WKE

FEB 13

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 = 48

PROJECT ID: 1090-07-74

WITH: N/A

COUNTY: MILWAUKEE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1090-07-74		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ZOO FREEWAY - WEST ALLIS

CLEVELAND AVE WATERMAIN, B-40-0122

IH 894/USH 45
MILWAUKEE COUNTY

STATE PROJECT NUMBER

1090-07-74

DESIGN DESIGNATION		IH 894/USH 45	CLEVELAND AVENUE
A.A.D.T. 2013	=	150,180	10,396
A.A.D.T. 2035	=	160,000	11,050
D.H.V. 2035	=	6.3	10.1
D.D.	=	58% EB/42% WB	52% EB/48% WB
T.	=	7.9%	0.4%
DESIGN SPEED	=	60 MPH	40 MPH
ESALS	=	-	-

CONVENTIONAL SYMBOLS

PLAN

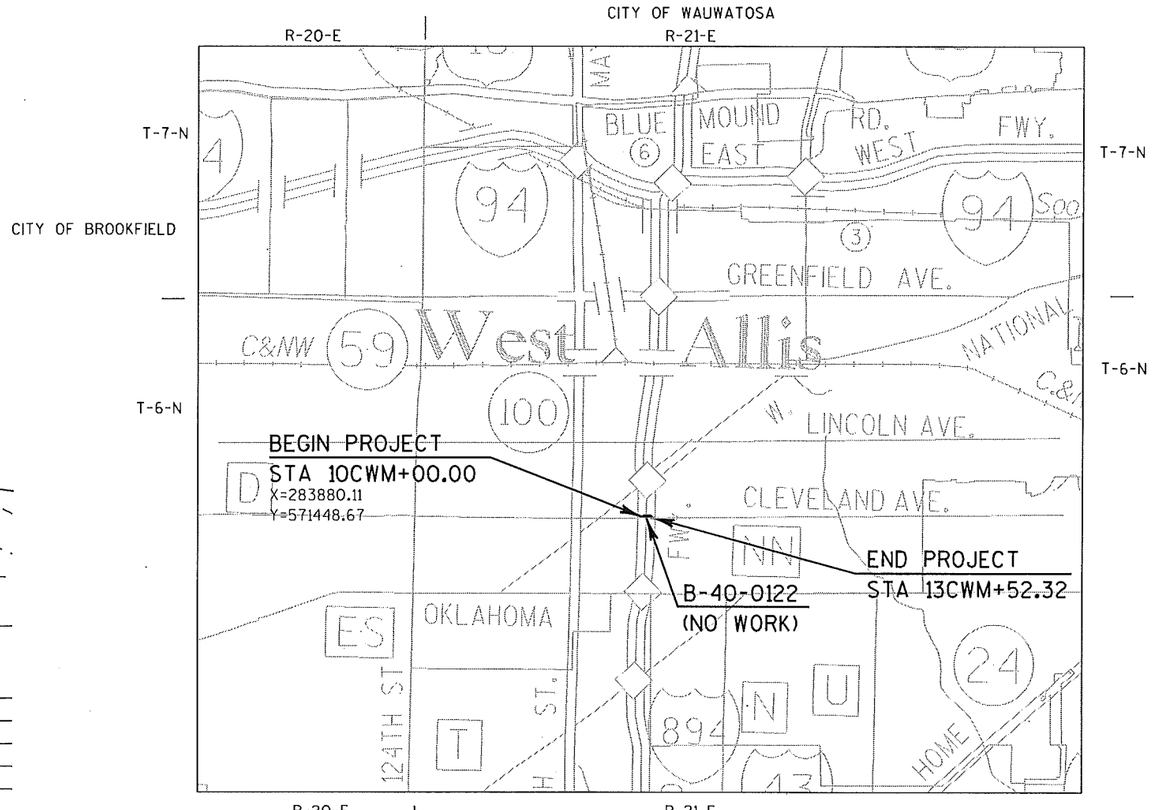
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS — CAUTION
- HIGH VOLTAGE — CAUTION
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

- ELECTRIC — E
- FIBER OPTIC — FO
- GAS — G
- OVERHEAD UTILITY — OH
- SANITARY SEWER — SAN
- STORM SEWER — SS
- TELEPHONE — T
- WATER — W
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE
- TRANSMISSION TOWER



LAYOUT SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MILWAUKEE COUNTY ZONE, NAD 83 (2007)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007)

ORIGINAL PLANS PREPARED BY

KAPUR & ASSOCIATES, INC.
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN
414.751.7200

WISCONSIN
TIMOTHY E. ANHEUSER
E-25058
BROOKFIELD, WI
PROFESSIONAL ENGINEER

10/1/12
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KAPUR & ASSOCIATES, INC.
Designer	GREGORY GOVERNATORI
Project Manager	JAMES KEEGAN
Regional Examiner	
Regional Supervisor	WAFA ELOAD
C.O. Examiner	CYB

APPROVED FOR THE DEPARTMENT

DATE: _____ Wafa Eloal
(Signature)

E

UTILITY CONTACTS

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MR. KEVIN ANDERSON
7721 W. FOND DU LAC AVENUE
MILWAUKEE, WI 53218
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ka8421@att.com

AT&T LEGACY - COMMUNICATION
MR. BILL KOENIG
JMC ENGINEERS & ASSOCIATES, INC.
P.O. BOX 2401
LAKE MILLS, WI 53551
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435 S. 95TH STREET
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TIME WARNER CABLE
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1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE: (414) 277-4045
Steve.cramer@twcable.com

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WEST ALLIS, WI 53214
PHONE: (414) 221-3529
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WISCONSIN GAS COMPANY d/b/a WE ENERGIES
SEND ALL CORRESPONDENCE TO:
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pdaniels@westalliswi.gov

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7525 W. GREENFIELD AVENUE
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matthew.pfeifer@dot.wi.gov

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WAUKESHA, WI 53187-0798
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John.haug@dot.state.wi.us

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STATE AGENCIES

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James.keegan@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION
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OTHER AGENCIES

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10190 W. WATERTOWN PLANK ROAD
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csmeltzer@milwcnty.com

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MILWAUKEE COUNTY TRANSIT
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COORDINATOR OF STREET SUPERVISION
MILWAUKEE COUNTY TRANSIT SYSTEM
1942 N. 17H STREET
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PHONE: (414) 343-1764
dziarek@mcts.org

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

GENERAL NOTES

UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND BEST INFORMATION AVAILABLE FROM EXISTIN G PLANS. IT IS EXPECTED THAT THERE MAY BE DISCREPANCIES AND OMISSIONS IN THE LOCATION AND QUANTITIES OF UTILITIES AND STRUCTURES SHOWN. VERIFY ALL LOCATIONS IN THE FIELD AND IF NECESSARY, PER SPV.0060.001. EXPOSE EXISTING UTILITY, AS APPROVED BY THE ENGINEER.

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

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

SAWCUT CONCRETE PAVEMENT AT THE MATCHLINE AS SHOWN ON THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.

SEED, FERTILIZE AND EROSION MAT ALL TOPSOILED AREAS WITHIN 5-7 DAYS AFTER PLACEMENT.

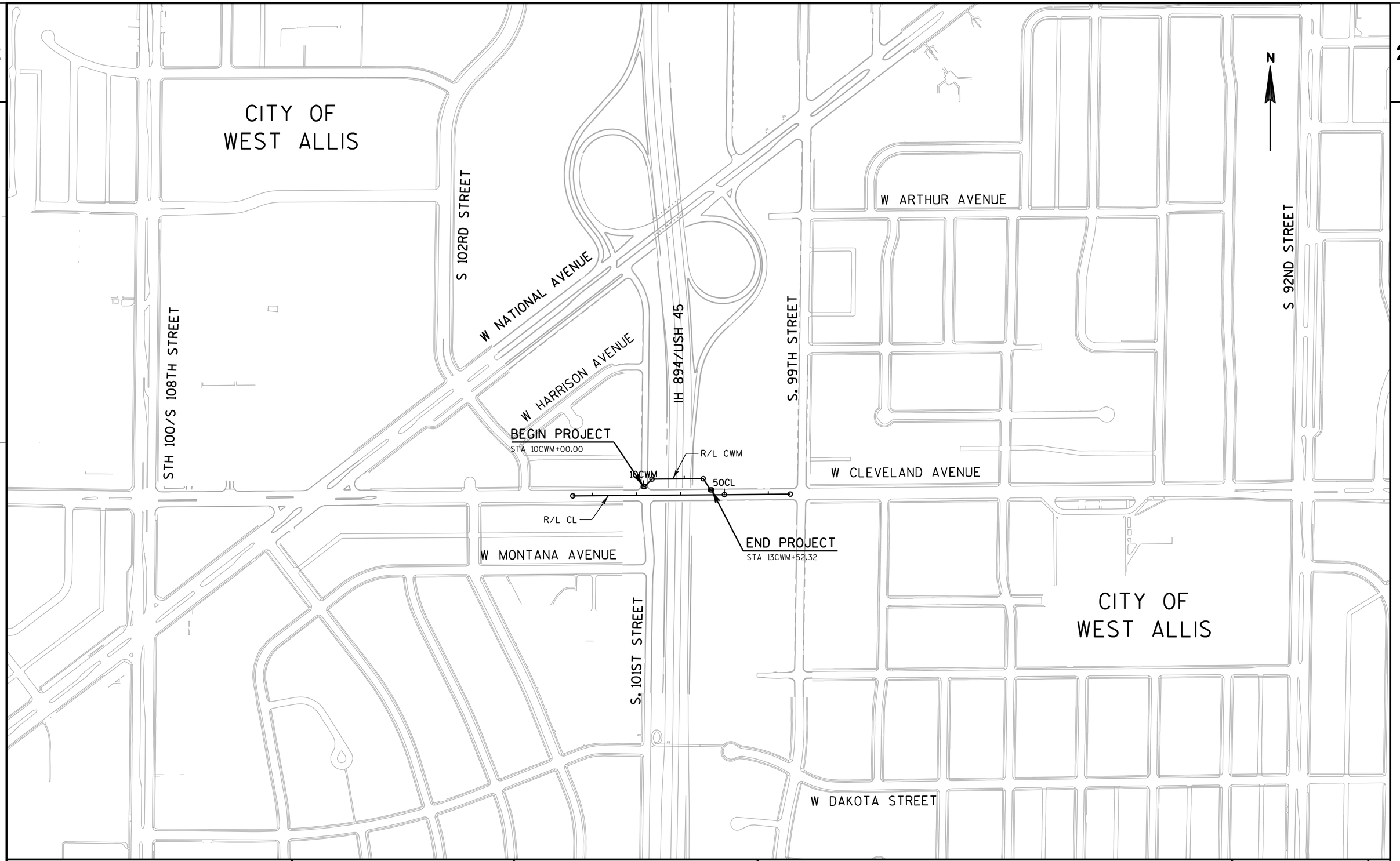
FOR BENCHMARK INFORMATION, SEE THE ALIGNMENT LAYOUT SURVEY CONTROL SHEET.

REMOVAL OF UNFORSEEN BOULDERS IN THE CASING BORE PATH WILL BE NEGOTIATED AT THE TIME OF CONSTRUCTION.

ORDER OF SECTION 2 DETAIL SHEETS

STANDARD ABBREVIATIONS

AGG	AGGREGATE
ASPH	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
CL	CLEVELAND AVENEUE ALIGNMENT
C/L	CENTER OR CONSTRUCTION LINE
CIWM	CAST IRON WATER MAIN
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CONTROL POINT
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
CWM	CLEVELAND AVE WATER MAIN ALIGNMENT
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
DIWM	DUCTILE IRON WATER MAIN
EB	EASTBOUND
FE	FIELD ENTRANCE
FL	FLOW LINE
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
IE	INVERT ELEVATION
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LP	LOW POINT
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PGL	PROFILE GRADE LINE
PLE	PERMANENT LIMITED EASEMENT
PL	PROPERTY LINE
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RJDI	RESTRAINED JOINT DUCTILE IRON
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
STOC	STATE TRAFFIC OPERATIONS CENTER
SS	STORM SEWER
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WB	WESTBOUND
WM	WATER MAIN



PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\020201_po.dgn PLOT DATE : 01-OCT-2012 12:30 PLOT BY : MSCD1S PLOT NAME : 020201_po PLOT SCALE : 400:1

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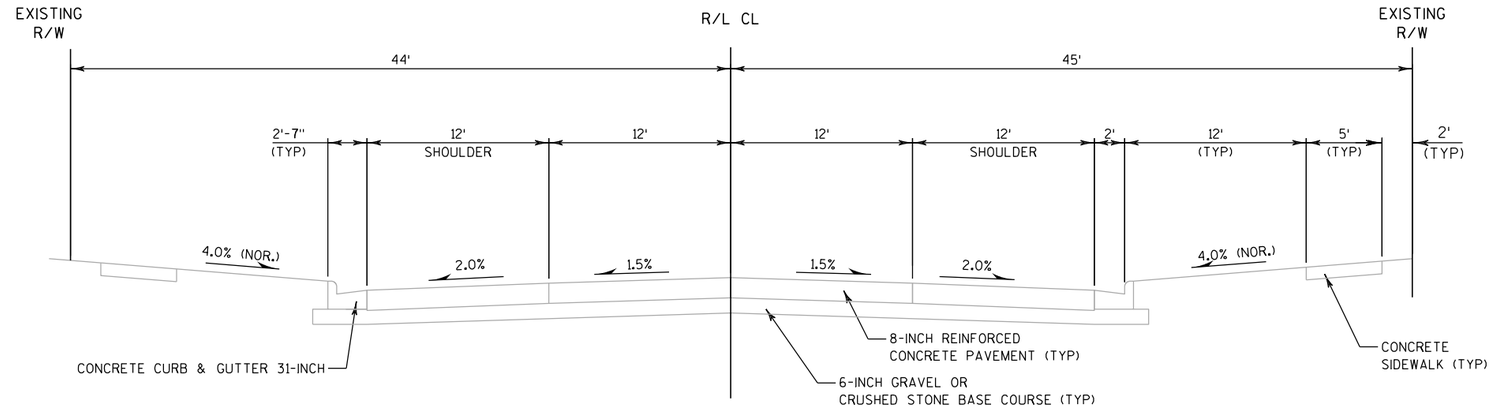
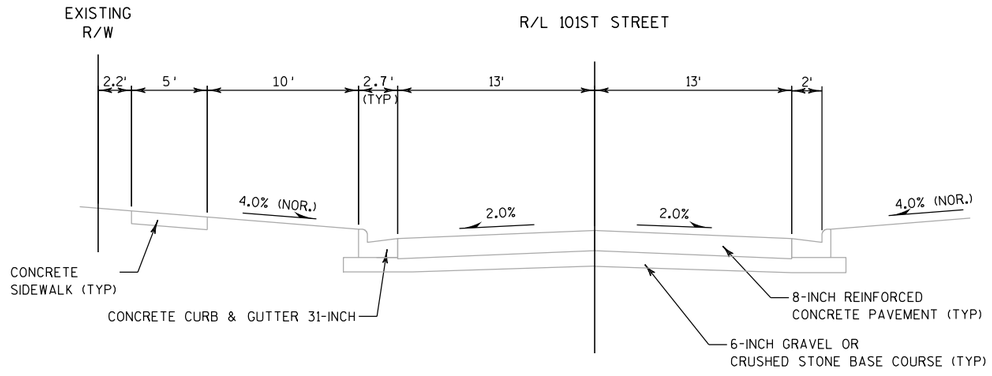


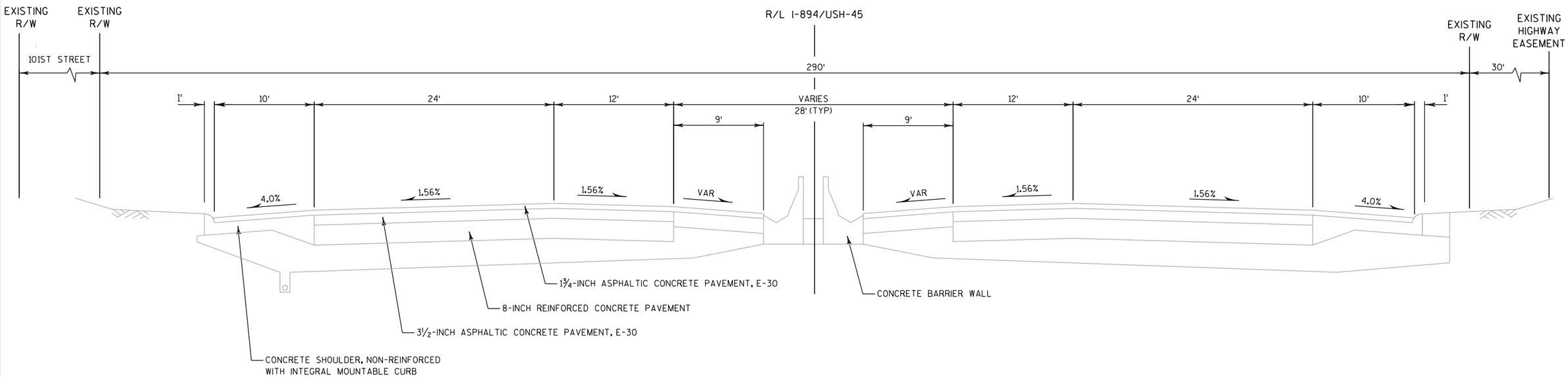
TYPICAL EXISTING SECTION
W CLEVELAND AVE
STA 45CL+00 TO 52CL+20.90



TYPICAL EXISTING SECTION
S 101ST STREET

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET	E

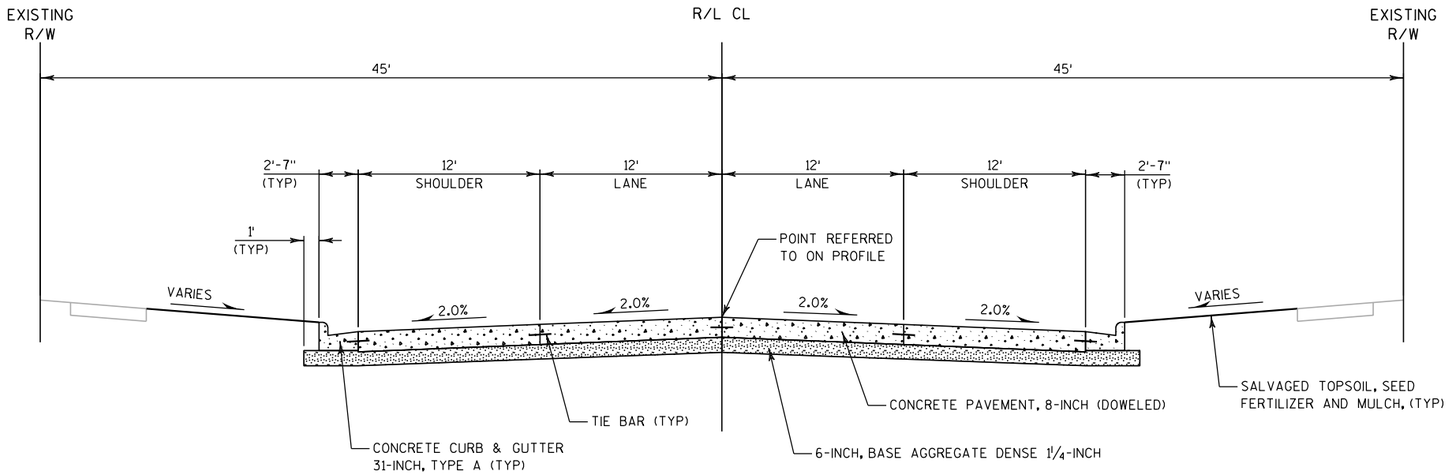
2



TYPICAL EXISTING SECTION
IH 894/USH 45

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET	E

2



TYPICAL FUTURE SECTION

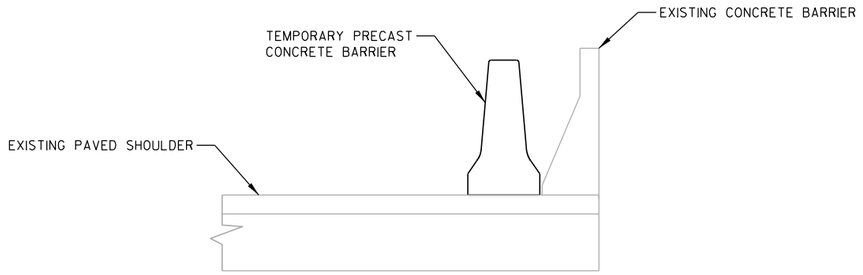
W CLEVELAND AVE

STA 45CL+00 TO 52CL+20.90

(BY OTHERS)

