EAU

JULY 2017

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 = 282

PROJECT ID: 1000-08-81 WITH: 3700-50-26, 3700-50-27

COUNTY: CHIPPEWA, DUNN, & EAU CLAIRE

17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1000-08-81		
3700-50-26		
3700-50-27		

NW REGION, VAR SGNLIZED INTERSECTIONS

VAR HWY & LOCATION/ SGNL HEAD PER LN

VAR HWY

CHIPPEWA, DUNN, & EAU CLAIRE COUNTIES

STATE PROJECT NUMBER: 1000-08-81

EAU CLAIRE - CHIPPEWA FALLS

IH 94 TO STH 93 (USH 53 SOUTH SECT)

USH 53

EAU CLAIRE COUNTY

STATE PROJECT NUMBER: 3700-50-26

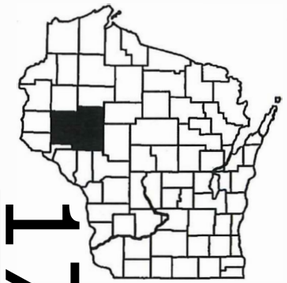
EAU CLAIRE, STH 93

GOLF ROAD INTERSECTION

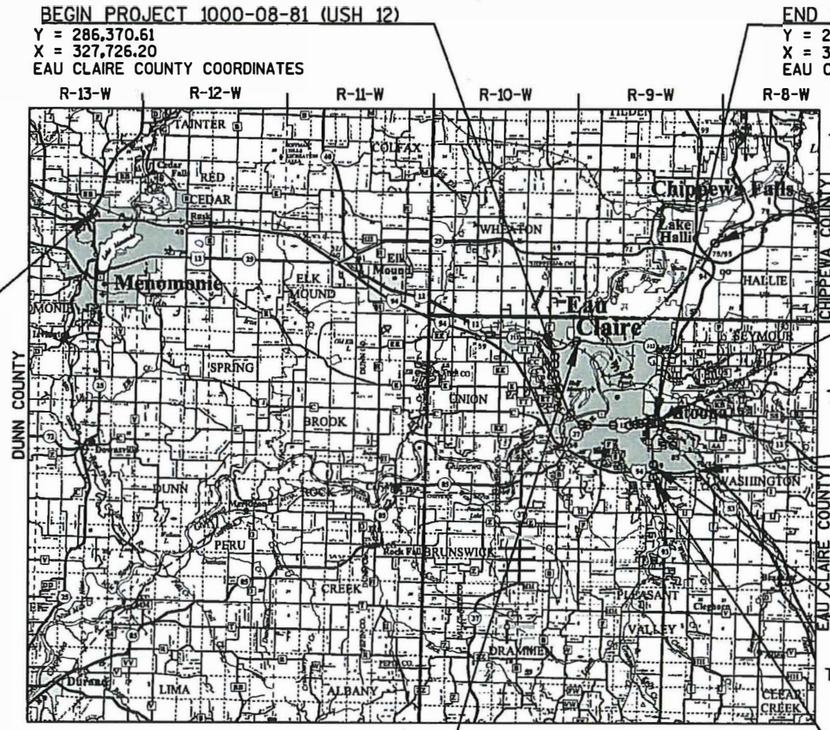
STH 93

EAU CLAIRE COUNTY

STATE PROJECT NUMBER: 3700-50-27







BEGIN PROJECT 1000-08-81 (USH 12)
Y = 286,370.61
X = 327,726.20
EAU CLAIRE COUNTY COORDINATES

END PROJECT 1000-08-81 (USH 12)
Y = 272,680.11
X = 350,087.40
EAU CLAIRE COUNTY COORDINATES

PROJECT 1000-08-81 (STH 25)
Y = 183,584.668
X = 159,820.94
DUNN COUNTY COORDINATES

PROJECT 1000-08-81 (STH 124)
Y = 116,575.34
X = 166,116.09
CHIPPEWA COUNTY COORDINATES

END PROJECT 3700-50-26
Y = 274,747.16
X = 350,627.04
EAU CLAIRE COUNTY COORDINATES

BEGIN PROJECT 3700-50-26
Y = 262,546.64
X = 359,416.11
EAU CLAIRE COUNTY COORDINATES

PROJECT 3700-50-27
Y = 263,991.95
X = 349,70148
EAU CLAIRE COUNTY COORDINATES

PROJECT 1000-08-81 (STH 312)
Y = 290,017.92
X = 332,903.37
EAU CLAIRE COUNTY COORDINATES

PROJECT 1000-08-81 (STH 93)
Y = 260,508.88
X = 349,982.51
EAU CLAIRE COUNTY COORDINATES

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)
- MARSH AREA
- WOODED OR SHRUB AREA

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

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

LAYOUT
SCALE 0 3.00

TOTAL NET LENGTH OF CENTERLINE = 0.00 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS); DUNN COUNTY, CHIPPEWA COUNTY, AND EAU CLAIRE COUNTY.

ORIGINAL PLANS PREPARED BY

AECOM

AECOM
1350 Deming Way, Suite 100, Middleton, WI 53562
T 608.836.9800 www.aecom.com

WISCONSIN
JEFFREY J. SANDBERG
E-39308
PRAIRIE DU SAC, WI
PROFESSIONAL ENGINEER

5/4/17 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	DAVID KOEPP
Regional Examiner	
Regional Supervisor	TIM MASON

APPROVED FOR THE DEPARTMENT

DATE: 5/5/2017 (Signature)

E

2

GENERAL NOTES

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

BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

LOCATE ELECTRICAL SERVICE METER BREAKER PEDESTALS AND WOOD POLES WITH METER SOCKETS ON HIGHWAY RIGHT-OF-WAY AND OUTSIDE OF FENCE, OR AS DIRECTED BY ENGINEER.

THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

EROSION CONTROL BEST MANAGEMENT PRACTICES AND LOCATIONS ARE TO BE UTILIZED PER THE GUIDANCE AND APPROVAL OF THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER. FINAL TREE AND SHRUBS CLEARING LOCATIONS WILL BE DETERMINED BASED ON INSTALLED CAMERA VIEWSHEDS AS DETERMINED BY ENGINEER IN FIELD AFTER CAMERAS ARE INSTALLED.

WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

NOTIFY THE REGION ELECTRICAL UNIT BY CALLING (715) 839-3787 A MINIMUM OF TWO (2) WEEKS PRIOR TO STAKING ANY DEVICES.

NOTIFY THE REGION ELECTRICAL UNIT TO HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING CABLE INTO SYSTEM. TO MAKE ARRANGEMENTS, CALL (715) 839-3787

RESTORE DISTURBED AREAS WITHIN THE RIGHT OF WAY BY DIRECTION OF THE ENGINEER WITH THE FOLLOWING FINISH ITEMS: SALVAGED TOPSOIL, SEED, FERTILIZER, AND MULCH. APPLY FINISHING ITEMS ON DISTURBED AREAS WITHIN 5 WORKING DAYS AFTER GRADING WORK IS COMPLETED.

ORDER OF DETAIL SHEETS

CONSTRUCTION DETAILS

ITS PLANS

PERMANENT SIGNING

TRAFFIC SIGNAL PLANS

TRAFFIC CONTROL

STRUCTURE PLAN

CROSS SECTIONS

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

2

ABBREVIATIONS

AP	ACCESS POINT/ DRIVEWAY CONNECTION
AR	ACCESS RIGHTS
AC.	ACRES
ET.AL.	AND OTHERS
℄ OR C/L	CENTERLINE
CMCP	CORRUGATED METAL CULVERT PIPE
CSM	CERTIFIED SURVEY MAP
COR.	CORNER
D	DEGREE OF CURVE
D.D.	DIRECTION DISTRIBUTION
D.H.V.	DESIGN HOUR VOLUME
DOC.	DOCUMENT
E.	EAST
EASE.	EASEMENT
EL OR ELEV	ELEVATION
E.S.A.L.	EQUIVALENT SINGLE AXLE LOAD
EXIST.	EXISTING
H.E.	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
IP OR I.P.	IRON PIN
L	LENGTH OF CURVE
LN	LANE
LT. OR LT	LEFT
MAX.	MAXIMUM
MIN.	MINIMUM
MON.	MONUMENT
MP	ROADWAY MILEAGE
N.	NORTH
P.	PAGE
PLE	PERMANENT LIMITED EASEMENT
PL OR P.L.	PROPERTY LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
RD.	ROAD
(100')	RECORDED AS
R	RADIUS
R.L. OR R/L	REFERENCE LINE
ROR	RELEASE OF RIGHTS
REM.	REMAINING
RT OR RT.	RIGHT
R/W	RIGHT-OF-WAY
S.	SOUTH
S.E.	SUPEREVELVATION
SEC.	SECTION
SF	SQUARE FEET
STA.	STATION
T	TANGENT
TLE	TEMPORARY LIMITED EASEMENT
T. %	TRUCK (PERCENT OF)
V.	VOLUME
W.	WEST

WISDNR

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
(WEST CENTRAL REGION)
1300 W. CLAIRMONT STREET
EAU CLAIRE, WI 54702
CHRIS WILLGER
(715) 839-1609
christopherj.willger@wisconsin.gov

WISDOT

WISCONSIN DEPARTMENT OF TRANSPORTATION
(NORTHWEST REGION)
718 WEST CLAIREMONT AVE
EAU CLAIRE WI 54701
DAVE KOEPP
(715) 836-2078
david.koepp@dot.wi.gov

STATE PATROL

WISCONSIN STATE PATROL EAU CLAIRE POST
5005 HIGHWAY 53 SOUTH
EAU CLAIRE WI 54701-8846
CAPTAIN NICK WANINK
(715) 839-3800

UTILITIES

AT&T LEGACY

WILLIAM KOENIG
JMC ENGINEERS & ASSOCIATES
128 W. SUNSET AVE
APPLETON, WI 54911
608-628-0575
WEKOENIG@ATT.NET

AT&T WISCONSIN

RICK PODOLAK
304 SOUTH DEWEY ST., 4TH FLOOR
EAU CLAIRE, WI 54701
715-839-5565 (OFFICE)
715-410-0656 (MOBILE)
RP4514@ATT.COM

CENTURY LINK

KIRK THOELKE
NATIONAL RIGHT OF WAY
CENTURYLINK COMM., LLC
11111 DORSETT RD
MARYLAND HEIGHTS, MO 63043
636-887-4752 (OFFICE)
636-887-4905 (FAX)
KIRK.THOELKE@CENTRYLINK.COM

CHARTER COMMUNICATIONS

SHANE YODER
1201 MCCANN DRIVE
ALTOONA, WI 54720
715-831-8940 EXT 51113 (OFFICE)
715-370-7870 (MOBILE)
SHANE.YODER@CHARTER.COM

CINC

DAREN BAUER
105 GARFIELD AVE
EAU CLAIRE, WI 54701
715-836-5286
BAUERDP@UWEC.EDU

CITY OF EAU CLARIE

LANE BERG
UTILITIES ADMINISTRATOR
1040 FOREST ST
EAU CLAIRE, WI 54703
715-839-1876
715-828-6801
LANE.BERG@EAUCLAIREWI.GOV

CITY OF MENOMONIE

SEWER & WATER
RANDY EIDE, DPW
800 WILSON AVE
MENOMONIE, WI 54751
715-232-2207 (OFFICE)
715-308-0664 (MOBILE)
715-235-0888 (FAX)
REIDE@MENOMONIE-WI.GOV

EAU CLAIRE ENERGY CO-OP

GARY BRECKA
8214 USH 12
PO BOX 368
FALL CREEK, WI 54742-0368
715-832-1603 (OFFICE)
715-836-6474 (DIRECT)
715-210-4974 (MOBILE)
GBRECKA@ECEC.COM

MAGELLAN PIPELINE

CLAIRE MADSEN
2728 PATTON DR
ST PAUL, MN 55113
612-750-1806 (MOBILE)
CLAIR.MADSEN@MAGELLANLP.COM

SPRINT

JAMES BURTON
FACILITY ENGINEERING/OSP-EAST
5600 N. RIVER RD, SUITE 200
ROSEMONT, IL 60018
708-955-6659 (MOBILE)
JAMES.M.BURTON@SPRINT.COM

VIKING GAS

STEVE KEILEN
OSCEOLA, WI 54020
715-294-2155
STEVEN.KEILEN@ONEOK.COM

VILLAGE OF LAKE HALLIE

WATER
DEREK SHAD
13136 30TH AVE
CHIPPEWA FALLS, WI 54729
715-726-2660
715-559-7019
DSCHAD@LAKEHALLIE.US

WEST WI TELECOM CO-OP

BRAD SCHMIDTKNECHT
5808 OLD MILL PLAZA
EAU CLAIRE, WI 54703
715-231-0504 (OFFICE)
715-308-1914 (MOBILE)
BRADS@WWT.NET

WINDSTREAM

AARON GLODI
13935 BISHOPS DR
BROOKFIELD, WI 53005
608-819-5014 (OFFICE)
AARON.GRODI@WINDSTREAM.COM

XCEL ENERGY

BRUCE ZEMKE
414 NICOLLET MALL, 5TH FLOOR
MINNEAPOLIS, MN 55401
612-330-7815
BRUCE.M.ZEMKE@XCELENERGY.COM

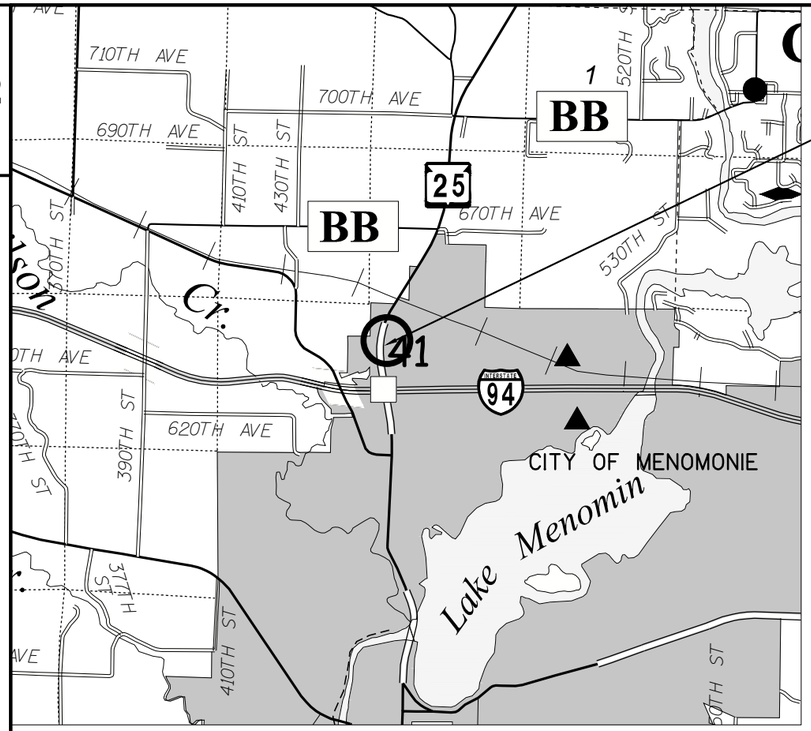
US OIL COMPANY, INC

MIKE KOEL
425 BETTER WAY
APPLETON, WI 54915
1.800.US OIL CO (1.800.876.4526)
MKOEL@USOIL.COM

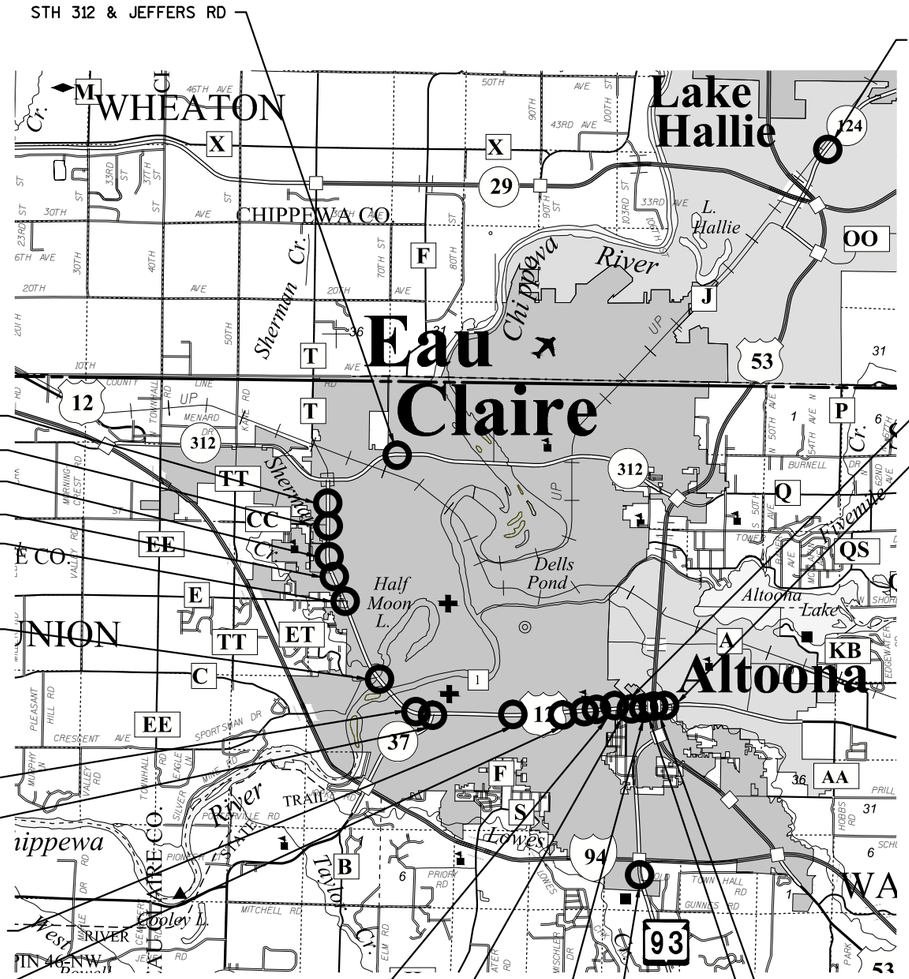
PACKERLAND BROADBAND

WAYNE CRETTON
105 KENT ST
P.O. BOX 190
IRON MOUNTAIN, MI 49801
(906) 282-3768
WAYNE.CRETTON@PACKERLANDBROADBAND.US

2



STH 25 & CEDAR FALLS RD



STH 312 & JEFFERS RD

STH 124 & PEDERSON RD/40TH AVE

USH 12 (CLAIREMONT AVE) & TRUAX BLVD

USH 12 (CLAIREMONT AVE) & FOLSOM ST

USH 12 (CLAIREMONT AVE) & MOHOLT DR

USH 12 (CLAIREMONT AVE) & VINE ST

USH 12 (CLAIREMONT AVE) & CAMERON ST

USH 12 (CLAIREMONT AVE) & MENOMONIE ST

USH 12 (CLAIREMONT AVE) & CRAIG RD

USH 12 (CLAIREMONT AVE) & STH 37

USH 12 (CLAIREMONT AVE) & STEIN BLVD

USH 12 (CLAIREMONT AVE) & UNIVERSITY DR

USH 12 & BUSINESS USH 53/HASTINGS WAY EAST RAMPS

USH 12 (CLAIREMONT AVE) & OTTER RD

USH 12 (CLAIREMONT AVE) & PATTON ST

USH 12 (CLAIREMONT AVE) & RUDOLPH RD

USH 12 (CLAIREMONT AVE) & KEITH ST

STH 93 & LORCH AVE

USH 12 & BUSINESS USH 53 WEST RAMPS/LONDON ROAD

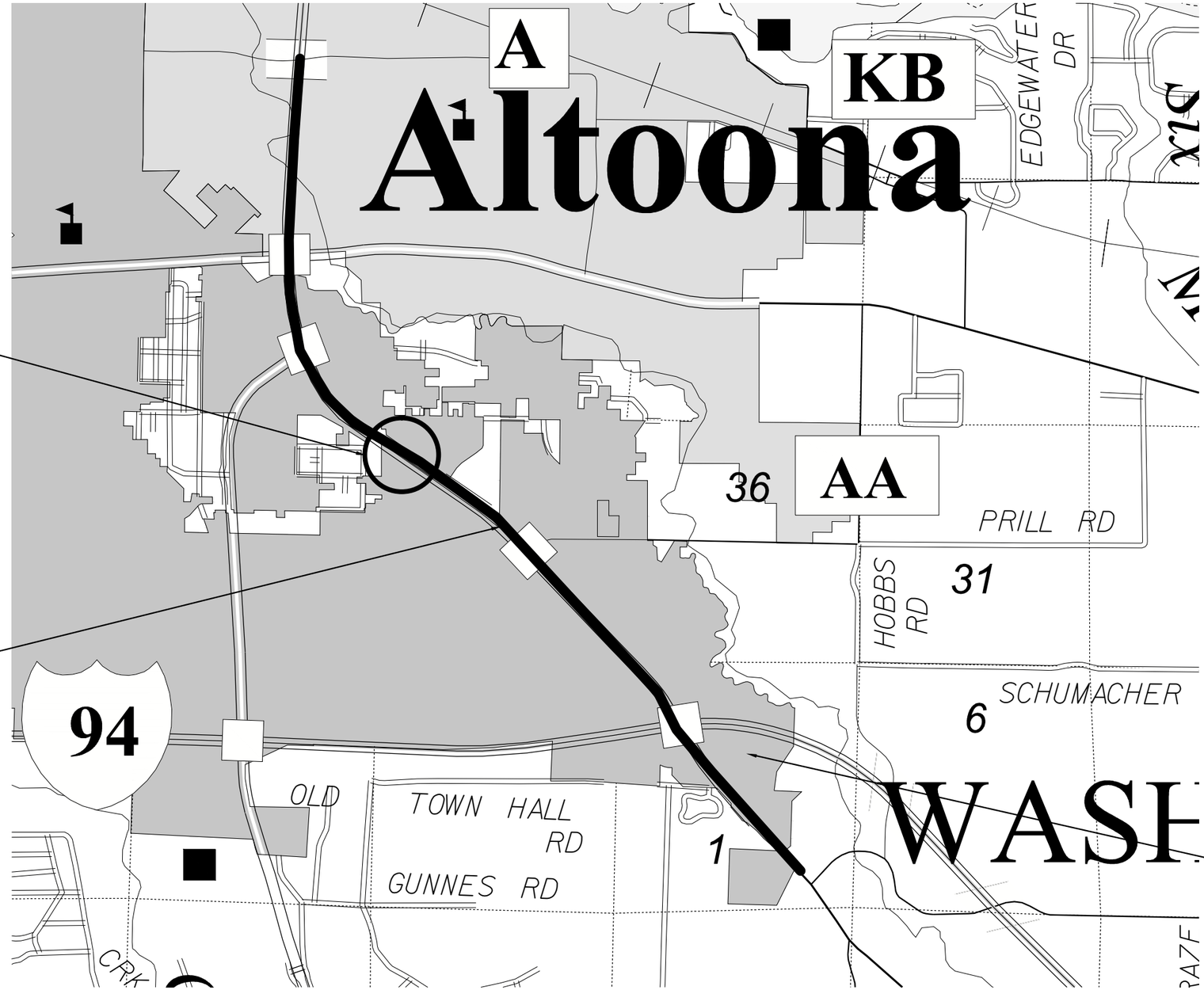
USH 12 (CLAIREMONT AVE) & FAIRFAX ST

PROJECT NO: 1000-08-81	HWY: VARIOUS	COUNTY: EAU CLAIRE, CHIPPEWA, DUNN	PROJECT OVERVIEW	SHEET 4	E

2

2

N



S-18-118 & DMS-18-0033

USH 53 BETWEEN STATE PATROL BUILDING AND SPOONER AVENUE

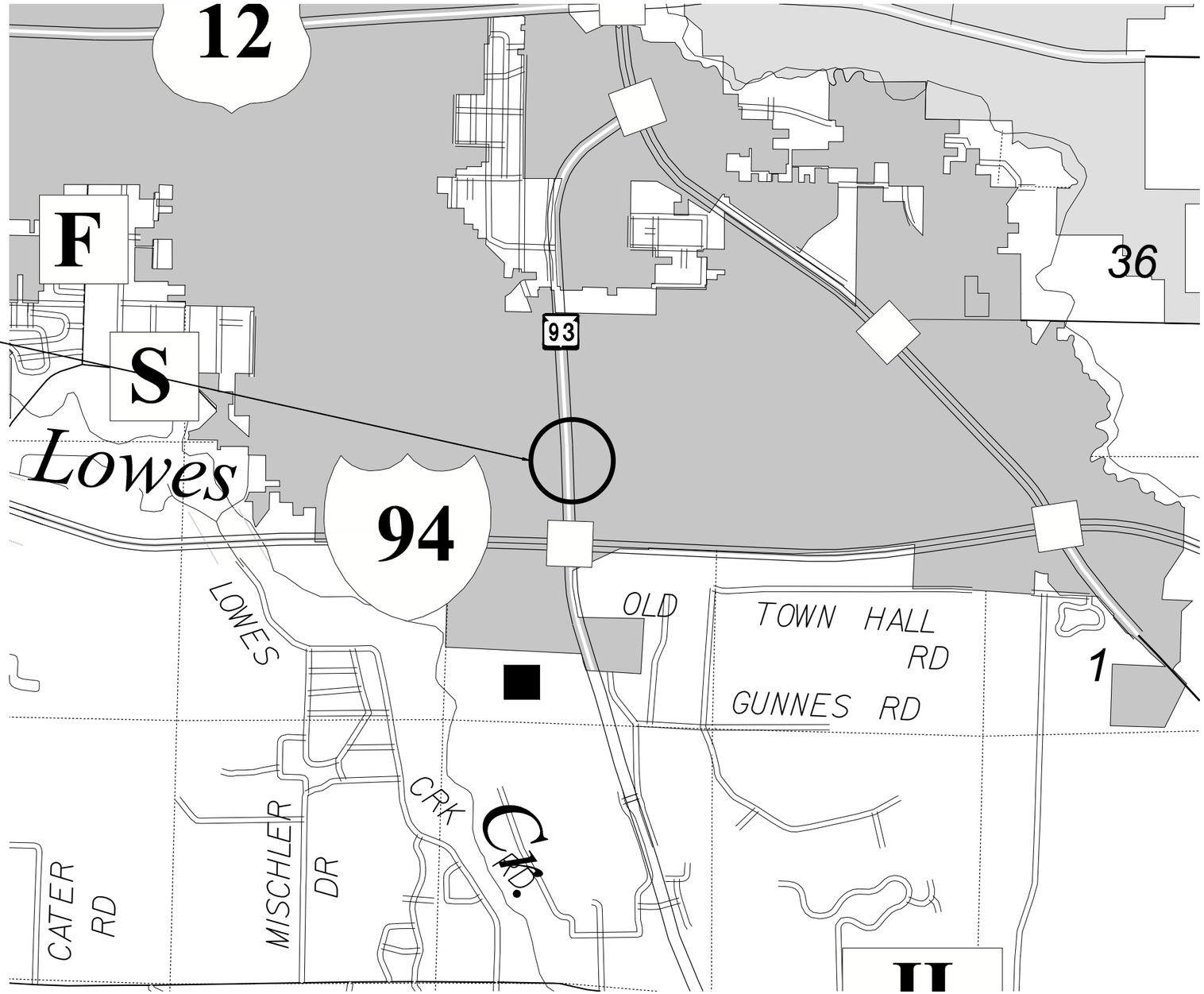
STATE PATROL BUILDING

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	PROJECT OVERVIEW	SHEET 5	E

2

N

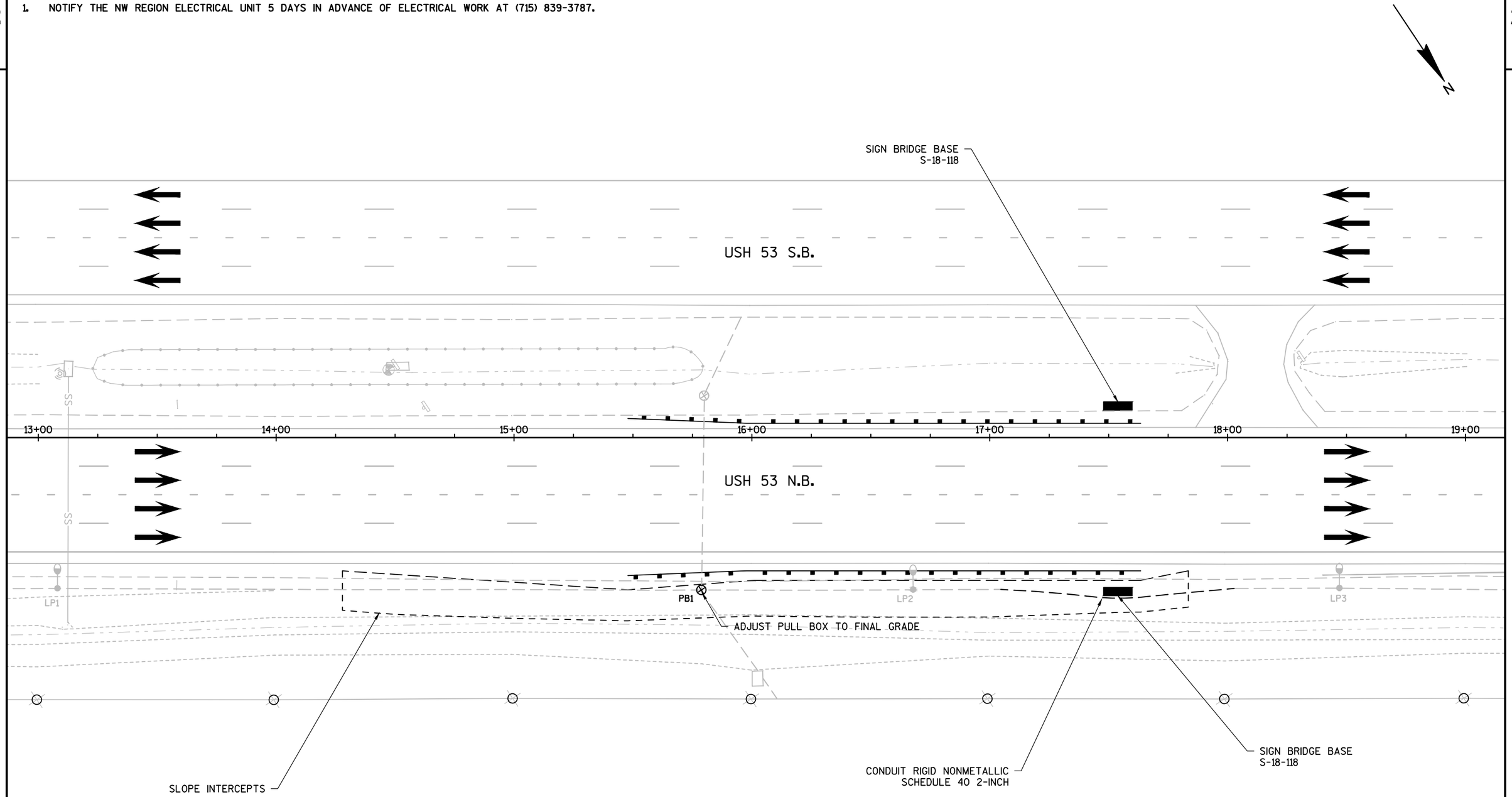
STH 93 & GOLF ROAD INTERSECTION



PROJECT NO: 3700-50-27	HWY: STH 93	COUNTY: EAU CLAIRE	PROJECT OVERVIEW	SHEET 6	E

NOTES:

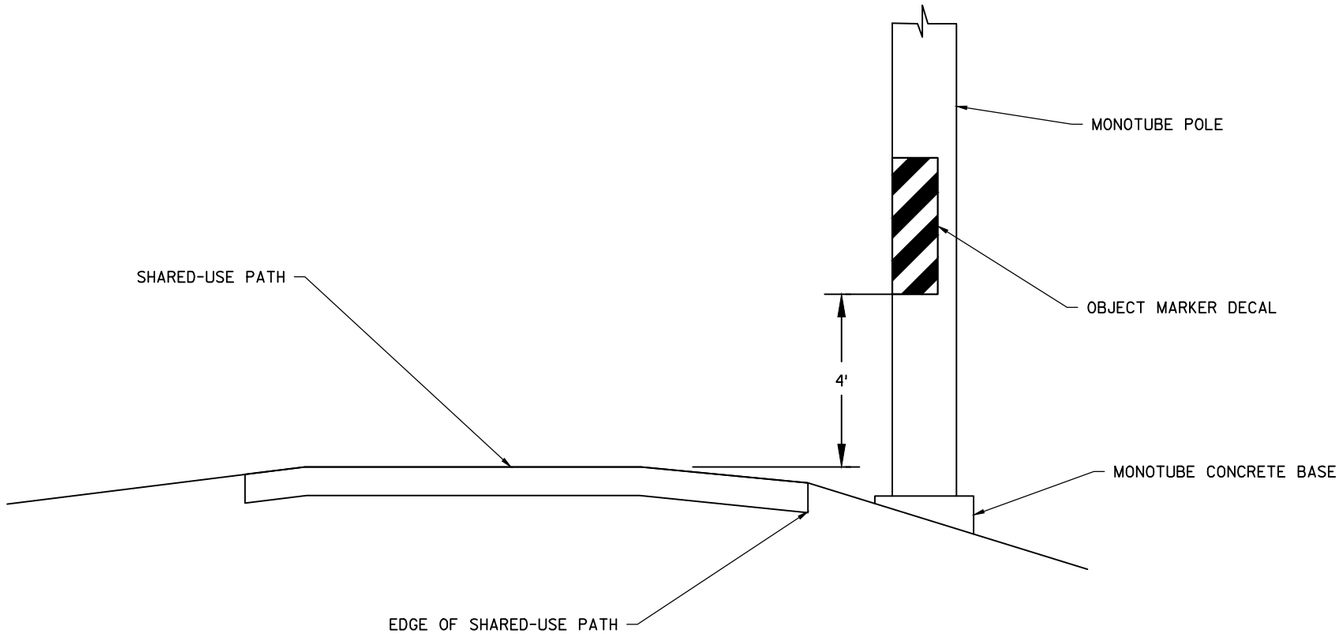
1. NOTIFY THE NW REGION ELECTRICAL UNIT 5 DAYS IN ADVANCE OF ELECTRICAL WORK AT (715) 839-3787.



PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	ELECTRICAL DETAIL	SHEET 7	E

NOTES:

1. ALIGN EDGE OF OBJECT MARKER WITH EDGE OF POLE CLOSEST TO SHARED-USE PATH.



OBJECT MARKER MOUNTING HEIGHT

PROJECT NO: 1000-08-81	HWY: STH 93	COUNTY: EAU CLAIRE	CONSTRUCTION DETAIL: OBJECT MARKER MOUNTING HEIGHT	SHEET 8	E

2

GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.

ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TEST BORINGS WERE MADE WHERE CONDUITS, PULL BOXES, COMMUNICATION VAULTS, POLES, FOUNDATIONS, OR OTHER EQUIPMENT ARE TO BE INSTALLED.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED OR TRIMMED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR ITS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, AND SEED AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS, BUT ALSO CONTAINING ITS CONSTRUCTION, WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR ITS CONSTRUCTION OPERATIONS.

DUE TO RAMP, LANE AND SHOULDER CLOSURE RESTRICTIONS AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

NOTIFY THE REGION ELECTRICAL FIELD UNIT (715-839-3787), A MINIMUM OF TWO (2) WEEKS PRIOR TO THE NEED TO STAKE THE FOLLOWING ITEMS: CCTV CAMERAS, COMMUNICATION VAULTS, DMS SIGN, PULL BOXES, POLES, AND RAMP GATES.

HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

FOR THE FIBER OPTIC CABLE INSTALLATION IN THE EAU CLAIRE STATE PATROL BUILDING, CONTACT CAPTAIN NICK WANINK AT (715) 839-3800 AT LEAST FOUR (4) DAYS PRIOR TO THE INSTALLATION TO GAIN ACCESS TO THE STATE PATROL BUILDING.

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
OVERHEAD DYNAMIC MESSAGE SIGN	
POLE MOUNTED CABINET	
ITS CONDUIT	
COMMUNICATIONS VAULT	V
POLE	
PULL BOX 24X42	
RAMP CLOSURE GATE	
SOLAR POWER SYSTEM	
LIGHTING CABINET	
SIGNAL CABINET	
QUANTITY POINT (NON-PHYSICAL ITEM)	
ELECTRICAL METER BREAKER PEDESTAL	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	

NOTE: EXISTING COMPONENTS AND EXISTING ROADWAY ARE SHOWN IN GRAY SHADE.

ITS STANDARD ABBREVIATIONS

CV	COMMUNICATIONS VAULT
PB	PULL BOX
CCTV	CLOSED CIRCUIT TELEVISION
DMS	OVERHEAD DYNAMIC MESSAGE SIGN
HUT	ITS HUT
RG	RAMP GATE
SP	SOLAR POWER SYSTEM
MB	ELECTRICAL METER BREAKER PEDESTAL
EXRG	EXISTING RAMP CLOSURE GATE
EXSC	EXISTING SIGNAL CABINET
EXLC	EXISTING LIGHTING CABINET

CONTACTS

WISDOT NW REGION
718 W. CLAIREMONT AVE
EAU CLAIRE, WI 54701
NW REGION ELECTRICAL FIELD UNIT
(715) 839-3787

WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER
433 W. ST. PAUL AVE, SUITE 300
MILWAUKEE, WI 53203
DEAN BEEKMAN
(414) 227-2154
dean.beekman@dot.wi.gov
DON SCHELL
donald.schell@dot.wi.gov
(414) 227-2148

AECOM
1350 DEMING WAY, SUITE 100
MIDDLETON, WI 53562
JEFF SANDBERG
(608) 828-8161
Jeff.sandberg@aecom.com

LEGEND

- CCTV CAMERA
- DYNAMIC MESSAGE SIGN
- V — COMMUNICATIONS VAULT
- ---------- 6-CT FIBER OPTIC CABLE
- —— - - —— 36-CT FIBER OPTIC CABLE
- — — — — — 72-CT FIBER OPTIC CABLE

NOTES

GRAYSHADE REPRESENTS EXISTING.

N

USH 53 & CTH AA
S-18-0673 (EXSC2)
- TRAFFIC SIGNAL CONTROLLER

USH 53 & CTH AA
S-18-0604 (EXSC1)
- TRAFFIC SIGNAL CONTROLLER

USH 53 & STH 93
S-18-1006 (EXSC3)
- TRAFFIC SIGNAL CONTROLLER

I-94 & USH 53
CCTV-18-0009 (EXCP1)
- CAMERA ASSEMBLY

USH 53 & CTH AA
CCTV-18-0042 (CP1)
- CAMERA ASSEMBLY

USH 53
DMS-18-0033 (DMS1)
- DMS CONTROLLER

USH 53 & STH 93
CCTV-18-00439 (CP2)
- CAMERA ASSEMBLY

USH 53
ITS HUT (HUT1)
- FIBER PANEL

I-94 & USH 12
CCTV-18-0010 (EXCP2)
- CAMERA ASSEMBLY

EAU CLAIRE
STATE PATROL
POST
-FIBER PANEL

DROP SPLICE LOCATION

DROP SPLICE LOCATION

DROP SPLICE LOCATION

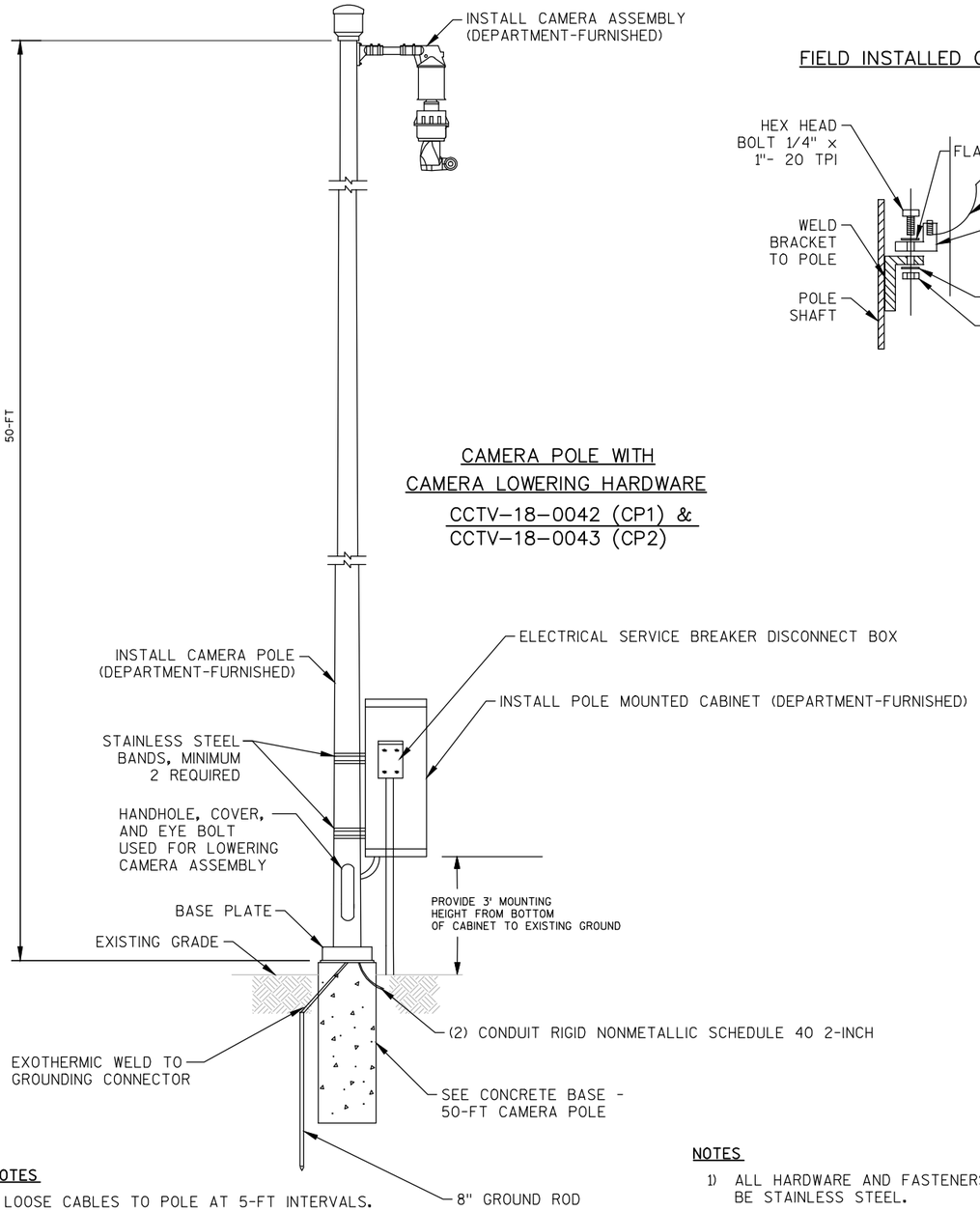
BUTT SPLICE LOCATION

V CV2 — V CV4 — V CV5 — V CV6 — V CV8 — V CV10 — V CV11 — V EXCV4

USH 53 & USH 12
S-18-1030 (EXSC4)
- TRAFFIC SIGNAL CONTROLLER

USH 53
ITS DEPLOYMENT
COMMUNICATIONS SCHEMATIC OVERVIEW

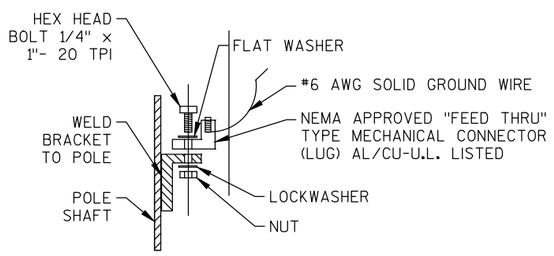
PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS COMMUNICATIONS OVERVIEW	SHEET 10	E



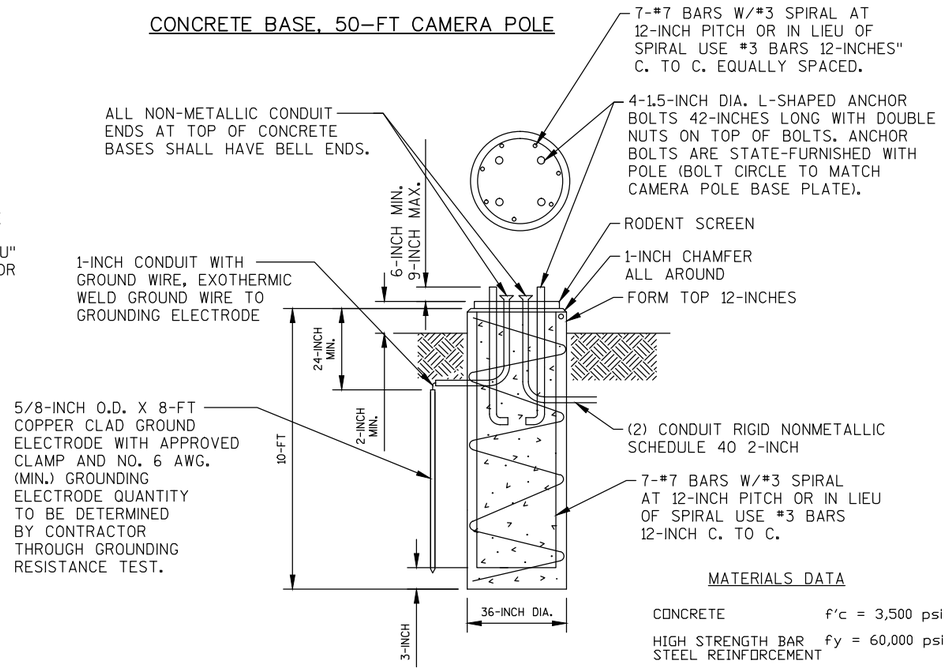
CAMERA POLE WITH CAMERA LOWERING HARDWARE

CCTV-18-0042 (CP1) & CCTV-18-0043 (CP2)

FIELD INSTALLED GROUNDING LUG



CONCRETE BASE, 50-FT CAMERA POLE



MATERIALS DATA

CONCRETE f'c = 3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT fy = 60,000 psi

GENERAL NOTES

SECURE LOOSE CABLES TO POLE AT 5-FT INTERVALS.

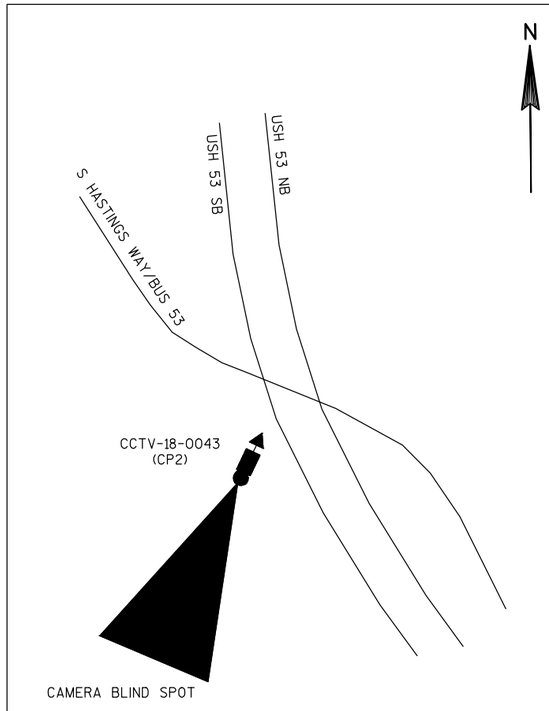
INSTALL DRIP LOOPS ON LOOSE CABLES TO PREVENT WATER FROM FLOWING ON CABLE AND ENTERING POLES/ENCLOSURES.

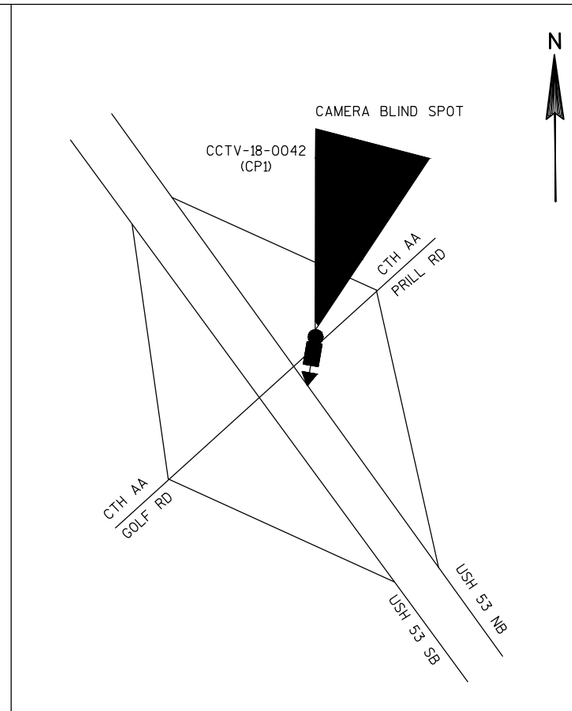
MOUNT EQUIPMENT UTILIZING STAINLESS STEEL BANDS OR METHOD APPROVED BY THE ENGINEER.

CONDUIT FLEXIBLE METALLIC SHALL BE LIQUID TIGHT.

NOTES

1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL.
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE DEPARTMENT-FURNISHED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN.





PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	ITS CONSTRUCTION DETAILS	SHEET 11	E

2

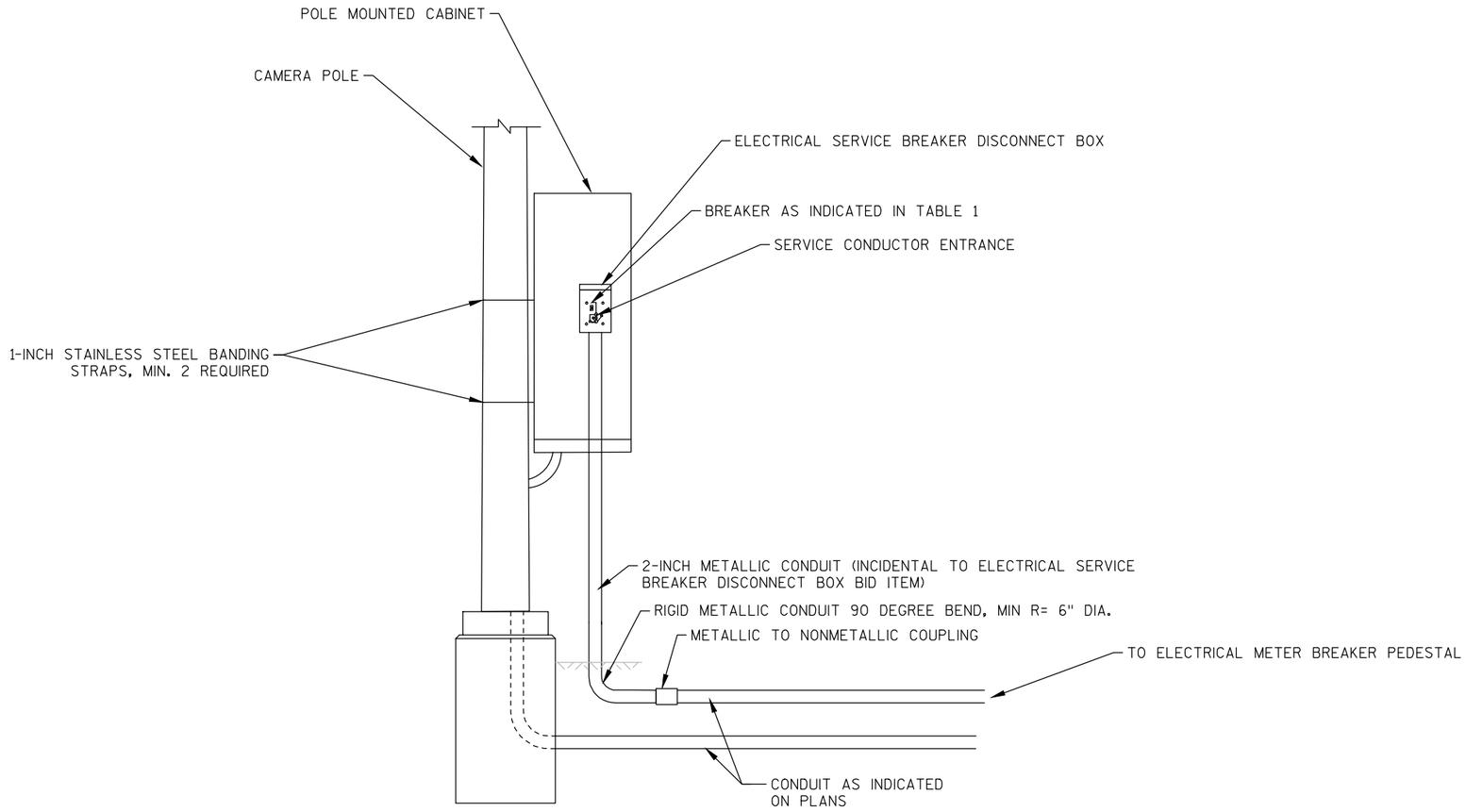
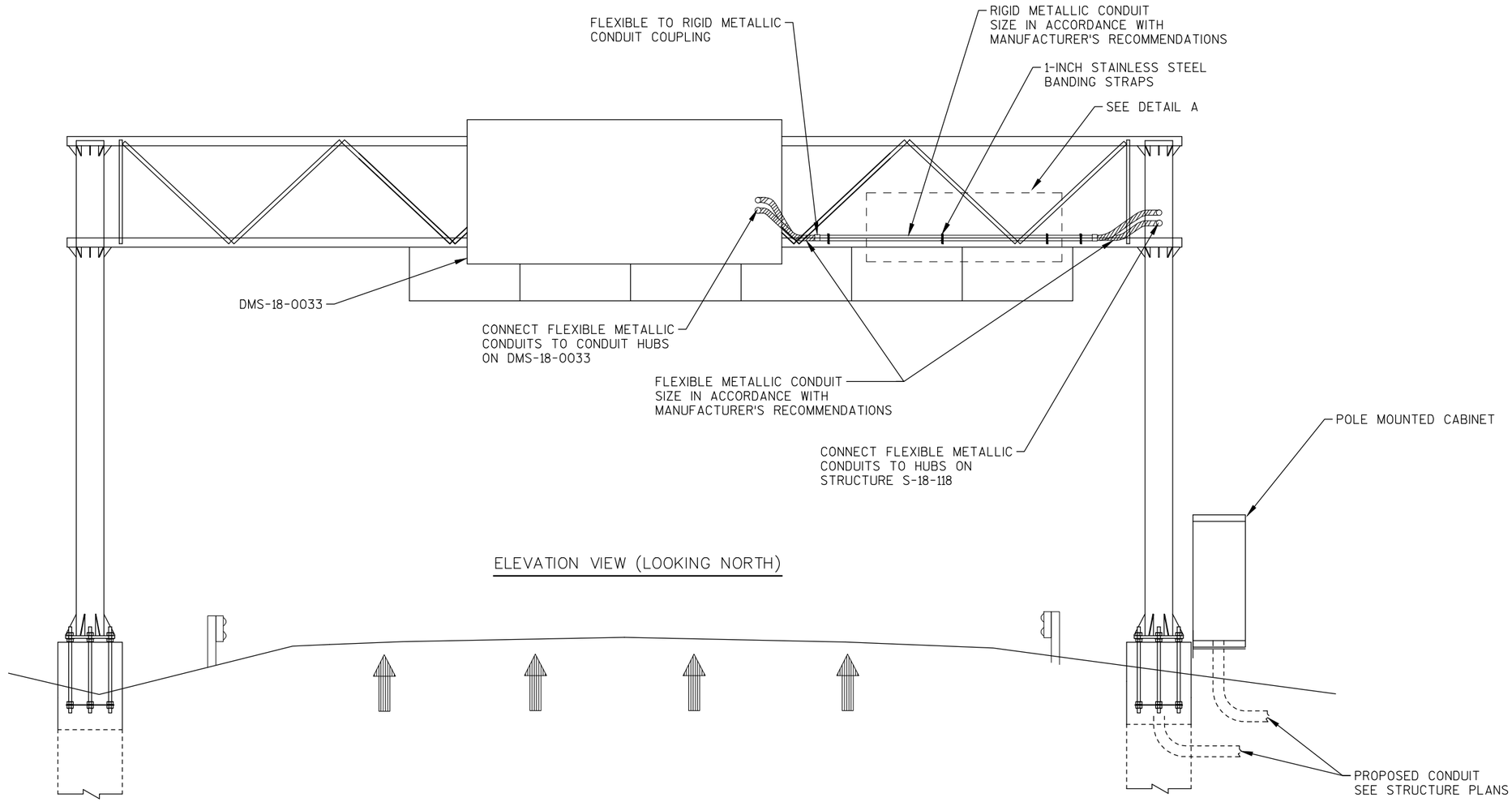


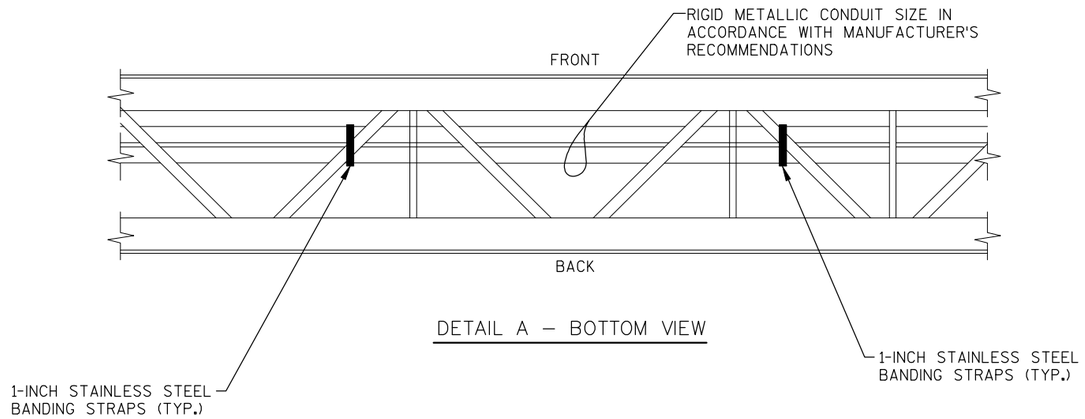
TABLE 1			
BREAKER SIZES BY LOCATION			
LOCATION	ID	MAIN BREAKER SIZE	SUB BREAKER SIZE
USH 53 & CTH AA/GOLF RD USH 53 & STH 93	CCTV-18-0042 (CP1) CCTV-18-0043 (CP2)	30 AMPS	30 AMPS (SPARE)

POLE MOUNTED CABINET
ELECTRICAL SERVICE BREAKER DISCONNECT BOX

(NOT TO SCALE)



ELEVATION VIEW (LOOKING NORTH)

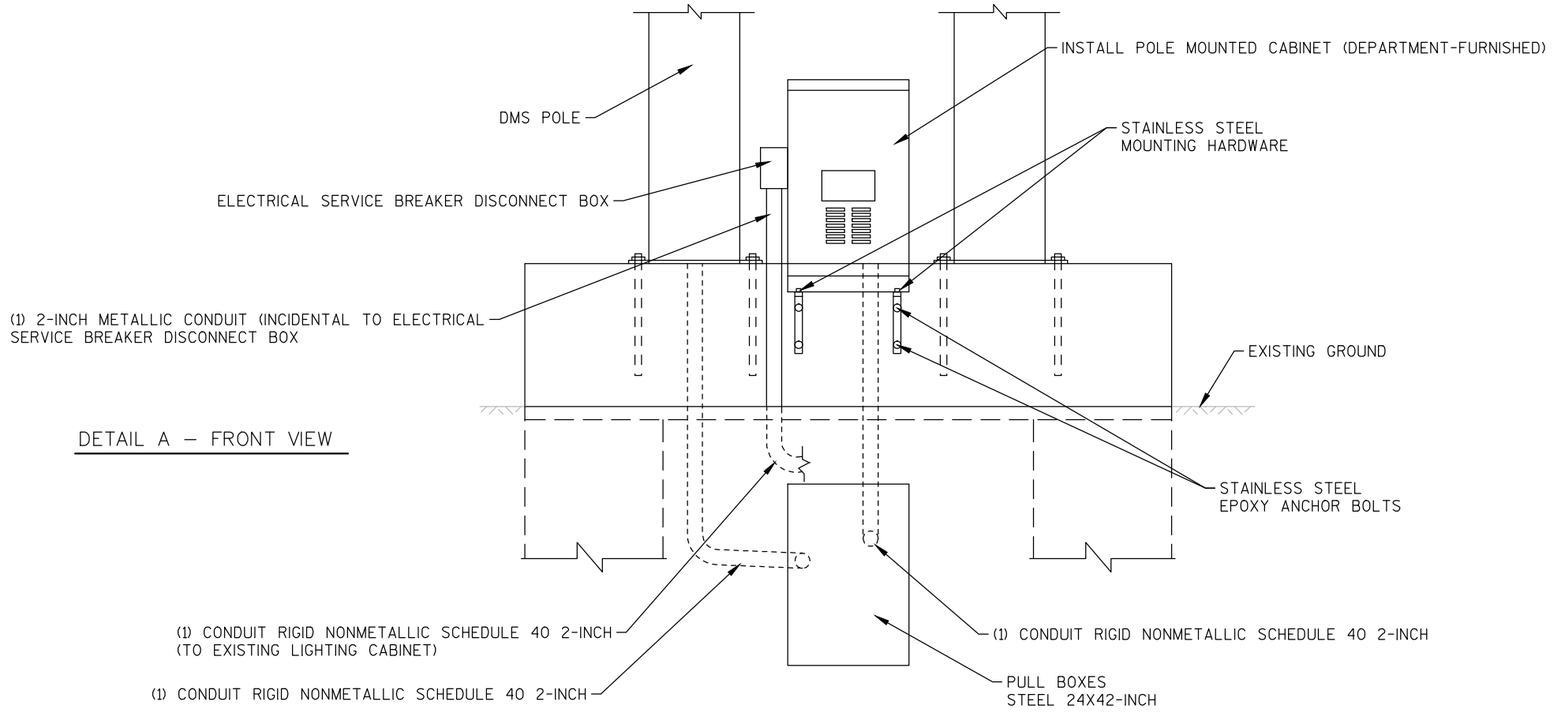


DETAIL A – BOTTOM VIEW

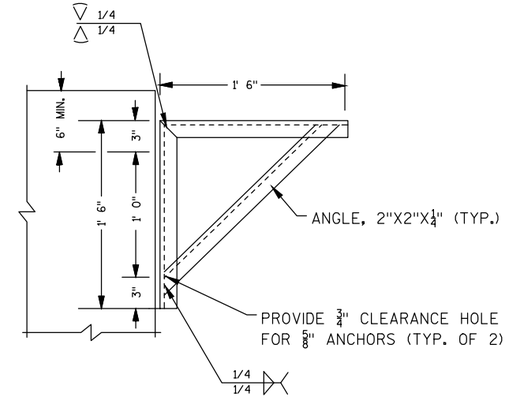
OVERHEAD FREEWAY DMS–18–0033 CONDUIT DETAIL

NOTE: 1-INCH STAINLESS STEEL BANDING STRAPS NEEDEED AT FLEXIBLE TO RIGID METALLIC CONDUIT COUPLINGS

2

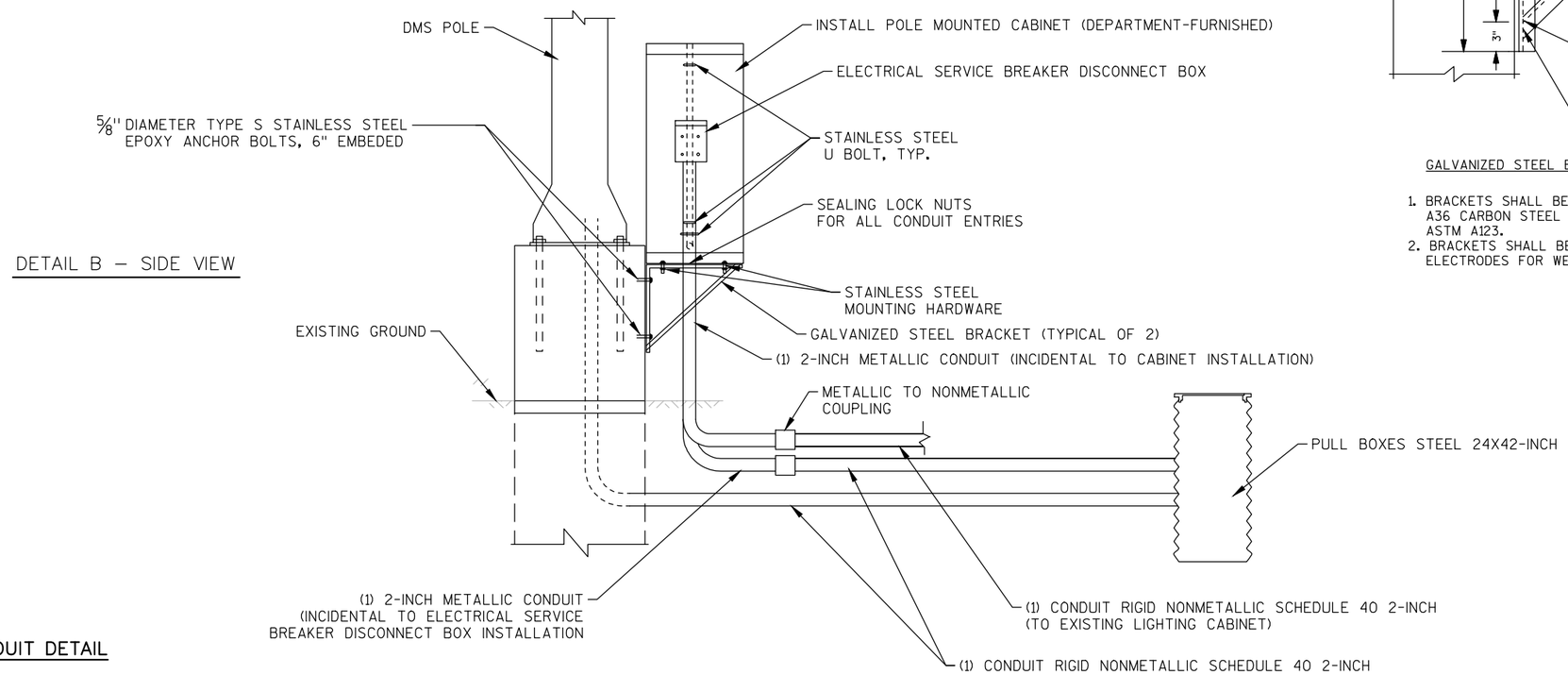


DETAIL A – FRONT VIEW



GALVANIZED STEEL BRACKET

1. BRACKETS SHALL BE SHOP-FABRICATED FROM ASTM A36 CARBON STEEL AND HOT-DIPPED GALVANIZED PER ASTM A123.
2. BRACKETS SHALL BE SHOP-FABRICATED USING ETOXX ELECTRODES FOR WELDS.

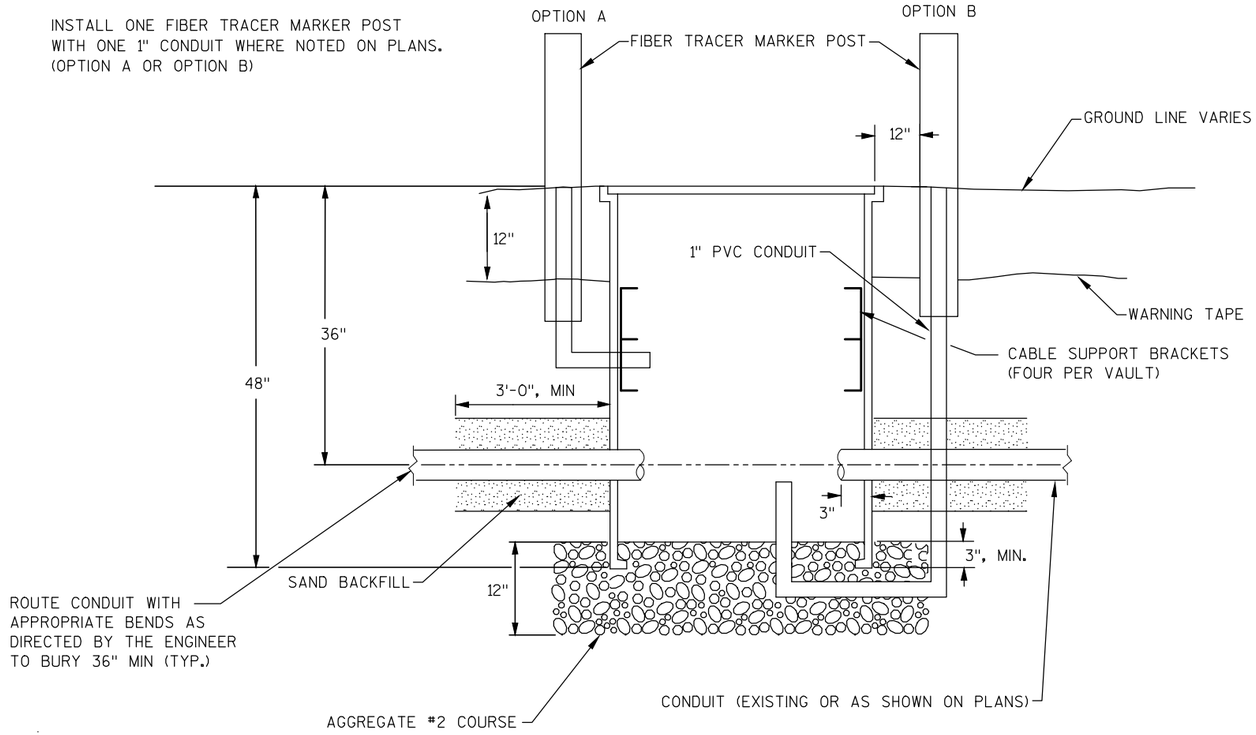


DETAIL B – SIDE VIEW

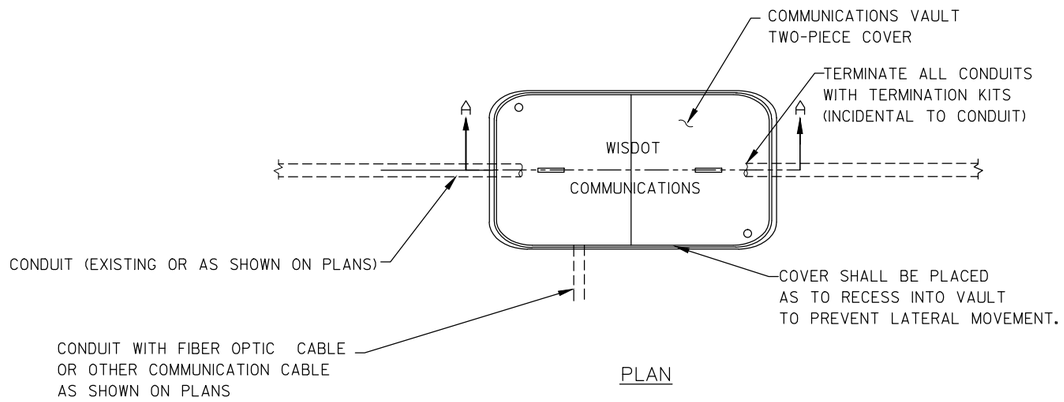
DMS–18–0033 STRUCTURE CONDUIT DETAIL

PROJECT NO:3700–50–26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS CONSTRUCTION DETAILS	SHEET 14	E

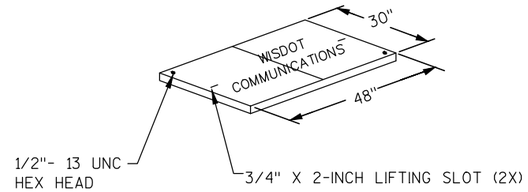
INSTALL ONE FIBER TRACER MARKER POST WITH ONE 1" CONDUIT WHERE NOTED ON PLANS. (OPTION A OR OPTION B)

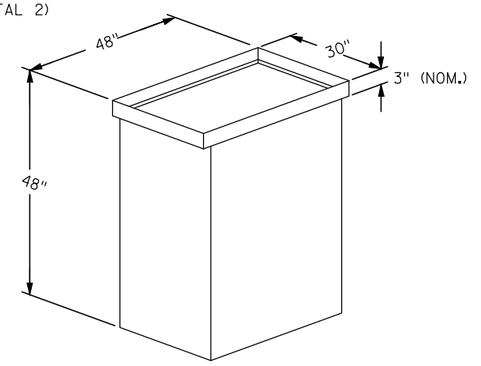


SECTION A–A



PLAN





ISOMETRIC

NOTES

1) BOX SHALL HAVE AN OPEN BASE.
2) COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.
3) ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.
4) VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.
5) FIELD LOCATION OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

COMMUNICATIONS VAULT

2

2

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

A

A

R/W

USH 53 SB

USH 53 NB

SCULLY DR

R/W

R/W

EXCV2

V

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

EAU CLAIRE STATE PATROL POST

V

EXCV1

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

N

ITS STANDARD ABBREVIATIONS

CV ---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 16	E

2

2

R/W

N

USH 53 SB

USH 53 NB

A

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

INSTALL CONDUIT INTO EXISTING ITEM

EXCV3
V

R/W

IH 94 EB RAMP TO NB USH 53

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

A

SCULLY DR

R/W

B

B

ITS STANDARD ABBREVIATIONS

CV ---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
ITS CONDUIT----------	- - -
COMMUNICATIONS VAULT----------	V

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

IH 94 EB

IH 94 WB

IH 94 WB C-D TO SB USH 53

USH 53 NB RAMP TO IH 94 WB

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 17 E

2

N

B

B

C

C

IH 94 EB RAMP TO USH 53 NB

USH 53 NB RAMP TO IH 94 EB

IH 94 EB

IH 94 WB

IH 94 NB C-D TO USH 53 SB RAMP

IH 94 WB RAMP TO USH 53 NB

R/W

QP1

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

CV1
V

FIBER TRACER MARKER POST REQ'D

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

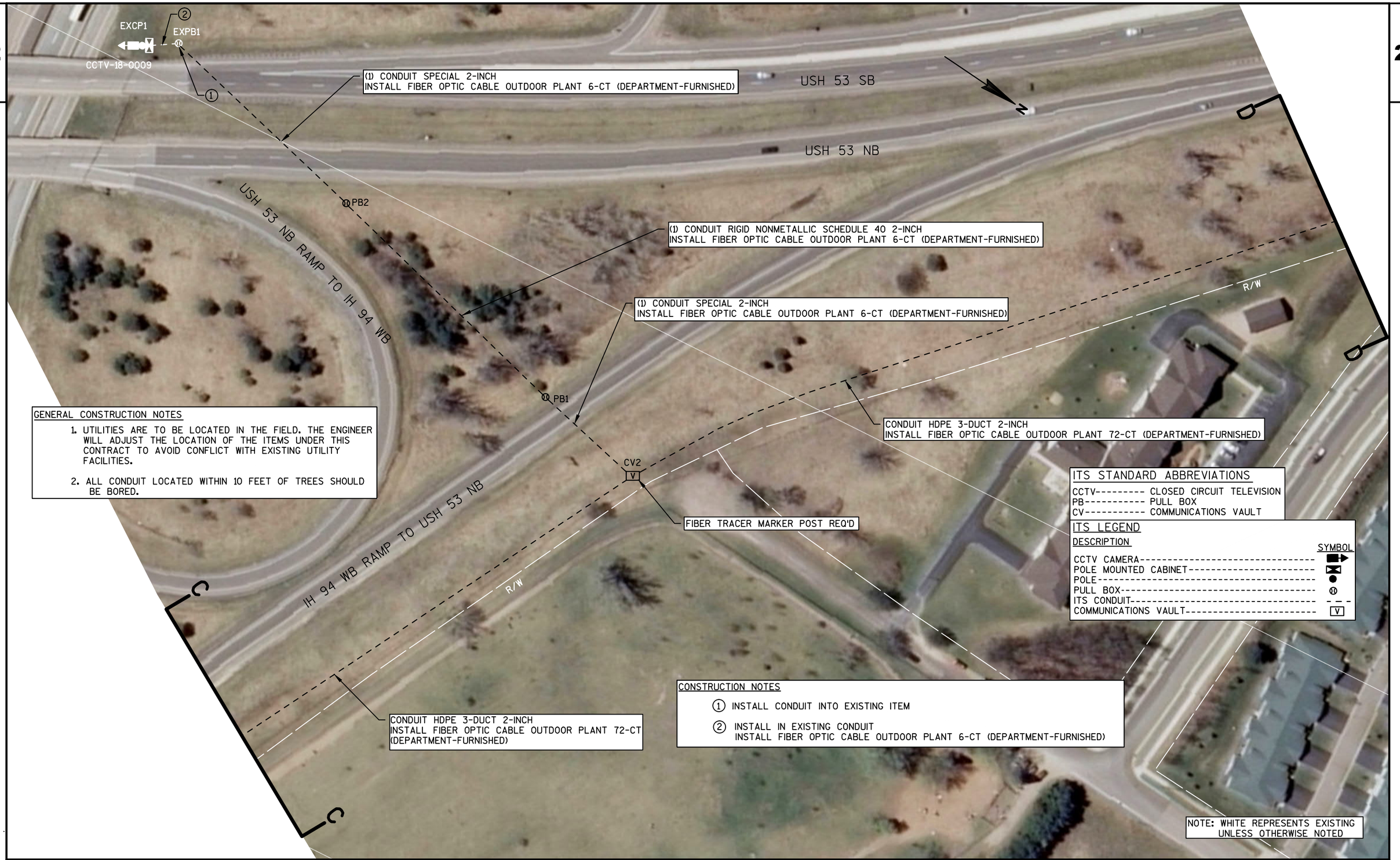
ITS STANDARD ABBREVIATIONS

CV ---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V
QUANTITY POINT (NON-PHYSICAL ITEM)	▲

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED



GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

ITS STANDARD ABBREVIATIONS

CCTV--------- CLOSED CIRCUIT TELEVISION
PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX	
ITS CONDUIT	
COMMUNICATIONS VAULT	V

CONSTRUCTION NOTES

1. INSTALL CONDUIT INTO EXISTING ITEM
2. INSTALL IN EXISTING CONDUIT
   INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	ITS PLANS	SHEET 19 E

2

2

COMMONWEALTH AVE

R/W

KEYSTONE CROSSING

N

USH 53 SB

USH 53 NB

GATEWAY DR

R/W

R/W

CV3

QP2

ITS STANDARD ABBREVIATIONS

CV ---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V
QUANTITY POINT (NON-PHYSICAL ITEM)	▲

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

FIBER TRACER MARKER POST REQ'D

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

NOTE: WHITE REPRESENTS EXISTING
UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	ITS PLANS	SHEET 20 E

2



PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 21 E

FILE NAME : P:\60483055\900_WORK\910_CAD\WORKING FOLDERS\ITS\021404_FM.DWG
LAYOUT NAME - ****
PLOT DATE : 1/20/2017 10:29 AM PLOT BY : MELENDEZ, WILLIAM PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

R/W

CTH AA/GOLF RD SB ON-RAMP

S 18-0673
EXSC2
EXPB12
EXPB11
EXPB10
EXPB9
EXPB8
EXPB7
EXPB6
EXPB5
EXPB4
EXPB3
EXPB2
S 18-0604
PB5
PB4
PB3
EXSC1
CP1
CV4
CCTV-18-0042

CTH AA/GOLF RD

CTH AA/GOLF RD SB OFF-RAMP

R/W

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

USH 53 SB

USH 53 NB

SEE DETAIL ON THE FOLLOWING PAGE

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

CONSTRUCTION NOTES

(1) INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

INSTALL IN EXISTING CONDUIT (BRIDGE PARAPET)
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT

ITS STANDARD ABBREVIATIONS

CCTV--------- CLOSED CIRCUIT TELEVISION
PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT
EXSC --------- EXISTING SIGNAL CABINET

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX	
ITS CONDUIT	
COMMUNICATIONS VAULT	V
QUANTITY POINT (NON-PHYSICAL ITEM)	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	
EXISTING SIGNAL CABINET	
ELECTRICAL SERVICE METER BREAKER PEDESTAL	

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

QP3

CTH AA/GOLF RD NB OFF-RAMP

CTH AA/GOLF RD NB ON-RAMP

R/W

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	ITS PLANS	SHEET 22 E

CONSTRUCTION NOTES

① METER BREAKER PEDESTAL AT EXISTING SIGNAL CABINET TO BE USED FOR CCTV-18-0042 ELECTRIC SERVICE.

② (1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

③ INSTALL CONDUIT INTO EXISTING ITEM

④ INSTALL IN EXISTING CONDUIT
(2) INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

⑤ (1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOR PLANT 6-CT (DEPARTMENT-FURNISHED)

⑥ (1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG

⑦ INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

CTH AA/GOLF RD NB ON-RAMP

R/W

(1) CONDUIT SPECIAL 2-INCH
1-2" (2) INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

FIBER TRACER MARKER POST REQ'D

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

(2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
1-2" (1) INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)
1-2" (3) ELECTRICAL WIRE LIGHTING 6 AWG

CCTV-18-0042
INSTALL ON BASE CAMERA POLE 50-FT
(1) INSTALL CAMERA POLE (DEPARTMENT-FURNISHED)
(1) INSTALL CAMERA ASSEMBLY (DEPARTMENT-FURNISHED)
(1) INSTALL POLE MOUNTED CABINET (DEPARTMENT-FURNISHED)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(2) PLAQUES SEQUENCE IDENTIFICATION

CV4

S 18-0604

PB3

PB4

PB5

CP1

EXSC1

EXPB4

EXPB3

EXPB2

EXPB5

EXPB7

EXPB6

RAMP

MH

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG

CTH AA/GOLF RD (WB)

CTH AA/GOLF RD (EB)

INSTALL IN EXISTING CONDUIT (BRIDGE PARAPET)
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

QP3

CAMERA ARM ALIGNMENT
ALIGN BOLT CIRCLE TO BE
SQUARE TO THIS LINE

USH 53 SB

USH 53 NB

CTH AA/GOLF RD NB OFF-RAMP

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

R/W OUTSIDE
OF SHEET
LIMITS

ITS STANDARD ABBREVIATIONS

CCTV--------- CLOSED CIRCUIT TELEVISION
PB----------- PULL BOX
CV----------- COMMUNICATIONS VAULT
EXSC--------- EXISTING SIGNAL CABINET

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX	
ITS CONDUIT	
COMMUNICATIONS VAULT	V
QUANTITY POINT (NON-PHYSICAL ITEM)	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	
EXISTING SIGNAL CABINET	
ELECTRICAL SERVICE METER BREAKER PEDESTAL	

NOTE: GRAYSHADE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 23	E

2

2



ITS STANDARD ABBREVIATIONS

CV ---------- COMMUNICATIONS VAULT

ITS LEGEND

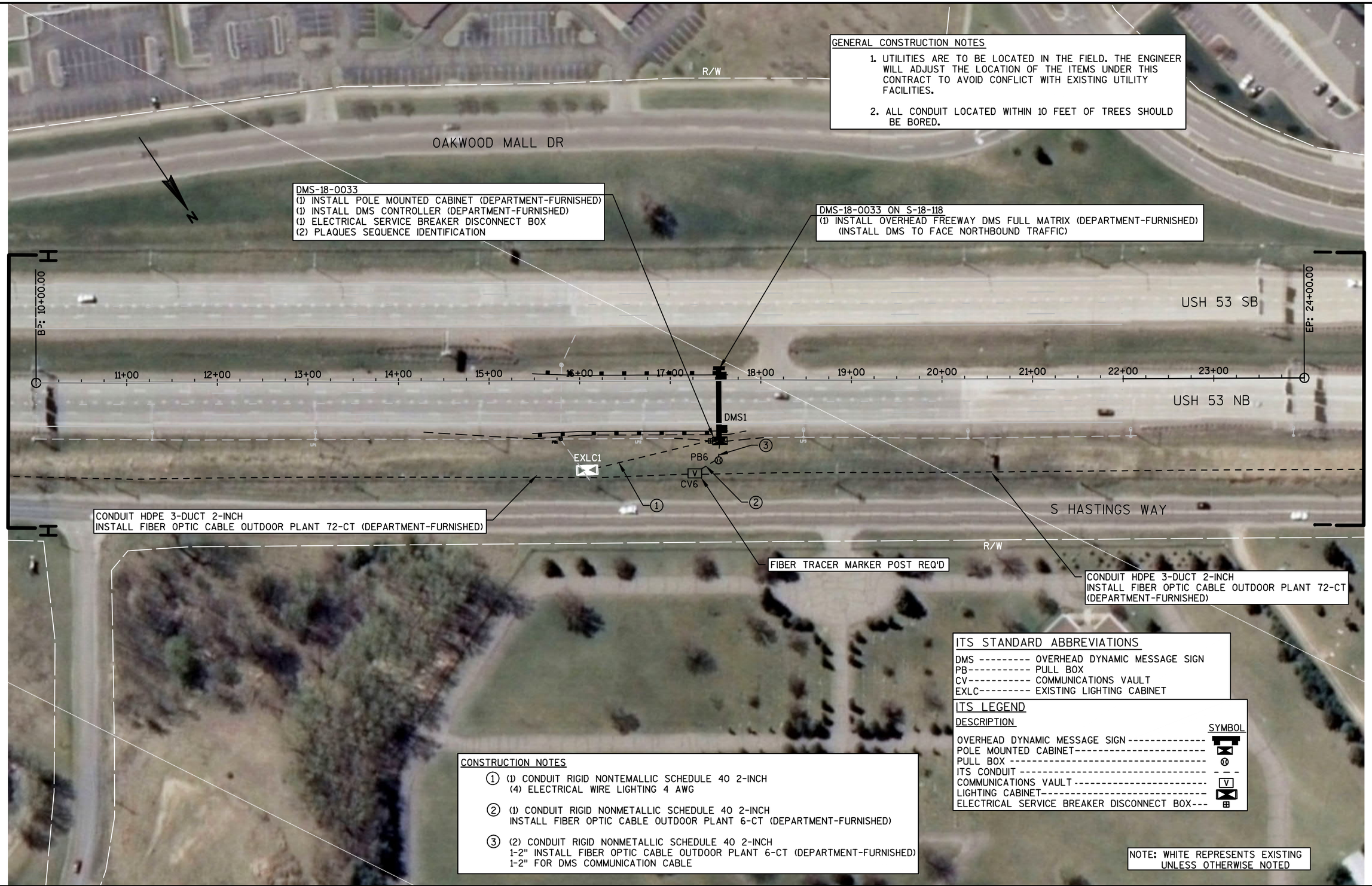
DESCRIPTION	SYMBOL
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

2



GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

ITS STANDARD ABBREVIATIONS

DMS --------- OVERHEAD DYNAMIC MESSAGE SIGN
PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT
EXLC-------- EXISTING LIGHTING CABINET

ITS LEGEND

DESCRIPTION	SYMBOL
OVERHEAD DYNAMIC MESSAGE SIGN	
POLE MOUNTED CABINET	
PULL BOX	PB
ITS CONDUIT	
COMMUNICATIONS VAULT	V
LIGHTING CABINET	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	

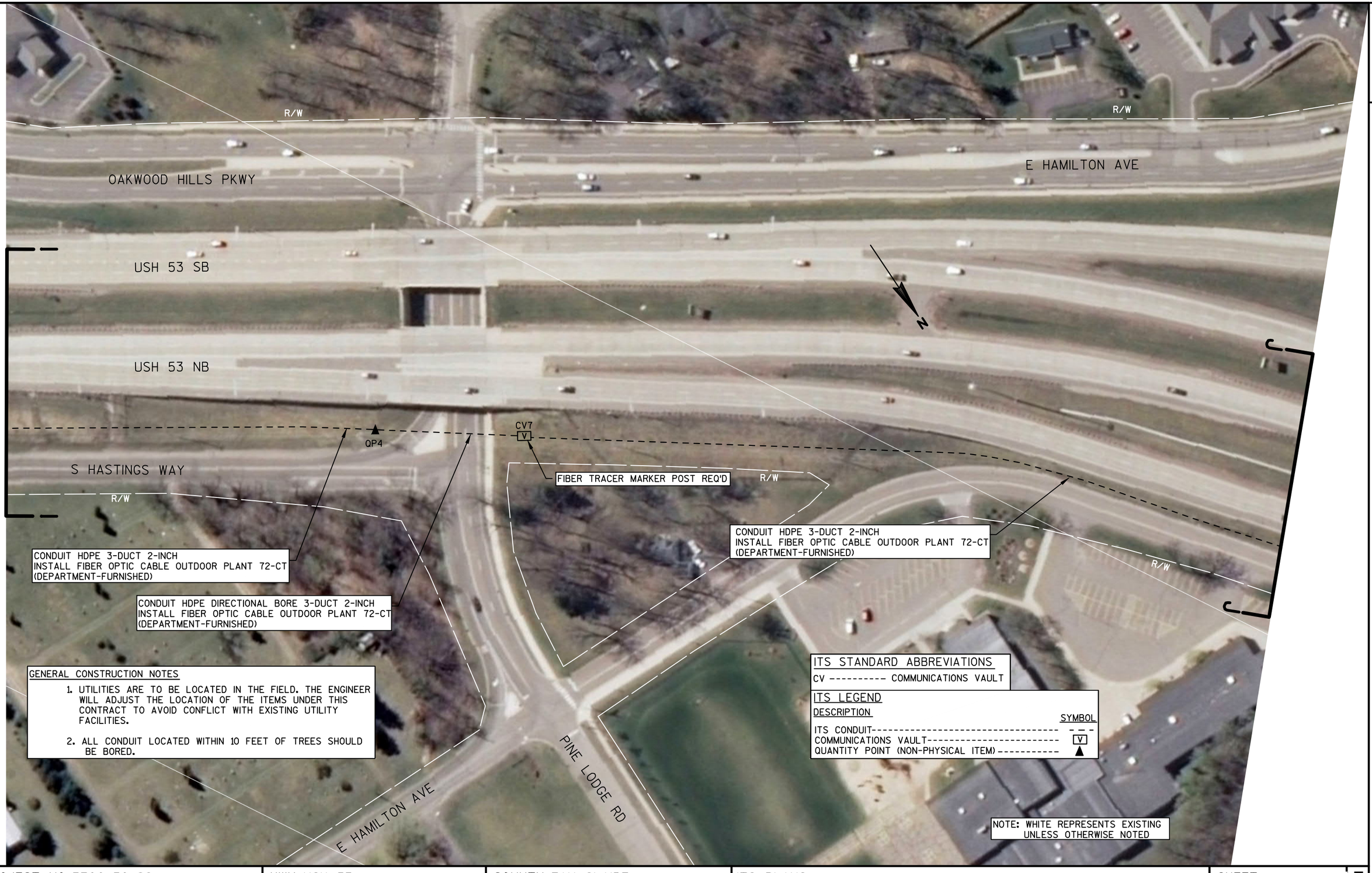
CONSTRUCTION NOTES

1. (1) CONDUIT RIGID NONTEMALLIC SCHEDULE 40 2-INCH
   (4) ELECTRICAL WIRE LIGHTING 4 AWG
2. (1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
   INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)
3. (2) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
   1-2" INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)
   1-2" FOR DMS COMMUNICATION CABLE

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 25	E

2



PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 26 E

2

2

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG

(1) CONDUIT SPECIAL 2-INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
(3) ELECTRICAL WIRE LIGHTING 6 AWG

(1) CONDUIT SPECIAL 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

CCTV-18-0043
INSTALL ON BASE CAMERA POLE 50-FT
(1) INSTALL CAMERA POLE (DEPARTMENT-FURNISHED)
(1) INSTALL CAMERA ASSEMBLY (DEPARTMENT-FURNISHED)
(1) INSTALL POLE MOUNTED CABINET (DEPARTMENT-FURNISHED)
(1) ELECTRICAL SERVICE BREAKER DISCONNECT BOX
(2) PLAQUES SEQUENCE IDENTIFICATION

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

(1) CONDUIT SPECIAL 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

CAMERA ARM ALIGNMENT
ALIGN BOLT CIRCLE TO BE
SQUARE TO THIS LINE

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

FIBER TRACER MARKER POST REQ'D

PB11 PB12 PB9 PB8 PB7 PB13 PB10 MB1 CP2 CV8

SB BUS 53/HASTINGS WAY RAMP TO USH 53 SB
USH 53 SB
USH 53 NB
USH 53 NB RAMP TO USH 12
USH 53 NB RAMP TO NB BUS 53/HASTINGS WAY
SERVICE RD
R/W

ITS STANDARD ABBREVIATIONS

CCTV--------- CLOSED CIRCUIT TELEVISION
PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT
MB---------- ELECTRICAL METER BREAKER PEDESTAL

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX	PB
ITS CONDUIT	
COMMUNICATIONS VAULT	V
ELECTRICAL METER BREAKER PEDESTAL	
ELECTRICAL SERVICE BREAKER DISCONNECT BOX	

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY: USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 27 E

2

INSTALL IN EXISTING CONDUIT (BRIDGE PARAPET)
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT
(DEPARTMENT-FURNISHED)

H
HUT1

R/W

EXPB14

(1) CONDUIT RIGIDNONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

INSTALL CONDUIT INTO EXISTING ITEM

EXRG1

(1) CONDUIT SPECIAL 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

R/W

PB15

CV10

PB14

EXPB13

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

USH 53 SB RAMP TO STH 93

USH 12 RAMP TO STH 93

FIBER TRACER MARKER POST REQ'D

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT
(DEPARTMENT-FURNISHED)

USH 53 SB

STH 93 RAMP TO USH 53/USH 12

USH 53 NB

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

USH 53 NB C-D ROAD

FIBER TRACER MARKER POST REQ'D

CV9

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

R/W

NOTE: WHITE REPRESENTS EXISTING
UNLESS OTHERWISE NOTED

ITS STANDARD ABBREVIATIONS

PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT
EXRG-------- EXISTING RAMP CLOSURE GATE
HUT--------- ITS HUT

ITS LEGEND

DESCRIPTION	SYMBOL
PULL BOX	ⓅⒷ
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V
RAMP CLOSURE GATE	▱
ITS HUT	H

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

2

2

R/W

G18-29
(1) CONCRETE BASES TYPE 2
(1) RAMP CLOSURE GATES SOLAR 30-FT

RG5

PB16

SP3

S 18-1006
EXSC3

EXPB18

EXPB17

EXPB16

EXBP15

STH 93

R/W

STH 93 OFF-RAMP FROM SB BUS 53/HASTINGS WAY

SB BUS 53/HASTINGS WAY

R/W

STH 93 ON-RAMP TO SB BUS 53/HASTINGS WAY

INSTALL IN EXISTING CONDUIT (BRIDGE PARAPET)
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.
3. NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT AT (715) 839-3787 TO LOCATE THE RAMP GATE CONCRETE BASES 5 BUSINESS DAYS PRIOR TO POURING THE RAMP GATE CONCRETE BASES.

CONSTRUCTION NOTES

① INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT (DEPARTMENT-FURNISHED)

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

ITS STANDARD ABBREVIATIONS

PB---------- PULL BOX
RG---------- RAMP CLOSURE GATE SOLAR
EXSC--------- EXISTING SIGNAL CABINET
SP---------- SOLAR POWER SYSTEM

ITS LEGEND

DESCRIPTION	SYMBOL
PULL BOX	
ITS CONDUIT	
RAMP CLOSURE GATES SOLAR 30-FT	
EXISTING SIGNAL CABINET	
SOLAR POWER SYSTEM	

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 29 E

2

2

N

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

R/W

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

R/W

N

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

EXCV4

EXPB19

CCTV-18-0010

QP5

STH 93 OFF-RAMP FROM USH 53

(1) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

EXPB20

EXCP2

CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

USH 12 OFF-RAMP FROM USH 53 NB

INSTALL CONDUIT INTO EXISTING ITEM

EXPB21

USH 12 ON-RAMP TO USH 53

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

N

USH 53 SB

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

USH 53 NB

STH 93 ON-RAMP TO USH 53 NB

EXPB22

EXPB23

EXPB24

EXSC4

S 18-1030

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

USH 12 OFF-RAMP FROM STH 93 & USH 53

USH 12 ON-RAMP TO USH 53 NB

INSTALL IN EXISTING CONDUIT
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT
(DEPARTMENT-FURNISHED)

USH 12 (CLAIREMONT AVE)

ITS STANDARD ABBREVIATIONS

CCTV--------- CLOSED CIRCUIT TELEVISION
PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT
EXSC--------- EXISTING SIGNAL CABINET

ITS LEGEND

DESCRIPTION	SYMBOL
CCTV CAMERA	
POLE MOUNTED CABINET	
POLE	
PULL BOX	
ITS CONDUIT	
COMMUNICATIONS VAULT	V
EXISTING SIGNAL CABINET	

R/W OUTSIDE OF SHEET LIMITS

R/W

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 30 E

2

2

R/W

R/W

R/W

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT (DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

CONDUIT HDPE 3-DUCT 2-INCH
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT
(DEPARTMENT-FURNISHED)

HIGH-PRESURE XCEL ENERGY GAS IN THIS AREA

CAUTION

INSTALL IN EXISTING CONDUIT (BRIDGE PARAPET)
INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT

CV11

STH 93 OFF-RAMP FROM USH 53 NB

FIBER TRACER MARKER POST REQ'D

EXPB25

EXPB26

EXPB27

INSTALL CONDUIT INTO EXISTING ITEM

EXISTING LIGHTING PULL BOX

INSTALL CONDUIT INTO EXISTING ITEM

USH 53 SB

USH 53 NB

USH 12 ON-RAMP TO USH 53 NB

R/W

R/W

R/W

ITS STANDARD ABBREVIATIONS

PB---------- PULL BOX
CV---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
PULL BOX	Ⓟ
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 31 E

2



ITS STANDARD ABBREVIATIONS

CV---------- COMMUNICATIONS VAULT

ITS LEGEND

DESCRIPTION	SYMBOL
ITS CONDUIT	- - -
COMMUNICATIONS VAULT	V

GENERAL CONSTRUCTION NOTES

1. UTILITIES ARE TO BE LOCATED IN THE FIELD. THE ENGINEER WILL ADJUST THE LOCATION OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
2. ALL CONDUIT LOCATED WITHIN 10 FEET OF TREES SHOULD BE BORED.

NOTE: WHITE REPRESENTS EXISTING UNLESS OTHERWISE NOTED



2

PROJECT NO:3700-50-26	HWY:USH 53	COUNTY:EAU CLAIRE	ITS PLANS	SHEET 33 E

FILE NAME : P:\60483055\900_WORK\910_CAD\WORKING FOLDERS\ITS\021404_FM.DWG
LAYOUT NAME - ****
PLOT DATE : 1/20/2017 10:36 AM PLOT BY : MELENDEZ, WILLIAM PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

SIDEWALK

TRUAX BLVD.

Truax Blvd 1-01

M1-94-H
78" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

U.S.H. 12

U.S.H. 12

1-02 Truax Blvd

M1-94-H
78" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

MULTIUSE TRAIL

TRUAX BLVD.

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & TRUAX BLVD.	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 34

2

2

Folsom St
1-03
M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

FOLSOM ST.

U.S.H. 12

U.S.H. 12

1-04
Folsom St
M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

FOLSOM ST.

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FOLSOM STREET	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 35

2

2

MOHOLT DR.

N

Moholt Dr
1-05
M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

U.S.H. 12

U.S.H. 12

1-06
Moholt Dr
M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

MOHOLT DR.

SYMBOLS LEGEND

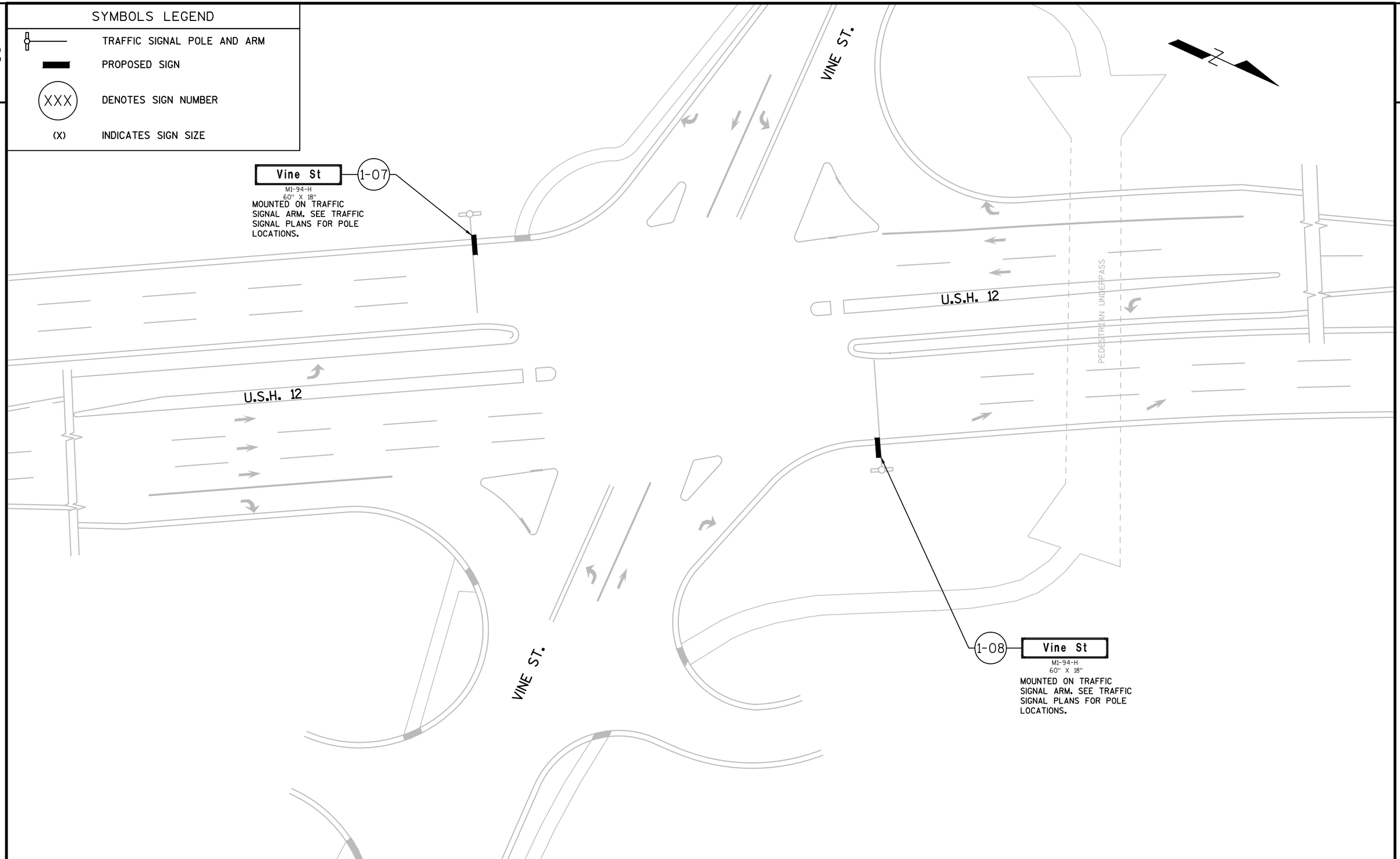
	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MOHOLT DRIVE	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 36

2

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE



PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & VINE STREET	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 37

2

CAMERON ST.

N

COUNTY E Cameron St

1-09

M1-94-H
102" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

U.S.H. 12

U.S.H. 12

1-10

COUNTY E Cameron St

M1-94-H
102" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

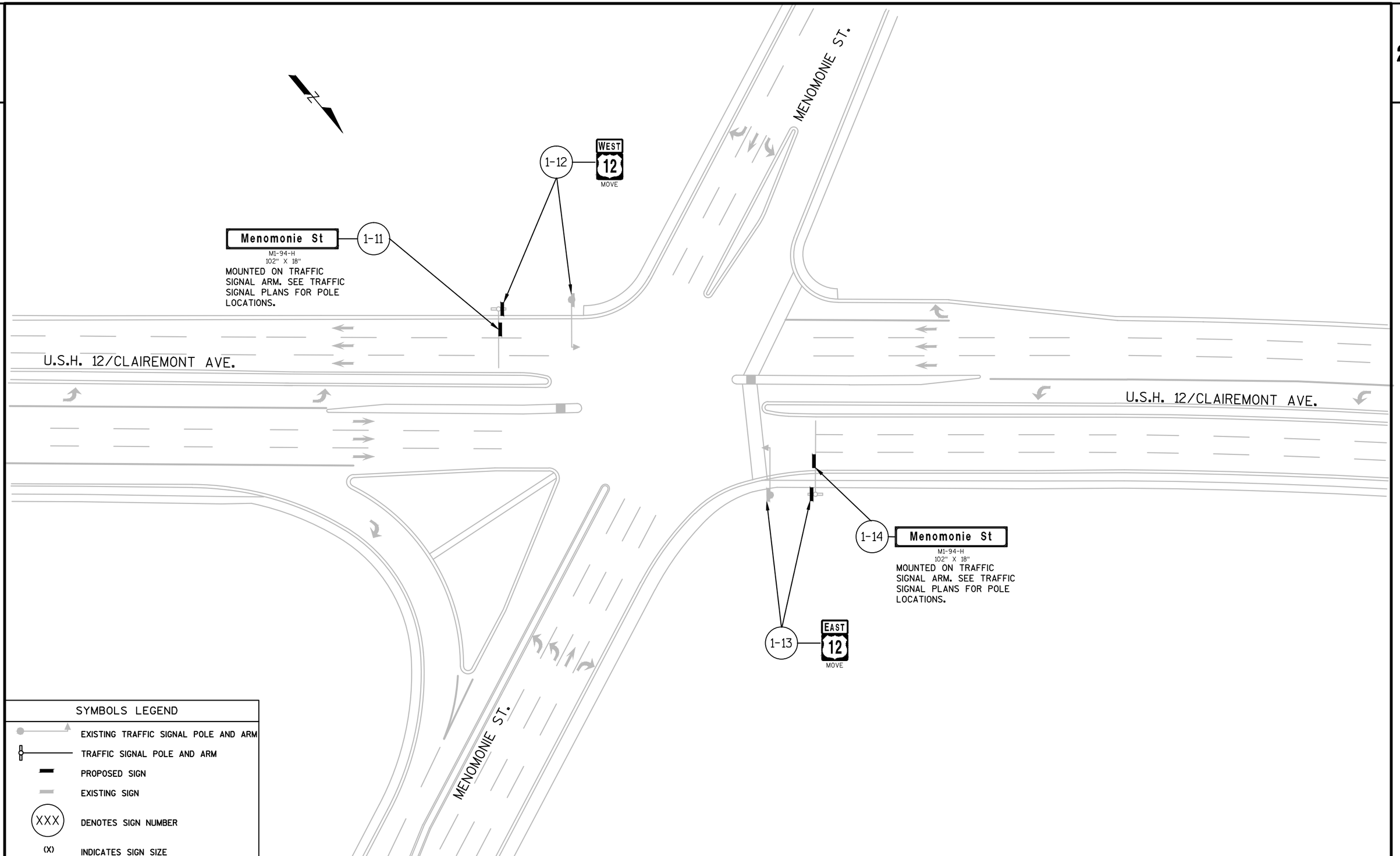
CAMERON ST.

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

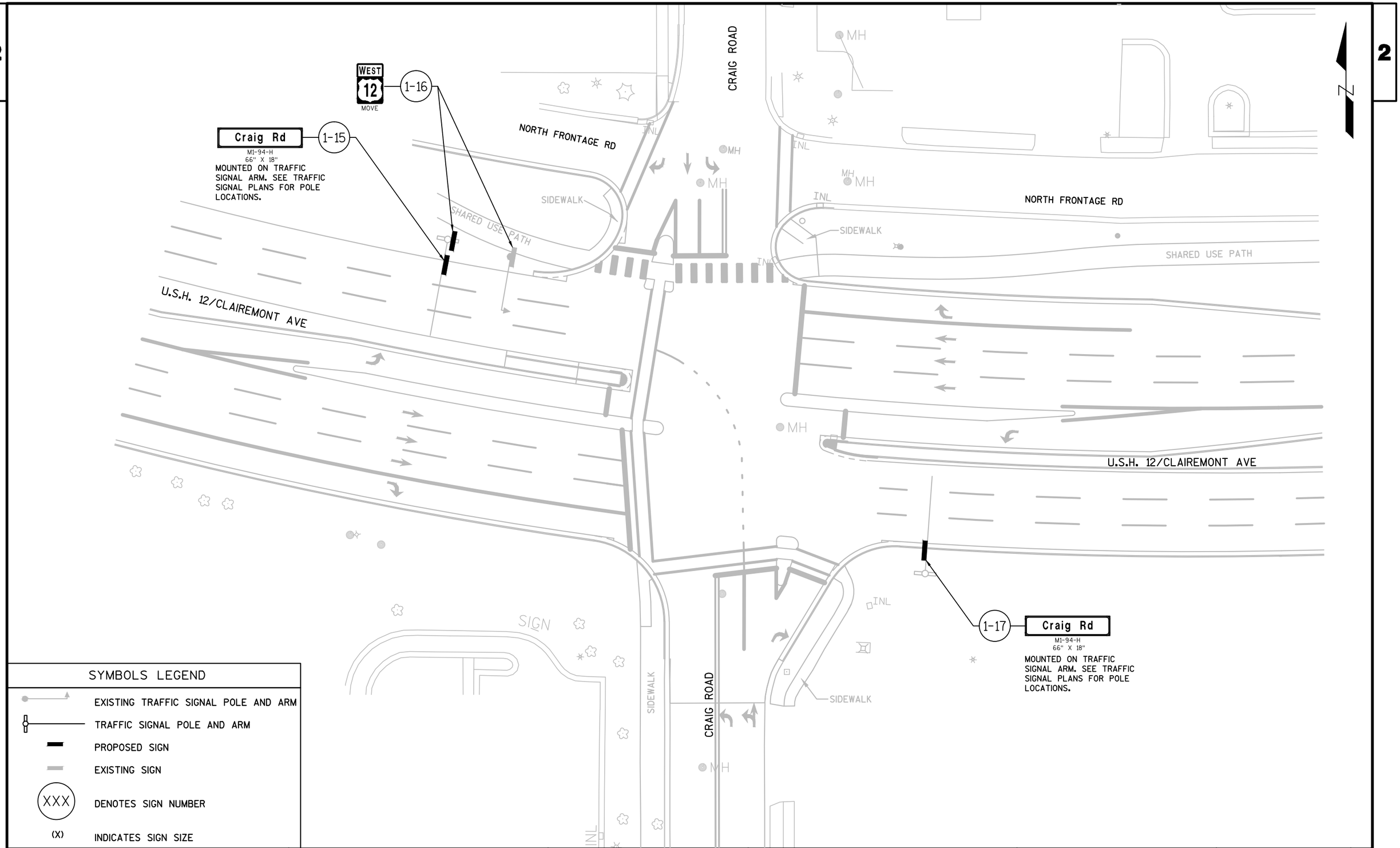
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CAMERON STREET	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 38

2



PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MENOMONIE ST.	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 30 60	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\SIGNING PLANS\023206_PS.DWG PLOT DATE : 1/26/2017 3:19 PM 1"=60'



SYMBOLS LEGEND

- EXISTING TRAFFIC SIGNAL POLE AND ARM
- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- EXISTING SIGN
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CRAIG ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 40

2

N

HENDRICKSON DR

SIDEWALK

SHARED USE PATH

MH

INL

37 Hendrickson Dr 1-18

M1-94-H
90" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

U.S.H. 12/CLAIREMONT AVE

U.S.H. 12/CLAIREMONT AVE

1-19 37 Hendrickson Dr

M1-94-H
90" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

S.T.H. 37

SYMBOLS LEGEND

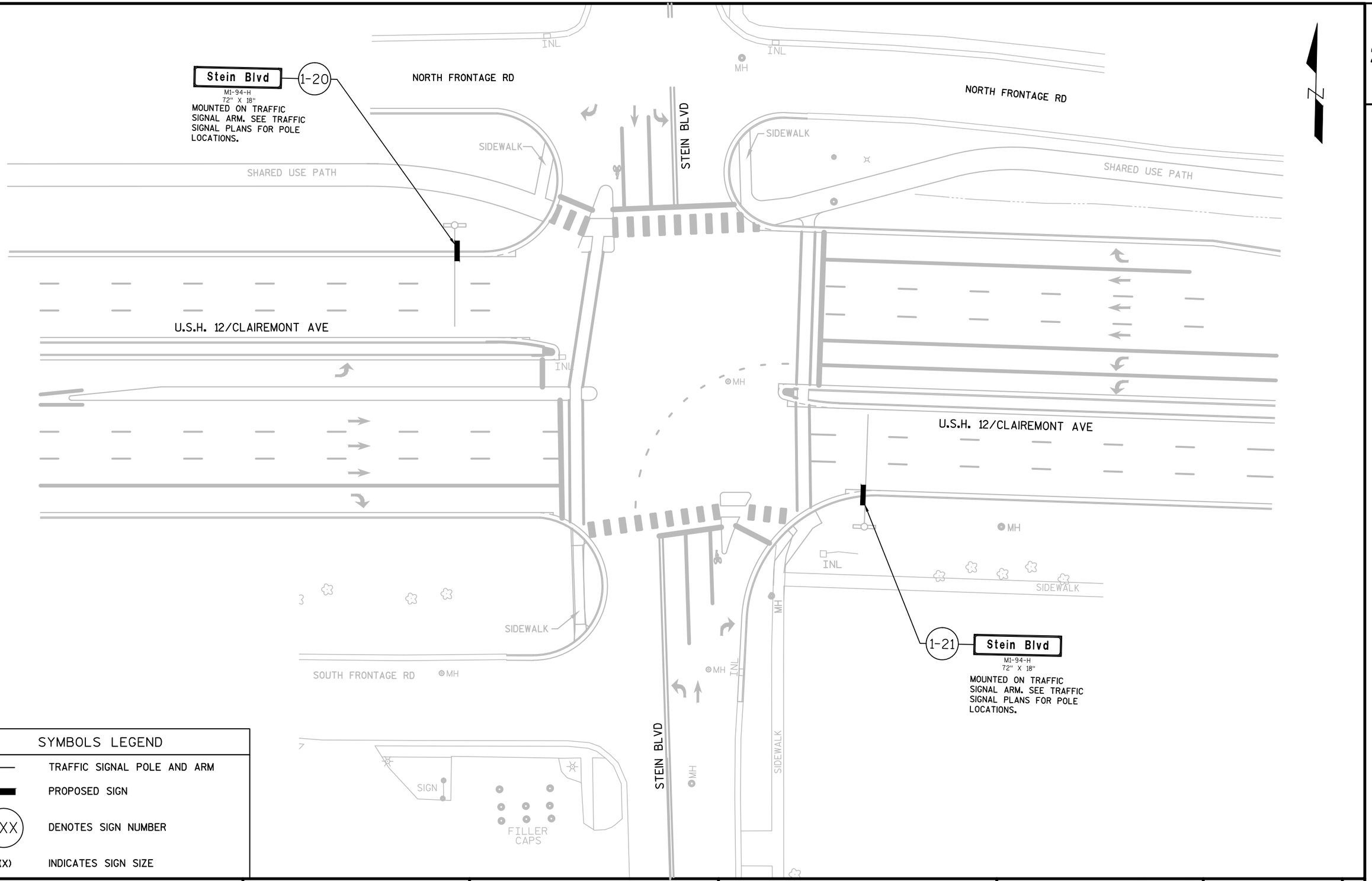
- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & STH 37/HENDRICKSON DR.	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40 1"=40'	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\SIGNING PLANS\023208_PS.DWG

PLOT DATE : 1/26/2017 3:19 PM

2



SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: USH 12 & STEIN BLVD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 42

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group B\Signing Plans\023209_ps.dwg
PLOT DATE : 1/26/2017 3:19 PM
1"=40'
WISDOT/CADDS SHEET 42

2

NORTH FRONTAGE RD

INL

UNIVERSITY DR

SIDEWALK

SHARED USE PATH

N

University Dr 1-22

M1-94-H
96" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SHARED USE PATH

CVTC PEDESTRIAN OVERPASS

INL

U.S.H. 12/CLAIREMONT AVE

INL

INL

U.S.H. 12/CLAIREMONT AVE

1-23 University Dr

M1-94-H
96" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SIDEWALK

SIDEWALK

SIDEWALK

WALL

MH

CVTC ENTRANCE

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & UNIVERSITY AVE.	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET:

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group B\Signing Plans\023210_ps.dwg

PLOT DATE : 1/26/2017 3:19 PM

1"=40'

WISDOT/CADDS SHEET 42

2

WEST 12 MOVE 1-25

PRIVATE ENTRANCE

Patton St 1-24

M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SHARED USE PATH

INL

U.S.H. 12/CLAIREMONT AVE

SIDEWALK

PATTON ST

1-26 Patton St

M1-94-H
78" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

N

SYMBOLS LEGEND

- EXISTING TRAFFIC SIGNAL POLE AND ARM
- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & PATTON ST/P.E.	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\SIGNING PLANS\023211_PS.DWG

PLOT DATE : 1/26/2017 3:19 PM

1"=40'

2

NORTH FRONTAGE RD

WEST 12 MOVE

1-28

1-27

Rudolph Rd
M1-94-H
90" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SIDEWALK

RUDOLPH RD

SHARED USE PATH

INL

U.S.H. 12/CLAIREMONT AVE

1-30

Rudolph Rd
M1-94-H
90" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

1-29

EAST 12 MOVE

SOUTH FRONTAGE ROAD

RUDOLPH ROAD

N

SYMBOLS LEGEND

- EXISTING TRAFFIC SIGNAL POLE AND ARM
- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & RUDOLPH ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: E

2

N

SIDEWALK

KEITH ST

SIDEWALK

WALL

SIDEWALK

SHARED USE PATH

SHARED USE PATH

MH

PEDESTRIAN UNDERPASS

WEST 12 MOVE

1-32

Keith St

1-31

M1-94-H
66" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

U.S.H. 12/CLAIREMONT AVE

U.S.H. 12/CLAIREMONT AVE

1-33

Keith St

M1-94-H
66" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

WALL

SIDEWALK

MH

MH

MH

SOUTH FRONTAGE RD

SOUTH FRONTAGE RD

KEITH ST

SIGN

SYMBOLS LEGEND

- EXISTING TRAFFIC SIGNAL POLE AND ARM
- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED SIGN MOUNTED ON POST
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & KEITH STREET	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 46

2

Fairfax St 1-34

M1-94-H
XX" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SIDEWALK

FAIRFAX ST

SHARED USE PATH

MH

INL

U.S.H. 12/CLAIREMONT AVE

SOUTH FRONTAGE RD

SIGN

G

Fairfax St 1-35

M1-94-H
XX" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

N

2

SYMBOLS LEGEND

- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FAIRFAX STREET	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 47

2

SYMBOLS LEGEND

- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

BUSINESS 53
SB OFF RAMP

MULTI – USE TRAIL

MULTI – USE TRAIL

USH 12

USH 12

London Rd 1-36

M1-94-H
102" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

BUSINESS 53
SB ON RAMP

1-37 London Rd

M1-94-H
102" X 18"
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

LONDON ROAD

2

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 W. RAMPS/LONDON ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET:

2

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

OTTER ROAD

N

◄Storrs Rd
Otter Rd ►

1-38

M1-94-H
96" X 36"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

USH 12

USH 12

STORRS ROAD

1-39

◄ Otter Rd
Storrs Rd ►

M1-94-H
96" X 36"

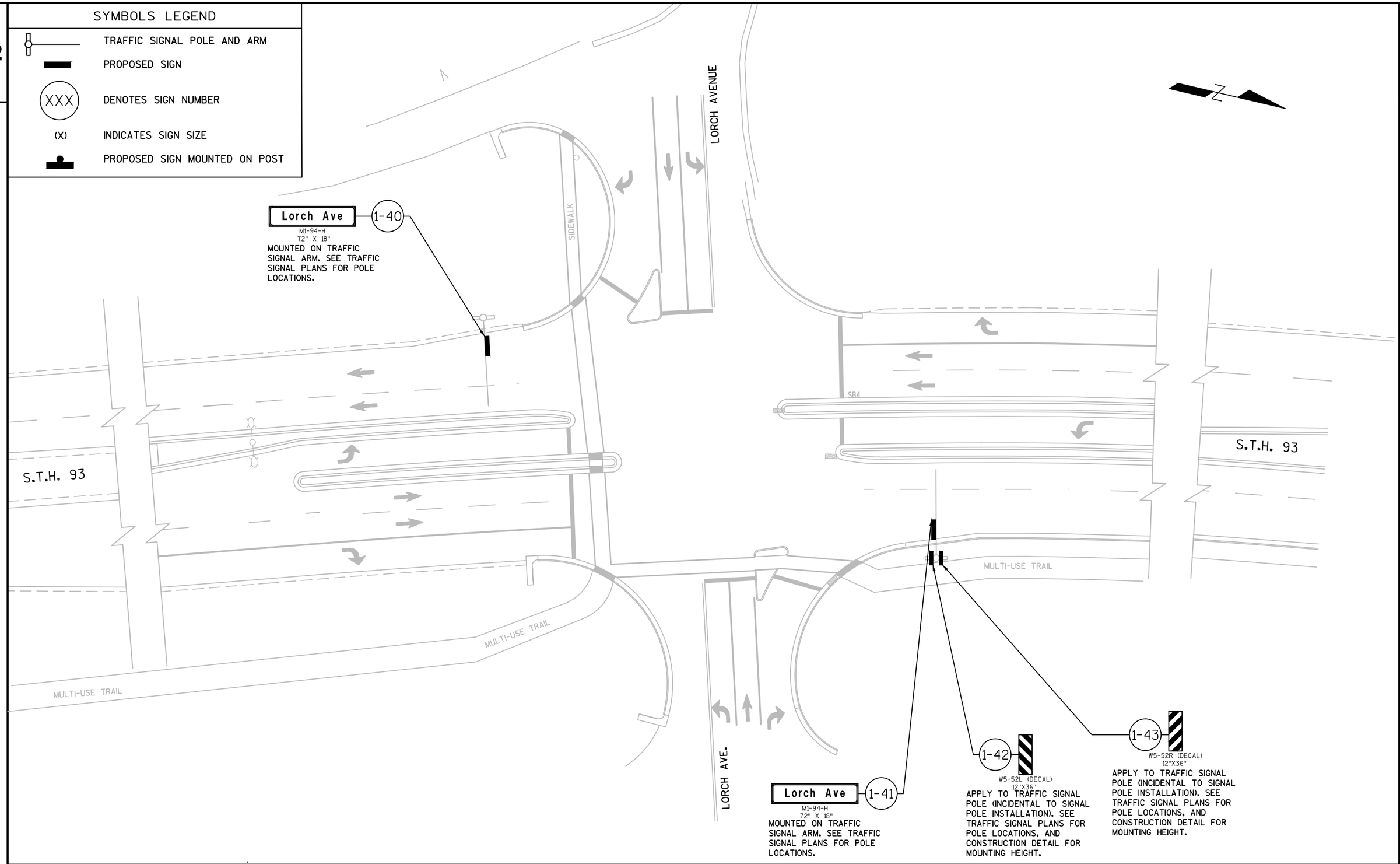
MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

PROJECT NUMBER: 1000-08-81	HWY: USH 12 AND OTTER ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET:	E

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Signing Plans\023216_ps.dwg
PLOT DATE : 5/4/2017 10:26 AM
1"=40'
WISDOT/CADDS SHEET 42

SYMBOLS LEGEND

- TRAFFIC SIGNAL POLE AND ARM
- PROPOSED SIGN
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- PROPOSED SIGN MOUNTED ON POST



PROJECT NUMBER: 1000-08-81	HWY: STH 93 & LORCH AVENUE	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE: 0 20 40	SHEET: E

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PLOT DATE : 5/5/2017 1:18 PM

1"=40'

WISDOT/CADDS SHEET 42

2

REMOVE

ONLY

R3-50-A
30"X36"

1-44

GOLF ROAD

1-46

HWY 93

M1-94-H
72" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

REMOVE PAVEMENT MARKING ARROWS, TYPE 3.

PAVEMENT MARKING ARROWS, TYPE 1, EPOXY (WHITE)

S.T.H. 93

S.T.H. 93

BIKE/PEDESTRIAN PATH

BIKE/PEDESTRIAN PATH

REMOVE PAVEMENT MARKING ARROWS, TYPE 3.

PAVEMENT MARKING ARROWS, TYPE 1, EPOXY (WHITE)

HWY 93

M1-94-H
72" X 18"

1-45

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

GOLF ROAD

1-47

REMOVE

ONLY

R3-50-A
30"X36"

PAVEMENT MARKING EPOXY 4-INCH

REMOVE PAVEMENT MARKING

REMOVE PAVEMENT MARKING ARROWS, TYPE 3.

PAVEMENT MARKING ARROWS, TYPE 1, EPOXY (WHITE)

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NUMBER: 3700-50-27	HWY: S.T.H. 93 & GOLF ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING AND PAVEMENT MARKING	SCALE, FEET 0 20 40	SHEET:

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Signing Plans\023218_ps.dwg

PLOT DATE : 1/26/2017 3:20 PM

1"=40'

WISDOT/CADDS SHEET 42

2

JEFFERS ROAD

SIDEWALK

N

Jeffers Rd 1-48

M1-94-H
84" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

S.T.H. 312

S.T.H. 312

SIDEWALK

JEFFERS ROAD

SIDEWALK

1-49 Jeffers Rd

M1-94-H
84" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

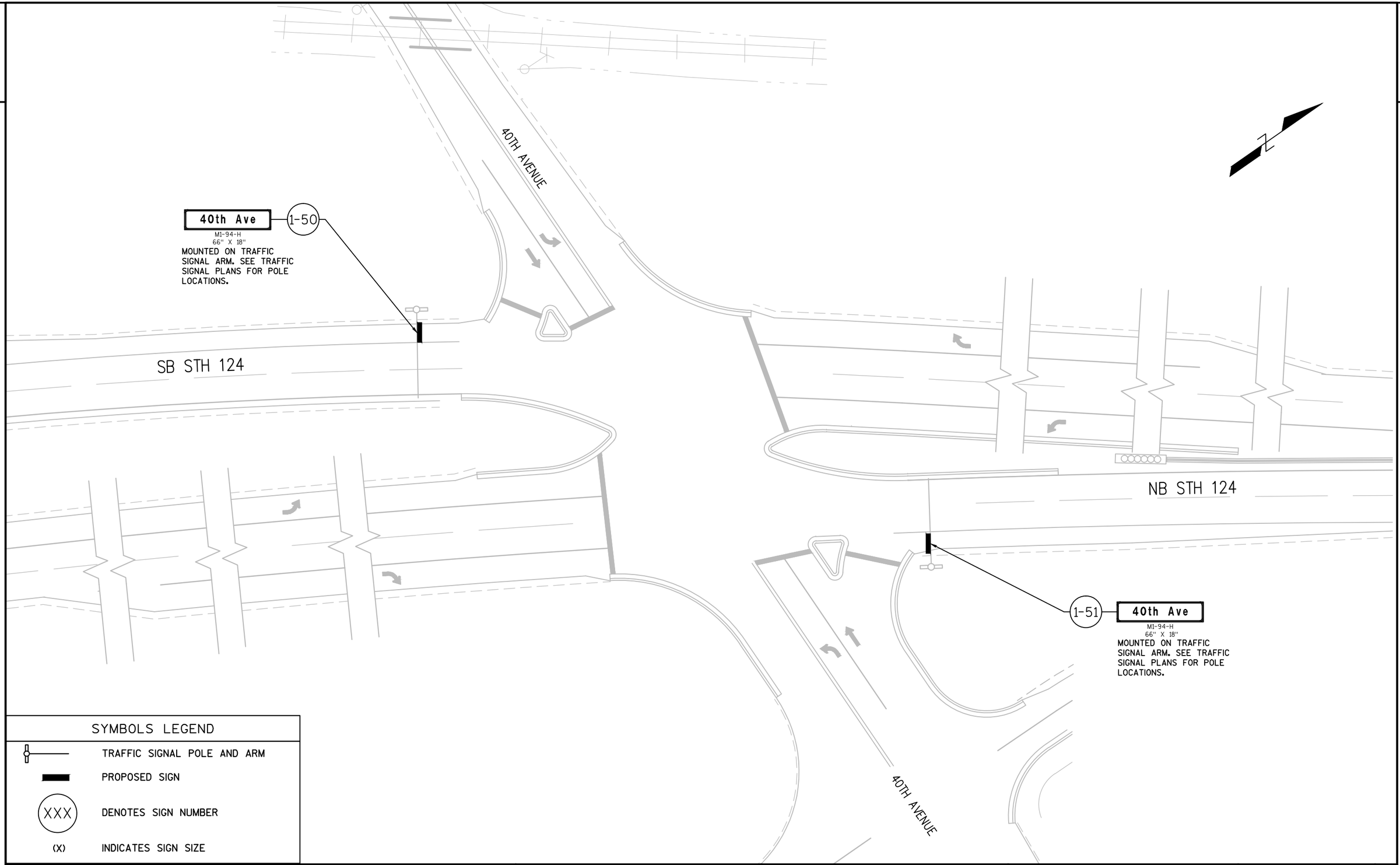
PROJECT NUMBER: 1000-08-81	HWY: STH 312 AND JEFFERS ROAD	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET:

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PLOT DATE : 1/26/2017 3:20 PM

1"=40'

2



SYMBOLS LEGEND	
	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: STH 124 & 40TH AVE	COUNTY: CHIPPEWA	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: 53	E

2

CEDAR FALLS ROAD

Cedar Falls Rd 1-52

M1-94-H
102" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

STH 25

Ø1

Ø6

STH 25

PED

1-53 Cedar Falls Rd

M1-94-H
102" X 18"

MOUNTED ON TRAFFIC SIGNAL ARM. SEE TRAFFIC SIGNAL PLANS FOR POLE LOCATIONS.

CEDAR FALLS ROAD

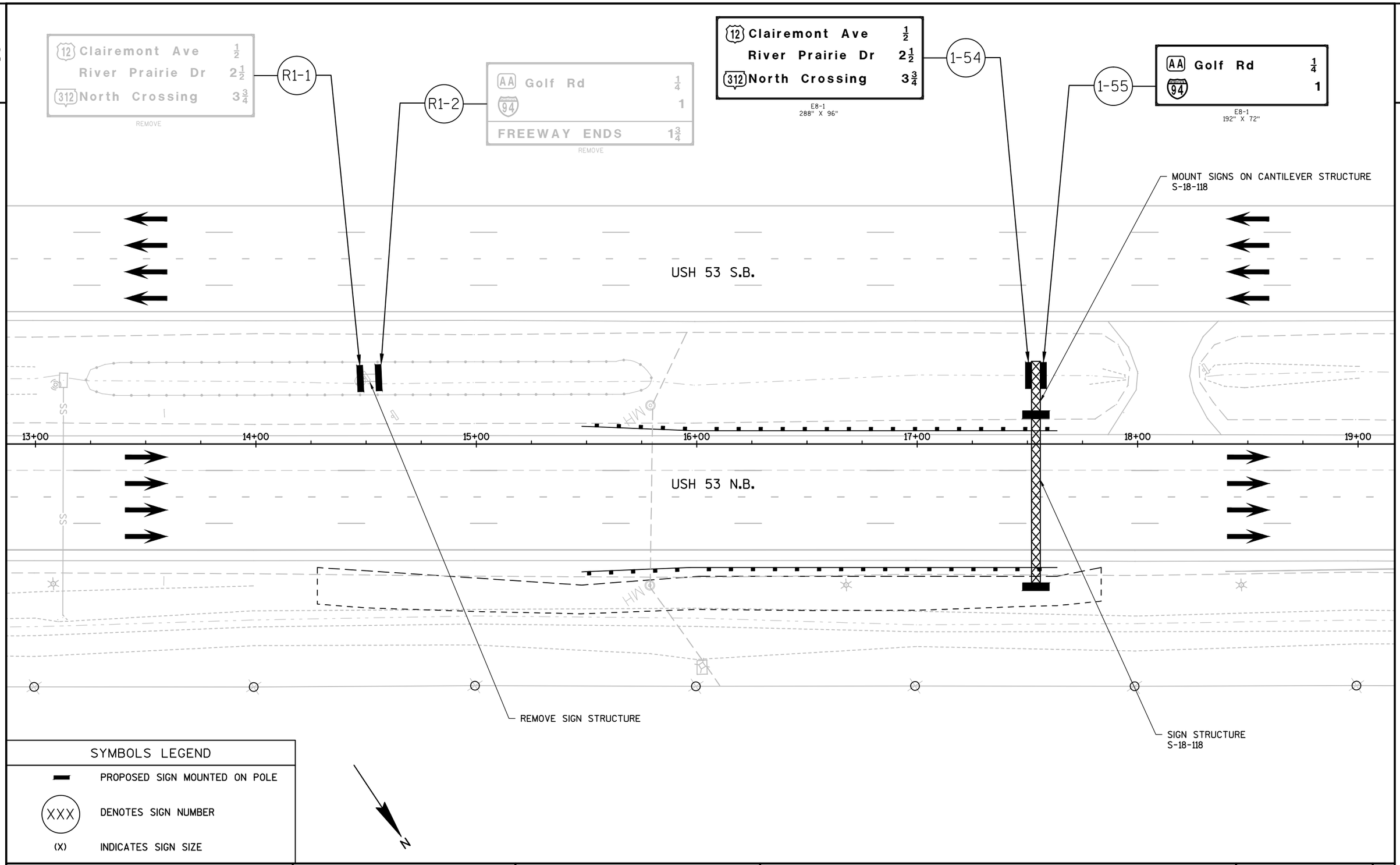
SYMBOLS LEGEND

	TRAFFIC SIGNAL POLE AND ARM
	PROPOSED SIGN
XXX	DENOTES SIGN NUMBER
(X)	INDICATES SIGN SIZE

PROJECT NO: 1000-08-81	HWY: S.T.H. 25 & CEDAR FALLS ROAD	COUNTY: DUNN	PERMANENT SIGNING	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP C\SIGNING PLANS\023221_PS.DWG PLOT DATE : 1/26/2017 3:20 PM 1"=40'

2



SYMBOLS LEGEND

- PROPOSED SIGN MOUNTED ON POLE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 55	E

2

LEGEND

- EMERGENCY VEHICLE DETECTOR
- SIGNAL
- CONTROL CABINET
- SIGNAL HEAD, MAST ARM MOUNT
- CONDUIT
- LOOP DETECTOR
- LUMINAIRE-LOCAL MUNICIPALITY
- JUNCTION BOX, 8x8x8 INCH
- CURB RAMP OR CUT
- PULL BOX 24" X 36"
- PULL BOX 12" X 24"
- RED CIRCULAR OR RED ARROW
- YELLOW CIRCULAR OR YELLOW ARROW
- GREEN CIRCULAR OR GREEN ARROW
- FLASHING YELLOW ARROW
- PEDESTRIAN SIGNAL COUNTDOWN TIMER

R/W

TRUAX BLVD.

SIDEWALK

STOP

U.S.H. 12

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6 Ø8

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14

EC CITY LIGHTING CONDUIT RUNS UNDER SIGNAL BASE 2

24" DEEP BASE
24" DIAM.

± 400' BACK

± 180' BACK

± 225' BACK

± 450' BACK

1-2" SIGNAL INTERCONNECT CONDUIT TO FOLSOM ST.

