

MAD

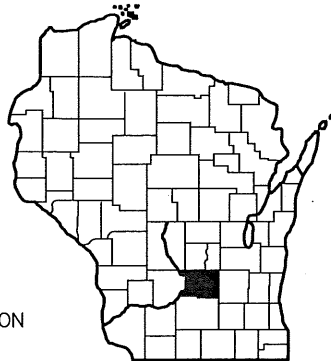
WITH: N/A

PROJECT ID: 1010-02-68

ORDER OF SHEETS
MAR 13

Section No. 1	Title
Section No. 2	General Notes & Typical Sections
Section No. 2	Construction Details
Section No. 2	Construction Staging & Traffic Control Plan
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 5	Plan Layout
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans

TOTAL SHEETS = 24



01

DESIGN DESIGNATION

A.D.T. (2011) = 53,000
A.D.T. (2031) = 75,000
D.H.V. (2031) = 16.8%
D.D. = 58/42
T. = 21.0%
DESIGN SPEED = 70
ESAL'S = 31,587,100

CONVENTIONAL SYMBOLS

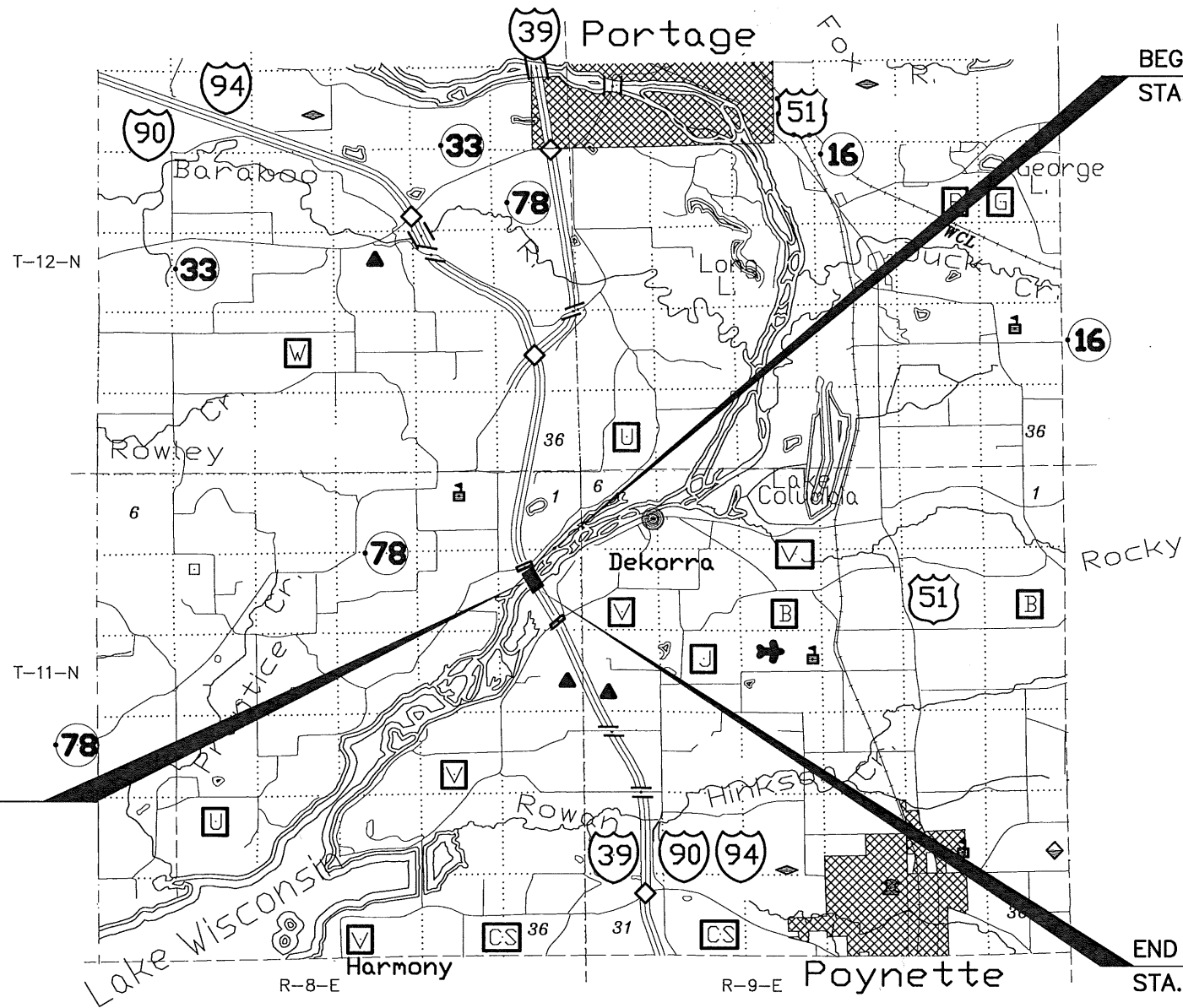
COUNTY LINE	---
CORPORATE LIMITS	////
PROPERTY LINE	----
LOT LINE	----
LIMITED EASEMENT	----
EXISTING RIGHT OF WAY	----
NEW RIGHT OF WAY	----
REFERENCE LINE	----
SLOPE INTERCEPT	----
ORIGINAL GROUND	----
MARSH OR ROCK PROFILE	----
CULVERT IN PLACE	----
CULVERT REQUIRED	----
CULVERT REQUIRED (Profile)	----
COMBUSTIBLE FLUIDS (UNDER PRESSURE)	CAUTION
UNDERGROUND UTILITIES	----
GAS	G
ELECTRIC	E
TELEPHONE	T
SERVICE PEDESTAL	⊗
CABLE MARKER	P
POWER POLE	⊕
TELEPHONE POLE	⊖
RAILROADS	++++
MARSH	----
WOODED AREA	----

STRUCTURES

B-11-22, E.B. &
B-11-23, W.B.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
MADISON - PORTAGE
(WISCONSIN RIVER BRIDGES B-11-22 & B-11-23)
IH 39
COLUMBIA COUNTY

STATE PROJECT NUMBER
1010-02-68



LAYOUT
SCALE 0 1 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.00 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), COLUMBIA COUNTY.

STATE PROJECT

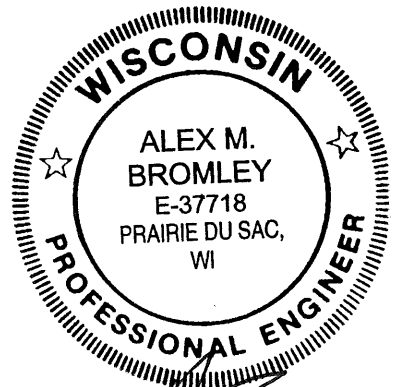
1010-02-68

FEDERAL PROJECT

PROJECT

CONTRACT

ORIGINAL PLANS PREPARED BY
WESTBROOK ASSOCIATED
ENGINEERS, INC.
SPRING GREEN, WISCONSIN 53588



10/29/12
(Date) (Signature)

WESTBROOK
Associated Engineers, Inc.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588
PHONE (608) 588-7866
FAX (608) 588-7954

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor
Designer WESTBROOK ASSOCIATED ENGINEERS
Project Manager BILL STROBEL
Regional Examiner
Regional Supervisor CHRISTOPHER HODGES
C.O. Examiner JE

APPROVED FOR THE DEPARTMENT
DATE 10/14/12 (Signature)

E

STANDARD ABBREVIATIONS

AADT	AVERAGE ANNUAL DAILY TRAFFIC	L	LENGTH OF CURVE	REINF.	REINFORCED
AGG.	AGGREGATE	L.F.	LINEAR FEET	REQ'D.	REQUIRED
B.A.D.	BASE AGGREGATE DENSE	L.H.F.	LEFT HAND FORWARD	RT.	RIGHT
B.M.	BENCH MARK	L.S.	LUMP SUM	R/W	RIGHT-OF-WAY
☉ OR CL	CENTERLINE	LT.	LEFT	RD.	ROAD
CR.	CRUSHED	MAX.	MAXIMUM	RDWY.	ROADWAY
C.T.H.	COUNTY TRUNK HIGHWAY	MIN.	MINIMUM	S.	SOUTH
CWT.	HUNDREDWEIGHT	N.	NORTH	SE	SOUTHEAST
C.Y.	CUBIC YARD	NOR.	NORMAL	SHRK.	SHRINKAGE
D.H.	DOUBLE HEADED	PAV'T.	PAVEMENT	S.R.	SIDE ROAD
D.H.V.	DESIGN HOURLY VOLUME	P.C.	POINT OF CURVE	STD.	STANDARD
DIR.	DIRECTED	P.I.	POINT OF INTERSECTION	S.T.H.	STATE TRUNK HIGHWAY
E.	EAST	P.E.	PRIVATE ENTRANCE	STA.	STATION
COR.	CORNER	P.K.	PARKER-KALON NAIL	S.Y.	SQUARE YARD
EL. OR ELEV.	ELEVATION	PL OR PL	PROPERTY LINE	T	TANGENT LENGTH OF CURVE
F.E.	FIELD ENTRANCE	P.P.	POWER POLE	TL	TRANSIT LINE
FT.	FOOT (FEET)	PROJ.	PROJECT	V	DESIGN SPEED
GAL.	GALLON	P.T.	POINT OF TANGENCY	V.C.	VERTICAL CURVE
H.W.	HIGH WATER	PVMT.	PAVEMENT	VAR.	VARIABLE
IN.	INCHES	R.	RADIUS	W.	WEST
K	SIGHT DISTANCE	R.R.	RAILROAD		

WisDNR LIAISON

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711

ATTN: RUSS ANDERSON
PHONE: (608) 275-3467
russel.anderson@wisconsin.gov

GENERAL NOTES

THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

BEARINGS ORIENTED TO THE WISCONSIN COUNTY COORDINATES SYSTEM.

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

THE CONTRACTOR SHALL CALL DIGGERS HOTLINE BEFORE STARTING ANY WORK.

LOCATION, NUMBER AND SPACING OF SIGNS AND DEVICES, AS SHOWN ON THE PLANS, SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

PRIOR TO LANE CLOSURE THE CONTRACTOR SHALL PROVIDE THE ENGINEER, THE SHERIFF AND THE STATE HIGHWAY PATROL WITH THE NAME AND NUMBER OF A LOCAL PERSON TO CONTACT IN CASE OF EMERGENCY.

ALL ACCESS ONTO AND OFF OF THE PROJECT LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE AT THE CONTRACTOR'S EXPENSE.

CONSULTANT LIAISON

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 E. HOXIE STREET
P.O. BOX 429
SPRING GREEN, WI 53588

ATTN: ALEX BROMLEY, P.E.
PHONE: (608) 219-0718
abromley@westbrookeng.com

UTILITIES

AT&T Legacy-Communication Live
866 Rock Creek Rd
Plano, IL 60545

ATTN: Carl Donahue
(630) 552-9785
cdonahue@att.com

Wisconsin DOT RWIS Program - Communication Tower
Rm 501 P.O. Box 7986
Madison, WI 53707

ATTN: Mike Adams
(608) 266-5004
michael.adams@dot.wi.gov

Merrimac Communications Ltd-Communication Line
327 Pallisades St
Merrimac, WI 53561

ATTN: Kirk Olson
(608) 493-2291
kolson@merr.com

CenturyLink - Communication Line
333 N Front St
P.O. Box 4800
La Crosse, WI 54602

