

WISCONSIN
PROJECT ID: 6340-00-72
WITH: N/A
COUNTY: PORTAGE

MAY 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 Plot
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

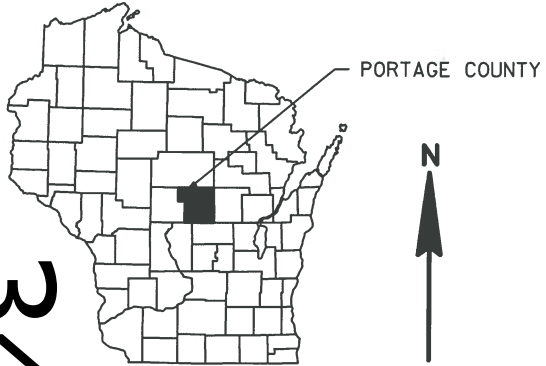
TOTAL SHEETS = 18

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

WISCONSIN RAPIDS - KNOWLTON
LITTLE EAU PLEINE RIVER BR B-49-92
STH 34
PORTAGE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6340-00-72	WISC 2017288	1

STATE PROJECT NUMBER
6340-00-72



DESIGN DESIGNATION

A.A.D.T.	2017	=	3800
A.A.D.T.	2037	=	4200
D.H.V.		=	5.9
D.D.		=	60/40
T.		=	5.9
DESIGN SPEED		=	60 MPH
ESALS		=	

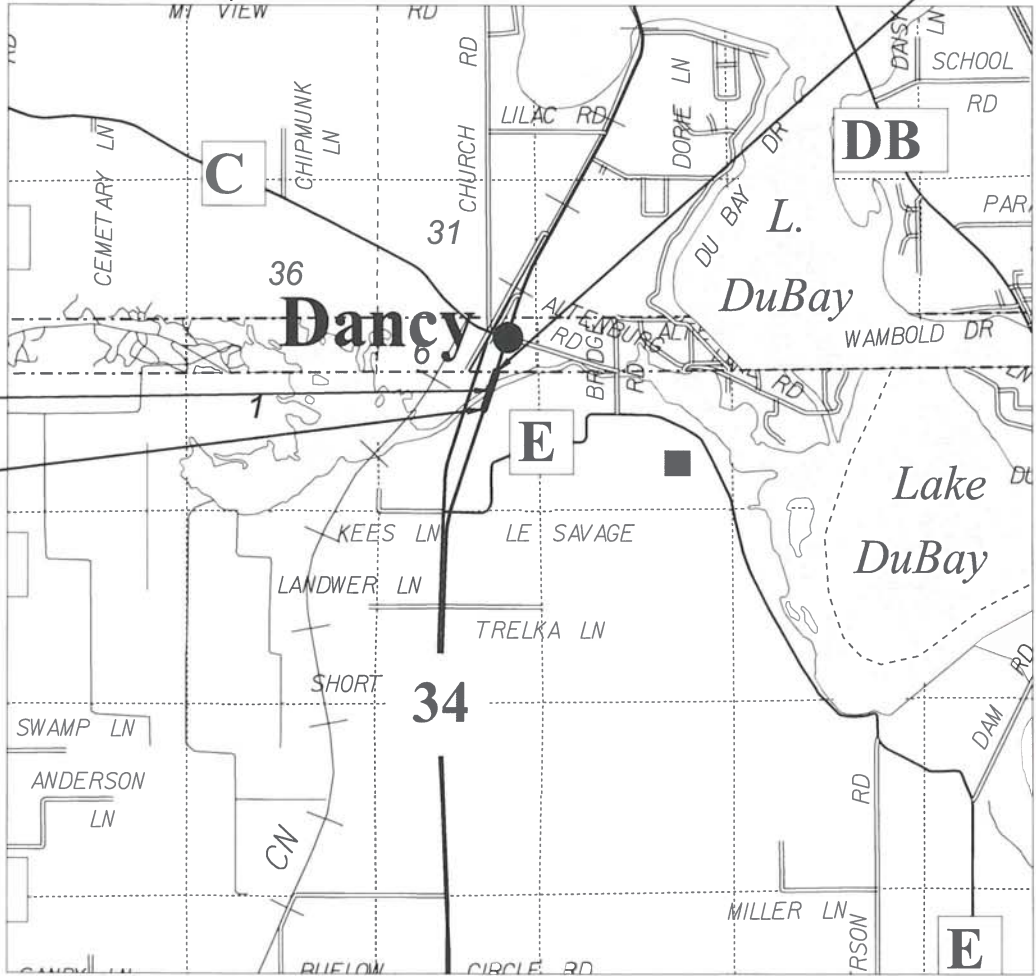
CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	----
LOT LINE	----
LIMITED HIGHWAY EASEMENT	----
EXISTING RIGHT OF WAY	----
PROPOSED OR NEW R/W LINE	----
SLOPE INTERCEPT	300' 0"
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)	----
SPECIAL DITCH	----
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	----

ROCK	----
LABEL	95.36
SWAMP LN	----
ANDERSON LN	----
CN	----
BUFLOW	----
CIRCLE RD	----
MILLER LN	----
TRSON	----
DAM RD	----

LAYOUT
SCALE 0 1 MILE
TOTAL NET LENGTH OF CENTERLINE = 0.062 MILES



END PROJECT 6340-00-72
STA 101+62.09

ORIGINAL PLANS PREPARED BY

OMNI ASSOCIATES

WISCONSIN PROFESSIONAL ENGINEER

KRISTOFER R. OLSON
E-35236
APPLETON, WI

1/9/17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OMNI ASSOCIATES, INC.
Designer	OMNI ASSOCIATES, INC.
Project Manager	WENDY ARNESON
Regional Examiner	CHERYL SIMON
Regional Supervisor	MICHAEL KRETSCHMER

APPROVED FOR THE DEPARTMENT

DATE: 1/13/2017

Wendy Arneson (Signature)

E

GENERAL NOTES

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

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

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMIT. DISTURBED AREAS ARE TO BE SEEDED AND COVERED WITH EROSION MAT OR MULCH. USE SEED MIXTURE NO. 75 ON ALL DISTURBED AREAS. ALL RESTORATION WORK IS INCIDENTAL TO FINISHING ROADWAY.

WETLAND AREAS ARE SHOWN ON THE PLANS. DO NOT STORE EQUIPMENT OR MATERIALS, OR OPERATE IN WETLANDS. LIMIT DISTURBANCE OF THE PROJECT SITE TO AREAS NECESSARY TO ACCESS THE RIVER TO DELIVER MATERIALS AND EQUIPMENT.

TRAFFIC CONTROL

FOR CONSTRUCTION OPERATIONS THAT REQUIRE CLOSURE OF A SHOULDER, FOLLOW STANDARD
DETAIL DRAWING 15D-28: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED
ROADWAY.

FOR CONSTRUCTION OPERATIONS THAT REQUIRE CLOSURE OF A LANE, FOLLOW STANDARD DETAIL
DRAWING 15C-12: TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION.

