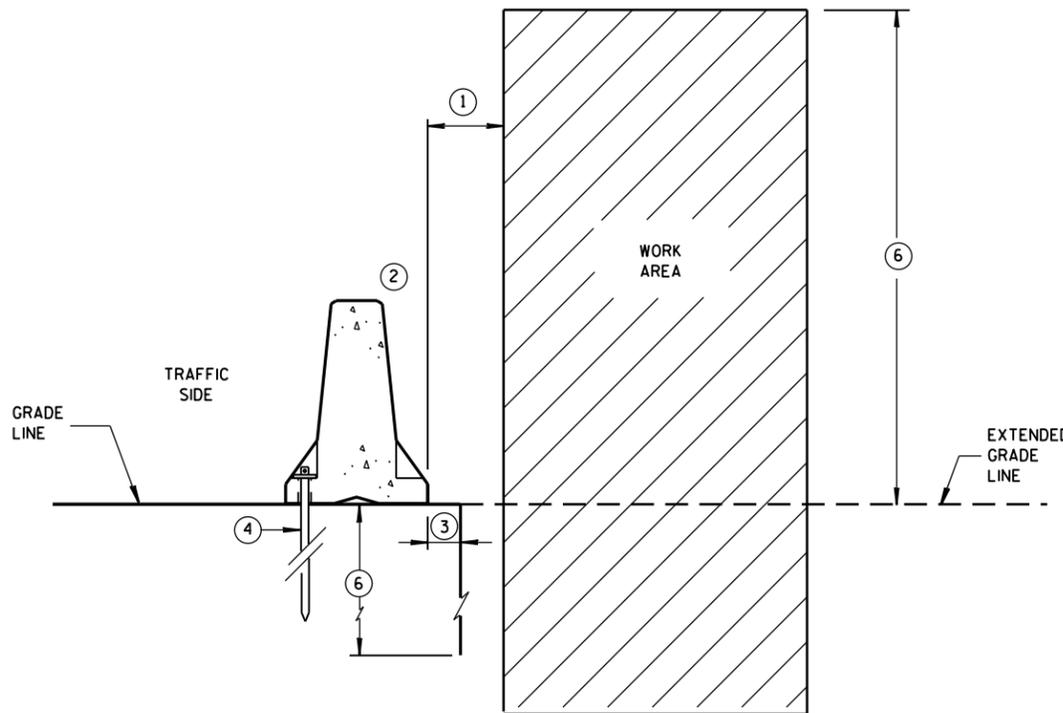
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- ① WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
- ② OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
- ③ SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
- ④ SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
- ⑤ DEPTH OF 3 FEET OR MORE.
- ⑥ Y = 6'-6".

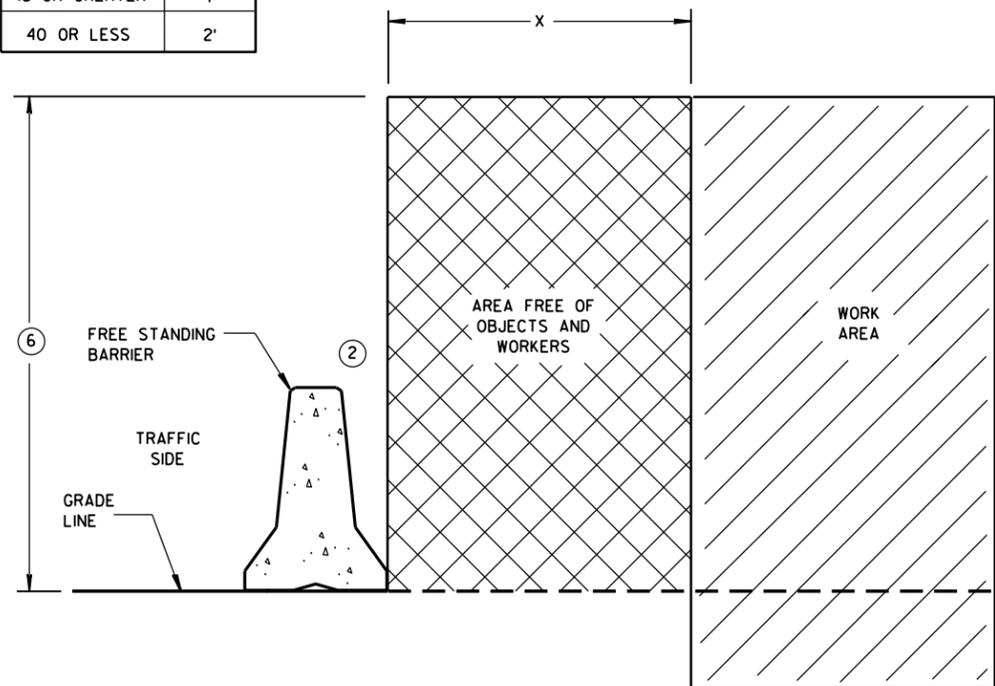


ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

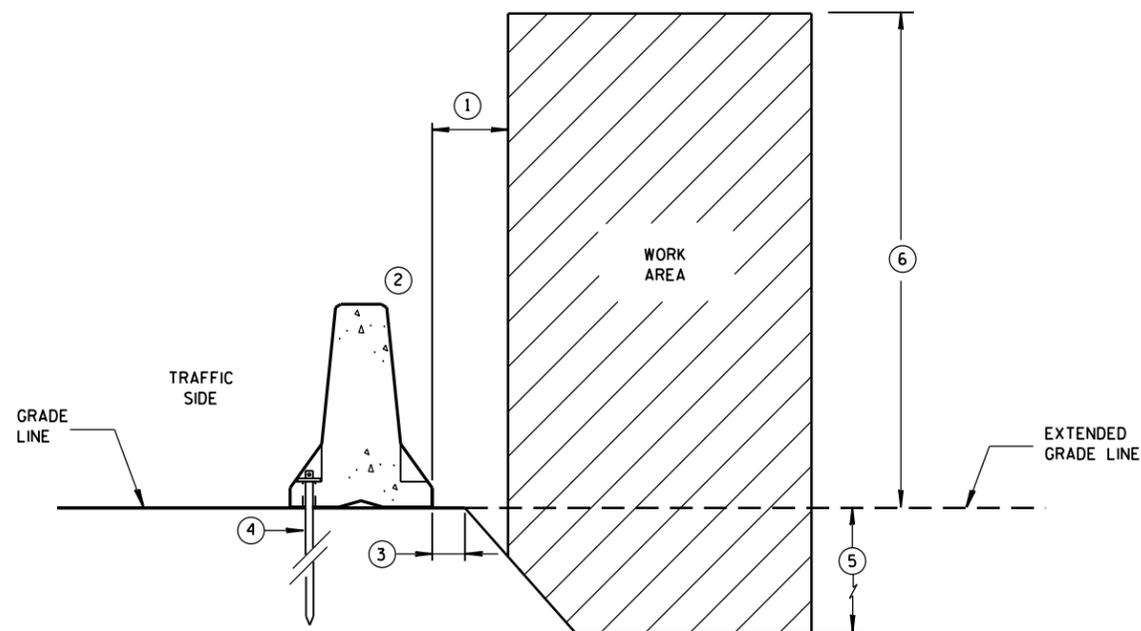


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



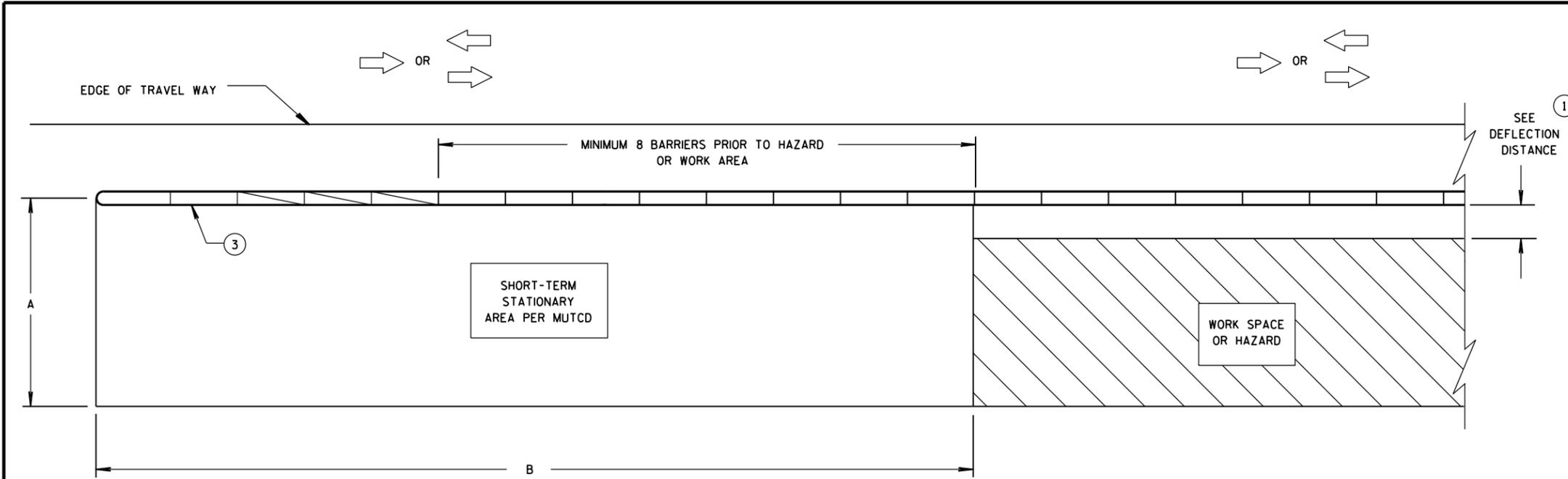
FREE STANDING BARRIER SPACE REQUIREMENTS



ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



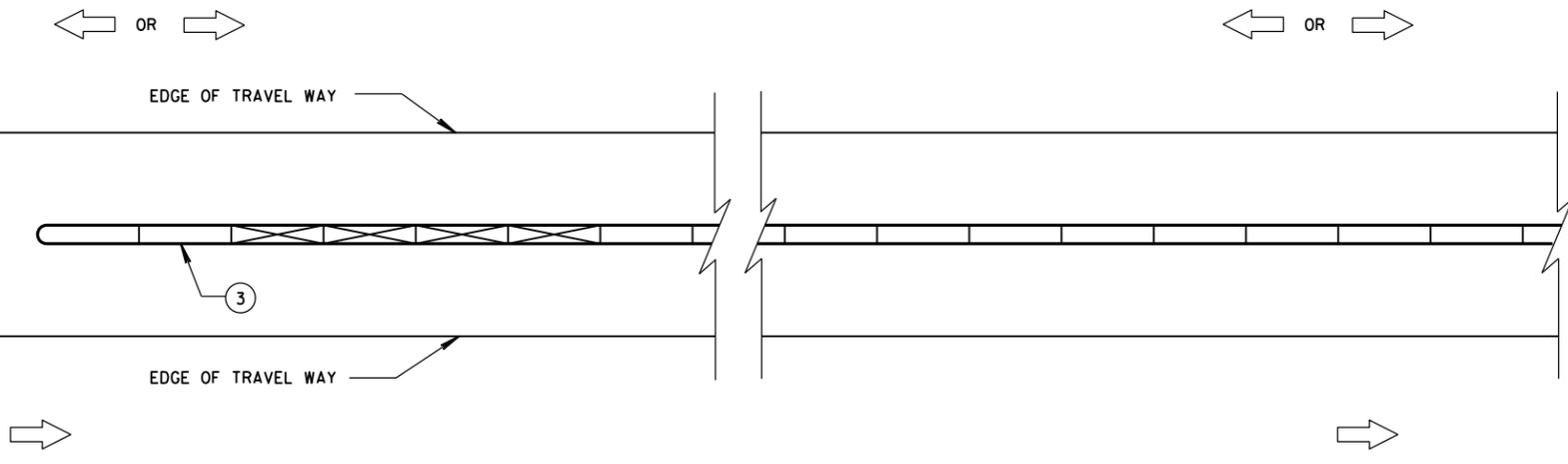
DIMENSION A TABLE ②

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER**

DIMENSION B TABLE ②

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER**

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

- ① FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.
- ② VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.
- ③ ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

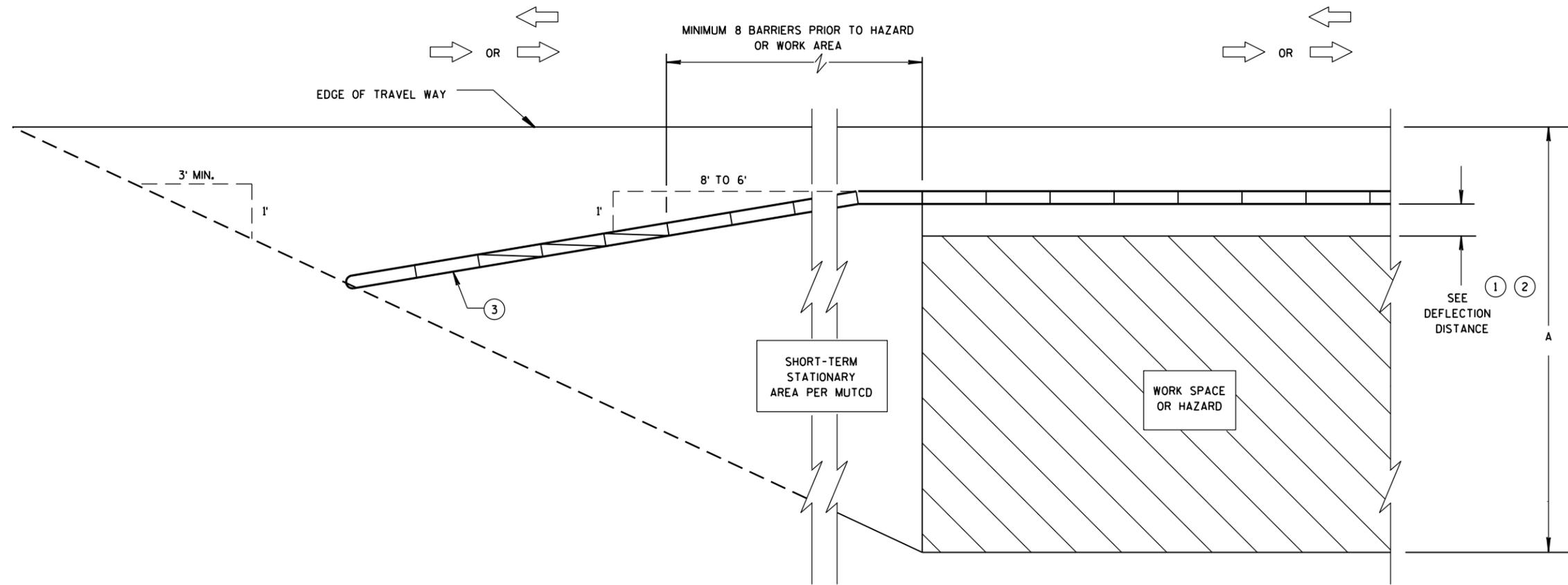
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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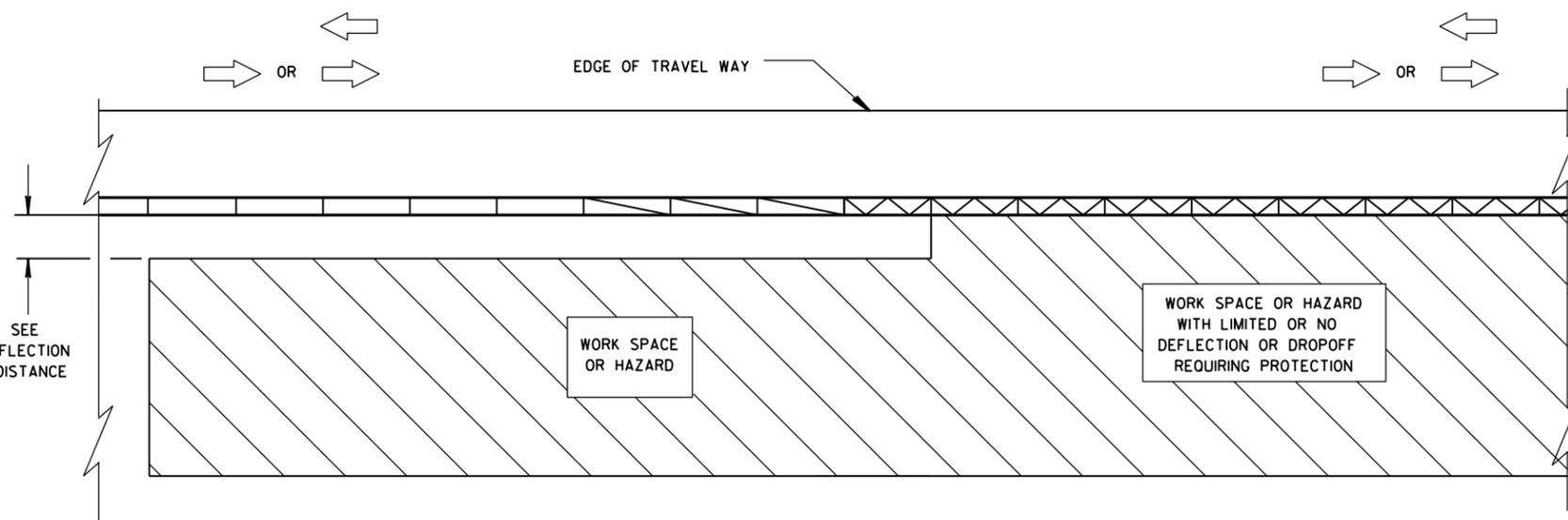
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S.D.D. 14 B 8-2a

S.D.D. 14 B 8-2a



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION**



**TRANSITION FROM FREE STANDING TEMPORARY BARRIER
TO ANCHORED BARRIER**

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

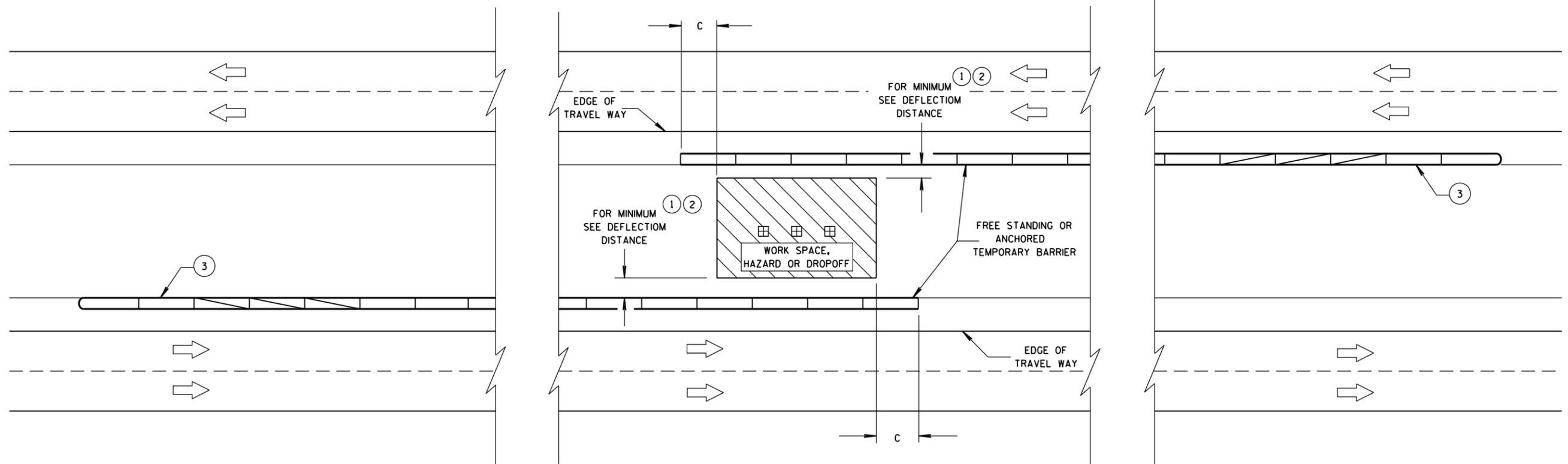
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE ²

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



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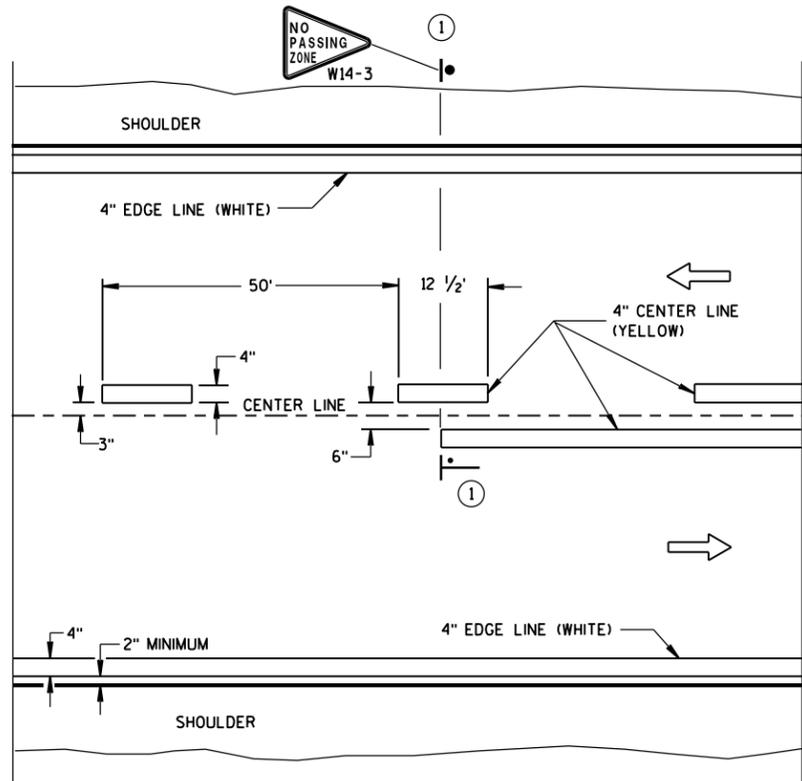
S.D.D. 14 B 8-2e

S.D.D. 14 B 8-2e

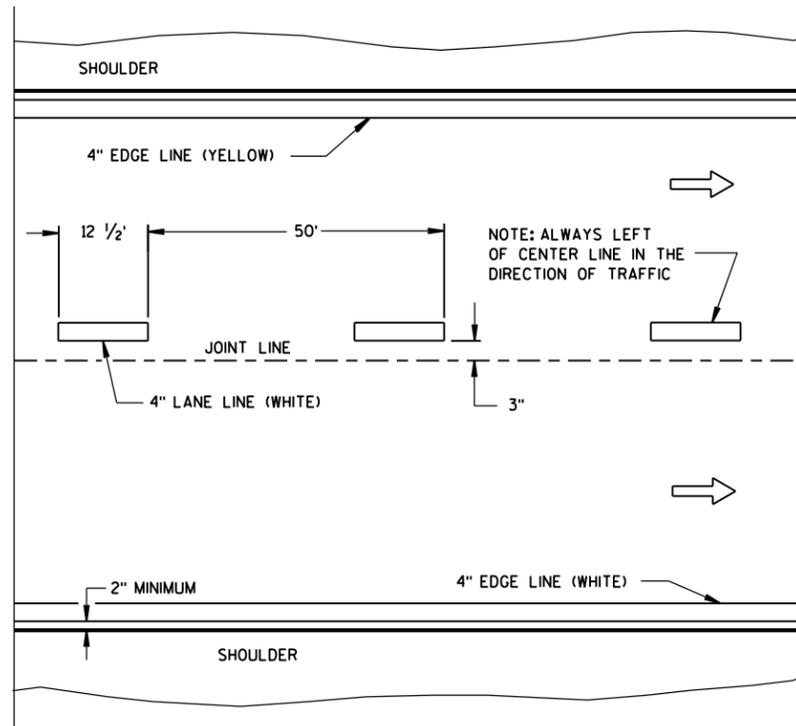
**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 DATE /S/ Jerry H. Zogg
FHWA ROADWAY STANDARDS DEVELOPMENT ENGINEER

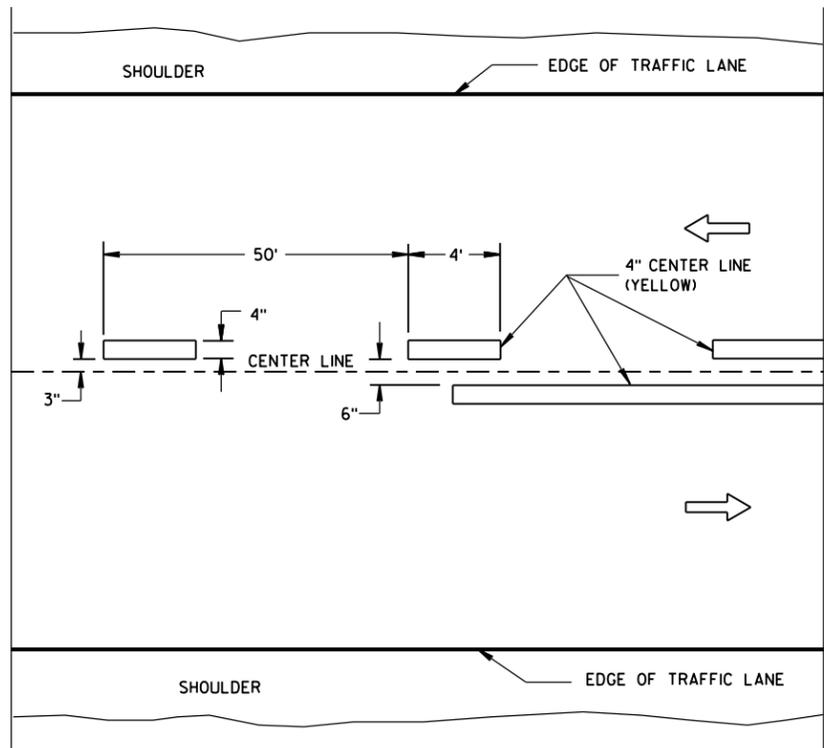


TWO WAY TRAFFIC

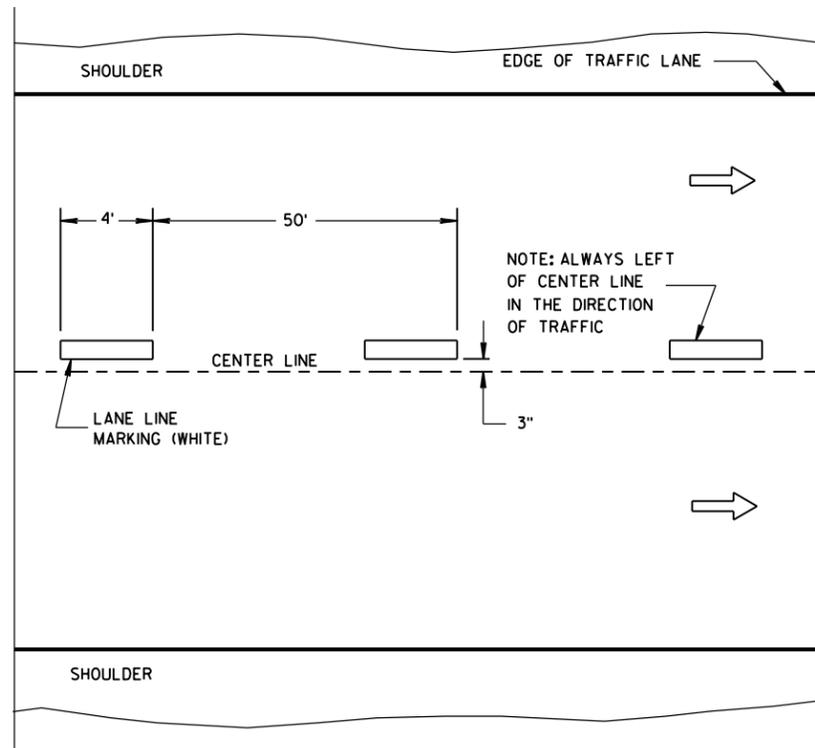


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

-  "T" MARKING
-  POST MOUNTED SIGN

6

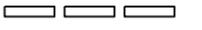
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LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TRAFFIC CONTROL DRUM
-  FLASHING ARROW BOARD
-  REMOVING PAVEMENT MARKING
-  CONCRETE BARRIER TEMPORARY PRECAST
-  DIRECTION OF TRAFFIC
-  WORK AREA

SPEED (MPH)	L. TAPER LENGTH (MPH)						
	W. LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.
 R2-1 48"x60" (BLACK AND WHITE)
 LOCATED 500 FEET BEYOND W20-5G SIGN.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

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

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.

ALL SIGNS ARE 48"x48" 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.

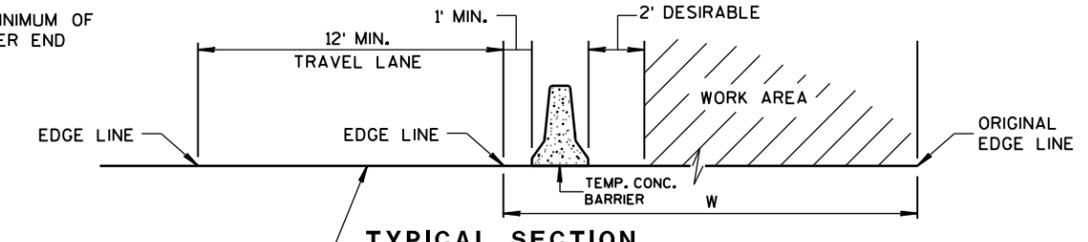
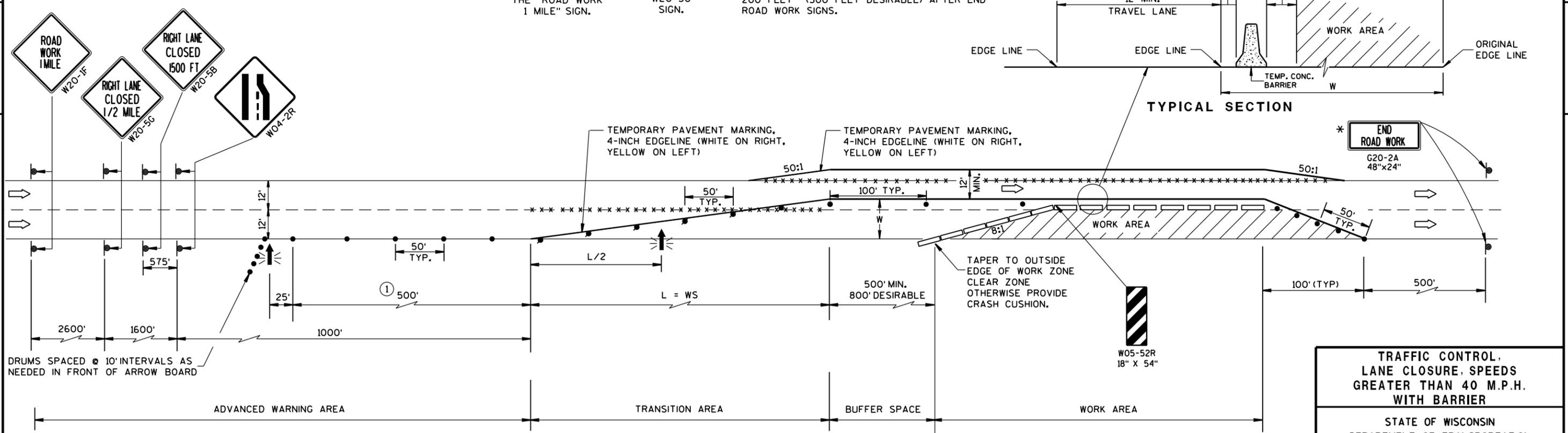
① CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 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.