ATTN: Steve Blado
(608) 796-5543
steve.blado@centurylink.com

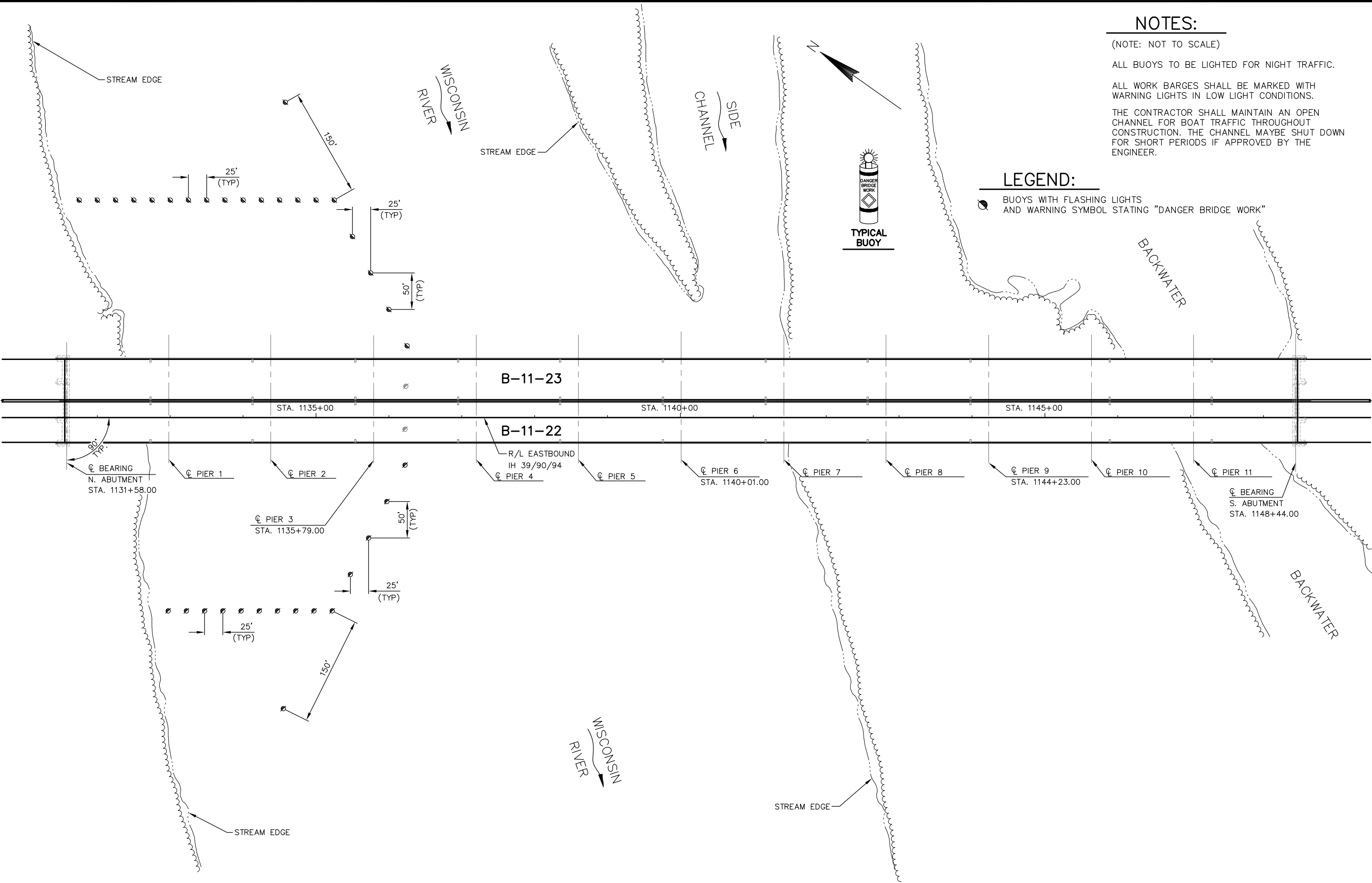
Frontier Communications of WI LLC - Communication Line
100 Communication Dr
Sun Prairie, WI 53590

ATTN: Walter Wright
(608) 837-1494
walter.wright@ftr.com



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

** DENOTES UTILITIES THAT
ARE NOT DIGGERS HOTLINE MEMBERS



DATE 13DEC12		E S T I M A T E O F Q U A N T I T I E S			
LINE					1010-02-68
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0700.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM (STATION) 01. STA. 1140+00 EB	LS	1.000	1.000
0020	203.0700.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM (STATION) 02. STA. 1140+00 WB	LS	1.000	1.000
0030	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-11-22	LS	1.000	1.000
0040	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 02. B-11-23	LS	1.000	1.000
0050	206.5000	COFFERDAMS (STRUCTURE) 01. B-11-0022	LS	1.000	1.000
0060	206.5000	COFFERDAMS (STRUCTURE) 02. B-11-0023	LS	1.000	1.000
0070	210.0100	BACKFILL STRUCTURE	CY	360.000	360.000
0080	502.0100	CONCRETE MASONRY BRIDGES	CY	114.000	114.000
0090	502.1100	CONCRETE MASONRY SEAL	CY	298.000	298.000
0100	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	800.000	800.000
0110	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	10,800.000	10,800.000
0120	509.1500	CONCRETE SURFACE REPAIR	SF	8,592.000	8,592.000
0130	606.0300	RIPRAP HEAVY	CY	519.000	519.000
0140	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1010-02-68	EACH	1.000	1.000
0150	619.1000	MOBILIZATION	EACH	1.000	1.000
0160	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1010-02-68	EACH	1.000	1.000
0170	643.0300	TRAFFIC CONTROL DRUMS	DAY	1,120.000	1,120.000
0180	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	10.000	10.000
0190	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	20.000	20.000
0200	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	160.000	160.000
0210	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	40.000	40.000
0220	643.0900	TRAFFIC CONTROL SIGNS	DAY	640.000	640.000
0230	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	684.000	684.000
0240	SPV.0045	SPECIAL 01. BUOYS WATERWAY	DAY	4,440.000	4,440.000
0250	SPV.0105	SPECIAL 01. CATWALK REMOVAL	LS	1.000	1.000
0260	SPV.0165	SPECIAL 01. FIBER WRAP PIER REINFORCING	SF	5,764.000	5,764.000
0270	SPV.0165	SPECIAL 02. POLYUREA COATING	SF	920.000	920.000
0280	SPV.0165	SPECIAL 03. CONCRETE SURFACE REPAIR SPECIAL	SF	5,764.000	5,764.000

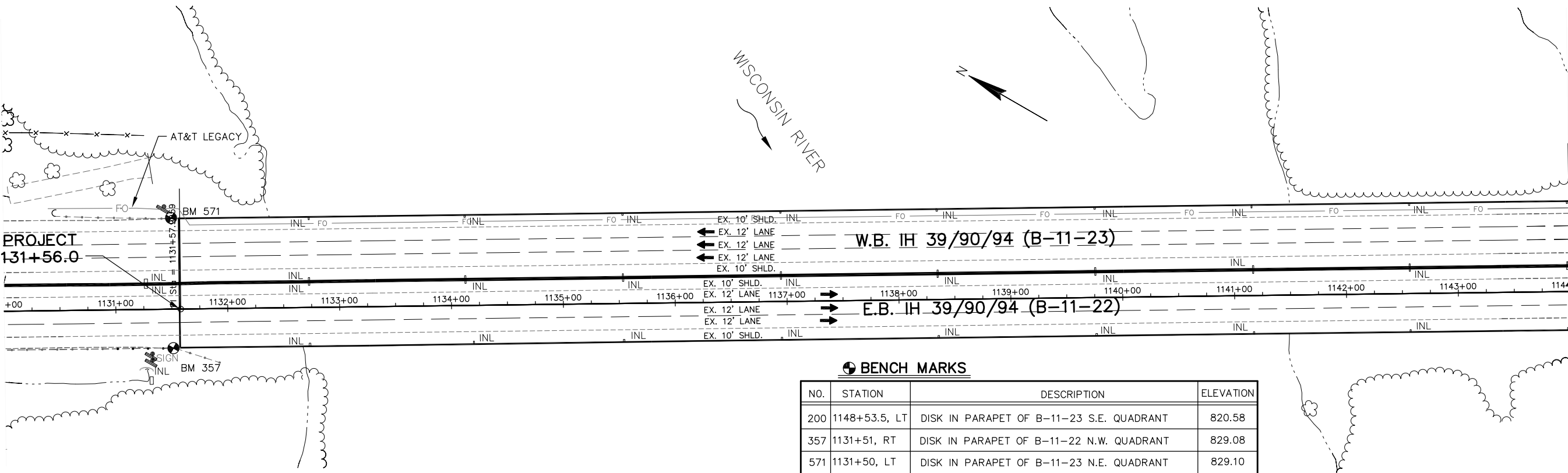
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL

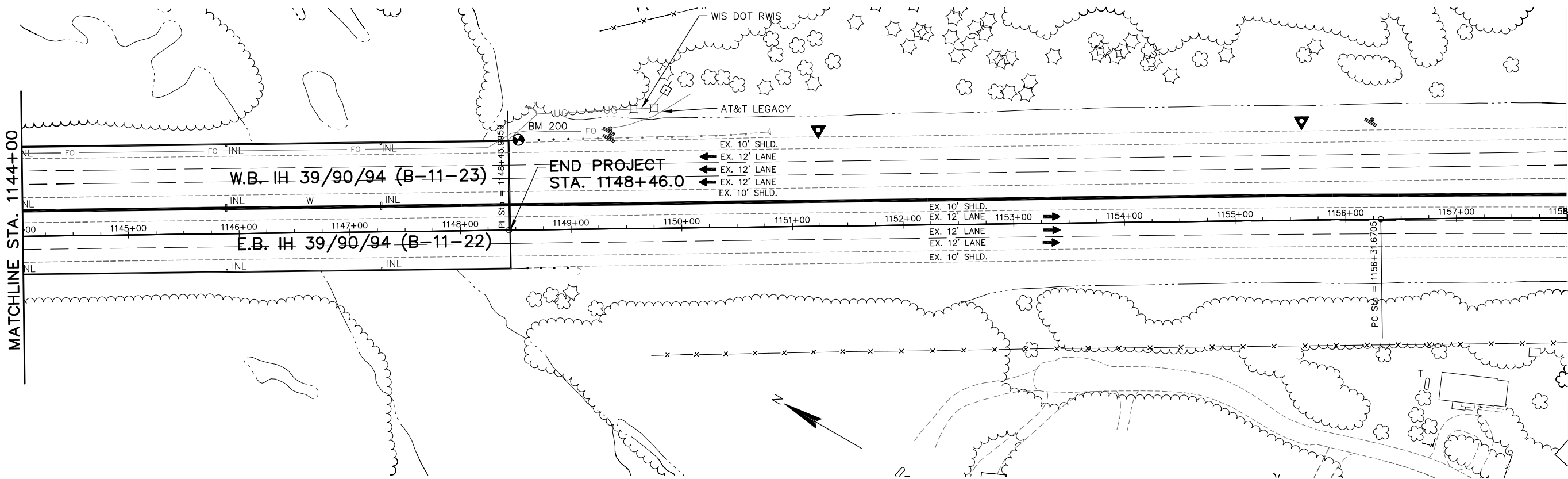
				643.0300		643.0420		643.0705		643.0715		643.0800		643.0900	
				DRUMS		BARRICADES		WARNING LIGHTS		WARNING LIGHTS		ARROW BOARDS		SIGNS	
				(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)	(NO.)	(DAYS)
1093+50	–	1153+50	IH 39, EB, SHOULDER CLOSURE	28	280	0	0	0	0	0	0	1	10	8	280
1126+50	–	1186+50	IH 39, WB, SHOULDER CLOSURE	28	280	0	0	0	0	0	0	1	10	8	280
1063+50	–	1149+50	IH 39, EB, LANE CLOSURE	56	280	1	5	2	10	16	80	2	10	8	40
1130+50	–	1216+50	IH 39, WB, LANE CLOSURE	56	280	1	5	2	10	16	80	2	10	8	40
TOTALS				1120		10		20		160		40		640	

BUOYS WATERWAY

LOCATION	QTY.	SPV.0045.01 BUOYS WATERWAY (DAYS)
WISCONSIN RIVER	37	4440
TOTAL		4440



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEVATION
200	1148+53.5, LT	DISK IN PARAPET OF B-11-23 S.E. QUADRANT	820.58
357	1131+51, RT	DISK IN PARAPET OF B-11-22 N.W. QUADRANT	829.08
571	1131+50, LT	DISK IN PARAPET OF B-11-23 N.E. QUADRANT	829.10



Standard Detail Drawing List

15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D27-01	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

LEGEND

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

GENERAL NOTES :

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

GENERAL NOTES CONTINUED:

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

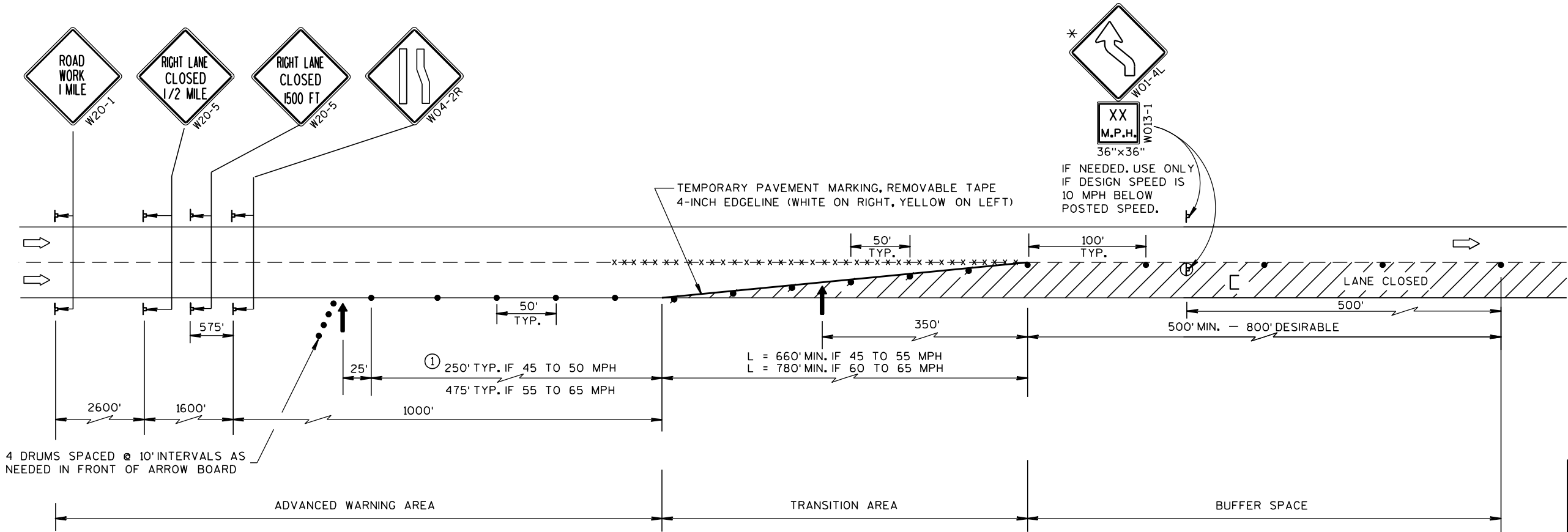
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE /S/ Chester J. Spang
DIRECTOR, OFFICE OF TRAFFIC
FHWA

SYMBOLS

- TRAFFIC CONTROL DRUM
- ┐ POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW
- ⓧ ARROW BOARD IN CAUTION MODE

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.

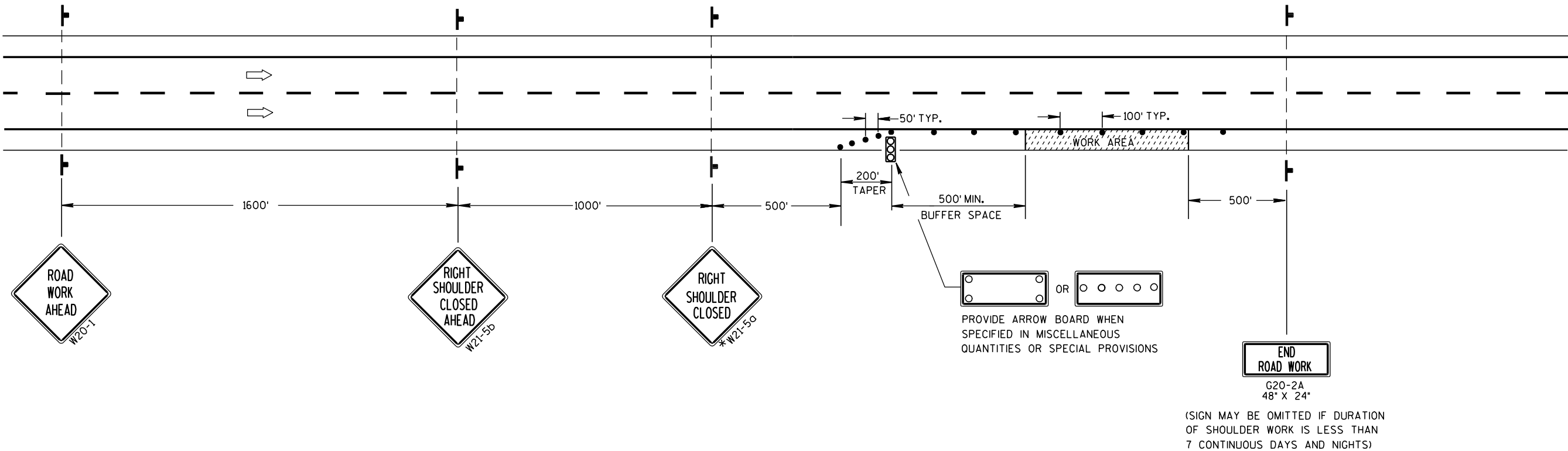
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.



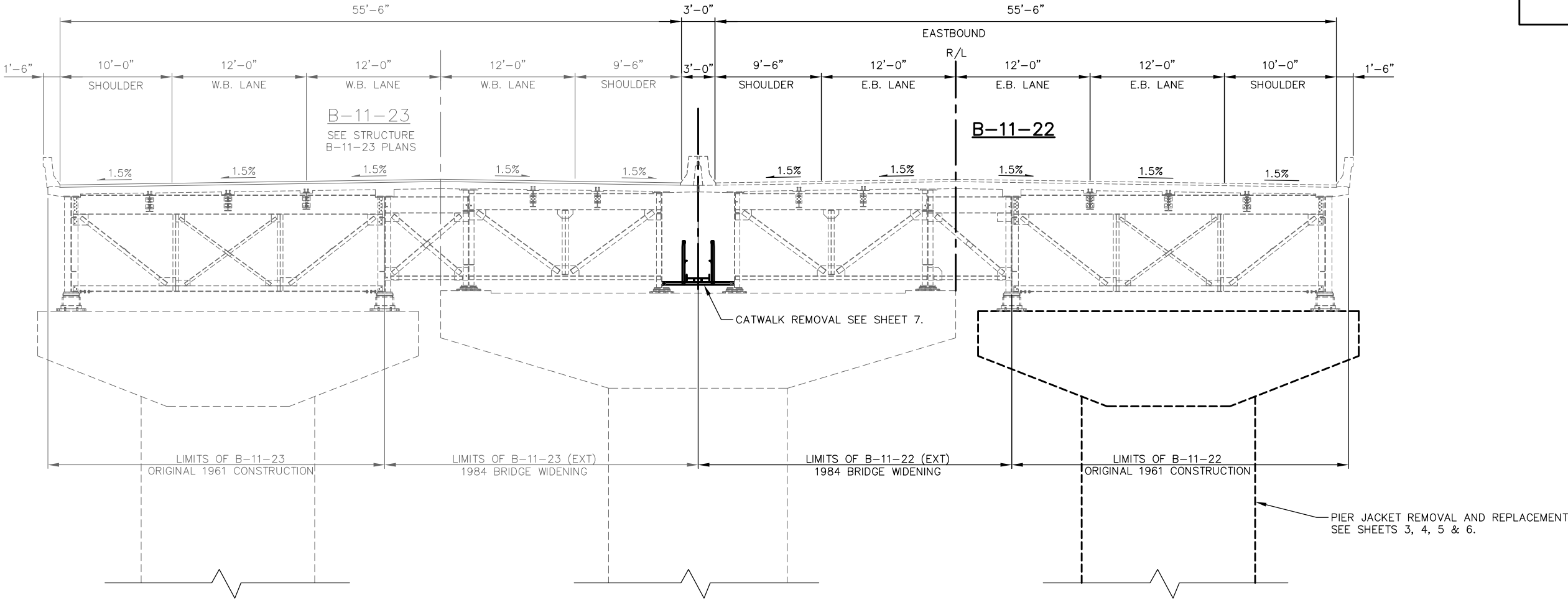
TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



FILE: 01 B-11-22 tsh.dwg
PLOT SCALE:



TYPICAL SECTION THRU IH 39/90/94

LOOKING SOUTH
IN SPAN

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNIT	PIER 3	PIER 4	PIER 5	PIER 9	TOTALS
203.0700.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM (STA. 1140+00)	LS	---	---	---	---	0.5
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-22	LS	---	---	---	---	1
206.5000	COFFERDAMS STRUCTURE B-11-22	LS	---	---	---	---	1
210.0100	BACKFILL STRUCTURE	CY	---	---	---	180	180
502.0100	CONCRETE MASONRY BRIDGES	CY	29	---	---	28	57
502.1100	CONCRETE MASONRY SEAL	CY	79	---	---	70	149
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	200	---	---	200	400
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	2,720	---	---	2,680	5,400
509.1500	CONCRETE SURFACE REPAIR	SF	2,220	---	---	2,076	4,296
606.0300	RIPRAP HEAVY	CY	91	214	214	---	519
SPV.0105.01	CATWALK REMOVAL	LS	---	---	---	---	1
SPV.0165.01	FIBER WRAP PIER REINFORCING	SF	1,499	---	---	1,383	2,882
SPV.0165.02	POLYUREA COATING	SF	230	---	---	230	460
SPV.0165.03	CONCRETE SURFACE REPAIR SPECIAL	SF	1,499	---	---	1,383	2,882
(NON-BID ITEM)	FILLER	SIZE				---	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS WHERE NOTED ARE BASED ON THE EXISTING STRUCTURE PLANS AND ARE AVAILABLE AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION WEBSITE.

FIELD VERIFY ALL PERTINENT DIMENSIONS PRIOR TO ANY FABRICATION.

THE FIRST DIGIT OF A 3 DIGIT MARK OR THE FIRST TWO DIGITS OF A 4 DIGIT MARK SIGNIFIES THE BAR SIZE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND A MINIMUM OF 24 BAR DIAMETERS INTO THE NEW WORK, UNLESS SPECIFIED OTHERWISE.

ALL VOLUME WHICH IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

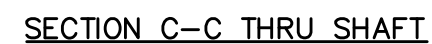
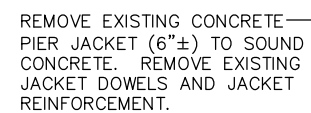
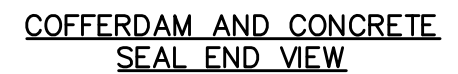
ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