CONTACTS

ELECTRIC

ATC MANAGEMENT, INC
5303 FEN OAK DRIVE
MADISON, WI 53718
ATTN: DOUG VOSBERG
TELEPHONE: 608-877-7650
CELL PHONE: 608-438-7650
EMAIL: dvosberg@atc11c.com

COMMUNICATION

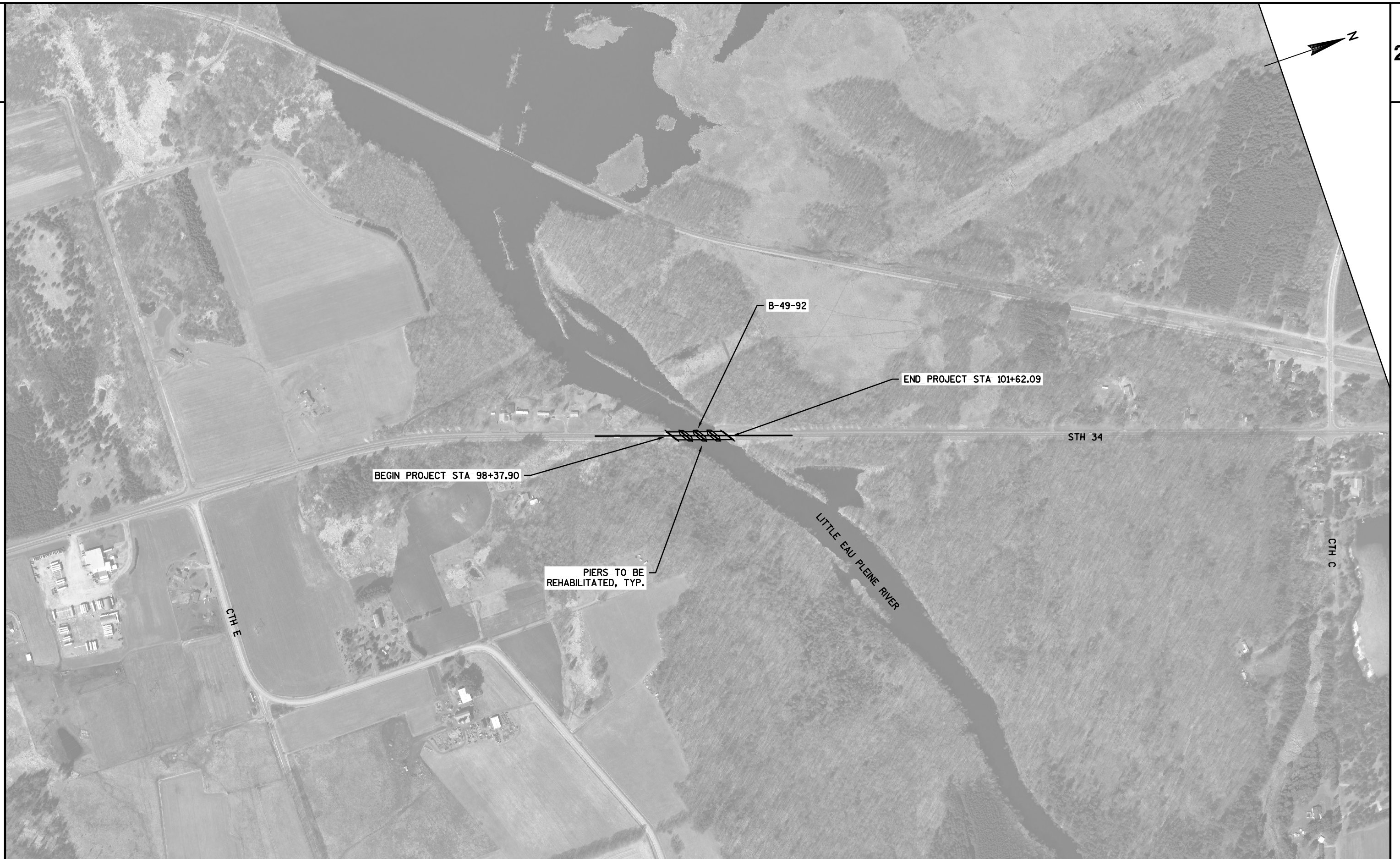
TDSD TELECOM
10 COLLEGE AVENUE, SUITE 218A
APPLETON, WI 54911
ATTN: STEVE JAKUBIEC
TELEPHONE: 920-882-4166
CELL PHONE: 920-562-7221
EMAIL: steve.jakubiec@tdstelecom.com

DNR LIAISON

MARC HERSHFIELD
DEPARTMENT OF NATURAL RESOURCES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
TELEPHONE: 715-421-7867
EMAIL: marc.hershfield@wisconsin.gov



** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS



PROJECT NO:6340-00-72

HWY:STH 34

COUNTY:PORTAGE

PROJECT OVERVIEW

SHEET

E

FILE NAME : F:\TR\JOBS\E2176A15\CIVIL 3D 2014\SHEETS\PLAN\63400072-020201-PO.DWG
LAYOUT NAME - ****

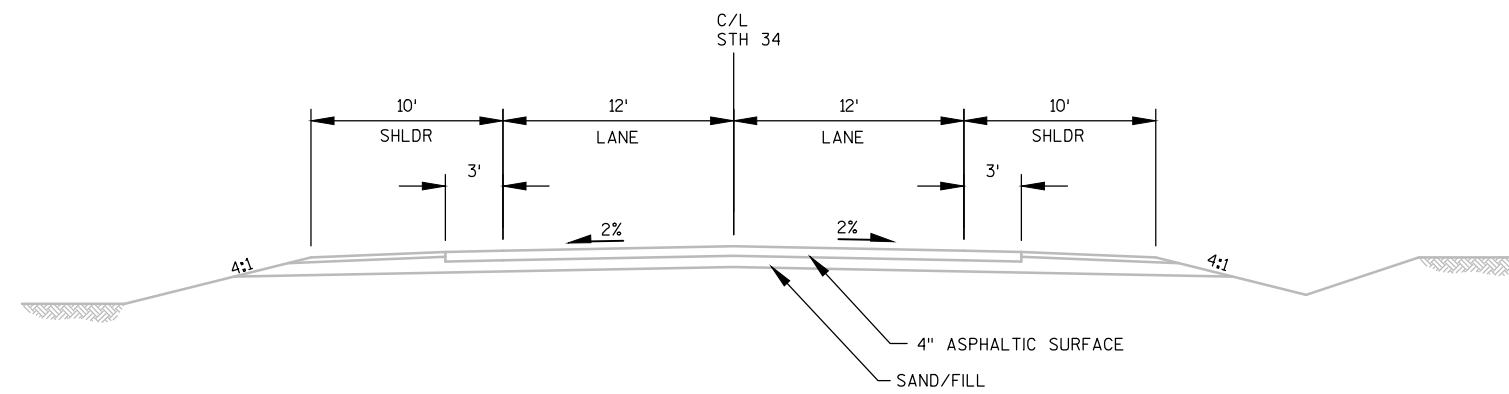
PLOT DATE : 10/13/2016 10:50 AM

PLOT BY : ANDREW WESTBROOK

PLOT NAME :