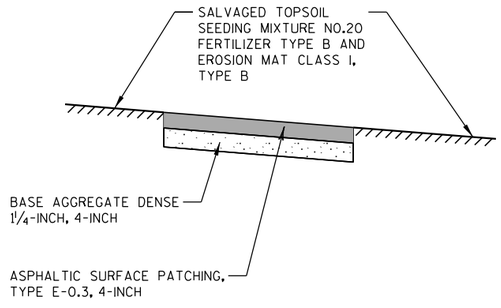
PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET	E

2



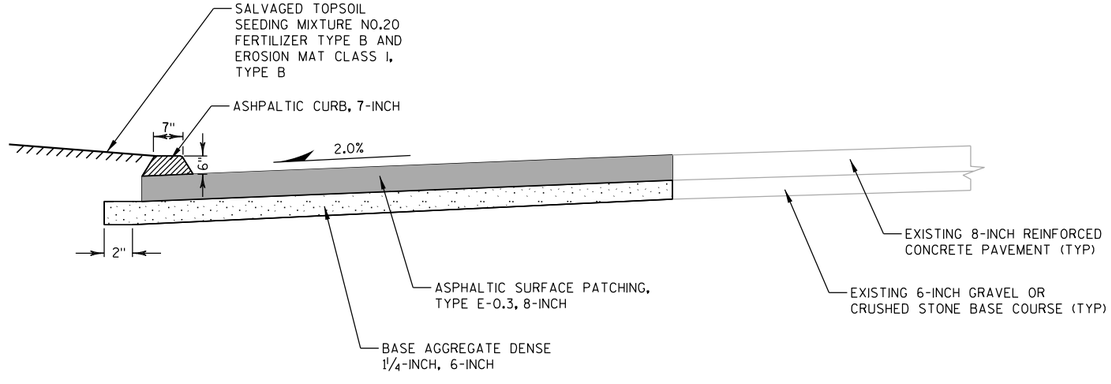
TEMPORARY PRECAST CONCRETE BARRIER INSTALLATION

IH 894/USH 45 NB
(NOT TO SCALE)



SIDEWALK REPAIR

W. CLEVELAND AVENUE
(NOT TO SCALE)



PAVEMENT REPAIR

W. CLEVELAND AVENUE
AND
S. 101ST STREET
(NOT TO SCALE)

2

S. 101ST STREET

EXIST R/W

DO NOT BLOCK EXISTING GUIDE SIGN AND/OR DAMAGE SIGN OR SIGN FOOTINGS.

END 46CL+68, 110.7'LT REMOVING FENCE

EXIST R/W

REMOVING CURB AND GUTTER

CAUTION

CAUTION

REMOVING PAVEMENT

SAWING CONCRETE

BEGIN 46CL+66, 45.7'LT REMOVING FENCE

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

30'

11CWM

12CWM

10CWM

REMOVE NOISE BARRIER: THREE PANELS, SUPPORTS AND FOOTINGS. FOOTING DEPTH ESTIMATED AT ⅔ OF WALL HEIGHT.

EXISTING NOISE BARRIER SUPPORT AND FOOTING TO REMAIN

20'

15CWM

EXIST R/W

CAUTION

HIGHWAY EASEMENT

END 49CL+24, 69.9'LT REMOVING FENCE

HIGHWAY EASEMENT

REMOVING CONCRETE SIDEWALK

HIGHWAY EASEMENT

HIGHWAY EASEMENT

REMOVING CURB AND GUTTER

EXIST R/W

EXIST R/W

BEGIN 49CL+03, 32.1'LT REMOVING FENCE

SAWING CONCRETE

REMOVING PAVEMENT

46CL

47CL

48CL

49CL

50CL

51CL

W CLEVELAND AVENUE

N

REMOVAL LEGEND

- CLEARING AND GRUBBING
- REMOVING PAVEMENT
- REMOVING CONCRETE SIDEWALK
- REMOVING CURB AND GUTTER
- REMOVING FENCE
- REMOVING NOISE BARRIER
- XXXX SAWING CONCRETE

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	REMOVAL PLAN	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\021101_rm.dgn PLOT DATE : 01-OCT-2012 12:32 PLOT BY : MSCD1S PLOT NAME : PLOT SCALE : 40:1

2

S 101ST STREET

EXIST R/W

EXIST R/W

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

EXIST R/W

HIGHWAY EASEMENT

N

11CWM

12CWM

13CWM

+51.61
58.68' LT

ASPHALTIC CURB 7-INCH

+35.68
45.34' LT

EXIST R/W

10CWM

+26.76
45.37' LT

+26.73
35.37' LT

+39.81
35.32' LT

+51.54
44.95' LT

+49.02
44.54' LT

ASPHALTIC SURFACE PATCHING,
TYPE E-0.3, 8-INCH

HIGHWAY EASEMENT

HIGHWAY EASEMENT

+32.80
38.17' LT

HIGHWAY EASEMENT

+35.33
34.16' LT

ASPHALTIC CURB 7-INCH

+23.73
33.80' LT

+47.00
26.61' LT

ASPHALTIC SURFACE PATCHING,
TYPE E-0.3, 4-INCH

+26.45
29.49' LT

+29.25
25.51' LT

+46.97
16.5' LT

+29.24
16.5' LT

ASPHALTIC SURFACE PATCHING,
TYPE E-0.3, 8-INCH

45CL

46CL

47CL

48CL

49CL

50CL

51CL

W CLEVELAND AVENUE

2

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\021201_pd.dgn PLOT DATE : 03-DEC-2012 10:34 PLOT BY : MSCD1S PLOT NAME : PLOT SCALE : 40:1

2

S 101ST STREET

EXIST R/W

EXIST R/W

EXIST R/W

HIGHWAY EASEMENT

HIGHWAY EASEMENT

HIGHWAY EASEMENT

46CL+52.56
104.24'LT

46CL+97.80
103.44'LT

46CL+77.43
38.80'LT

46CL+99.84
42.50'LT

10CWM

11CWM

12CWM

48CL+58.86
93.70'LT

49CL+08.71
93.57'LT

48CL+58.37
36.14'LT

44CL

45CL

46CL

47CL

48CL

49CL

W CLEVELAND AVENUE

W HARRISON AVENUE

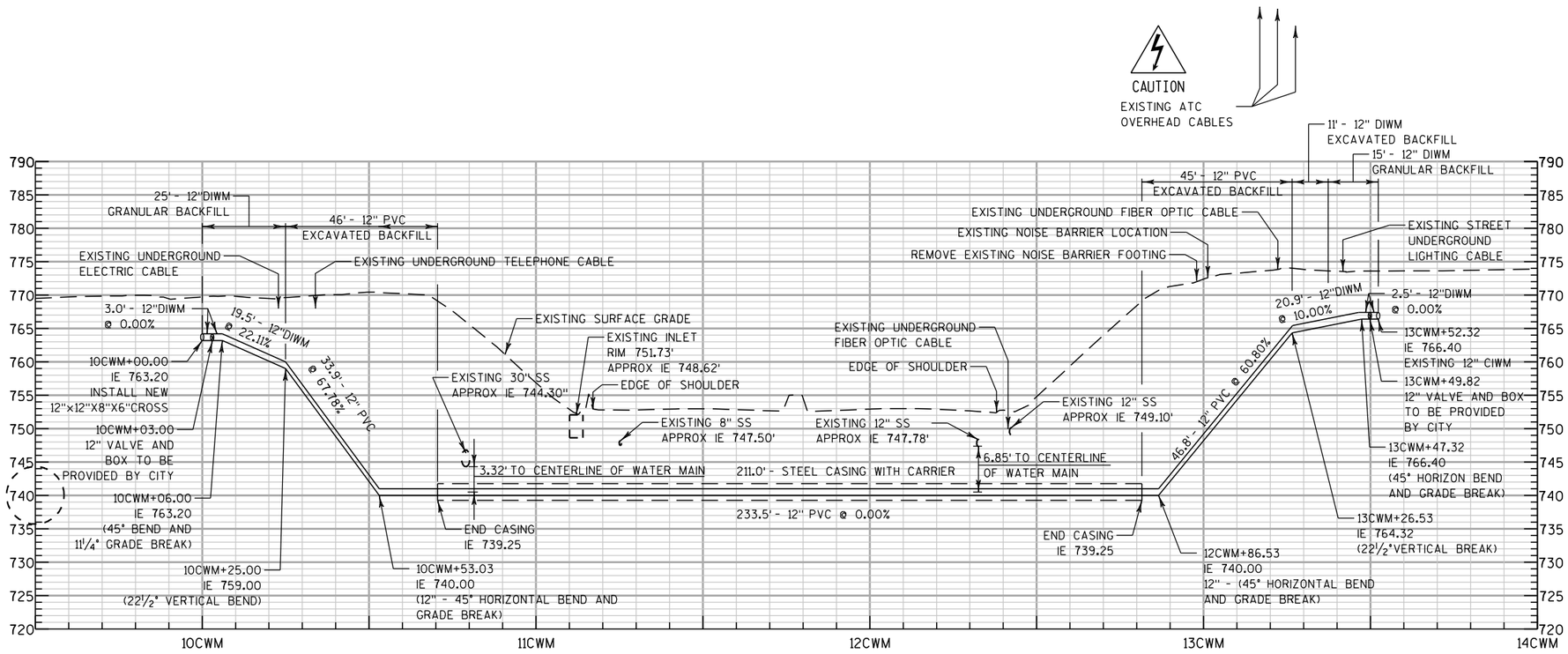
S 101ST STREET

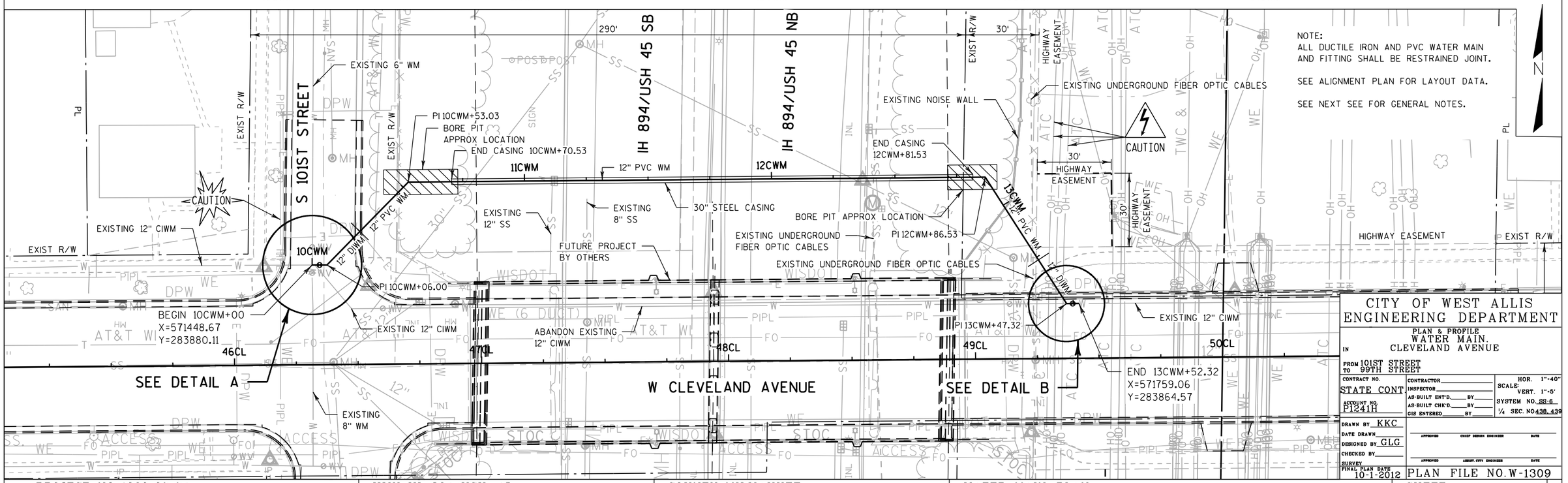
SEEDING MIXTURE NO. 20,
FERTILIZER TYPE B AND
EROSION MAT CLASS I,
TYPE B

EROSION CONTROL LEGEND

- SILT FENCE
- (A) INLET PROTECTION TYPE A
- (B) INLET PROTECTION TYPE B
- (C) INLET PROTECTION TYPE C
- SURFACE WATER FLOW
- # # # # SEEDING MIXTURE NO. 20, FERTILIZER TYPE B AND EROSION MAT CLASS I, TYPE B

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	EROSION CONTROL AND RESTORATION PLAN	SHEET	E





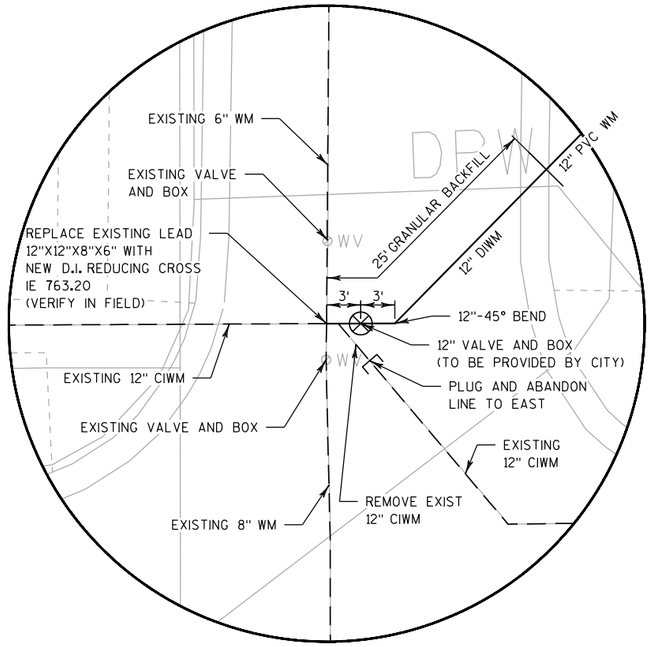
CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN & PROFILE
WATER MAIN.
IN CLEVELAND AVENUE
FROM 101ST STREET
TO 99TH STREET

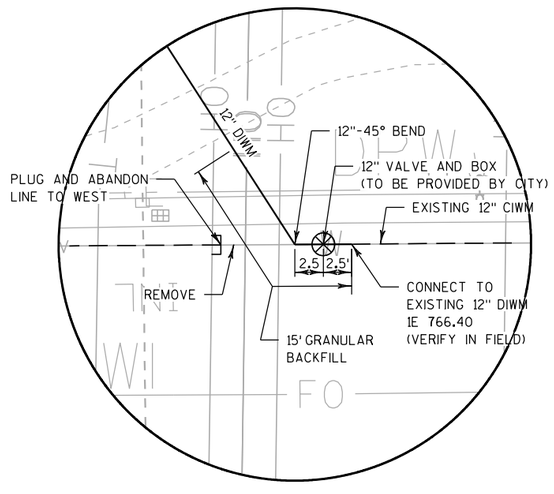
CONTRACT NO. STATE CONT	CONTRACTOR
ACCOUNT NO. P1241H	INSPECTOR
	AS-BUILT ENT'D BY
	AS-BUILT CHK'D BY
	GIS ENTERED BY
DRAWN BY KKC	HOR. SCALE: 1"=40'
DATE DRAWN	VERT. 1"=5'
DESIGNED BY GLG	SYSTEM NO. SS-6
CHECKED BY	¼ SEC. NO 438, 439
SURVEY	
FINAL PLAN DATE 10-1-2012	PLAN FILE NO. W-1309

APPROVED CHIEF DESIGN ENGINEER DATE
APPROVED ASSIST. CITY ENGINEER DATE

PROJECT NO: 1090-07-74 | HWY: IH 894/USH 45 | COUNTY: MILWAUKEE | WATER MAIN PLAN | SHEET 12



DETAIL A
NOT TO SCALE



DETAIL B
NOT TO SCALE

DEWATERING NOTES:

A. IF DEWATERING WILL BE NECESSARY, WATER PUMPED FROM THE TRENCH SHALL BE TREATED FOR WATER QUALITY PRIOR TO SITE DISCHARGE PER WDNR DEWATERING TECHNICAL STANDARD 1061. DEWATERING PUMPS MUST BE PLACED ON TOP OF A METAL OR PLASTIC CONTAINMENT TO CAPTURE ANY SOILS SPILLS. FILTER BAGS AND PUMPS SHALL NOT BE PLACED IN WETLANDS OR ON SOILS THAT ARE BARE, ERODIBLE OR UPGRADE FROM THESE SOIL AREAS. BASED UPON SITE ASSESSMENT THE FOLLOWING GUIDELINES SHALL BE UTILIZED WHEN DEWATERING:

- I SITE SOILS WITHIN THE TRENCH AREA ARE MEDIUM TO FINE PARTICLES PER THE USDA SOILS SURVEY, THEREFORE CONTRACTOR SHALL USE A TYPE 2 GEOTEXTILE BAG, SECURELY ATTACHED AT THE TERMINAL END OF PUMPING HOSE MEETING ALL ASTM STANDARDS AS FOUND IN TECHNICAL STANDARD 1061.
- II. FOR SURFACE DEWATERING CONTRACTOR SHALL UTILIZE A FLOATING SUCTION HOSE OR OTHER METHOD TO MINIMIZE SEDIMENT BEING SUCKED OFF THE BOTTOM.
- III. THE TYPE 2 GEOTEXTILE BAG SHALL BE PLACED DOWN GRADIENT OF BARE SOILS ON TOP OF VEGETATED LAND, BUT NOT WITHIN THE WETLANDS OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- IV. GEOTEXTILE BAGS SHALL BE SIZED ACCORDINGLY BUT BE NO LESS THAN 100 SQUARE FEET.
- V. IF WATER LEAVING THE DEWATERING AREA IS TURBID OR CLOUDY IN APPEARANCE, DEWATERING OPERATIONS SHALL BE SHUT DOWN. THE CONTRACTOR MAY INSTALL TRENCHED IN HAY BALES OR MAY USE A NON-TOXIC POLYMER APPROVED BY WDNR TECHNICAL STANDARD 1051.
- VI. WHEN THE TYPE 2 GEOTEXTILE BAG BECOMES TOO FILLED WITH SEDIMENT IT SHALL BE PROPERLY REMOVED AND DISPOSED.
- Vii. CONTRACTOR SHALL MONITOR DEWATERING, KEEPING DAILY NOTES AS FOLLOWS:
  - A. DISCHARGE DURATION AND SPECIFIED PUMPING RATE.
  - B. OBSERVED WATER TABLE AT TIME OF DEWATERING.
  - C. NOTE MOST RECENT RAIN STORM EVENT.
  - D. IF USED, TYPE AND AMOUNT OF POLYMER USED FOR TREATMENT.
  - E. MAINTENANCE ACTIVITIES

NOTES:

1. SEE SPECIAL PROVISIONS AND CONTRUCTIONS DOCUMENTS FOR COMPLETE DETAILS.
2. THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAIN AT CONNECTIONS AND CROSS POINTS TO VERIFY ELEVATIONS PRIOR TO INSTALLATION OF THE WATER MAIN.
3. ALL DUCTILE IRON WATER MAIN AND FITTINGS SHALL BE R.J.D.I., CLASS 53, MIN. 250PSI. ALL PVC WATER MAIN SHALL BE RESTRAINED JOINT C-900, DR14.
4. ALL DUCTILE IRON PIPE SHALL BE DOUBLE POLYETHYELENE WRAPPED AND LAID WITH CRUSHED LIMESTONE CONFORMING TO STATE SEWER AND WATER SPECIFICATIONS.
5. NOTIFY THE CITY OF WEST ALLIS PRIOR TO CONNECTING TO EXISTING MAINS PER SPECIFICATIONS. CITY OF WEST ALLIS WILL PERFORM ALL MAIN CLOSURES.
6. ALL BACKFILL WITHIN W. CLEVELAND AVENUE AND S. 101ST STREET SHALL BE AN GRANULAR BACKFILL CONFORMING TO 8.43.4 OF THE STATE SEWER AND WATER SPECIFICATIONS.
7. CONTRACTOR SHALL INSTALL TEMPORARY CHAIN LINK FENCE AROUND THE BORE PITS, INCIDENTAL TO CASING INSTALLATION.
8. ALL TEES, CAPS AND BENDS TO HAVE CONCRETE BUTTRESSES CONFORMING TO FILE NO. 44 OF THE STATE SEWER AND WATER SPECIFICATION.
9. CONTRACTOR SHALL DETERMINE THE BORE PIT LOCATIONS IN THE FIELD APPROVED BY ENGINEER.
10. ALL EXCAVATION, CONNECTIONS, FITTINGS, BENDS, TEES, BUTTRESSES, COLLARS, SPACERS, BOOTS, SEALANTS, PLUGS, CAPS, AND RESTRAINTS ARE INCIDENTAL TO THE WATER MAIN CONSTRUCTION.
11. SEE ALIGNMENT LAYOUT SHEET FOR PICOORDINATES AND CONTROL POINTS.
12. ALL ELEVATIONS SHOWN ARE TO INVERT OF THE PIPES.
13. FOR BENCHMARK INFORMATION SEE THE ALIGNMENT LAYOUT SURVEY CONTROL SHEETS.
14. PROVIDE TRACER WIRE IN ALL PVC WATER MAIN NOT LOCATED IN CASING. TRACER WIRE INCIDENTAL TO WATER MAIN.

CITY OF WEST ALLIS
ENGINEERING DEPARTMENT

PLAN & PROFILE
WATER MAIN.
IN CLEVELAND AVENUE

FROM 101ST STREET
TO 99TH STREET

CONTRACT NO. STATE CONT.
ACCOUNT NO. P1241H

CONTRACTOR
INSPECTOR
AS-BUILT ENT'D. BY
AS-BUILT CHK'D. BY
GIS ENTERED BY

SCALE: HOR. 1"=40'
VERT. 1"=5'
SYSTEM NO. SS-6
¼ SEC. NO 438, 439

DRAWN BY KKC
DATE DRAWN
DESIGNED BY GLG
CHECKED BY
SURVEY
FINAL PLAN DATE 10-1-2012

APPROVED CHIEF DESIGN ENGINEER DATE
APPROV. CITY ENGINEER DATE

PLAN FILE NO. W-1309A

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	WATER MAIN PLAN	SHEET 13

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\022802_wm.dgn PLOT DATE : 01-OCT-2012 12:34 PLOT BY : MSCD1S PLOT NAME : PLOT SCALE : 40:1

GENERAL NOTES FOR TRAFFIC CONTROL

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

2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.

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

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

5) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

7) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF THE BARRIER.

8) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS. SEE REMOVAL SHEETS FOR ADDITIONAL INFORMATION.

STAGING LEGEND

- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A AND ATTACHED SIGN
- TRAFFIC CONTROL BARRICADE TYPE II WITH LIGHTS TYPE A AND ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL ARROW BOARD
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC CONTROL DRUM
- CONCRETE BARRIER TEMPORARY PRECAST (CBTP)
- TRAFFIC FLOW ARROW
- WORK ZONE THIS STAGE

2

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TRAFFIC CONTROL NOTES AND LEGEND	SHEET	E

2

N

W CLEVELAND AVENUE

S 102RD STREET

W HARRISON AVENUE

W NATIONAL AVENUE

W OKLAHOMA AVENUE

S. 101ST STREET

S. 99TH STREET

IH 894/USH 45

ROAD WORK AHEAD W20-1

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

W04-2R

1600'

575'

2160'

500'

100' MIN.

725'

350'

ROAD WORK 1 MILE W20-1

RIGHT LANE CLOSED 1/2 MILE W20-5

RIGHT LANE CLOSED 1500 FT W20-5

STAGE 1

CONSTRUCTION
- INSTALL WATER MAIN/CASING UNDER IH 894/USH 45.
- BEGIN AND COMPLETE EXCAVATION, BORING AND INSTALLATION OF WATER MAIN EXCEPT WITHIN W. CLEVELAND AVENUE ROADWAY.
- BEGIN AND COMPLETE EXCAVATION AND INSTALLTION OF WATER MAIN AT S 101ST STREET.
- MAKE WESTERLY CONNECTION TO EXISTING 12" WATER MAIN AT S 101ST STREET.

TRAFFIC
- IH 894/USH 45 ALL FREEWAY LANES OPEN TO TRAFFIC.
- CLOSE IH 894/USH 45 NORTHBOUND OUTSIDE SHOULDER.
- CLOSE W CLEVELAND AVENUE WESTBOUND SHOULDER.
- CLOSE S 101ST STREET SECTION FROM W HARRISON AVENUE TO W CLEVELAND AVENUE.

WORK ZONE

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TRAFFIC CONTROL STAGE 1 OVERVIEW & ADVANCE SIGNING	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\026000_s1.dgn PLOT DATE : 01-OCT-2012 12:35 PLOT BY : MSCD1S PLOT NAME : 026000_s1 PLOT SCALE : 400:1

2

2

W MONTANA AVENUE

W CLEVELAND AVENUE

GENERAL MITCHELL

44CL

46CL

48CL

50CL

52CL

EXIST R/W

S 101ST STREET

10CWM

12CWM

CONSTRUCTION ACCESS

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

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

500'

50' TYP

50' TYP

INSTALL TEMPORARY PRECAST CONCRETE BARRIER AT OUTSIDE EDGE OF PAVED SHOULDER.

TEMPORARY CRASH CUSHION

ARROW BOARD
(SWITCH TO CAUTION MODE AFTER LANE IS OPENED)

300' BUFFER

660' TAPER

500' LANE CLOSURE

25' TYP

RAMP TO REMAIN OPEN

100'

150' TAPER

500'

NOTE:
SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATEER THAN 40 M.P.H.

LANE CLOSURE REQUIRED FOR INSTALLATION AND REMOVAL OF TEMPORARY PRECAST CONCRETE BARRIER AND CRASH CUSHION.

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	STAGE 1 TRAFFIC CONTROL	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\026002_s1.dgn PLOT DATE : 01-OCT-2012 12:36 PLOT BY : MSCD1S PLOT NAME : 026002_s1 PLOT SCALE : 100:1

2

2

N

R11-4(2S)
60" X 30"
ROAD CLOSED TO THRU TRAFFIC

ROAD CLOSED AHEAD
W20-3

W HARRISON AVENUE

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

S 101ST STREET

S 99TH STREET

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R3-1

STOP
REMAIN

EXIST R/W

SIDEWALK CLOSED
R9-9
24" X 12"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
48" X 24"

ROAD WORK AHEAD
W20-1

RIGHT SHOULDER CLOSED AHEAD
W21-5B

100' MIN.

END ROAD WORK
G20-2A

S 102ND STREET

12CWM

10CWM

SCHOOL CROSSING TO REMAIN OPEN

W CLEVELAND AVENUE

44CL

46CL

48CL

50CL

52CL

12' MIN

25' TYP

10' TYP

HE

150'

350'

325'
SHOULDER CLOSURE

100'
BUFFER

70'
TAPER

260'

350'

R3-2

R11-2
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	STAGE 1 TRAFFIC CONTROL	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\026003_s1.dgn PLOT DATE : 01-OCT-2012 12:36 PLOT BY : MSCD1S PLOT NAME : 026003_s1 PLOT SCALE : 100:1

2

N

S 108TH STREET

S 102RD STREET

W NATIONAL AVENUE

W HARRISON AVENUE

IH 894/USH 45

S. 101ST STREET

S. 92TH STREET

W CLEVELAND AVENUE

W MONTANA AVENUE

S. 99TH STREET

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

ROAD WORK AHEAD
W20-1

859'

500'

500'

RIGHT SHOULDER CLOSED AHEAD
W21-5B

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

ROAD WORK AHEAD
W20-1

ROAD WORK AHEAD
W20-1

STAGE 2

CONSTRUCTION
- BEGIN AND COMPLETE EXCAVATION AND INSTALLATION OF WATER MAIN AT W. CLEVELAND AVENUE.
- MAKE CONNECTION TO EXISTING 12" WATER MAIN AT W CLEVELAND AVENUE.

TRAFFIC
- IH 894/USH 45 ALL FREEWAY LANES OPEN TO TRAFFIC.
- CLOSE W CLEVELAND AVENUE WESTBOUND SHOULDER.
- S 101ST STREET OPEN TO TRAFFIC.

WORK ZONE

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	TRAFFIC CONTROL STAGE 2 OVERVIEW & ADVANCE SIGNING	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\026010_s2.dgn PLOT DATE : 01-OCT-2012 12:36 PLOT BY : MSCD1S PLOT NAME : 026010_s2 PLOT SCALE : 400:1

2

2

W HARRISON AVENUE

S 101ST STREET

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

S 99TH STREET

N

ROAD WORK AHEAD W20-1

R11-2 48" X 30" LANE CLOSED

TYPE III BARRICADE

SIDEWALK CLOSED R9-9 24" X 12"

SIDEWALK CLOSED USE OTHER SIDE R9-10 48" X 24"

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

RIGHT SHOULDER CLOSED AHEAD W21-5B

12CWM

10CWM

EXIST R/W

HE

10' TYP

25' TYP

44CL

46CL

W CLEVELAND AVENUE

8CL

50CL

52CL

100' SHOULDER CLOSURE

100' BUFFER

70' TAPER

260'

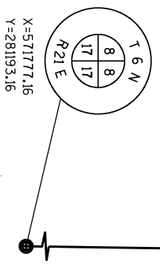
350'

500'

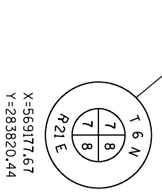
PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	STAGE 2 TRAFFIC CONTROL	SHEET E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\026011_s2.dgn PLOT DATE : 01-OCT-2012 12:37 PLOT BY : MSCD1S PLOT NAME : 026011_s2 PLOT SCALE : 100:1

2



1/4 LINE 2650.03' N00°52'1"W



SECTION LINE 2639.68' N89°30'46"E

CP02

POT 43CL+10.00
X=571127.28
Y=283837.02

R/L CL

45CL

BEGIN PROJECT 1090-07-74
10CWM+00.00
X=571448.67
Y=283880.11

N89°42'51"E

10CWM

PI 10CWM+06.00
X=571454.67
Y=283880.14

N44°30'46"E

N89°30'46"E

PI 10CWM+53.00
X=571487.62
Y=283913.66

R/L CWM (WATER MAIN)

PI 13CWM+47.32
X=571754.06
Y=283864.54

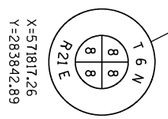
PI 12CWM+86.53
X=571721.14
Y=283915.64

N89°38'00"E

S32°47'02"E

50CL

CP01



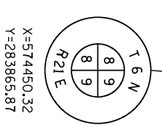
END PROJECT 1090-07-74
13CWM+52.32
X=571759.06
Y=283864.57

PI 50CL+00.00
X=571817.26
Y=283842.89

N89°30'00"E

POT 53CL+00.00
X=572117.24
Y=283845.51

SECTION LINE 2633.16' N89°30'00"E



N

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET	E

2

2

N

STH 100/S 108TH STREET

W. NATIONAL AVENUE

S. 102ND STREET

W. HARRISON AVENUE

S. 101ST STREET

IH 894 EB/USH 45 SB

IH 894 WB/USH 45 NB

S. 99TH STREET

W. CLEVELAND AVENUE

W. MONTANA AVENUE

10CWM

45CL

50CL

CP02
CONCRETE MONUMENT W/ SEWRPC BRASS CAP
X 283820.44
Y 569177.67
ELEV. 750.92

CP01
CONCRETE MONUMENT W/ SEWRPC BRASS CAP
X 283842.88
Y 571817.25
ELEV. 774.08

PARKING
EPS
PKNG
REC AREA
ATHLETIC FIELD
GENERAL MITCHELL
FP
27-33

PROJECT NO: 1090-07-74	HWY: IH 894/USH 45	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET	E

FILE NAME : W:\Cadd\Final\10900774_CWM\Roads\cds\027210_ad_cp.dgn PLOT DATE : 01-OCT-2012 12:38 PLOT BY : MSCD1S PLOT NAME : 027210_ad_cp PLOT SCALE : 200:1

DATE 05DEC12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1090-07-74 QUANTITY
0010	201.0110	CLEARING	SY	700.000	700.000
0020	201.0210	GRUBBING	SY	700.000	700.000
0030	204.0100	REMOVING PAVEMENT	SY	45.000	45.000
0040	204.0150	REMOVING CURB & GUTTER	LF	32.000	32.000
0050	204.0155	REMOVING CONCRETE SIDEWALK	SY	5.000	5.000
0060	204.0170	REMOVING FENCE	LF	120.000	120.000
0070	209.0100	BACKFILL GRANULAR	CY	26.000	26.000
0080	213.0100	FINISHING ROADWAY (PROJECT) 001. 1090-07-74	EACH	1.000	1.000
0090	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	20.000	20.000
0100	465.0110	ASPHALTIC SURFACE PATCHING 01. E-0.3	TON	25.000	25.000
0110	465.0310	ASPHALTIC CURB	LF	32.000	32.000
0120	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	100.000	100.000
0130	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	100.000	100.000
0140	614.0905	CRASH CUSHIONS TEMPORARY	EACH	1.000	1.000
0150	619.1000	MOBILIZATION	EACH	1.000	1.000
0160	625.0500	SALVAGED TOPSOIL	SY	843.000	843.000
0170	628.1104	EROSION BALES	EACH	50.000	50.000
0180	628.1504	SILT FENCE	LF	372.000	372.000
0190	628.1520	SILT FENCE MAINTENANCE	LF	372.000	372.000
0200	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0210	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0220	628.2004	EROSION MAT CLASS I TYPE B	SY	843.000	843.000
0230	628.7005	INLET PROTECTION TYPE A	EACH	3.000	3.000
0240	628.7010	INLET PROTECTION TYPE B	EACH	7.000	7.000
0250	628.7015	INLET PROTECTION TYPE C	EACH	5.000	5.000
0260	628.7560	TRACKING PADS	EACH	2.000	2.000
0270	628.7570	ROCK BAGS	EACH	20.000	20.000
0280	629.0210	FERTILIZER TYPE B	CWT	0.500	0.500
0290	630.0120	SEEDING MIXTURE NO. 20	LB	24.000	24.000
0300	630.0200	SEEDING TEMPORARY	LB	24.000	24.000
0310	643.0100	TRAFFIC CONTROL (PROJECT) 001. 1090-07-74	EACH	1.000	1.000
0320	643.0300	TRAFFIC CONTROL DRUMS	DAY	3,508.000	3,508.000
0330	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	272.000	272.000
0340	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	508.000	508.000
0350	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,560.000	1,560.000
0360	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1,160.000	1,160.000
0370	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	88.000	88.000
0380	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,116.000	2,116.000
0390	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	2.000	2.000
0400	690.0250	SAWING CONCRETE	LF	115.000	115.000
0410	SPV.0060	SPECIAL 001. EXPOSING EXISTING UTILITIES	EACH	5.000	5.000
0420	SPV.0060	SPECIAL 002. INSTALLING VALVE & BOX 12-INCH	EACH	2.000	2.000
0430	SPV.0090	SPECIAL 001. STEEL CASING W / PVC 12-INCH CARRIER	LF	211.000	211.000
0440	SPV.0090	SPECIAL 002. WATER MAIN 12-INCH DUCTILE IRON EXCAVATED BACKFILL	LF	11.000	11.000
0450	SPV.0090	SPECIAL 003. WATER MAIN 12-INCH DUCTILE IRON GRANULAR BACKFILL	LF	40.000	40.000
0460	SPV.0090	SPECIAL 004. WATER MAIN 12-INCH PVC EXCAVATED BACKFILL	LF	91.000	91.000