CONSTRUCTION SHALL CONFORM TO THE LATEST WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

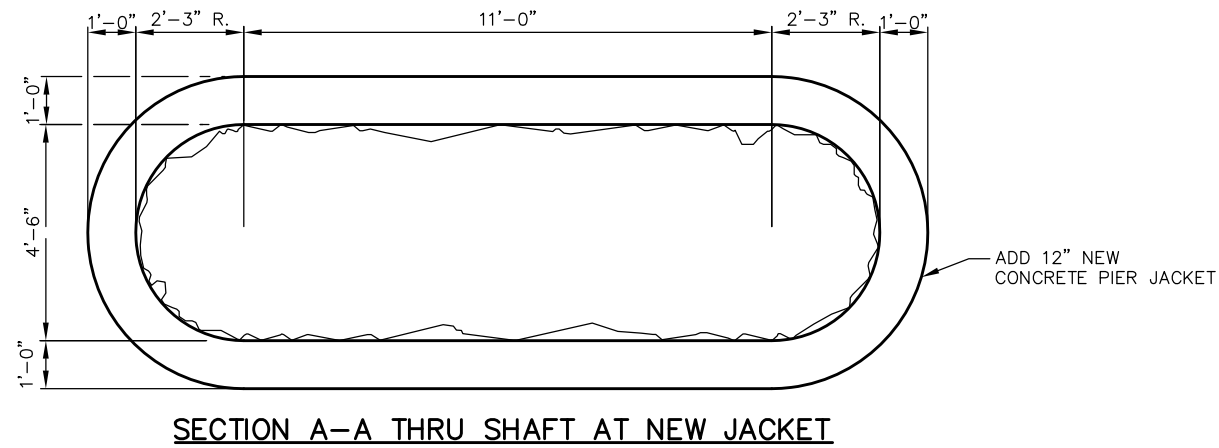
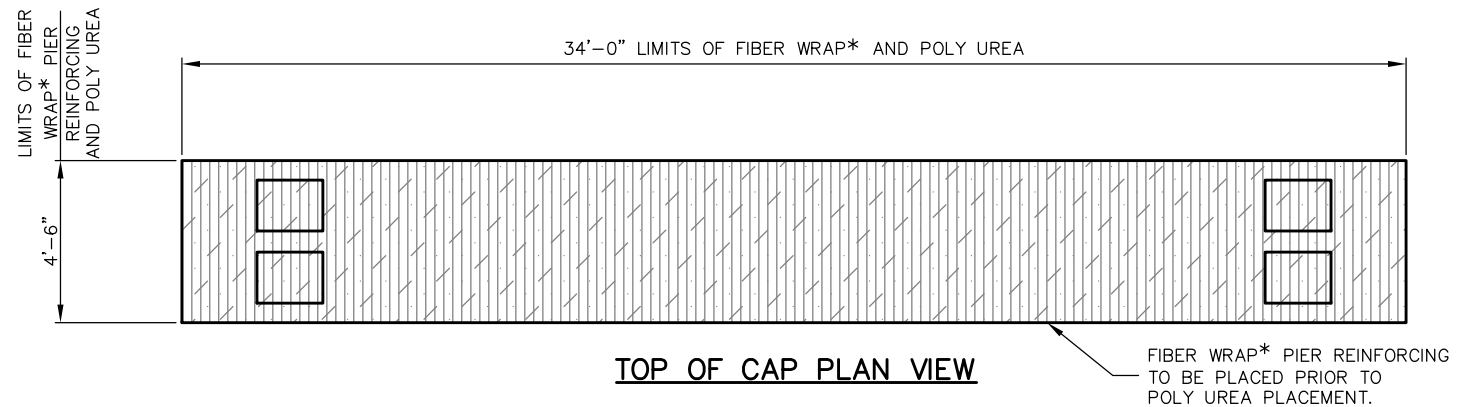
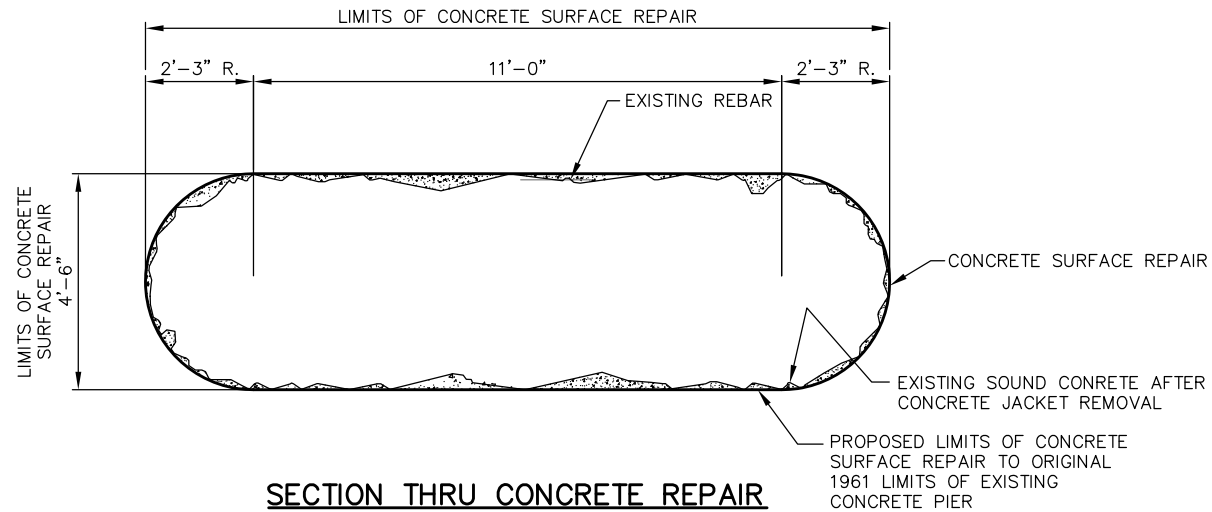
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By		KDK	Plans Checked AMB
CROSS SECTION AND QUANTITIES			SHEET 2 OF 8

 6"± EXISTING CONCRETE PIER
JACKET REMOVAL TO SOUND
CONCRETE. REMOVE ENTIRE
EXISTING JACKET.

IF NEW PIER JACKET CAN BE PLACED IN DRY
CONDITIONS, COFFERDAMS MAY NOT BE
NECESSARY. CONTRACTOR MAY SUBMIT
ALTERNATE EXCAVATION PROCEDURE TO THE
ENGINEER.



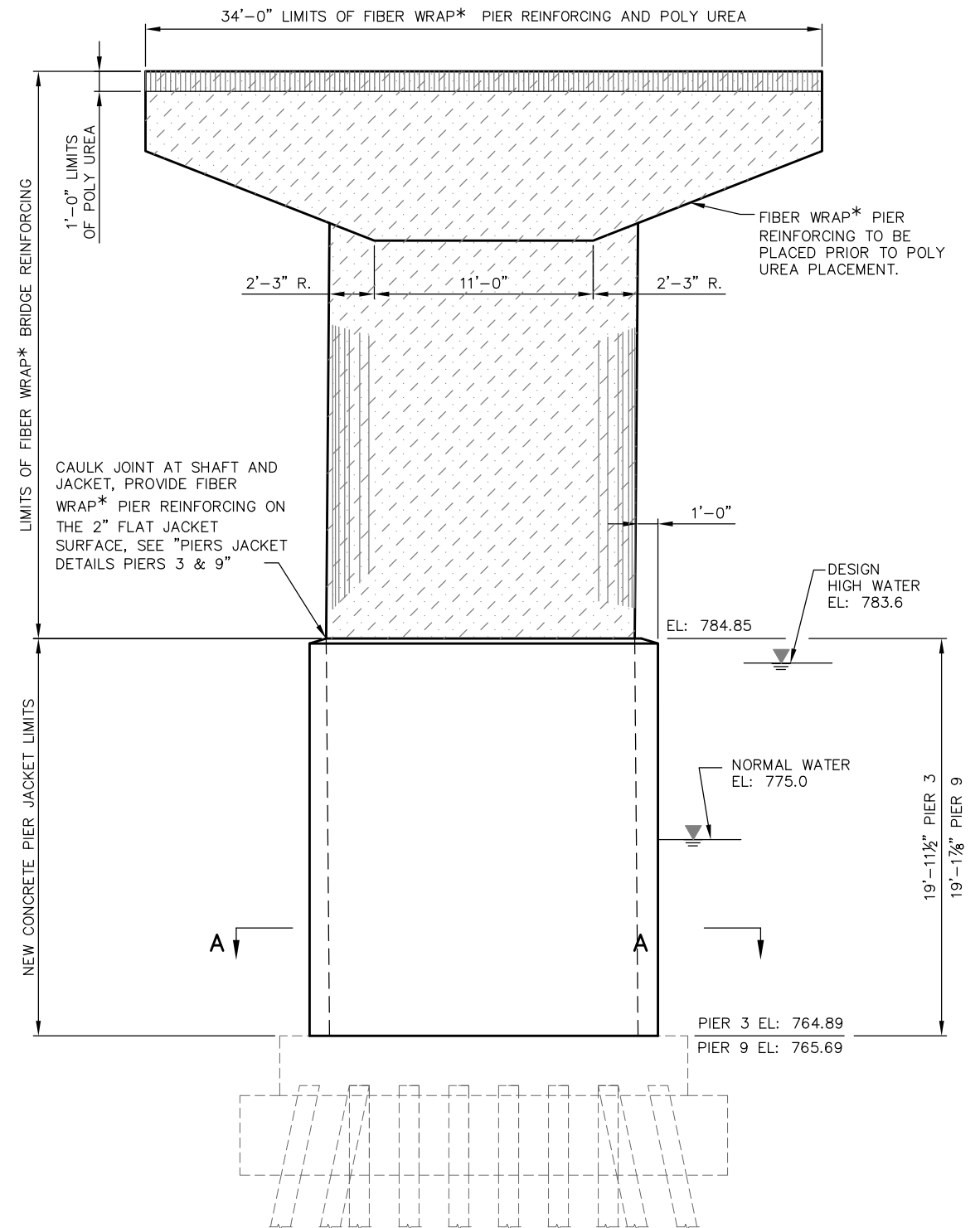
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By	JAP	Plans Checked	ACK
PIER JACKET REMOVAL PIER 3 & 9		SHEET 3 OF 8	



LEGEND AND NOTES

- SURFACE TO RECEIVE FIBER WRAP* PIER REINFORCING
- SURFACE TO RECEIVE POLY UREA TREATMENT

* FIBER WRAP* PIER REINFORCING TO BE PLACED PRIOR TO POLY UREA PLACEMENT.

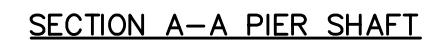


PIER JACKET & FIBER WRAP* PIER REINFORCING ELEVATION

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By JAP		Plans Checked ACK	
PIER JACKET REPAIR PIERS 3 & 9		SHEET 4 OF 8	

PLOT DATE: Aug 30, 2012

FILE: 04 B-11-22 Pier Rpr.dwg
PLOT SCALE:



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By		JAP	Plans Checked ACK
PIER JACKET DETAILS PIERS 3 & 9		SHEET 5 OF 8	

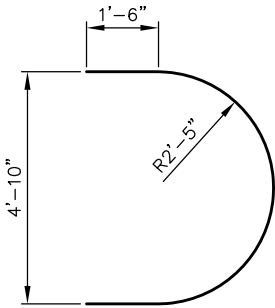
BILL OF BARS
PIERS 3 & 9

COATED = 5,400 LBS.

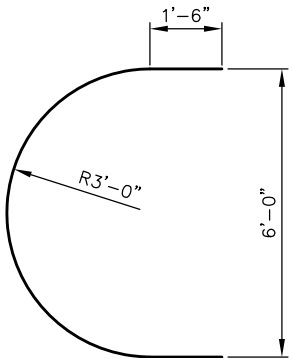
MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION	
	COATED	UNCOATED					
Q401	38		19-7			PIER 3 JACKET INSIDE FACE	VERT.
Q402	38		19-4			PIER 3 JACKET OUTSIDE FACE	VERT.
Q403	164		11-0			PIER JACKET INSIDE & OUTSIDE FACE	HORIZ.
Q404	84		10-6	X		PIER JACKET INSIDE FACE	HORIZ.
Q405	80		12-3	X		PIER JACKET OUTSIDE FACE	HORIZ.
Q506	400		2-5	X		PIER JACKET DOWEL	HORIZ.
Q407	38		18-10			PIER 9 JACKET INSIDE FACE	VERT.
Q408	38		18-7			PIER 9 JACKET OUTSIDE FACE	VERT.

▲ CONCRETE MASONRY ANCHORS, TYPE L, NO. 5 BARS, EMBED A MINIMUM OF 1'-3".

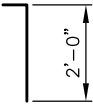
THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.



Q404



Q405



Q506

STATE PROJECT NUMBER
1010-02-68

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By JAP		Plans Checked AMB	
PIER JACKET BILL OF BARS PIERS 3 & 9			SHEET 6 OF 8

PLOT DATE: Aug 30, 2012

NOTES

DRAWINGS SHALL NOT BE SCALED.