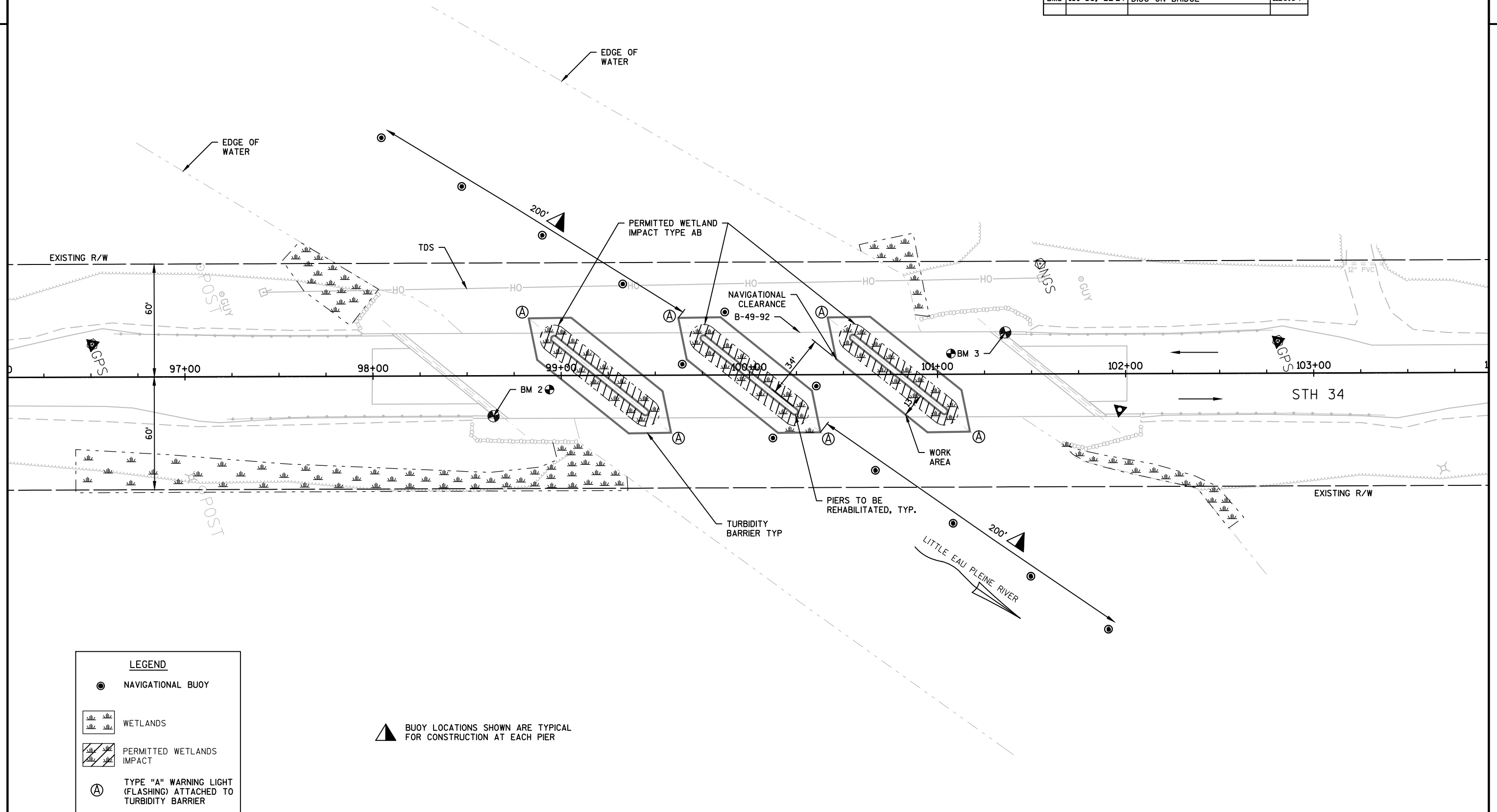
PLOT SCALE : *****

WISDOT/CADDs SHEET 44



TYPICAL EXISTING SECTION - STH 34

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM2	98+64, 22'RT	DISC ON BRIDGE	1125.93
BM3	101+36, 22'LT	DISC ON BRIDGE	1126.04





PROJECT NO:6340-00-72

HWY:STH 34

COUNTY:PORTAGE

TRAFFIC CONTROL OVERVIEW

SHEET

E

FILE NAME : F:\TR\JOBS\E2176A15\CIVIL 3D 2014\SHEETS\PLAN\63400072-025001-TC.DWG
LAYOUT NAME - *****

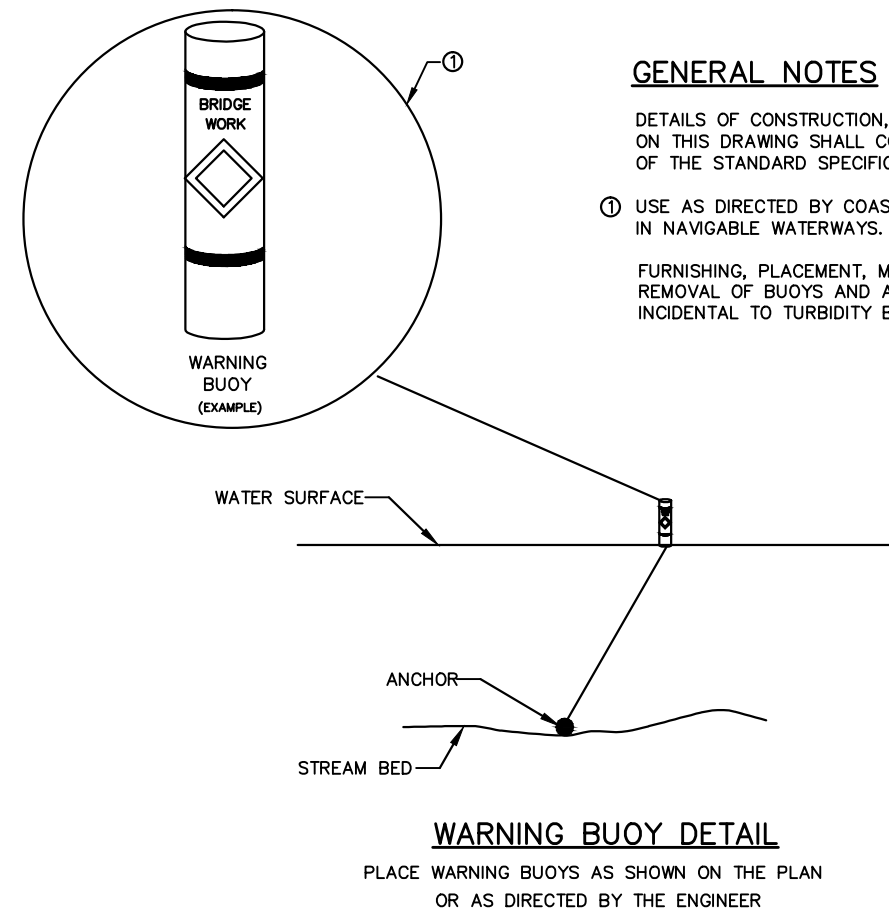
PLOT DATE : 12/1/2016 1:02 PM

PLOT BY : JAIRO MAZARIEGOS

PLOT NAME :

PLOT SCALE : *****

WISDOT/CADDS SHEET 44



Estimate Of Quantities

6340-00-72					
Line	Item	Item Description	Unit	Total	Qty
0010	213.0100	Finishing Roadway (project) 01. 6340-00-72	EACH	1.000	1.000
0020	311.0115	Breaker Run	CY	15.000	15.000
0030	502.4204	Adhesive Anchors No. 4 Bar	EACH	612.000	612.000
0040	505.0400	Bar Steel Reinforcement HS Structures	LB	1,340.000	1,340.000
0050	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6340-00-72	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0070	628.6005	Turbidity Barriers	SY	1,100.000	1,100.000
0080	642.5001	Field Office Type B	EACH	1.000	1.000
0090	643.0100	Traffic Control (project) 01. 6340-00-72	EACH	1.000	1.000
0100	643.0300	Traffic Control Drums	DAY	1,064.000	1,064.000
0110	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0120	643.0705	Traffic Control Warning Lights Type A	DAY	300.000	300.000
0130	643.0900	Traffic Control Signs	DAY	464.000	464.000
0140	SPV.0035	Special 01. Structural Grout	CY	158.000	158.000
0150	SPV.0060	Special 01. Preparation and Anchorage for Vinyl Sheet Piling	EACH	3.000	3.000
0160	SPV.0105	Special 01. Excavation and Backfilling for Structures Special B-49-92	LS	1.000	1.000
0170	SPV.0165	Special 01. Piling Vinyl Sheet Permanent Delivered and Installed	SF	4,330.000	4,330.000
0180	SPV.0165	Special 02. Preparation of Pier Surfaces	SF	4,120.000	4,120.000
0190	SPV.0165	Special 03. Welded Wire Fabric 6x6 D4/D4 (Grade 60)	SF	4,000.000	4,000.000