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 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



**TRAFFIC CONTROL,
LANE CLOSURE, SPEEDS
GREATER THAN 40 M.P.H.
WITH BARRIER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 Sept., 2016 /S/ Peter Amakobe Atepe
 DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
 FHWA

S.D.D. 15 D 3-4

S.D.D. 15 D 3-4

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

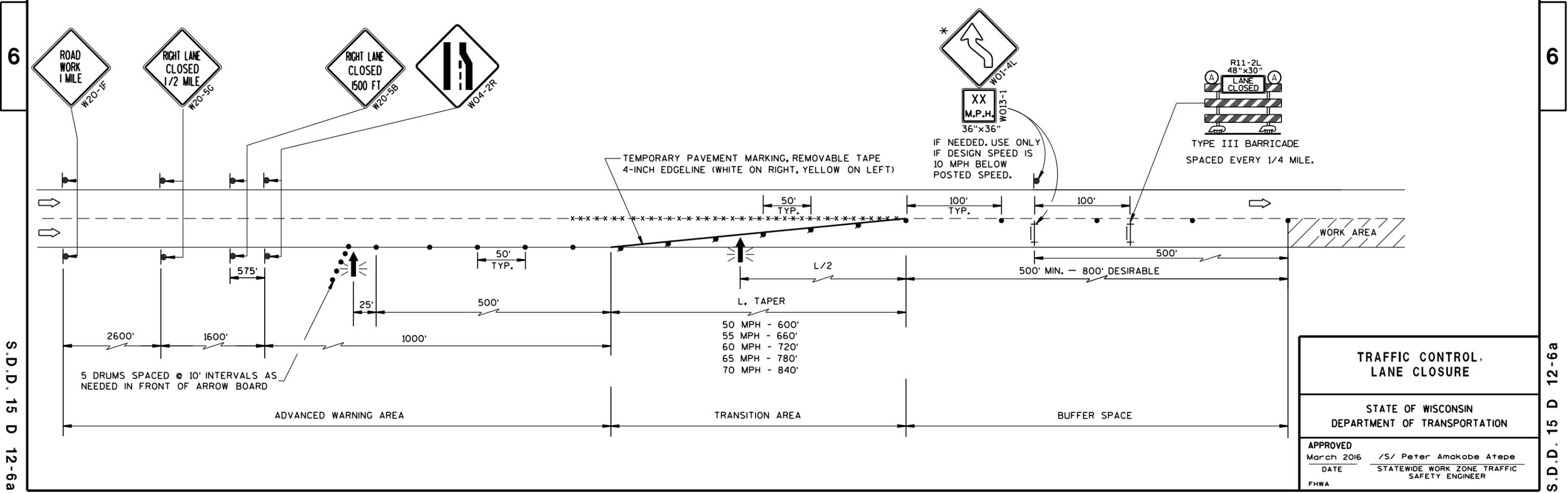
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

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

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



S.D.D. 15 D 12-6a

S.D.D. 15 D 12-6a

TRAFFIC CONTROL, LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

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

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

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

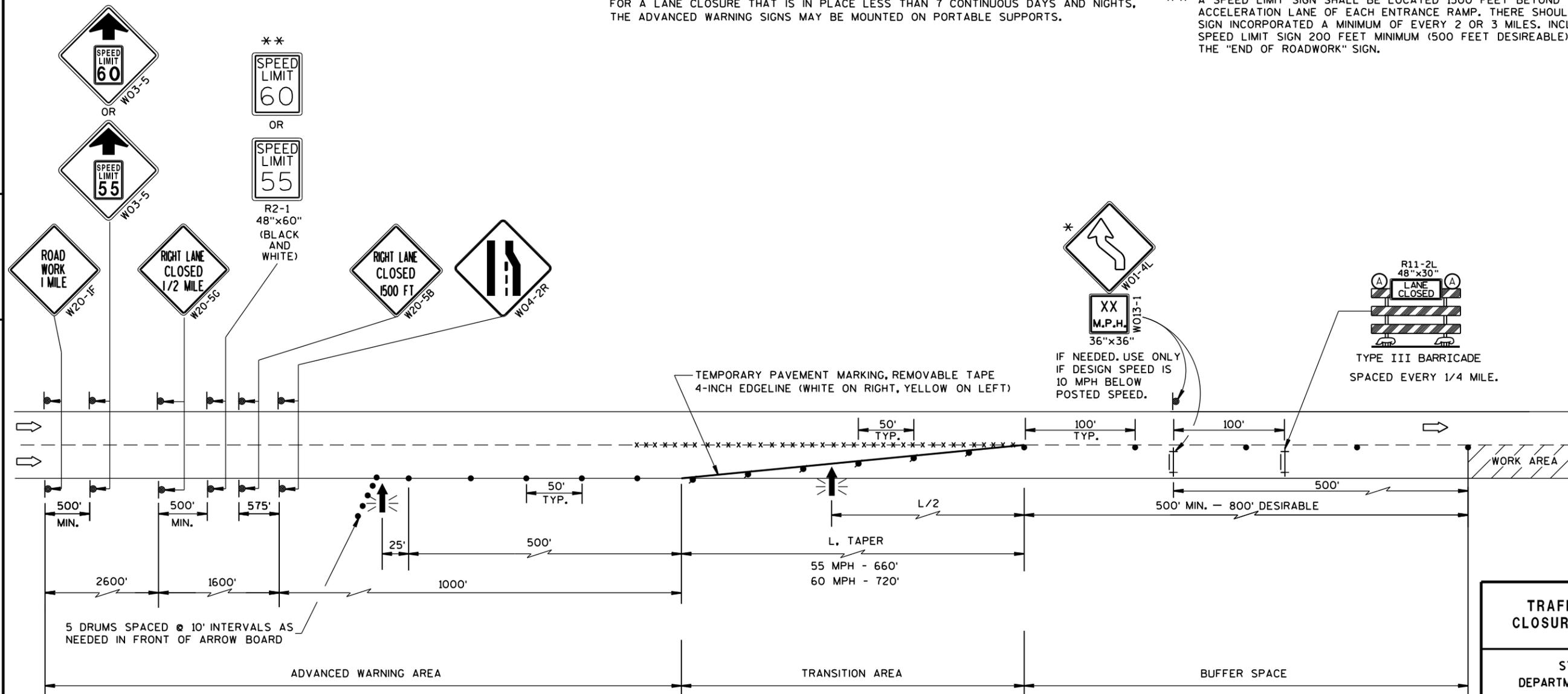
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.

6

6

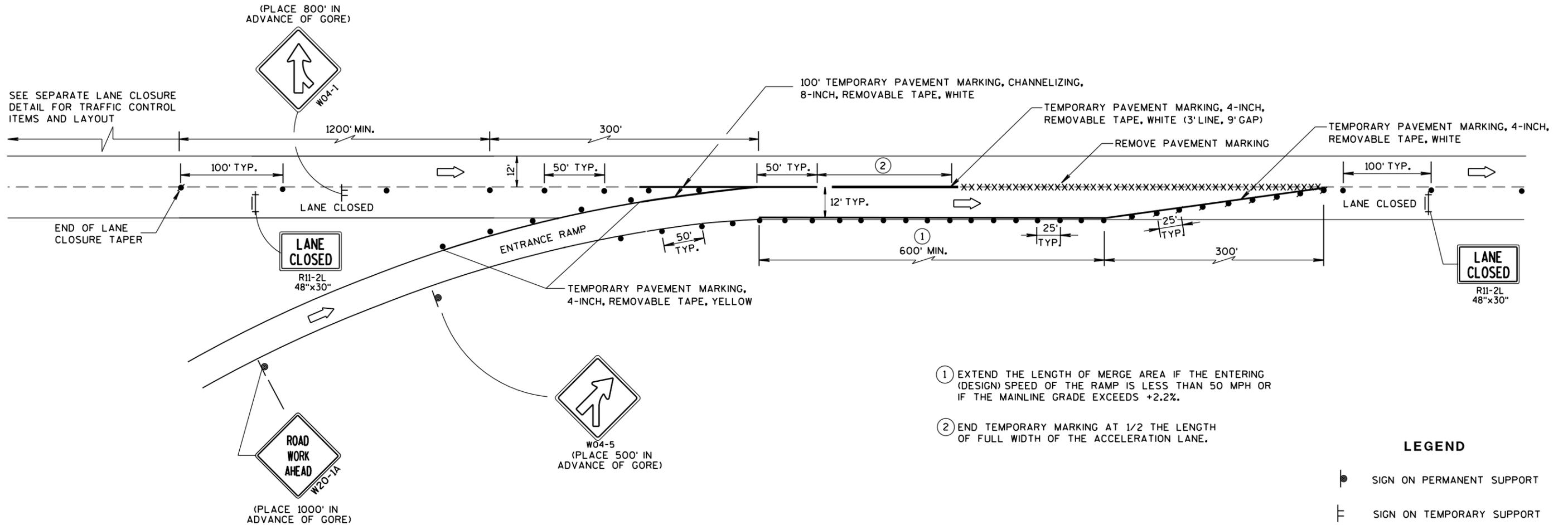


TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/s/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

S.D.D. 15 D 12-6b

S.D.D. 15 D 12-6b

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



- ① EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.
- ② END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

PARALLEL ENTRANCE RAMP

LEGEND

- SIGN ON PERMANENT SUPPORT
- ⊥ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- ⦿ TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- ***** REMOVING PAVEMENT MARKING
- ➡ DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" 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 PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

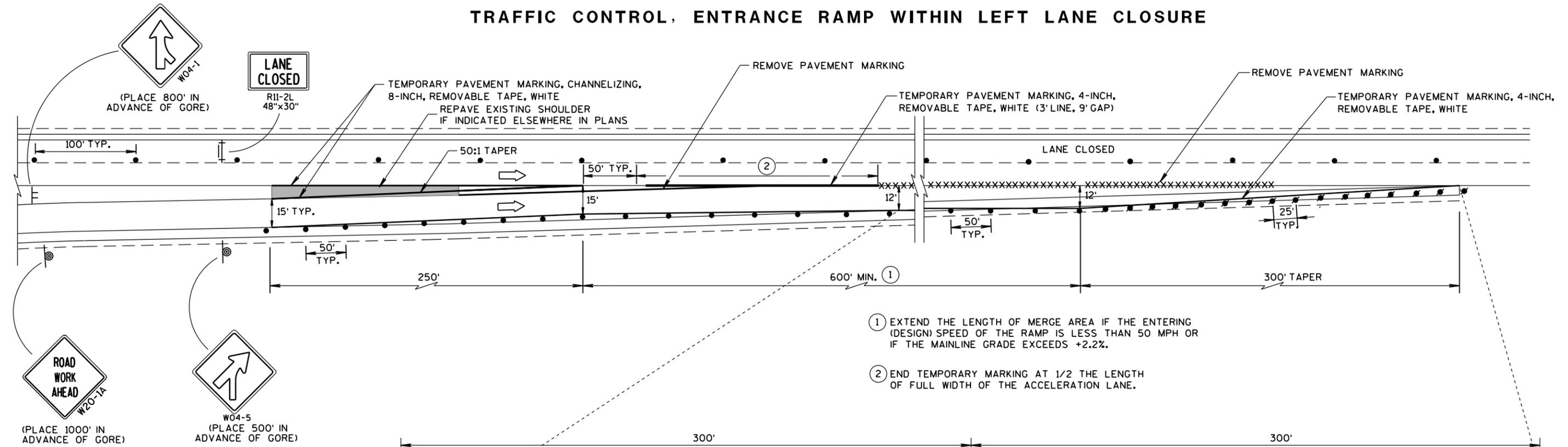
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL,
PARALLEL ENTRANCE RAMP
WITHIN LANE CLOSURE

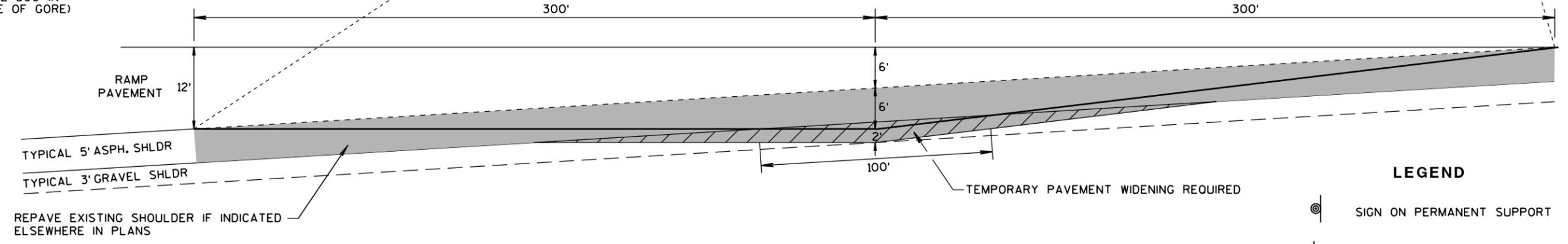
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



- ① EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.
- ② END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY. ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- XXXXX REMOVING PAVEMENT MARKING
- ➔ DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" 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 PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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

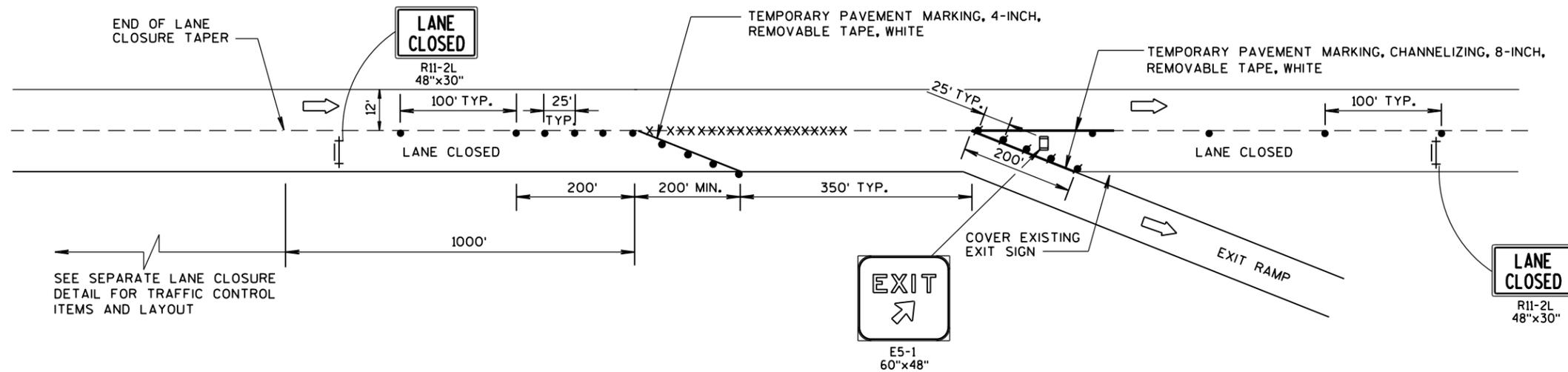
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

**TRAFFIC CONTROL,
ENTRANCE RAMP
WITHIN LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Andrew Heidtke
DATE DATE WORK ZONE ENGINEER
FHWA



PARALLEL EXIT RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP, AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

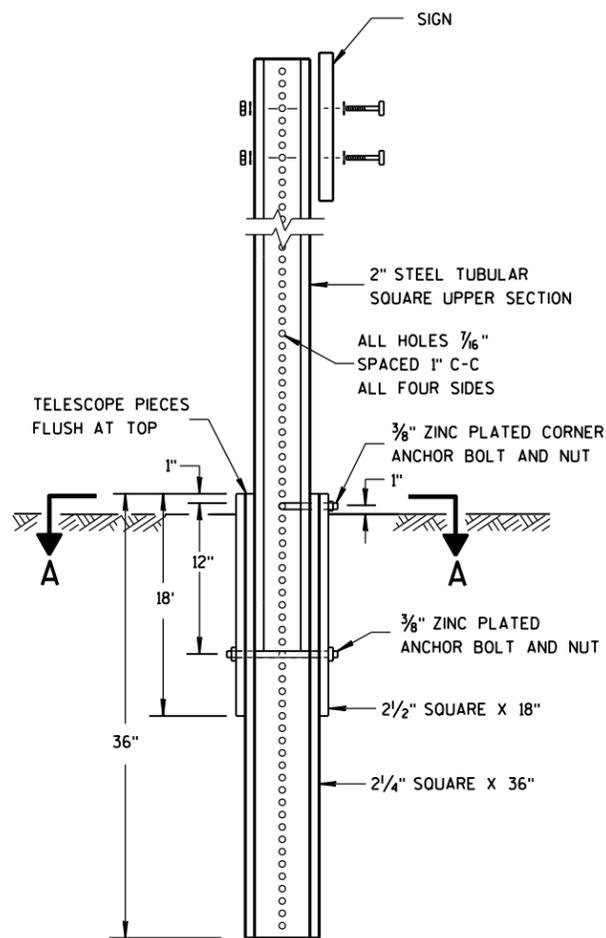
LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



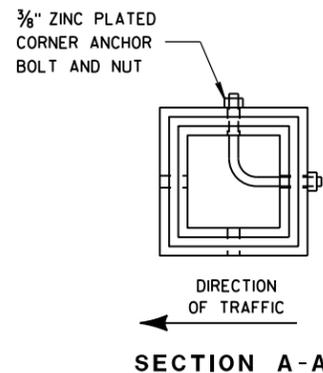
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

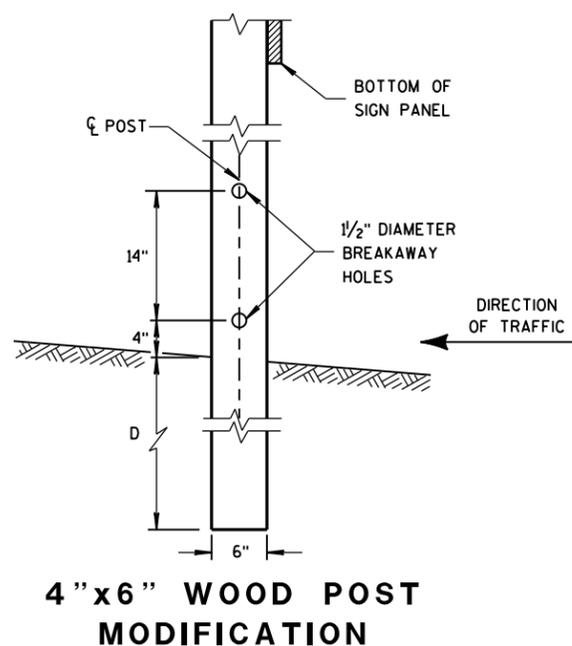
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

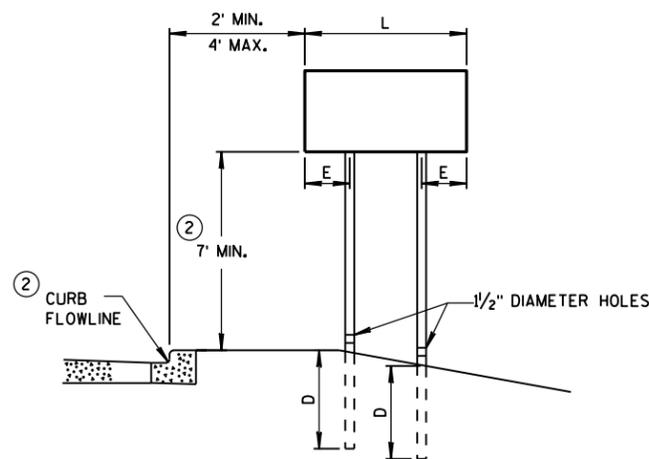
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.



SECTION A-A



4" X 6" WOOD POST MODIFICATION

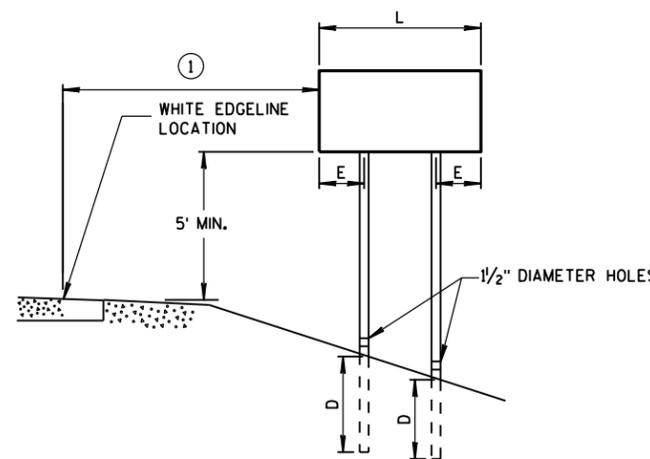


URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

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



RURAL AREA

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

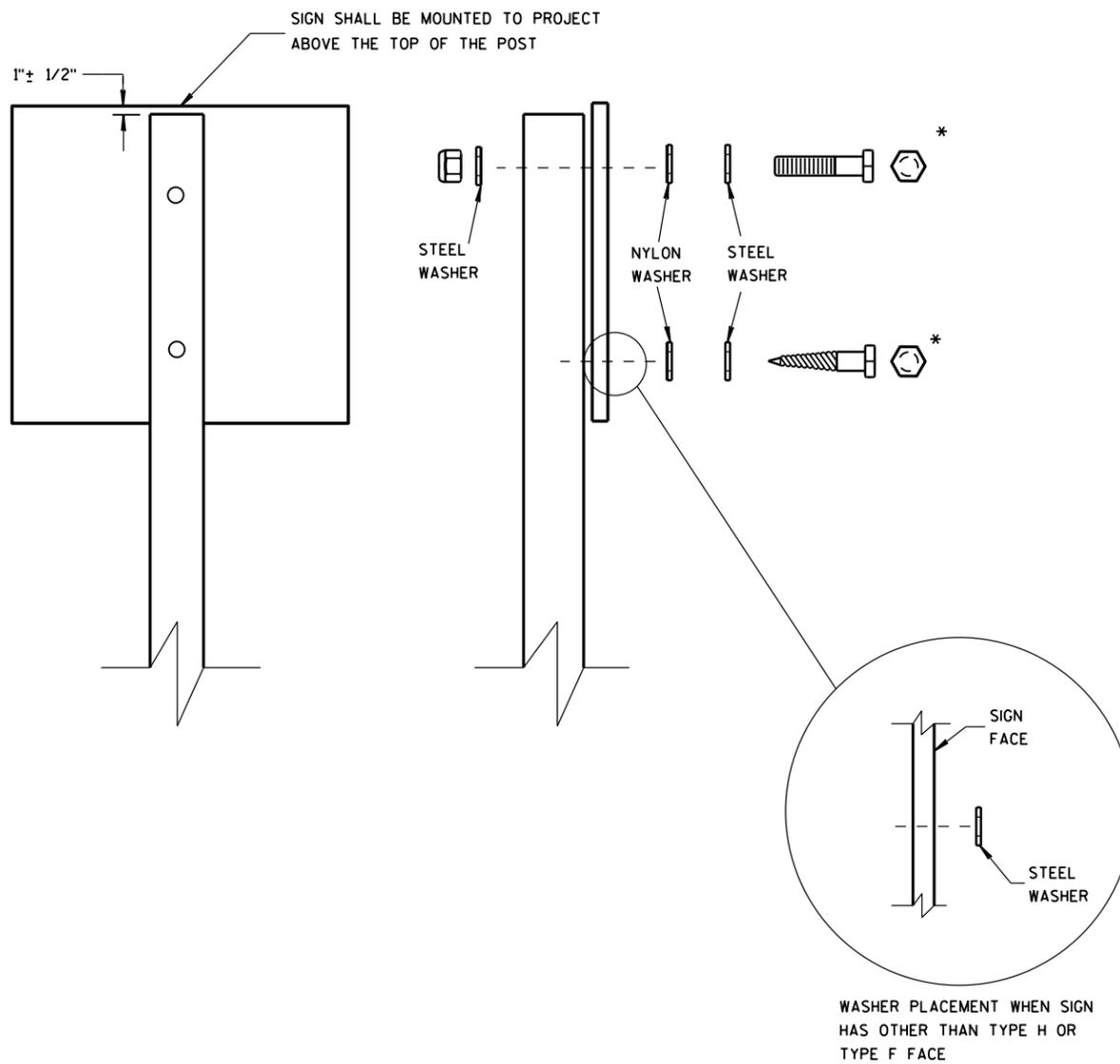
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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

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

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

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

LAG SCREWS - 3/8" x 3"

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

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

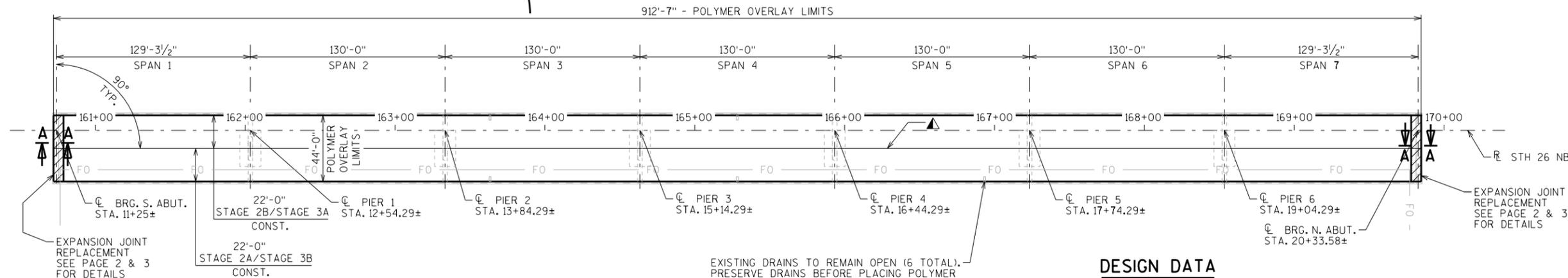
1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

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

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



ROCK RIVER



BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
1	11+09.52, 23.64'RT	DISK LOCATED IN SOUTHEAST CORNER OF BRIDGE	809.551

PLAN

7 SPAN PRESTRESSED GIRDER BRIDGE

DESIGN DATA

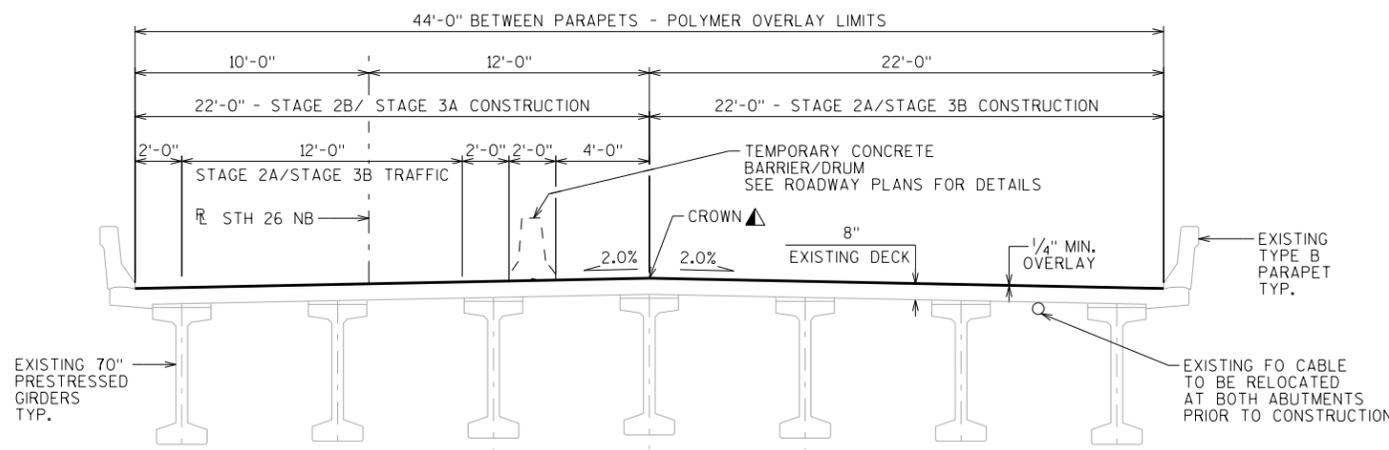
LIVE LOAD:
 INVENTORY RATING: HS-16
 OPERATING RATING: HS-29
 MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS

MATERIAL PROPERTIES:
 CONCRETE MASONRY:
 SUPERSTRUCTURE $f'_c = 4,000$ P.S.I.
 ABUTMENTS & PIERS $f'_c = 3,500$ P.S.I.

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY"
- REMOVE ANY/ALL LOOSE CONCRETE AT ABUTMENTS, PIERS AND GIRDERS UNDER BID ITEM "CONCRETE SURFACE REPAIR". SURFACES SHALL BE BLAST CLEANED AND ANY EXPOSED STEEL SHALL BE BRUSH CLEANED PRIOR TO THE SURFACE REPAIRS BEING COMPLETED. REPAIR AREAS SHALL BE DETERMINED BY THE FIELD ENGINEER.
- BID ITEM "CONCRETE SURFACE REPAIR" INCLUDES THE REPAIR OF SPALLS AT END OF GIRDER 1 AT THE NORTH ABUTMENT.
- STAGE 2A AND STAGE 2B INCLUDES JOINT REPAIR WORK. STAGE 3A AND STAGE 3B INCLUDES POLYMER OVERLAY. SEE ROADWAY PLANS FOR MORE DETAILED STAGING PLANS.