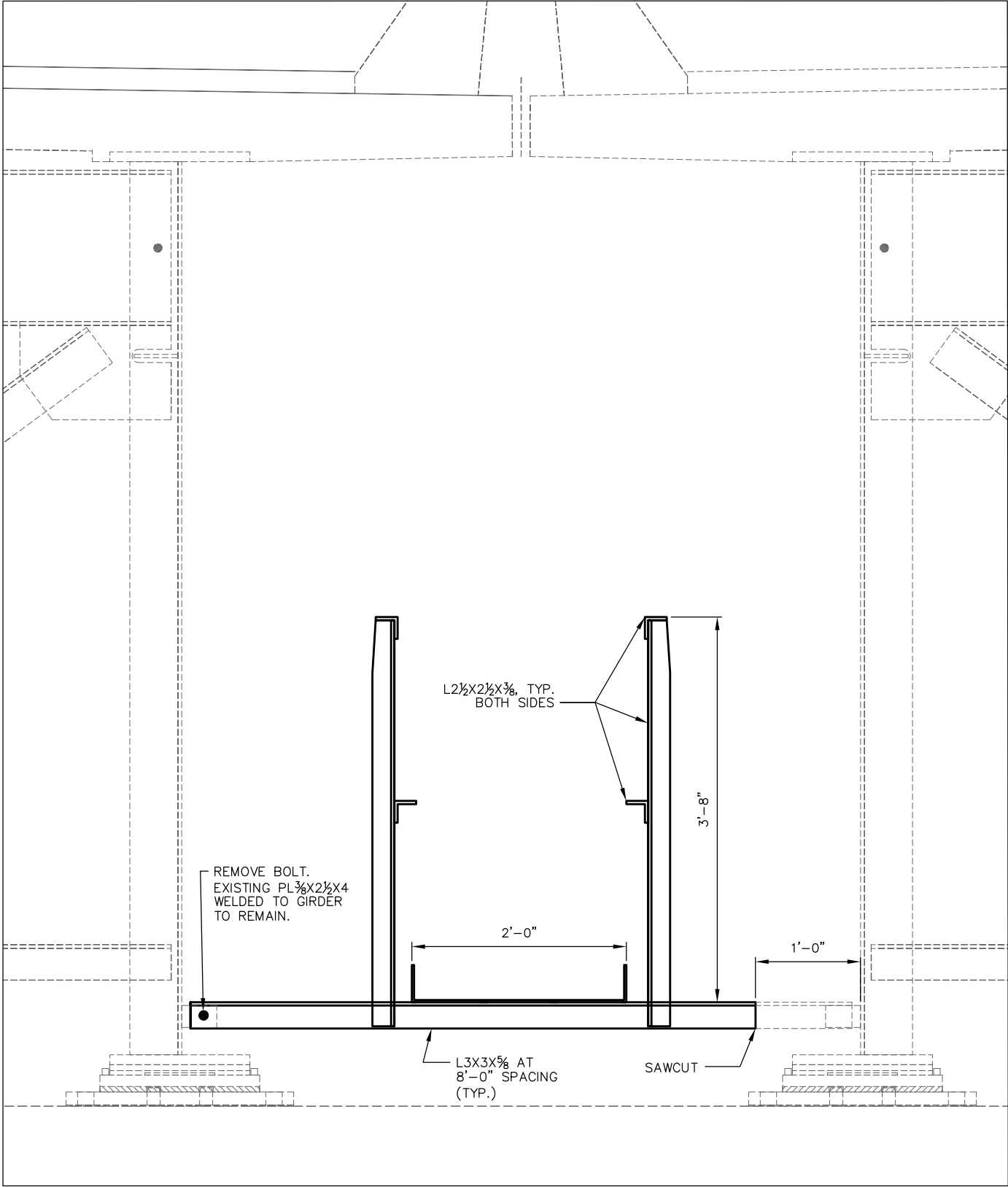
EXISTING STRUCTURE PLANS AND SHOP DRAWINGS ARE AVAILABLE AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION WEBSITE.

FIELD VERIFY ALL PERTINENT DIMENSIONS.

CATWALK REMOVAL TO BE COMPLETED IN A MANNER THAT PREVENTS DAMAGE TO THE EXISTING GIRDERS AND PORTIONS OF THE STRUCTURE TO REMAIN.

PROVIDE A WRITTEN DEMOLITION PLAN TO THE ENGINEER TWO WEEKS PRIOR TO COMMENCING CATWALK REMOVAL.

CATWALK LENGTH APPROXIMATELY 1404 LF BASED ON EXISTING PLANS.



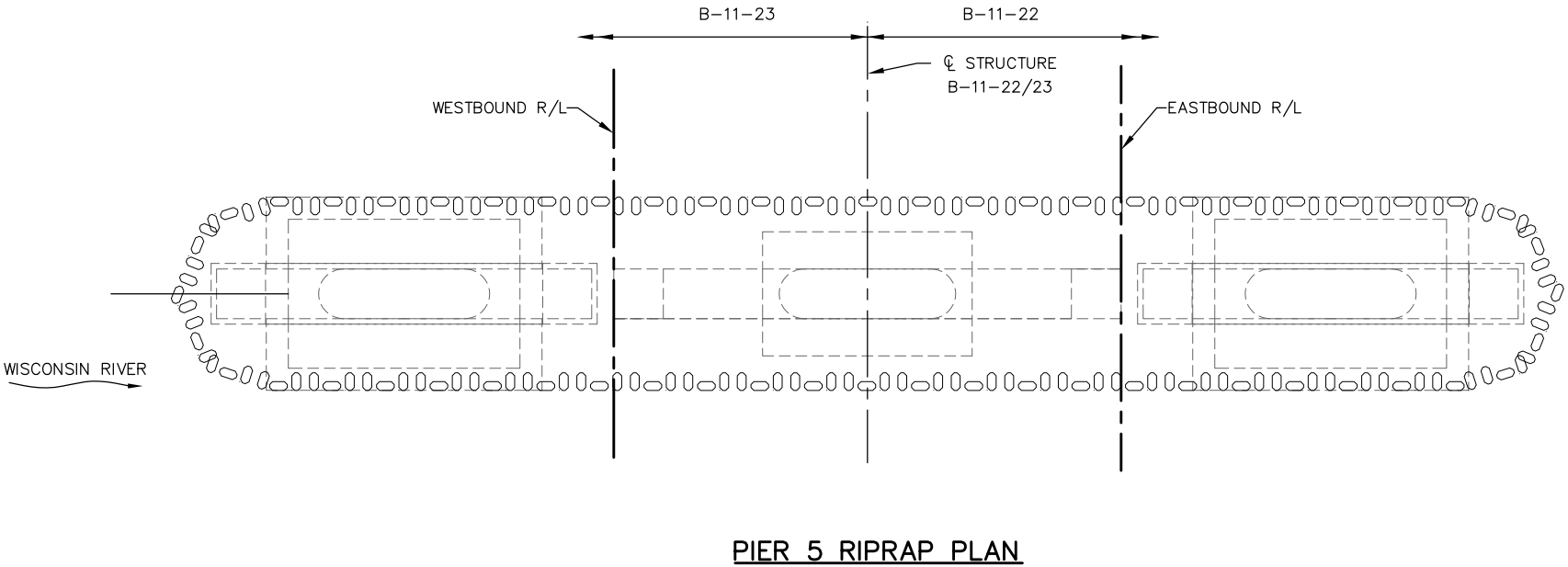
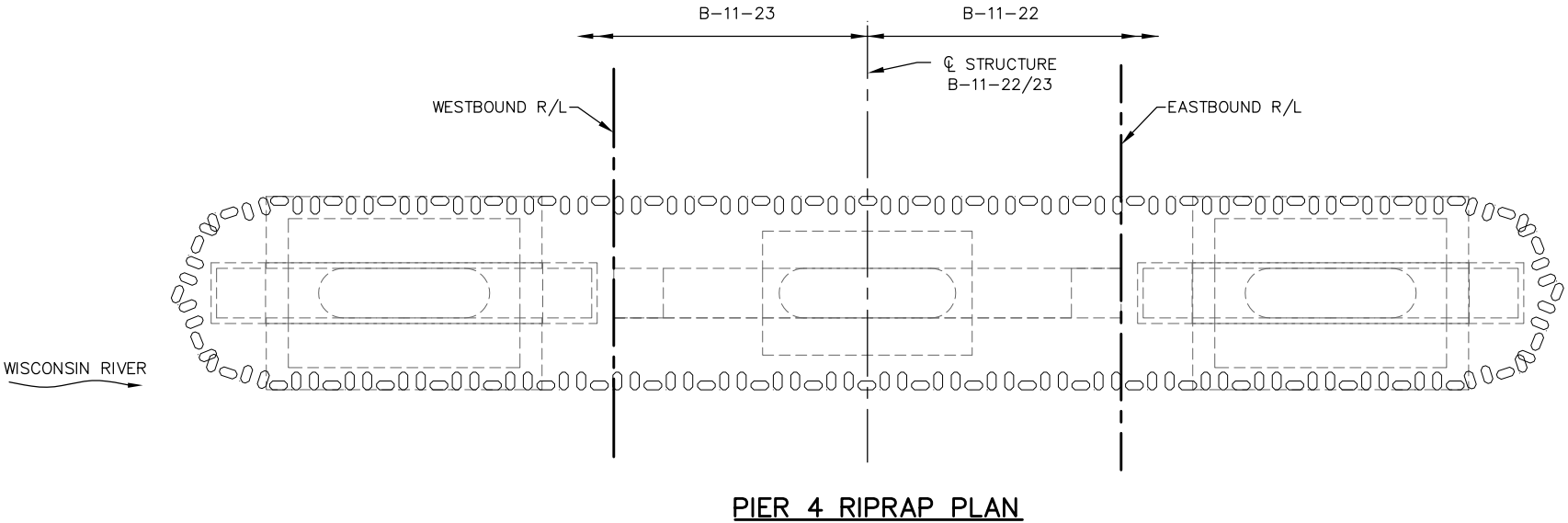
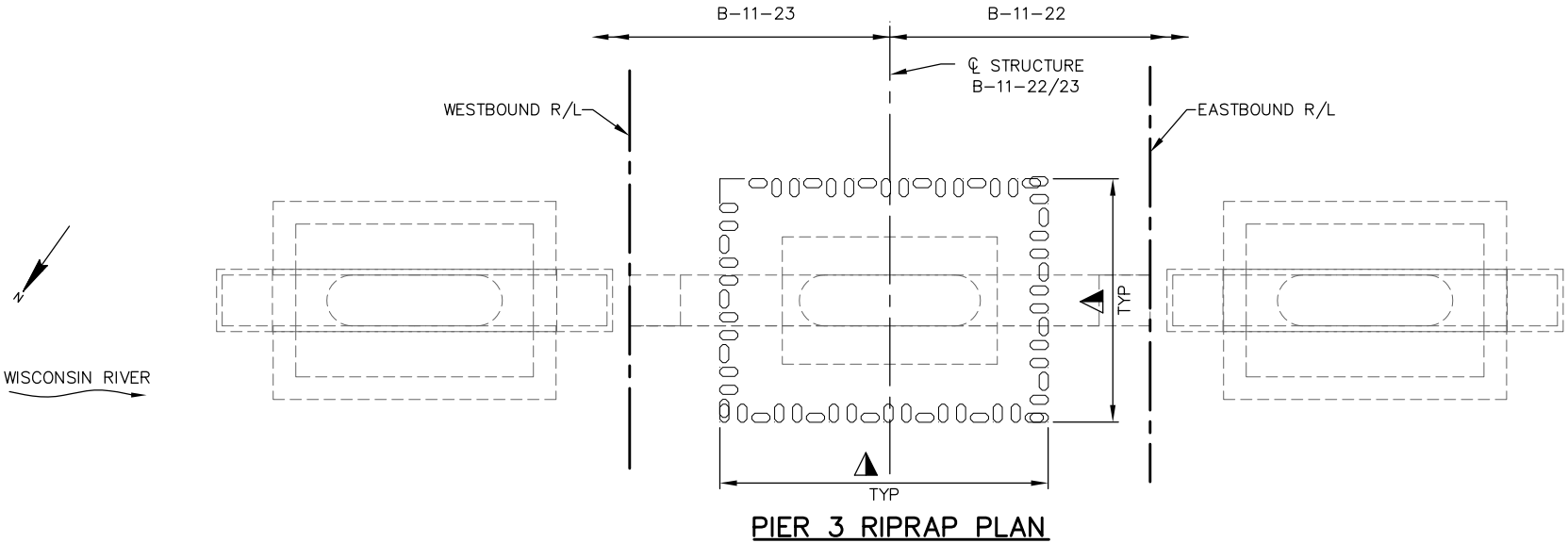
CATWALK REMOVAL DETAIL
LOOKING NORTH
AT PIER TYP.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By KDK		Plans Checked AMB	
CATWALK REMOVAL DETAIL		SHEET 7 OF 8	