3

DATE 05DEC12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1090-07-74 QUANTITY
0470	SPV.0090	SPECIAL 005. REMOVING NOISE BARRIER	LF	48.000	48.000
0480	SPV.0105	SPECIAL 001. PAVEMENT CLEANUP	LS	1.000	1.000
0490	SPV.0105	SPECIAL 002. SURVEY PROJECT 1090-07-74	LS	1.000	1.000

3

REMOVING CONCRETE SIDEWALK

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	204.0155 SY
7000	WB CLEVELAND AVENUE					
0		49CL+24		49CL+35	LT	5
	TOTAL					5

REMOVING PAVEMENT

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	204.0100 SY	NOTES
7000	WB CLEVELAND AVENUE						
		46CL+27		46CL+49	LT	30	WEST CONNECTION
		49CL+29		49CL+47	LT	15	EAST CONNECTION
	TOTAL					45	

3

CLEARING AND GRUBBING ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	201.0110 CLEARING SY	201.0210 GRUBBING SY	NOTES
7000	WB CLEVELAND AVE							
		46CL+54		46CL+99	LT	267	267	
		48CL+65		49CL+17	LT	340	340	
	UNDISTRIBUTED					93	93	
	TOTALS					700	700	

REMOVING CURB & GUTTER

CATEGORY	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	204.0150 LF
7000	WB CLEVELAND AVENUE					
		46CL+49	59' LT	46CL+49	45' LT	14
		49CL+29	24' LT	49CL+47	24' LT	18
	TOTAL					32

REMOVING FENCE

CATEGORY	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	204.0170 LF
7000	WB CLEVELAND AVENUE					
		46CL+66	45.7'LT	46CL+68	110.7'LT	65
		49CL+03	32.1'LT	49CL+24	69.9'LT	55
	TOTAL					120

3

REMOVING NOISE BARRIERS

CATEGORY	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	SPV.0090.005 LF
7000	W. CLEVELAND AVENUE					
		48CL+95	39.0'LT	49CL+17	80.6'LT	48
	TOTAL					48

FINISHING ROADWAY PROJECT ID 1090-07-74

CATEGORY	STAGE	LOCATION	213.0100 EACH
7000	ALL	PROJECT	1
		TOTAL	1

3

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON
7000	W CLEVELAND AVE						
		46CL+27	35'LT		46CL+52	45'LT	11.6
		49CL+26	29'LT		49CL+35	34'LT	1.9
		49CL+29	17'LT		49CL+47	16'LT	6.5
	TOTALS						20

ASPHALTIC ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	465.0110 ASPHALTIC SURFACE PATCHING, TYPE E-0.3 TON	465.0310 ASPHALTIC CURB LF	REMARKS
7000	WB CLEVELAND AVE						
		49CL+23.73		49CL+35.33	1	--	SIDEWALK
		49CL+29.24		49CL+46.97	9	--	PAVEMENT
		49CL+29.25		49CL+47.00	--	18	CURB
	S 101ST STREET						
		46CL+26.73		46CL+51.54	15	--	PAVEMENT
		46CL+26.73		46CL+49.03	--	14	CURB
	TOTALS				25	32	

3

SAW CUTTING ITEMS

CATEGORY	ROADWAY	FROM STATION	OFFSET	TO STATION	OFFSET	690.0250 SAWING CONCRETE LF	REMARKS
7000	WB CLEVELAND AVENUE						
		49CL+29.28	26'LT	49CL+29.24	17'LT	9	
		49CL+29.24	17'LT	49CL+49.97	17'LT	18	
		49CL+49.97	17'LT	49CL+47.00	27'LT	9	
		49CL+23.73	34'LT	49CL+26.45	29'LT	5	
		49CL+32.80	38'LT	49CL+35.33	34'LT	5	
	S 101ST STREET						
		46CL+26.73	35'LT	46CL+26.76	45'LT	10	
		46CL+26.73	35'LT	46CL+51.49	45'LT	30	
		46CL+26.76	45'LT	46CL+51.53	59'LT	29	
	TOTAL					115	

3

EXPOSING EXISTING UTILITY

CATEGORY	LOCATION	SPV.0060.001 EACH
7000	UNDISTRIBUTED	5
	TOTAL	5

SURVEY PROJECT

CATEGORY	STAGE	LOCATION	SPV.0105.002 SURVEY PROJECT 1090-07-74 LS
7000	ALL	PROJECT	1
		TOTAL	1

3

PAVEMENT CLEANUP

CATEGORY	STAGE	LOCATION	SPV.0105.001 LS
7000	ALL	PROJECT	1
		TOTAL	1

MOBILIZATION

CATEGORY	STAGE	LOCATION	619.1000 EACH
7000	ALL	PROJECT	1
		TOTAL	1

WATER MAIN ITEMS

CATEGORY	LOCATION	SPV.0060.002 INSTALLING VALVE & VALVE BOX 12-INCH EACH	SPV.0090.001 STEEL CASING W/ PVC 12-INCH CARRIER LF	SPV.0090.002 WATER MAIN 12-INCH DUCTILE IRON EXCAVATED BACKFILL LF	SPV.0090.003 WATER MAIN 12-INCH DUCTILE IRON GRANUALR BACKFILL LF	SPV.0090.004 WATER MAIN 12-INCH PVC EXCAVATED BACKFILL LF
7000	10CWM+03	1	--	--	--	--
	10CWM+00 - 10CWM+25	--	--	--	25	--
	10CWM+25 - 10CWM+71	--	--	--	--	46
	10CWM+71 - 12CWM+82	--	211	--	--	--
	12CWM+82 - 13CWM+27	--	--	--	--	45
	13CWM+27 - 13CWM+37	--	--	11	--	--
	13CWM+37 - 13CWM+52	--	--	--	15	--
	13CWM+50	1	--	--	--	--
	TOTAL	2	211	11	40	91

GRANULAR BACKFILL

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	209.0100 BACKFILL GRANULAR CY
7000	W CLEVELAND AVE					
		46CL+27		46CL+32	LT	13
		49CL+42		49CL+47	LT	13
	TOTAL					26

EROSION CONTROL ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.7560 TRACKING PAD EACH	628.7570 ROCK BAGS EACH
7000	W. CLEVELAND AVE												
		46CL+51		46CL+99	LT	--	--	--	--	--	292	--	--
		46CL+57			102'LT	--	--	--	--	--	--	1	--
		48CL+65		49CL+33	LT	--	--	--	--	--	368	--	--
		49CL+22		49CL+46	LT	--	--	--	--	--	14	--	--
		46CL+53		47CL+00	LT	--	106	106	--	--	--	--	--
		46CL+77		47CL+00	LT	--	23	23	--	--	--	--	--
		48CL+58		48CL+59	LT	--	58	58	--	--	--	--	--
		48CL+59		49CL+42	LT	--	111	111	--	--	--	--	--
		49CL+45			32'LT	--	--	--	--	--	--	1	--
		SUBTOTALS				--	298	298	--	--	674	2	--
	UNDISTRIBUTED					50	74	74	1	1	169	--	20
	TOTALS					50	372	372	1	1	843	2	20

SALVAGED TOPSOIL

CATEGORY	ROADWAY	STATION	TO	STATION	625.0500 SY
7000	WB CLEVELAND AVENUE				
		46CL+51		46CL+99	292
		48CL+65		49CL+33	368
		49CL+22		49CL+46	14
	UNDISTRIBUTED				169
	TOTALS				843

3

RESTORATION ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO.20 LB	630.0200 SEEDING TEMPORARY LB	NOTES
7000	WB CLEVELAND AVENUE							
		46CL+51		46CL+99	0.2	8	8	
		48CL+65		49CL+33	0.2	10	10	
		49CL+22		49CL+46	0.0	1	1	
	UNDISTRIBUTED				0.1	4.7	4.7	
	TOTALS				0.5	24	24	

INLET PROTECTION

CATEGORY	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	NOTES
7000	I-894/USH 45 NB	3	7	--	
	W CLEVELAND AVENUE	--	--	3	
	S. 101ST STREET	--	--	2	
	TOTALS	3	7	5	

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOCATION	STATION	STATION	STAGE DURATION DAYS	643.0100 TRAFFIC CONTROL (PROJECT) 1090-07-74 EACH	643.0300 TRAFFIC CONTROL DRUMS EACH**	DAYS	643.0410 TRAFFIC CONTROL BARRICADES TYPE II EACH**	DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH**	DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH**	DAYS	649.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH
7000	1	**STAGE 1 - ADVANCED SIGNING**			44	--	--	--	--	--	--	--	--	--	--	--	--	--	41	1,804	--
		IH 894/USH 45				--	46	2,024	--	--	1	44	2	88	14	616	2	88	--	--	--
		W. CLEVELAND AVENUE				--	25	1,100	4	176	10	440	28	1,232	8	352	--	--	--	--	--
		S. 101ST STREET				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		STAGE 1 SUBTOTALS				--		3,124		176		484		1,320		968		88		1,804	--
7000	2	**STAGE 2 - ADVANCED SIGNING**			24	--	--	--	--	--	--	--	--	--	--	--	--	--	13	312	--
		W CLEVELAND AVENUE				--	16	384	4	96	1	24	10	240	8	192	--	--	--	--	--
		STAGE 2 SUBTOTALS				--		384		96		24		240		192		--		312	--
		UNDISTRIBUTED				1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
		TOTALS				1		3,508		272		508		1,560		1,160		88		2,116	2

TEMPORARY BARRIER

CATEGORY	STAGE	LOCATION	STATION	STATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EACH
7000	1	IH 894/USH 45			100	100	1
		STAGE 1 SUBTOTALS			100	100	1
		TOTALS			100	100	1

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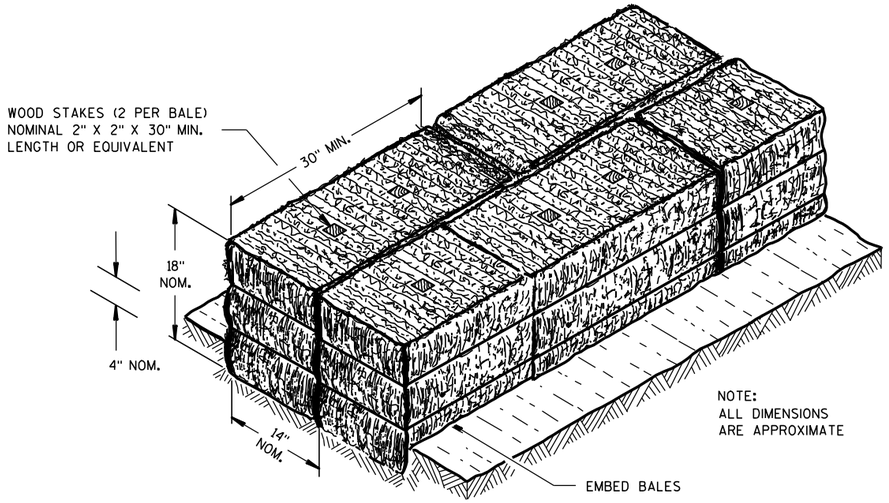
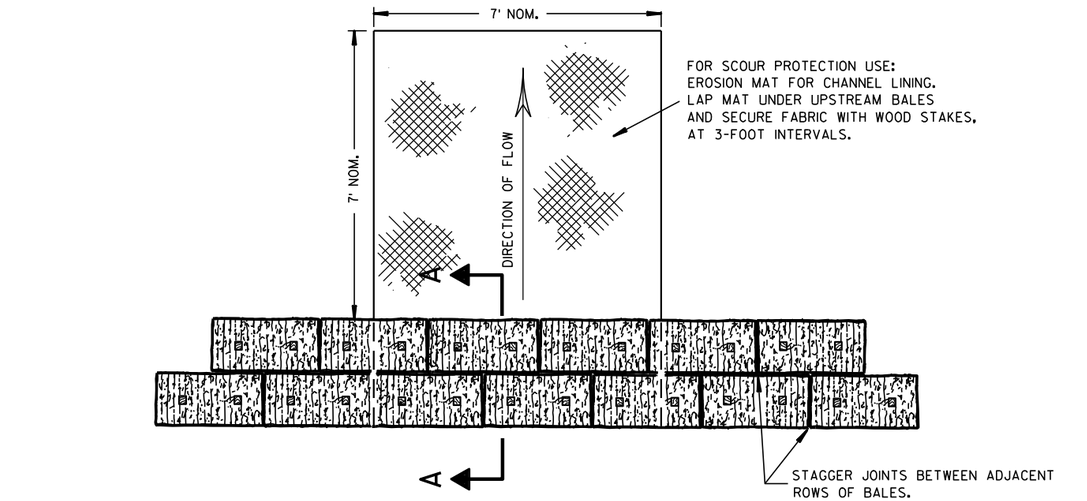
Standard Detail Drawing List

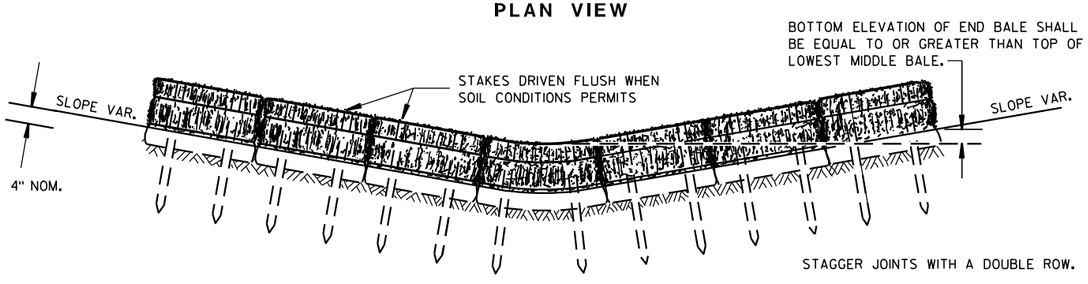
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



SECTION A-A



PLAN VIEW



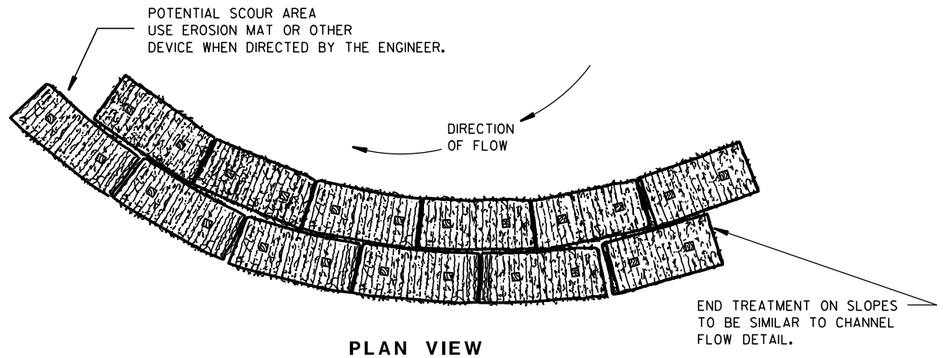
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

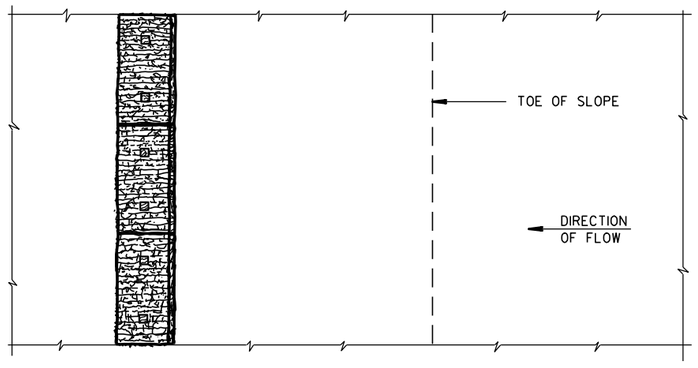
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

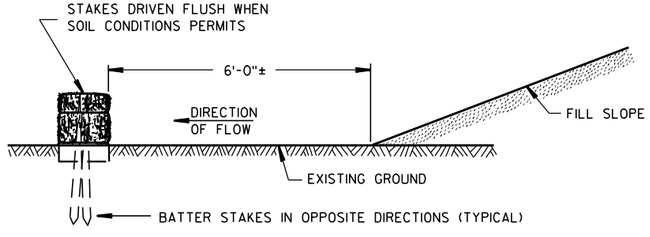


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

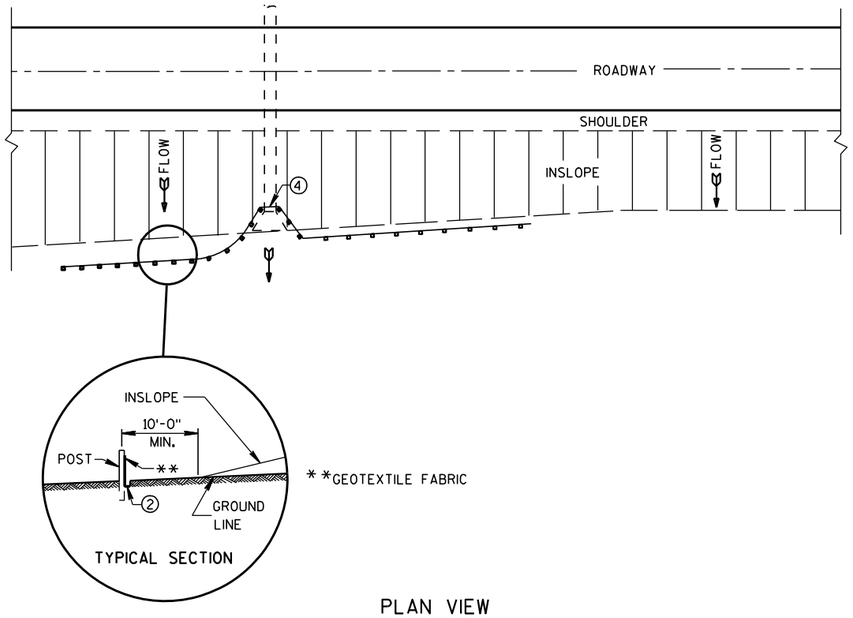
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