▲ LONGITUDINAL CONSTRUCTION JOINT



CROSS SECTION THRU ROADWAY

LOOKING UPSTATION
 (STAGE 2A/STAGE 3B TRAFFIC SHOWN, STAGE 2B/STAGE 3A IS SIMILAR)

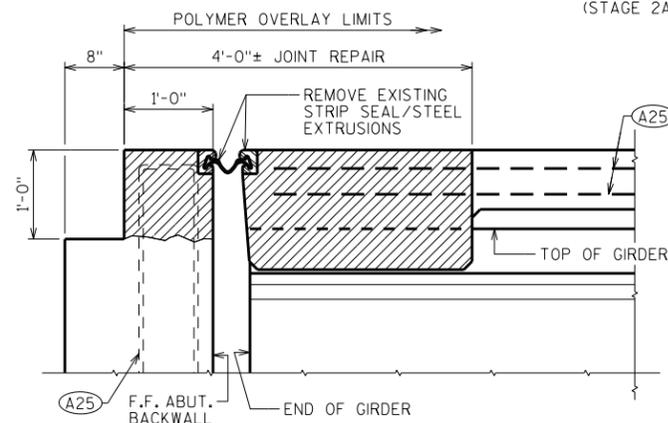
LIST OF DRAWINGS

1. POLYMER OVERLAY
2. JOINT REPAIR DETAILS
3. EXPANSION DEVICE
4. COVER PLATE DETAILS
5. PARAPET DETAILS

STRUCTURE DESIGN CONTACTS:
 MICHAEL LARSON (608) 267-4539
 LAURA SHADEWALD (608) 267-9592

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
203.0225.S	DEBRIS CONTAINMENT B-28-81	LS	1
502.3100	EXPANSION DEVICE B-28-81	LS	1
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	96
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,670
505.0905	BAR COUPLERS NO. 5	EACH	20
509.1000	JOINT REPAIR	SY	41
509.1500	CONCRETE SURFACE REPAIR	SF	5
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	15
509.5100.S	POLYMER OVERLAY	SY	4,462



SECTION A-A - SHOWING REMOVAL

NO.	DATE	REVISION	BY

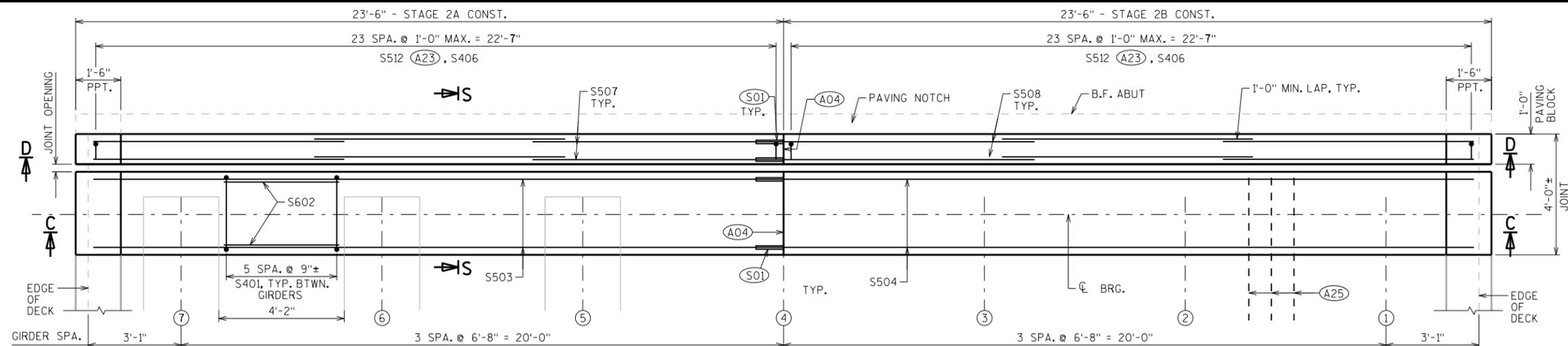
BUREAU OF STRUCTURES
 ACCEPTED *William C. Diebe, P.E.* 11/27/17
 CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-28-81
 STH 26 NB OVER ROCK RIVER

COUNTY: JEFFERSON TOWN: KOSHKONONG

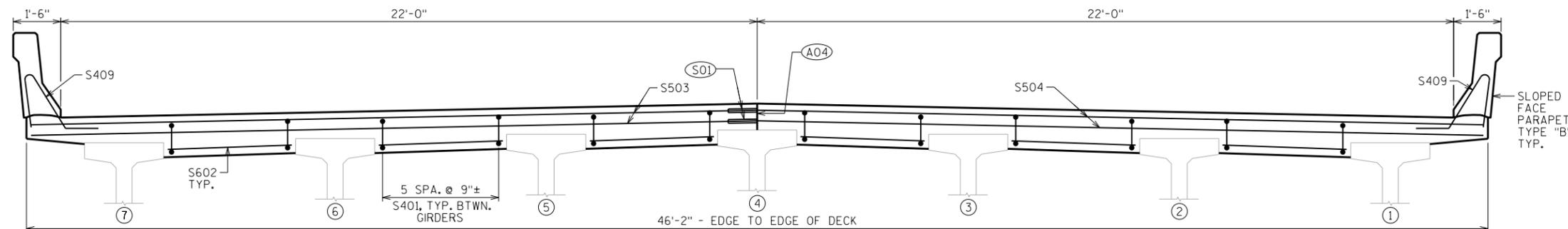
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 DESIGNED BY: MJL DESIGNED CK'D: DMB DRAWN BY: MJL PLANS CK'D: DMB

POLYMER OVERLAY SHEET 1 OF 5

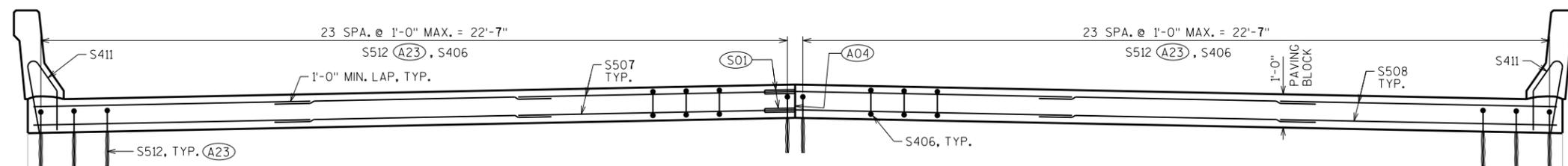


SOUTH ABUTMENT EXPANSION JOINT REPAIR PLAN

(NORTH ABUTMENT SIMILAR)



SECTION C-C



SECTION D-D

(S01) BAR COUPLERS USED. BAR LENGTH COMPUTED TO ϕ OF VERT. JOINT & SHALL BE MODIFIED TO THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

(A04) VERTICAL CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 X 8.

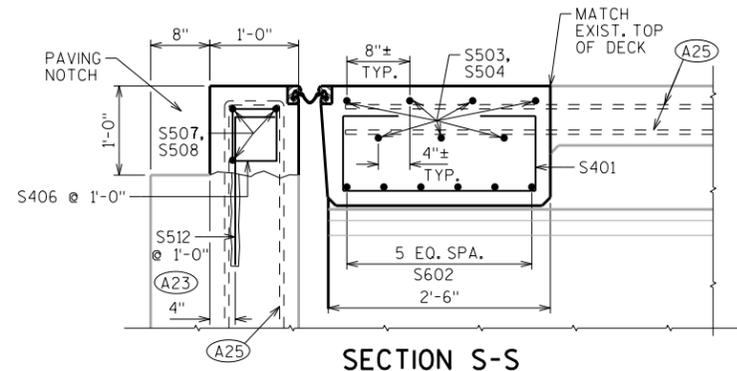
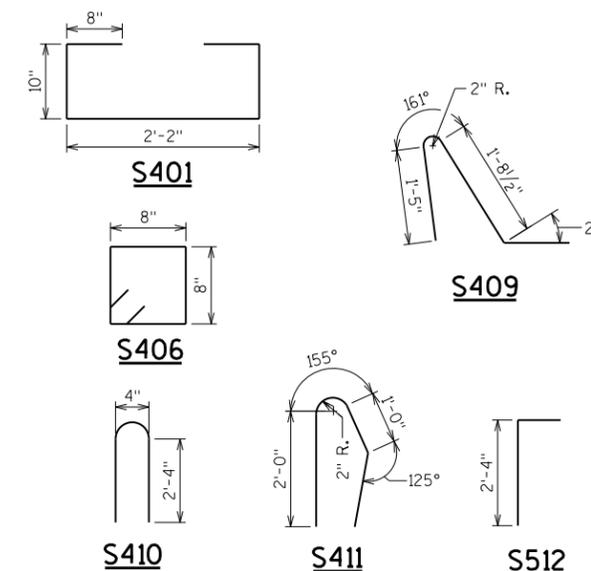
(A23) ADHESIVE ANCHORS NO. 5 BARS. EMBED 1'-6" MIN. INTO EXIST. CONCRETE. TURN 10" LEG AS NECESSARY TO FIT.

(A25) SALVAGE EXIST. REINF. & EXTEND FULL LENGTH INTO NEW WORK. TRIM REBAR AS NECESSARY TO ACCOMMODATE NEW JOINT OPENING.

BILL OF BARS

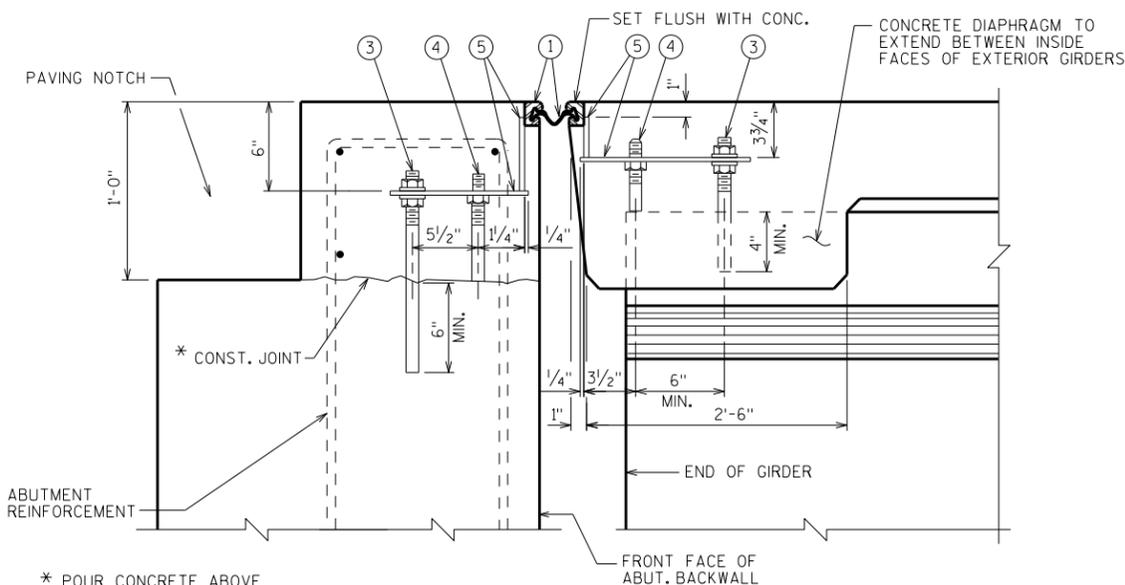
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	72	4'-10"	X		DIAPHRAGM - VERT.
S602	X	72	3'-10"			DIAPHRAGM - HORIZ.
(S01) S503	X	14	22'-11"			DECK - TRANS. - STAGE 2A
(S01) S504	X	14	22'-11"			DECK - TRANS. - STAGE 2B
S405	X	24	3'-10"			ABUT. EXPANSION - TRANS.
S406	X	96	3'-2"	X		PAVING BLOCK - VERT.
(S01) S507	X	18	8'-4"			PAVING BLOCK - HORIZ. - STAGE 2A
(S01) S508	X	18	8'-4"			PAVING BLOCK - HORIZ. - STAGE 2B
S409	X	16	4'-4"	X		PARAPET/DECK - VERT.
S410	X	24	5'-2"	X		PARAPET - VERT.
S411	X	8	4'-7"	X		PARAPET/PAVING BLOCK - VERT.
(A23) S512	X	96	3'-1"	X		PAVING BLOCK - VERT.



SECTION S-S

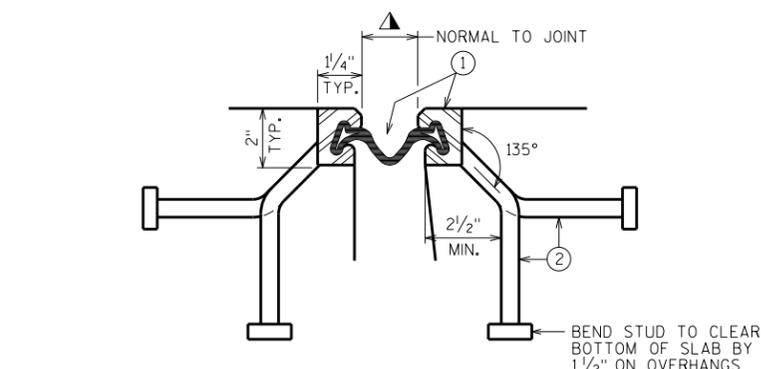
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-28-81			
DRAWN BY		MJL	PLANS CK'D. DMB
JOINT REPAIR DETAILS		SHEET 2	



* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

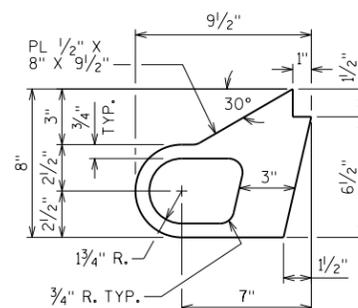
SECTION THRU JOINT AT ABUTMENT

NORMAL TO ϕ SUBSTRUCTURE

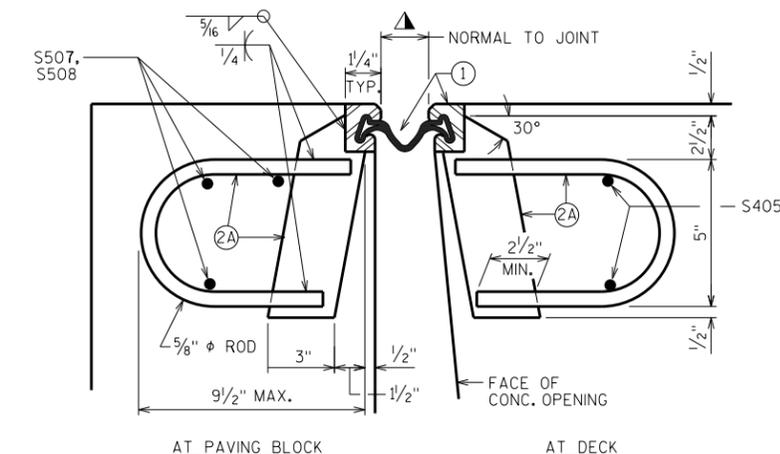


SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF DECK AND AT PARAPETS, MEDIANS AND SIDEWALKS

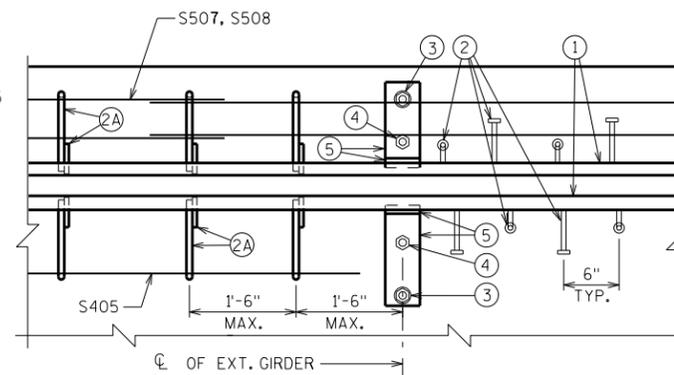


ALTERNATE STRIP SEAL ANCHOR



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

LEGEND

- ① NEOPRENE STRIP SEAL (5 - INCH) AND STEEL EXTRUSIONS.
- ② STUDS $\frac{5}{8}$ " ϕ X $6\frac{3}{8}$ " LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
- ②A $\frac{1}{2}$ " THICK ANCHOR PLATE WITH $\frac{5}{8}$ " ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
- ③ $\frac{3}{4}$ " ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ϕ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
- ④ $\frac{3}{4}$ " ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- ⑤ FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$ " BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE $1\frac{1}{2}$ " ϕ HOLE FOR NO. 3 AND 1" ϕ HOLE FOR NO. 4.
- ⑥ GALVANIZED PLATE $\frac{3}{8}$ " X 1'-2" X 2'-0" LONG WITH HOLES FOR NO. 7. BEND AS SHOWN.
- ⑦ $\frac{3}{4}$ " ϕ X $1\frac{1}{2}$ " STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS $\frac{1}{16}$ " BELOW PLATE SURFACE.
- ⑧ $\frac{3}{4}$ " ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
- ⑨ $\frac{3}{4}$ " ϕ X $2\frac{1}{4}$ " GALVANIZED THREADED COUPLING.
- ⑩ 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

SEE SHEET 4: "COVER PLATE DETAILS" SHEET

TEMPERATURE TABLE

SHADED UNDERSIDE DECK TEMP. (°F)	SOUTH ABUTMENT JOINT OPENING (NORMAL TO JT.)	NORTH ABUTMENT JOINT OPENING (NORMAL TO JT.)
85°	1 3/4"	1 1/2"
75°	2 1/8"	1 7/8"
65°	2 3/8"	2 1/4"
55°	2 3/4"	2 5/8"
45°	3"	3"
35°	3 1/4"	3 3/8"
25°	3 5/8"	3 3/4"
15°	3 7/8"	4 1/8"
5°	4 1/4"	4 1/2"

A SMALL JOINT OPENING DUE TO A HIGH TEMPERATURE AT TIME OF CONSTRUCTION MAY REQUIRE NEOPRENE STRIP SEAL INSTALLATION INTO STEEL EXTRUSIONS PRIOR TO SETTING THE EXPANSION JOINT.

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

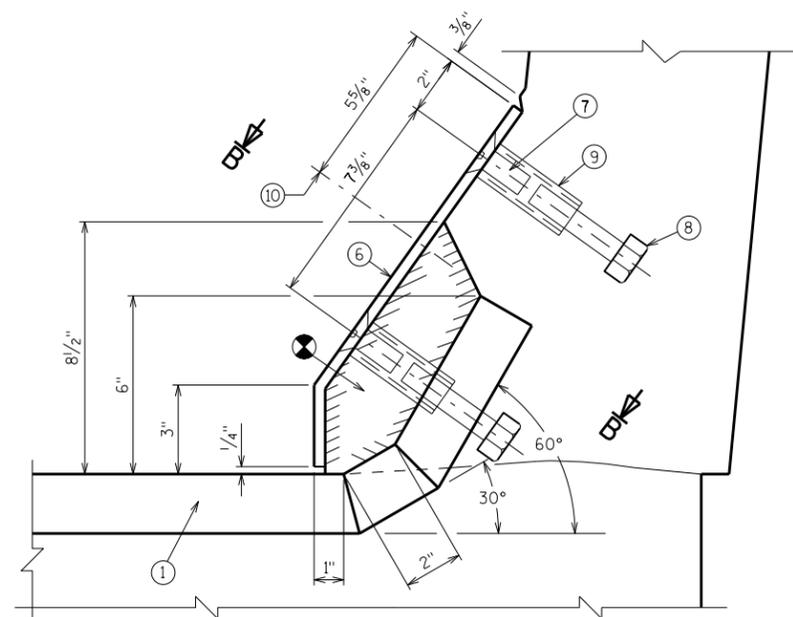
FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

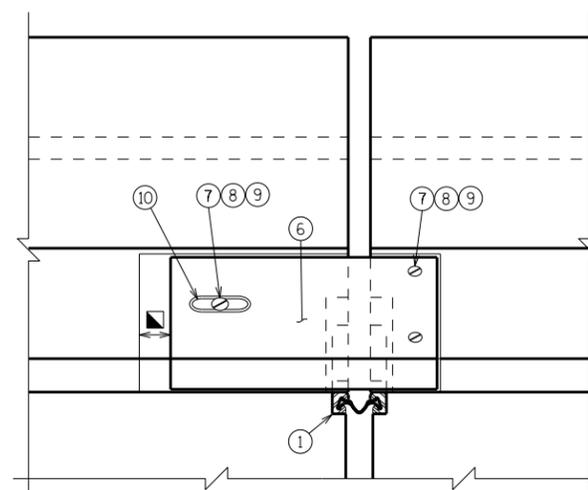
ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-28-81".

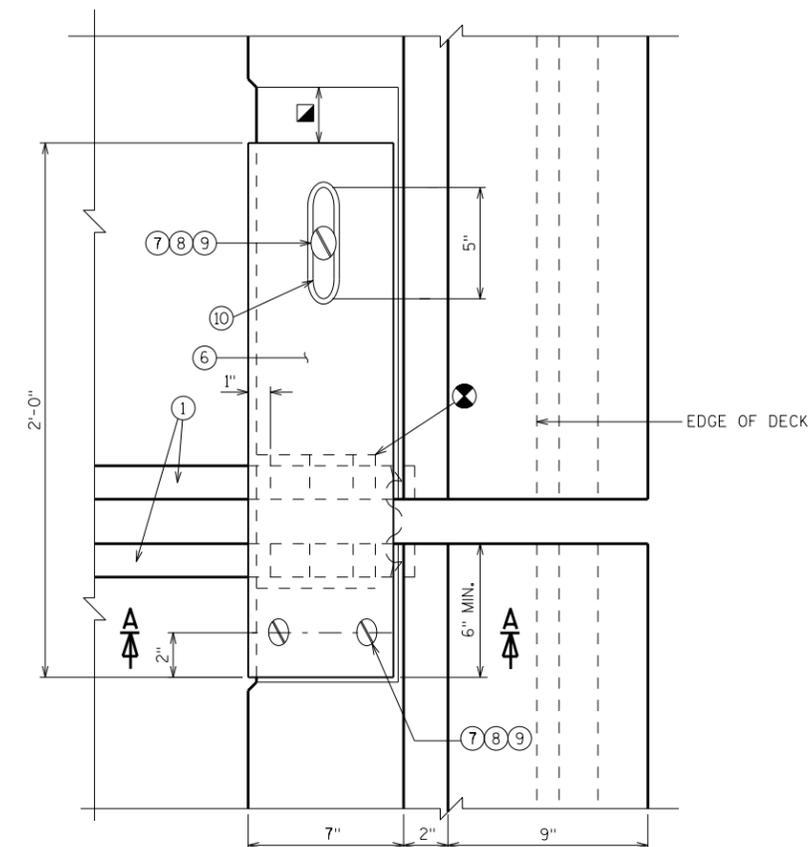
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-28-81			
DRAWN BY		MJL	PLANS CK'D. DMB
EXPANSION DEVICE		SHEET 3	



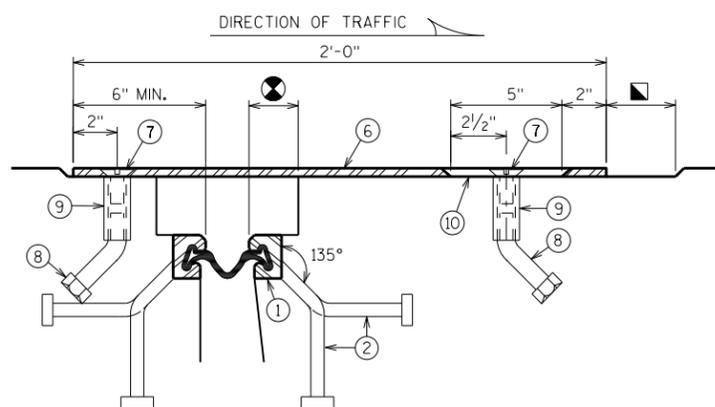
SECTION A-A



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION B-B

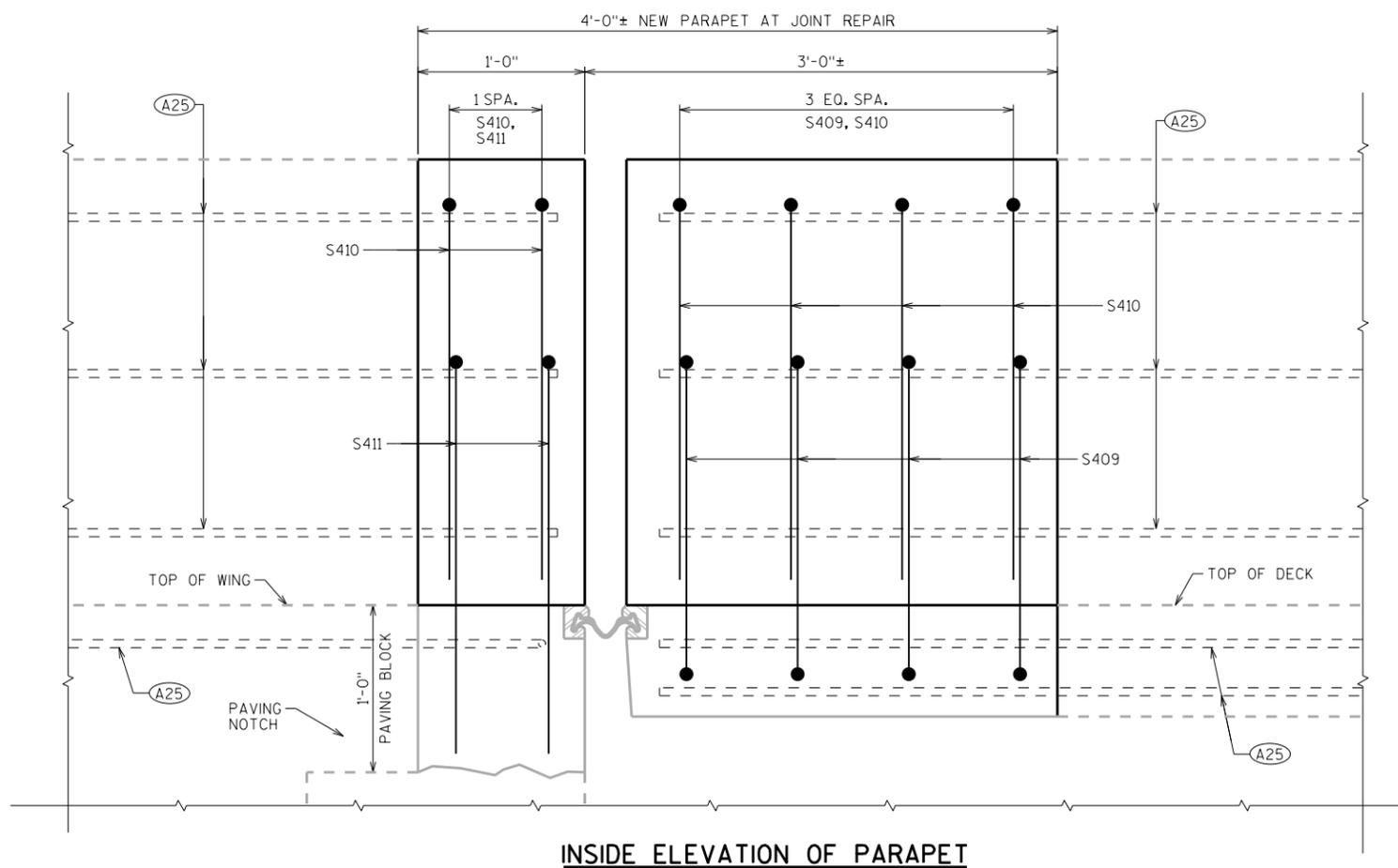
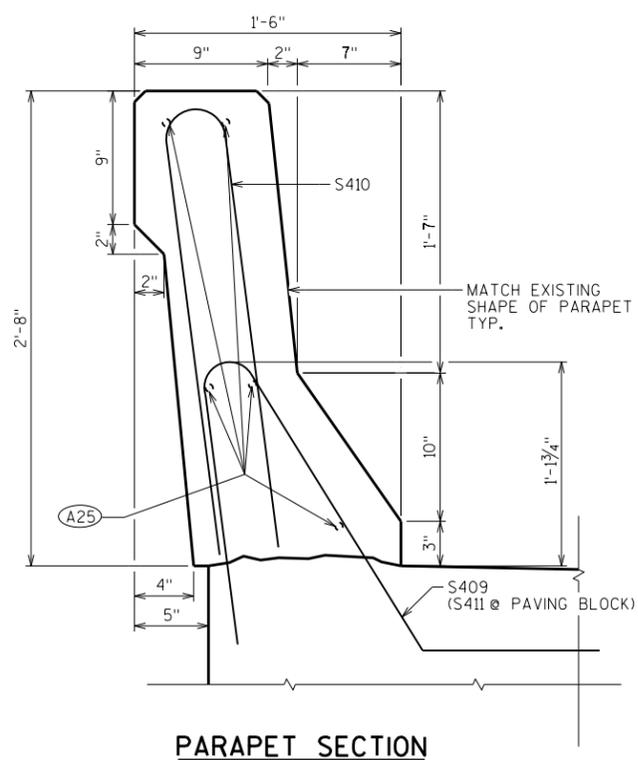
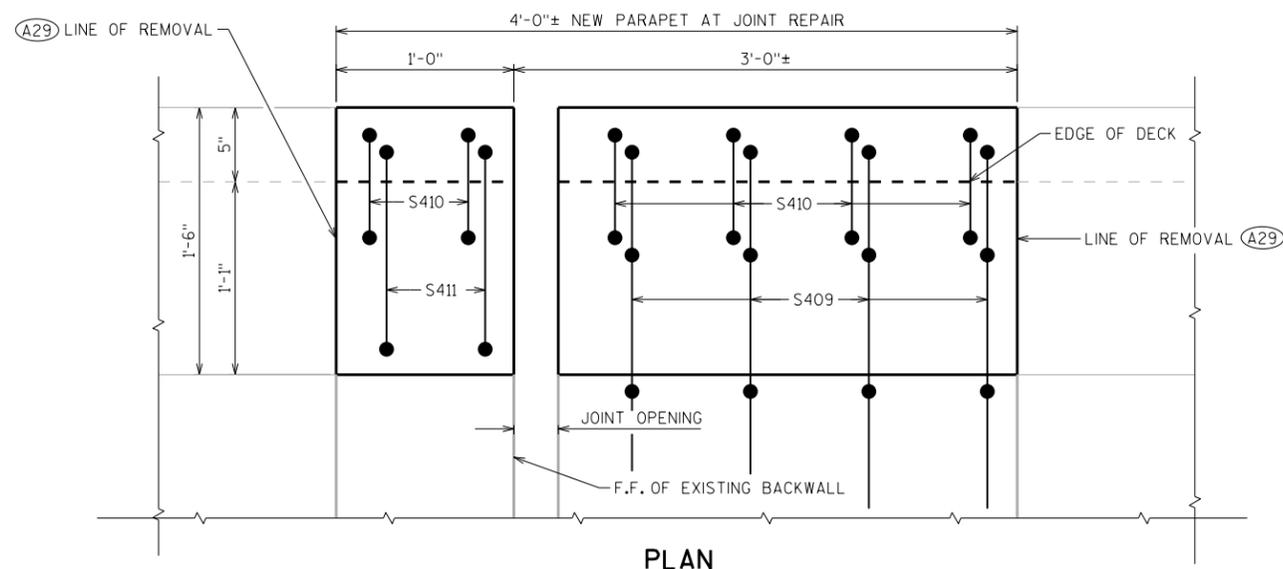
LEGEND

- ① NEOPRENE STRIP SEAL (5 - INCH) AND STEEL EXTRUSIONS.
- ② STUDS $\frac{5}{8}$ " ϕ X $6\frac{3}{8}$ " LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
- ③ $\frac{1}{2}$ " THICK ANCHOR PLATE WITH $\frac{5}{8}$ " ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
- ④ $\frac{3}{4}$ " ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON $\frac{1}{4}$ " OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
- ⑤ $\frac{3}{4}$ " ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
- ⑥ FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$ " BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE $\frac{1}{2}$ " ϕ HOLE FOR NO. 3 AND 1" ϕ HOLE FOR NO. 4.
- ⑦ GALVANIZED PLATE $\frac{3}{8}$ " X 1'-2" X 2'-0" LONG WITH HOLES FOR NO. 7. BEND AS SHOWN.
- ⑧ $\frac{3}{4}$ " ϕ X $\frac{1}{2}$ " STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS $\frac{1}{16}$ " BELOW PLATE SURFACE.
- ⑨ $\frac{3}{4}$ " ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
- ⑩ $\frac{3}{4}$ " ϕ X $2\frac{1}{4}$ " GALVANIZED THREADED COUPLING.
- ⑪ 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

SEE SHEET 3:
"EXPANSION
DEVICE" SHEET

- ⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.
- ▣ JOINT OPENING DIMENSION ALONG SKEW PLUS $\frac{1}{2}$ ".