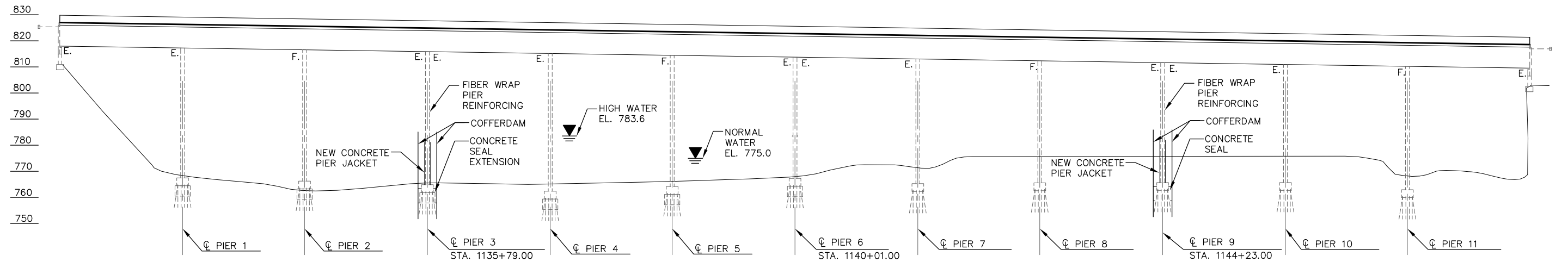
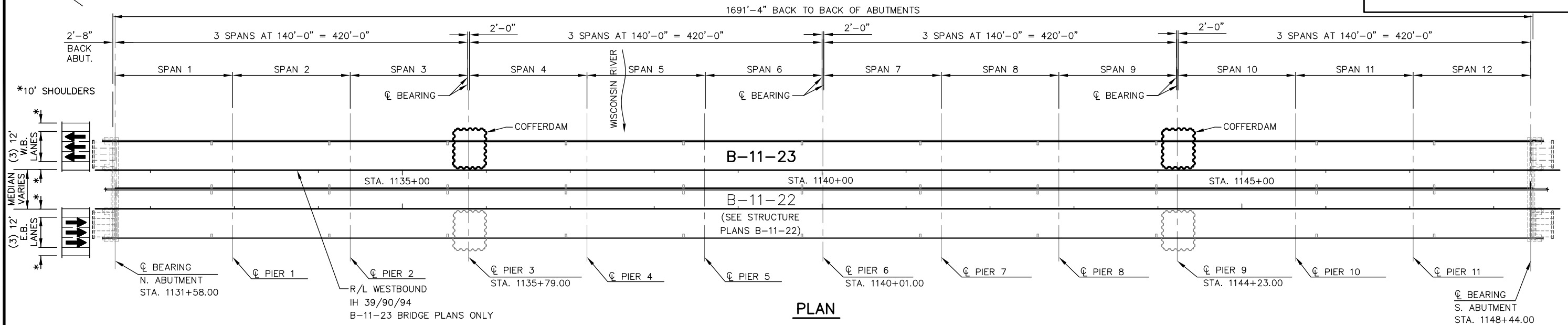
NOTES

RIPRAP LOCATIONS ARE BASED ON 8/14/2012
SCOUR NOTES BY MSA PROFESSIONAL SERVICES.

- ▲ VERIFY SCOUR LOCATIONS AT PIERS 3, 4, 5.
PLACE RIPRAP HEAVY AT THE SCOUR LOCATIONS
UNTIL IT MATCHES THE STREAMBED ELEVATION.



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-22			
Drawn By		JJS	Plans Checked AMB
PIER RIPRAP			SHEET 8 OF 8



LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION AND QUANTITIES
3. PIER JACKET REMOVAL PIERS 3 & 9
4. PIER JACKET REPAIR PIERS 3 & 9
5. PIER JACKET DETAILS PIERS 3 & 9
6. PIER JACKET BILL OF BARS PIERS 3 & 9

BENCH MARKS

NO.	DESCRIPTION	ELEVATION
200	DISK IN PARAPET OF B-11-23 SOUTHEAST QUADRANT	820.58
357	DISK IN PARAPET OF B-11-22 NORTHWEST QUADRANT	829.08
571	DISK IN PARAPET OF B-11-23 NORTHEAST QUADRANT	829.10

DESIGN DATA

LIVE LOAD:

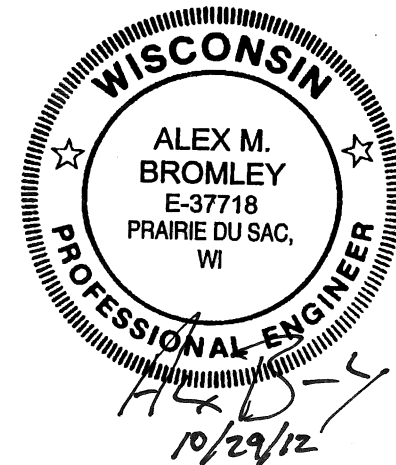
INVENTORY RATING _____ HS14
OPERATING RATING _____ HS23
MAXIMUM STANDARD PERMIT VEHICLE LOAD _____ 160 Kips.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY _____ $f_c = 4,000$ p.s.i.
HIGH-STRENGTH BAR STEEL REINFORCEMENT _____ $f_y = 60,000$ p.s.i.

TRAFFIC DATA

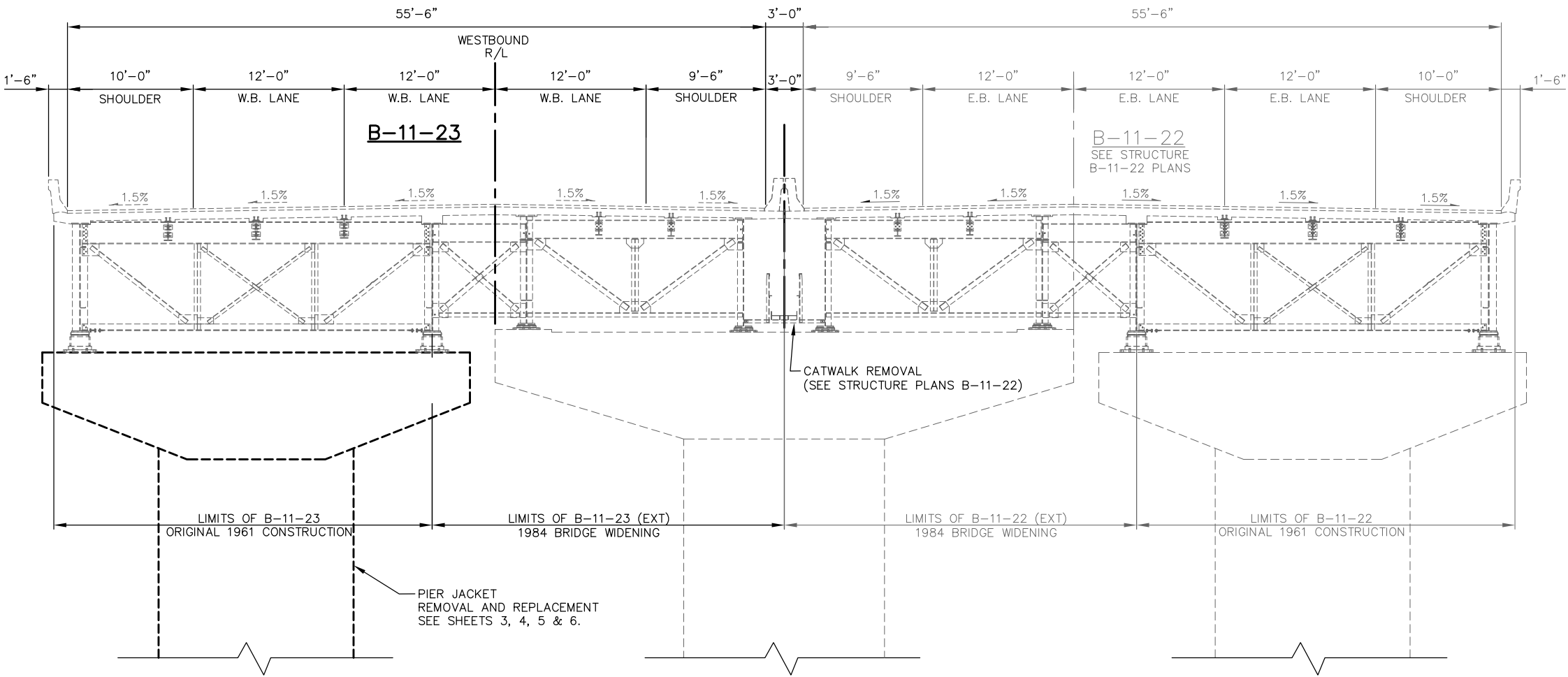
A.A.D.T. (2011) _____ 53,000
A.A.D.T. (2031) _____ 75,000
DESIGN SPEED _____ 70 M.P.H.



DESIGN CONTACT:
ALEX BROMLEY, P.E. (608) 588-7866

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E. (608) 266-8489

NO.	DATE	REVISION	BY
 619 EAST HOXIE STREET P.O. BOX 429 SPRING GREEN, WI 53588 PHONE (608) 588-7866 FAX (608) 588-7954			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED  KAR 12/13/12 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-11-23			
IH 39/90/94 OVER WISCONSIN RIVER			
COUNTY	COLUMBIA	TOWN/CITY/VILLAGE	DEKORRA & CALEDONIA
DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION			
DESIGNED BY	JAP	DESIGN CK'D.	ACK
DRAWN BY	JAP	PLANS CK'D.	AMB
GENERAL PLAN			SHEET 1 OF 6



TYPICAL SECTION THRU IH 39/90/94
LOOKING SOUTH
IN SPAN

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNIT	PIER 3	PIER 9	TOTALS
203.0700.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH DEBRIS CAPTURE SYSTEM (STA. 1140+00)	LS	---	---	0.5
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-23	LS	---	---	1
206.5000	COFFERDAMS STRUCTURE B-11-23	LS	---	---	1
210.0100	BACKFILL STRUCTURE	CY	---	180	180
502.0100	CONCRETE MASONRY BRIDGES	CY	29	28	57
502.1100	CONCRETE MASONRY SEAL	CY	79	70	149
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	200	200	400
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	2,720	2,680	5,400
509.1500	CONCRETE SURFACE REPAIR	SF	2,220	2,076	4,296
SPV.0165.01	FIBER WRAP PIER REINFORCING	SF	1,499	1,383	2,882
SPV.0165.02	POLYUREA COATING	SF	230	230	460
SPV.0165.03	CONCRETE SURFACE REPAIR SPECIAL	SF	1,499	1,383	2,882
(NON-BID ITEM)	FILLER	SIZE	---	---	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS WHERE NOTED ARE BASED ON THE EXISTING STRUCTURE PLANS AND ARE AVAILABLE AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION WEBSITE.

FIELD VERIFY ALL PERTINENT DIMENSIONS PRIOR TO ANY FABRICATION.

THE FIRST DIGIT OF A 3 DIGIT MARK OR THE FIRST TWO DIGITS OF A 4 DIGIT MARK SIGNIFIES THE BAR SIZE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND A MINIMUM OF 24 BAR DIAMETERS INTO THE NEW WORK, UNLESS SPECIFIED OTHERWISE.

ALL VOLUME WHICH IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

CONSTRUCTION SHALL CONFORM TO THE LATEST WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-23			
Drawn By		KDK	Plans Checked
CROSS SECTION AND QUANTITIES		AMB	
		SHEET 2 OF 6	

NOTES:

REMOVE EXISTING PIER JACKET ON B-11-22 AT PIERS 3 & 9.

THERE IS NO WORK TO PERFORM AT B-11-22(EXT) PIER.

PIER JACKET REMOVAL INCLUDED IN BID ITEM "CONCRETE SURFACE REPAIR".