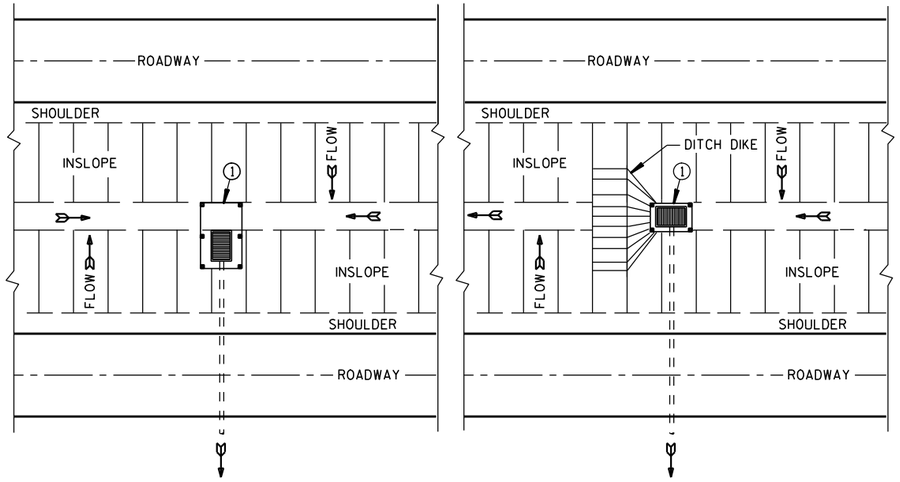
6/04/02 DATE — /S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



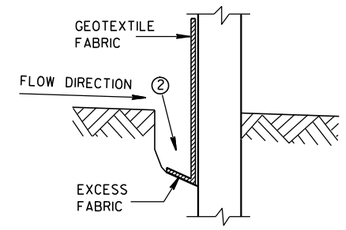
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

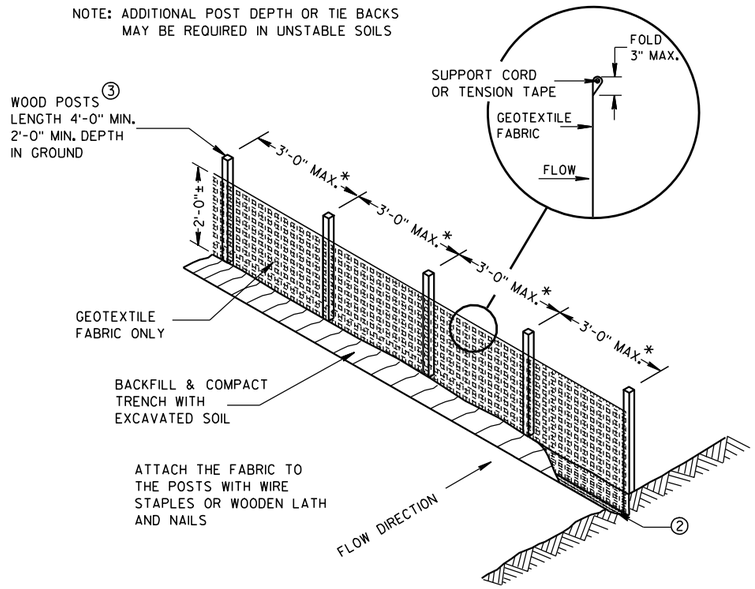
GENERAL NOTES

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

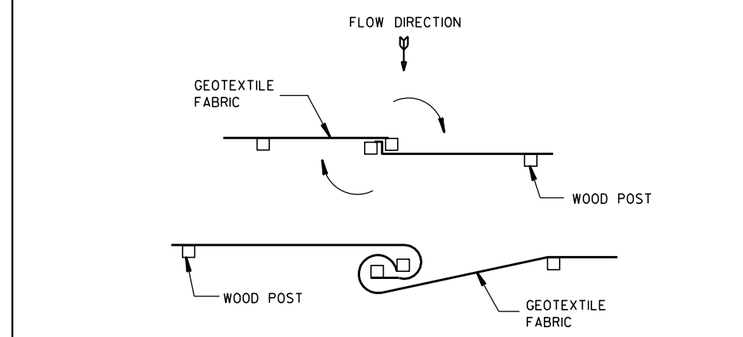
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



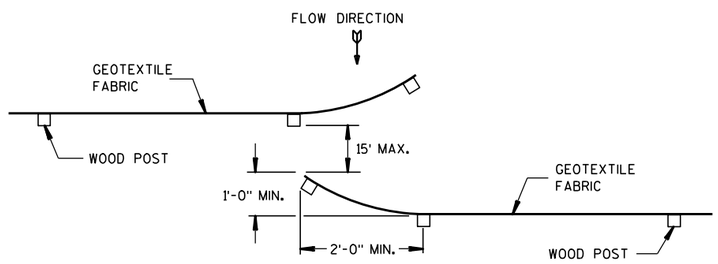
TRENCH DETAIL



SILT FENCE

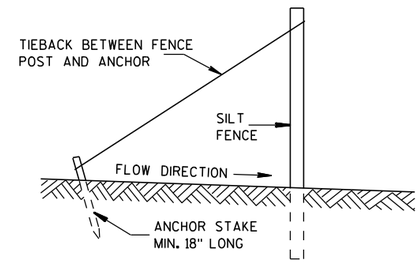


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

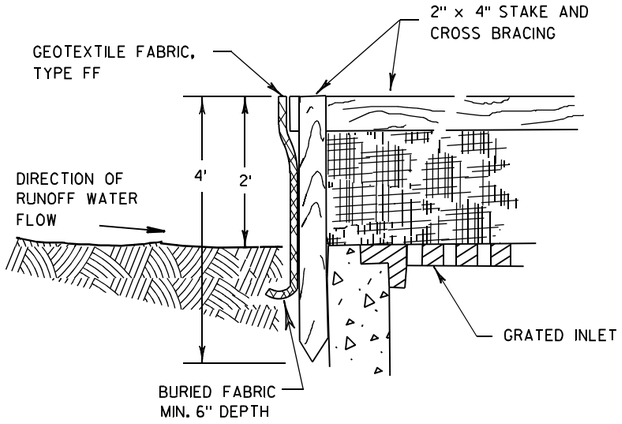
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

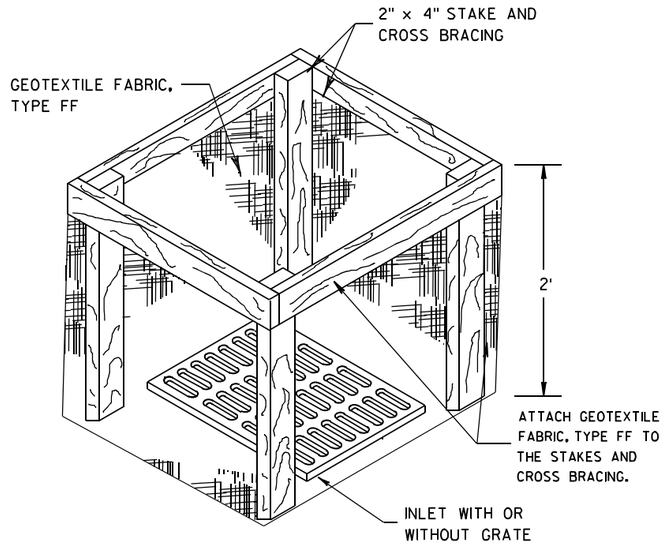
6

S.D.D. 8 E 9-6

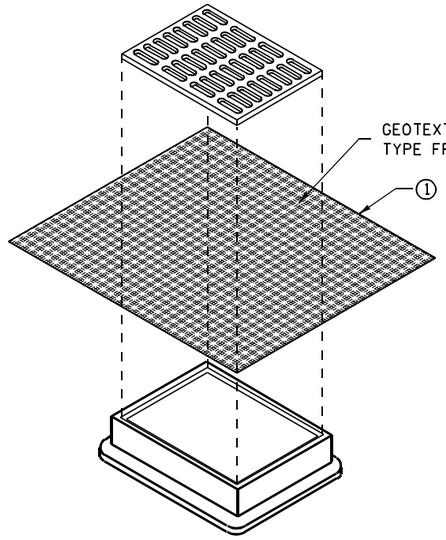
6

S.D.D. 8 E 9-6



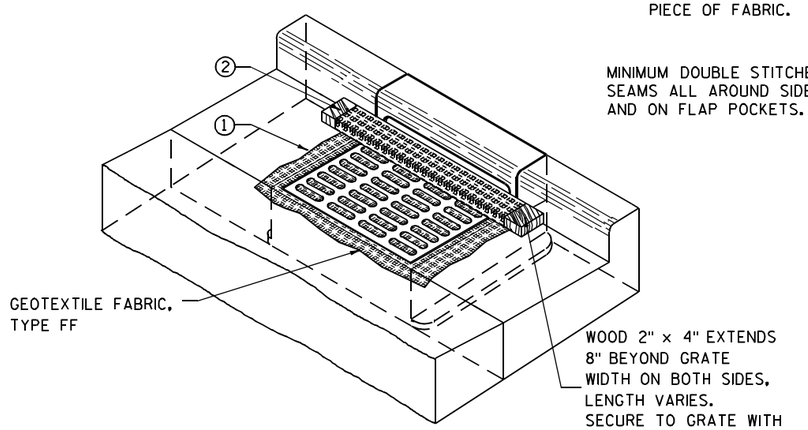


INLET PROTECTION, TYPE A

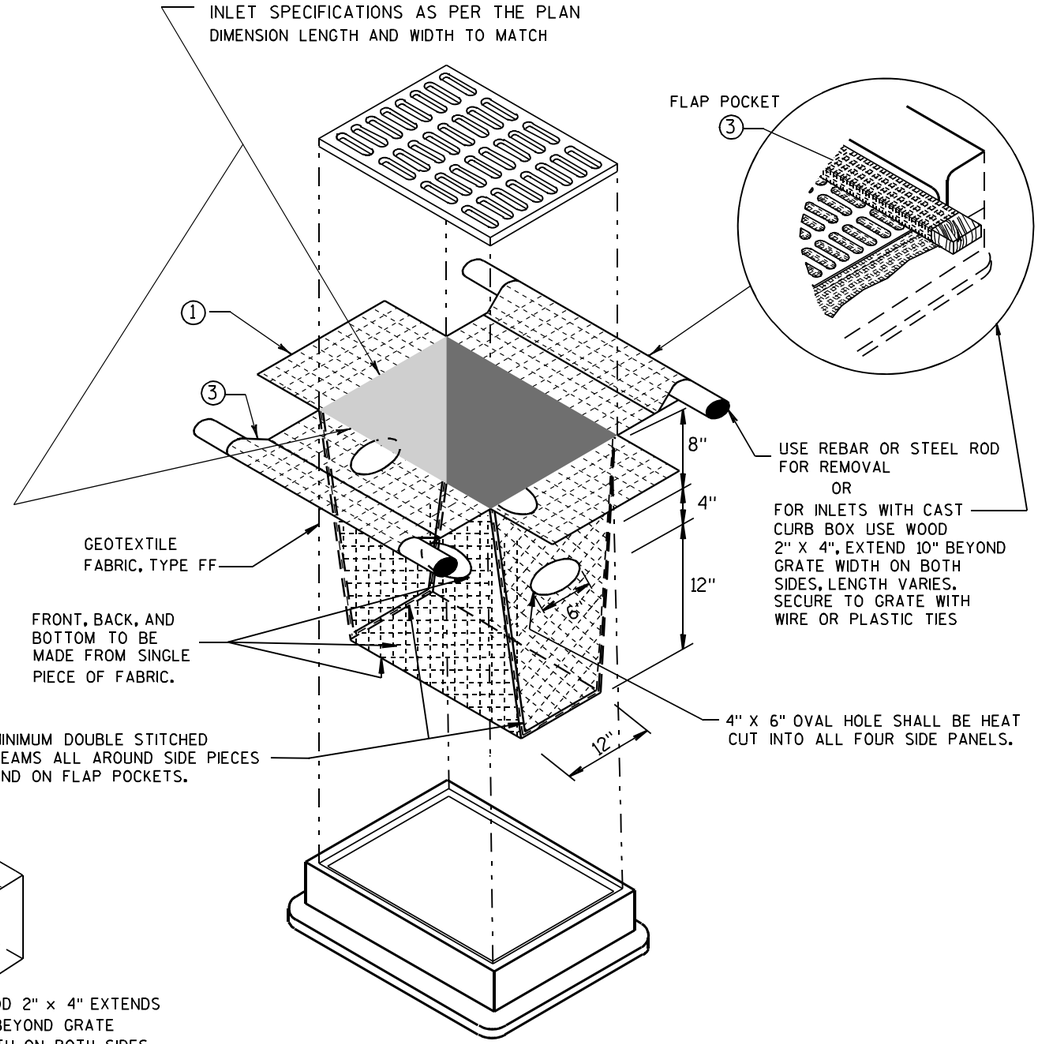


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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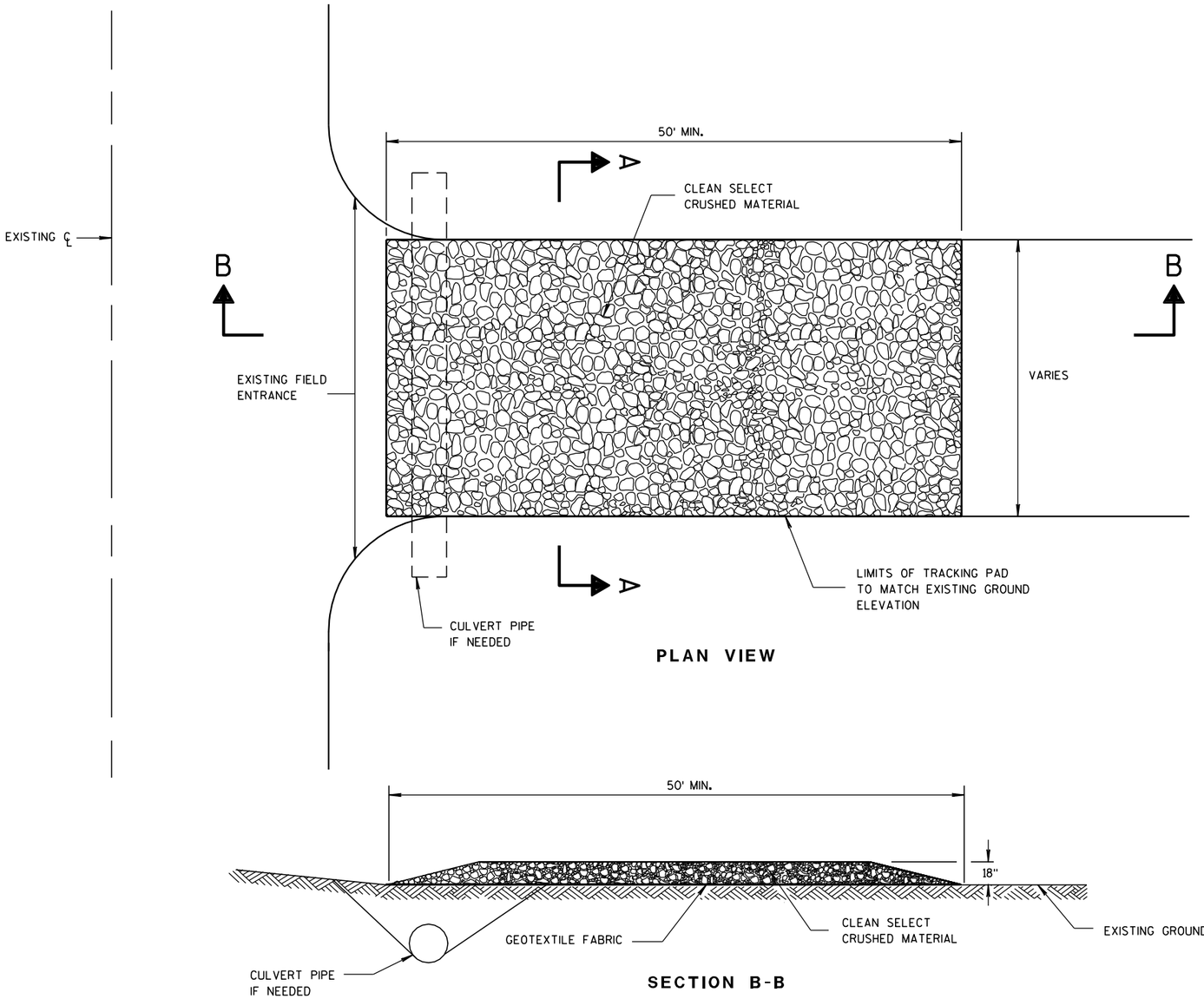
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

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

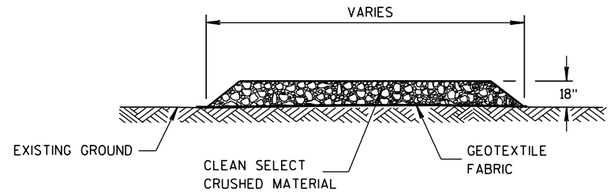
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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

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

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



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

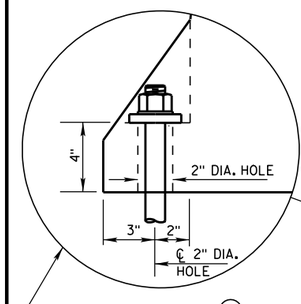
APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER	ENT

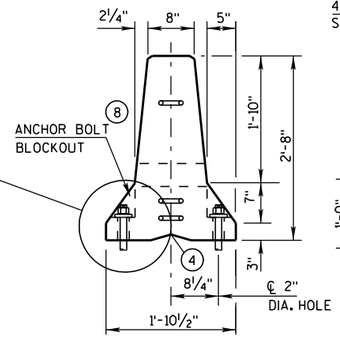
FHWA

6

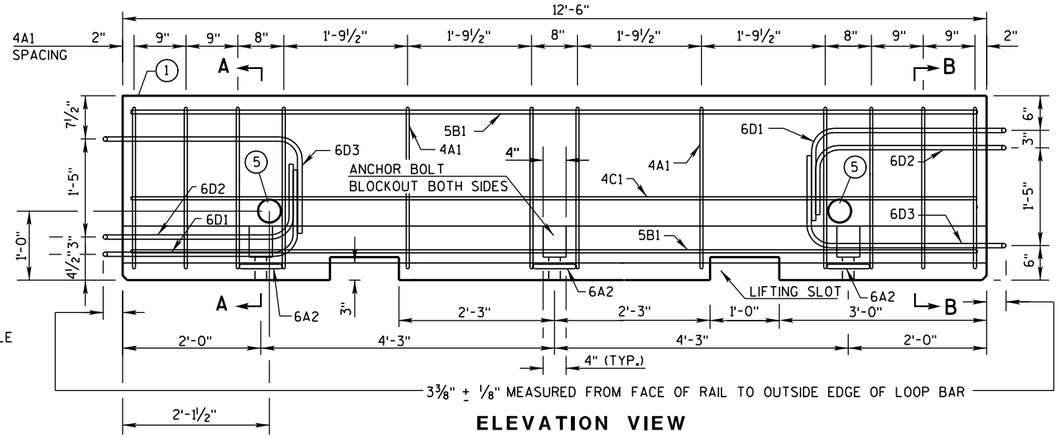
S.D.D. 8 E 14-1



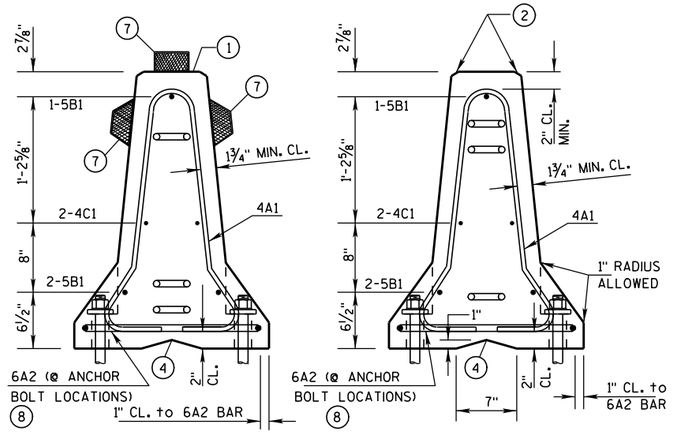
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