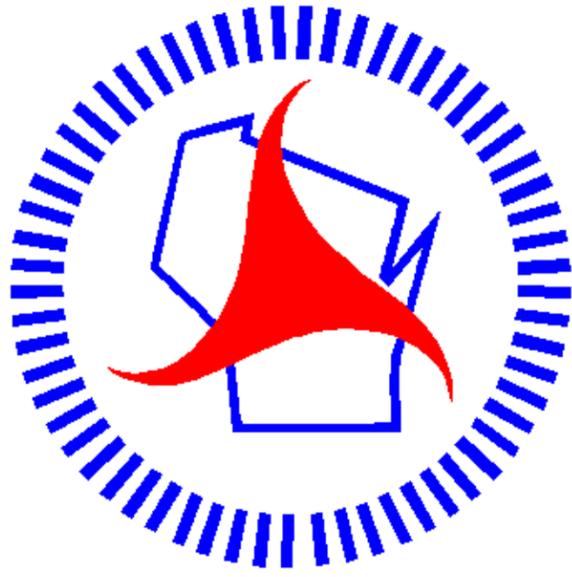
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-28-81			
DRAWN BY		MJL	PLANS CK'D. DMB
COVER PLATE DETAILS			SHEET 4



(A25) SALVAGE EXIST. REINF. & EXTEND FULL LENGTH INTO NEW WORK. TRIM REBAR AS NECESSARY TO ACCOMMODATE NEW JOINT OPENING.

(A29) ROUGHEN SURFACE OF CONCRETE 1/4" DEEP MINIMUM ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-28-81			
DRAWN BY		MJL	PLANS CK'D. DMB
PARAPET DETAILS			SHEET 5



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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

MAD PROJECT ID: WITH: 1390-00-83

3080-07-60

COUNTY: JEFFERSON

APRIL 2018 ORDER OF SHEETS

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

TOTAL SHEETS = 34

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C JEFFERSON, W RACINE STREET

ROCK RIVER STRUCTURE, B-28-89

USH 18

JEFFERSON COUNTY

STATE PROJECT NUMBER
3080-07-60

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3080-07-60	WISC 2018188	1



04

DESIGN DESIGNATION

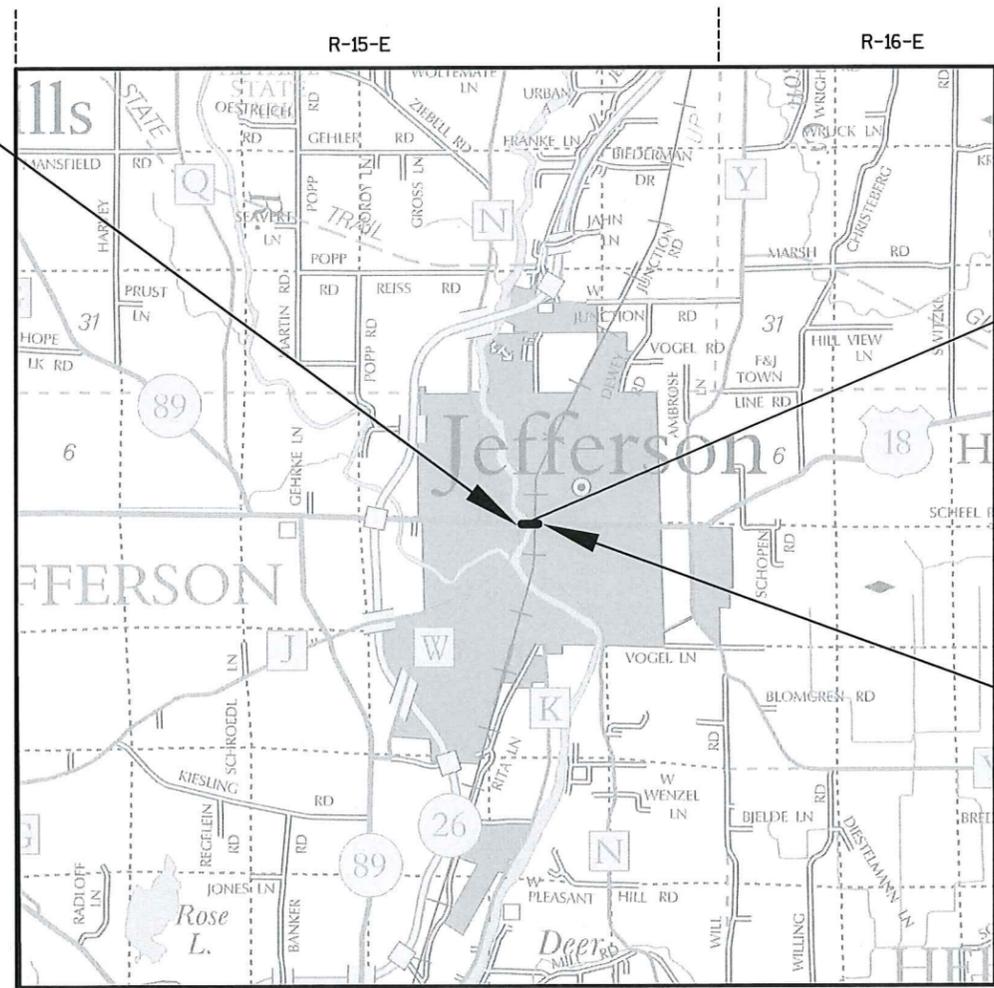
A.A.D.T. (2012)	=	8,800
A.A.D.T. (2038)	=	10,000
D.H.V. (2038)	=	4.9
D.D.	=	59/41
T.	=	5.7%
DESIGN SPEED	=	30 MPH
ESALS	=	N/A

CONVENTIONAL SYMBOLS

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

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

BEGIN PROJECT
STA. 101+19
Y= 558,749.46
X= 854,532.45



STRUCTURE B-28-89

END PROJECT
STA. 108+03

LAYOUT
SCALE 0 1.5 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.130 MI.

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

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	MSA PROFESSIONAL SERVICES
Designer	MEGAN SCHERER
Project Manager	JOHN JENKINS
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	JAMES OETTINGER

APPROVED FOR THE DEPARTMENT
DATE: 10/23/17 (signature)

GENERAL NOTES

DIMENSIONS GIVEN FOR EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE AND MEASURED IN THE FIELD FOR MATCHING PURPOSES.

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

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

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS 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.

WISDOT CONTACTS

WISDOT PROJECT MANAGER
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2101 WRIGHT ST.
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(608) 246-3866
John.jenkins@dot.wi.gov

WISDOT PROJECT LEADER
MEGAN SCHERER
2101 WRIGHT ST.
MADISON, WI 53704
(608) 513-4562
megan.scherer@dot.wi.gov

DNR CONTACT

LAURA BUB
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
3911 FISH HATCHERY ROAD
MADISON, WI 53711
(608) 275-3485
Laura.Bub@wisconsin.gov

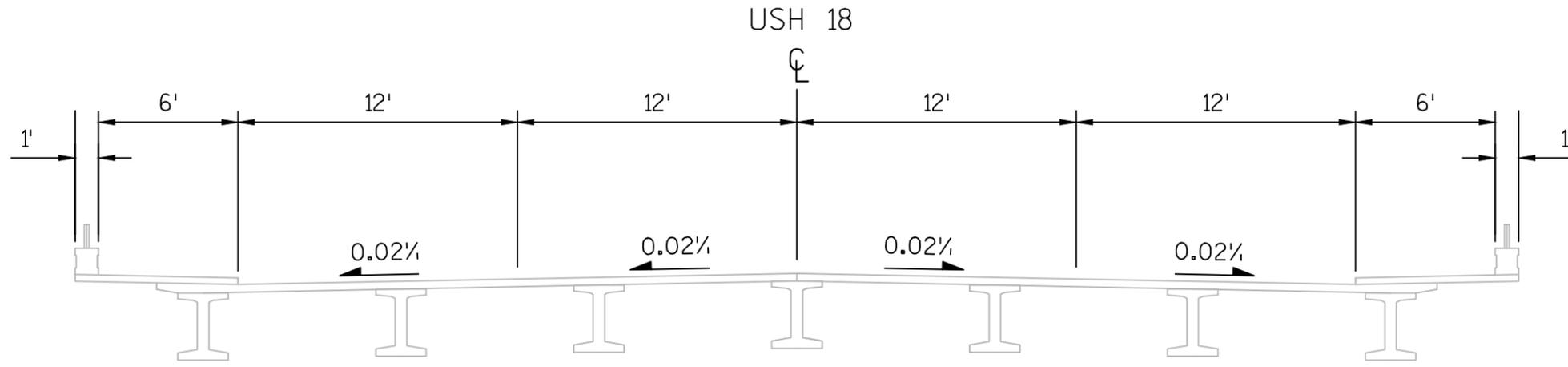


Dial **811** or (800) 242-8511

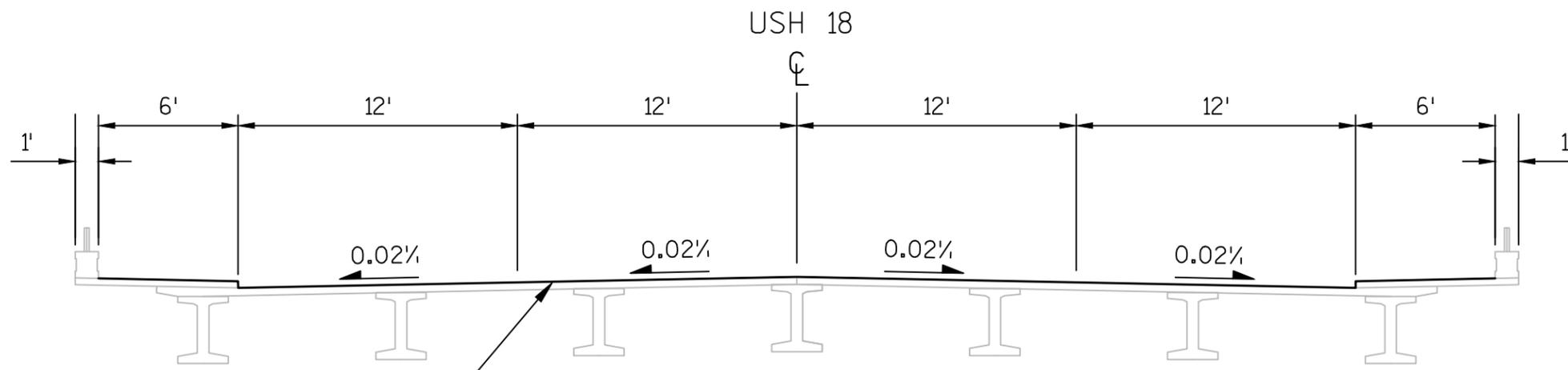
www.DiggersHotline.com

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
D	CENTRAL ANGLE OR DELTA	V.P.I.	VERTICAL POINT OF INTERSECTION
C.M.C.P.	CORRUGATED METAL CULVERT PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
C.A.B.C.	CRUSHED AGGREGATE BASE COURSE	R/L	REFERENCE LINE
C.Y.	CUBIC YARD	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL., ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT (FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

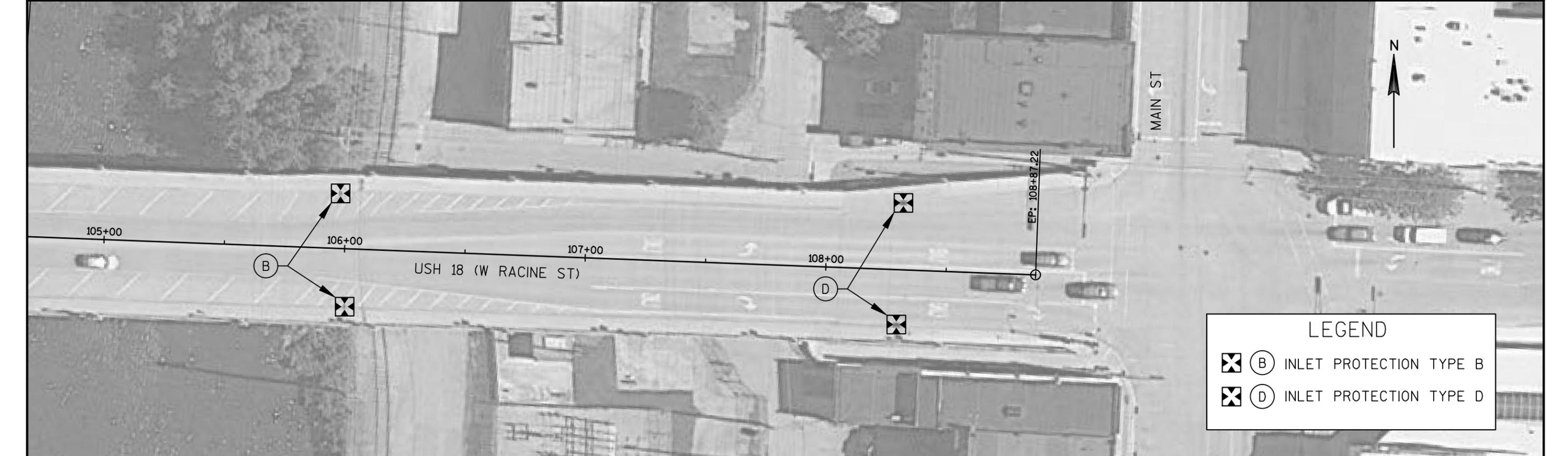
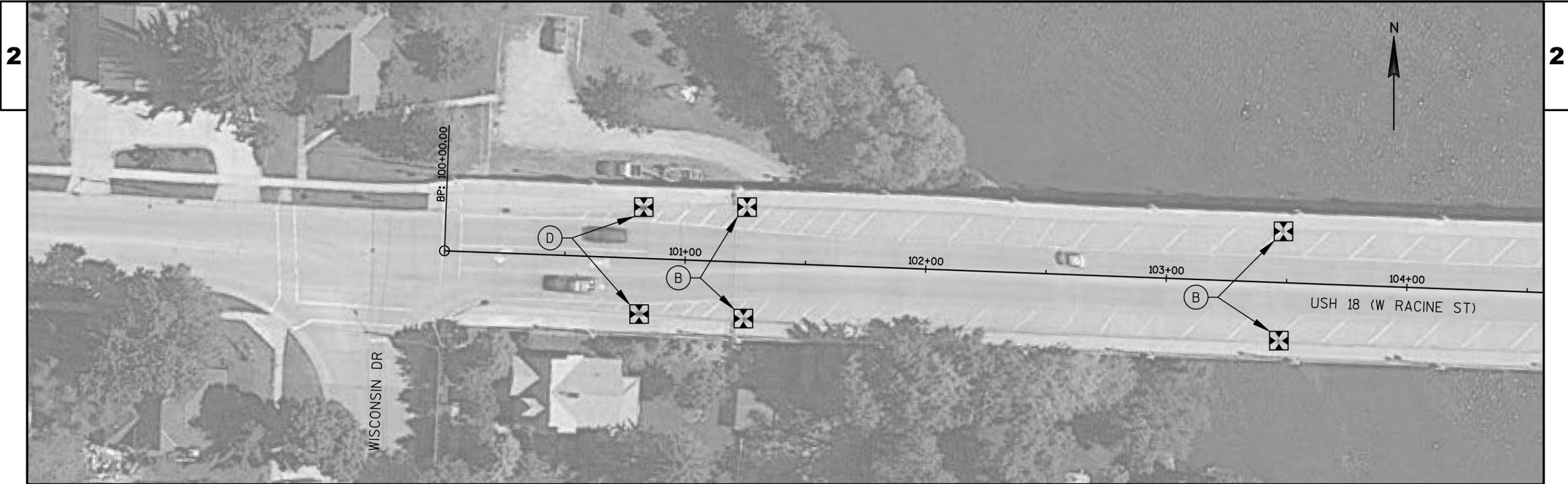


EXISTING TYPICAL SECTION
 STRUCTURE B-28-89
 STA 101+19 - STA 108+03



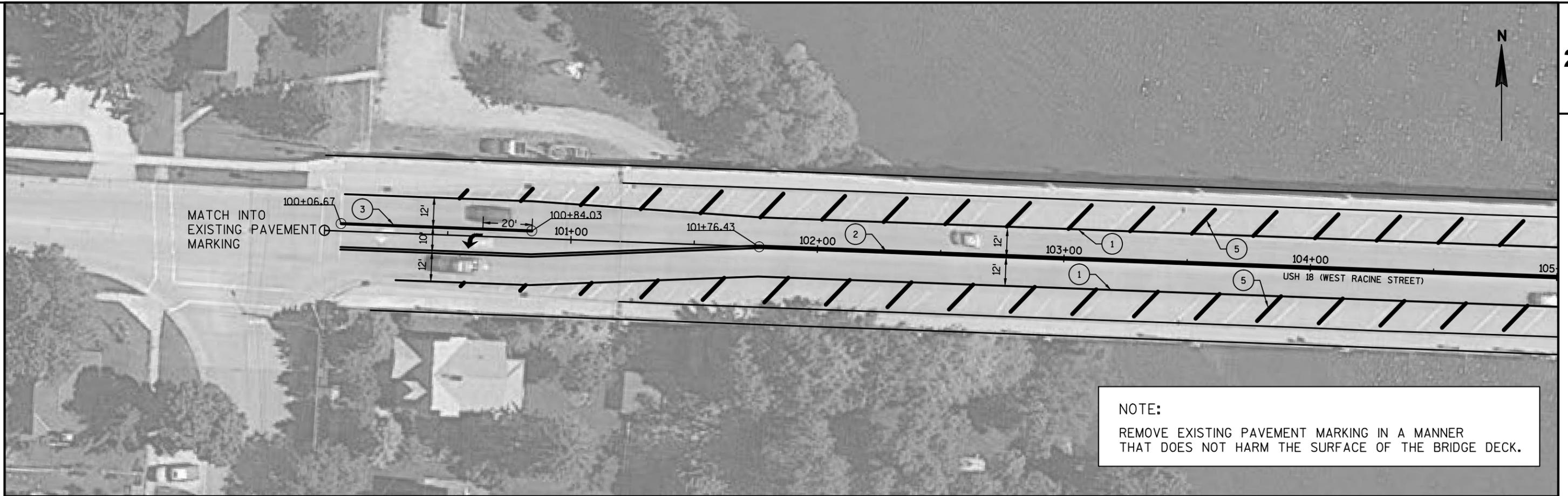
POLYMER OVERLAY

FINISHED TYPICAL SECTION
 STRUCTURE B-28-89
 STA 101+19 - STA 108+03

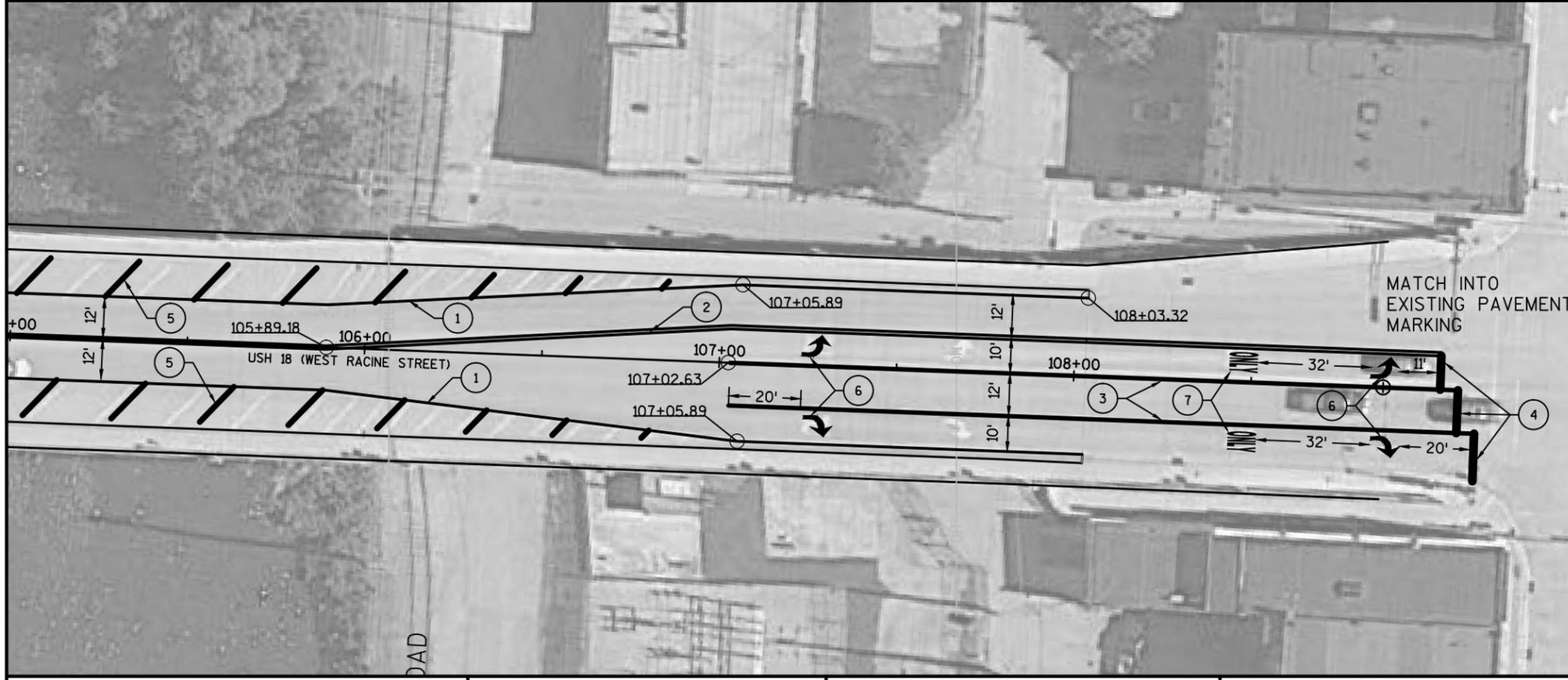


LEGEND

INLET PROTECTION TYPE B
 INLET PROTECTION TYPE D



NOTE:
 REMOVE EXISTING PAVEMENT MARKING IN A MANNER THAT DOES NOT HARM THE SURFACE OF THE BRIDGE DECK.



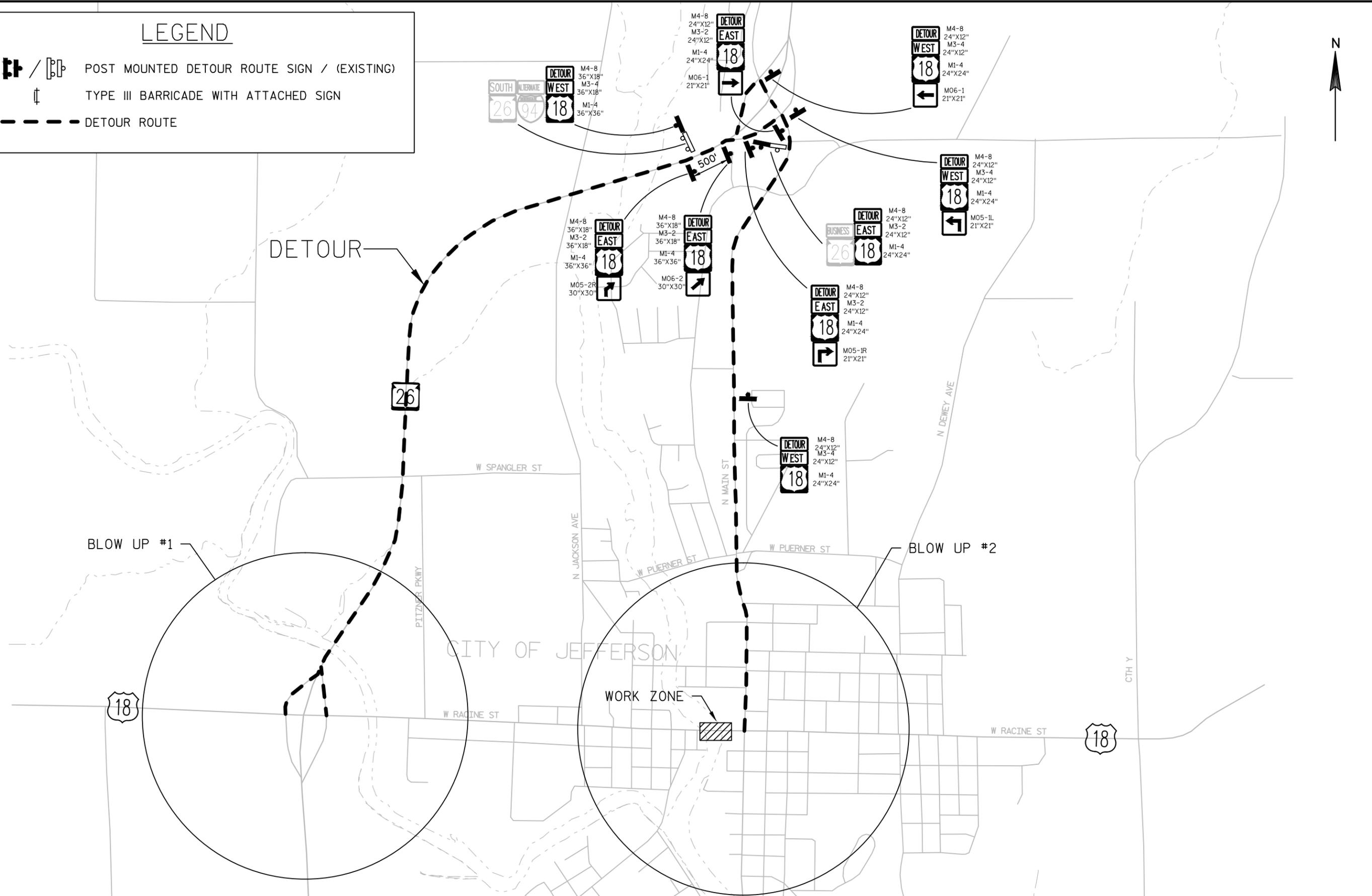
LEGEND

- ① MARKING LINE EPOXY 4-INCH (WHITE)
- ② MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- ③ MARKING LINE EPOXY 8-INCH (WHITE)
- ④ MARKING STOP LINE EPOXY 18-INCH
- ⑤ MARKING DIAGONAL EPOXY 12-INCH (WHITE)*
- ⑥ MARKING ARROW EPOXY (WHITE)
- ⑦ MARKING WORD EPOXY ("ONLY" WHITE)

* SPACE AT 25' INTERVALS

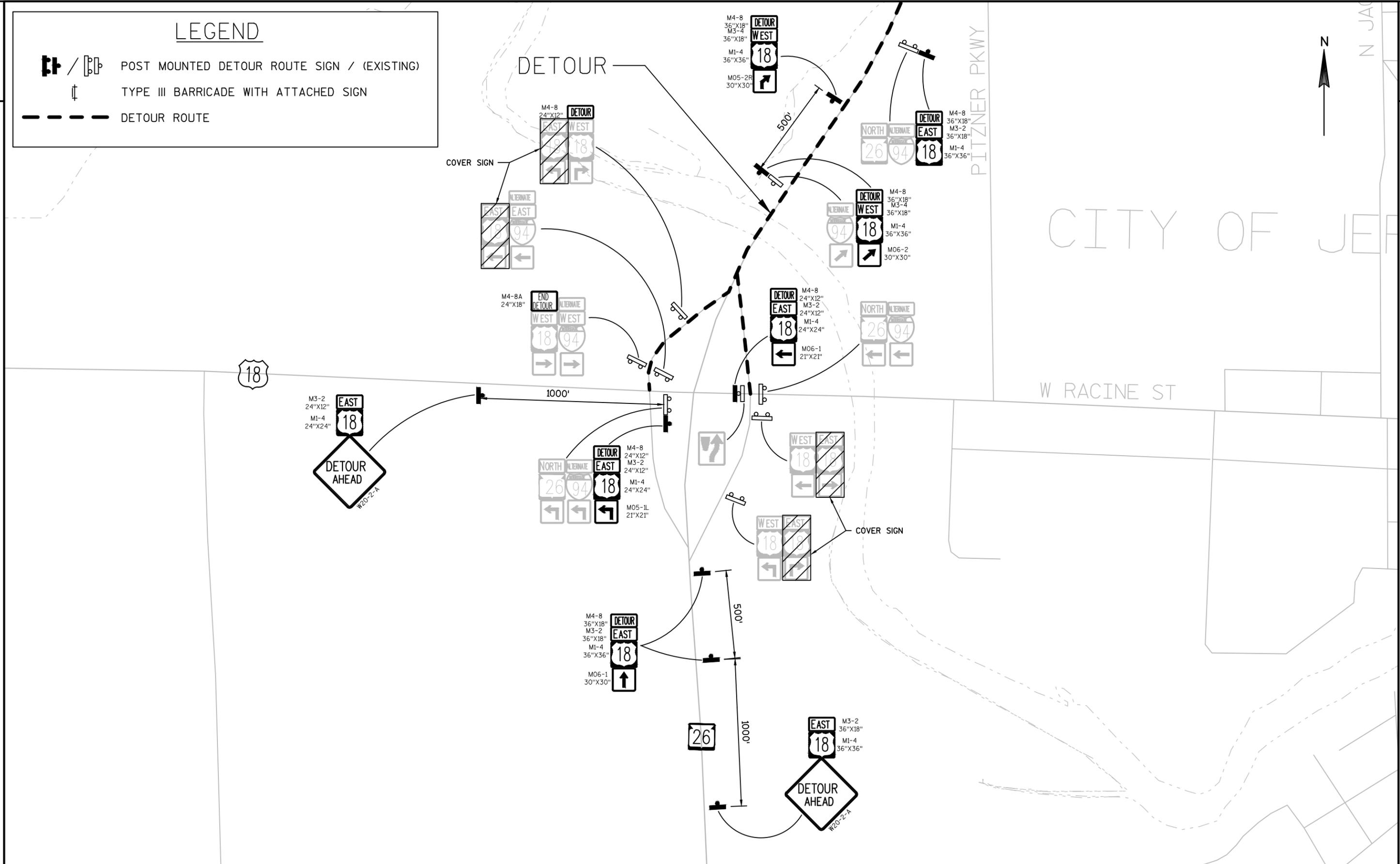
LEGEND

-  POST MOUNTED DETOUR ROUTE SIGN / (EXISTING)
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  DETOUR ROUTE



LEGEND

-  POST MOUNTED DETOUR ROUTE SIGN / (EXISTING)
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  DETOUR ROUTE



--- PEDESTRIAN DETOUR ROUTE

 WORK ZONE

NOTES:
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILED TRAFFIC CONTROL ALONG BIKE AND PEDESTRIAN DETOUR ROUTE.
EXISTING SIDEWALK TO BE UTILIZED FOR DETOUR.