1-2" SIGNAL INTERCONNECT CONDUIT TO STH 312 S. RAMPS

SPEED LIMIT 45

SPEED LIMIT 35

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

MULTIUSE TRAIL

XCEL UNDERGROUND FEED TO SIGNAL CABINET

XCEL TRANSFORMER

XCEL JUNCTION CABINET

CAP

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND TRUAX BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0711

REVISED BY: AECOM

PAGE 1 OF 1

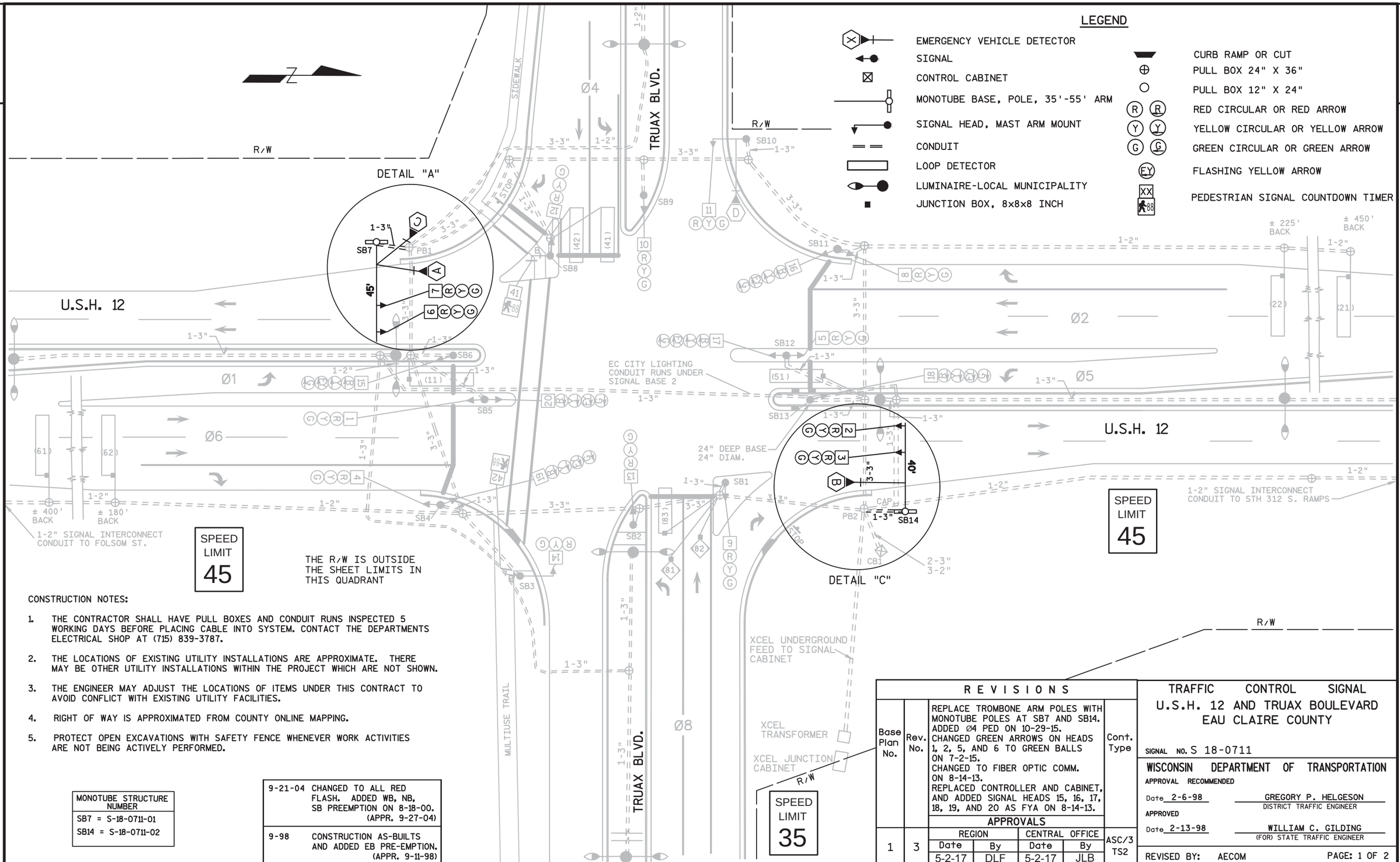
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & TRUAX BLVD.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET:

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PLOT DATE : 1/18/2017 7:45 AM

1"=40'

WISDOT/CADDS SHEET 42



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB7 = S-18-0711-01
SB14 = S-18-0711-02

9-21-04	CHANGED TO ALL RED FLASH. ADDED WB, NB, SB PREEMPTION ON 8-18-00. (APPR. 9-27-04)
9-98	CONSTRUCTION AS-BUILTS AND ADDED EB PRE-EMPTION. (APPR. 9-11-98)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB7 AND SB14. ADDED Ø4 PED ON 10-29-15. CHANGED GREEN ARROWS ON HEADS 1, 2, 5, AND 6 TO GREEN BALLS ON 7-2-15. CHANGED TO FIBER OPTIC COMM. ON 8-14-13. REPLACED CONTROLLER AND CABINET, AND ADDED SIGNAL HEADS 15, 16, 17, 18, 19, AND 20 AS FYA ON 8-14-13.	
		APPROVALS	
1	3	REGION Date 5-2-17 By DLF; CENTRAL OFFICE Date 5-2-17 By JLB	ASC/3 TS2

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND TRUAX BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0711

WISCONSIN DEPARTMENT OF TRANSPORTATION

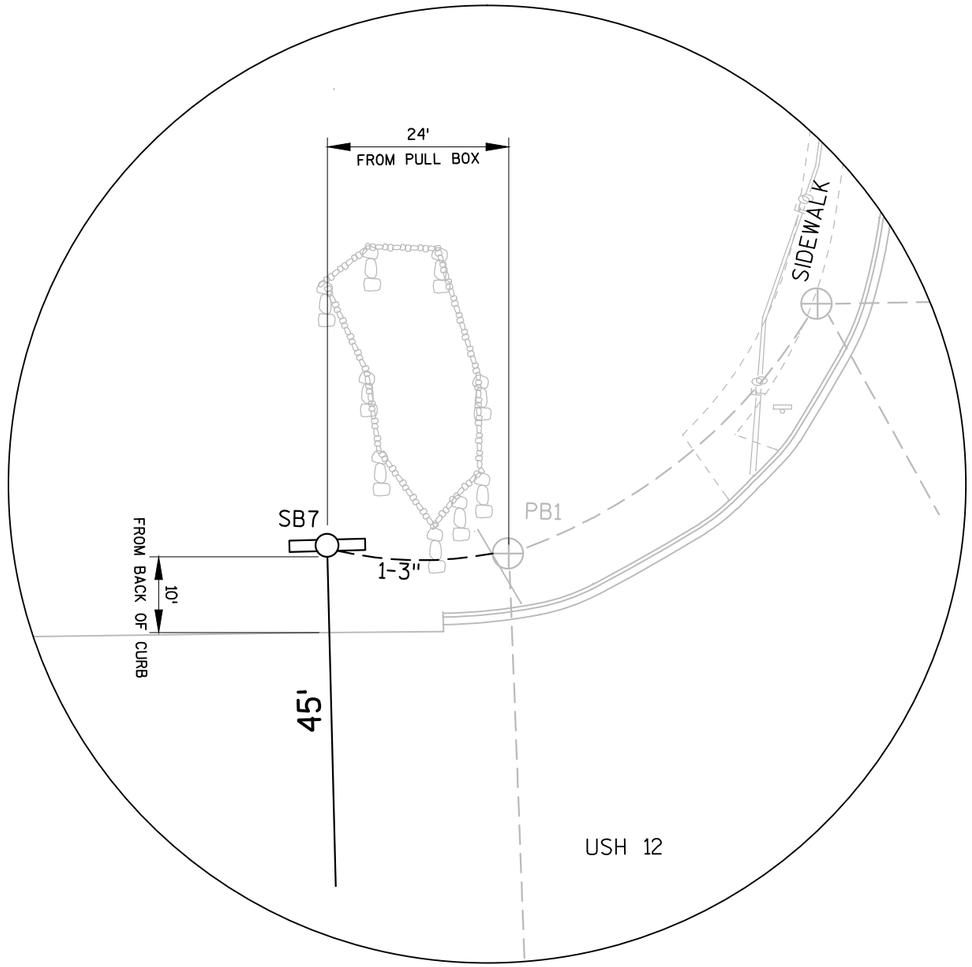
APPROVAL RECOMMENDED
Date 2-6-98 — GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

APPROVED
Date 2-13-98 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

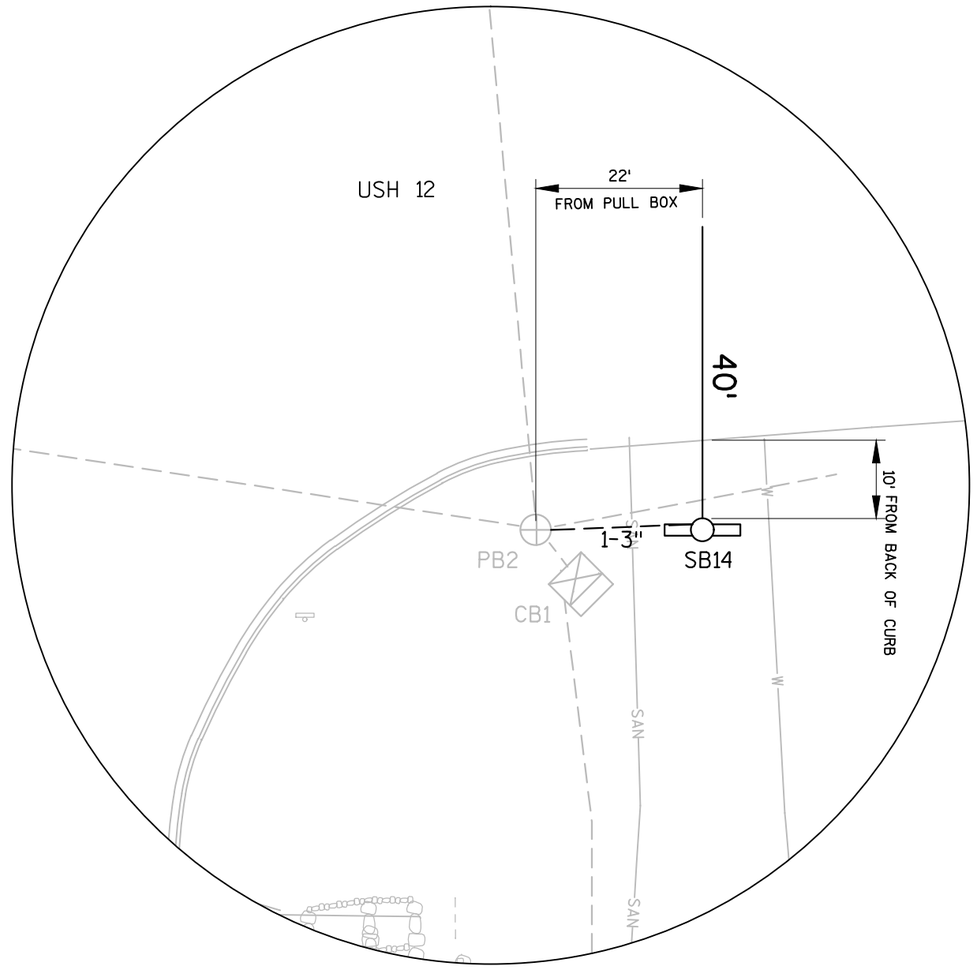
REVISED BY: AECOM — PAGE: 1 OF 2

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & TRUAX BLVD.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP B\024001_SP.DWG
PLOT DATE : 1/18/2017 7:45 AM
1"=40'
WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND TRUAX BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0711

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & TRUAX BLVD.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 58	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & TRUAX BLVD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	9	EXISTING										
SB2	EXISTING	13	EXISTING										
SB3	EXISTING	14	EXISTING										
		42	EXISTING										
		PB	EXISTING										
SB4	EXISTING	4	EXISTING										
		19	EXISTING										
SB5	EXISTING	1	EXISTING										
		20	EXISTING										
SB6	EXISTING	15	EXISTING										
SB7	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								
SB8	EXISTING	12	EXISTING										
		41	EXISTING										
		PB	EXISTING										
SB9	EXISTING	10	EXISTING										
SB10	EXISTING	11	EXISTING										
SB11	EXISTING	8	EXISTING										
		16	EXISTING										
SB12	EXISTING	5	EXISTING										
		17	EXISTING										
SB13	EXISTING	18	EXISTING										
SB14	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB6	SB7
SB7	SB8
SB13	SB14
SB14	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB7
PB2	SB14

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB7
B	CB1	SB14
C	CB1	SB7

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND TRUAX BOULEVARD
EAU CLAIRE COUNTY

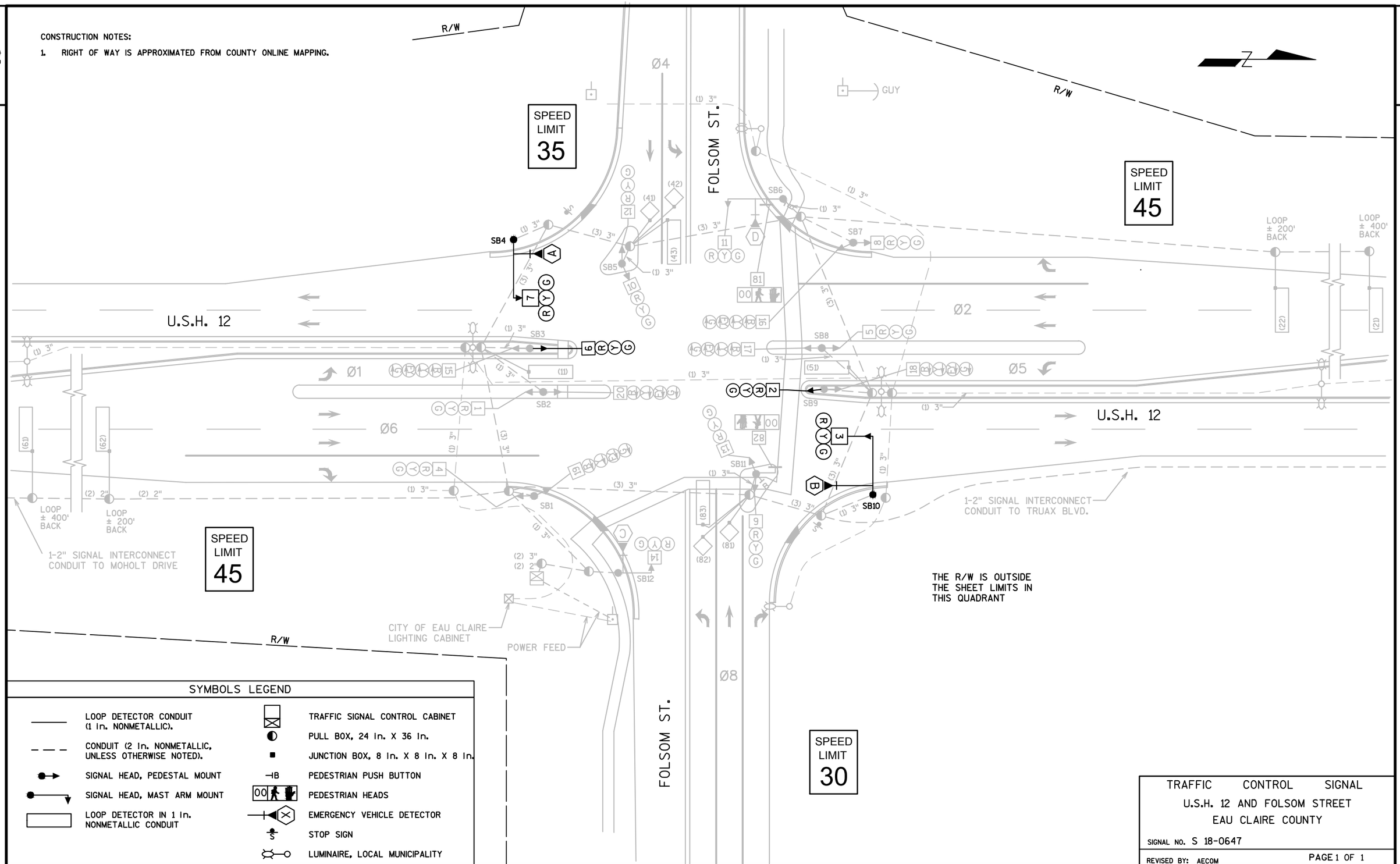
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0711 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.



SYMBOLS LEGEND

LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).	TRAFFIC SIGNAL CONTROL CABINET
CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).	PULL BOX, 24 In. X 36 In.
SIGNAL HEAD, PEDESTAL MOUNT	JUNCTION BOX, 8 In. X 8 In. X 8 In.
SIGNAL HEAD, MAST ARM MOUNT	PEDESTRIAN PUSH BUTTON
LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT	PEDESTRIAN HEADS
	EMERGENCY VEHICLE DETECTOR
	STOP SIGN
	LUMINAIRE, LOCAL MUNICIPALITY

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND FOLSOM STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0647

REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FOLSOM STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

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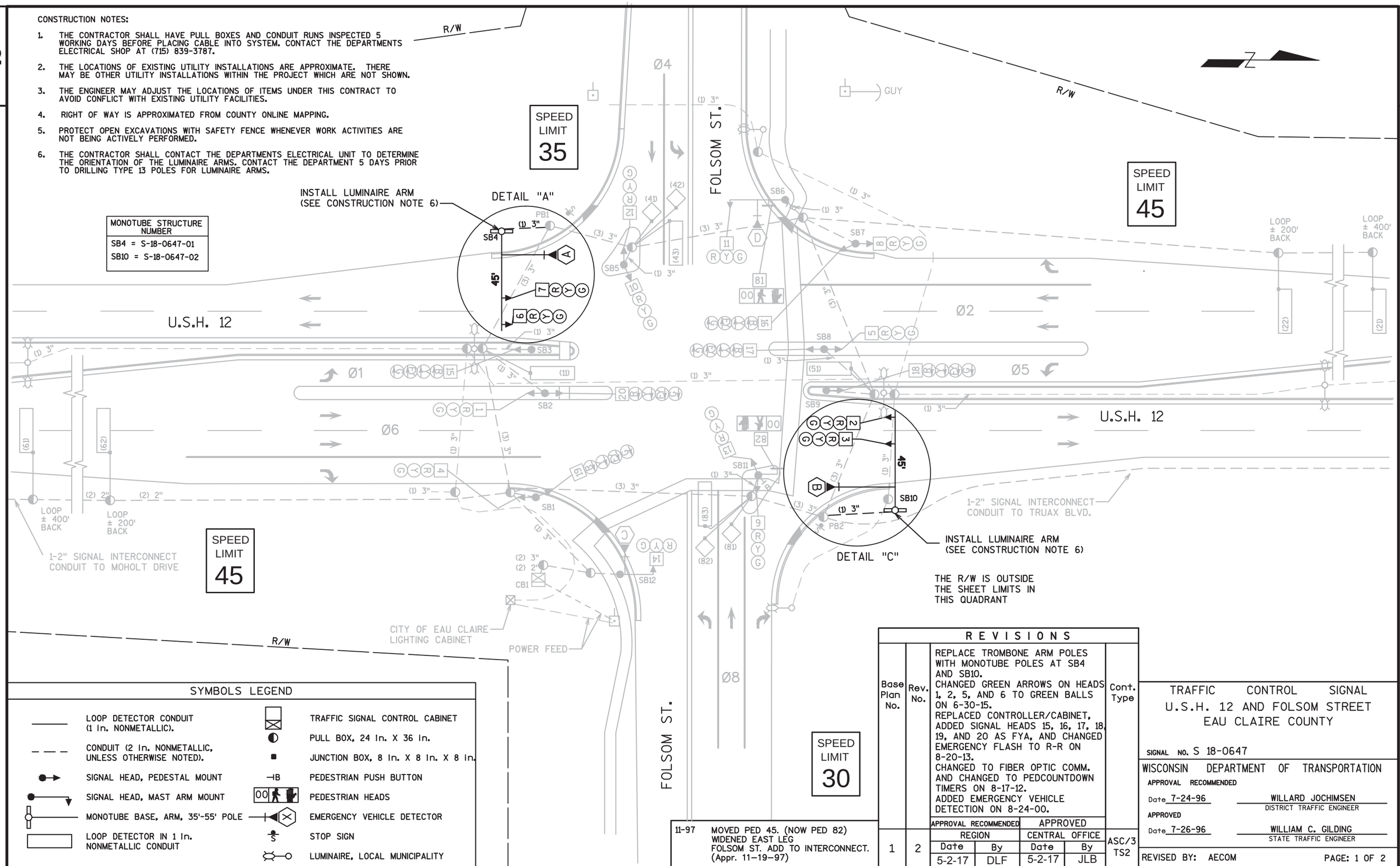
1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

MONOTUBE STRUCTURE NUMBER
SB4 = S-18-0647-01
SB10 = S-18-0647-02



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, ARM, 35'-55' POLE
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LUMINAIRE, LOCAL MUNICIPALITY

11-97 MOVED PED 45. (NOW PED 82) WIDENED EAST LEG FOLSOM ST. ADD TO INTERCONNECT. (Appr. 11–19–97)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB4 AND SB10. CHANGED GREEN ARROWS ON HEADS 1, 2, 5, AND 6 TO GREEN BALLS ON 6-30-15. REPLACED CONTROLLER/CABINET, ADDED SIGNAL HEADS 15, 16, 17, 18, 19, AND 20 AS FYA, AND CHANGED EMERGENCY FLASH TO R-R ON 8-20-13. CHANGED TO FIBER OPTIC COMM. AND CHANGED TO PEDCOUNTDOWN TIMERS ON 8-17-12. ADDED EMERGENCY VEHICLE DETECTION ON 8-24-00.	
		APPROVAL RECOMMENDED / APPROVED	
		REGION Date 5-2-17 By DLF / CENTRAL OFFICE Date 5-2-17 By JLB	
1	2		ASC/3 TS2

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND FOLSOM STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0647

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 7-24-96 — WILLARD JOCHIMSEN, DISTRICT TRAFFIC ENGINEER

APPROVED
Date 7-26-96 — WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

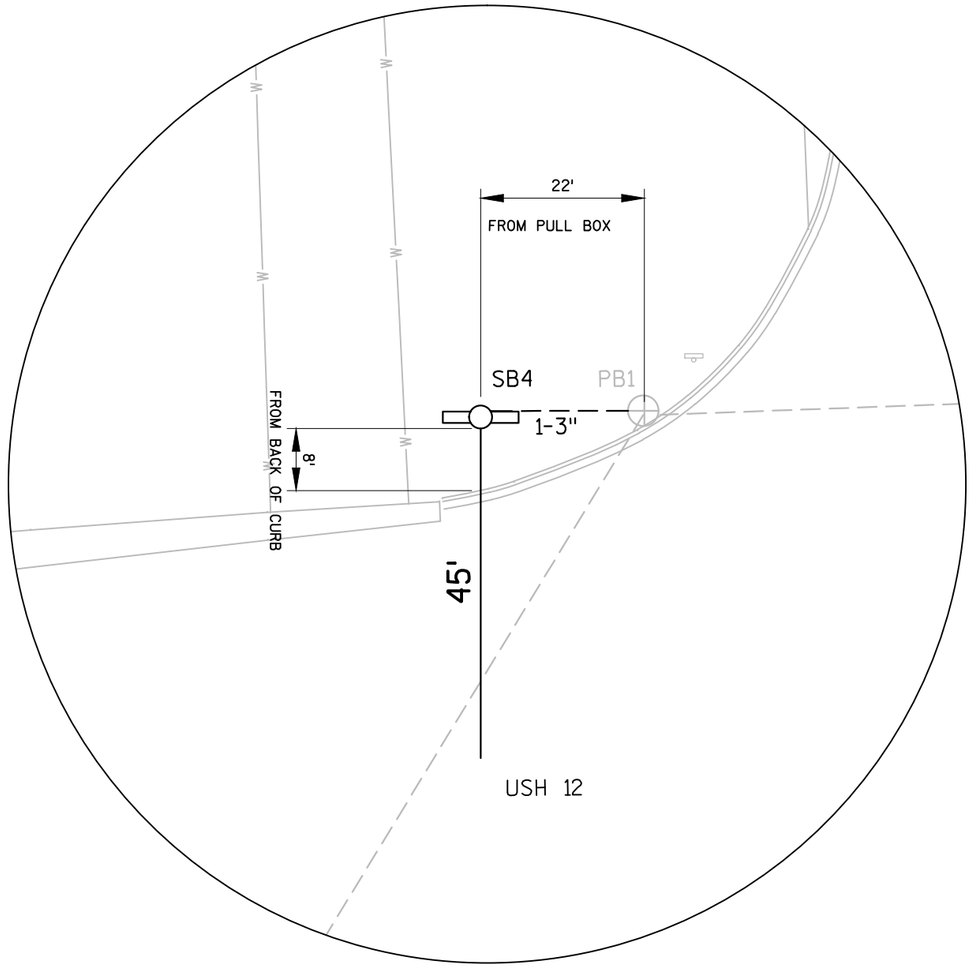
REVISED BY: AECOM

PAGE: 1 OF 2

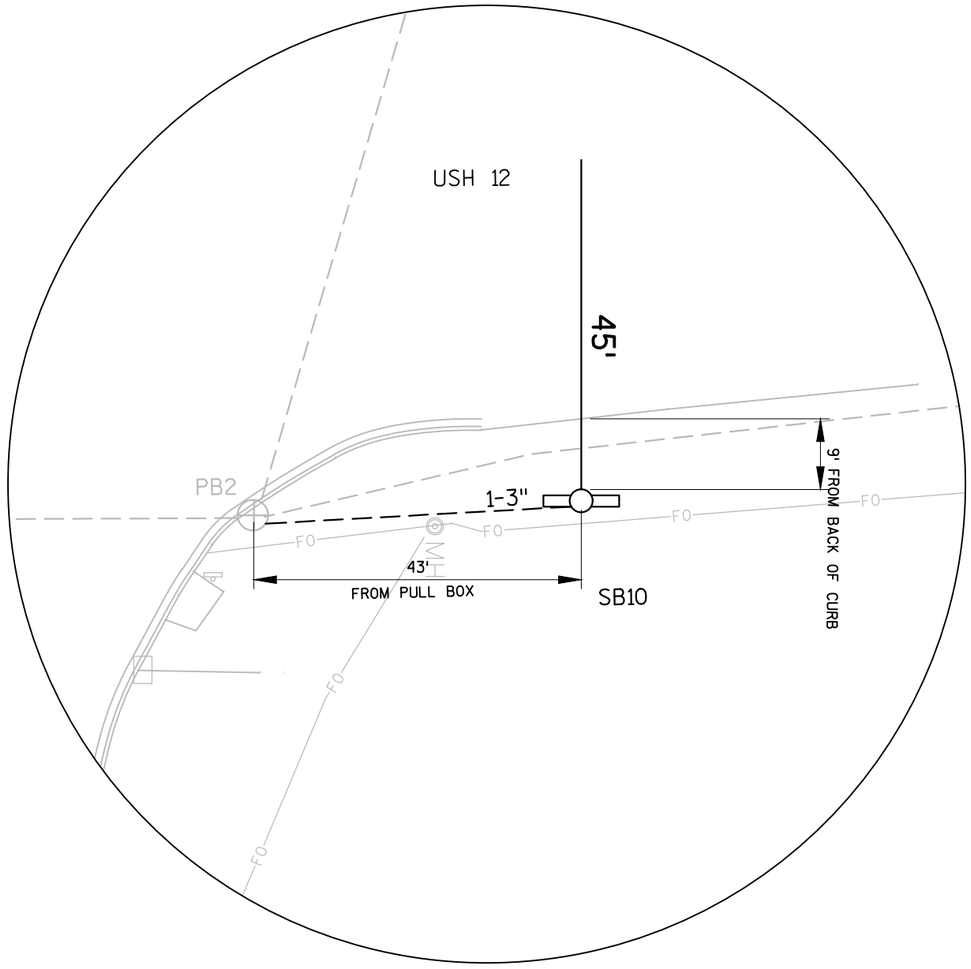
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FOLSOM STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP B\024002_SP.DWG PLOT DATE : 1/18/2017 7:47 AM 1"=40'

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND FOLSOM STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0647

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FOLSOM STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 62	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & FOLSOM ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	4	EXISTING										
		19	EXISTING										
SB2	EXISTING	1	EXISTING										
		20	EXISTING										
SB3	EXISTING	15	EXISTING										
SB4	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								
SB5	EXISTING	10	EXISTING										
		12	EXISTING										
SB6	EXISTING	11	EXISTING										
		81	EXISTING										
		PB	EXISTING										
SB7	EXISTING	8	EXISTING										
		16	EXISTING										
SB8	EXISTING	5	EXISTING										
		17	EXISTING										
SB9	EXISTING	18	EXISTING										
SB10	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
SB11	EXISTING	9	EXISTING										
		13	EXISTING										
		82	EXISTING										
		PB	EXISTING										
SB12	EXISTING	14	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB9	SB10
SB10	SB11

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB10

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB10

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

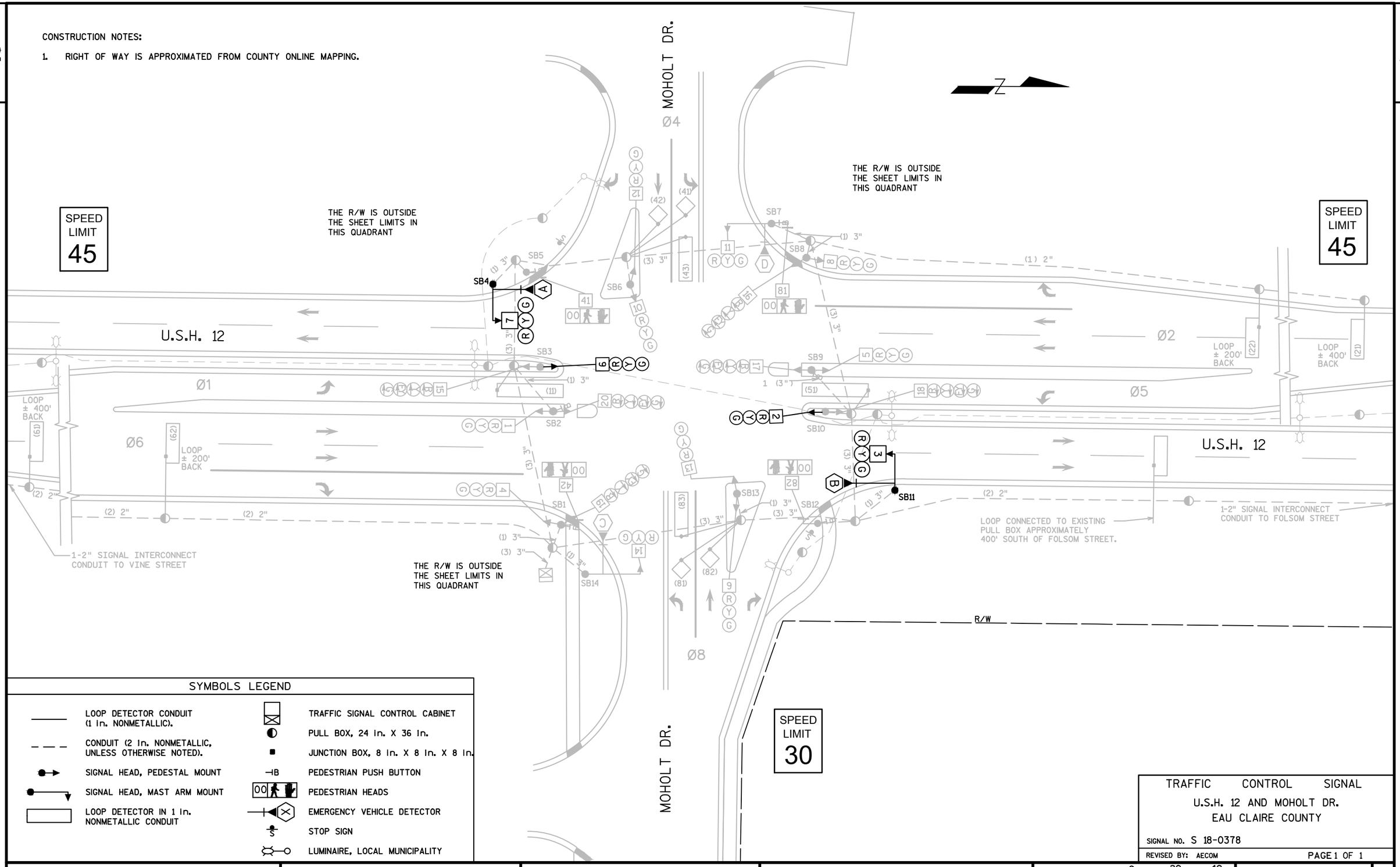
U.S.H. 12 AND FOLSOM ST
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2
SIGNAL NO: S 18-0647 CABINET TYPE: TS2
DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

2

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LUMINAIRE, LOCAL MUNICIPALITY

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MOHOLT DR.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0378

REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MOHOLT DRIVE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET:

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP B\REMOVAL PLANS\021003_CD.DWG

PLOT DATE : 2/1/2017 8:54 AM

1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

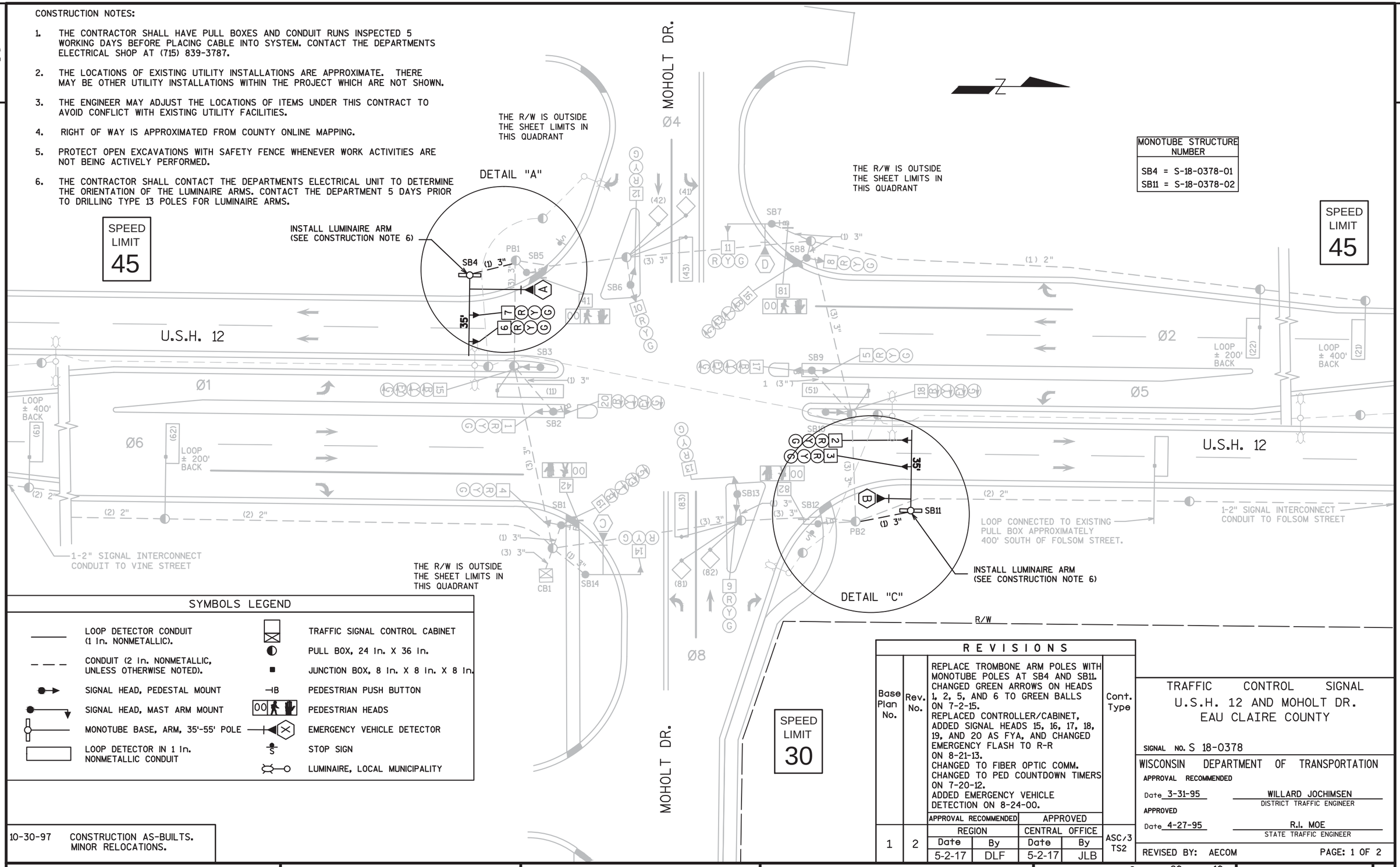
SPEED LIMIT 45

SPEED LIMIT 45

SPEED LIMIT 30

MONOTUBE STRUCTURE NUMBER

SB4 = S-18-0378-01
SB11 = S-18-0378-02



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, ARM, 35'-55' POLE
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LUMINAIRE, LOCAL MUNICIPALITY

10-30-97 CONSTRUCTION AS-BUILTS. MINOR RELOCATIONS.

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB4 AND SB11. CHANGED GREEN ARROWS ON HEADS 1, 2, 5, AND 6 TO GREEN BALLS ON 7-2-15. REPLACED CONTROLLER/CABINET, ADDED SIGNAL HEADS 15, 16, 17, 18, 19, AND 20 AS FYA, AND CHANGED EMERGENCY FLASH TO R-R ON 8-21-13. CHANGED TO FIBER OPTIC COMM. CHANGED TO PED COUNTDOWN TIMERS ON 7-20-12. ADDED EMERGENCY VEHICLE DETECTION ON 8-24-00.	
		APPROVAL RECOMMENDED / APPROVED	
		REGION: Date 5-2-17, By DLF / CENTRAL OFFICE: Date 5-2-17, By JLB	
1	2		ASC/3 TS2

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MOHOLT DR.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0378

WISCONSIN DEPARTMENT OF TRANSPORTATION

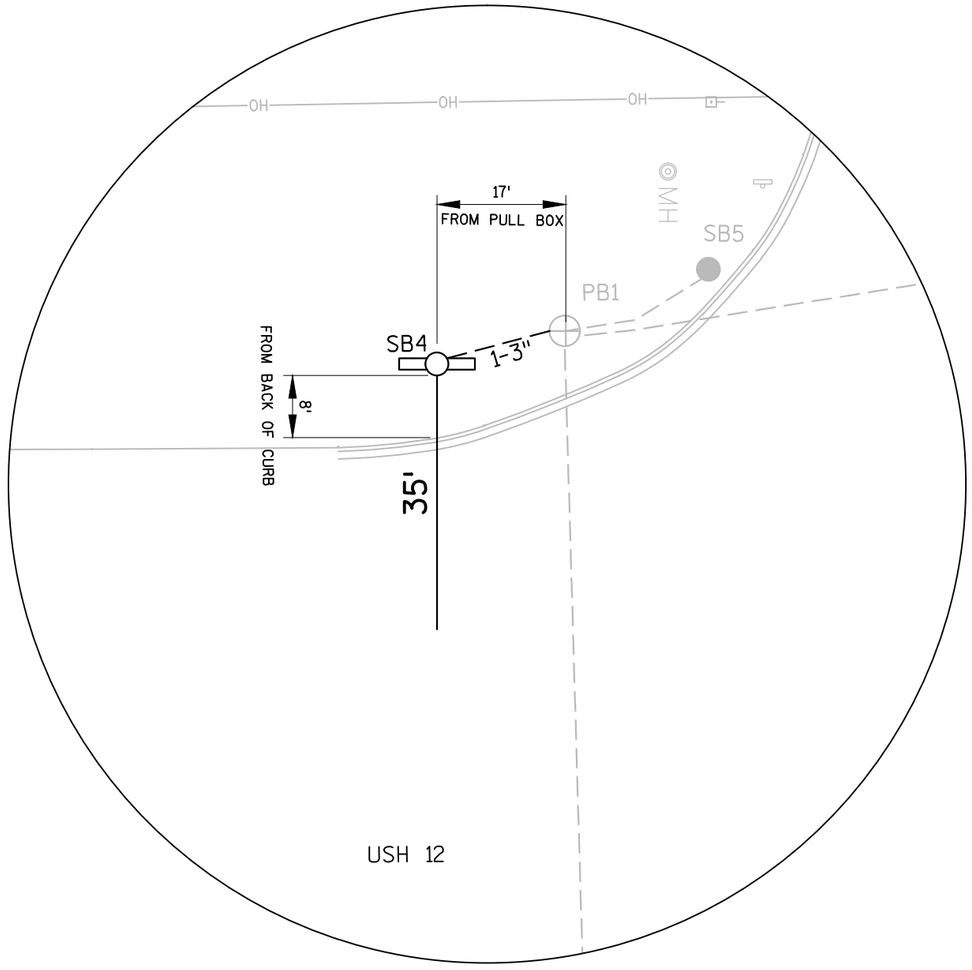
APPROVAL RECOMMENDED
Date 3-31-95 — WILLARD JOCHIMSEN, DISTRICT TRAFFIC ENGINEER

APPROVED
Date 4-27-95 — R.J. MOE, STATE TRAFFIC ENGINEER

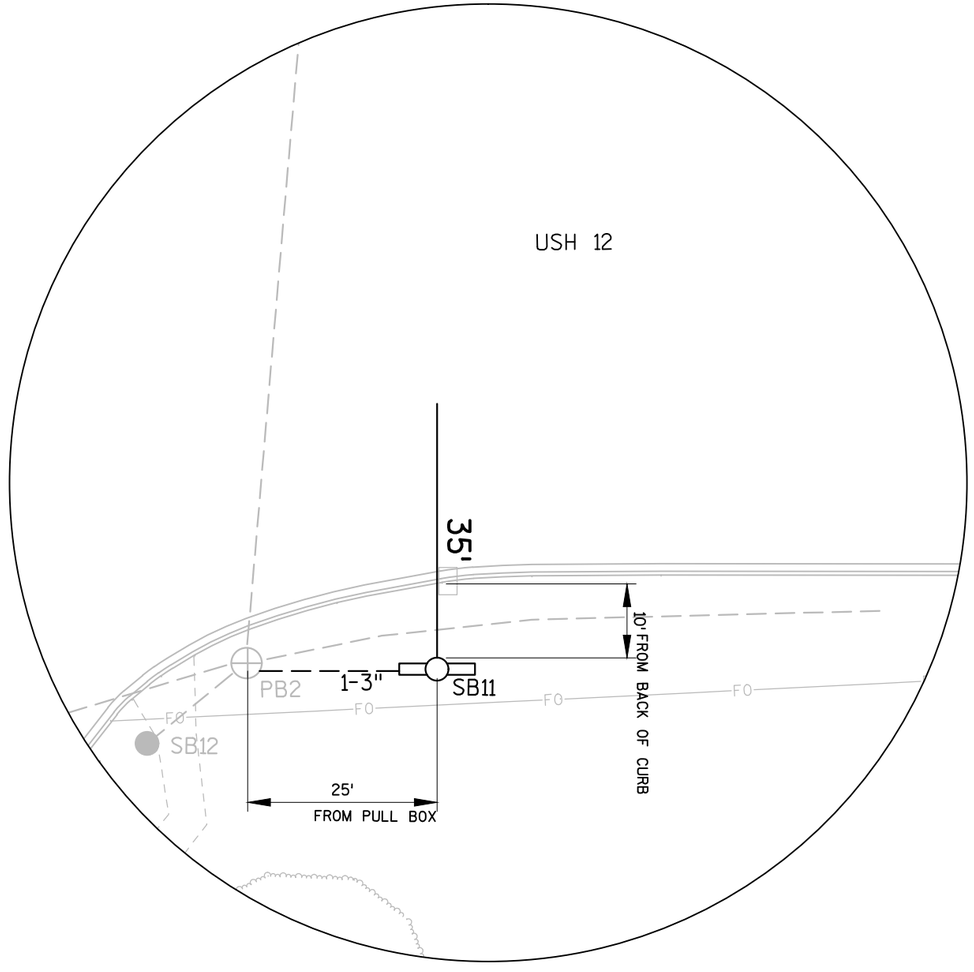
REVISED BY: AECOM — PAGE: 1 OF 2

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MOHOLT DRIVE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP B\024003_SP.DWG
PLOT DATE : 1/18/2017 8:51 AM
1"=40'
WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MOHOLT DR.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0378

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: USH 12 & MOHOLT DRIVE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 66	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & MOHOLT DR

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	4	EXISTING										
		19	EXISTING										
		42	EXISTING										
		PB	EXISTING										
SB2	EXISTING	1	EXISTING										
		20	EXISTING										
		PB	EXISTING										
SB3	EXISTING	15	EXISTING										
SB4	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								
SB5	EXISTING	41	EXISTING										
		PB	EXISTING										
SB6	EXISTING	10	EXISTING										
		12	EXISTING										
SB7	EXISTING	11	EXISTING										
		81	EXISTING										
		PB	EXISTING										
SB8	EXISTING	8	EXISTING										
		16	EXISTING										
SB9	EXISTING	5	EXISTING										
		17	EXISTING										
		PB	EXISTING										
SB10	EXISTING	18	EXISTING										
SB11	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
SB12	EXISTING	82	EXISTING										
		PB	EXISTING										
SB13	EXISTING	9	EXISTING										
		13	EXISTING										
SB14	EXISTING	14	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB10	SB11
SB11	SB12

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB11

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB11

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND MOHOLT DR
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0378 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LUMINAIRE, LOCAL MUNICIPALITY

SPEED LIMIT 30

SPEED LIMIT 45

VINE ST.

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

R/W

Ø1 Ø2 Ø4 Ø5 Ø6 Ø8

U.S.H. 12

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12

SYS. 9 SYS. 10 SYS. 11

SYS. 7 SYS. 6 SYS. 5

LOOP ± 200' BACK

LOOP ± 400' BACK

PEDESTRIAN UNDERPASS

(LANE DROP)

1 - 2" SIGNAL INTERCONNECT CONDUIT TO MOHOLT DRIVE

1 - 2" SIGNAL INTERCONNECT CONDUIT TO CAMERON STREET

SPEED LIMIT 45

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

SPEED LIMIT 30

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND VINE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0598

REVISED BY: AECOM

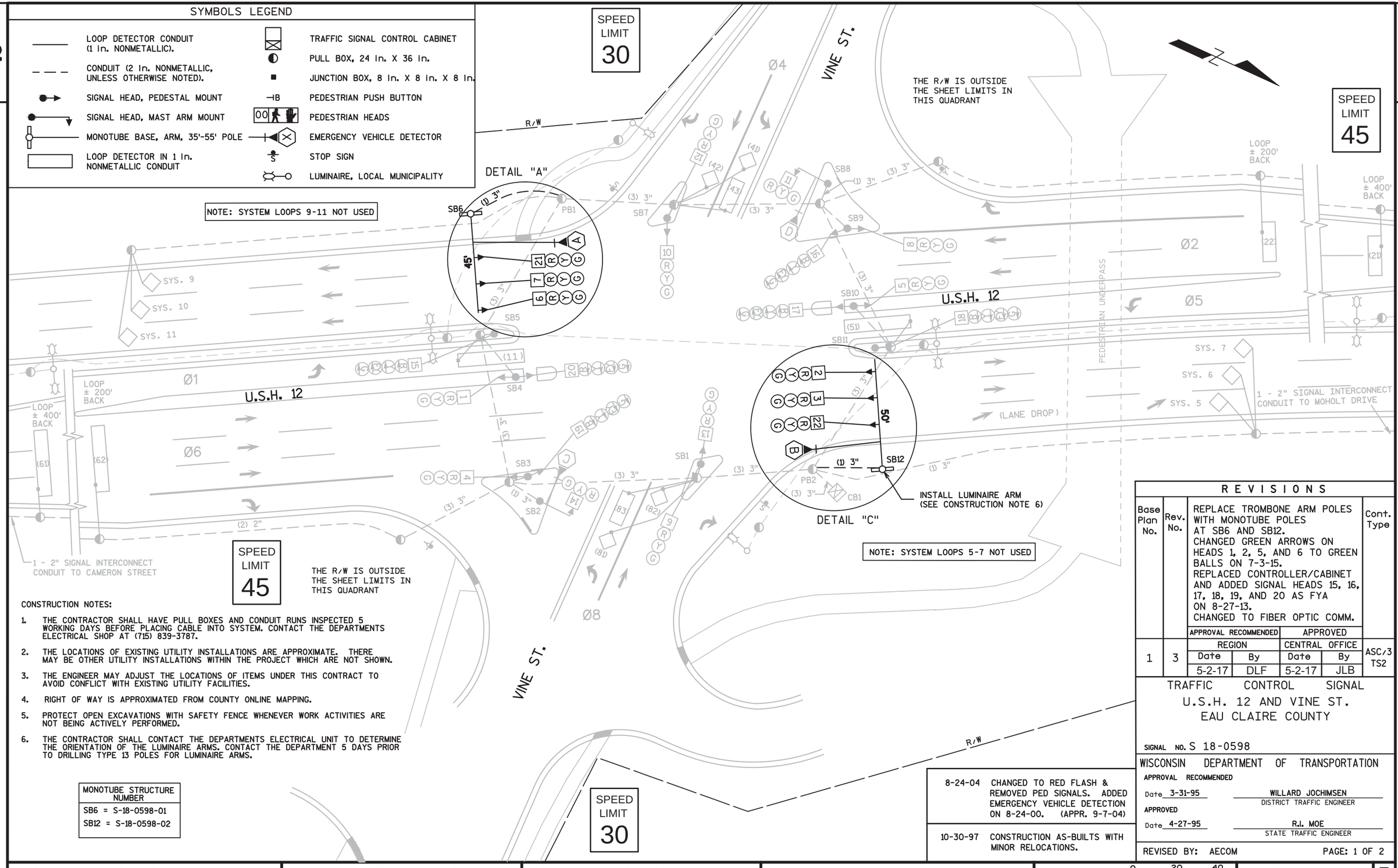
PAGE 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & VINE STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 68

SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, ARM, 35'-55' POLE
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LUMINAIRE, LOCAL MUNICIPALITY

NOTE: SYSTEM LOOPS 9-11 NOT USED



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

MONOTUBE STRUCTURE NUMBER
SB6 = S-18-0598-01
SB12 = S-18-0598-02

8-24-04	CHANGED TO RED FLASH & REMOVED PED SIGNALS. ADDED EMERGENCY VEHICLE DETECTION ON 8-24-00. (APPR. 9-7-04)
10-30-97	CONSTRUCTION AS-BUILTS WITH MINOR RELOCATIONS.

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB6 AND SB12. CHANGED GREEN ARROWS ON HEADS 1, 2, 5, AND 6 TO GREEN BALLS ON 7-3-15. REPLACED CONTROLLER/CABINET AND ADDED SIGNAL HEADS 15, 16, 17, 18, 19, AND 20 AS FYA ON 8-27-13. CHANGED TO FIBER OPTIC COMM.	
		APPROVAL RECOMMENDED	APPROVED
1	3	REGION: Date 5-2-17, By DLF	CENTRAL OFFICE: Date 5-2-17, By JLB	ASC/3 TS2

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND VINE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0598

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 3-31-95 — WILLARD JOCHIMSEN, DISTRICT TRAFFIC ENGINEER

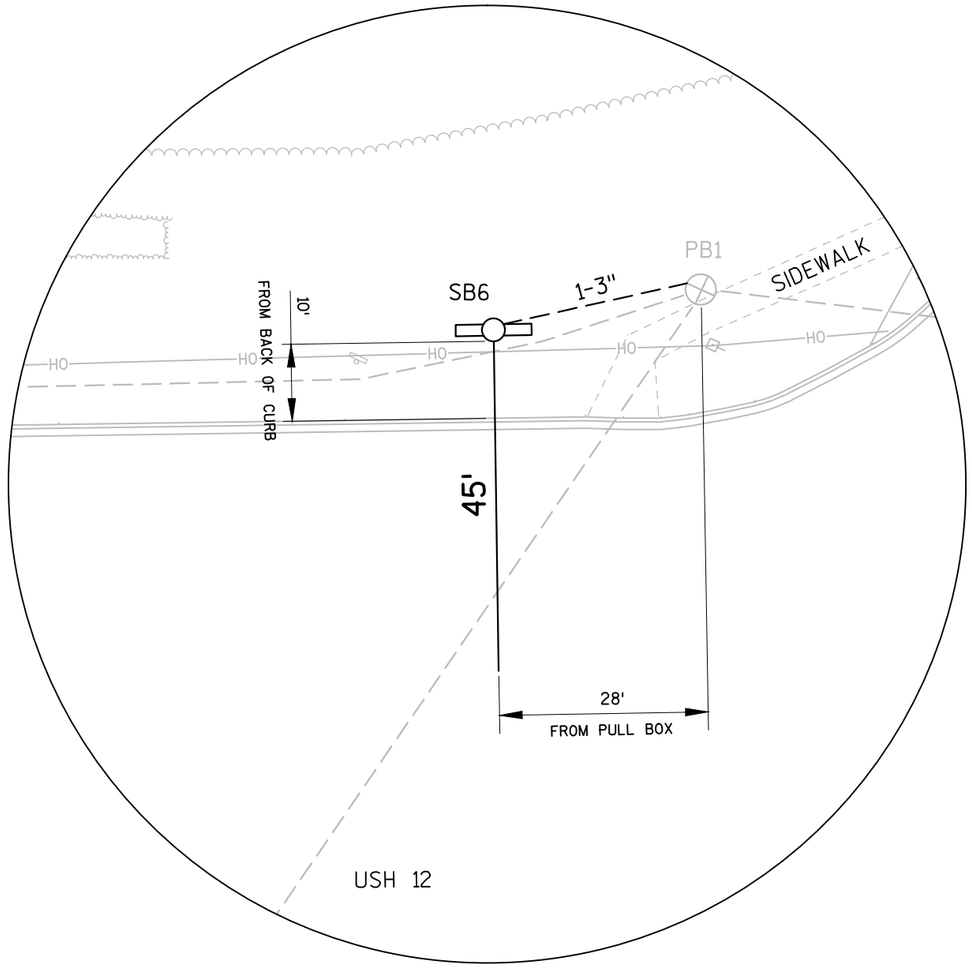
APPROVED
Date 4-27-95 — R.I. MOE, STATE TRAFFIC ENGINEER

REVISED BY: AECOM

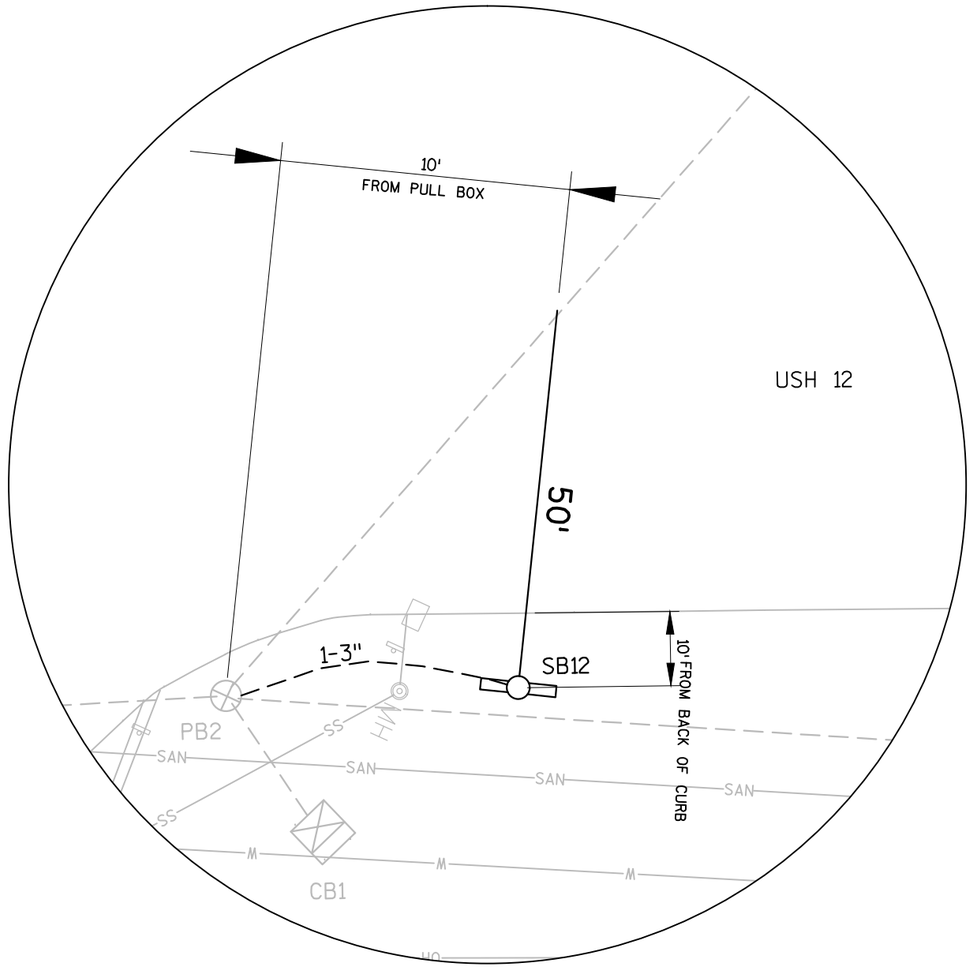
PROJECT NO: 1000-08-81 | HWY: U.S.H. 12 & VINE STREET | COUNTY: EAU CLAIRE | TRAFFIC SIGNAL PLAN | SCALE, FEET 0 20 40 | SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP B\024004_SP.DWG | PLOT DATE : 1/18/2017 7:51 AM | 1"=40' | WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND VINE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0598

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: USH 12 & VINE STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 70	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & VINE ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	13	EXISTING										
		9	EXISTING										
SB2	EXISTING	14	EXISTING										
SB3	EXISTING	4	EXISTING										
		19	EXISTING										
SB4	EXISTING	1	EXISTING										
		20	EXISTING										
SB5	EXISTING	15	EXISTING										
SB6	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								
		21	RED	ORG	GRN								
SB7	EXISTING	10	EXISTING										
		12	EXISTING										
SB8	EXISTING	11	EXISTING										
SB9	EXISTING	8	EXISTING										
		16	EXISTING										
SB10	EXISTING	5	EXISTING										
		17	EXISTING										
SB11	EXISTING	18	EXISTING										
SB12	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		22	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB5	SB6
SB6	SB7
SB11	SB12
SB12	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB6
PB2	SB12

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB6
B	CB1	SB12

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND VINE ST
EAU CLAIRE COUNTY

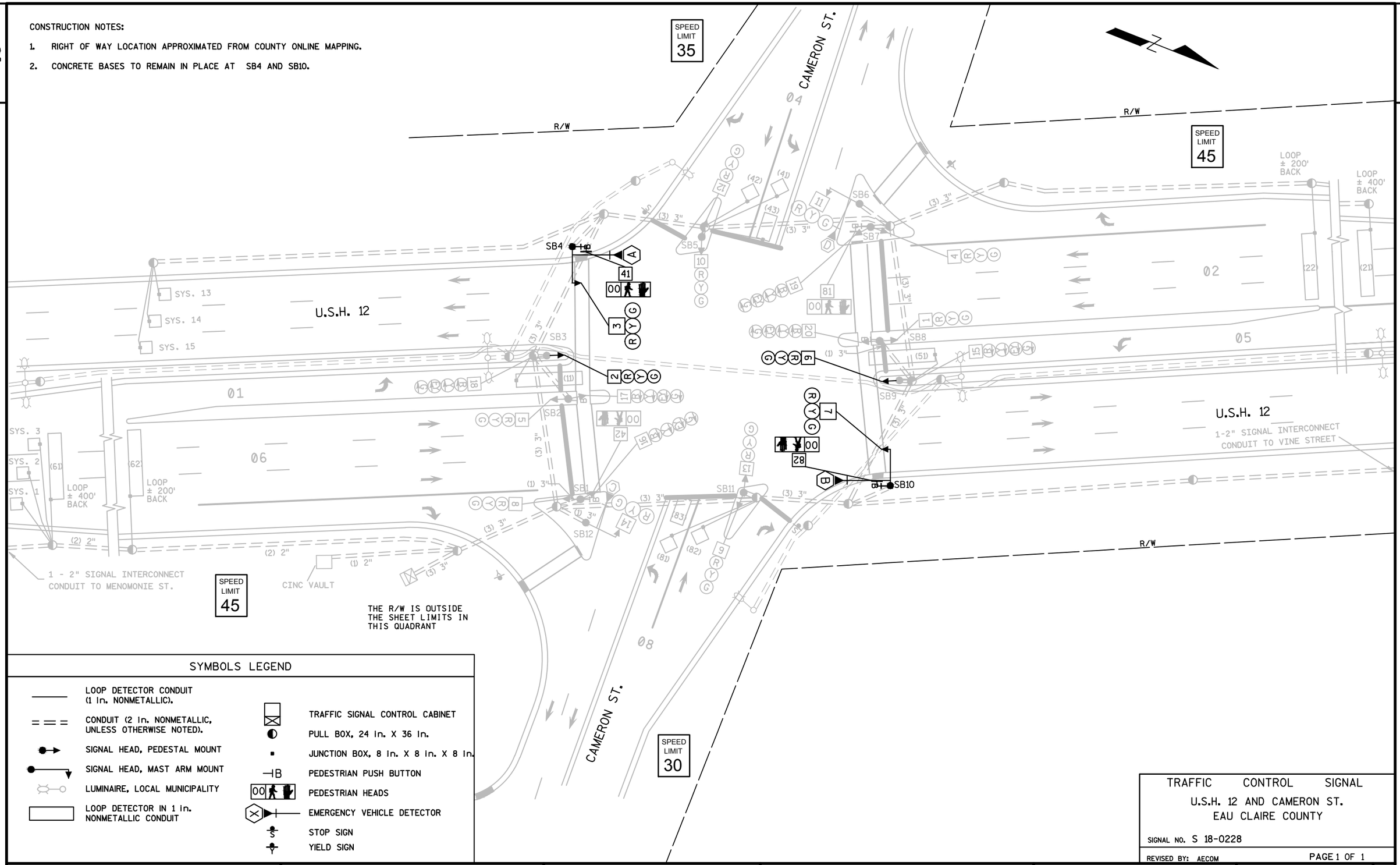
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0598 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASES TO REMAIN IN PLACE AT SB4 AND SB10.



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- LUMINAIRE, LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- YIELD SIGN

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND CAMERON ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0228

REVISED BY: AECOM

PAGE 1 OF 1

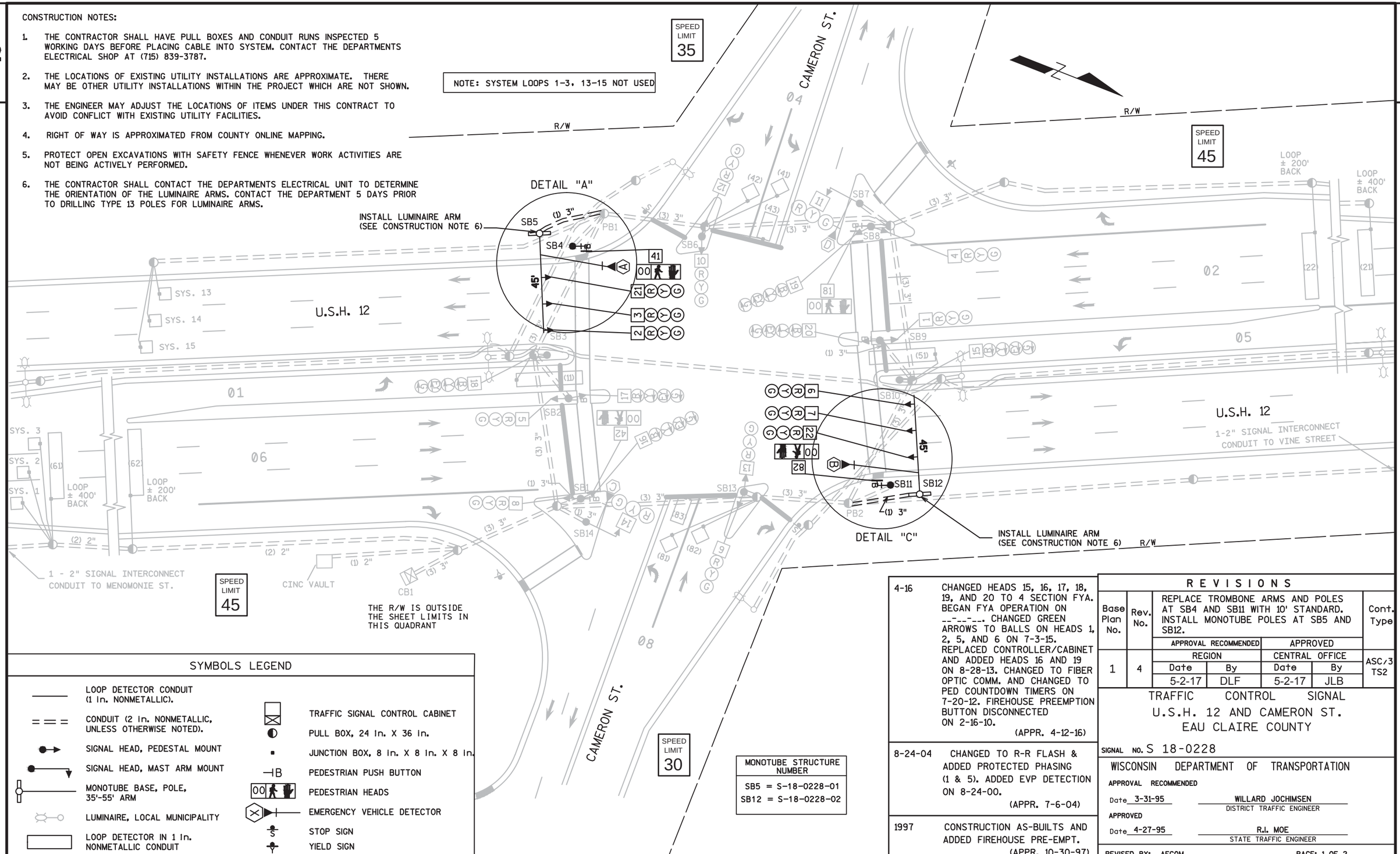
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CAMERON STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\REMOVAL PLANS\021005_CD.DWG
PLOT DATE : 1/18/2017 7:53 AM
1"=40'
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

NOTE: SYSTEM LOOPS 1-3, 13-15 NOT USED



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- JUNCTION BOX, 8 In. X 8 In. X 8 In.
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN HEADS
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- YIELD SIGN

MONOTUBE STRUCTURE NUMBER
SB5 = S-18-0228-01
SB12 = S-18-0228-02

REVISIONS					
4-16	CHANGED HEADS 15, 16, 17, 18, 19, AND 20 TO 4 SECTION FYA. BEGAN FYA OPERATION ON --_--_--_. CHANGED GREEN ARROWS TO BALLS ON HEADS 1, 2, 5, AND 6 ON 7-3-15. REPLACED CONTROLLER/CABINET AND ADDED HEADS 16 AND 19 ON 8-28-13. CHANGED TO FIBER OPTIC COMM. AND CHANGED TO PED COUNTDOWN TIMERS ON 7-20-12. FIREHOUSE PREEMPTION BUTTON DISCONNECTED ON 2-16-10. (APPR. 4-12-16)				
8-24-04	CHANGED TO R-R FLASH & ADDED PROTECTED PHASING (1 & 5). ADDED EVP DETECTION ON 8-24-00. (APPR. 7-6-04)				
1997	CONSTRUCTION AS-BUILTS AND ADDED FIREHOUSE PRE-EMPT. (APPR. 10-30-97)				

Base Plan No.	Rev. No.	REPLACE TROMBONE ARMS AND POLES AT SB4 AND SB11 WITH 10' STANDARD. INSTALL MONOTUBE POLES AT SB5 AND SB12.				Cont. Type
		APPROVAL RECOMMENDED		APPROVED		
1	4	REGION		CENTRAL OFFICE		ASC/3 TS2
		Date	By	Date	By	
		5-2-17	DLF	5-2-17	JLB	

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND CAMERON ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0228

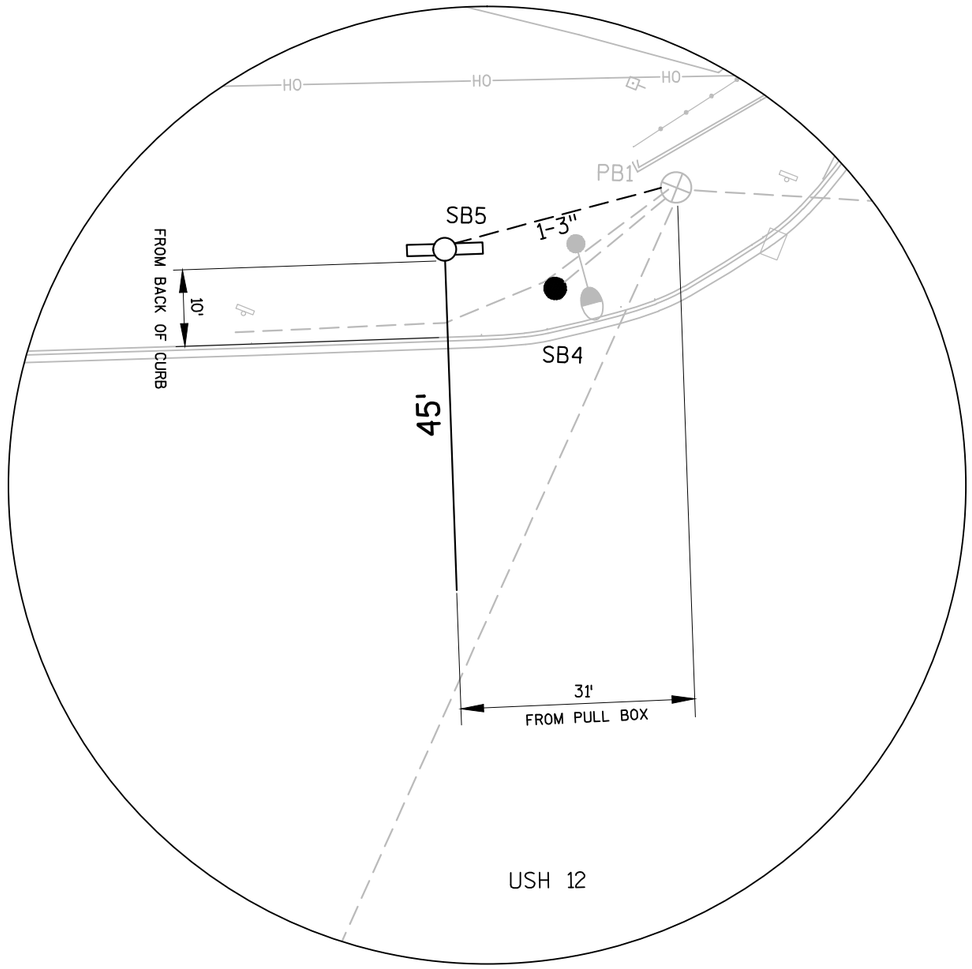
WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 3-31-95 — WILLARD JOCHIMSEN, DISTRICT TRAFFIC ENGINEER

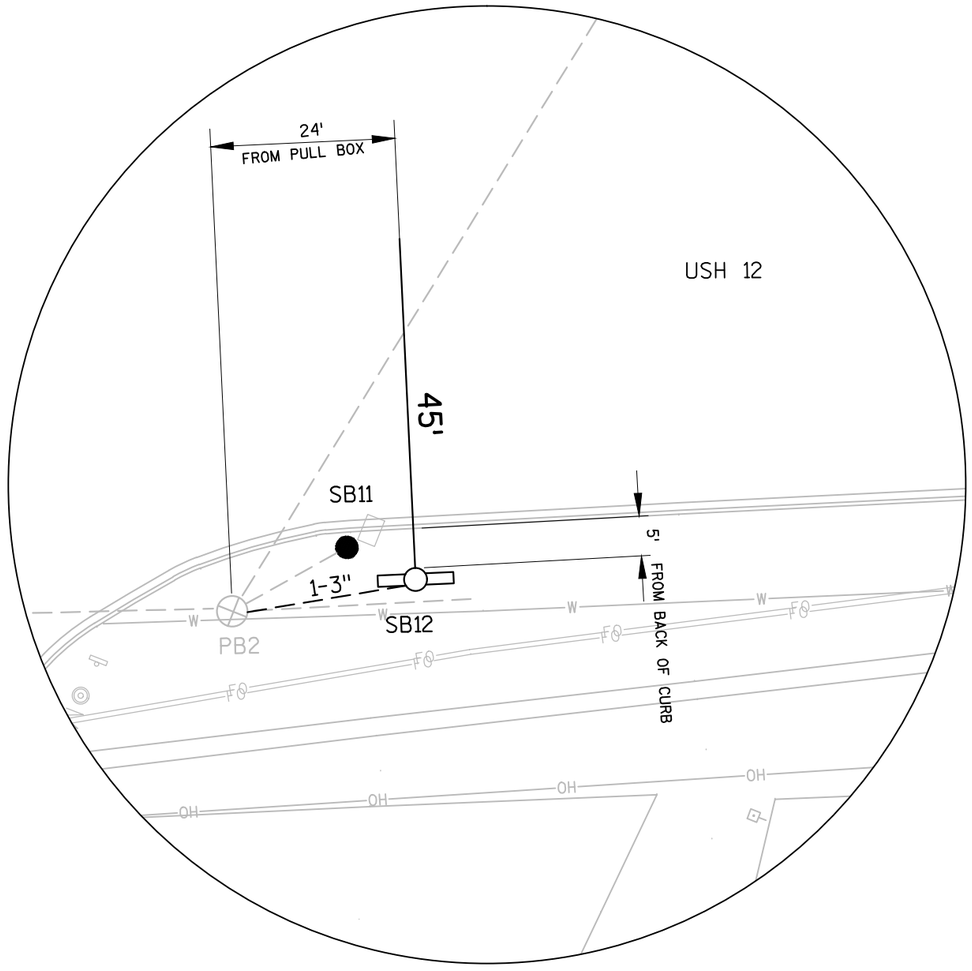
APPROVED
Date 4-27-95 — R.I. MOE, STATE TRAFFIC ENGINEER

REVISED BY: AECOM — PAGE: 1 OF 2

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CAMERON STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 73 E



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND CAMERON ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0228

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CAMERON STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 74	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & CAMERON ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	8	EXISTING										
		16	EXISTING										
		42	EXISTING										
		PB	EXISTING										
SB2	EXISTING	5	EXISTING										
		17	EXISTING										
		PB	EXISTING										
SB3	EXISTING	18	EXISTING										
SB4	EXISTING	41	EXISTING										
		PB	EXISTING										
SB5	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		21	RED	ORG	GRN								
SB6	EXISTING	10	EXISTING										
		12	EXISTING										
SB7	EXISTING	11	EXISTING										
SB8	EXISTING	4	EXISTING										
		19	EXISTING										
		81	EXISTING										
		PB	EXISTING										
SB9	EXISTING	1	EXISTING										
		20	EXISTING										
		PB	EXISTING										
SB10	EXISTING	15	EXISTING										
SB11	EXISTING	82	EXISTING										
		PB	EXISTING										
SB12	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								
		22	RED	ORG	GRN								
SB13	EXISTING	9	EXISTING										
		13	EXISTING										
SB14	EXISTING	14	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB4	SB5
SB5	SB6
SB11	SB12
SB12	SB13

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB5
B	CB1	SB12

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND CAMERON ST
EAU CLAIRE COUNTY

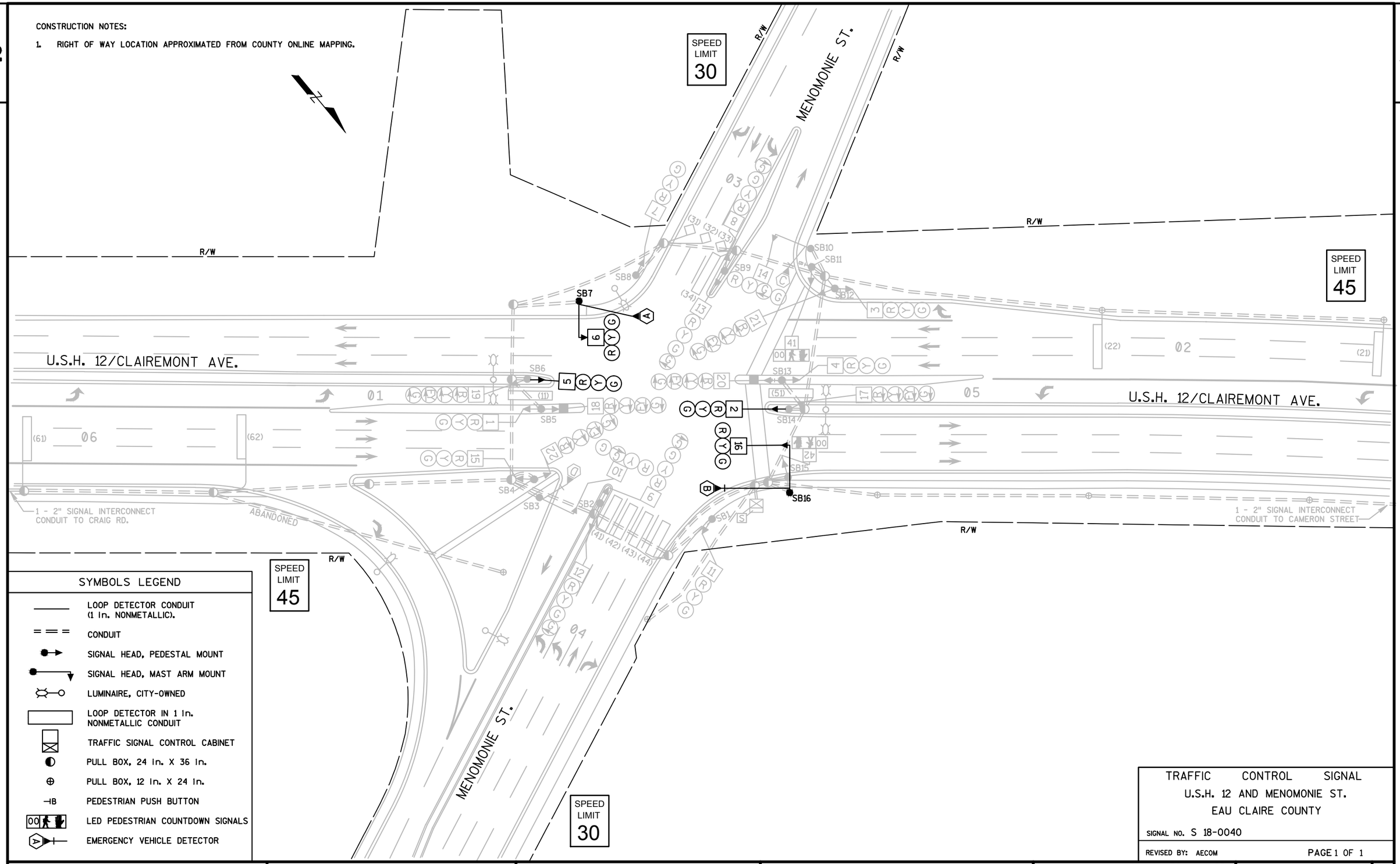
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0228 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- LUMINAIRE, CITY-OWNED
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- PULL BOX, 12 In. X 24 In.
- PEDESTRIAN PUSH BUTTON
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MENOMONIE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0040

REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MENOMONIE ST.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 30 60	SHEET:

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\REMOVAL PLANS\021006_CD.DWG PLOT DATE : 1/18/2017 7:55 AM 1"=60'

2

MONOTUBE STRUCTUR NUMBER
SB7 = S-18-0119-01
SB16 = S-18-0119-02

NOTE: LOOP 31 NOT USED

SPEED LIMIT 30

MENOMONIE ST.

R/W

DETAIL "A"

INSTALL LUMINAIRE ARM (SEE CONSTRUCTION NOTE 6)

1-3"

PB1

SB7

SB8

SB9

SB10

SB11

SB12

SB13

SB14

SB15

PB2

SB16

SB6

SB5

SB4

SB3

SB2

SB1

CB1

U.S.H. 12/CLAIREMONT AVE.

SPEED LIMIT 45

01

02

03

04

05

06

1 - 2" SIGNAL INTERCONNECT CONDUIT TO CRAIG RD.

ABANDONED

1 - 2" SIGNAL INTERCONNECT CONDUIT TO CAMERON STREET

DETAIL "C"

INSTALL LUMINAIRE ARM (SEE CONSTRUCTION NOTE 6)

NOTE: LOOP 44 NOT USED

SPEED LIMIT 45

SPEED LIMIT 30

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, CITY-OWNED
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- PULL BOX, 12 In. X 24 In.
- PEDESTRIAN PUSH BUTTON
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR

REVISIONS						
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB7 AND SB16.				Cont. Type
		APPROVALS				
		REGION		CENTRAL OFFICE		
		Date	By	Date	By	
1	4	5-2-17	DLF	5-2-17	JLB	ASC/3 TS1

4-16	CHANGED HEADS 17, 18, 19, AND 20 TO 4 SECTION FYA AND ADDED HEADS 21 AND 22 AS FYA. BEGAN FYA OPERATION ON __-__-__. CHANGED GREEN ARROWS TO GREEN BALLS ON HEADS 1, 2, 4, AND 5 ON 7-15-15. REPLACED MMU ON 1-21-15. REPLACED CONTROLLER ON 5-21-14. (APPR. 4-12-16)
8-08	CHANGED PHASES 1 AND 5 TO "PROTECTED ONLY", REPLACED CONTROLLER & CABINET AND ADDED FIBER OPTIC COMMUNICATION. ADDED EMERGENCY VEHICLE DETECTION ON 8-24-00. (APPR. 8-12-08)
4-97	CHANGED CONTROLLER TO LC 8000. ADD TO STEIN BLVD. INTERCONNECT. ALL RED FLASH. (APPR. 4-17-97)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MENOMONIE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0040

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 7-31-91 — WILLARD JOCHIMSEN, DISTRICT CHIEF TRAFFIC ENGINEER

APPROVED

Date 8-7-91 — PETER F. RUSCH, STATE TRAFFIC ENGINEER

REVISED BY: AECOM

PAGE: 1 OF 2

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MENOMONIE ST.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 30 60	SHEET: E

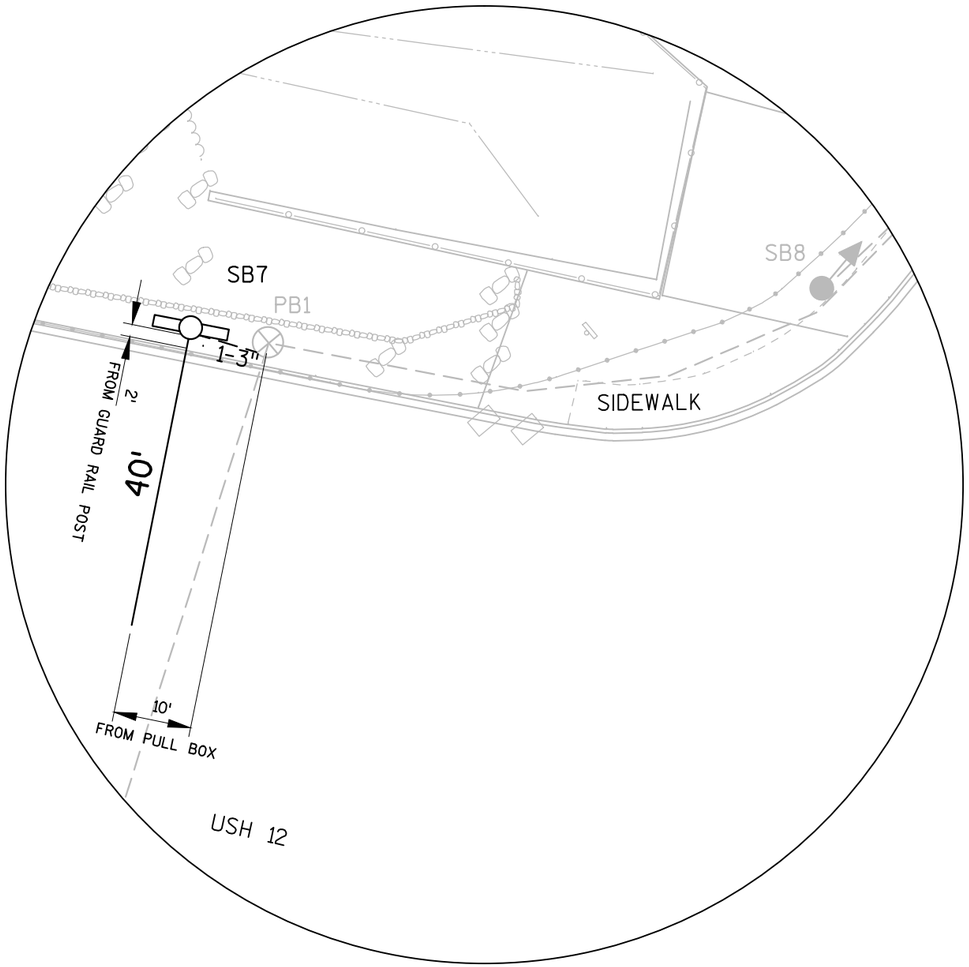
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PLOT DATE : 1/18/2017 7:55 AM

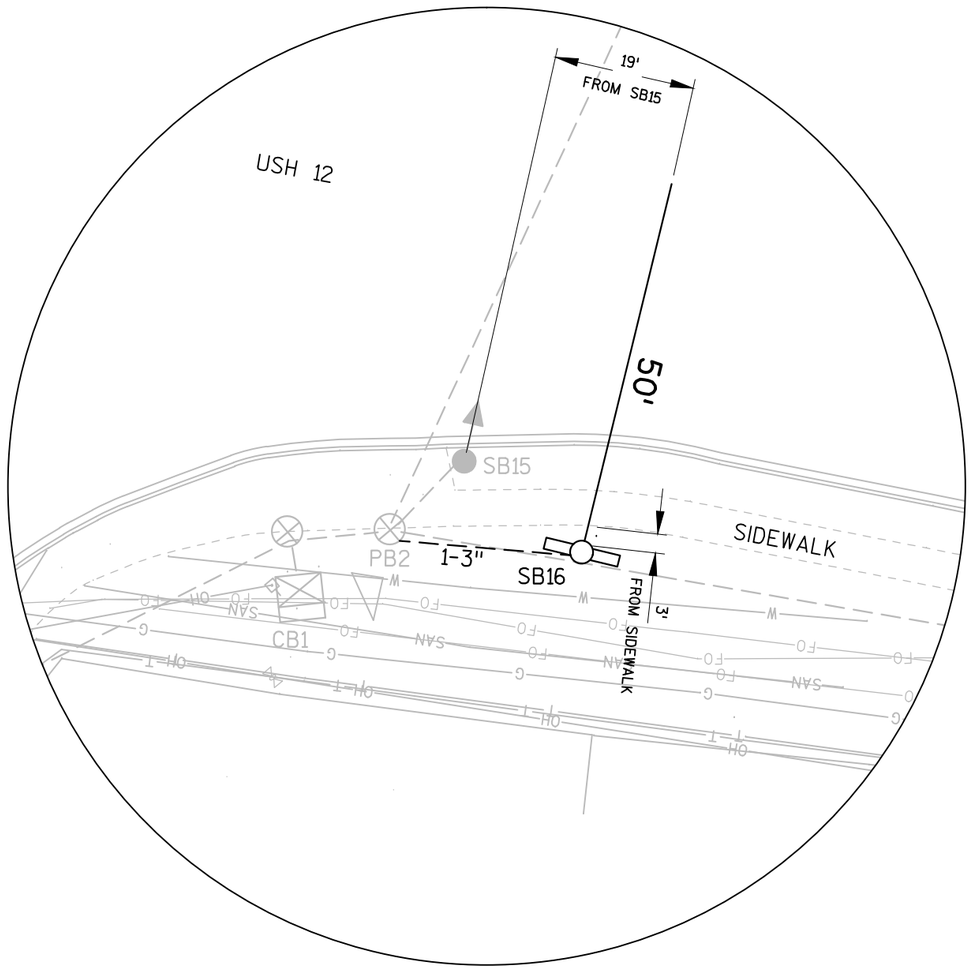
1"=60'

WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND MENOMONIE ST.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0040

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & MENOMONIE ST.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 78	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & MENOMONIE ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	11	EXISTING										
SB2	EXISTING	9	EXISTING										
		12	EXISTING										
SB3	EXISTING	10	EXISTING										
SB4	EXISTING	15	EXISTING										
		22	EXISTING										
SB5	EXISTING	1	EXISTING										
		18	EXISTING										
SB6	EXISTING	19	EXISTING										
SB7	5	5	RED	ORG	GRN								
		6	RED	ORG	GRN								
		23	RED	ORG	GRN								
SB8	EXISTING	7	EXISTING										
SB9	EXISTING	8	EXISTING										
		13	EXISTING										
SB10	EXISTING	14	EXISTING										
SB11	EXISTING	41	EXISTING										
		PB	EXISTING										
SB12	EXISTING	3	EXISTING										
		21	EXISTING										
SB13	EXISTING	4	EXISTING										
		20	EXISTING										
		PB	EXISTING										
SB14	EXISTING	17	EXISTING										
SB15	EXISTING	42	EXISTING										
		PB	EXISTING										
SB16	5	2	RED	ORG	GRN								
		16	RED	ORG	GRN								
		22	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB6	SB7
SB7	SB8
SB15	SB16
SB16	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB7
PB2	SB16

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB7
B	CB1	SB16

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND MENOMONIE ST
EAU CLAIRE COUNTY

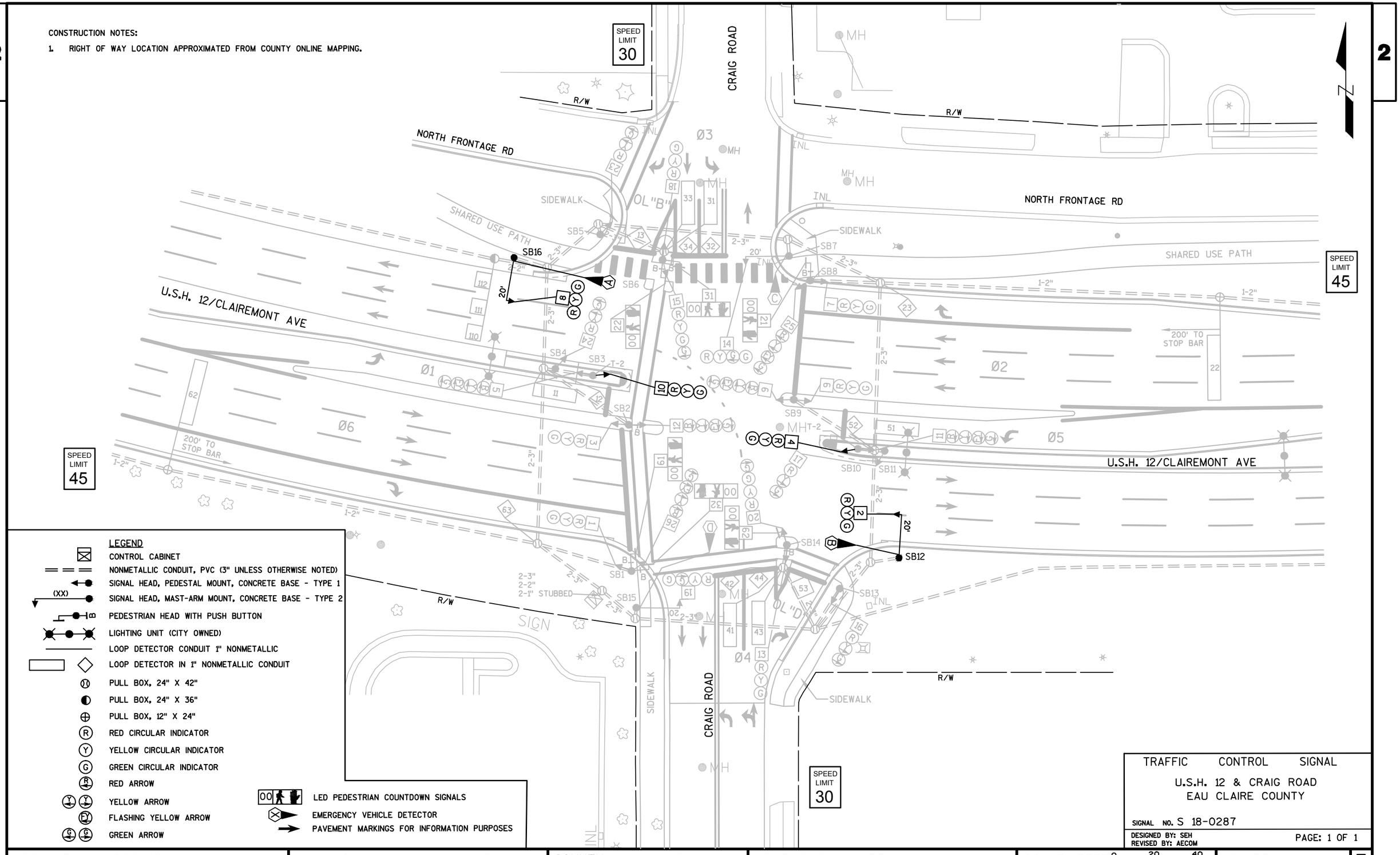
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0040 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL

U.S.H. 12 & CRAIG ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0287

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CRAIG ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 80

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB12 = S-18-0287-02
SB16 = S-18-0287-01

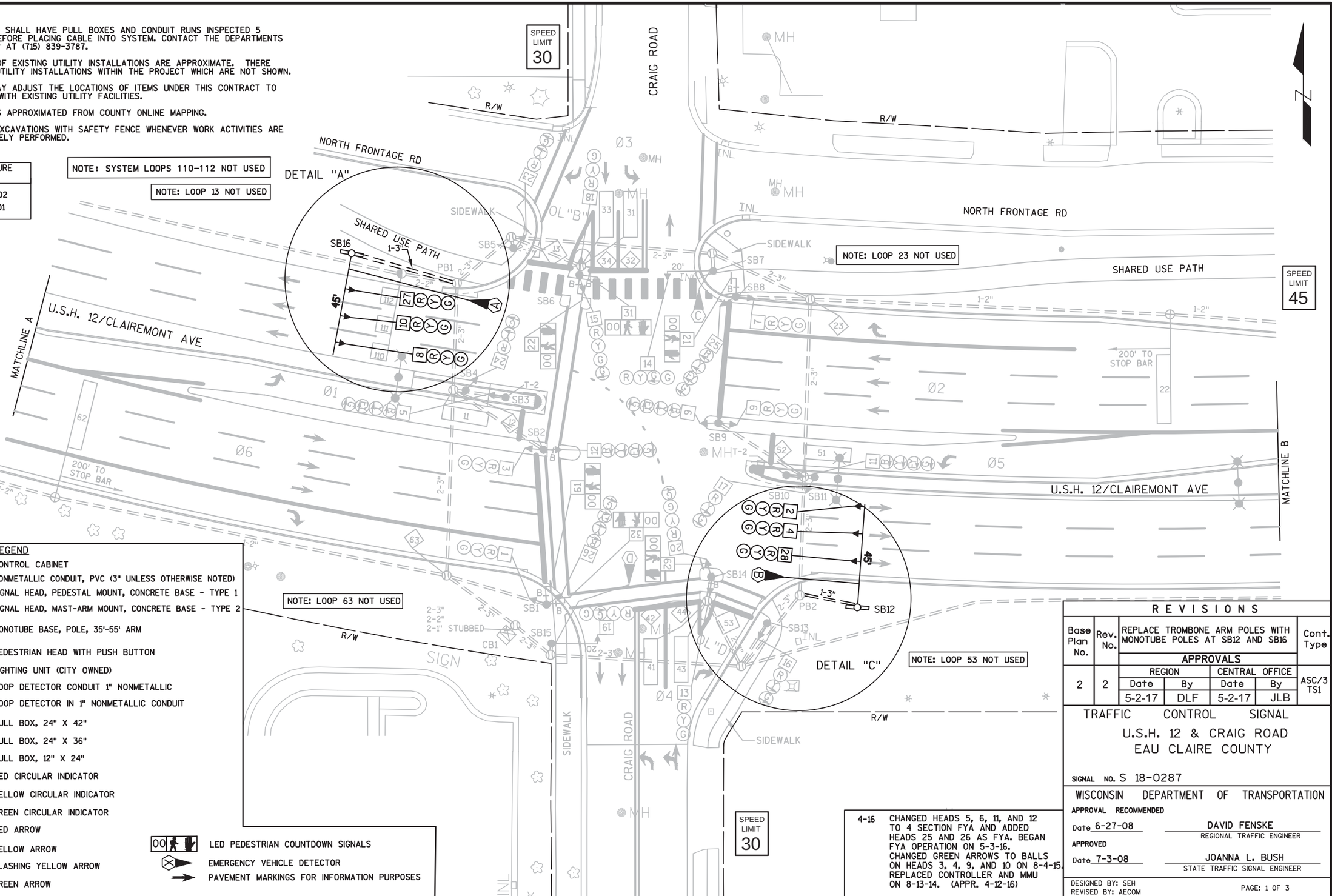
NOTE: SYSTEM LOOPS 110-112 NOT USED

NOTE: LOOP 13 NOT USED

NOTE: LOOP 23 NOT USED

NOTE: LOOP 63 NOT USED

NOTE: LOOP 53 NOT USED



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) (Y) YELLOW ARROW
- (FY) FLASHING YELLOW ARROW
- (G) (G) GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

4-16 CHANGED HEADS 5, 6, 11, AND 12 TO 4 SECTION FYA AND ADDED HEADS 25 AND 26 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROWS TO BALLS ON HEADS 3, 4, 9, AND 10 ON 8-4-15. REPLACED CONTROLLER AND MMU ON 8-13-14. (APPR. 4-12-16)

REVISIONS

Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB12 AND SB16				Cont. Type
		APPROVALS				
		REGION		CENTRAL OFFICE		
		Date	By	Date	By	
2	2	5-2-17	DLF	5-2-17	JLB	ASC/3 TS1

TRAFFIC CONTROL SIGNAL

U.S.H. 12 & CRAIG ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0287

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 6-27-08 — DAVID FENSKE, REGIONAL TRAFFIC ENGINEER

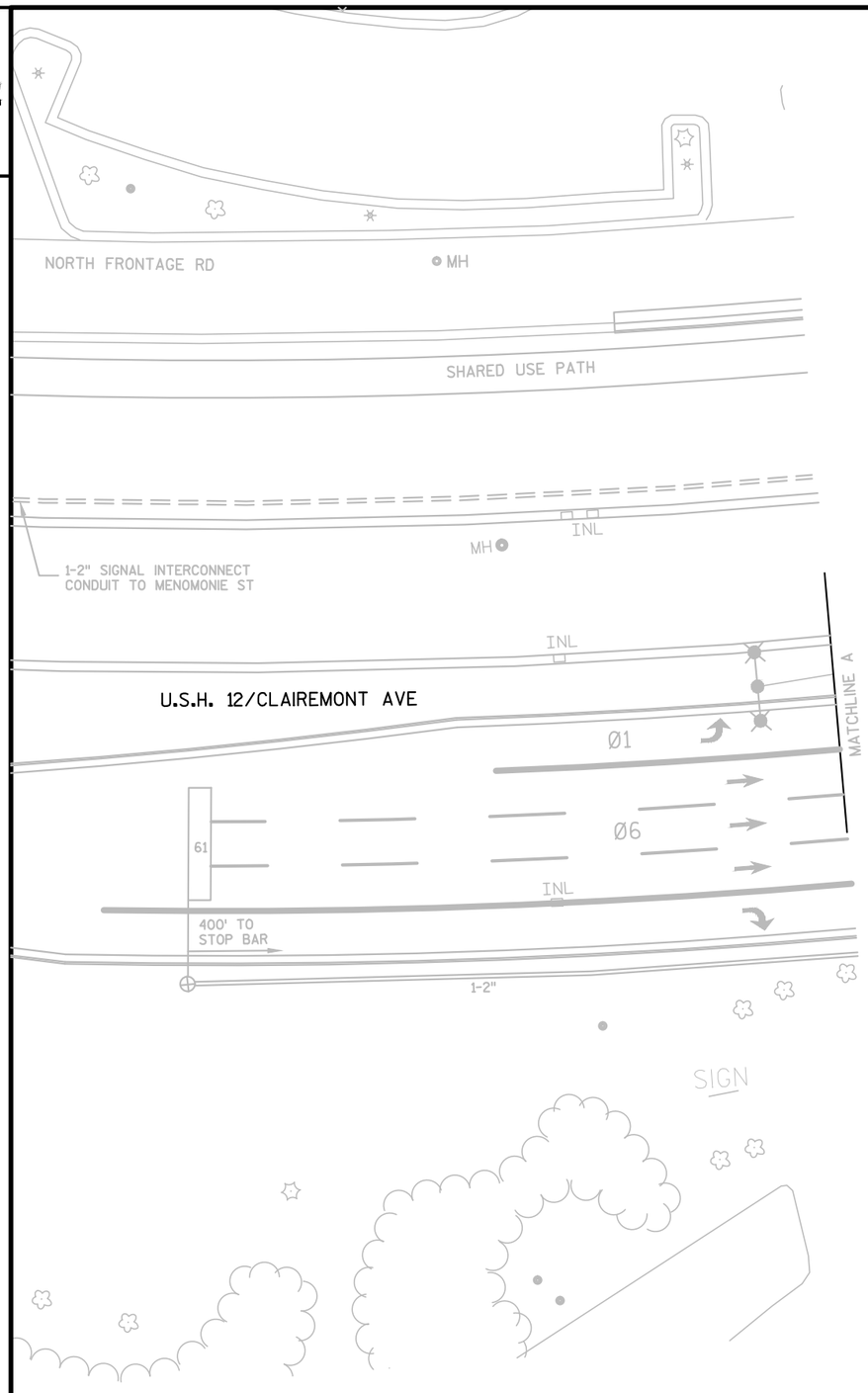
APPROVED
Date 7-3-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

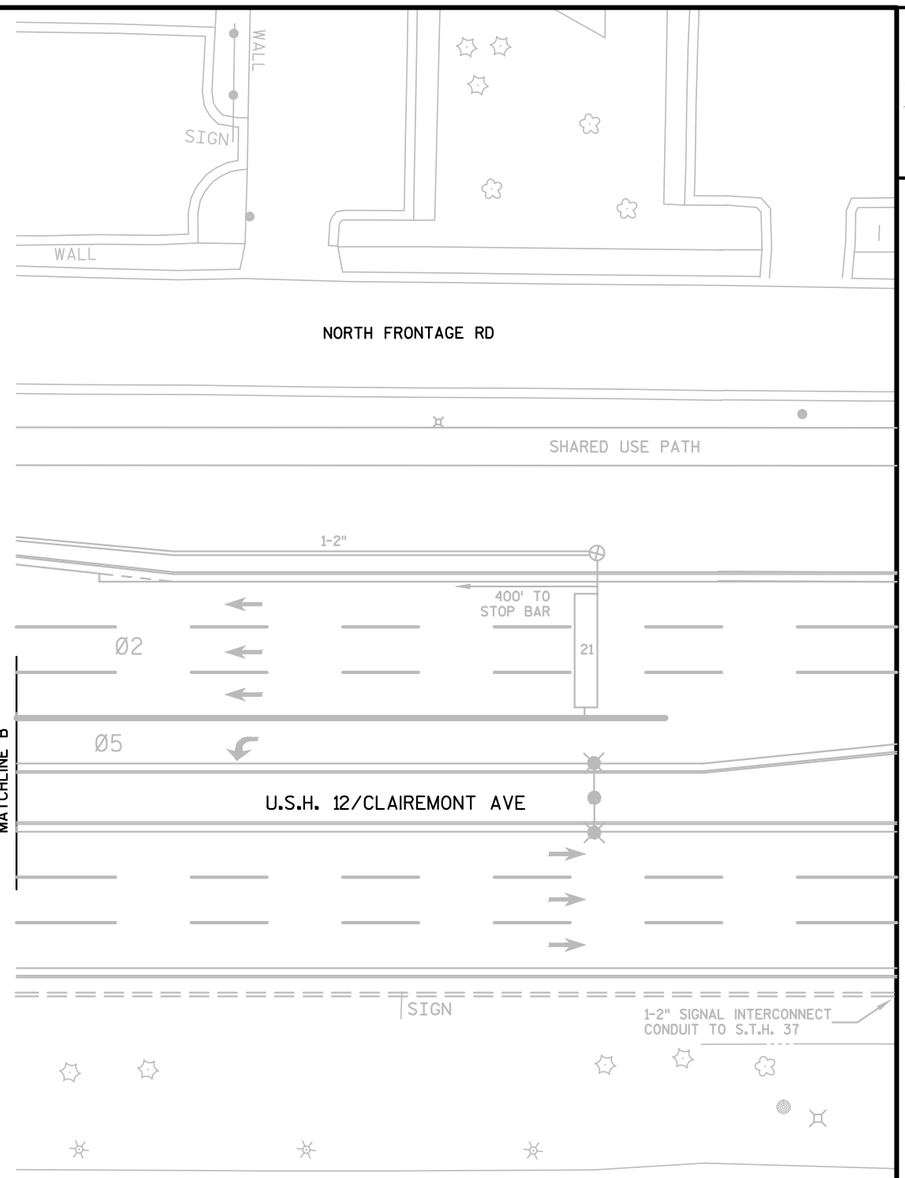
DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CRAIG ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 81

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PLOT DATE : 1/18/2017 7:57 AM
1"=40'
WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL

U.S.H. 12 & CRAIG ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0287

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

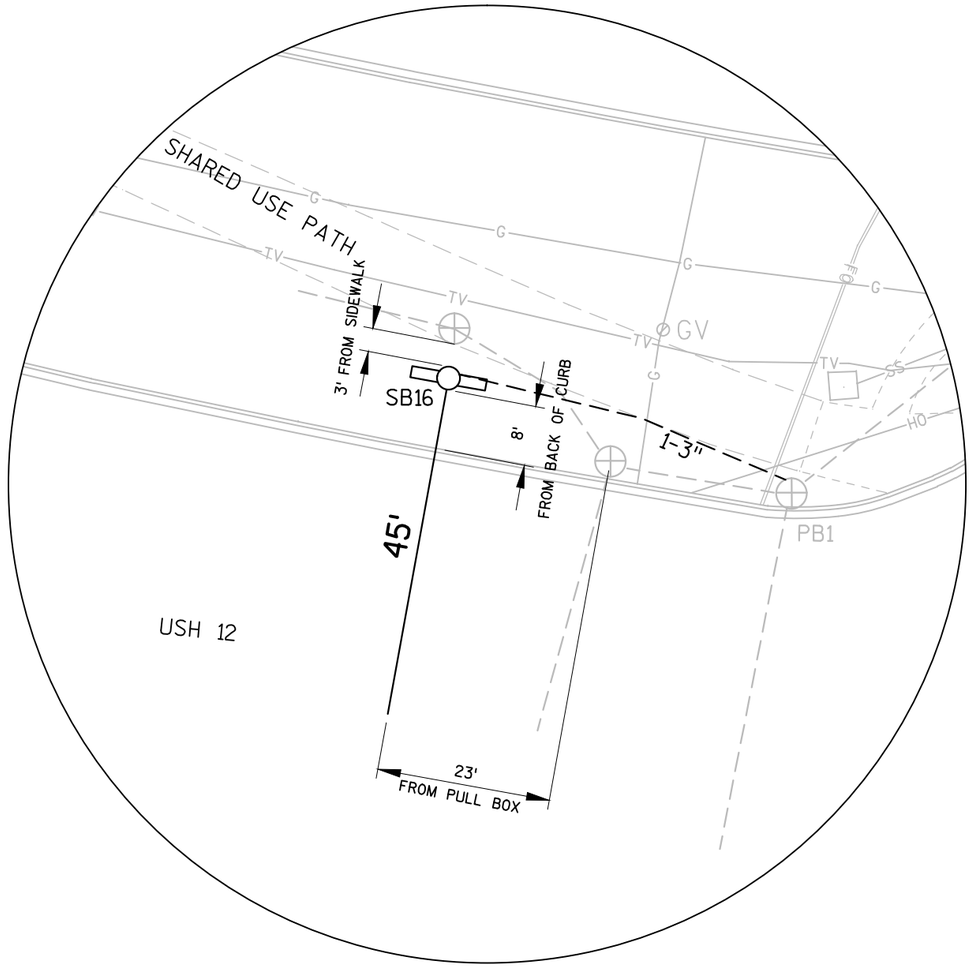
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CRAIG ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 82

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024007_SP.DWG

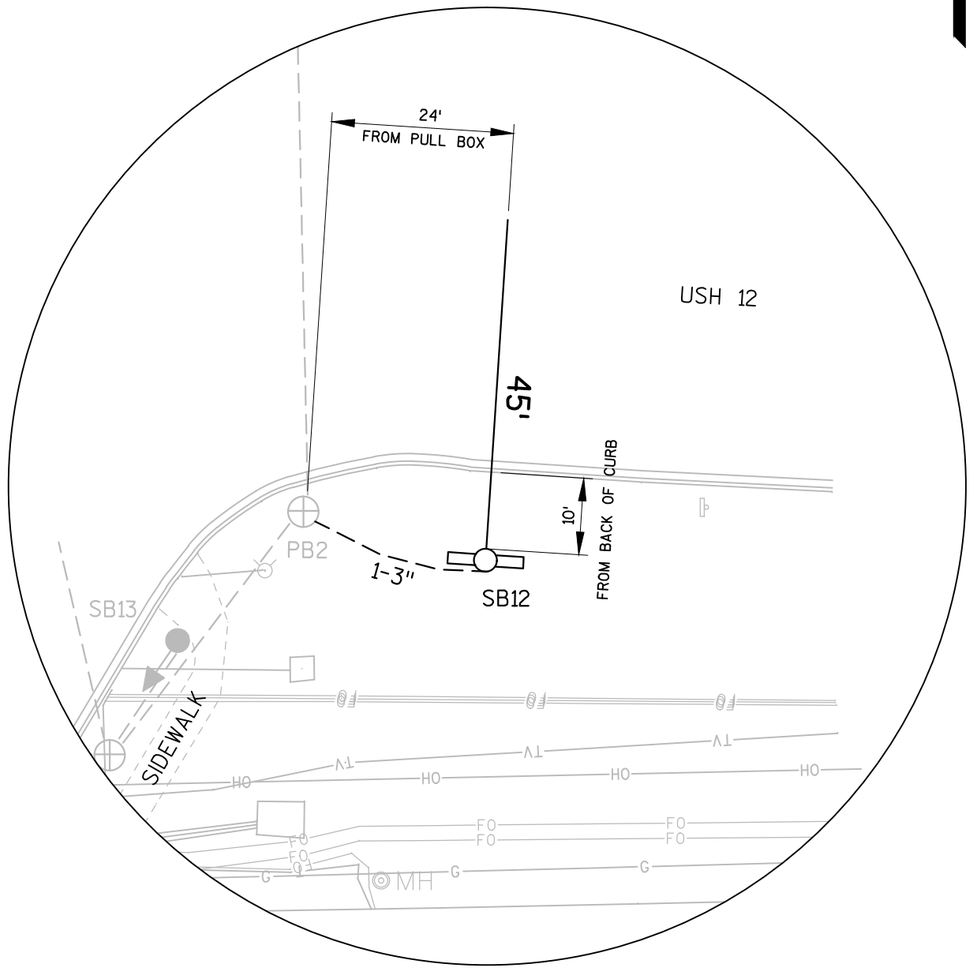
PLOT DATE : 1/18/2017 7:57 AM

1"=40'

WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & CRAIG ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0287

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & CRAIG ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 83	E

2

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & CRAIG ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK	PED BUTTON	OTHER
SB1	EXISTING	1	EXISTING										
		26	EXISTING										
		32	EXISTING										
		61	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB2	EXISTING	3	EXISTING										
		12	EXISTING										
SB3	EXISTING	5	EXISTING										
SB4	EXISTING	24	EXISTING										
SB5	EXISTING	23	EXISTING										
SB6	EXISTING	15	EXISTING										
		18	EXISTING										
		31	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB7	EXISTING	14	EXISTING										
SB8	EXISTING	7	EXISTING										
		21	EXISTING										
		25	EXISTING										
		PB	EXISTING										
SB9	EXISTING	6	EXISTING										
		9	EXISTING										
SB10	EXISTING	11	EXISTING										
SB11	EXISTING	17	EXISTING										
SB12	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		28	RED	ORG	GRN								
SB13	EXISTING	16	EXISTING										
SB14	EXISTING	13	EXISTING										
		20	EXISTING										
		62	EXISTING										
		PB	EXISTING										
SB15	EXISTING	19	EXISTING										
SB16	5	8	RED	ORG	GRN								
		10	RED	ORG	GRN								
		27	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB4	SB16
SB16	SB5
SB11	SB12
SB12	SB13

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB16
PB2	SB12

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB16
B	CB1	SB12

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND CRAIG ST
EAU CLAIRE COUNTY

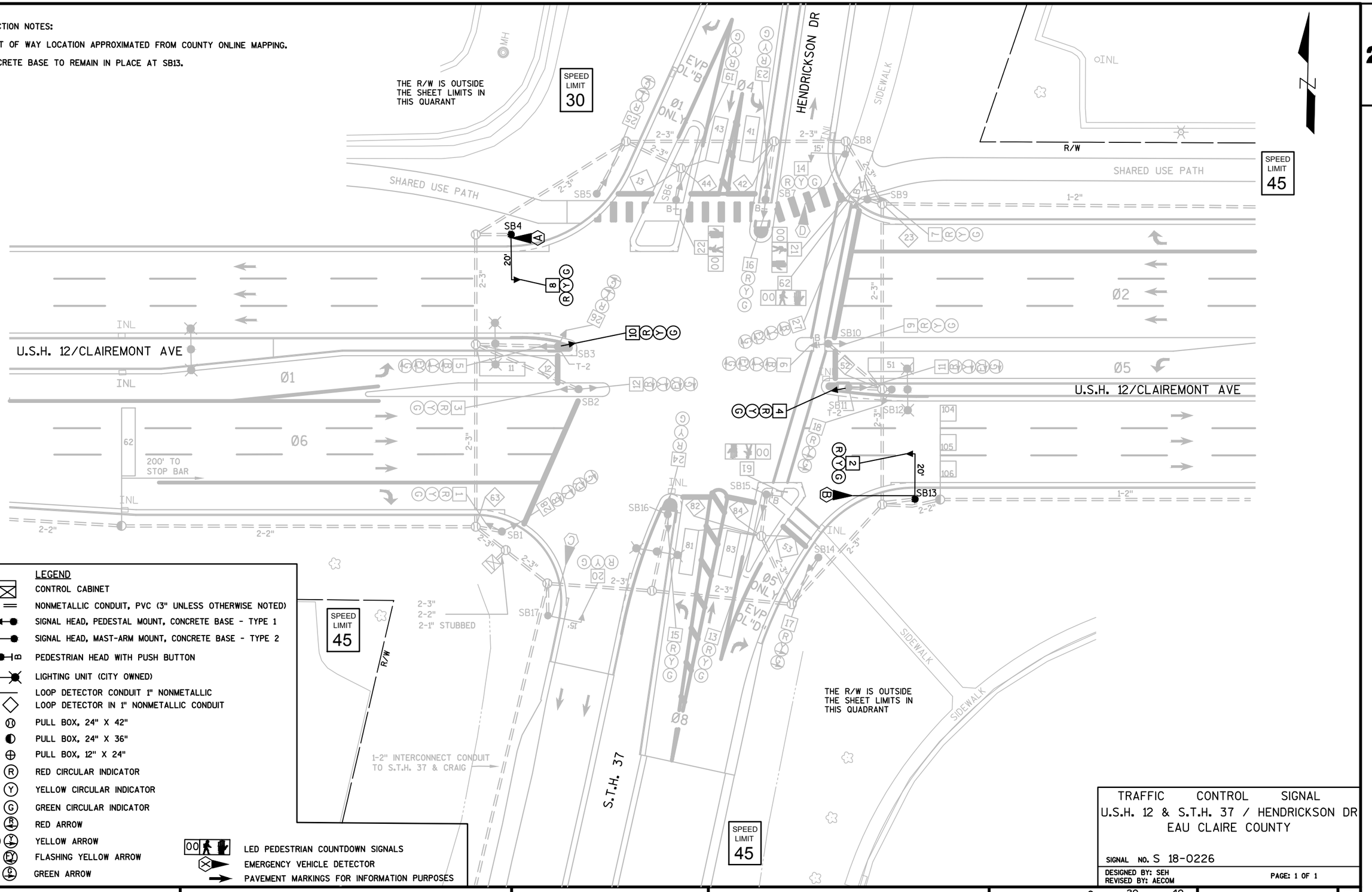
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0287 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB13.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & S.T.H. 37 / HENDRICKSON DR
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0226

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & STH 37/HENDRICKSON DR.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40 1"=40'	SHEET: E

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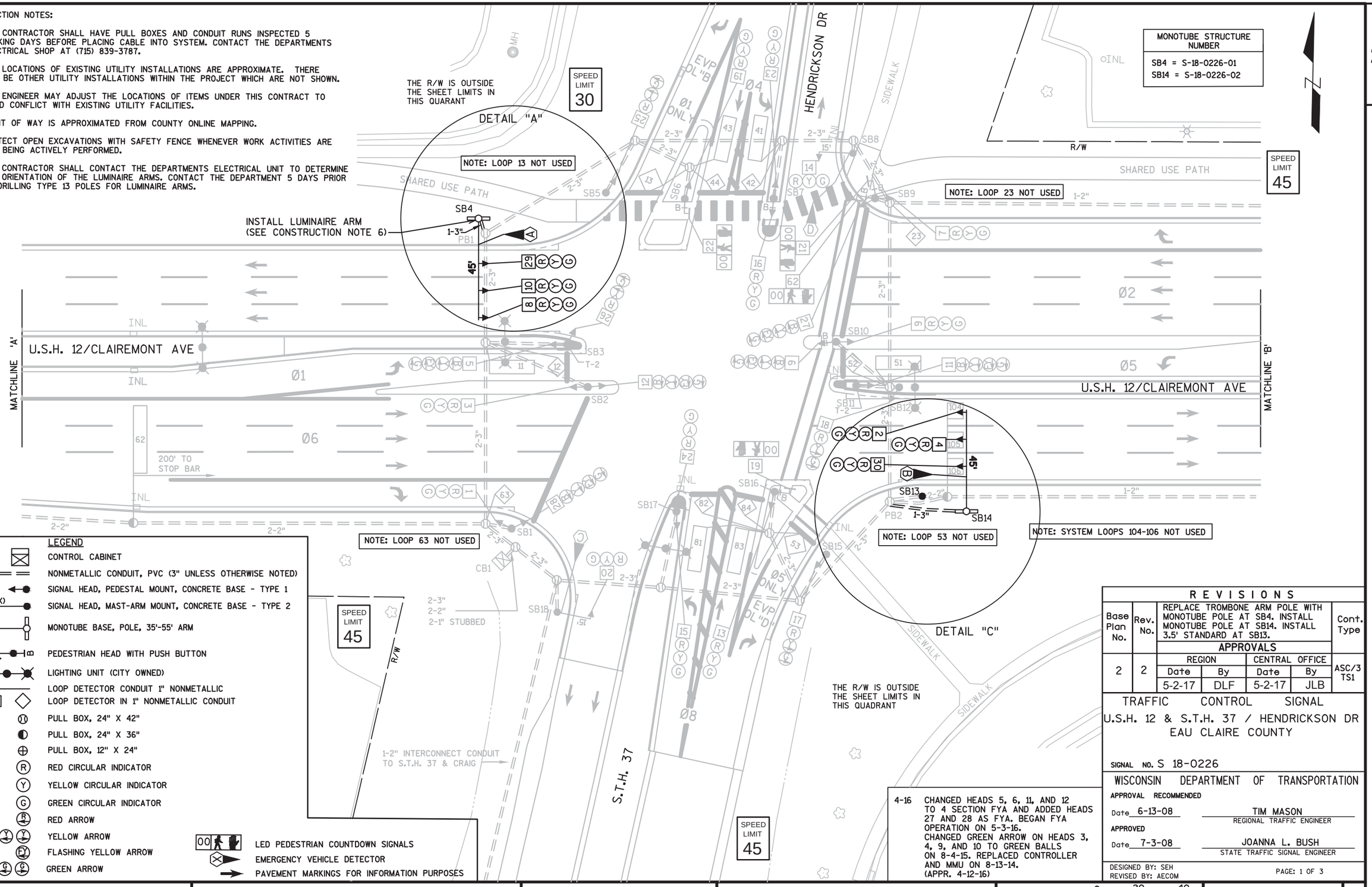
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WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

REVISIONS						
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLE WITH MONOTUBE POLE AT SB4. INSTALL MONOTUBE POLE AT SB14. INSTALL 3.5' STANDARD AT SB13.				Cont. Type
		APPROVALS				
		REGION		CENTRAL OFFICE		
2	2	Date	By	Date	By	ASC/3 TS1
		5-2-17	DLF	5-2-17	JLB	

4-16 CHANGED HEADS 5, 6, 11, AND 12 TO 4 SECTION FYA AND ADDED HEADS 27 AND 28 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROW ON HEADS 3, 4, 9, AND 10 TO GREEN BALLS ON 8-4-15. REPLACED CONTROLLER AND MMU ON 8-13-14. (APPR. 4-12-16)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & S.T.H. 37 / HENDRICKSON DR
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0226

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 6-13-08 — TIM MASON, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 7-3-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

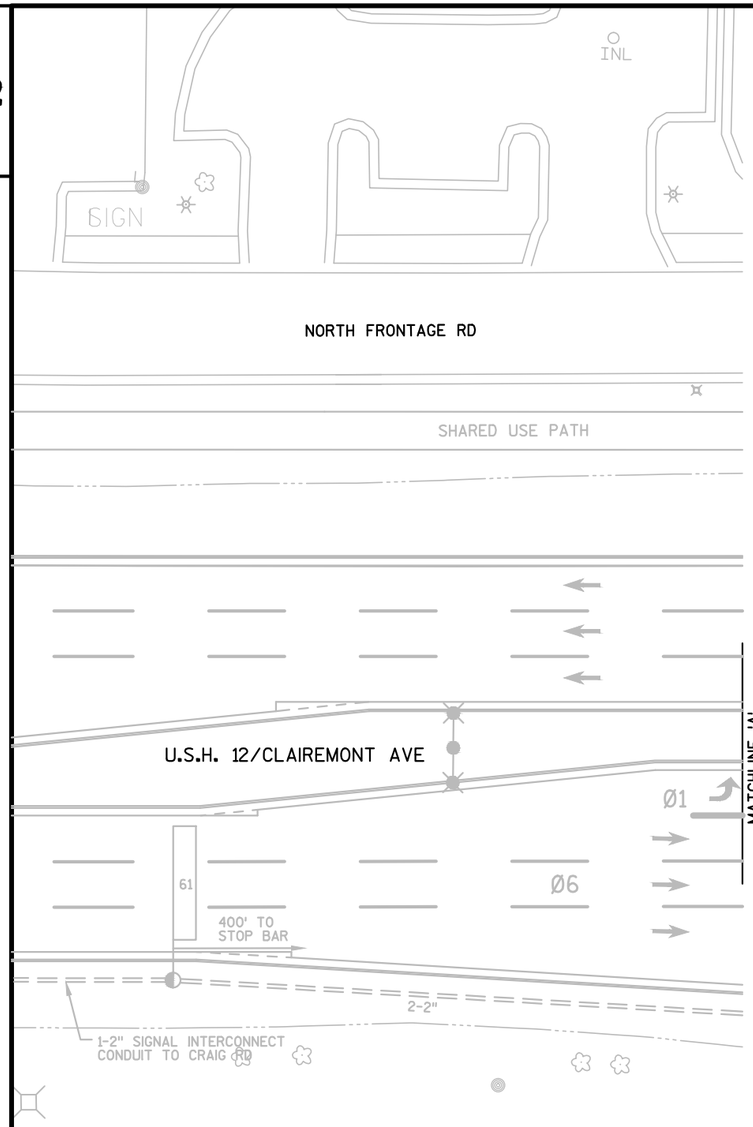
DESIGNED BY: SEH
REVISED BY: AECOM

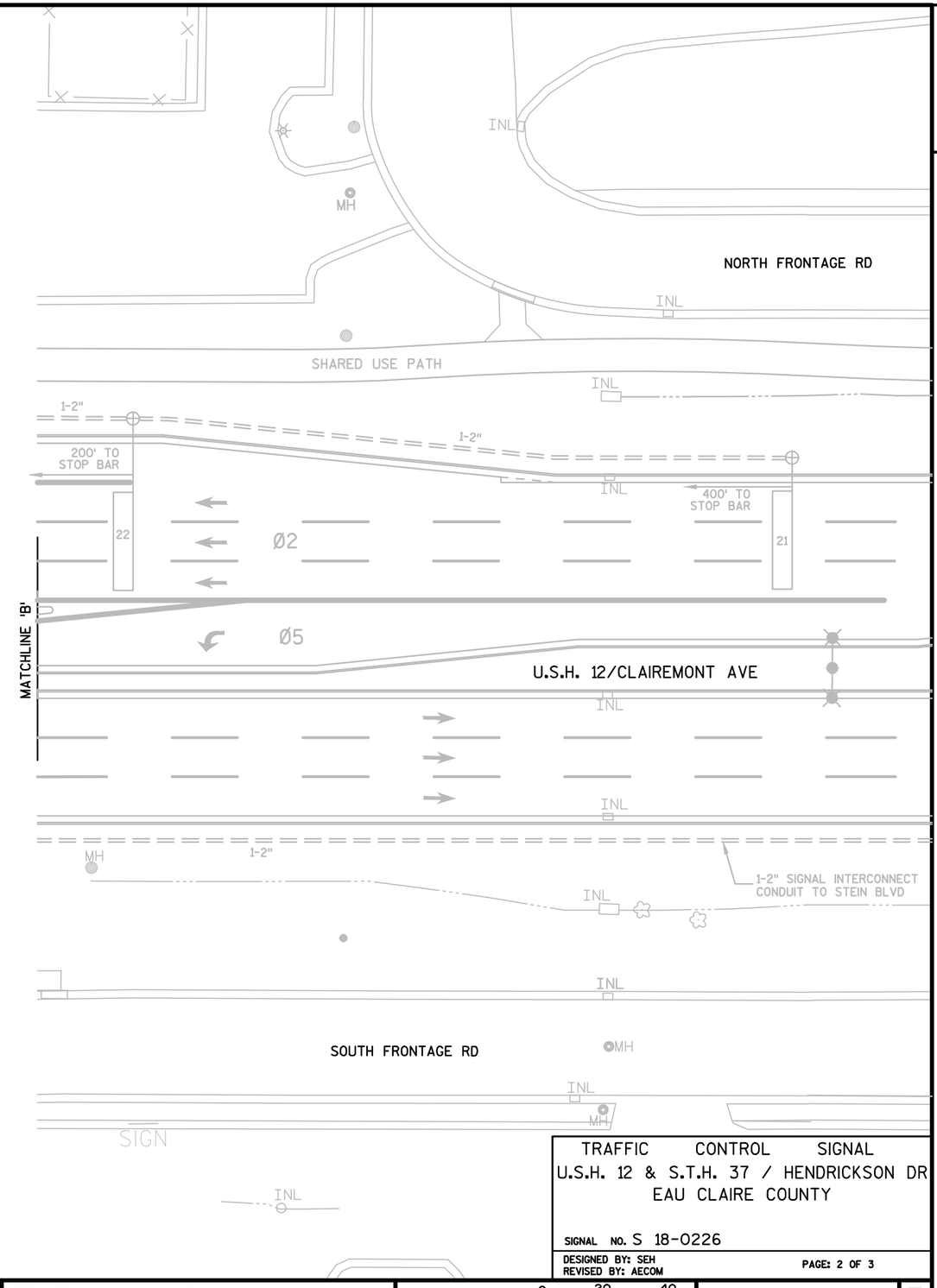
PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & STH 37/HENDRICKSON DR.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40 1"=40'	SHEET: E

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PLOT DATE : 1/18/2017 7:59 AM

2





TRAFFIC CONTROL SIGNAL
U.S.H. 12 & S.T.H. 37 / HENDRICKSON DR
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0226

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & STH 37/HENDRICKSON DR.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET:

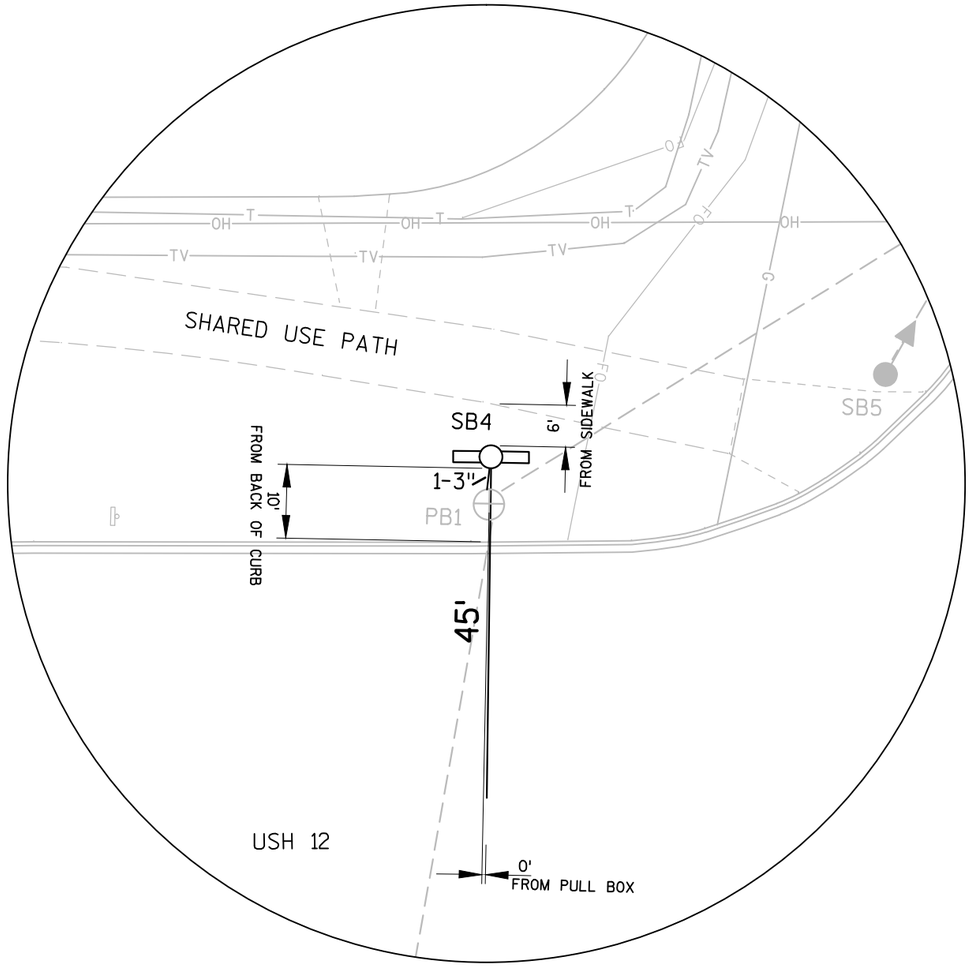
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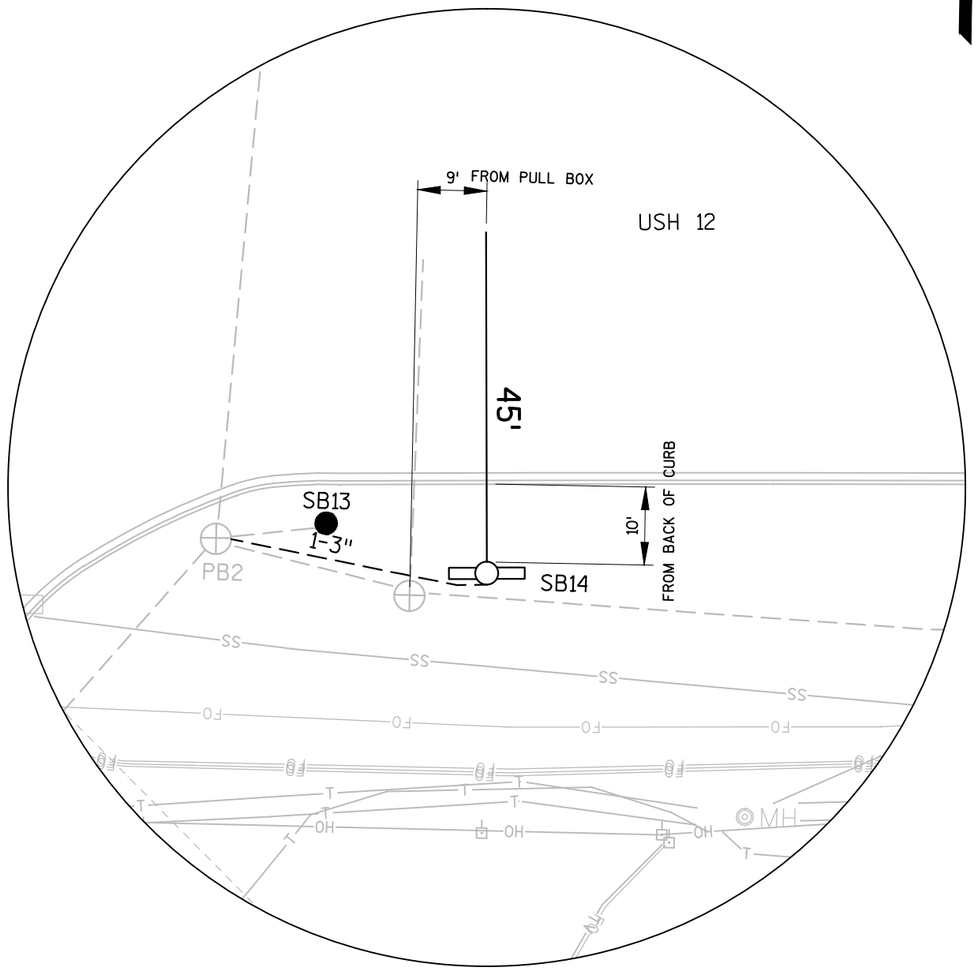
1"=40'

WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & STH 37 / HENDRICKSON DR
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0226

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & STH 37/HENDRICKSON DR.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 88	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & STH 37/Hendrickson Dr

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	1	EXISTING										
		28	EXISTING										
SB2	EXISTING	3	EXISTING										
		12	EXISTING										
SB3	EXISTING	5	EXISTING										
		26	EXISTING										
SB4	5	8	RED	ORG	GRN								
		10	RED	ORG	GRN								
		29	RED	ORG	GRN								
SB5	EXISTING	25	EXISTING										
SB6	EXISTING	19	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB7	EXISTING	16	EXISTING										
		23	EXISTING										
		PB	EXISTING										
SB8	EXISTING	14	EXISTING										
SB9	EXISTING	7	EXISTING										
		21	EXISTING										
		27	EXISTING										
		62	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB10	EXISTING	6	EXISTING										
		9	EXISTING										
		PB	EXISTING										
SB11	EXISTING	11	EXISTING										
SB12	EXISTING	18	EXISTING										
SB13	EXISTING	-											
SB14	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		30	RED	ORG	GRN								
SB15	EXISTING	17	EXISTING										
SB16	EXISTING	13	EXISTING										
		61	EXISTING										
		PB	EXISTING										
SB17	EXISTING	15	EXISTING										
		24	EXISTING										
SB18	EXISTING	20	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB13	SB14
SB14	SB15

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB14

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB14

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND STH 37/HENDRICKSON DR
EAU CLAIRE COUNTY

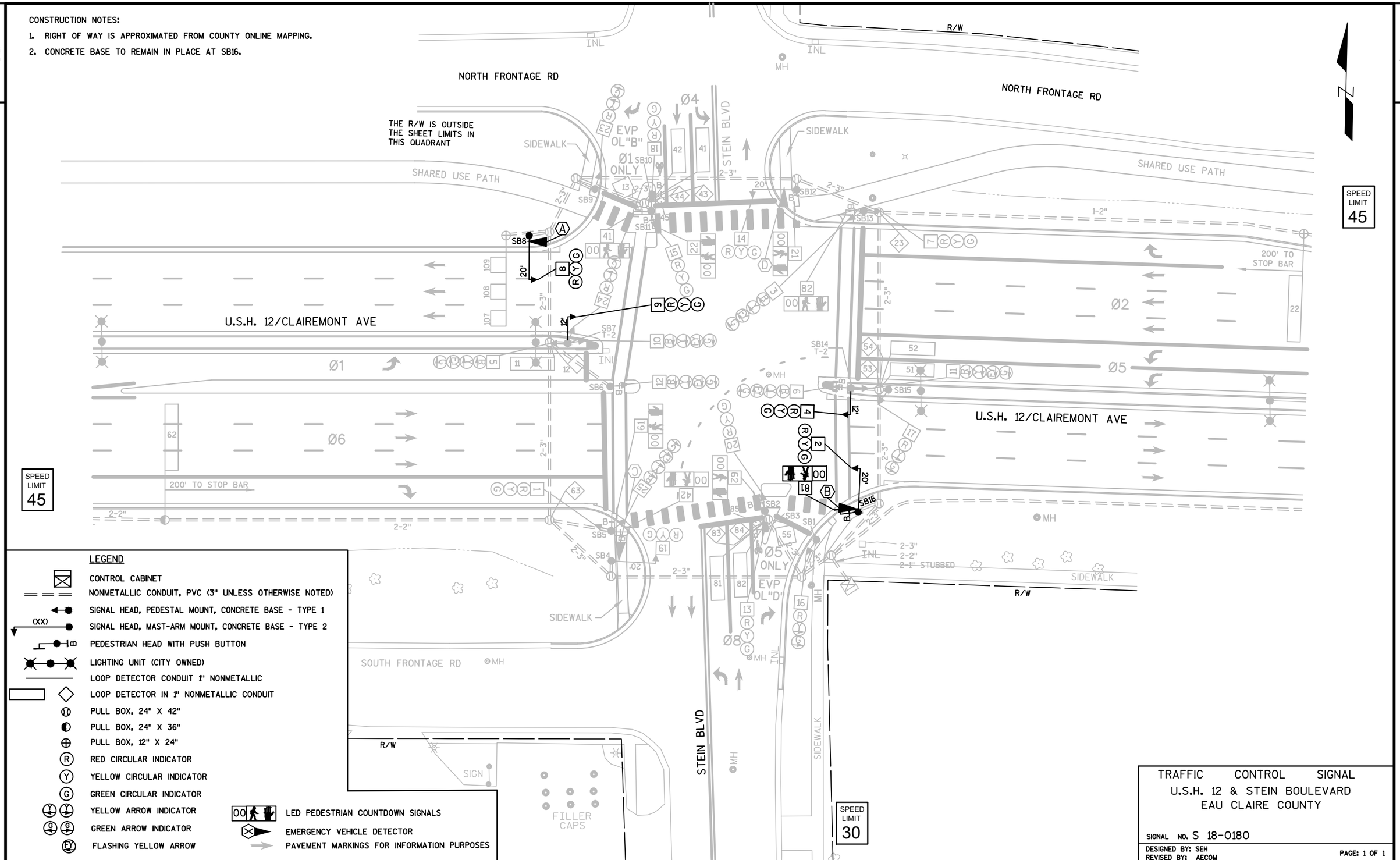
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0226 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB16.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW INDICATOR
- GREEN ARROW INDICATOR
- FLASHING YELLOW ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & STEIN BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0180

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO: 1000-08-81	HWY: USH 12 & STEIN BLVD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 90

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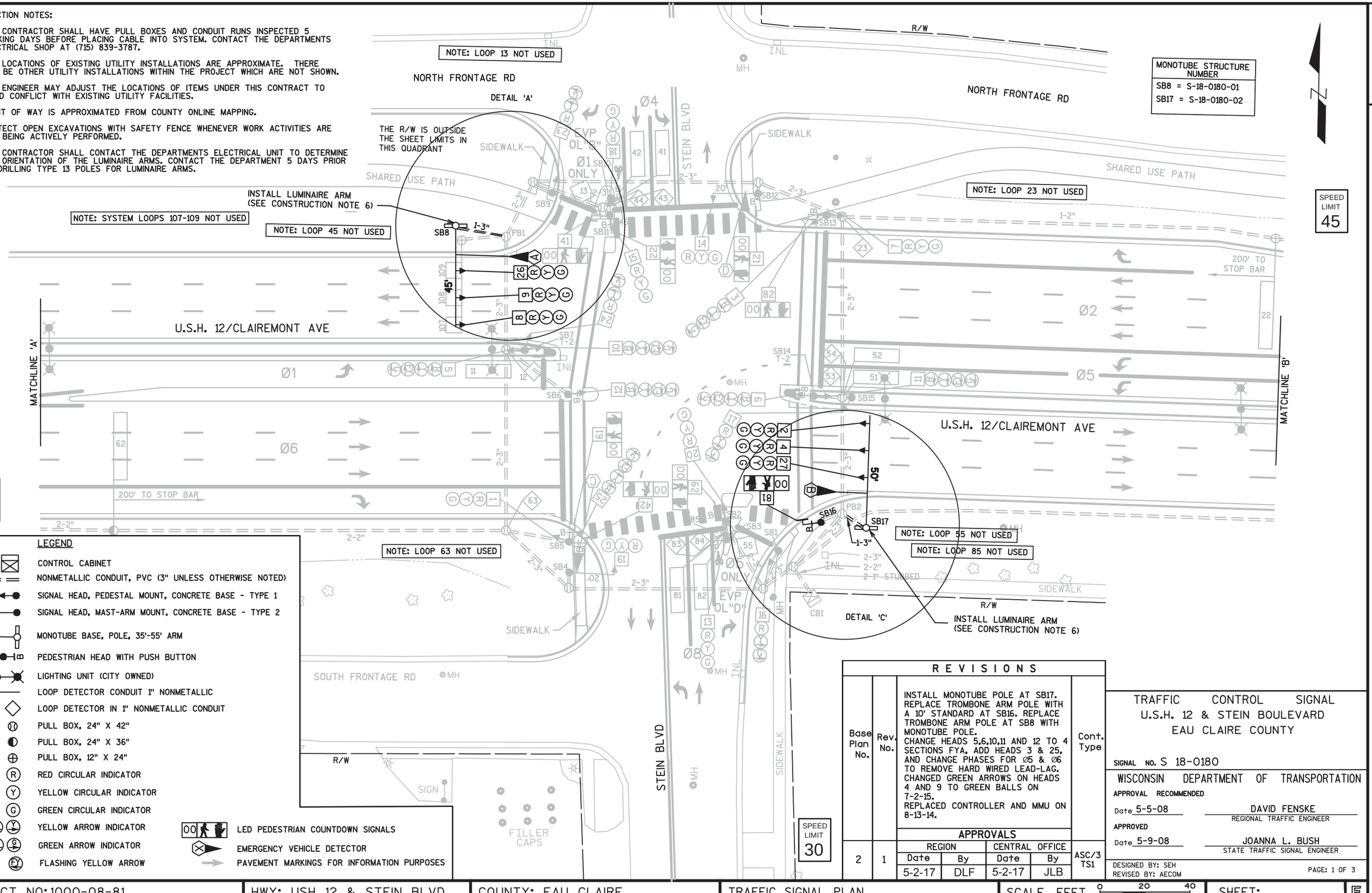
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1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW INDICATOR
- GREEN ARROW INDICATOR
- FLASHING YELLOW ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
2	1	INSTALL MONOTUBE POLE AT SB17. REPLACE TROMBONE ARM POLE WITH A 10' STANDARD AT SB16. REPLACE TROMBONE ARM POLE AT SB8 WITH MONOTUBE POLE. CHANGE HEADS 5,6,10,11 AND 12 TO 4 SECTIONS FYA, ADD HEADS 3 & 25, AND CHANGE PHASES FOR Ø5 & Ø6 TO REMOVE HARD WIRED LEAD-LAG. CHANGED GREEN ARROWS ON HEADS 4 AND 9 TO GREEN BALLS ON 7-2-15. REPLACED CONTROLLER AND MMU ON 8-13-14.	ASC/3 TS1