END VIEW

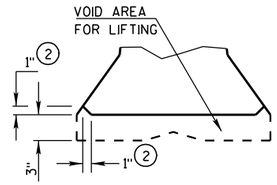


ELEVATION VIEW

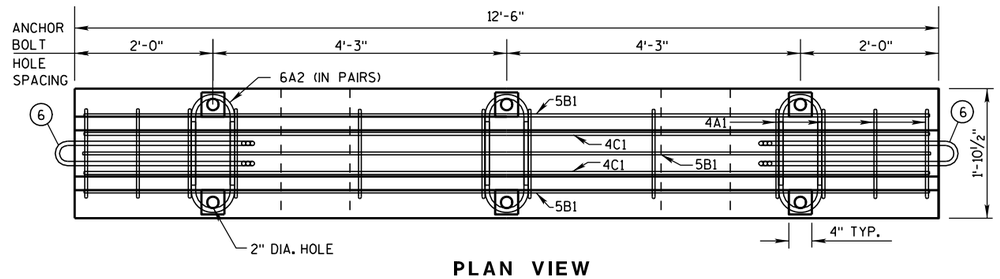


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

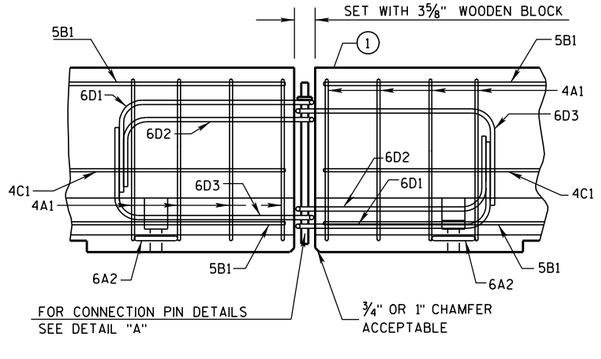


DETAIL "B"
LIFTING SLOT DETAIL

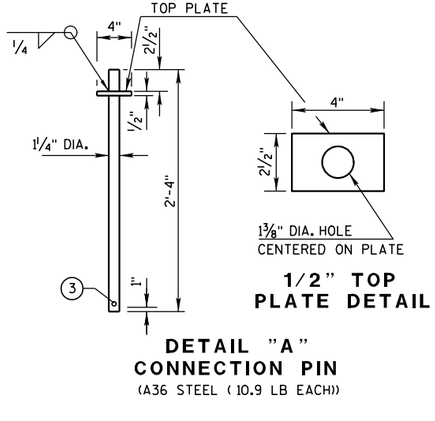


PLAN VIEW

DETAILS OF BARRIER SECTION

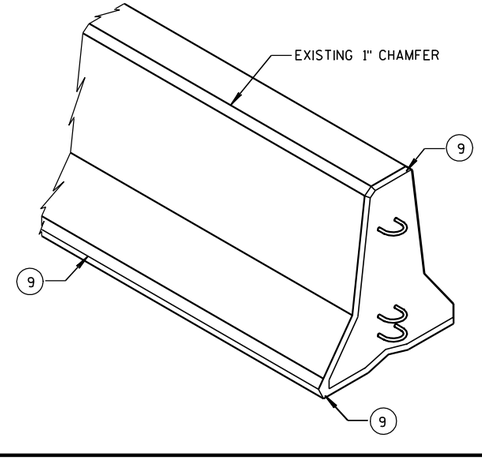


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

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



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(a) THRU 14B7-13(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 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 ¾" 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 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" 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 EPOXY 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 ⅜" 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.

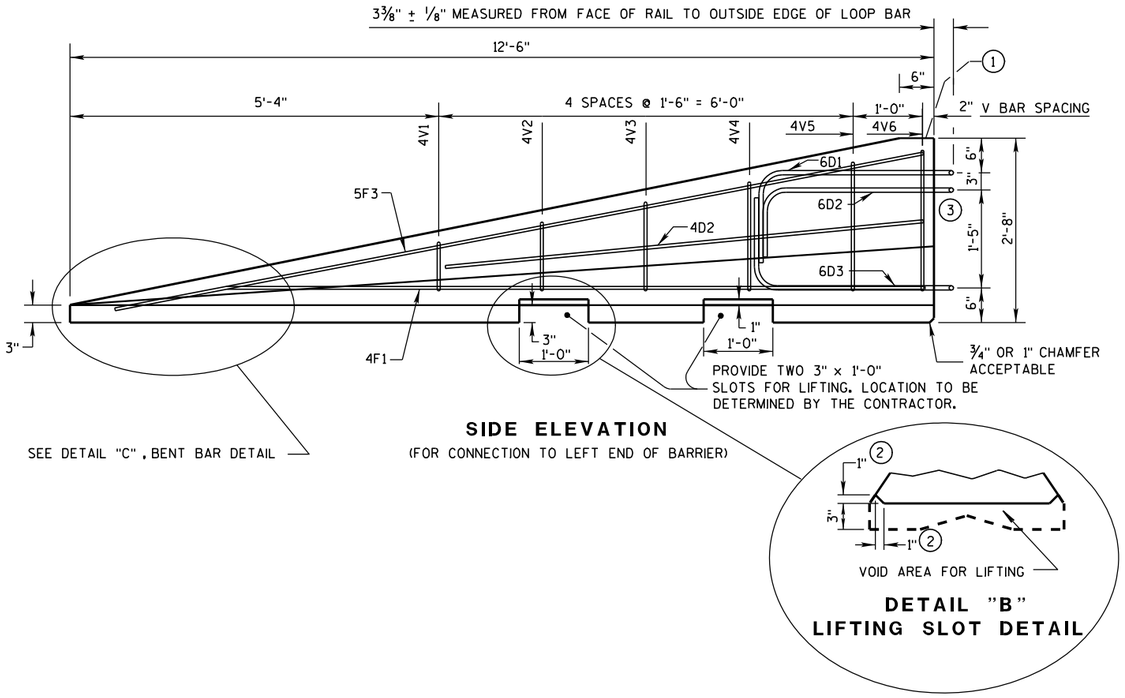
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED 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 ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

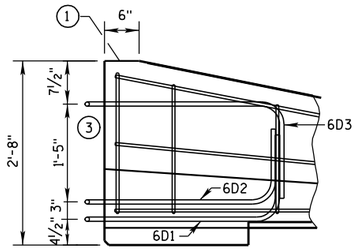
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....



SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)

DETAIL "B"
LIFTING SLOT DETAIL

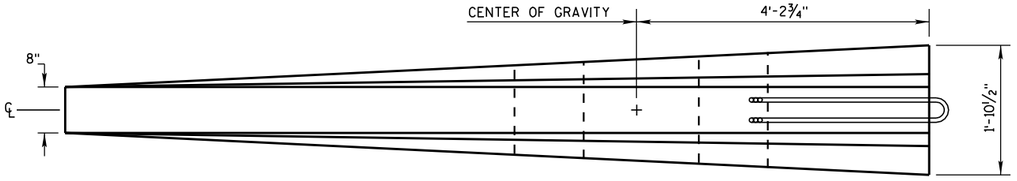


SIDE ELEVATION

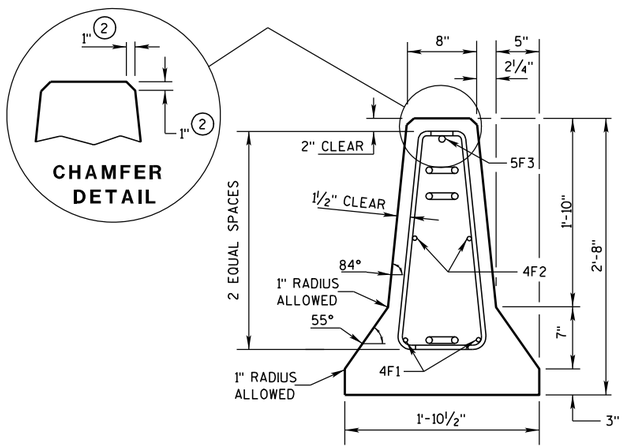
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

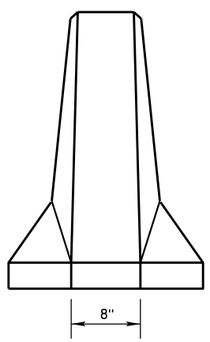
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



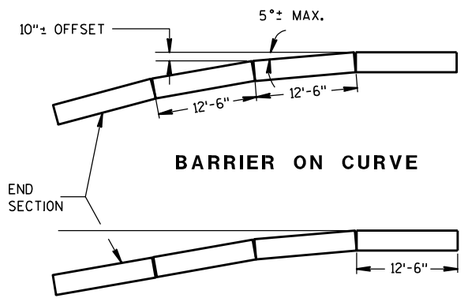
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

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

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 7-13b

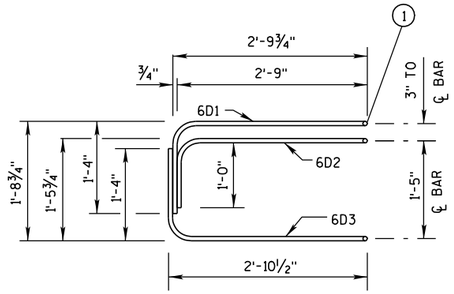
6

S.D.D. 14 B 7-13b

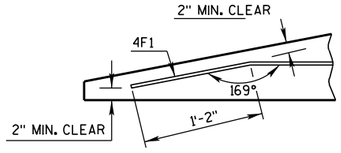
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

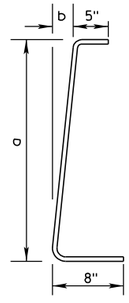
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

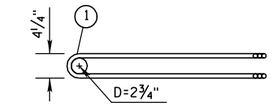
GENERAL NOTES

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

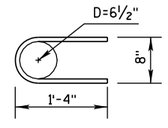
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

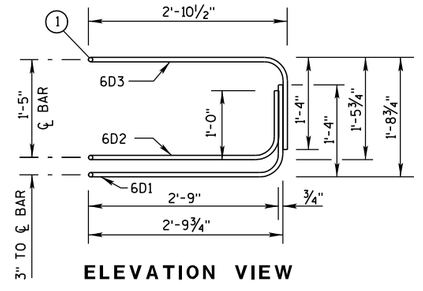
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



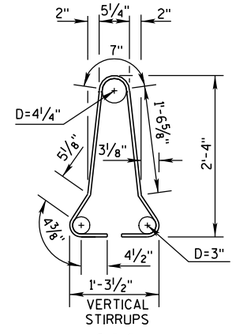
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

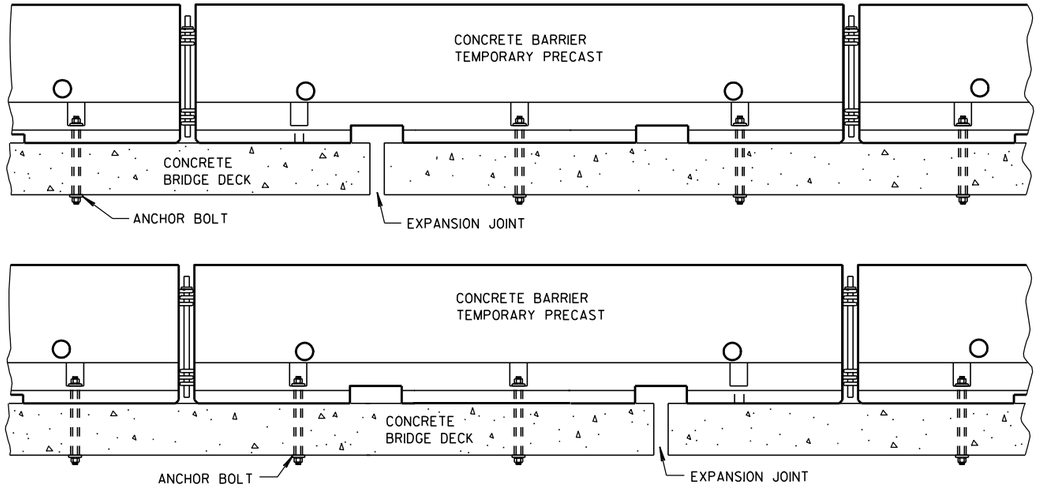
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

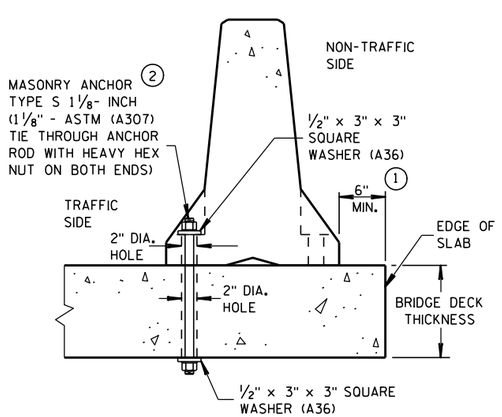
6

S.D.D. 14 B 7-13c



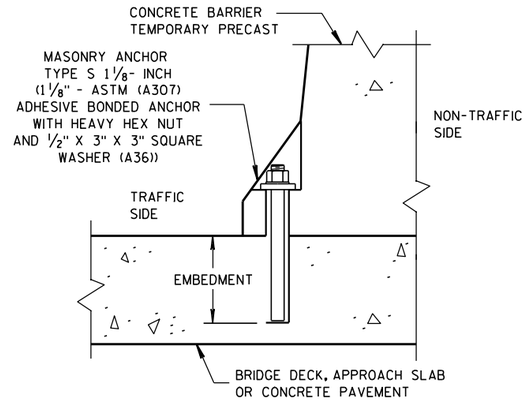
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

2

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

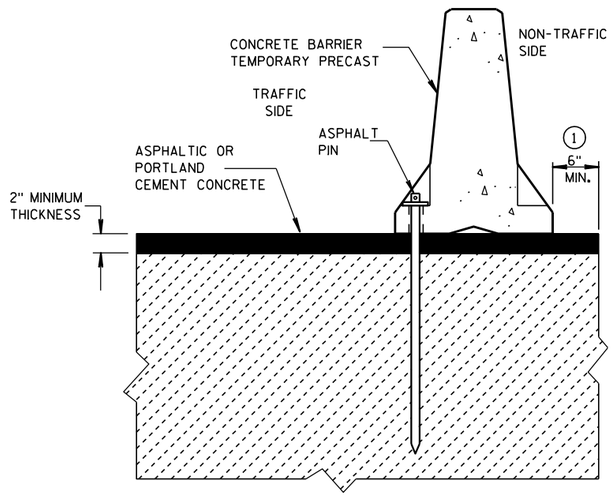
1. CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
   THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

   THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

2. ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

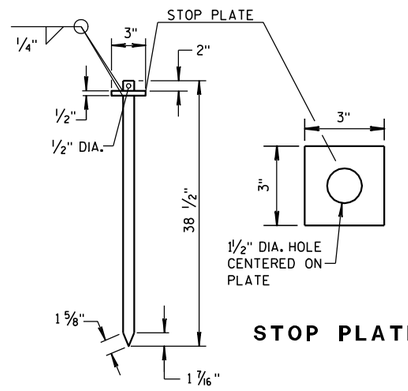
   WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

   UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

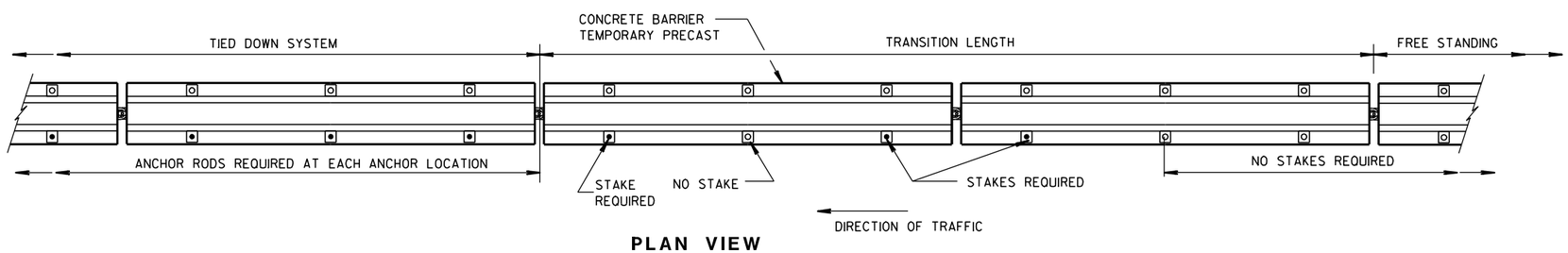
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



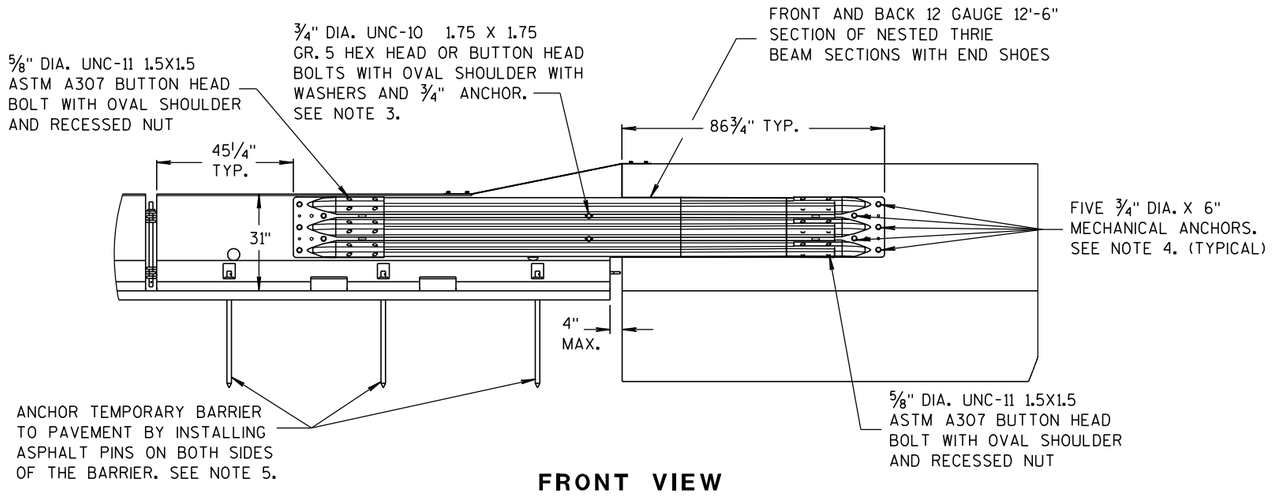
PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