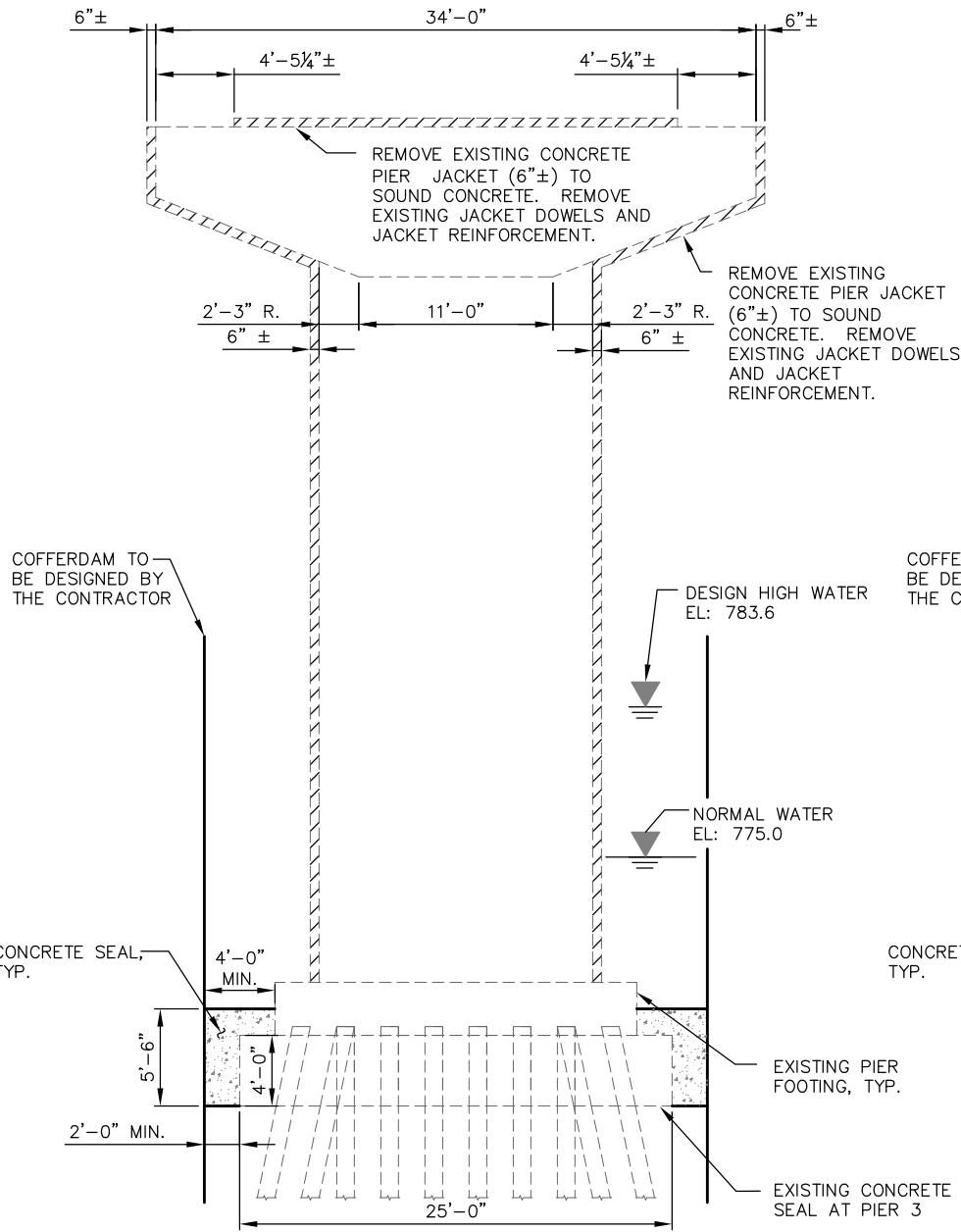
CONCRETE SEAL DESIGNED FOR TEN YEAR HIGH WATER LEVEL OF 780.0 FT. IF WATER LEVEL EXCEEDS 780.0 FT, CONCRETE SEAL THICKNESS MUST BE INCREASED.

IF NEW PIER JACKET CAN BE PLACED IN DRY CONDITIONS, COFFERDAMS MAY NOT BE NECESSARY. CONTRACTOR MAY SUBMIT ALTERNATE EXCAVATION PROCEDURE TO THE ENGINEER.

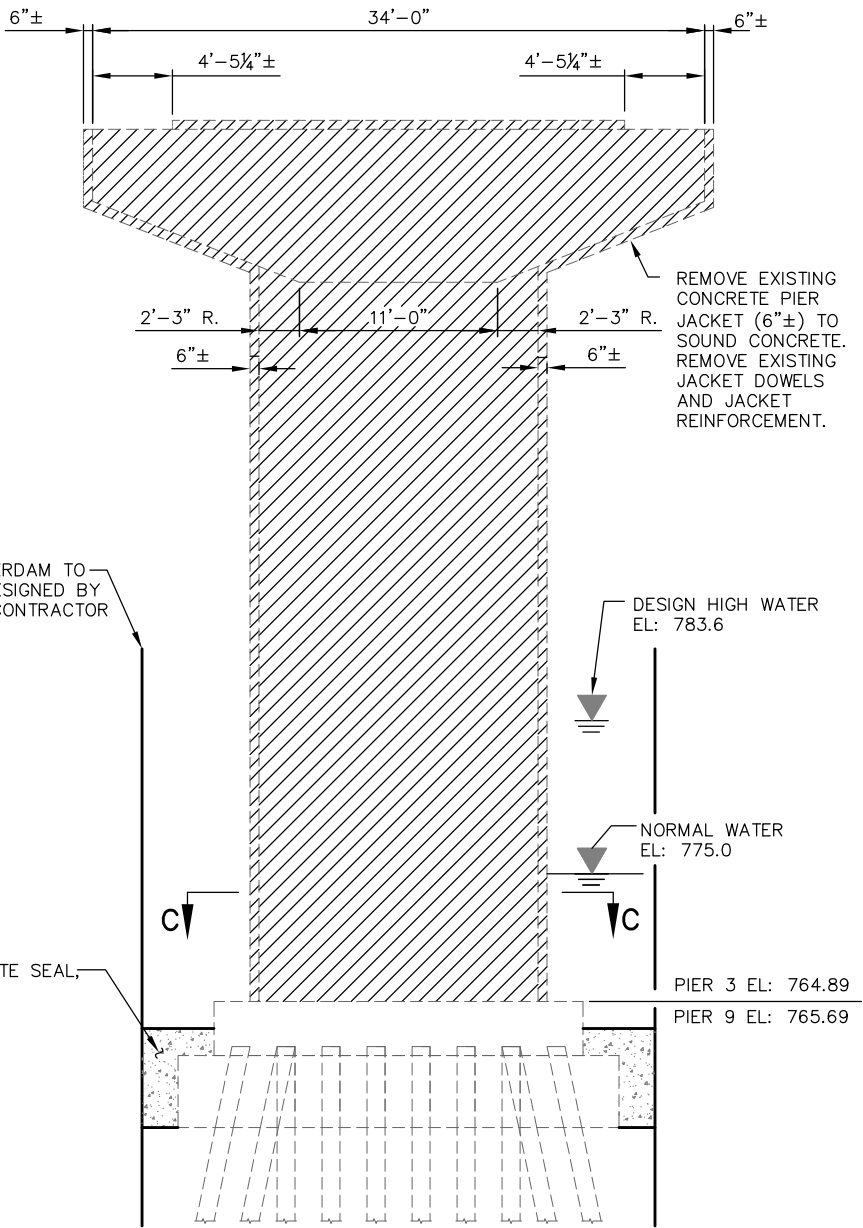
ALL DIMENSIONS AND ELEVATIONS BASED ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY. EXISTING PLANS AVAILABLE AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION WEBSITE.

EXCAVATED SOIL FOR COFFERDAM AND CONCRETE SEAL PLACEMENT MAY NOT BE REUSED.

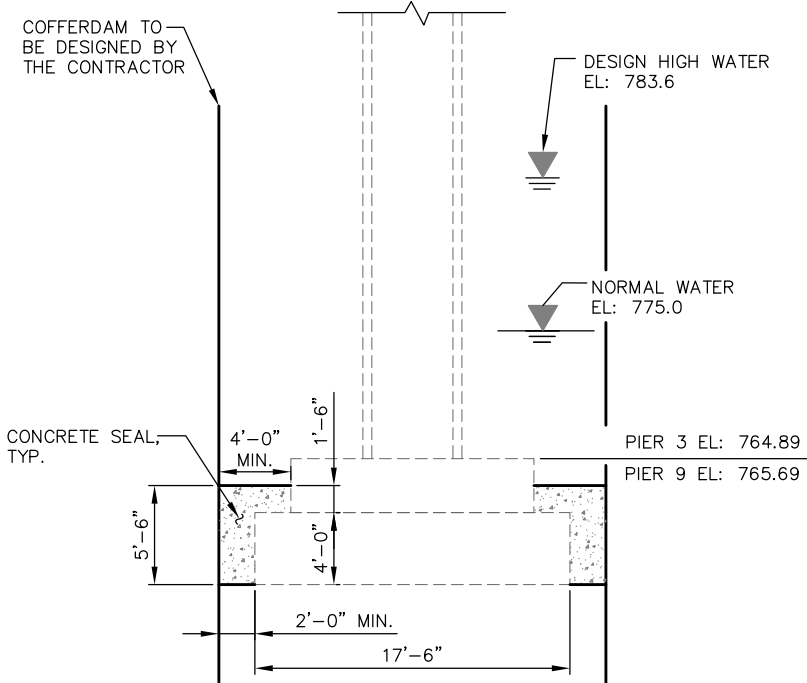
6"± EXISTING CONCRETE PIER JACKET REMOVAL TO SOUND CONCRETE. REMOVE ENTIRE EXISTING JACKET.



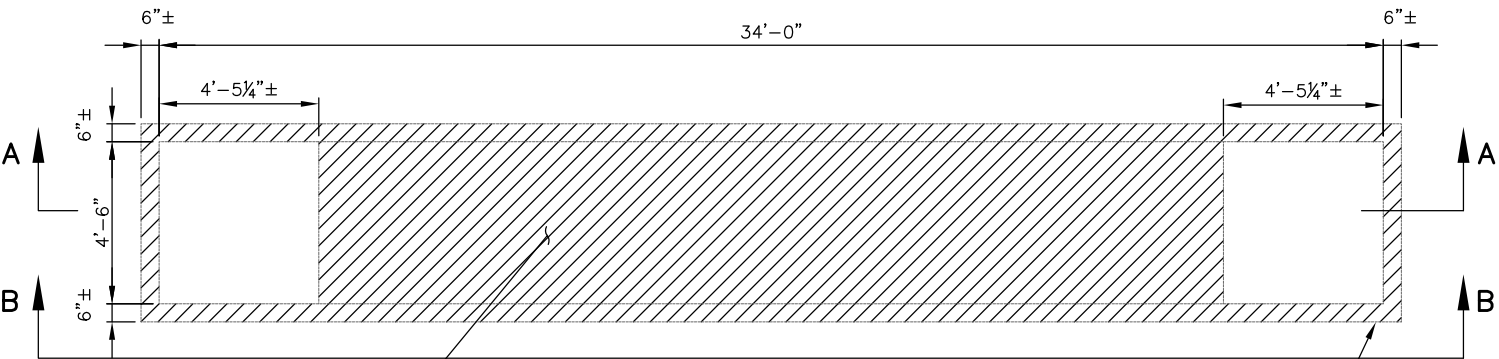
PIERS 3 & 9 JACKET REMOVAL SECTION A-A



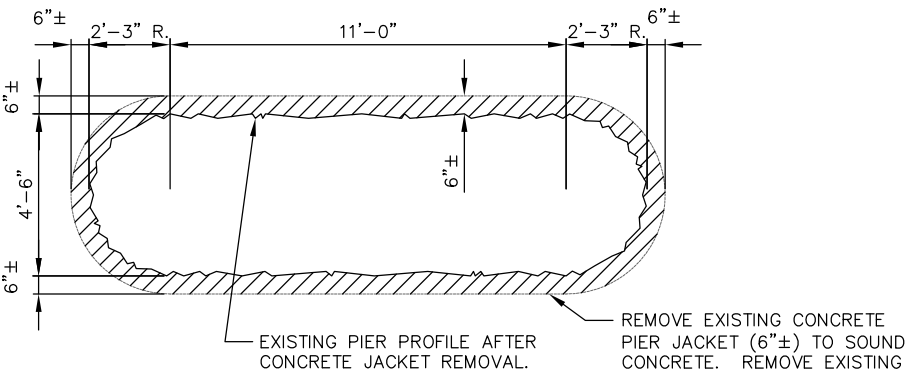
PIERS 3 & 9 JACKET REMOVAL ELEVATION B-B



COFFERDAM AND CONCRETE SEAL END VIEW



TOP OF CAP PLAN VIEW



SECTION C-C THRU SHAFT

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-23			
Drawn By JAP		Plans Checked ACK	
PIER JACKET REMOVAL PIER 3 & 9		SHEET 3 OF 6	