APPROVALS

REGION Date	REGION By	CENTRAL OFFICE Date	CENTRAL OFFICE By
5-2-17	DLF	5-2-17	JLB

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & STEIN BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0180

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-5-08 — DAVID FENSKE, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 5-9-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

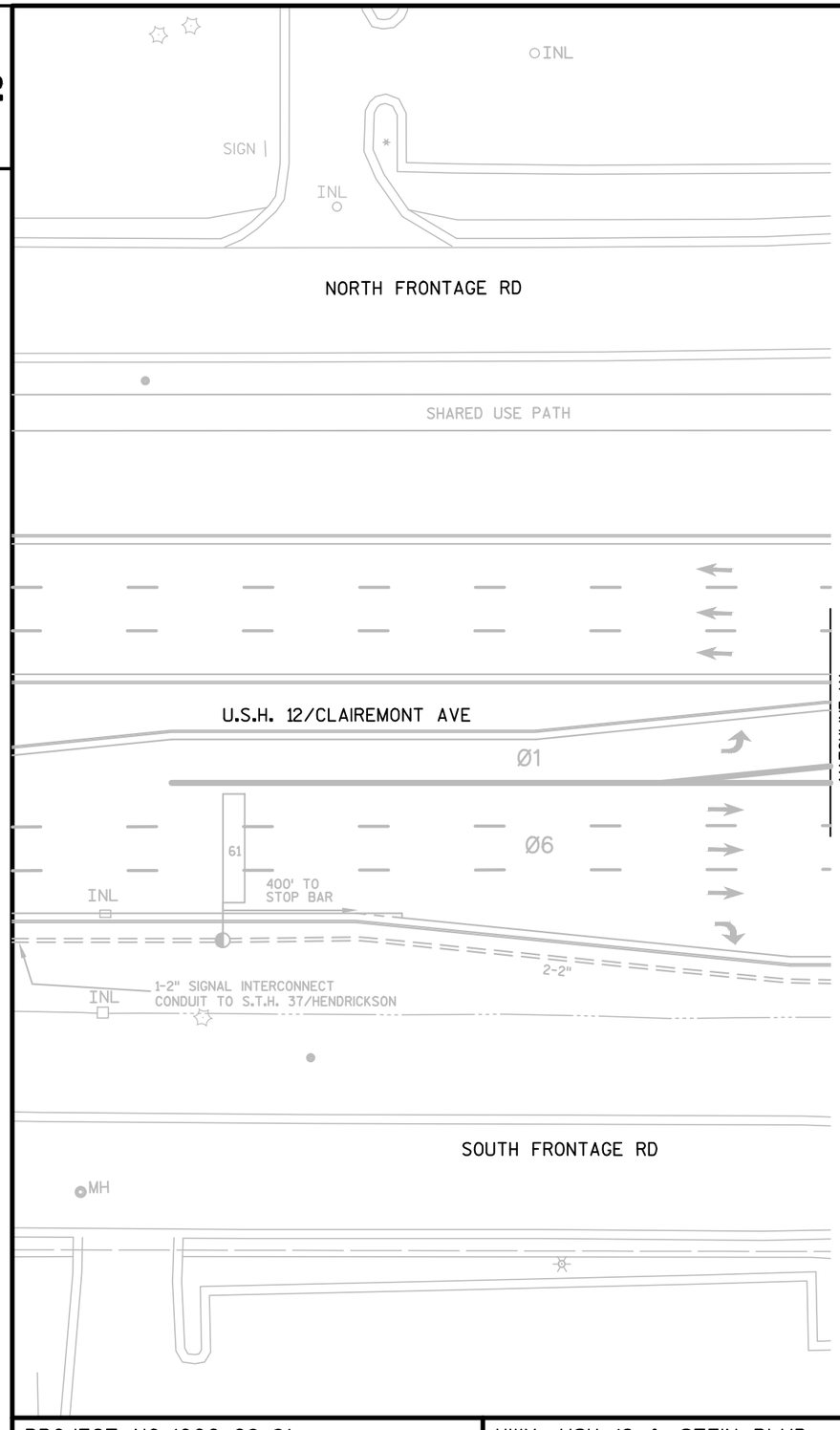
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REVISED BY: AECOM

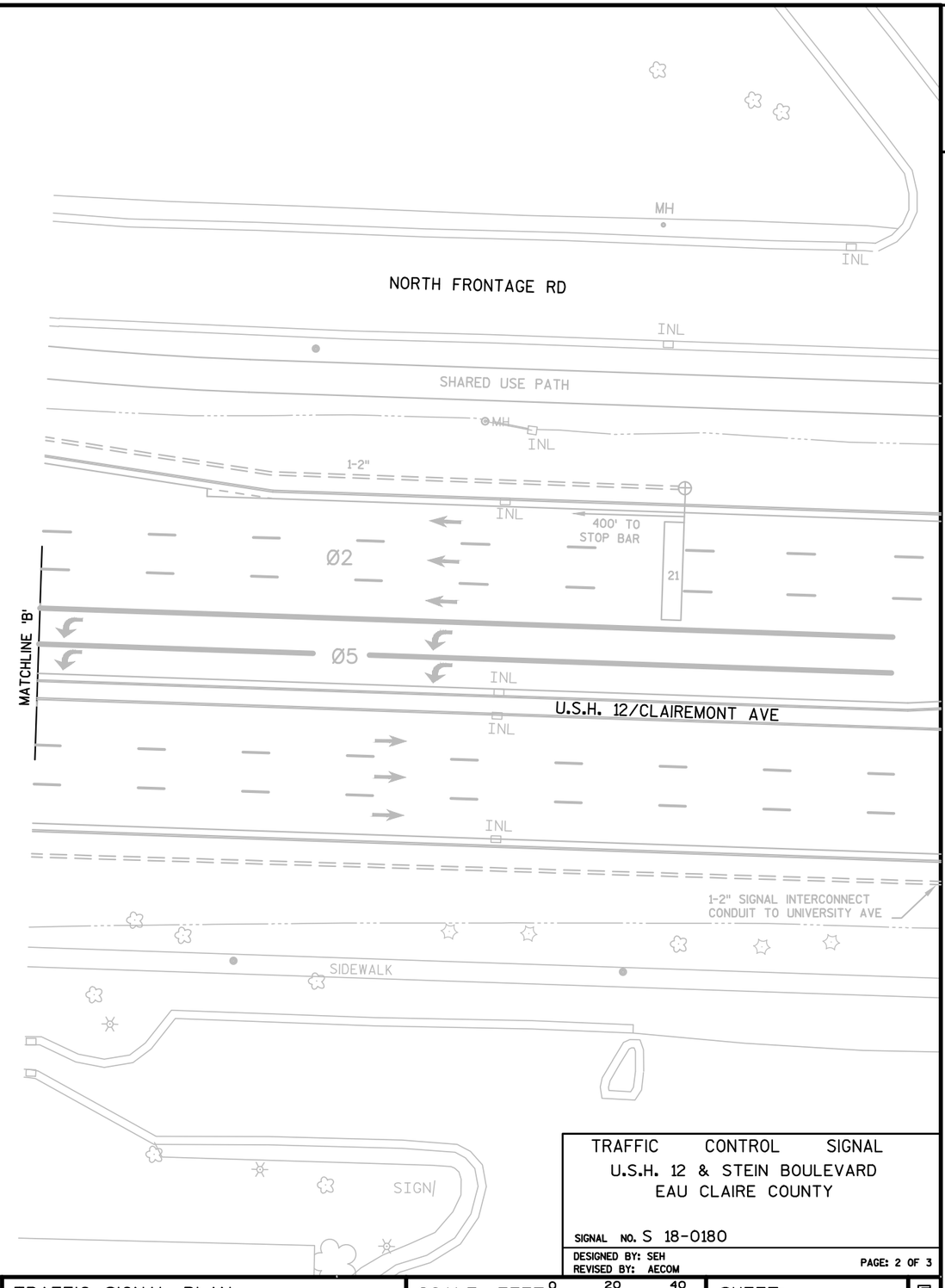
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PROJECT NO: 1000-08-81	HWY: USH 12 & STEIN BLVD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 91

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1"=40'
WISDOT/CADDS SHEET 42

2





2

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & STEIN BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0180

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

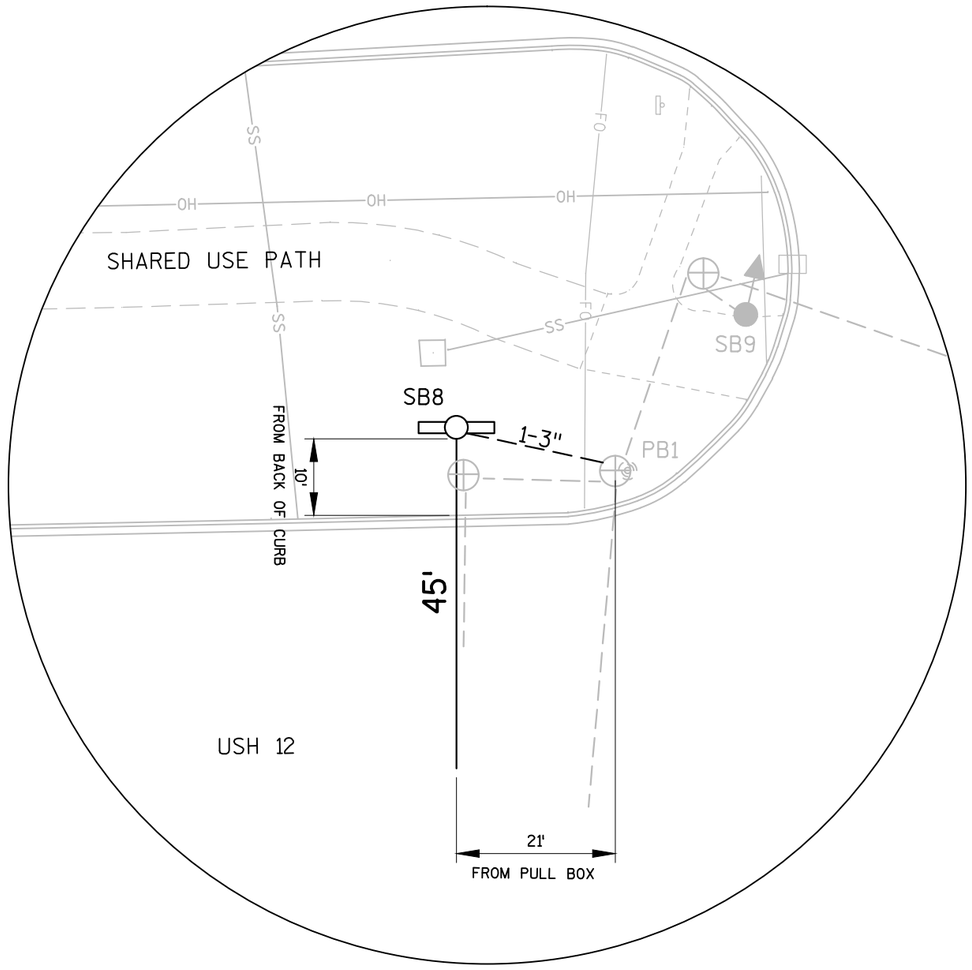
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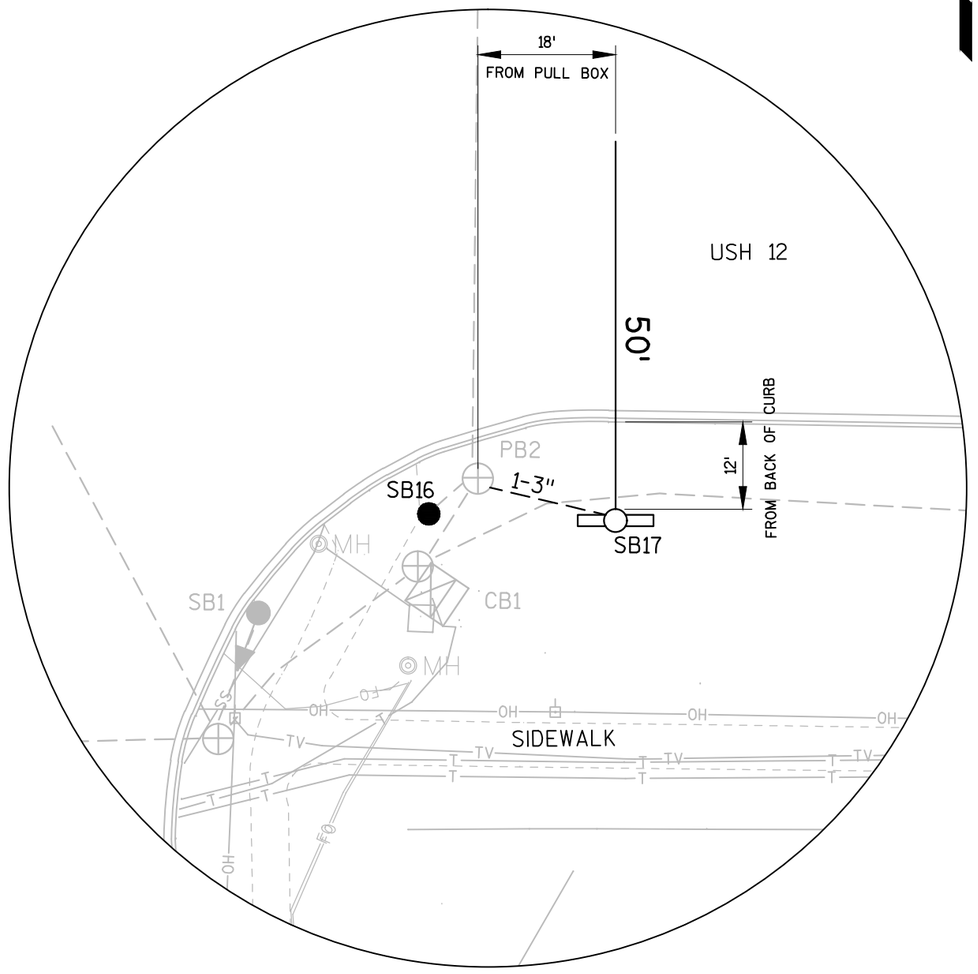
PLOT DATE : 1/18/2017 8:01 AM

1"=40'

WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & STEIN BOULEVARD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0180

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: USH 12 & STEIN BLVD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 93	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & STEIN BLVD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	16	EXISTING										
SB2	EXISTING	13	EXISTING										
		20	EXISTING										
		62	EXISTING										
		PB	EXISTING										
SB3	EXISTING	PB	EXISTING										
SB4	EXISTING	19	EXISTING										
SB5	EXISTING	1	EXISTING										
		25	EXISTING										
		42	EXISTING										
		61	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB6	EXISTING	12	EXISTING										
		PB	EXISTING										
SB7	EXISTING	5	EXISTING										
		10	EXISTING										
		24	EXISTING										
SB8	5	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		26	RED	ORG	GRN								
SB9	EXISTING	23	EXISTING										
SB10	EXISTING	PB	EXISTING										
SSB11	EXISTING	15	EXISTING										
		18	EXISTING										
		22	EXISTING										
		41	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB12	EXISTING	14	EXISTING										
		21	EXISTING										
		PB	EXISTING										
SB13	EXISTING	3	EXISTING										
		7	EXISTING										
		82	EXISTING										
		PB	EXISTING										
SB14	EXISTING	6	EXISTING										
		11	EXISTING										
		PB	EXISTING										
SB15	EXISTING	17	EXISTING										
SB16	EXISTING	81	EXISTING										
		PB	EXISTING										
SB17	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		27	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB7	SB8
SB8	SB9
SB16	SB17
SB17	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB8
PB2	SB17

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB8
B	CB1	SB17

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND STEIN BLVD
EAU CLAIRE COUNTY

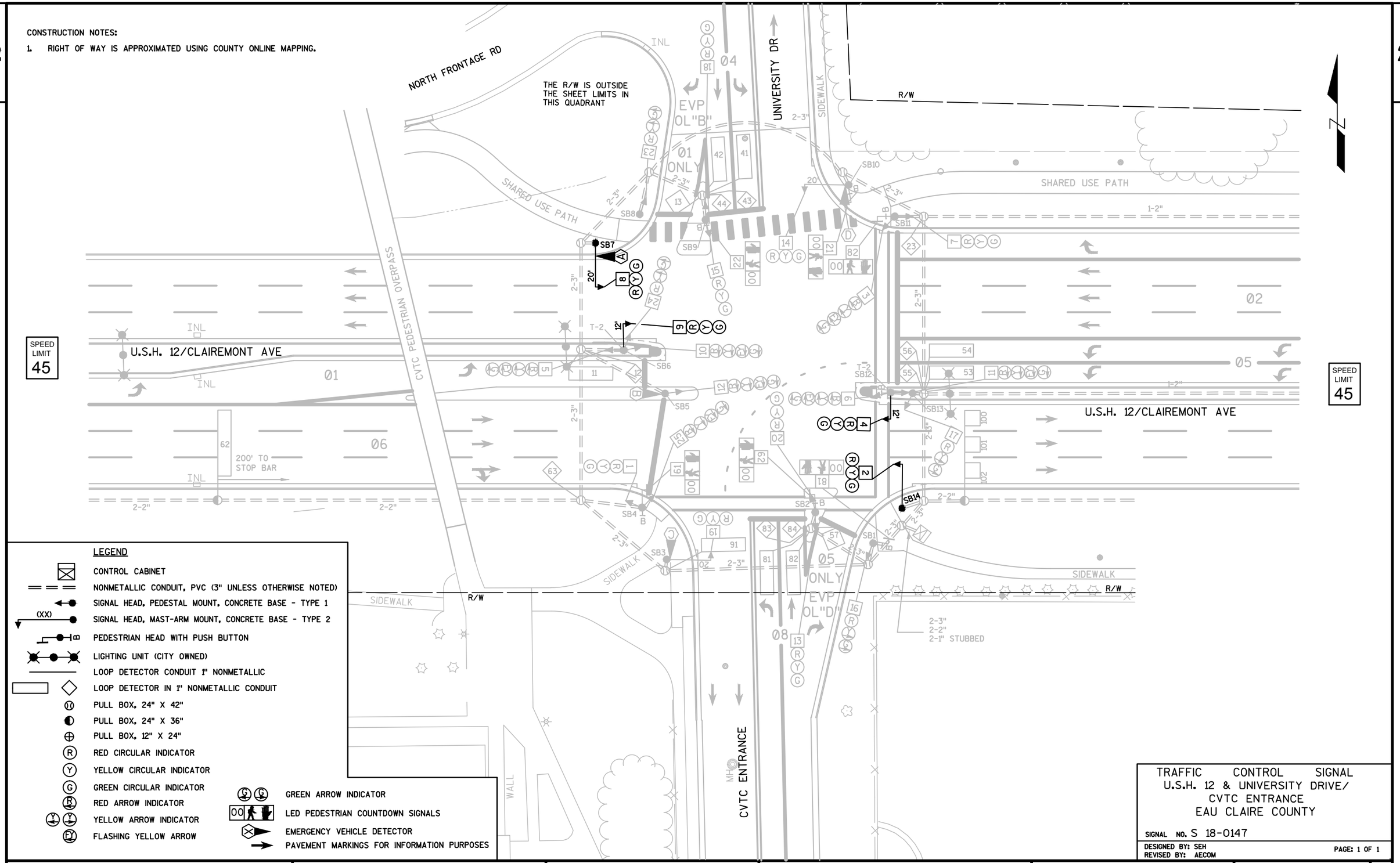
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0180 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED USING COUNTY ONLINE MAPPING.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW INDICATOR
- (Y) YELLOW ARROW INDICATOR
- (FY) FLASHING YELLOW ARROW
- GREEN ARROW INDICATOR
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & UNIVERSITY DRIVE/
CVTC ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0147

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & UNIVERSITY AVE.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET:

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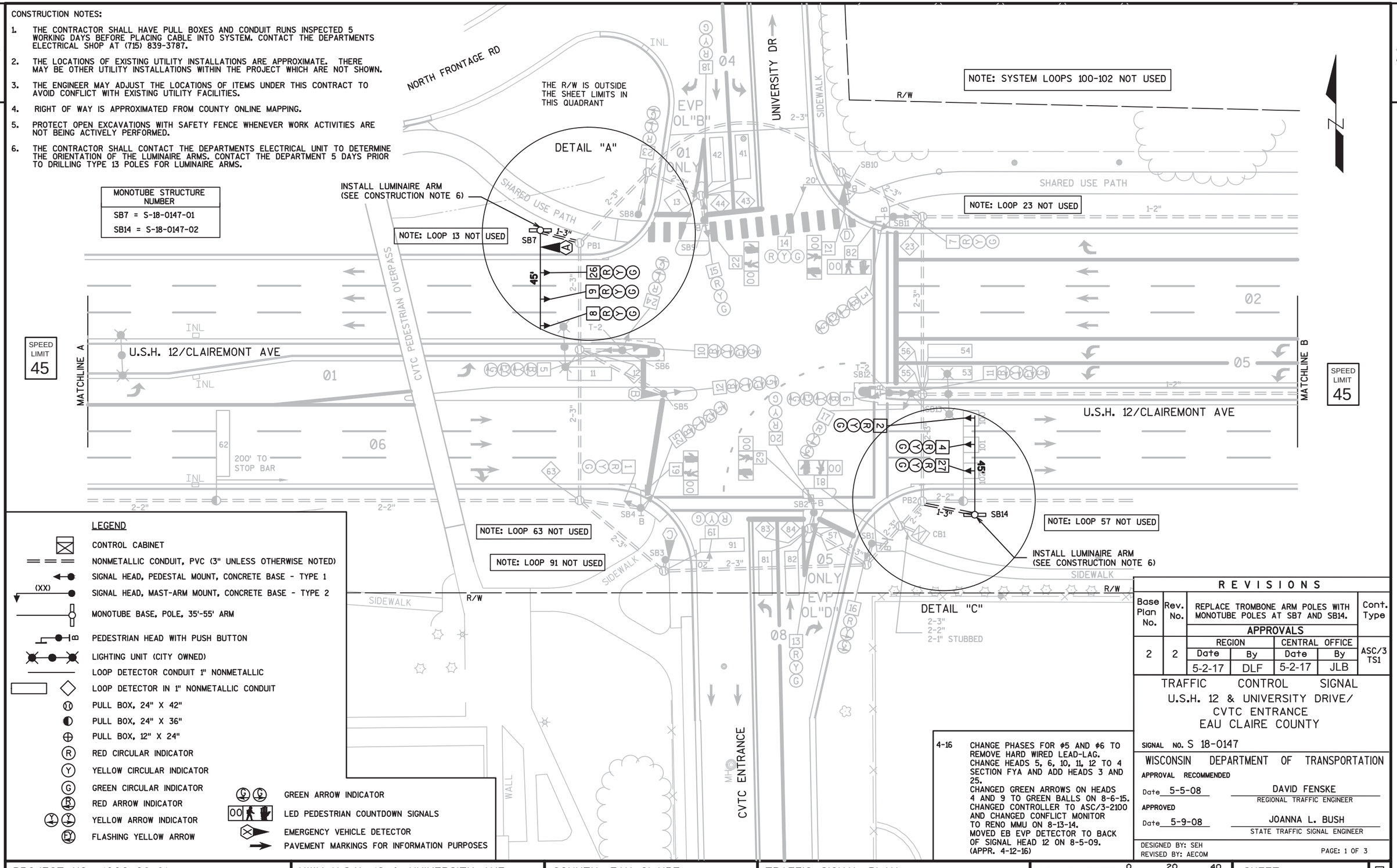
1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

MONOTUBE STRUCTURE NUMBER
SB7 = S-18-0147-01
SB14 = S-18-0147-02



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW INDICATOR
- (Y) YELLOW ARROW INDICATOR
- (FY) FLASHING YELLOW ARROW
- GREEN ARROW INDICATOR
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

REVISIONS					
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB7 AND SB14.			Cont. Type
		APPROVALS			
		REGION		CENTRAL OFFICE	
		Date	By	Date	By
2	2	5-2-17	DLF	5-2-17	JLB

ASC/3 TS1

4-16 CHANGE PHASES FOR Ø5 AND Ø6 TO REMOVE HARD WIRED LEAD-LAG. CHANGE HEADS 5, 6, 10, 11, 12 TO 4 SECTION FYA AND ADD HEADS 3 AND 25. CHANGED GREEN ARROWS ON HEADS 4 AND 9 TO GREEN BALLS ON 8-6-15. CHANGED CONTROLLER TO ASC/3-2100 AND CHANGED CONFLICT MONITOR TO RENO MMU ON 8-13-14. MOVED EB EVP DETECTOR TO BACK OF SIGNAL HEAD 12 ON 8-5-09. (APPR. 4-12-16)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & UNIVERSITY DRIVE/
CVTC ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0147

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-5-08 — DAVID FENSKE, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 5-9-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & UNIVERSITY AVE.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET:

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group B\024010_sp.dwg
PLOT DATE : 1/18/2017 8:54 AM
1"=40'
WISDOT/CADDS SHEET 42

2

2

SIGN

NORTH FRONTAGE RD

SHARED USE PATH

MH

U.S.H. 12/CLAIREMONT AVE

MATCHLINE A

01

06

61

400' TO STOP BAR

MH

2-2"

1-2" SIGNAL INTERCONNECT CONDUIT TO STEIN BLVD

SIDEWALK

SHARED USE PATH

INL

1-2"

200' TO STOP BAR

22

02

400' TO STOP BAR

21

SIGN

INL

600' TO STOP BAR

MATCHLINE B

05

U.S.H. 12/CLAIREMONT AVE

52

51

1-2" SIGNAL INTERCONNECT CONDUIT TO PATTON ST

SIDEWALK

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & UNIVERSITY DRIVE/
CVTC ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0147

DESIGNED BY: SEH
REVISED BY: AECOM

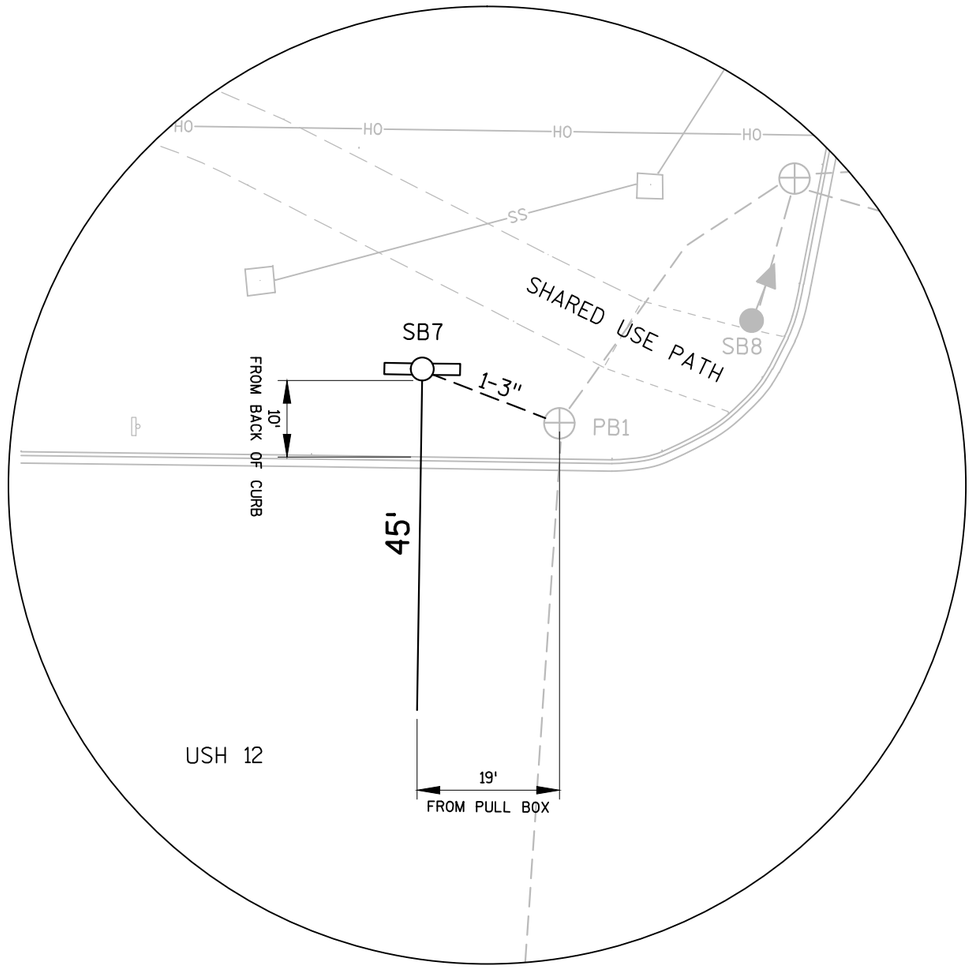
PAGE: 2 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & UNIVERSITY AVE.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

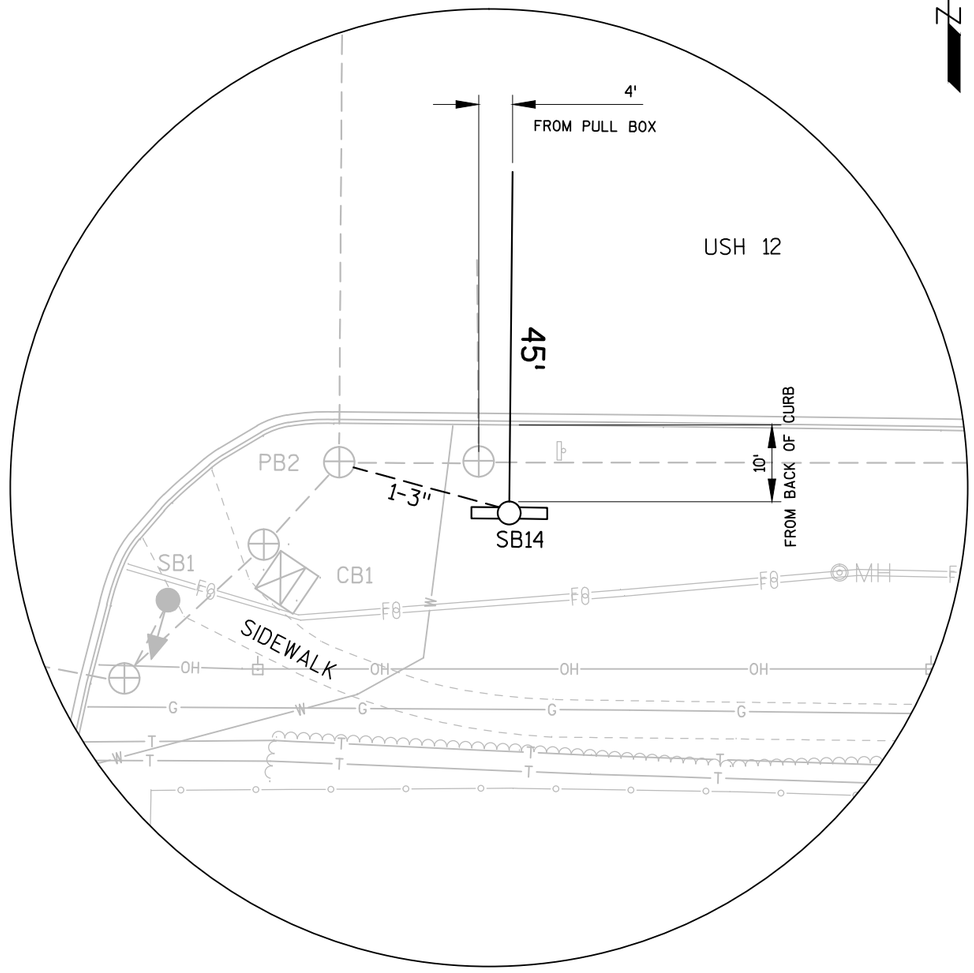
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PLOT DATE : 1/18/2017 8:03 AM

1"=40'



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & UNIVERSITY DRIVE/
CVTC ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0147

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & UNIVERISTY DR.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 98	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & University Ave

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	16	EXISTING										
		18	EXISTING										
		PB	EXISTING										
SB2	EXISTING	13	EXISTING										
		20	EXISTING										
		62	EXISTING										
		PB	EXISTING										
SB3	EXISTING	19	EXISTING										
SB4	EXISTING	1	EXISTING										
		25	EXISTING										
		61	EXISTING										
		PB	EXISTING										
SB5	EXISTING	12	EXISTING										
SB6	EXISTING	5	EXISTING										
		10	EXISTING										
		24	EXISTING										
SB7	5	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		26	RED	ORG	GRN								
SB8	EXISTING	23	EXISTING										
SB9	EXISTING	15	EXISTING										
		18	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB10	EXISTING	14	EXISTING										
		21	EXISTING										
		PB	EXISTING										
SB11	EXISTING	3	EXISTING										
		7	EXISTING										
		82	EXISTING										
		PB	EXISTING										
SB12	EXISTING	6	EXISTING										
		11	EXISTING										
		PB	EXISTING										
SB13	EXISTING	11	EXISTING										
		17	EXISTING										
SB14	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		27	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB6	SB7
SB7	SB8
SB13	SB14
SB14	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB7
PB2	SB14

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB7

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND UNIVERSITY AVE
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

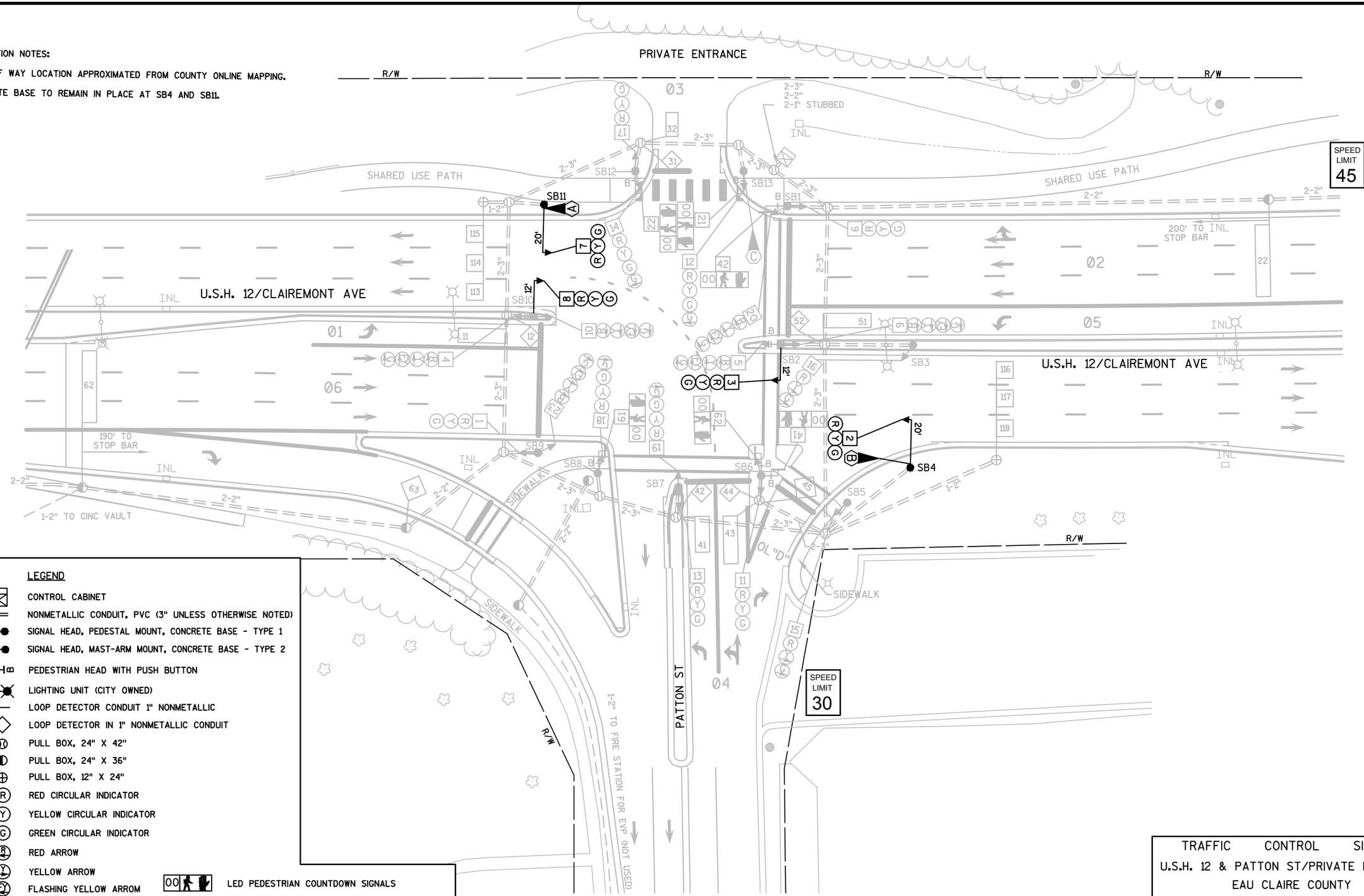
SIGNAL NO: S 18-0147 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

2

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB4 AND SB11.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) (Y) YELLOW ARROW
- (FY) FLASHING YELLOW ARROW
- (G) (G) GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & PATTON ST/PRIVATE ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0146

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE 1 OF 1

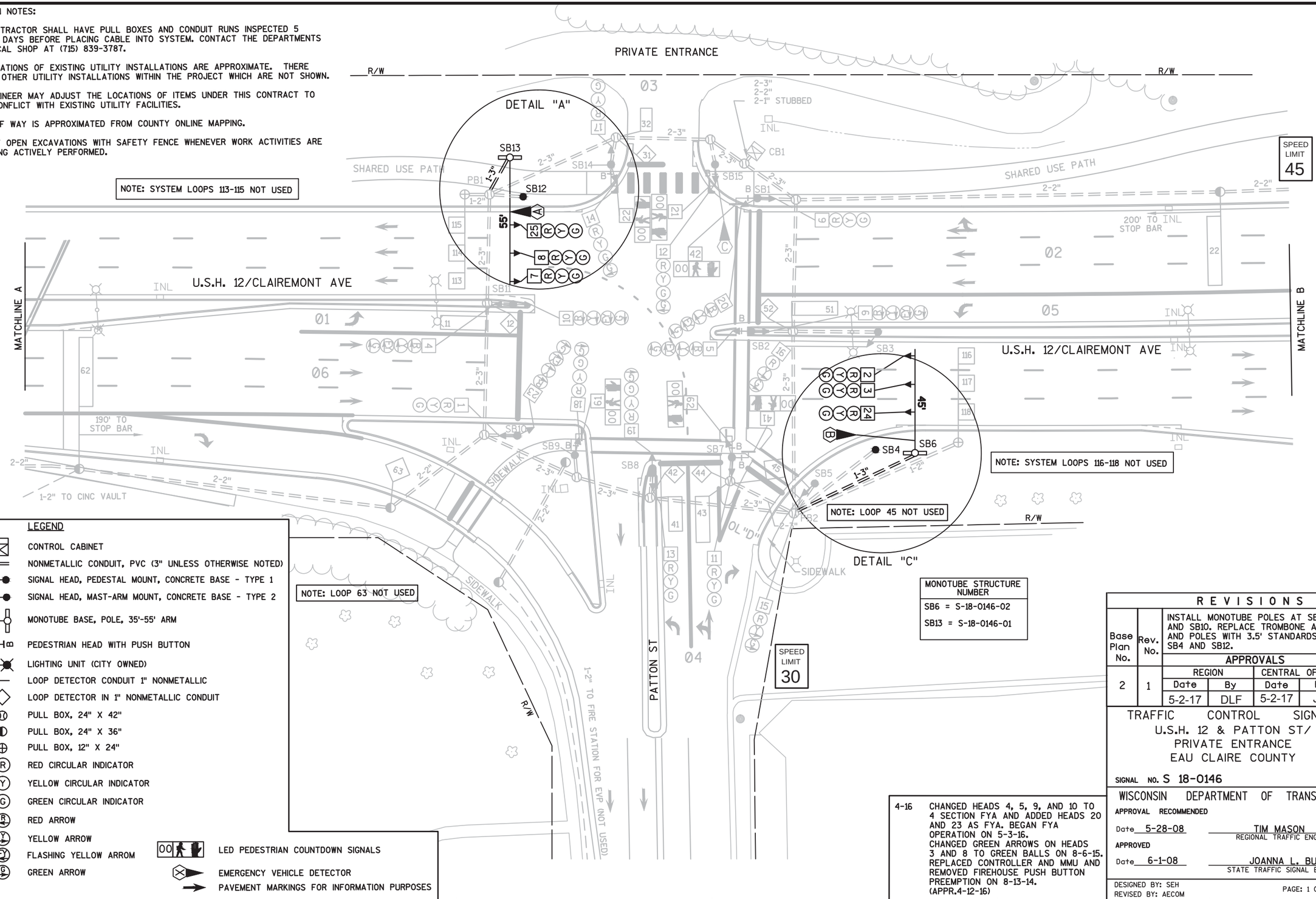
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & PATTON ST/P.E.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\REMOVAL PLANS\021011_CD.DWG PLOT DATE : 1/18/2017 8:05 AM 1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.



MONOTUBE STRUCTURE NUMBER
SB6 = S-18-0146-02
SB13 = S-18-0146-01

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FY FLASHING YELLOW ARROM
- GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

4-16 CHANGED HEADS 4, 5, 9, AND 10 TO 4 SECTION FYA AND ADDED HEADS 20 AND 23 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROWS ON HEADS 3 AND 8 TO GREEN BALLS ON 8-6-15. REPLACED CONTROLLER AND MMU AND REMOVED FIREHOUSE PUSH BUTTON PREEMPTION ON 8-13-14. (APPR.4-12-16)

REVISIONS

Base Plan No.	Rev. No.					Cont. Type
		INSTALL MONOTUBE POLES AT SB4 AND SB10. REPLACE TROMBONE ARMS AND POLES WITH 3.5' STANDARDS AT SB4 AND SB12.				
		APPROVALS				
		REGION		CENTRAL OFFICE		
		Date	By	Date	By	
2	1	5-2-17	DLF	5-2-17	JLB	ASC/3 TS1

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & PATTON ST/
PRIVATE ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0146

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-28-08 — TIM MASON, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 6-1-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

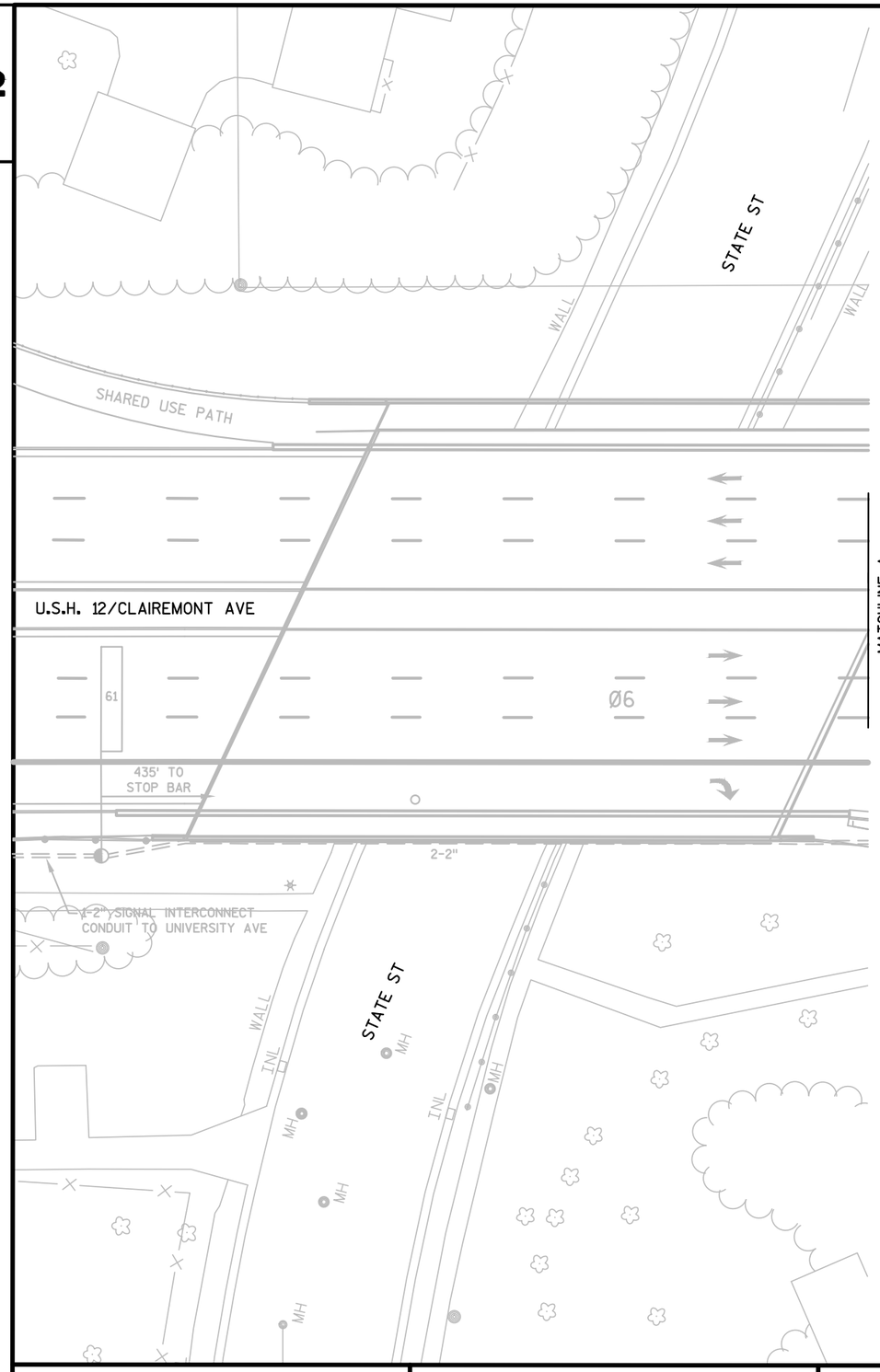
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REVISED BY: AECOM

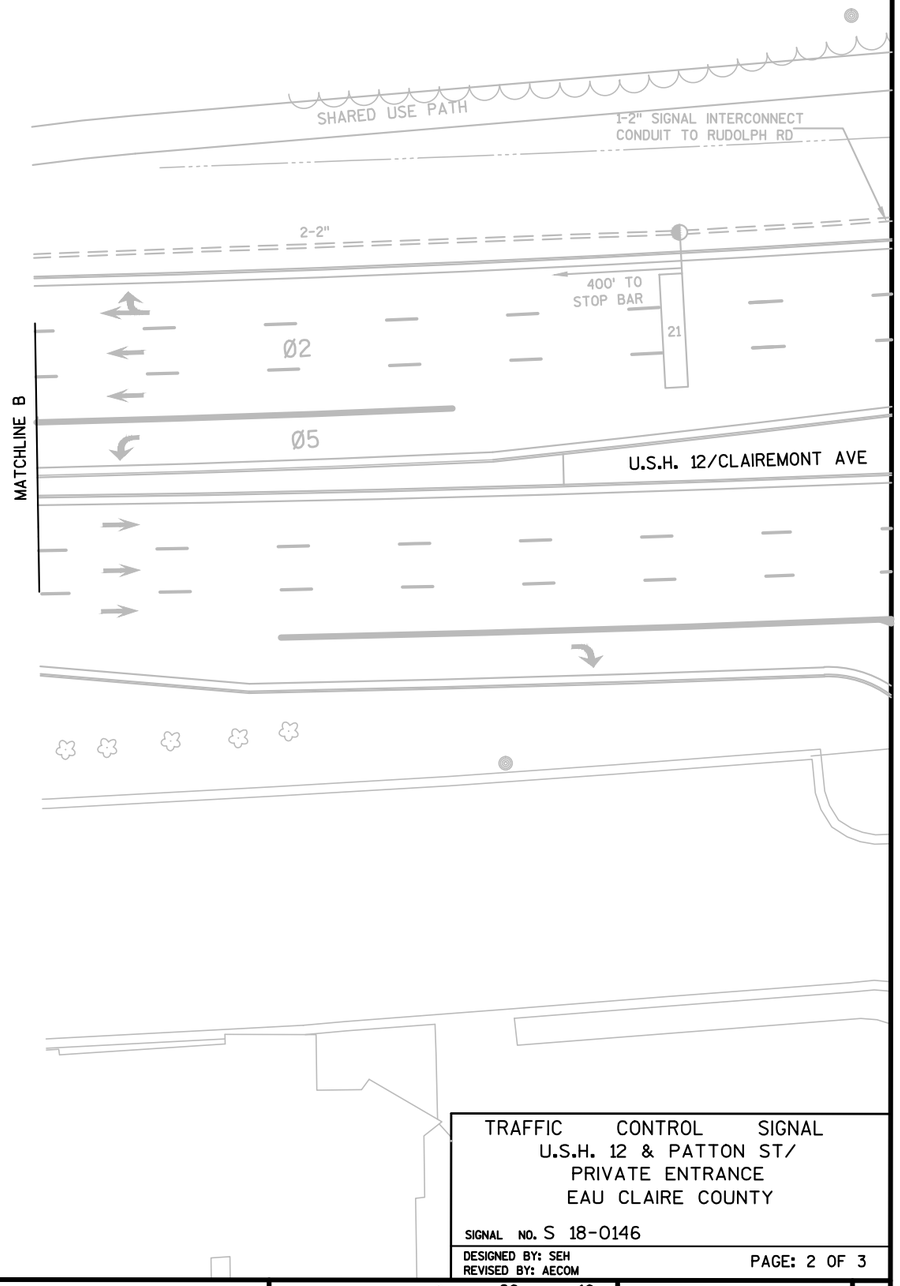
PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & PATTON ST/P.E.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024011_SP.DWG PLOT DATE : 1/18/2017 8:05 AM 1"=40'

2





TRAFFIC CONTROL SIGNAL
U.S.H. 12 & PATTON ST/
PRIVATE ENTRANCE
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0146

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & PATTON ST/P.E.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 102

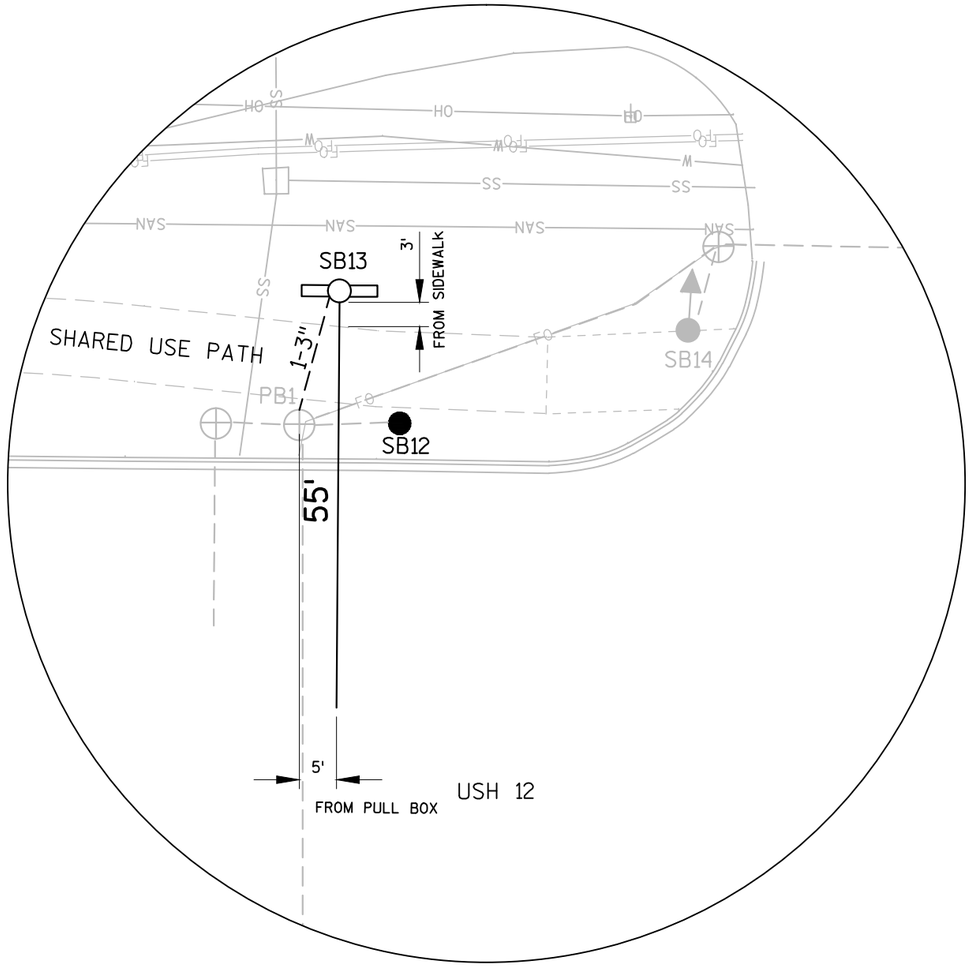
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PLOT DATE : 1/18/2017 8:05 AM

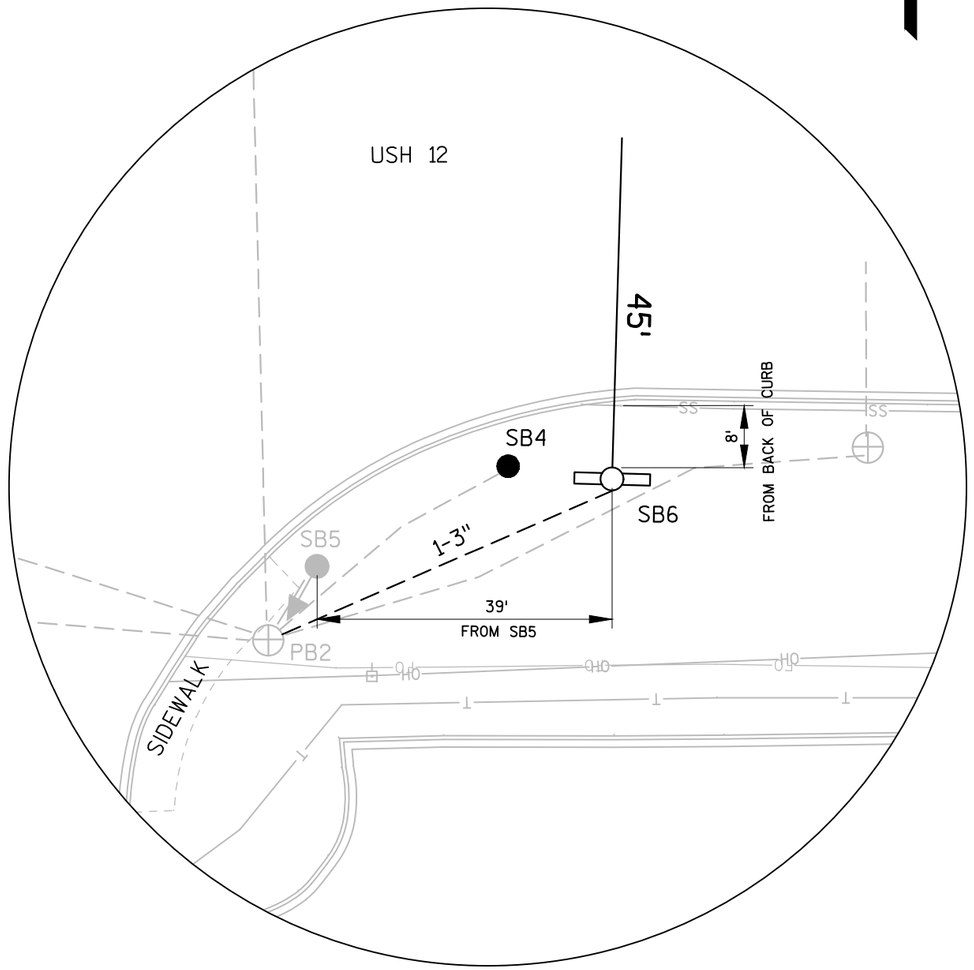
1"=40'

WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL U.S.H. 12 & PATTON ST/ PRIVATE ENTRANCE EAU CLAIRE COUNTY SIGNAL NO. S 18-0146	
DESIGNED BY: SEH REVISED BY: AECOM	PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & PATTON ST/P.E.	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 103	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & PATTON ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	6	EXISTING										
		20	EXISTING										
		42	EXISTING										
		PB	EXISTING										
SB2	EXISTING	5	EXISTING										
		9	EXISTING										
		PB	EXISTING										
SB3	EXISTING	16	EXISTING										
SB4	EXISTING	-											
SB5	EXISTING	15	EXISTING										
SB6	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		24	RED	ORG	GRN								
SB7	EXISTING	11	EXISTING										
		41	EXISTING										
		62	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB8	EXISTING	13	EXISTING										
		19	EXISTING										
SB9	EXISTING	18	EXISTING										
		61	EXISTING										
		PB	EXISTING										
SB10	EXISTING	1	EXISTING										
		23	EXISTING										
SB11	EXISTING	4	EXISTING										
		10	EXISTING										
SB12	EXISTING	-											
SB13	5	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		25	RED	ORG	GRN								
SB14	EXISTING	17	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB15	EXISTING	12	EXISTING										
		21	EXISTING										
		PB	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB5	SB6
SB6	SB7
SB12	SB13
SB13	SB14

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB13
PB2	SB6

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB13
B	CB1	SB6

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND PATTON ST
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0146 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.

THE R/W IS OUTSIDE OF SHEET LIMITS IN THIS QUADRANT

NORTH FRONTAGE RD

SPEED LIMIT 30

SPEED LIMIT 45

SPEED LIMIT 45

SPEED LIMIT 30

RUDOLPH RD

SIDEWALK

SHARED USE PATH

2-3"
2-2"
2-1" STUBBED

R/W

U.S.H. 12/CLAIREMONT AVE

INL

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6 Ø7 Ø8

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16 SB17

T-2

200' TO STOP BAR

SOUTH FRONTAGE ROAD

RUDOLPH ROAD

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (FY) FLASHING YELLOW ARROW
- (G) GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & RUDOLPH RD.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0141

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & RUDOLPH ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

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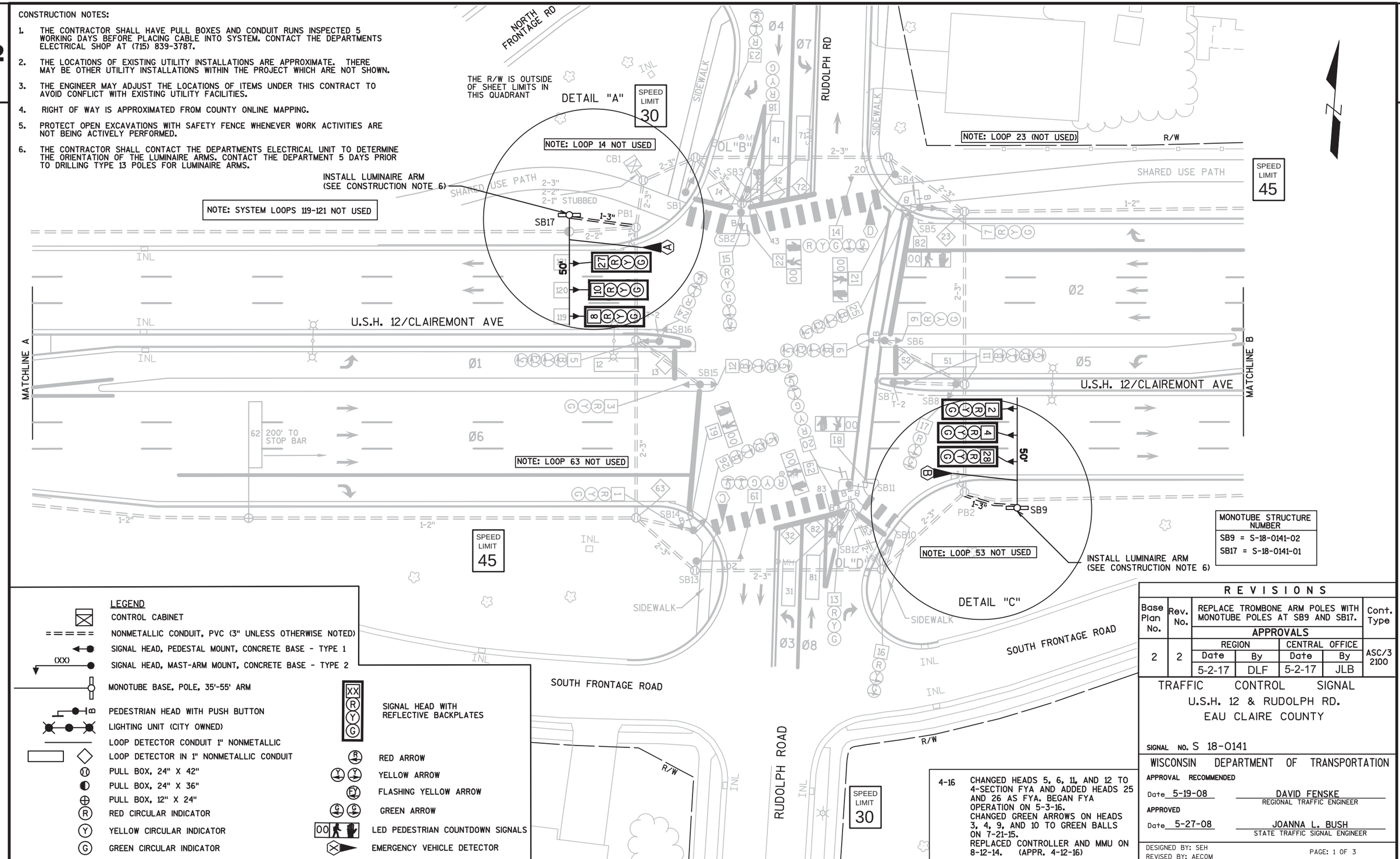
PLOT DATE : 1/18/2017 8:07 AM

1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- SIGNAL HEAD WITH REFLECTIVE BACKPLATES
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR

REVISIONS					
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB9 AND SB17.			Cont. Type
		APPROVALS			
		REGION		CENTRAL OFFICE	
		Date	By	Date	By
2	2	5-2-17	DLF	5-2-17	JLB

ASC/3 2100

4-16 CHANGED HEADS 5, 6, 11, AND 12 TO 4-SECTION FYA AND ADDED HEADS 25 AND 26 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROWS ON HEADS 3, 4, 9, AND 10 TO GREEN BALLS ON 7-21-15. REPLACED CONTROLLER AND MMU ON 8-12-14. (APPR. 4-12-16)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & RUDOLPH RD.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0141

WISCONSIN DEPARTMENT OF TRANSPORTATION

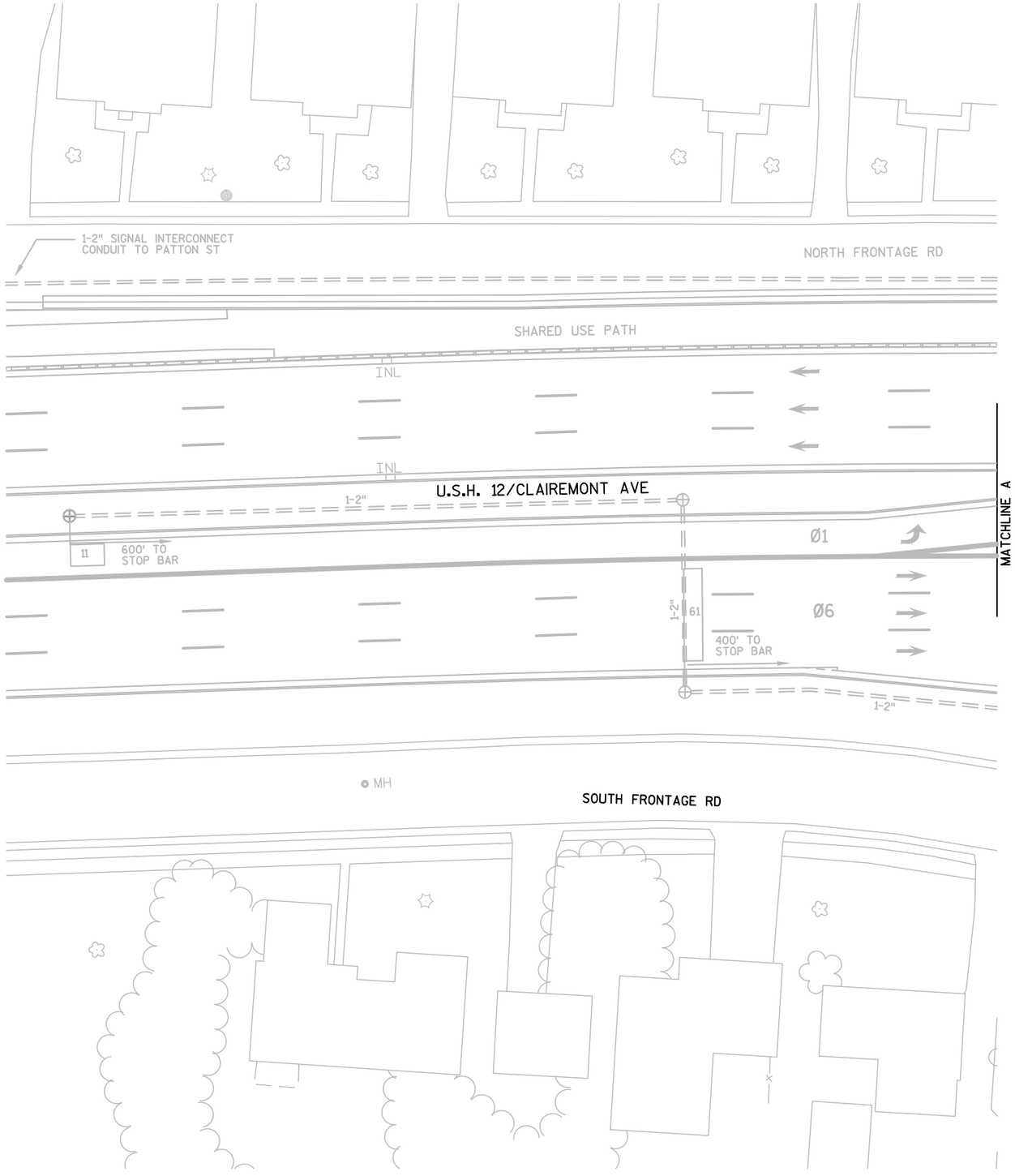
APPROVAL RECOMMENDED
Date 5-19-08 — DAVID FENSKE, REGIONAL TRAFFIC ENGINEER

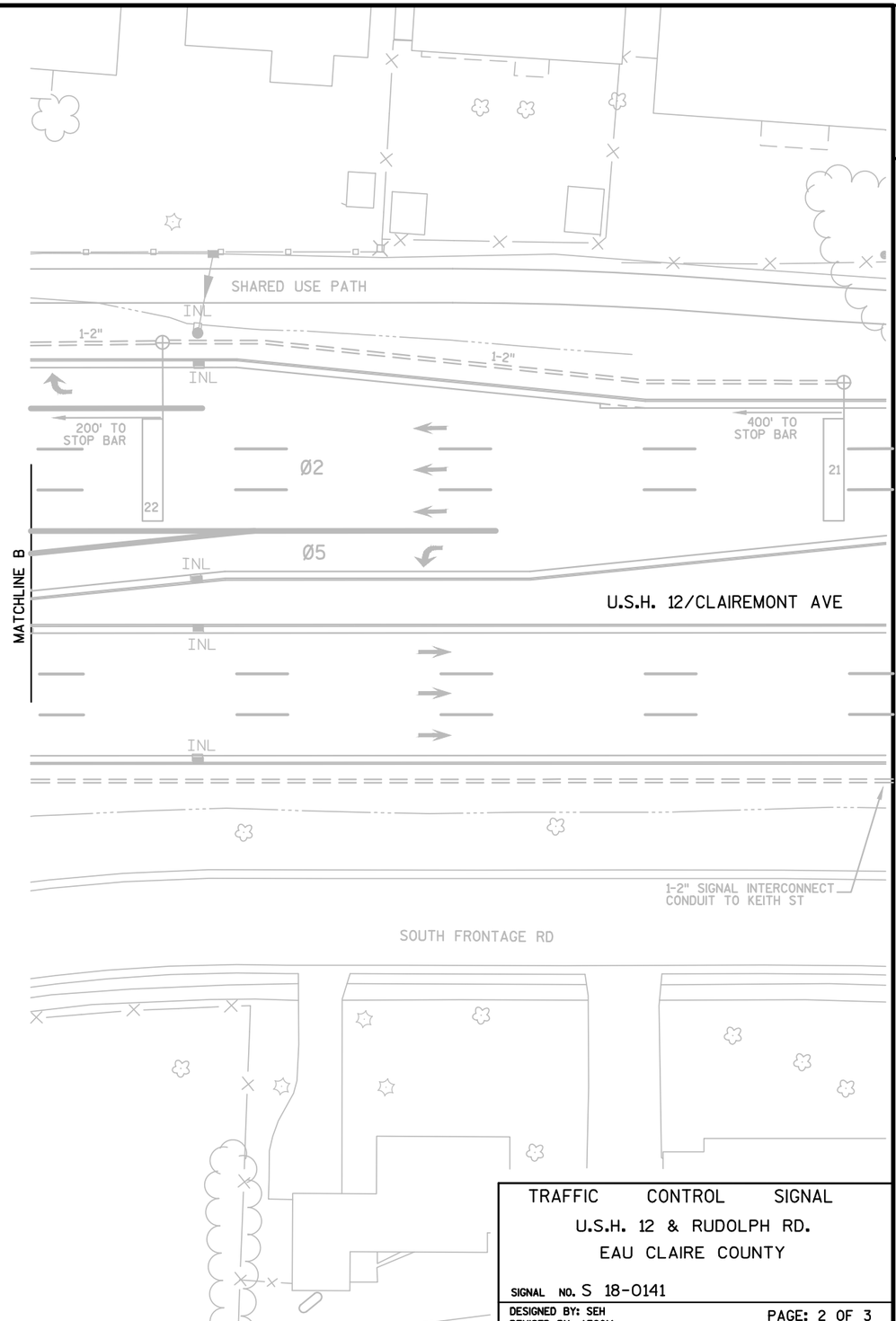
APPROVED
Date 5-27-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & RUDOLPH ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E





TRAFFIC CONTROL SIGNAL
U.S.H. 12 & RUDOLPH RD.
EAU CLAIRE COUNTY

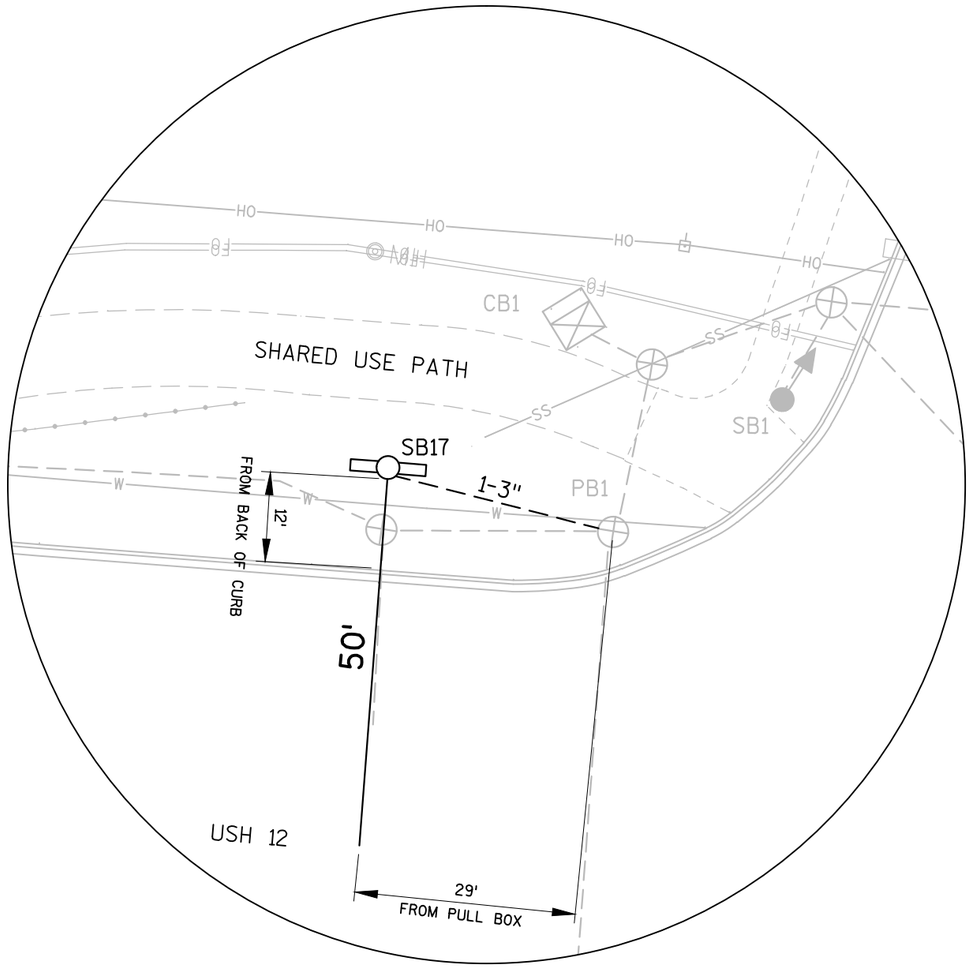
SIGNAL NO. S 18-0141

DESIGNED BY: SEH
REVISED BY: AECOM

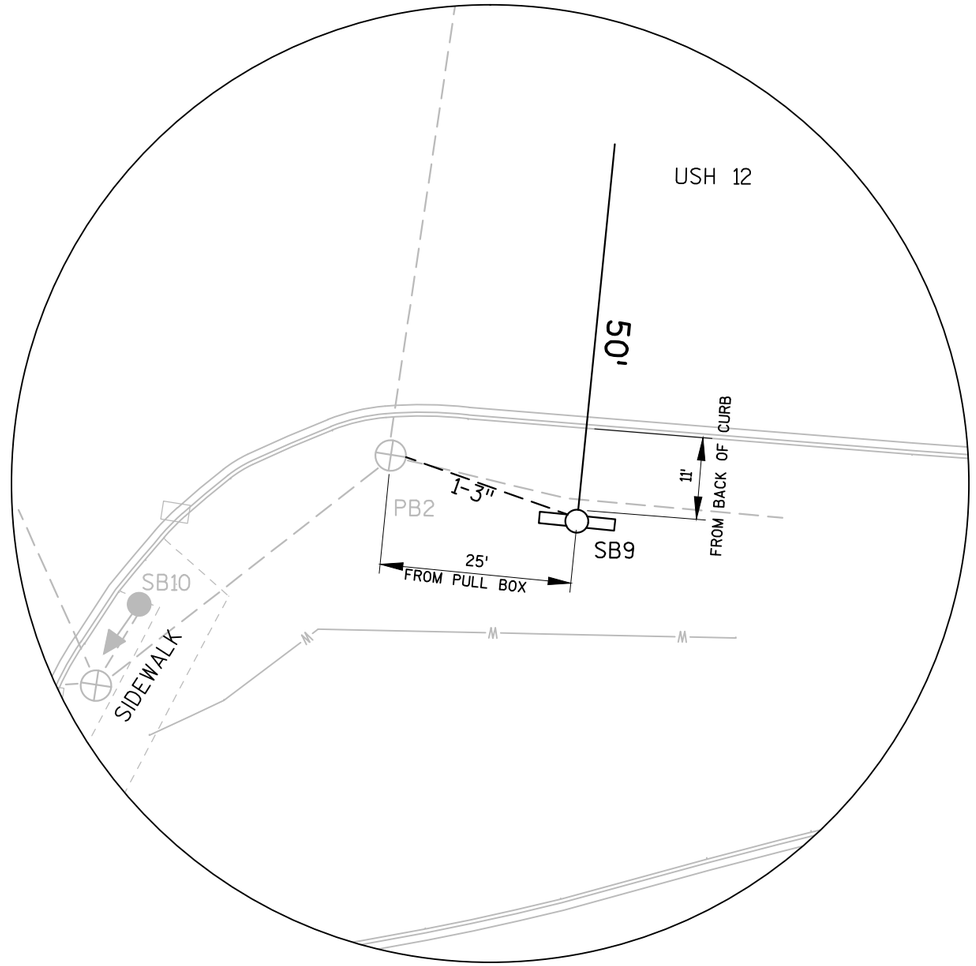
PAGE: 2 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & RUDOLPH ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024012_SP.DWG
PLOT DATE : 1/18/2017 8:07 AM
1"=40'
WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & RUDOLPH RD.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0141

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & RUDOLPH ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 108	E

2

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & RUDOLPH RD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK	PED BUTTON	OTHER
SB1	EXISTING	23	EXISTING										
SB2	EXISTING	15	EXISTING										
		18	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB3	EXISTING	PB	EXISTING										
SB4	EXISTING	14	EXISTING										
SB5	EXISTING	7	EXISTING										
		25	EXISTING										
		21	EXISTING										
		82	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB6	EXISTING	6	EXISTING										
		9	EXISTING										
		PB	EXISTING										
SB7	EXISTING	11	EXISTING										
SB8	EXISTING	17	EXISTING										
SB9	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		28	RED	ORG	GRN								
SB10	EXISTING	16	EXISTING										
SB11	EXISTING	62	EXISTING										
		81	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB12	EXISTING	13	EXISTING										
		20	EXISTING										
		PB	EXISTING										
SB13	EXISTING	19	EXISTING										
SB14	EXISTING	1	EXISTING										
		26	EXISTING										
		61	EXISTING										
		PB	EXISTING										
SB15	EXISTING	3	EXISTING										
		12	EXISTING										
SB16	EXISTING	5	EXISTING										
		24	EXISTING										
SB17	5	8	RED	ORG	GRN								
		10	RED	ORG	GRN								
		27	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB16	SB17
SB17	CB1
SB8	SB9
SB9	SB10

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB17
PB2	SB9

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB17
B	CB1	SB9

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND RUDOLPH RD
EAU CLAIRE COUNTY

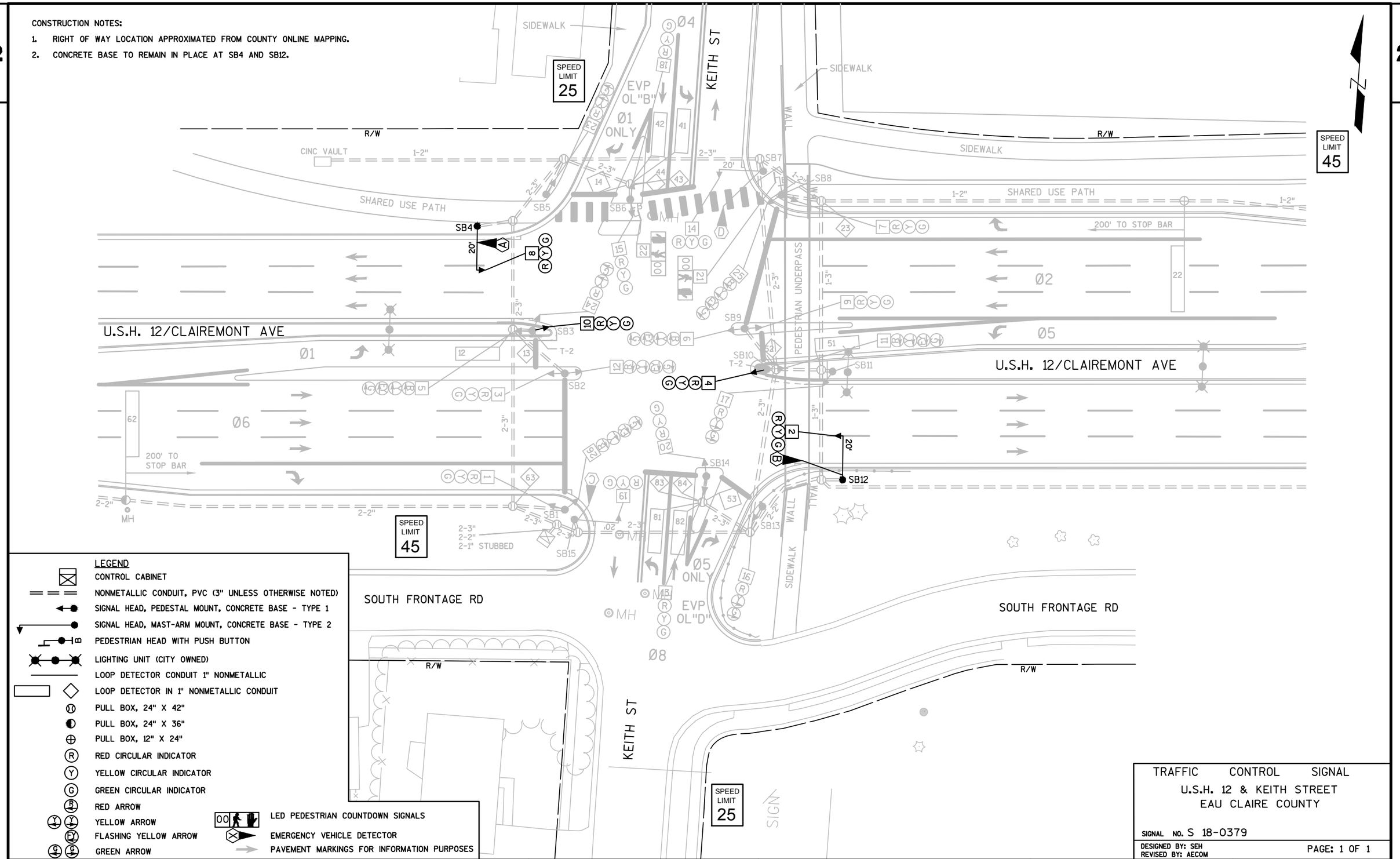
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0141 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB4 AND SB12.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & KEITH STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0379

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & KEITH STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

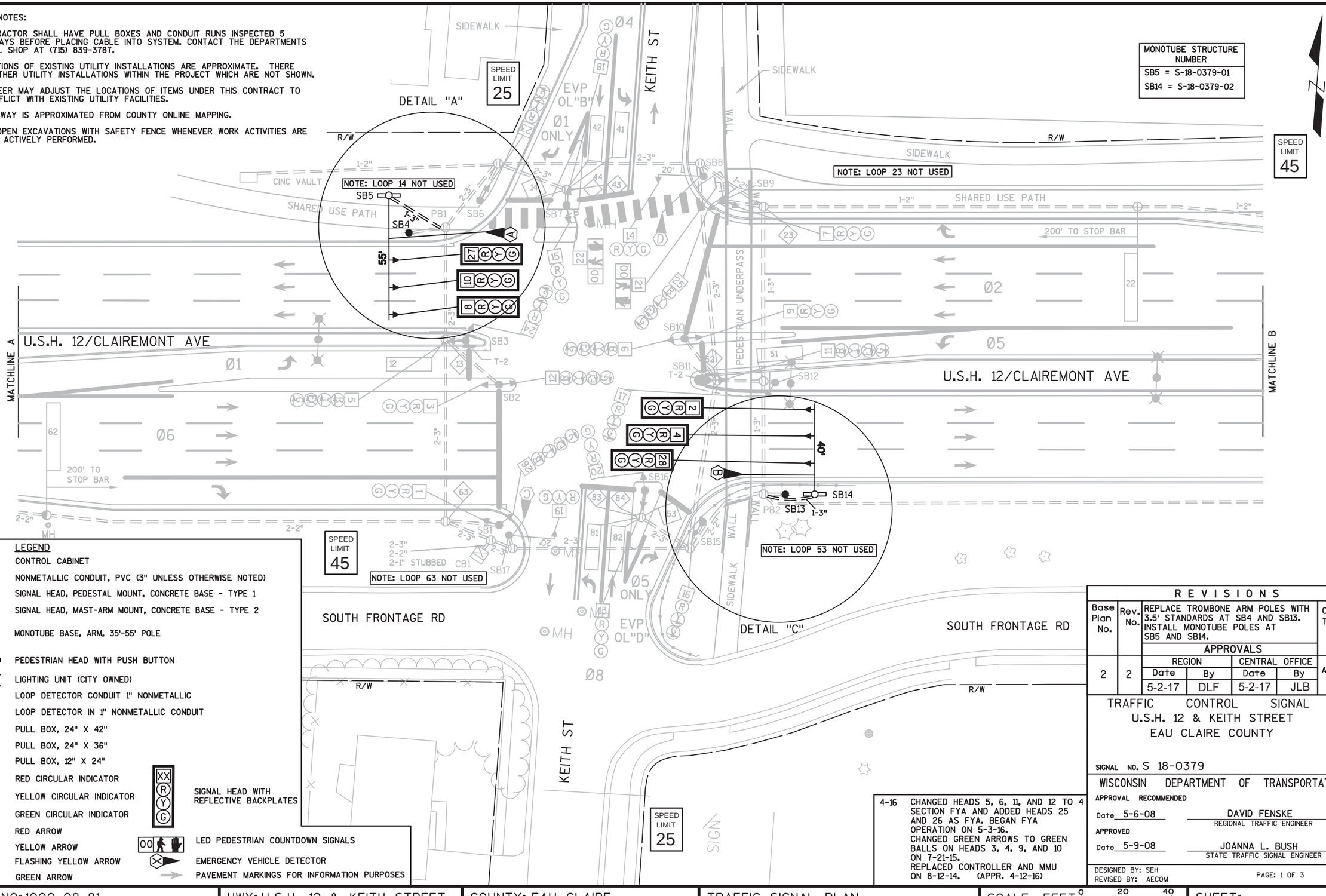
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PLOT DATE : 1/18/2017 8:09 AM
1"=40'

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB5 = S-18-0379-01
SB14 = S-18-0379-02



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, ARM, 35'-55' POLE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- SIGNAL HEAD WITH REFLECTIVE BACKPLATES
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES

REVISIONS						
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH 3.5' STANDARDS AT SB4 AND SB13. INSTALL MONOTUBE POLES AT SB5 AND SB14.				Cont. Type
		APPROVALS				
		REGION		CENTRAL OFFICE		
		Date	By	Date	By	
2	2	5-2-17	DLF	5-2-17	JLB	ASC/3 TS1

4-16 CHANGED HEADS 5, 6, 11, AND 12 TO 4 SECTION FYA AND ADDED HEADS 25 AND 26 AS FYA. BEGAN FYA OPERATION ON 5-3-16.
CHANGED GREEN ARROWS TO GREEN BALLS ON HEADS 3, 4, 9, AND 10 ON 7-21-15.
REPLACED CONTROLLER AND MMU ON 8-12-14. (APPR. 4-12-16)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & KEITH STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0379

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-6-08 — DAVID FENSKE, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 5-9-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

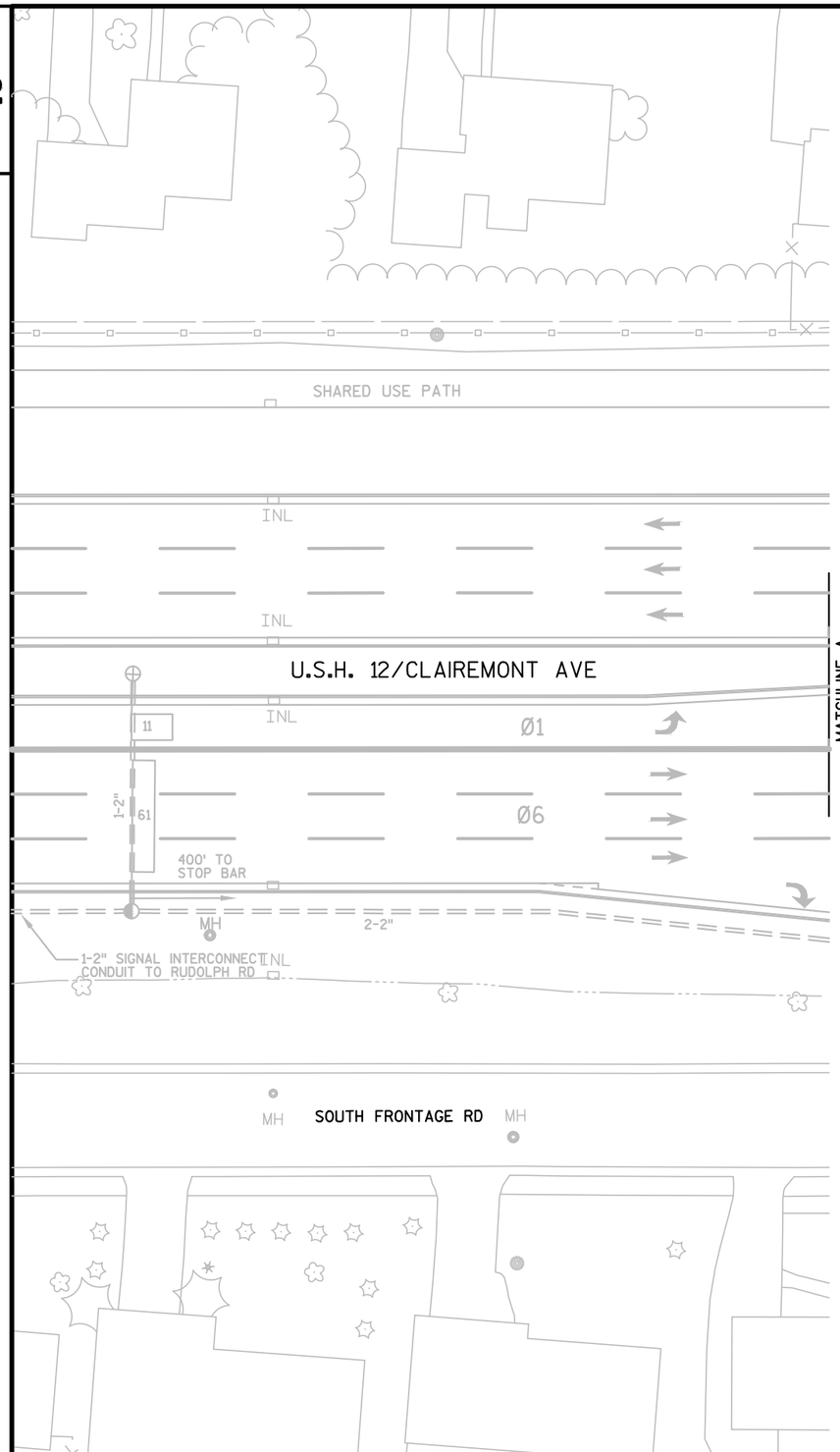
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REVISED BY: AECOM

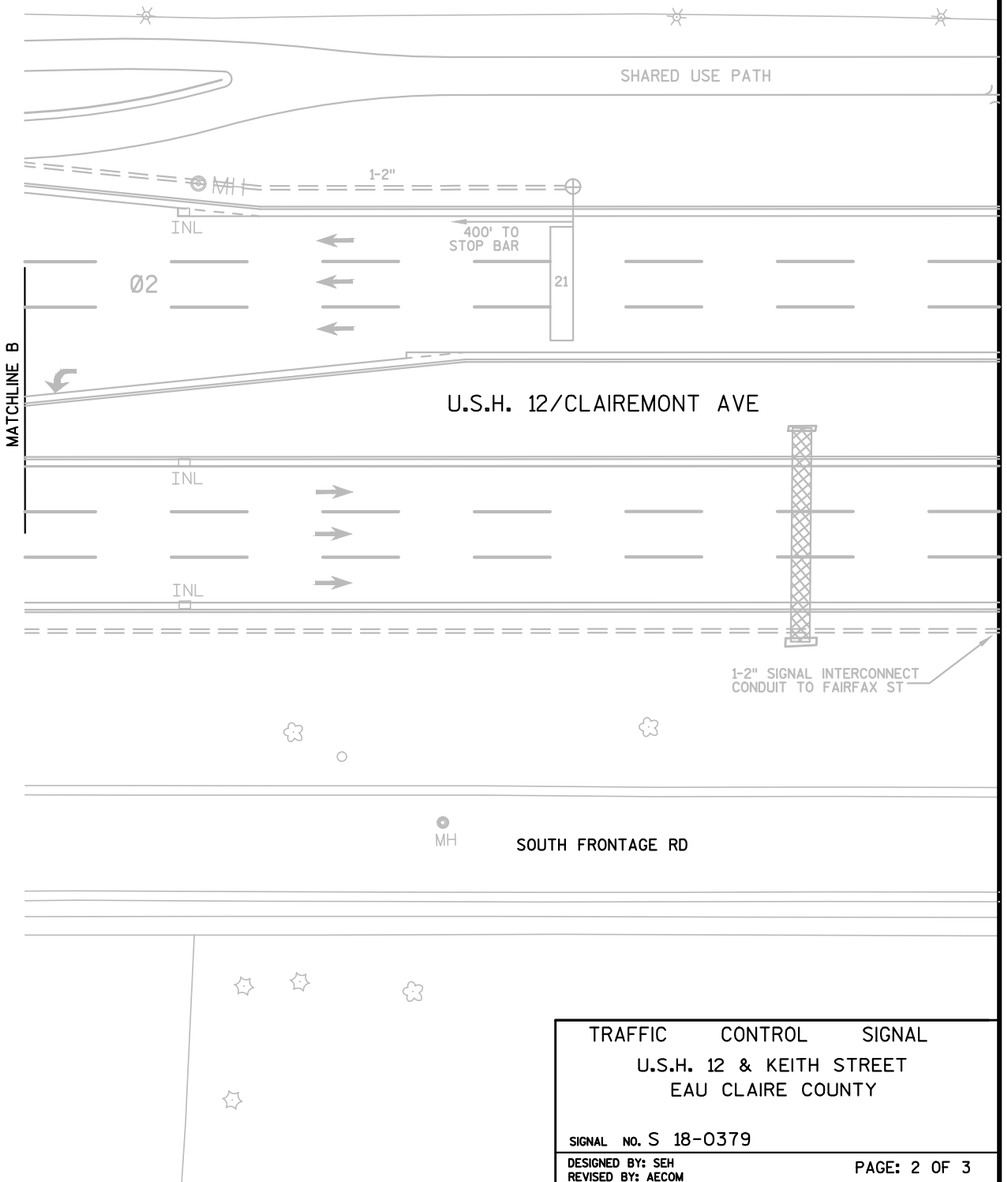
PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & KEITH STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024013_SP.DWG
PLOT DATE : 1/18/2017 8:09 AM
1"=40'
WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
U.S.H. 12 & KEITH STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0379

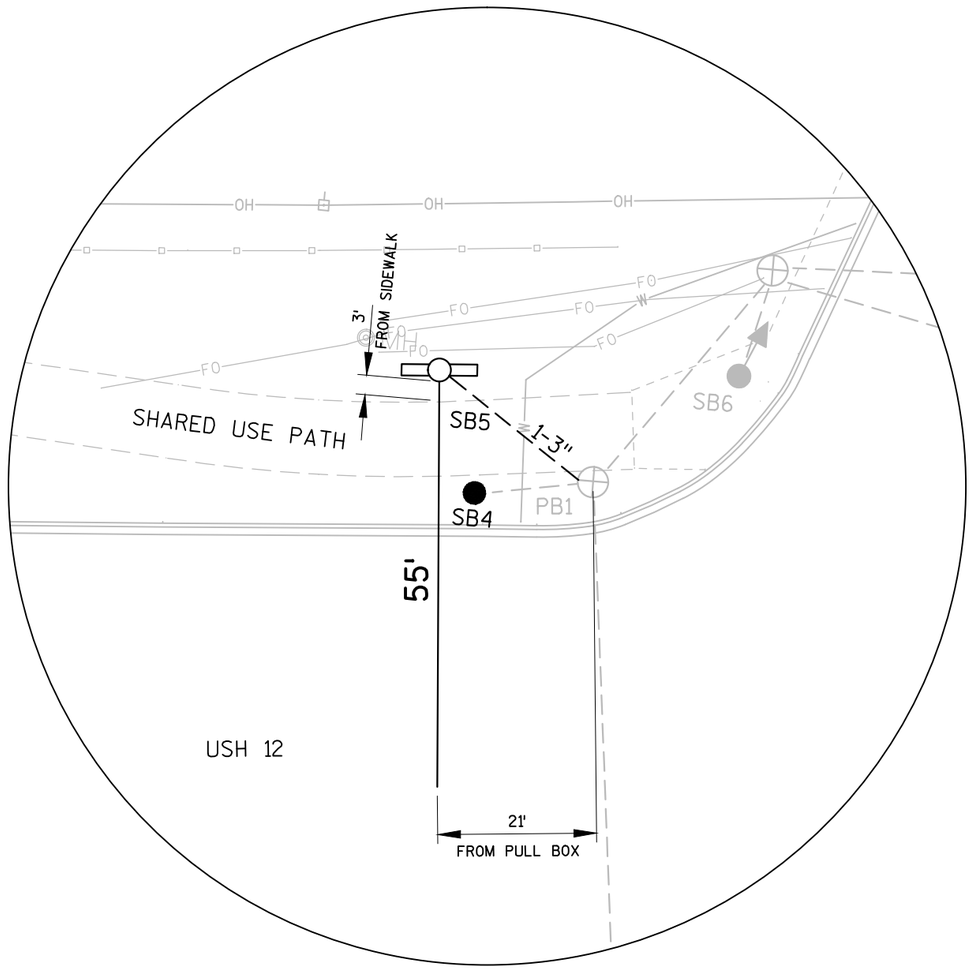
DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

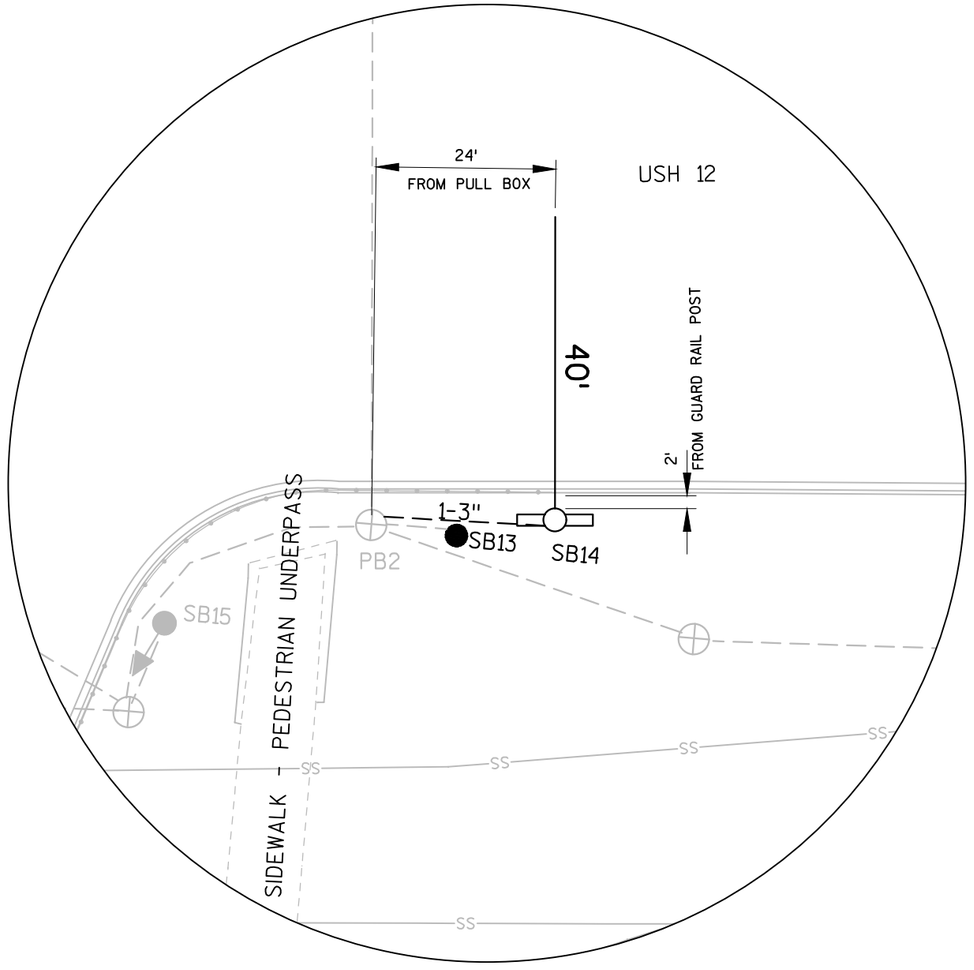
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & KEITH STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024013_SP.DWG
PLOT DATE : 1/18/2017 8:09 AM
1"=40'
WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & KEITH STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0379

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & KEITH STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 113	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\SIGNAL DETAILS\EAU CLAIRE\024023_SP.DWG
LAYOUT NAME - 024023_SP - S 18-0379

PLOT DATE : 1/18/2017 8:11 AM PLOT BY : SALOMONSEN, DEREK PLOT NAME :

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & KEITH ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	1	EXISTING										
		26	EXISTING										
SB2	EXISTING	3	EXISTING										
		12	EXISTING										
SB3	EXISTING	5	EXISTING										
		24	EXISTING										
SB4	EXISTING	-											
SB5	5	8	RED	ORG	GRN								
		10	RED	ORG	GRN								
		27	RED	ORG	GRN								
SB6	EXISTING	23	EXISTING										
SB7	EXISTING	15	EXISTING										
		18	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB8	EXISTING	14	EXISTING										
SB9	EXISTING	7	EXISTING										
		21	EXISTING										
		25	EXISTING										
SB10	EXISTING	6	EXISTING										
		9	EXISTING										
SB11	EXISTING	11	EXISTING										
SB12	EXISTING	17	EXISTING										
SB13	EXISTING	-											
SB14	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		28	RED	ORG	GRN								
SB15	EXISTING	16	EXISTING										
SB16	EXISTING	13	EXISTING										
		20	EXISTING										
SB17	EXISTING	19	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB4	SB5
SB5	SB6
SB13	SB14
SB14	SB15

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB5
PB2	SB14

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB5
B	CB1	SB14

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND KEITH ST
EAU CLAIRE COUNTY

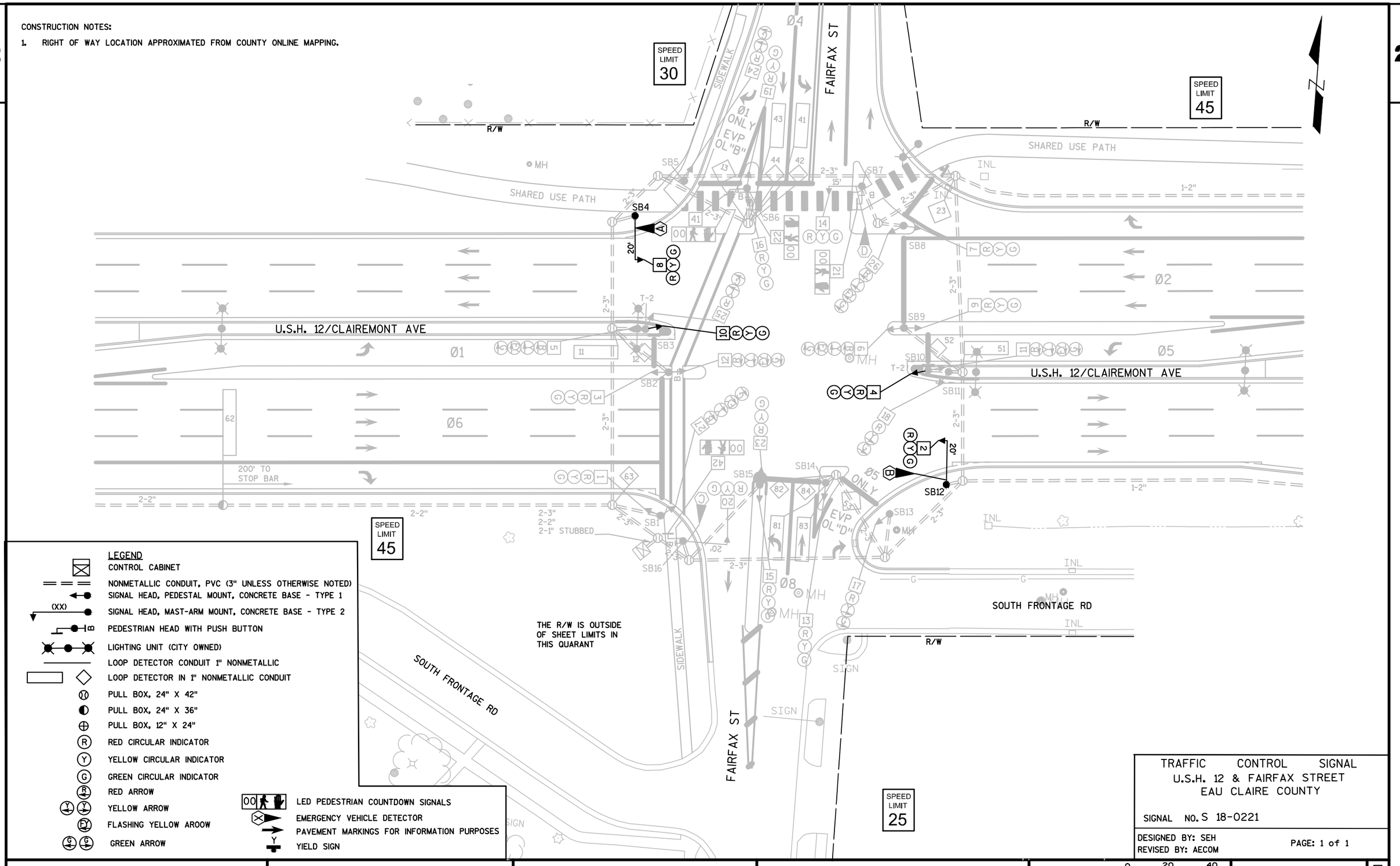
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0379 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW AROOW
- GREEN ARROW
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES
- Y YIELD SIGN

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & FAIRFAX STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0221

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 1 of 1

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FAIRFAX STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET:

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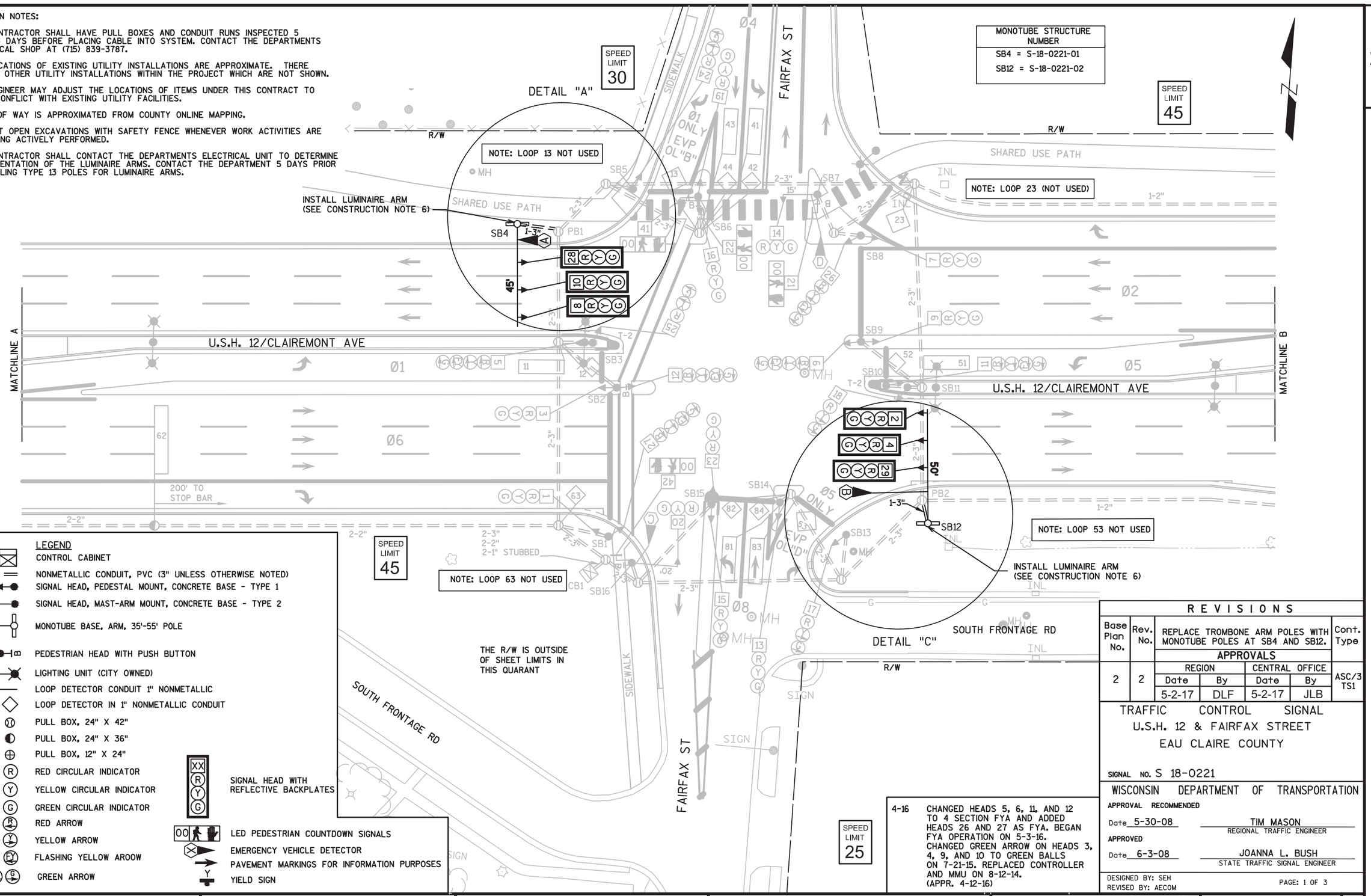
1"=40'

WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT, PVC (3" UNLESS OTHERWISE NOTED)
- SIGNAL HEAD, PEDESTAL MOUNT, CONCRETE BASE - TYPE 1
- (XX) SIGNAL HEAD, MAST-ARM MOUNT, CONCRETE BASE - TYPE 2
- MONOTUBE BASE, ARM, 35'-55' POLE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT (CITY OWNED)
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y)(Y) YELLOW ARROW
- (FY) FLASHING YELLOW AROOW
- (G)(G) GREEN ARROW
- XX R Y G SIGNAL HEAD WITH REFLECTIVE BACKPLATES
- 00 LED PEDESTRIAN COUNTDOWN SIGNALS
- EMERGENCY VEHICLE DETECTOR
- PAVEMENT MARKINGS FOR INFORMATION PURPOSES
- Y YIELD SIGN

REVISIONS						
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB4 AND SB12.				Cont. Type
		APPROVALS				
		REGION		CENTRAL OFFICE		
		Date	By	Date	By	
2	2	5-2-17	DLF	5-2-17	JLB	ASC/3 TS1

4-16 CHANGED HEADS 5, 6, 11, AND 12 TO 4 SECTION FYA AND ADDED HEADS 26 AND 27 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROW ON HEADS 3, 4, 9, AND 10 TO GREEN BALLS ON 7-21-15. REPLACED CONTROLLER AND MMU ON 8-12-14. (APPR. 4-12-16)

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & FAIRFAX STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0221

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-30-08 — TIM MASON, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 6-3-08 — JOANNA L. BUSH, STATE TRAFFIC SIGNAL ENGINEER

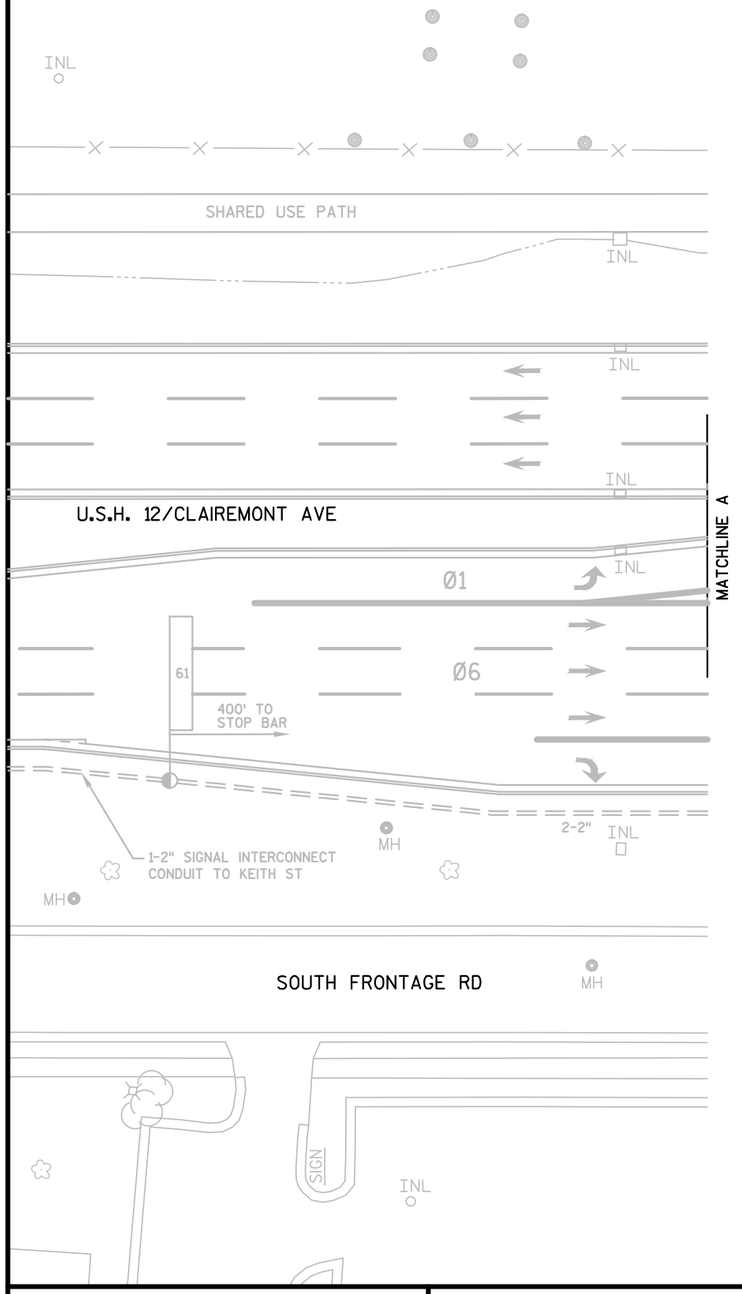
DESIGNED BY: SEH
REVISED BY: AECOM

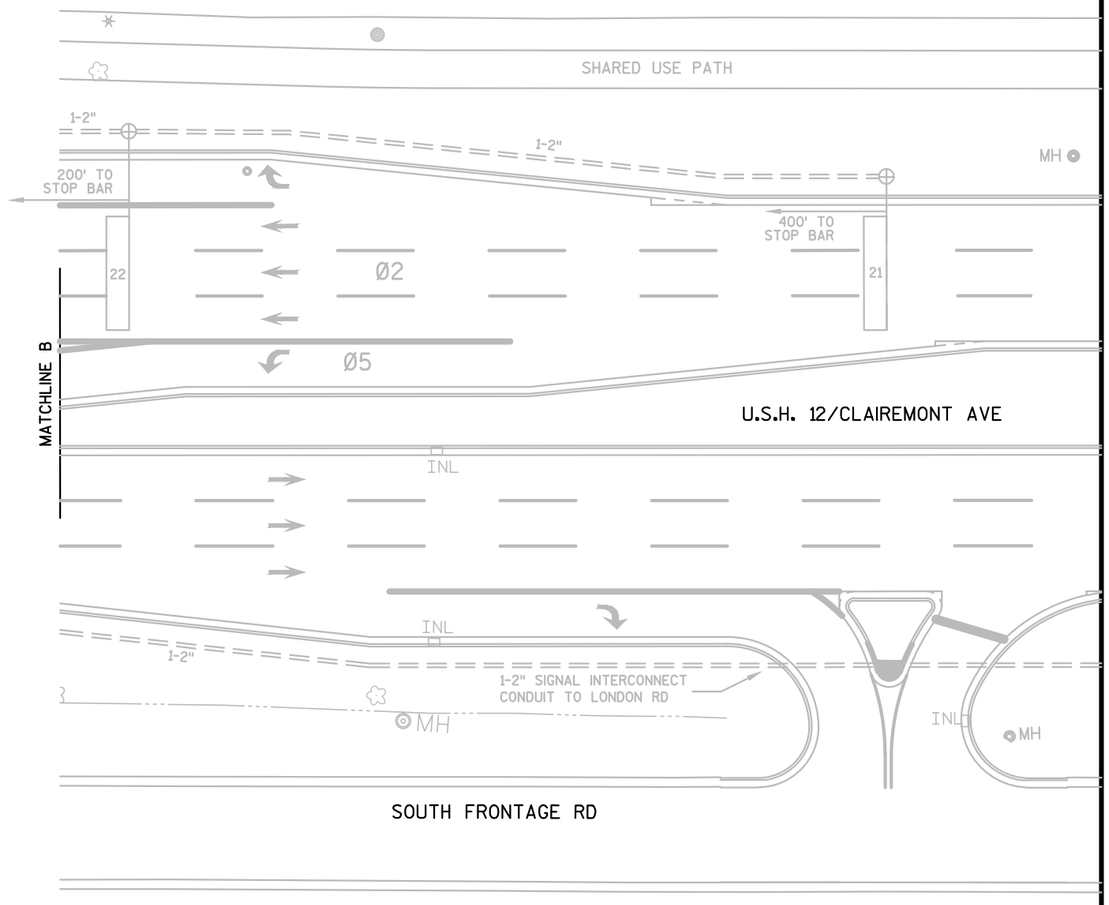
PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FAIRFAX STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 116

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024014_SP.DWG
PLOT DATE : 1/18/2017 8:56 AM
1"=40'
WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
U.S.H. 12 & FAIRFAX STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0221

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 2 OF 3

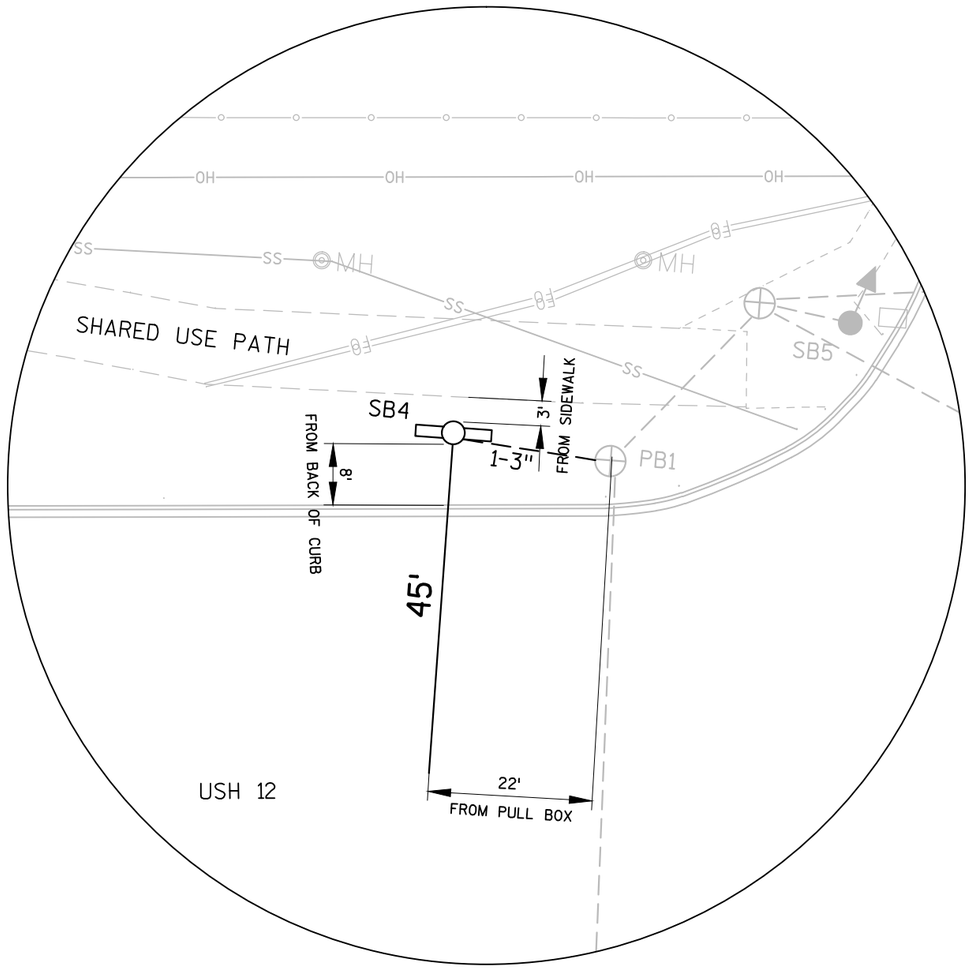
PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FAIRFAX STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\024014_SP.DWG

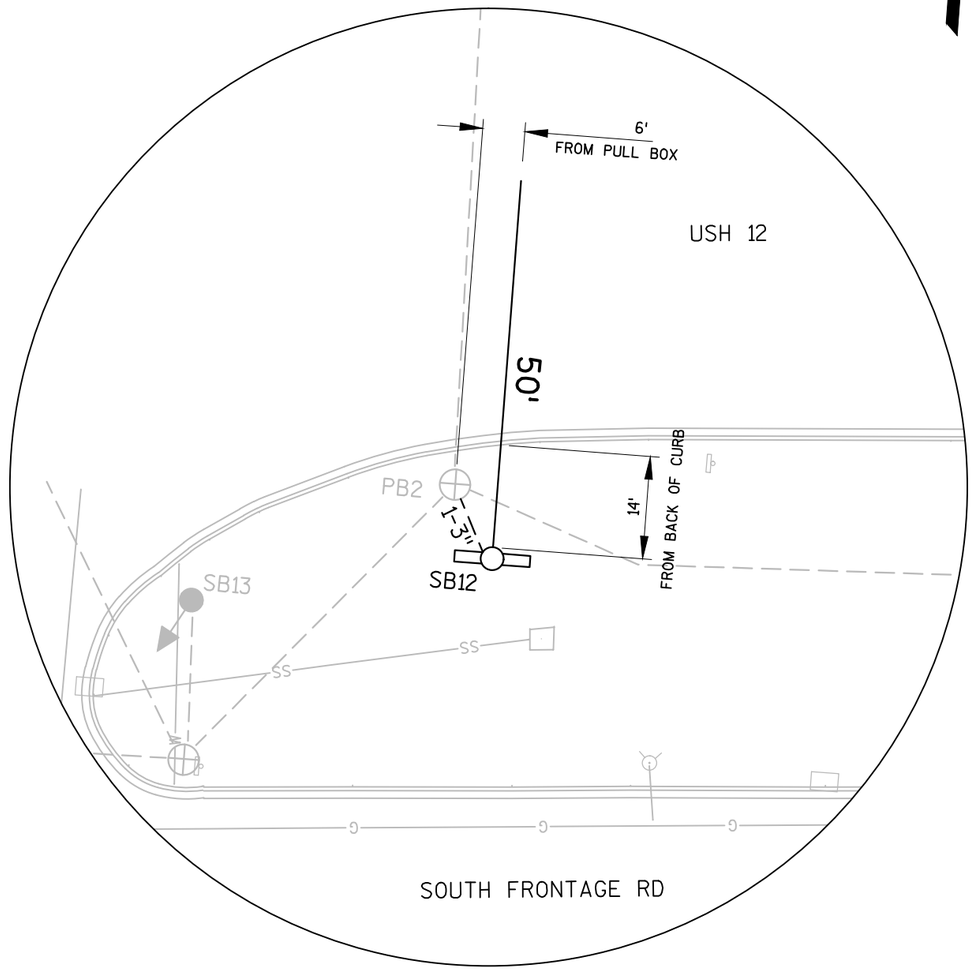
PLOT DATE : 1/18/2017 8:11 AM

1"=40'

WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & FAIRFAX STREET
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0221

DESIGNED BY: SEH
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: U.S.H. 12 & FAIRFAX STREET	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 118	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & FAIRFAX ST

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	1	EXISTING										
		27	EXISTING										
SB2	EXISTING	3	EXISTING										
		12	EXISTING										
		PB											
SB3	EXISTING	5	EXISTING										
		25	EXISTING										
SB4	5	8	RED	ORG	GRN								
		10	RED	ORG	GRN								
		28	RED	ORG	GRN								
SB5	EXISTING	24	EXISTING										
SB6	EXISTING	16	EXISTING										
		19	EXISTING										
		22	EXISTING										
		41	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB7	EXISTING	14	EXISTING										
		21	EXISTING										
		PB	EXISTING										
SB8	EXISTING	7	EXISTING										
		26	EXISTING										
SB9	EXISTING	6	EXISTING										
		9	EXISTING										
SB10	EXISTING	11	EXISTING										
SB11	EXISTING	18	EXISTING										
SB12	5	2	RED	ORG	GRN								
		4	RED	ORG	GRN								
		29	RED	ORG	GRN								
SB13	EXISTING	17	EXISTING										
SB14	EXISTING	13	EXISTING										
SB15	EXISTING	15	EXISTING										
		23	EXISTING										
SB16	EXISTING	20	EXISTING										
		42	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB11	SB12
SB12	SB13

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB12

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB12

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND FAIRFAX ST
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18–0221 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY LOCATION APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB14.

LEGEND

- CONTROL CABINET
- PROPOSED NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- (XX) SIGNAL HEAD, MAST-ARM MOUNT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- PULL BOX, 24" X 42"
- EVP DETECTOR
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN SIGNAL
- CITY-OWNED LIGHTING UNIT

N

R/W

SPEED LIMIT 35

SPEED LIMIT 45

SPEED LIMIT 30

THE R/W IS OUTSIDE OF SHEET LIMITS IN THIS QUADRANT

THE R/W IS OUTSIDE OF SHEET LIMITS IN THIS QUADRANT

BUSINESS 53 SB OFF RAMP

BUSINESS 53 SB ON RAMP

MULTI - USE TRAIL

USH 12

LONDON ROAD

LOOP BACK 220'

LOOP FOR EAST RAMPS BACK 405'

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6

2-3" 3-2" 2-1" STUBS

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 W. RAMPS/LONDON ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET:

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & BUSINESS 53
WEST RAMP/LONDON ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0160

DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE 1 OF 1

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP A\REMOVAL PLANS\021015_CD.DWG

PLOT DATE : 1/18/2017 8:13 AM

1"=40'

WISDOT/CADD

T 42

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

MONOTUBE STRUCTURE NUMBER
SB9 = S-18-0160-01
SB16 = S-18-0160-02

NOTE: LOOP 38 NOT USED

NOTE: SYSTEM LOOPS 913-924 NOT USED

LEGEND

- CONTROL CABINET
- PROPOSED NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST-ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- PULL BOX, 24" X 42"
- EVP DETECTOR
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN SIGNAL
- SIGNAL HEAD WITH REFLECTIVE BACKPLATES
- CITY-OWNED LIGHTING UNIT

THE R/W IS OUTSIDE OF SHEET LIMITS IN THIS QUADRANT

MATCH LINE D

MATCH LINE A

MATCH LINE B

BUSINESS 53 SB OFF RAMP

BUSINESS 53 SB ON RAMP

USH 12

MULTI - USE TRAIL

LONDON ROAD

SPEED LIMIT 35

SPEED LIMIT 45

SPEED LIMIT 30

INSTALL LUMINAIRE ARM (SEE CONSTRUCTION NOTE 6)

DETAIL "A"

DETAIL "C"

LOOP BACK 220'

LOOP FOR EAST RAMPS BACK 405'

4-16	CHANGED HEADS 4 AND 5 TO 4 SECTION FYA AND ADDED HEAD 24 AS FYA. BEGAN FYA OPERATION ON 5-3-16. CHANGED GREEN ARROW TO GREEN BALL ON HEADS 3, 8, AND 9 ON 7-16-15. REPLACED CONTROLLER AND MMU ON 8-12-14. (APPR. 4-12-16)

REVISIONS				
Base Plan No.	Rev. No.			Cont. Type
2	2	REPLACE TROMBONE ARM POLE WITH MONOTUBE POLE AT SB16. REMOVE TROMBONE ARM POLE AT SB9 AND REPLACE WITH MEDIAN MOUNTED MONOTUBE. REPLACE TROMBONE ARM POLE WITH A 15' STANDARD AT SB14.	APPROVALS: REGION Date 5-2-17 By DLF; CENTRAL OFFICE Date 5-2-17 By JLB	ASC/3 TS1

TRAFFIC CONTROL SIGNAL
U.S.H. 12 & BUSINESS 53
WEST RAMP/LONDON ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0160

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 4-27-07 GREGORY P. HELGESON, REGIONAL TRAFFIC ENGINEER

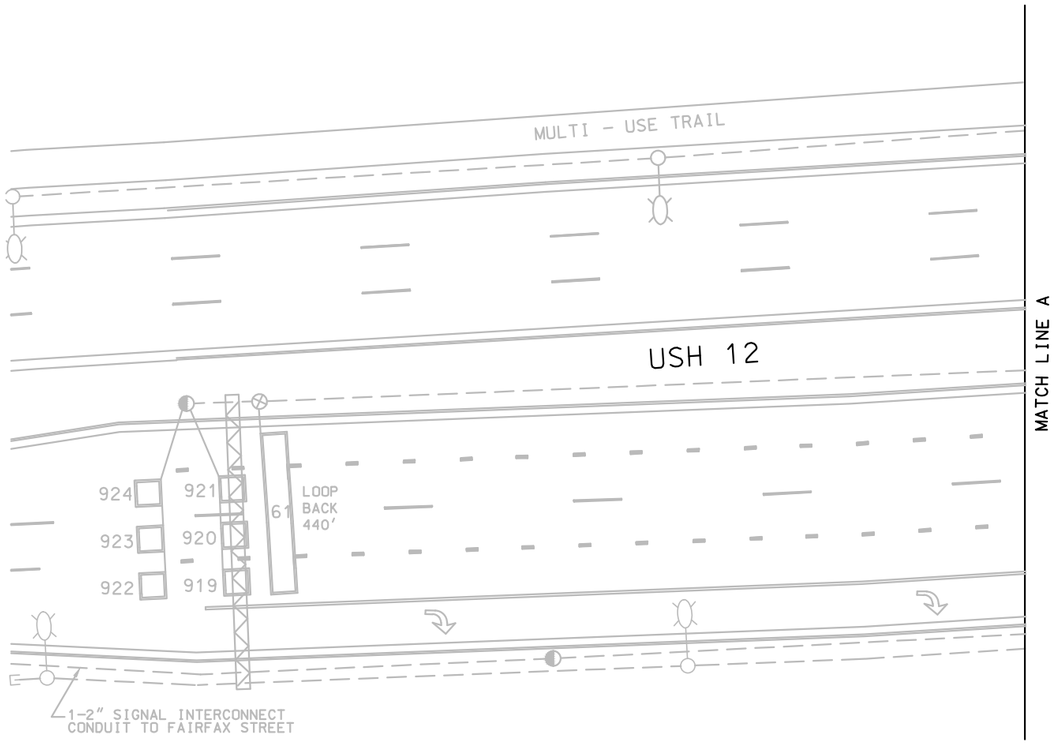
APPROVED
Date 5-1-07 BALU ANANTHANARAYANAN, FOR STATE TRAFFIC SIGNAL ENGINEER

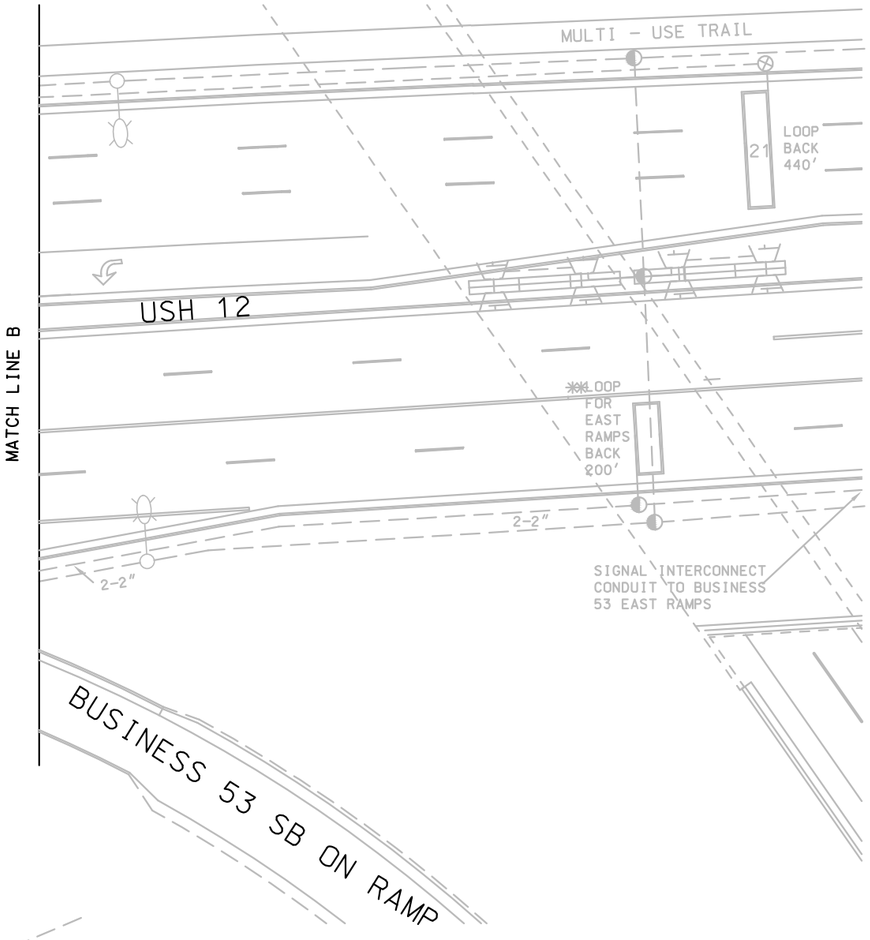
DESIGNED BY: TAD, INC.
REVISED BY: AECOM

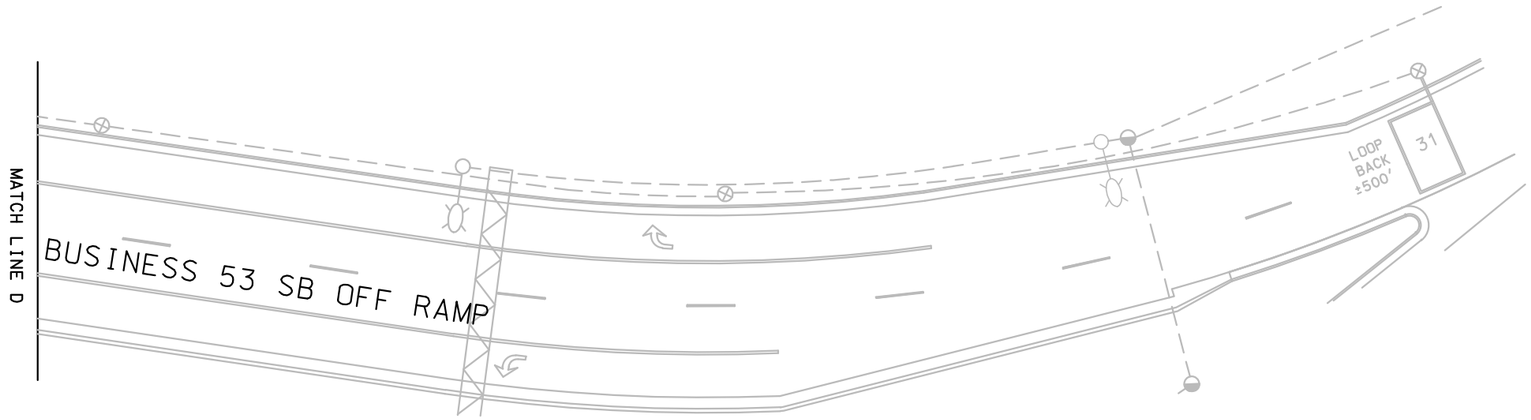
PAGE: 1 OF 3

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 W. RAMPS/LONDON ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET:

2







TRAFFIC CONTROL SIGNAL
U.S.H. 12 & BUSINESS 53
WEST RAMP/ LONDON ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0160 SCALE 0 20

REVISED BY: AECOM
DESIGNED BY: TAD, INC.