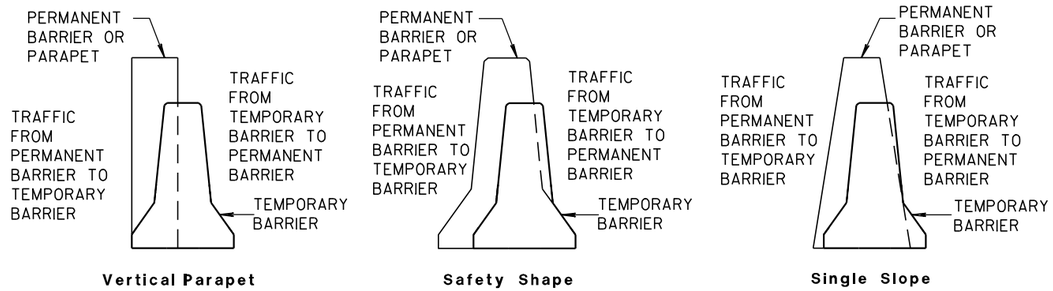
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



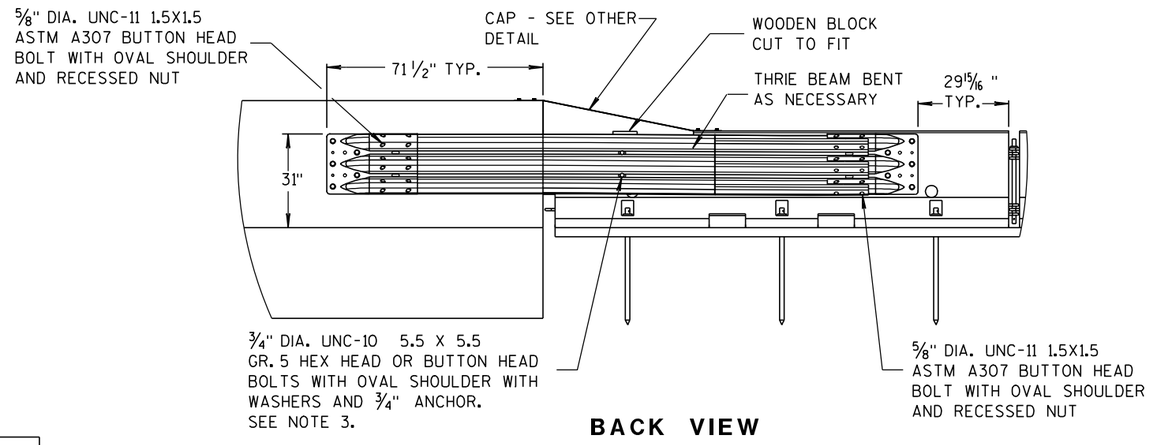
FRONT VIEW

NOTES

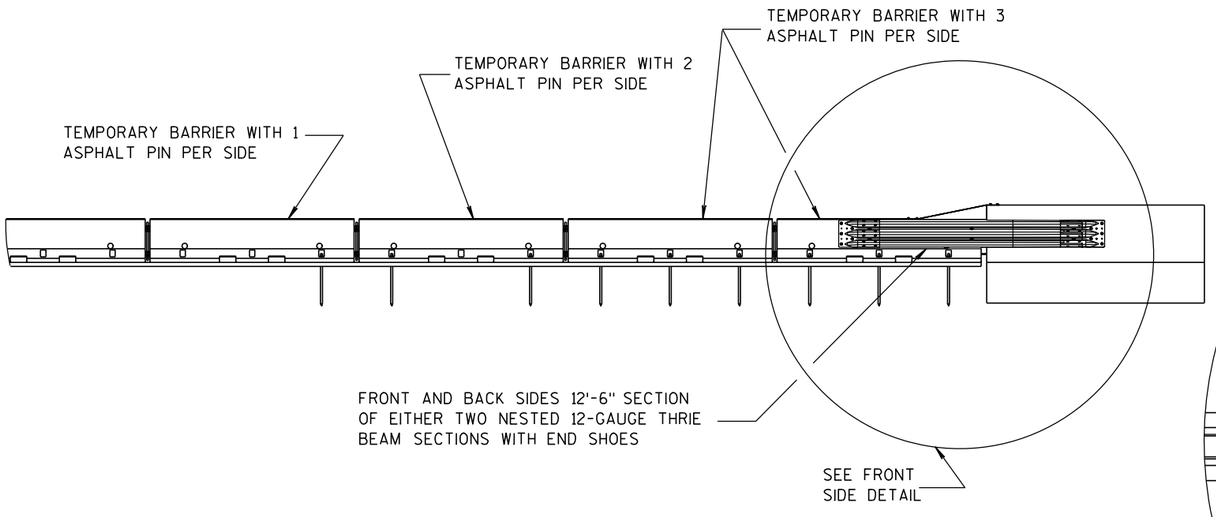
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



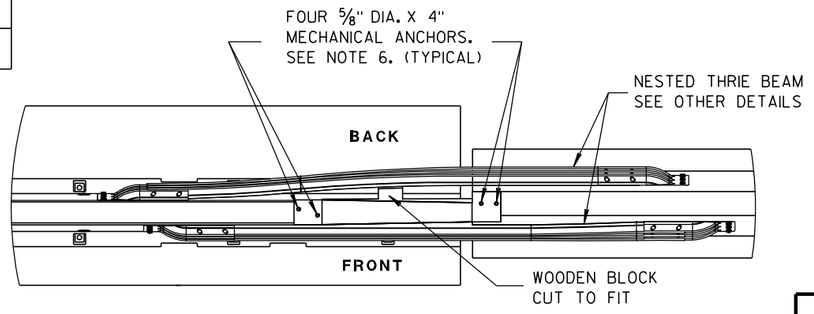
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



BACK VIEW



FRONT VIEW



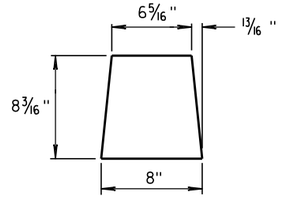
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

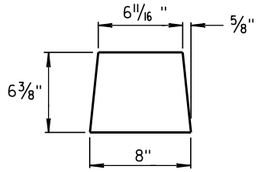
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 7-13e



GUSSET 1



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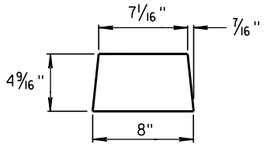

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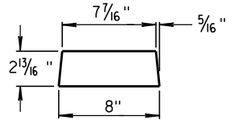
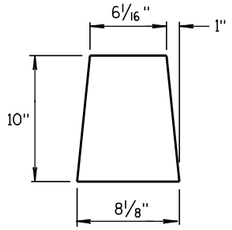
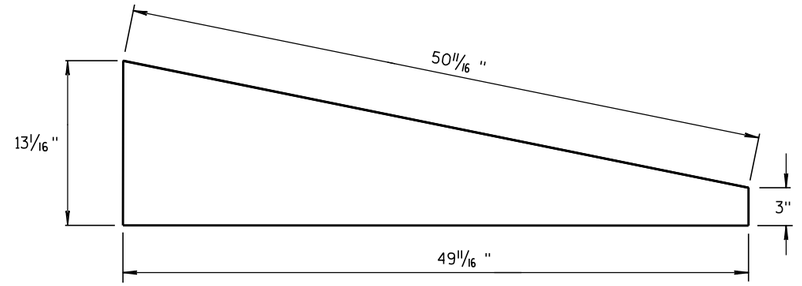


GUSSET 4

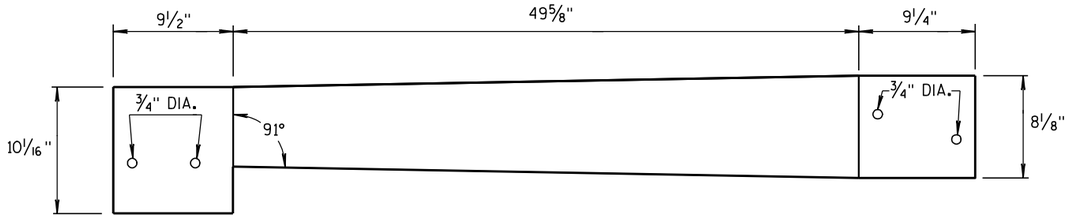
GUSSETS

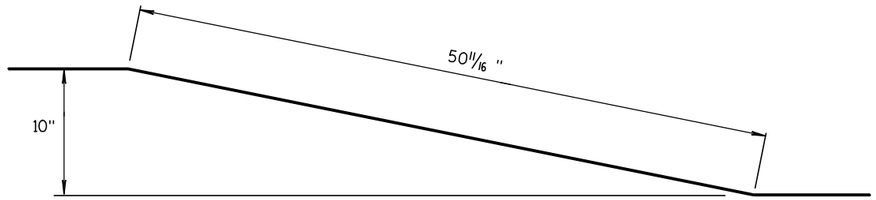


END PLATE

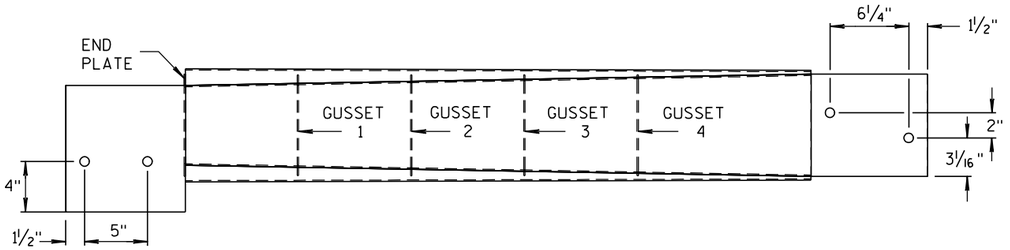


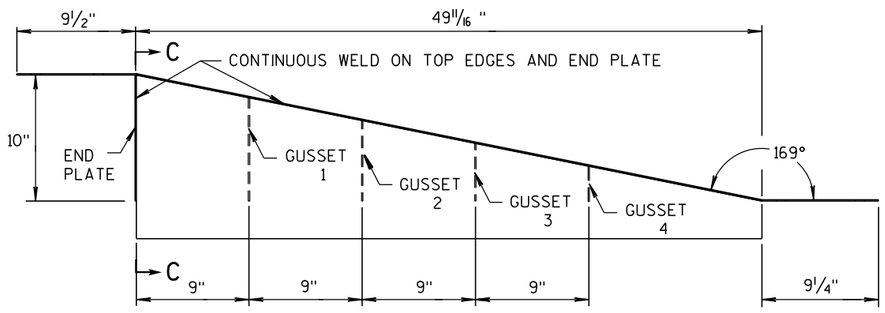
SIDE PLATE

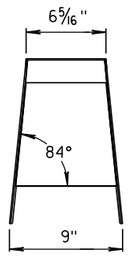




TOP PLATE







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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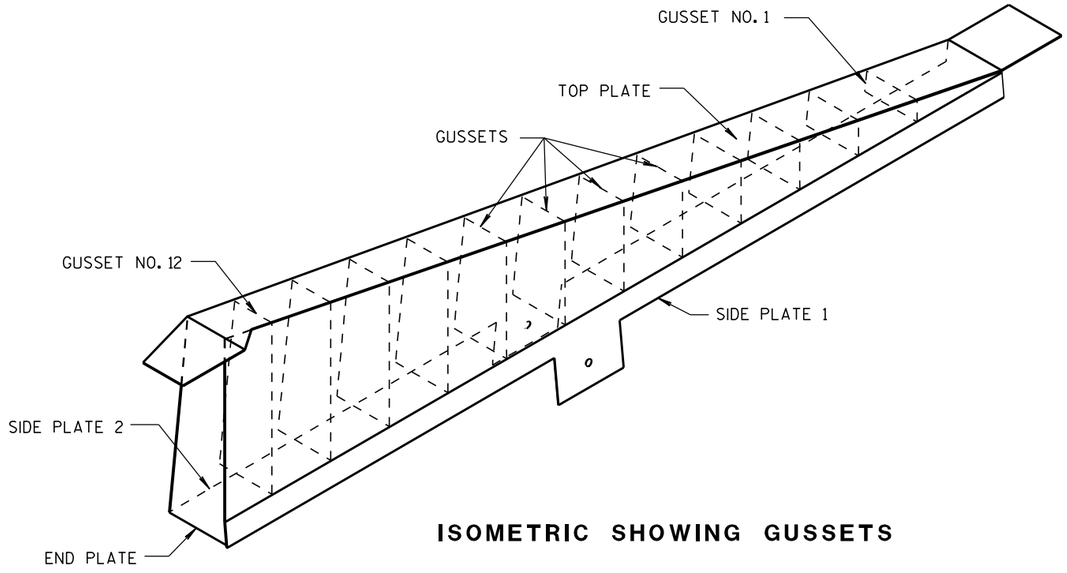
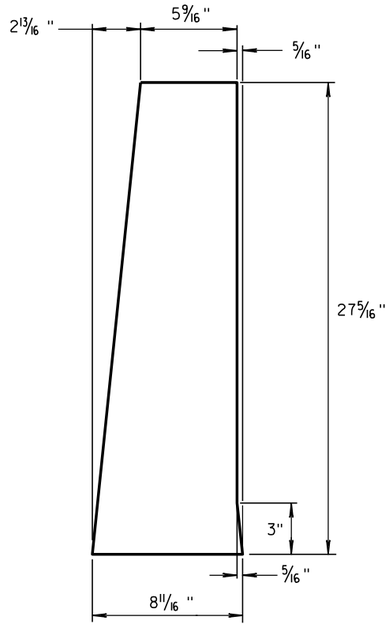
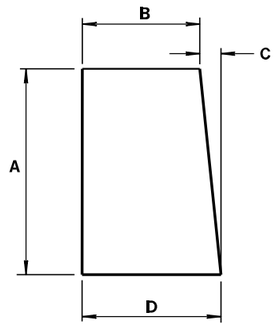


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



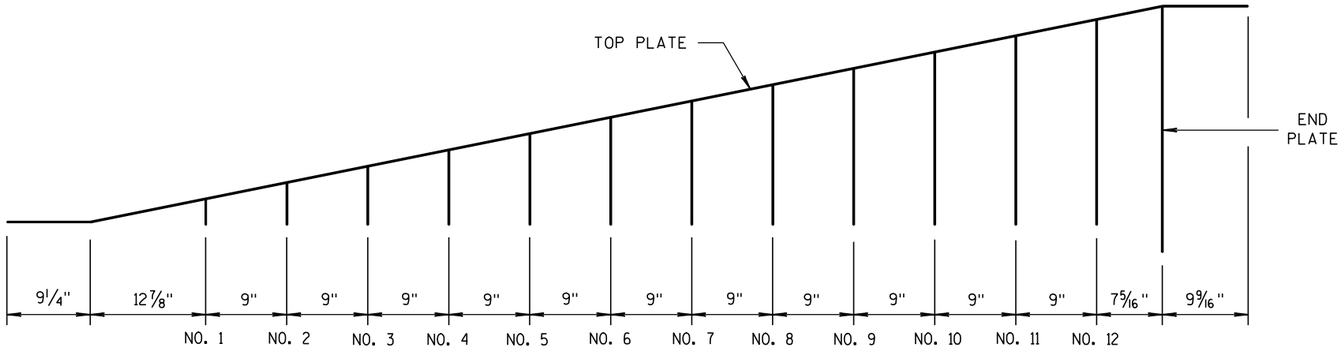
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....