N

(A)  R9-11 48"x24"

(B)  R9-11 48"x24"

(C)  M4-9AL 30"x24"

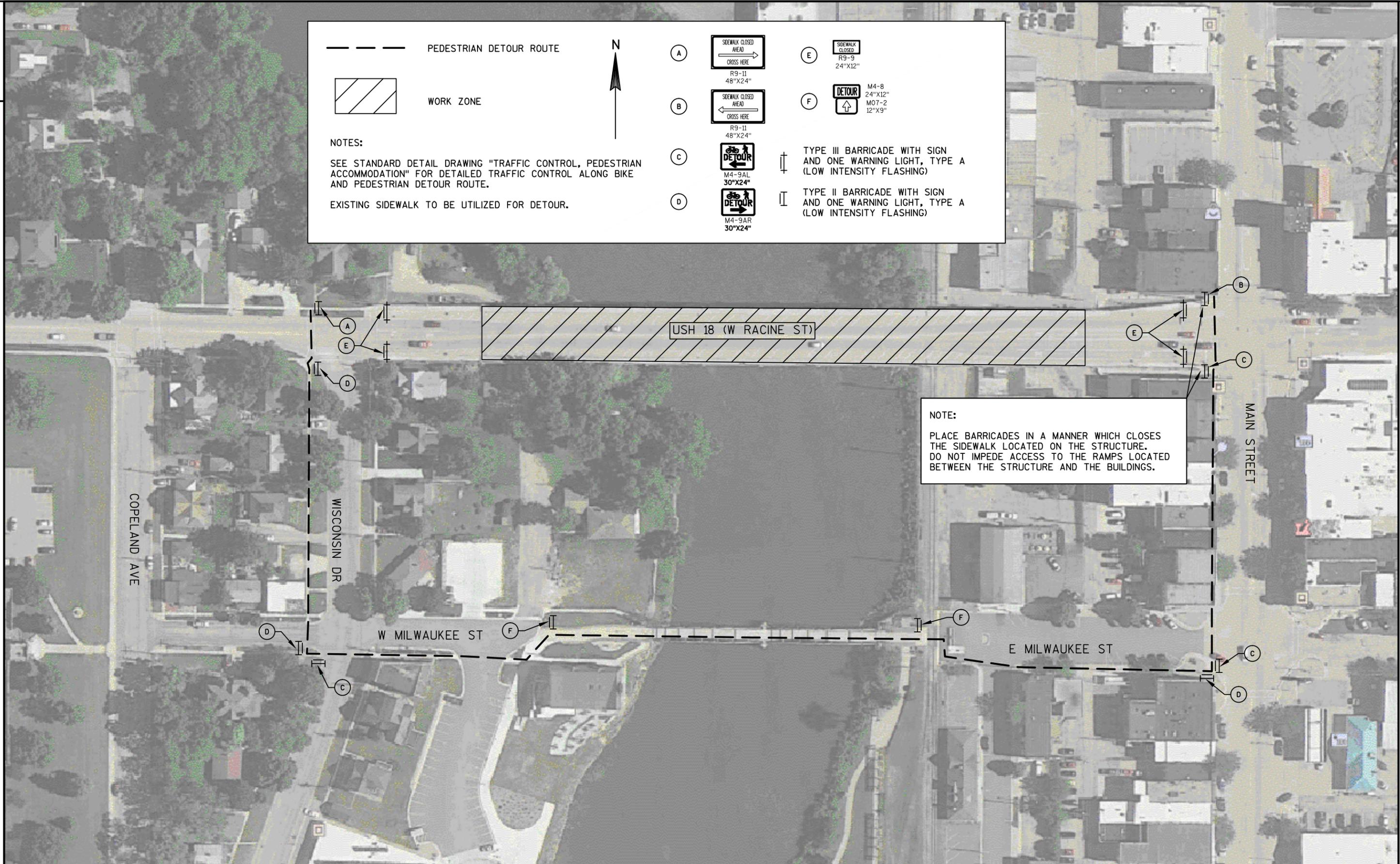
(D)  M4-9AR 30"x24"

(E)  R9-9 24"x12"

(F)  M4-8 24"x12" M07-2 12"x9"

 TYPE III BARRICADE WITH SIGN AND ONE WARNING LIGHT, TYPE A (LOW INTENSITY FLASHING)

 TYPE II BARRICADE WITH SIGN AND ONE WARNING LIGHT, TYPE A (LOW INTENSITY FLASHING)



LEGEND

PCMS PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

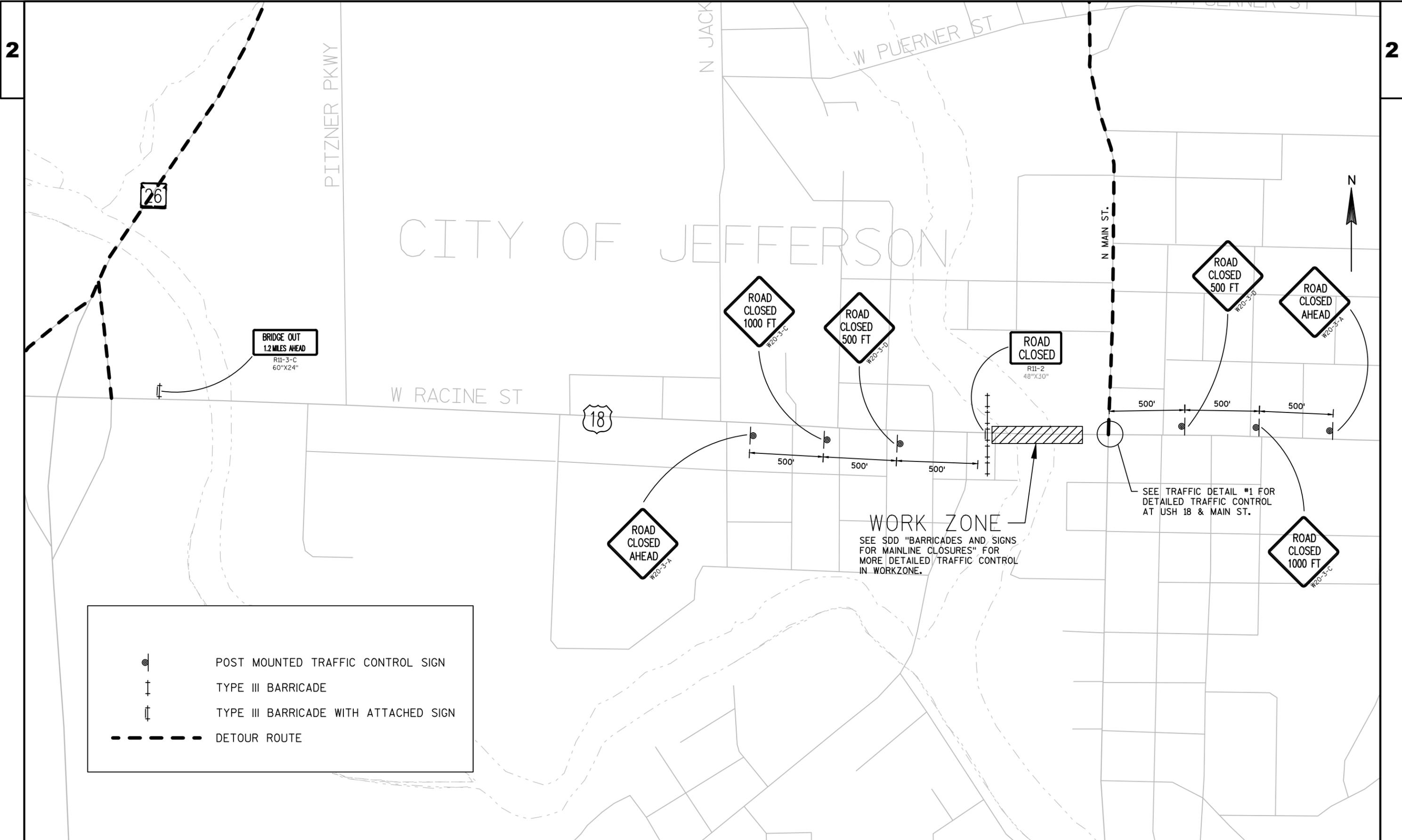
● TRAFFIC CONTROL DRUM



MESSAGE

BRIDGE
CLOSED

STARTING
(DATE)



LEGEND

-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-   FLAGS, 16" X 16" MIN (ORANGE)
-  WORK AREA

 N



Estimate Of Quantities By Plan Sets

3080-07-60

Line	Item	Item Description	Unit	Total	Qty
0006	213.0100	Finishing Roadway (project) 02. 3080-07-60	EACH	1.000	1.000
0020	509.1500	Concrete Surface Repair	SF	10.000	10.000
0024	509.5100.S	Polymer Overlay	SY	4,654.000	4,654.000
0030	619.1000	Mobilization	EACH	0.310	0.310
0032	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0034	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0036	628.7010	Inlet Protection Type B	EACH	6.000	6.000
0038	628.7020	Inlet Protection Type D	EACH	4.000	4.000
0042	643.0300	Traffic Control Drums	DAY	730.000	730.000
0044	643.0410	Traffic Control Barricades Type II	DAY	300.000	300.000
0046	643.0420	Traffic Control Barricades Type III	DAY	540.000	540.000
0048	643.0705	Traffic Control Warning Lights Type A	DAY	780.000	780.000
0050	643.0715	Traffic Control Warning Lights Type C	DAY	240.000	240.000
0054	643.0900	Traffic Control Signs	DAY	3,720.000	3,720.000
0056	643.0920	Traffic Control Covering Signs Type II	EACH	7.000	7.000
0058	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0060	643.5000	Traffic Control	EACH	0.500	0.500
0062	646.1020	Marking Line Epoxy 4-Inch	LF	3,373.000	3,373.000
0064	646.3020	Marking Line Epoxy 8-Inch	LF	495.000	495.000
0066	646.5020	Marking Arrow Epoxy	EACH	5.000	5.000
0068	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0070	646.6120	Marking Stop Line Epoxy 18-Inch	LF	36.000	36.000
0072	646.7120	Marking Diagonal Epoxy 12-Inch	LF	665.000	665.000
0074	646.9000	Marking Removal Line 4-Inch	LF	1,797.000	1,797.000
0076	646.9100	Marking Removal Line 8-Inch	LF	2,736.000	2,736.000
0078	646.9200	Marking Removal Line Wide	LF	36.000	36.000
0080	646.9300	Marking Removal Special Marking	EACH	10.000	10.000

FINISHING ROADWAY

CATEGORY	ROADWAY	213.0100 FINISHING ROADWAY (01. 3080-07-60) EACH
0010	USH 18	1
TOTAL 0010		1

MOBILIZATION ITEMS

CATEGORY	ROADWAY	619.1000 MOBILIZATION EACH	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
0010	USH 18	0.31	1	1
TOTAL 0010		0.31	1	1

INLET PROTECTION ITEMS

CATEGORY	LOCATION	628.7010 INLET PROTECTION TYPE B EACH	628.7020 INLET PROTECTION TYPE D EACH	REMARKS
0010	USH 18 - LT	3	2	ON BRIDGE
0010	USH 18 - RT	3	2	ON BRIDGE
TOTAL 0010		6	4	

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	DAY**	643.0300 TRAFFIC CONTROL DRUMS EACH**	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS EACH**	DAY			
0010	USH 18 - WEST OF BRIDGE	30	-	6	180	6	180	-	5	150	
0010	USH 18 - EAST OF BRIDGE	30	-	5	150	6	180	-	4	120	
0010	USH 18/MAIN ST INTERSECTION	30	22	660	3	90	-	8	240	8	240
TOTAL 0010			660	420	360	240	510				

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
**INFORMATION ONLY

TRAFFIC CONTROL ITEMS - PCMS

CATEGORY	LOCATION	DAY**	643.0300 TRAFFIC CONTROL DRUMS EACH**	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
0010	USH 18 - SOUTHWEST END OF BRIDGE	7	5	35
0010	USH 18 - NORTHEAST END OF BRIDGE	7	5	35
TOTAL 0010			70	14

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
**INFORMATION ONLY

TRAFFIC CONTROL ITEMS - DETOUR

* ***
643.0900 643.0920
TRAFFIC TRAFFIC
CONTROL CONTROL
SIGNS COVERING
SIGNS
TYPE II

CATEGORY	LOCATION	DAY**	EACH**	DAY	EACH
0010	STH 26 & BUS 26	30	33	990	-
0010	USH 18 & STH 26 BLOW UP 1	30	35	1050	4
0010	USH 18 & STH 26 BLOW UP 2	30	23	690	3
TOTAL 0010			2730	7	

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
**INFORMATION ONLY
***1 CYCLE FOR ALL TRAFFIC CONTROL COVERING SIGNS TYPE II

TRAFFIC CONTROL ITEMS - PEDESTRIAN DETOUR

* * *
643.0410 643.0420 643.0705 643.0900
TRAFFIC TRAFFIC TRAFFIC TRAFFIC
CONTROL CONTROL CONTROL CONTROL
BARRICADES BARRICADES WARNING SIGNS
TYPE II TYPE III LIGHTS
TYPE A

CATEGORY	LOCATION	DAY**	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY
0010	PROJECT LIMITS	30	10	300	4	120	14	420	16	480
TOTAL 0010			300	120	420	480				

*NOTE: ADDITIONAL QUANTITIES LISTED ELSEWHERE
**INFORMATION ONLY

TRAFFIC CONTROL

CATEGORY	ROADWAY	EACH
0010	USH 18	0.50
TOTAL 0010		0.50

MARKING ITEMS

646.1020 646.3020 646.5020 646.5120 646.6120 646.7120
MARKING MARKING MARKING MARKING MARKING MARKING
LINE LINE ARROW WORD STOP LINE DIAGONAL
EPOXY EPOXY EPOXY EPOXY EPOXY EPOXY
4-INCH 8-INCH 18-INCH 12-INCH
WHITE YELLOW WHITE WHITE WHITE WHITE
LF LF LF EACH EACH LF LF

CATEGORY	STATION TO STATION	LOCATION	WHITE LF	YELLOW LF	WHITE LF	WHITE EACH	WHITE EACH	WHITE LF	WHITE LF
0010	100+06 - 100+84	USH 18	132	155	78	1	-	-	38
0010	100+84 - 101+76	USH 18	186	186	-	-	-	-	53
0010	101+76 - 105+89	USH 18	826	826	-	-	-	-	504
0010	105+89 - 107+06	USH 18	236	229	-	-	-	-	70
0010	107+06 - 109+13	USH 18	196	401	417	4	2	36	-
TOTAL 0010			1576	1797	495	5	2	36	665

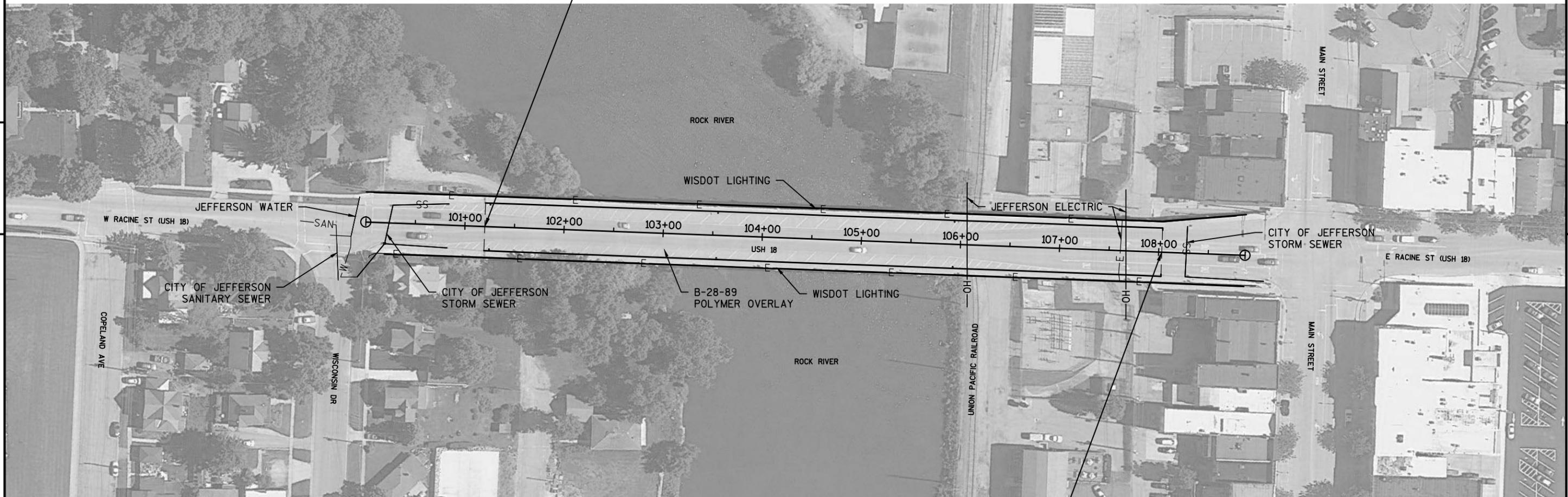
MARKING REMOVAL ITEMS

646.9000 646.9100 646.9200 646.9300
MARKING MARKING MARKING MARKING
REMOVAL REMOVAL REMOVAL REMOVAL
LINE LINE LINE SPECIAL
4-INCH 8-INCH WIDE MARKING
LF LF LF EACH

CATEGORY	STATION TO STATION	LOCATION	4-INCH LF	8-INCH LF	LINE LF	SPECIAL MARKING EACH
0010	100+06 - 101+76	USH 18	341	487	-	2
0010	101+76 - 105+89	USH 18	826	1330	-	-
0010	105+89 - 109+13	USH 18	630	919	36	8
TOTAL 0010			1797	2736	36	10



BEGIN PROJECT
STA 101+19

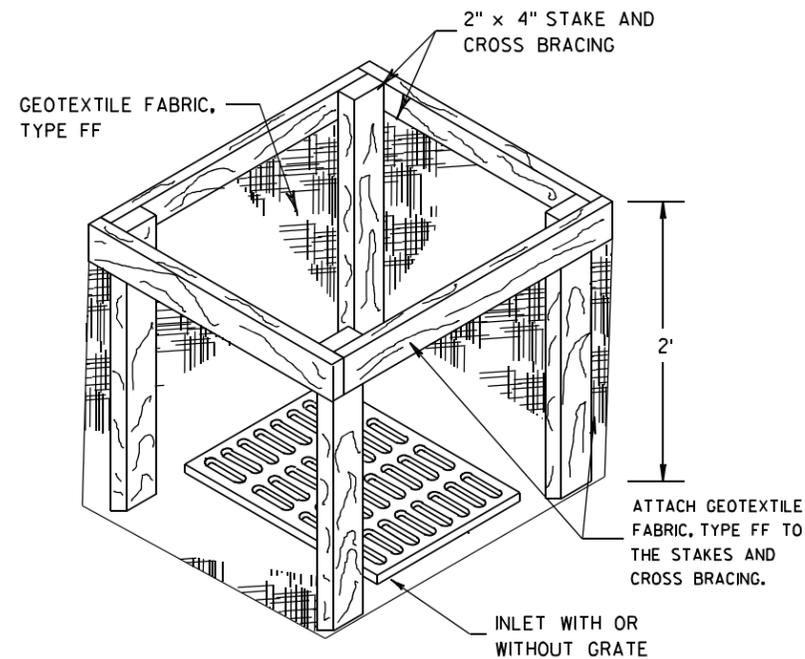
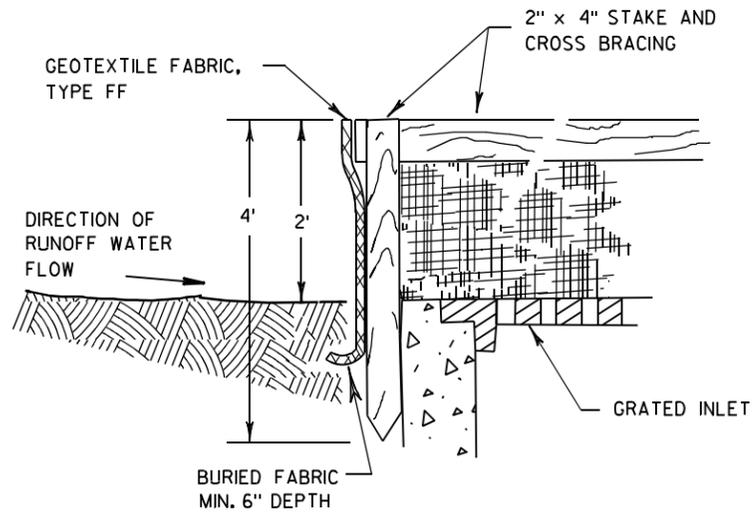


END PROJECT
STA 108+03

PROJECT NO: 3080-07-60	HWY: USH 18	COUNTY: JEFFERSON	PLAN : W RACINE ST (USH 18)	SHEET	E
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Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



INLET PROTECTION, TYPE A

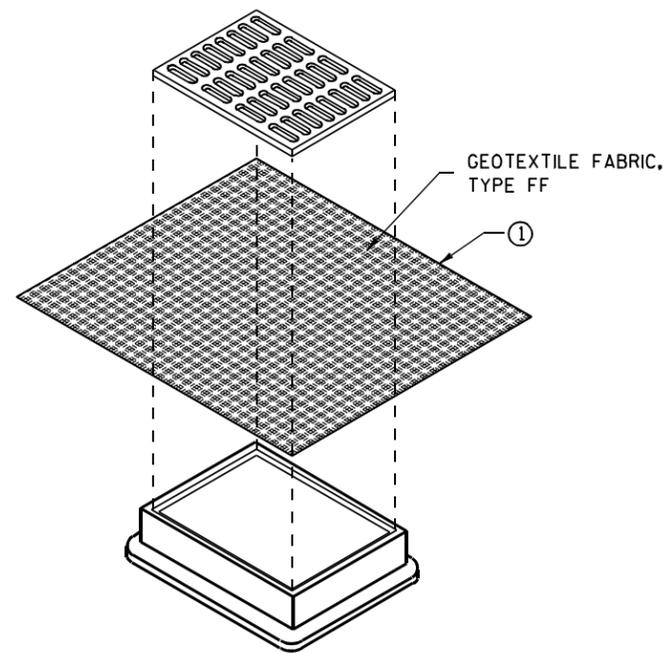
GENERAL NOTES

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.

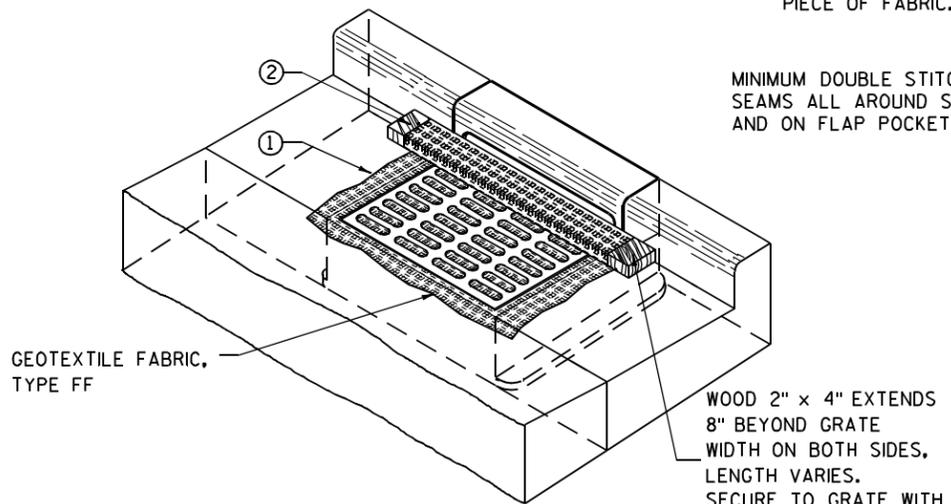
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

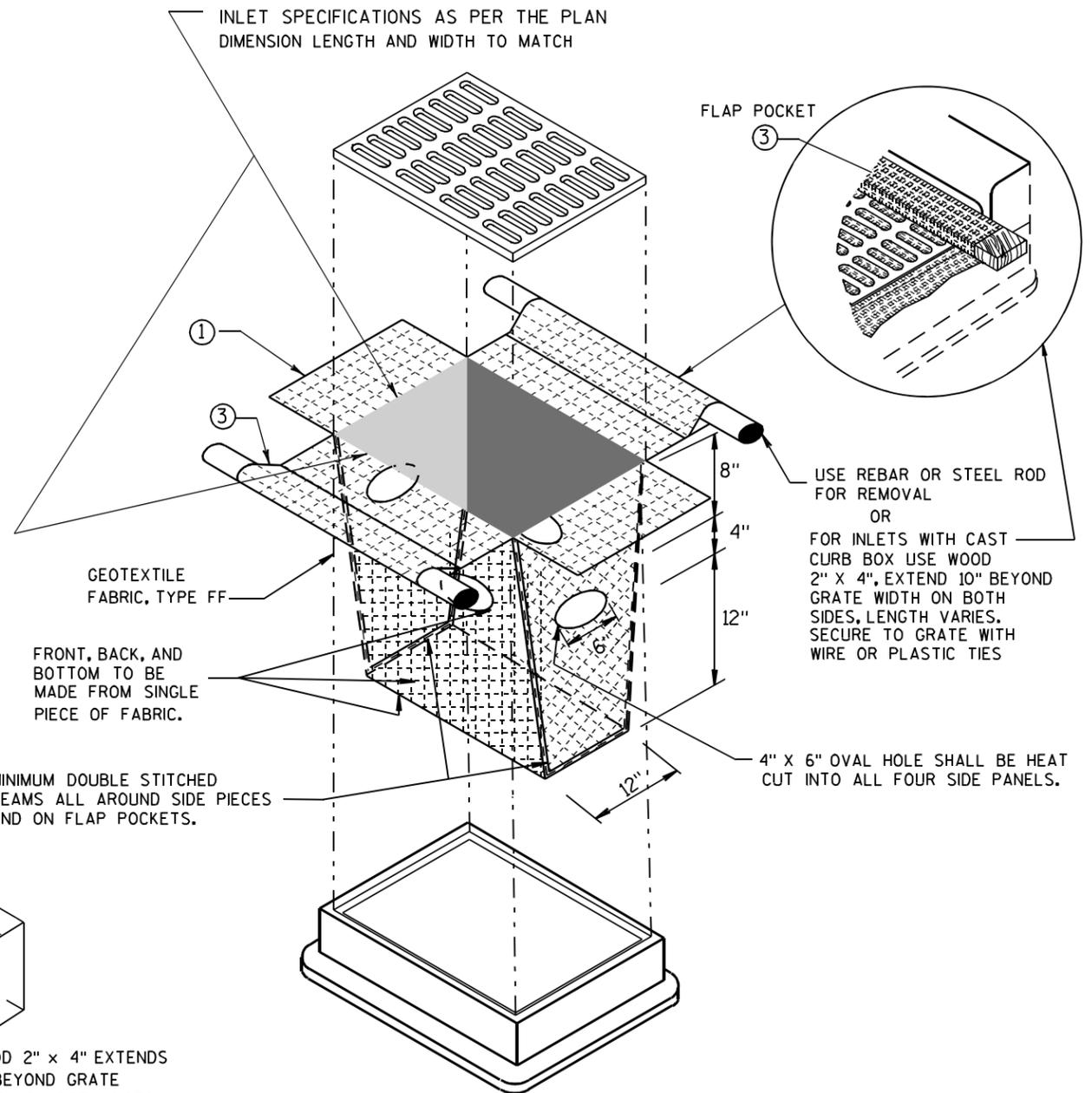
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.