PAGE: 2 OF 3

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 W. RAMPS/LONDON ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

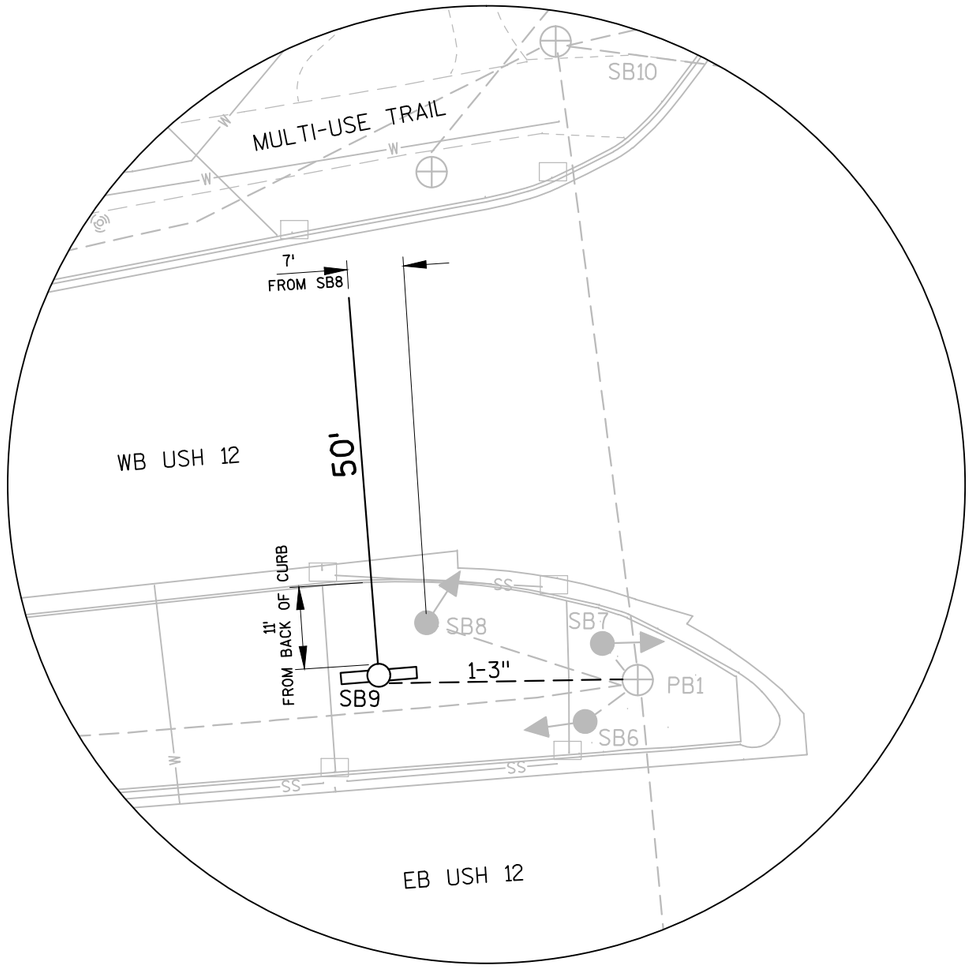
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PLOT DATE : 1/18/2017 8:13 AM

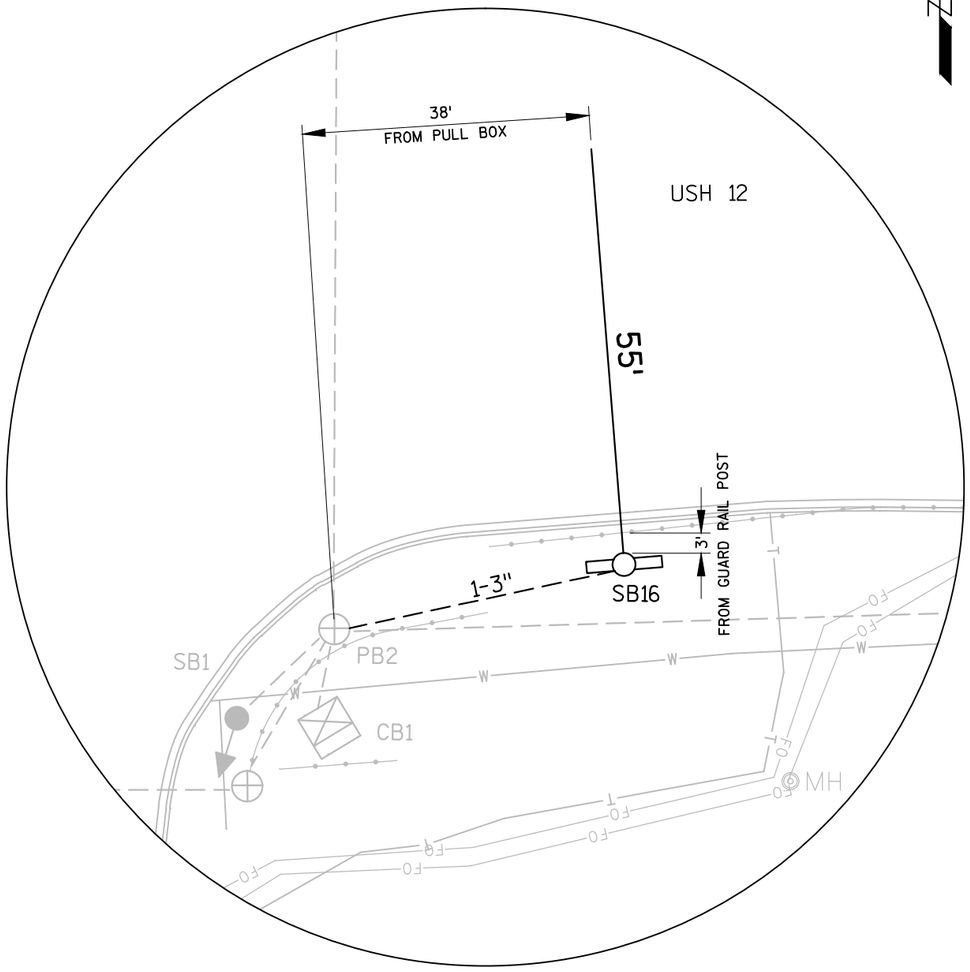
1"=40'

WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
USH 12 & BUSINESS 53
WEST RAMP/LONDON ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0160

DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 W.RAMPS/LONDON ROAD	COUNTY:EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 123	E

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & BUSINESS 53 WEST RAMP/LONDON RD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	18	EXISTING										
SB2	EXISTING	14	EXISTING										
SB3	EXISTING	12	EXISTING										
		17	EXISTING										
SB4	EXISTING	11	EXISTING										
SB5	EXISTING	6	EXISTING										
		24	EXISTING										
		34	EXISTING										
		PB	EXISTING										
SB6	EXISTING	9	EXISTING										
		33	EXISTING										
		PB	EXISTING										
SB7	EXISTING	4	EXISTING										
		32	EXISTING										
		PB	EXISTING										
SB8	EXISTING	21	EXISTING										
SB9	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		27	RED	ORG	GRN								
SB10	EXISTING	20	EXISTING										
SB11	EXISTING	10	EXISTING										
		16	EXISTING										
		21	EXISTING										
		31	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB12	EXISTING	13	EXISTING										
		15	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB13	EXISTING	1	EXISTING										
SB14	EXISTING	5	EXISTING										
SB15	EXISTING	19	EXISTING										
SB16	5	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		25	RED	ORG	GRN								
		26	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB8	SB9
SB9	SB10
SB15	SB16
SB16	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB9
PB2	SB16

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB16
B	CB1	SB9

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND BUSINESS 53
WEST RAMP/LONDON ROAD
EAU CLAIRE COUNTY

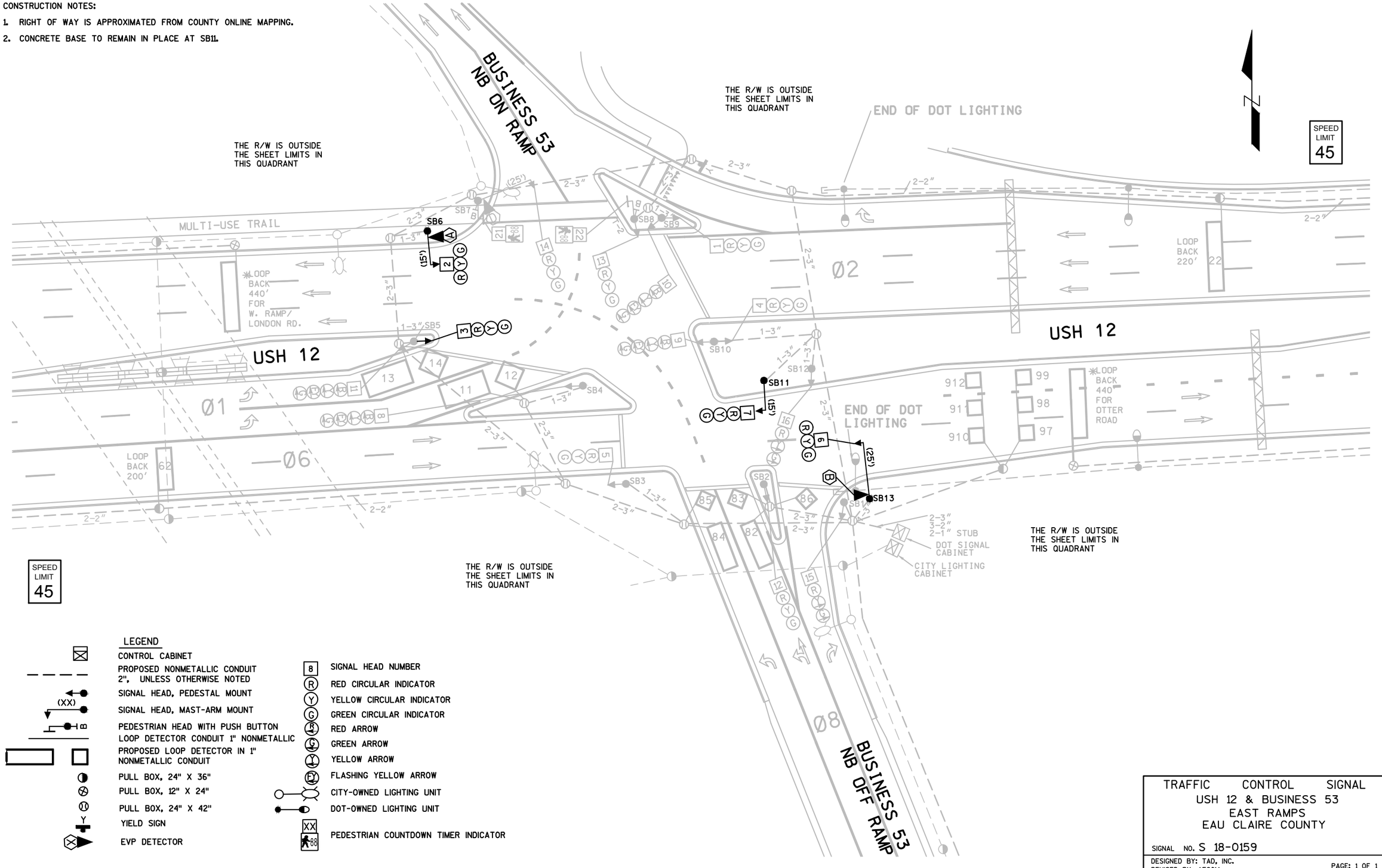
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0160 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB11.



SPEED
LIMIT
45

LEGEND

- CONTROL CABINET
- PROPOSED NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- (XX) SIGNAL HEAD, MAST-ARM MOUNT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- PULL BOX, 24" X 42"
- YIELD SIGN
- EVP DETECTOR
- 8 SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (G) GREEN ARROW
- (Y) YELLOW ARROW
- (FY) FLASHING YELLOW ARROW
- CITY-OWNED LIGHTING UNIT
- DOT-OWNED LIGHTING UNIT
- XX PEDESTRIAN COUNTDOWN TIMER INDICATOR

TRAFFIC CONTROL SIGNAL
USH 12 & BUSINESS 53
EAST RAMPS
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0159

DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE: 1 OF 1

PROJECT NO:1000-08-81	HWY: USH 12 & BUSINESS 53 EAST RAMPS	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group B\Removal Plans\021016_cd.dwg

PLOT DATE : 1/18/2017 8:15 AM

1"=40'

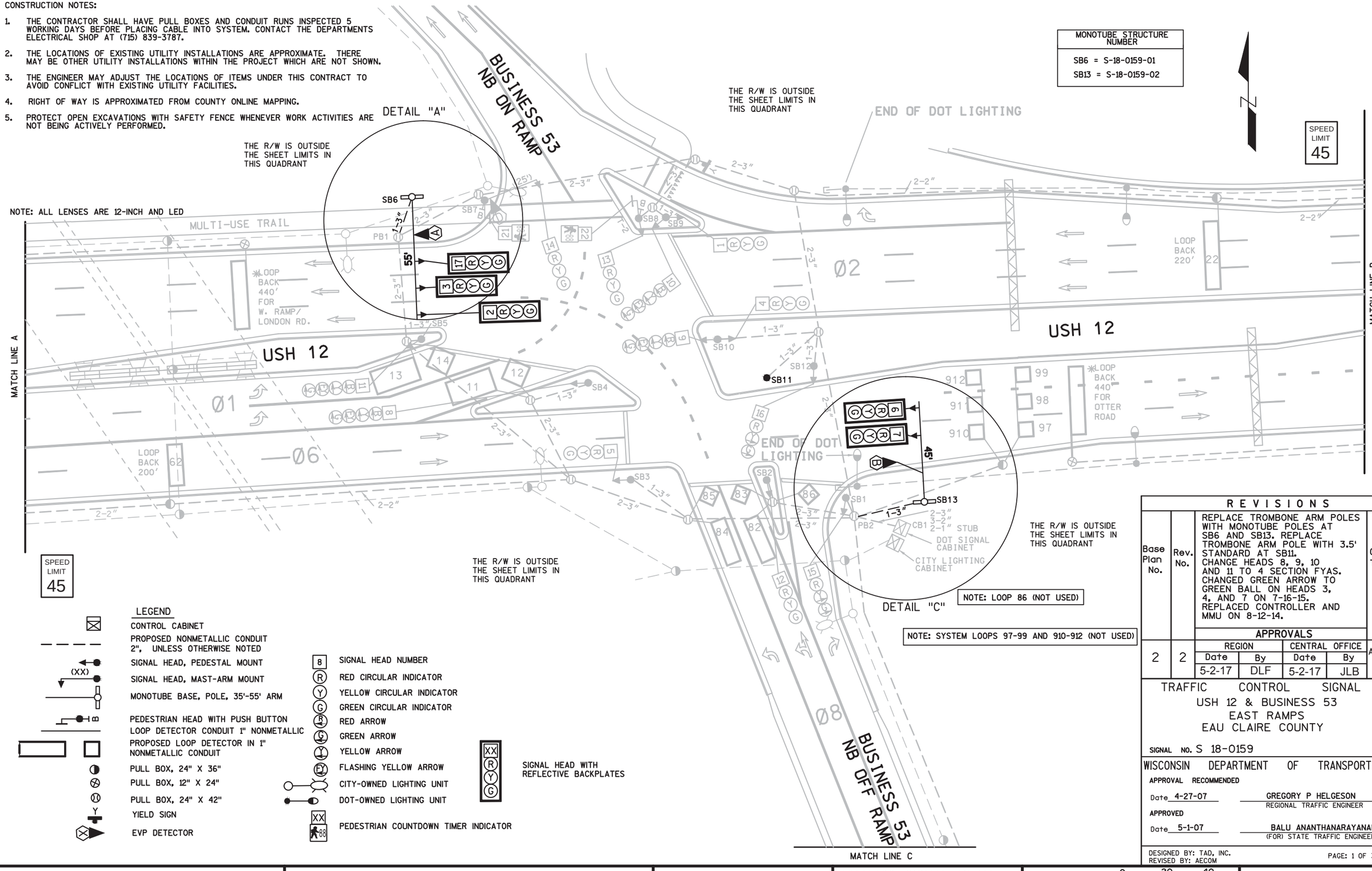
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB6 = S-18-0159-01
SB13 = S-18-0159-02

NOTE: ALL LENSES ARE 12-INCH AND LED



LEGEND

- CONTROL CABINET
- PROPOSED NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- (XX) SIGNAL HEAD, MAST-ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- PULL BOX, 24" X 42"
- YIELD SIGN
- EVP DETECTOR
- 8 SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (G) GREEN ARROW
- (Y) YELLOW ARROW
- (FY) FLASHING YELLOW ARROW
- CITY-OWNED LIGHTING UNIT
- DOT-OWNED LIGHTING UNIT
- XX 88 PEDESTRIAN COUNTDOWN TIMER INDICATOR
- XX R Y G SIGNAL HEAD WITH REFLECTIVE BACKPLATES

REVISIONS			
Base Plan No.	Rev. No.	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB6 AND SB13. REPLACE TROMBONE ARM POLE WITH 3.5' STANDARD AT SB11. CHANGE HEADS 8, 9, 10 AND 11 TO 4 SECTION FYAS. CHANGED GREEN ARROW TO GREEN BALL ON HEADS 3, 4, AND 7 ON 7-16-15. REPLACED CONTROLLER AND MMU ON 8-12-14.	Cont. Type
2	2	APPROVALS: REGION Date 5-2-17 By DLF; CENTRAL OFFICE Date 5-2-17 By JLB	ASC/3 TS1

TRAFFIC CONTROL SIGNAL
USH 12 & BUSINESS 53
EAST RAMPS
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0159

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 4-27-07 GREGORY P HELGESON, REGIONAL TRAFFIC ENGINEER

APPROVED
Date 5-1-07 BALU ANANTHANARAYANAN, (FOR) STATE TRAFFIC ENGINEER

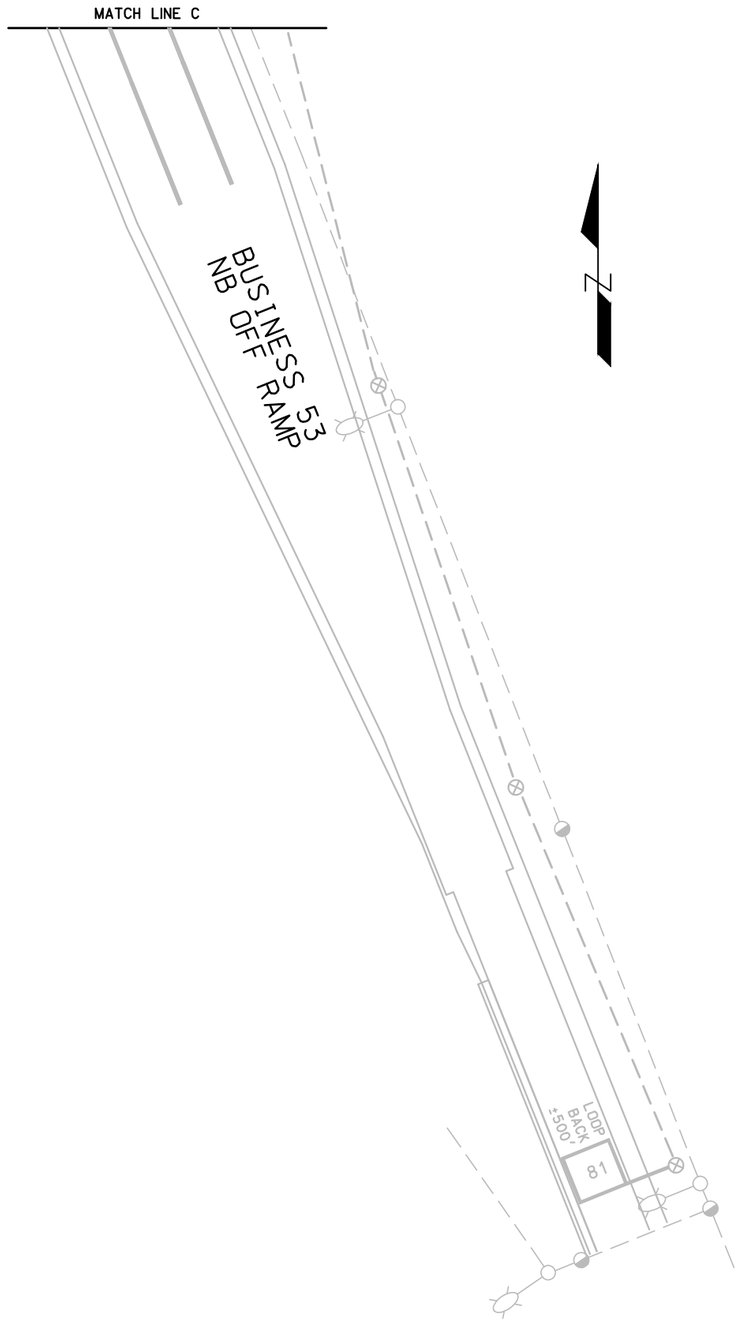
DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE: 1 OF 3

PROJECT NO:1000-08-81	HWY: USH 12 & BUSINESS 53 EAST RAMPS	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group B\024016_sp.dwg PLOT DATE : 1/18/2017 8:15 AM 1"=40' WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
USH 12 & BUSINESS 53
EAST RAMPS
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0159

SCALE 0 20

DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE: 2 OF 3

PROJECT NO:1000-08-81	HWY: USH 12 & BUSINESS 53 EAST RAMPS	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: E

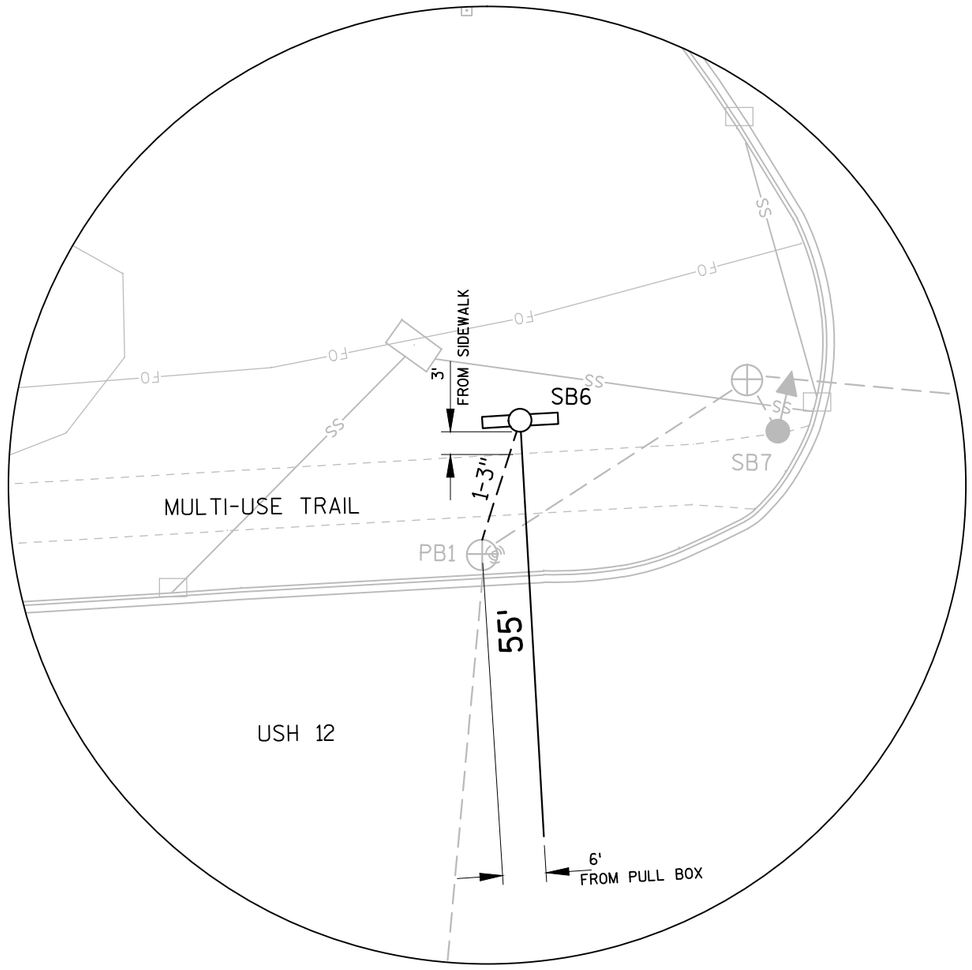
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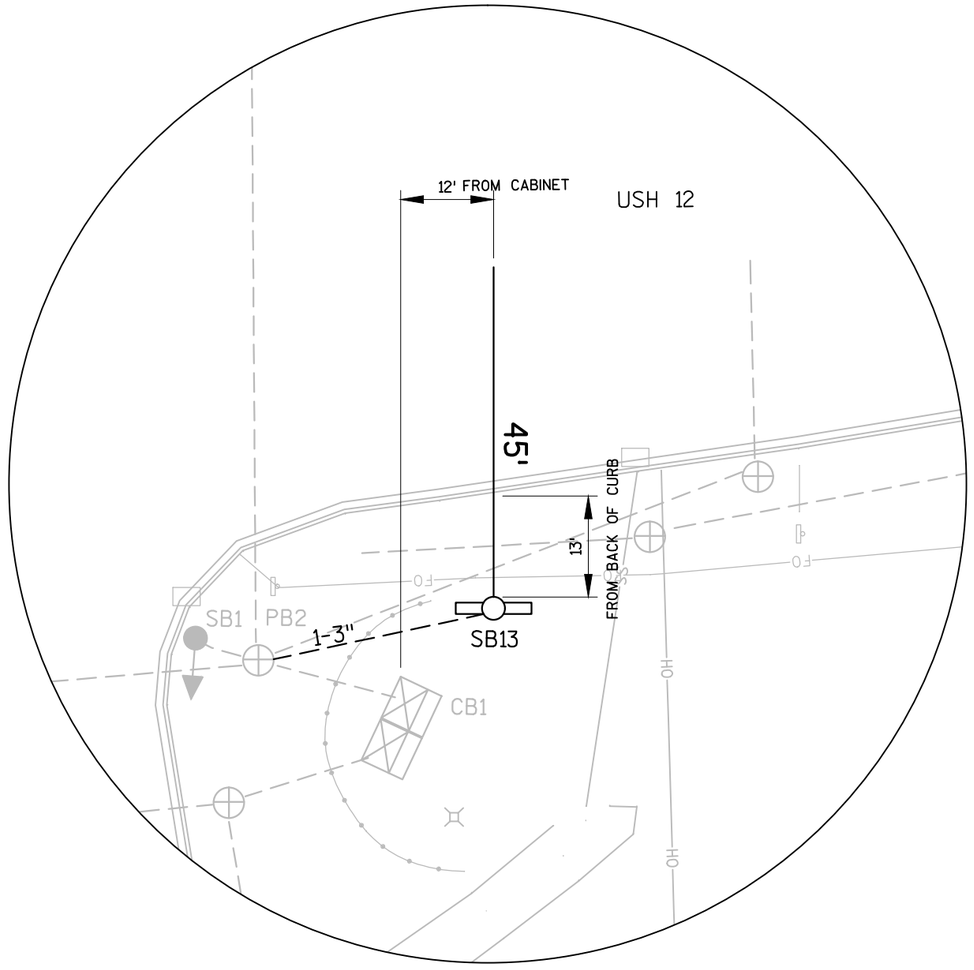
1"=40'

WISDOT/CADDS SHEET 42

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
USH 12 & BUSINESS 53
EAST RAMPS
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0159

DESIGNED BY: TAD, INC.
REVISED BY: AECOM

PAGE: 3 OF 3

PROJECT NO: 1000-08-81	HWY: USH 12 & BUSINESS 53 EAST RAMPS	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\SIGNAL DETAILS\EAU CLAIRE\024023_SP.DWG
LAYOUT NAME - 024023_SP - S 18-0159
PLOT DATE : 1/18/2017 8:17 AM PLOT BY : SALOMONSEN, DEREK PLOT NAME :
WISDOT/CADDS SHEET 42

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & BUSINESS 53 EAST RAMPS

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	15	EXISTING										
SB2	EXISTING	12	EXISTING										
SB3	EXISTING	5	EXISTING										
SB4	EXISTING	8	EXISTING										
SB5	EXISTING	11	EXISTING										
SB6	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		17	RED	ORG	GRN								
SB7	EXISTING	14	EXISTING										
		21	EXISTING										
		PB	EXISTING										
SB8	EXISTING	13	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB9	EXISTING	1	EXISTING										
		10	EXISTING										
SB10	EXISTING	4	EXISTING										
		9	EXISTING										
SB11	EXISTING	-											
SB12	EXISTING	16	EXISTING										
SB13	5	6	RED	ORG	GRN								
		7	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB5	SB6
SB6	SB7
SB12	SB13
SB13	CB1

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB6
PB2	SB13

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB6
B	CB1	SB13

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND BUSINESS 53 EAST RAMPS
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

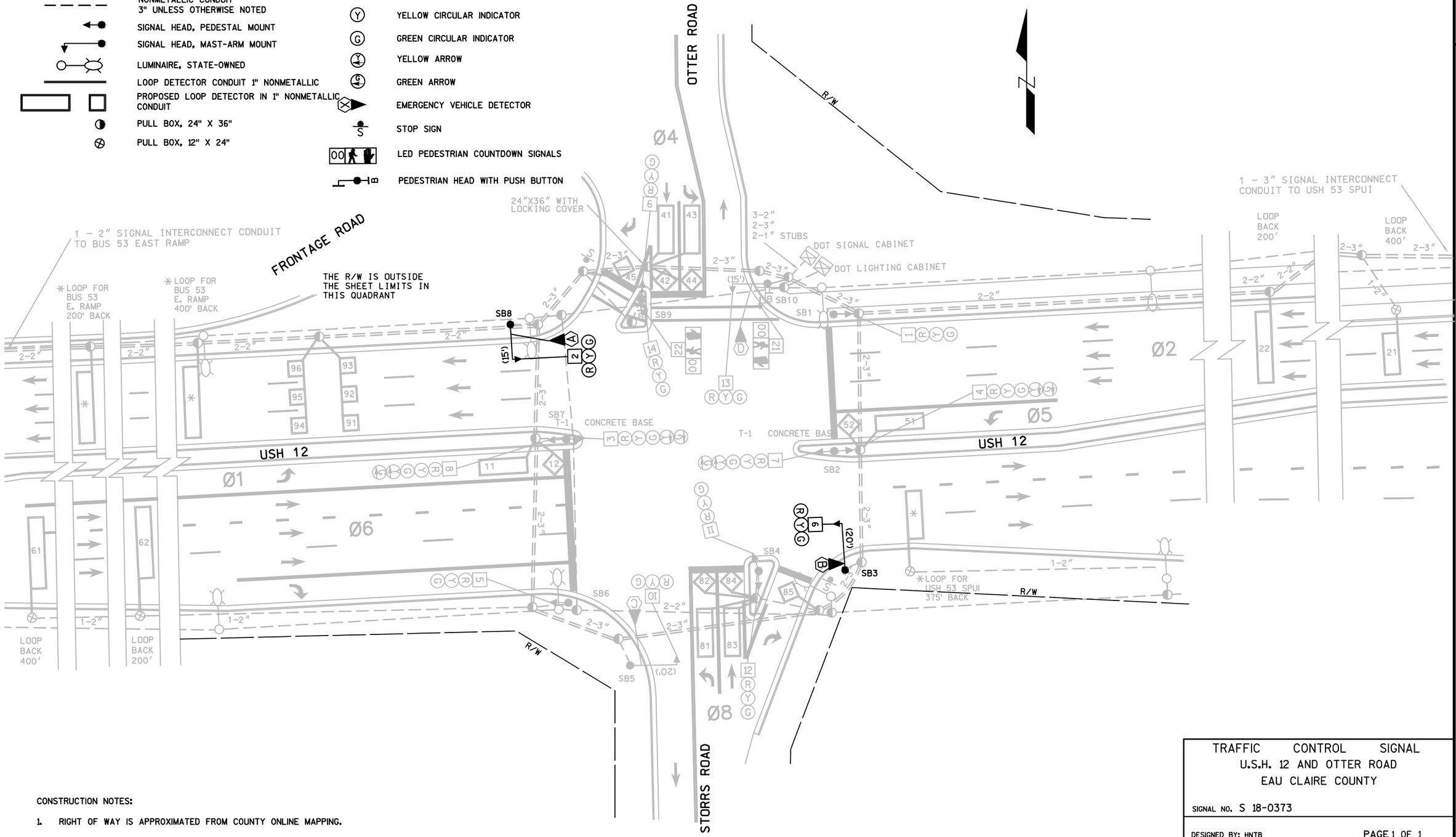
SIGNAL NO: S 18–0159 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 3" UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST-ARM MOUNT
- LUMINAIRE, STATE-OWNED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LED PEDESTRIAN COUNTDOWN SIGNALS
- PEDESTRIAN HEAD WITH PUSH BUTTON



CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND OTTER ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0373

DESIGNED BY: HNTB
REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NUMBER: 1000-08-81	HWY: USH 12 AND OTTER ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Removal Plans\021017_cd.dwg

PLOT DATE : 1/18/2017 8:17 AM

1"=40'

WISDOT/CADDS SHEET 42

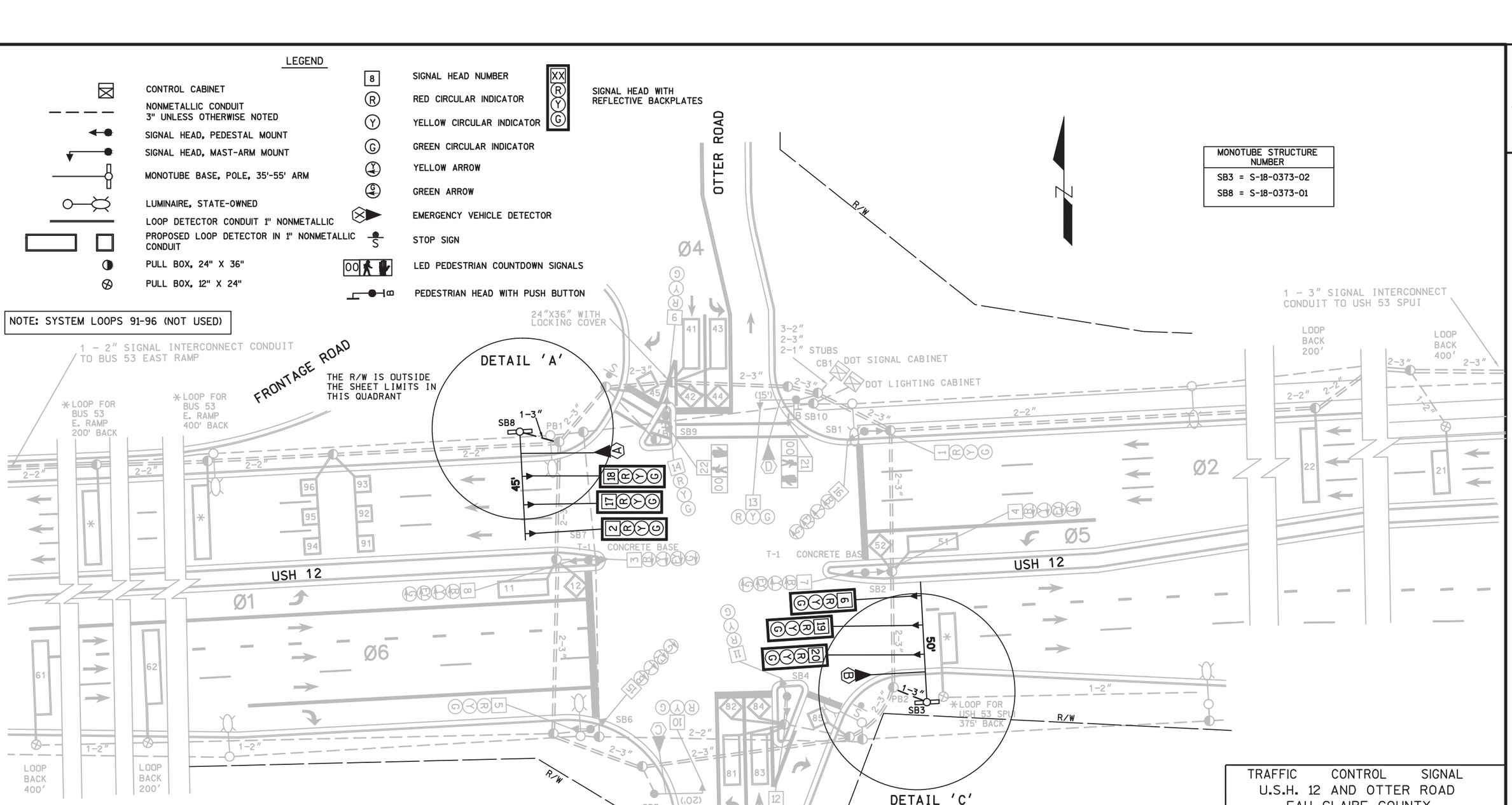
2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 3" UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST-ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, STATE-OWNED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- PROPOSED LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- EMERGENCY VEHICLE DETECTOR
- STOP SIGN
- LED PEDESTRIAN COUNTDOWN SIGNALS
- PEDESTRIAN HEAD WITH PUSH BUTTON
- SIGNAL HEAD WITH REFLECTIVE BACKPLATES

MONOTUBE STRUCTURE NUMBER
SB3 = S-18-0373-02
SB8 = S-18-0373-01

NOTE: SYSTEM LOOPS 91-96 (NOT USED)



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

ADDED PHASE 2 PED HEADS AND WIRING ON 5-20-09.
CHANGED TO FIBER 2070 AND ADDED FIBER MASTER ON 8-24-06.
CHANGED TO EPAC 300 ON 5-13-05.
(APPR. 5-14-09)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
2	2	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB3 AND SB8. CHANGE HEADS 3, 4, 7, AND 8 TO 4-SECTION FYA AND ADD HEADS 15 AND 16 AS FYA. CHANGED CONTROLLER AND MMU ON 8-12-14.	ASC/3 TS2

APPROVALS

REGION Date	REGION By	CENTRAL OFFICE Date	CENTRAL OFFICE By
5-2-17	DLF	5-2-17	JLB

TRAFFIC CONTROL SIGNAL
U.S.H. 12 AND OTTER ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0373

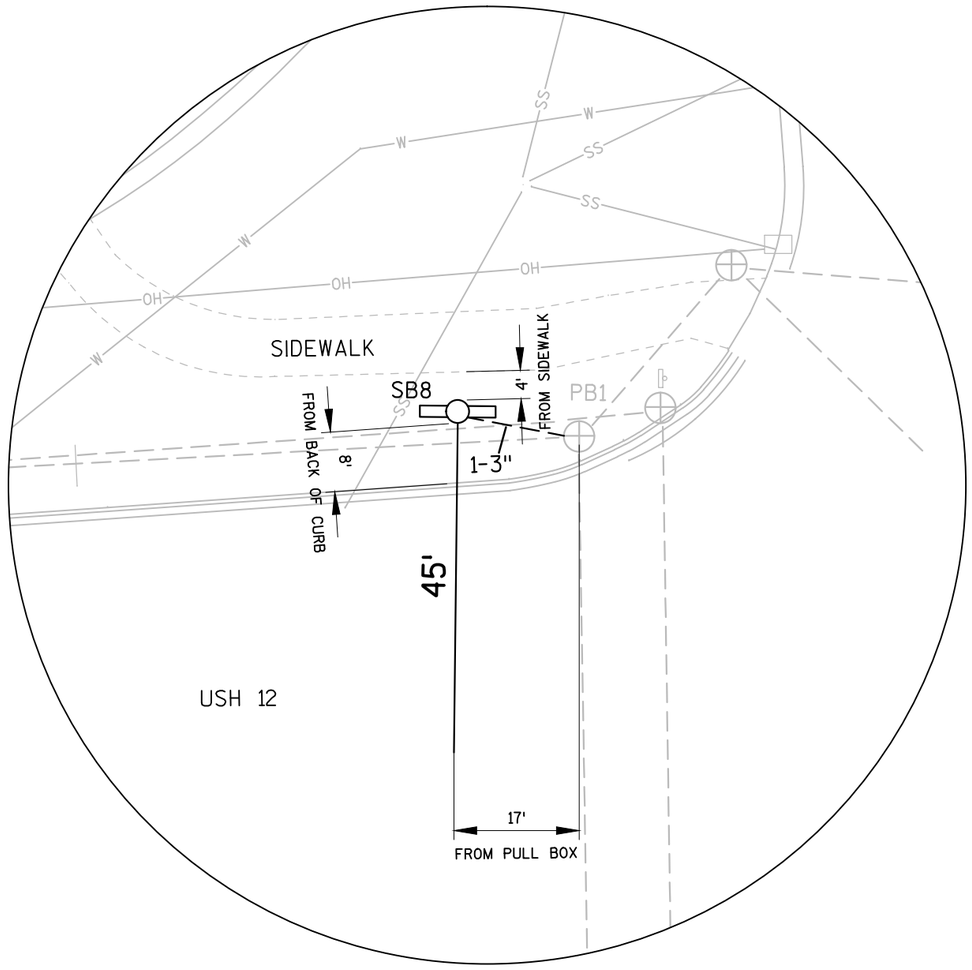
WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-11-05 — GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

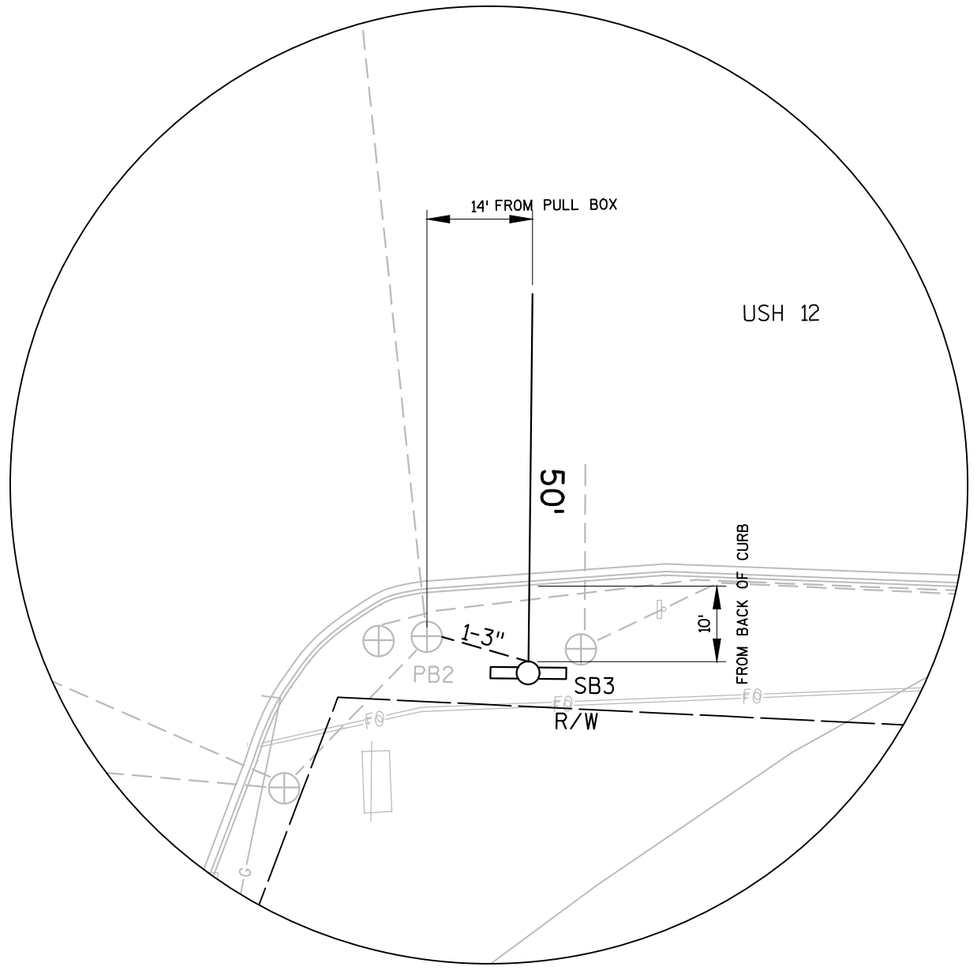
APPROVED
Date 5-16-05 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

DESIGNED BY: HNTB
REVISED BY: AECOM

PROJECT NUMBER: 1000-08-81	HWY: USH 12 AND OTTER ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 131 E



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
USH 12 AND OTTER ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0373

DESIGNED BY: HNTB
REVISED BY: AECOM

PAGE: 2 OF 2

PROJECT NO: 1000-08-81	HWY: USH 12 AND OTTER ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 132	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\SIGNAL DETAILS\EAU CLAIRE\024023_SP.DWG
LAYOUT NAME - 024023_SP - S 18-0373

PLOT DATE : 1/18/2017 8:19 AM PLOT BY : SALOMONSEN, DEREK PLOT NAME :

PROJECT ID:	1000-08-81
INTERSECTION:	USH 12 & OTTER RD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXSTING	1	EXISTING										
		16	EXISTING										
SB2	EXISTING	4	EXISTING										
		7	EXISTING										
SB3	5	6	RED	ORG	GRN								
		19	RED	ORG	GRN								
		20	RED	ORG	GRN								
SB4	EXISTING	11	EXISTING										
		12	EXISTING										
SB5	EXISTING	10	EXISTING										
SB6	EXISTING	5	EXISTING										
		15	EXISTING										
SB7	EXISTING	3	EXISTING										
		8	EXISTING										
SB8	5	2	RED	ORG	GRN								
		17	RED	ORG	GRN								
		18	RED	ORG	GRN								
SB9	EXISTING	99	EXISTING										
		14	EXISTING										
		22	EXISTING										
		PB	EXISTING										
SB10	EXISTING	13	EXISTING										
		21	EXISTING										
		PB	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB7	SB8
SB8	SB9
SB2	SB3
SB3	SB4

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB8
PB2	SB3

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB8
B	CB1	SB3

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

U.S.H. 12 AND OTTER RD
EAU CLAIRE COUNTY

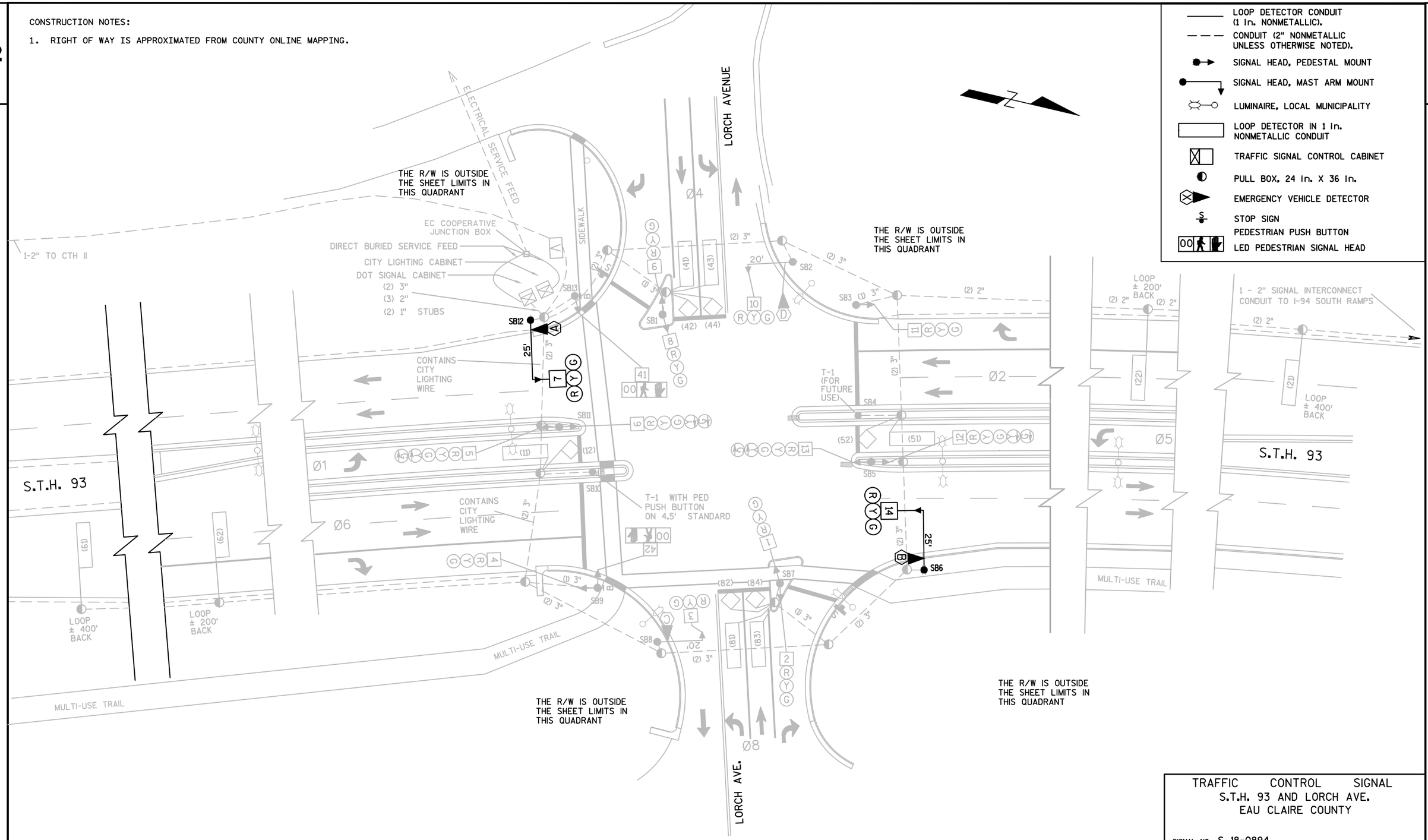
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0373 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.



TRAFFIC CONTROL SIGNAL
S.T.H. 93 AND LORCH AVE.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0894

DESIGNED BY: OWEN AYRES AND ASSOCIATES PAGE 1 OF 1
REVISED BY: AECOM

PROJECT NUMBER: 1000-08-81	HWY: STH 93 & LORCH AVENUE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE: 0 20 40 1"=40'	SHEET: E

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Removal Plans\021018_cd.dwg

PLOT DATE : 1/18/2017 8:19 AM

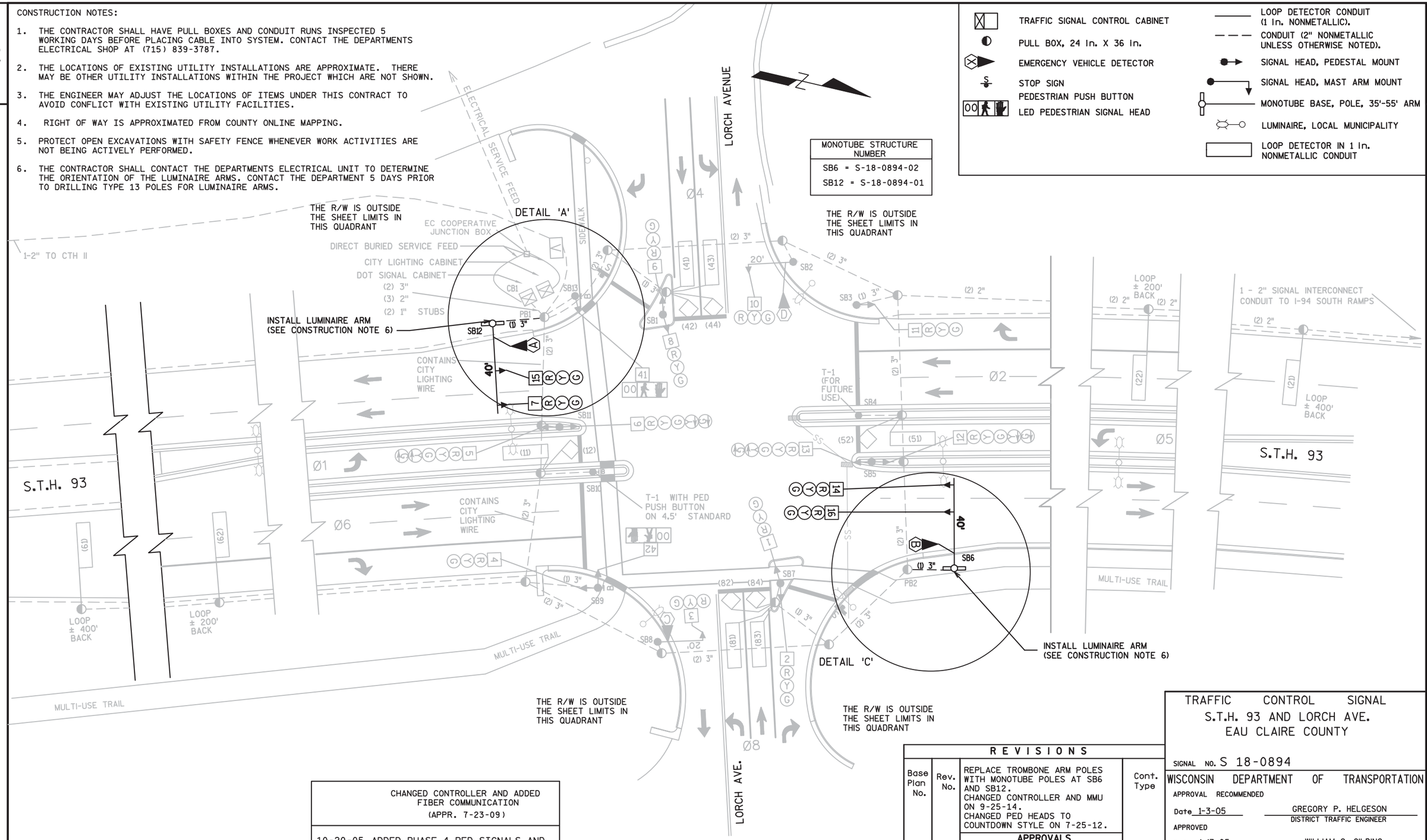
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.
6. THE CONTRACTOR SHALL CONTACT THE DEPARTMENTS ELECTRICAL UNIT TO DETERMINE THE ORIENTATION OF THE LUMINAIRE ARMS. CONTACT THE DEPARTMENT 5 DAYS PRIOR TO DRILLING TYPE 13 POLES FOR LUMINAIRE ARMS.

TRAFFIC SIGNAL CONTROL CABINET
PULL BOX, 24 In. X 36 In.
EMERGENCY VEHICLE DETECTOR
STOP SIGN
PEDESTRIAN PUSH BUTTON
LED PEDESTRIAN SIGNAL HEAD
LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
CONDUIT (2" NONMETALLIC UNLESS OTHERWISE NOTED).
SIGNAL HEAD, PEDESTAL MOUNT
SIGNAL HEAD, MAST ARM MOUNT
MONOTUBE BASE, POLE, 35'-55' ARM
LUMINAIRE, LOCAL MUNICIPALITY
LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT

MONOTUBE STRUCTURE NUMBER
SB6 = S-18-0894-02
SB12 = S-18-0894-01



CHANGED CONTROLLER AND ADDED FIBER COMMUNICATION (APPR. 7-23-09)
10-20-05 ADDED PHASE 4 PED SIGNALS AND WIRED CABINET FOR (FUTURE) PHASE 6 PED. (APPR. 10-18-05)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
1	3	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB6 AND SB12. CHANGED CONTROLLER AND MMU ON 9-25-14. CHANGED PED HEADS TO COUNTDOWN STYLE ON 7-25-12.	ASC/3 TS1

APPROVALS

REGION Date	REGION By	CENTRAL OFFICE Date	CENTRAL OFFICE By
5-2-17	DLF	5-2-17	JLB

TRAFFIC CONTROL SIGNAL
S.T.H. 93 AND LORCH AVE.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0894

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 1-3-05 — GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

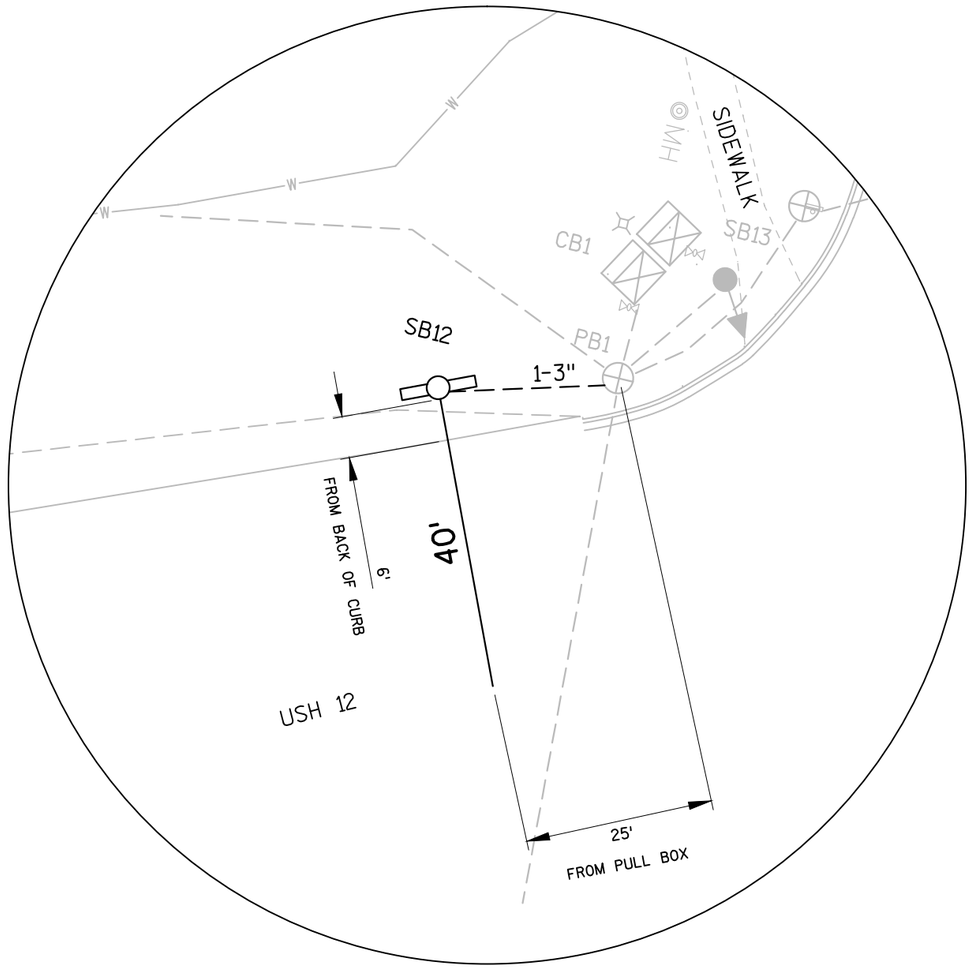
APPROVED
Date 1-13-05 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

DESIGNED BY: OWEN AYRES AND ASSOCIATES
REVISED BY: AECOM

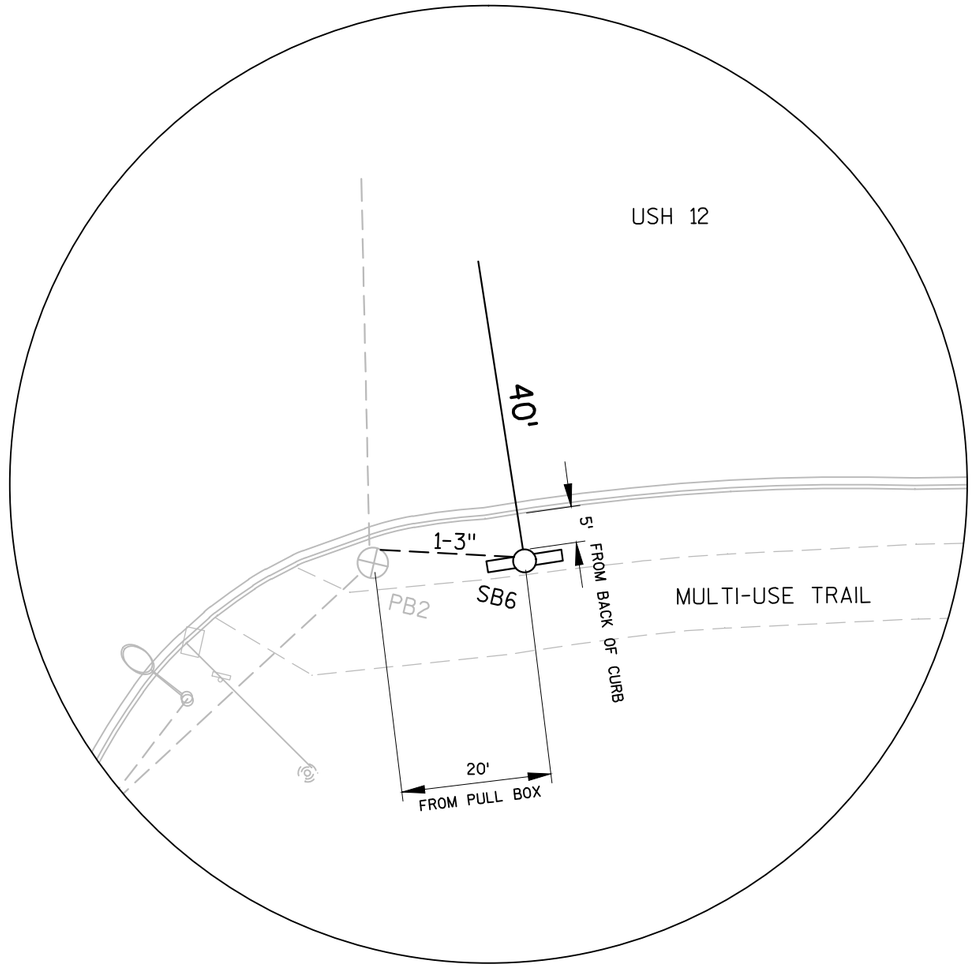
PAGE: 1 OF 2

PROJECT NUMBER: 1000-08-81	HWY: STH 93 & LORCH AVENUE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE: 0 20 40 1"=40'	SHEET: E

FILE NAME : P:\60483055\900_Work\910_CAD\05-MODELS\Group C\024018_sp.dwg
PLOT DATE : 1/18/2017 8:58 AM
WISDOT/CADDS SHEET 42



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
S.T.H. 93 & LORCH AVE.
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0894

DESIGNED BY: OWEN AYRES AND ASSOCIATES PAGE: 2 OF 2
REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: STH 93 & LORCH AVENUE	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 136	E

PROJECT ID:	1000-08-81
INTERSECTION:	STH 93 & LORCH AVE

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	8	EXISTING										
		9	EXISTING										
SB2	EXISTING	10	EXISTING										
SB3	EXISTING	11	EXISTING										
SB5	EXISTING	12	EXISTING										
		13	EXISTING										
SB6	5	14	RED	ORG	GRN								
		16	RED	ORG	GRN								
SB7	EXISTING	1	EXISTING										
		2	EXISTING										
SB8	EXISTING	3	EXISTING										
SB9	EXISTING	4	EXISTING										
		42	EXISTING										
		PB	EXISTING										
SB10	EXISTING	PB	EXISTING										
SB11	EXISTING	5	EXISTING										
		6	EXISTING										
SB12	5	7	RED	ORG	GRN								
		15	RED	ORG	GRN								
SB13	EXISTING	41	EXISTING										
		PB	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB11	SB12
SB12	SB13
SB5	SB6
SB6	SB7

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB12
PB2	SB6

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB12
B	CB1	SB6

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

S.T.H. 93 AND LORCH AVE
EAU CLAIRE COUNTY

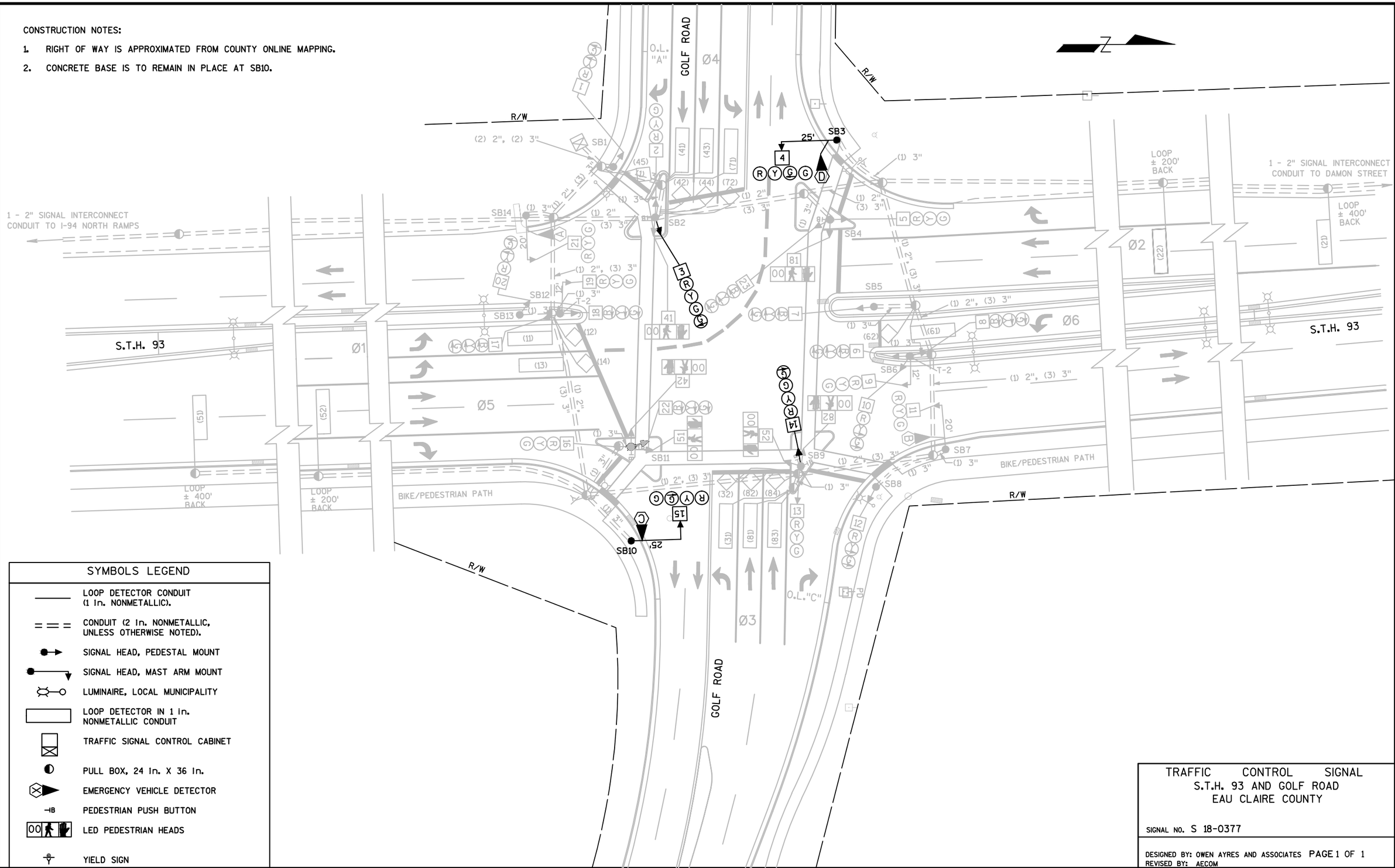
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0894 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE IS TO REMAIN IN PLACE AT SB10.



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- LUMINAIRE, LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- EMERGENCY VEHICLE DETECTOR
- PEDESTRIAN PUSH BUTTON
- LED PEDESTRIAN HEADS
- YIELD SIGN

TRAFFIC CONTROL SIGNAL
S.T.H. 93 AND GOLF ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0377

DESIGNED BY: OWEN AYRES AND ASSOCIATES PAGE 1 OF 1
REVISED BY: AECOM

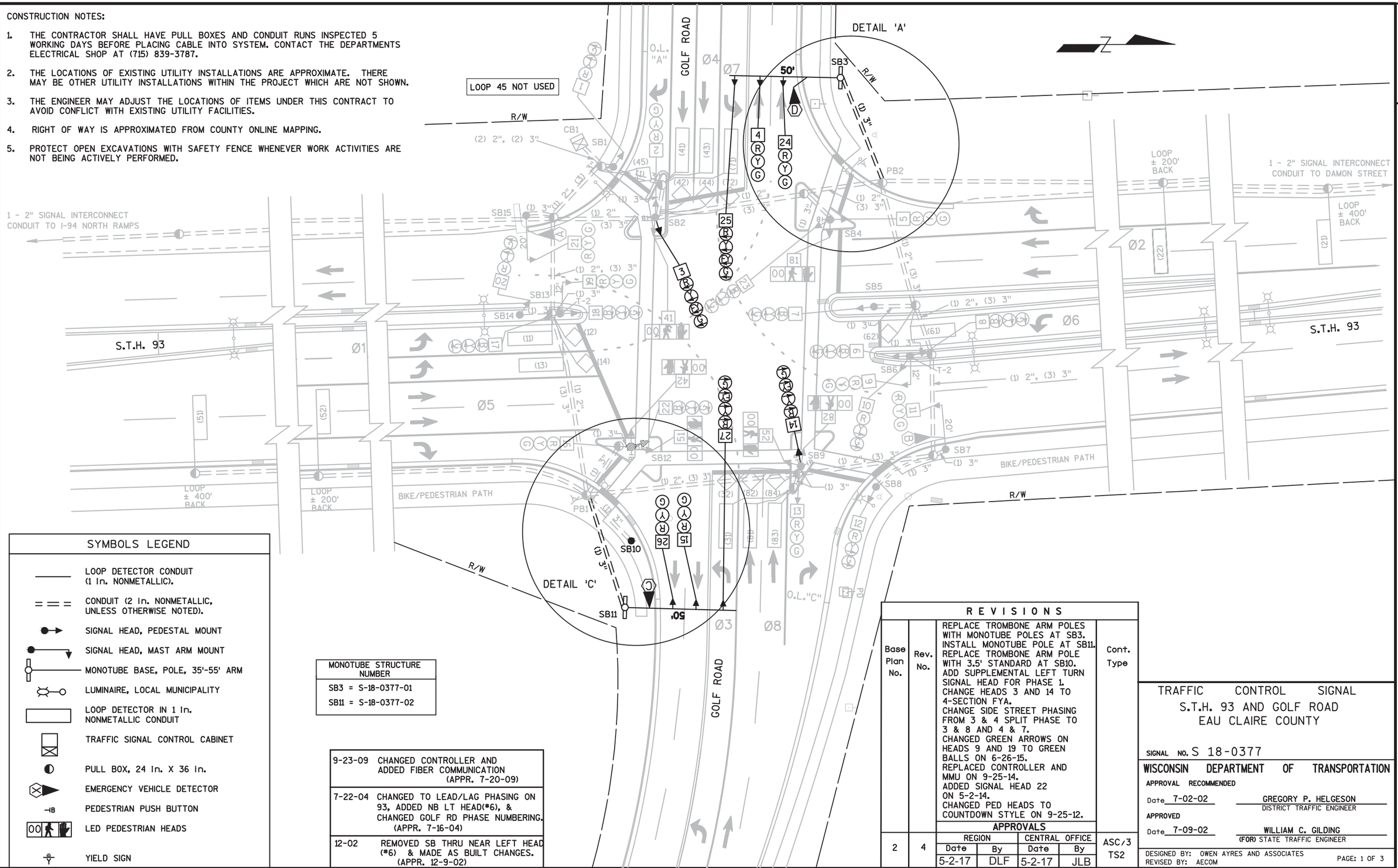
PROJECT NUMBER: 3700-50-27	HWY: S.T.H. 93 & GOLF ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: E

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Removal Plans\021019_cd.dwg
PLOT DATE : 1/18/2017 8:21 AM
1"=40'
WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.



SYMBOLS LEGEND

- LOOP DETECTOR CONDUIT (1 In. NONMETALLIC).
- CONDUIT (2 In. NONMETALLIC, UNLESS OTHERWISE NOTED).
- SIGNAL HEAD, PEDESTAL MOUNT
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1 In. NONMETALLIC CONDUIT
- TRAFFIC SIGNAL CONTROL CABINET
- PULL BOX, 24 In. X 36 In.
- EMERGENCY VEHICLE DETECTOR
- PEDESTRIAN PUSH BUTTON
- LED PEDESTRIAN HEADS
- YIELD SIGN

MONOTUBE STRUCTURE NUMBER
SB3 = S-18-0377-01
SB11 = S-18-0377-02

9-23-09	CHANGED CONTROLLER AND ADDED FIBER COMMUNICATION (APPR. 7-20-09)
7-22-04	CHANGED TO LEAD/LAG PHASING ON 93, ADDED NB LT HEAD(*6), & CHANGED GOLF RD PHASE NUMBERING. (APPR. 7-16-04)
12-02	REMOVED SB THRU NEAR LEFT HEAD (*6) & MADE AS BUILT CHANGES. (APPR. 12-9-02)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
2	4	REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB3. INSTALL MONOTUBE POLE AT SB11. REPLACE TROMBONE ARM POLE WITH 3.5' STANDARD AT SB10. ADD SUPPLEMENTAL LEFT TURN SIGNAL HEAD FOR PHASE 1. CHANGE HEADS 3 AND 14 TO 4-SECTION FYA. CHANGE SIDE STREET PHASING FROM 3 & 4 SPLIT PHASE TO 3 & 8 AND 4 & 7. CHANGED GREEN ARROWS ON HEADS 9 AND 19 TO GREEN BALLS ON 6-26-15. REPLACED CONTROLLER AND MMU ON 9-25-14. ADDED SIGNAL HEAD 22 ON 5-2-14. CHANGED PED HEADS TO COUNTDOWN STYLE ON 9-25-12.	ASC/3 TS2

APPROVALS

REGION Date	REGION By	CENTRAL OFFICE Date	CENTRAL OFFICE By
5-2-17	DLF	5-2-17	JLB

TRAFFIC CONTROL SIGNAL
S.T.H. 93 AND GOLF ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0377

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 7-02-02 — GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

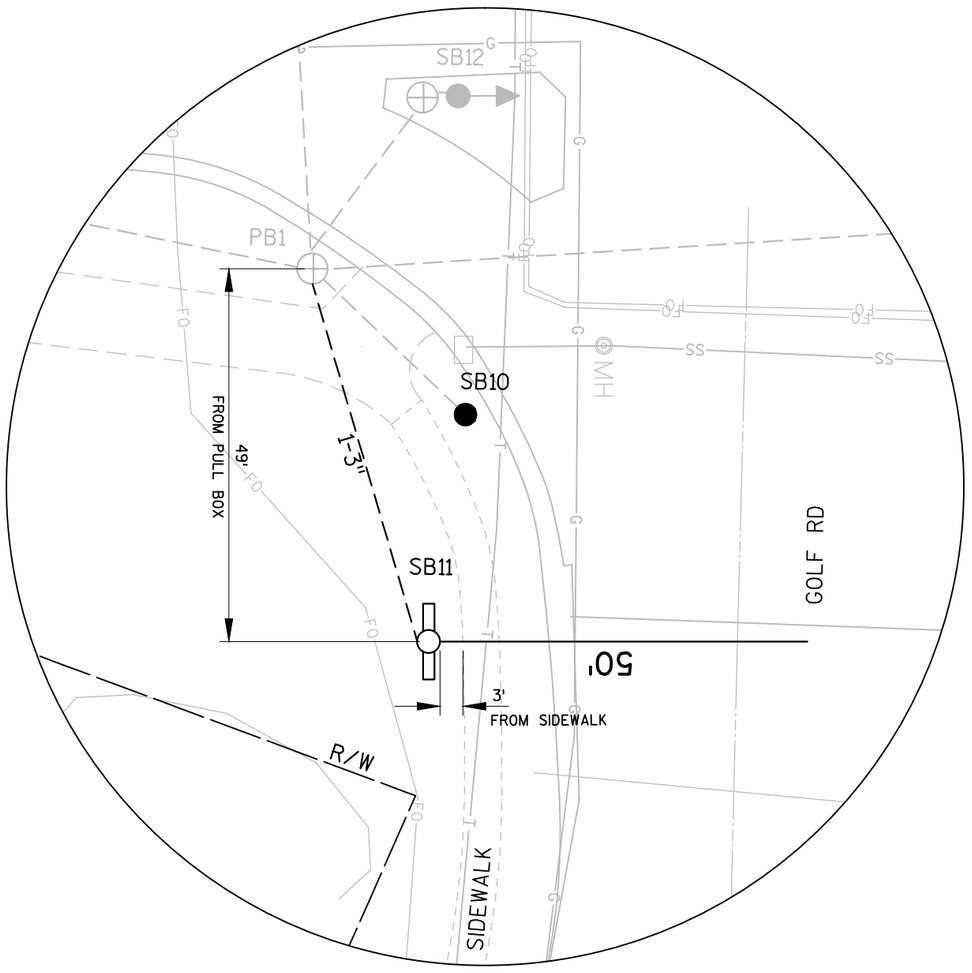
APPROVED
Date 7-09-02 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

DESIGNED BY: OWEN AYRES AND ASSOCIATES
REVISED BY: AECOM
PAGE: 1 OF 3

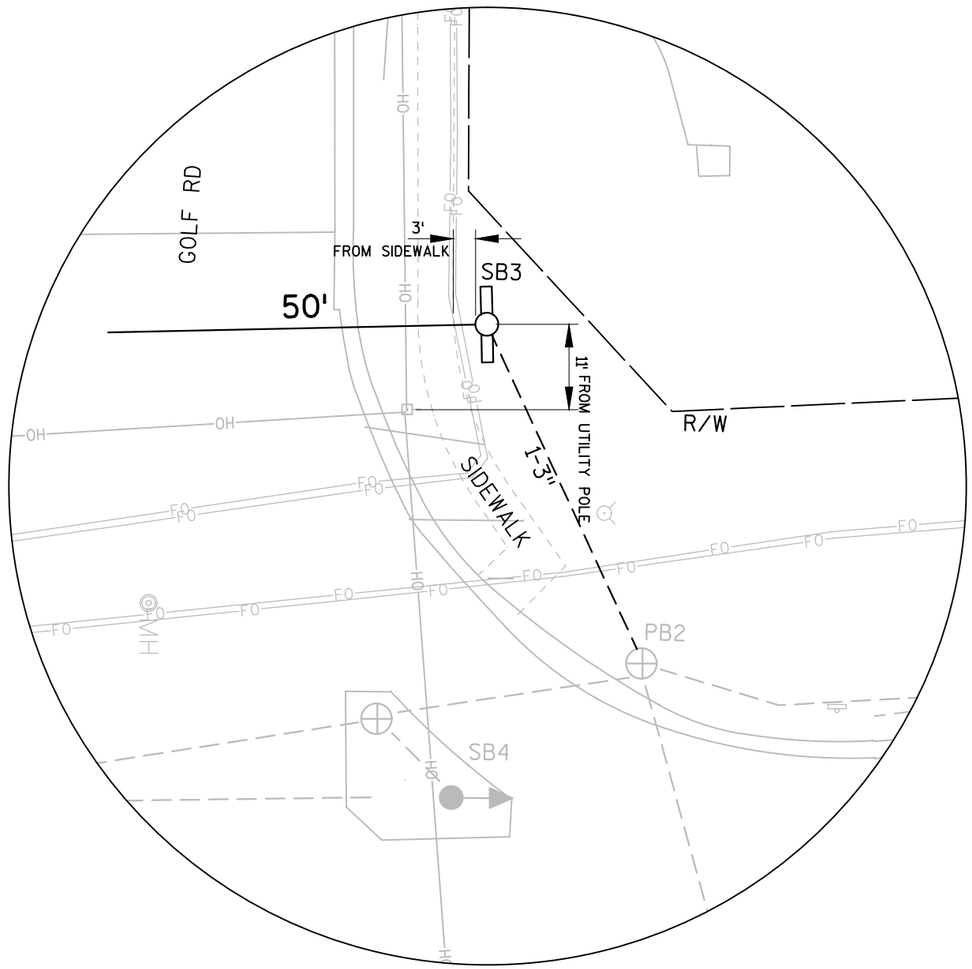
PROJECT NUMBER: 3700-50-27	HWY: S.T.H. 93 & GOLF ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 139 E

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\024019_sp.dwg
PLOT DATE : 1/18/2017 8:21 AM
1"=40'
WISDOT/CADDS SHEET 42

2



DETAIL 'C'



DETAIL 'A'

TRAFFIC CONTROL SIGNAL
S.T.H. 93 & GOLF ROAD
EAU CLAIRE COUNTY

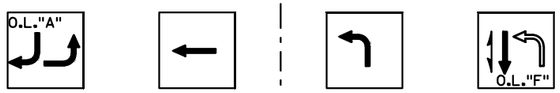
SIGNAL NO. S 18-0377

DESIGNED BY: OWEN AYRES AND ASSOCIATES PAGE: 2 OF 3
REVISED BY: AECOM

PROJECT NO: 3700-50-27	HWY: S.T.H. 93 & GOLF ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 140	E

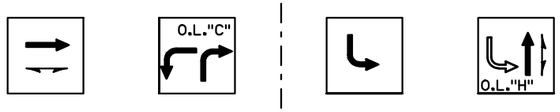
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LAYOUT NAME - 024023_SP - S 18-0377
PLOT DATE : 1/18/2017 8:23 AM PLOT BY : SALOMONSEN, DEREK PLOT NAME :

SEQUENCE OF OPERATION



RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 **	Ø1 CLEAR TO	Ø2 R/W	Ø2 **	Ø2 CLEAR TO	Ø3 R/W	Ø3 **	Ø3 CLEAR TO	Ø4 R/W	Ø4 **	Ø4 CLEAR TO	FLASH
Ø1	6,7,17,23	G	Y R		R	R R		R	R R		R	R R		R
Ø2	5,19,21	R	R R		G	Y R		R	R R		R	R R		R
Ø3	3,25	R	R R		R	R R		G	Y R		R	R R		R
Ø4	2,15,26	R	R R		R	R R		R	R R		G	Y R		R
Ø5	9,11,16	R	R R		R	R R		R	R R		R	R R		R
Ø6	8,18,22	R	R R		R	R R		R	R R		R	R R		R
Ø7	14,27	R	R R		R	R R		R	R R		R	R R		R
Ø8	13,4,24	R	R R		R	R R		R	R R		R	R R		R
OL"A"	1,20	G	Y R		R	R R		R	R R		R	R R		R
OL"C"	10,12	R	R R		R	R R		R	R R		R	R R		R
OL"F"	3,25	-	- -		-	- -		-	- -		FY	Y R		-
OL"H"	14,27	-	- -		-	- -		-	- -		-	- -		-
Ø4P	41,42	D	D D		D	D D		D	D D		*	D D		
Ø5P	51,52	D	D D		D	D D		D	D D		D	D D		
Ø8P	81,82	D	D D		D	D D		D	D D		D	D D		



RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 **	Ø5 CLEAR TO	Ø6 R/W	Ø6 **	Ø6 CLEAR TO	Ø7 R/W	Ø7 **	Ø7 CLEAR TO	Ø8 R/W	Ø8 **	Ø8 CLEAR TO
Ø1	6,7,17,23	R	R R		R	R R		R	R R		R	R R	
Ø2	5,19,21	R	R R		R	R R		R	R R		R	R R	
Ø3	3,25	R	R R		R	R R		R	R R		R	R R	
Ø4	2,15,26	R	R R		R	R R		R	R R		R	R R	
Ø5	9,11,16	G	Y R		R	R R		R	R R		R	R R	
Ø6	8,18,22	R	R R		G	Y R		R	R R		R	R R	
Ø7	14,27	R	R R		R	R R		G	Y R		R	R R	
Ø8	13,4,24												
OL"A"	1,20	R	R R		R	R R		R	R R		R	R R	
OL"C"	10,12	R	R R		G	Y R		R	R R		R	R R	
OL"F"	3,25	-	- -		-	- -		-	- -		-	- -	
OL"H"	14,27	-	- -		-	- -		-	- -		FY	Y R	
Ø4P	41,42	D	D D		D	D D		D	D D		D	D D	
Ø5P	51,52	*	D D		D	D D		D	D D		D	D D	
Ø8P	81,82	D	D D		D	D D		D	D D		*	D D	

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY "WALK", THEN FLASHING "DON'T WALK" WITH PED COUNTDOWN TIMER, THEN ACTIVATED STEADY "DON'T WALK."

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	O.L."A" & (5 OR (6 & O.L."C"))	2,3,4,7,8
2	5 OR (6 & O.L."C")	1,3,4,O.L."A",7,8
3	7 OR 8	1,2,4,5,6,O.L."A",O.L."C"
4	7 OR 8	1,2,3,5,6,O.L."A",O.L."C"
5	(1 & O.L."A") OR 2	3,4,6,7,8,O.L."C"
6	O.L."C" & ((1 & O.L."A") OR 2)	3,4,5,7,8
7	3 OR 4	1,2,5,6,8,O.L."A",O.L."C"
8	3 OR 4	1,2,5,6,7,O.L."A",O.L."C"

DETECTOR LOGIC

LOOP NUMBER	DETECTOR NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	LOOP SIZE	NUMBER OF TURNS
11	1	X			1	1				6'x20'	4
12	2	X			1	1				6'x6'	3
13	3	X			1	1				6'x20'	3
14	4	X			1	1				6'x6'	4
21	5	X			2	2				6'x20'	4
22	6	X			2	2				6'x20'	3
31	7	X			3	3				6'x20'	3
32	8	X			3	3				6'x6'	4
41	13	X			4	4				6'x20'	3
42	14	X			4	4				6'x6'	4
43	15	X			4	4				6'x20'	4
44	16	X			4	4				6'x6'	3
*45										6'x6'	3
51	19	X			5	5				6'x20'	4
52	20	X			5	5				6'x20'	3
61	21	X			6	6				6'x20'	3
62	22	X			6	6				6'x6'	4
71	17	X			7	7				6'x20'	3
72	18	X			7	7				6'x6'	4
81	9	X			8	8				6'x20'	4
82	10	X			8	8				6'x6'	3
83	11	X			8	8				6'x20'	3
84	12	X			8	8				6'x6'	4

* WIRED IN CABINET FOR FUTURE USE.

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
O.L. "E" =		
O.L. "F" =	3	4
O.L. "G" =		
O.L. "H" =	7	8

OVERLAPS

O.L. "A" = Ø1
O.L. "B" =
O.L. "C" = Ø6
O.L. "D" =

EMERGENCY VEHICLE PREEMPTION ASSIGNMENT

EMERGENCY VEHICLE DETECTOR	A	B	C	D
PREEMPTION CHANNEL	3	4	5	6
MOVEMENT				
DIRECTION	SB	NB	EB	WB
PHASES	2+6	1+5	4+7+OLA	3+8+OLC

NOTES:
FULL CLEARANCE AND MINIMUM GREEN INTERVALS SHALL ALWAYS BE PROVIDED.

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. WHEN PHASES 4 AND 8 ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN.

CONTROLLER LOGIC

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

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
CLOSED LOOP TWISTED PAIR	
FIBER OPTIC NETWORK	X
INTERSECTION ONLY (CELL MODEM)*	
*LOCATION OF CELL MODEM	
CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS-18-0141	

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

TYPE OF DOT LIGHTING	
NONE	X
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE CONTROL CABINET	

CONTROLLER TYPE: ASC/3 TS2

REVISION:

REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB3 AND SB10.
ADD SUPPLEMENTAL LEFT TURN SIGNAL HEAD FOR PHASE 1.
CHANGE SIDE STREET PHASING FROM 3 & 4 SPLIT PHASE TO 3 & 8 AND 4 & 7.
CHANGED GREEN ARROWS ON HEADS 9 AND 19 TO GREEN BALLS ON 6-26-15.
REPLACED CONTROLLER AND MMU ON 9-25-14.
ADDED SIGNAL HEAD 22 ON 5-2-14.
CHANGED PED HEADS TO COUNTDOWN STYLE ON 9-25-12.

REVISION DATE: FEB. 2017 PAGE: 3 OF 3

2

PROJECT ID:	3700-50-27
INTERSECTION:	STH 93 & GOLF RD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK	PED BUTTON	OTHER
SB1	EXISTING	1	EXISTING										
SB2	EXISTING	2	EXISTING										
		3	EXISTING										
		41	EXISTING										
		PB	EXISTING										
SB3	12	4	RED	ORG	GRN								
		24	RED	ORG	GRN								
		25				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
SB4	EXISTING	5	EXISTING										
		23	EXISTING										
		81	EXISTING										
		PB	EXISTING										
SB5	EXISTING	7	EXISTING										
SB6	EXISTING	6	EXISTING										
		8	EXISTING										
		9	EXISTING										
		10	EXISTING										
SB7	EXISTING	11	EXISTING										
SB8	EXISTING	12	EXISTING										
SB9	EXISTING	13	EXISTING										
		14	EXISTING										
		52	EXISTING										
		82	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB10	EXISTING	-											
SB11	12	15	RED	ORG	GRN								
		26	RED	ORG	GRN								
		27				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
SB12	EXISTING	16	EXISTING										
		22	EXISTING										
		42	EXISTING										
		51	EXISTING										
		PB	EXISTING										
		PB	EXISTING										
SB13	EXISTING	17	EXISTING										
		18	EXISTING										
		19	EXISTING										
SB14	EXISTING	20	EXISTING										
SB15	EXISTING	21	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB10	SB11
SB11	SB12
SB2	SB3
SB3	SB4

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB11
PB2	SB3

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
C	CB1	SB11
D	CB1	SB3

NOTES:

1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

S.T.H. 93 AND GOLF RD
EAU CLAIRE COUNTY

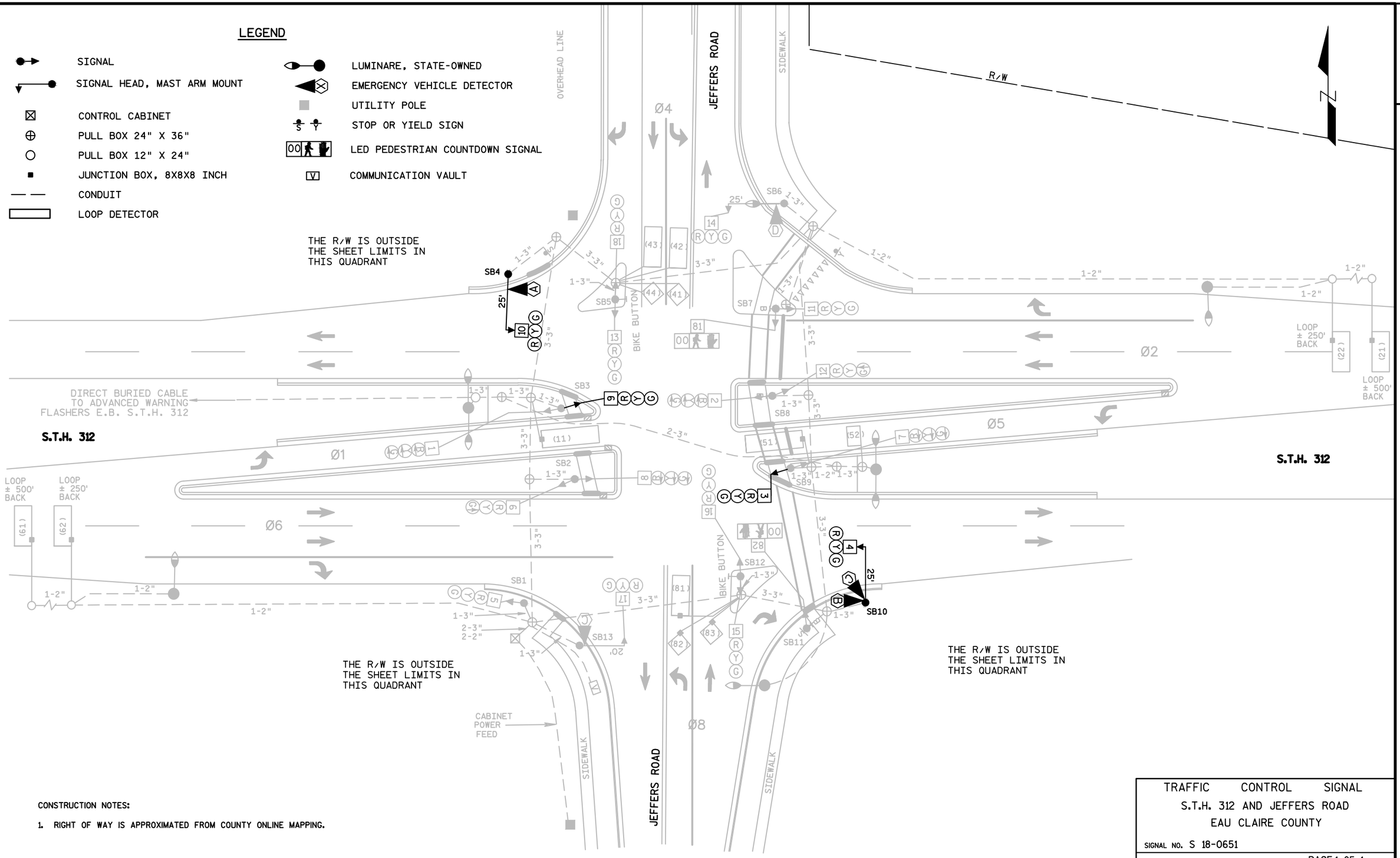
CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0377 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

LEGEND

- SIGNAL
- SIGNAL HEAD, MAST ARM MOUNT
- CONTROL CABINET
- PULL BOX 24" X 36"
- PULL BOX 12" X 24"
- JUNCTION BOX, 8X8X8 INCH
- CONDUIT
- LOOP DETECTOR
- LUMINARE, STATE-OWNED
- EMERGENCY VEHICLE DETECTOR
- UTILITY POLE
- STOP OR YIELD SIGN
- LED PEDESTRIAN COUNTDOWN SIGNAL
- COMMUNICATION VAULT



CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.

TRAFFIC CONTROL SIGNAL
S.T.H. 312 AND JEFFERS ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0651

REVISED BY: AECOM

PAGE 1 OF 1

PROJECT NUMBER: 1000-08-81	HWY: STH 312 AND JEFFERS ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 143

FILE NAME :P:\60483055\900_Work\910_CAD\05-MODELS\Group C\Removal Plans\021020_cd.dwg

PLOT DATE : 1/18/2017 8:23 AM

1"=40'

WISDOT/CADDS SHEET 42

LEGEND

- SIGNAL
- MONOTUBE BASE, POLE, 35'-55' ARM
- SIGNAL HEAD, MAST ARM MOUNT
- CONTROL CABINET
- PULL BOX 24" X 36"
- PULL BOX 12" X 24"
- JUNCTION BOX, 8X8X8 INCH
- CONDUIT
- LOOP DETECTOR
- LUMINARE, STATE-OWNED
- EMERGENCY VEHICLE DETECTOR
- UTILITY POLE
- STOP OR YIELD SIGN
- LED PEDESTRIAN COUNTDOWN SIGNAL
- COMMUNICATION VAULT

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

DETAIL 'A'

DETAIL 'C'

MONOTUBE STRUCTURE NUMBER
SB4 = S-18-0651-01
SB10 = S-18-0651-02

OVERHEAD LINE
JEFFERS ROAD
SIDEWALK
R/W
BIKE BUTTON
Ø1 Ø2 Ø4 Ø5 Ø6 Ø8
SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB12 SB13
PB1 PB2 CB1
DIRECT BURIED CABLE TO ADVANCED WARNING FLASHERS E.B. S.T.H. 312
S.T.H. 312
LOOP ± 500' BACK
LOOP ± 250' BACK
CABINET POWER FEED

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

WIRED PHASE 4 & 8 BIKE BUTTONS AND PH 8 PED HEADS WITH NE QUADRANT RECONSTRUCTION ON 10-26-07.
ADDED PH 8 PED WIRING ON 5-25-07. CHANGED TO ALL RED FLASH, ADDED FIBER COMM AND CHANGED NUMBERING OF SIDE STREET PHASING ON 2-22-07. CHANGED CONTROLLER ON 12-14-06 AND ADDED EMERGENCY VEHICLE DETECTION 10-6-00. (APPR. 9-4-07)

11-19-97 CONSTRUCTION AS-BUILT. MINOR LOCATION REVISIONS.

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
		REPLACE TROMBONE ARM POLES WITH MONOTUBE POLES AT SB4 AND SB10. CHANGED MMU ON 2-2-15. REPLACED CONTROLLER ON 2-7-14. CHANGED PED HEADS TO COUNTDOWN STYLE ON 7-19-12.	
		APPROVALS	
		REGION: Date 5-2-17, By DLF; CENTRAL OFFICE: Date 5-2-17, By JLB	
1	3		ASC/3 TS2

TRAFFIC CONTROL SIGNAL
S.T.H. 312 AND JEFFERS ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0651

WISCONSIN DEPARTMENT OF TRANSPORTATION

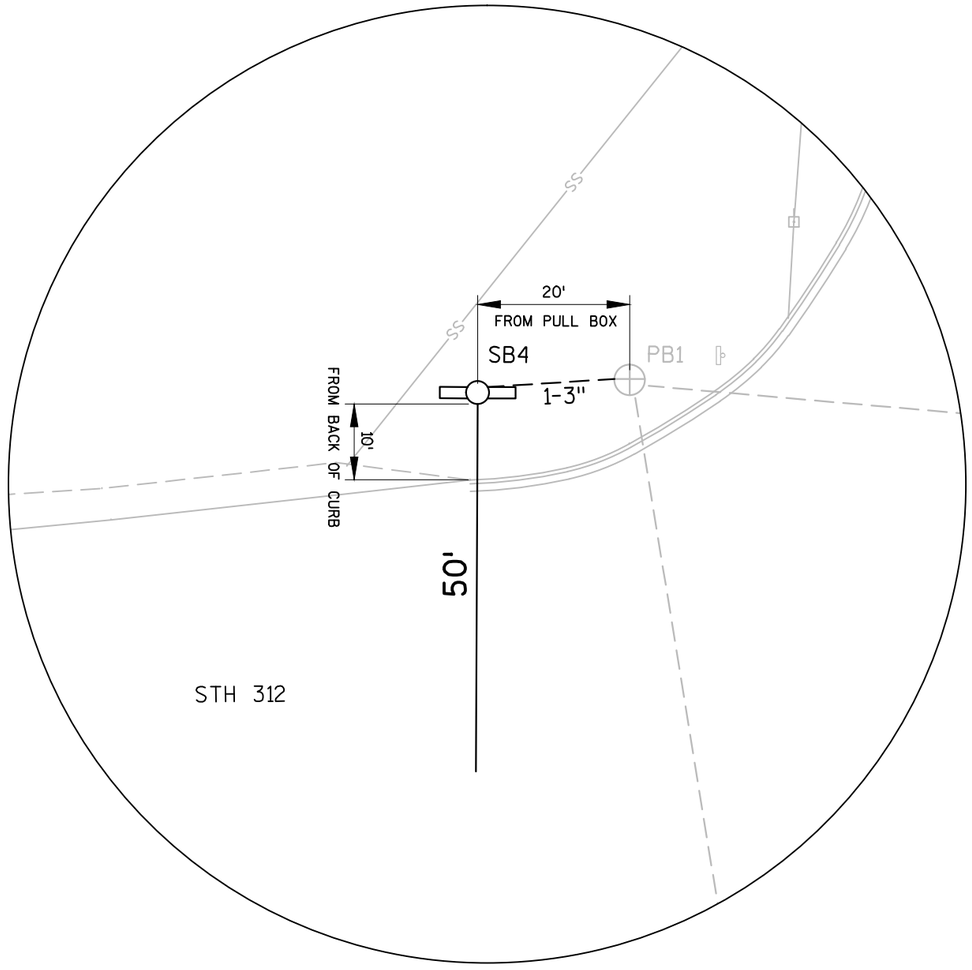
APPROVAL RECOMMENDED
Date 8-26-96 — WILLARD JOCHIMSEN, DISTRICT CHIEF TRAFFIC ENGINEER

APPROVED
Date 9-3-96 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

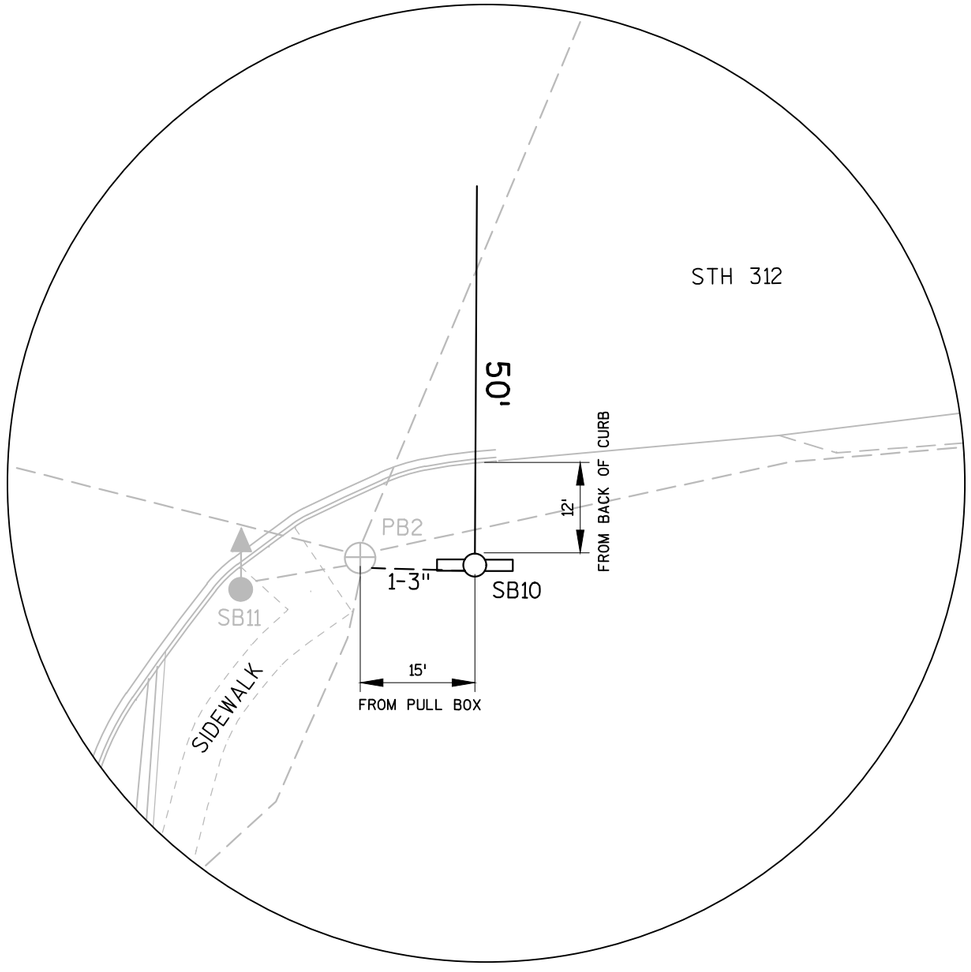
REVISED BY: AECOM

PROJECT NUMBER: 1000-08-81	HWY: STH 312 AND JEFFERS ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 144 E

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
S.T.H. 312 & JEFFERS ROAD
EAU CLAIRE COUNTY

SIGNAL NO. S 18-0651

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: STH 312 AND JEFFERS ROAD	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 145	E

PROJECT ID:	1000-08-81
INTERSECTION:	STH 312 & JEFFERS RD

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

DATE: May-17

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	5	EXISTING										
SB2	EXISTING	6	EXISTING										
		8	EXISTING										
SB3	EXISTING	1	EXISTING										
SB4	5	9	RED	ORG	GRN								
		10	RED	ORG	GRN								
SB5	EXISTING	13	EXISTING										
		18	EXISTING										
		PB	EXISTING										
SB6	EXISTING	14	EXISTING										
SB7	EXISTING	11	EXISTING										
		81	EXISTING										
		PB	EXISTING										
SB8	EXISTING	2	EXISTING										
		12	EXISTING										
		PB	EXISTING										
SB9	EXISTING	7	EXISTING										
SB10	5	3	RED	ORG	GRN								
		4	RED	ORG	GRN								
SB11	EXISTING	82	EXISTING										
		PB	EXISTING										
SB12	EXISTING	15	EXISTING										
		16	EXISTING										
		PB	EXISTING										
SB13	EXISTING	17	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB9	SB10
SB10	SB11

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB10

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB10
C	CB1	SB10

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

S.T.H. 312 AND JEFFERS RD
EAU CLAIRE COUNTY

CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 18-0651 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE TO REMAIN IN PLACE AT SB3, SB4, SB8, AND SB9.

LEGEND

- CONTROL CABINET
- EMERGENCY VEHICLE DETECTOR
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 18" X 36"
- PULL BOX, STEEL, 12" X 24"
- SIGNAL HEAD, MAST ARM MOUNT
- SIGNAL
- NONMETALLIC CONDUIT
- LOOP DETECTOR
- STOP SIGN
- LUMINAIRE – STATE OWNED (150 WATT HPS)
- PUSH BUTTON

RAILROAD PRE-EMPTION CONDUIT

40TH AVENUE

R/W

SB STH 124

NB STH 124

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB9 SB10

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6 Ø7 Ø8

LOOP DETECTOR BACK ±260 FEET

LOOP DETECTOR BACK ±500 FEET

1-2" SIGNAL INTERCONNECT TO CTH 00/BUS 53

CINC COMMUNICATION VAULT

THE R/W IS OUTSIDE THE SHEET LIMITS IN THIS QUADRANT

TRAFFIC CONTROL SIGNAL
STH 124 AND 40TH AVENUE
CHIPPEWA COUNTY

SIGNAL NO. S 09-0800

PAGE 1 OF 1

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: STH 124 & 40TH AVE	COUNTY: CHIPPEWA	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 147	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP C\REMOVAL PLANS\021021_CD.DWG
LAYOUT NAME - 021021_CD - S09-0800A

PLOT DATE : 1/18/2017 8:25 AM PLOT BY : SALOMONSEN, DEREK PLOT NAME : 1"=40'

WISDOT/CADDS SHEET 42

2

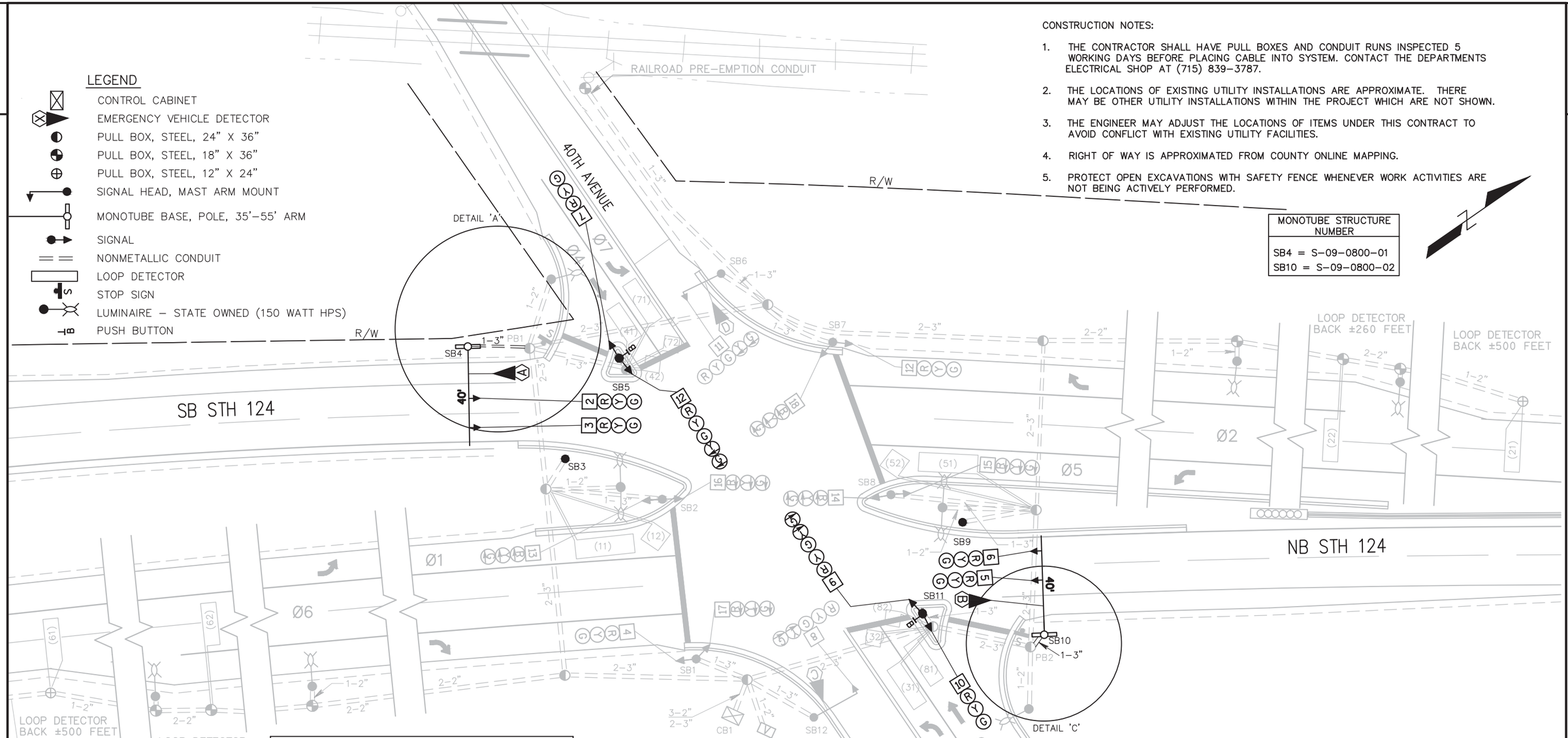
LEGEND

- CONTROL CABINET
- EMERGENCY VEHICLE DETECTOR
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 18" X 36"
- PULL BOX, STEEL, 12" X 24"
- SIGNAL HEAD, MAST ARM MOUNT
- MONOTUBE BASE, POLE, 35'–55' ARM
- SIGNAL
- NONMETALLIC CONDUIT
- LOOP DETECTOR
- STOP SIGN
- LUMINAIRE – STATE OWNED (150 WATT HPS)
- PUSH BUTTON

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839–3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB4 = S–09–0800–01
SB10 = S–09–0800–02



REVISIONS							
Base Plan No.	Rev. No.						Cont. Type
		REPLACE TROMBONE ARM POLES WITH 15' STANDARDS AT SB5 AND SB11. INSTALL MONOTUBE POLES AT SB4 AND SB10. REPLACED POLE AT SB3 AND SB9 WITH A 3.5' STANDARD. ADD HEADS 17 AND 18. ADDED BIKE BUTTONS FOR PHASE 4 AND 8 ON 10–3–13. REPLACED CABINET, CONTROLLER, AND ADDED BATTERY BACKUP SYSTEMS ON 6–11–13. CHANGED CONTROLLER FROM EPAC 300 TO 2070 AND ADDED FIBER COMMUNICATION ON 5–25–07.					
		APPROVALS					
		DISTRICT		CENTRAL OFFICE			ASC/3 TS2
		Date	By	Date	By		
12–10–02 CHANGED TO ALL RED FLASH (APPR. 12–12–02)	1	2	5-2-17	DLF	5-2-17	JLB	

TRAFFIC CONTROL SIGNAL
STH 124 AND 40TH AVENUE
CHIPPEWA COUNTY

SIGNAL NO. S 09–0800

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 5–8–00 — GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

APPROVED

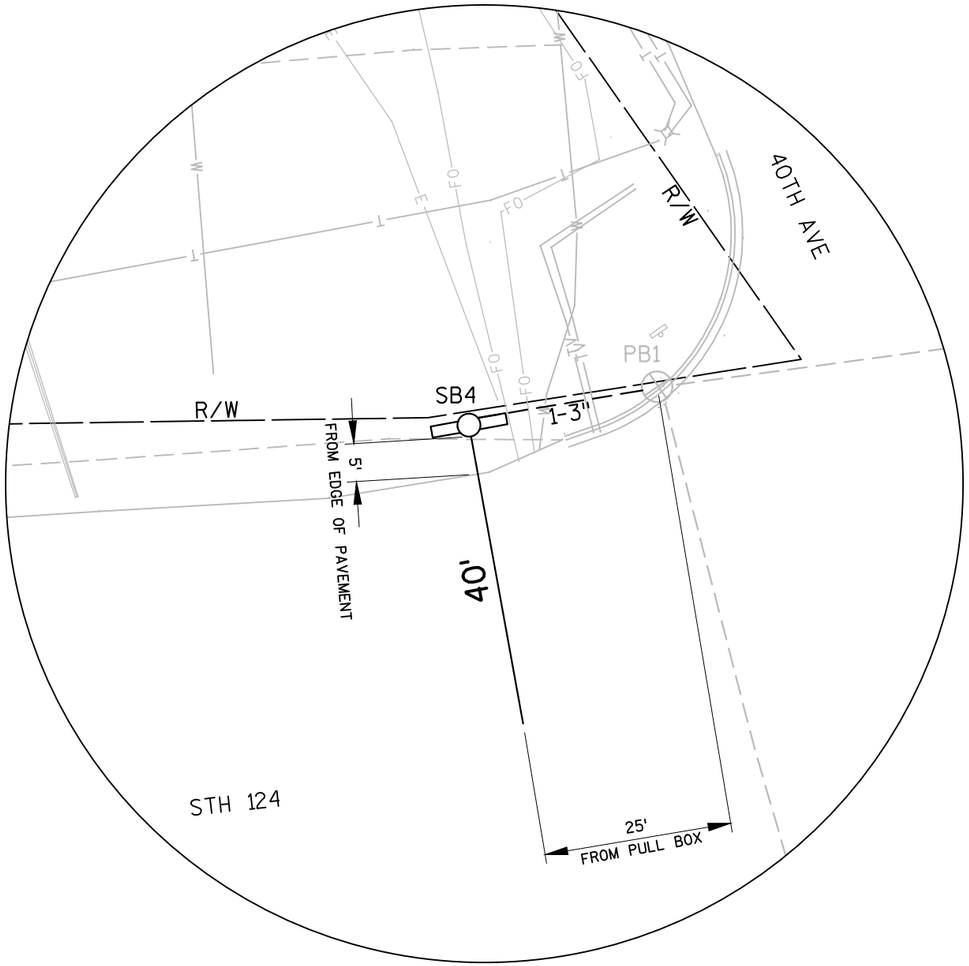
Date 5–9–00 — WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

REVISED BY: AECOM

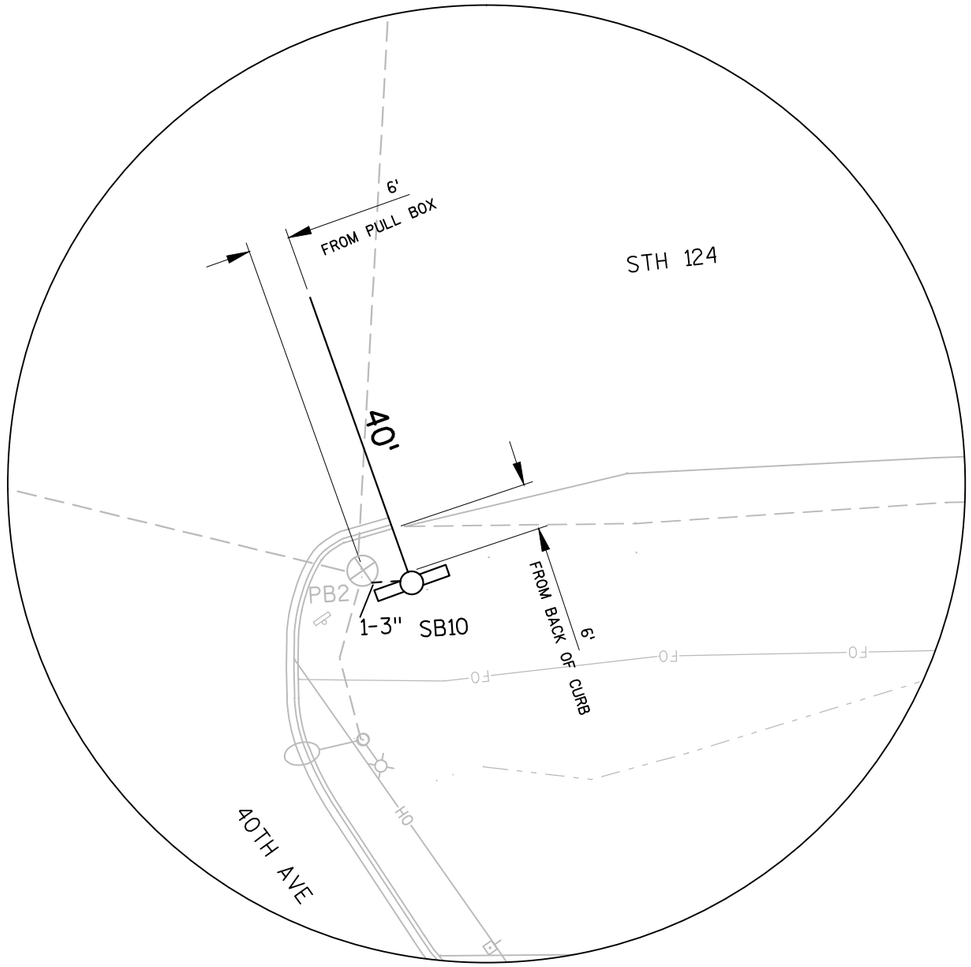
PAGE: 1 OF 2

PROJECT NO: 1000-08-81	HWY: STH 124 & 40TH AVE	COUNTY: CHIPPEWA	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 148	E

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
STH 124 AND 40TH AVENUE
CHIPPEWA COUNTY

SIGNAL NO. S 09-0800

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: STH 124 & 40TH AVE	COUNTY: CHIPPEWA	TRAFFIC SIGNAL PLAN	SHEET 149	E

2

PROJECT ID:	1000-08-81
INTERSECTION:	STH 124 & 40TH AVE

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

DATE: May-17

2

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	4	EXISTING										
		17	EXISTING										
SB2	EXISTING	13	EXISTING										
		16	EXISTING										
SB3	EXISTING	-	EXISTING										
SB4	5	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
SB5	EXISTING	7	EXISTING										
		12	EXISTING										
		PB	EXISTING										
SB6	EXISTING	11	EXISTING										
SB7	EXISTING	12	EXISTING										
		18	EXISTING										
SB8	EXISTING	14	EXISTING										
		15	EXISTING										
SB9	EXISTING	-	EXISTING										
SB10	5	5	RED	ORG	GRN								
		6	RED	ORG	GRN								
SB11	EXISTING	9	EXISTING										
		10	EXISTING										
		PB	EXISTING										
SB12	EXISTING	8	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB9	SB10
SB10	SB11

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB4
PB2	SB10

EMERGENCY VEHICLE PREEMPTION		
HEAD	FROM	TO
A	CB1	SB4
B	CB1	SB10

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

STH 124 AND 40TH AVE
CHIPPEWA COUNTY

CONTROLLER TYPE: ASC/3 TS2

SIGNAL NO: S 09-0800 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

CONSTRUCTION NOTES:

1. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
2. CONCRETE BASE IS TO REMAIN IN PLACE AT SB3 AND SB8.

CEDAR FALLS ROAD

STH 25

SPEED LIMIT 25

SPEED LIMIT 45

SPEED LIMIT 45

SPEED LIMIT 25

R/W

SERVICE - POWER POLE

SERVICE FEED

CID

LOOP DETECTOR 200' BACK FROM STOPLINE

LOOP DETECTOR ± 400' BACK FROM STOPLINE

LOOP DETECTOR ± 400' FROM STOPLINE

LOOP DETECTOR ± 200' FROM STOPLINE

1-2" SIGNAL INTERCONNECT CONDUIT TO I-94 N. RAMPS

DAMAGED/UNUSABLE T-2 BASE

PED

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6

LEGEND

- SIGNAL HEAD
- SIGNAL HEAD, MAST ARM MOUNT
- SIGNAL CONTROL CABINET
- PULL BOX 24" X 36"
- PULL BOX 12" X 24"
- CONDUIT
- LOOP DETECTOR
- LUMINAIRE-CITY OWNED
- UTILITY POLE
- STOP SIGN
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LED PEDESTRIAN COUNTDOWN SIGNALS

** ON HEADS 1 & 2 - YELLOW AND GREEN RIGHT ARROWS ON DURING PHASE 4 ONLY.

TRAFFIC CONTROL SIGNAL
S.T.H. 25 & CEDAR FALLS ROAD
DUNN COUNTY

SIGNAL NO. S 17-0693

PAGE 1 OF 1

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: S.T.H. 25 & CEDAR FALLS ROAD	COUNTY: DUNN	TRAFFIC SIGNAL REMOVAL PLAN	SCALE, FEET 0 20 40	SHEET: 151

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP C\REMOVAL PLANS\021022_CD.DWG

PLOT DATE : 1/18/2017 8:26 AM

1"=40'

WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS BEFORE PLACING CABLE INTO SYSTEM. CONTACT THE DEPARTMENTS ELECTRICAL SHOP AT (715) 839-3787.
2. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RIGHT OF WAY IS APPROXIMATED FROM COUNTY ONLINE MAPPING.
5. PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.

MONOTUBE STRUCTURE NUMBER
SB4 = S-17-0693-02
SB10 = S-17-0693-01

SPEED LIMIT 25

SPEED LIMIT 45

SPEED LIMIT 45

SPEED LIMIT 25

DETAIL 'A'

DETAIL 'C'

CEDAR FALLS ROAD

STH 25

R/W

CID

SERVICE - POWER POLE

SERVICE FEED

CB1

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12

PB1 1-3"

PB2

DAMAGED/UNUSABLE T-2 BASE

LOOP DETECTOR 200' BACK FROM STOPLINE

LOOP DETECTOR ± 400' BACK FROM STOPLINE

LOOP DETECTOR ± 400' FROM STOPLINE

LOOP DETECTOR ± 200' FROM STOPLINE

1-2" SIGNAL INTERCONNECT CONDUIT TO I-94 N. RAMPS

Ø1 Ø2 Ø3 Ø4 Ø5 Ø6

LEGEND

- SIGNAL HEAD
- MONOTUBE BASE, POLE, 35'-55' ARM
- SIGNAL CONTROL CABINET
- PULL BOX 24" X 36"
- PULL BOX 12" X 24"
- CONDUIT
- LOOP DETECTOR
- LUMINAIRE-CITY OWNED
- UTILITY POLE
- STOP SIGN
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LED PEDESTRIAN COUNTDOWN SIGNALS

** ON HEADS 1 & 2 - YELLOW AND GREEN RIGHT ARROWS ON DURING PHASE 4 ONLY.

6-13-03 CHANGED CONTROLLER TO EPAC 300 WITH COMMUNICATION & ADDED PHASE 3 PED WIRING FOR FUTURE ACTIVATION. (APPR. 11-10-03)
9-30-02 ADDED NB RIGHT TURN ARROWS THAT TIME WITH ONLY PHASE 4 ON HEADS 1 AND 2. (APPR. 9-24-02)
8-30-01 ADDED ALL RED FLASH AND PHASES 1 AND 5 (APPR. 8-3-01)
10-18-99 ADDED SPLIT PHASING 3 & 4 (APPR. 10-15-99)

REVISIONS

Base Plan No.	Rev. No.		Cont. Type
1	5	REPLACE TROMBONE ARM POLE AT SB9 WITH 10' STANDARD AND REPLACE TROMBONE ARM POLE AT SB3 WITH 3.5' STANDARD. INSTALL MONOTUBE POLE AT SB4 AND SB11. CHANGE PHASE 1 AND 5 TO PROTECTED/PERMISSIVE FYAS AND ADD SIGNAL HEADS 15 AND 16 AS FYA. CHANGED CONTROLLER AND MMU ON 11-19-15. ADDED PHASE 3 PED ON 6-27-13. MOVED SIGNAL HEAD 2 ON 11-17-06.	ASC/3 TS2

APPROVALS

DISTRICT		CENTRAL OFFICE	
Date	By	Date	By
5-2-17	DLF	5-2-17	JLB

TRAFFIC CONTROL SIGNAL

S.T.H. 25 & CEDAR FALLS ROAD

DUNN COUNTY

SIGNAL NO. S 17-0693

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date 10-13-97 GREGORY P. HELGESON, DISTRICT TRAFFIC ENGINEER

APPROVED

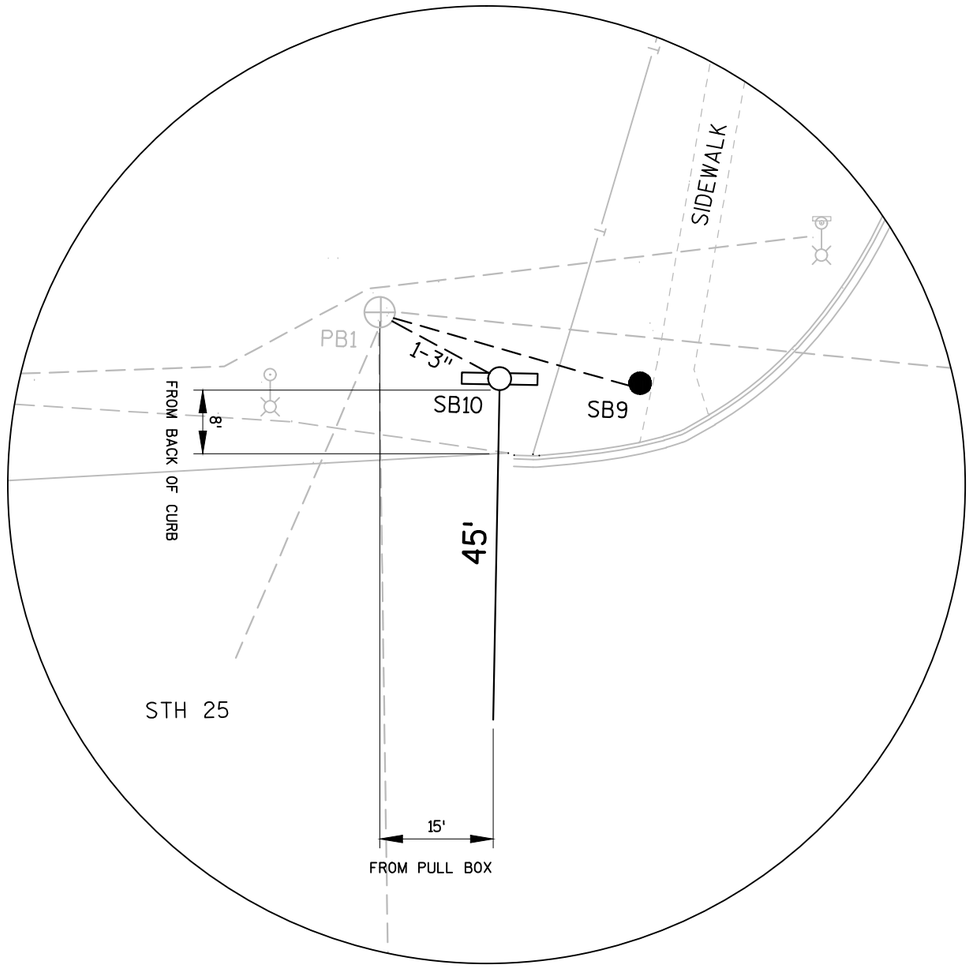
Date 10-30-97 WILLIAM C. GILDING, (FOR) STATE TRAFFIC ENGINEER

REVISED BY: AECOM PAGE: 1 OF 2

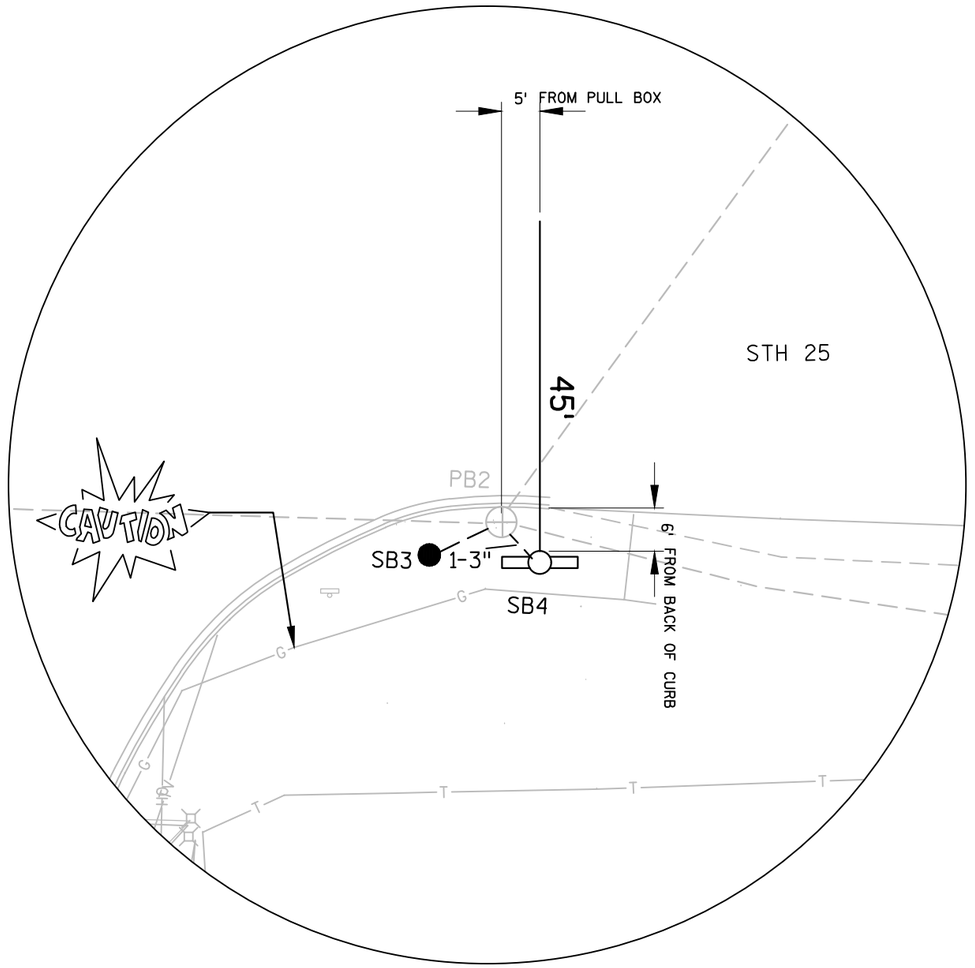
PROJECT NO: 1000-08-81	HWY: S.T.H. 25 & CEDAR FALLS ROAD	COUNTY: DUNN	TRAFFIC SIGNAL PLAN	SCALE, FEET 0 20 40	SHEET: 152

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\GROUP C\024022_SP.DWG PLOT DATE : 1/18/2017 8:26 AM 1"=40'

2



DETAIL 'A'



DETAIL 'C'

TRAFFIC CONTROL SIGNAL
S.T.H. 25 & CEDAR FALLS ROAD
DUNN COUNTY

SIGNAL NO. S 17-0693

PAGE: 2 OF 2

REVISED BY: AECOM

PROJECT NO: 1000-08-81	HWY: STH 25 & CEDAR FALLS ROAD	COUNTY: DUNN	TRAFFIC SIGNAL PLAN	SHEET 153 E

PROJECT ID:	1000-08-81
INTERSECTION:	STH 25 & CEDAR FALLS RD

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

DATE: May-17

2

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	EXISTING	5	EXISTING										
		16	EXISTING										
SB2	EXISTING	3	EXISTING										
		8	EXISTING										
SB3	EXISTING	-											
SB4	12	2	RED	ORG	GRN								
		18	RED	ORG	GRN								
		19	RED/BLK	ORG/BLK	GRN/BLK		BLU/BLK		BLK/WHT				
SB5	EXISTING	9	EXISTING										
		14	EXISTING										
SB6	EXISTING	13	EXISTING										
SB7	EXISTING	1	EXISTING										
		15	EXISTING										
		32	EXISTING										
		PB	EXISTING										
SB8	EXISTING	4	EXISTING										
		7	EXISTING										
SB9	EXISTING	31	EXISTING										
		PB	EXISTING										
SB10	5	6	RED	ORG	GRN								
		17	RED	ORG	GRN								
SB11	EXISTING	11	EXISTING										
		12	EXISTING										
SB12	EXISTING	10	EXISTING										

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
SB3	SB4
SB4	SB5
SB9	SB10
SB10	SB11

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
PB1	SB10
PB2	SB4

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. REESTABLISH THE EXISTING EQUIPMENT GROUNDING CONDUCTOR FROM BASE TO BASE FOR ALL SIGNAL BASES, IN ACCORDANCE WITH THE WISCONSIN ELECTRIC CODE.

S.T.H. 25 & CEDAR FALLS ROAD
DUNN COUNTY

CONTROLLER TYPE: ASC/3 TS2

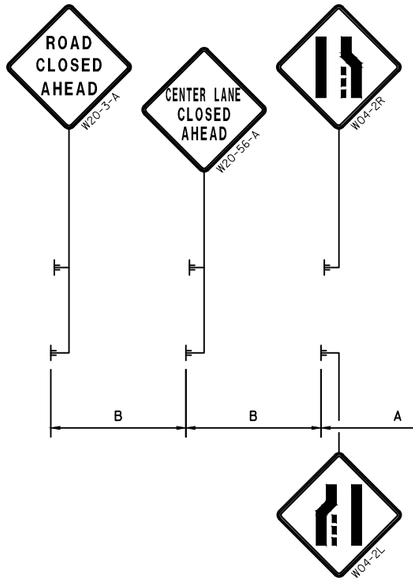
SIGNAL NO: S 17-0693 CABINET TYPE: TS2

DATE: NOVEMBER 2016 PAGE NO. 1 OF 1

WHERE AN INTERSECTION OCCURS WITHIN THE REQUIRED LENGTHS THE LAYOUT WILL BEGIN AT THE INTERSECTION AND LENGTHS ADJUSTED PER ENGINEER.

SIDE ROAD TURN LANES USED FOR ACCESSING CLOSED ROADWAY SHALL BE CLOSED WITH TRAFFIC CONTROL DRUMS WITH TYPE C STEADY BURN LIGHTS DURING ACTIVE WORK HOURS.