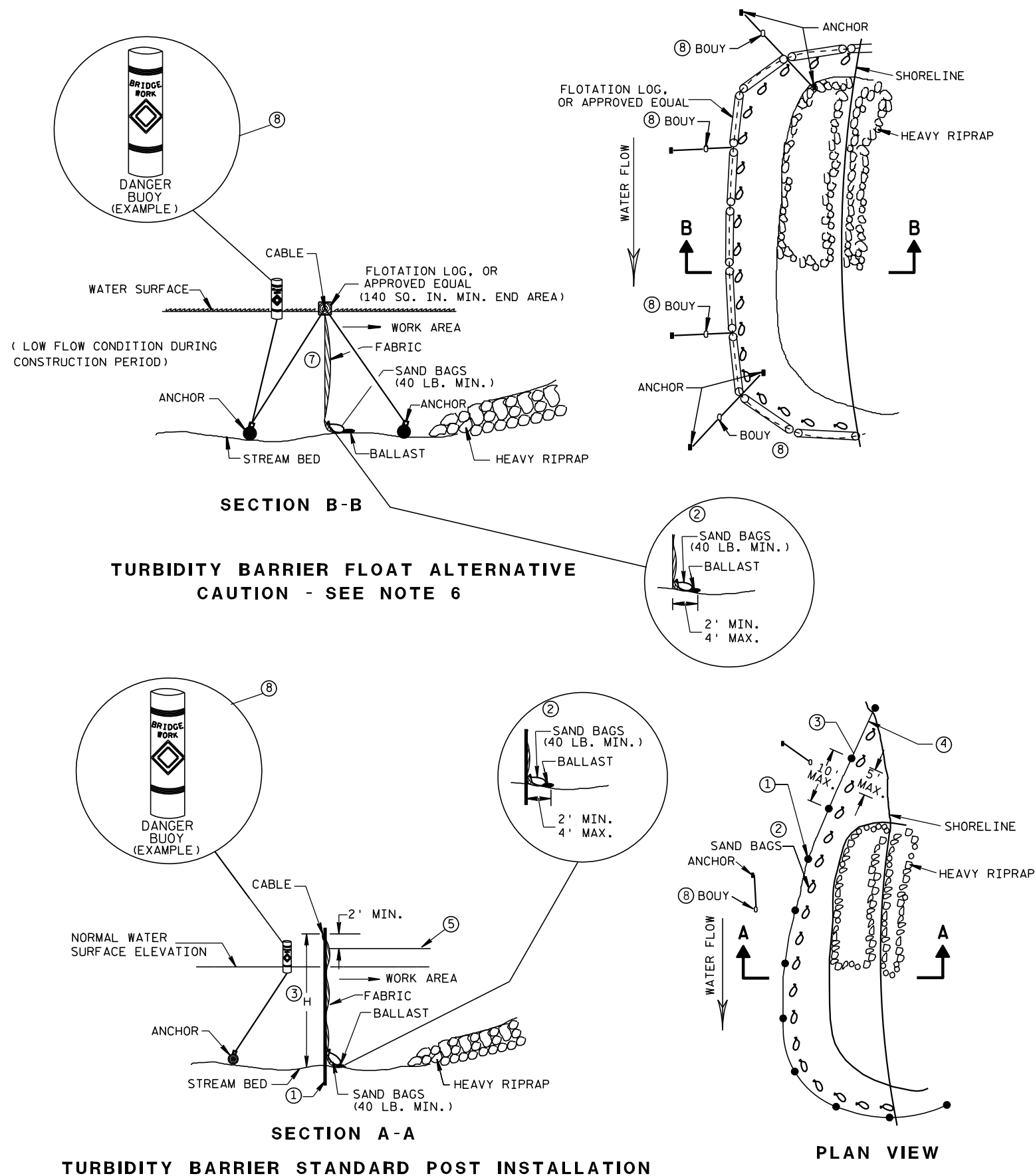
TURBIDITY BARRIER		
STATION	LOCATION	628.6005 TURBIDITY BARRIER SY
CATEGORY 0010		
99+21	STH 34	308
100+00	STH 34	383
100+79	STH 34	409
PROJECT TOTALS		1,100

TRAFFIC CONTROL									
LOCATION	PHASE	APPROX. SERVICE PERIOD 102 DAYS	643.0300		643.0705		643.0900		643.0310.S
			TRAFFIC CONTROL DRUMS		WARNING LIGHTS TYPE A		SIGNS	TEMPORARY PORTABLE RUMBLE STRIPS	
			NO.	DAYS	NO.	DAYS	NO.	DAYS	LS
CATEGORY 0010									
STH 34	PROJECT DURATION	102		---		---	4	408	
STH 34	LANE CLOSURE WITH FLAGGERS	56		---		---		---	1
STH 34	SHOULDER CLOSURE	56	19	1,064		---	1	56	
LITTLE EAU PLEINE RIVER	PIER CONSTRUCTION	50		---	6	300		---	
PROJECT TOTALS			1,064		300		464		1

* SIGNS INCIDENTAL TO CONTRACT PER SDD 15C12.