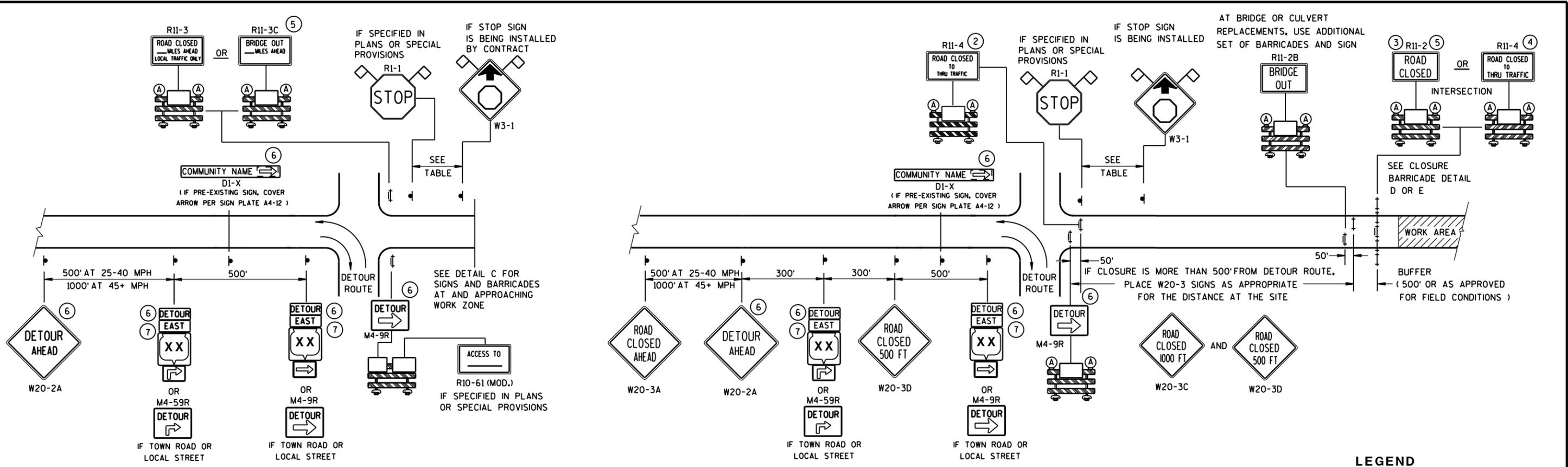
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

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

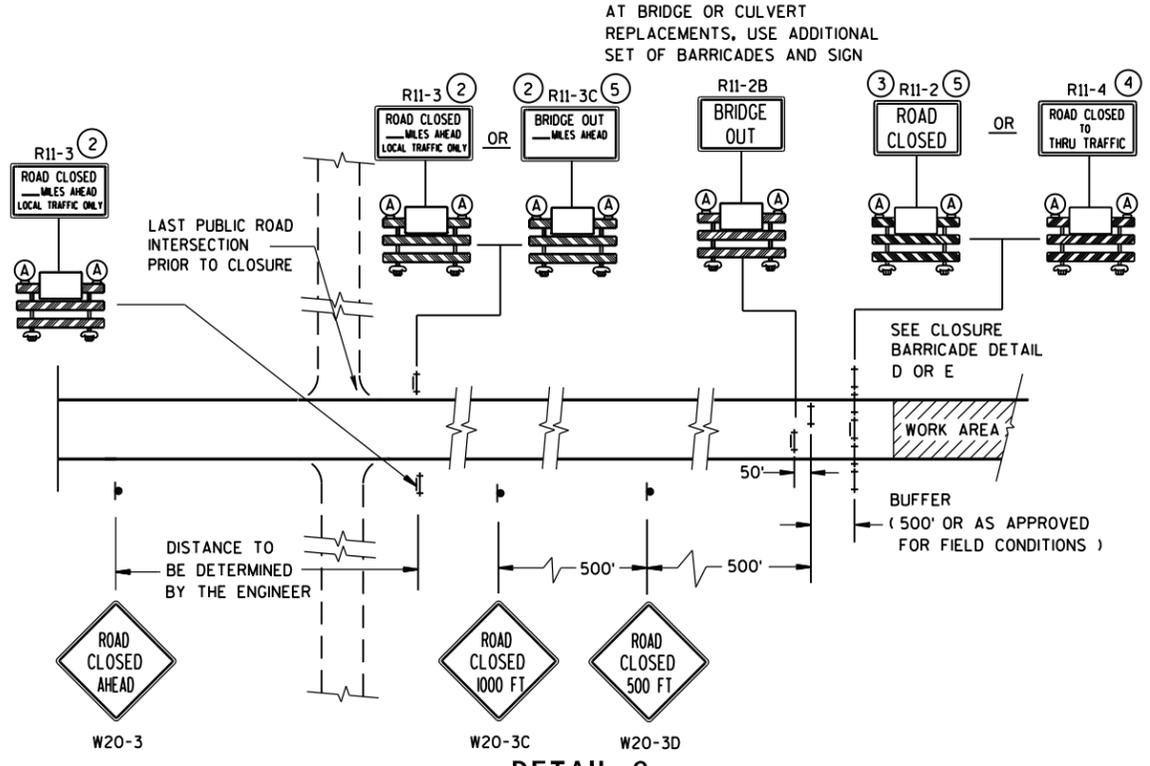


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
 WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

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

- LEGEND**
- ⊙ SIGN ON PERMANENT SUPPORT
 - ⊥ TYPE III BARRICADE
 - ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
 - Ⓐ TYPE "A" WARNING LIGHT (FLASHING)
 - ▨ WORK AREA
 - DETOUR EAST M4-8 M3-X
 - XX OR COUNTY XX OR XX M1-4 M1-5A M1-6
 - OR M05-1 M06-1
 - ◇ 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



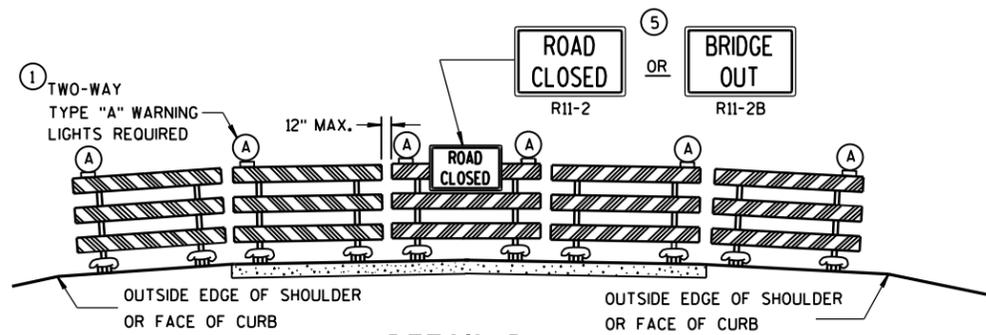
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

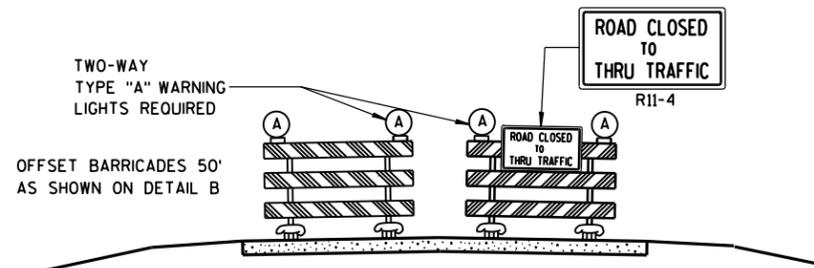
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

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



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
 APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
 APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

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

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

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

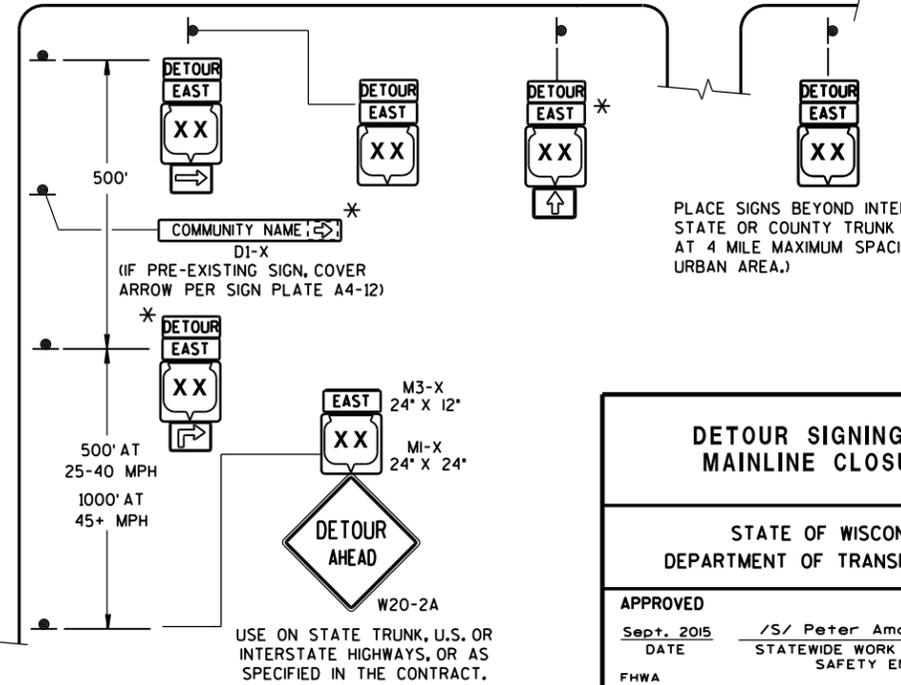
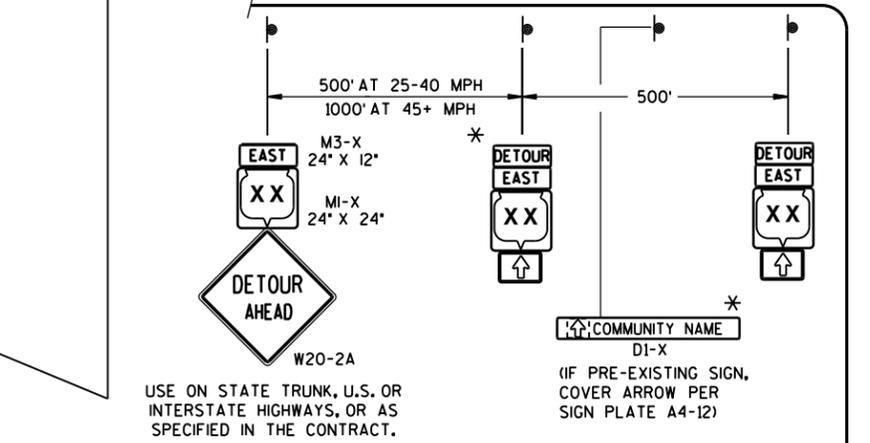
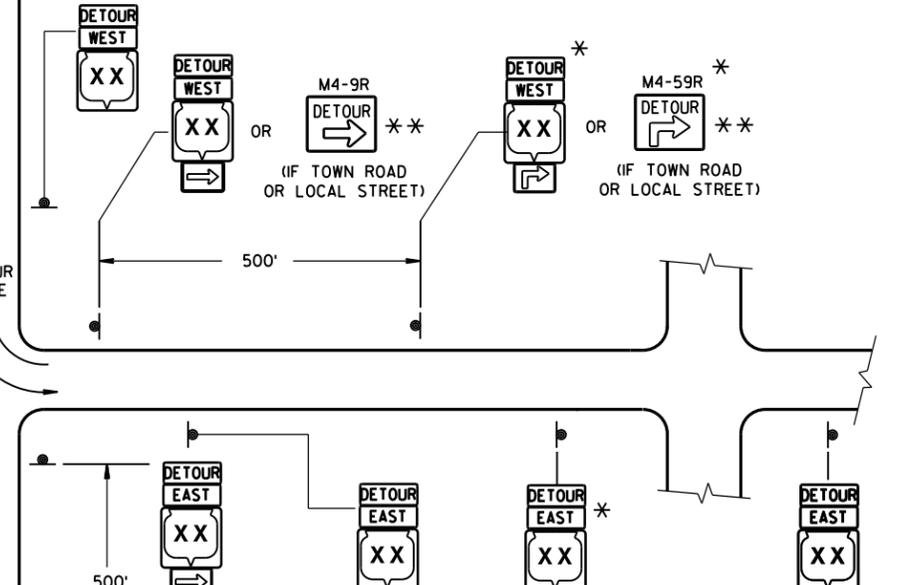
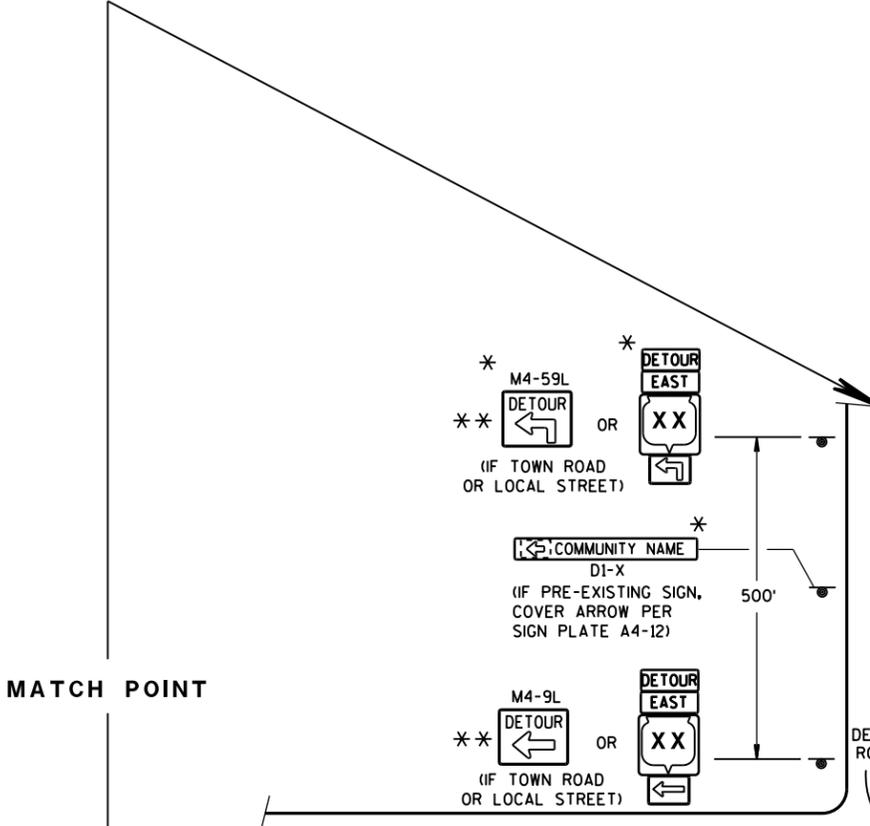
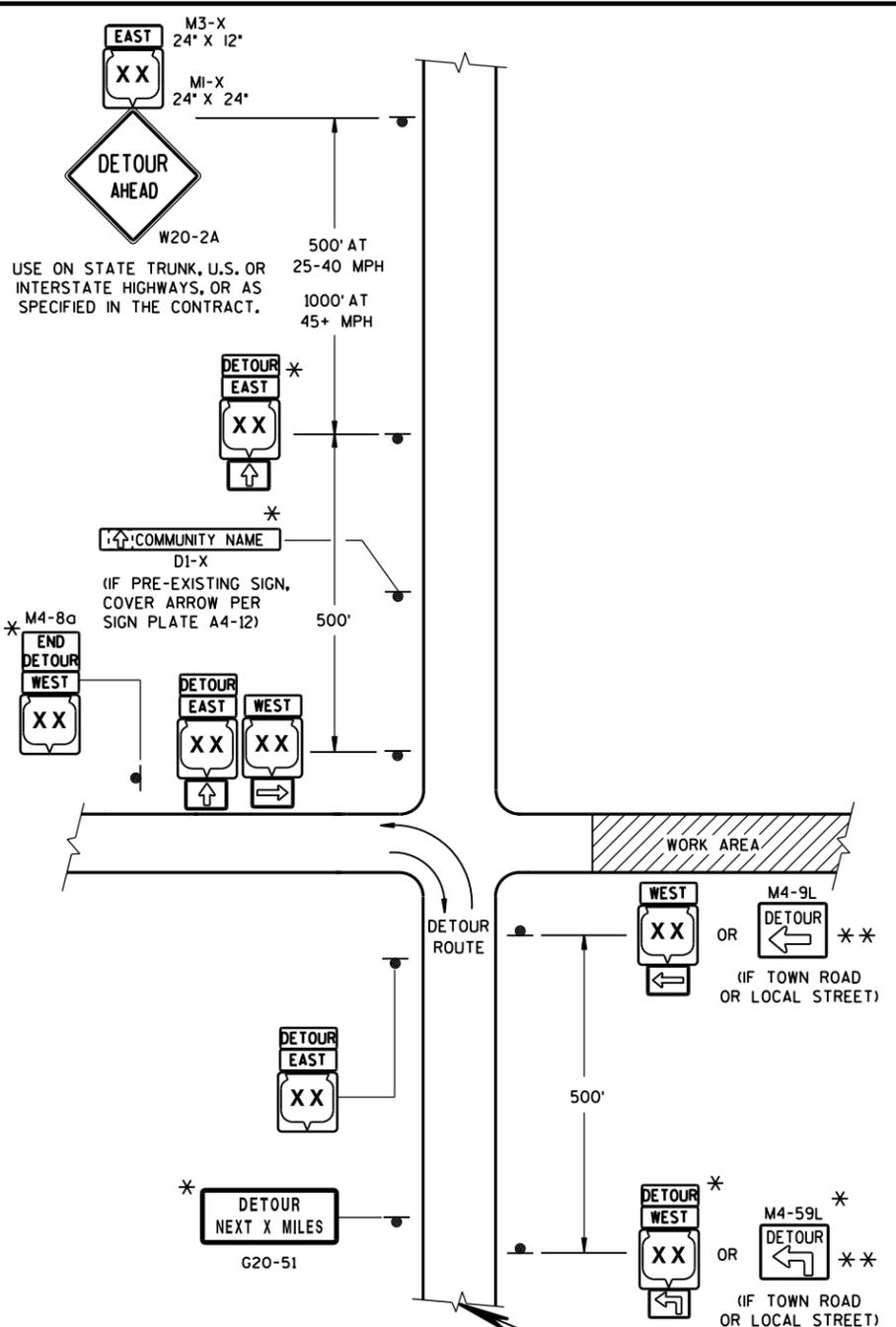
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

SIGN SIZES SHALL BE AS FOLLOWS:
 M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
 M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 MI-4, MI-5A, AND MI-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 M4-9 SHALL BE 30" X 24".
 M4-8a SHALL BE 24" X 18".
 G20-51 SHALL BE 60" X 24".
 W20-2 SHALL BE 48" X 48".
 DI-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.



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

**DETAIL F
DETOUR SIGNING**

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4-8
- M3-X
- MI-4
- MI-5A
- MI-6
- MO5-1
- MO6-1
- MO6-1

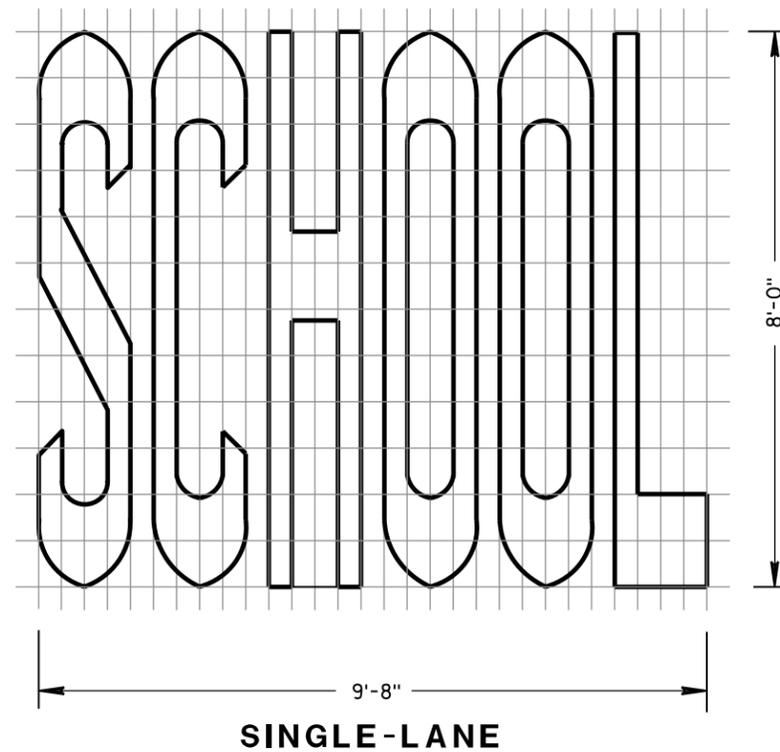
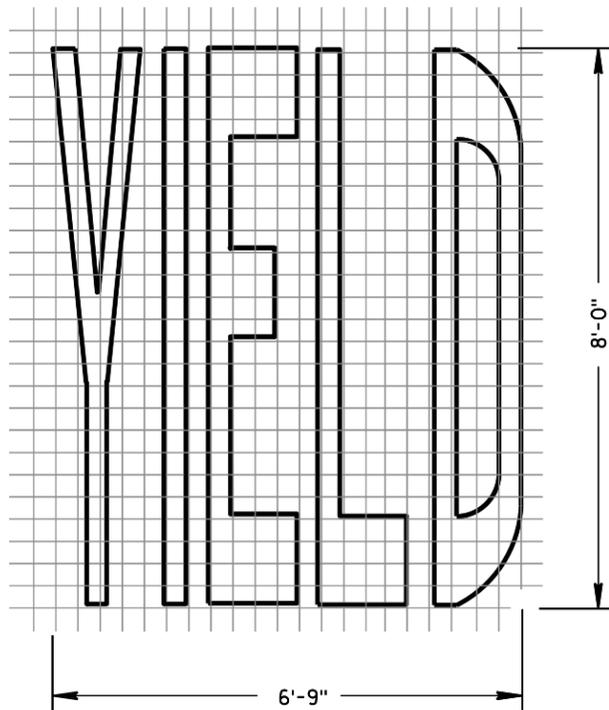
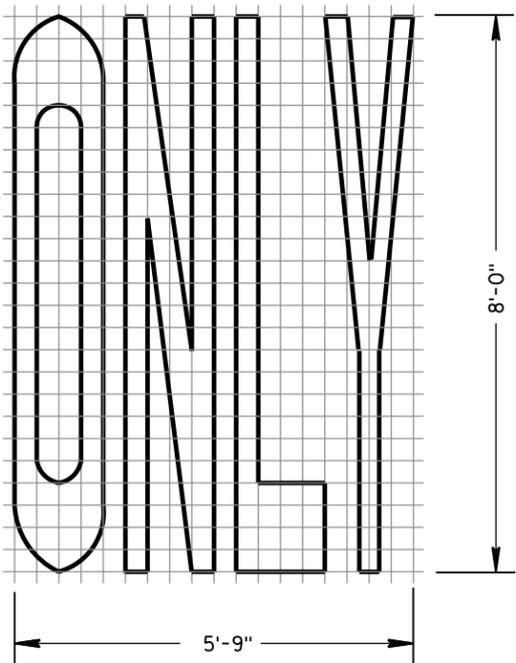
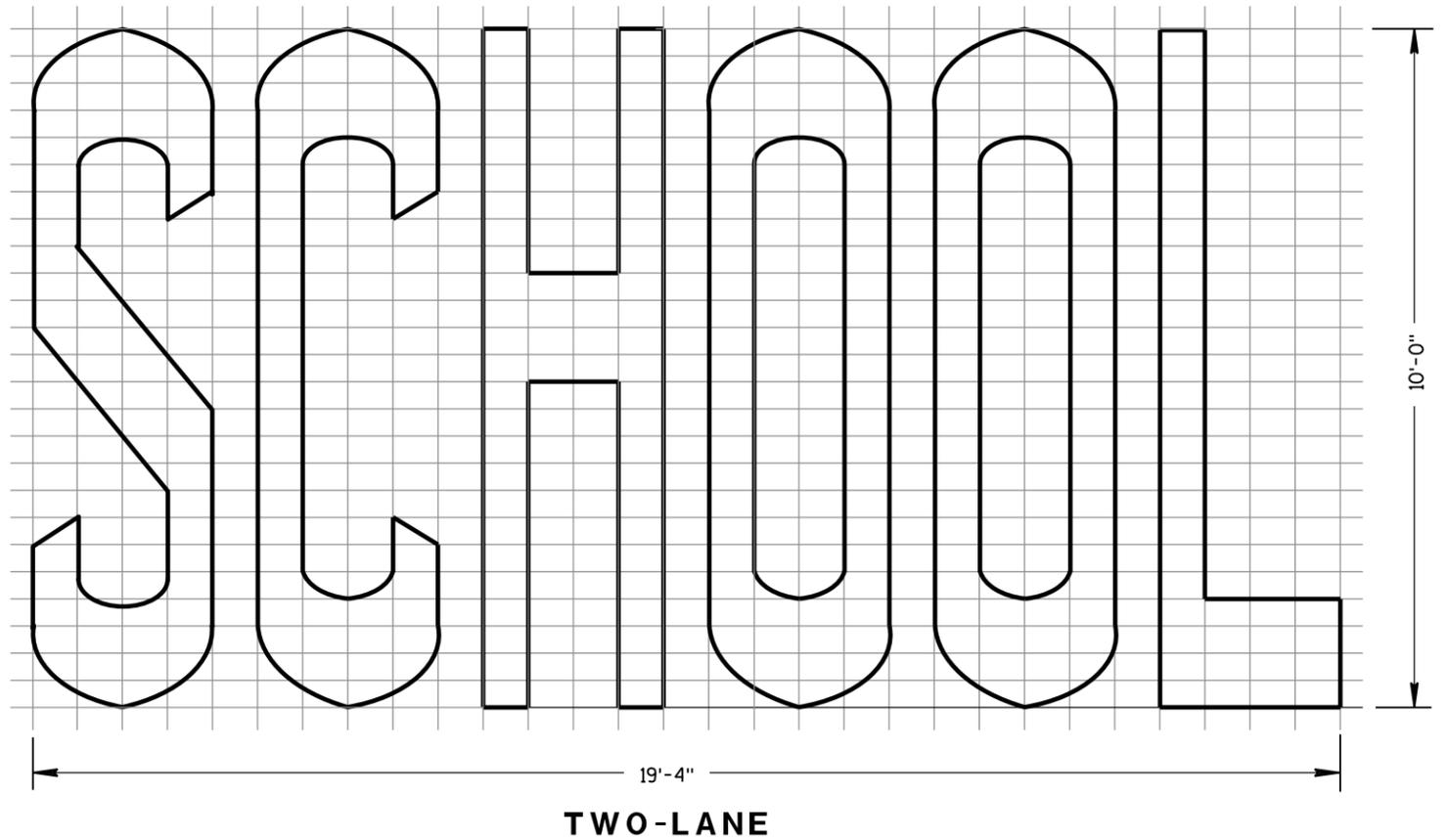
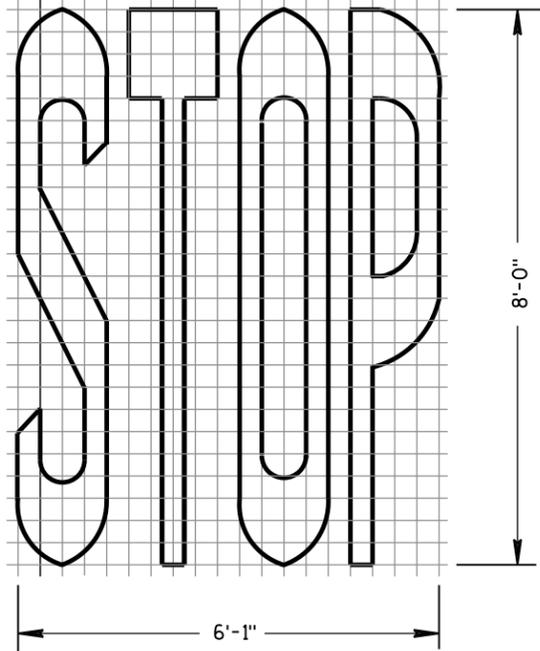
**DETOUR SIGNING FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

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



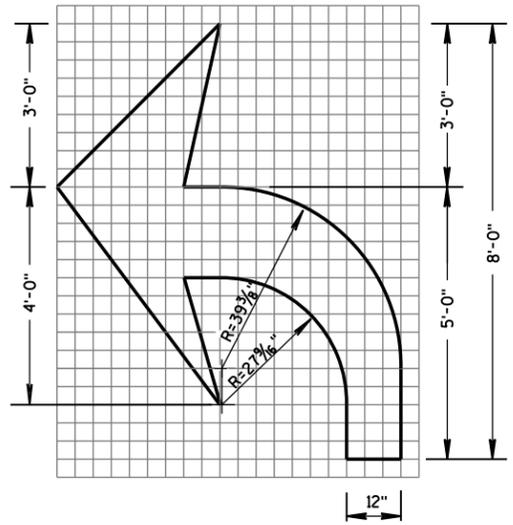
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