PROVIDE MINIMUM OF 15' LANE WIDTH DURING ALL LANE CLOSURES.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- (A) TYPE A WARNING LIGHT (FLASHING)
- PCMS PORTABLE CHANGEABLE MESSAGE BOARD
- TC TRAFFIC FLOW ARROW
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT

TABLE 1
TAPER SPACE

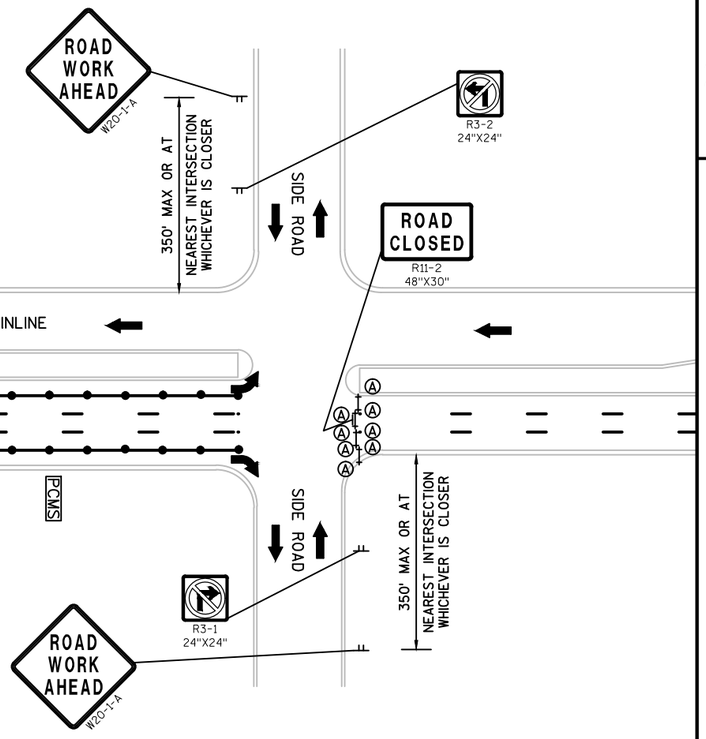
S	L
25	125'
30	180'
35	245'
40	320'
45	540'
50	600'
55	660'

*25' @ 35 MPH OR LESS
45' @ 40 MPH OR MORE

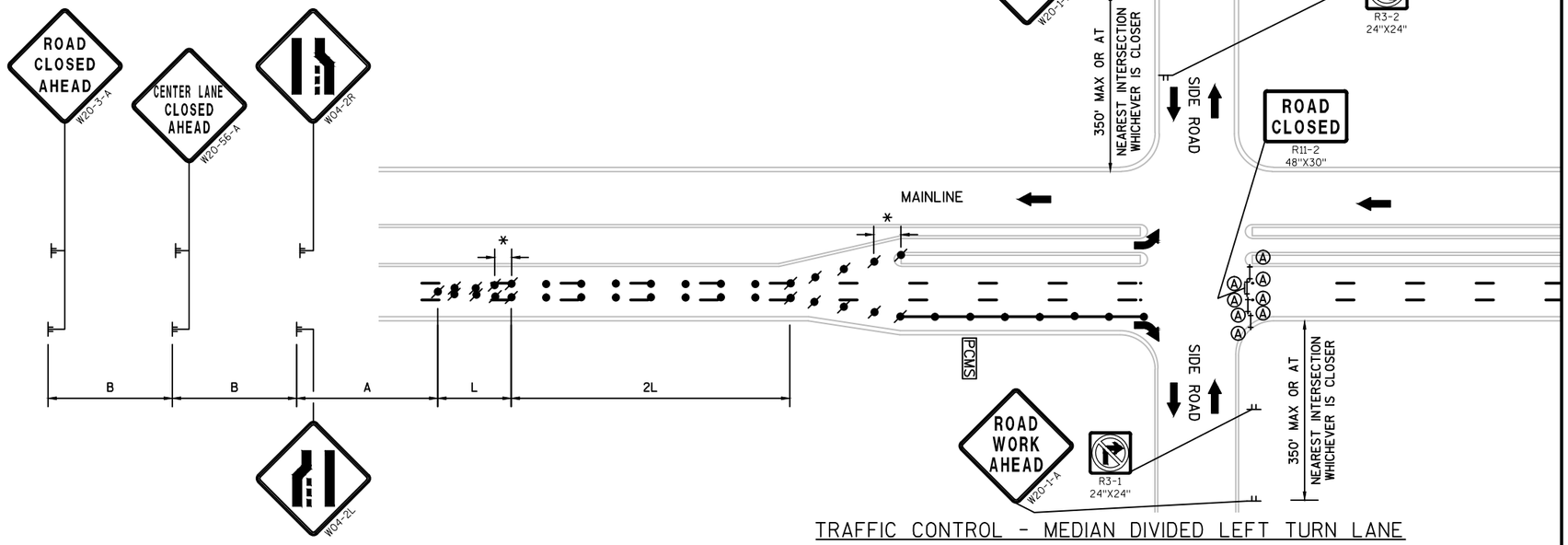
A = 200' @ 25-30 MPH
350' @ 35-40 MPH
500' @ 45-55 MPH

B = 400' @ 25-30 MPH
700' @ 35-40 MPH
1000' @ 45-55 MPH

S = NON-CONSTRUCTION SPEED LIMIT (MPH)
L = TAPER LENGTH IN FEET



TRAFFIC CONTROL - LEFT TURN LANE WITH NO TURN LANE MEDIAN



TRAFFIC CONTROL - MEDIAN DIVIDED LEFT TURN LANE

Estimate Of Quantities

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
0010	204.0165	Removing Guardrail	LF	525.000		525.000	
0020	204.0195	Removing Concrete Bases	EACH	31.000	30.000		1.000
0030	213.0100	Finishing Roadway (project) 01. 1000-08-81	EACH	1.000	1.000		
0040	213.0100	Finishing Roadway (project) 02. 3700-50-26	EACH	1.000		1.000	
0050	213.0100	Finishing Roadway (project) 03. 3700-50-27	EACH	1.000			1.000
0060	603.8000	Concrete Barrier Temporary Precast Delivered	LF	2,000.000		2,000.000	
0070	603.8125	Concrete Barrier Temporary Precast Installed	LF	2,000.000		2,000.000	
0080	614.0010	Barrier System Grading Shaping Finishing	EACH	1.000		1.000	
0090	614.0905	Crash Cushions Temporary	EACH	2.000		2.000	
0100	614.2300	MGS Guardrail 3	LF	325.000		325.000	
0110	614.2610	MGS Guardrail Terminal EAT	EACH	2.000		2.000	
0120	614.2620	MGS Guardrail Terminal Type 2	EACH	2.000		2.000	
0130	616.0700.S	Fence Safety	LF	2,640.000	2,520.000		120.000
0140	619.1000	Mobilization	EACH	1.000	0.600	0.300	0.100
0150	625.0500	Salvaged Topsoil	SY	11,000.000	810.000	10,140.000	50.000
0160	627.0200	Mulching	SY	11,000.000	810.000	10,140.000	50.000
0170	628.1504	Silt Fence	LF	100.000	100.000		
0180	628.1520	Silt Fence Maintenance	LF	100.000	100.000		
0190	628.1905	Mobilizations Erosion Control	EACH	10.000	4.000	4.000	2.000
0200	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	4.000	3.000	1.000
0210	628.7010	Inlet Protection Type B	EACH	22.000	22.000		
0220	628.7015	Inlet Protection Type C	EACH	30.000	30.000		
0230	628.7020	Inlet Protection Type D	EACH	30.000	30.000		
0240	628.7504	Temporary Ditch Checks	LF	250.000	60.000	150.000	40.000
0250	629.0210	Fertilizer Type B	CWT	9.000	1.000	7.000	1.000
0260	630.0130	Seeding Mixture No. 30	LB	206.000	15.000	187.000	4.000
0270	630.0200	Seeding Temporary	LB	303.000	22.000	277.000	4.000
0280	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000		
0290	636.0100	Sign Supports Concrete Masonry	CY	39.000		39.000	
0300	636.1500	Sign Supports Steel Coated Reinforcement HS	LB	5,780.000		5,780.000	
0310	637.1220	Signs Type I Reflective SH	SF	288.000		288.000	
0320	637.2210	Signs Type II Reflective H	SF	484.500	451.500		33.000
0330	638.2102	Moving Signs Type II	EACH	7.000	7.000		
0340	638.2601	Removing Signs Type I	EACH	2.000		2.000	
0350	641.6600	Sign Bridge (structure) 01. S-18-118	LS	1.000		1.000	
0360	643.0100	Traffic Control (project) 01. 1000-08-81	EACH	1.000	1.000		
0370	643.0100	Traffic Control (project) 02. 3700-50-26	EACH	1.000		1.000	
0380	643.0100	Traffic Control (project) 03. 3700-50-27	EACH	1.000			1.000
0390	643.0300	Traffic Control Drums	DAY	11,500.000	9,000.000	2,000.000	500.000
0400	643.0420	Traffic Control Barricades Type III	DAY	650.000	550.000	70.000	30.000

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
0410	643.0705	Traffic Control Warning Lights Type A	DAY	1,300.000	1,100.000	140.000	60.000
0420	643.0715	Traffic Control Warning Lights Type C	DAY	2,400.000	1,800.000	500.000	100.000
0430	643.0800	Traffic Control Arrow Boards	DAY	40.000		40.000	
0440	643.0900	Traffic Control Signs	DAY	2,800.000	1,150.000	835.000	815.000
0450	643.1050	Traffic Control Signs PCMS	DAY	438.000	240.000	170.000	28.000
0460	646.0106	Pavement Marking Epoxy 4-Inch	LF	70.000			70.000
0470	646.0600	Removing Pavement Markings	LF	280.000			280.000
0480	647.0156	Pavement Marking Arrows Epoxy Type 1	EACH	3.000			3.000
0490	647.0955	Removing Pavement Markings Arrows	EACH	3.000			3.000
0500	650.6500	Construction Staking Structure Layout (structure) 01. S-18-118	LS	1.000		1.000	
0510	650.8500	Construction Staking Electrical Installations (project) 01. 1000-08-81	LS	1.000	1.000		
0520	650.8500	Construction Staking Electrical Installations (project) 02. 3700-50-26	LS	1.000		1.000	
0530	650.8500	Construction Staking Electrical Installations (project) 03. 3700-50-27	LS	1.000			1.000
0540	650.9910	Construction Staking Supplemental Control (project) 02. 3700-50-26	LS	1.000		1.000	
0550	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,673.000		2,673.000	
0560	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,021.000	971.000		50.000
0570	652.0605	Conduit Special 2-Inch	LF	830.000		830.000	
0580	652.0615	Conduit Special 3-Inch	LF	119.000	66.000		53.000
0590	652.0700.S	Install Conduit into Existing Item	EACH	56.000	42.000	12.000	2.000
0600	653.0140	Pull Boxes Steel 24x42-Inch	EACH	16.000		16.000	
0610	653.0900	Adjusting Pull Boxes	EACH	1.000		1.000	
0620	654.0102	Concrete Bases Type 2	EACH	1.000		1.000	
0630	654.0113	Concrete Bases Type 13	EACH	44.000	42.000		2.000
0640	655.0230	Cable Traffic Signal 5-14 AWG	LF	17,372.000	17,158.000		214.000
0650	655.0240	Cable Traffic Signal 7-14 AWG	LF	298.000	110.000		188.000
0660	655.0260	Cable Traffic Signal 12-14 AWG	LF	825.000	237.000		588.000
0670	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	12,104.000	11,389.000		715.000
0680	655.0625	Electrical Wire Lighting 6 AWG	LF	3,654.000		3,654.000	
0690	655.0630	Electrical Wire Lighting 4 AWG	LF	660.000		660.000	
0700	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. ITS	LS	1.000		1.000	
0710	656.0500	Electrical Service Breaker Disconnect Box (location) 01. CCTV-18-0042	LS	1.000		1.000	
0720	656.0500	Electrical Service Breaker Disconnect Box (location) 02. CCTV-18-0043	LS	1.000		1.000	
0730	656.0500	Electrical Service Breaker Disconnect Box (location) 03. DMS-18-0033	LS	1.000		1.000	

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
0740	657.0100	Pedestal Bases	EACH	17.000	16.000		1.000
0750	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	10.000	9.000		1.000
0760	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000	3.000		
0770	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	4.000	4.000		
0780	657.1355	Install Poles Type 12	EACH	22.000	20.000		2.000
0790	657.1360	Install Poles Type 13	EACH	22.000	22.000		
0800	657.1535	Install Monotube Arms 35-FT	EACH	2.000	2.000		
0810	657.1540	Install Monotube Arms 40-FT	EACH	7.000	7.000		
0820	657.1545	Install Monotube Arms 45-FT	EACH	19.000	19.000		
0830	657.1550	Install Monotube Arms 50-FT	EACH	12.000	10.000		2.000
0840	657.1555	Install Monotube Arms 55-FT	EACH	4.000	4.000		
0850	658.0190.S	Traffic Signal Face - LED State Furnished	EACH	126.000	118.000		8.000
0860	658.0420.S	Pedestrian Signal Face - LED State Furnished	EACH	4.000	4.000		
0870	658.0500	Pedestrian Push Buttons	EACH	6.000	6.000		
0880	662.2030.S	Ramp Closure Gates Solar 30-FT	EACH	1.000		1.000	
0890	670.0100	Field System Integrator 01. ITS	LS	1.000		1.000	
0900	670.0200	ITS Documentation 01. ITS	LS	1.000		1.000	
0910	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	21,450.000		21,450.000	
0920	671.0232	Conduit HDPE Directional Bore 3-Duct 2-Inch	LF	1,435.000		1,435.000	
0930	671.0300	Fiber Optic Cable Marker	EACH	153.000		153.000	
0940	672.0250	Base Camera Pole 50-FT	EACH	2.000		2.000	
0950	673.0105	Communication Vault Type 1	EACH	12.000		12.000	
0960	673.0225.S	Install Pole Mounted Cabinet	EACH	3.000		3.000	
0970	677.0150	Install Camera Pole 50-FT	EACH	2.000		2.000	
0980	677.0200	Install Camera Assembly	EACH	2.000		2.000	
0990	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	5,265.000		5,265.000	
1000	678.0036	Install Fiber Optic Cable Outdoor Plant 36-CT	LF	300.000		300.000	
1010	678.0072	Install Fiber Optic Cable Outdoor Plant 72-CT	LF	24,700.000		24,700.000	
1020	678.0100.S	Install Overhead Freeway DMS Full Matrix	EACH	1.000		1.000	
1030	SPV.0060	Special 01. Fiber Tracer Marker Post	EACH	12.000		12.000	
1040	SPV.0060	Special 02. Install Luminaire Arms Steel 15-Ft 15-5/8-Inch Clamp	EACH	22.000	22.000		
1050	SPV.0060	Special 03. Removing Overhead Signs Type II	EACH	2.000			2.000
1060	SPV.0105	Special 01. Install State Furnished Evp System Ush 12 & Truax Blvd	LS	1.000	1.000		
1070	SPV.0105	Special 02. Install State Furnished Evp System Ush 12 & Folsom St	LS	1.000	1.000		
1080	SPV.0105	Special 03. Install State Furnished EVP System USH 12 & Moholt Dr	LS	1.000	1.000		
1090	SPV.0105	Special 04. Install State Furnished EVP System USH 12 & Vine St	LS	1.000	1.000		

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
1100	SPV.0105	Special 05. Install State Furnished EVP System USH 12 & Cameron St	LS	1.000	1.000		
1110	SPV.0105	Special 06. Install State Furnished EVP System USH 12 & Menomonie St	LS	1.000	1.000		
1120	SPV.0105	Special 07. Install State Furnished EVP System USH 12 & Craig Rd	LS	1.000	1.000		
1130	SPV.0105	Special 08. Install State Furnished EVP System USH 12 & STH 37	LS	1.000	1.000		
1140	SPV.0105	Special 09. Install State Furnished EVP System USH 12 & University Dr	LS	1.000	1.000		
1150	SPV.0105	Special 10. Install State Furnished EVP System USH 12 & Stein Blvd	LS	1.000	1.000		
1160	SPV.0105	Special 11. Install State Furnished EVP System USH 12 & Patton St	LS	1.000	1.000		
1170	SPV.0105	Special 12. Install State Furnished EVP System USH 12 & Rudolph Rd	LS	1.000	1.000		
1180	SPV.0105	Special 13. Install State Furnished EVP System USH 12 & Keith St	LS	1.000	1.000		
1190	SPV.0105	Special 14. Install State Furnished EVP System USH 12 & Fairfax St	LS	1.000	1.000		
1200	SPV.0105	Special 15. Install State Furnished EVP System USH 12 & BUS 53 West Ramps	LS	1.000	1.000		
1210	SPV.0105	Special 16. Install State Furnished EVP System USH 12 & BUS 53 East Ramps	LS	1.000	1.000		
1220	SPV.0105	Special 17. Install State Furnished EVP System USH 12 & Otter Rd	LS	1.000	1.000		
1230	SPV.0105	Special 18. Install State Furnished EVP System STH 93 & Lorch Ave	LS	1.000	1.000		
1240	SPV.0105	Special 19. Install State Furnished EVP System STH 93 & Golf Rd	LS	1.000		1.000	
1250	SPV.0105	Special 20. Install State Furnished EVP System STH 312 & Jeffers Rd	LS	1.000	1.000		
1260	SPV.0105	Special 21. Install State Furnished EVP System STH 124 & 40th Ave	LS	1.000	1.000		
1270	SPV.0105	Special 22. Remove Traffic Signals USH 12 & Truax Blvd	LS	1.000	1.000		
1280	SPV.0105	Special 23. Remove Traffic Signals USH 12 & Folsom St	LS	1.000	1.000		
1290	SPV.0105	Special 24. Remove Traffic Signals USH 12 & Moholt Dr	LS	1.000	1.000		
1300	SPV.0105	Special 25. Remove Traffic Signals USH 12 & Vine St	LS	1.000	1.000		
1310	SPV.0105	Special 26. Remove Traffic Signals USH 12 & Cameron St	LS	1.000	1.000		
1320	SPV.0105	Special 27. Remove Traffic Signals USH 12 & Menomonie St	LS	1.000	1.000		

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
1330	SPV.0105	Special 28. Remove Traffic Signals USH 12 & Craig Rd	LS	1.000	1.000		
1340	SPV.0105	Special 29. Remove Traffic Signals USH 12 & STH 37	LS	1.000	1.000		
1350	SPV.0105	Special 30. Remove Traffic Signals USH 12 & University Dr	LS	1.000	1.000		
1360	SPV.0105	Special 31. Remove Traffic Signals USH 12 & Stein Blvd	LS	1.000	1.000		
1370	SPV.0105	Special 32. Remove Traffic Signals USH 12 & Patton St	LS	1.000	1.000		
1380	SPV.0105	Special 33. Remove Traffic Signals USH 12 & Rudolph Rd	LS	1.000	1.000		
1390	SPV.0105	Special 34. Remove Traffic Signals USH 12 & Keith St	LS	1.000	1.000		
1400	SPV.0105	Special 35. Remove Traffic Signals USH 12 & Fairfax St	LS	1.000	1.000		
1410	SPV.0105	Special 36. Remove Traffic Signals USH 12 & BUS 53 West Ramps	LS	1.000	1.000		
1420	SPV.0105	Special 37. Remove Traffic Signals USH 12 & BUS 53 East Ramps	LS	1.000	1.000		
1430	SPV.0105	Special 38. Remove Traffic Signals USH 12 & Otter Rd	LS	1.000	1.000		
1440	SPV.0105	Special 39. Remove Traffic Signals STH 93 & Lorch Ave	LS	1.000	1.000		
1450	SPV.0105	Special 40. Remove Traffic Signals STH 93 & Golf Rd	LS	1.000			1.000
1460	SPV.0105	Special 41. Remove Traffic Signals STH 312 & Jeffers Rd	LS	1.000	1.000		
1470	SPV.0105	Special 42. Remove Traffic Signals STH 124 & 40Th Ave	LS	1.000	1.000		
1480	SPV.0105	Special 43. Remove Traffic Signals STH 25 & Cedar Falls Rd	LS	1.000	1.000		
1490	SPV.0105	Special 44. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Truax Blvd	LS	1.000	1.000		
1500	SPV.0105	Special 45. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Folsom St	LS	1.000	1.000		
1510	SPV.0105	Special 46. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Moholt Dr	LS	1.000	1.000		
1520	SPV.0105	Special 47. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Vine St	LS	1.000	1.000		
1530	SPV.0105	Special 48. Install S Furn Traf Sig Mount Hard (Ornamental) USH 12 & Cameron St	LS	1.000	1.000		
1540	SPV.0105	Special 49. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Menomonie St	LS	1.000	1.000		
1550	SPV.0105	Special 50. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Craig Rd	LS	1.000	1.000		
1560	SPV.0105	Special 51. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & STH 37	LS	1.000	1.000		
1570	SPV.0105	Special 52.Install St Furntraff Sig Mount Hard (Ornamental) USH 12 & University Dr	LS	1.000	1.000		
1580	SPV.0105	Special 53. Install St Furn Traf Sign Mount Hard	LS	1.000	1.000		

					1000-08-81	3700-50-26	3700-50-27
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**
		(Ornamental) USH 12 & Stein Blvd					
1590	SPV.0105	Special 54. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Patton St	LS	1.000	1.000		
1600	SPV.0105	Special 55. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Rudolph Rd	LS	1.000	1.000		
1610	SPV.0105	Special 56. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Keith St	LS	1.000	1.000		
1620	SPV.0105	Special 57. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Fairfax St	LS	1.000	1.000		
1630	SPV.0105	Special 58. Install St Furn Traf Sig Mount Hard (Ornamental) USH12 & BUS 53 West Ramps	LS	1.000	1.000		
1640	SPV.0105	Special 59. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & BUS 53 East Ramps	LS	1.000	1.000		
1650	SPV.0105	Special 60. Install St Furn Traf Sig Mount Hard (Ornamental) USH 12 & Otter Rd	LS	1.000	1.000		
1660	SPV.0105	Special 61. Install St Furn Traf Sig Mount Hard (Ornamental) STH 93 & Lorch Ave	LS	1.000	1.000		
1670	SPV.0105	Special 62. Intall St Furn Traf Sig Mount Hard (Ornamental) STH 93 & Golf Rd	LS	1.000			1.000
1680	SPV.0105	Special 63. Install St Furn Traf Sig Mount Hard (Ornamental) STH 312 & Jeffers Rd	LS	1.000	1.000		
1690	SPV.0105	Special 64. Install St Furn Traf Sig Mount Hard (Ornamental) STH 124 & 40th Ave	LS	1.000	1.000		
1700	SPV.0105	Special 65. Install St Furn Traf Sig Mount Hard (Ornamental) STH 25 & Cedar Falls Rd	LS	1.000	1.000		
1710	SPV.0105	Special 66. Removing Old Sign Bridge Single Pole S-18-057	LS	1.000		1.000	

3

PERMANENT SIGNING

LOCATION	SIGN ID	ID	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	SPV.0060.03 REMOVING OVERHEAD SIGNS TYPE II EACH	* SIGN DECALS (FOR INFORMATION ONLY) EACH
S 18-0711	1-01	1000-08-81		9.75				
S 18-0711	1-02	1000-08-81		9.75				
S 18-0647	1-03	1000-08-81		9.75				
S 18-0647	1-04	1000-08-81		9.75				
S 18-0378	1-05	1000-08-81		9.75				
S 18-0378	1-06	1000-08-81		9.75				
S 18-0598	1-07	1000-08-81		7.50				
S 18-0598	1-08	1000-08-81		7.50				
S 18-0228	1-09	1000-08-81		12.75				
S 18-0228	1-10	1000-08-81		12.75				
S 18-0040	1-11	1000-08-81		12.75				
S 18-0040	1-12	1000-08-81				1		
S 18-0040	1-13	1000-08-81				1		
S 18-0040	1-14	1000-08-81		12.75				
S 18-0287	1-15	1000-08-81		8.25				
S 18-0287	1-16	1000-08-81		8.25		1		
S 18-0287	1-17	1000-08-81		11.25				
S 18-0226	1-18	1000-08-81		11.25				
S 18-0226	1-19	1000-08-81		9.00				
S 18-0180	1-20	1000-08-81		9.00				
S 18-0180	1-21	1000-08-81		12.00				
S 18-0147	1-22	1000-08-81		12.00				
S 18-0147	1-23	1000-08-81		12.00				
S 18-0146	1-24	1000-08-81		9.75				
S 18-0146	1-25	1000-08-81	1			1		
S 18-0146	1-26	1000-08-81		9.75				
S 18-0141	1-27	1000-08-81		11.25				
S 18-0141	1-28	1000-08-81	1			1		
S 18-0141	1-29	1000-08-81	1			1		
S 18-0141	1-30	1000-08-81		11.25				
S 18-0379	1-31	1000-08-81		8.25				
S 18-0379	1-32	1000-08-81	1			1		
S 18-0379	1-33	1000-08-81		8.25				
S 18-0221	1-34	1000-08-81		10.50				
S 18-0221	1-35	1000-08-81		10.50				
S 18-0160	1-36	1000-08-81		12.75				

(CONTINUED ON NEXT PAGE)

* INCIDENTAL TO SIGNAL POLE INSTALLATION

REMOVE SIGNING

SIGN ID	STATION	LOCATION	638.2601 REMOVING SIGNS TYPE I (EACH)
R1-1	14+52	LT	1
R1-2	14+52	LT	1
		TOTAL 3700-50-26	2

PERMANENT SIGNING

SIGN ID	STATION	LOCATION	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)
1-54	17+53.2	LT	192
1-55	17+53.2	LT	96
		TOTAL 3700-50-26	288

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

PERMANENT SIGNING
VARIOUS HIGHWAYS
PAGE 1 OF 2

PERMANENT SIGNING-CONTINUED

LOCATION	SIGN ID	ID	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	SPV.0060.03 REMOVING OVERHEAD SIGNS TYPE II EACH	* SIGN DECALS (FOR INFORMATION ONLY) EACH
S 18-0160	1-37	1000-08-81		12.75				
S 18-0373	1-38	1000-08-81		24.00				
S 18-0373	1-39	1000-08-81		24.00				
S 18-0894	1-40	1000-08-81		9.00				
S 18-0894	1-41	1000-08-81		9.00				
S 18-0894	1-42	1000-08-81						1
S 18-0894	1-43	1000-08-81						1
S 18-0377	1-44	3700-50-27		7.50			1	
S 18-0377	1-45	3700-50-27		9.00				
S 18-0377	1-46	3700-50-27		9.00				
S 18-0377	1-47	3700-50-27		7.50			1	
S 18-0651	1-48	1000-08-81		10.50				
S 18-0651	1-49	1000-08-81		10.50				
S 09-0800	1-50	1000-08-81		8.25				
S 09-0800	1-51	1000-08-81		8.25				
S 17-0693	1-52	1000-08-81		12.75				
S 17-0693	1-53	1000-08-81		12.75				
		TOTAL 1000-08-81	4	451.5	0	7	0	2
		TOTAL 3700-50-27	0	33	0	0	2	0

* INCIDENTAL TO SIGNAL POLE INSTALLATION

PAVEMENT MARKING

LOCATION	ID	647.0156 PAVEMENT MARKING ARROW EPOXY TYPE I EACH	646.0106 PAVEMENT MARKING EPOXY 4-INCH L.F.	647.0955 REMOVING PAVEMENT MARKING ARROWS EACH	646.0600 REMOVING PAVEMENT MARKINGS LF
S 18-0377	3700-50-27	3	70	3	280
	TOTAL 1000-08-81	0	0	0	0
	TOTAL 3700-50-27	3	70	3	280

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

PERMANENT SIGNING
VARIOUS HIGHWAYS
PAGE 2 OF 2

NOTE

- **PROTECT OPEN EXCAVATIONS WITH SAFETY FENCE WHENEVER WORK ACTIVITIES ARE NOT BEING ACTIVELY PERFORMED.**

SAFETY FENCE

LOCATION	ID	616.0700.S FENCE SAFETY L.F.
S 18-0711	1000-08-81	120
S 18-0647	1000-08-81	120
S 18-0378	1000-08-81	120
S 18-0598	1000-08-81	120
S 18-0228	1000-08-81	120
S 18-0040	1000-08-81	120
S 18-0287	1000-08-81	120
S 18-0226	1000-08-81	120
S 18-0147	1000-08-81	120
S 18-0180	1000-08-81	120
S 18-0146	1000-08-81	120
S 18-0141	1000-08-81	120
S 18-0379	1000-08-81	120
S 18-0221	1000-08-81	120
S 18-0160	1000-08-81	120
S 18-0159	1000-08-81	120
S 18-0373	1000-08-81	120
S 18-0894	1000-08-81	120
S 18-0377	3700-50-27	120
S 18-0651	1000-08-81	120
S 09-0800	1000-08-81	120
S 17-0693	1000-08-81	120

TOTAL 1000-08-81	2520
TOTAL 3700-50-27	120

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

TRAFFIC CONTROL, EROSION CONTROL, AND RESTORATION
VARIOUS HIGHWAYS
PAGE 1 OF 4

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EROSION CONTROL - INLET PROTECTION, TEMPORARY DITCH CHECKS, SILT FENCE

PROJECT		628.7010 INLET PROTECTION TYPE B (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROI (EACH)
1000-08-81		22	30	30	60	100	100	4	4
	SUB-TOTAL	22	30	30	60	100	100	4	4
3700-50-26		--	--	--	150	--	--	4	3
	SUB-TOTAL	0	0	0	150	0	0	4	3
3700-50-27		--	--	--	40	--	--	2	1
	SUB-TOTAL	0	0	0	40	0	0	2	1
	TOTALS	22	30	30	250	100	100	10	8

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

TRAFFIC CONTROL, EROSION CONTROL, AND RESTORATION
VARIOUS HIGHWAYS
PAGE 2 OF 4

TRAFFIC CONTROL

LOCATION	DAYS IN SERVICE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (EACH)	603.8125 CONCRETE BARRIER TERMPORARY PRECAST INSTALLED (EACH)	614.0905 CRASH CUSHIONS TEMPORARY (EACH)	643.0300 DRUMS NO.	643.0300 DRUMS (DAYS)	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III (DAYS)	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A (DAYS)	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C (DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS NO.	643.0800 TRAFFIC CONTROL ARROW BOARDS (DAYS)	643.0900 SIGNS NO.	643.0900 SIGNS (DAYS)	643.1050 SIGNS PCMS NO.	643.1050 SIGNS PCMS (DAYS)
1000-08-81																		
USH 12 & TRUAX	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & FOLSOM ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & MOHOLT DR	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & VINE ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & CAMERON ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & MENOMONIE ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & CRAIG RD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & STH 37	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & UNIVERSITY DR	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & STEIN BLVD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & PATTON ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & RUDOLPH RD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & KEITH ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & FAIRFAX ST	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & BUS 53 WEST RAMPS	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & BUS 53 EAST RAMPS	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 & OTTER RD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
STH 93 & LORCH AVE	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
STH 312 & JEFFERS RD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
STH 124 & 40TH AVE	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
STH 25 & CEDAR FALLS RD	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
USH 12 LIMITS	85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	170
STH 93 & LORCH AVE	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	14
STH 312 & JEFFERS RD	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	14
STH 124 & 40TH AVE	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	14
STH 25 & CEDAR FALLS RD	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	14
UNDISTRIBUTED		--	--	--	--	600	--	46	--	92	--	120	--	--	--	58	--	14
PROJECT 1000-08-81 TOTALS		0	0	0		9000		550		1100		1800		0		1150		240
3700-50-26																		
USH 53 (ADV. WARNING)	85	--	--	--	--	--	--	--	--	--	--	--	--	--	8	680	2	170
USH 53 (LANE/SHLDR CLOSURES)	15	2000	2000	2	100	1500	4	60	8	120	30	450	2	30	7	105	--	--
UNDISTRIBUTED		--	--	--	--	500	--	10	--	20	--	50	--	10	--	50	--	--
PROJECT 3700-50-26 TOTALS		2000	2000	2		2000		70		140		500		40		835		170
3700-50-27																		
STH 93 & GOLF RD (ADV. WARNING)	40	--	--	--	--	--	--	--	--	--	--	--	--	--	18	720	--	--
STH 93 & GOLF RD (LANE/SHLDR CLOSURES)	2	--	--	--	200	400	12	24	24	48	40	80	--	--	26	52	--	--
UNDISTRIBUTED	14	--	--	--	--	100	--	6	--	12	--	20	--	--	--	43	2	28
PROJECT 3700-50-27 TOTALS		0	0	0		500		30		60		100		0		815		28
TOTALS		2000	2000	2		11500		650		1300		2400		40		2800		438

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

TRAFFIC CONTROL, EROSION CONTROL, AND RESTORATION
VARIOUS HIGHWAYS
PAGE 3 OF 4

RESTORATION

LOCATION	625.0500 SALVAGE TOPSOIL S.Y.	627.0200 MULCHING S.Y.	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO.30 LB	630.0200 SEEDING TEMPORARY LB
1000-08-81					
CONCRETE BASES TYPE 13	300	300	1	5	8
REMOVING CONCRETE BASES	30	30	--	1	1
TRENCHED CONDUIT	320	320	--	6	9
UNDISTRIBUTED	160	160	--	3	4
PROJECT 1000-08-81 TOTALS	810	810	1	15	22
3700-50-26					
SIGN BRIDGE S-18-118	20	20	1	1	1
PULL BOXES	10	10	--	1	1
CONCRETE BASES TYPE 2	10	10	--	1	1
BASE CAMERA POLE	10	10	--	1	1
PEDESTAL BASE - ITS	10	10	--	1	1
ADJUSTING PULL BOX	10	10	--	1	1
TRENCHED CONDUIT	8040	8040	5	145	217
UNDISTRIBUTED	2030	2030	1	37	55
PROJECT 3700-50-26 TOTALS	10,140	10,140	7	187	277
3700-50-27					
CONCRETE BASES TYPE 13	10	10	1	1	1
REMOVING CONCRETE BASES	10	10	--	1	1
TRENCHED CONDUIT	20	20	--	1	1
UNDISTRIBUTED	10	10	--	1	1
PROJECT 3700-50-27 TOTALS	50	50	1	4	4
TOTALS	11,000	11,000	9	206	303

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

TRAFFIC CONTROL, EROSION CONTROL, AND RESTORATION
VARIOUS HIGHWAYS
PAGE 4 OF 4

3

GUARDRAIL

STATION	-	STATION	LOCATION	204.0165 REMOVING GUARDRAIL (LF)	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING (EACH)	614.2300 MGS GUARDRAIL 3 (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 (EACH)
13+50	-	15+60	LT.	525	--	--	--	--
15+47.8	-	17+63.5	RT.	--	1	162.5	1	1
15+47.8	-	17+63.5	LT.	--	--	162.5	1	1
			PROJECT TOTALS	525	1	325.0	2	2

ELECTRICAL WIRE

LOCATION	TO	LOCATION	* 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG (LF)
LP2		LP3	1,134
		PROJECT TOTALS	1,134

3

CONDUIT

STATION	STATION	LOCATION	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH (LF)
17+04.7	18+02.8	LT	98
		PROJECT TOTALS	98

ADJUSTING PULL BOXES

STATION	LOCATION	653.0900 ADJUSTING PULL BOXES (EACH)
15+78.7	RT.	1
	PROJECT TOTALS	1

LEGEND

* **ADDITIONAL ITEMS FOR QUANTITIES LISTED ELSEWHERE**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

ROADSIDE DESIGN
USH 53

PAGE 1 OF 1

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CONDUIT

LOCATION	LOC.	TO	LOC.	ID	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
S 18-0711	PB1		SB7	1000-08-81	15	
S 18-0711	PB2		SB14	1000-08-81	19	
S 18-0647	PB1		SB4	1000-08-81	22	
S 18-0647	PB2		SB10	1000-08-81	34	
S 18-0378	PB1		SB4	1000-08-81	22	
S 18-0378	PB2		SB11	1000-08-81	25	
S 18-0598	PB1		SB6	1000-08-81	40	
S 18-0598	PB2		SB12	1000-08-81	32	
S 18-0228	PB1		SB5	1000-08-81	33	
S 18-0228	PB2		SB12	1000-08-81	33	
S 18-0040	PB1		SB7	1000-08-81	9	
S 18-0040	PB2		SB16	1000-08-81	35	
S 18-0287	PB1		SB16	1000-08-81	48	
S 18-0287	PB2		SB12	1000-08-81	26	
S 18-0226	PB1		SB4	1000-08-81	8	
S 18-0226	PB2		SB14	1000-08-81	35	
S 18-0147	PB1		SB7	1000-08-81	17	
S 18-0147	PB2		SB14	1000-08-81	25	
S 18-0180	PB1		SB8	1000-08-81	24	
S 18-0180	PB2		SB17	1000-08-81	12	
S 18-0146	PB1		SB13	1000-08-81		18
S 18-0146	PB2		SB6	1000-08-81	59	
S 18-0141	PB1		SB17	1000-08-81	30	
S 18-0141	PB2		SB9	1000-08-81	24	
S 18-0379	PB1		SB5	1000-08-81		29
S 18-0379	PB2		SB14	1000-08-81	23	
S 18-0221	PB1		SB4	1000-08-81	17	
S 18-0221	PB2		SB12	1000-08-81	9	
S 18-0160	PB1		SB9	1000-08-81	34	
S 18-0160	PB2		SB16	1000-08-81	39	
S 18-0159	PB1		SB6	1000-08-81		19
S 18-0159	PB2		SB13	1000-08-81	32	
S 18-0373	PB1		SB8	1000-08-81	18	

CONDUIT - CONTINUED

LOCATION	LOC.	TO	LOC.	ID	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
S 18-0373	PB2		SB3	1000-08-81	15	
S 18-0894	PB1		SB12	1000-08-81	23	
S 18-0894	PB2		SB6	1000-08-81	21	
S 18-0377	PB1		SB11	3700-50-27		53
S 18-0377	PB2		SB3	3700-50-27	50	
S 18-0651	PB1		SB4	1000-08-81	33	
S 18-0651	PB2		SB10	1000-08-81	25	
S 09-0800	PB1		SB4	1000-08-81	25	
S 09-0800	PB2		SB10	1000-08-81	7	
S 17-0693	PB1		SB10	1000-08-81	16	
S 17-0693	PB2		SB4	1000-08-81	7	
				TOTAL 1000-08-81	971	66
				TOTAL 3700-50-27	50	53

REMOVING CONRETE BASES

SIGNAL BASE NO.	LOCATION	ID	204.0195 REMOVING CONCRETE BASES EACH
SB7	S 18-0711	1000-08-81	1
SB14	S 18-0711	1000-08-81	1
SB4	S 18-0647	1000-08-81	1
SB10	S 18-0647	1000-08-81	1
SB4	S 18-0378	1000-08-81	1
SB11	S 18-0378	1000-08-81	1
SB6	S 18-0598	1000-08-81	1
SB12	S 18-0598	1000-08-81	1
SB7	S 18-0040	1000-08-81	1
SB16	S 18-0040	1000-08-81	1
SB12	S 18-0287	1000-08-81	1
SB16	S 18-0287	1000-08-81	1
SB4	S 18-0226	1000-08-81	1
SB7	S 18-0147	1000-08-81	1
SB14	S 18-0147	1000-08-81	1
SB8	S 18-0180	1000-08-81	1
SB9	S 18-0141	1000-08-81	1
SB17	S 18-0141	1000-08-81	1
SB4	S 18-0221	1000-08-81	1
SB12	S 18-0221	1000-08-81	1
SB9	S 18-0160	1000-08-81	1
SB16	S 18-0160	1000-08-81	1
SB6	S 18-0159	1000-08-81	1
SB13	S 18-0159	1000-08-81	1
SB3	S 18-0373	1000-08-81	1
SB8	S 18-0373	1000-08-81	1
SB6	S 18-0894	1000-08-81	1
SB12	S 18-0894	1000-08-81	1
SB3	S 18-0377	3700-50-27	1
SB4	S 18-0651	1000-08-81	1
SB10	S 18-0651	1000-08-81	1
		TOTAL 1000-08-81	30
		TOTAL 3700-50-27	1

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 1 OF 15

CONCRETE BASES

SIGNAL BASE NO.	LOCATION	ID	654.0113 CONCRETE BASE TYPE 13 EACH
SB7	S 18-0711	1000-08-81	1
SB14	S 18-0711	1000-08-81	1
SB4	S 18-0647	1000-08-81	1
SB10	S 18-0647	1000-08-81	1
SB4	S 18-0378	1000-08-81	1
SB11	S 18-0378	1000-08-81	1
SB6	S 18-0598	1000-08-81	1
SB12	S 18-0598	1000-08-81	1
SB5	S 18-0228	1000-08-81	1
SB12	S 18-0228	1000-08-81	1
SB7	S 18-0040	1000-08-81	1
SB16	S 18-0040	1000-08-81	1
SB12	S 18-0287	1000-08-81	1
SB16	S 18-0287	1000-08-81	1
SB4	S 18-0226	1000-08-81	1
SB14	S 18-0226	1000-08-81	1
SB7	S 18-0147	1000-08-81	1
SB14	S 18-0147	1000-08-81	1
SB8	S 18-0180	1000-08-81	1
SB17	S 18-0180	1000-08-81	1
SB6	S 18-0146	1000-08-81	1
SB13	S 18-0146	1000-08-81	1
SB9	S 18-0141	1000-08-81	1
SB17	S 18-0141	1000-08-81	1
SB5	S 18-0379	1000-08-81	1
SB14	S 18-0379	1000-08-81	1
SB4	S 18-0221	1000-08-81	1
SB12	S 18-0221	1000-08-81	1
SB9	S 18-0160	1000-08-81	1
SB16	S 18-0160	1000-08-81	1
SB6	S 18-0159	1000-08-81	1
SB13	S 18-0159	1000-08-81	1
SB3	S 18-0373	1000-08-81	1
SB8	S 18-0373	1000-08-81	1
SB6	S 18-0894	1000-08-81	1
SB12	S 18-0894	1000-08-81	1
SB3	S 18-0377	3700-50-27	1
SB11	S 18-0377	3700-50-27	1
SB4	S 18-0651	1000-08-81	1
SB10	S 18-0651	1000-08-81	1
SB4	S 09-0800	1000-08-81	1
SB10	S 09-0800	1000-08-81	1
SB4	S 17-0693	1000-08-81	1
SB10	S 17-0693	1000-08-81	1

TOTAL 1000-08-81	42
TOTAL 3700-50-27	2

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0711	CB1		SB7	1000-08-81	445				1026
S 18-0711	CB1		SB14	1000-08-81	67			67	130
S 18-0711	SB6		SB7	1000-08-81				123	
S 18-0711	SB7		SB8	1000-08-81				182	
S 18-0711	SB13		SB14	1000-08-81				133	
S 18-0711	PB1		SB7	1000-08-81				35	
S 18-0711	PB2		SB14	1000-08-81				39	
S 18-0711	SB7		HEAD 6	1000-08-81	66				
S 18-0711	SB7		HEAD 7	1000-08-81	54				
S 18-0711	SB14		HEAD 2	1000-08-81	64				
S 18-0711	SB14		HEAD 3	1000-08-81	52				
S 18-0647	CB1		SB4	1000-08-81	319				387
S 18-0647	CB1		SB10	1000-08-81	343				411
S 18-0647	SB3		SB4	1000-08-81				148	
S 18-0647	SB4		SB5	1000-08-81				109	
S 18-0647	SB9		SB10	1000-08-81				155	
S 18-0647	SB10		SB11	1000-08-81				116	
S 18-0647	PB1		SB4	1000-08-81				42	
S 18-0647	PB2		SB10	1000-08-81				53	
S 18-0647	SB4		HEAD 6	1000-08-81	67				
S 18-0647	SB4		HEAD 7	1000-08-81	55				
S 18-0647	SB10		HEAD 2	1000-08-81	67				
S 18-0647	SB10		HEAD 3	1000-08-81	55				
S 18-0378	CB1		SB4	1000-08-81	224				282
S 18-0378	CB1		SB11	1000-08-81	234				292
S 18-0378	SB3		SB4	1000-08-81				122	
S 18-0378	SB4		SB5	1000-08-81				54	
S 18-0378	SB10		SB11	1000-08-81				126	
S 18-0378	SB11		SB12	1000-08-81				67	
S 18-0378	PB1		SB4	1000-08-81				42	
S 18-0378	PB2		SB11	1000-08-81				45	
S 18-0378	SB4		HEAD 6	1000-08-81	55				
S 18-0378	SB4		HEAD 7	1000-08-81	43				
S 18-0378	SB11		HEAD 2	1000-08-81	57				
S 18-0378	SB11		HEAD 3	1000-08-81	45				
S 18-0598	CB1		SB6	1000-08-81	422				490

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 2 OF 15

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	(FOR INFORMATION ONLY) INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0598	CB1		SB12	1000-08-81	74			74	147
S 18-0598	SB5		SB6	1000-08-81				160	
S 18-0598	SB6		SB7	1000-08-81				140	
S 18-0598	SB11		SB12	1000-08-81				145	
S 18-0598	PB1		SB6	1000-08-81				62	
S 18-0598	PB2		SB12	1000-08-81				52	
S 18-0598	SB6		HEAD 6	1000-08-81	69				
S 18-0598	SB6		HEAD 7	1000-08-81	57				
S 18-0598	SB6		HEAD 21	1000-08-81	45				
S 18-0598	SB12		HEAD 2	1000-08-81	70				
S 18-0598	SB12		HEAD 3	1000-08-81	58				
S 18-0598	SB12		HEAD 22	1000-08-81	46				
S 18-0228	CB1		SB5	1000-08-81	318				386
S 18-0228	CB1		SB12	1000-08-81	311				379
S 18-0228	SB4		SB5	1000-08-81				77	
S 18-0228	SB5		SB6	1000-08-81				122	
S 18-0228	SB11		SB12	1000-08-81				78	
S 18-0228	SB12		SB13	1000-08-81				121	
S 18-0228	SB4		HEAD 41	1000-08-81	15				
S 18-0228	SB5		HEAD 2	1000-08-81	69				
S 18-0228	SB5		HEAD 3	1000-08-81	57				
S 18-0228	SB5		HEAD 21	1000-08-81	45				
S 18-0228	SB11		HEAD 82	1000-08-81	15				
S 18-0228	SB12		HEAD 6	1000-08-81	66				
S 18-0228	SB12		HEAD 7	1000-08-81	54				
S 18-0228	SB12		HEAD 22	1000-08-81	42				
S 18-0040	CB1		SB7	1000-08-81	439				502
S 18-0040	CB1		SB16	1000-08-81	100			100	173
S 18-0040	SB6		SB7	1000-08-81				110	
S 18-0040	SB7		SB8	1000-08-81				189	
S 18-0040	SB15		SB16	1000-08-81				74	
S 18-0040	PB1		SB7	1000-08-81				29	
S 18-0040	PB2		SB16	1000-08-81				55	
S 18-0040	SB7		HEAD 5	1000-08-81	63				
S 18-0040	SB7		HEAD 6	1000-08-81	51				
S 18-0040	SB7		HEAD 23	1000-08-81	39				
S 18-0040	SB16		HEAD 2	1000-08-81	72				
S 18-0040	SB16		HEAD 16	1000-08-81	60				
S 18-0040	SB16		HEAD 22	1000-08-81	48				

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	(FOR INFORMATION ONLY) INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0287	CB1		SB12	1000-08-81	247				315
S 18-0287	CB1		SB16	1000-08-81	290				358
S 18-0287	SB4		SB16	1000-08-81				140	
S 18-0287	SB16		SB5	1000-08-81				124	
S 18-0287	SB11		SB12	1000-08-81				122	
S 18-0287	SB12		SB13	1000-08-81				128	
S 18-0287	PB1		SB16	1000-08-81				68	
S 18-0287	PB2		SB12	1000-08-81				46	
S 18-0287	SB12		HEAD 2	1000-08-81	69				
S 18-0287	SB12		HEAD 4	1000-08-81	57				
S 18-0287	SB12		HEAD 28	1000-08-81	45				
S 18-0287	SB16		HEAD 8	1000-08-81	65				
S 18-0287	SB16		HEAD 10	1000-08-81	53				
S 18-0287	SB16		HEAD 27	1000-08-81	41				
S 18-0226	CB1		SB4	1000-08-81	235				308
S 18-0226	CB1		SB14	1000-08-81	321				389
S 18-0226	SB3		SB4	1000-08-81				133	
S 18-0226	SB4		SB5	1000-08-81				153	
S 18-0226	SB13		SB14	1000-08-81				74	
S 18-0226	SB14		SB15	1000-08-81				158	
S 18-0226	PB1		SB4	1000-08-81				28	
S 18-0226	PB2		SB14	1000-08-81				54	
S 18-0226	SB4		HEAD 8	1000-08-81	70				
S 18-0226	SB4		HEAD 10	1000-08-81	58				
S 18-0226	SB4		HEAD 29	1000-08-81	46				
S 18-0226	SB14		HEAD 2	1000-08-81	69				
S 18-0226	SB14		HEAD 4	1000-08-81	57				
S 18-0226	SB14		HEAD 30	1000-08-81	45				
S 18-0147	CB1		SB7	1000-08-81	414				482
S 18-0147	CB1		SB14	1000-08-81	92			92	
S 18-0147	SB6		SB7	1000-08-81				127	
S 18-0147	SB7		SB8	1000-08-81				123	
S 18-0147	SB13		SB14	1000-08-81				118	

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 3 OF 15

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0147	PB1		SB7	1000-08-81				39	
S 18-0147	PB2		SB14	1000-08-81				45	
S 18-0147	SB7		HEAD 8	1000-08-81	68				
S 18-0147	SB7		HEAD 9	1000-08-81	56				
S 18-0147	SB7		HEAD 26	1000-08-81	44				
S 18-0147	SB14		HEAD 2	1000-08-81	69				
S 18-0147	SB14		HEAD 4	1000-08-81	57				
S 18-0147	SB14		HEAD 27	1000-08-81	45				
S 18-0180	CB1		SB8	1000-08-81	413				481
S 18-0180	CB1		SB17	1000-08-81	103			103	176
S 18-0180	SB7		SB8	1000-08-81				121	
S 18-0180	SB8		SB9	1000-08-81				100	
S 18-0180	SB16		SB17	1000-08-81				47	
S 18-0180	PB1		SB8	1000-08-81				43	
S 18-0180	PB2		SB17	1000-08-81				32	
S 18-0180	SB8		HEAD 8	1000-08-81	69				
S 18-0180	SB8		HEAD 9	1000-08-81	57				
S 18-0180	SB8		HEAD 26	1000-08-81	45				
S 18-0180	SB16		HEAD 81	1000-08-81	15				
S 18-0180	SB17		HEAD 2	1000-08-81	71				
S 18-0180	SB17		HEAD 4	1000-08-81	59				
S 18-0180	SB17		HEAD 27	1000-08-81	47				
S 18-0146	CB1		SB6	1000-08-81	302				370
S 18-0146	CB1		SB13	1000-08-81	217				295
S 18-0146	SB5		SB6	1000-08-81				100	
S 18-0146	SB6		SB7	1000-08-81				140	
S 18-0146	SB12		SB13	1000-08-81				58	
S 18-0146	SB13		SB14	1000-08-81				131	
S 18-0146	PB1		SB13	1000-08-81				38	
S 18-0146	PB2		SB6	1000-08-81				79	
S 18-0146	SB6		HEAD 2	1000-08-81	67				
S 18-0146	SB6		HEAD 3	1000-08-81	55				
S 18-0146	SB6		HEAD 24	1000-08-81	43				
S 18-0146	SB13		HEAD 7	1000-08-81	79				
S 18-0146	SB13		HEAD 8	1000-08-81	67				
S 18-0146	SB13		HEAD 25	1000-08-81	55				
S 18-0141	CB1		SB9	1000-08-81	419				492
S 18-0141	CB1		SB17	1000-08-81	103			103	176
S 18-0141	SB8		SB9	1000-08-81				118	

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0141	SB9		SB10	1000-08-81				129	
S 18-0141	SB16		SB17	1000-08-81				133	
S 18-0141	PB1		SB17	1000-08-81				51	
S 18-0141	PB2		SB9	1000-08-81				45	
S 18-0141	SB9		HEAD 2	1000-08-81	70				
S 18-0141	SB9		HEAD 4	1000-08-81	58				
S 18-0141	SB9		HEAD 28	1000-08-81	46				
S 18-0141	SB17		HEAD 8	1000-08-81	71				
S 18-0141	SB17		HEAD 10	1000-08-81	59				
S 18-0141	SB17		HEAD 27	1000-08-81	47				
S 18-0379	CB1		SB5	1000-08-81	260				338
S 18-0379	CB1		SB14	1000-08-81	234				297
S 18-0379	SB4		SB5	1000-08-81				70	
S 18-0379	SB5		SB6	1000-08-81				123	
S 18-0379	SB13		SB14	1000-08-81				59	
S 18-0379	SB14		SB15	1000-08-81				119	
S 18-0379	PB1		SB5	1000-08-81				49	
S 18-0379	PB2		SB14	1000-08-81				43	
S 18-0379	SB5		HEAD 8	1000-08-81	78				
S 18-0379	SB5		HEAD 10	1000-08-81	66				
S 18-0379	SB5		HEAD 27	1000-08-81	54				
S 18-0379	SB14		HEAD 2	1000-08-81	63				
S 18-0379	SB14		HEAD 4	1000-08-81	51				
S 18-0379	SB14		HEAD 28	1000-08-81	39				
S 18-0221	CB1		SB4	1000-08-81	254				322
S 18-0221	CB1		SB12	1000-08-81	246				319
S 18-0221	SB3		SB4	1000-08-81				122	
S 18-0221	SB4		SB5	1000-08-81				100	
S 18-0221	SB11		SB12	1000-08-81				104	
S 18-0221	SB12		SB13	1000-08-81				118	
S 18-0221	PB1		SB4	1000-08-81				38	
S 18-0221	PB2		SB12	1000-08-81				28	
S 18-0221	SB4		HEAD 8	1000-08-81	66				

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
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TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0221	SB4		HEAD 10	1000-08-81	54				
S 18-0221	SB4		HEAD 28	1000-08-81	42				
S 18-0221	SB12		HEAD 2	1000-08-81	71				
S 18-0221	SB12		HEAD 4	1000-08-81	59				
S 18-0221	SB12		HEAD 29	1000-08-81	47				
S 18-0160	CB1		SB9	1000-08-81	360				433
S 18-0160	CB1		SB16	1000-08-81	78			78	156
S 18-0160	SB8		SB9	1000-08-81				88	
S 18-0160	SB9		SB10	1000-08-81				173	
S 18-0160	SB15		SB16	1000-08-81				168	
S 18-0160	PB1		SB9	1000-08-81				54	
S 18-0160	PB2		SB16	1000-08-81				58	
S 18-0160	SB9		HEAD 2	1000-08-81	47				
S 18-0160	SB9		HEAD 3	1000-08-81	59				
S 18-0160	SB9		HEAD 27	1000-08-81	71				
S 18-0160	SB14		HEAD 5	1000-08-81		22			
S 18-0160	SB16		HEAD 7	1000-08-81	75				
S 18-0160	SB16		HEAD 8	1000-08-81	63				
S 18-0160	SB16		HEAD 25	1000-08-81	51				
S 18-0160	SB16		HEAD 26	1000-08-81	39				
S 18-0159	CB1		SB6	1000-08-81	401				479
S 18-0159	CB1		SB13	1000-08-81	81			81	149
S 18-0159	SB5		SB6	1000-08-81				113	
S 18-0159	SB6		SB7	1000-08-81				104	
S 18-0159	SB12		SB13	1000-08-81				172	
S 18-0159	PB1		SB6	1000-08-81				39	
S 18-0159	PB2		SB13	1000-08-81				52	
S 18-0159	SB6		HEAD 2	1000-08-81	78				
S 18-0159	SB6		HEAD 3	1000-08-81	66				
S 18-0159	SB6		HEAD 17	1000-08-81	54				
S 18-0159	SB13		HEAD 6	1000-08-81	67				
S 18-0159	SB13		HEAD 7	1000-08-81	55				
S 18-0373	CB1		SB3	1000-08-81	241				314
S 18-0373	CB1		SB8	1000-08-81	235				303
S 18-0373	SB7		SB8	1000-08-81				119	
S 18-0373	SB8		SB9	1000-08-81				143	
S 18-0373	SB2		SB3	1000-08-81				115	
S 18-0373	SB3		SB4	1000-08-81				138	
S 18-0373	PB1		SB8	1000-08-81				37	

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO	LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0373	PB2		SB3	1000-08-81				35	
S 18-0373	SB3		HEAD 6	1000-08-81	69				
S 18-0373	SB3		HEAD 19	1000-08-81	57				
S 18-0373	SB3		HEAD 20	1000-08-81	45				
S 18-0373	SB8		HEAD 2	1000-08-81	67				
S 18-0373	SB8		HEAD 17	1000-08-81	55				
S 18-0373	SB8		HEAD 18	1000-08-81	43				
S 18-0894	CB1		SB6	1000-08-81	448				511
S 18-0894	CB1		SB12	1000-08-81	62				125
S 18-0894	SB11		SB12	1000-08-81				119	
S 18-0894	SB12		SB13	1000-08-81				65	
S 18-0894	SB5		SB6	1000-08-81				123	
S 18-0894	SB6		SB7	1000-08-81				163	
S 18-0894	PB1		SB12	1000-08-81				43	
S 18-0894	PB2		SB6	1000-08-81				41	
S 18-0894	SB6		HEAD 14	1000-08-81	62				
S 18-0894	SB6		HEAD 16	1000-08-81	50				
S 18-0894	SB12		HEAD 7	1000-08-81	61				
S 18-0894	SB12		HEAD 15	1000-08-81	46				
S 18-0377	CB1		SB3	3700-50-27			290		363
S 18-0377	CB1		SB11	3700-50-27			298		371
S 18-0377	SB10		SB11	3700-50-27				107	
S 18-0377	SB11		SB12	3700-50-27				126	
S 18-0377	SB2		SB3	3700-50-27				195	
S 18-0377	SB3		SB4	3700-50-27				143	
S 18-0377	PB1		SB11	3700-50-27				73	
S 18-0377	PB2		SB3	3700-50-27				71	
S 18-0377	SB2		HEAD 3	3700-50-27		22			
S 18-0377	SB3		HEAD 4	3700-50-27	61				
S 18-0377	SB3		HEAD 24	3700-50-27	49				
S 18-0377	SB3		HEAD 25	3700-50-27		74			
S 18-0377	SB9		HEAD 14	3700-50-27		22			
S 18-0377	SB11		HEAD 15	3700-50-27	57				

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
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TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 18-0377	SB11	HEAD 26	3700-50-27	47				
S 18-0377	SB11	HEAD 27	3700-50-27		70			
S 18-0651	CB1	SB4	1000-08-81	289				362
S 18-0651	CB1	SB10	1000-08-81	227				600
S 18-0651	SB3	SB4	1000-08-81				160	
S 18-0651	SB4	SB5	1000-08-81				113	
S 18-0651	SB9	SB10	1000-08-81				139	
S 18-0651	SB10	SB11	1000-08-81				62	
S 18-0651	PB1	SB4	1000-08-81				52	
S 18-0651	PB2	SB10	1000-08-81				45	
S 18-0651	SB4	HEAD 9	1000-08-81	72				
S 18-0651	SB4	HEAD 10	1000-08-81	59				
S 18-0651	SB10	HEAD 3	1000-08-81	73				
S 18-0651	SB10	HEAD 4	1000-08-81	61				
S 09-0800	CB1	SB4	1000-08-81	320				383
S 09-0800	CB1	SB10	1000-08-81	200				263
S 09-0800	SB3	SB4	1000-08-81				137	
S 09-0800	SB4	SB5	1000-08-81				111	
S 09-0800	SB9	SB10	1000-08-81				133	
S 09-0800	SB10	SB11	1000-08-81				95	
S 09-0800	PB1	SB4	1000-08-81				45	
S 09-0800	PB2	SB10	1000-08-81				27	
S 09-0800	SB4	HEAD 2	1000-08-81	58				
S 09-0800	SB4	HEAD 3	1000-08-81	46				
S 09-0800	SB5	HEAD 7	1000-08-81	21				
S 09-0800	SB5	HEAD 12	1000-08-81		25			
S 09-0800	SB10	HEAD 5	1000-08-81	59				
S 09-0800	SB10	HEAD 6	1000-08-81	47				
S 09-0800	SB11	HEAD 9	1000-08-81		23			
S 09-0800	SB11	HEAD 10	1000-08-81	21				
S 17-0693	CB1	SB4	1000-08-81			237		
S 17-0693	CB1	SB10	1000-08-81	226				
S 17-0693	SB3	SB4	1000-08-81				42	
S 17-0693	SB4	SB5	1000-08-81				124	
S 17-0693	SB9	SB10	1000-08-81				78	
S 17-0693	SB10	SB11	1000-08-81				79	

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE (CONTINUED)

(FOR INFORMATION ONLY)

LOCATION	LOC.	TO LOC.	ID	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	INSTALL STATE FURNISHED EVP DETECTOR CABLE L.F.
S 17-0693	PB1	SB10	1000-08-81				37	
S 17-0693	PB2	SB4	1000-08-81				27	
S 17-0693	SB4	HEAD 2	1000-08-81	62				
S 17-0693	SB4	HEAD 18	1000-08-81	50				
S 17-0693	SB4	HEAD 19	1000-08-81		40			
S 17-0693	SB9	HEAD 31	1000-08-81	15				
S 17-0693	SB10	HEAD 6	1000-08-81	63				
S 17-0693	SB10	HEAD 17	1000-08-81	52				
TOTAL 1000-08-81				17158	110	237	11389	13801
TOTAL 3700-50-27				214	188	588	715	734

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 6 OF 15

SIG. BASE NO.	LOCATION	ID	657.0100 PEDESTAL BASES EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.1355 INSTALL POLES TYPE 12 EACH	357.1360 INSTALL POLES TYPE 13 EACH	657.1535 INSTALL MONOTUBE ARMS 35-FT EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	657.1550 INSTALL MONOTUBE ARMS 50-FT EACH	657.1555 INSTALL MONOTUBE ARMS 55-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	658.0190.S TRAFFIC SIGNAL FACE - LED STATE FURNISHED EACH	658.0420.S PEDESTRIAN SIGNAL FACE - LED STATE FURNISHED EACH	SPV.0060.02 INSTALL LUMINAIRE ARMS STEEL 15-FT 15-5/8-INCH CLAMP EACH
SB7	S 18-0711	1000-08-81					1				1				2		
SB14	S 18-0711	1000-08-81					1			1					2		
SB4	S 18-0647	1000-08-81						1			1				2		1
SB10	S 18-0647	1000-08-81						1			1				2		1
SB4	S 18-0378	1000-08-81						1	1						2		1
SB11	S 18-0378	1000-08-81						1	1						2		1
SB6	S 18-0598	1000-08-81					1				1				3		
SB12	S 18-0598	1000-08-81						1				1			3		1
SB4	S 18-0228	1000-08-81	1			1								1		1	
SB5	S 18-0228	1000-08-81						1			1				3		1
SB11	S 18-0228	1000-08-81	1			1								1		1	
SB12	S 18-0228	1000-08-81						1			1				3		1
SB7	S 18-0040	1000-08-81						1		1					3		1
SB16	S 18-0040	1000-08-81						1				1			3		1
SB12	S 18-0287	1000-08-81					1				1				3		
SB16	S 18-0287	1000-08-81					1				1				3		
SB4	S 18-0226	1000-08-81						1			1				3		1
SB13	S 18-0226	1000-08-81	1	1													
SB14	S 18-0226	1000-08-81					1				1				3		
SB7	S 18-0147	1000-08-81						1			1				3		1
SB14	S 18-0147	1000-08-81						1			1				3		1
SB8	S 18-0180	1000-08-81						1			1				3		1
SB16	S 18-0180	1000-08-81	1			1								1		1	
SB17	S 18-0180	1000-08-81						1				1			3		1
SB4	S 18-0146	1000-08-81	1	1													
SB6	S 18-0146	1000-08-81					1				1				3		
SB12	S 18-0146	1000-08-81	1	1													
SB13	S 18-0146	1000-08-81					1						1		3		
SB9	S 18-0141	1000-08-81						1				1			3		1
SB17	S 18-0141	1000-08-81						1				1			3		1
SB4	S 18-0379	1000-08-81	1	1													
SB5	S 18-0379	1000-08-81					1						1		3		
SB13	S 18-0379	1000-08-81	1	1													
SB14	S 18-0379	1000-08-81					1			1					3		
SB4	S 18-0221	1000-08-81						1			1				3		1
SB12	S 18-0221	1000-08-81						1				1			3		1
SB9	S 18-0160	1000-08-81						1				1			3		1
SB14	S 18-0160	1000-08-81	1		1										1		
SB16	S 18-0160	1000-08-81						1					1		4		1

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS

TRAFFIC SIGNAL EQUIPMENT - CONTINUED

SIG. BASE NO.	LOCATION	ID	657.0100 PEDESTAL BASES EACH	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.1355 INSTALL POLES TYPE 12 EACH	357.1360 INSTALL POLES TYPE 13 EACH	657.1535 INSTALL MONOTUBE ARMS 35-FT EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	657.1550 INSTALL MONOTUBE ARMS 50-FT EACH	657.1555 INSTALL MONOTUBE ARMS 55-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	658.0190.S TRAFFIC SIGNAL FACE - LED STATE FURNISHED EACH	658.0420.S PEDESTRIAN SIGNAL FACE - LED STATE FURNISHED EACH	SPV.0060.02 INSTALL LUMINAIRE ARMS STEEL 15-FT 15-5/8-INCH CLAMP EACH
SB6	S 18-0159	1000-08-81					1						1		3		
SB11	S 18-0159	1000-08-81	1	1													
SB13	S 18-0159	1000-08-81					1				1				2		
SB3	S 18-0373	1000-08-81					1					1			3		
SB8	S 18-0373	1000-08-81					1				1				3		
SB6	S 18-0894	1000-08-81						1		1					2		1
SB12	S 18-0894	1000-08-81						1		1					2		1
SB2	S 18-0377	3700-50-27													1		
SB3	S 18-0377	3700-50-27					1					1			3		
SB9	S 18-0377	3700-50-27													1		
SB10	S 18-0377	3700-50-27	1	1													
SB11	S 18-0377	3700-50-27					1					1			3		
SB4	S 18-0651	1000-08-81					1					1			2		
SB10	S 18-0651	1000-08-81					1					1			2		
SB3	S 09-0800	1000-08-81	1	1													
SB4	S 09-0800	1000-08-81					1			1					2		
SB5	S 09-0800	1000-08-81	1		1									1	2		
SB9	S 09-0800	1000-08-81	1	1													
SB10	S 09-0800	1000-08-81					1			1					2		
SB11	S 09-0800	1000-08-81	1		1									1	2		
SB3	S 17-0693	1000-08-81	1	1													
SB4	S 17-0693	1000-08-81					1				1				3		
SB9	S 17-0693	1000-08-81	1			1								1		1	
SB10	S 17-0693	1000-08-81					1				1				2		
TOTAL 1000-08-81			16	9	3	4	20	22	2	7	19	10	4	6	118	4	22
TOTAL 3700-50-27			1	1	0	0	2	0	0	0	0	2	0	0	8	0	0

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 8 OF 15

INSTALL STATE FURNISHED EVP SYSTEM

LOCATION	ID	SPV.0105.01 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.02 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.03 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.04 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.05 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.06 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.07 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.08 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.09 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.10 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.11 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.12 INSTALL STATE FURNISHED EVP SYSTEM L.S.
USH 12 & TRUAX BLVD	1000-08-81	1											
USH 12 & FOLSOM ST	1000-08-81		1										
USH 12 & MOHOLT DR	1000-08-81			1									
USH 12 & VINE ST	1000-08-81				1								
USH 12 & CAMERON ST	1000-08-81					1							
USH 12 & MENOMONIE ST	1000-08-81						1						
USH 12 & CRAIG RD	1000-08-81							1					
USH 12 & STH 37	1000-08-81								1				
USH 12 & UNIVERSITY DR	1000-08-81									1			
USH 12 & STEIN BLVD	1000-08-81										1		
USH 12 & PATTON ST	1000-08-81											1	
USH 12 & RUDOLPH RD	1000-08-81												1
USH 12 & KEITH ST	1000-08-81												
USH 12 & FAIRFAX ST	1000-08-81												
USH 12 & BUS 53 WEST RAMPS	1000-08-81												
USH 12 & BUS 53 EAST RAMPS	1000-08-81												
USH 12 & OTTER RD	1000-08-81												
STH 93 & LORCH AVE	1000-08-81												
STH 93 & GOLF RD	3700-50-27												
STH 312 & JEFFERS RD	1000-08-81												
STH 124 & 40TH AVE	1000-08-81												
TOTAL 1000-08-81		1	1	1	1	1	1	1	1	1	1	1	1
TOTAL 3700-50-27		0	0	0	0	0	0	0	0	0	0	0	0

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ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
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INSTALL CONDUIT INTO EXISTING ITEM

PULL BOX NO.	LOCATION	ID	* 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
PB1	S 18-0711	1000-08-81	1
PB2	S 18-0711	1000-08-81	1
PB1	S 18-0647	1000-08-81	1
PB2	S 18-0647	1000-08-81	1
PB1	S 18-0378	1000-08-81	1
PB2	S 18-0378	1000-08-81	1
PB1	S 18-0598	1000-08-81	1
PB2	S 18-0598	1000-08-81	1
PB1	S 18-0228	1000-08-81	1
PB2	S 18-0228	1000-08-81	1
PB1	S 18-0040	1000-08-81	1
PB2	S 18-0040	1000-08-81	1
PB1	S 18-0287	1000-08-81	1
PB2	S 18-0287	1000-08-81	1
PB1	S 18-0226	1000-08-81	1
PB2	S 18-0226	1000-08-81	1
PB1	S 18-0147	1000-08-81	1
PB2	S 18-0147	1000-08-81	1
PB1	S 18-0180	1000-08-81	1
PB2	S 18-0180	1000-08-81	1
PB1	S 18-0146	1000-08-81	1
PB2	S 18-0146	1000-08-81	1
PB1	S 18-0141	1000-08-81	1
PB2	S 18-0141	1000-08-81	1
PB1	S 18-0379	1000-08-81	1
PB2	S 18-0379	1000-08-81	1
PB1	S 18-0221	1000-08-81	1
PB2	S 18-0221	1000-08-81	1
PB1	S 18-0160	1000-08-81	1
PB2	S 18-0160	1000-08-81	1
PB1	S 18-0159	1000-08-81	1
PB2	S 18-0159	1000-08-81	1
PB1	S 18-0373	1000-08-81	1
PB2	S 18-0373	1000-08-81	1
PB1	S 18-0894	1000-08-81	1
PB2	S 18-0894	1000-08-81	1
PB1	S 18-0377	3700-50-27	1
PB2	S 18-0377	3700-50-27	1
PB1	S 18-0651	1000-08-81	1
PB2	S 18-0651	1000-08-81	1
PB1	S 09-0800	1000-08-81	1
PB2	S 09-0800	1000-08-81	1
PB1	S 17-0693	1000-08-81	1
PB2	S 17-0693	1000-08-81	1
TOTAL 1000-08-81			42
TOTAL 3700-50-27			2

INSTALL STATE FURNISHED EVP SYSTEM - CONTINUED

LOCATION	ID	SPV.0105.13 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.14 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.15 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.16 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.17 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.18 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.19 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.20 INSTALL STATE FURNISHED EVP SYSTEM L.S.	SPV.0105.21 INSTALL STATE FURNISHED EVP SYSTEM L.S.
USH 12 & TRUAX BLVD	1000-08-81									
USH 12 & FOLSOM ST	1000-08-81									
USH 12 & MOHOLT DR	1000-08-81									
USH 12 & VINE ST	1000-08-81									
USH 12 & CAMERON ST	1000-08-81									
USH 12 & MENOMONIE ST	1000-08-81									
USH 12 & CRAIG RD	1000-08-81									
USH 12 & STH 37	1000-08-81									
USH 12 & UNIVERSITY DR	1000-08-81									
USH 12 & STEIN BLVD	1000-08-81									
USH 12 & PATTON ST	1000-08-81									
USH 12 & RUDOLPH RD	1000-08-81									
USH 12 & KEITH ST	1000-08-81	1								
USH 12 & FAIRFAX ST	1000-08-81		1							
USH 12 & BUS 53 WEST RAMPS	1000-08-81			1						
USH 12 & BUS 53 EAST RAMPS	1000-08-81				1					
USH 12 & OTTER RD	1000-08-81					1				
STH 93 & LORCH AVE	1000-08-81						1			
STH 93 & GOLF RD	3700-50-27							1		
STH 312 & JEFFERS RD	1000-08-81								1	
STH 124 & 40TH AVE	1000-08-81									1
TOTAL 1000-08-81		1	1	1	1	1	1	0	1	1
TOTAL 3700-50-27		0	0	0	0	0	0	1	0	0

LEGEND

* ADDITIONAL ITEMS FOR QUANTITIES LISTED ELSEWHERE

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 10 OF 15

REMOVE TRAFFIC SIGNALS

LOCATION	ID	SPV.0105.22 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.23 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.24 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.25 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.26 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.27 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.28 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.29 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.30 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.31 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.32 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.33 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.34 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.35 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.36 REMOVE TRAFFIC SIGNALS L.S.
USH12 & TRUAX BLVD	1000-08-81	1														
USH12 & FOLSOM ST	1000-08-81		1													
USH12 & MOHOLT DR	1000-08-81			1												
USH12 & VINE ST	1000-08-81				1											
USH12 & CAMERON ST	1000-08-81					1										
USH12 & MENOMONIE ST	1000-08-81						1									
USH12 & CRAIG RD	1000-08-81							1								
USH12 & STH 37	1000-08-81								1							
USH12 & UNIVERSITY DR	1000-08-81									1						
USH12 & STEIN BLVD	1000-08-81										1					
USH12 & PATTON ST	1000-08-81											1				
USH12 & RUDOLPH RD	1000-08-81												1			
USH12 & KEITH ST	1000-08-81													1		
USH12 & FAIRFAX ST	1000-08-81														1	
USH12 & BUS 53 WEST RAMPS	1000-08-81															1
USH12 & BUS 53 EAST RAMPS	1000-08-81															
USH12 & OTTER RD	1000-08-81															
STH 93 & LORCH AVE	1000-08-81															
STH 93 & GOLF RD	3700-50-27															
STH 312 & JEFFERS RD	1000-08-81															
STH 124 & 40TH AVE	1000-08-81															
STH 25 & CEDAR FALLS RD	1000-08-81															

(CONTINUED ON NEXT PAGE)

TOTAL 1000-08-81	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL 3700-50-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
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REMOVE TRAFFIC SIGNALS-CONTINUED

LOCATION	ID	SPV.0105.37 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.38 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.39 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.40 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.41 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.42 REMOVE TRAFFIC SIGNALS L.S.	SPV.0105.43 REMOVE TRAFFIC SIGNALS L.S.
USH12 & TRUAX BLVD	1000-08-81							
USH12 & FOLSOM ST	1000-08-81							
USH12 & MOHOLT DR	1000-08-81							
USH12 & VINE ST	1000-08-81							
USH12 & CAMERON ST	1000-08-81							
USH12 & MENOMONIE ST	1000-08-81							
USH12 & CRAIG RD	1000-08-81							
USH12 & STH 37	1000-08-81							
USH12 & UNIVERSITY DR	1000-08-81							
USH12 & STEIN BLVD	1000-08-81							
USH12 & PATTON ST	1000-08-81							
USH12 & RUDOLPH RD	1000-08-81							
USH12 & KEITH ST	1000-08-81							
USH12 & FAIRFAX ST	1000-08-81							
USH12 & BUS 53 WEST RAMPS	1000-08-81							
USH12 & BUS 53 EAST RAMPS	1000-08-81	1						
USH12 & OTTER RD	1000-08-81		1					
STH 93 & LORCH AVE	1000-08-81			1				
STH 93 & GOLF RD	3700-50-27				1			
STH 312 & JEFFERS RD	1000-08-81					1		
STH 124 & 40TH AVE	1000-08-81						1	
STH 25 & CEDAR FALLS RD	1000-08-81							1
TOTAL 1000-08-81		1	1	1	0	1	1	1
TOTAL 3700-50-27		0	0	0	1	0	0	0

SIGNAL MOUNTING HARDWARE

LOCATION	ID	SPV.0105.44 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.45 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.46 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.
USH12 & TRUAX BLVD	1000-08-81	1		
USH12 & FOLSOM ST	1000-08-81		1	
USH12 & MOHOLT DR	1000-08-81			1
USH12 & VINE ST	1000-08-81			
USH12 & CAMERON ST	1000-08-81			
USH12 & MENOMONIE ST	1000-08-81			
USH12 & CRAIG RD	1000-08-81			
USH12 & STH 37	1000-08-81			
USH12 & UNIVERSITY DR	1000-08-81			
USH12 & STEIN BLVD	1000-08-81			
USH12 & PATTON ST	1000-08-81			
USH12 & RUDOLPH RD	1000-08-81			
USH12 & KEITH ST	1000-08-81			
USH12 & FAIRFAX ST	1000-08-81			
USH12 & BUS 53 WEST RAMPS	1000-08-81			
USH12 & BUS 53 EAST RAMPS	1000-08-81			
USH12 & OTTER RD	1000-08-81			
STH 93 & LORCH AVE	1000-08-81			
STH 93 & GOLF RD	3700-50-27			
STH 312 & JEFFERS RD	1000-08-81			
STH 124 & 40TH AVE	1000-08-81			
STH 25 & CEDAR FALLS RD	1000-08-81			
TOTAL 1000-08-81		1	1	1
TOTAL 3700-50-27		0	0	0

(CONTINUED ON NEXT PAGE)

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 12 OF 15

SIGNAL MOUNTING HARDWARE-CONTINUED

LOCATION	ID	SPV.0105.47 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.48 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.49 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.50 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.51 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.52 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.53 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.
USH12 & TRUAX BLVD	1000-08-81							
USH12 & FOLSOM ST	1000-08-81							
USH12 & MOHOLT DR	1000-08-81							
USH12 & VINE ST	1000-08-81	1						
USH12 & CAMERON ST	1000-08-81		1					
USH12 & MENOMONIE ST	1000-08-81			1				
USH12 & CRAIG RD	1000-08-81				1			
USH12 & STH 37	1000-08-81					1		
USH12 & UNIVERSITY DR	1000-08-81						1	
USH12 & STEIN BLVD	1000-08-81							1
USH12 & PATTON ST	1000-08-81							
USH12 & RUDOLPH RD	1000-08-81							
USH12 & KEITH ST	1000-08-81							
USH12 & FAIRFAX ST	1000-08-81							
USH12 & BUS 53 WEST RAMPS	1000-08-81							
USH12 & BUS 53 EAST RAMPS	1000-08-81							
USH12 & OTTER RD	1000-08-81							
STH 93 & LORCH AVE	1000-08-81							
STH 93 & GOLF RD	3700-50-27							
STH 312 & JEFFERS RD	1000-08-81							
STH 124 & 40TH AVE	1000-08-81							
STH 25 & CEDAR FALLS RD	1000-08-81							

(CONTINUED ON NEXT PAGE)

TOTAL 1000-08-81	1	1	1	1	1	1	1
TOTAL 3700-50-27	0	0	0	0	0	0	0

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 13 OF 15

SIGNAL MOUNTING HARDWARE-CONTINUED

LOCATION	ID	SPV.0105.54 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.55 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.56 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.57 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.58 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.59 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.60 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.
USH12 & TRUAX BLVD	1000-08-81							
USH12 & FOLSOM ST	1000-08-81							
USH12 & MOHOLT DR	1000-08-81							
USH12 & VINE ST	1000-08-81							
USH12 & CAMERON ST	1000-08-81							
USH12 & MENOMONIE ST	1000-08-81							
USH12 & CRAIG RD	1000-08-81							
USH12 & STH 37	1000-08-81							
USH12 & UNIVERSITY DR	1000-08-81							
USH12 & STEIN BLVD	1000-08-81							
USH12 & PATTON ST	1000-08-81	1						
USH12 & RUDOLPH RD	1000-08-81		1					
USH12 & KEITH ST	1000-08-81			1				
USH12 & FAIRFAX ST	1000-08-81				1			
USH12 & BUS 53 WEST RAMPS	1000-08-81					1		
USH12 & BUS 53 EAST RAMPS	1000-08-81						1	
USH12 & OTTER RD	1000-08-81							1
STH 93 & LORCH AVE	1000-08-81							
STH 93 & GOLF RD	3700-50-27							
STH 312 & JEFFERS RD	1000-08-81							
STH 124 & 40TH AVE	1000-08-81							
STH 25 & CEDAR FALLS RD	1000-08-81							
TOTAL 1000-08-81		1	1	1	1	1	1	1
TOTAL 3700-50-27		0	0	0	0	0	0	0

(CONTINUED ON NEXT PAGE)

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 14 OF 15

SIGNAL MOUNTING HARDWARE-CONTINUED

LOCATION	ID	SPV.0105.61 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.62 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.63 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.64 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.	SPV.0105.65 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (ORNAMENTAL) L.S.
USH12 & TRUAX BLVD	1000-08-81					
USH12 & FOLSOM ST	1000-08-81					
USH12 & MOHOLT DR	1000-08-81					
USH12 & VINE ST	1000-08-81					
USH12 & CAMERON ST	1000-08-81					
USH12 & MENOMONIE ST	1000-08-81					
USH12 & CRAIG RD	1000-08-81					
USH12 & STH 37	1000-08-81					
USH12 & UNIVERSITY DR	1000-08-81					
USH12 & STEIN BLVD	1000-08-81					
USH12 & PATTON ST	1000-08-81					
USH12 & RUDOLPH RD	1000-08-81					
USH12 & KEITH ST	1000-08-81					
USH12 & FAIRFAX ST	1000-08-81					
USH12 & BUS 53 WEST RAMPS	1000-08-81					
USH12 & BUS 53 EAST RAMPS	1000-08-81					
USH12 & OTTER RD	1000-08-81					
STH 93 & LORCH AVE	1000-08-81	1				
STH 93 & GOLF RD	3700-50-27		1			
STH 312 & JEFFERS RD	1000-08-81			1		
STH 124 & 40TH AVE	1000-08-81				1	
STH 25 & CEDAR FALLS RD	1000-08-81					1
TOTAL	1000-08-81	1	0	1	1	1
TOTAL	3700-50-27	0	1	0	0	0

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGNALIZED INTERSECTION IMPROVEMENTS
VARIOUS HIGHWAYS
PAGE 15 OF 15

3

ITS PULL BOX & COMMUNICATION VAULT ITEMS

ITEM	EAU CLAIRE COUNTY COORDINATES X	Y	653.0140 PULL BOXES STEEL 24 X 42-INCH EA	673.0105 COMMUNICATION VAULT TYPE 1 EA	SPV.0060.01 FIBER TRACER MARKER POST EA
CATEGORY 0010					
PROJECT 3700-50-26					
PB1	359,322.16	263,238.89	1	--	--
PB2	359,265.90	262,927.38	1	--	--
PB3	356,213.85	266,559.48	1	--	--
PB4	356,175.04	266,518.24	1	--	--
PB5	356,058.63	266,410.78	1	--	--
PB6	353,637.14	268,224.07	1	--	--
PB7	351,310.79	270,117.14	1	--	--
PB8	351,310.67	269,999.55	1	--	--
PB9	351,310.67	269,907.28	1	--	--
PB10	351,476.09	269,740.46	1	--	--
PB11	351,255.34	269,674.21	1	--	--
PB12	351,328.32	269,720.91	1	--	--
PB13	351,489.57	269,702.77	1		
PB14	350,740.31	271,296.62	1	--	--
PB15	350,841.09	270,989.91	1	--	--
PB16	350,481.09	270,170.41	1	--	--
CV1	360,824.06	262,754.86	--	1	1
CV2	359,341.08	263,371.58	--	1	1
CV3	357,985.24	264,415.52	--	1	1
CV4	356,301.34	266,633.46	--	1	1
CV5	354,896.06	267,390.54	--	1	1
CV6	353,666.88	268,221.41	--	1	1
CV7	352,569.06	268,963.02	--	1	1
CV8	351,509.72	270,164.92	--	1	1
CV9	351,085.65	271,530.84	--	1	1
CV10	350,660.67	271,466.67	--	1	1
CV11	350,461.47	273,868.66	--	1	1
CV12	350,570.17	275,304.61	--	1	1
PROJECT TOTALS			16	12	12

ITS POLES AND BASES

ITEM	EAU CLAIRE COUNTY COORDINATES X	Y	654.0102 CONCRETE BASES TYPE 2 EA	672.0250 BASE CAMERA POLE 50-FT EA	677.0150 INSTALL CAMERA POLE 50-FT EA
CATEGORY 0010					
PROJECT 3700-50-26					
CP1 (GOLF RD)	356,024.63	266,381.86	--	1	1
CP2 (STH 93)	351,488.33	269,725.92	--	1	1
G18-19	350,455.57	270,175.46	1	--	--
PROJECT TOTALS			1	2	2

ITS MISCELLANEOUS ITEMS

	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS
CATEGORY 0010		
PROJECT 3700-50-26		
USH 53 ITS	1	1
PROJECT TOTALS	1	1

ITS ITEMS

ITEM	EAU CLAIRE COUNTY COORDINATES X	Y	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL - ITS LS	656.0500.01 ELECTRICAL SERVICE BREAKER DISCONNECT BOX - CCTV-18-0042 LS	656.0500.02 ELECTRICAL SERVICE BREAKER DISCONNECT BOX - CCTV-18-0043 LS	656.0500.03 ELECTRICAL SERVICE BREAKER DISCONNECT BOX - DMS-18-0033 LS	662.2030.S RAMP CLOSURE GATES SOLAR 30-FT EA	673.0225.S INSTALL POLE MOUNTED CABINET EA	677.0200 INSTALL CAMERA ASSEMBLY EA	678.0100.S INSTALL OVERHEAD FREEWAY DMS FULL MATRIX EA
CATEGORY 0010										
PROJECT 3700-50-26										
CP1	356,024.63	266,381.86	--	1	--	--	--	1	1	--
CP2	351,488.33	269,725.92	--	--	1	--	--	1	1	--
MB1	351,413.89	269,482.90	1	--	--	--	--	--	--	--
DMS1	353,623.81	268,206.88	--	--	--	1	--	1	--	1
G18-29	350,455.57	270,175.46	--	--	--	--	1	--	--	--
PROJECT TOTALS			1	1	1	1	1	3	2	1

ITS CONDUIT AND CABLE ITEMS

	FROM	TO	LINEAR DISTANCE	WIRE SLACK LF	NUMBER OF CONDUITS	NUMBER OF ELECTRICAL WIRES LIGHTING 6 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 4 AWG	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	* 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EA	* 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH LF	671.0300 FIBER OPTIC CABLE MARKER EA	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0036 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT LF	678.0072 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT LF
CATEGORY 0010																		
PROJECT 3700-50-26																		
	EAU CLAIRE SP	EXCV1	150	100	--	--	--	--	--	--	--	--	150	--	1	--	--	250
	EXCV1	EXCV2	285	100	--	--	--	--	--	--	--	--	285	--	2	--	--	385
	EXCV2	EXCV3	1675	100	--	--	--	--	--	--	--	--	1675	--	4	--	--	1775
	EXCV3	QP1	880	0	--	--	--	--	--	1	--	--	880	--	2	--	--	880
	QP1	CV1	415	100	--	--	--	--	--	--	--	--	--	415	2	--	--	515
	CV1	CV2	1605	100	--	--	--	--	--	--	--	--	1605	--	5	--	--	1705
	CV2	QP2	1590	0	--	--	--	--	--	--	--	--	1590	--	5	--	--	1590
	QP2	CV3	110	100	--	--	--	--	--	--	--	--	--	110	2	--	--	210
	CV3	QP3	2635	0	--	--	--	--	--	--	--	--	2635	--	6	--	--	2635
	QP3	CV4	165	100	--	--	--	--	--	--	--	--	--	165	5	--	--	265
	CV4	CV5	1610	100	--	--	--	--	--	--	--	--	1610	--	5	--	--	1710
	CV5	CV6	1470	100	--	--	--	--	--	--	--	--	1470	--	3	--	--	1570
MAINLINE FIBER	CV6	QP4	1145	0	--	--	--	--	--	--	--	--	1145	--	3	--	--	1145
	QP4	CV7	160	100	--	--	--	--	--	--	--	--	--	160	2	--	--	260
	CV7	CV8	1615	100	--	--	--	--	--	--	--	--	1615	--	6	--	--	1715
	CV8	CV9	1415	100	--	--	--	--	--	--	--	--	1415	--	3	--	--	1515
	CV9	CV10	420	100	--	--	--	--	--	--	--	--	--	420	2	--	--	520
	CV10	EXCV4	1190	100	--	--	--	--	--	1	--	--	1190	--	5	--	--	1290
	EXCV4	QP5	150	0	--	--	--	--	--	1	--	--	--	150	2	--	--	150
	QP5	CV11	1085	100	--	--	--	--	--	--	--	--	1085	--	6	--	--	1185
	CV11	EXPB25	360	100	--	--	--	--	--	1	--	--	360	--	2	--	--	460
	EXPB25	EXPB27	490	15	--	--	--	--	--	1	--	--	490	--	2	--	--	505
	EXPB27	CV12	585	100	--	--	--	--	--	--	--	--	585	--	4	--	--	685
	CV12	QP6	1665	0	--	--	--	--	--	--	--	--	1665	--	7	--	--	1665
	QP6	EXCV5	15	100	--	--	--	--	--	1	--	--	--	15	1	--	--	115
	CV2	PB1	120	25	1	--	--	--	120	--	--	--	--	--	2	145	--	--
IH 94 & USH 53 INTERCHANGE CCTV	PB1	PB2	310	15	1	--	--	310	--	--	--	--	--	--	2	325	--	--
	PB2	EXPB1	255	10	1	--	--	--	255	1	--	--	--	--	2	265	--	--
	EXPB1	EXCP1	25	10	--	--	--	--	--	--	--	--	--	--	1	35	--	--
	CV4	PB3	105	25	1	--	--	--	105	--	--	--	--	--	2	130	--	--
	PB3	PB4	50	15	1	--	--	50	--	--	--	--	--	--	2	65	--	--
USH 53 & GOLF RD INTERCHANGE CCTV	PB4	PB5	150	15	2	3	--	300	--	--	495	--	--	--	--	165	--	--
	PB5	CP1 (DISCONNECT BOX)	35	10	1	3	--	35	--	--	135	--	--	--	--	--	--	--
	PB5	CP1	30	10	1	--	--	30	--	--	--	--	--	--	1	40	--	--
	EXSC1	PB4	25	20	1	3	--	25	--	--	135	--	--	--	--	--	--	--
GOLF RD EAST SIGNAL CABINET FIBER	CV4	PB3	105	25	--	--	--	--	--	--	--	--	--	--	--	130	--	--
	PB3	EXPB2	25	30	1	--	--	25	--	1	--	--	--	--	2	55	--	--
	EXPB2	EXSC1	5	10	1	--	--	5	--	--	--	--	--	--	1	15	--	--
	EXSC1	EXPB2	5	10	--	--	--	--	--	--	--	--	-	--	--	15	--	--
	EXPB2	EXPB3	25	15	--	--	--	--	--	--	--	--	--	--	1	40	--	--
	EXPB3	EXPB4	30	15	--	--	--	--	--	--	--	--	--	--	2	45	--	--
	EXPB4	EXPB5	35	15	--	--	--	--	--	--	--	--	--	--	1	50	--	--
GOLF RD WEST SIGNAL CABINET FIBER	EXPB5	EXPB6	50	15	--	--	--	--	--	--	--	--	--	--	2	65	--	--
	EXPB6	EXPB7	110	15	--	--	--	--	--	--	--	--	--	--	2	125	--	--
	EXPB7	EXPB8	285	15	--	--	--	--	--	--	--	--	--	--	--	300	--	--
	EXPB8	EXPB9	80	15	--	--	--	--	--	--	--	--	--	--	2	95	--	--
	EXPB9	EXPB10	20	15	--	--	--	--	--	--	--	--	--	--	1	35	--	--
	EXPB10	EXPB11	35	15	--	--	--	--	--	--	--	--	--	--	1	50	--	--
	EXPB11	EXPB12	45	15	--	--	--	--	--	--	--	--	--	--	1	60	--	--
	EXPB12	EXSC2	5	10	--	--	--	--	--	--	--	--	--	--	1	15	--	--

(CONTINUED ON NEXT PAGE)

* ADDITIONAL ITEMS FOR QUANTITIES LISTED IN OTHER MISCELLANEOUS SHEETS

ITS CONDUIT AND CABLE ITEMS

	FROM	TO	LINEAR DISTANCE	WIRE SLACK LF	NUMBER OF CONDUITS	NUMBER OF ELECTRICAL WIRES LIGHTING 6 AWG	NUMBER OF ELECTRICAL WIRES LIGHTING 4 AWG	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	* 652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EA	* 655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH LF	671.0300 FIBER OPTIC CABLE MARKER EA	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0036 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT LF	678.0072 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT LF
CATEGORY 0010 PROJECT 3700-50-26																		
	CV6	PB6	20	25	1	--	--	20	--	--	--	--	--	--	2	45	--	--
USH 53 NB DMS	PB6	DMS1	15	10	2	--	--	30	--	--	--	--	--	--	2	25	--	--
	EXLC1	DMS1	145	20	1	--	4	145	--	--	--	660	--	--	--	--	--	--
	CV8	PB7	195	25	1	--	--	195	--	--	--	--	--	--	3	220	--	--
	PB7	PB8	110	15	1	--	--	110	--	--	--	--	--	--	2	125	--	--
	PB8	PB9	85	15	1	--	--	--	85	--	--	--	--	--	2	100	--	--
STH 93 & HASTINGS WAY CCTV	PB9	PB10	230	15	1	--	--	230	--	--	--	--	--	--	2	245	--	--
	PB10	CP2	10	10	1	--	--	10	--	--	--	--	--	--	1	20	--	--
	MB1	PB11	245	20	1	3	--	245	--	--	795	--	--	--	--	--	--	--
	PB11	PB12	90	15	1	3	--	--	90	--	315	--	--	--	--	--	--	--
	PB12	PB13	165	15	1	3	--	165	--	--	540	--	--	--	--	--	--	--
	PB13	CP2	20	15	1	3	--	20	--	--	105	--	--	--	--	--	--	--
ITS HUT	CV10	EXPB13	5	25	1	--	--	5	--	1	--	--	--	--	1	--	30	--
	EXPB13	HUT1	170	100	--	--	--	--	--	--	--	--	--	--	2	--	270	--
	CV10	PB14	175	25	1	--	--	--	175	--	--	--	--	--	2	200	--	--
	PB14	PB15	315	15	1	--	--	315	--	--	--	--	--	--	2	330	--	--
	PB15	EXPB14	275	15	1	--	--	275	--	1	--	--	--	--	3	290	--	--
STH 93 SIGNAL CABINET FIBER	EXPB14	EXPB15	355	15	--	--	--	--	--	--	--	--	--	--	2	370	--	--
	EXPB15	EXPB16	110	15	--	--	--	--	--	--	--	--	--	--	2	125	--	--
	EXPB16	EXPB17	125	15	--	--	--	--	--	--	--	--	--	--	2	140	--	--
	EXPB17	EXPB18	55	15	--	--	--	--	--	--	--	--	--	--	2	70	--	--
	EXPB18	EXSC3	15	10	--	--	--	--	--	--	--	--	--	--	1	25	--	--
CLAIREMONT CCTV	EXCV4	EXPB19	15	15	1	--	--	15	--	1	--	--	--	--	1	30	--	--
	EXPB19	EXCP2	15	20	1	--	--	15	--	--	--	--	--	--	1	35	--	--
	EXCV4	EXPB20	70	25	--	--	--	--	--	1	--	--	--	--	2	95	--	--
CLAIREMONT SIGNAL CABINET FIBER	EXPB20	EXPB21	70	15	--	--	--	--	--	--	--	--	--	--	--	85	--	--
	EXPB21	EXPB22	230	15	--	--	--	--	--	--	--	--	--	--	--	245	--	--
	EXPB22	EXPB23	70	15	--	--	--	--	--	--	--	--	--	--	--	85	--	--
	EXPB23	EXPB24	65	15	--	--	--	--	--	--	--	--	--	--	--	80	--	--
	EXPB24	EXSC4	5	10	--	--	--	--	--		--	--			--	15		
PROJECT TOTALS								2575	830	12	2520	660	21450	1435	153	5265	300	24700

* ADDITIONAL ITEMS FOR QUANTITIES LISTED IN OTHER MISCELLANEOUS SHEETS

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3

SIGN STRUCTURE (S-18-118)

STATION	636.0100 SIGN SUPPORTS CONCRETE MASONRY (CY)	636.1500 SIGN SUPPORTS STEEL COATED REINFORCEMENT HS (LB)	641.6600 SIGN BRIDGE (S-18-118) (LS)	SPV.0105.66 REMOVING OLD SIGN BRIDGE SINGLE POLE S-18-057 (LS)
17+58.4	39	5780	1	1
PROJECT TOTALS	39	5,780	1	1

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

SIGN STRUCTURE (S-18-118)
USH 53
PAGE 1 OF 1

PI STA. 10+00.00
X = 345215.102
Y = 267733.311

PI STA. 24+00.00
X = 353049.468
Y = 268508.744

N

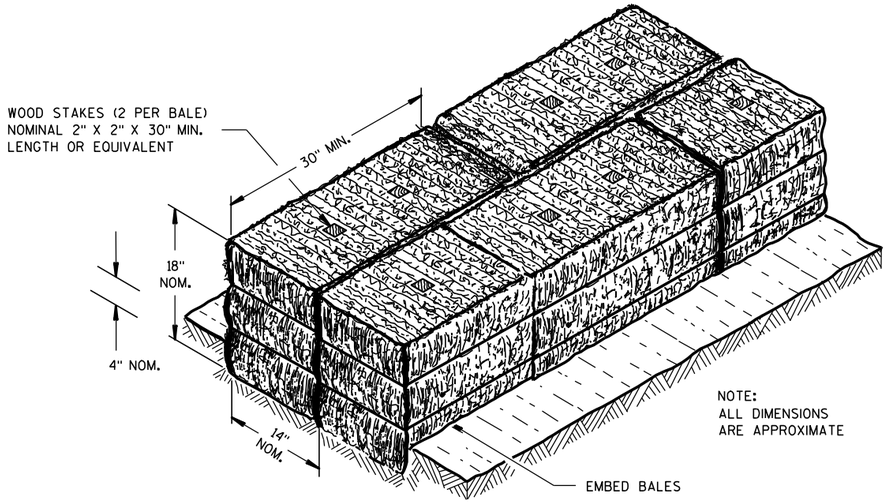
REMOVING CONCRETE BASE
REMOVING GUARDRAIL
MGS GUARDRAIL TERMINAL EAT
MSG GUARDRAIL 3
SIGN BRIDGE BASE S-18-118
MGS GUARDRAIL TERMINAL TYPE 2
USH 53 S.B.
POST #3
EXISTING MAINTENANCE CROSSOVER
+47.9
+97.9
+63.5
48'
60'
4'
8'
13+00
14+00
15+00
16+00
17+00
18+00
19+00
N56° 21' 59"W
USH 53 N.B.
6'
8'
7.0'
+27.9
+47.9
+97.9
+63.5
+83.5
5'
10'
HINGE POINT LINE
POST #3
MGS GUARDRAIL TERMINAL EAT
MGS GUARDRAIL 3
SIGN BRIDGE BASE S-18-118
MGS GUARDRAIL TERMINAL TYPE 2
SLOPE INTERCEPTS

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	PLAN: SIGN BASE AND GUARDRAIL LAYOUT	SHEET 188	E

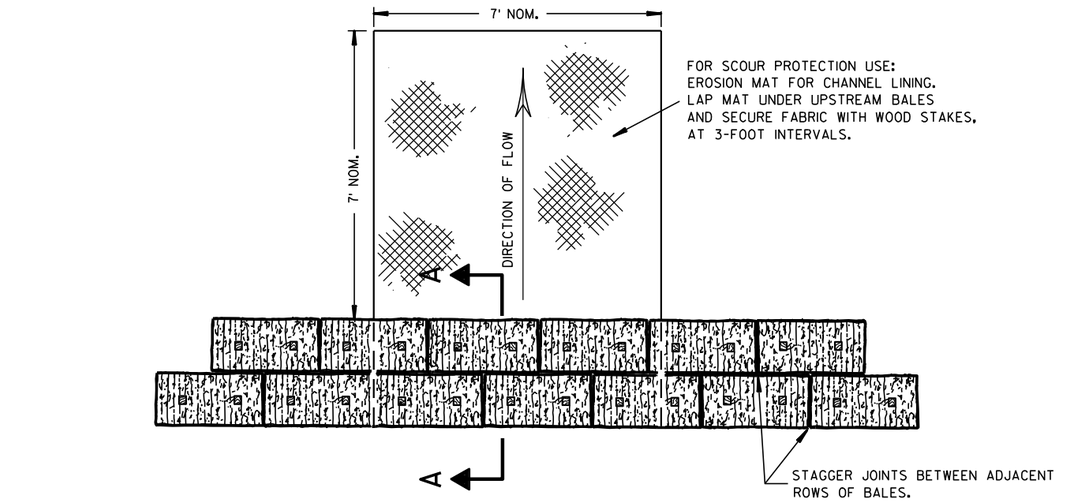
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C12-08A	CONCRETE BASE TYPE 13
09C12-08B	CONCRETE BASE TYPE 13
09C13-02	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	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
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C07-13C	PAVEMENT MARKING ARROWS
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D34-02A	RAMP GATE SOLAR POWER
15D34-02B	RAMP GATE SOLAR POWER
15D34-02C	RAMP GATE SOLAR POWER
15D34-02D	RAMP GATE SOLAR POWER

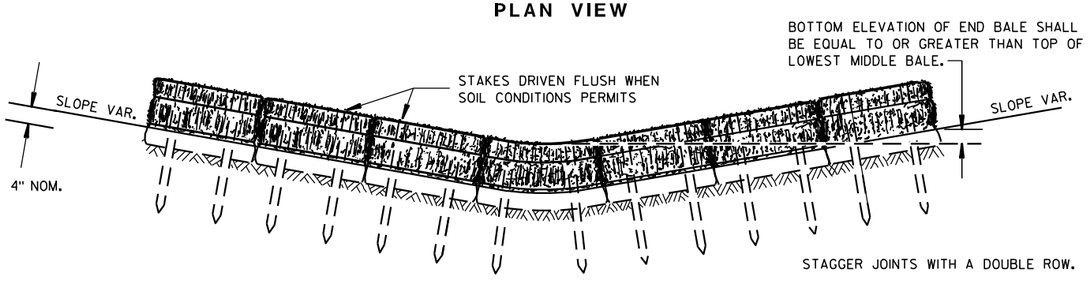
6



SECTION A-A



PLAN VIEW



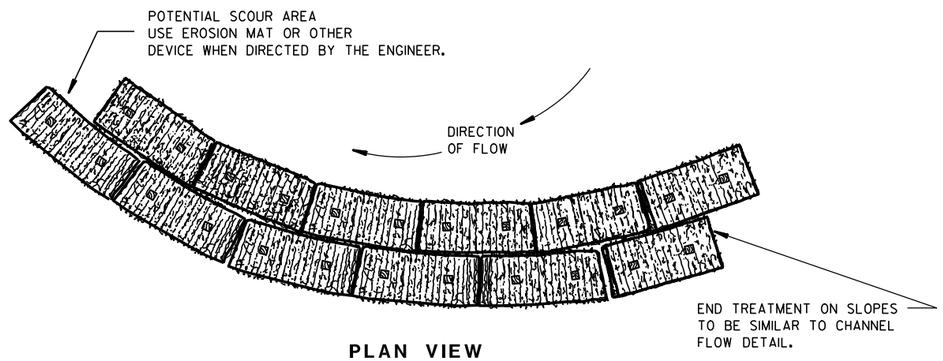
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

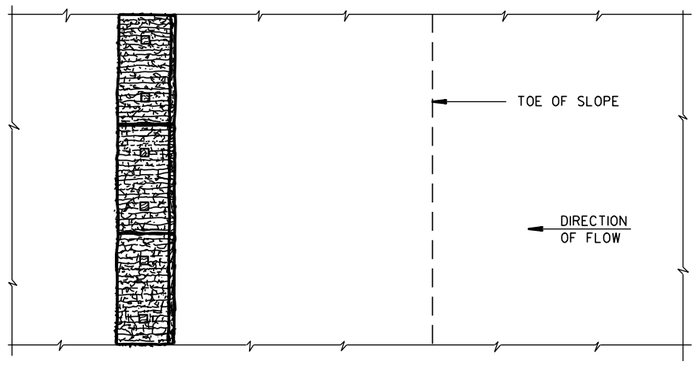
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

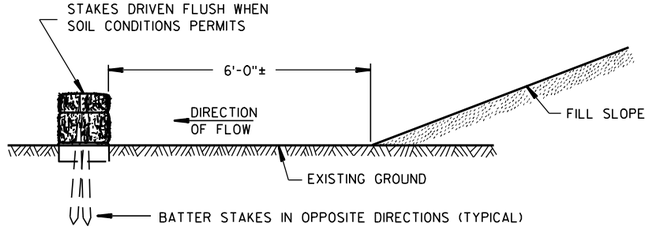


PLAN VIEW

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

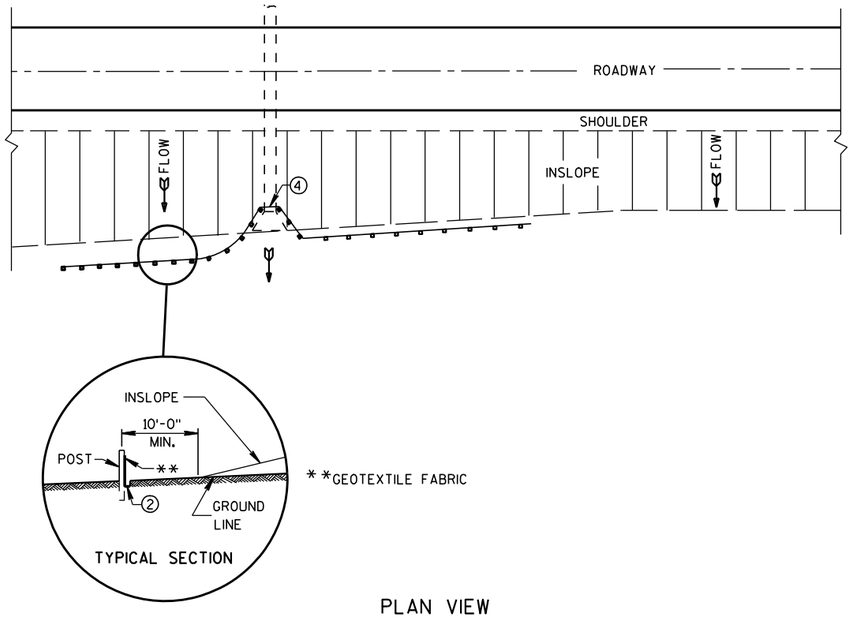
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

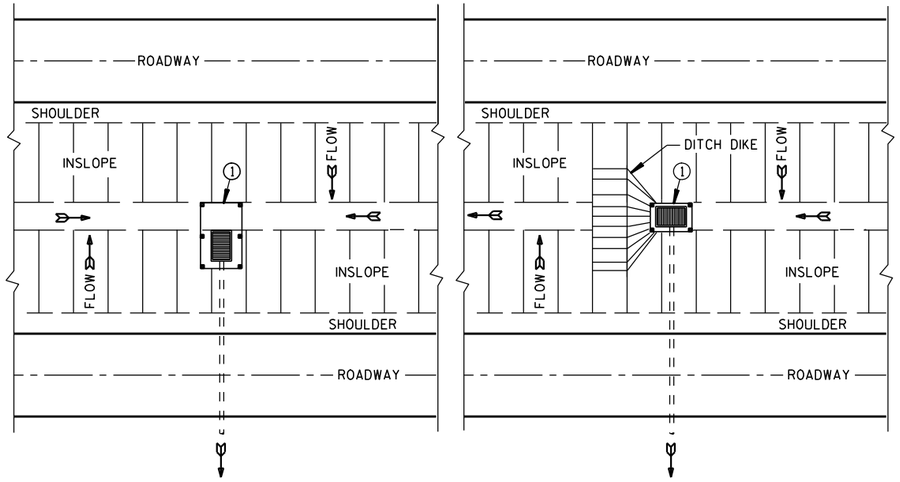
6

S.D.D. 8 E 8-3



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.

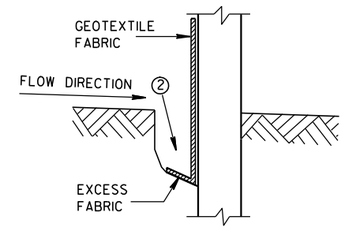
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

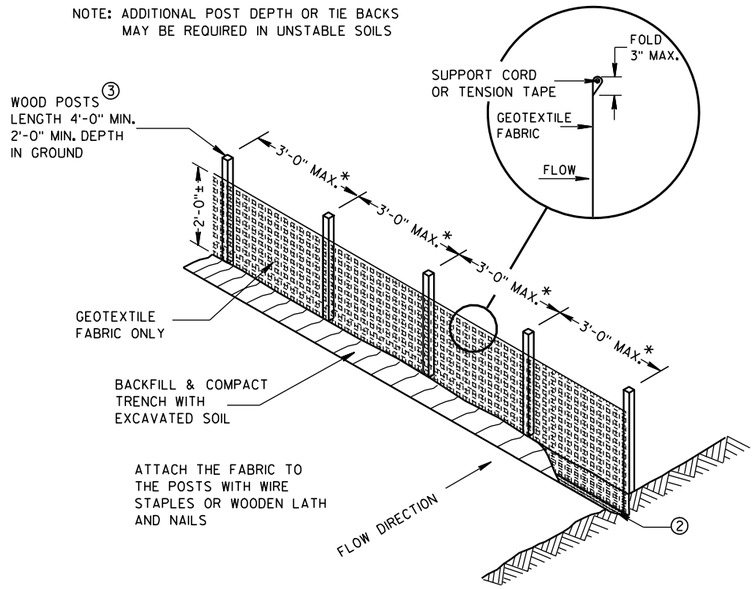
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

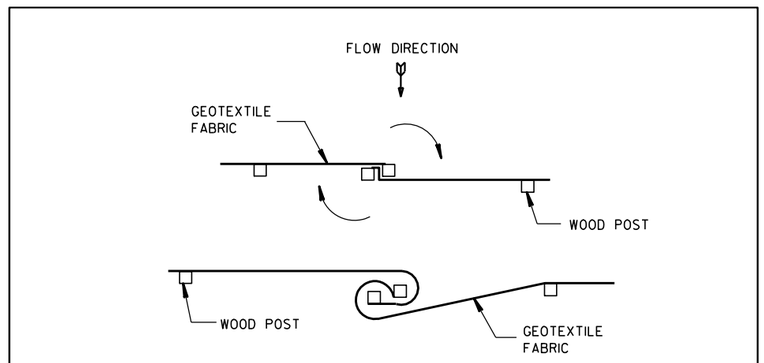
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



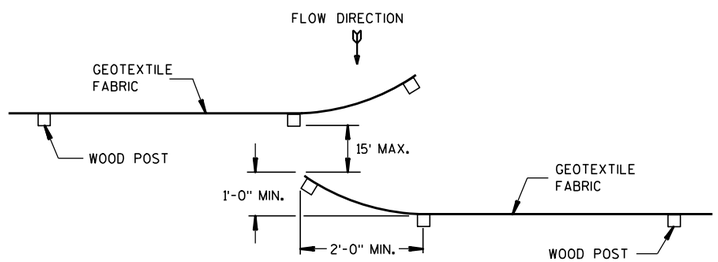
TRENCH DETAIL



SILT FENCE

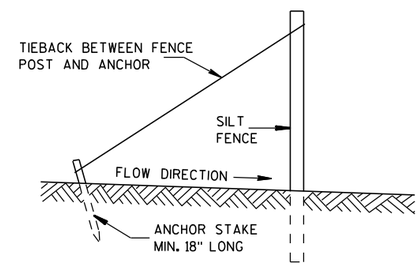


TWIST METHOD



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

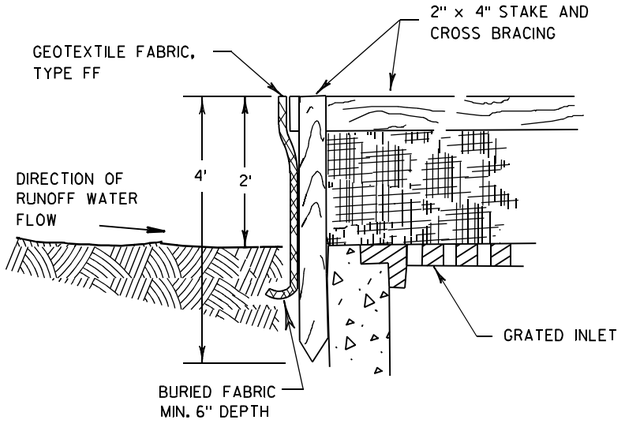
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

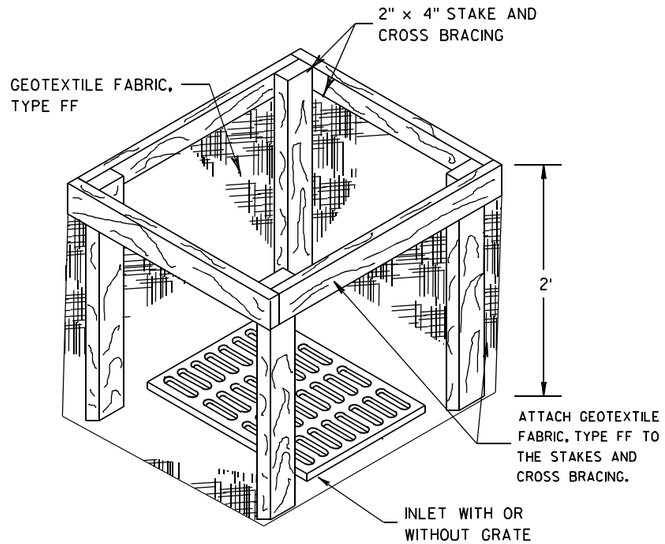
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S.D.D. 8 E 9-6

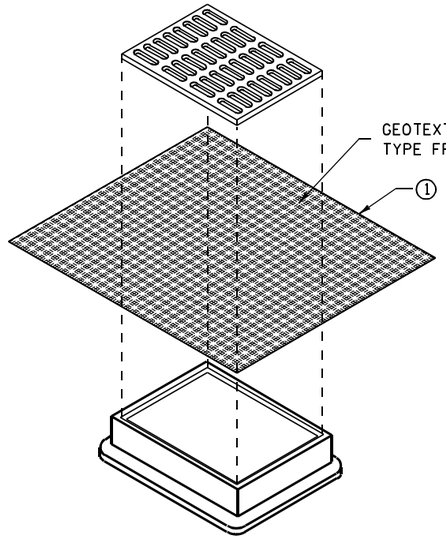
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S.D.D. 8 E 9-6



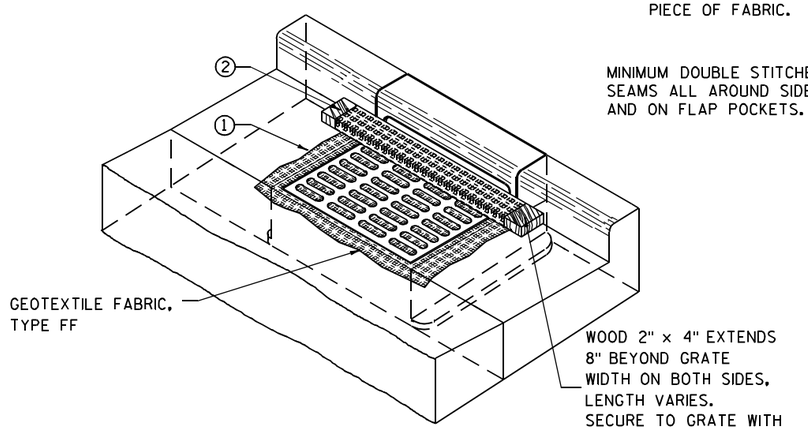


INLET PROTECTION, TYPE A

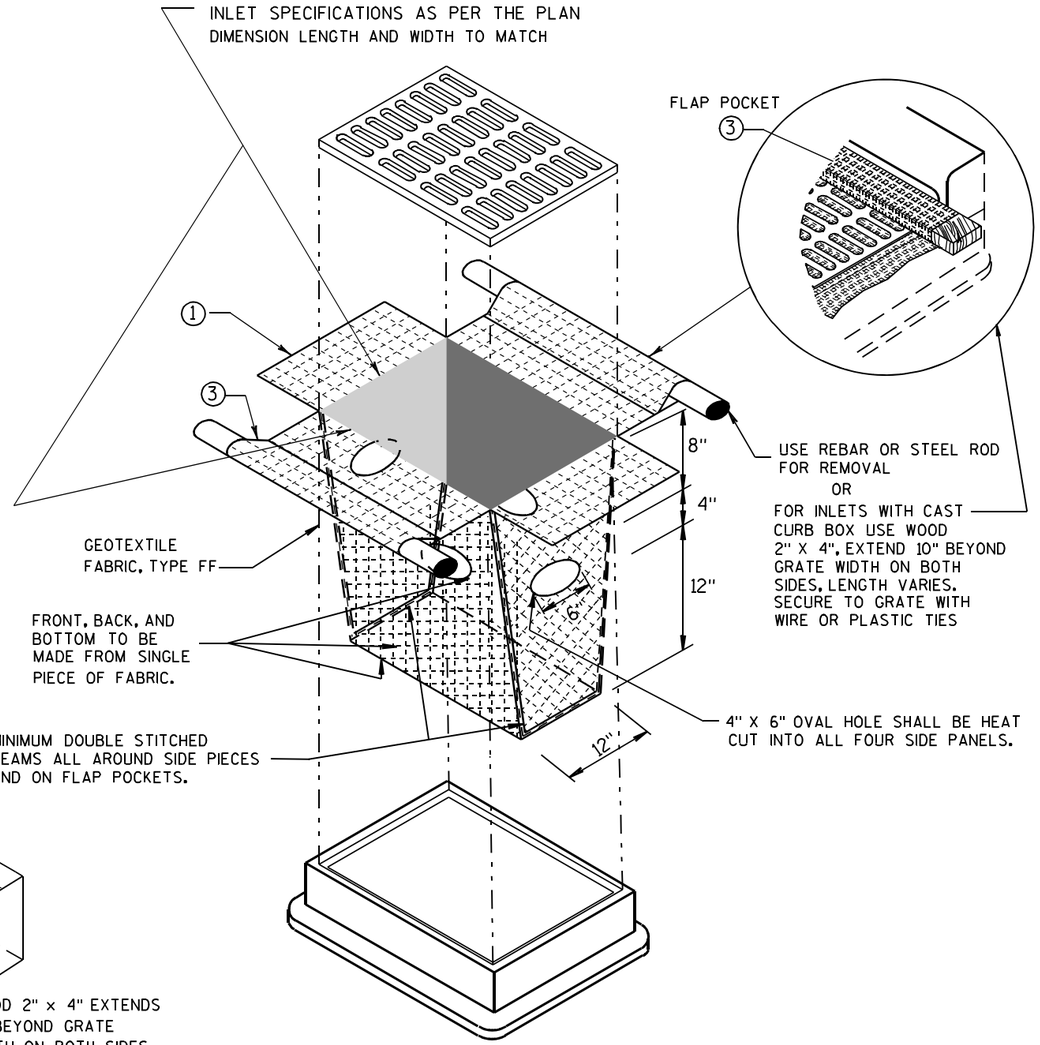


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

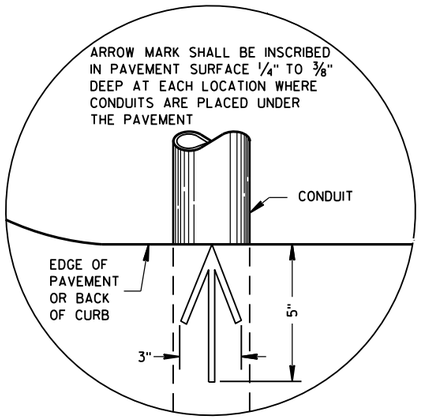
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

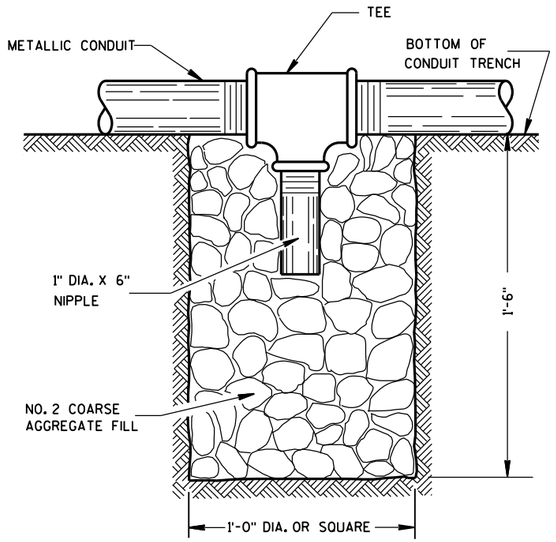
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



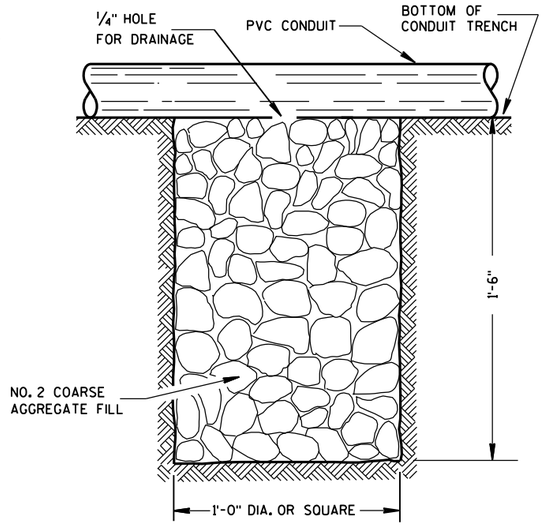
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

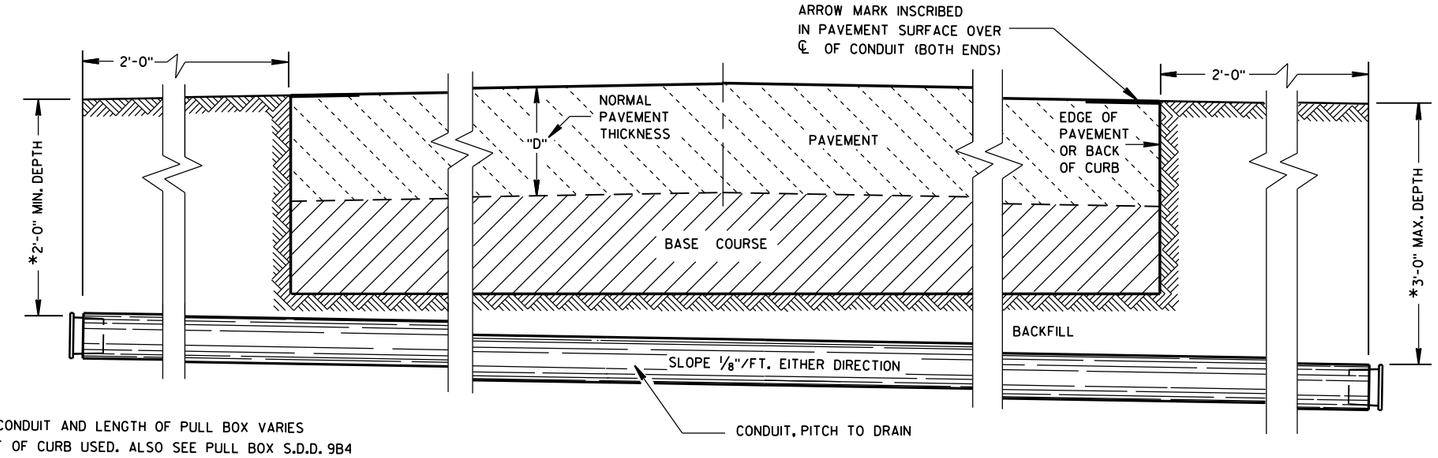
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

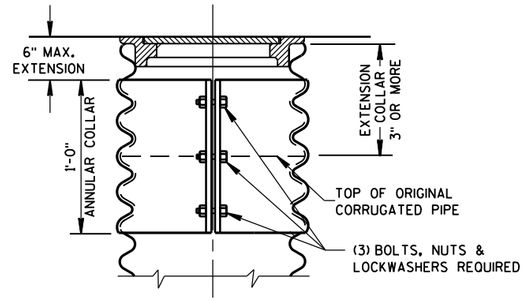
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

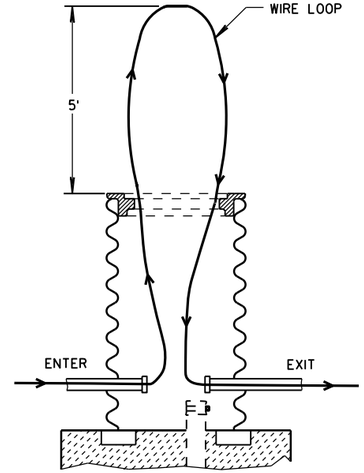
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

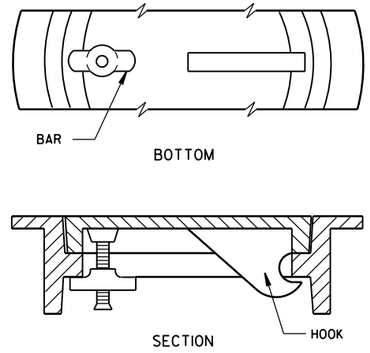
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

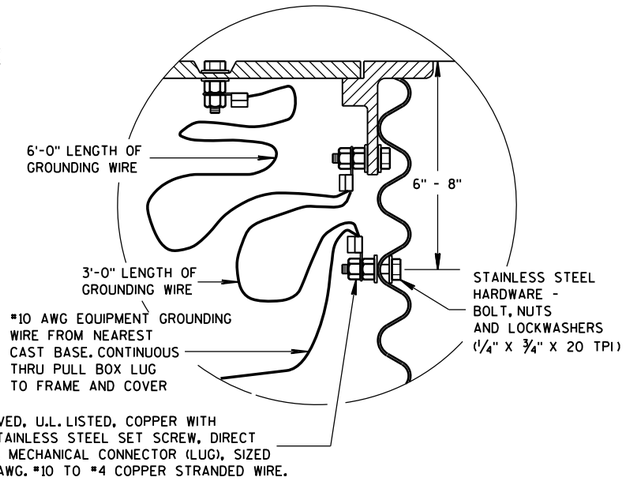


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

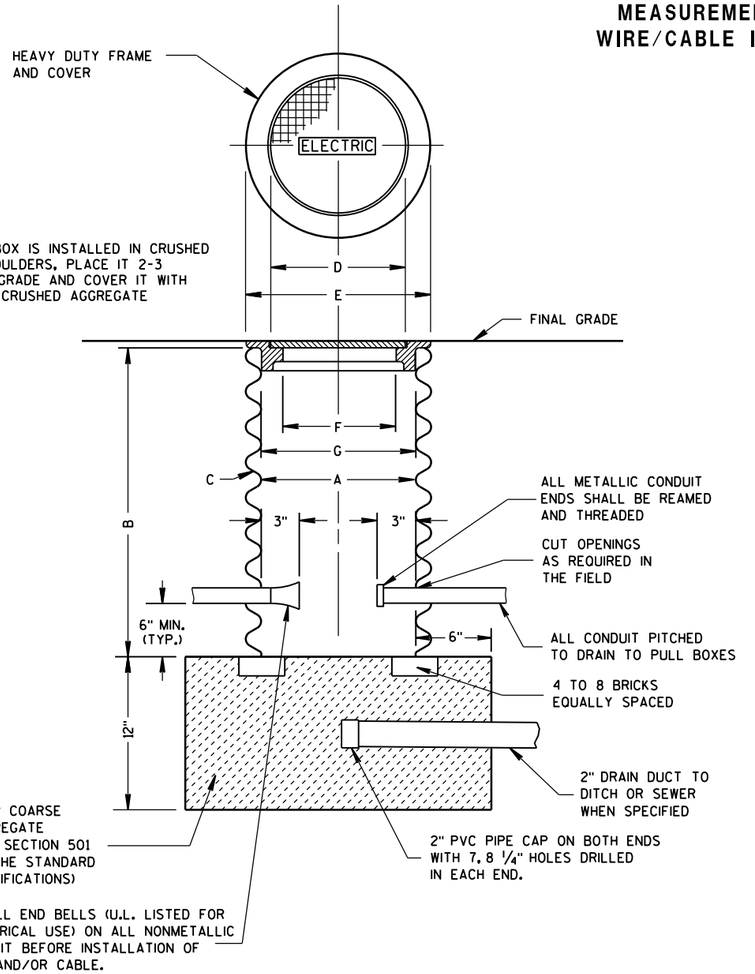


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

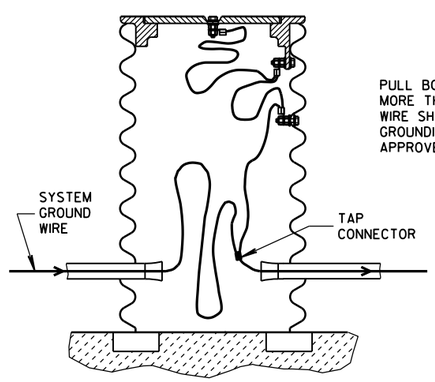
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

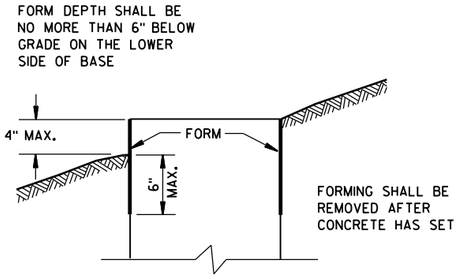
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

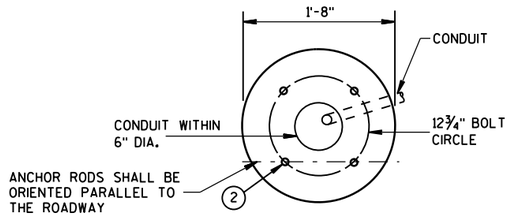
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

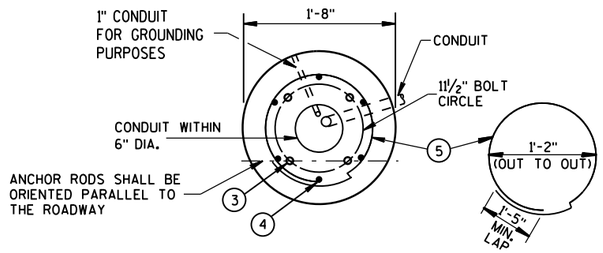
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

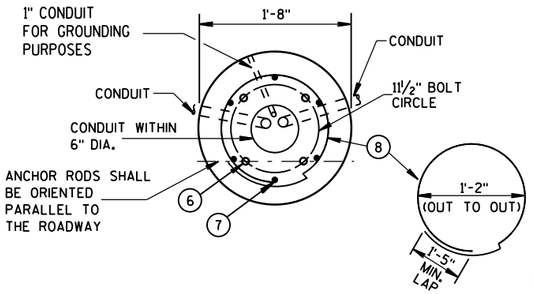
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

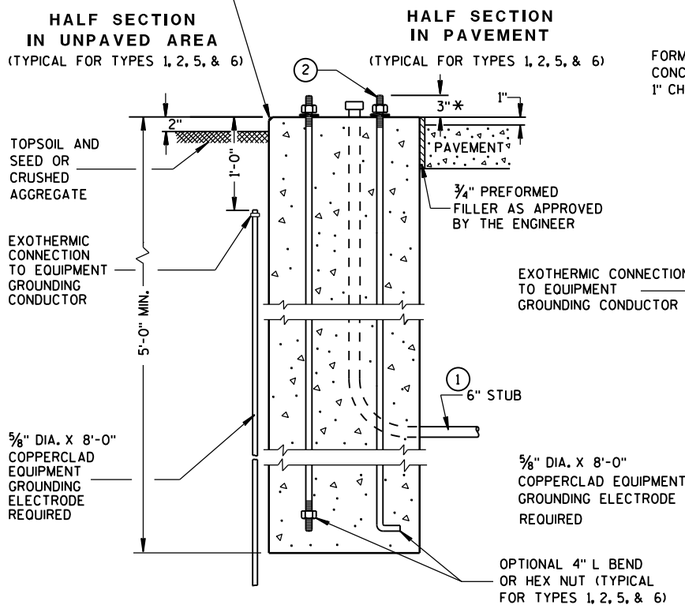
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

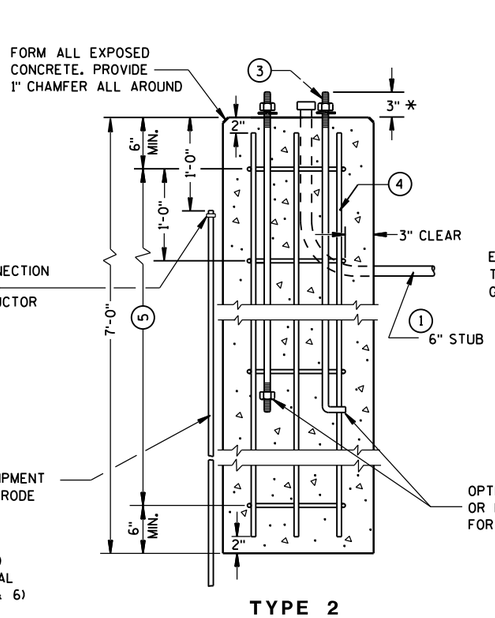
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



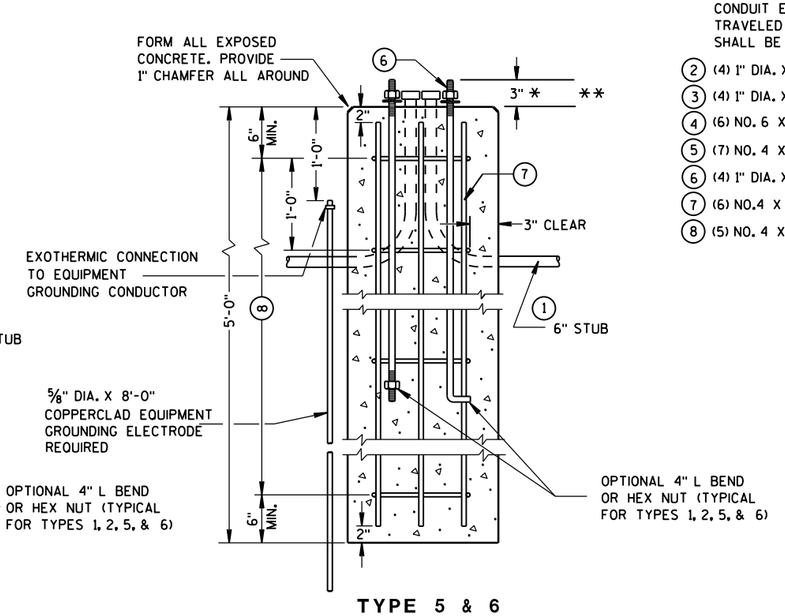








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

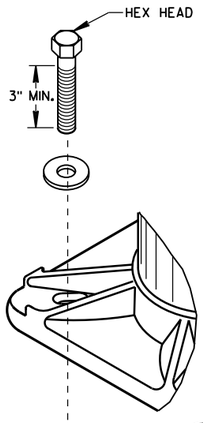
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

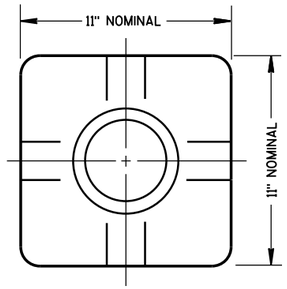
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

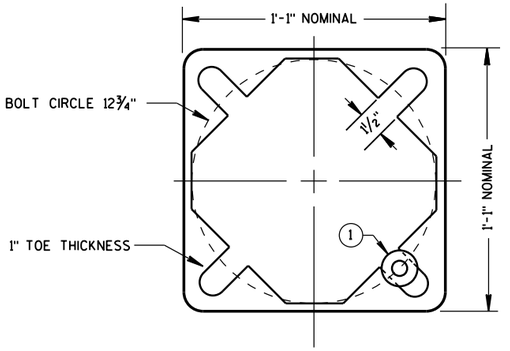
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

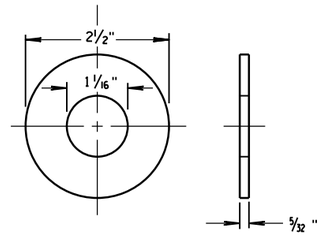




TOP VIEW
(PEDESTAL BASE)

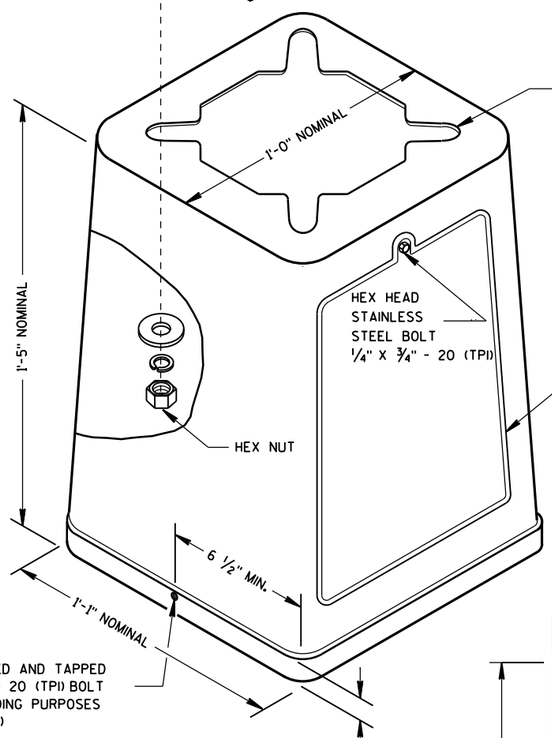


BOTTOM VIEW
(PEDESTAL BASE)

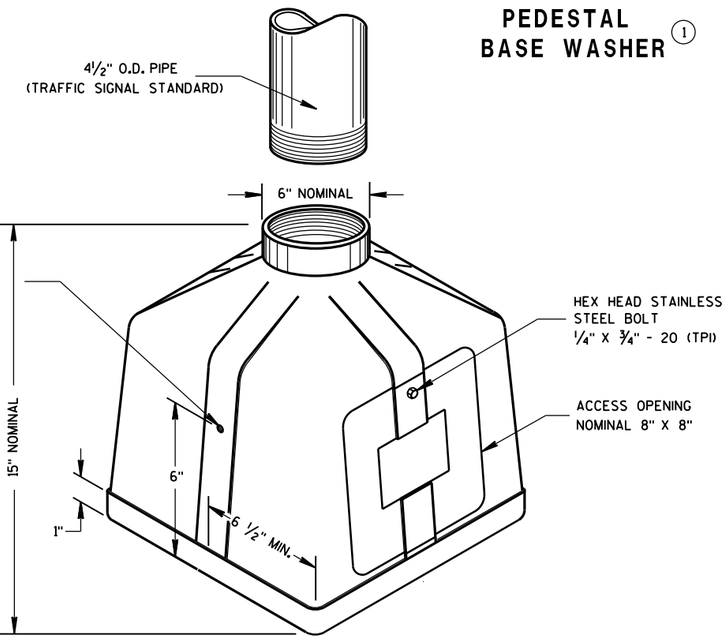


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

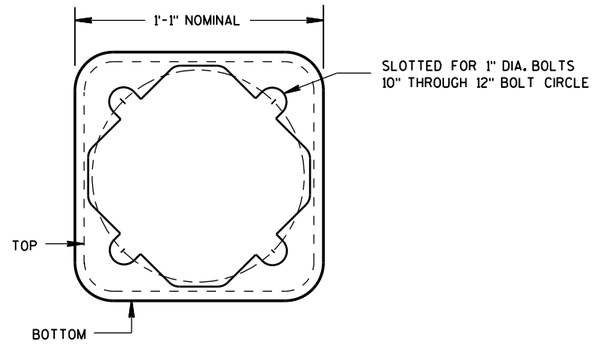


ISOMETRIC VIEW

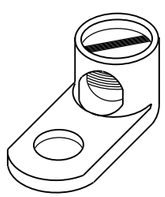


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

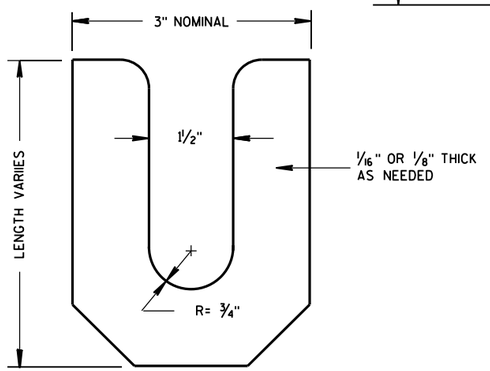


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

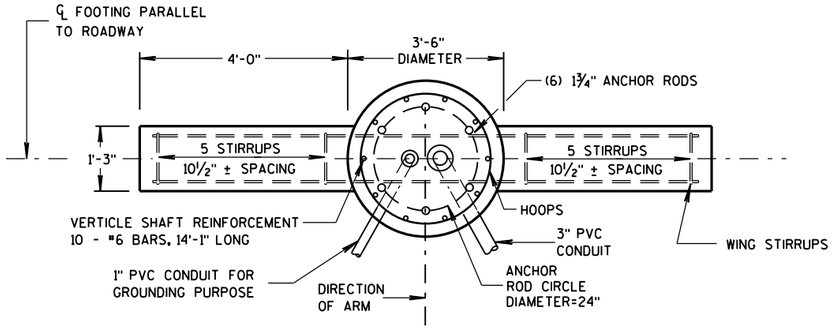
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

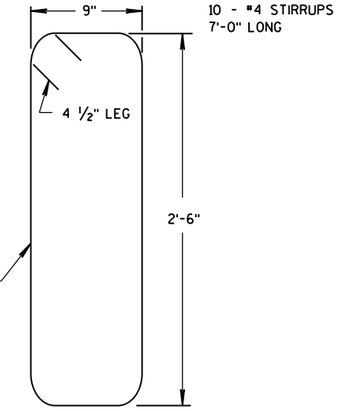
APPROVED
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FHWA

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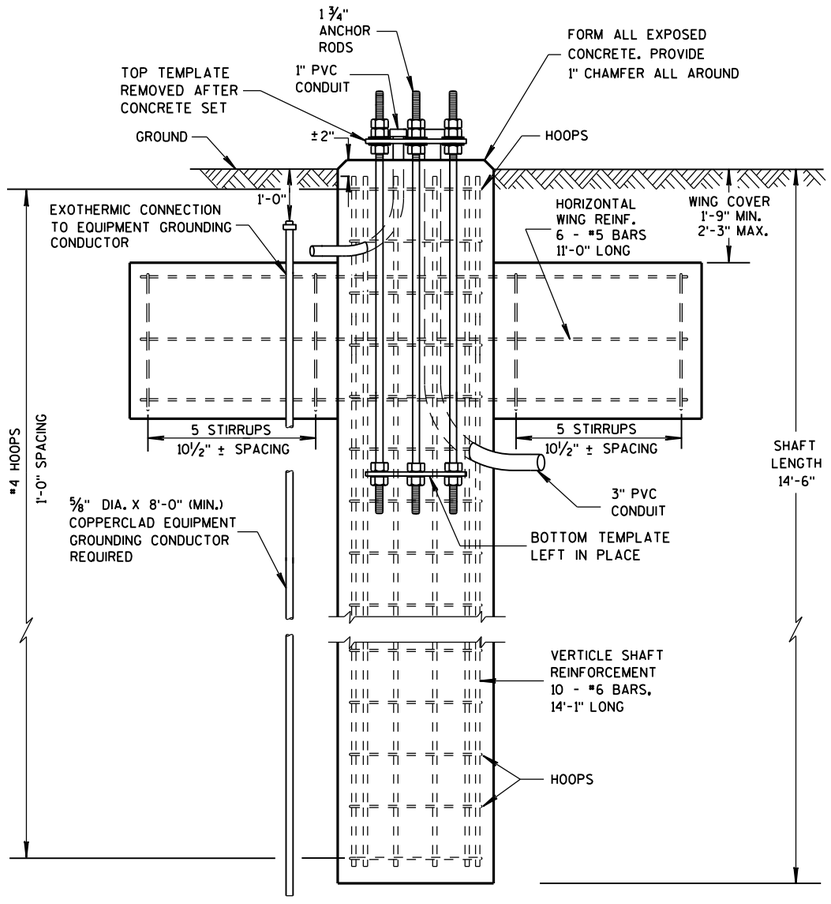
S.D.D. 9 C 3-4



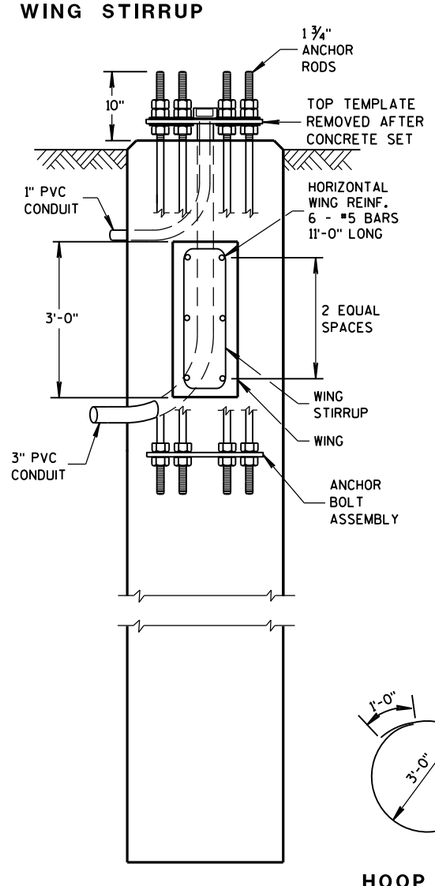
PLAN VIEW



WING STIRRUP

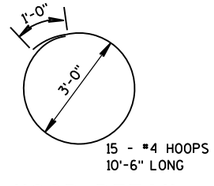


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT



15 - #4 HOOPS 10'-6" LONG

HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

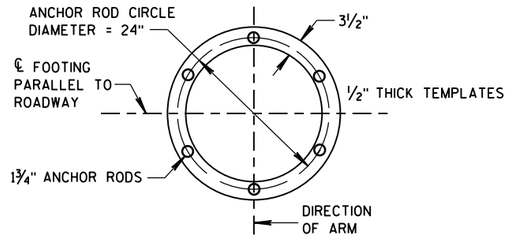
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

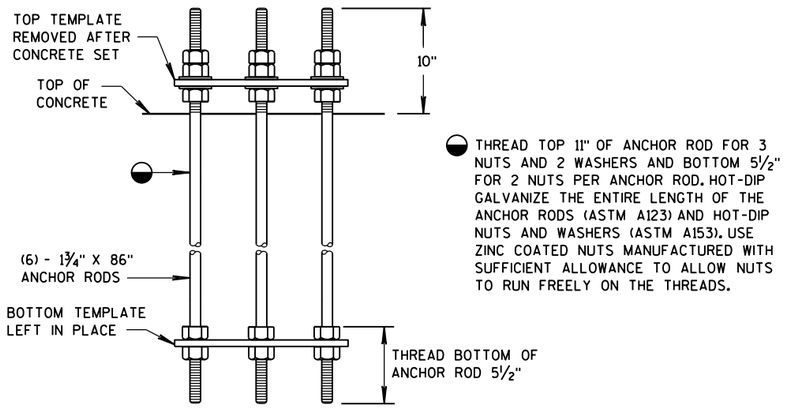
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 9 C 12-8a
S.D.D. 9 C 12-8a