Standard Detail Drawing List

08E11-02	TURBIDITY BARRIER
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

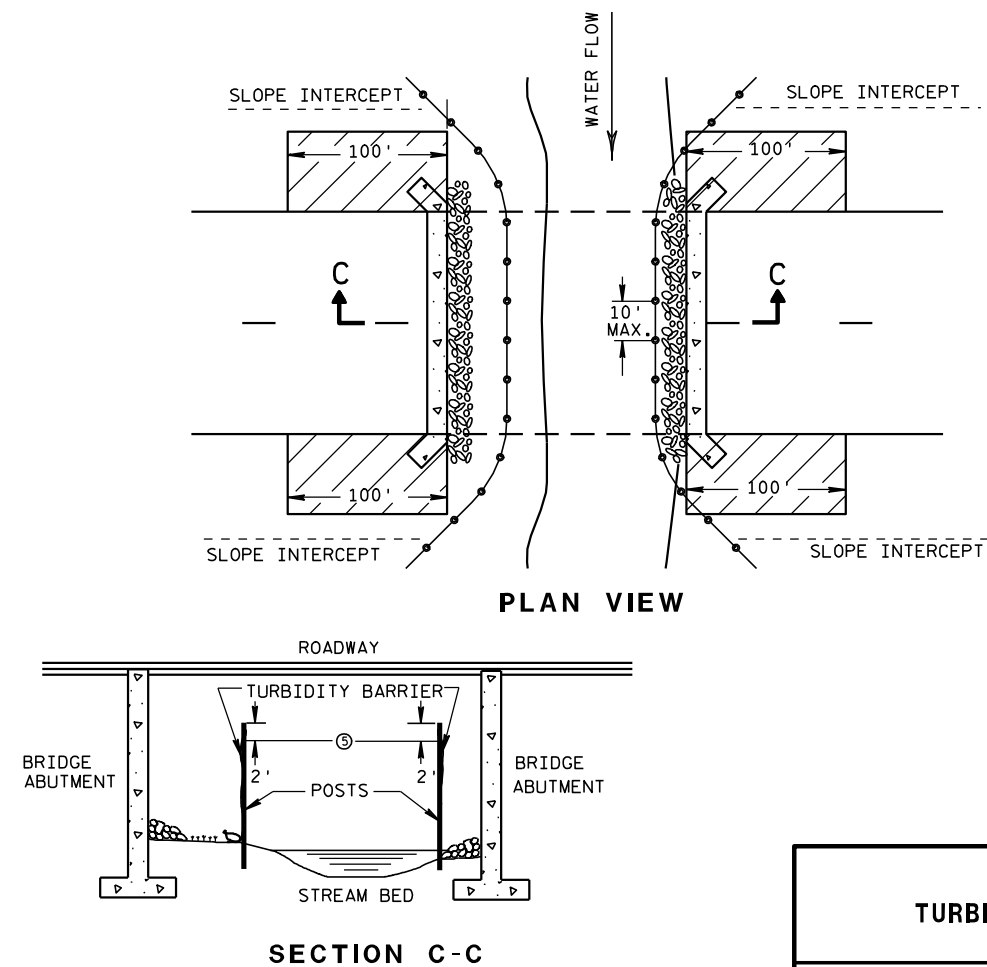


GENERAL NOTES

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FWHA

/S/ Beth Connestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

LEGEND

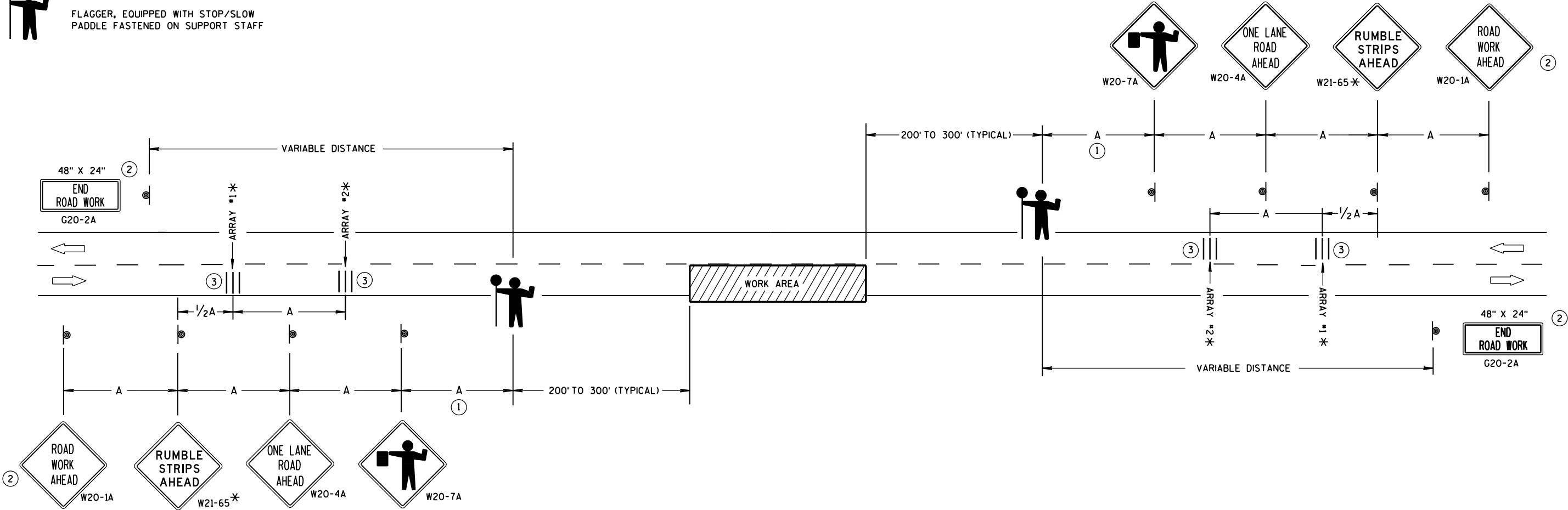
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

WHEN A SIDE ROAD OR 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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Andrew Heldtke
DATE WORK ZONE ENGINEER
FHWA

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

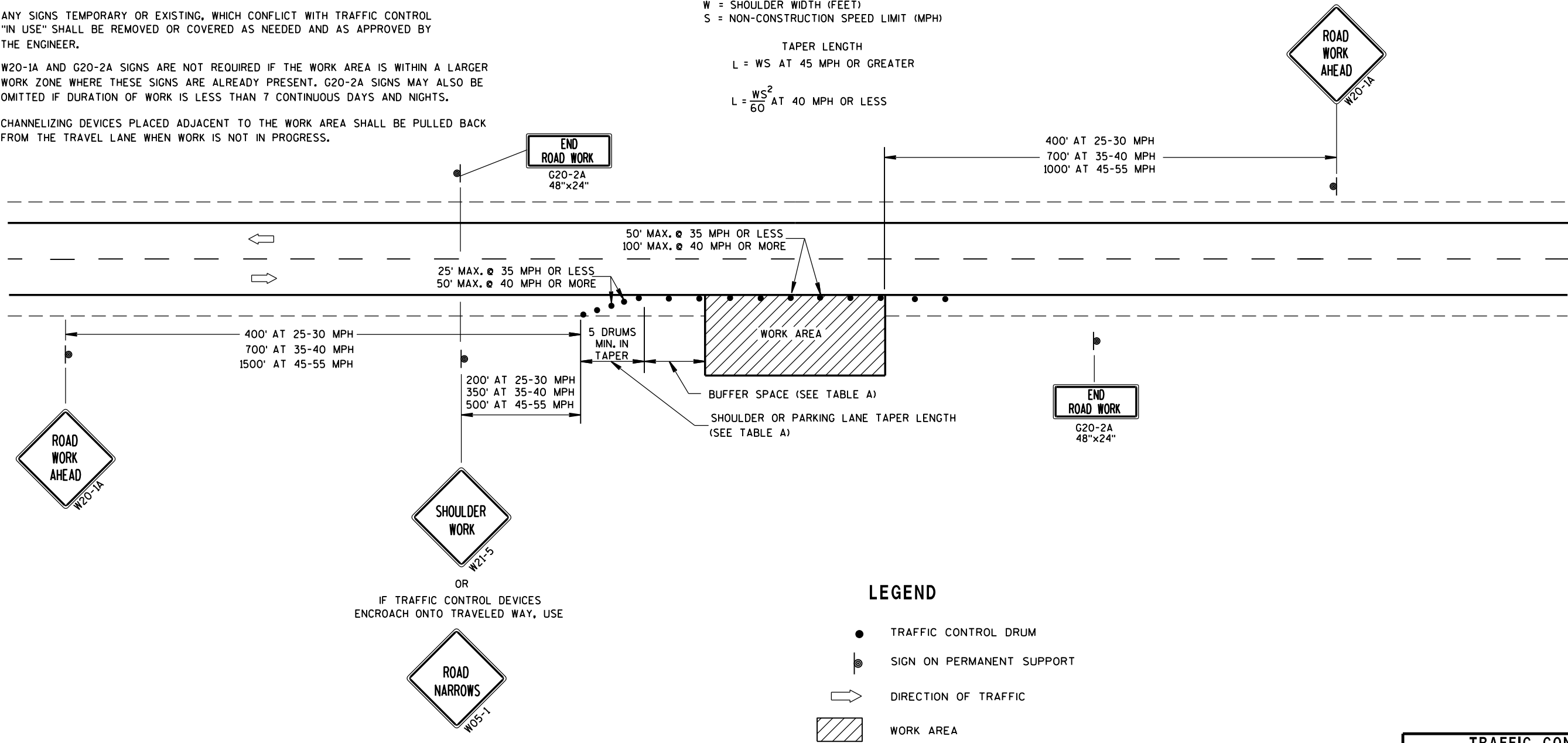
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

STRUCTURAL GROUT ————— $f'_c = 3,000$ PSI
HIGH STRENGTH BAR STEEL
REINFORCEMENT, GRADE 60 ————— $f_y = 60,000$ PSI
WELDED WIRE REINFORCEMENT — $f_y = 60,000$ PSI