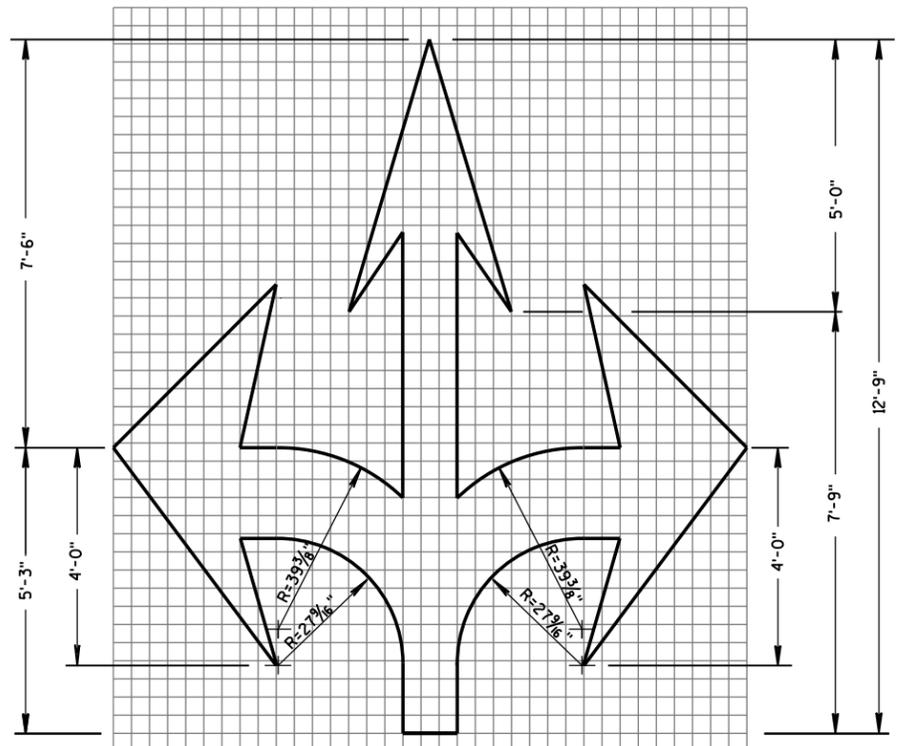
APPROVED

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

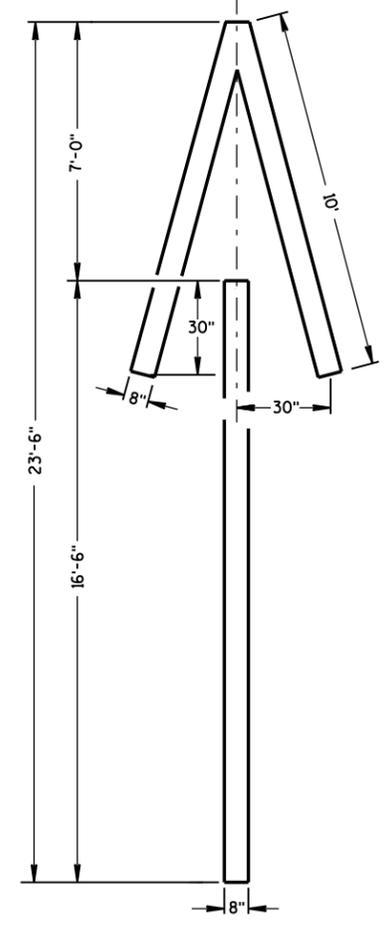
FHWA



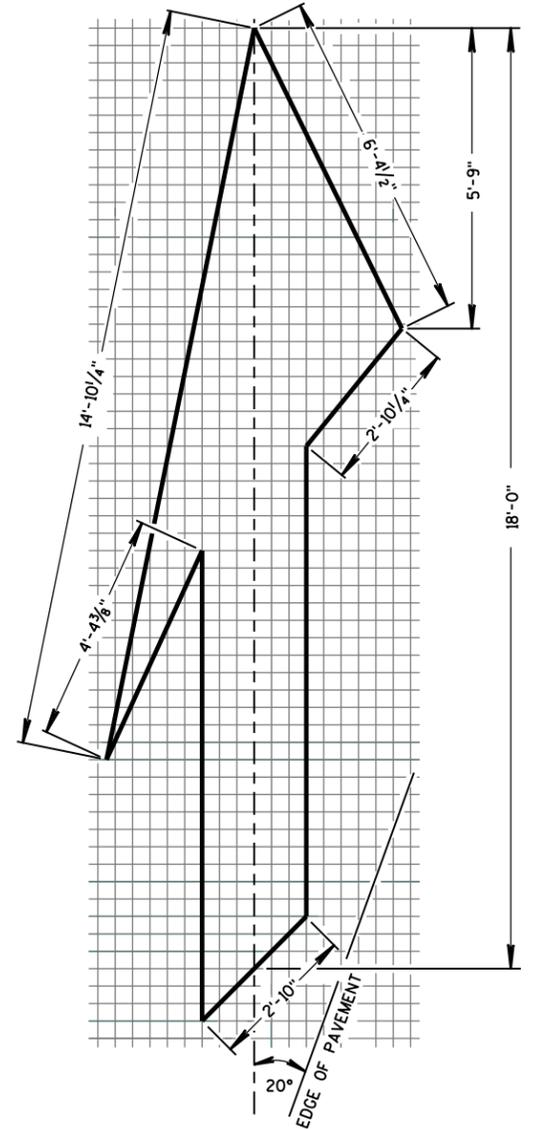
TYPE 2



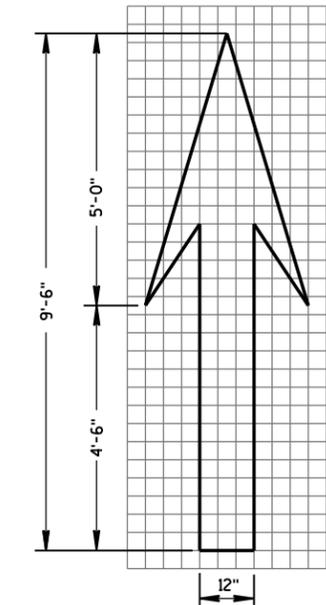
TYPE 6



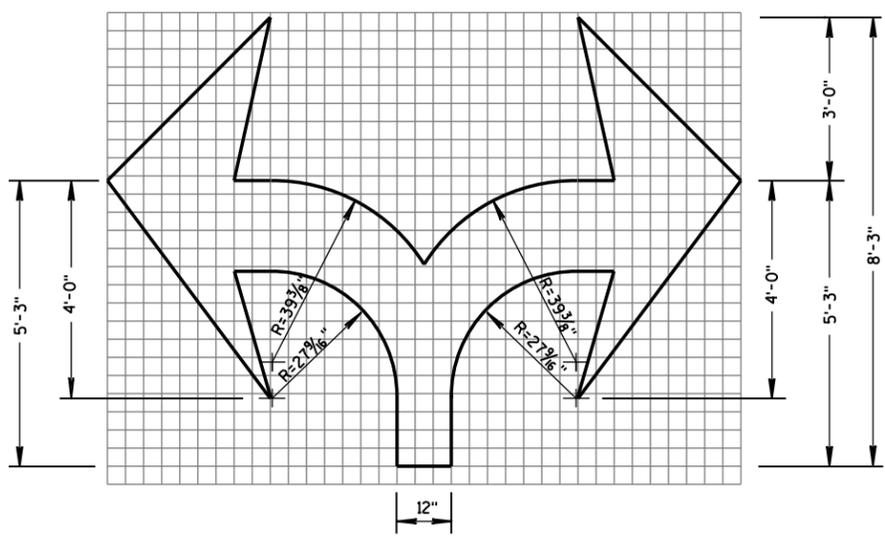
TYPE 4



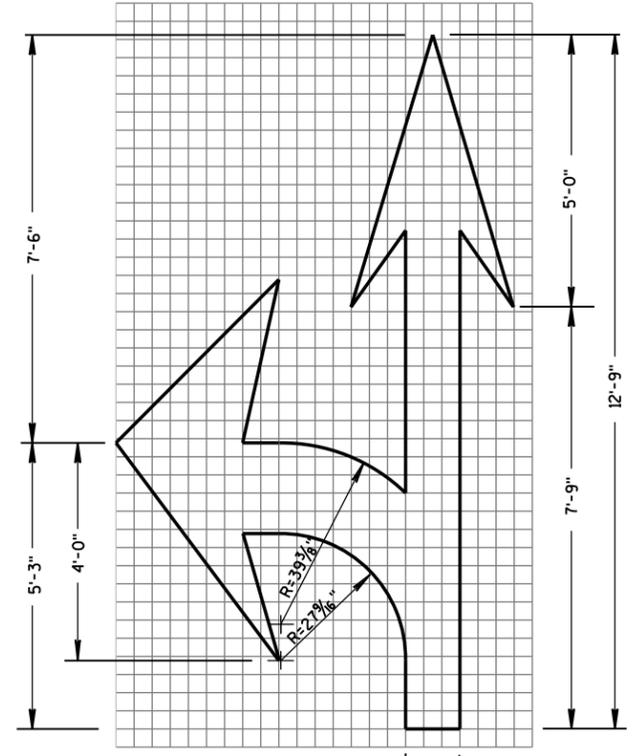
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7

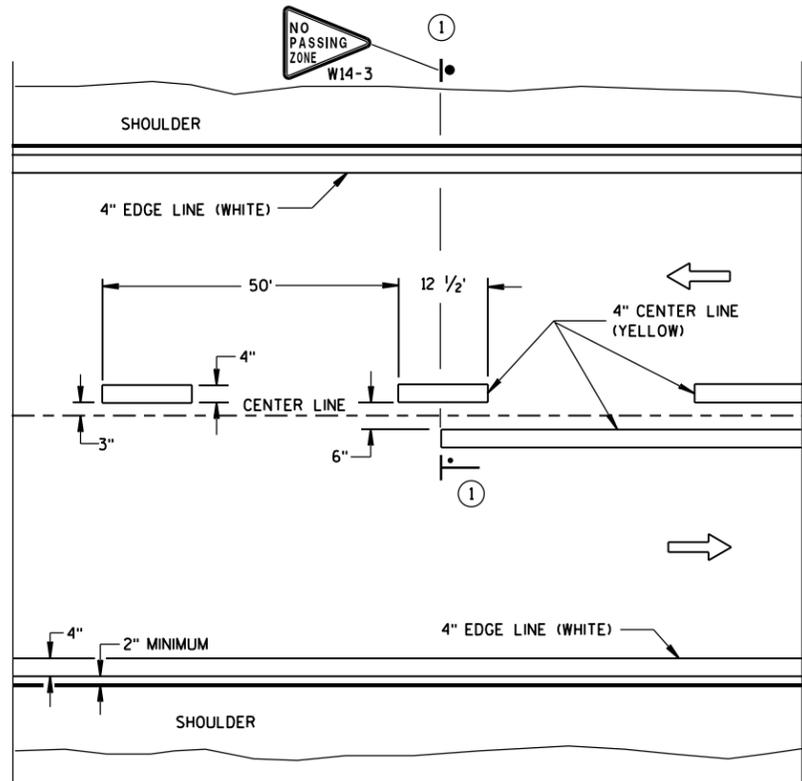


TYPE 3

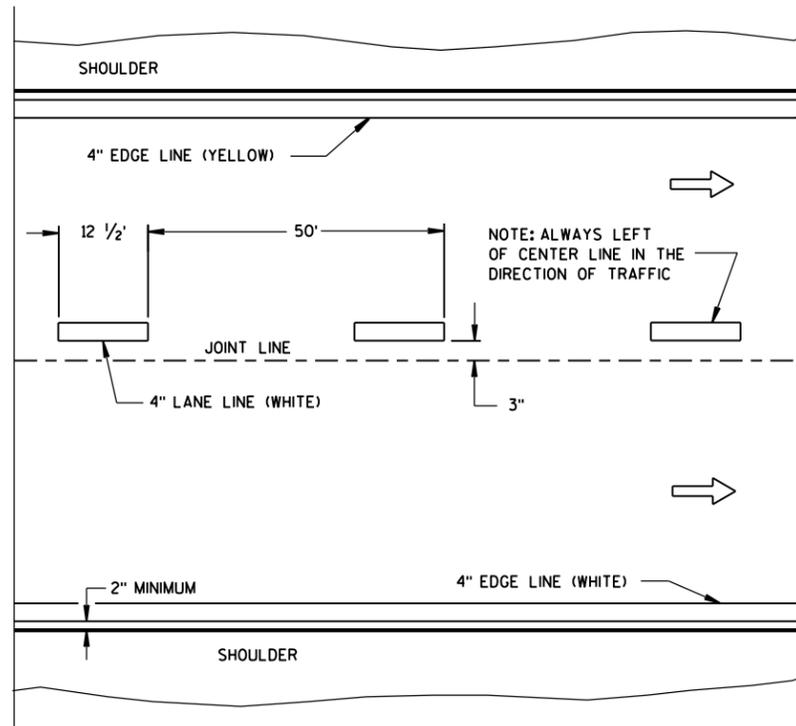
GENERAL NOTES

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

PAVEMENT MARKING ARROWS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

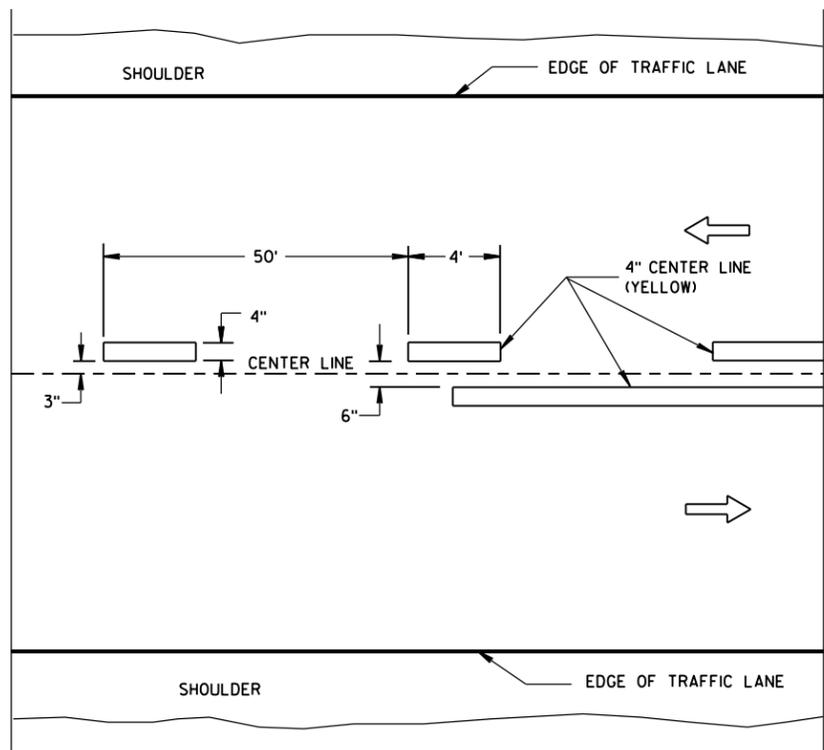


TWO WAY TRAFFIC

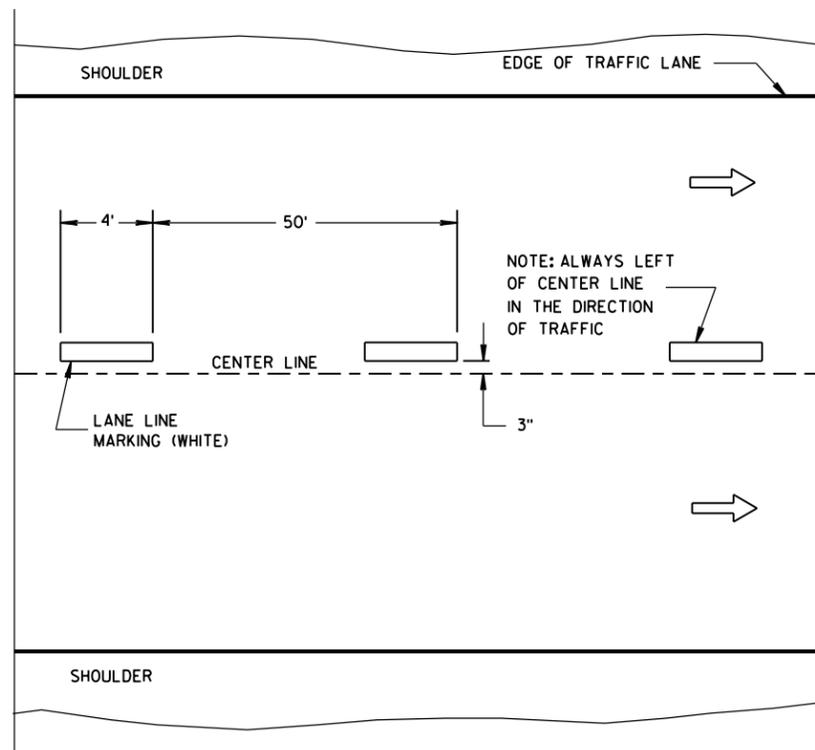


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

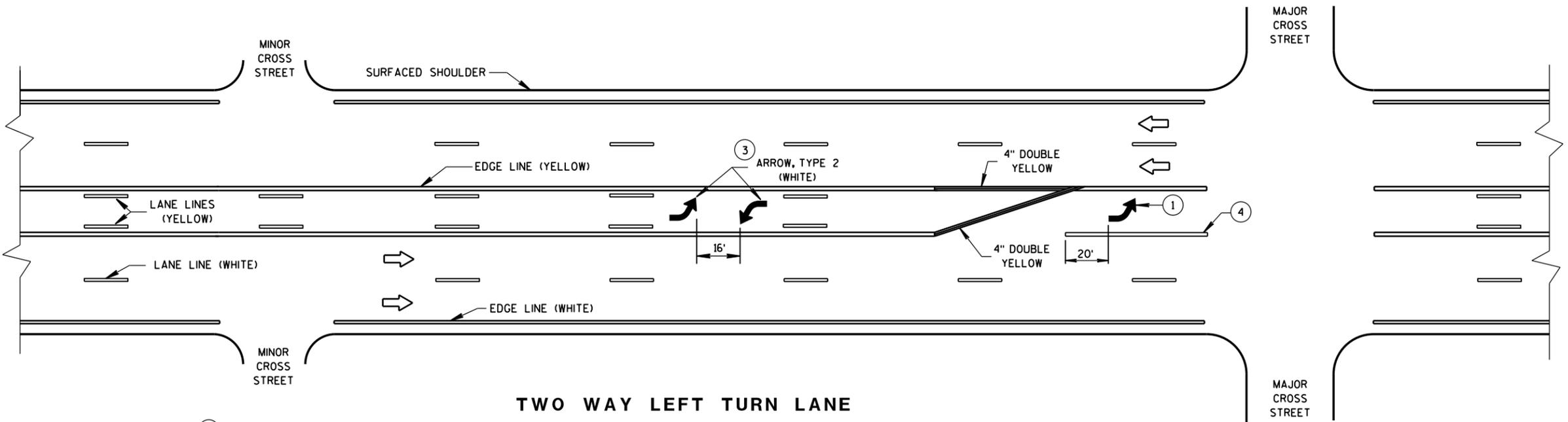
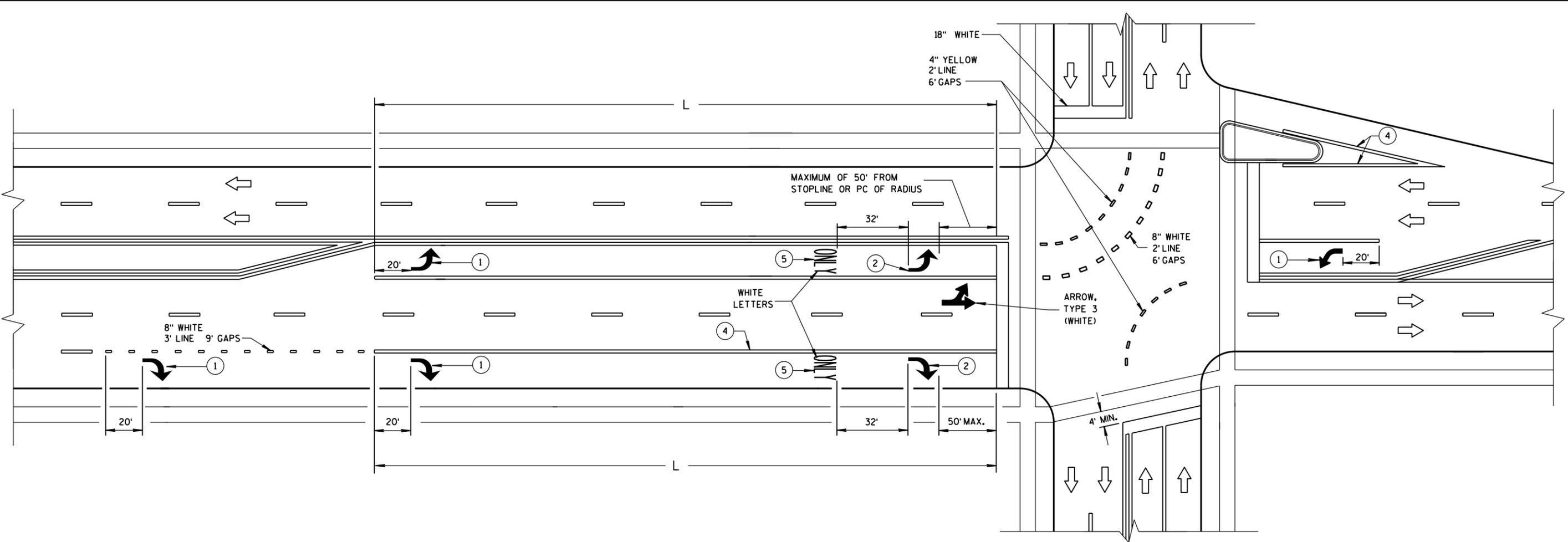
6

6

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



TWO WAY LEFT TURN LANE

GENERAL NOTES

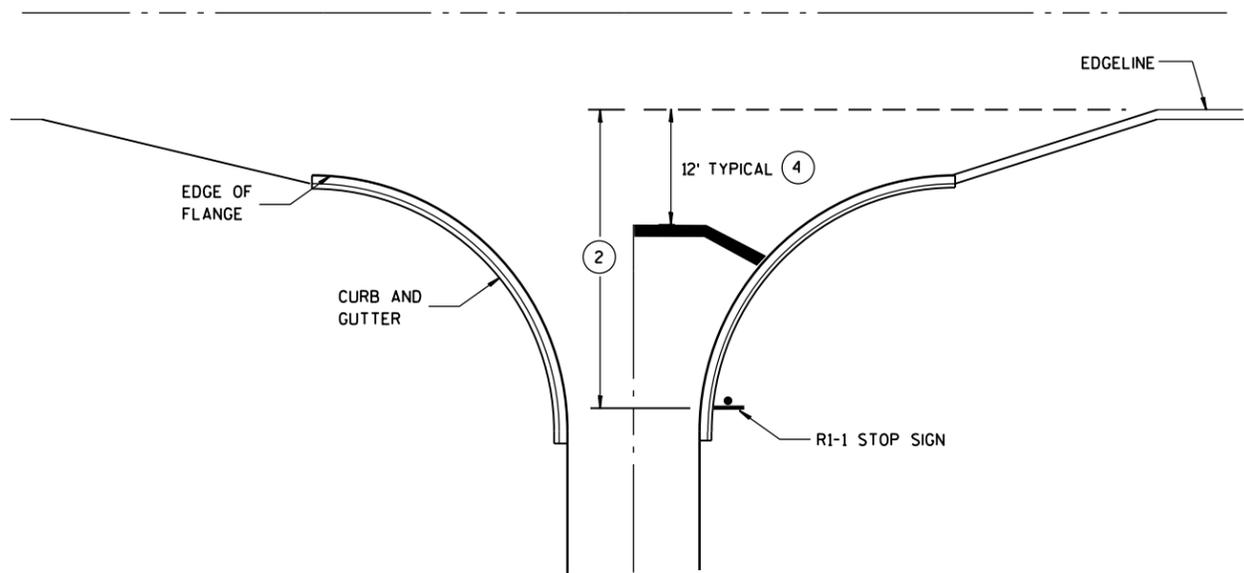
- ① REQUIRED ARROW, TYPE 2 (WHITE).
- ② REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ④ 8" WHITE
- ⑤ REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
 ARROW SYMBOL ()
 SHOWS DIRECTION OF TRAVEL

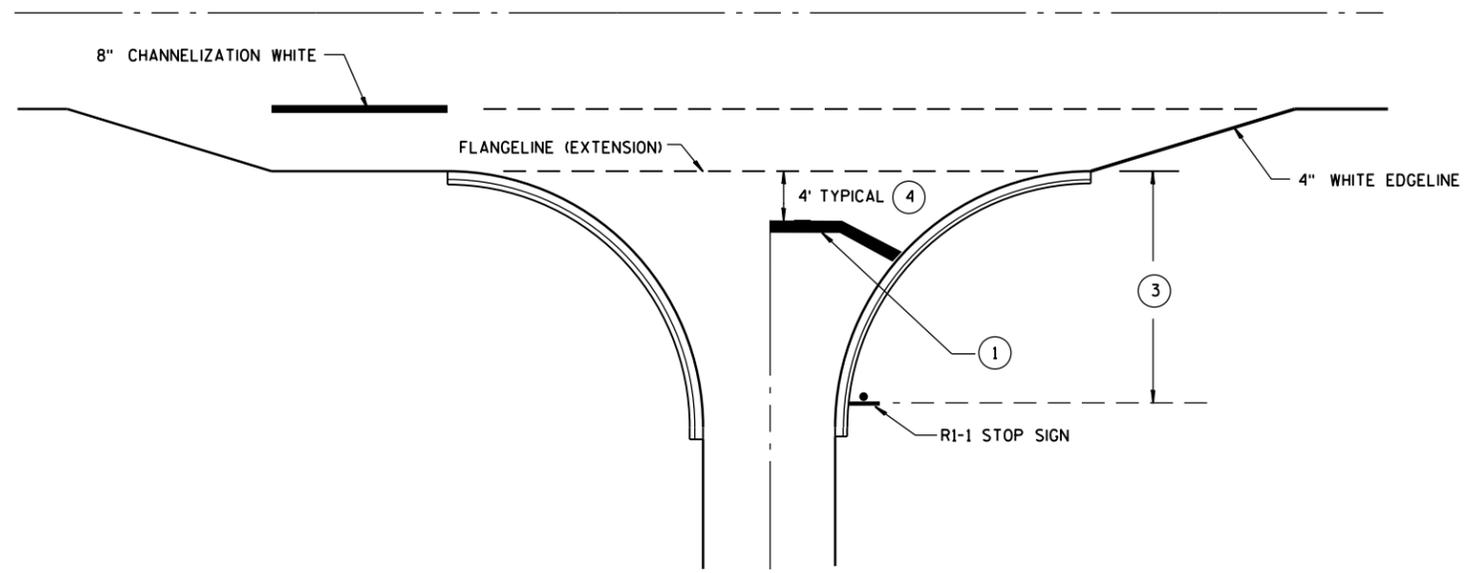
L = LENGTH OF TURN BAY

**PAVEMENT MARKING
(TURN LANES)**

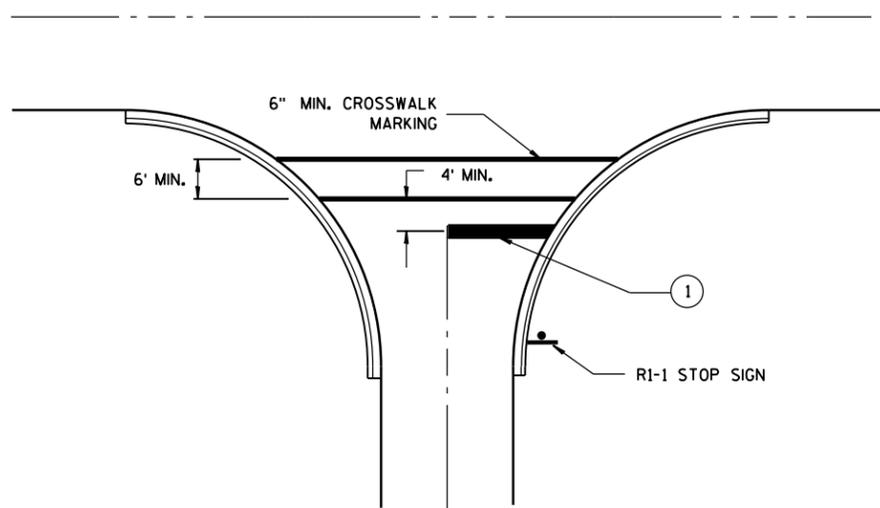
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



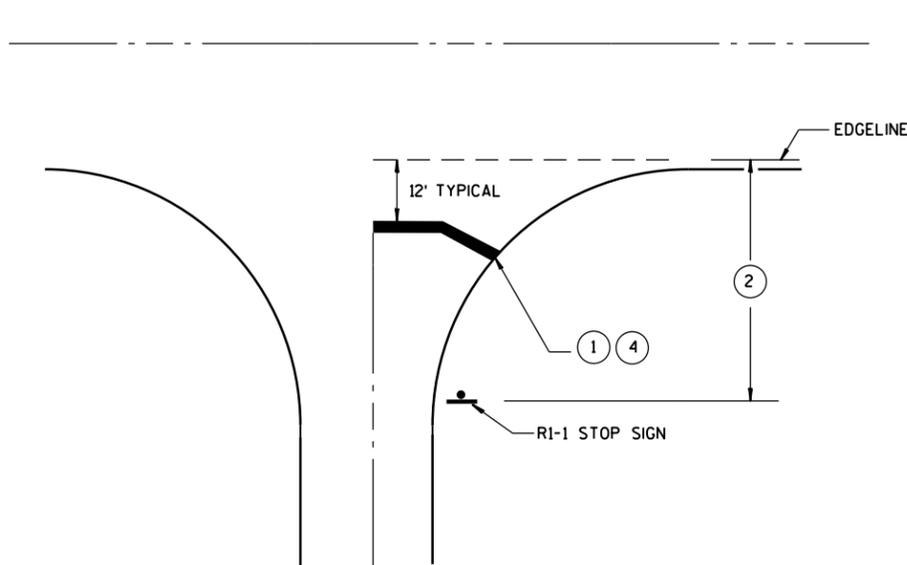
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

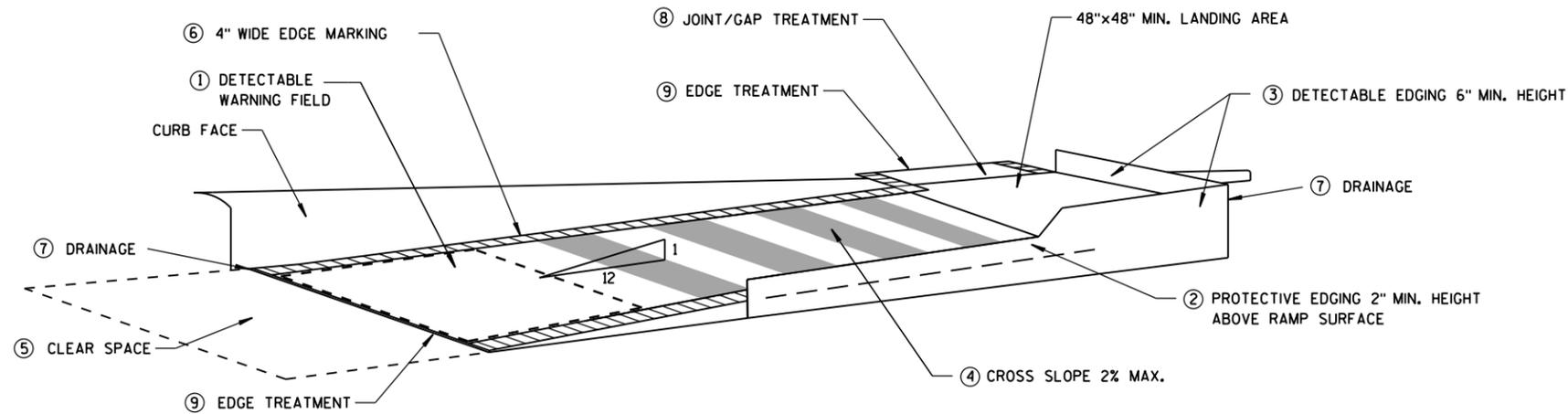
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

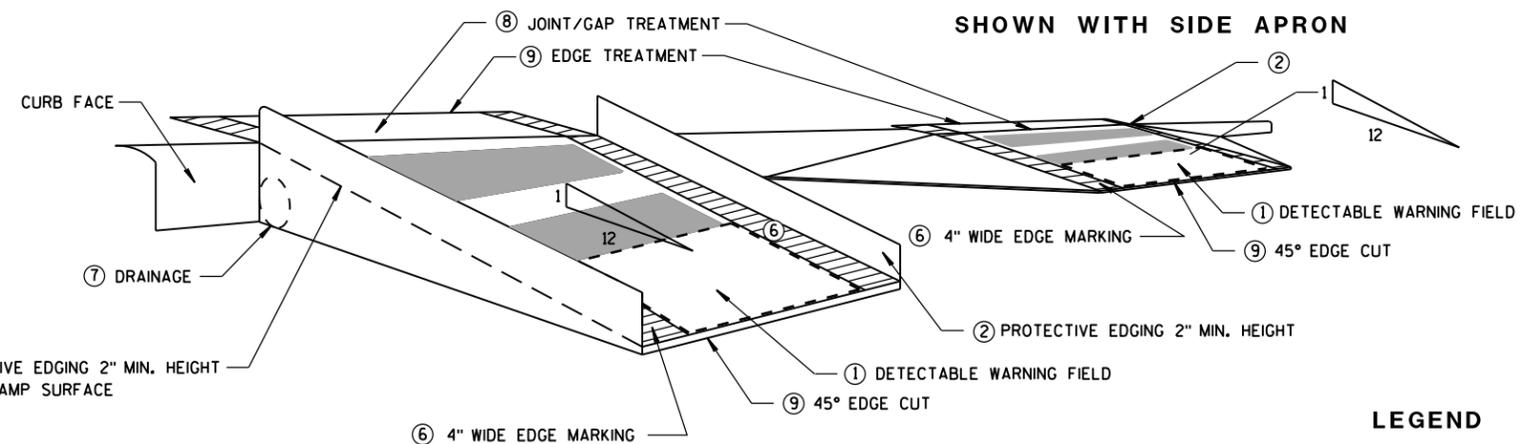
GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
- 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 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- ⑤ CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
- ⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- ⑩ 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.