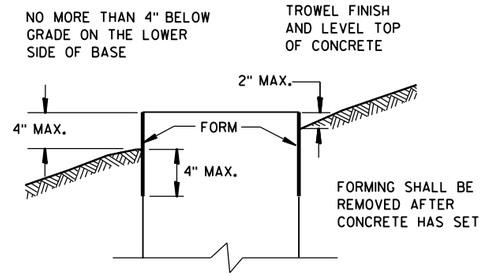


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

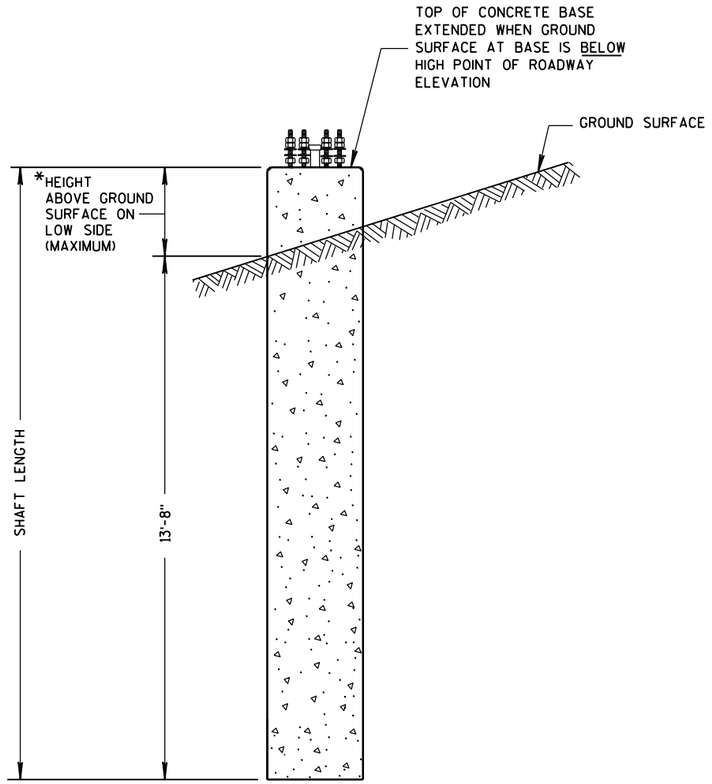
CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2016 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

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S.D.D. 9 C 12-8b

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

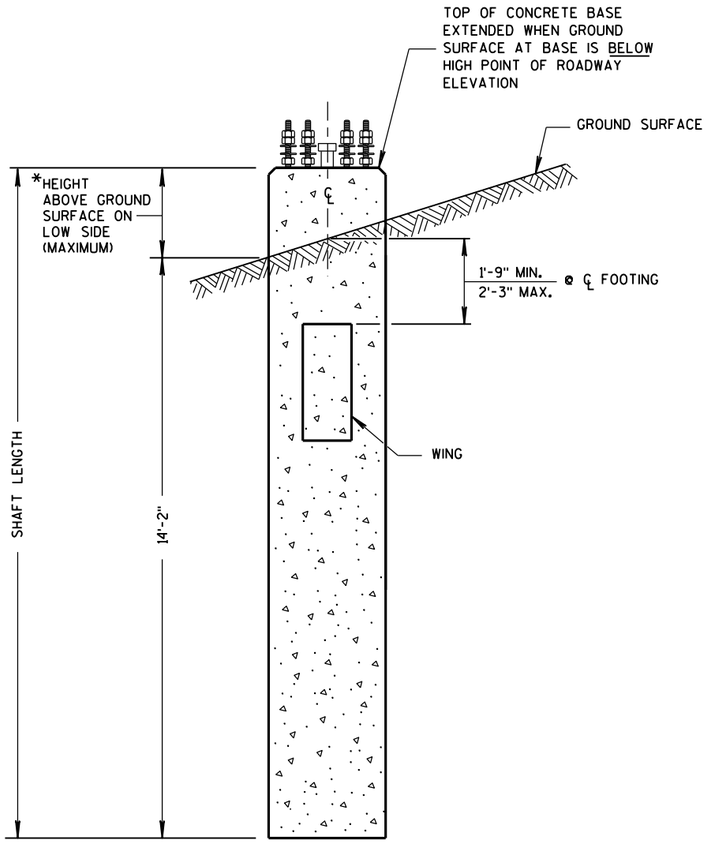
HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL BAR STEEL
>0" TO 6"	10"	14'-6"	14'-1"	16	2.6	78	127
>6" TO 1'-0"	1'-4"	15'-0"	14'-7"	16	2.7	78	131
>1'-0" TO 1'-6"	1'-10"	15'-6"	15'-1"	17	2.8	83	136
>1'-6" TO 2'-0"	2'-4"	16'-0"	15'-7"	17	2.9	83	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15'-0"	14'-7"	16	6.5	447
>6" TO 1'-0"	1'-4"	15'-6"	15'-1"	16	6.6	454
>1'-0" TO 1'-6"	1'-10"	16'-0"	15'-7"	17	6.8	469
>1'-6" TO 2'-0"	2'-4"	16'-6"	16'-1"	17	7.0	476



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE
TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

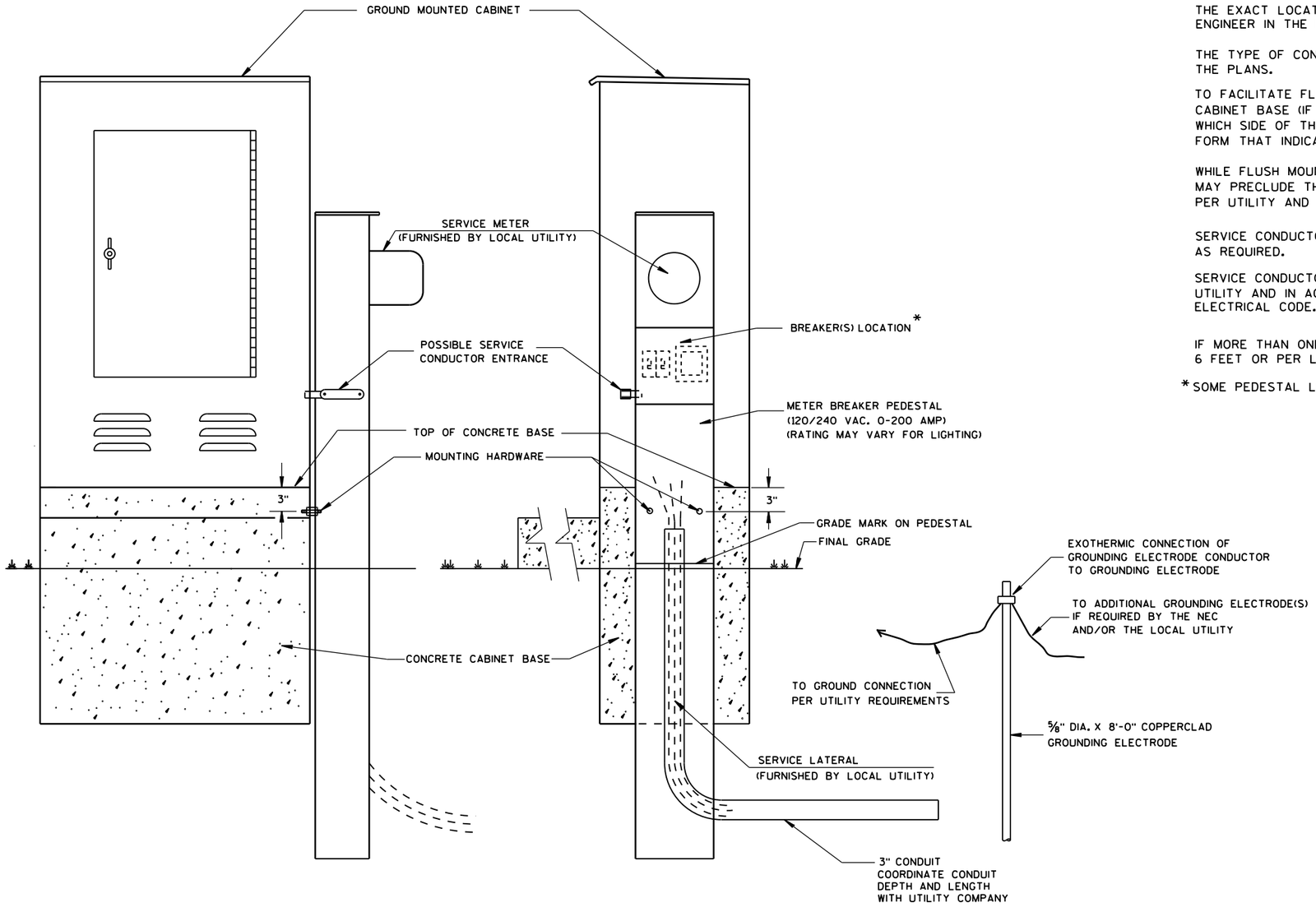
APPROVED
11-26-2013 DATE
/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 13-2

6

S.D.D. 9 C 13-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

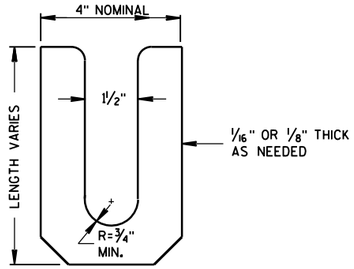
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

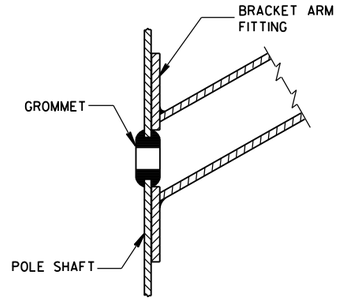
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 D 1-5

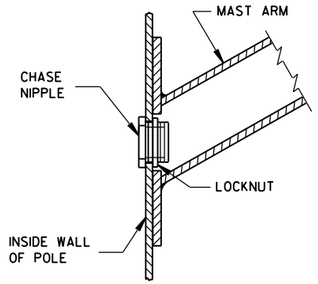


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

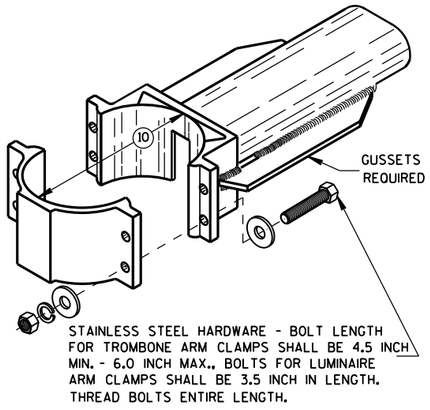
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

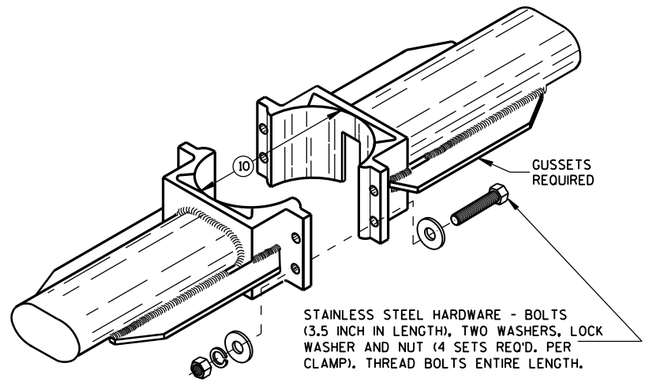
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

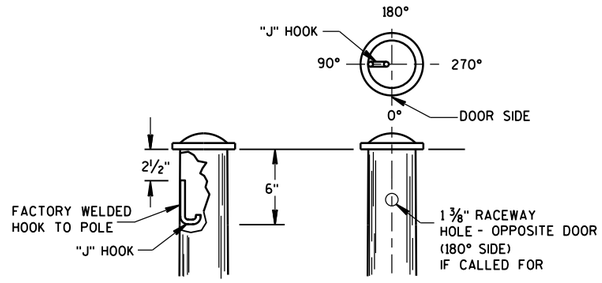
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



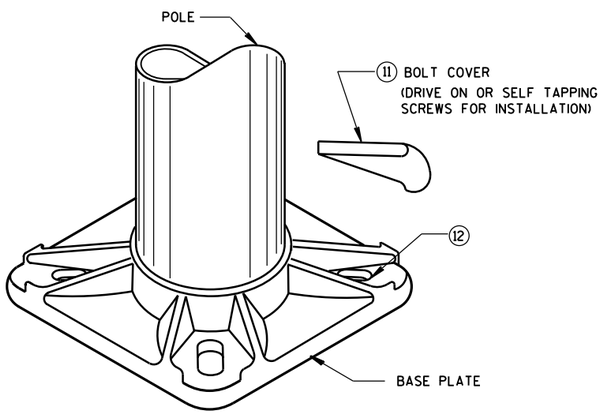
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



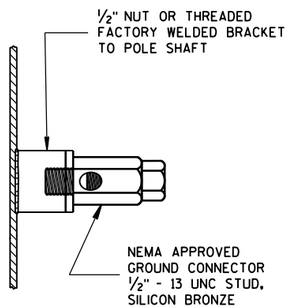
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

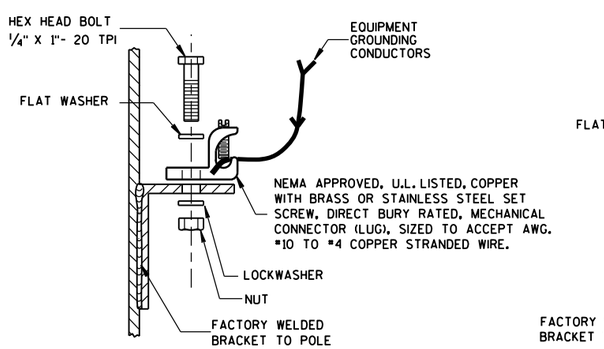


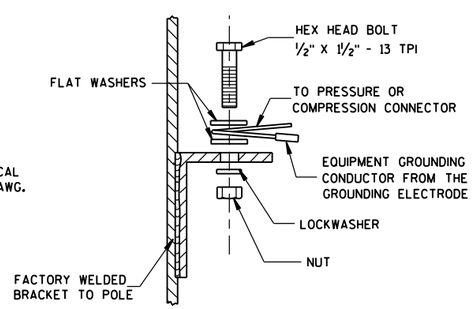
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

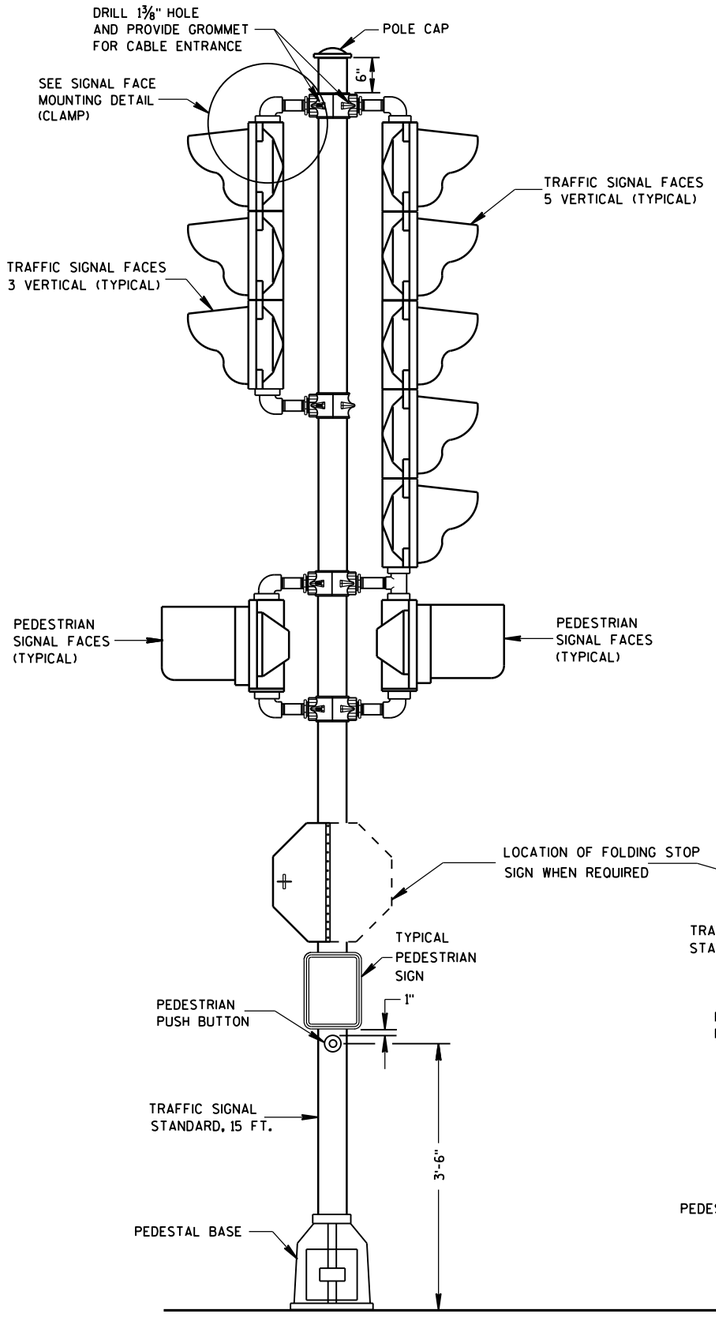
APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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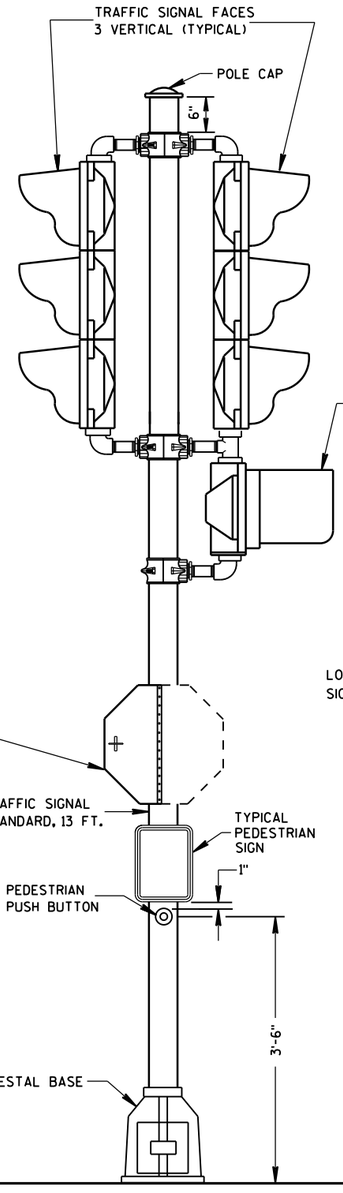
S.D.D. 9 E 1-14g

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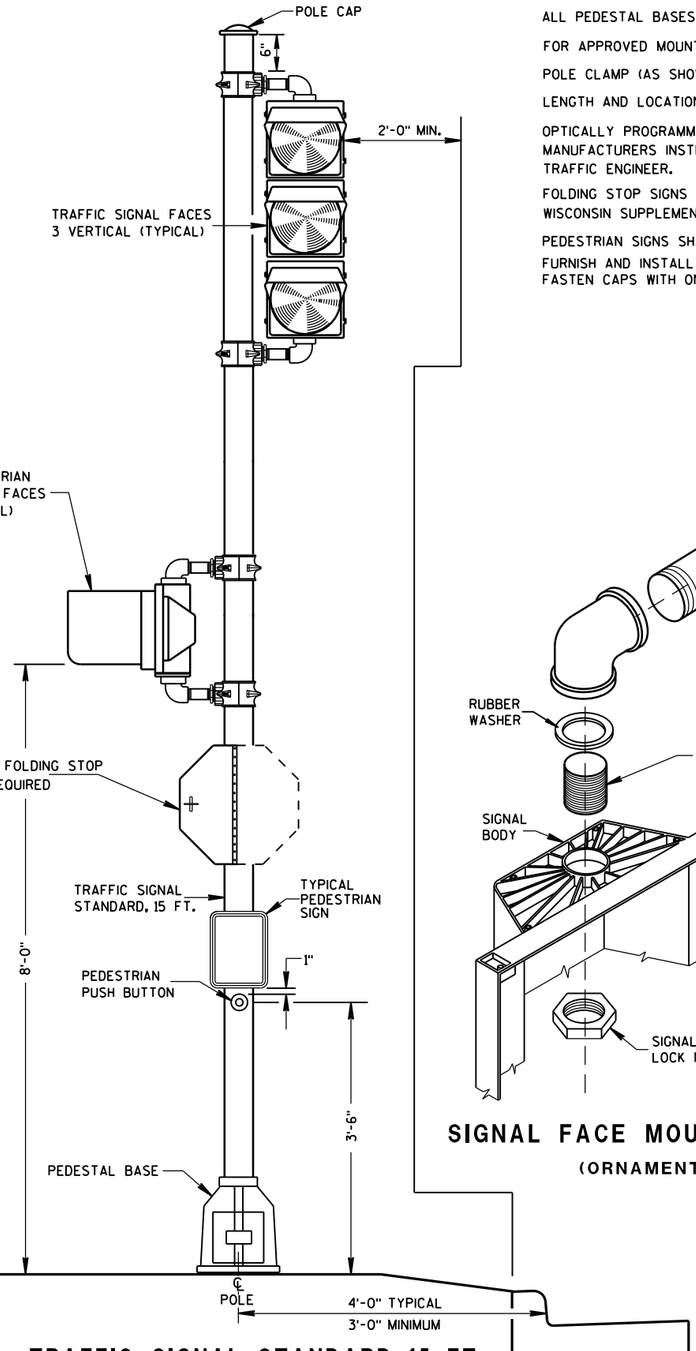
S.D.D. 9 E 1-14g



TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

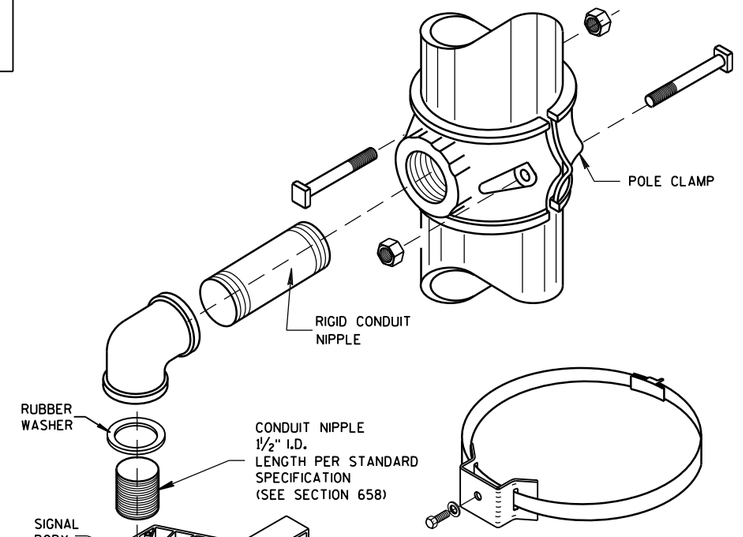
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

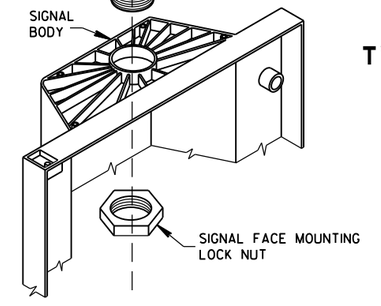
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

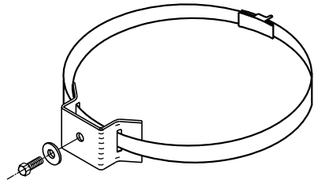
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

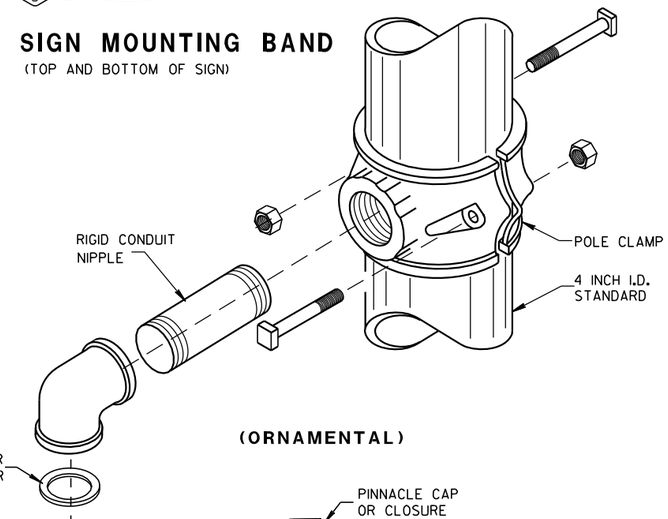
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S.D.D. 9 E 5-6

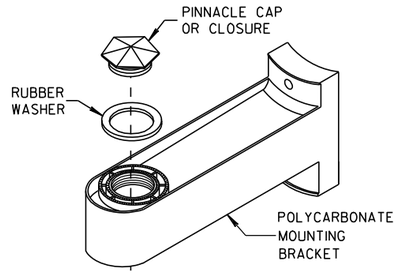
S.D.D. 9 E 5-6



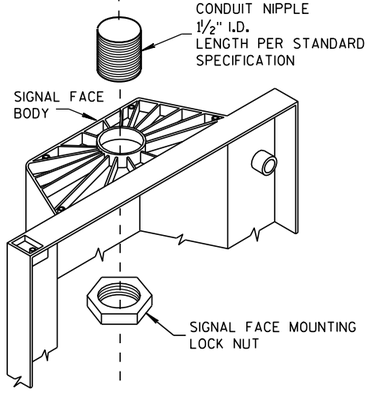
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



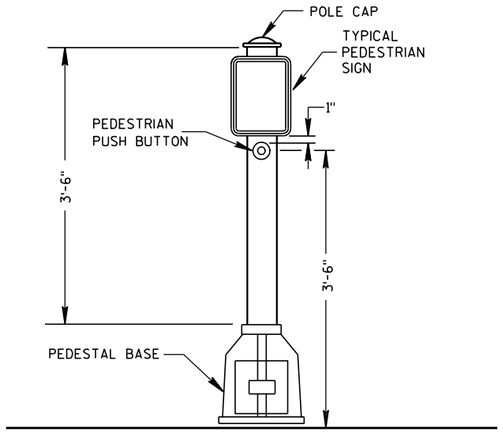
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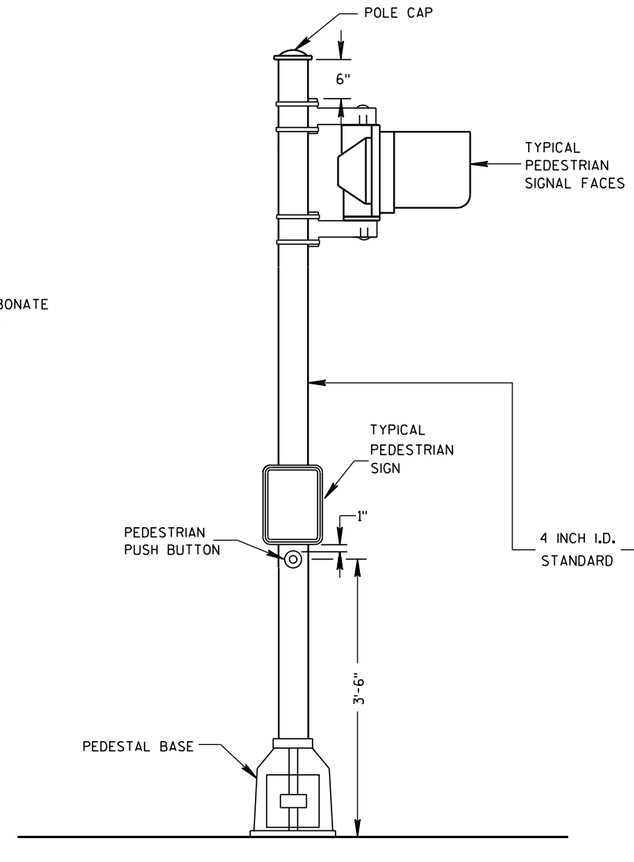
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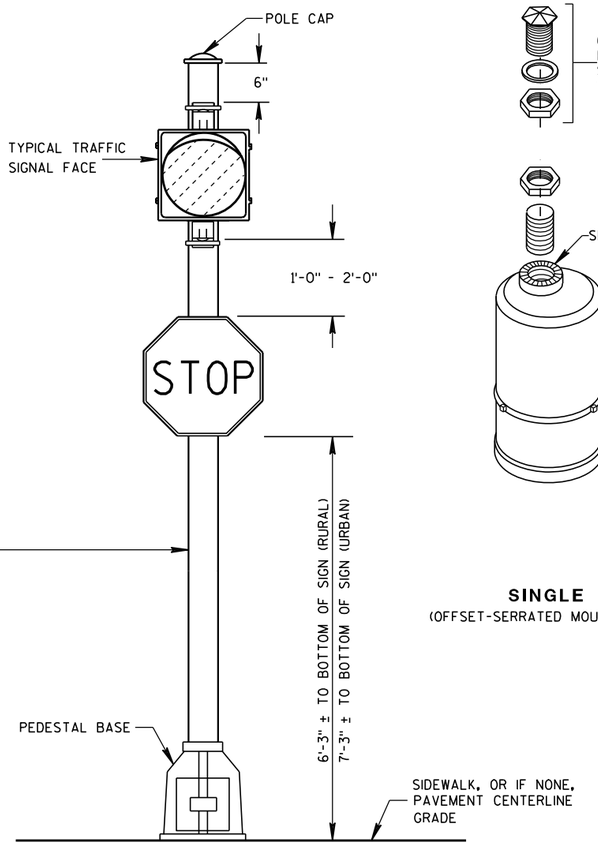
SIGNAL FACE MOUNTING DETAILS



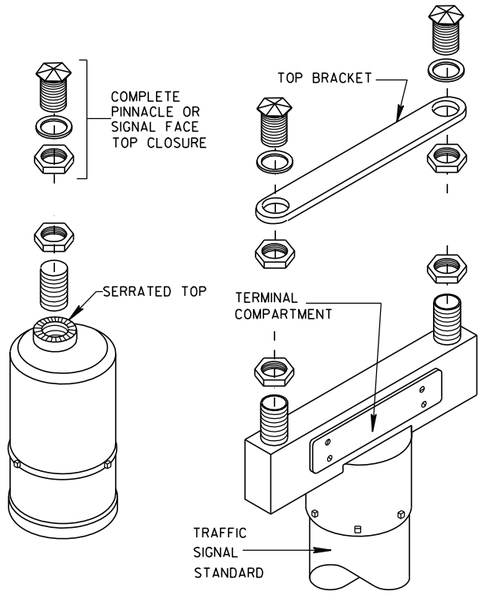
PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI

FHWA

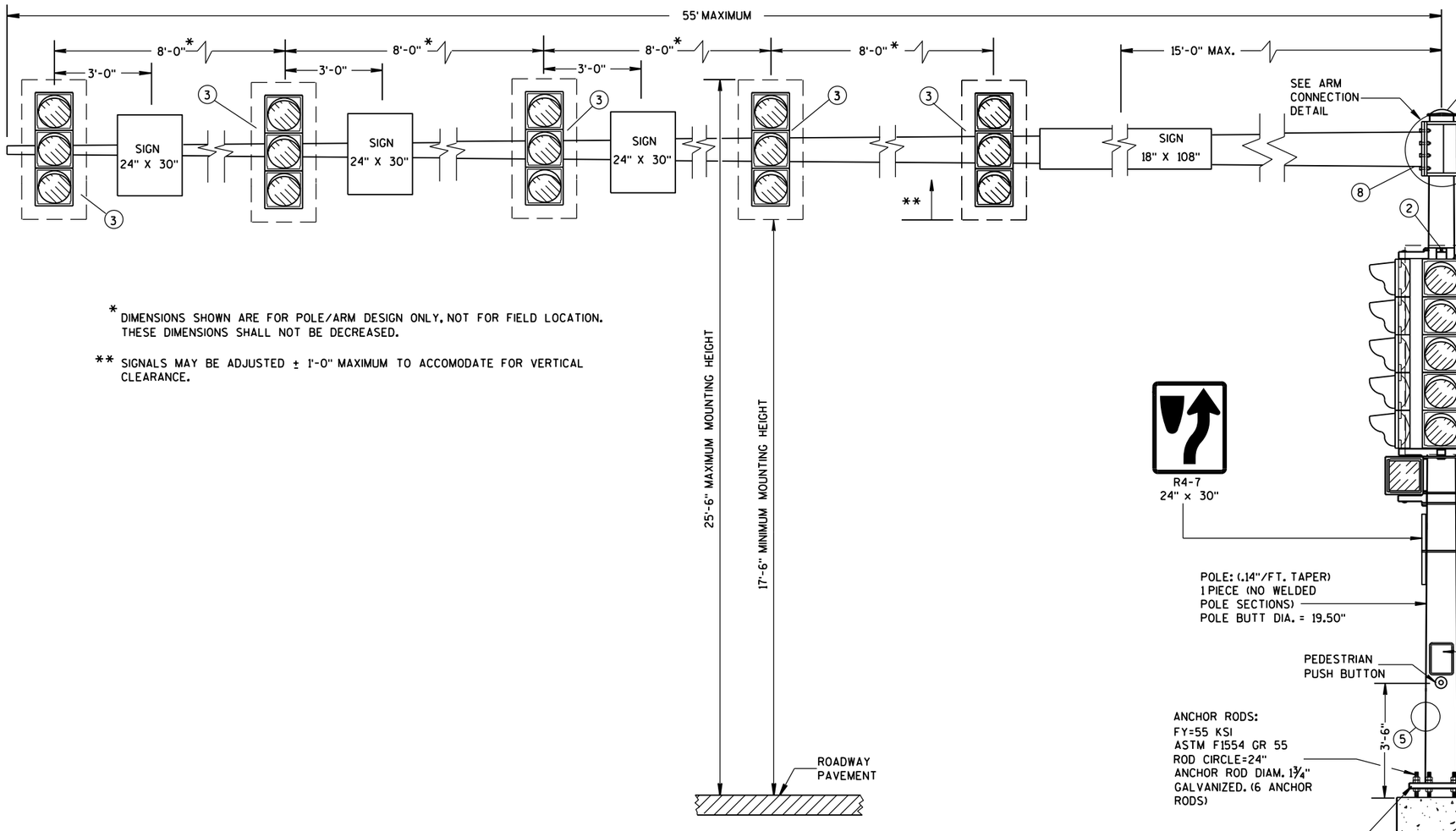
HWYS

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S.D.D. 9 E 7-5

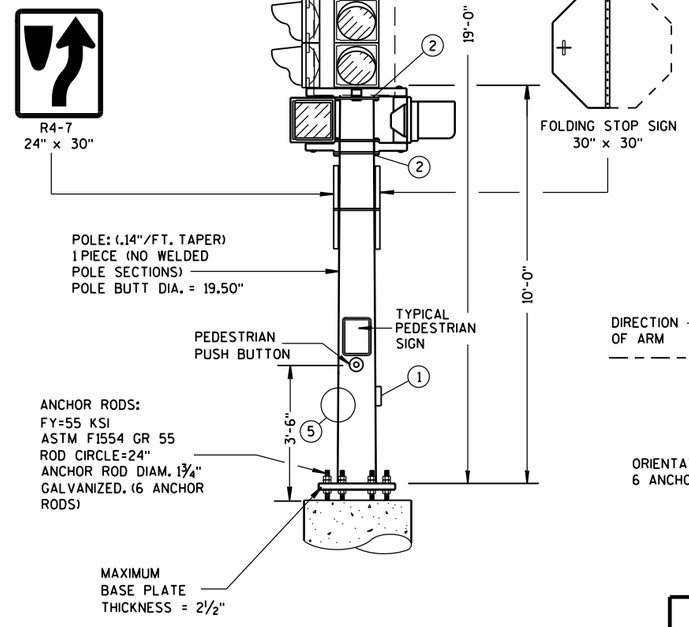
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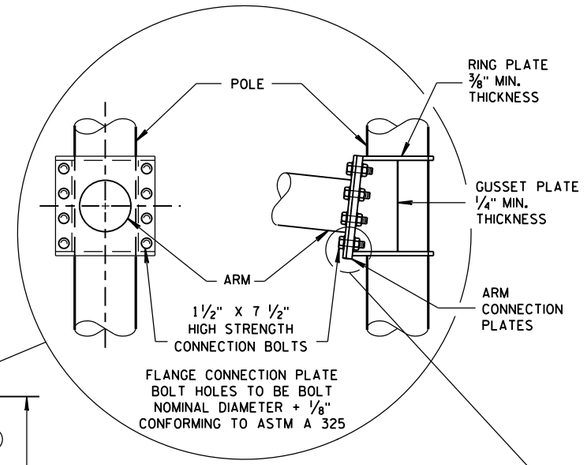
S.D.D. 9 E 7-5



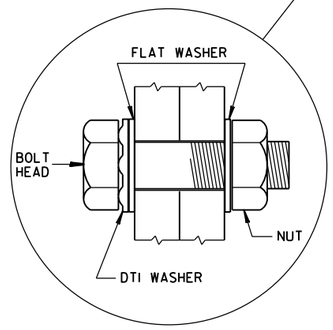
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

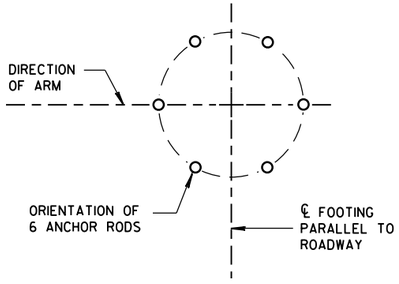




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED
BOLT ASSEMBLY
DETAIL



ANCHOR ROD LOCATION

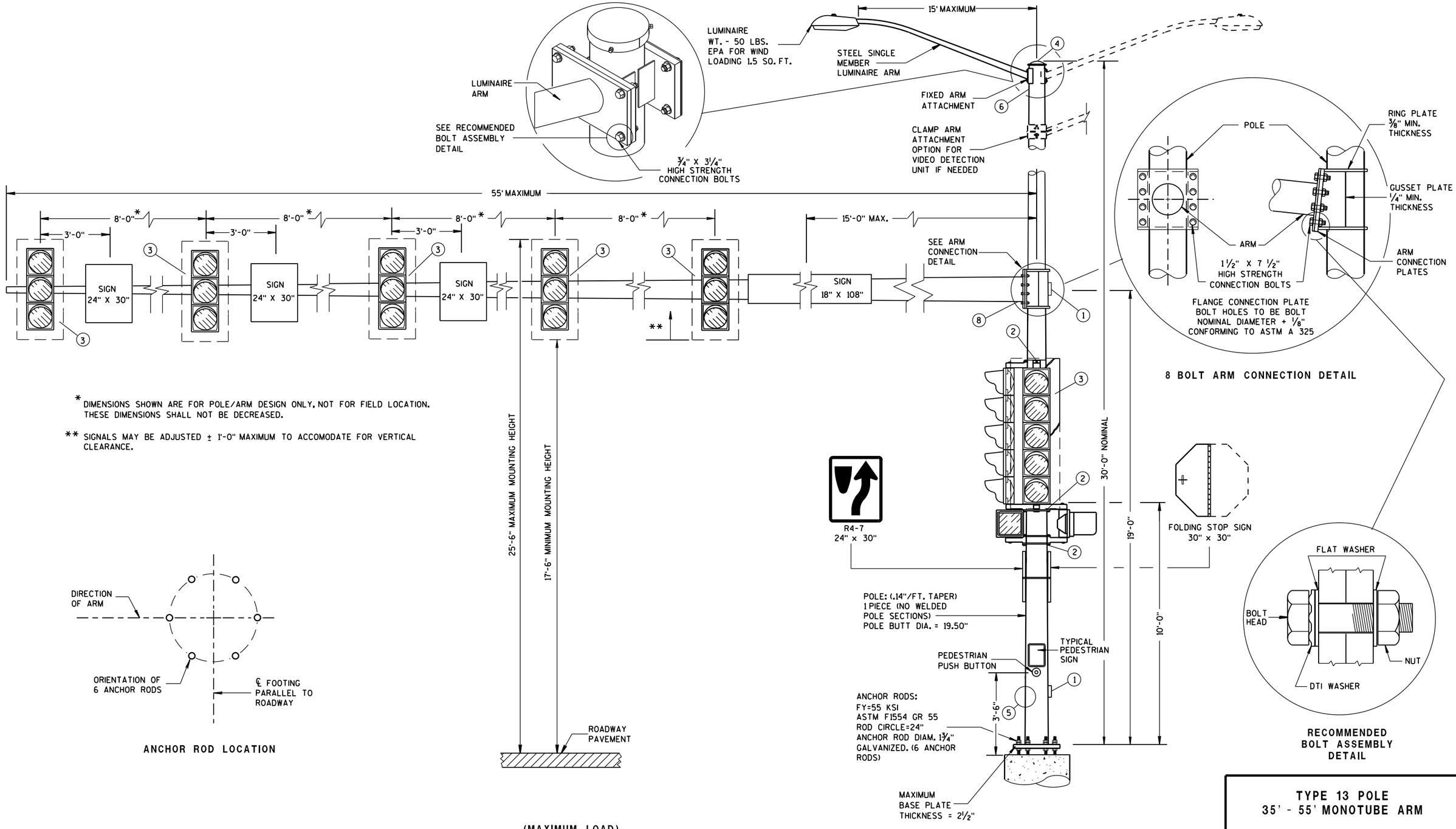
(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE 35' - 55' MONOTUBE ARM
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED May, 2015 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 E 8-8c



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 E 8-8d

6

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

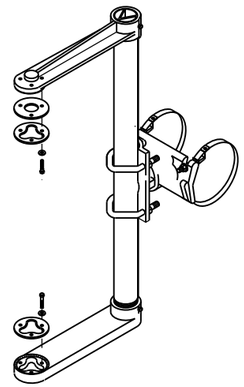
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

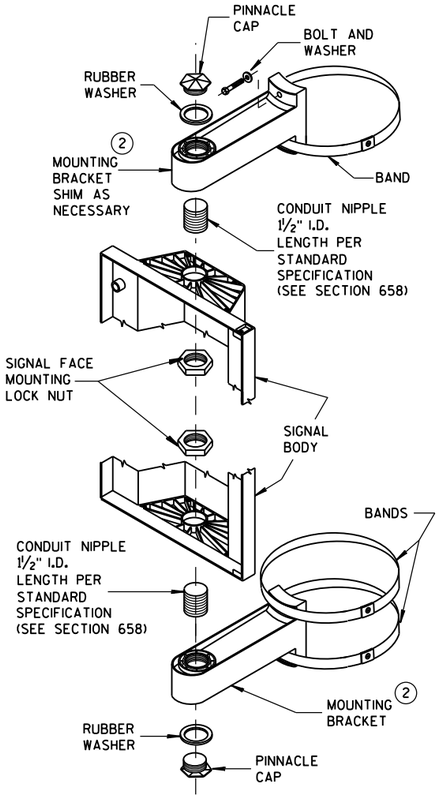
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

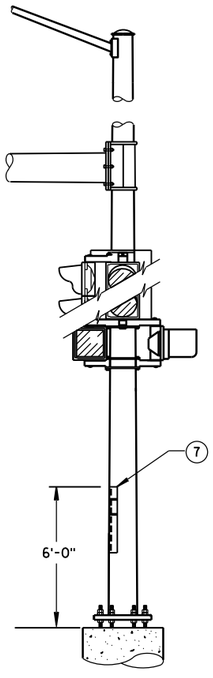


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

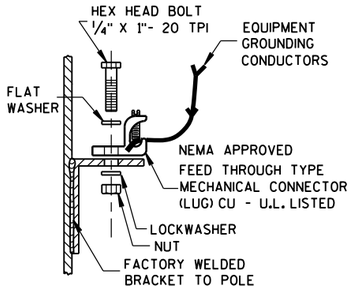
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

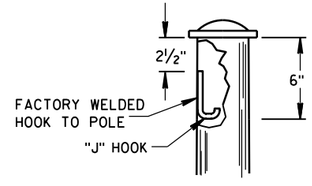


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

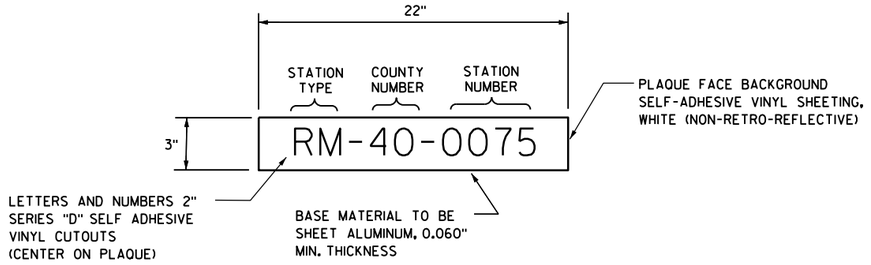
APPROVED
May 2016
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

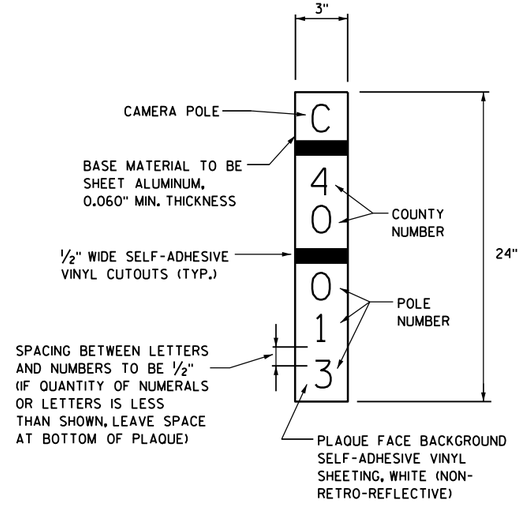
FHWA

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S.D.D. 9 E 8-8e



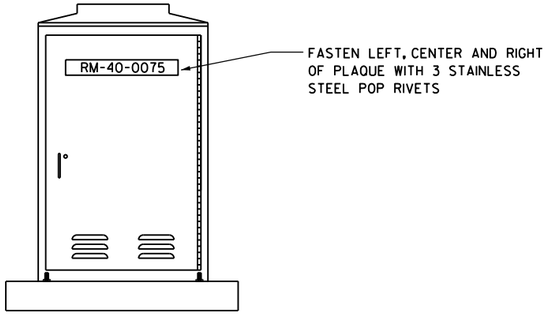
CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



POLE IDENTIFICATION PLAQUE DETAIL

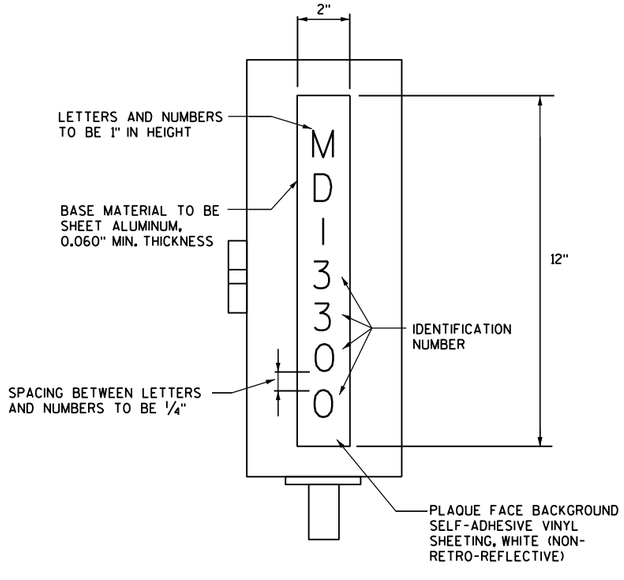
GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE (2), FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

LEGEND STATION TYPE

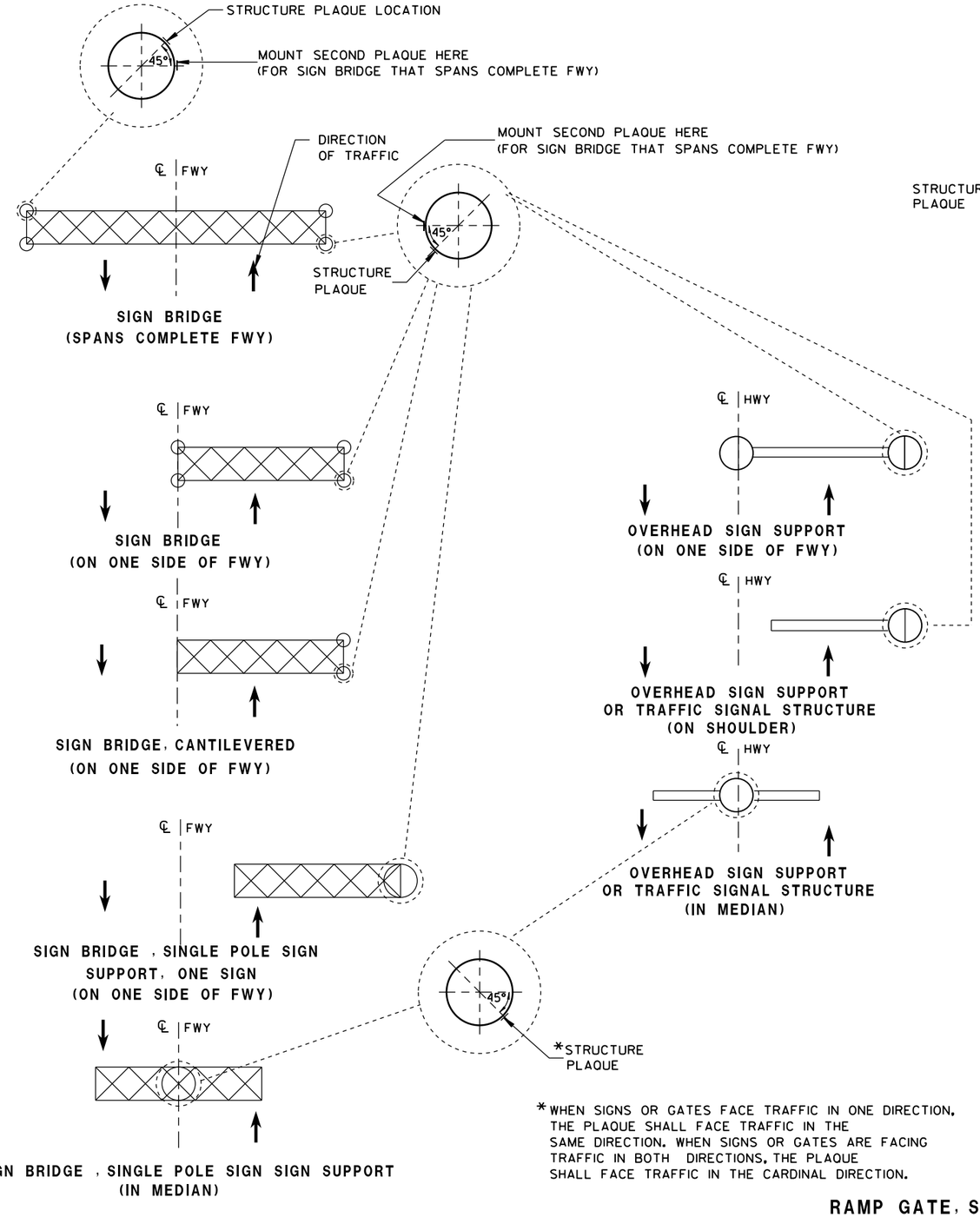
RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR

IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

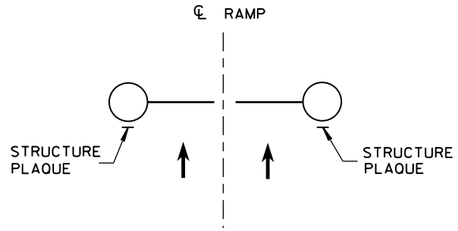
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demribilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 H 11-1

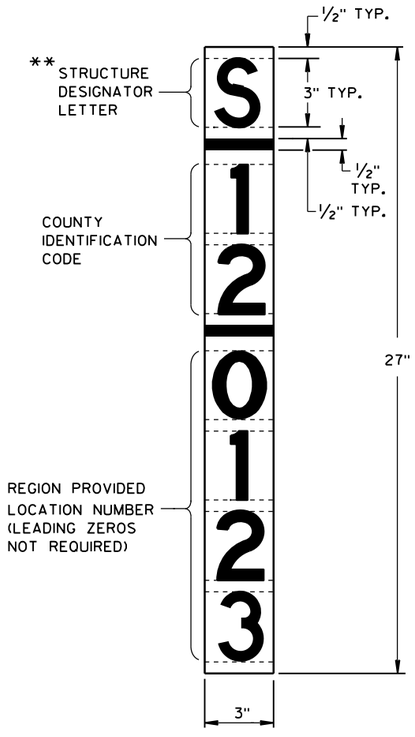


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

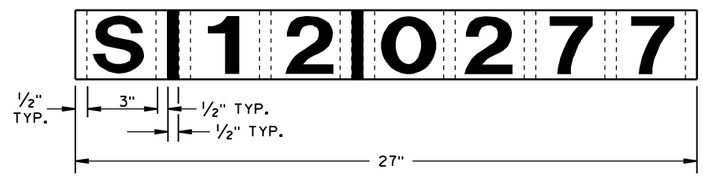
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

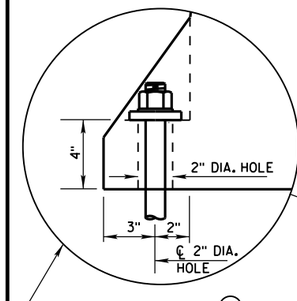
FHWA

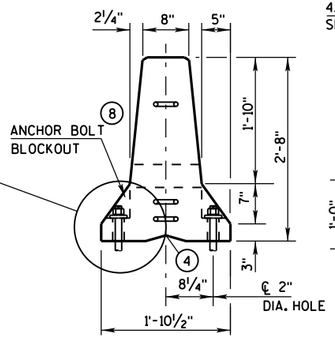
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S.D.D. 12 A 4-3

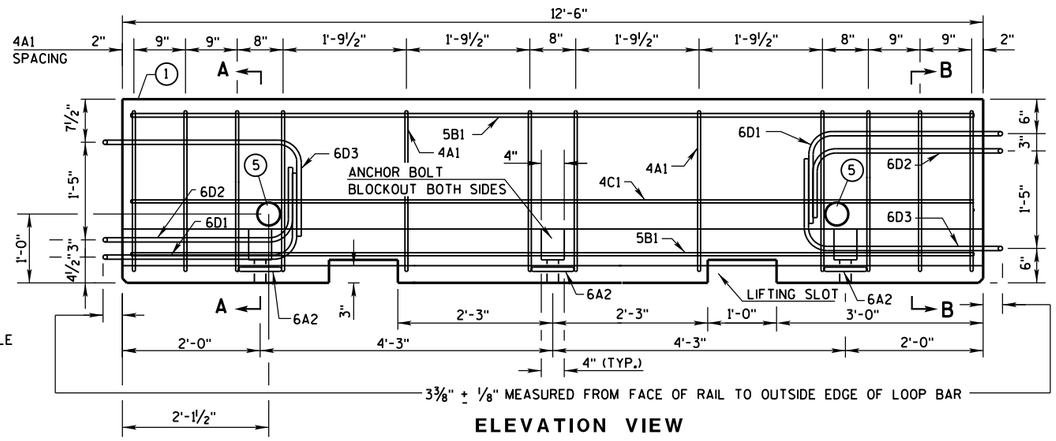
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S.D.D. 12 A 4-3

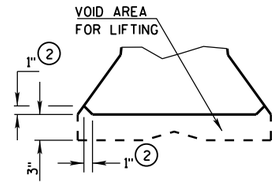




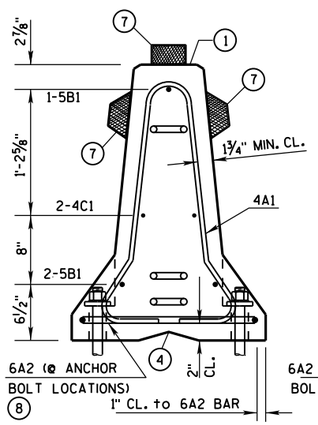
END VIEW



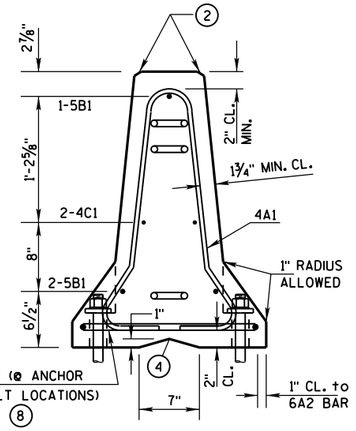
ELEVATION VIEW



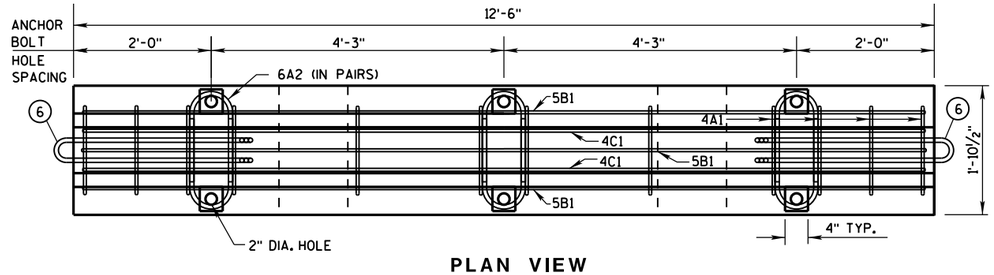
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

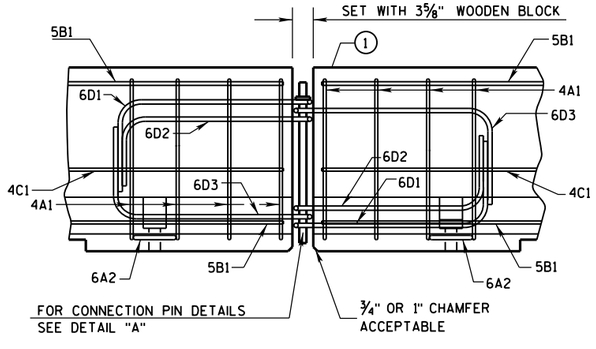


SECTION B-B
(STIRRUP PLACEMENT)

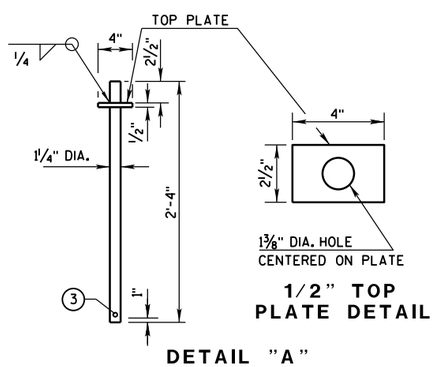


PLAN VIEW

DETAILS OF BARRIER SECTION

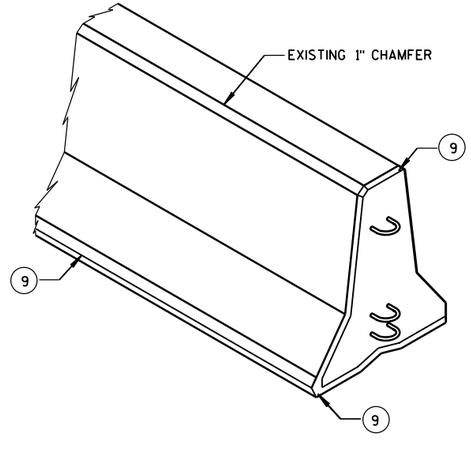


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

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



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(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 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: WI CBTP
- 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.

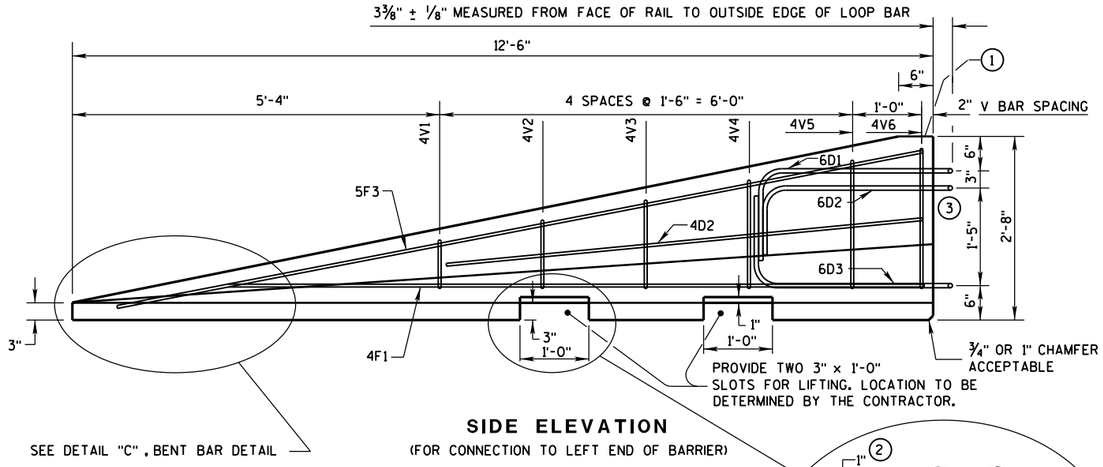
(8) SEE SHEET D FOR ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

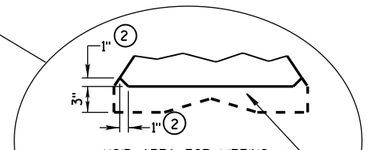
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

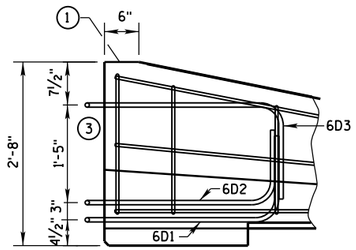
6
S.D.D. 14 B 7-14a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



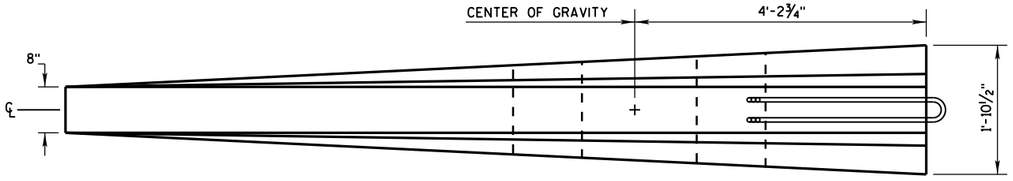
DETAIL "B"
LIFTING SLOT DETAIL



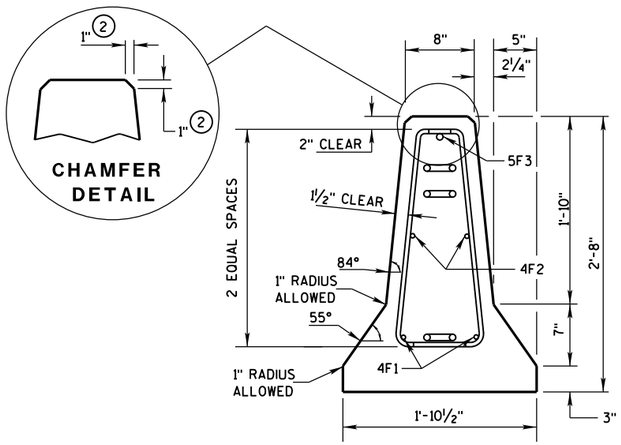
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

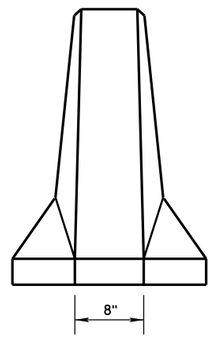
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



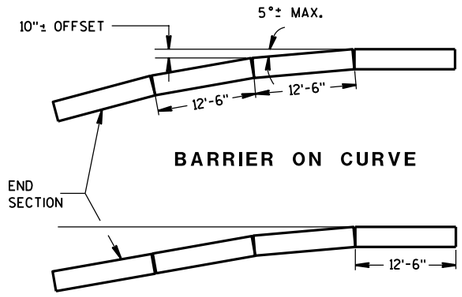
PLAN VIEW



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 TRANSPOI

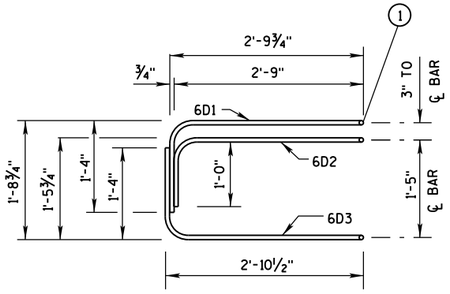
6

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

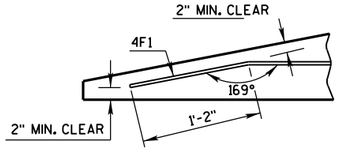
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

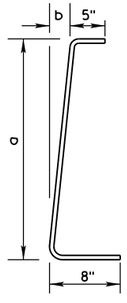
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

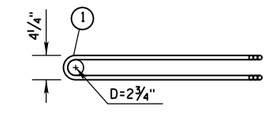
GENERAL NOTES

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

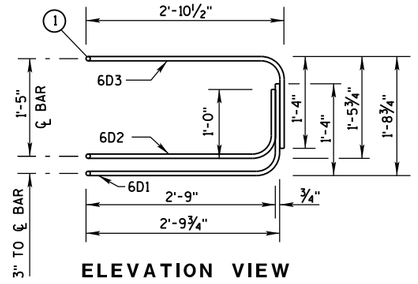
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

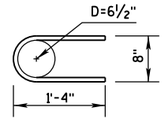
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



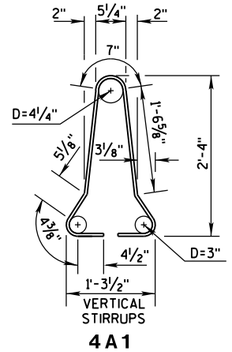
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

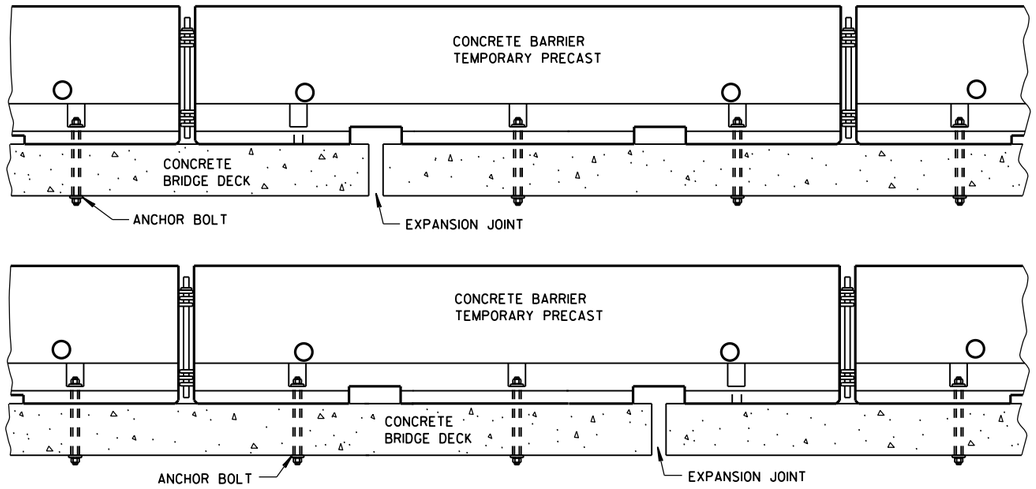
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

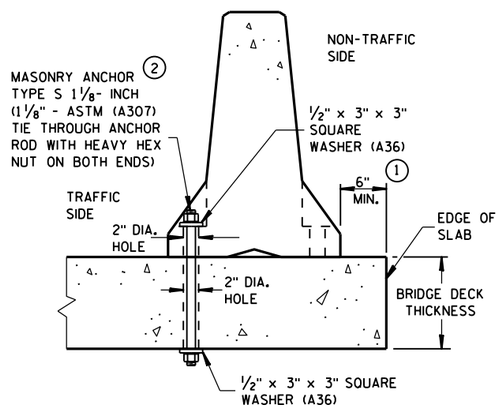
6

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



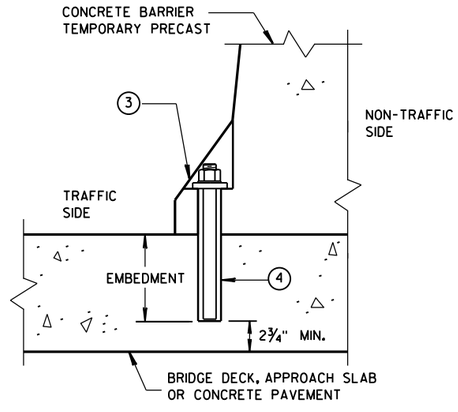
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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.)



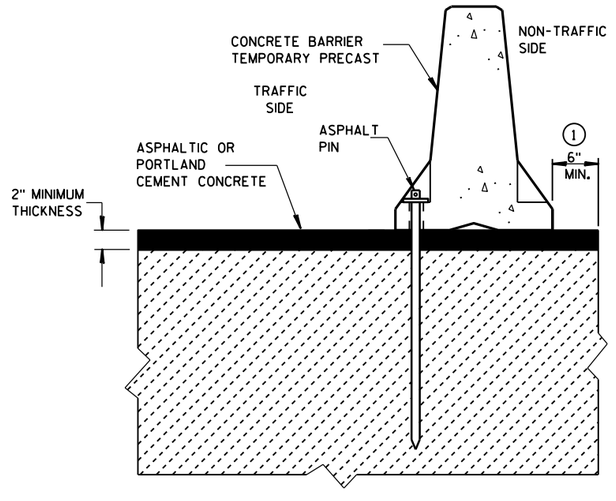
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



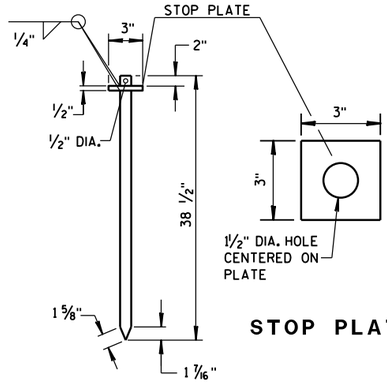
REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

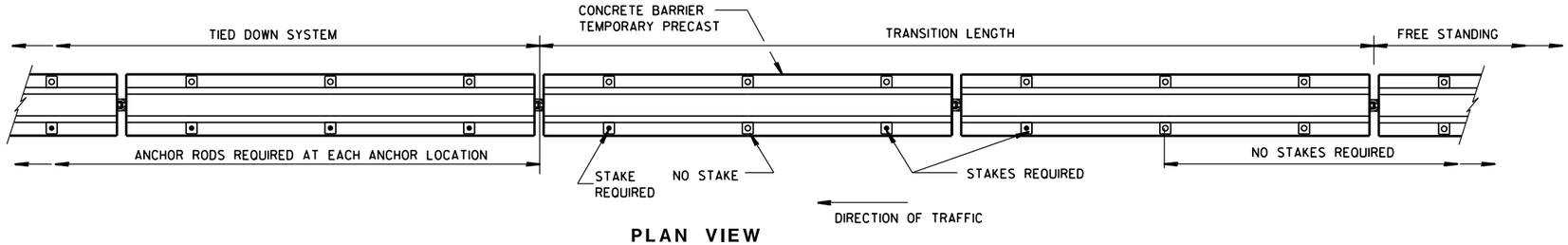
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



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.)

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 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 ALL ANCHOR 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 MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

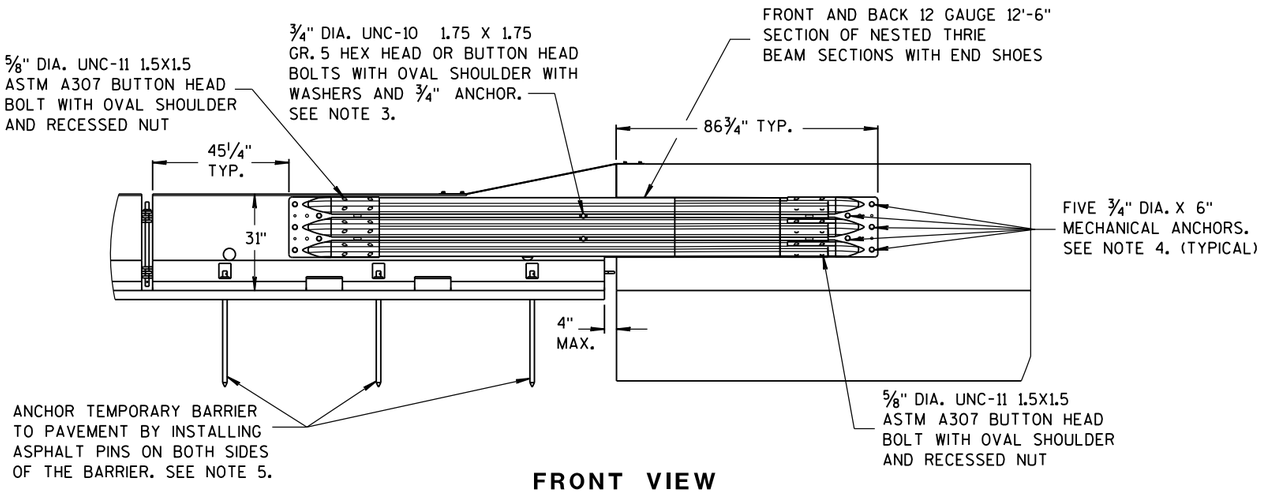
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

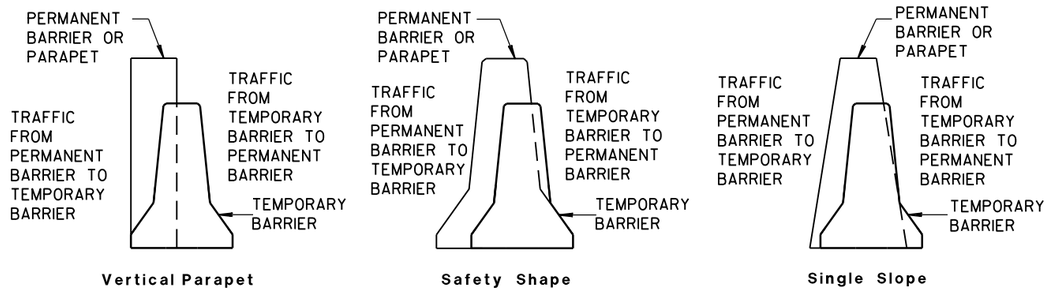
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14d



FRONT VIEW



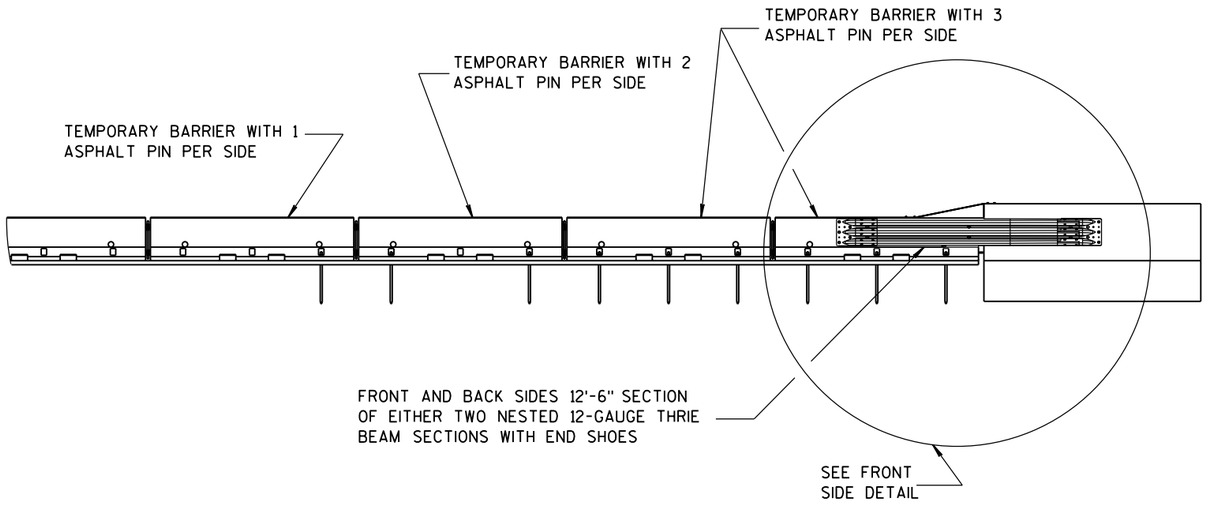
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

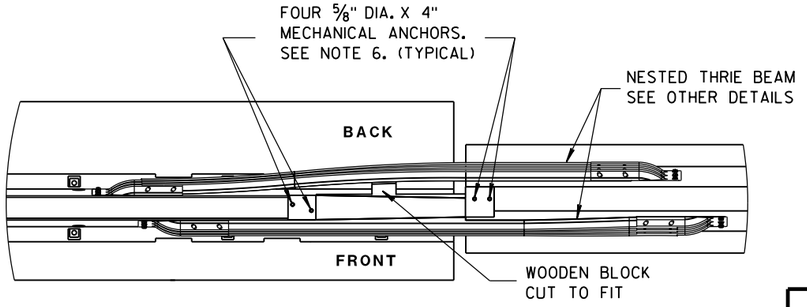
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

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 ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE 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 ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW



FRONT VIEW



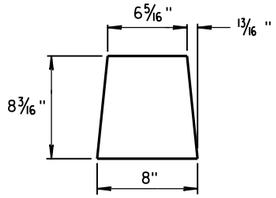
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

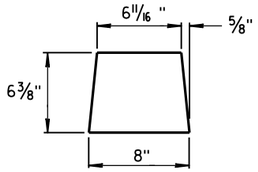
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

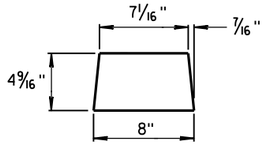
6
S.D.D. 14 B 7-14e



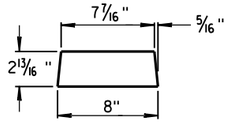
GUSSET 1



GUSSET 2

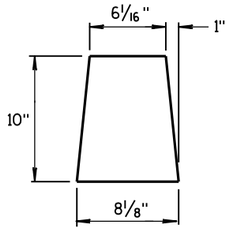


GUSSET 3

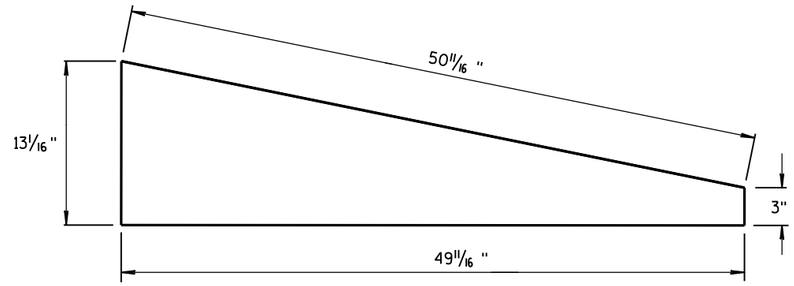


GUSSET 4

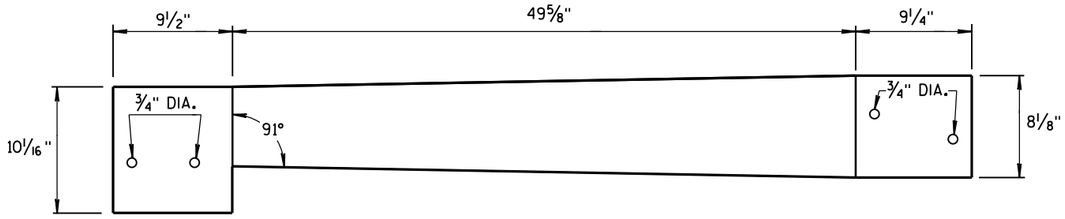
GUSSETS

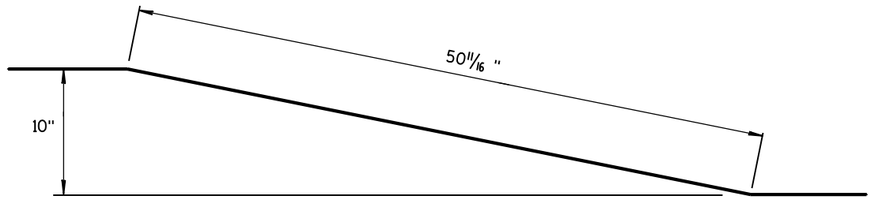


END PLATE



SIDE PLATE

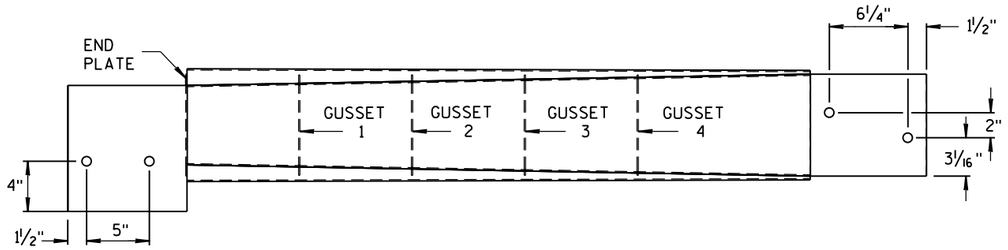


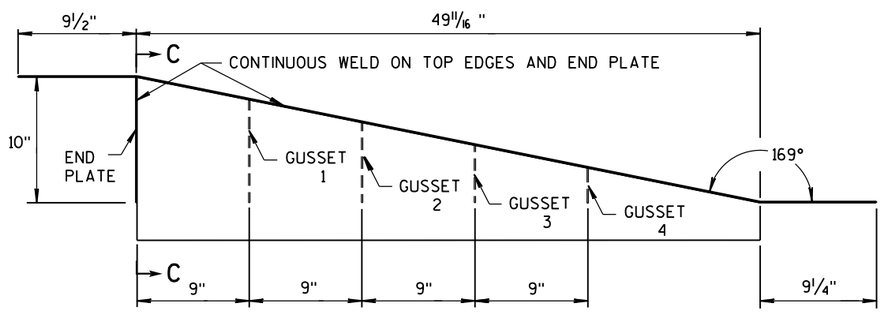


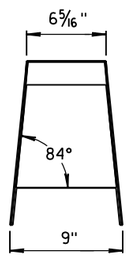
TOP PLATE

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.







SECTION C-C

NOTES

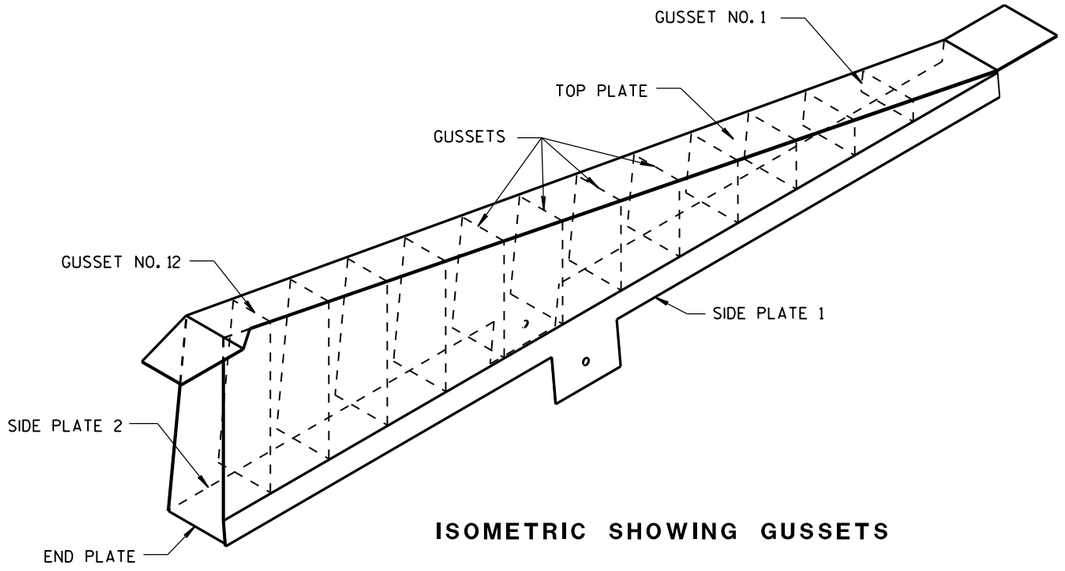
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

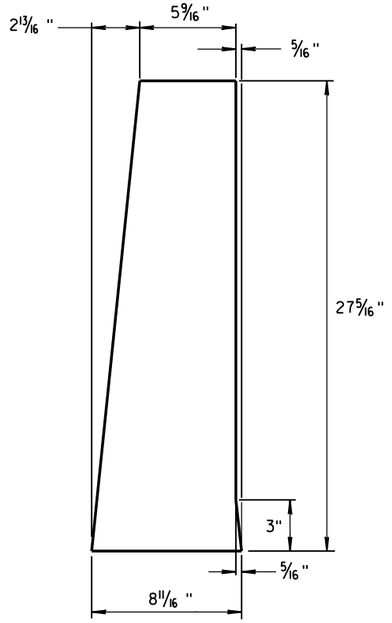
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

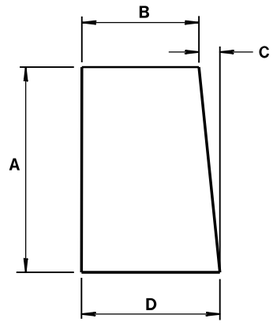


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



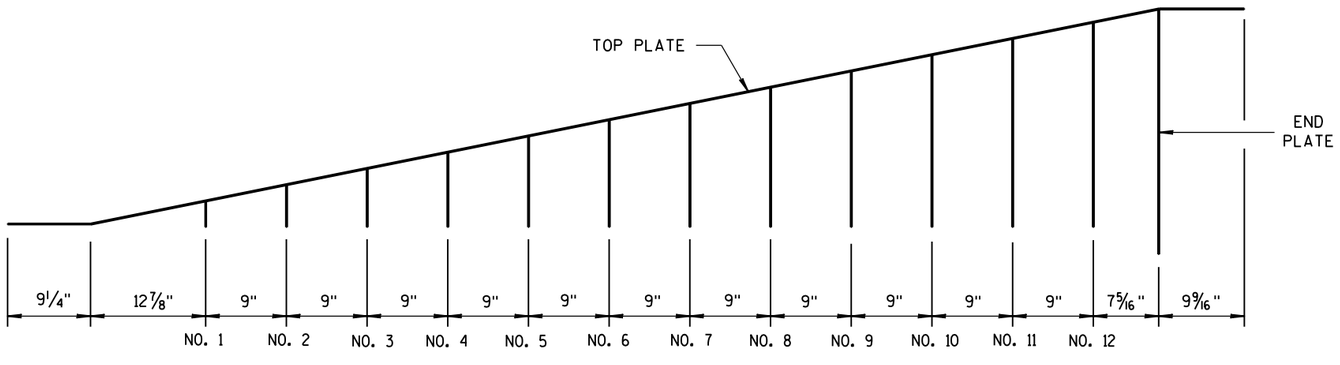
GUSSETS 1 - 12

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

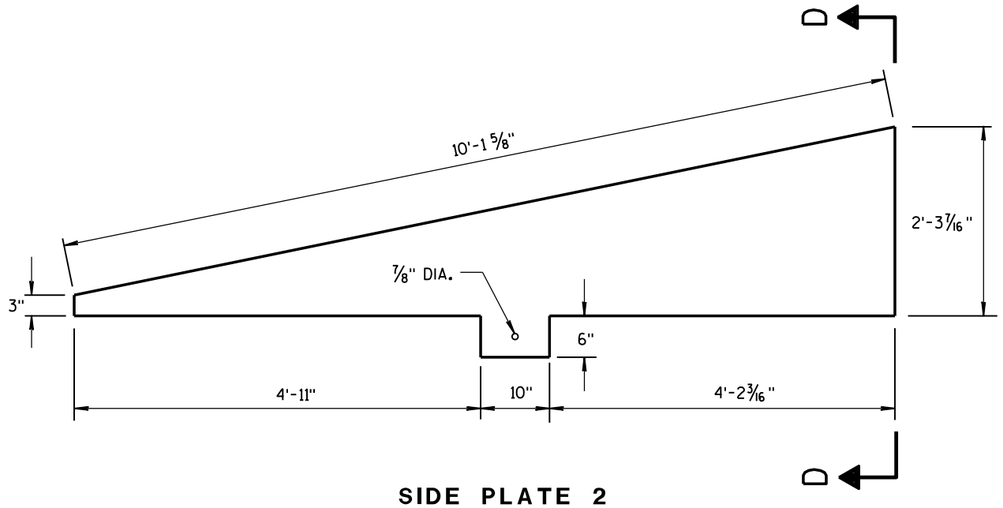
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

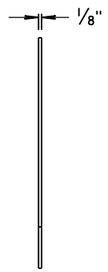
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

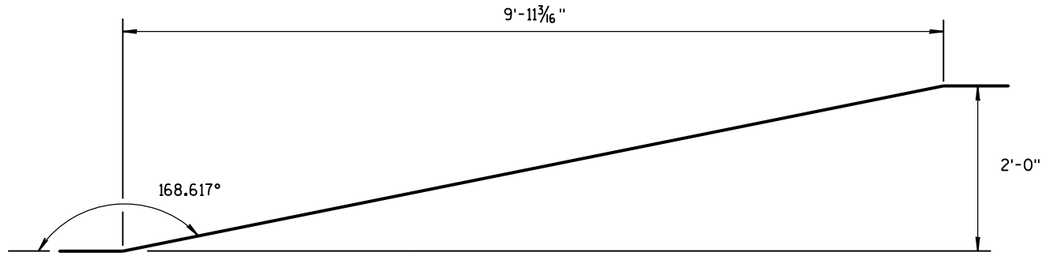
S.D.D. 14 B 7-14g



SIDE PLATE 2

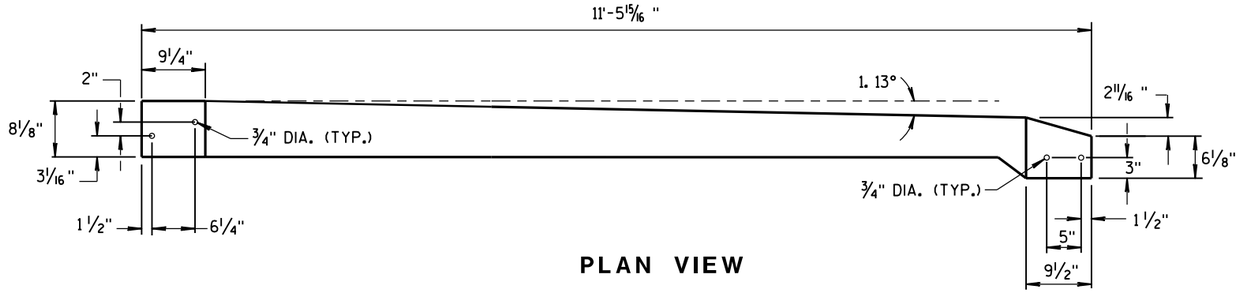


END VIEW



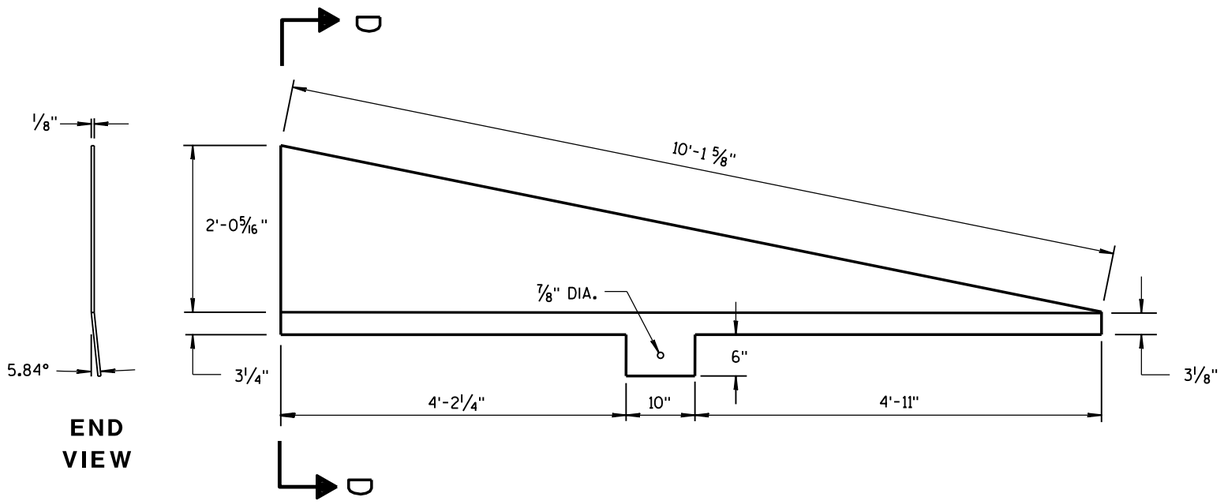
SIDE VIEW

TOP PLATE



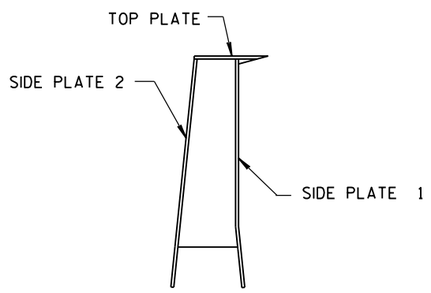
PLAN VIEW

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

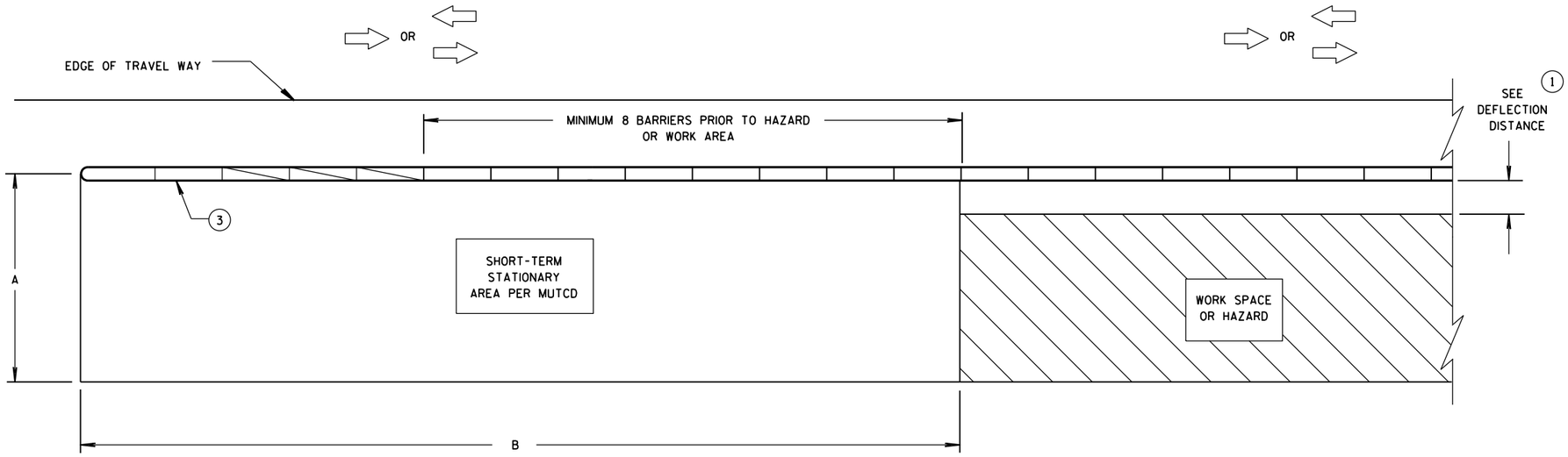
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

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

6

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



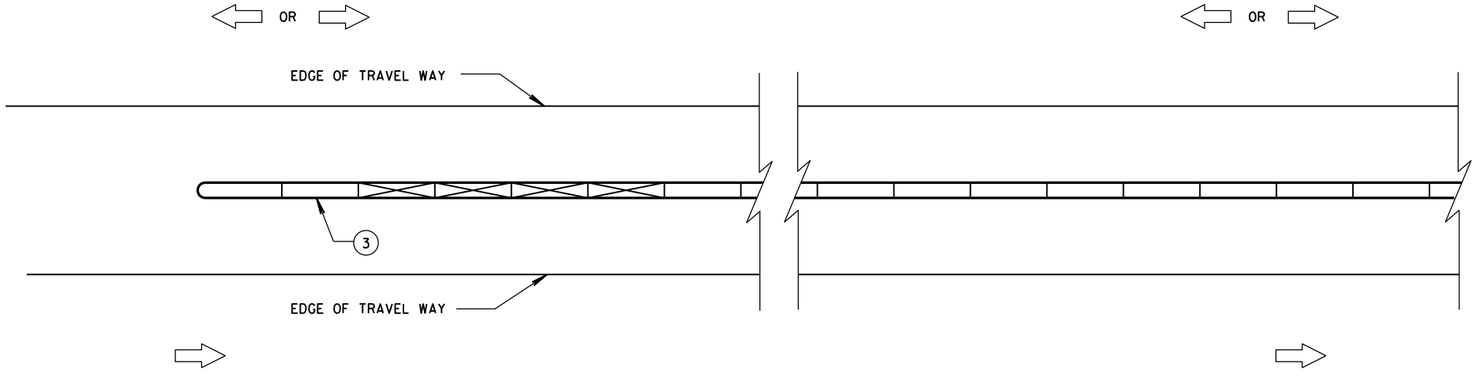
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

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

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.

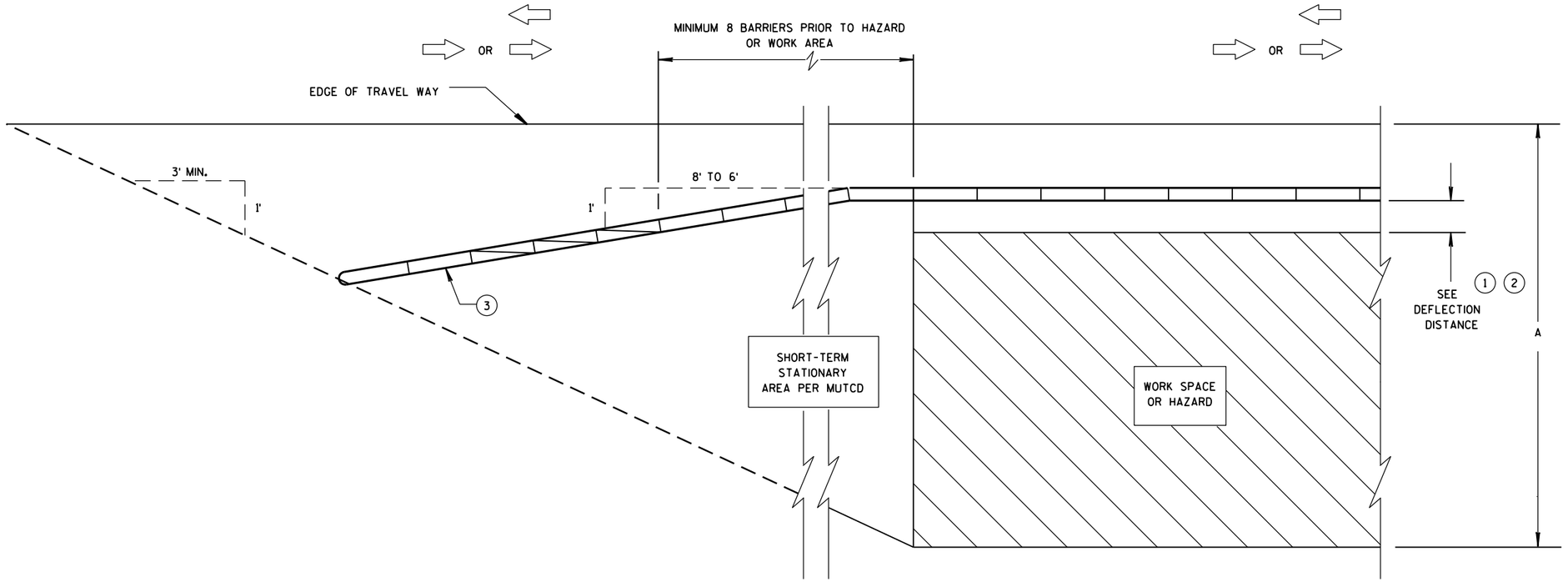
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

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

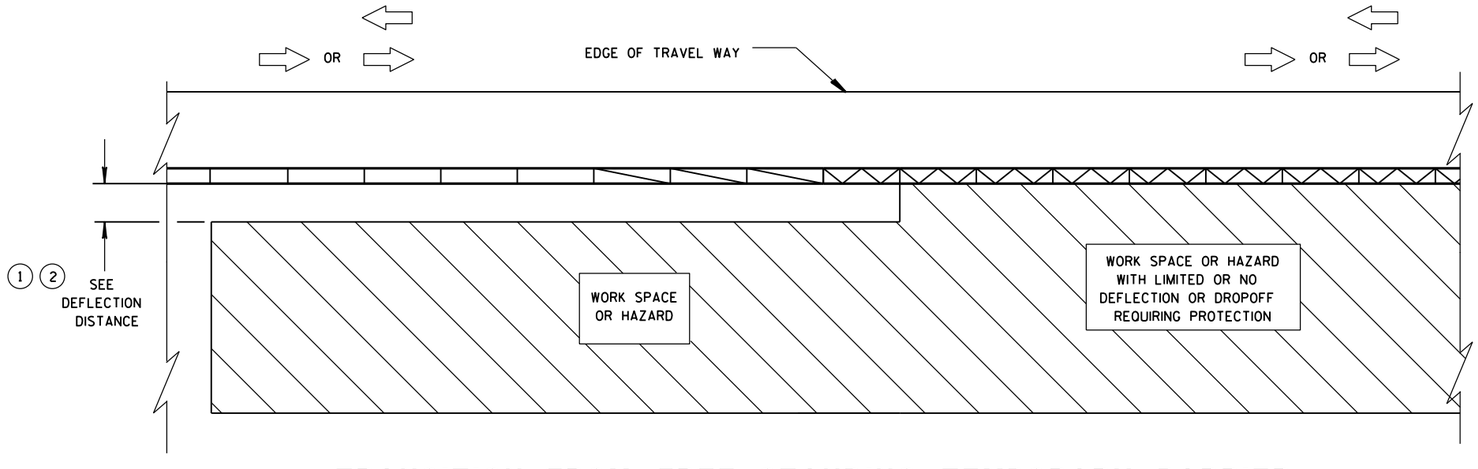
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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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

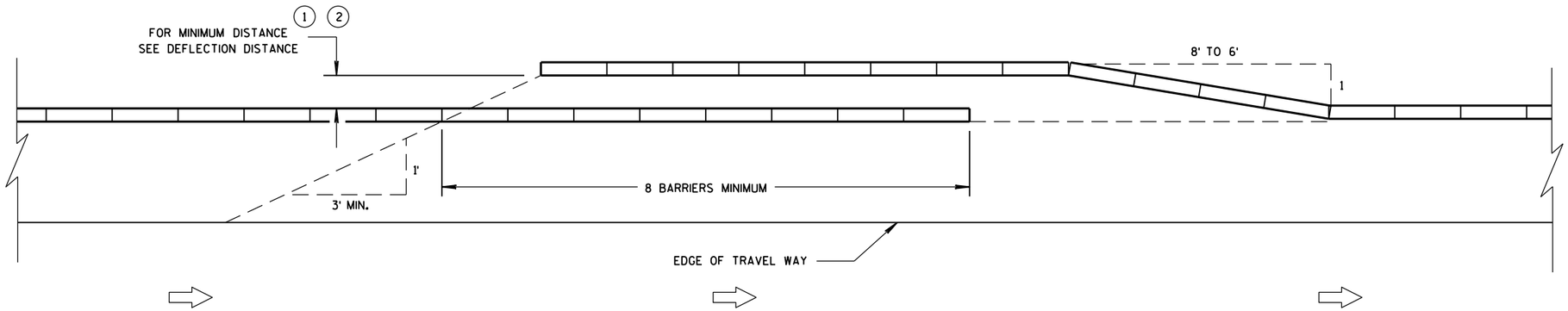
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

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

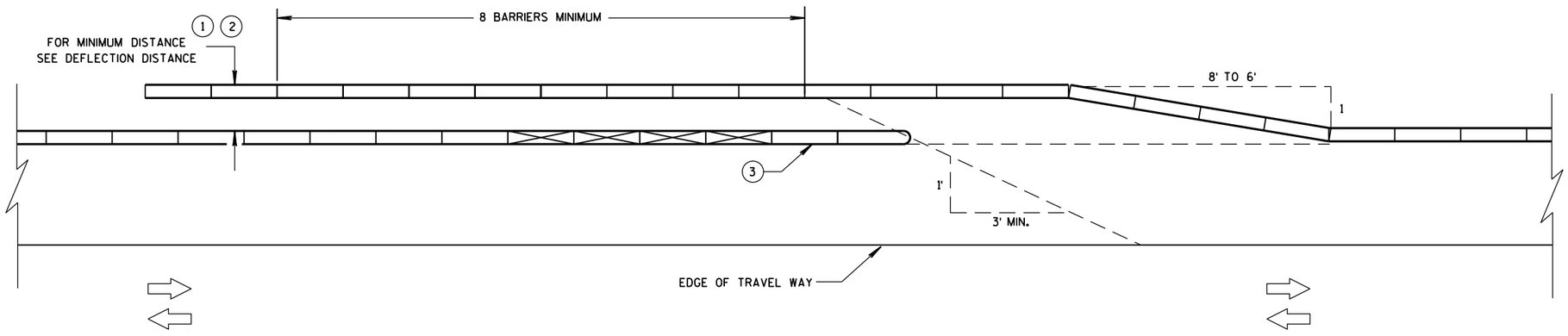
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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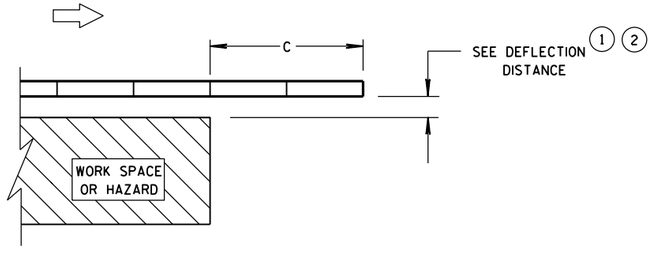
S.D.D. 14 B 8-2b



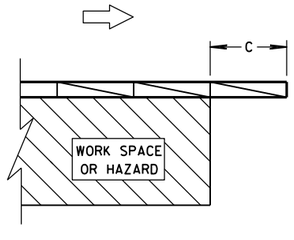
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

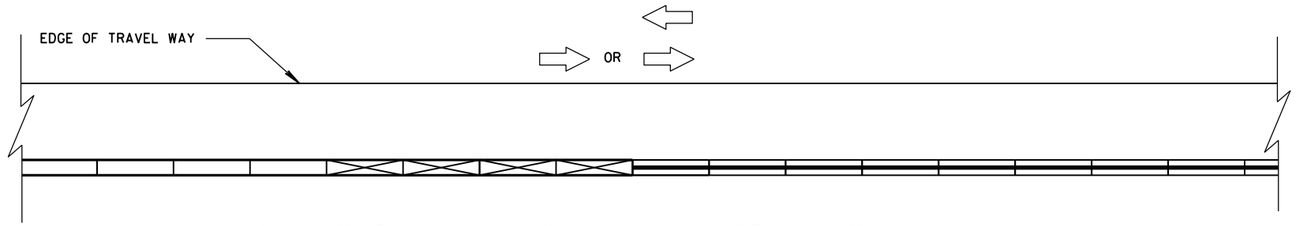
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

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

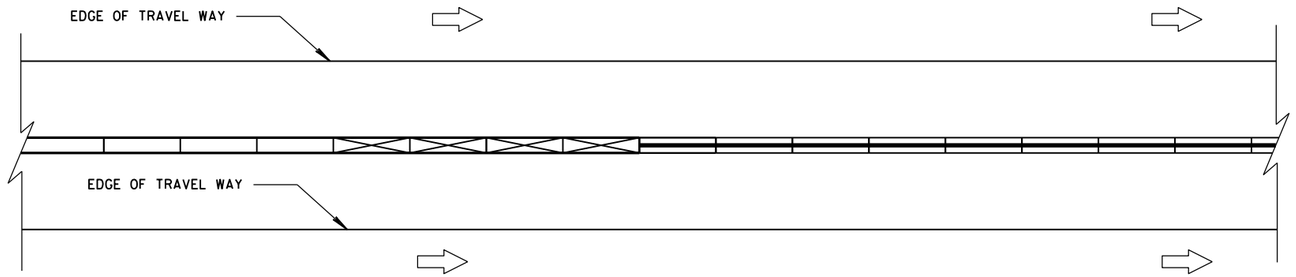
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



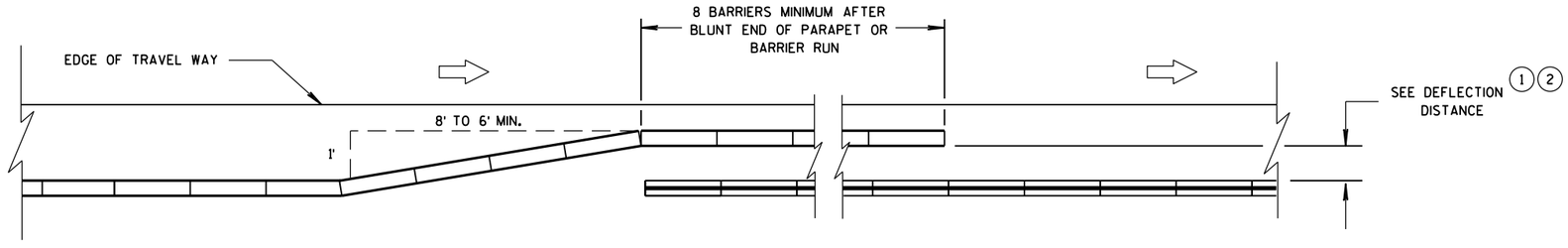
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



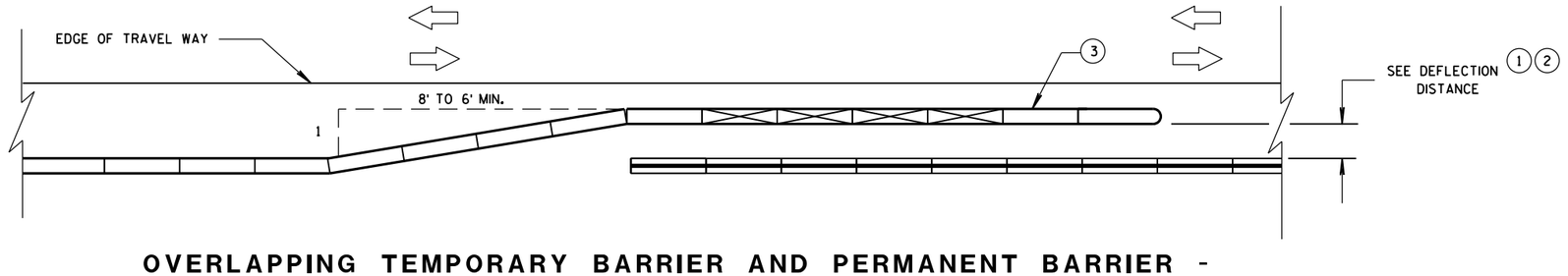
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

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



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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

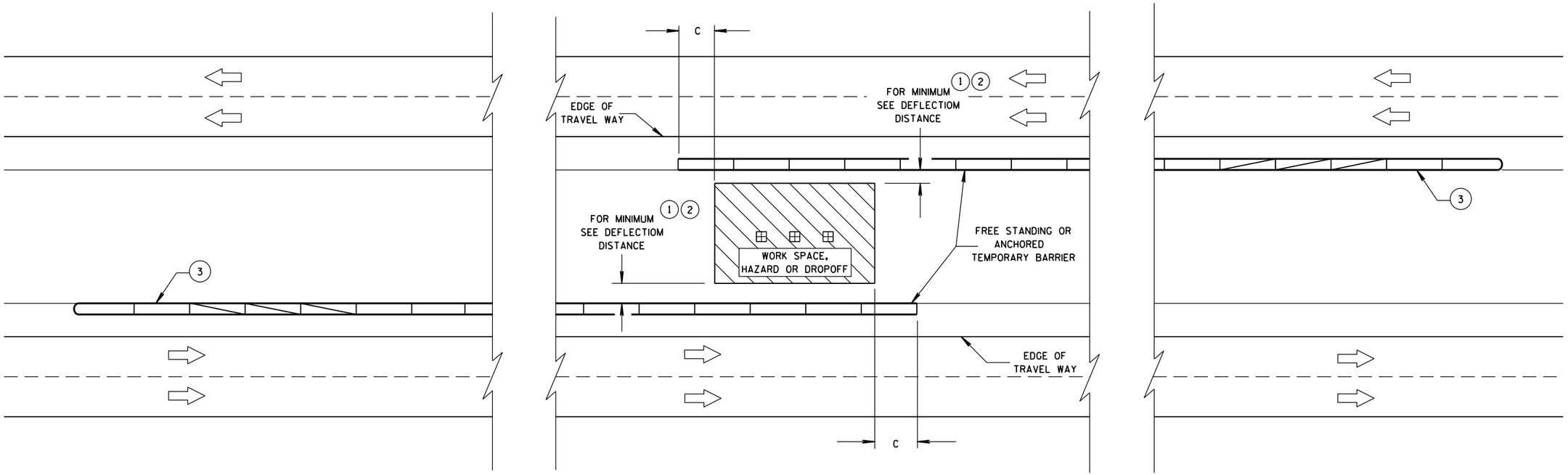
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

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



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
ROADWAY STANDARDS ENGINNER
FHWA

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

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

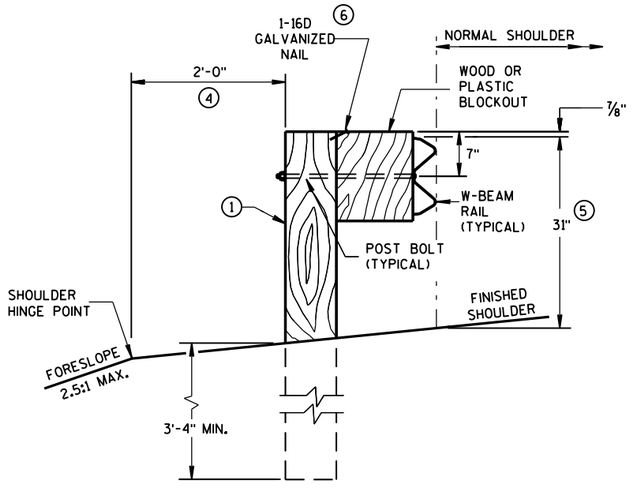
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

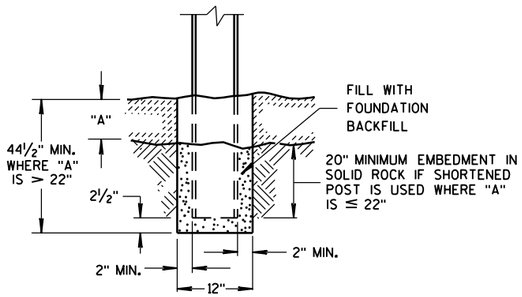
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



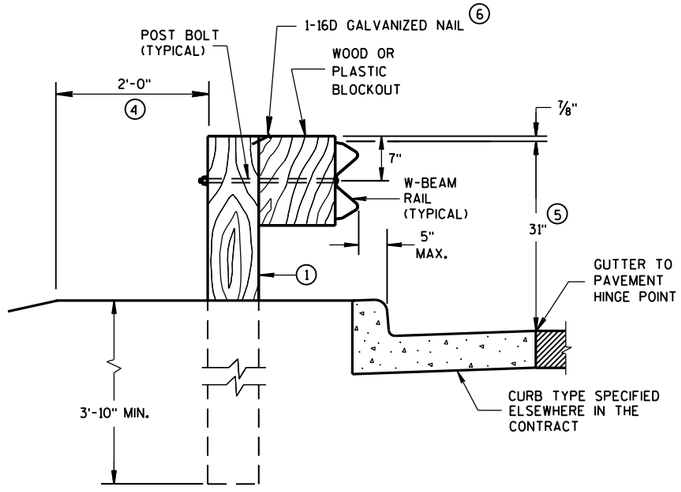
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



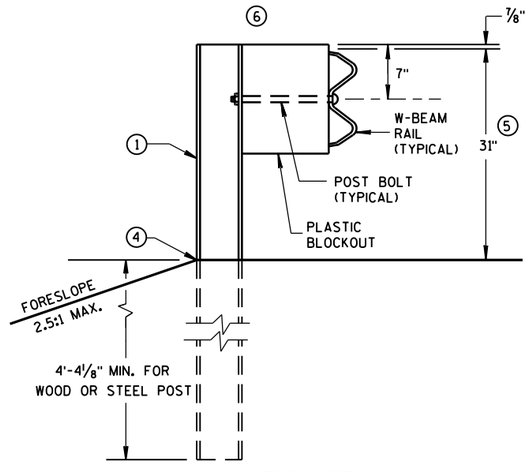
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



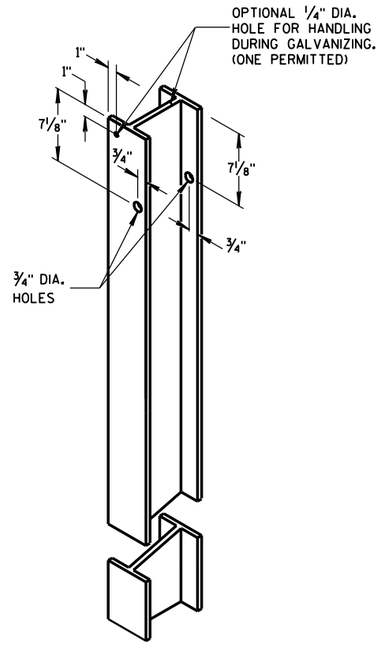
END VIEW

LOCATED ALONG A CURBED ROADWAY

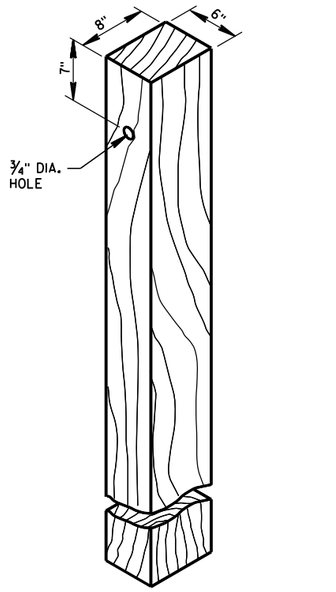


END VIEW

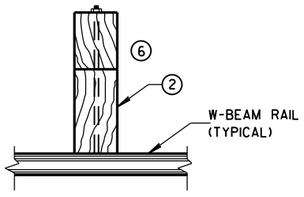
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



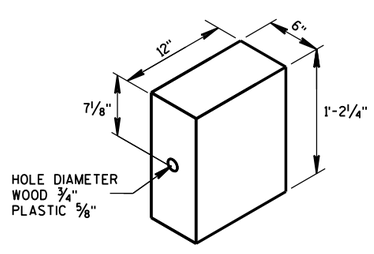
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



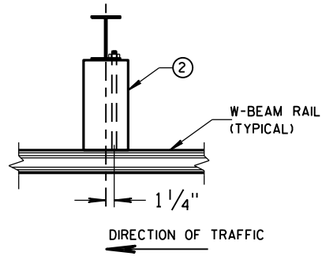
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

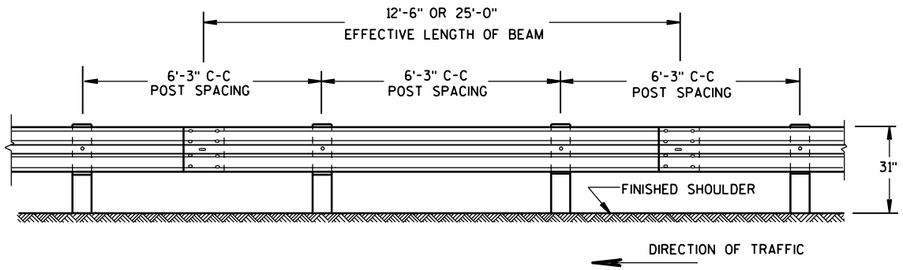


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

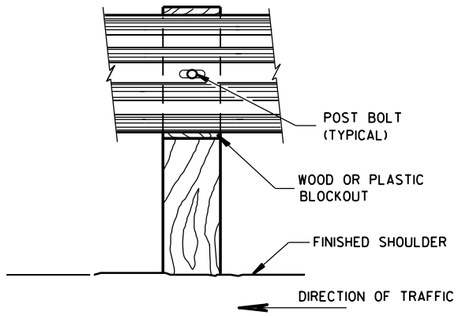
STATE OF WISCONSIN
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S.D.D. 14 B 42-4a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

7. PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

8. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

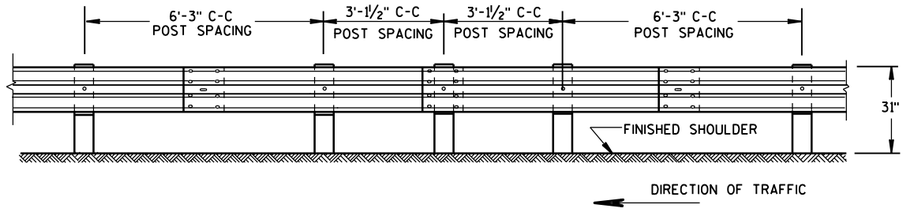
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

10. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

11. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

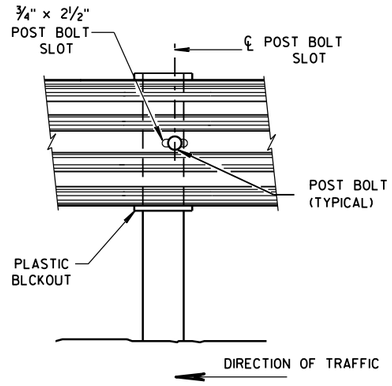
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

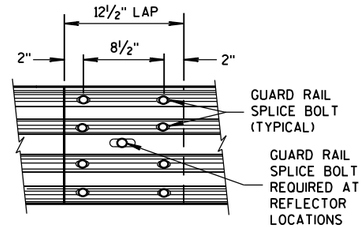


FRONT VIEW

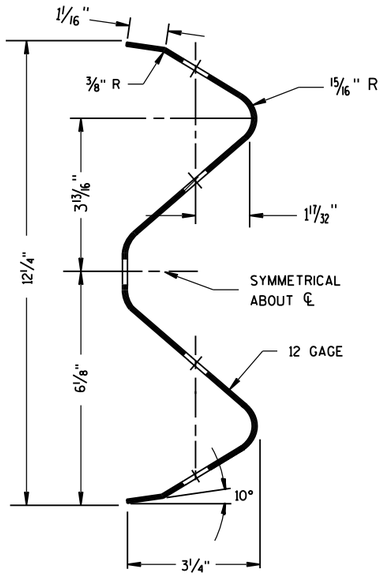
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



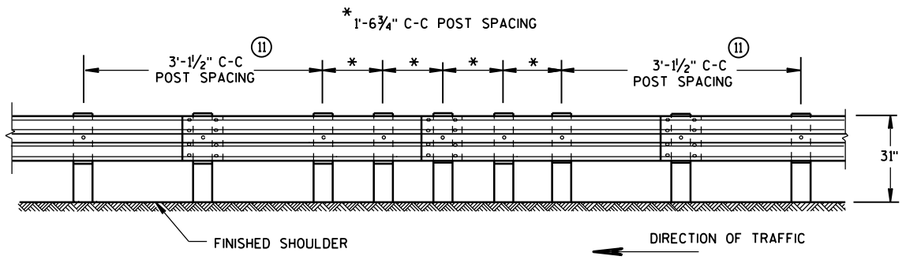
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

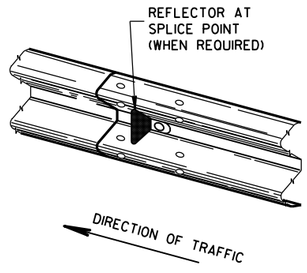


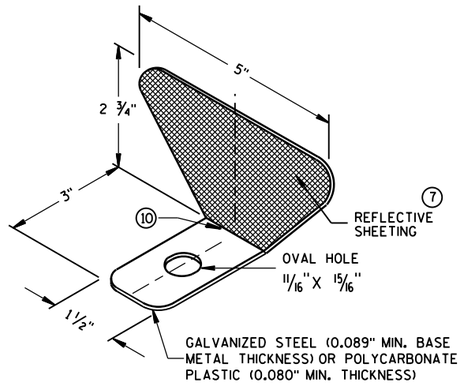
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

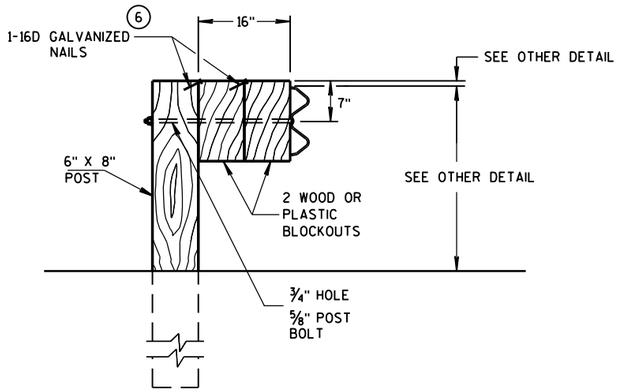
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

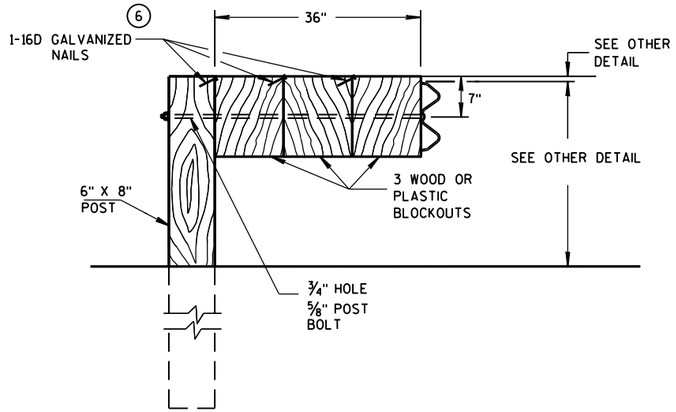
6

S.D.D. 14 B 42-4b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

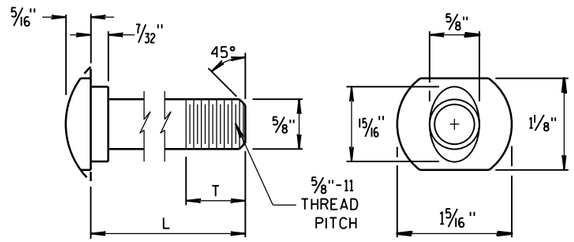


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

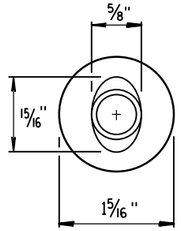
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

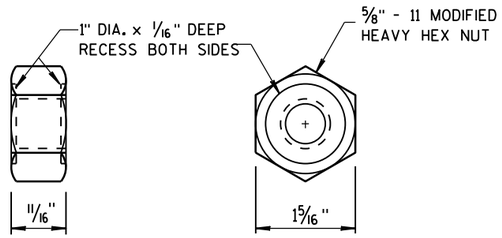


POST BOLT TABLE

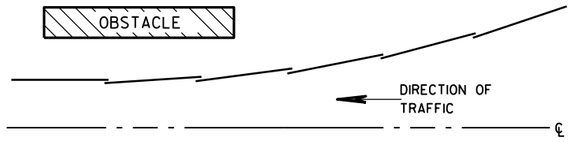
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

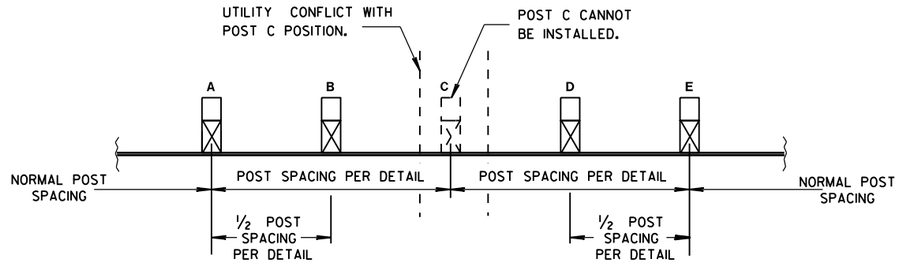


POST BOLT, SPLICE BOLT AND RECESS NUT

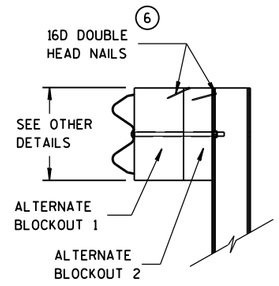


PLAN VIEW

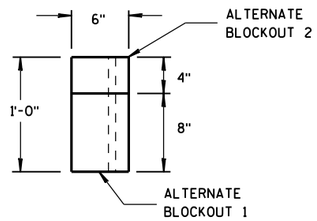
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

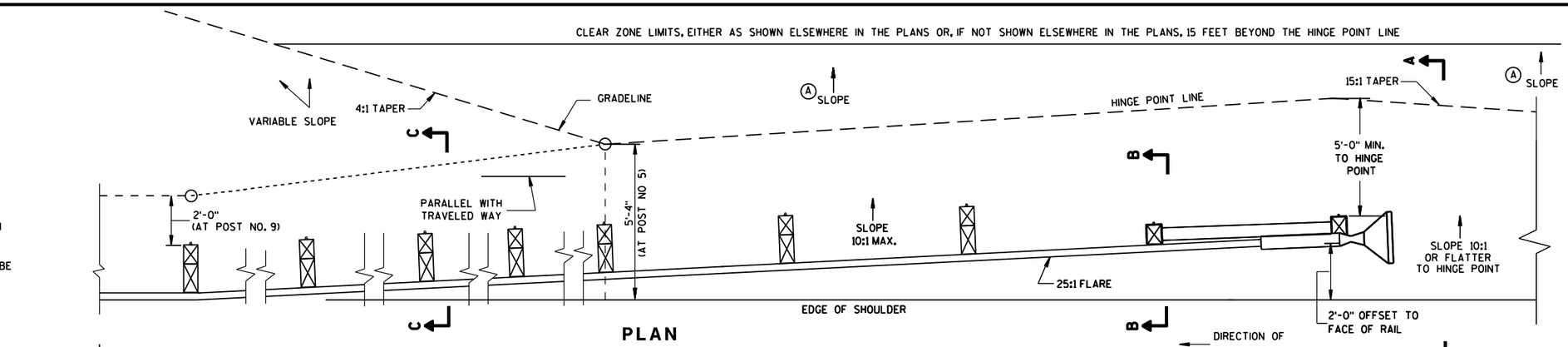
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

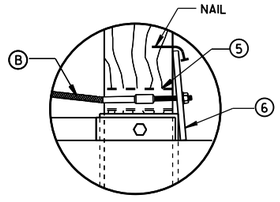
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

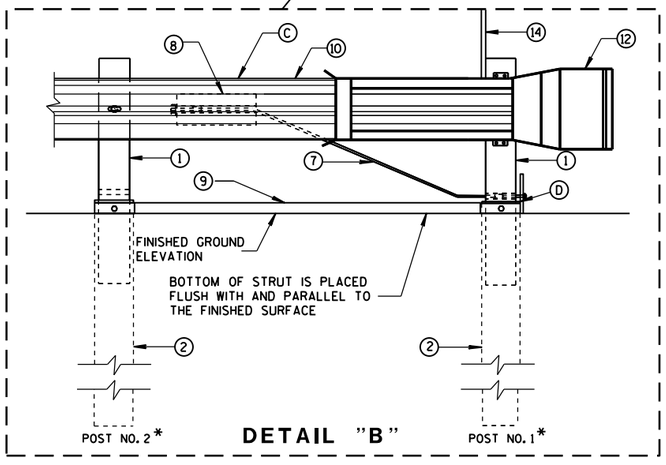
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

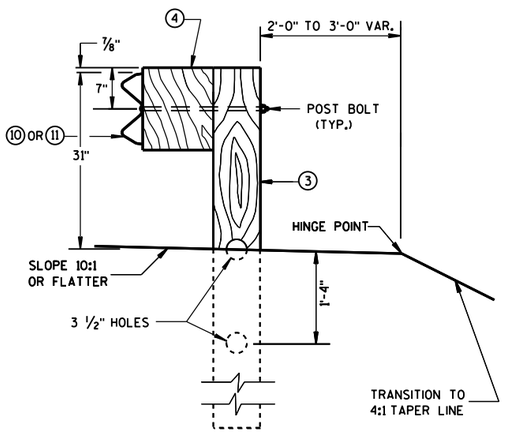
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



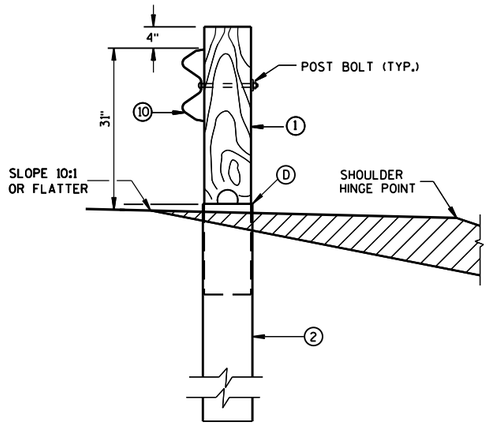
ELEVATION



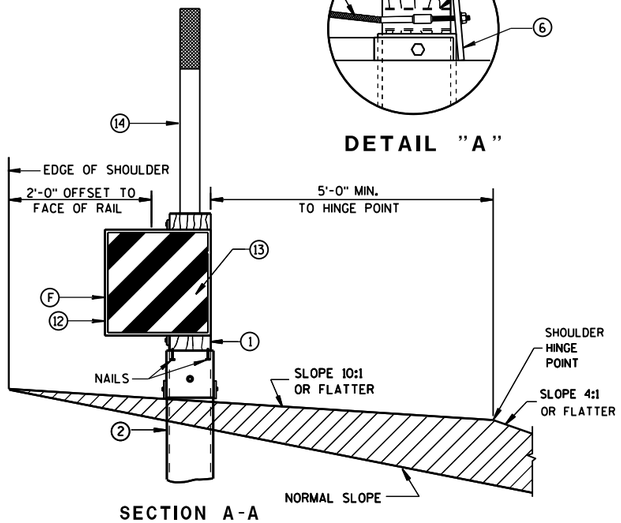




SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*



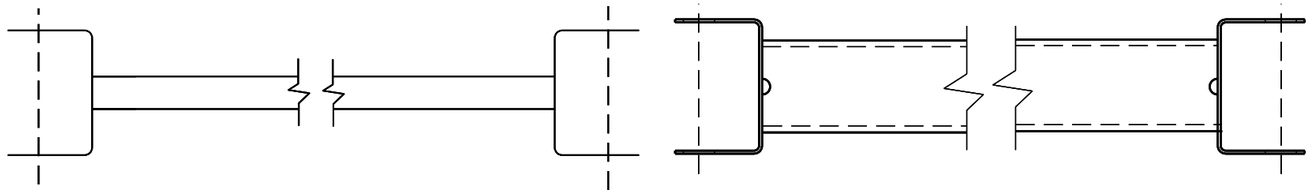
SECTION A-A
TYPICAL AT POST NO. 1*

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

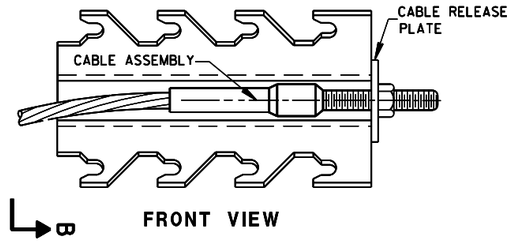
S.D.D. 14 B 44-2a



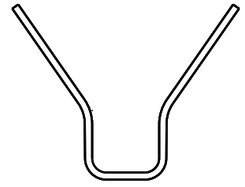
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

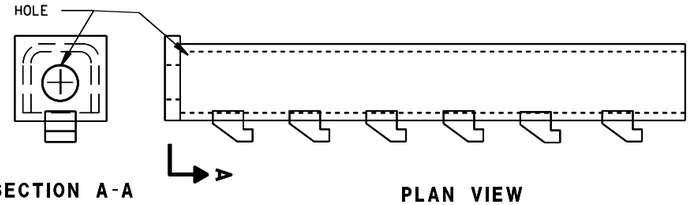
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



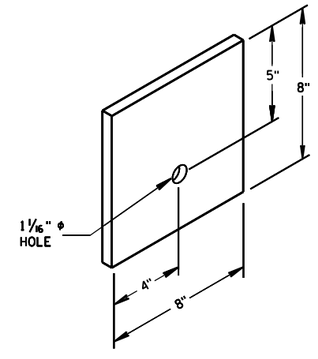
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



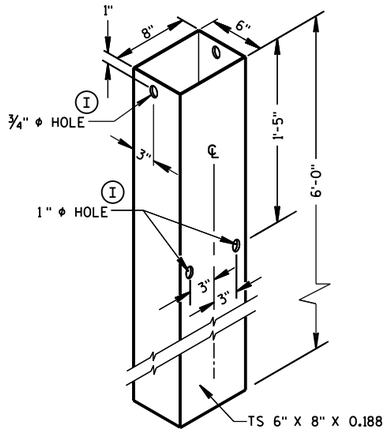
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

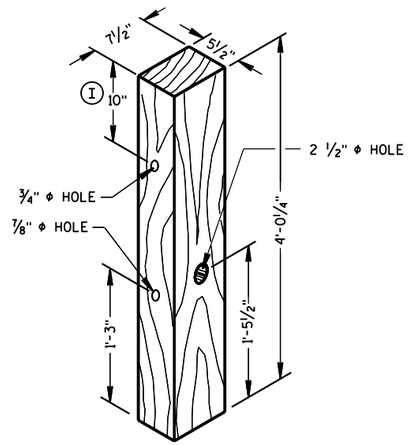
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 44-2b

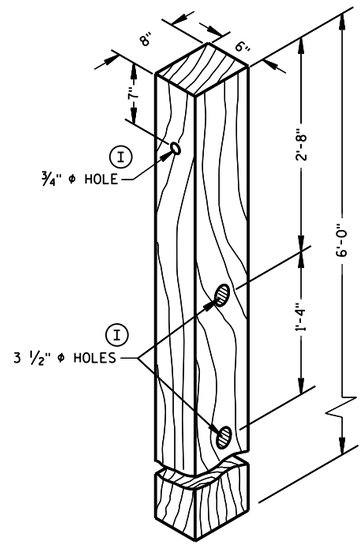


FOUNDATION TUBE (2)



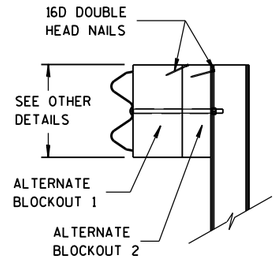
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

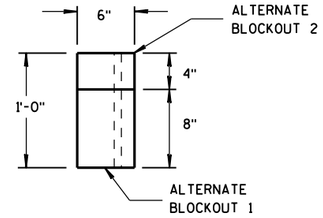


POSTS NUMBER 3-9

WOOD CRT POST (3)