Q100 _____ 14,000 C.F.S.
VELOCITY _____ 7.82 F.P.S.
HIGH WATER _____ EL. 1121.09 (100 YEAR)
HIGH WATER _____ EL. 1115.62 (2 YEAR)
WATERWAY AREA _____ 1790.6 S.F.
DRAINAGE AREA _____ 250.3 SQ. MILES
OVERTOPPING FREQUENCY = N/A
SCOUR CRITICAL CODE = 5

WORK MAY BE PERFORMED UNDERWATER

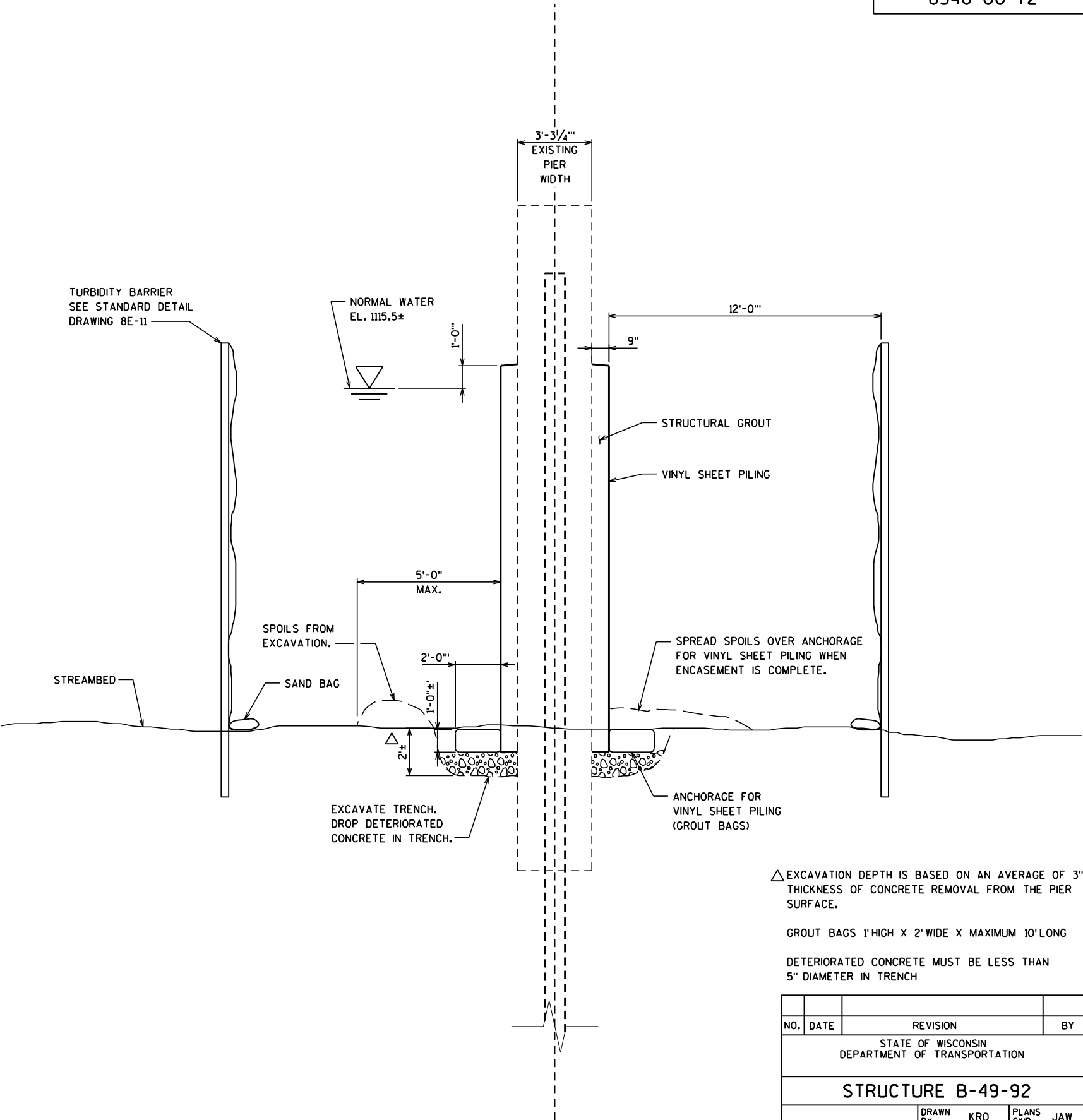
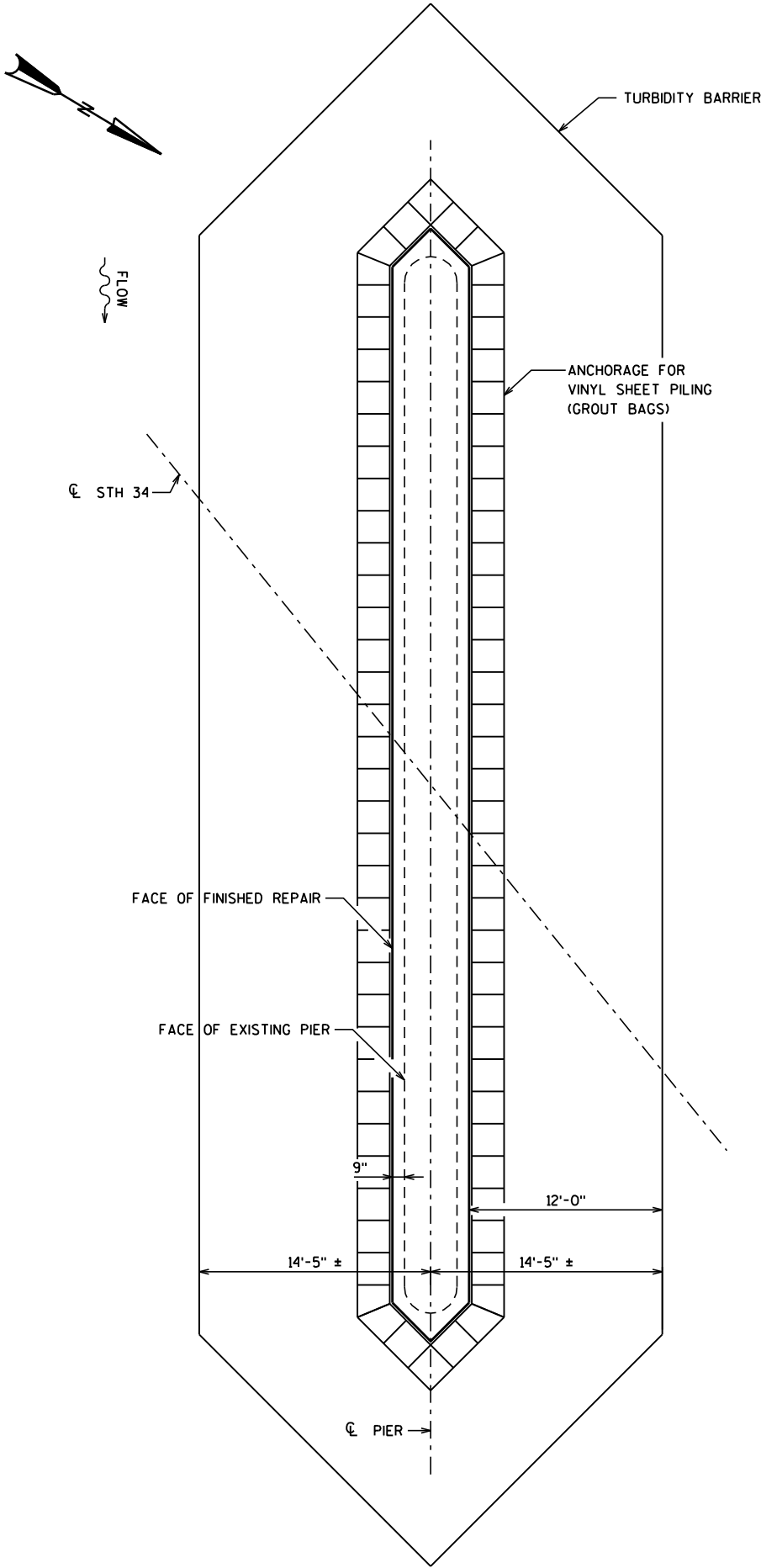
NO.	DATE	REVISION	BY
<p>ORIGINAL PLANS PREPARED BY</p> <p>OMNI ASSOCIATES</p>			
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p> <p>ACCEPTED <i>William C. Dreher</i> ^{SDR} 02/17/17</p> <p>CHIEF STRUCTURES DESIGN ENGINEER DATE</p>			
<p>STRUCTURE B-49-92</p>			
<p>STH 34 OVER LITTLE EAU PLINE RIVER</p>			
COUNTY	PORTAGE	TOWN	EAU PLINE
<p>DESIGN SPEC. REHABILITATION N/A</p>			
DESIGNED BY	BRE	DESIGN CK'D. KRO	<p>DRAWN BY BRE</p> <p>PLANS CK'D. KRO</p>
<p>GENERAL PLAN</p>			<p>SHEET 1 OF 3</p>