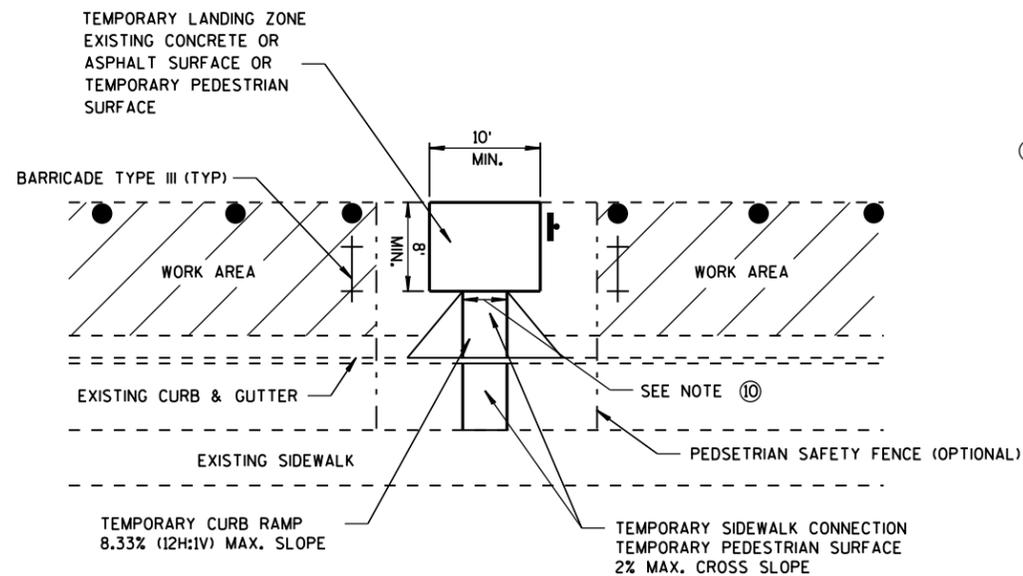


**TEMPORARY CURB RAMP
PARALLEL TO CURB**



SHOWN WITH PROTECTIVE EDGE

**TEMPORARY CURB RAMP
PERPENDICULAR TO CURB**



TEMPORARY BUS STOP PAD

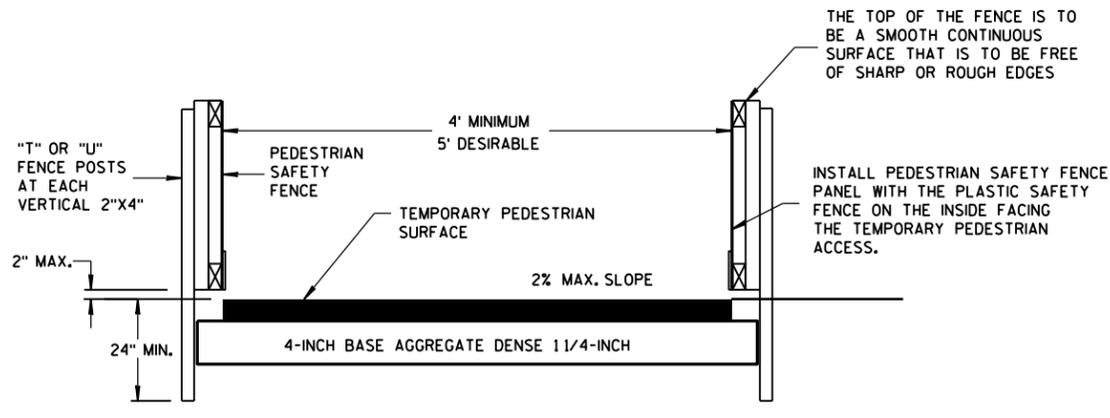
LEGEND

-  WORK AREA
-  TYPE III BARRICADE
-  TRAFFIC CONTROL DRUM

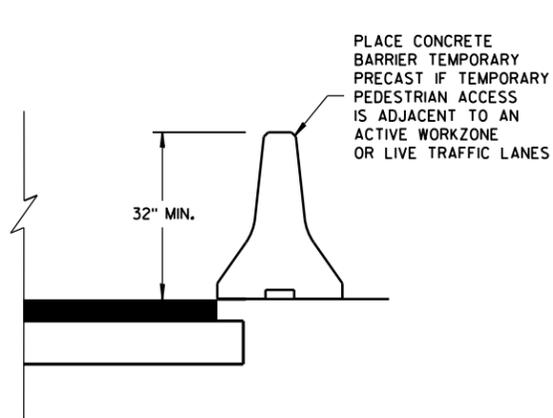
**TRAFFIC CONTROL,
TEMPORARY ADA COMPLIANT
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

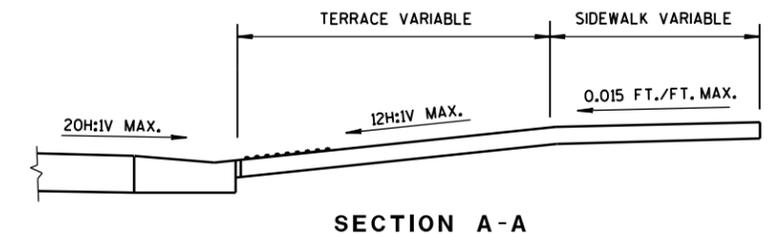


TEMPORARY PEDESTRIAN ACCESS

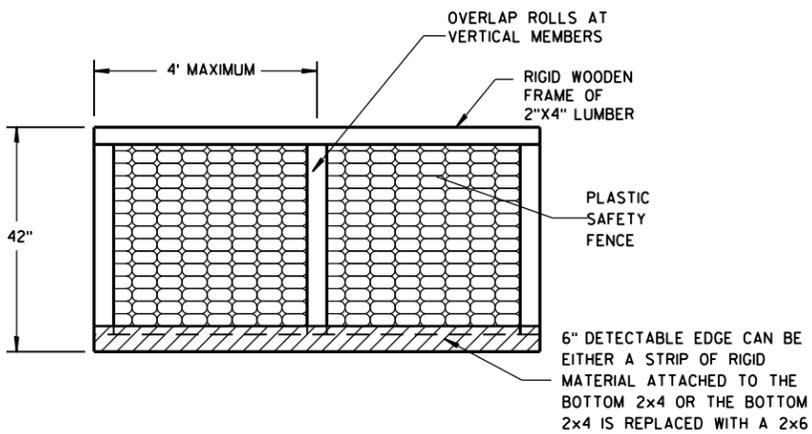


GENERAL NOTES

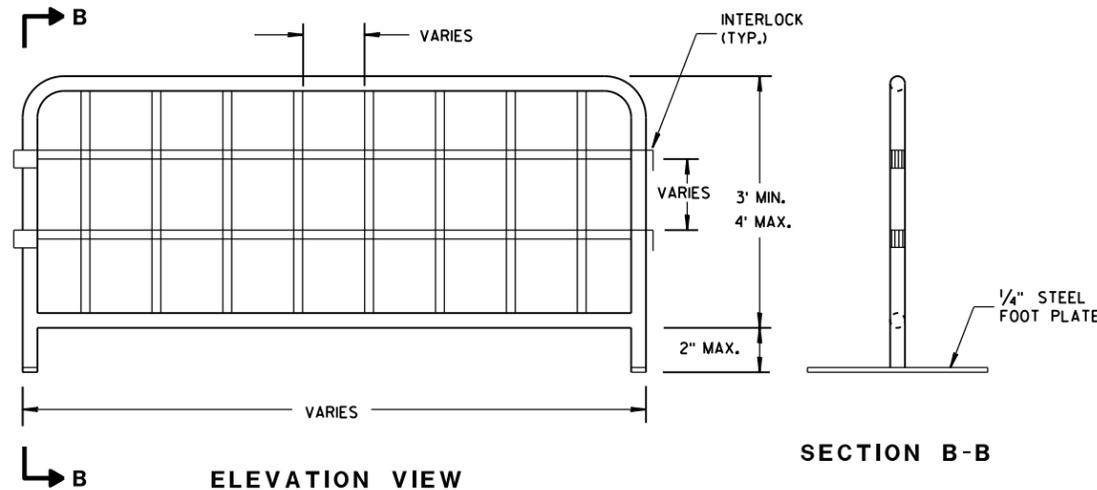
① INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



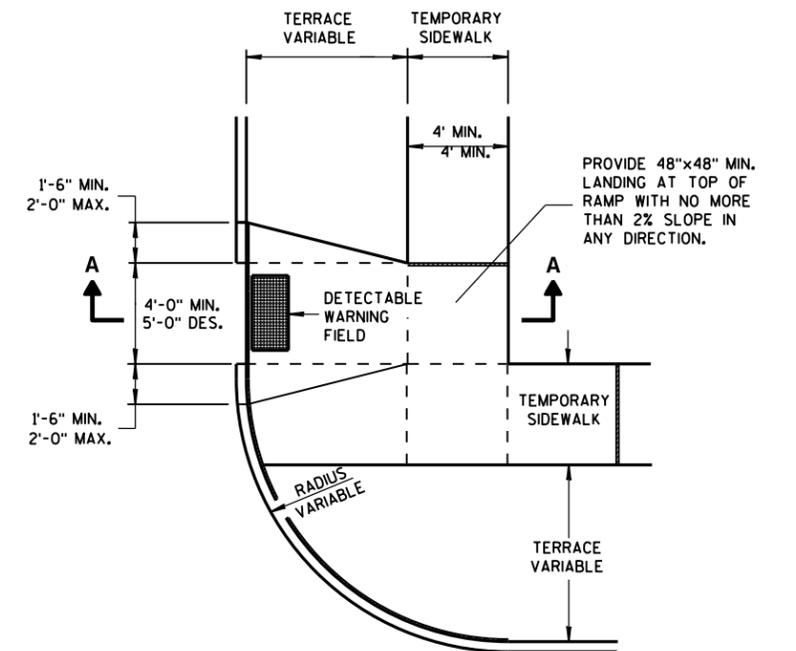
SECTION A-A



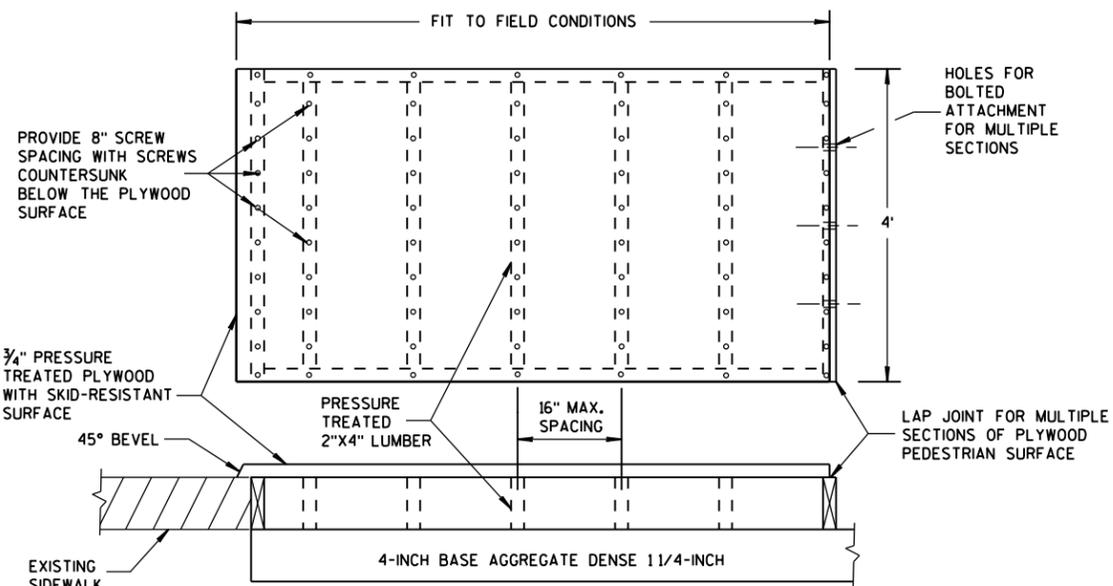
PEDESTRIAN SAFETY FENCE



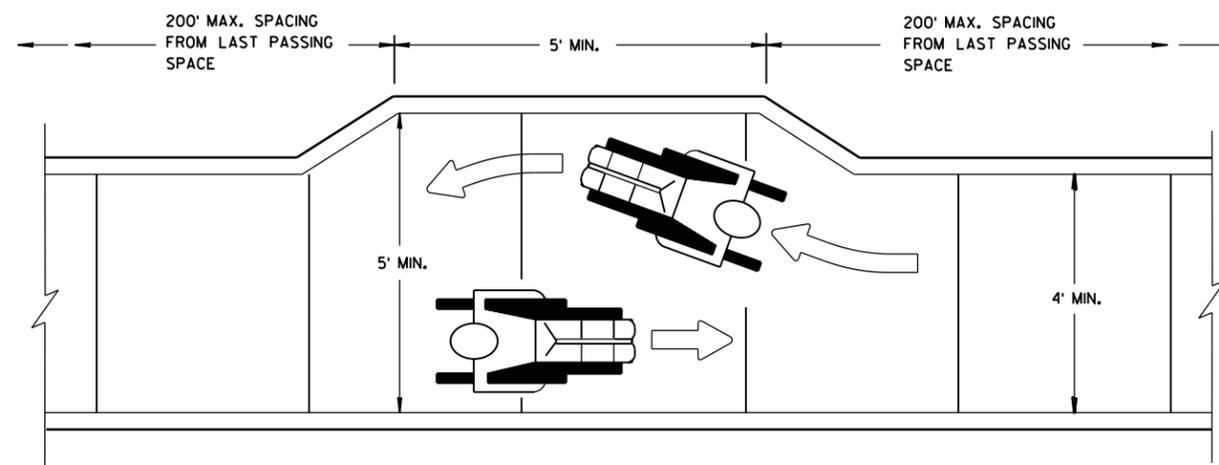
TEMPORARY PEDESTRIAN STEEL BARRICADE



TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

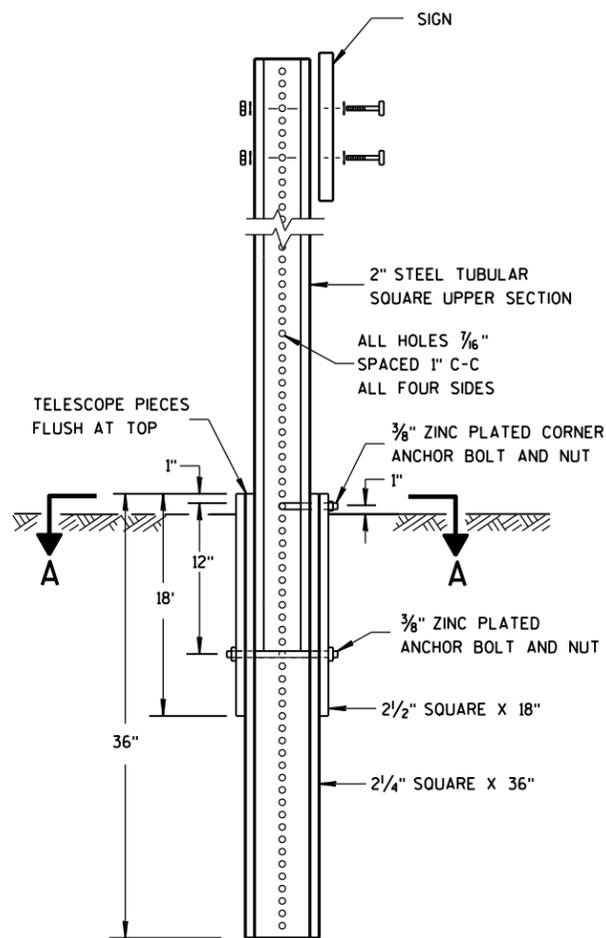


TEMPORARY PEDESTRIAN SURFACE PLYWOOD

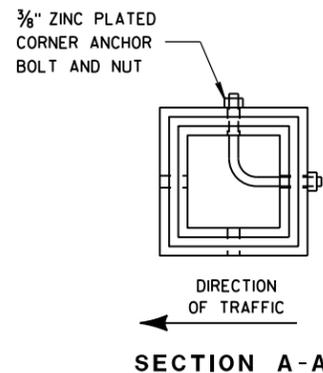


NARROW SIDEWALK PASSING DETAIL

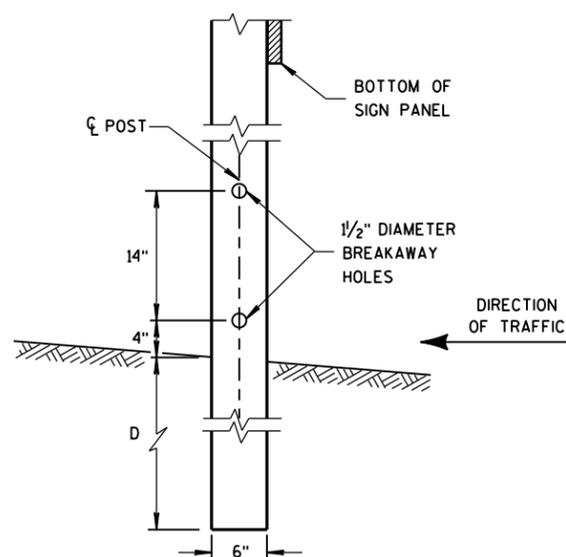
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



DETAIL OF TUBULAR STEEL SIGN POST



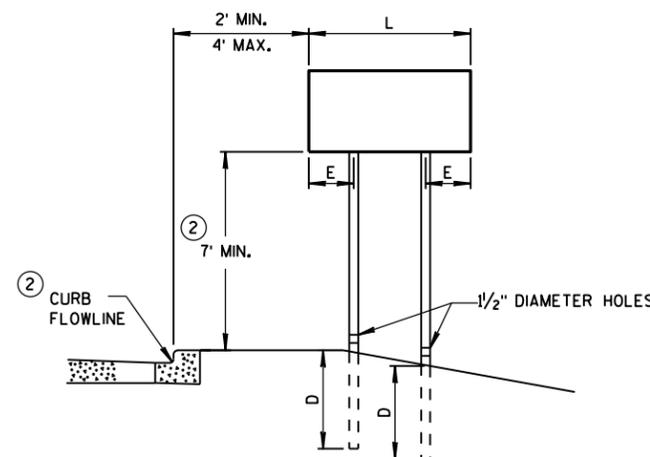
SECTION A-A



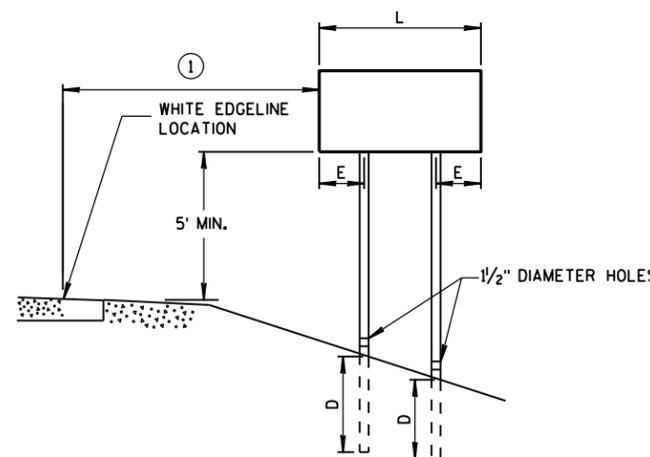
4" X 6" WOOD POST MODIFICATION

GENERAL NOTES

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



URBAN AREA



RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).
 SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

SEE NOTE ③

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

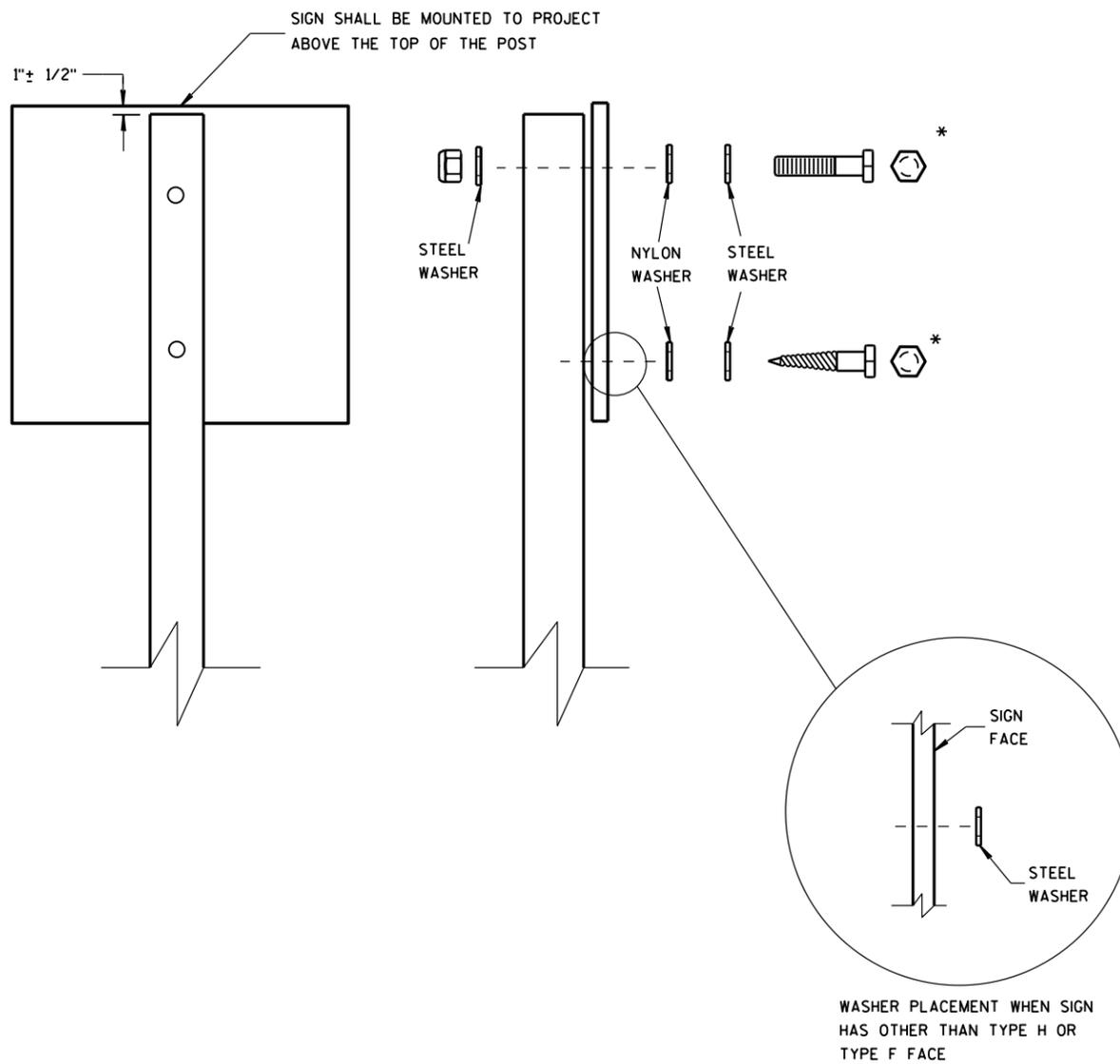
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

6

S.D.D. 15 D 38-2a

S.D.D. 15 D 38-2a



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

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

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

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

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

LAG SCREWS - 3/8" x 3"

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

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

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

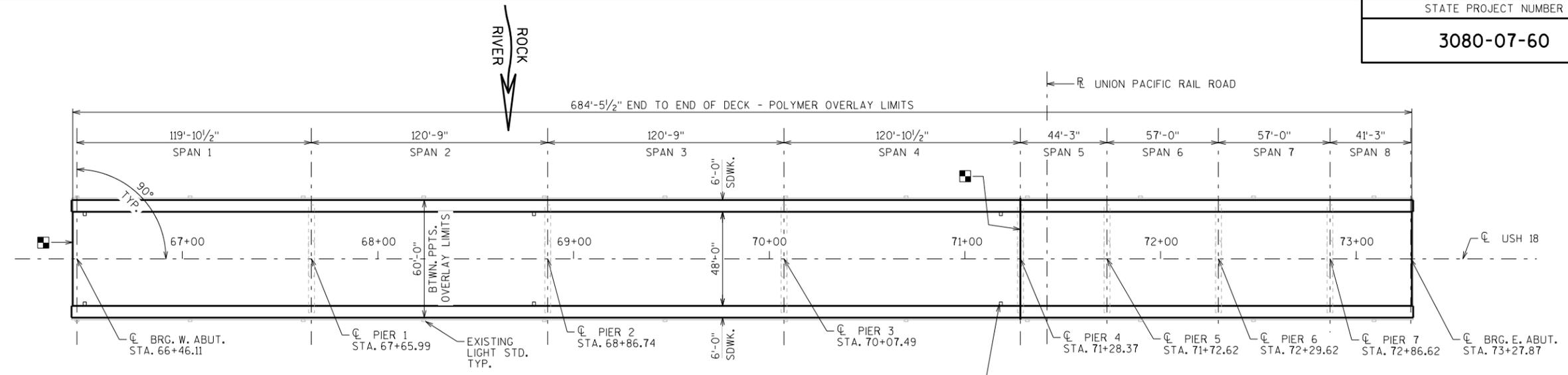
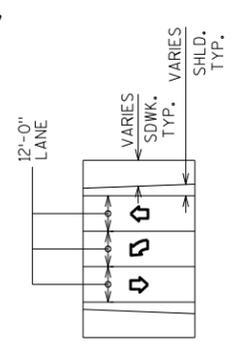
June 2017

DATE

FHWA

/s/ Andrew Heidtke

WORK ZONE ENGINEER



PLAN

8 SPAN PRESTRESSED GIRDER/HANCHED SLAB BRIDGE

EXPANSION JOINT - PRESERVE AND PROTECT BEFORE PLACING POLYMER OVERLAY

DESIGN DATA

LIVE LOAD:
 INVENTORY RATING: HS-21
 OPERATING RATING: HS-41
 MAXIMUM STANDARD PERMIT VEHICLE LOAD = 190 KIPS

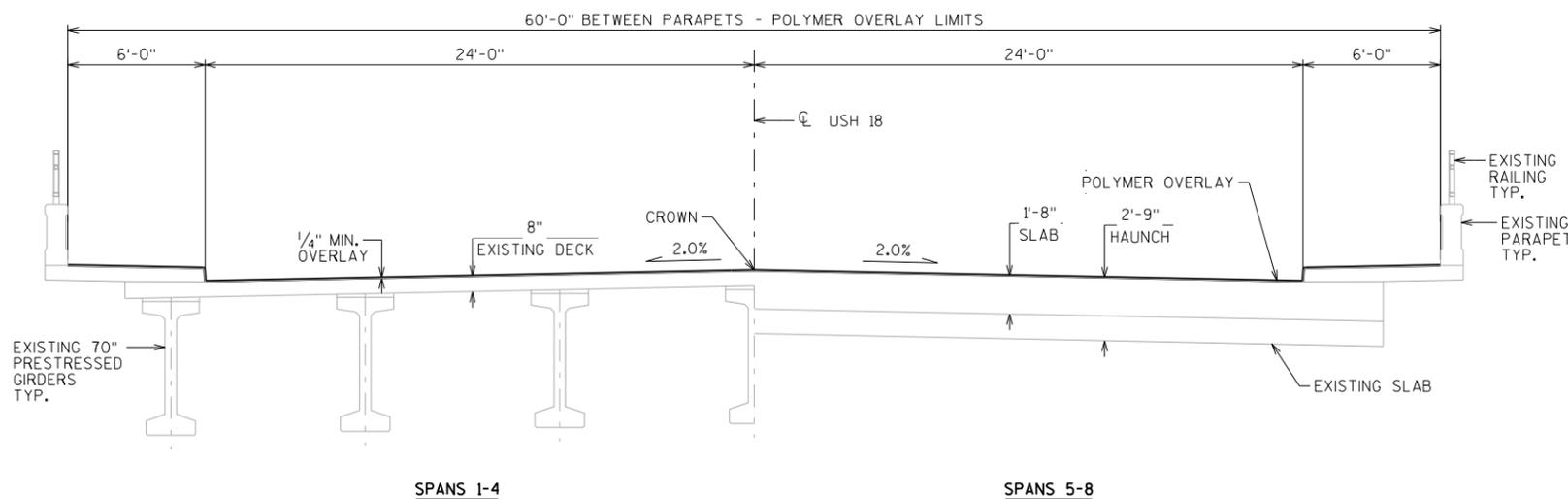
MATERIAL PROPERTIES:
 CONCRETE MASONRY:
 SUPERSTRUCTURE $f'_c = 4,000$ P.S.I.
 ABUTMENTS & PIERS $f'_c = 3,500$ P.S.I.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
 DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY"
 REMOVE ANY/ALL LOOSE CONCRETE AT ABUTMENTS, PIERS AND GIRDERS UNDER BID ITEM "CONCRETE SURFACE REPAIR". SURFACES SHALL BE BLAST CLEANED AND ANY EXPOSED STEEL SHALL BE BRUSH CLEANED PRIOR TO THE SURFACE REPAIRS BEING COMPLETED. REPAIR AREAS SHALL BE DETERMINED BY THE FIELD ENGINEER.
 OVERLAY ON THE SIDE AND TOP OF THE SIDEWALKS IS INCLUDED IN THE QUANTITY FOR BID ITEM "POLYMER OVERLAY".

LIST OF DRAWINGS

1. POLYMER OVERLAY



CROSS SECTION THRU ROADWAY

LOOKING UPSTATION

TRAFFIC VOLUME

USH 18
 ADT = 10,000 (2038)
 R.D.S. = 30 M.P.H.

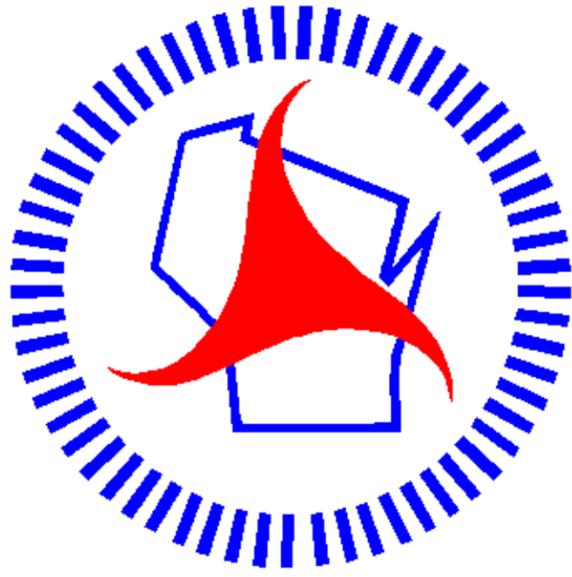
STRUCTURE DESIGN CONTACTS:
 MICHAEL LARSON (608) 267-4539
 LAURA SHADEWALD (608) 267-9592

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.1500	CONCRETE SURFACE REPAIR	SF	10
509.5100.S	POLYMER OVERLAY	SY	4,654

NO.	DATE	REVISION	BY
 ACCEPTED <i>William C. Decker</i> 11/27/17 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-28-89			
USH 18 OVER ROCK RIVER & UNION PACIFIC R.R.			
COUNTY	JEFFERSON	TOWN/CITY/VILLAGE	JEFFERSON
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	M.J.L.	DESIGNED CK'D.	DMB
DRAWN BY	M.J.L.	PLANS CK'D.	DMB
POLYMER OVERLAY			SHEET 1 OF 1

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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