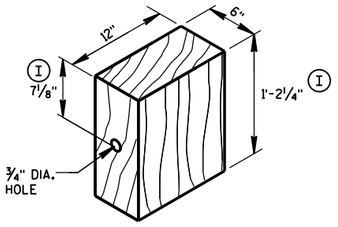


SIDE VIEW



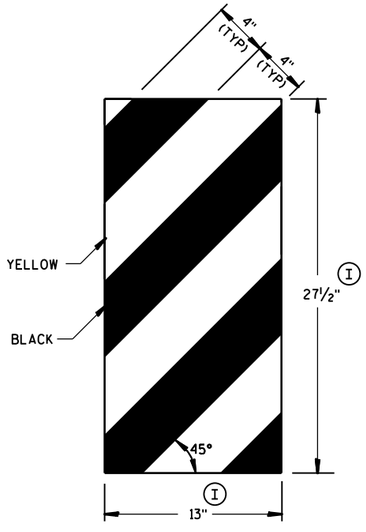
TOP VIEW

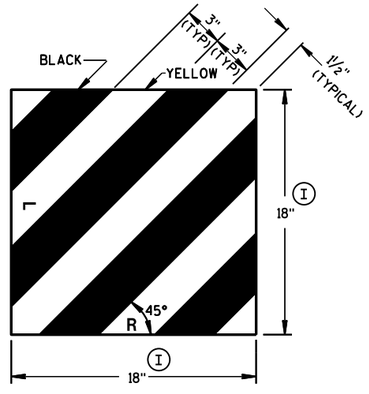
ALTERNATE WOOD BLOCKOUT DETAIL



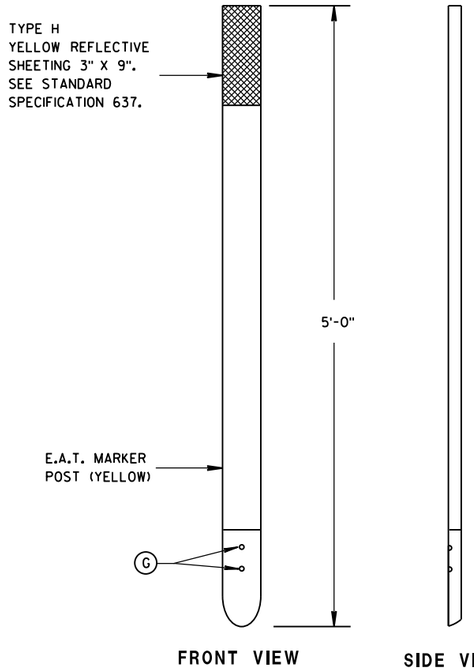
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





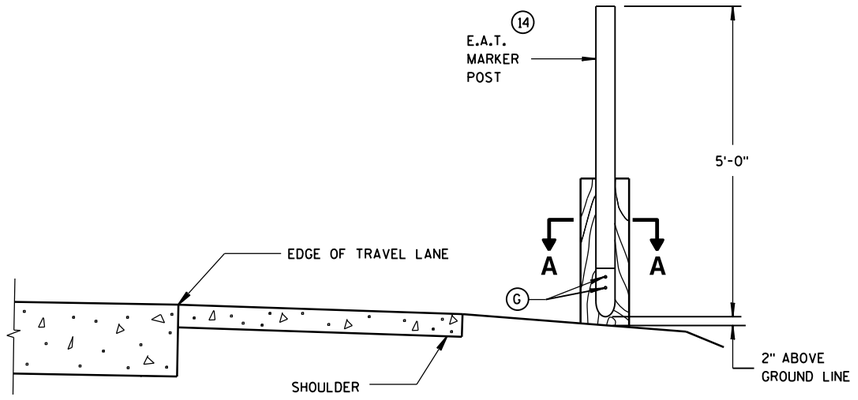
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

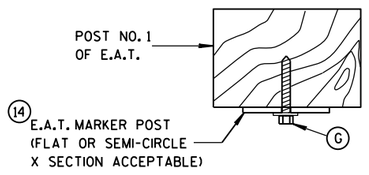
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

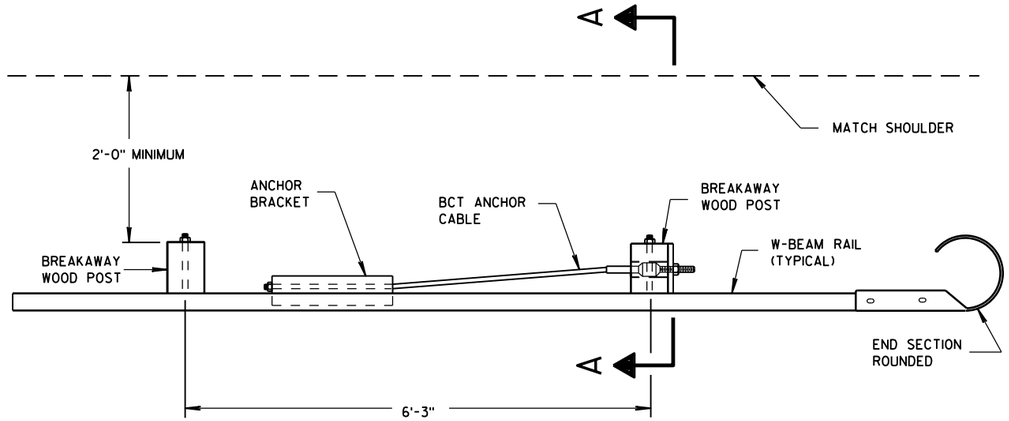
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

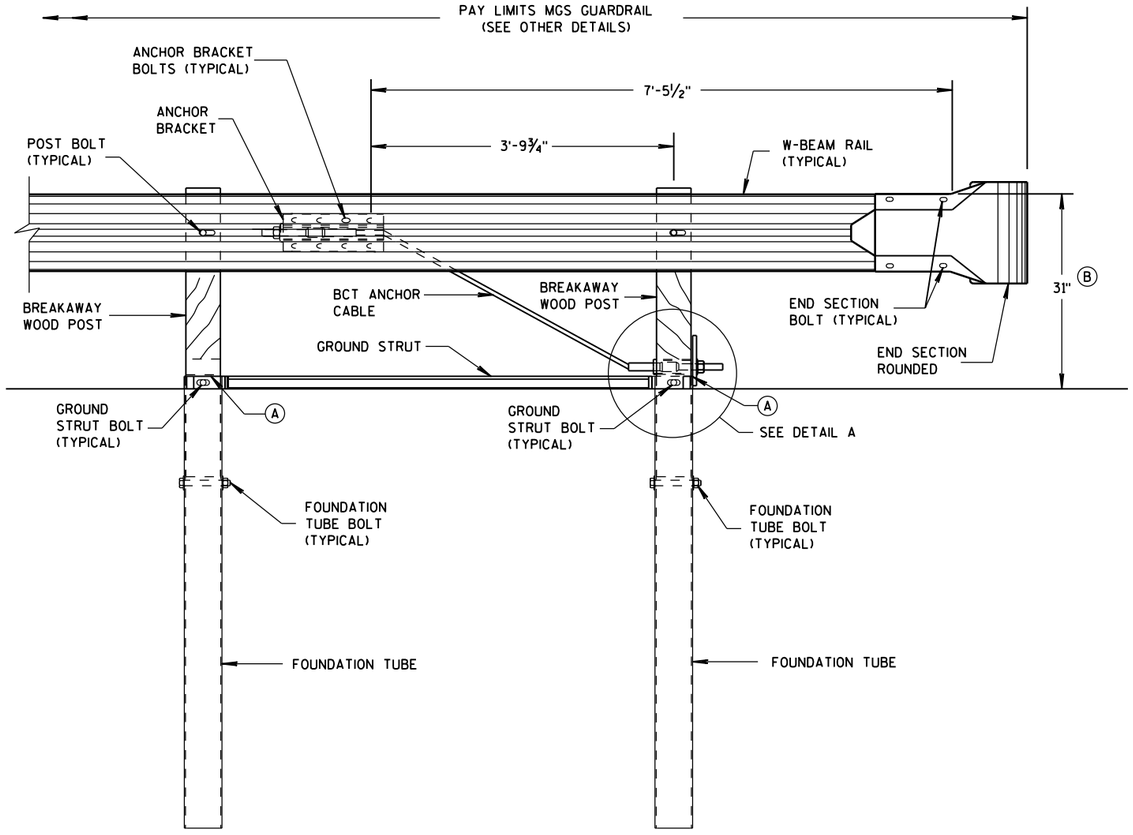
S.D.D. 14 B 44-2c

6

S.D.D. 14 B 44-2c

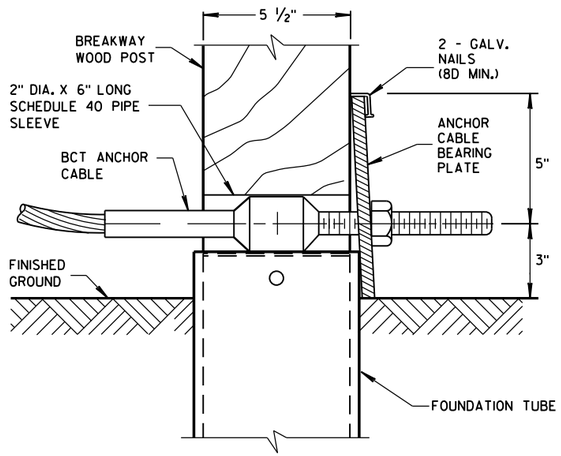


PLAN VIEW



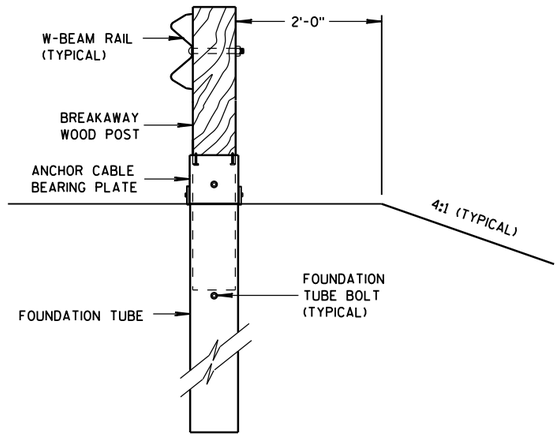
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

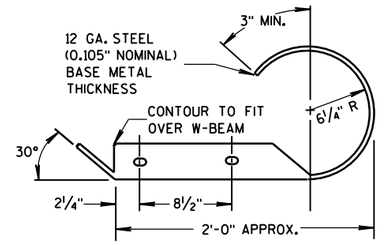
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

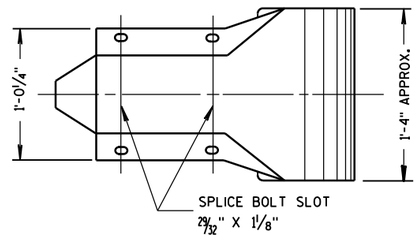
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



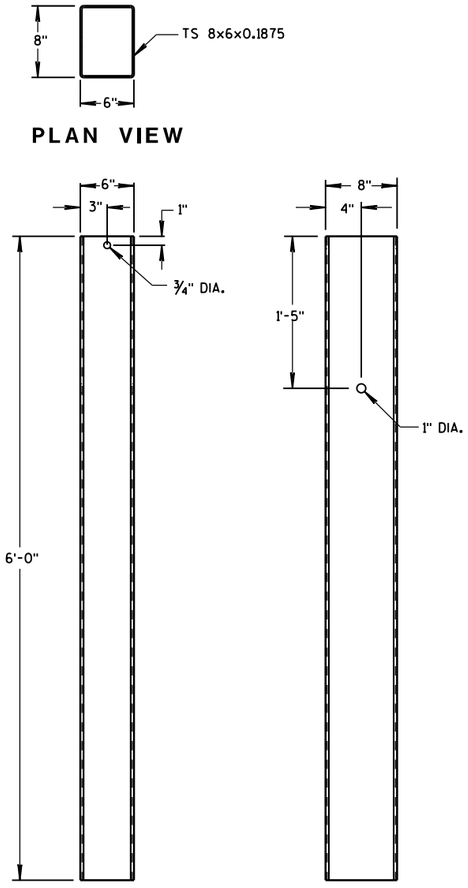
FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

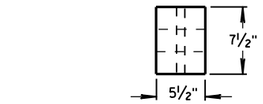
6
S.D.D. 14 B 47-2a



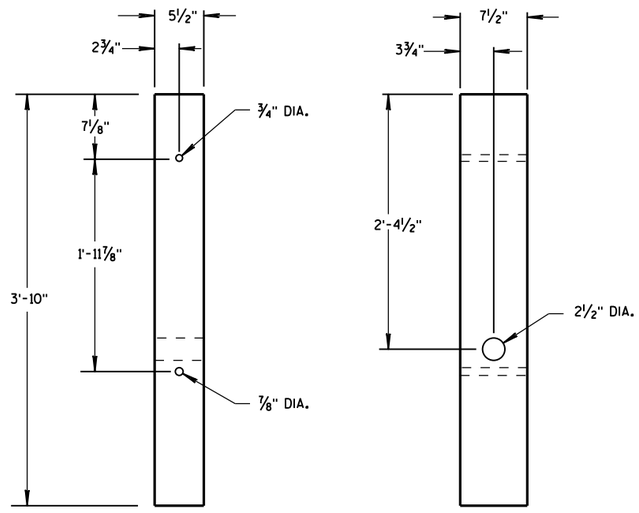
PLAN VIEW

FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW



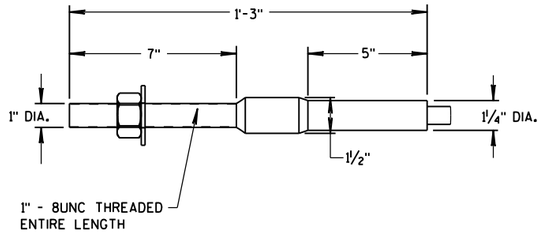
FRONT VIEW SIDE VIEW

BREAKAWAY WOOD POST

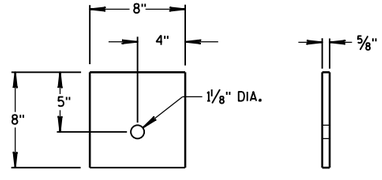
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

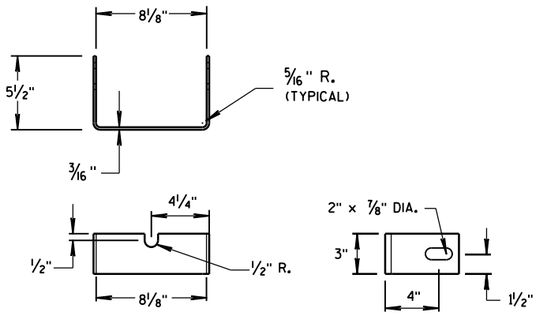
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

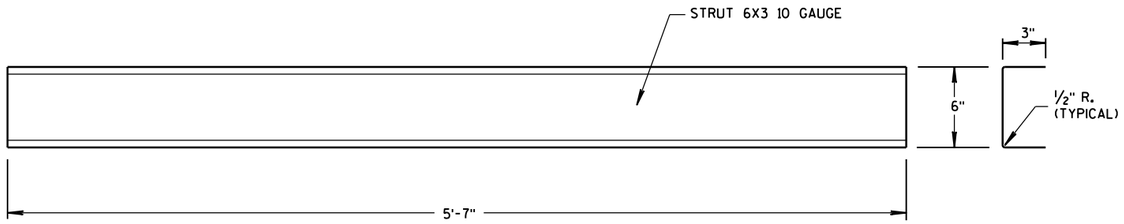
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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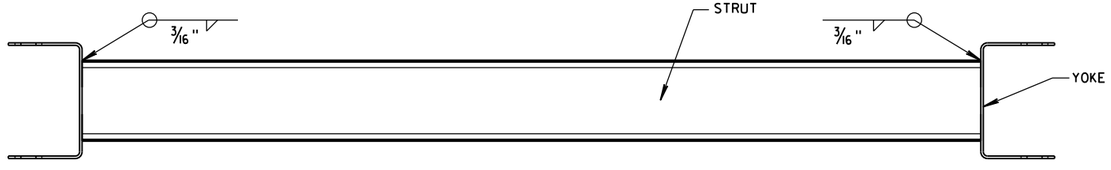
S.D.D. 14 B 47-2b



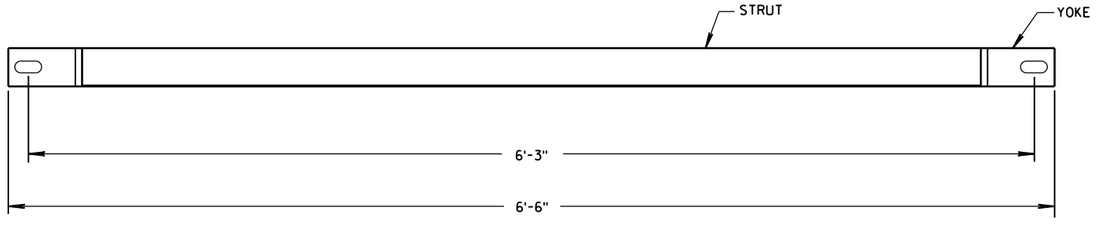
YOKE DETAIL



STRUT DETAIL

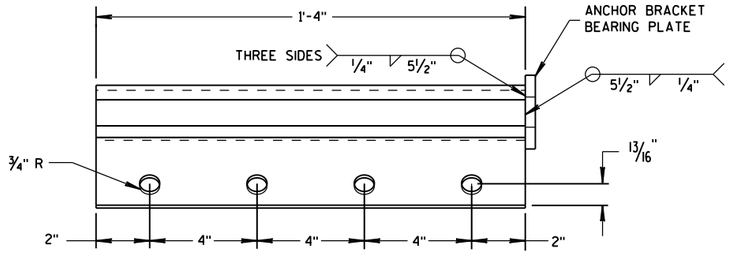


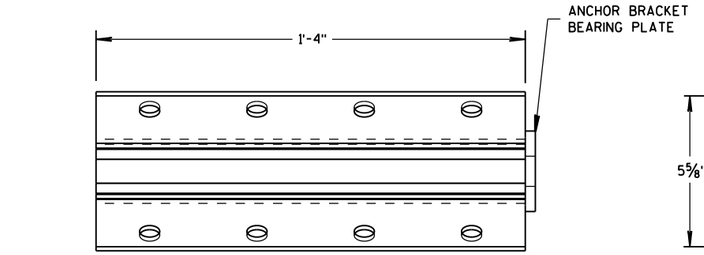
PLAN VIEW

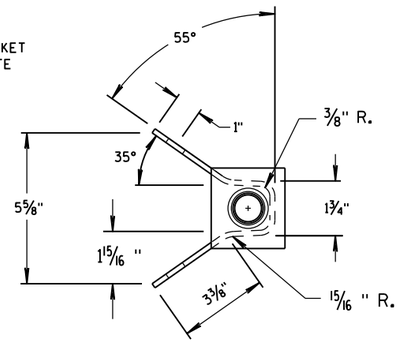


FRONT VIEW

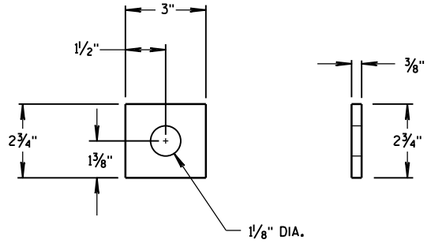
GROUND STRUT DETAIL







ANCHOR BRACKET



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

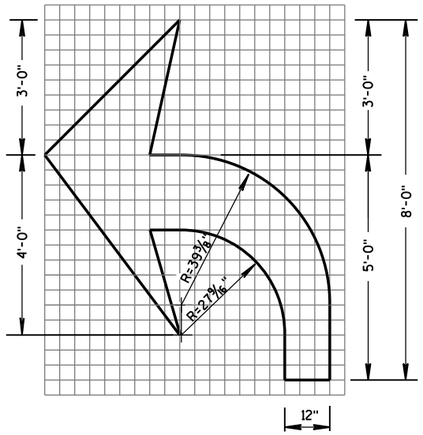
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

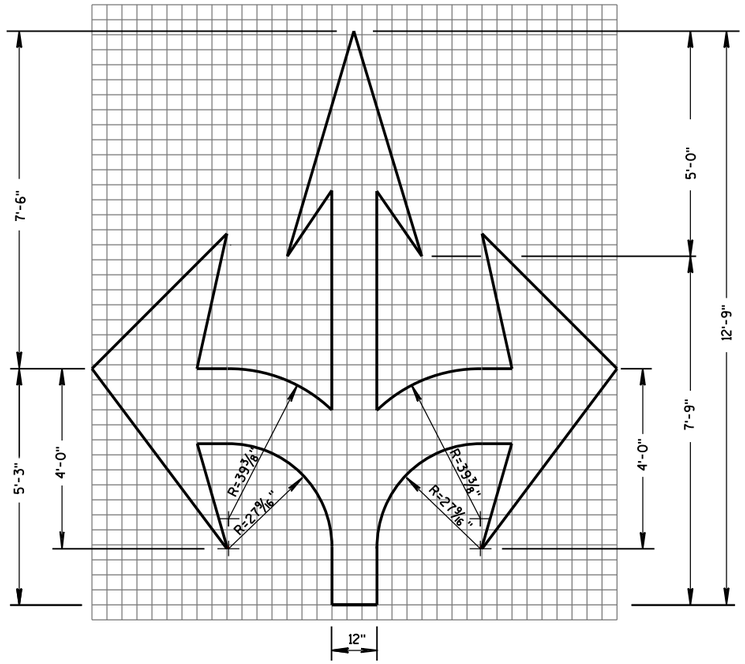
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S.D.D. 14 B 47-2c

GENERAL NOTES

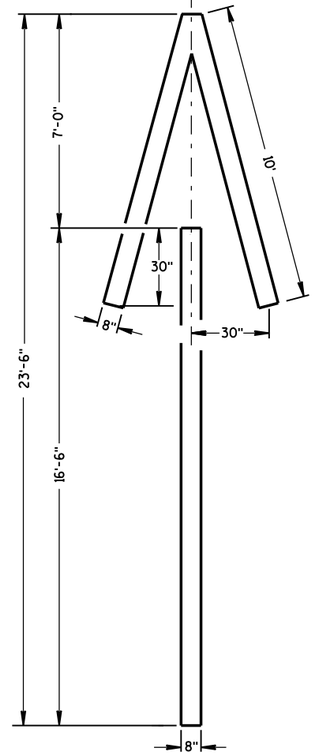
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



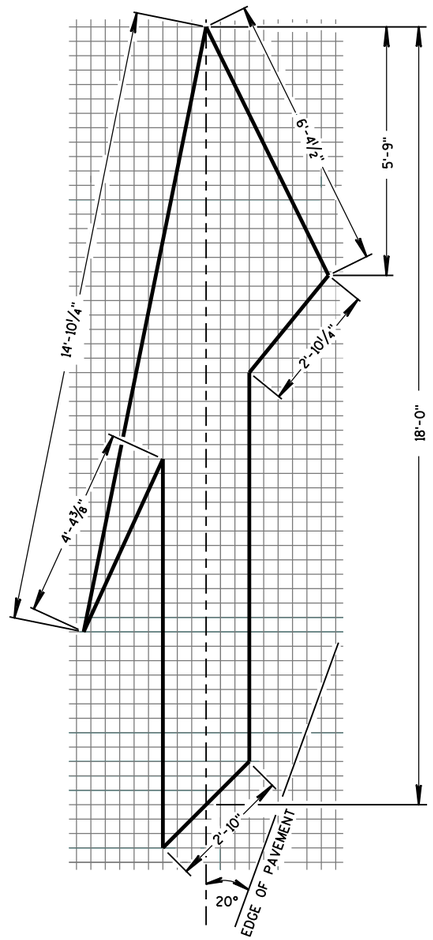
TYPE 2



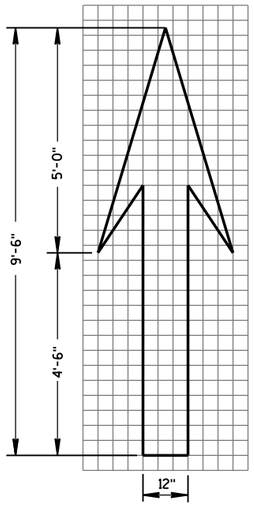
TYPE 6



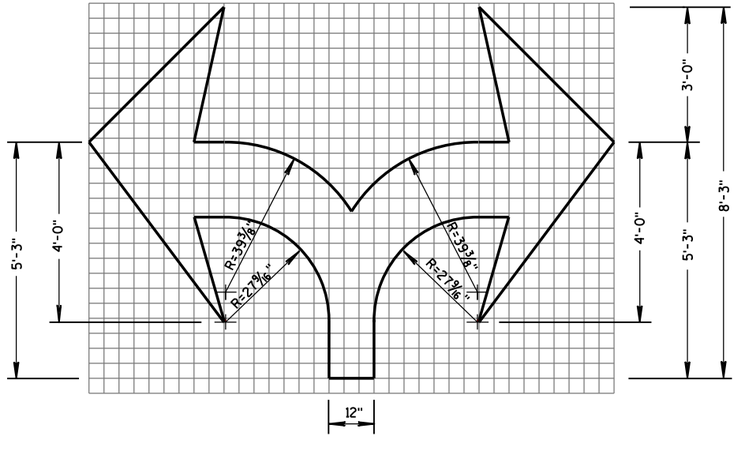
TYPE 4



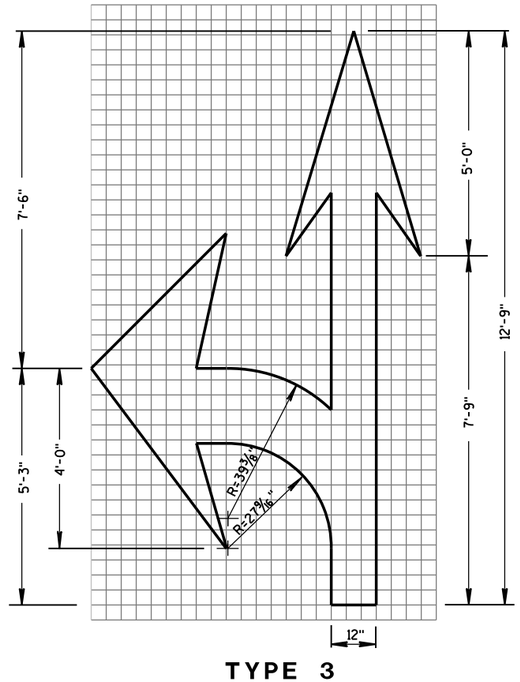
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

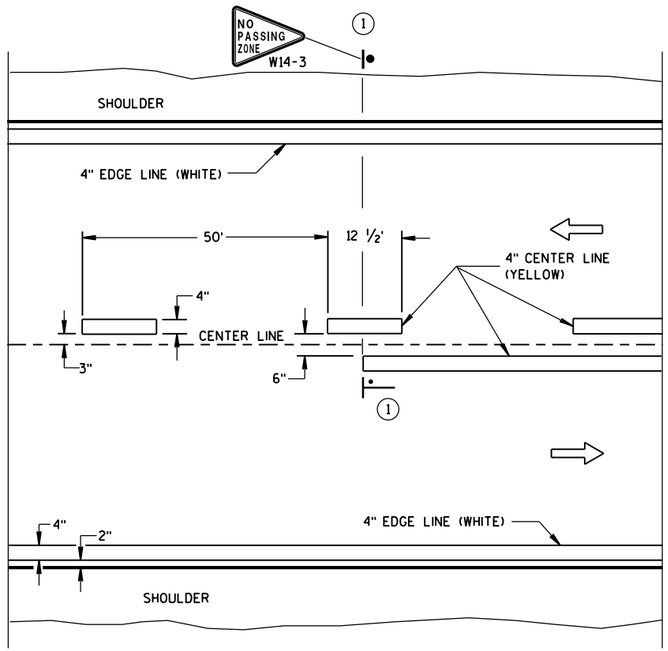
APPROVED
4-18-16
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR
NEER
FHWA

6

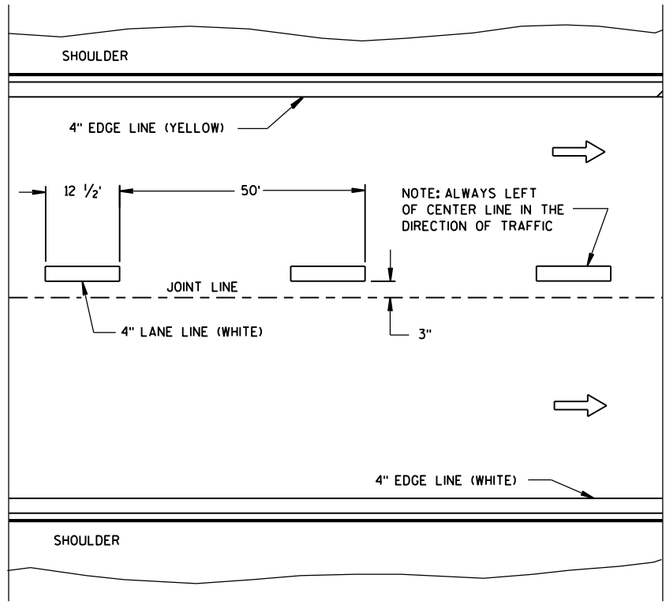
S.D.D. 15 C 7-13c

6

S.D.D. 15 C 7-13c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

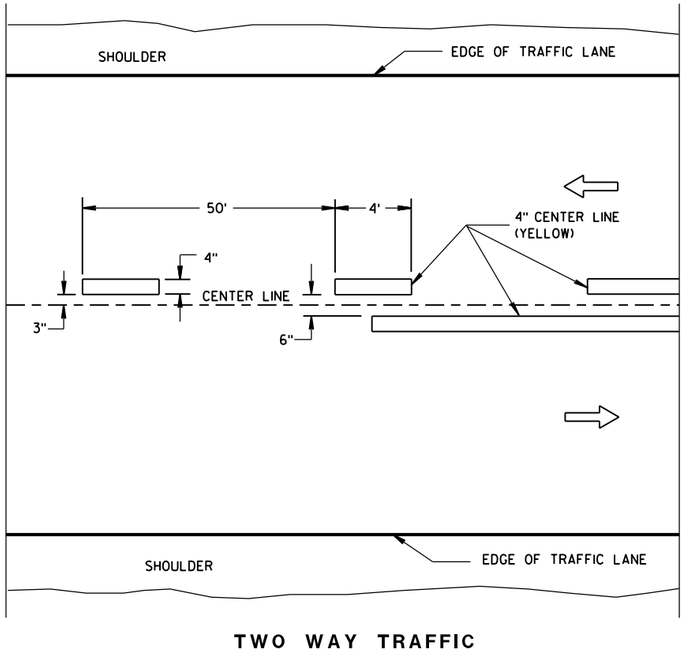
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

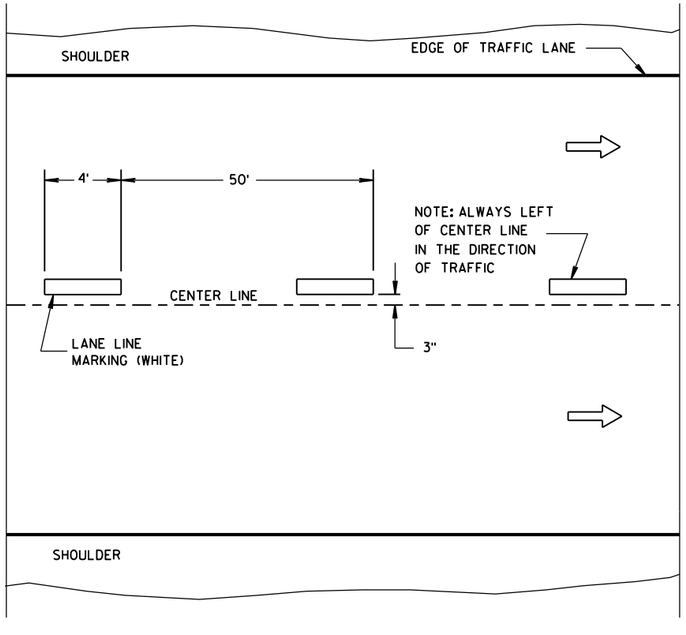
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

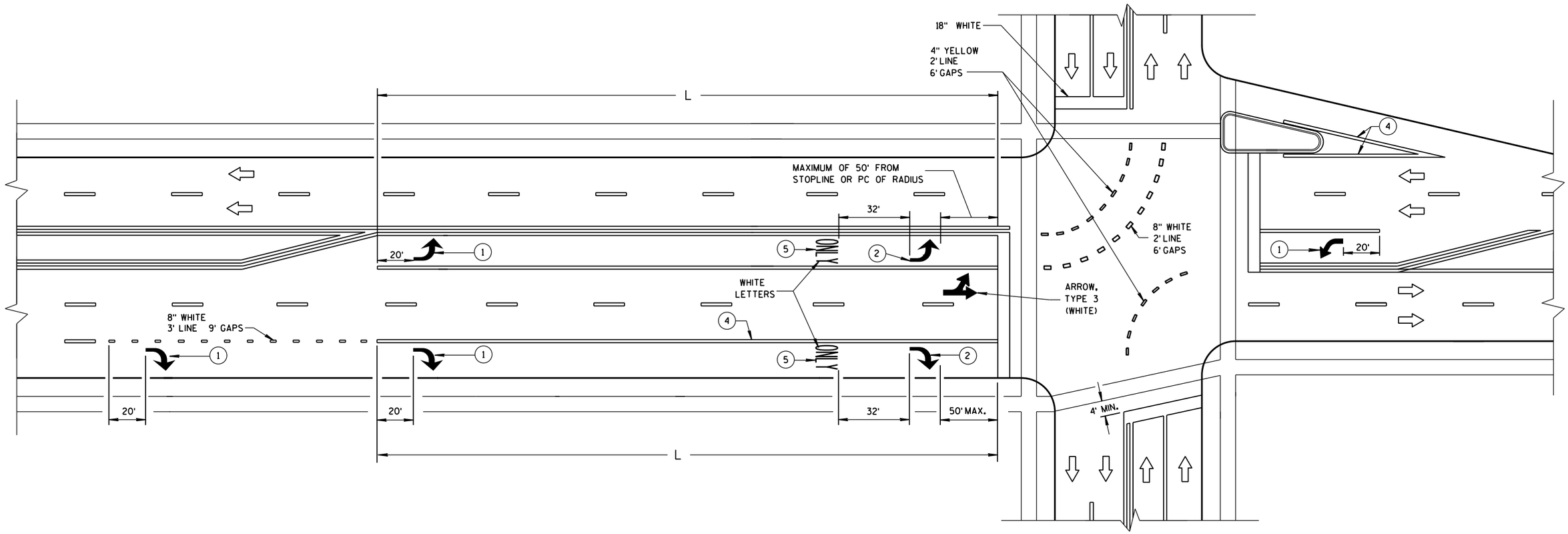
APPROVED
Sept., 2016 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

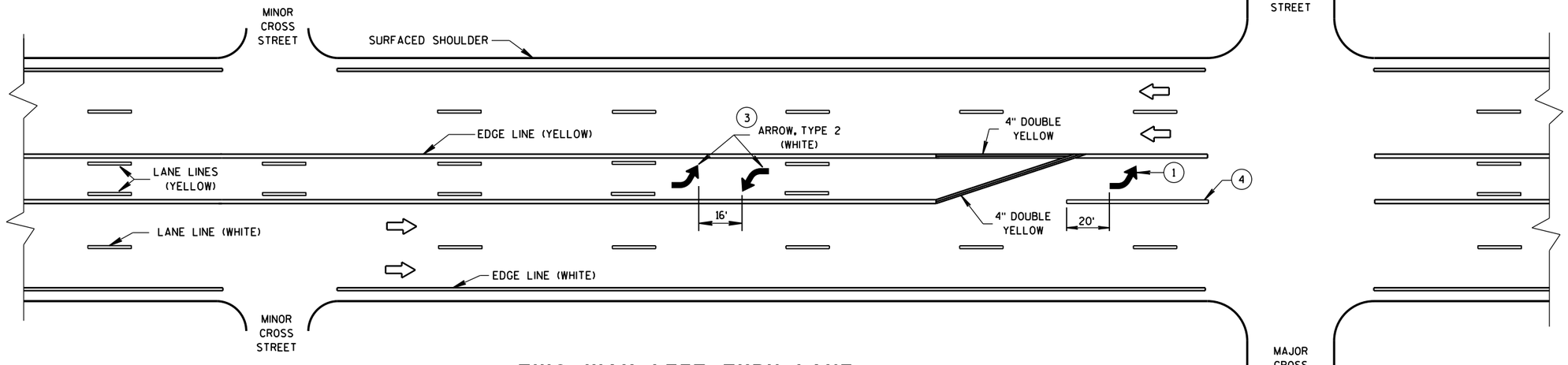
6

S.D.D. 15 C 8-17a

6

S.D.D. 15 C 8-17a





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 TRANSPOI

6

S.D.D. 15 C 8-17b

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
- (A) 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.

"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.

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.

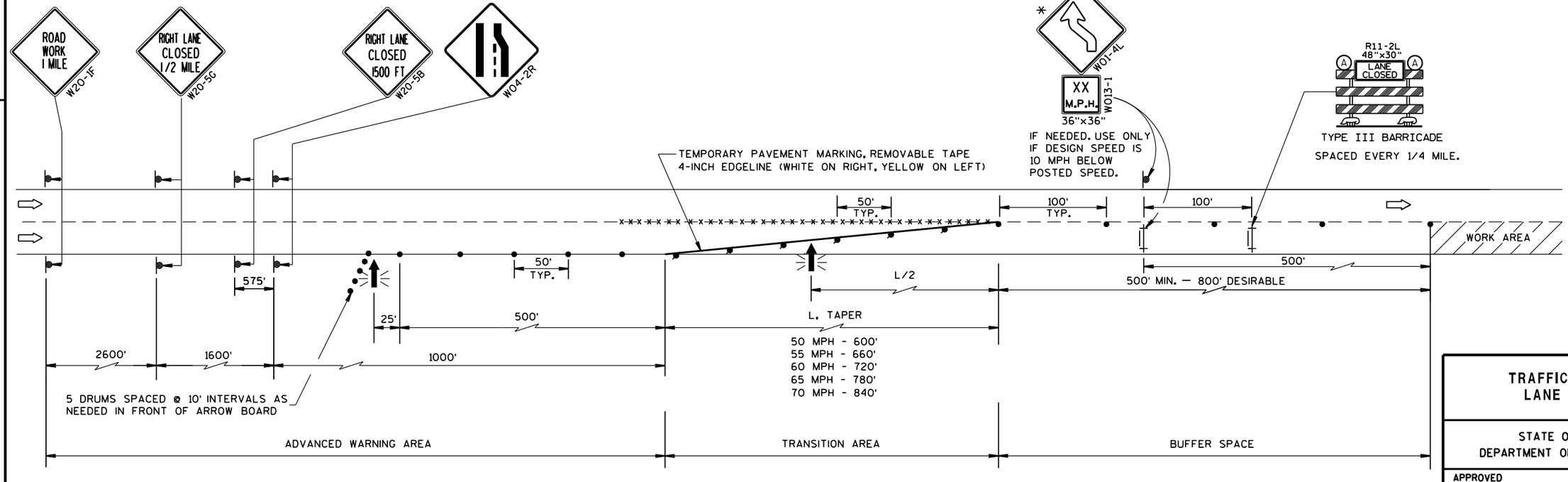
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

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

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

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

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

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

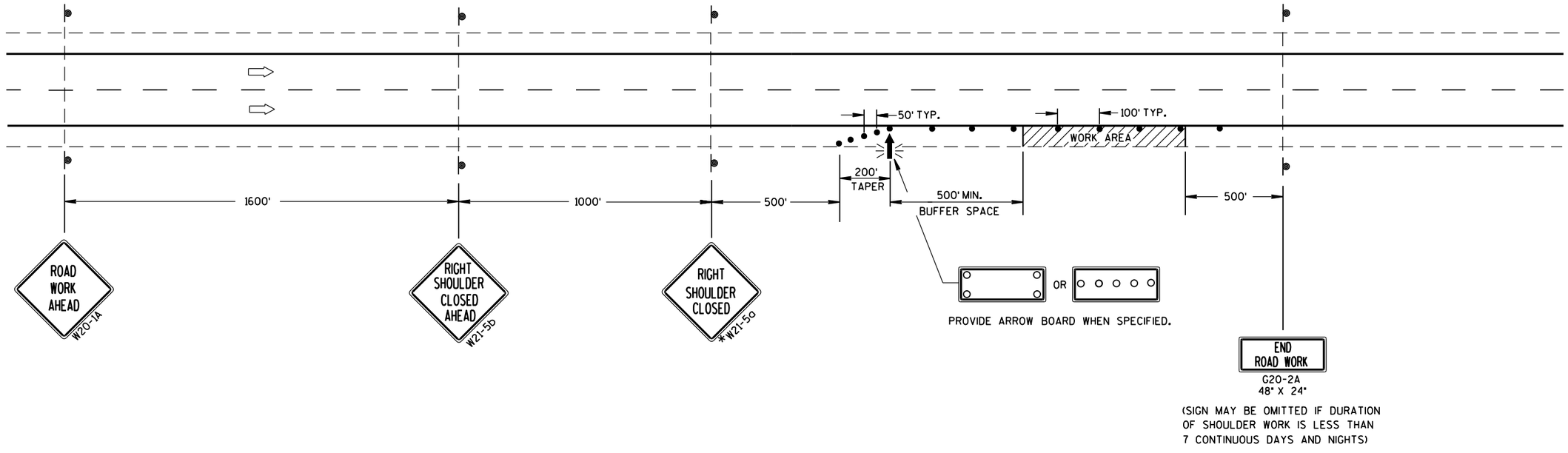
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

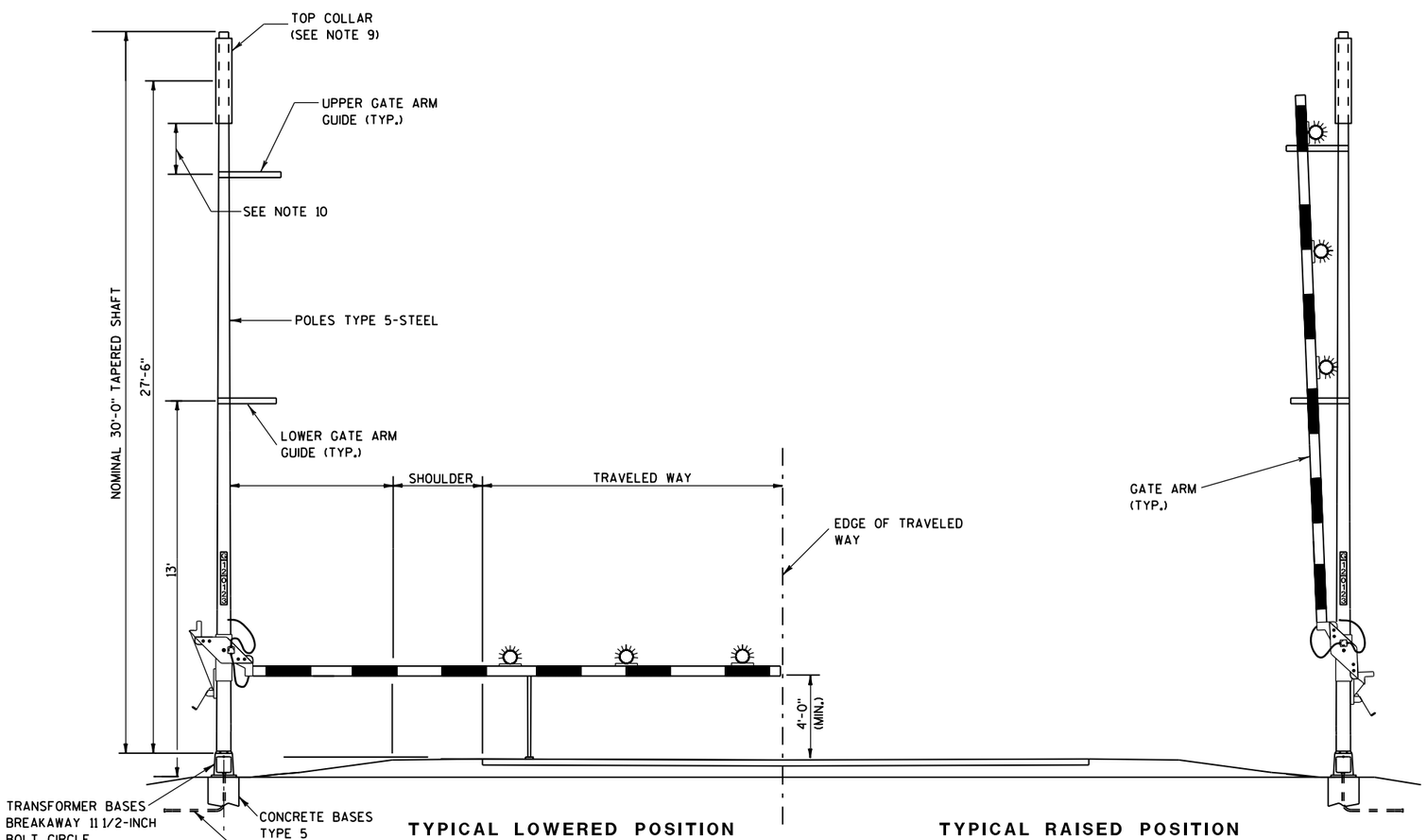
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

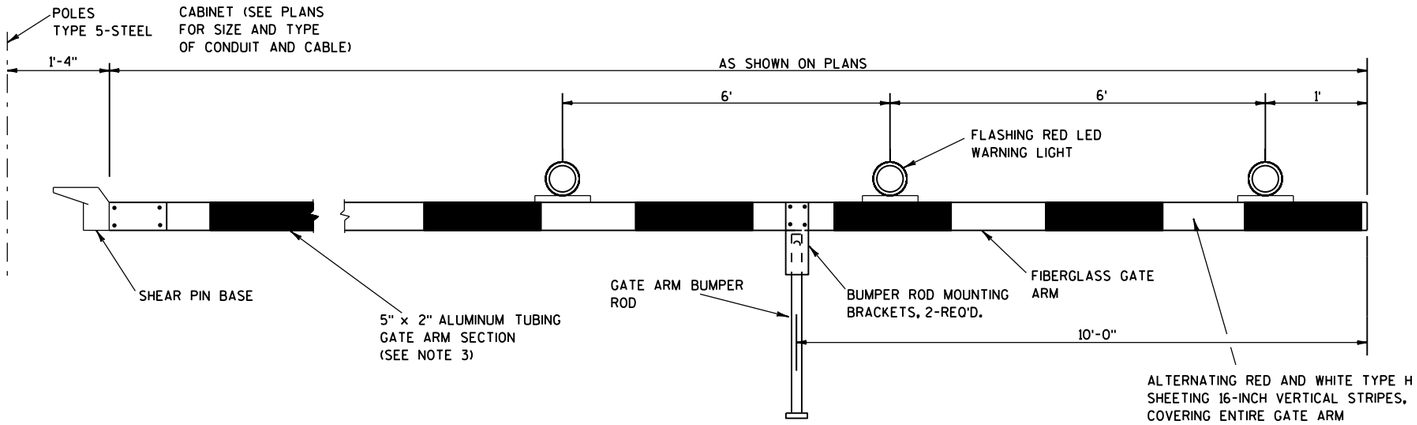
6

S.D.D. 15 D 27-3



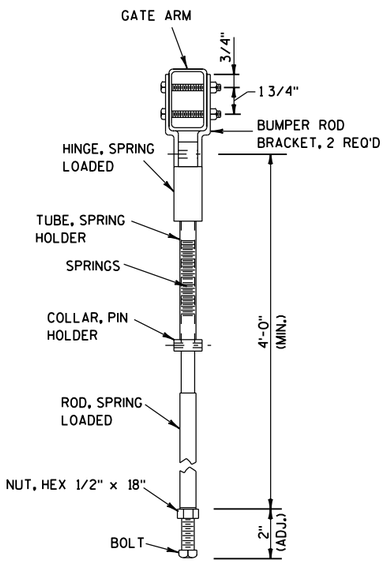
TYPICAL LOWERED POSITION

TYPICAL RAISED POSITION

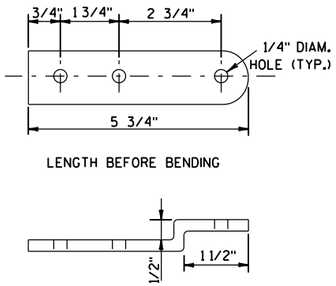


GATE DETAIL

(SOLAR POWER OPTION)



GATE ARM BUMPER ROD DETAIL



BUMPER ROD MOUNTING
BRACKET DETAIL

GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.

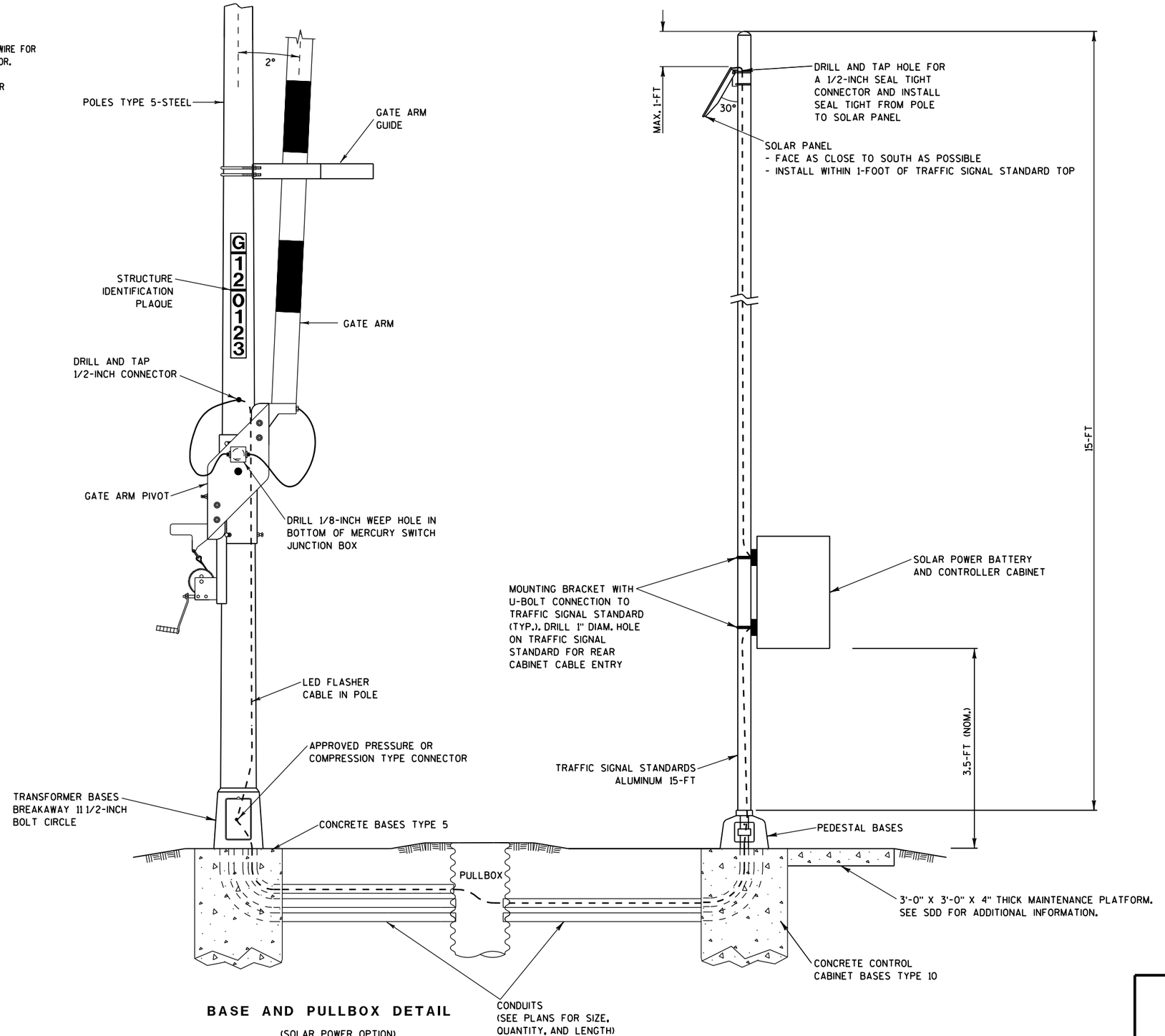
RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

WIRING NOTES

1. WIRING FROM SOLAR PANEL TO CABINET SHALL BE BLUE #10 XLP WIRE FOR POSITIVE CONDUCTOR AND WHITE #10 XLP FOR NEGATIVE CONDUCTOR.

2. WIRING FROM CABINET TO GATE ARM SHALL BE WHITE #10 XLP FOR COMMON, RED #10 XLP FOR FLASHER CIRCUIT 1, AND BLUE #10 XLP FOR FLASHER CIRCUIT 2.



BASE AND PULLBOX DETAIL

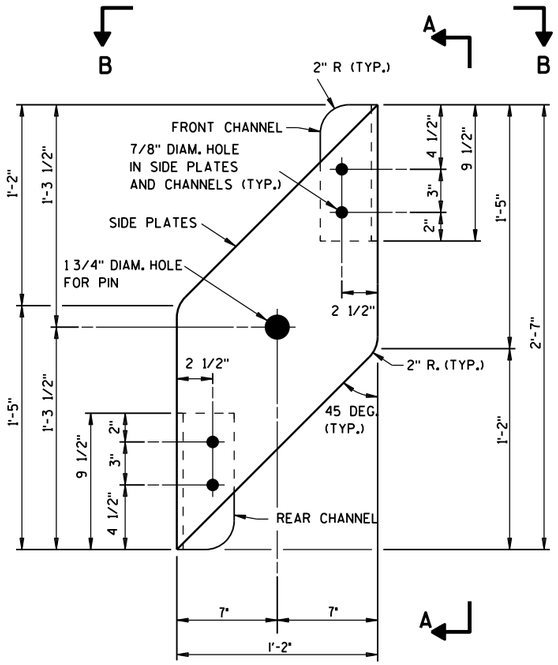
(SOLAR POWER OPTION)

RAMP GATE SOLAR POWER

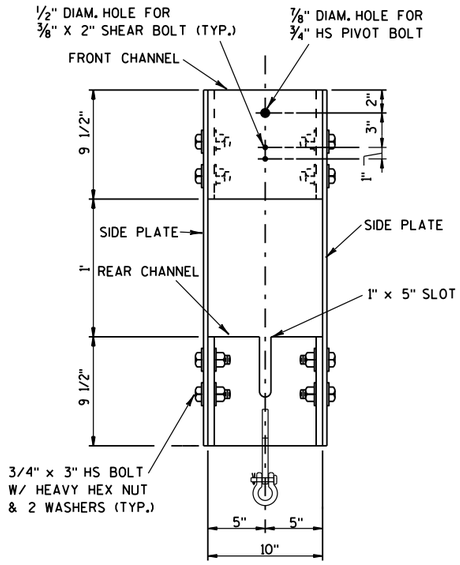
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

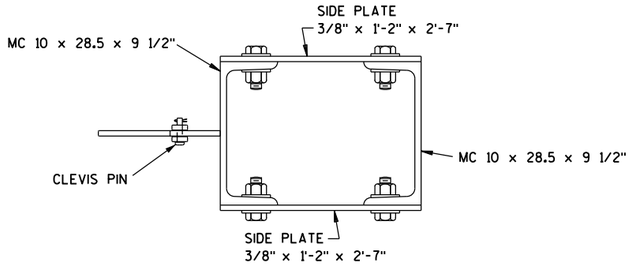
S.D.D. 15 D 34-2b



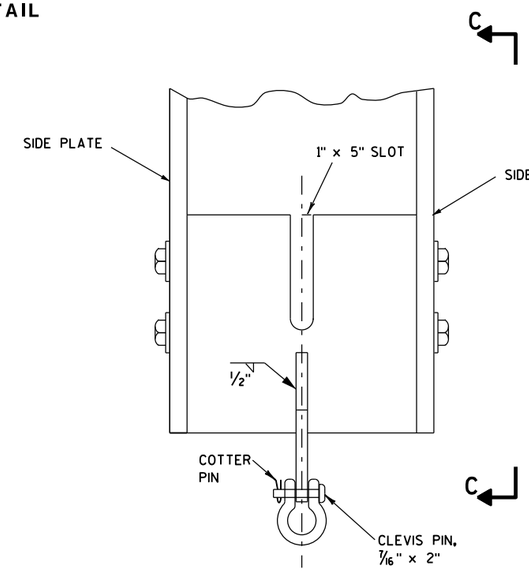
SIDE PLATE DETAIL



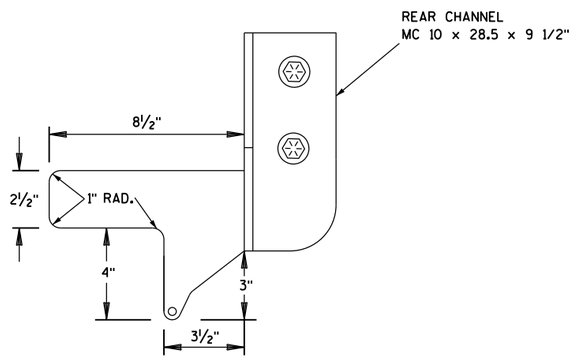
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 34-2c

6

S.D.D. 15 D 34-2c

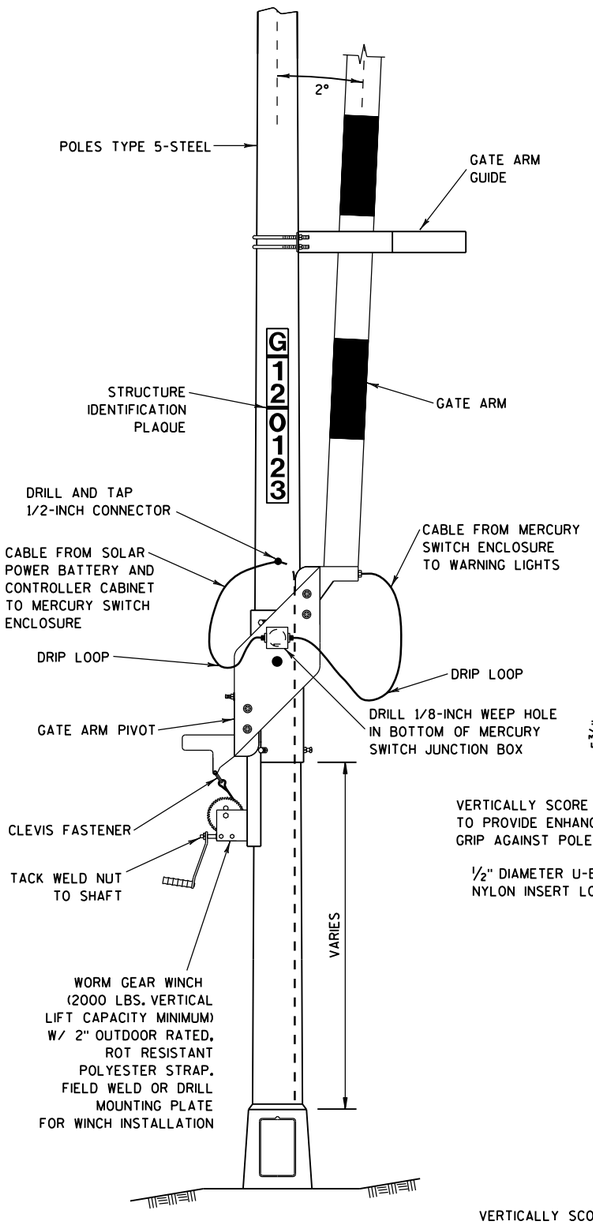
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

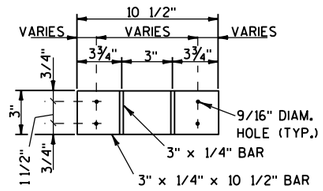
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

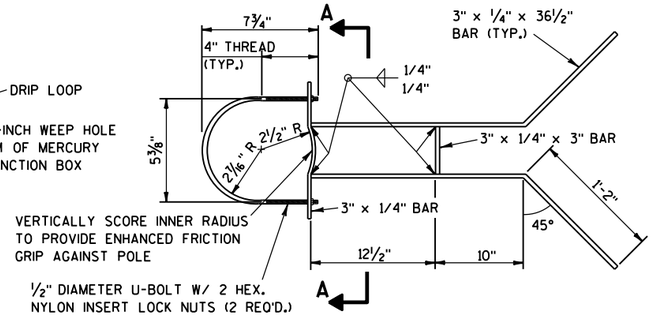
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



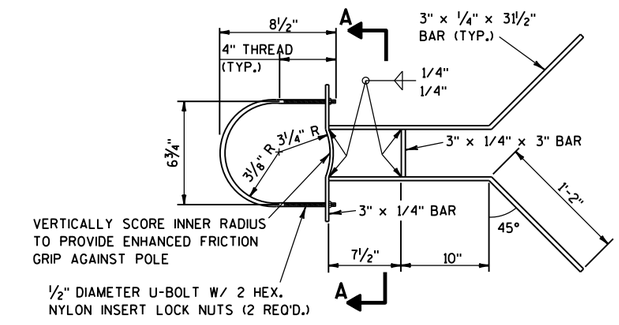
GATE PIVOT ASSEMBLY



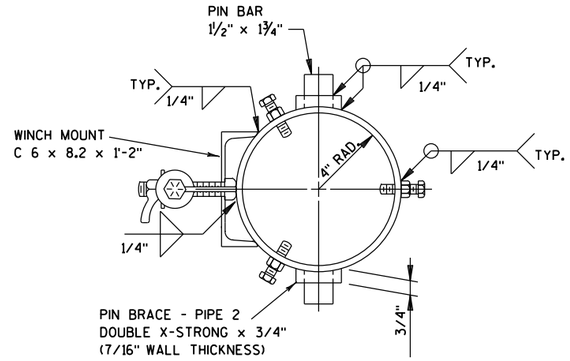
SECTION A-A
U-BOLTS NOT SHOWN



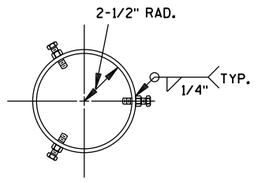
UPPER GATE ARM GUIDE DETAIL



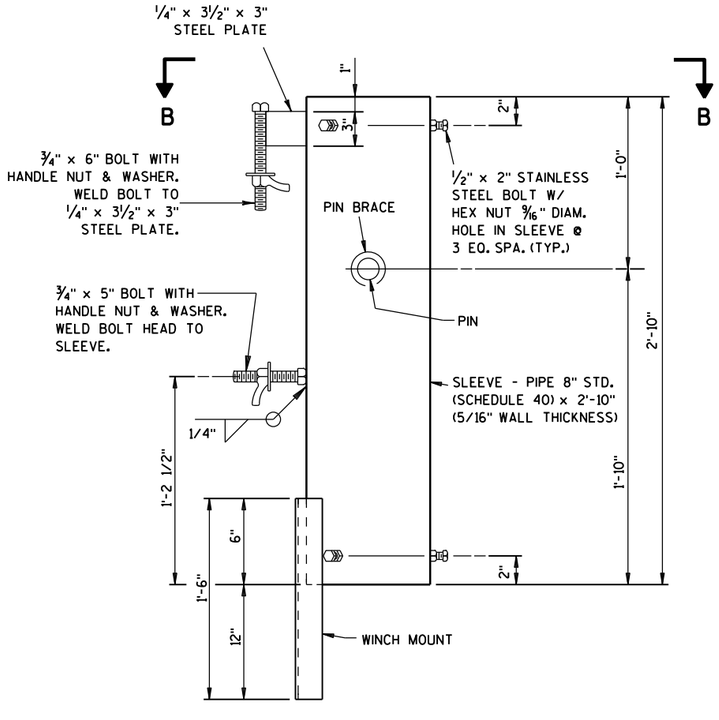
LOWER GATE ARM GUIDE DETAIL



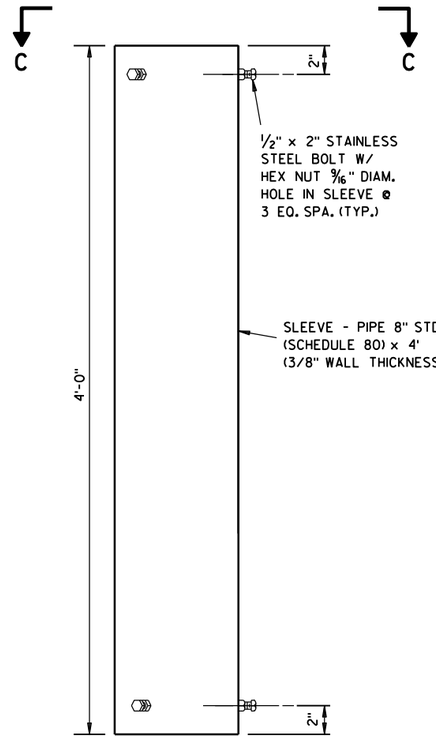
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRCIAL
FHWA

6

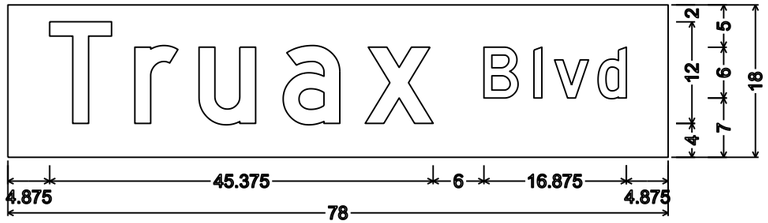
S.D.D. 15 D 34-2d

6

S.D.D. 15 D 34-2d

NOTES

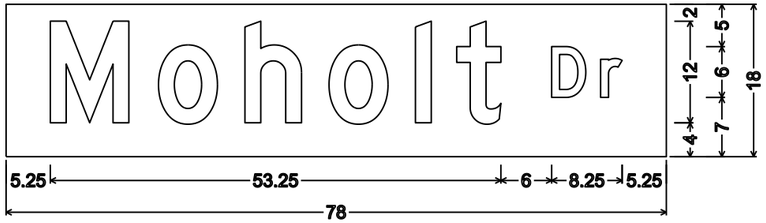
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D except as noted
4. M1-94S and M1-94H base material .125" aluminum



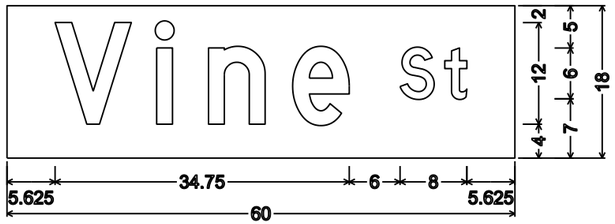
M1-94H; No border



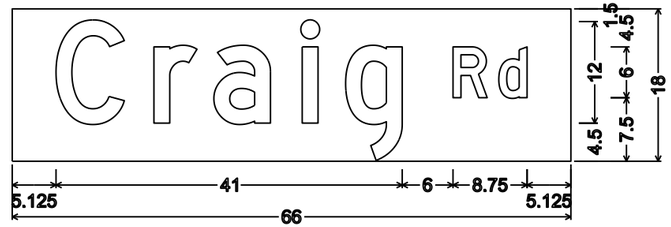
M1-94H; No border



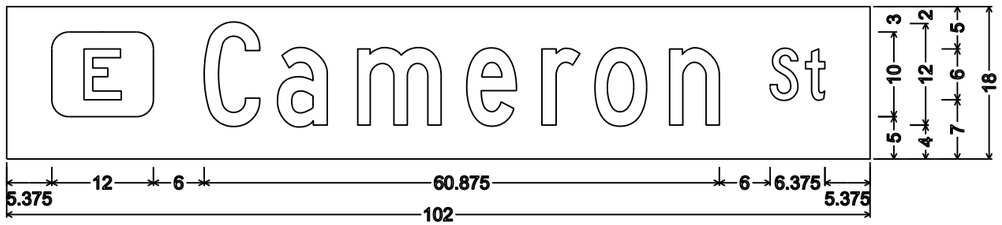
M1-94H; No border



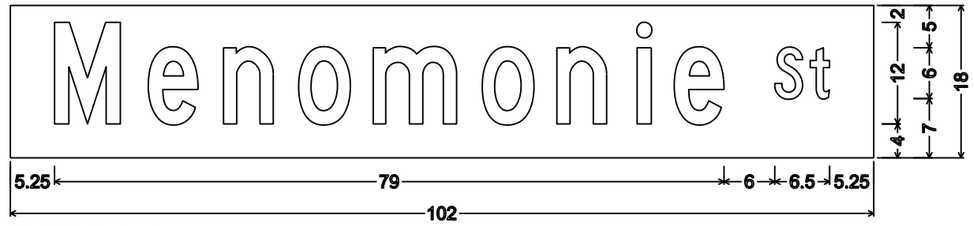
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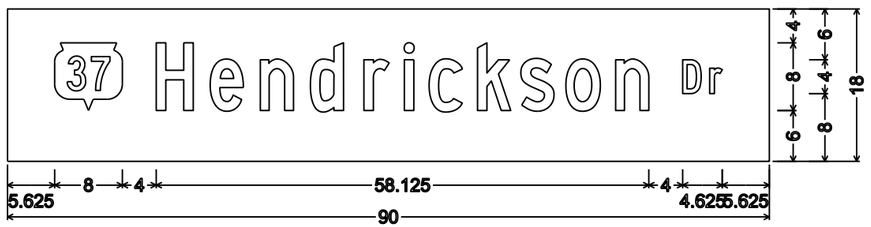
M1-94H; No border



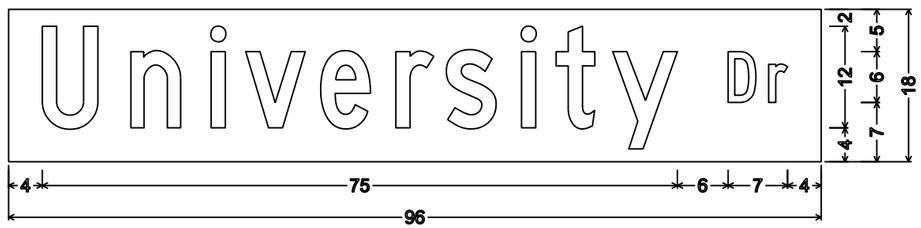
M1-94S; No border,
"Cameron" C; "St" C



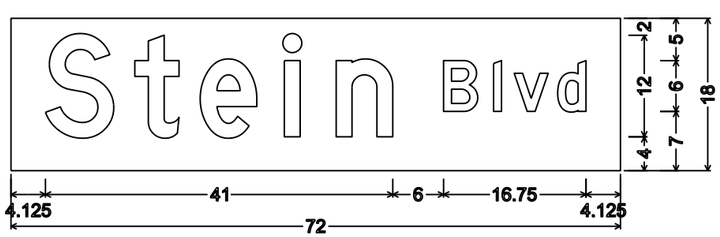
M1-94H; No border,
"Menomonie" C; "St" C



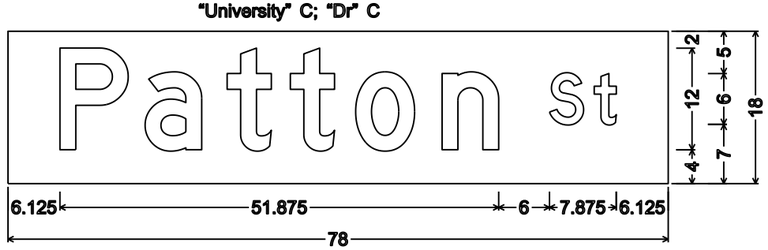
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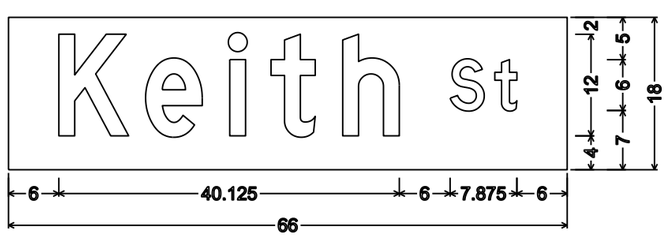
M1-94H; No border,
"University" C; "Dr" C



M1-94H; No border



M1-94H; No border

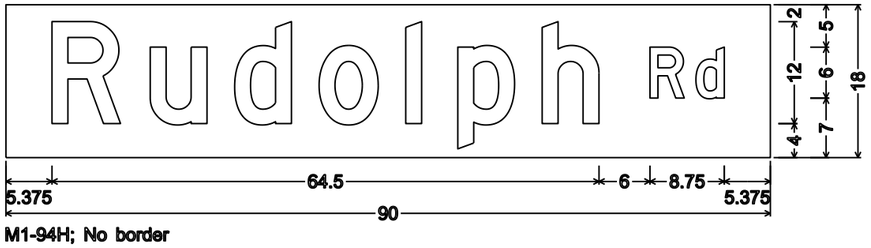


M1-94H; No border

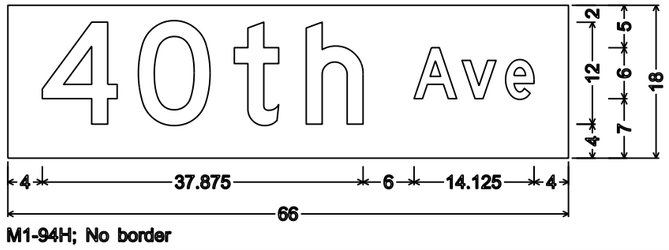
7

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PROJECT NO: 1000-08-81	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 240	E



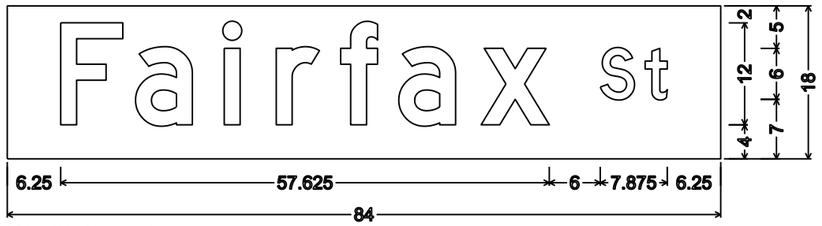
M1-94H; No border



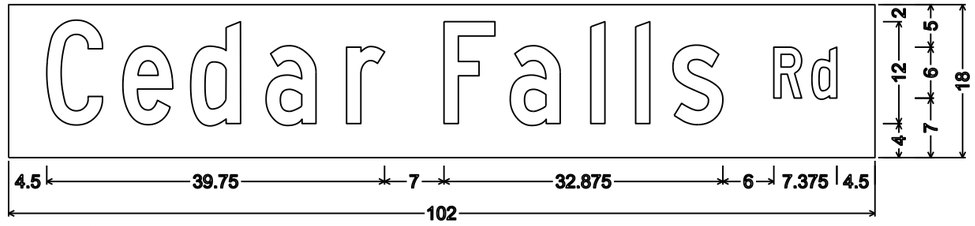
M1-94H; No border

NOTES

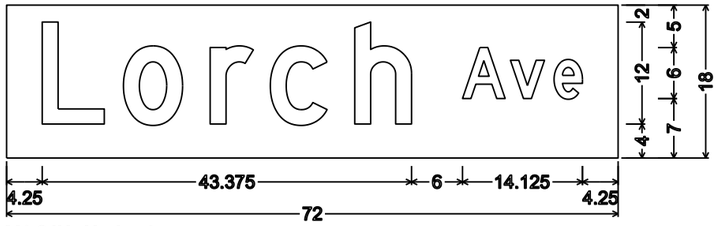
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D except as noted
4. M1-94S and M1-94H base material .125" aluminum



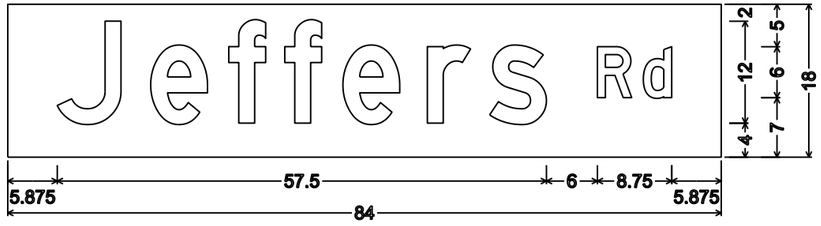
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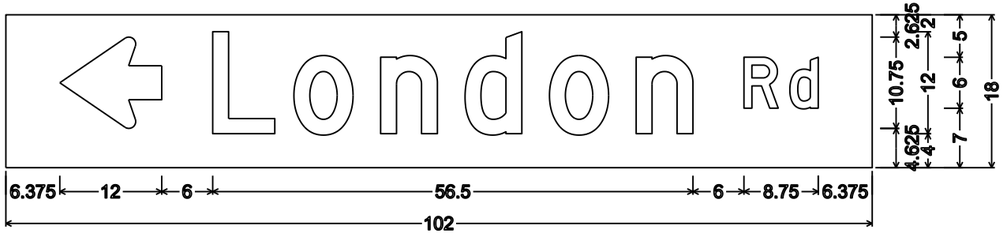
M1-94H; No border
"Cedar" C; "Falls" C; "Rd" C;



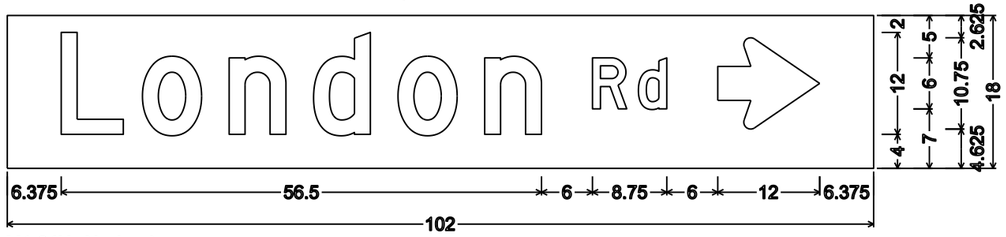
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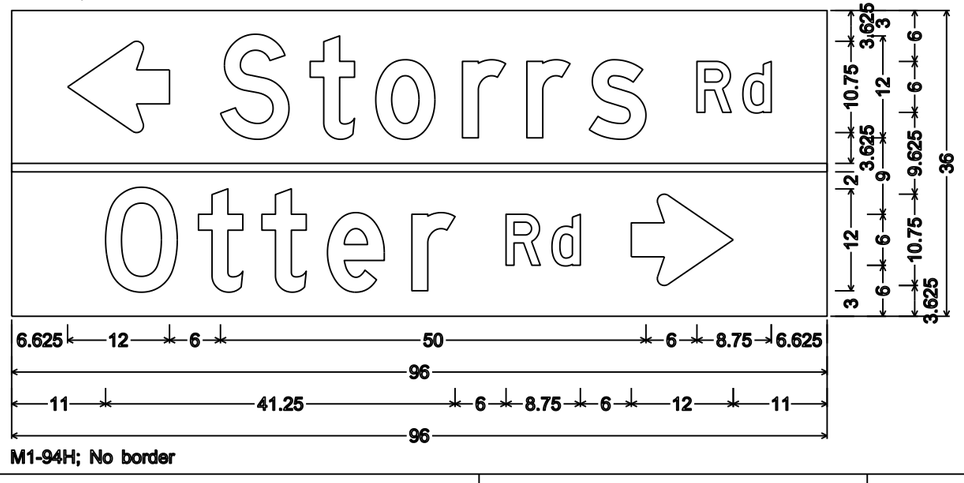
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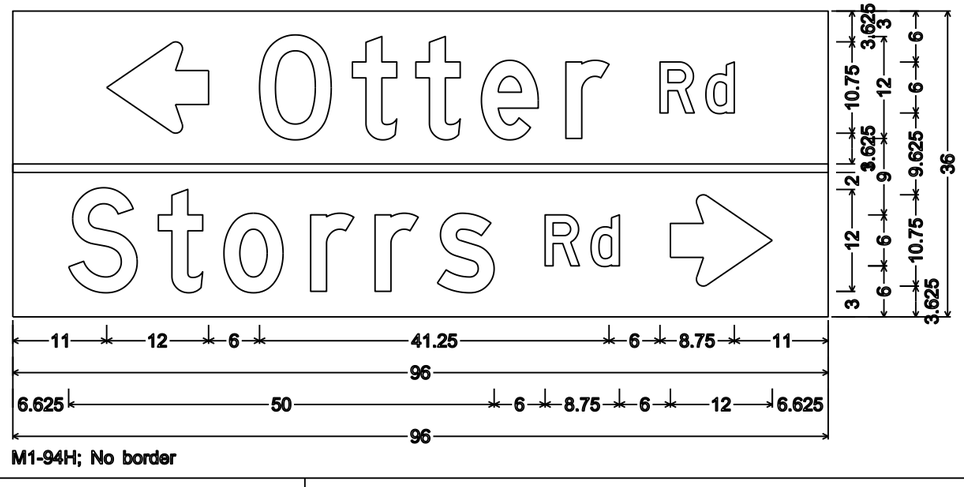
M1-94H; No border



M1-94H; No border



M1-94H; No border



M1-94H; No border

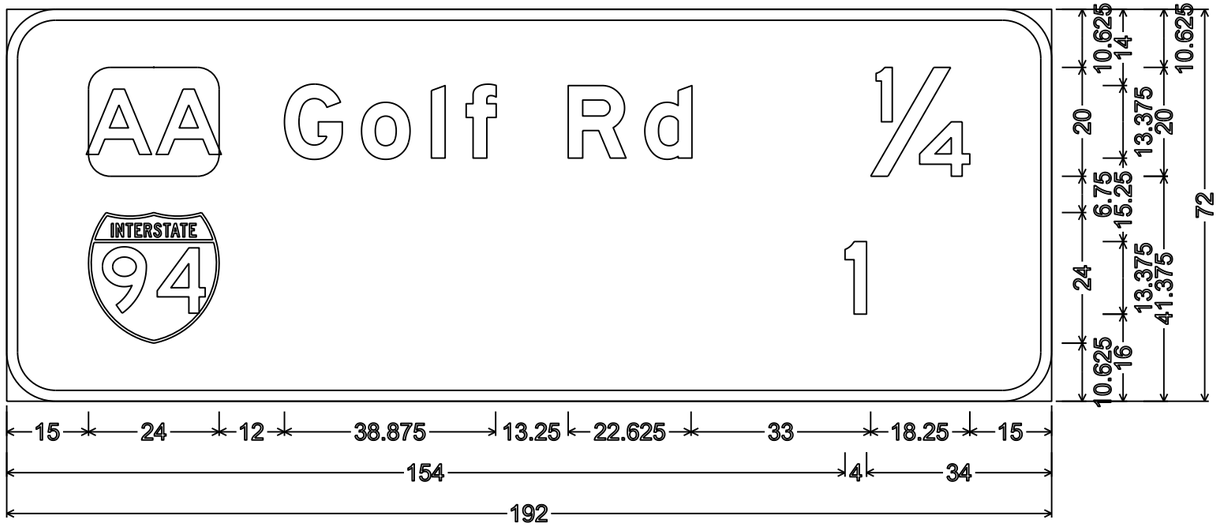
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7

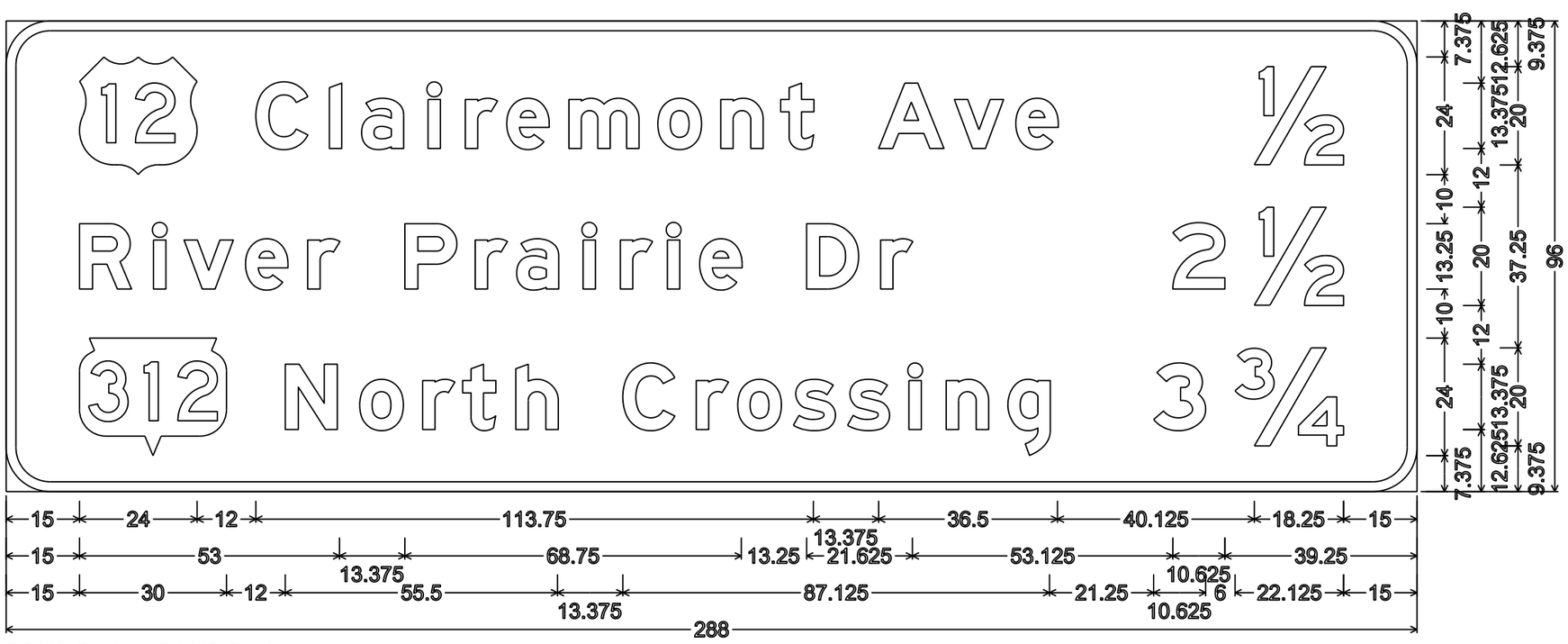
PROJECT NO: 1000-08-81	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 241	E

NOTES

1. Signs are Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified



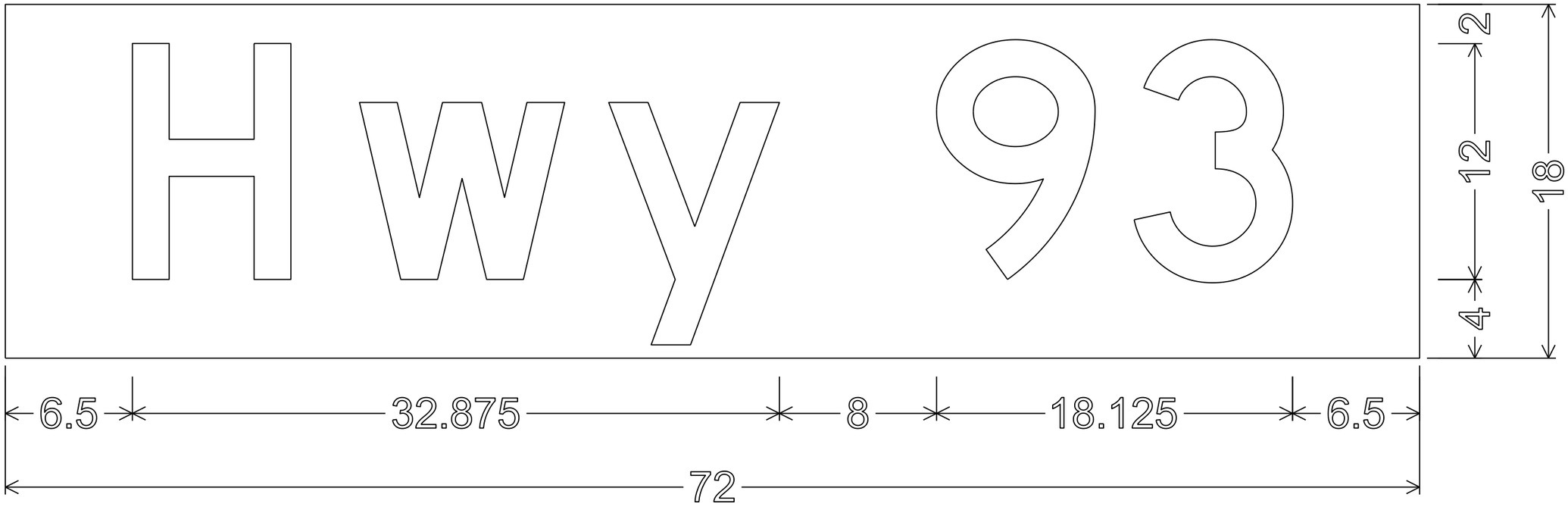
9.000" Radius, 2.000" Border



9.000" Radius, 2.000" Border

NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D
4. M1-94H base material .125" aluminum

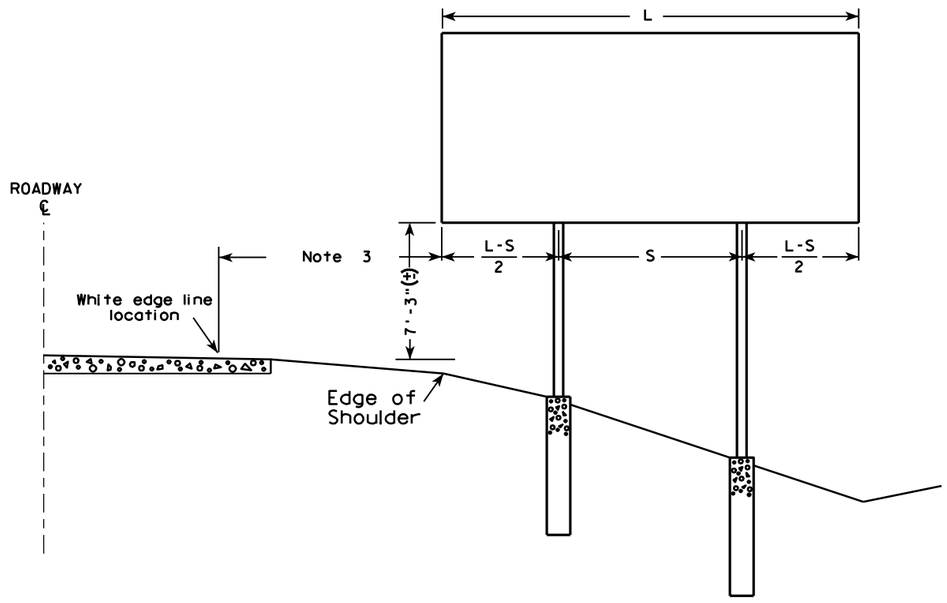


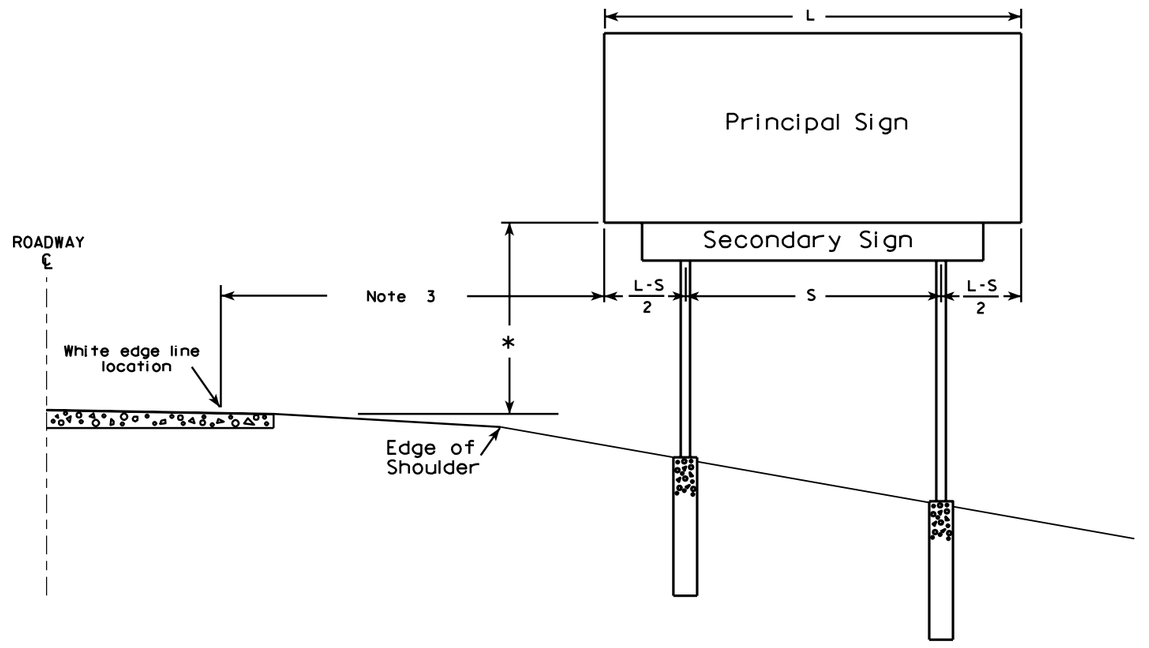
M1-94H; No border

7

7

PROJECT NO: 3700-50-27	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 243	E





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

TYPICAL INSTALLATION OF TYPE I SIGNS

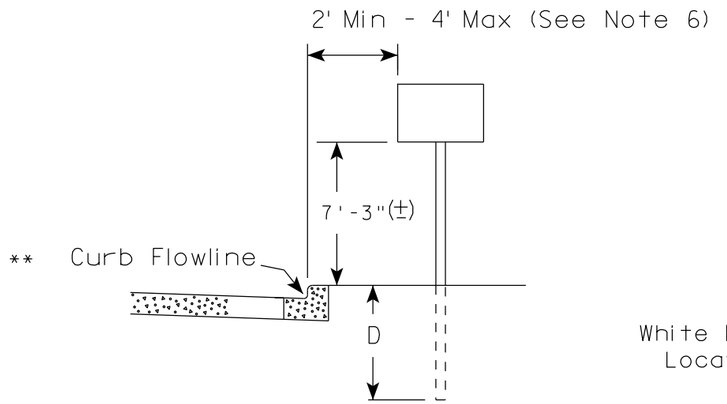
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

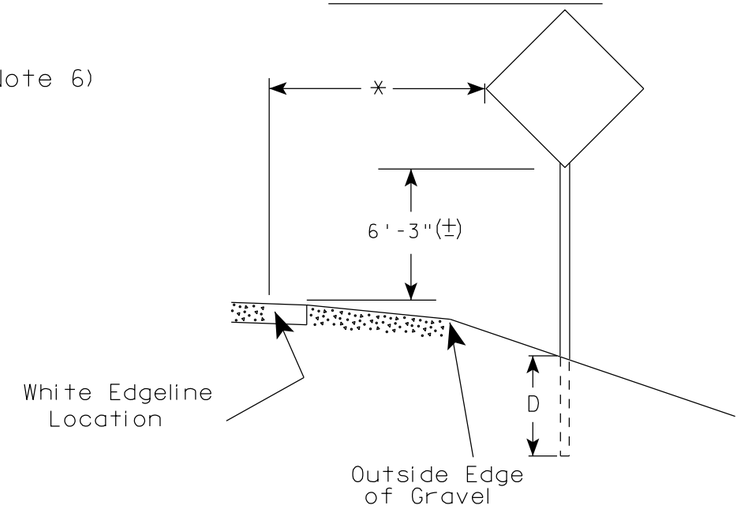
DATE 4/02/08 PLATE NO. A4-1.9

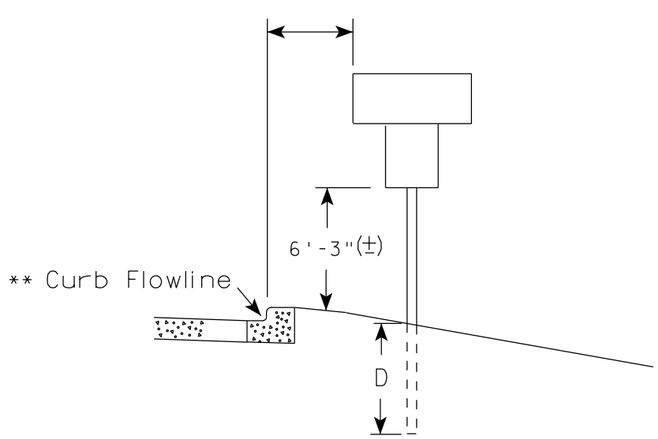
PROJECT NO: | SHEET NO: 244 | E

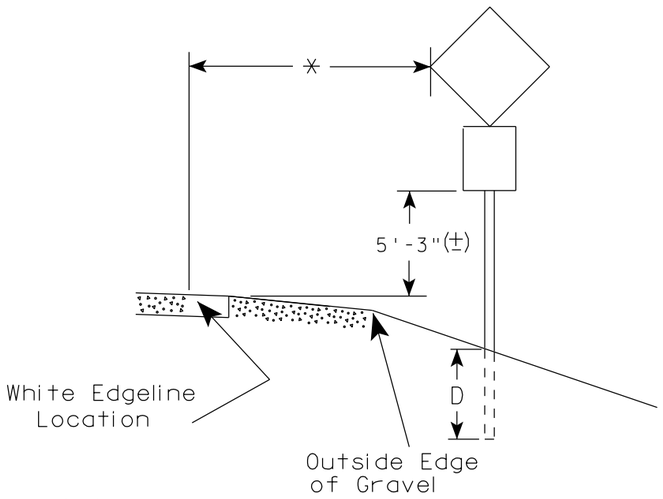
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

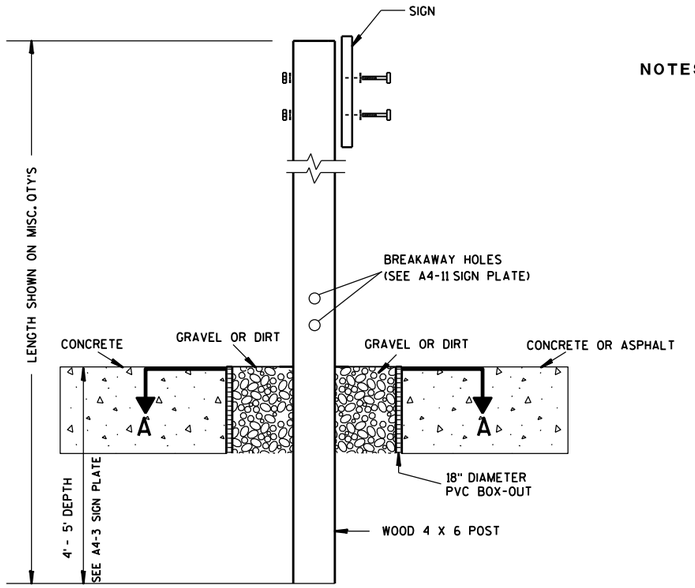
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

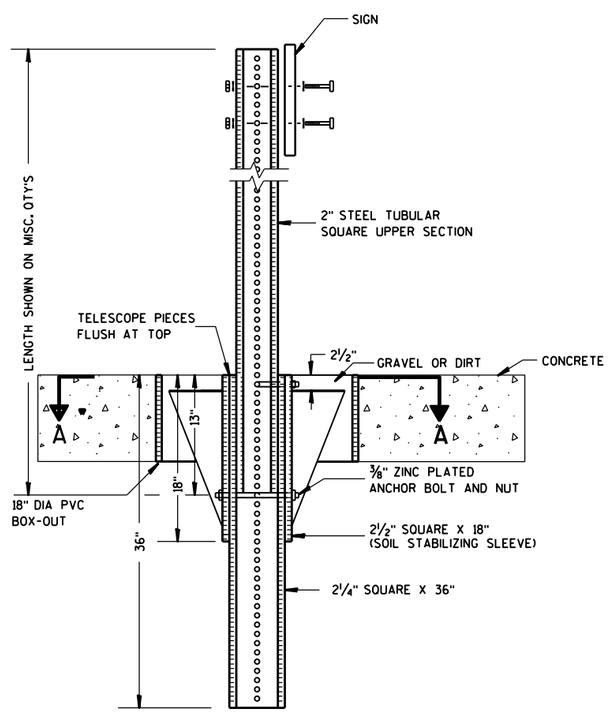
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

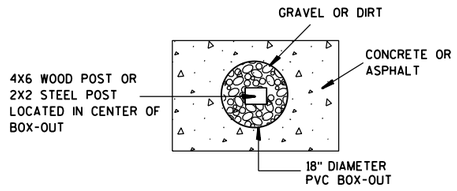
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

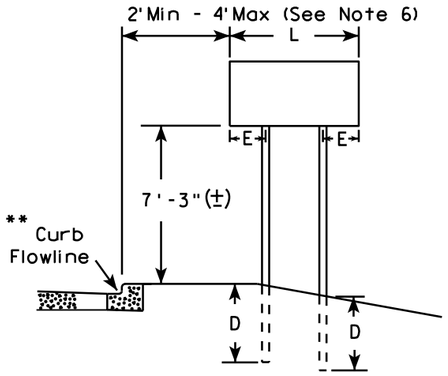
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

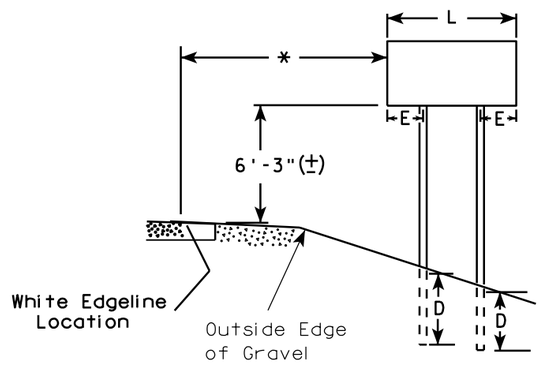
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

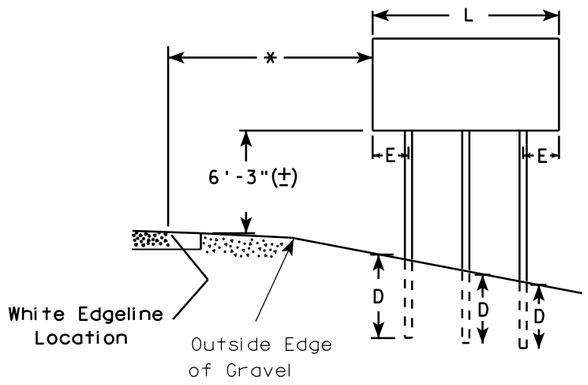
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

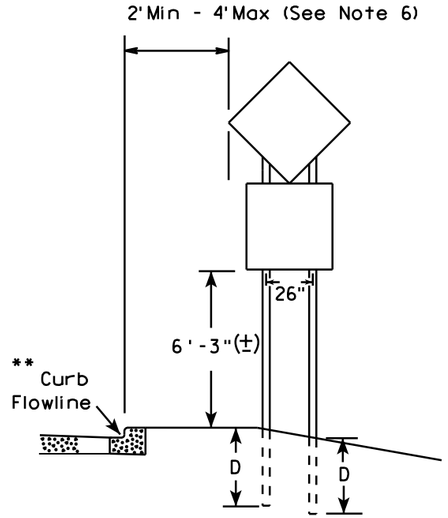
URBAN AREA



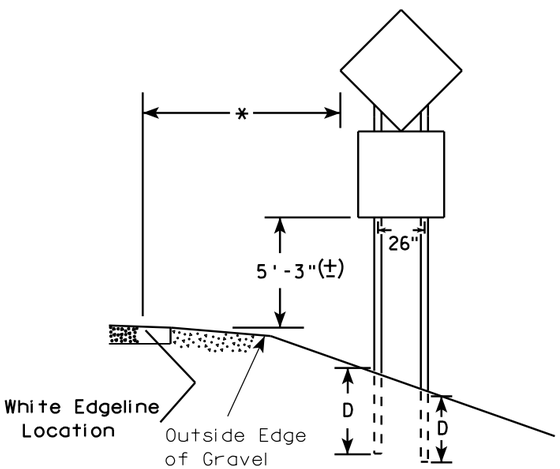
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

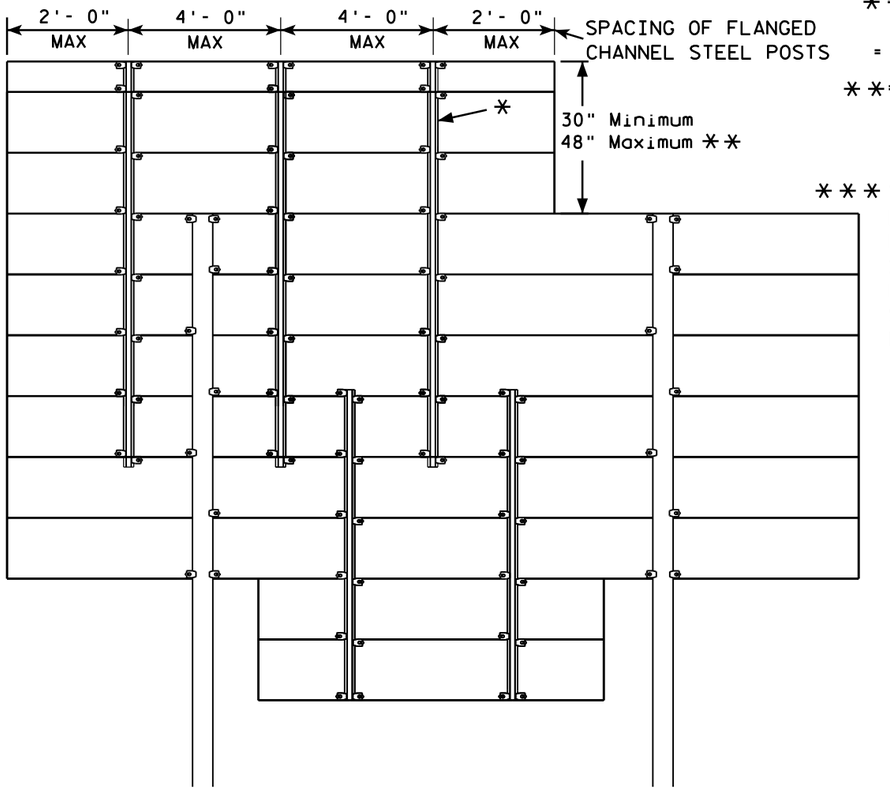
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. AA-A 14-247

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

GROUND MOUNTED SIGN

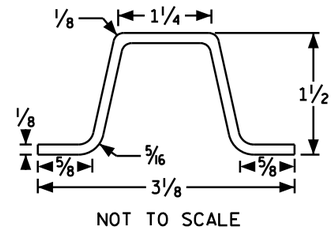


*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

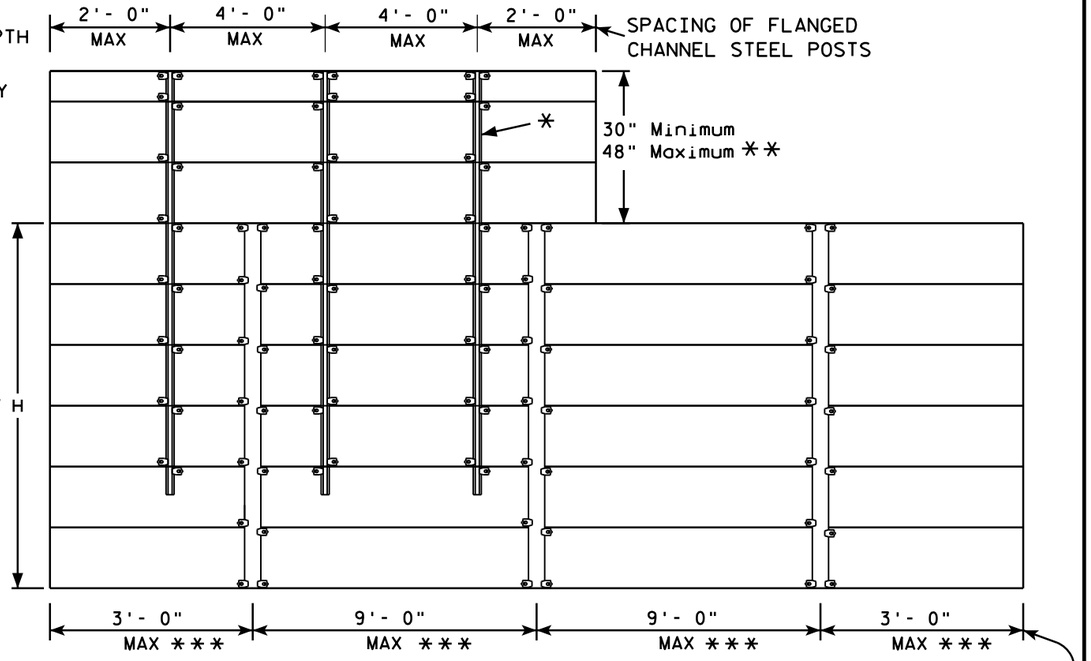
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

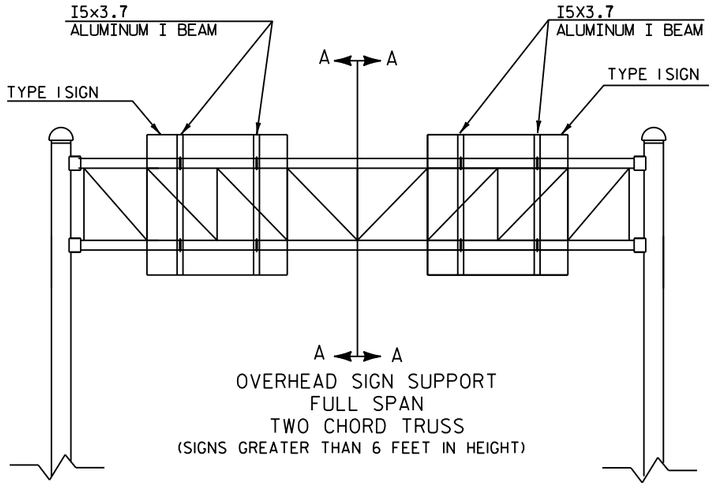
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

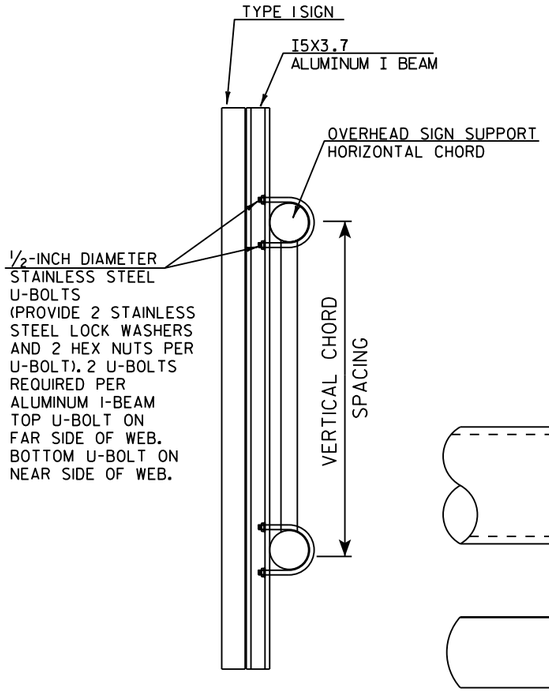
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 12/05/13 PLAT 248 A4-6.12

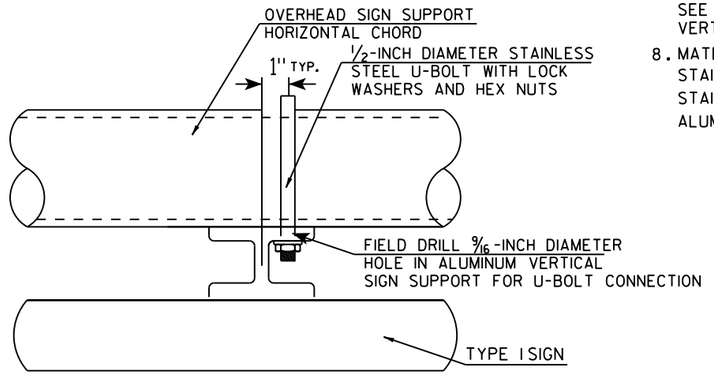
PROJECT NO: | SHEET NO: E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



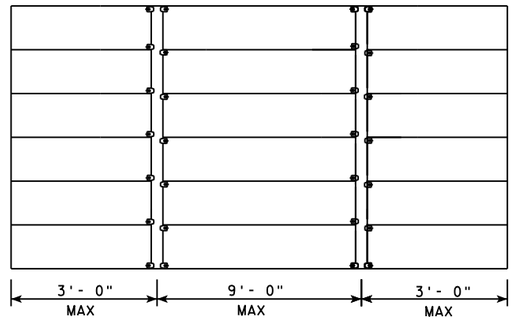
CUT SECTION A-A



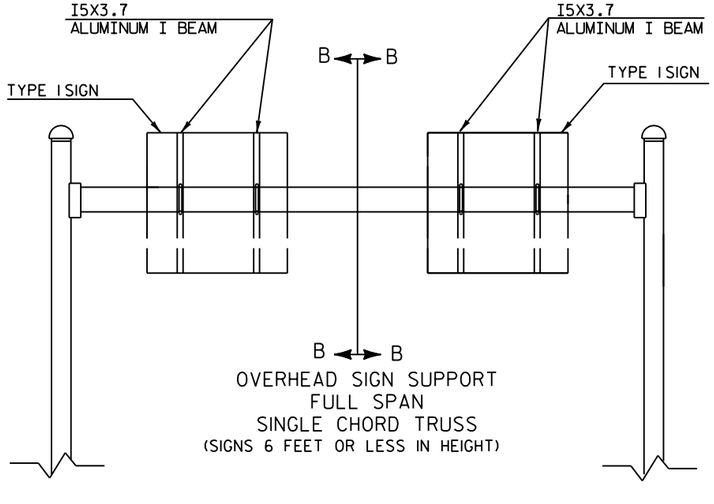
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

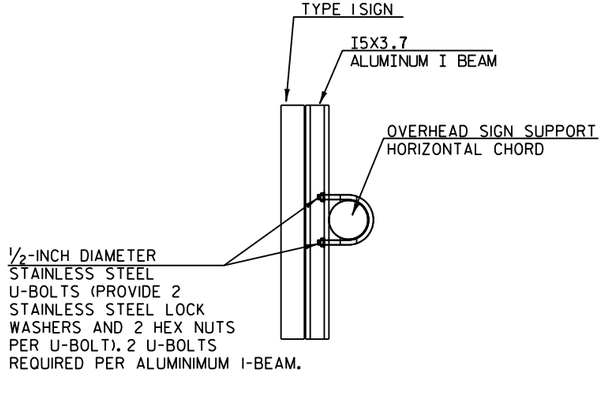
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.



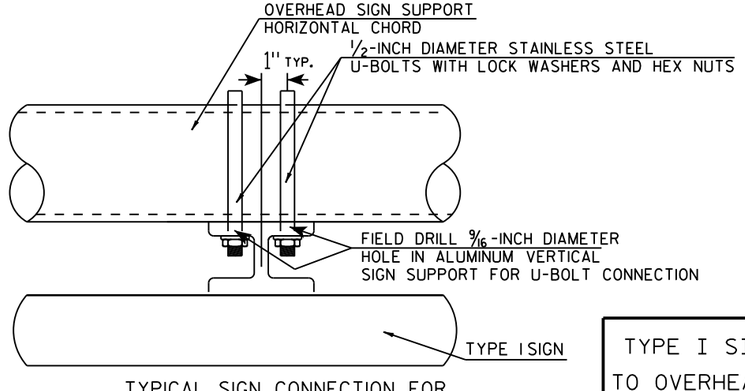
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

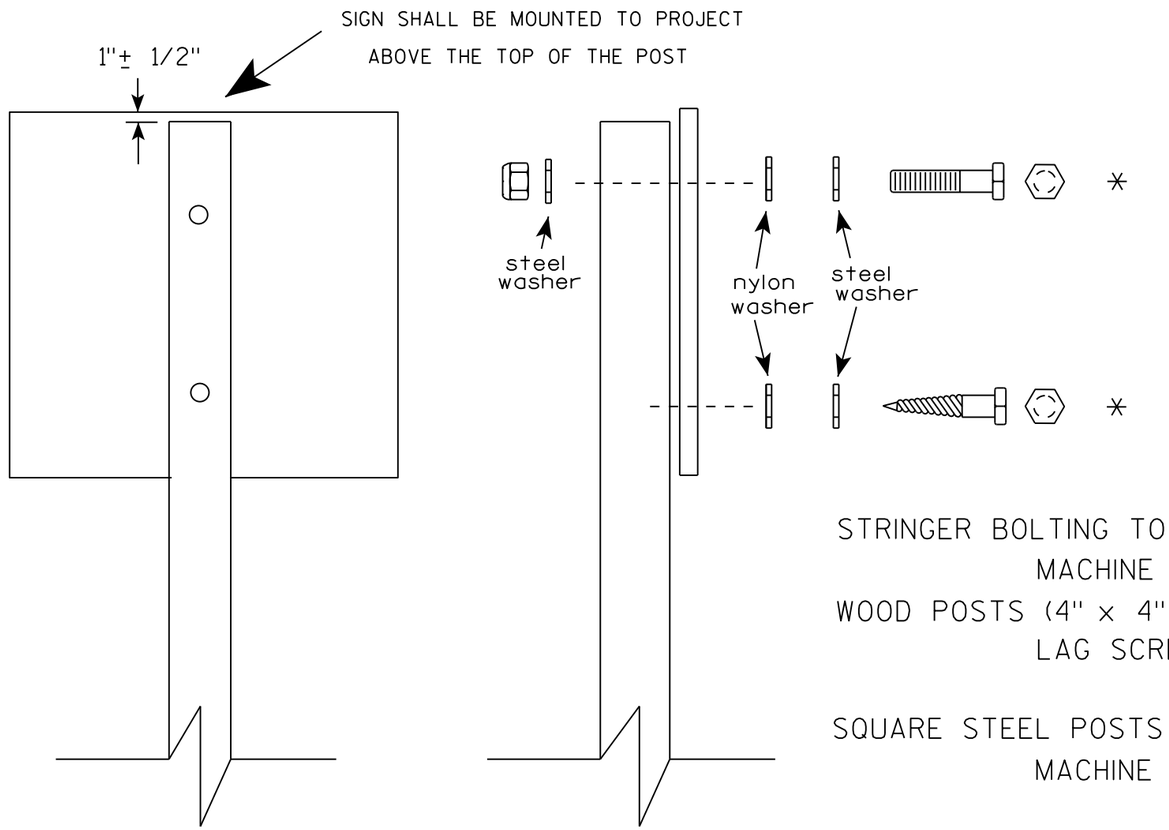
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/15 PLATE NO. A4-7.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A47.DGN PLOT DATE : 01-DEC-2015 17:42 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 38.916838:1.000000



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

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

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

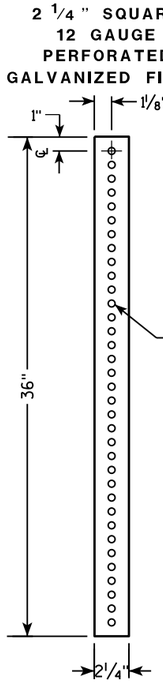
PROJECT NO:

SHEET NO: E

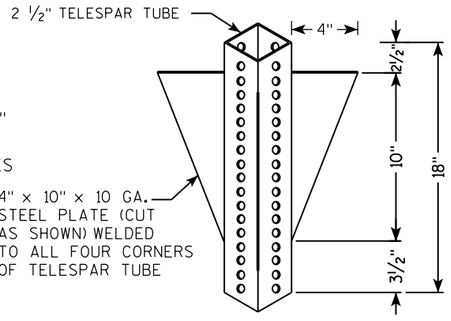
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

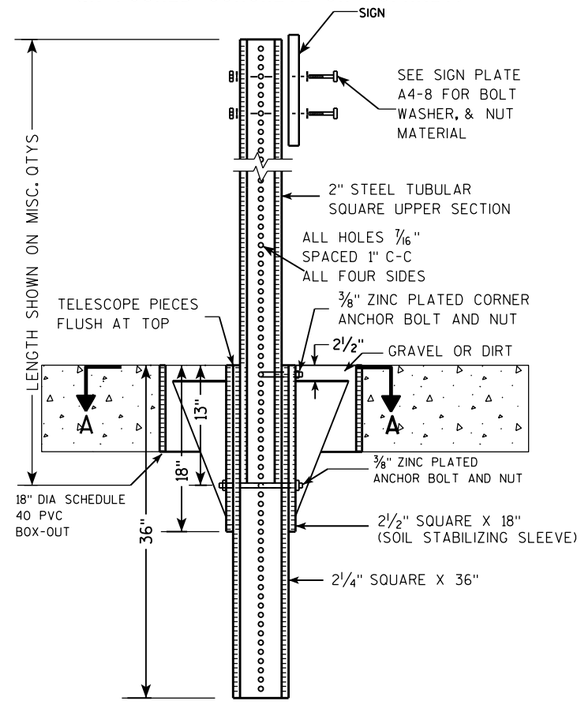
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



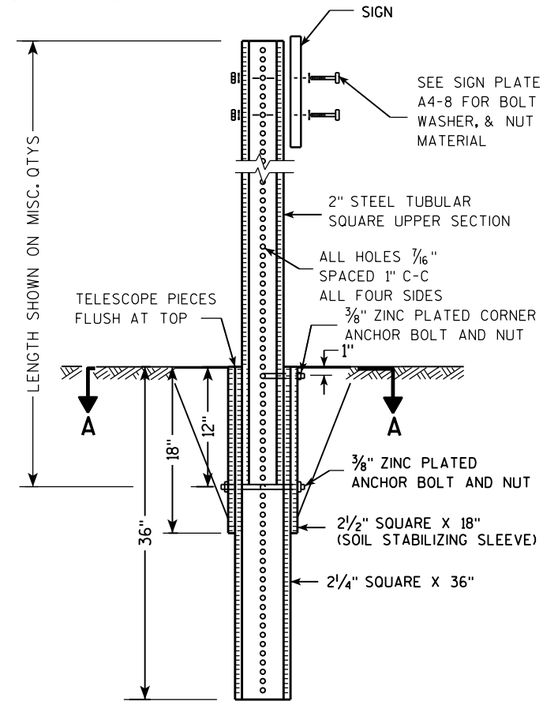
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

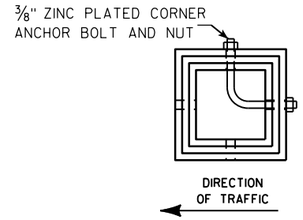


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

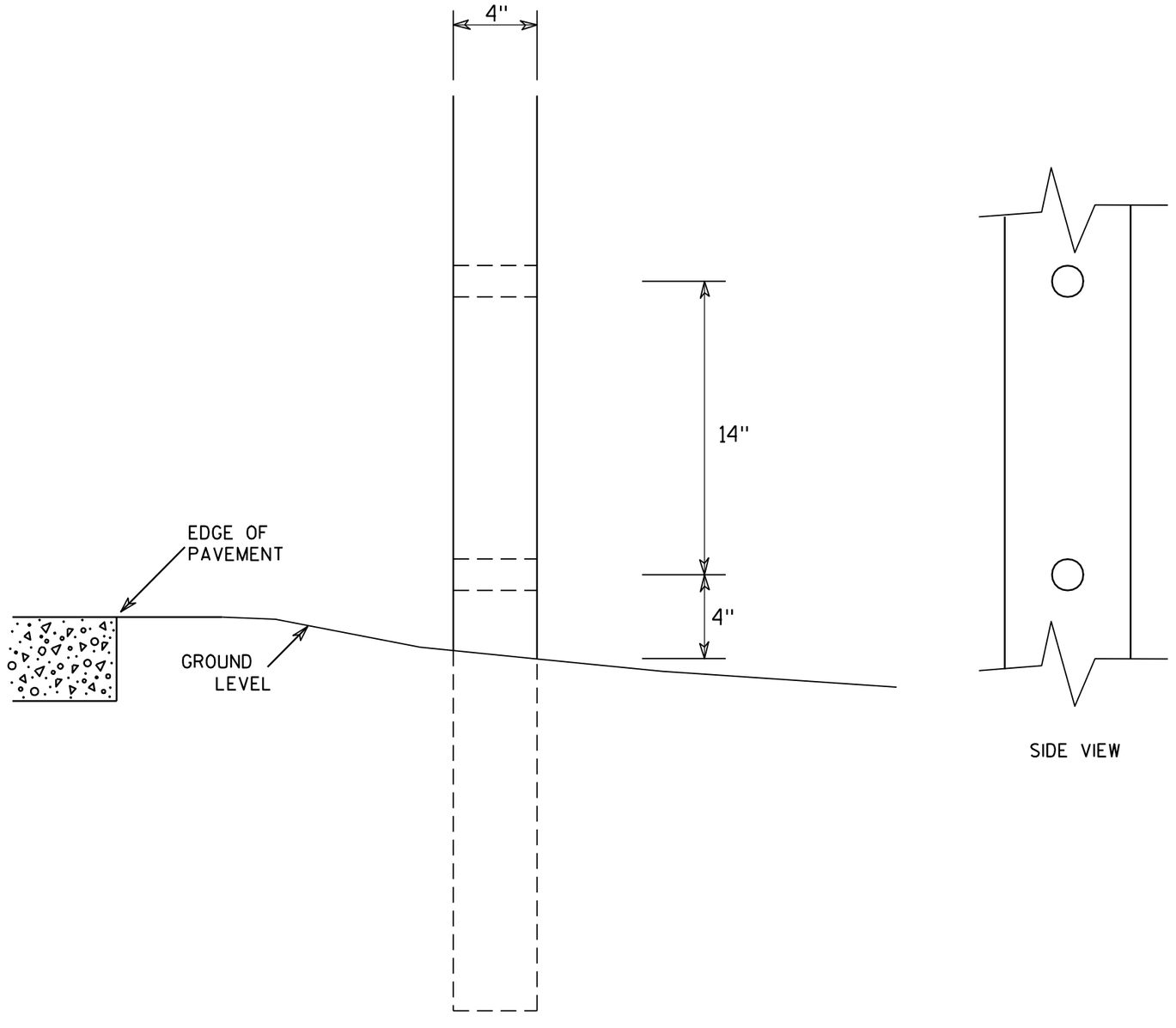
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 251 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

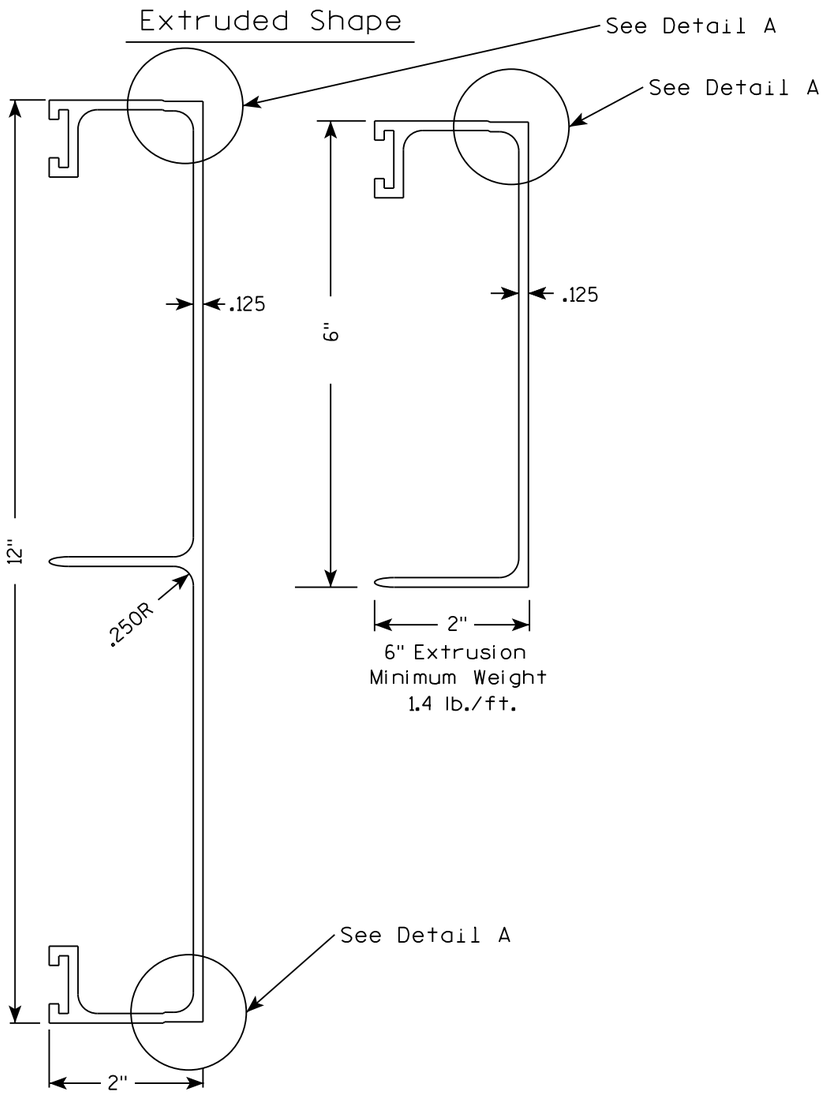
WISCONSIN DEPT OF TRANSPORTATION

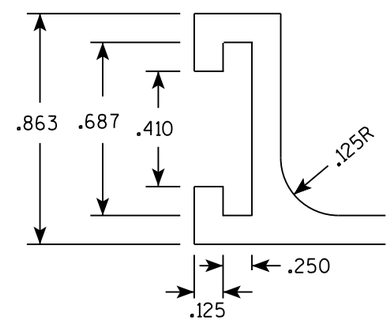
APPROVED Chester J Spang for State Traffic Engineer

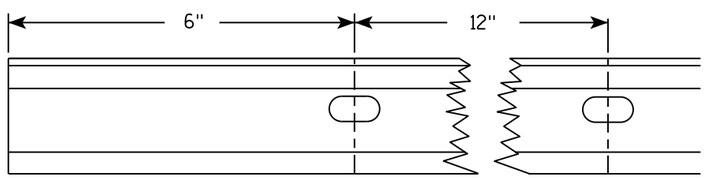
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E

Extruded Shape







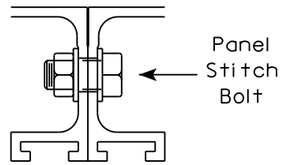
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

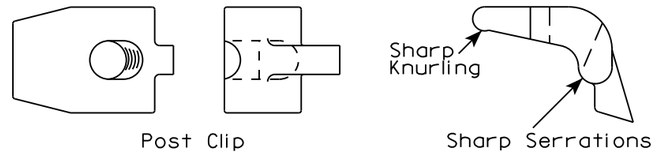
The hardware includes:

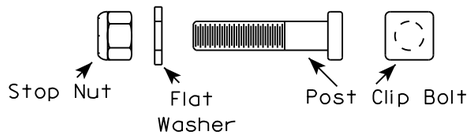
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

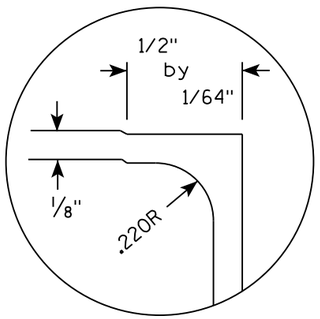
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

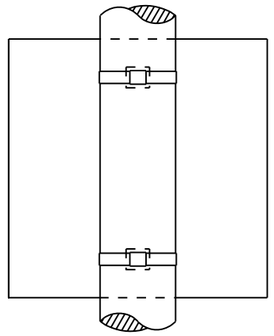
WISCONSIN DEPT OF TRANSPORTATION

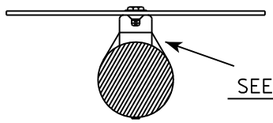
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 11/30/16 PLATE NO. A5-2.10

PROJECT NO:				SHEET NO: 253	E

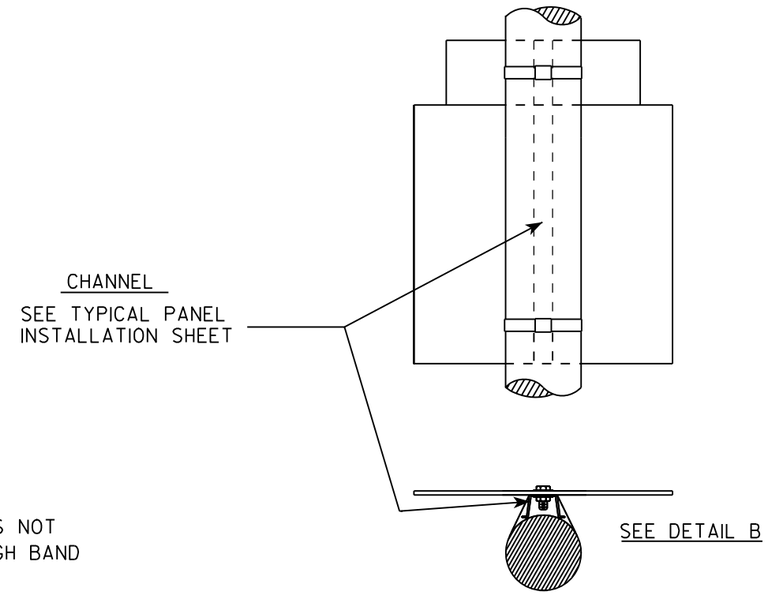
BANDING

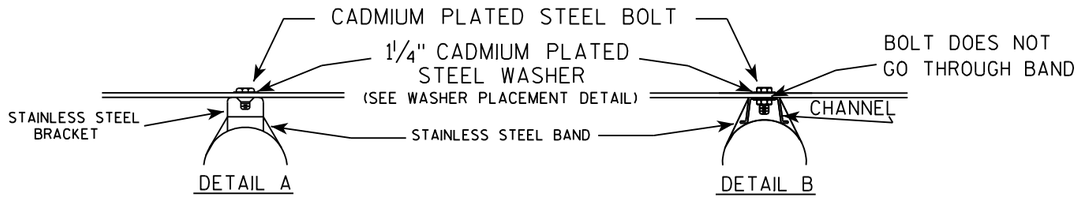
SINGLE SIGN



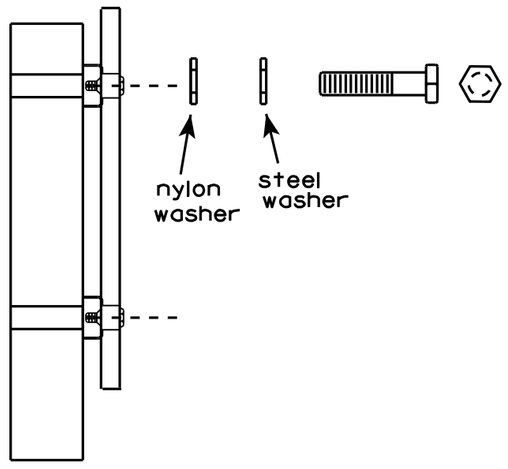


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

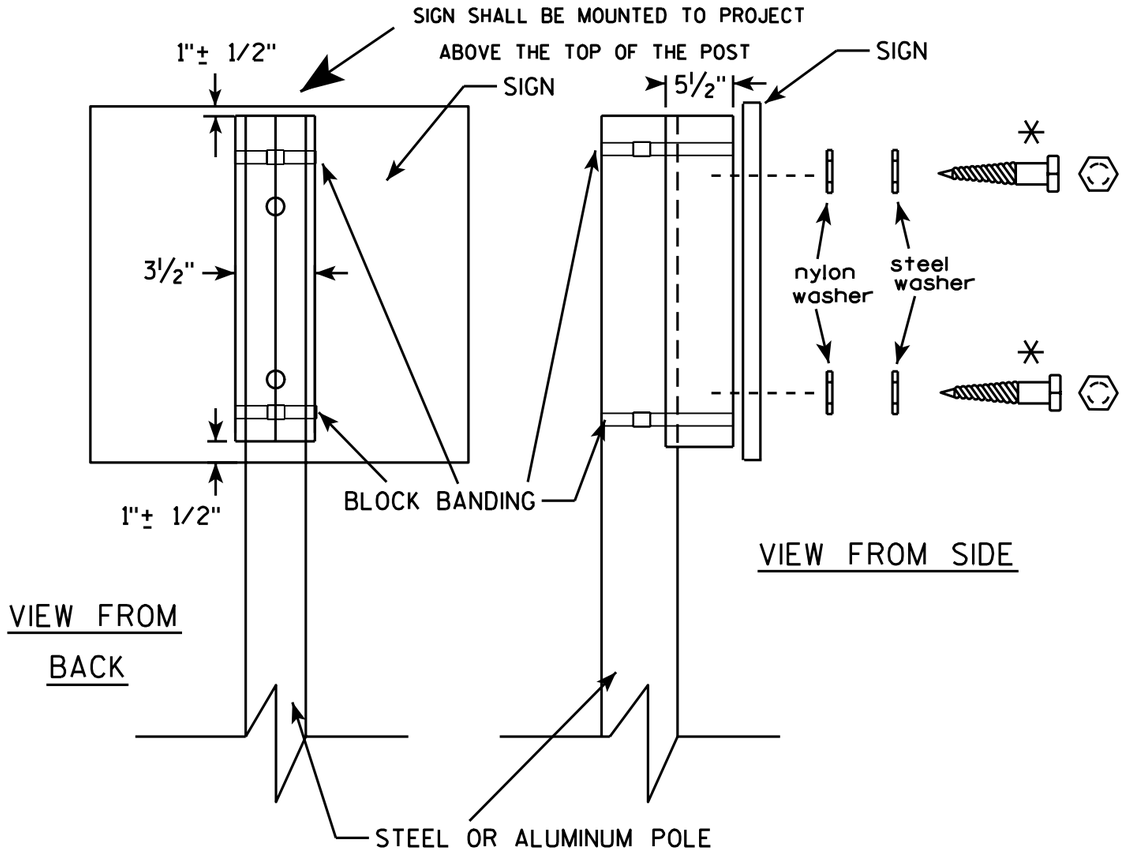
STANDARD SIGN
SIGN BANDING DETAILS

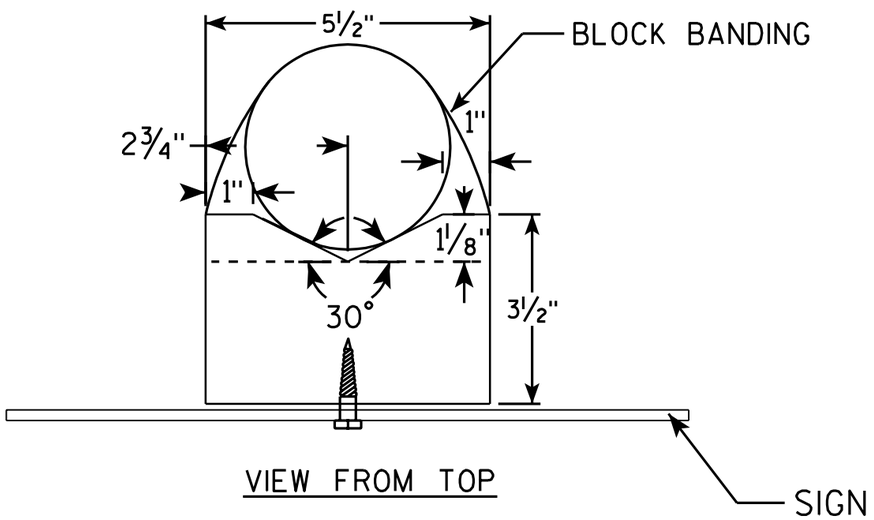
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 254	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