WILLIAM DREHER
(608) 266-8489

ITEM NO.	BID ITEMS	UNIT	PIER 1	PIER 2	PIER 3	TOTALS
31L0115	BREAKER RUN	CY	5	5	5	15
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	180	216	216	612
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	580	370	390	1,340
SPV.0035	STRUCTURAL GROUT	CY	69	42	48	158
SPV.0060	PREPARATION AND ANCHORAGE FOR VINYL SHEET PILING	EACH	1	1	1	3
SPV.0105	EXCAVATION AND BACKFILLING FOR STRUCTURES SPECIAL B-49-92	LS	-----	-----	-----	1
SPV.0165	PILING VINYL SHEET PERMANENT DELIVERED AND INSTALLED	SF	1,280	1,420	1,630	4,330
SPV.0165	PREPARATION OF PIER SURFACES	SF	1,220	1,350	1,550	4,120
SPV.0165	WELDED WIRE FABRIC 6X6 D4/D4 (GRADE 60)	SF	1,170	1,310	1,520	4,000



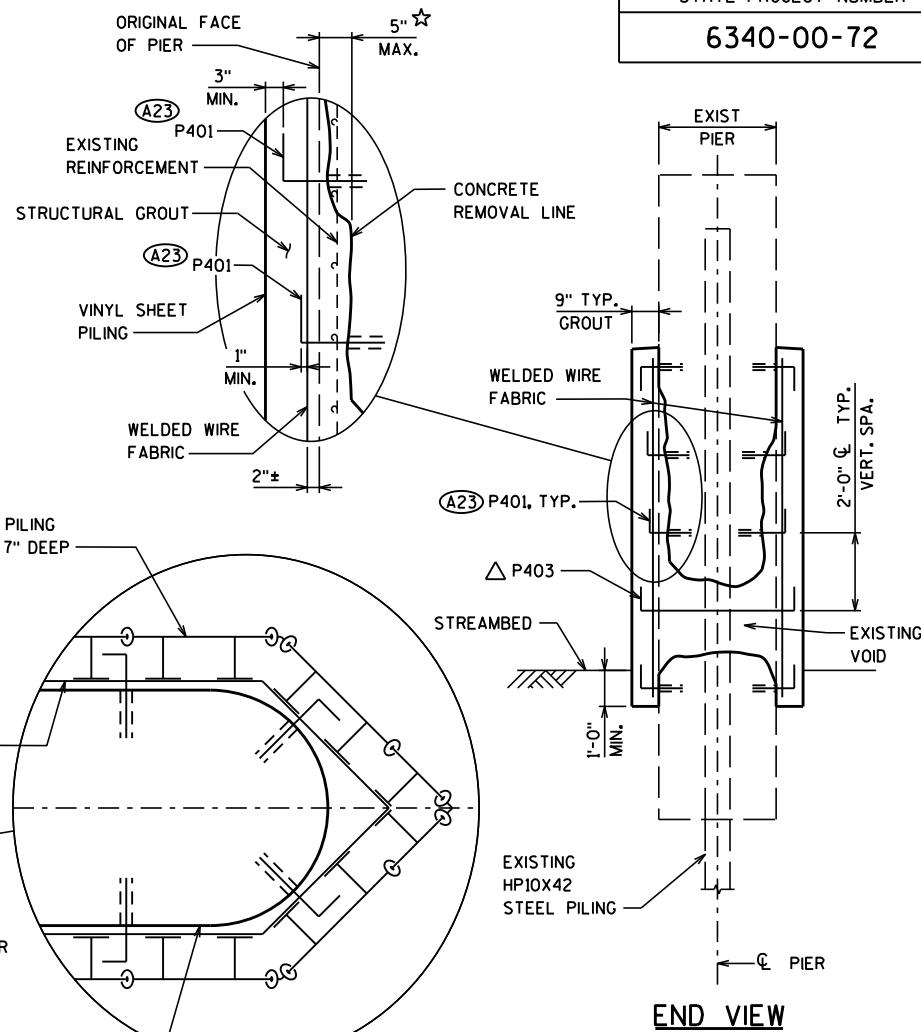
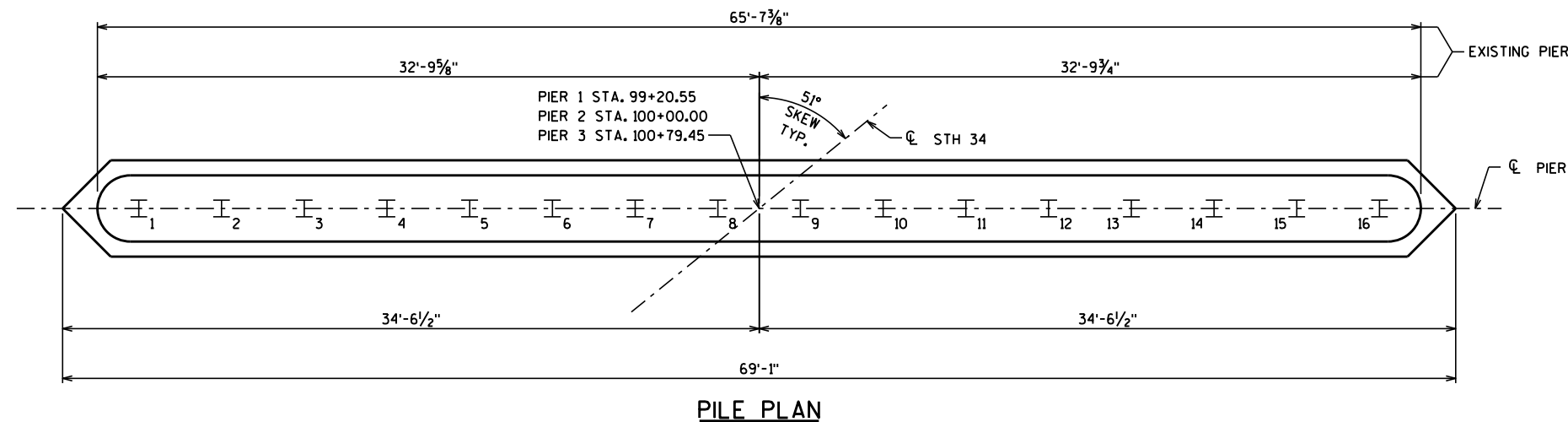
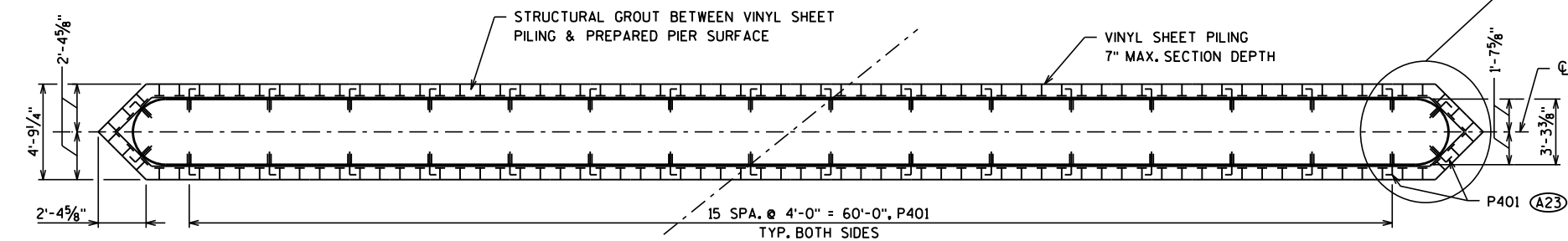
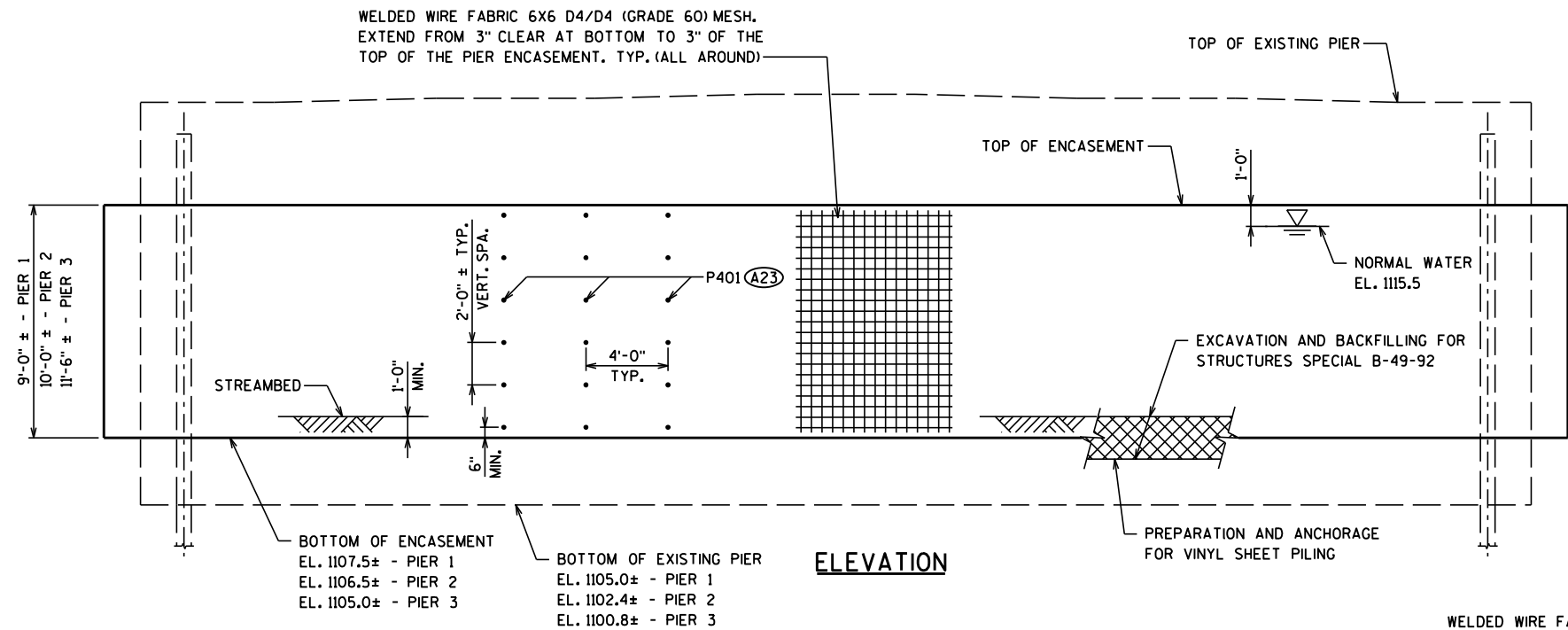