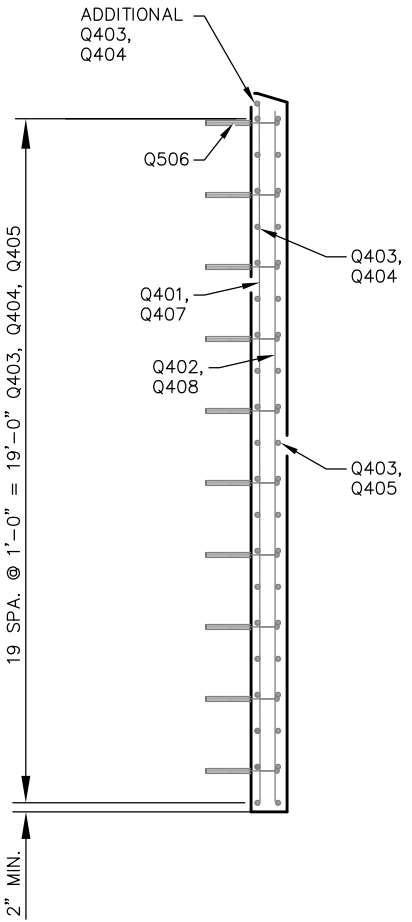
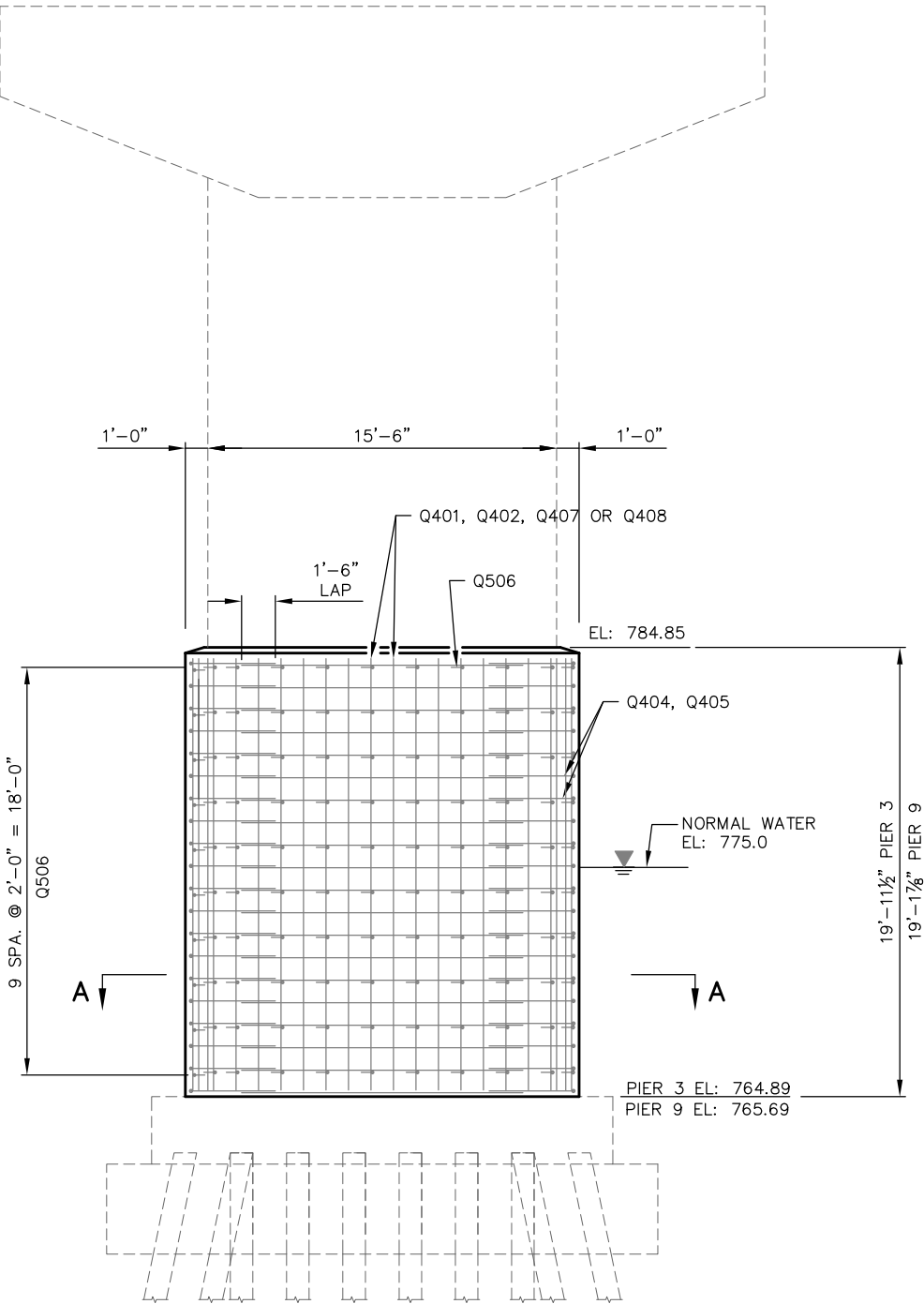


* FIBER WRAP* PIER REINFORCING TO BE PLACED PRIOR TO POLY UREA PLACEMENT.

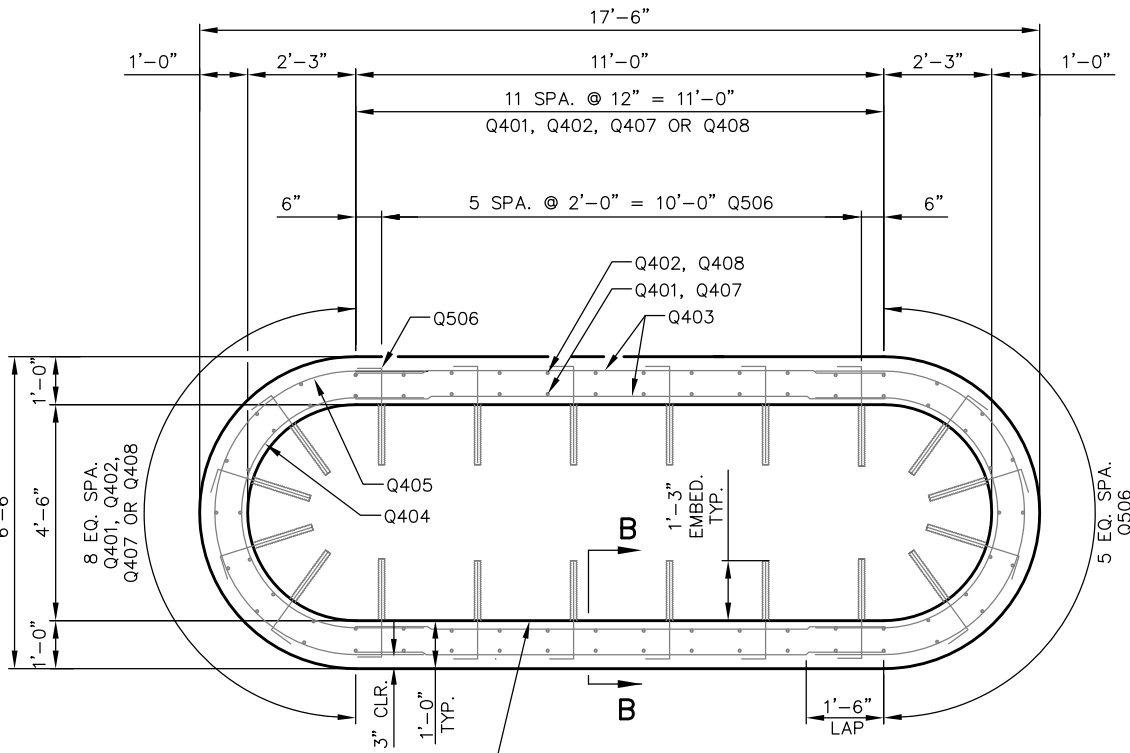


No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-23			
Drawn By		JAP	Plans Checked
ACK		SHEET 4 OF	
PIER JACKET REPAIR PIERS 3 & 9		SHEET 4 OF	

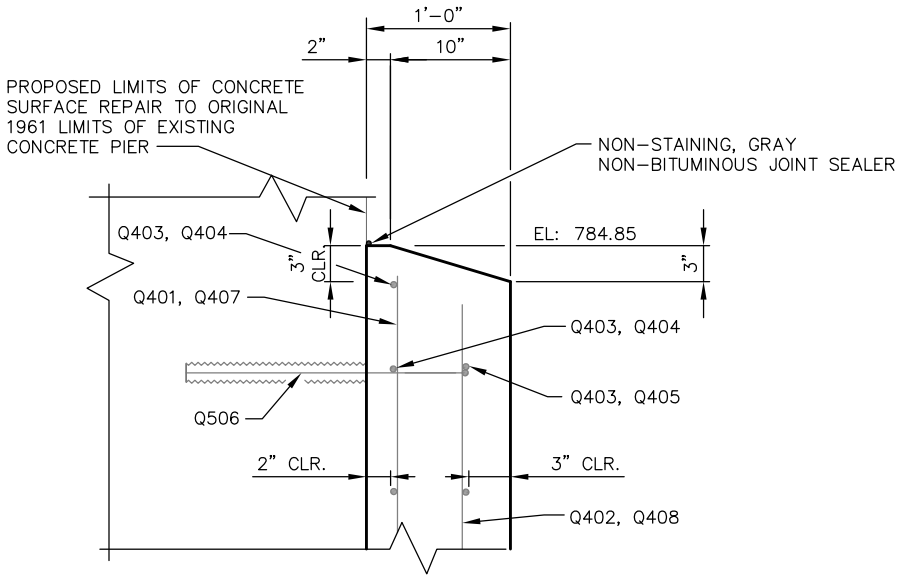
PLOT DATE: Oct 29, 2012



PIER JACKET SECTION



SECTION A-A PIER SHAFT



SECTION B-B TOP OF PIER JACKET DETAIL

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-23			
Drawn By JAP		Plans Checked ACK	
PIER JACKET DETAILS PIERS 3 & 9			SHEET 5 OF 6

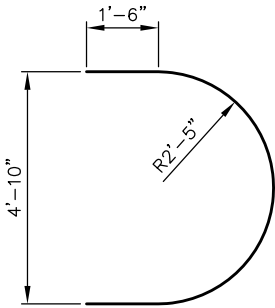
BILL OF BARS
PIERS 3 & 9

COATED = 5,400 LBS.

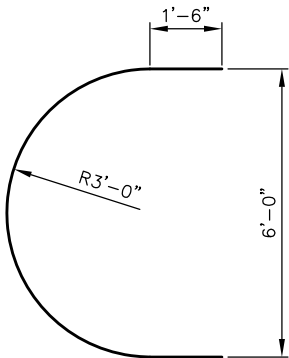
MARK	NUMBER		LENGTH	BENT	BAR SERIES	LOCATION	
	COATED	UNCOATED					
Q401	38		19-7			PIER 3 JACKET INSIDE FACE	VERT.
Q402	38		19-4			PIER 3 JACKET OUTSIDE FACE	VERT.
Q403	164		11-0			PIER JACKET INSIDE & OUTSIDE FACE	HORIZ.
Q404	84		10-6	X		PIER JACKET INSIDE FACE	HORIZ.
Q405	80		12-3	X		PIER JACKET OUTSIDE FACE	HORIZ.
Q506	400		2-5	X		PIER JACKET DOWEL	HORIZ.
Q407	38		18-10			PIER 9 JACKET INSIDE FACE	VERT.
Q408	38		18-7			PIER 9 JACKET OUTSIDE FACE	VERT.

▲ CONCRETE MASONRY ANCHORS, TYPE L, NO. 5 BARS, EMBED A MINIMUM OF 1'-3".

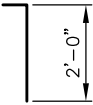
THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.



Q404



Q405

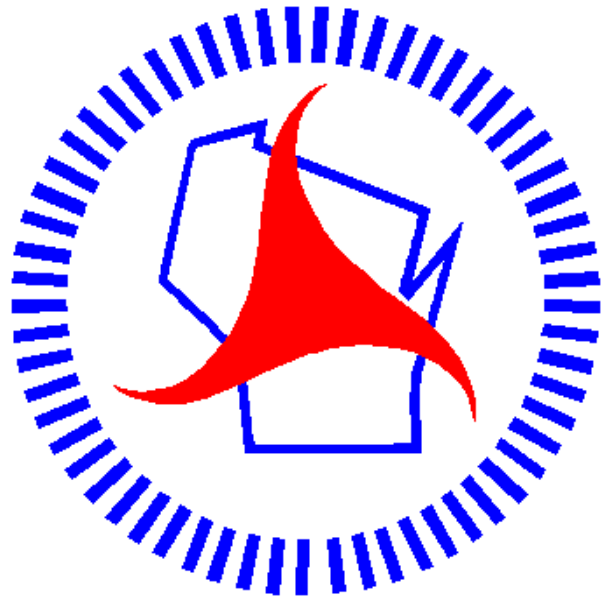


Q506

STATE PROJECT NUMBER
1010-02-68

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-11-23			
Drawn By JAP		Plans Checked AMB	
PIER JACKET BILL OF BARS PIERS 3 & 9			SHEET 6 OF 6

PLOT DATE: Oct 29, 2012



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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