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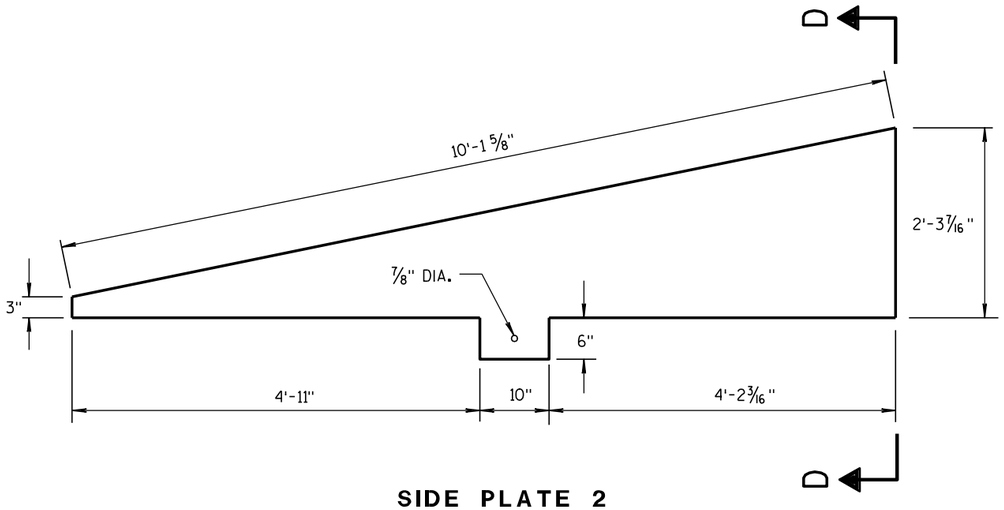
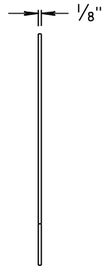
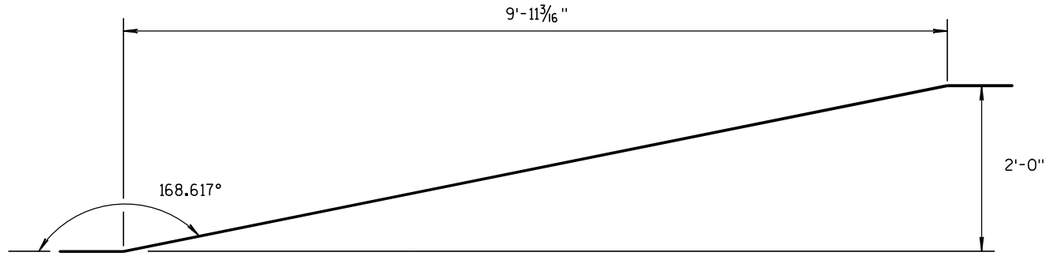
S.D.D. 14 B 7-13g



SIDE PLATE 2

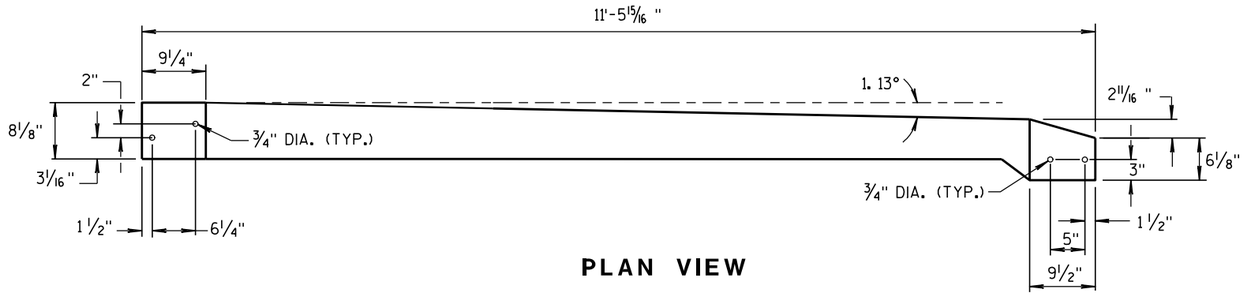


END VIEW



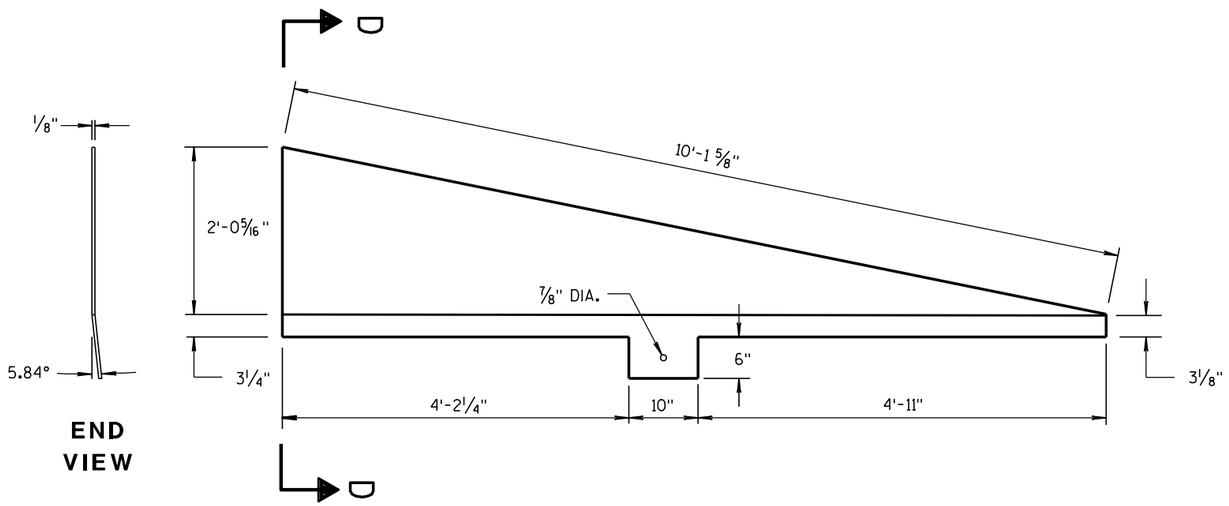
SIDE VIEW

TOP PLATE



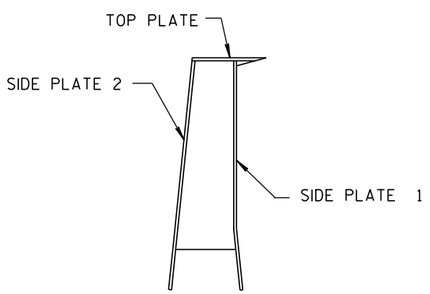
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE
/S/ Jerry H. [illegible] ENT
ROADWAY STANDARDS ENGINEER
42
FHWA

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S.D.D. 14 B 7-13h

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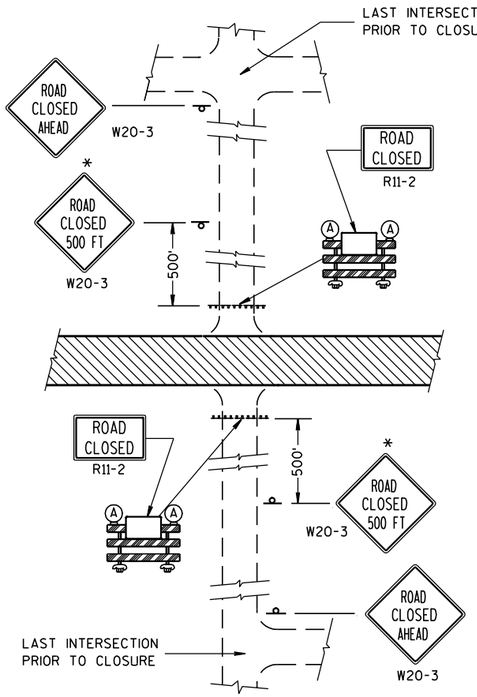
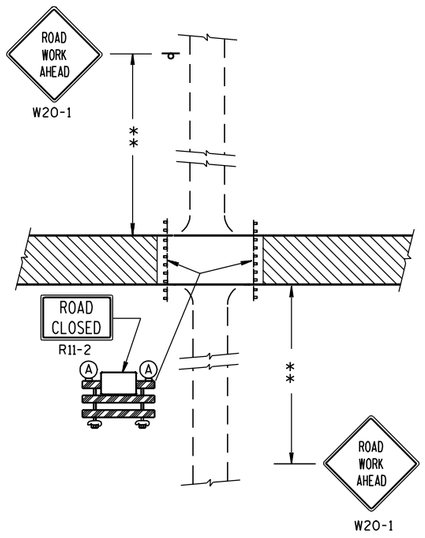
S.D.D. 14 B 7-13h



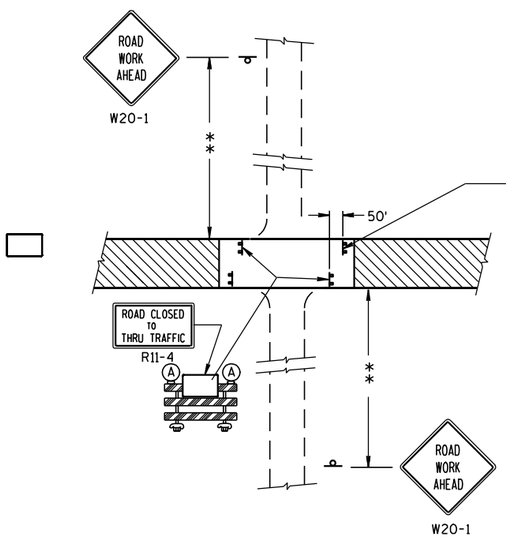
DETAIL 1

(NO ACCESS TO PROJECT)



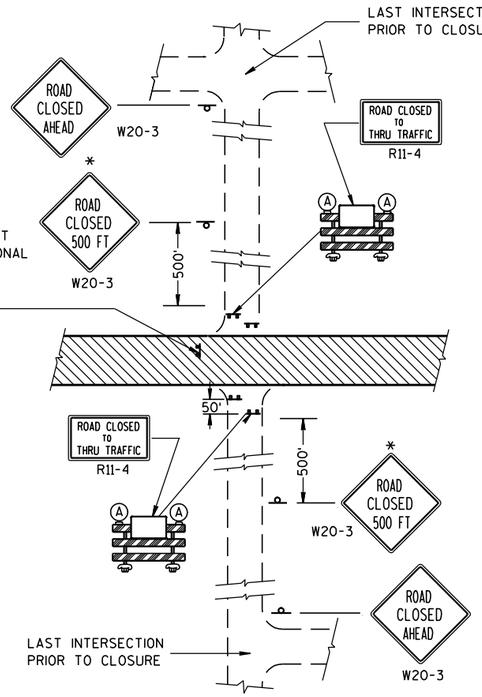
DETAIL 2

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



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-16-03 DATE

/S/ Thomas N. N[illegible] CHIEF SIGNS AND MAR[illegible] INEER

FHWA

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S.D.D. 15 C 3-1

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

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.

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

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

(1) 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.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

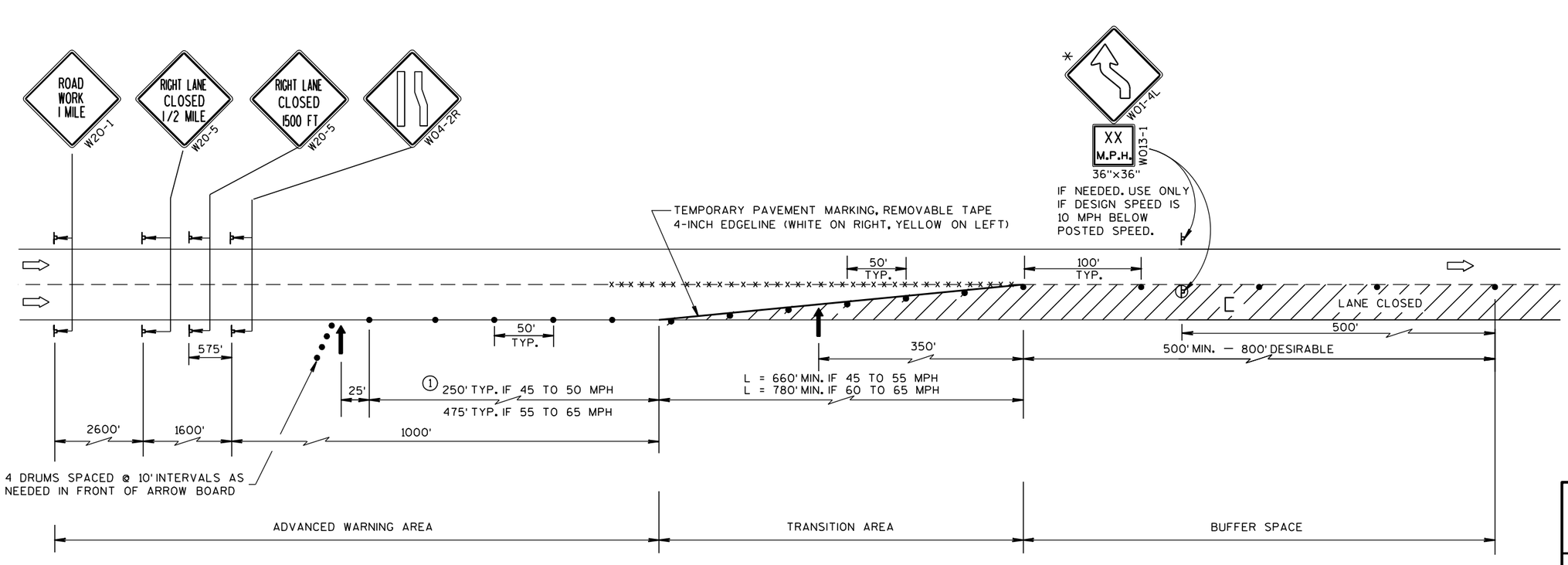
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

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

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95 DATE
/S/ Chester J. [illegible]
DIRECTOR, OFFICE O 44 C
FHWA

GENERAL NOTES

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

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

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

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

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

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

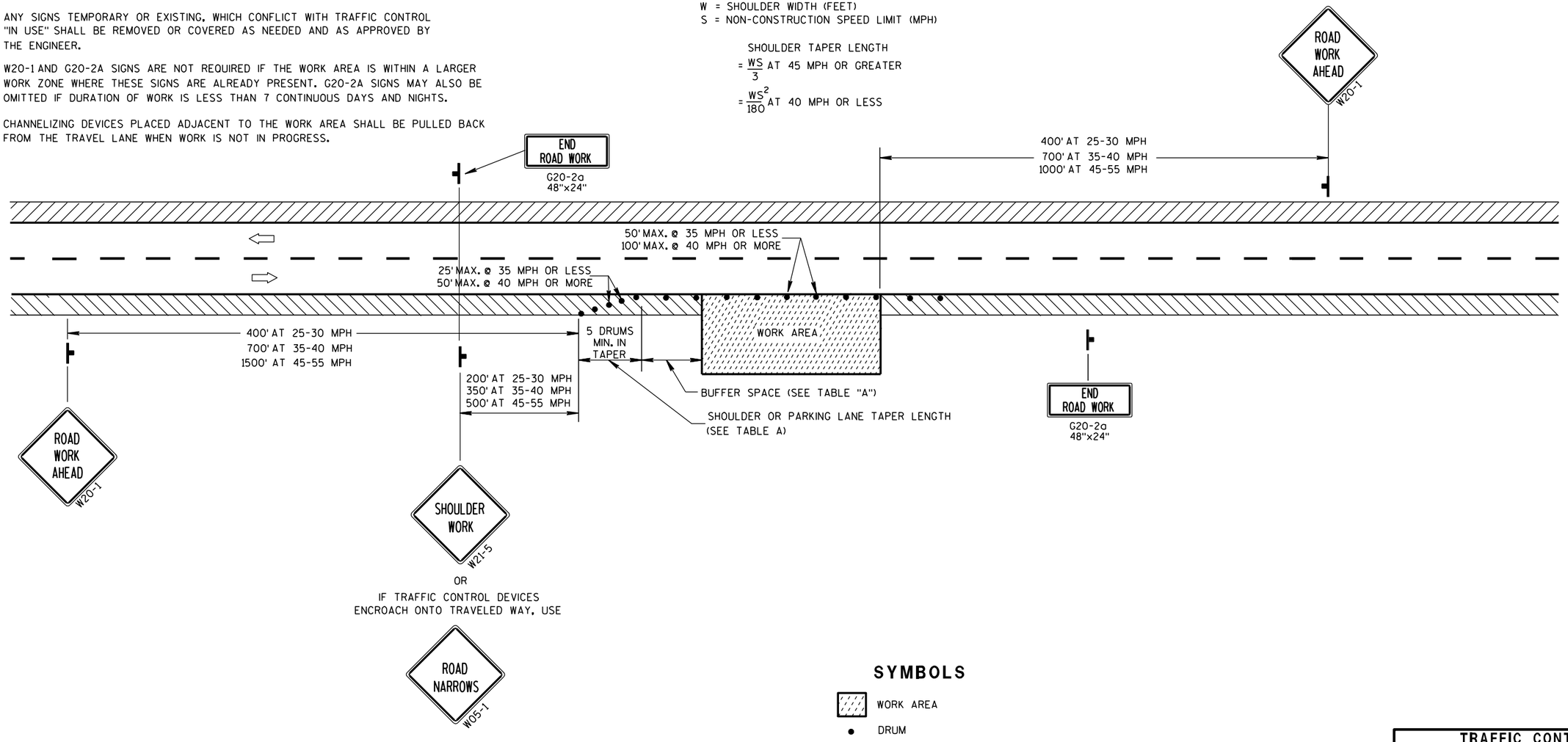
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
$= \frac{WS}{3}$ AT 45 MPH OR GREATER
$= \frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible] ENGINEER
FHWA

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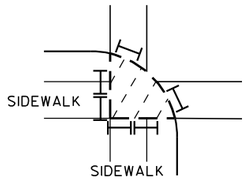
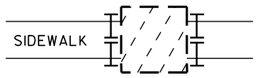
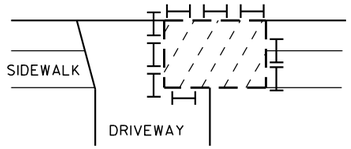
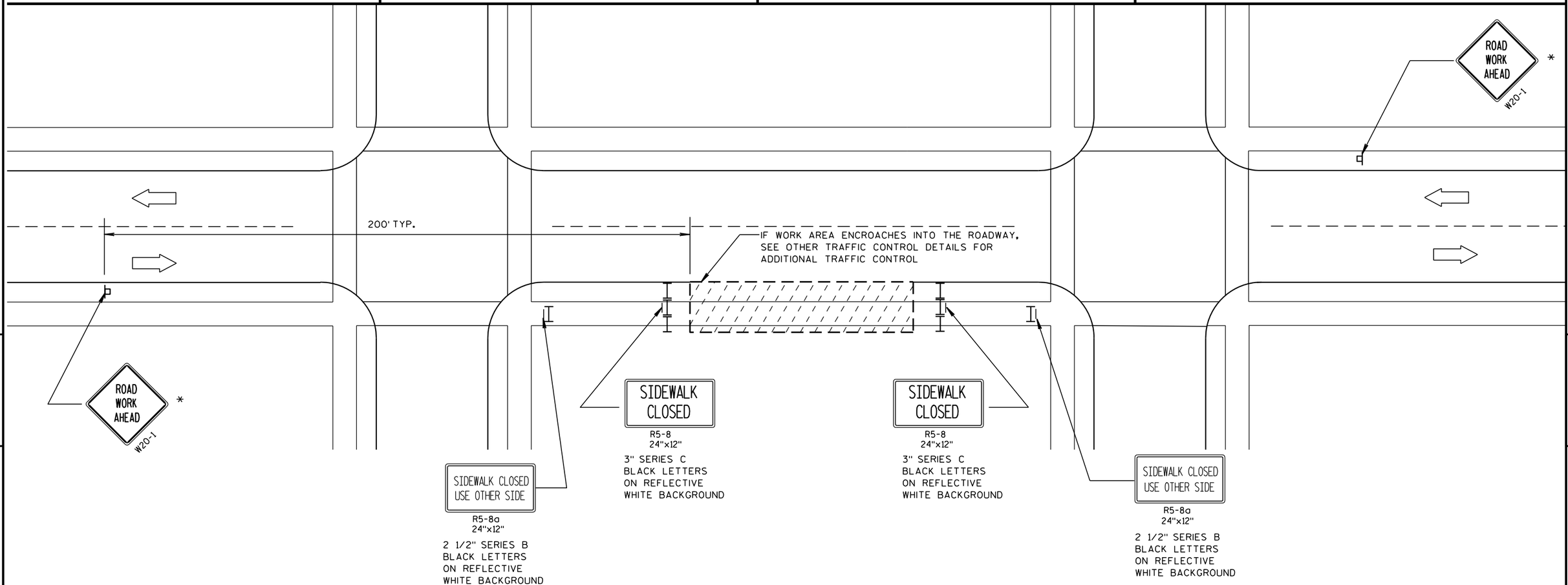
S.D.D. 15 D 28-1

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

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

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible]NEER
FHWA

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S.D.D. 15 D 30-1

Notes

Wisconsin Department of Transportation

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