△ EXCAVATION DEPTH IS BASED ON AN AVERAGE OF 3" THICKNESS OF CONCRETE REMOVAL FROM THE PIER SURFACE.

GROUT BAGS 1' HIGH X 2' WIDE X MAXIMUM 10' LONG

DETERIORATED CONCRETE MUST BE LESS THAN 5" DIAMETER IN TRENCH

NO.	DATE	REVISION	BY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION					
STRUCTURE B-49-92					
		DRAWN BY	KRO	PLANS CK'D.	JAW
PIER ENCLOSURE			SHEET 2		OF 3



☆ DO NOT REMOVE CONCRETE MORE THAN 5" FROM ORIGINAL FACE OF PIER.

△ USE P403 IN PLACE OF P401 WHERE VOIDS EXIST IN THE THE PIER SHAFT.

BILL OF BARS

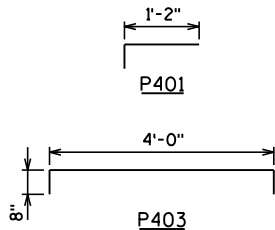
BAR MARK	COAT	NO. REQ'D.			LENGTH	BENT	LOCATION
		PIER 1	PIER 2	PIER 3			
(A23) P401		180	216	216	1'-9"	X	ANCHORS
P402		20	5	6	20'-0"		UNDISTRIBUTED
P403		30	15	15	5'-2"	X	TIES FOR VOIDS

NOTES:

(A23) ADHESIVE ANCHORS NO. 4 BARS. EMBED MIN. 6" INTO EXISTING CONCRETE. TURN 8" LEG AS NECESSARY TO FIT. EMBED ANCHORS DEEPER AS NECESSARY TO MAINTAIN MINIMUM CLEARANCES.

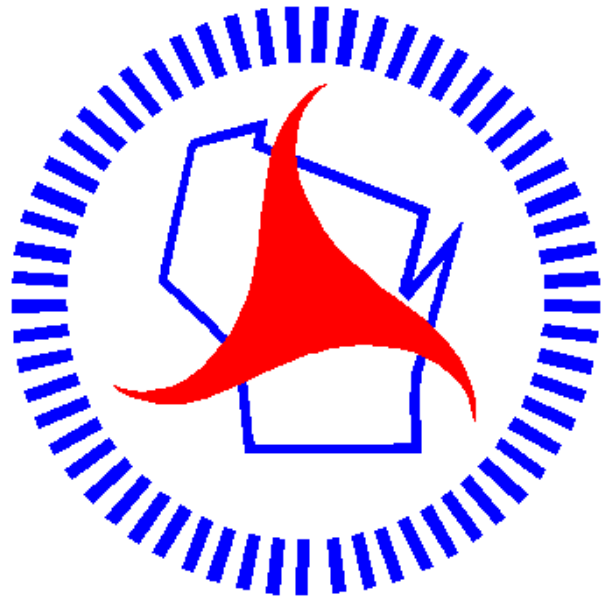
THE REBAR "BAR STEEL REINFORCEMENT HS STRUCTURES" UNDISTRIBUTED QUANTITY OF 20'-0" LONG NO.4 BARS TO REPLACE EXISTING BARS IN POOR CONDITION.

BAR BENDING DIAGRAMS



NO.	DATE	REVISION		BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION				
STRUCTURE B-49-92				
		DRAWN BY	KRO	PLANS CK'D. JAW
PIER DETAILS			SHEET 3 OF 3	

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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