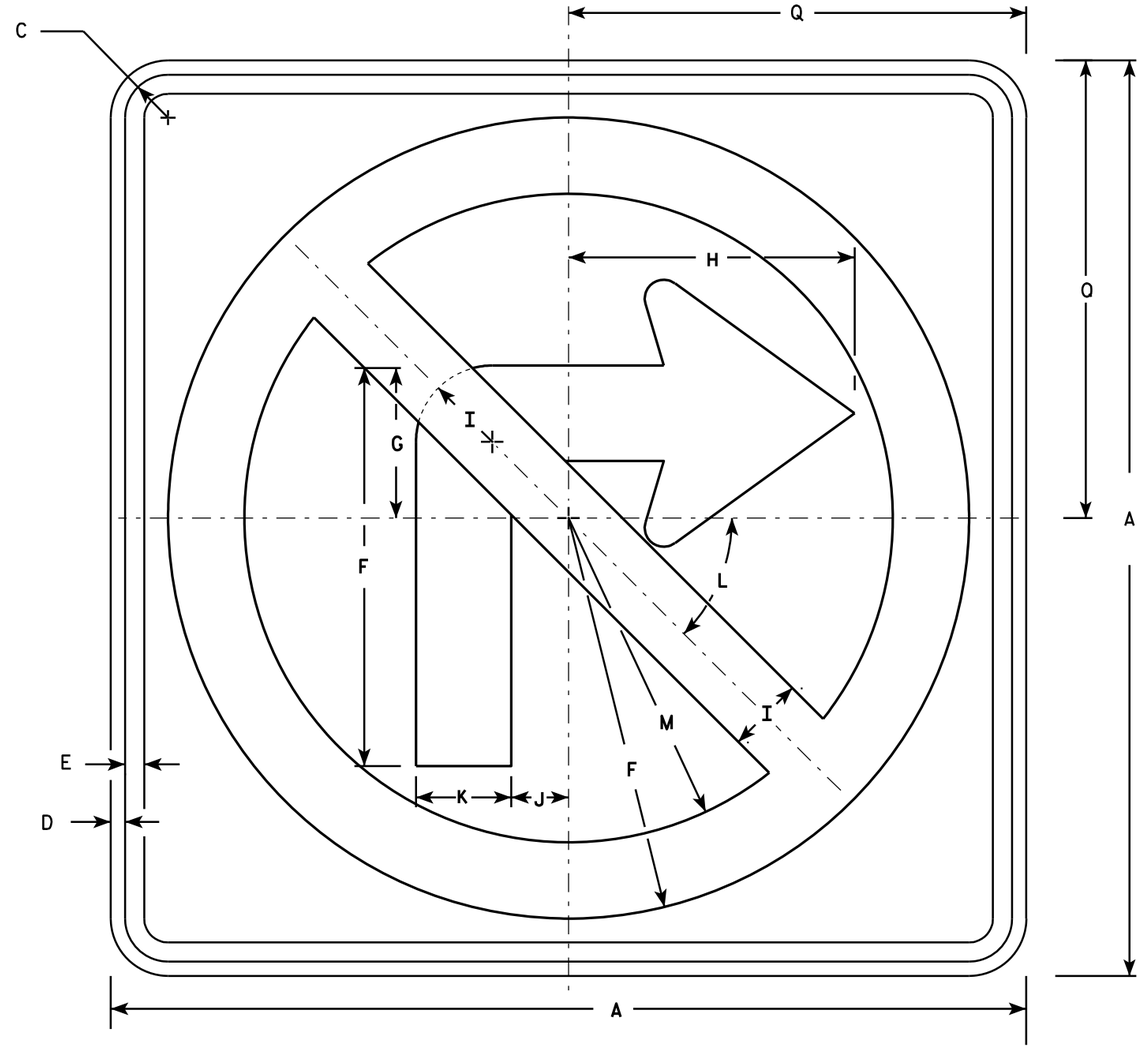
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 255 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

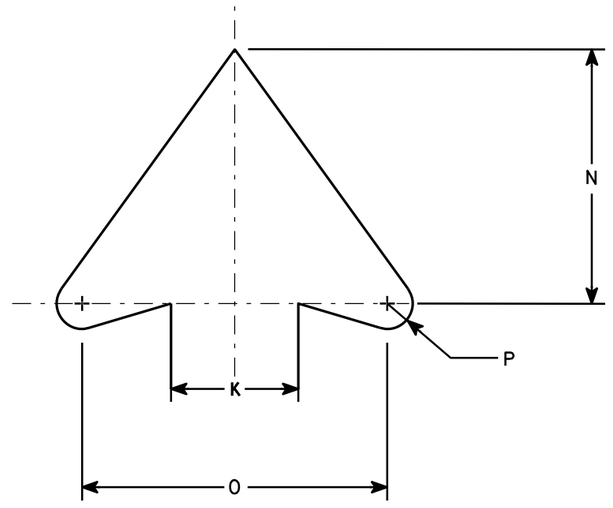
WISDOT/CADDS SHEET 42



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

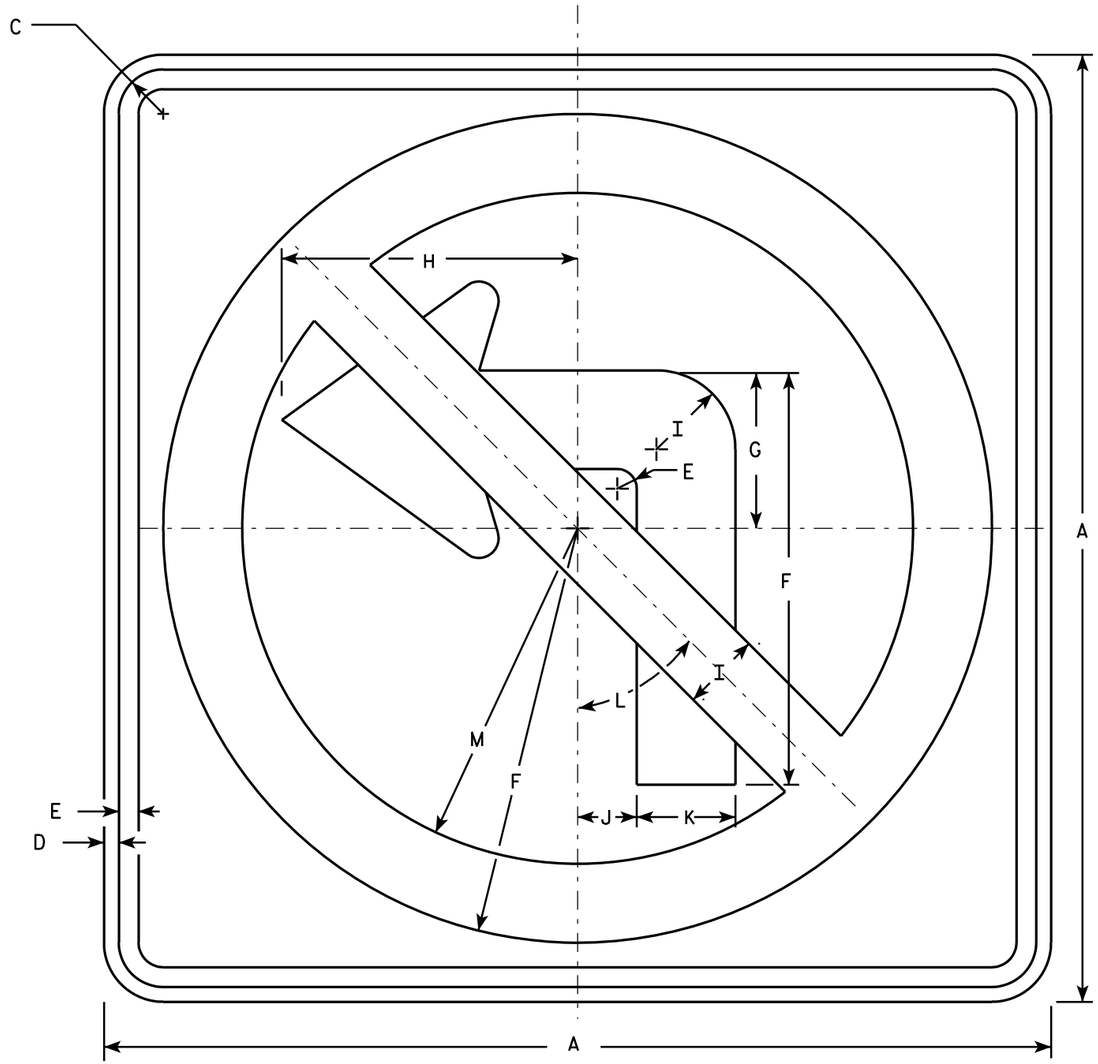
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

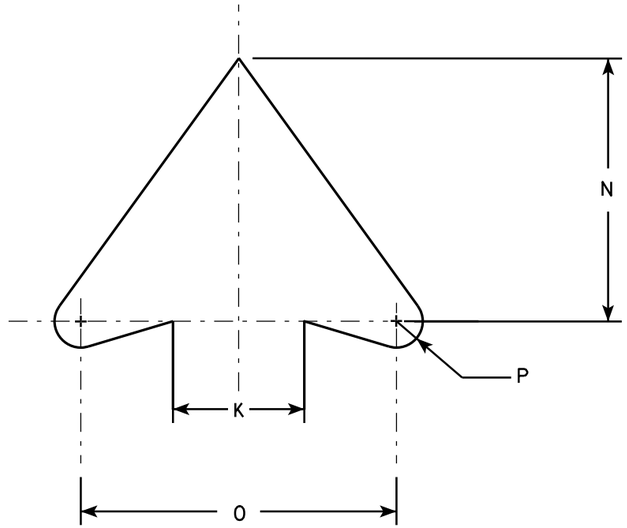
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 256	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

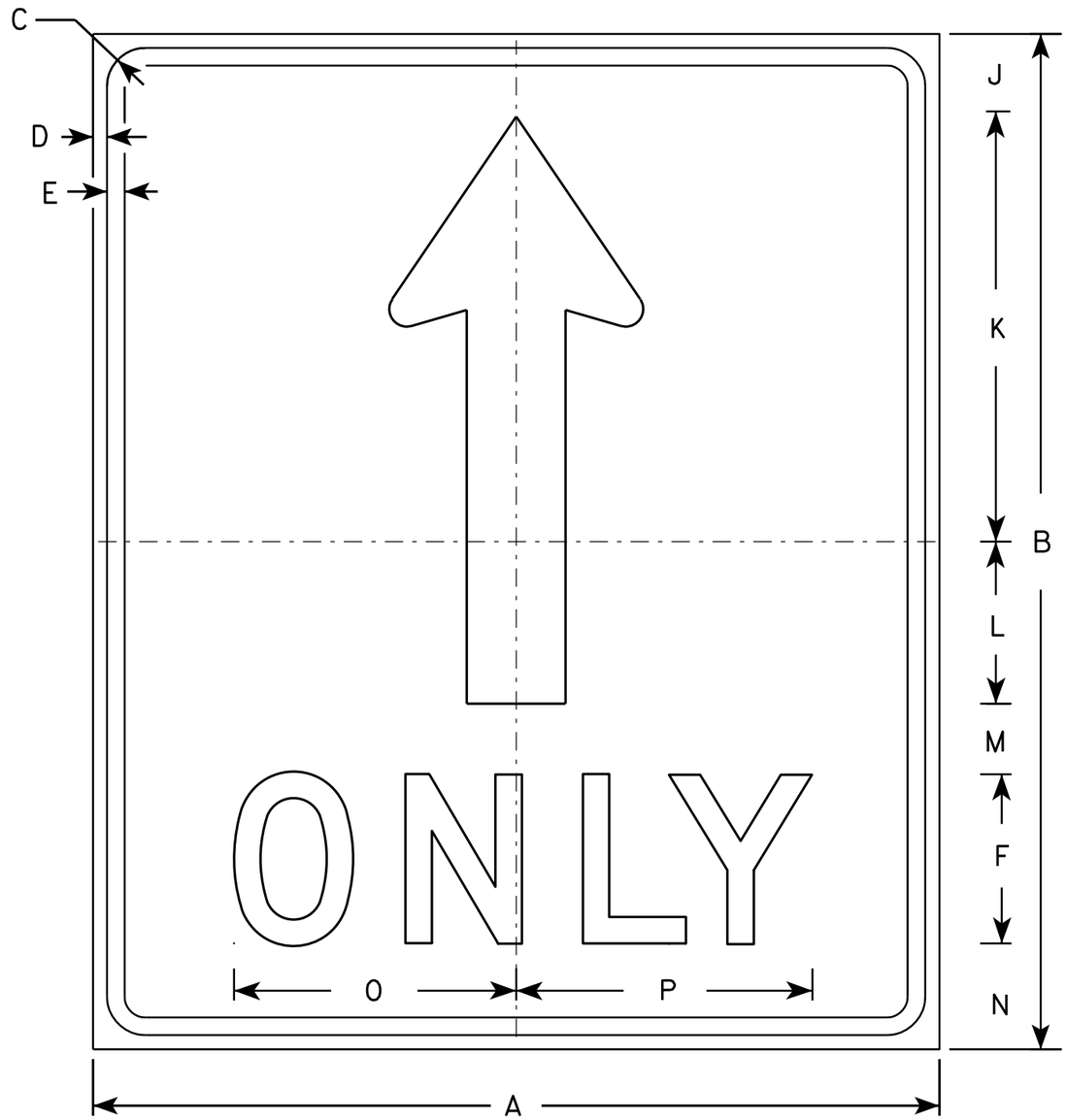
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

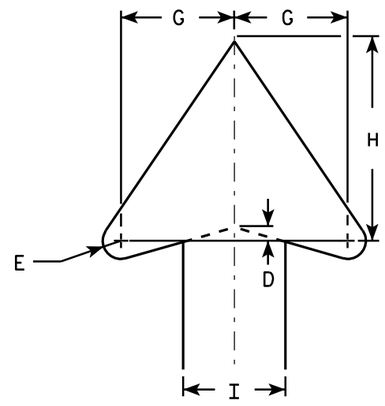
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 257	E



R3-50A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	6	4	7	3 1/2	2 3/4	15 1/4	5 3/4	2 1/2	3 3/4	10	10 1/2											7.5
2M	30	36	1 3/8	1/2	5/8	6	4	7	3 1/2	2 3/4	15 1/4	5 3/4	2 1/2	3 3/4	10	10 1/2											7.5
3																											
4																											
5																											

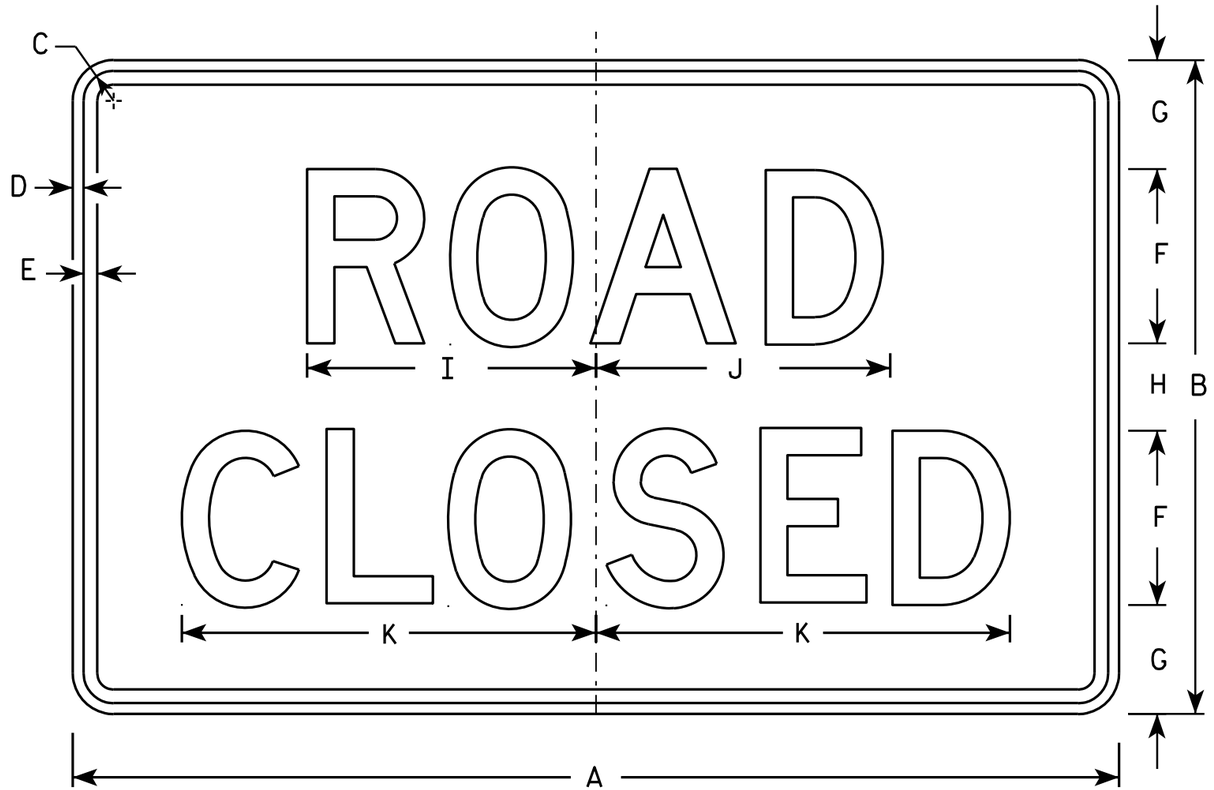
STANDARD SIGN
R3-50A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-50A.3

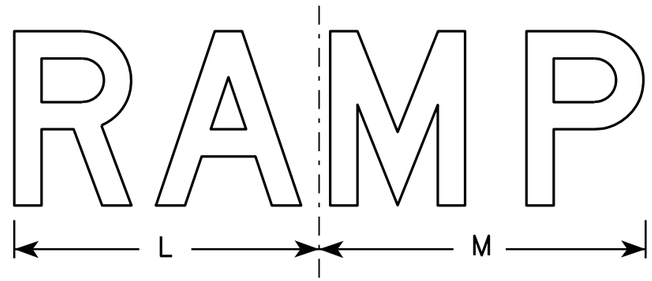
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 258	E



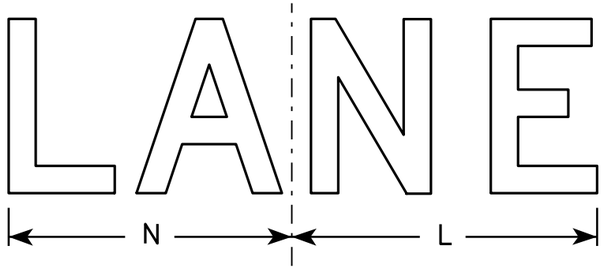
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

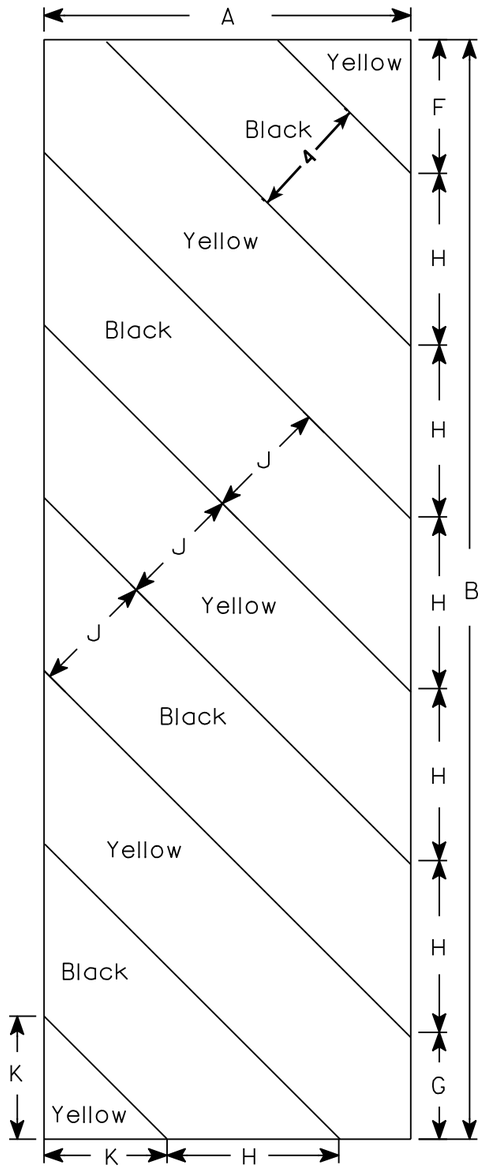
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

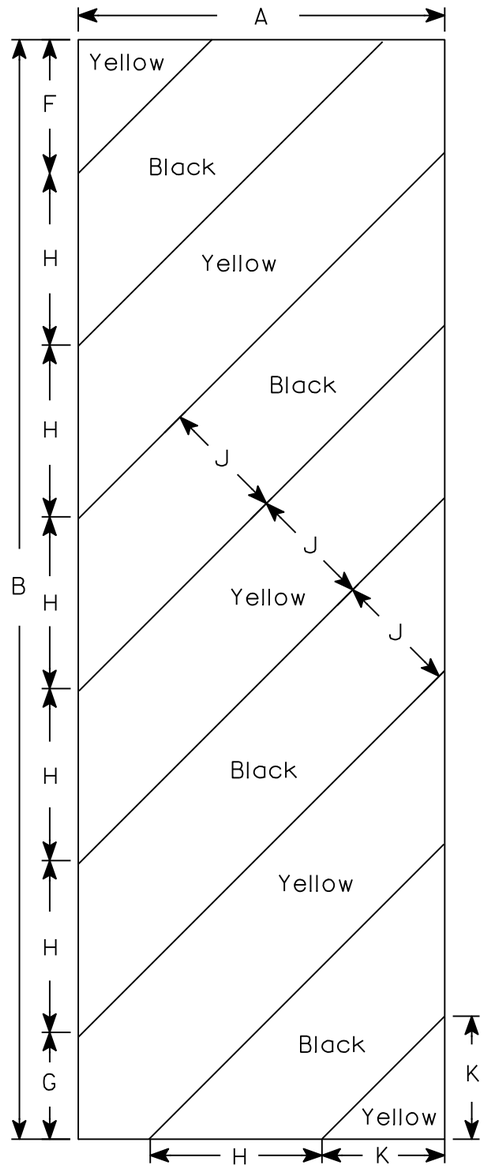
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 259	E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

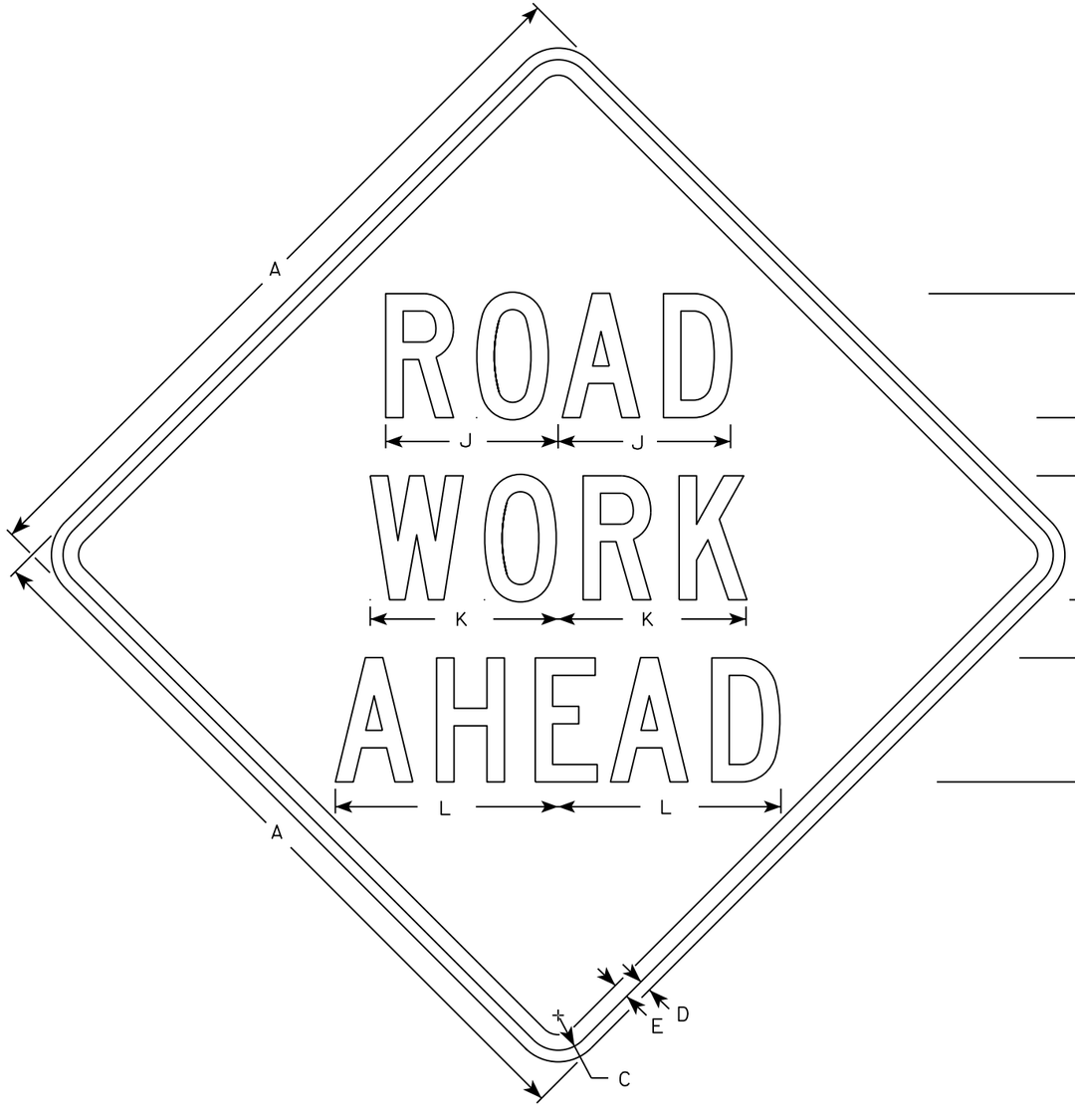
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

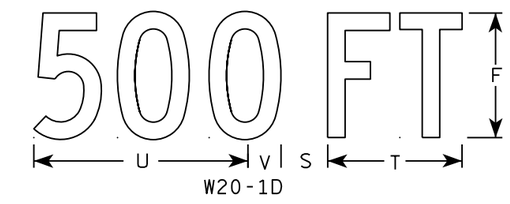
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

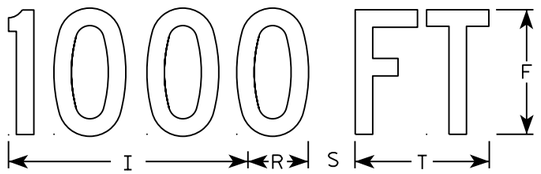
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 260	E



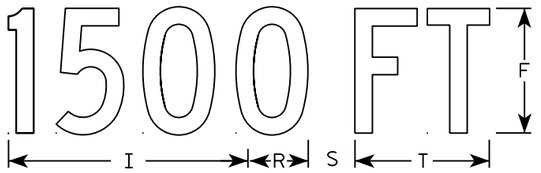
W20-1A



W20-1D



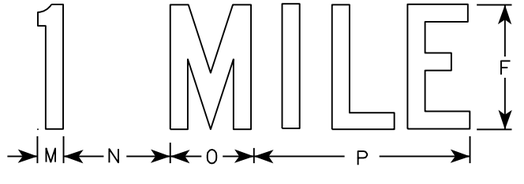
W20-1C



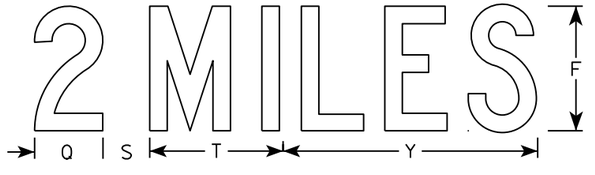
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

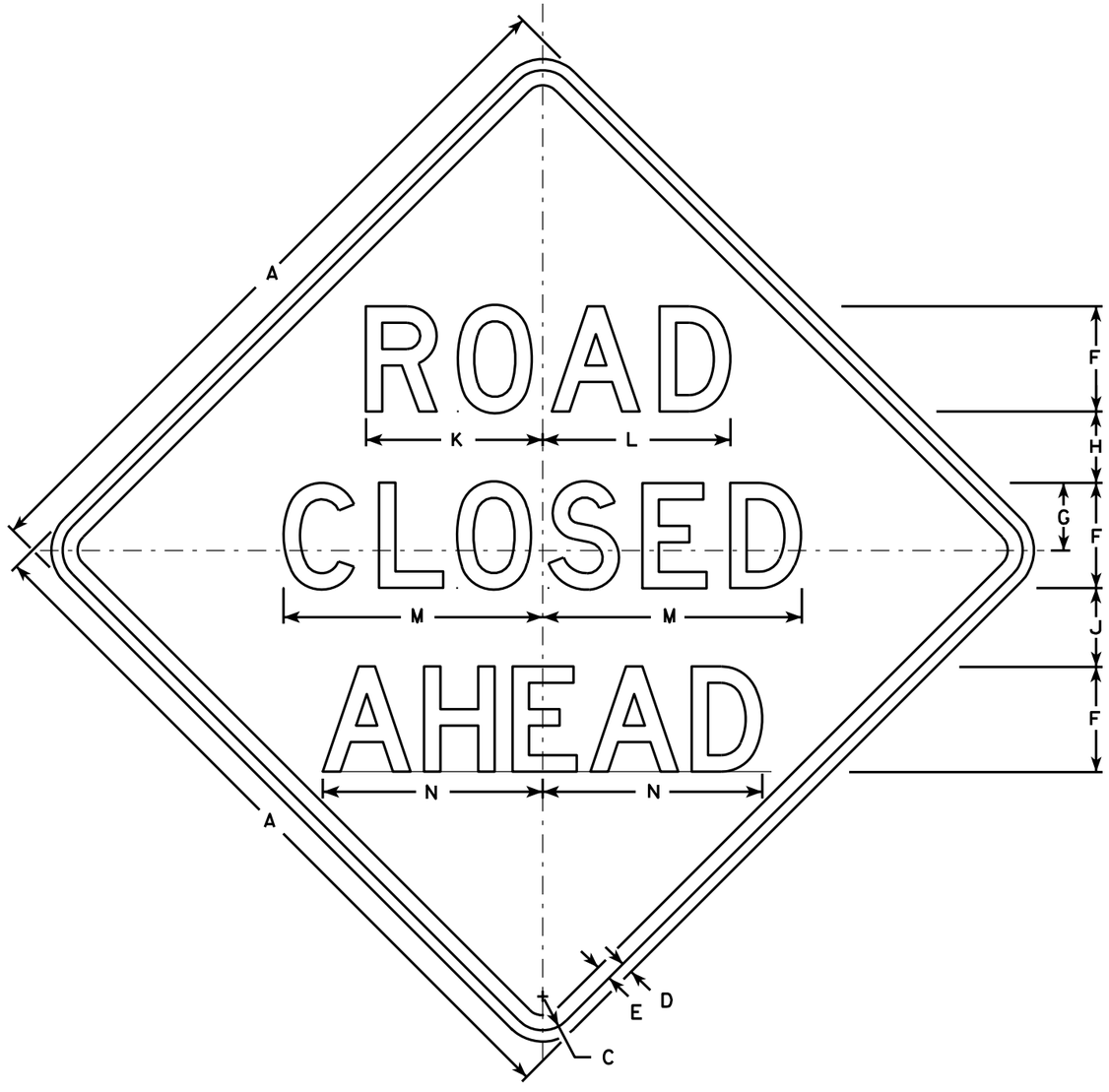
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

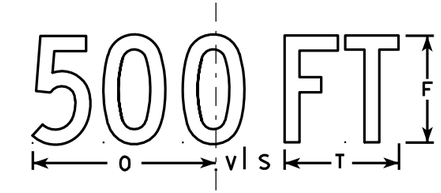
PROJECT NO:

SHEET NO: E

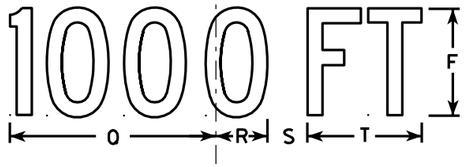
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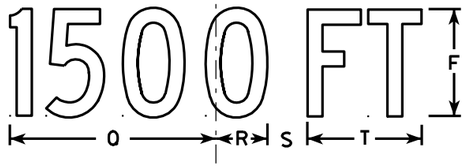
W20-3A



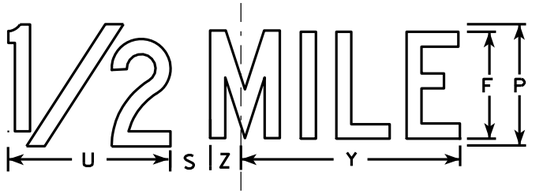
W20-3D



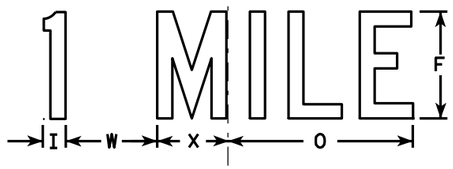
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

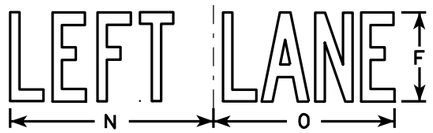
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

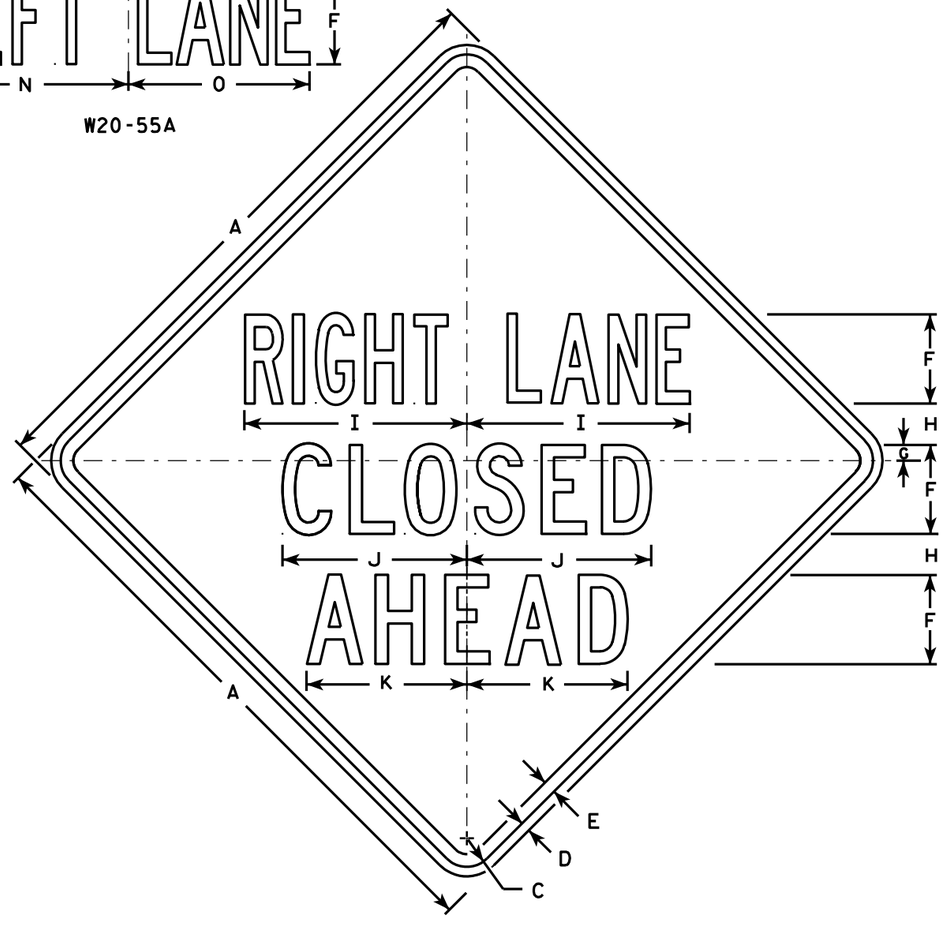
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 262 | E



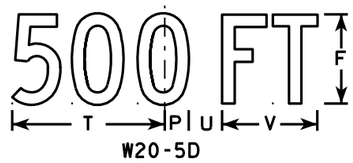
W20-56A



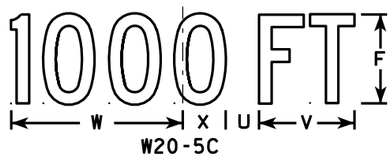
W20-55A



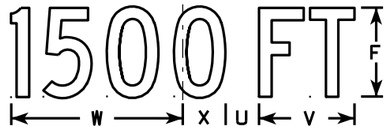
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

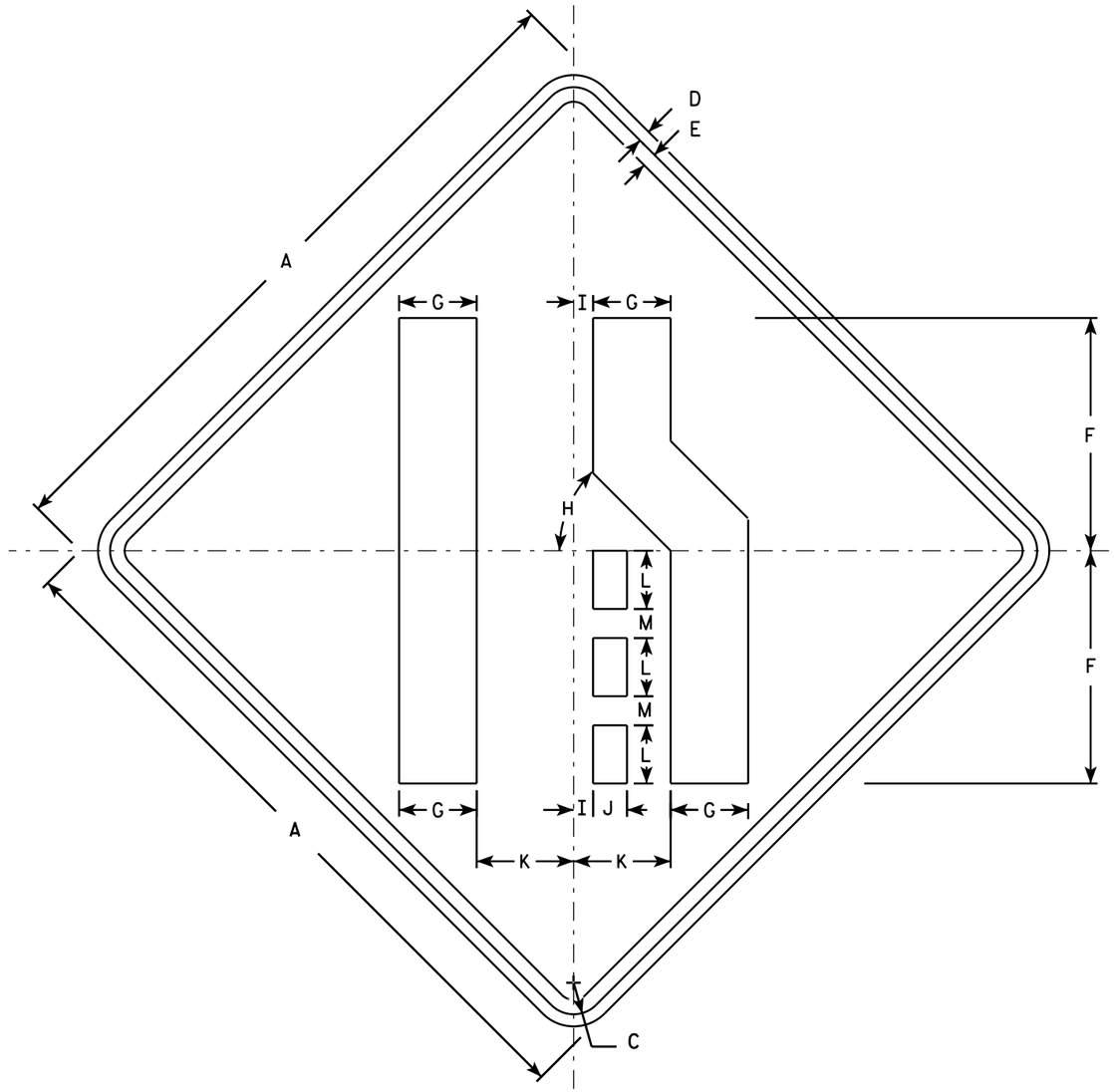
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 263 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

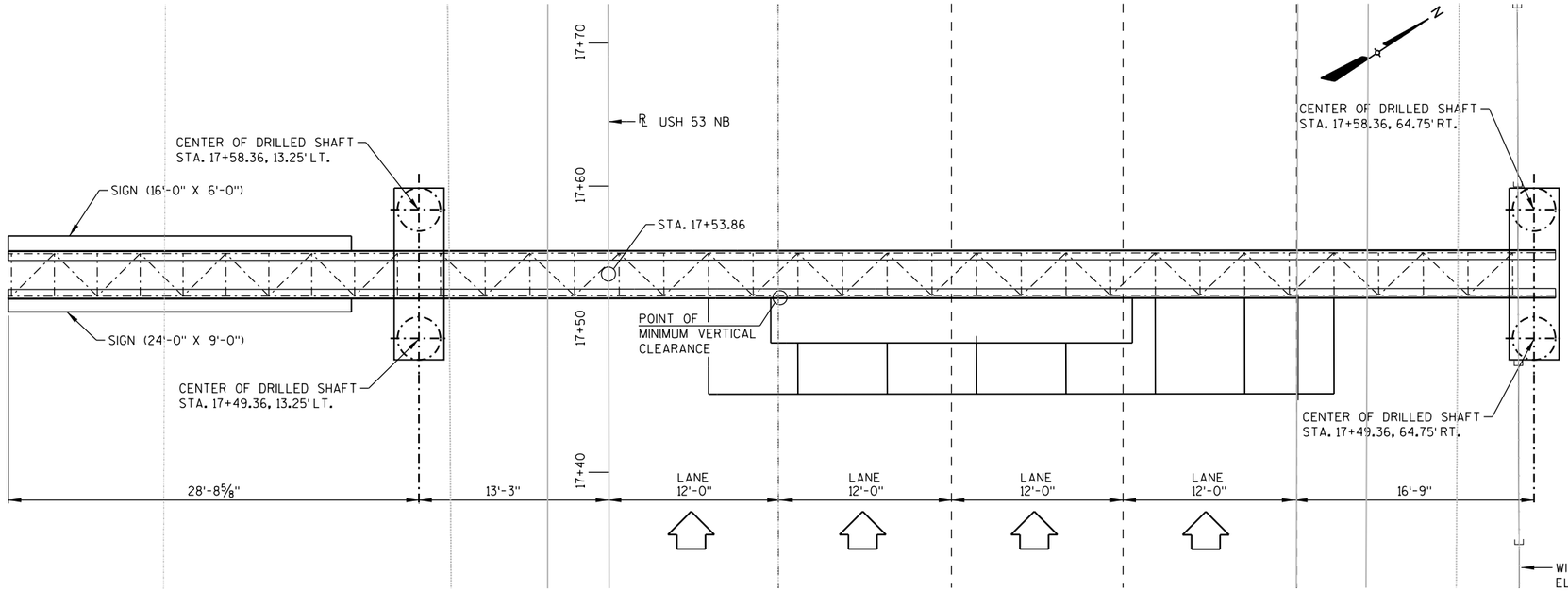
DATE 11/20/13 PLATE 264 W04-2.1

PROJECT NO: | SHEET NO: E

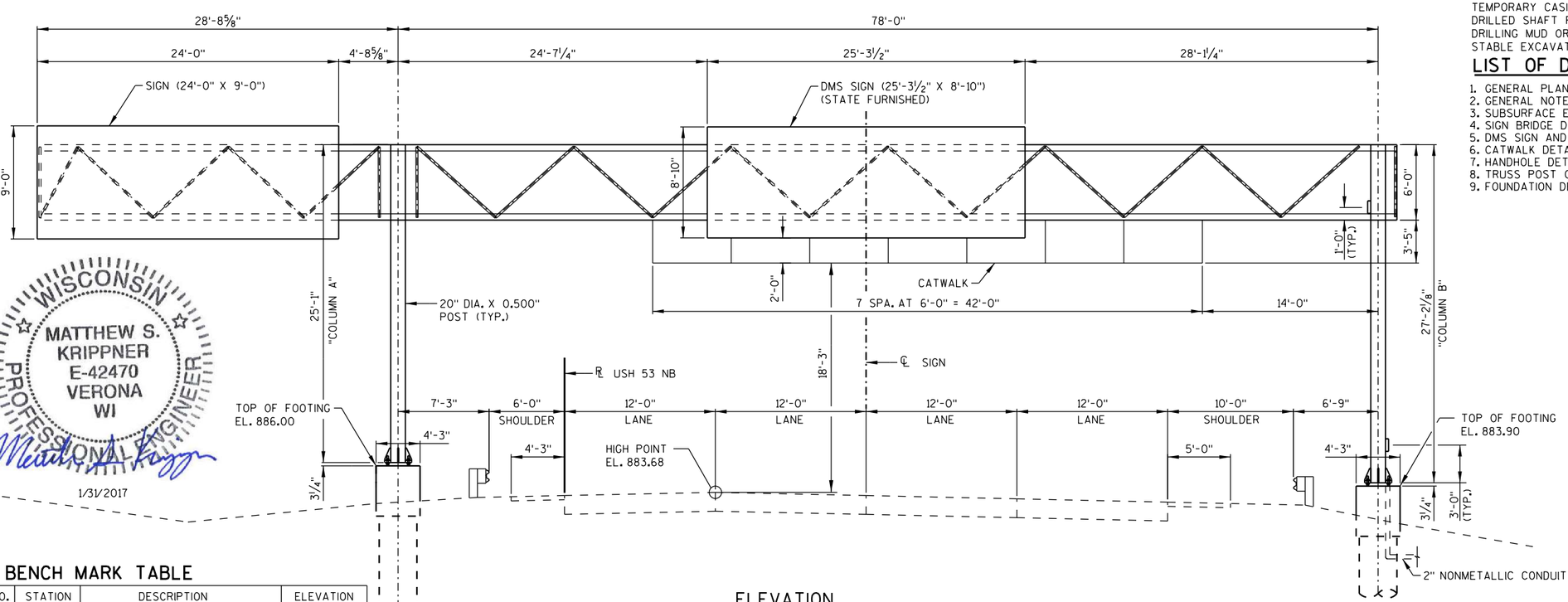
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PLOT DATE: 1/9/2017 PLOT TIME: 3:40:52 PM
BATCH PRINT SHEET 1 OF 9

STATE PROJECT NUMBER

3700-50-26



PLAN



ELEVATION

(LOOKING NORTHWEST AT FRONT FACE OF SIGN)
S-18-118
US 53 NB
STA. 17+53.86

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
BM1	20+29.75, 64.52' RT.	NW BOLT ON LIGHT POLE BASE, EAST SIDE OF US 53, SW OF LARGE SIGN FOR EXIT 87. COUNTY COORDINATES: N = 268357.51 E = 353393.35	885.86

MATTHEW S. KRIPPNER E-42470 VERONA WI
WISCONSIN PROFESSIONAL ENGINEER
1/31/2017

DMS UNIT DATA

DMS UNIT DIMENSIONS: 25'-3½" WIDE X 8'-10" TALL X 3'-2" DEEP.
DMS UNIT WEIGHT: 4,000 LBS. (INCLUDES MOUNTING BEAMS)

DESIGN DATA

DESIGNED ACCORDING TO THE 6TH EDITION OF A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

ADDITIONAL SIGN AREA - 216 SF, EACH FACE (CANTILEVER SPAN)
MAXIMUM DMS SIGN DEPTH = 8'-10"

DEAD LOAD - WEIGHT OF DMS AND SUPPORT BEAMS, 3 PSF WEIGHT OF TYPE i SIGNS, WEIGHT OF SUPPORTING STRUCTURE, AND CATWALK.
LIVE LOAD - SINGLE LINE LOAD OF 500 LBS. DISTRIBUTED OVER 2'-0" OF CATWALK.
ICE LOAD - 3 PSF APPLIED AROUND SURFACE OF MEMBER, FRONT AND BACK FACE, SIDES, AND TOP OF DMS SIGNS, AND TO ONE FACE OF TYPE i SIGNS.
WIND PRESSURE - 90 MPH (3 SECOND GUST SPEED) TO SIGN AREA AND EXPOSED MEMBERS.
FATIGUE GROUP LOAD IS APPLIED PER AASHTO SPEC.

MATERIAL PROPERTIES

CONCRETE MASONRY — f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 psi
COLUMN, API-5L-X42 — fy = 52,000 psi
STRUCTURAL ANGLES, PLATES, & BARS, ASTM A709 GRADE 36 — fy = 36,000 psi
ANCHOR RODS, ASTM F1554 GRADE 55, ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS — fy = 55,000 psi
HIGH STRENGTH BOLTS, A325 — fy = 92,000 psi
STRUCTURAL MEMBERS GALVANIZED — A123

FOUNDATION DATA

SOIL PROPERTIES USED FOR THIS DESIGN ARE LOCATED ON THE GENERAL NOTES AND QUANTITIES SHEET. IF VARIATIONS IN THE ASSUMED DESIGN PARAMETERS ARE FOUND DURING CONSTRUCTION NOTIFY THE PROJECT ENGINEER FOR REQUIRED MODIFICATION TO THE FOUNDATION SYSTEM.

TEMPORARY CASING SHOULD BE PLANNED DURING THE EXCAVATION OF THE DRILLED SHAFT FOUNDATION. CONTRACTOR SHOULD BE PREPARED TO ULITILIZE DRILLING MUD OR OTHER TECHNIQUES DURING CONSTRUCTION IF A CLEAN, STABLE EXCAVATION BASE IS NOT MAINTAINED.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. GENERAL NOTES AND QUANTITIES
3. SUBSURFACE EXPLORATION
4. SIGN BRIDGE DETAILS
5. DMS SIGN AND PANEL MOUNTING DETAILS
6. CATWALK DETAILS
7. HANDHOLE DETAILS
8. TRUSS POST CONNECTION & BASE PLATES
9. FOUNDATION DETAILS

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
BILL DREHER (608) 266-8489

CONSULTANT:
MATT KRIPPNER (608) 828-8123

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 04/20/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-18-118

US 53 NB

COUNTY EAU CLAIRE
~~TOWN~~/CITY/~~VILLAGE~~ EAU CLAIRE

DESIGN SPEC. AASHTO STD. SPEC. FOR HIGHWAY BRIDGES, 17TH EDITION

DESIGNED BY	MSK	DESIGN CK'D.	CAK	DRAWN BY	MES	PLANS CK'D.	MSK

GENERAL PLAN & ELEVATION

SHEET 1 OF 9
265

8

8

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PLOT DATE: 1/9/2017 PLOT TIME: 3:40:55 PM
BATCH PRINT SHEET 2 OF 9

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	QUANTITY
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	39
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	5,780
SPV.0105.66	REMOVING OLD SIGN BRIDGE SINGLE POLE S-18-057	LS	1
641.6600	SIGN BRIDGE (S-18-118)	LS	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" UNLESS OTHERWISE SHOWN.

TEMPORARY CASINGS FOR FOOTING SHAFTS ARE INCLUDED WITH THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY" IN ACCORDANCE WITH SECTION 636.3.3 OF THE STANDARD SPECIFICATIONS.

CASINGS USED WHEN POURING FOOTING SHAFT SHALL NOT BE LEFT IN PLACE.

EXCAVATION REQUIRED FOR DRILLED SHAFT WILL BE INCLUDED WITH THE "SIGN SUPPORTS CONCRETE MASONRY" BID ITEM.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED OR SHOWN.

ALTERNATE DESIGNS ARE NOT ALLOWED.

STATIONS AND OFFSETS ARE AT THE LOCATION OF THE CENTER OF THE DRILLED SHAFT.

ALL STRUCTURAL STEEL MEMBERS, PLATES, ANCHOR RODS, H.S. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARD SPECIFICATIONS.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6 OF THE SIGN PLATE MANUAL FOR INSTRUCTION ON CENTERING SIGN VERTICALLY ON TRUSS.

ALL H.S. STRENGTH BOLTED CONNECTIONS SHALL BE MADE WITH A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.

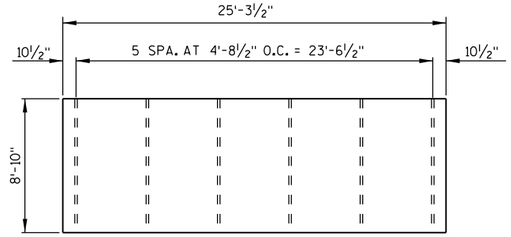
SIGN BRIDGE IDENTIFICATION PLAQUES SHALL BE INLCUDED IN THE BID ITEM "SIGN BRIDGE S-18-118". FABRICATE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

HANDHOLES ARE REQUIRED.

THE ELEVATION DATUM IS NAVD 88.

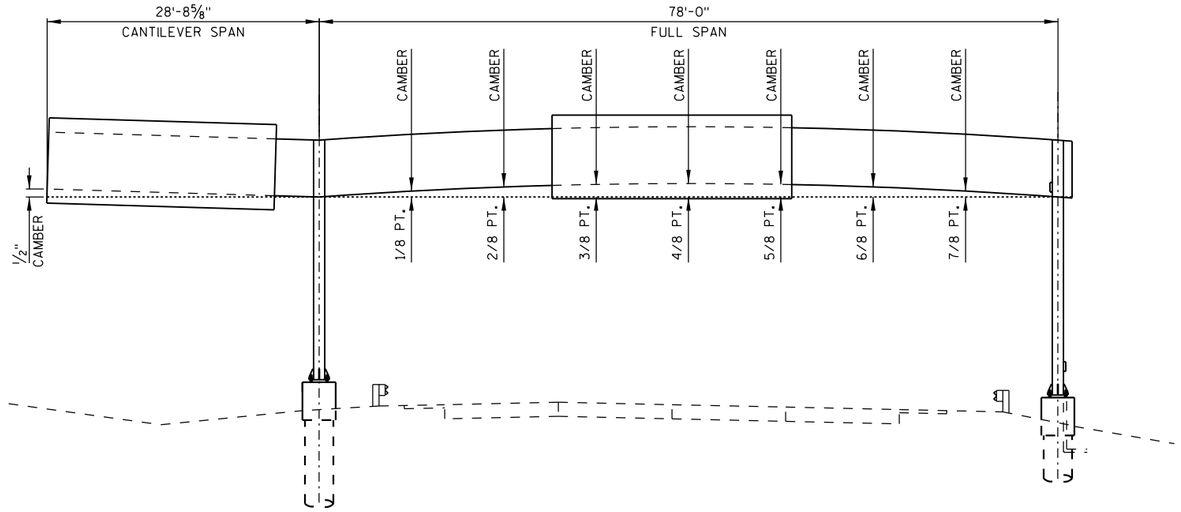
S-18-118 SOIL DESIGN PARAMETERS

ELEVATION (FEET)	LAYER DESCRIPTION	TOTAL UNIT WEIGHT (LB/FT^3)	UNDRAINED STRENGTH PARAMETERS		ALLOWABLE END BEARING PRESSURE (LB/FT^2)	ALLOWABLE SKIN FRICTION (LB/FT^2)
			TOTAL COHESION, C (LB/FT^3)	TOTAL FRICTION ANGLE, F (DEGREES)		
880.0 - 875.0	FILL: SILTY SAND, TRACE TO SOME GRAVEL	120.0	0	35	0	0
875.0 - 872.5	SANDY SILT, BROWN	120.0	0	30	5975	309
872.5 - 870.0	SILTY SAND, TRACE GRAVEL, BROWN	120.0	0	32	9778	484
870.0 - 865.0	SILTY SAND, TRACE GRAVEL, BROWN	120.0	0	31	6518	613
865.0 - 860.0	SANDY SILT, BROWN	120.0	0	31	5432	620
860.0 - 855.0	SILTY SAND, TRACE GRAVEL, BROWN	120.0	0	31	6518	772

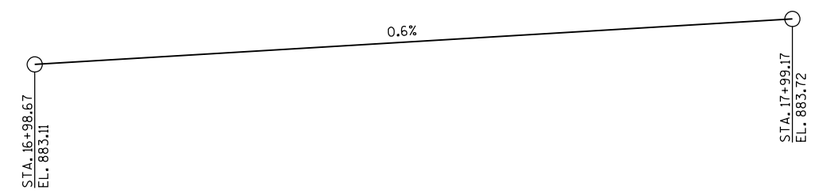


DMS PANEL MOUNTING POST SPACING DETAIL

NOTE: POST SPACING MAY BE ADJUSTED ±4" AS REQUIRED IF CONFLICT WITH TRUSS DETAILS IS ENCOUNTERED.



	FULL SPAN						
SPAN POINT	1/8	2/8	3/8	4/8	5/8	6/8	7/8
CAMBER (IN)	½"	⅞"	1¼"	1½"	1¼"	⅞"	½"



PROFILE GRADE LINE
(BASED ON SURVEY)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

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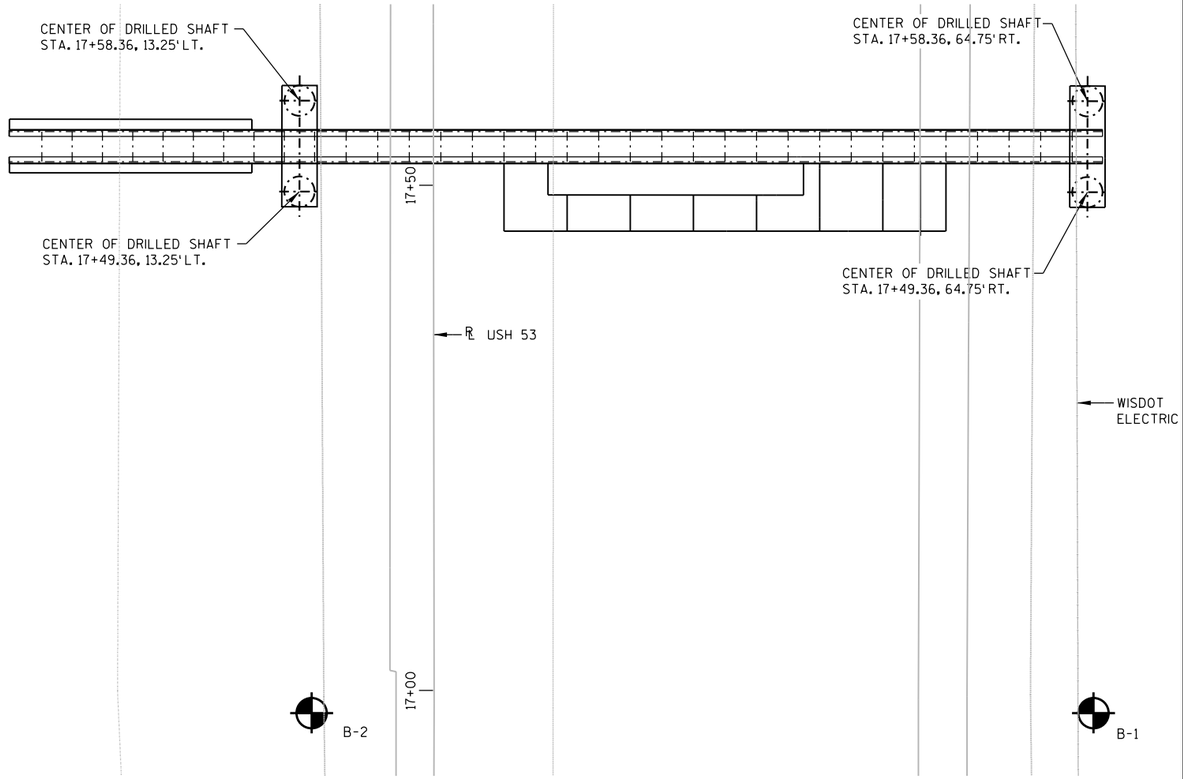
GENERAL NOTES AND QUANTITIES

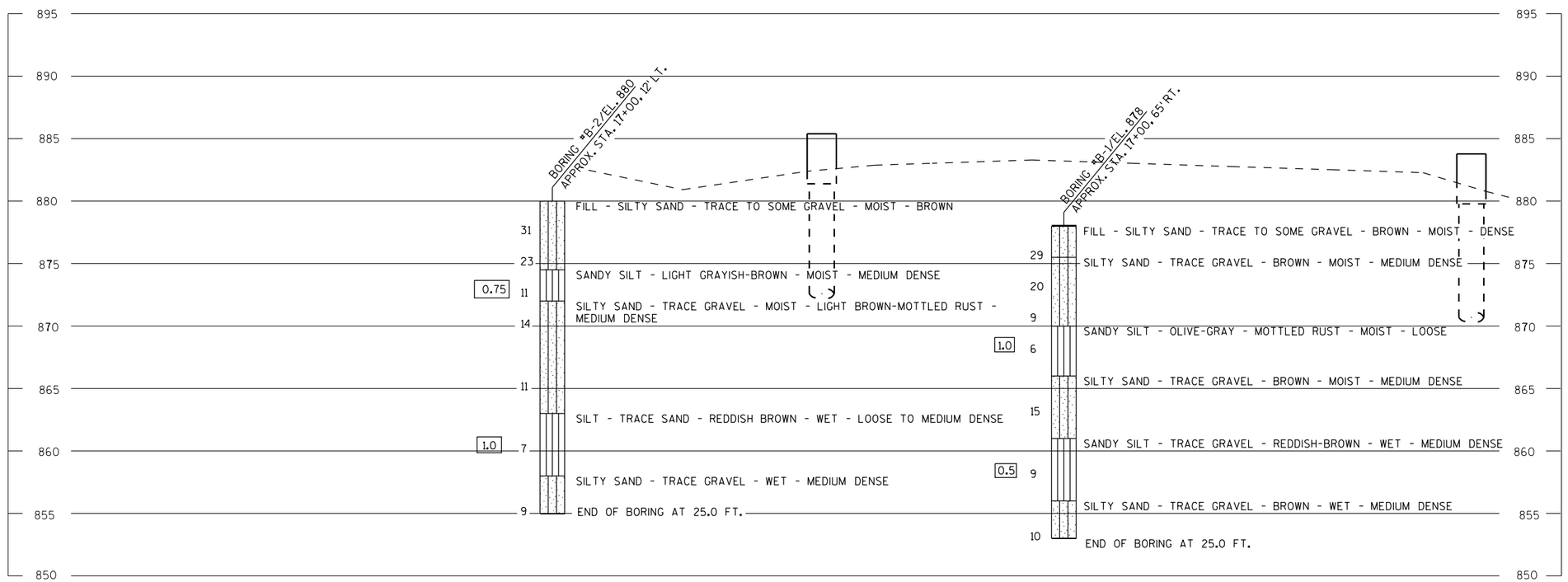
SHEET 2 OF 9
266

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	3/08/2016	349433.063	1593529.587
B-2	3/08/2016	349378.499	1593481.765
BORINGS COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC. (PSI)			
REPORT COMPLETED BY: AECOM			
ALL COORDINATES REFERENCED TO WISCONSIN STATE PLANE COORDINATE SYSTEM.			





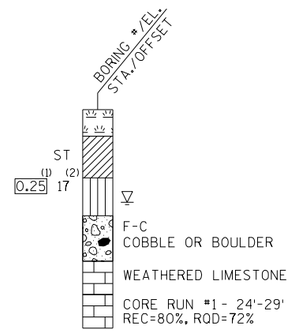
STATE PROJECT NUMBER

3700-50-26

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-18-118

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SUBSURFACE EXPLORATION

SHEET 3 OF 3

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SCALE =

8

8

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BATCH PRINT SHEET 4 OF 9

NOTES:

TRUSS SECTIONS SHALL BE MADE IN MULTIPLES OF 6'-0", EXCEPT THAT THE BRACING PANEL NEAREST EACH POST MAY VARY TO MAKE UP THE NEEDED SECTION LENGTH. WELDED CHORD SPLICES ARE NOT PERMITTED EXCEPT IN CANTILEVER TRUSSES AS NOTED BELOW.

CANTILEVER TRUSSES SHALL BE SUPPLIED AS A SINGLE UNIT WHENEVER POSSIBLE. WHEN CANTILEVER TRUSS LENGTH EXCEEDS 40'-0"CHORDS MAY BE SPLICED, AS SHOWN, IN THE END BRACING PANEL ONLY. CHORD SPLICE WELD SHALL BE COMPLETE PENETRATION, WITH 100% UT AND MT TESTING PER 2471.3M.

UNLESS OTHERWISE SHOWN, ALL WELDS SHALL BE 1/4" FILLET WELDS ALL AROUND.

BOLTED SPLICES SHALL NOT BE LOCATED BEHIND DMS SIGNS.

PROVIDE 2- 1/16"BRASS, STAINLESS STEEL OR GALVANIZED STEEL SHIMS AT EACH FLANGE TO BRING TRUSS INTO CORRECT CAMBER AND ALIGNMENT.

TRUSSES SHALL BE SHOP ASSEMBLED AND MATCH MARKED.

ALL VIEWS OF THE TRUSSES ARE DRAWN FROM THE INSIDE OF THE TRUSS LOOKING OUT.

SEE SHEET 8 FOR POST CONNECTION DETAILS.

CHORD SPLICES, IF REQUIRED, SHALL BE IN ACCORDANCE WITH PLATE "F" DETAIL.

CHORD SPLICES SHALL BE AT THE TOP OF DIAGAONAL MEMBERS FOR PROPER WELDING.

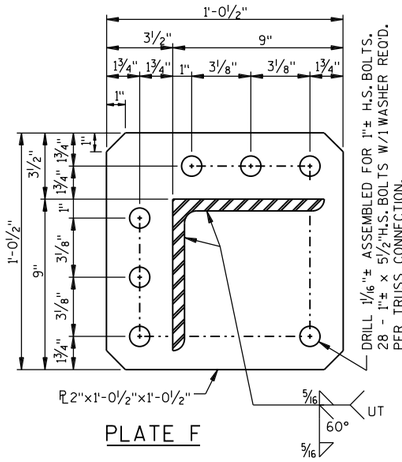
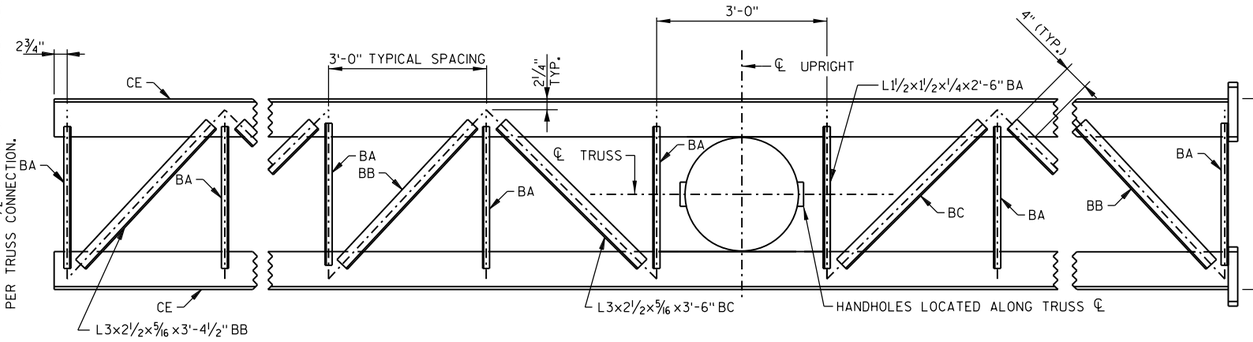
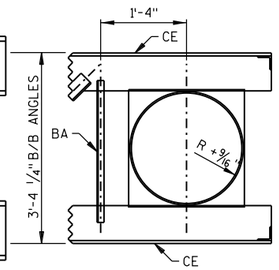


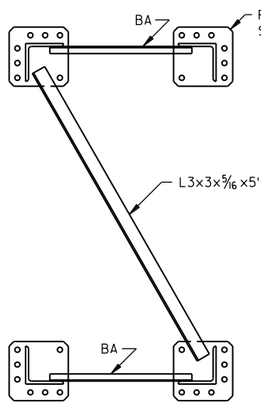
PLATE F



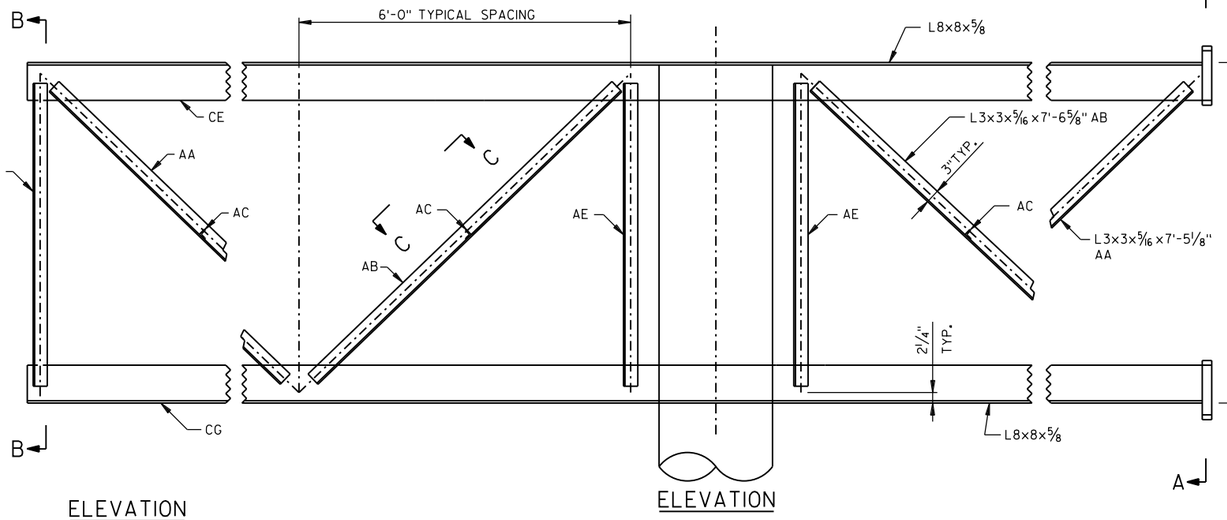
TOP VIEW



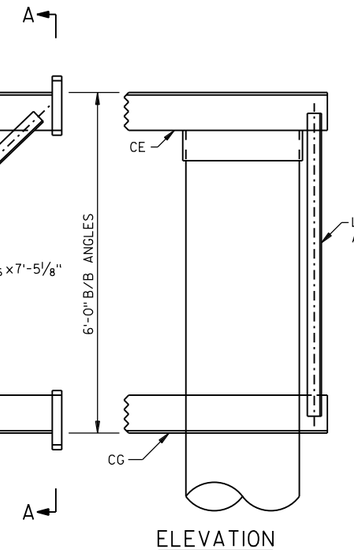
TOP VIEW



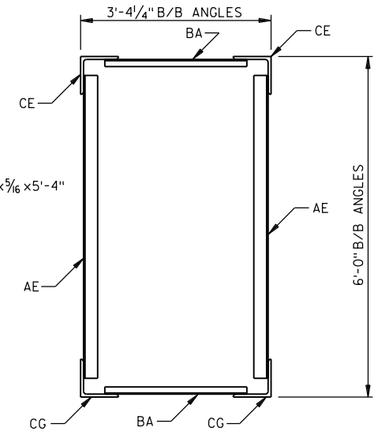
SECTION A-A



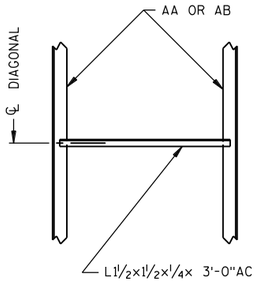
ELEVATION



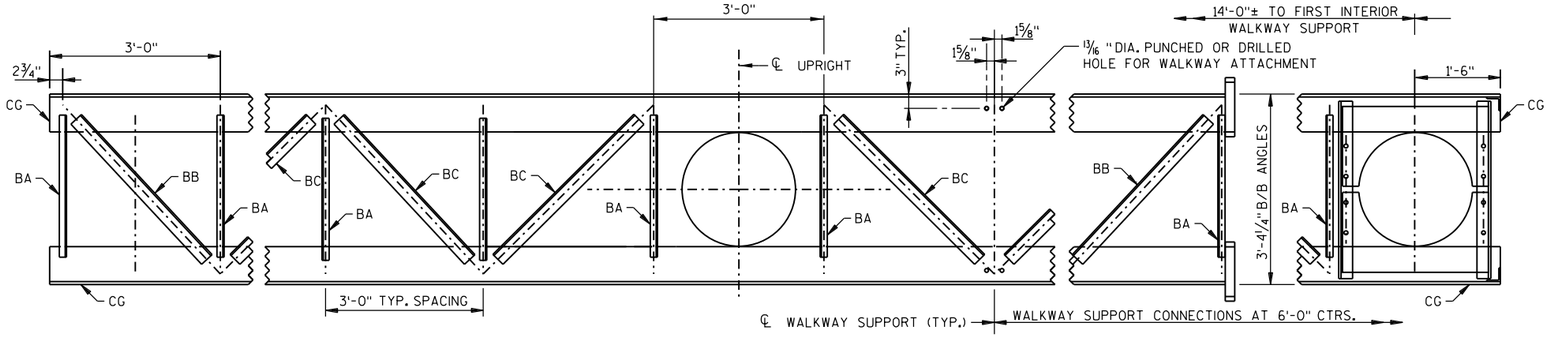
ELEVATION



SECTION B-B



SECTION C-C



BOTTOM VIEW
CANTILEVER END

BOTTOM VIEW

BOTTOM VIEW
FULL SPAN END

NOTES:
THE BOTTOM VIEW IS DETAILED TO PROVIDE FOR WALKWAY ATTACHMENT. WHERE THE WALKWAY IS OMITTED, PROVIDE STRUT "BA" AS INDICATED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

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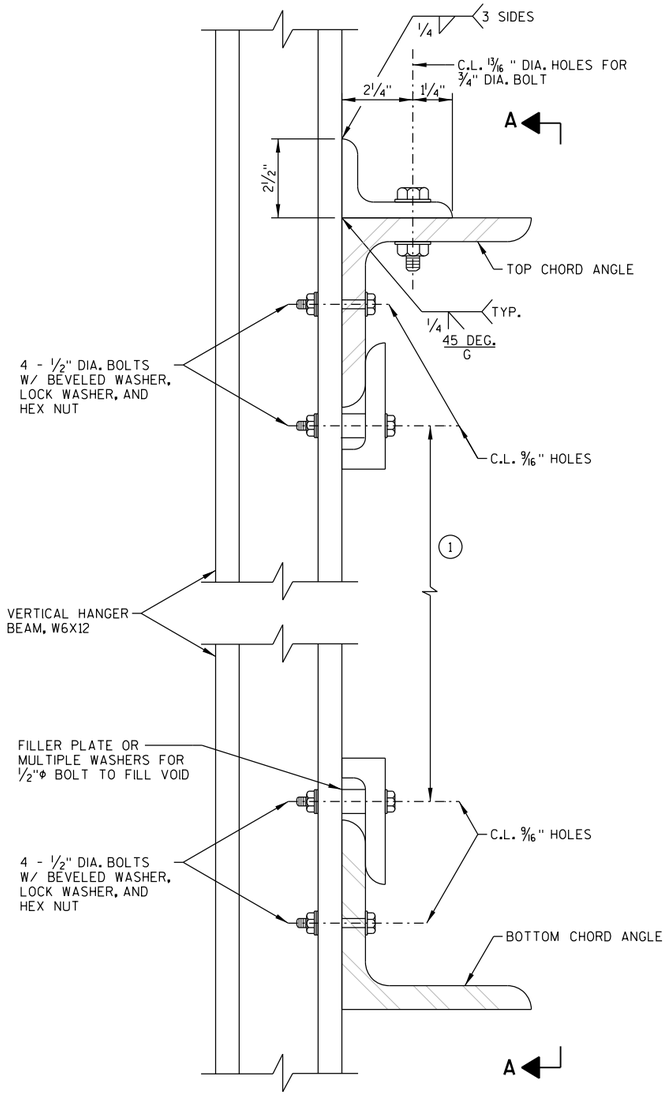
SIGN BRIDGE DETAILS

SHEET 4 OF 9
268

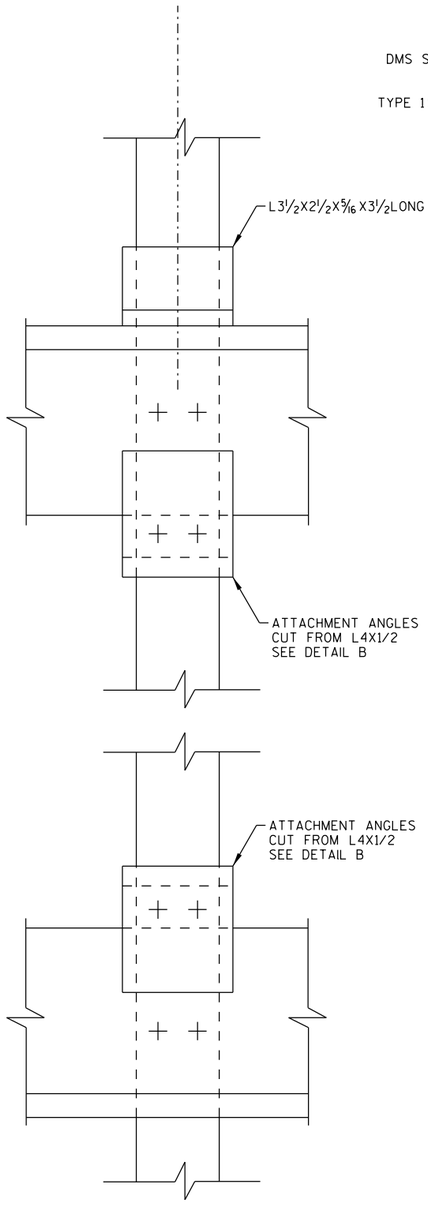
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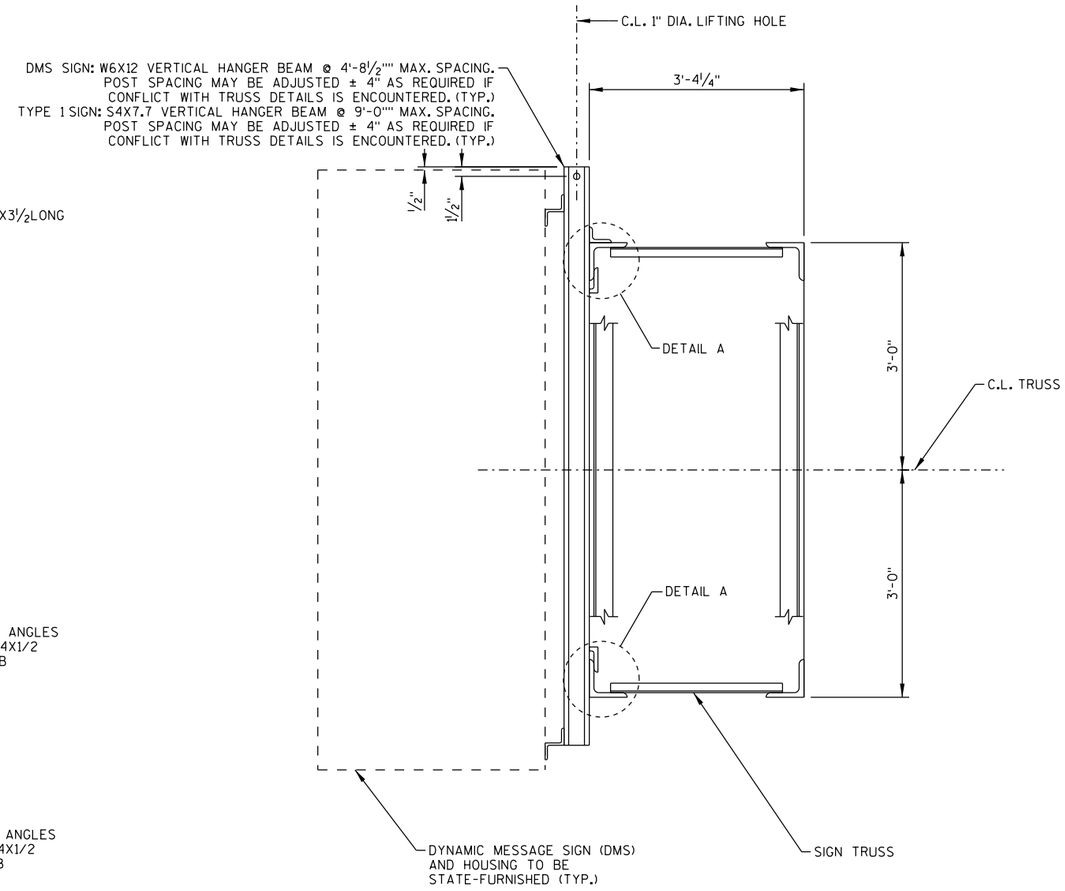
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BATCH PRINT SHEET 5 OF 9



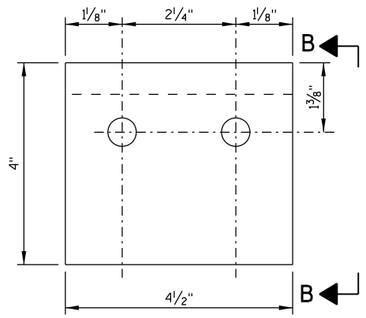
DETAIL A



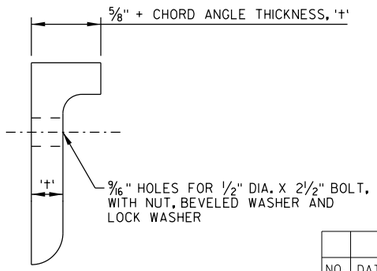
SECTION A-A



SECTION THRU TRUSS AT DYNAMIC MESSAGE SIGN (DMS)
(TRUSS AT TYPE 1 SIGN SIMILAR)



DETAIL B



SECTION B-B

NOTES

(1) (TRUSS DEPTH) - (TOP & BOTTOM CHORD < LEGS) - 1 1/4"

SUPPLY PANEL MOUNTING POSTS, BOLTS, MOUNTING ANGLES, AND SPACERS WITH TRUSS. THE COST OF MOUNTING THE STATE-SUPPLIED VMS SIGN TO THE TRUSS IS CONSIDERED INCLUDED IN BID ITEM "SIGN BRIDGE S-18-118".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

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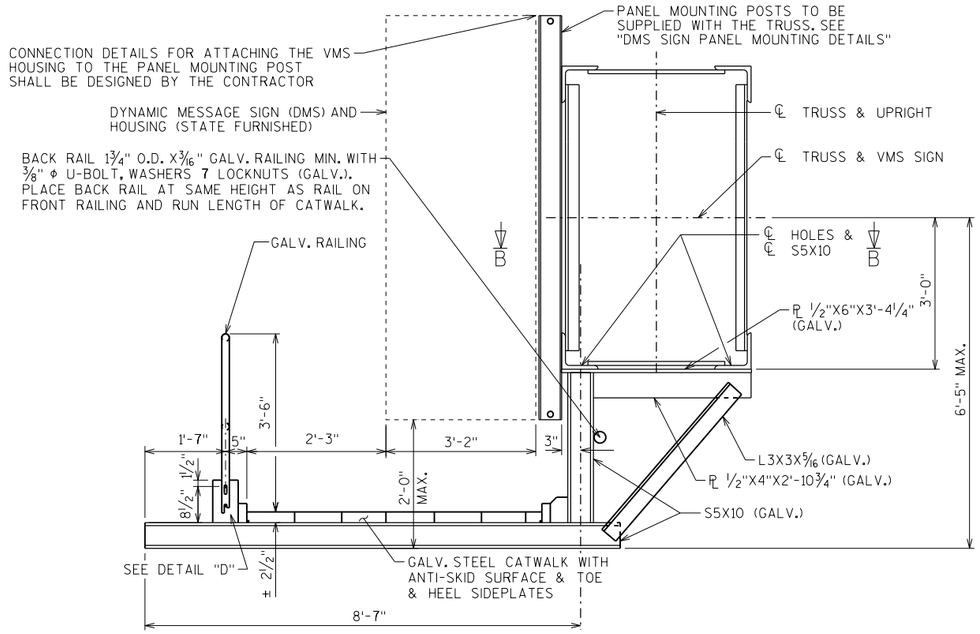
DMS SIGN AND PANEL MOUNTING DETAILS

SHEET 5 OF 9
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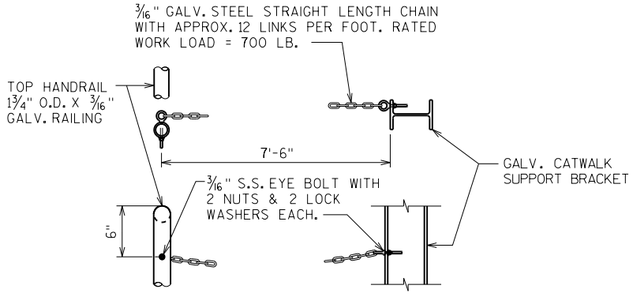
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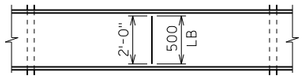
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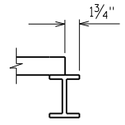
SECTION THRU WALKWAY



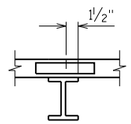
SAFETY CHAIN DETAIL



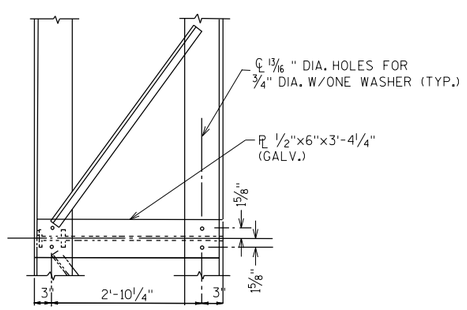
NOTE:
CATWALK SHALL MEET AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" 6TH EDITION. (500 LB. DISTRIBUTED OVER 2'-0" TRANSVERSELY WITH THE BASIC ALLOWABLE UNIT STRESS INCREASED 25%). MAX. SPAN IS 8'-0". CATWALK SHALL ALSO MEET THE MOST RECENT ISSUE OF OSHA STD'S FOR WALKING-WORKING SURFACES.



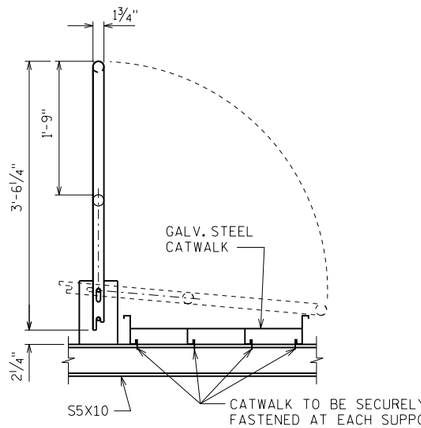
CATWALK TERMINATION DETAIL



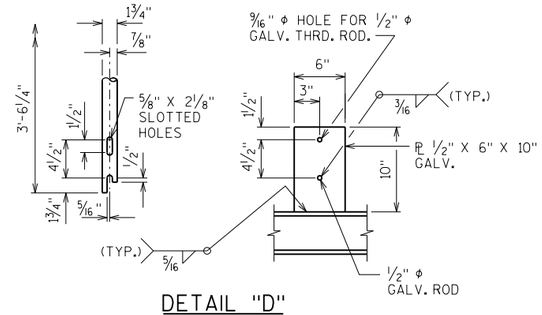
CATWALK SPLICE LOCATION DETAIL



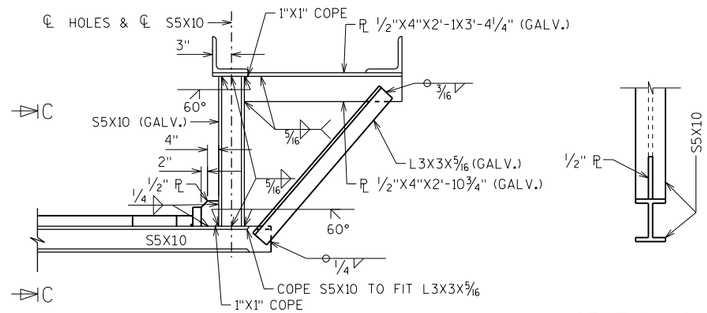
SECTION B-B



RAIL POST DETAIL

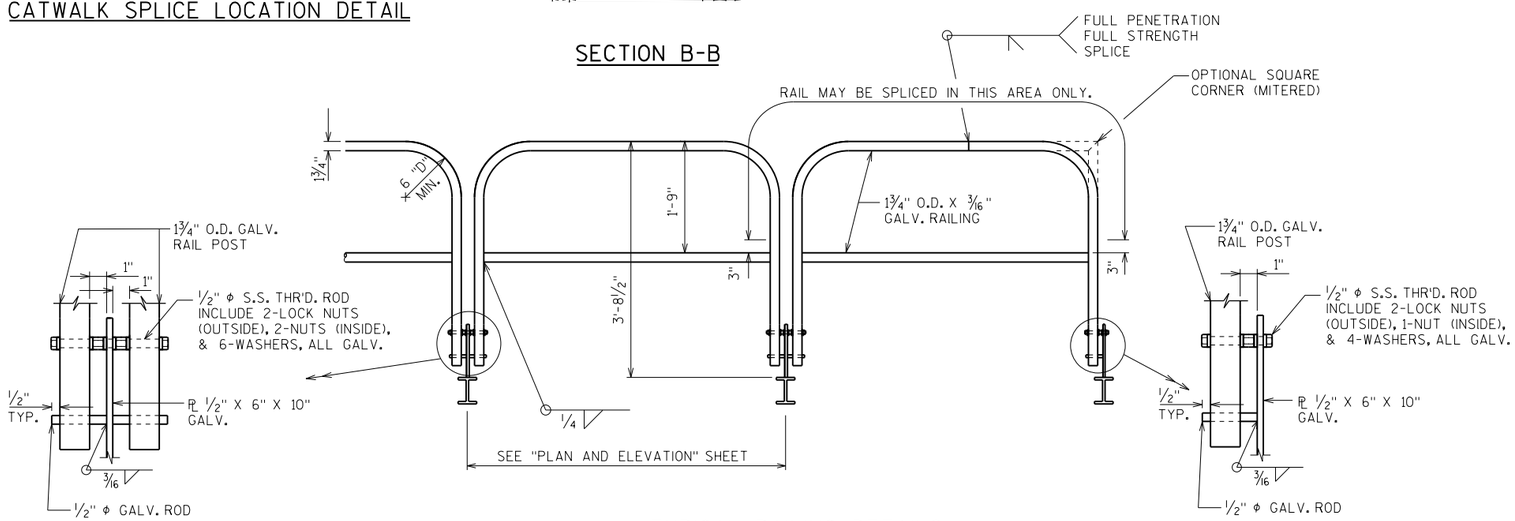


DETAIL "D"

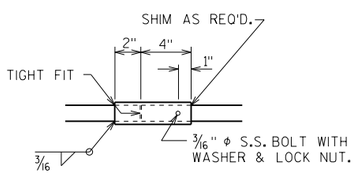


BRACKET DETAIL

SECTION C-C



TYPICAL RAILING DETAILS



BACKRAIL SPLICE

ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

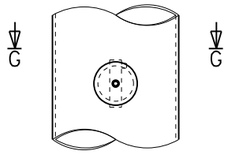
STRUCTURE S-18-118

DRAWN BY	MES	PLANS CK'D.	MAH

CATWALK DETAILS

SHEET 6 OF 9
270

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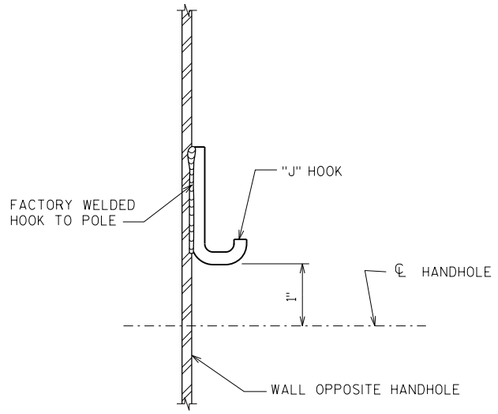


HANDHOLE DETAILS

HANDHOLE NOTES

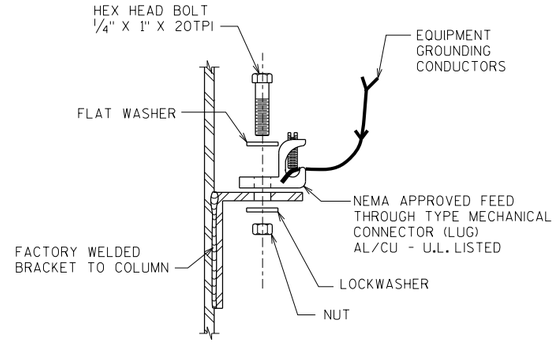
COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC ENGINEER PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL DETAIL PLAN SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER SECTION 641 OF THE WISDOT STANDARAD SPECIFICTIONS.



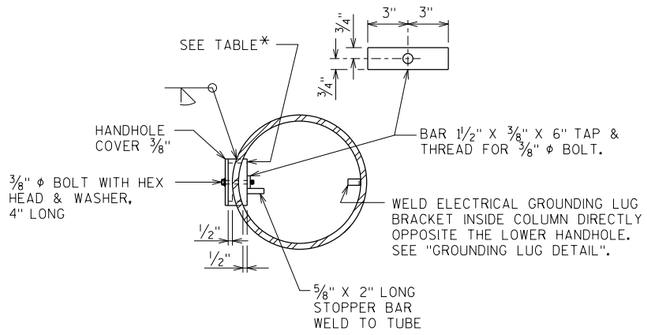
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



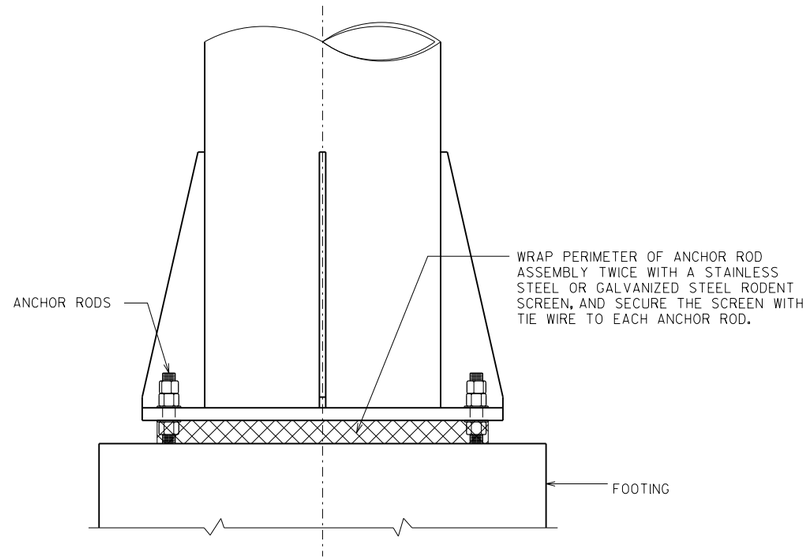
GROUNDING LUG DETAIL

STAINLESS STEEL BOLTS, NUT AND WASHERS



SECTION G-G

* COLUMN O.D. SIZE	HANDHOLE PIPE O.D. X MIN. THK.
UP TO AND INCLD. 16" X 0.375"	5.562" X 0.500"
GREATER THAN 16" X 0.375" TO AND INCLD. 24" X 0.562"	6.625" X 0.562"



RODENT SCREEN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

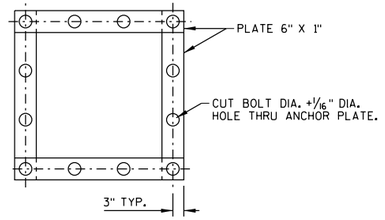
DRAWN BY MES | PLANS CK'D. MAH

HANDHOLE DETAILS

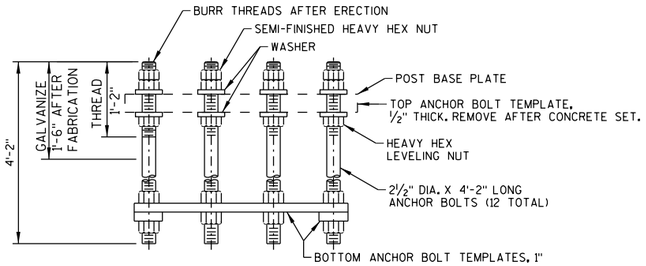
SHEET 7 OF 9
271

PRINTER DRIVER: S:\..acm-CADstds_Libraries\WISDOT\Microstation\Resources\MS_Printing\Printer_Drivers\AE_PDF.11 x 17.plt
PEN TABLE: S:\..acm-CADstds_Libraries\WISDOT\MicroStation\Resources\MS_Printing\pen tables\AE_WisDOT.tbl
FILE NAME: P:\60483055\400_Technical\438_Struct\Bridge dgn\08_truss post connection.dgn
PLOT DATE: 1/9/2017 PLOT TIME: 3:41:19 PM
BATCH PRINT SHEET 8 OF 9

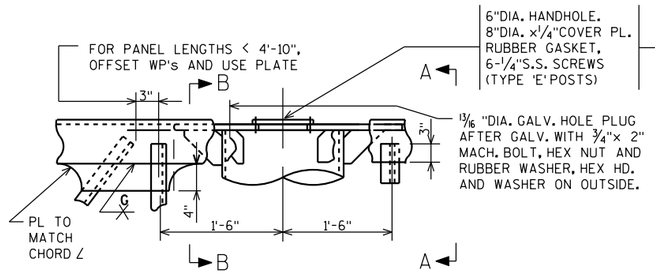
ANCHOR PLATE PLAN
(TOP AND BOTTOM PLATES)

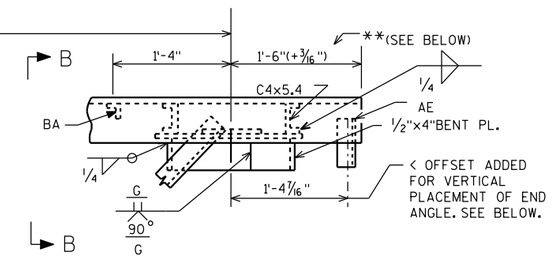


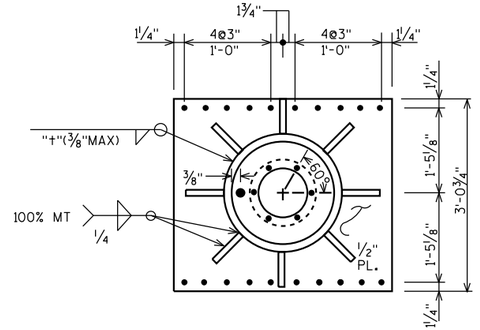
ELEVATION



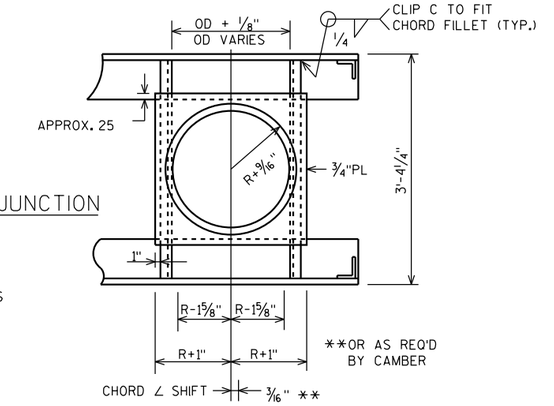
ANCHOR BOLT DETAILS

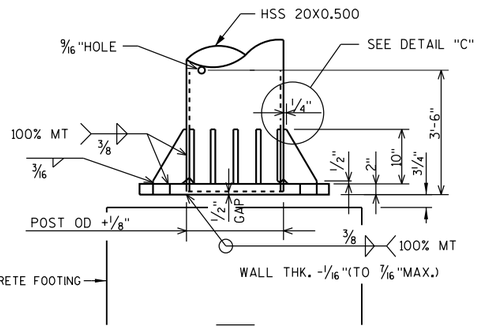


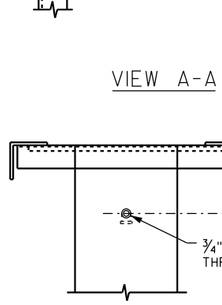




UPPER JUNCTION

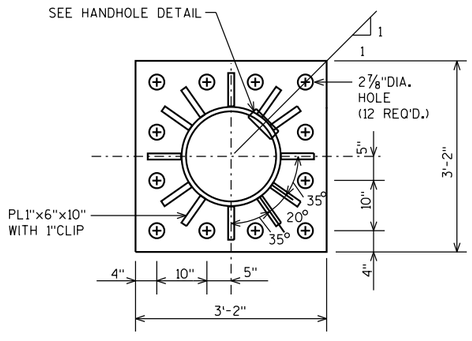




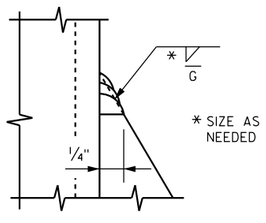


VIEW A-A

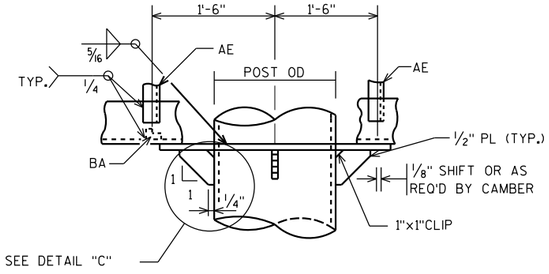
VIEW B-B
(TYPE 'E' POSTS)

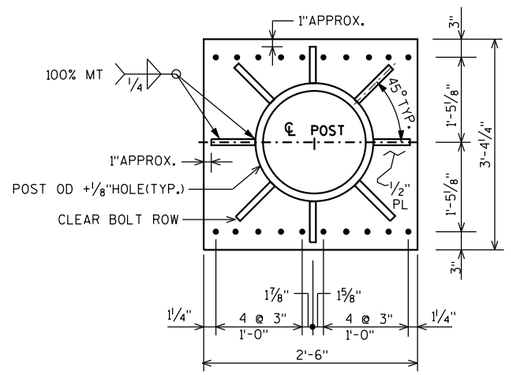


PLAN & ELEVATION - BASEPLATE



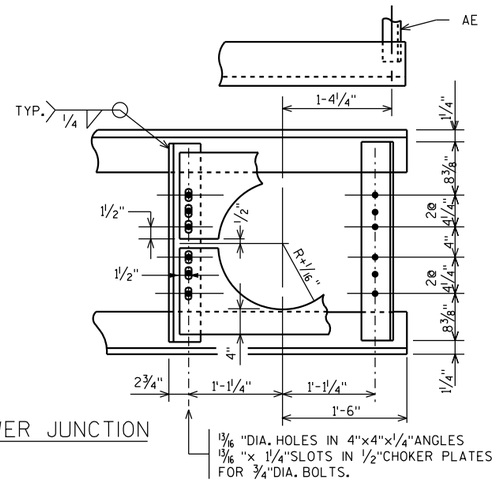
DETAIL "C"





CANTILEVER TRUSS

NOTE:
CHOKER PLATES AND HANDHOLE COVERS SHALL BE GALVANIZED SEPARATELY.



LOWER JUNCTION

SIMPLE TRUSS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

DRAWN BY MES | PLANS CK'D. MAH

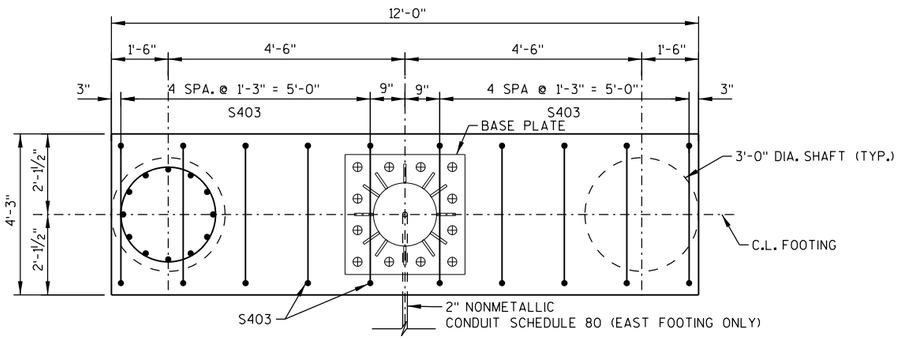
TRUSS POST CONNECTION & BASE PLATES

SHEET 8 OF 9
272

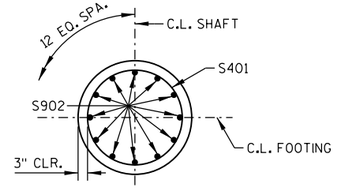
8

8

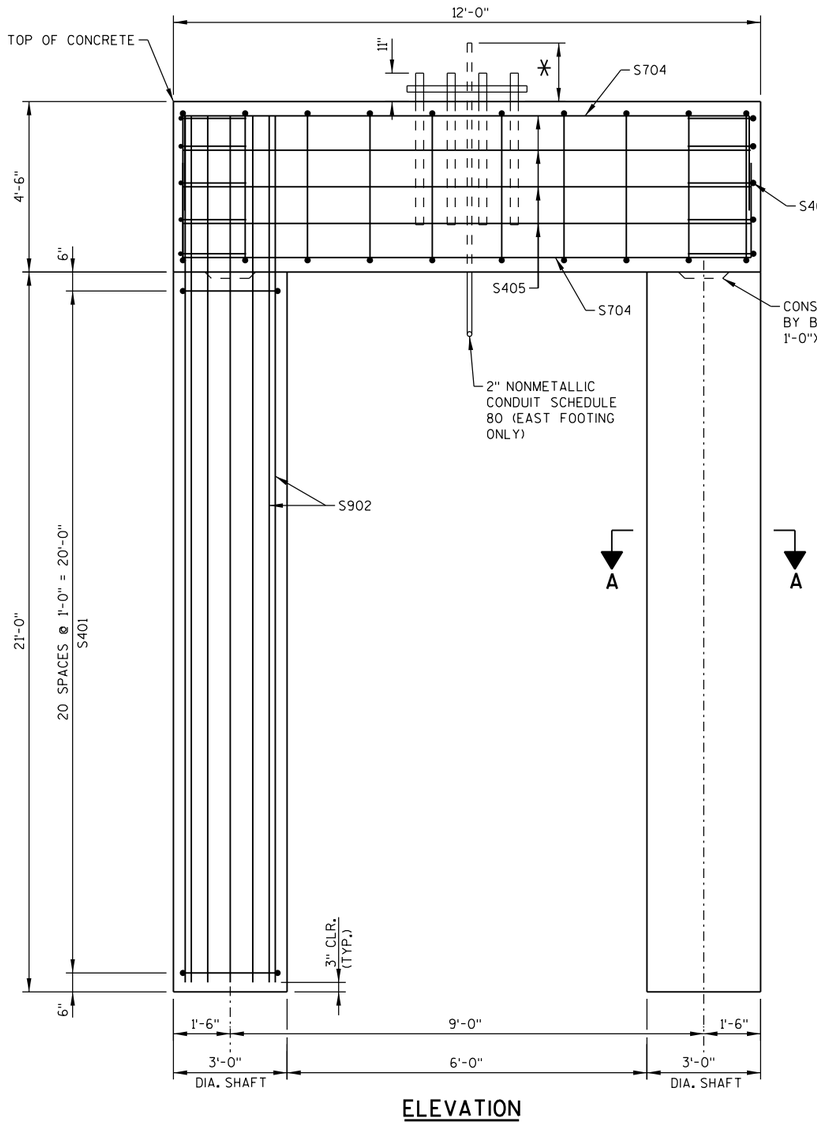
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FILE NAME: P:\60483055\v400_Technical\V38_Struct\Bridge dgn\09_foundation.dgn
PLOT DATE: 1/9/2017 PLOT TIME: 3:41:22 PM
BATCH PRINT SHEET 9 OF 9



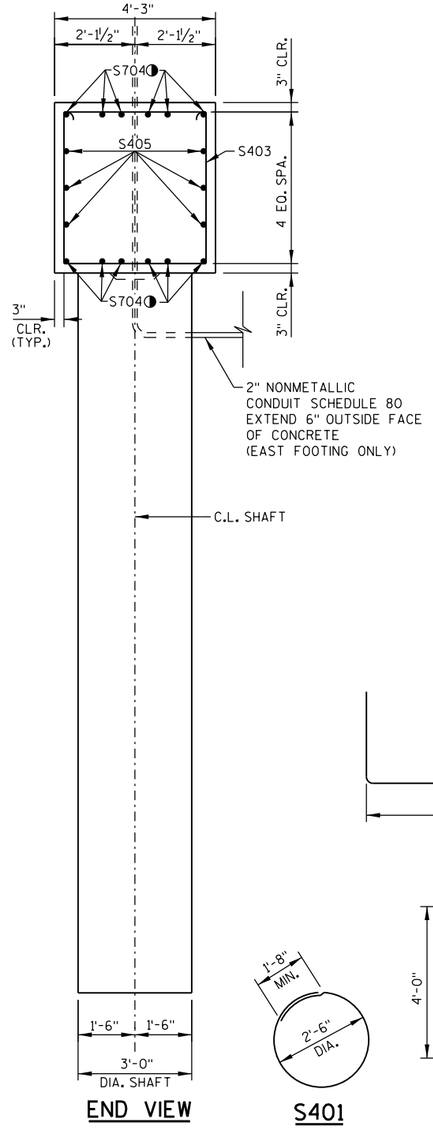
PLAN



SECTION A-A



ELEVATION



END VIEW

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS					TOTAL WEIGHT = 2,890 LBS
S401	42	9-6	X		DRILLED SHAFT HORIZONTAL
S902	24	24-10			DRILLED SHAFT VERTICAL
S403	10	16-0	X		FOOTING VERTICAL
S704	12	16-1	X		FOOTING HORIZONTAL
S405	6	11-6			FOOTING HORIZONTAL
S406	10	6-10	X		FOOTING HORIZONTAL

NOTE: REINFORCEMENT SHOWN IS FOR ONE FOOTING

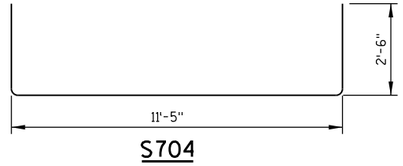
NOTES & LEGEND

PROVIDE A ¾" CHAMFER ON ALL EXPOSED CONCRETE EDGES.

1 - 2" NONMETALLIC CONDUIT SCHEDULE 80 SHALL BE INCLUDED WITH THE BID ITEM "SIGN SUPPORT CONCRETE MASONRY."

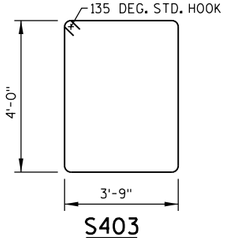
✳ EXTEND 2" NONMETALLIC CONDUIT SCHEDULE 80 TO THE BOTTOM OF THE HANDHOLE, 1'-6" +/-

◑ SPACE TO MISS VERTICAL SHAFT REINFORCEMENT, CONDUIT AND ANCHORS

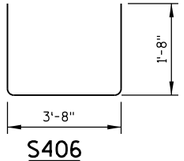


S704

S401



S403



S406

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-18-118

DRAWN BY MES | PLANS CK'D. MAH

FOUNDATION DETAILS

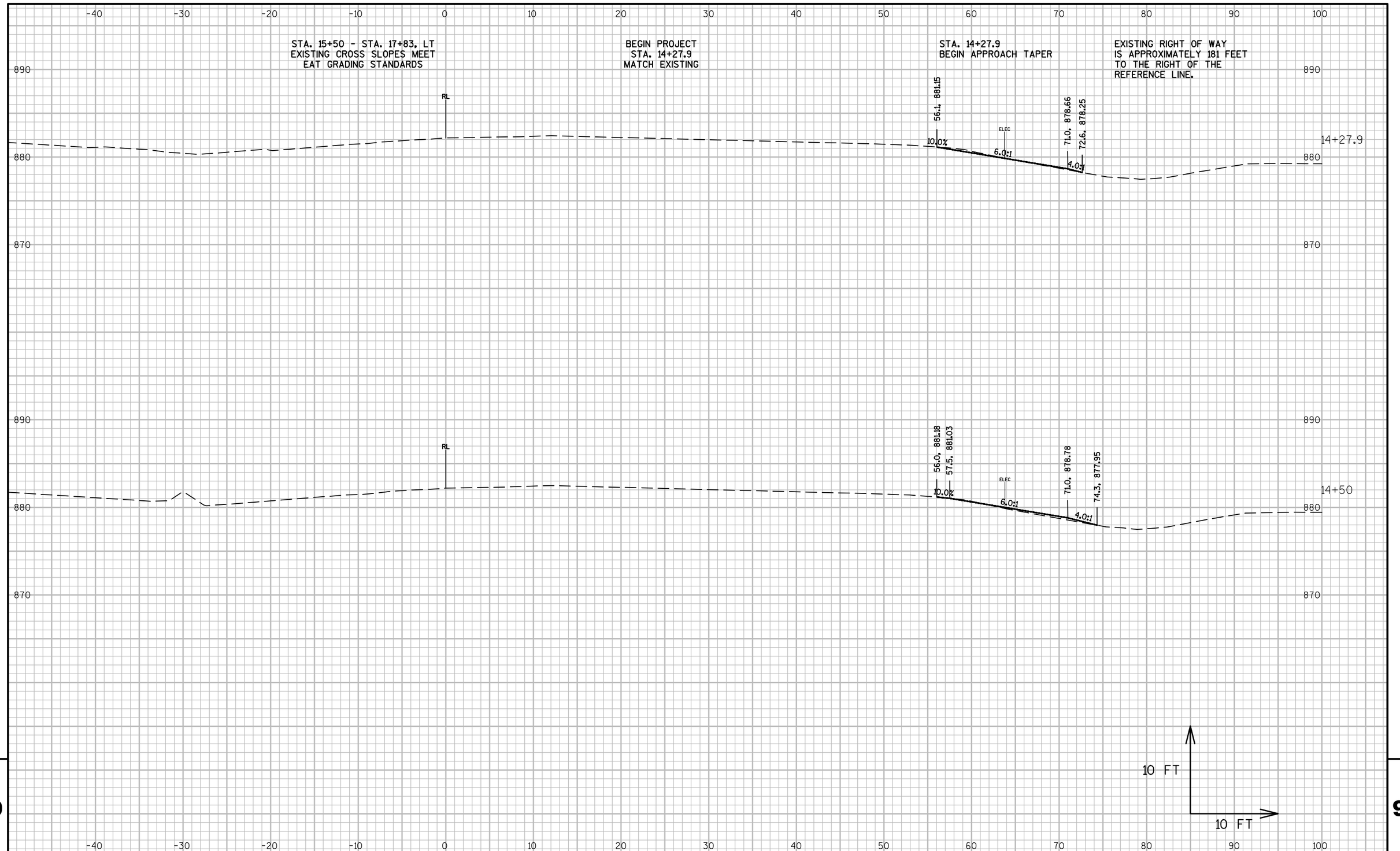
SHEET 9 OF 9
273

STA. 15+50 - STA. 17+83. LT
EXISTING CROSS SLOPES MEET
EAT GRADING STANDARDS

BEGIN PROJECT
STA. 14+27.9
MATCH EXISTING

STA. 14+27.9
BEGIN APPROACH TAPER

EXISTING RIGHT OF WAY
IS APPROXIMATELY 181 FEET
TO THE RIGHT OF THE
REFERENCE LINE.

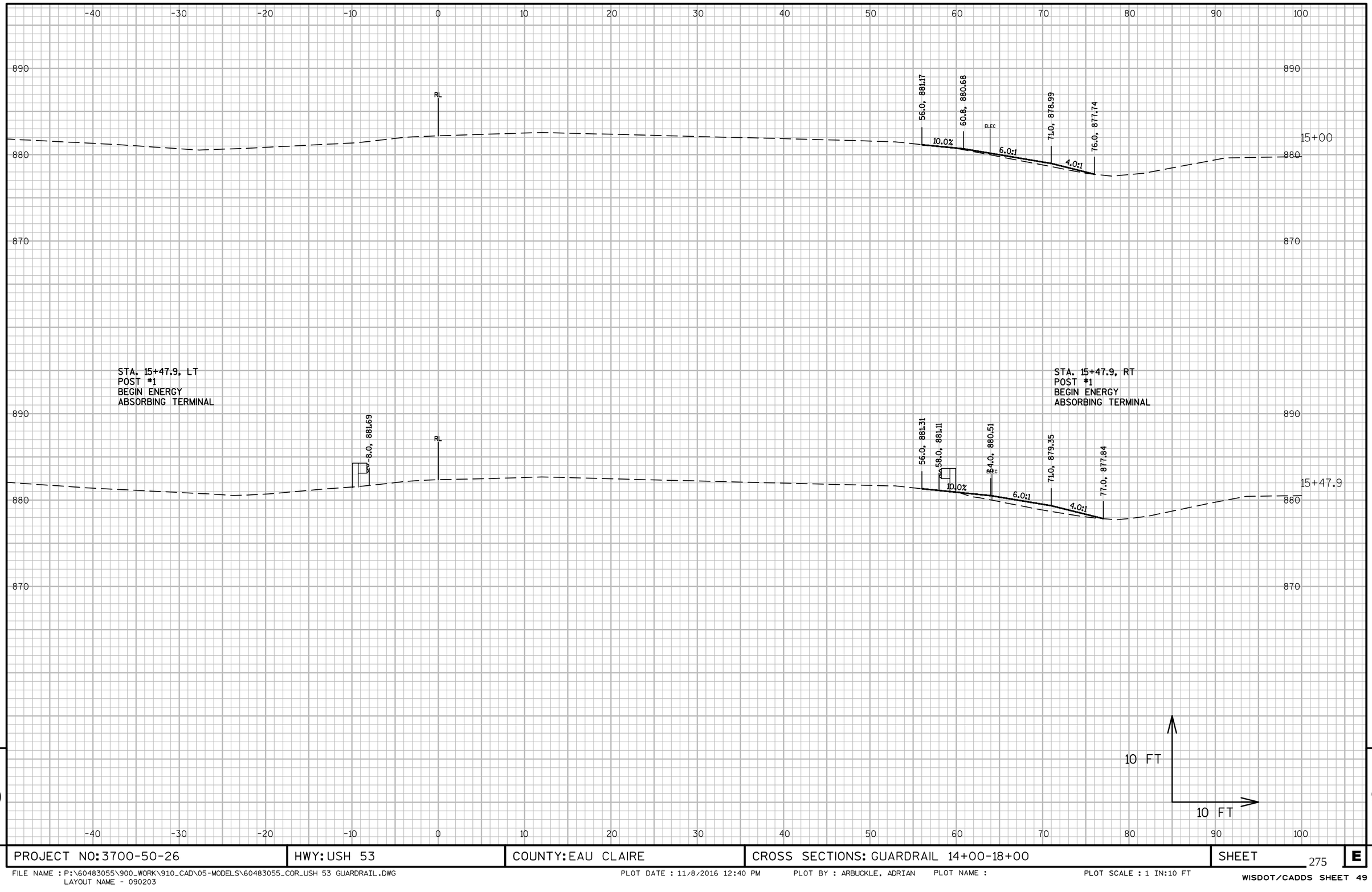


9

9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 274 E

FILE NAME : \\USMSN1FS001\PROD\DATA\PROJECTS\60483055\900_WORK\910_CAD\05-MODELS\60483055_COR_USH 53 GUARDRAIL_RECOVER.DWG
LAYOUT NAME - 090202
PLOT DATE : 11/28/2016 4:17 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

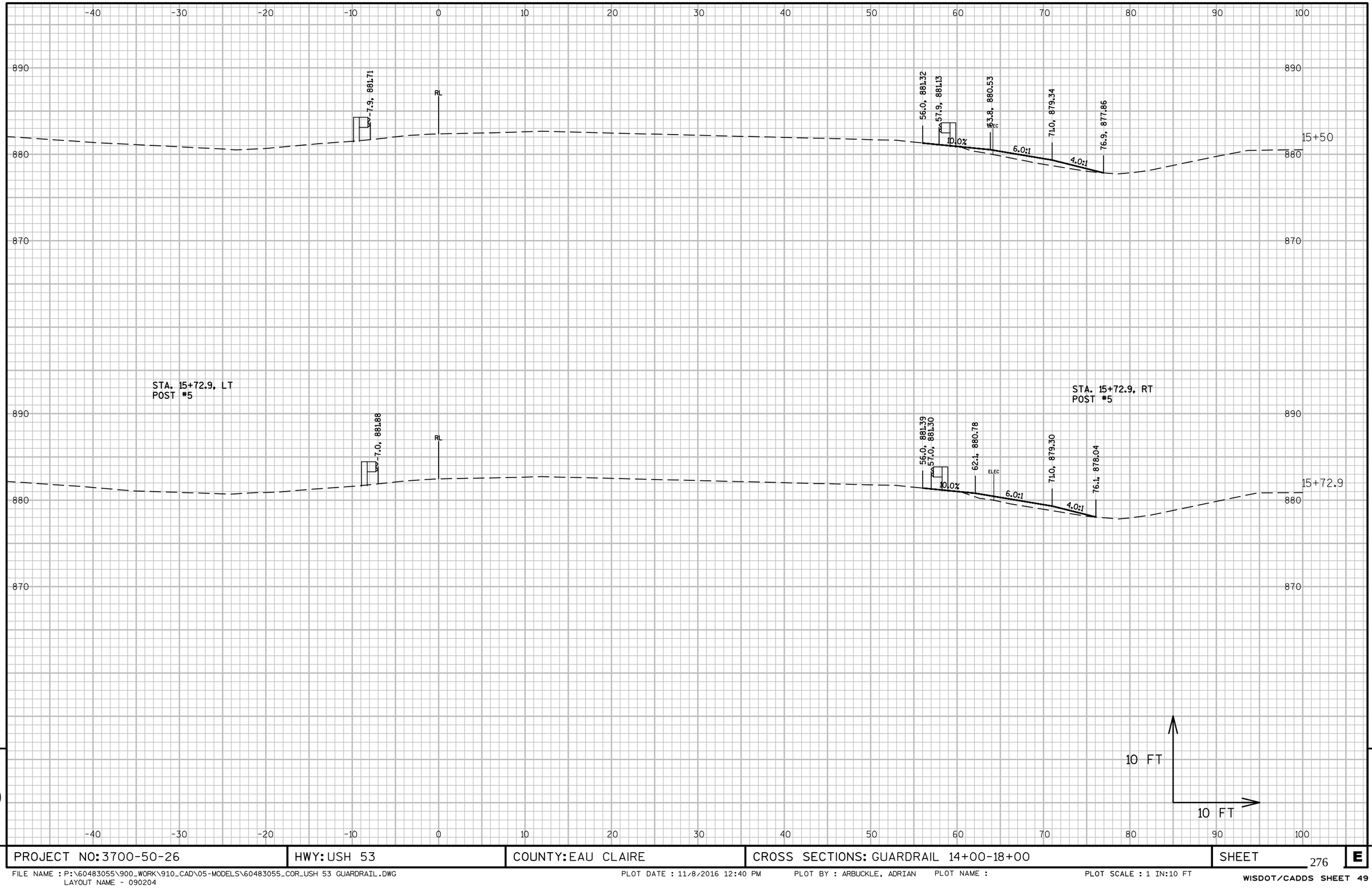


PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 275	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\60483055_COR_USH 53 GUARDRAIL.DWG
LAYOUT NAME - 090203

PLOT DATE : 11/8/2016 12:40 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 276	E

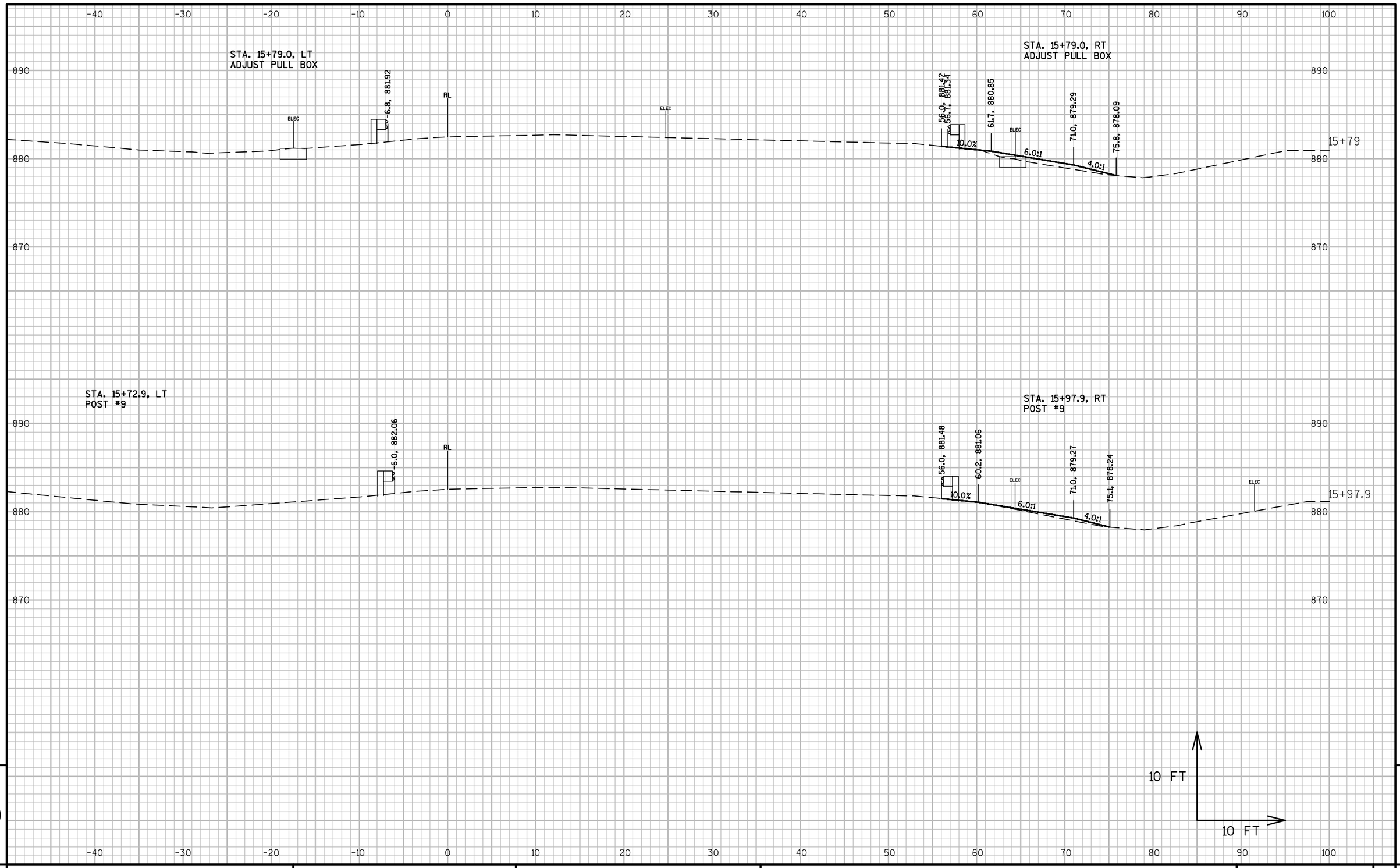
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LAYOUT NAME - 090204
PLOT DATE : 11/8/2016 12:40 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

STA. 15+79.0, LT
ADJUST PULL BOX

STA. 15+79.0, RT
ADJUST PULL BOX

STA. 15+72.9, LT
POST #9

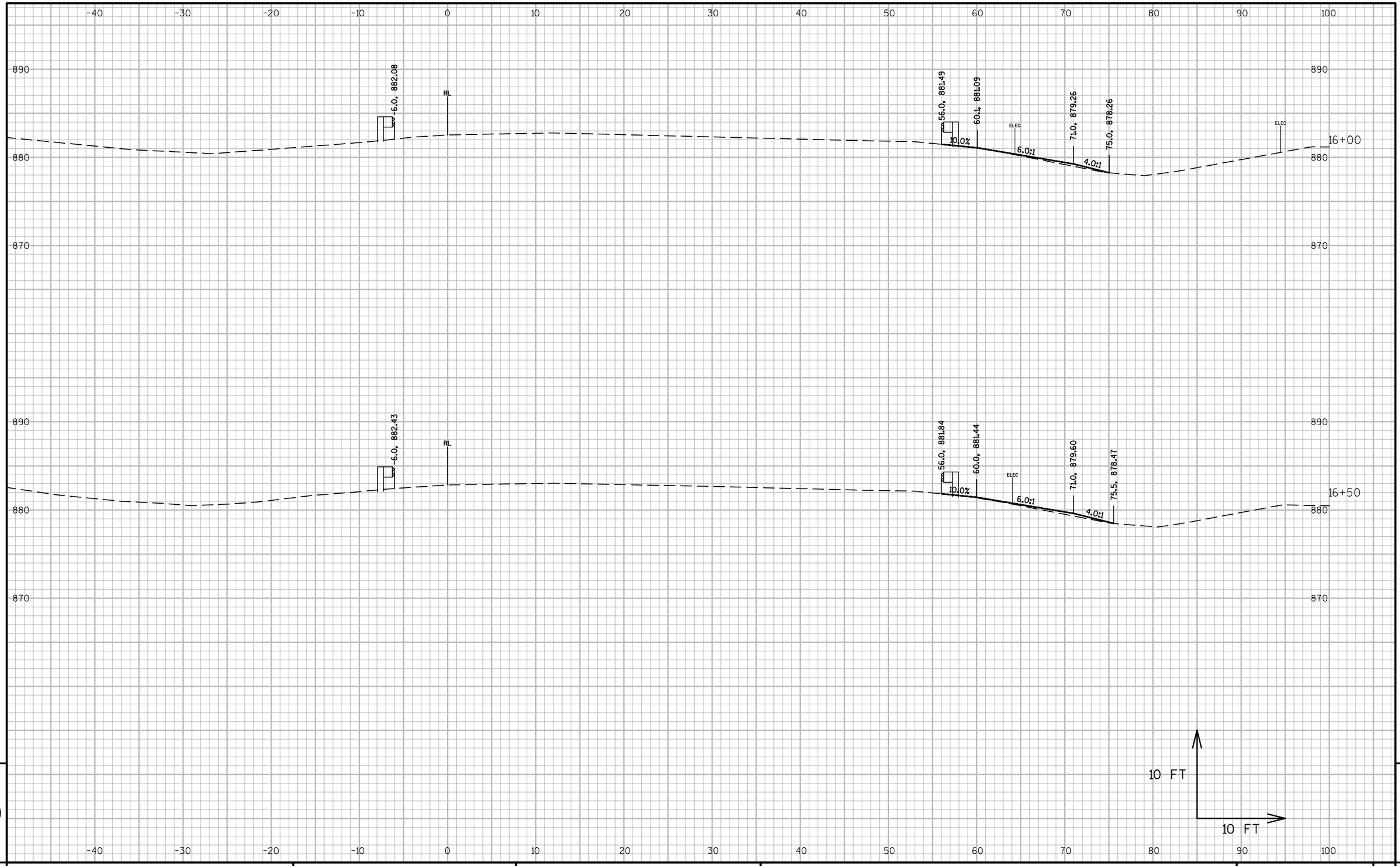
STA. 15+97.9, RT
POST #9



9

9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 277	E



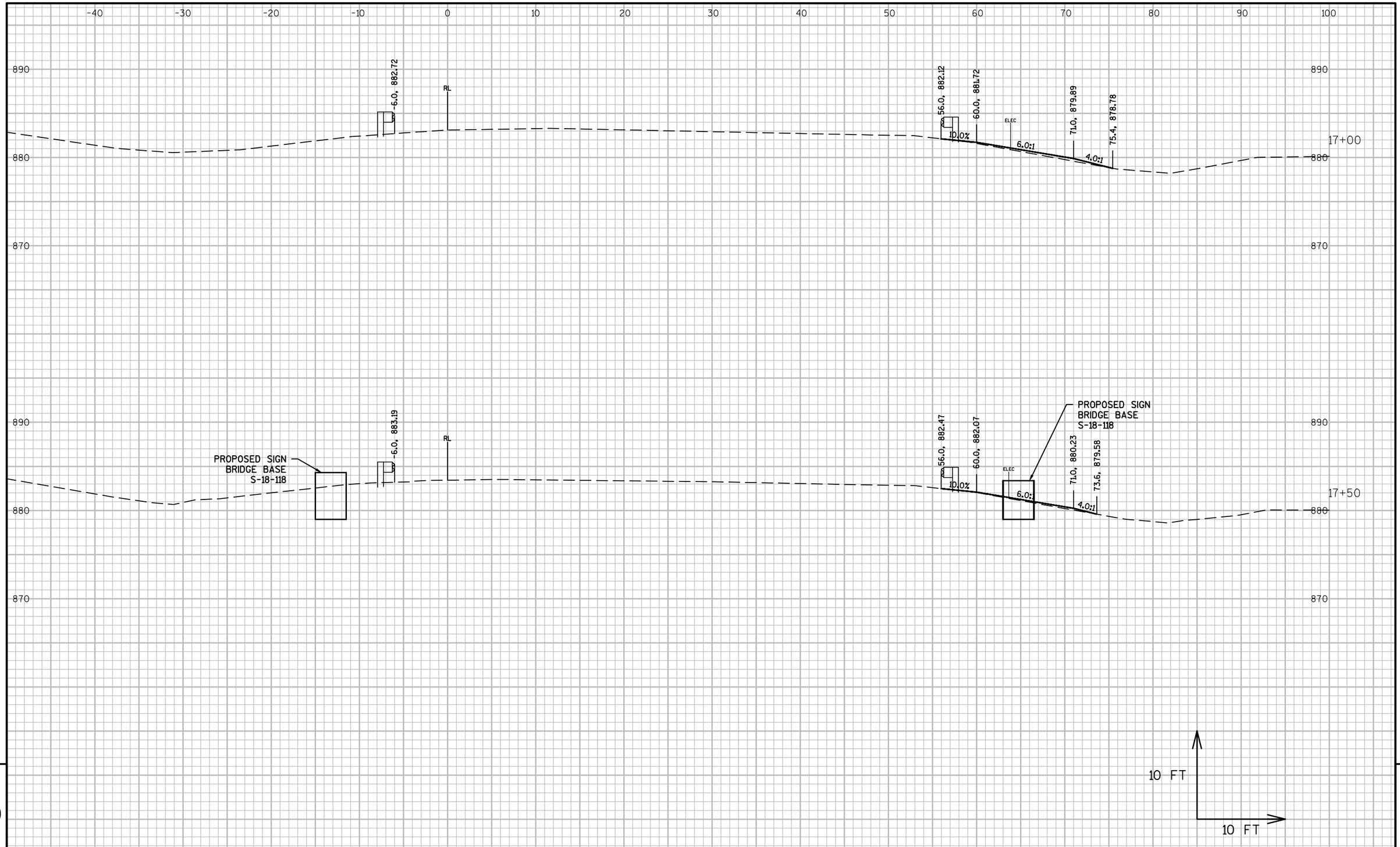
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9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 278	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\60483055_COR_USH 53 GUARDRAIL.DWG
LAYOUT NAME - 090206

PLOT DATE : 11/8/2016 12:42 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 279	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\60483055_COR_USH 53 GUARDRAIL.DWG
LAYOUT NAME - 090207

PLOT DATE : 11/8/2016 12:43 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

STA. 17+54.0
S-18-118

PROPOSED SIGN
BRIDGE BASE
S-18-118

-6.0, 883.23

RL

56.0, 882.50

60.0, 882.10

ELEC

10.0%

6.0:1

4.0:1

71.0, 880.26

73.5, 879.64

PROPOSED SIGN
BRIDGE BASE
S-18-118

17+54

STA. 17+63.5, LT
END MGS GUARDRAIL 3
1-MGS GUARDRAIL TERMINAL TYPE 2 REQ.

-6.0, 883.33

RL

56.0, 882.58

60.0, 882.18

ELEC

10.0%

6.0:1

4.0:1

71.0, 880.34

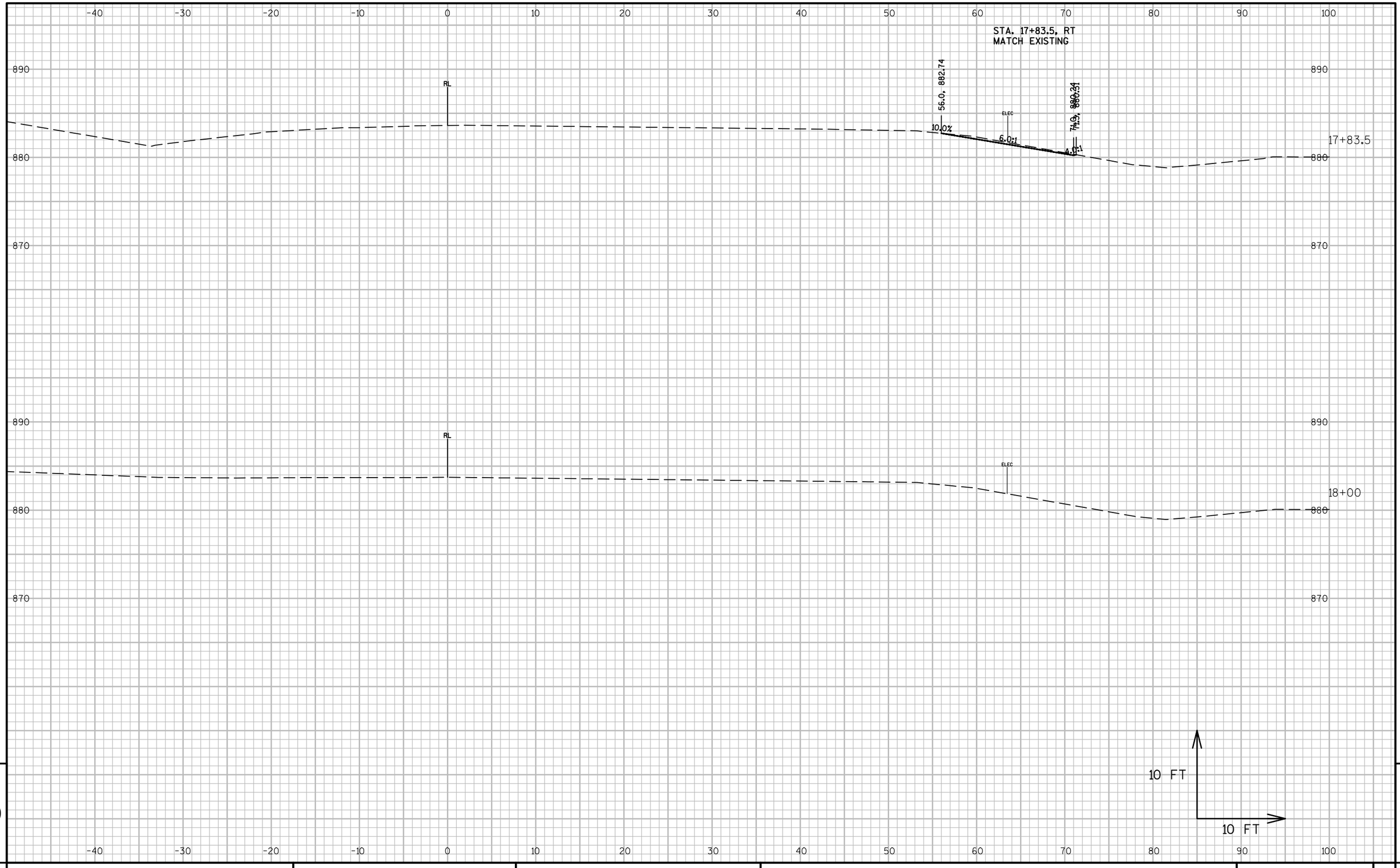
73.3, 879.76

17+63.5

STA. 17+63.5, RT
END MGS GUARDRAIL 3
1-MGS GUARDRAIL TERMINAL TYPE 2 REQ'D

10 FT

10 FT



9

9

PROJECT NO: 3700-50-26	HWY: USH 53	COUNTY: EAU CLAIRE	CROSS SECTIONS: GUARDRAIL 14+00-18+00	SHEET 281	E

FILE NAME : P:\60483055\900_WORK\910_CAD\05-MODELS\60483055_COR_USH 53 GUARDRAIL.DWG
LAYOUT NAME - 090209

PLOT DATE : 11/8/2016 12:44 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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