

DESIGN DATA

LIVE LOAD:
 INVENTORY RATING: HS XX
 OPERATING RATING: HS XX
 WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = X KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY:
 SUPERSTRUCTURE $f'_c = 4,000$ PSI
 ALL OTHER $f'_c = 3,500$ PSI
 BAR STEEL REINFORCEMENT, GRADE 60 $f_y = 60,000$ PSI

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- EXISTING DIMENSIONS AND STATIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS. ACTUAL DIMENSIONS AND STATIONS MAY VARY. ORIGINAL DRAWINGS CAN BE FOUND ON WISDOT HSI WEBSITE.
- BAR STEEL SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN.
- THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS 1/2-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
- DECK SURFACE PREPARATION FOR POLYMER OVERLAY IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
- AFTER CLEANING THE PARAPETS, "PIGMENTED SURFACE SEALER" SHALL BE APPLIED TO THE INSIDE AND TOPS OF PARAPETS TO THE SATISFACTION OF THE FIELD ENGINEER.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF THE CONCRETE OVERLAY.
- A MINIMUM OF 1" OF CONCRETE SHALL BE REMOVED FROM THE BRIDGE DECK BETWEEN PARAPETS (AS SHOWN) UNDER THE BID ITEM "CLEANING DECKS".
- TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION.
- "FULL DEPTH DECK REPAIR", "PREPARATION DECKS" AND "CONCRETE SURFACE REPAIR" SHALL BE DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".
- ALL CONCRETE REMOVAL NOT COVERED WITH THE CONCRETE OVERLAY SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT OR AS APPROVED BY ENGINEER.
- ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".
- PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON MINIMUM CONCRETE OVERLAY THICKNESS OF 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE CONCRETE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE CONCRETE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2" CONTACT BUREAU OF STRUCTURES DESIGN SECTION FOR REVIEW.
- SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF STANDARD SPECIFICATIONS UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".
- REPAIRS USING CONCRETE REQUIRE A MINIMUM CURE TIME OF 28 DAYS BEFORE PLACING POLYMER OVERLAY.
- ORIGINAL SLAB DEPTH SHOWN FROM 1984.
- THE FIRST DIGIT OF A THREE DIGIT BAR NO. OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.
- UTILIZE EXISTING BAR STEEL AS SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK.
- THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-21-10" SHALL BE THE EXISTING GROUND LINE.
- AT WING REPAIRS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW WING SHALL BE BACKFILLED WITH STRUCTURAL BACKFILL.

TRAFFIC VOLUME

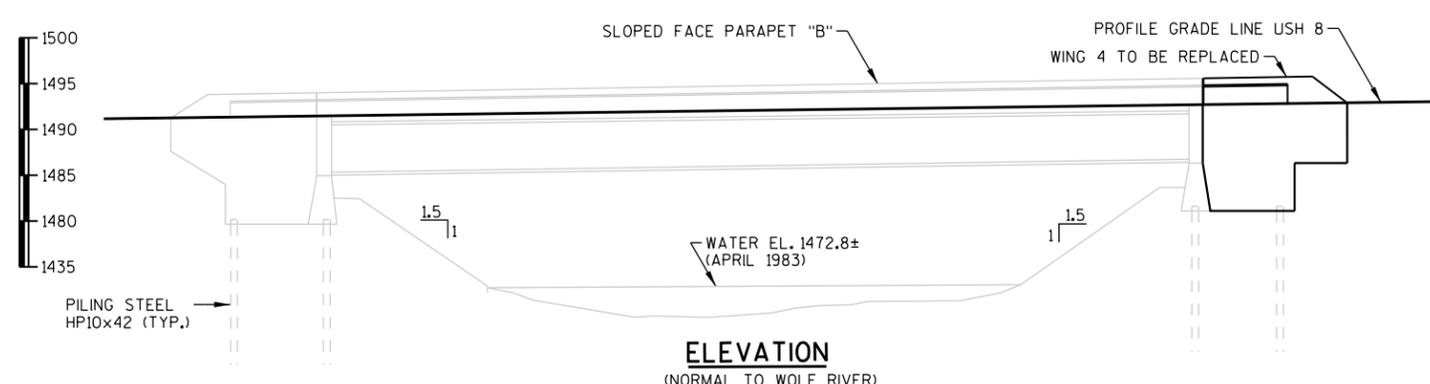
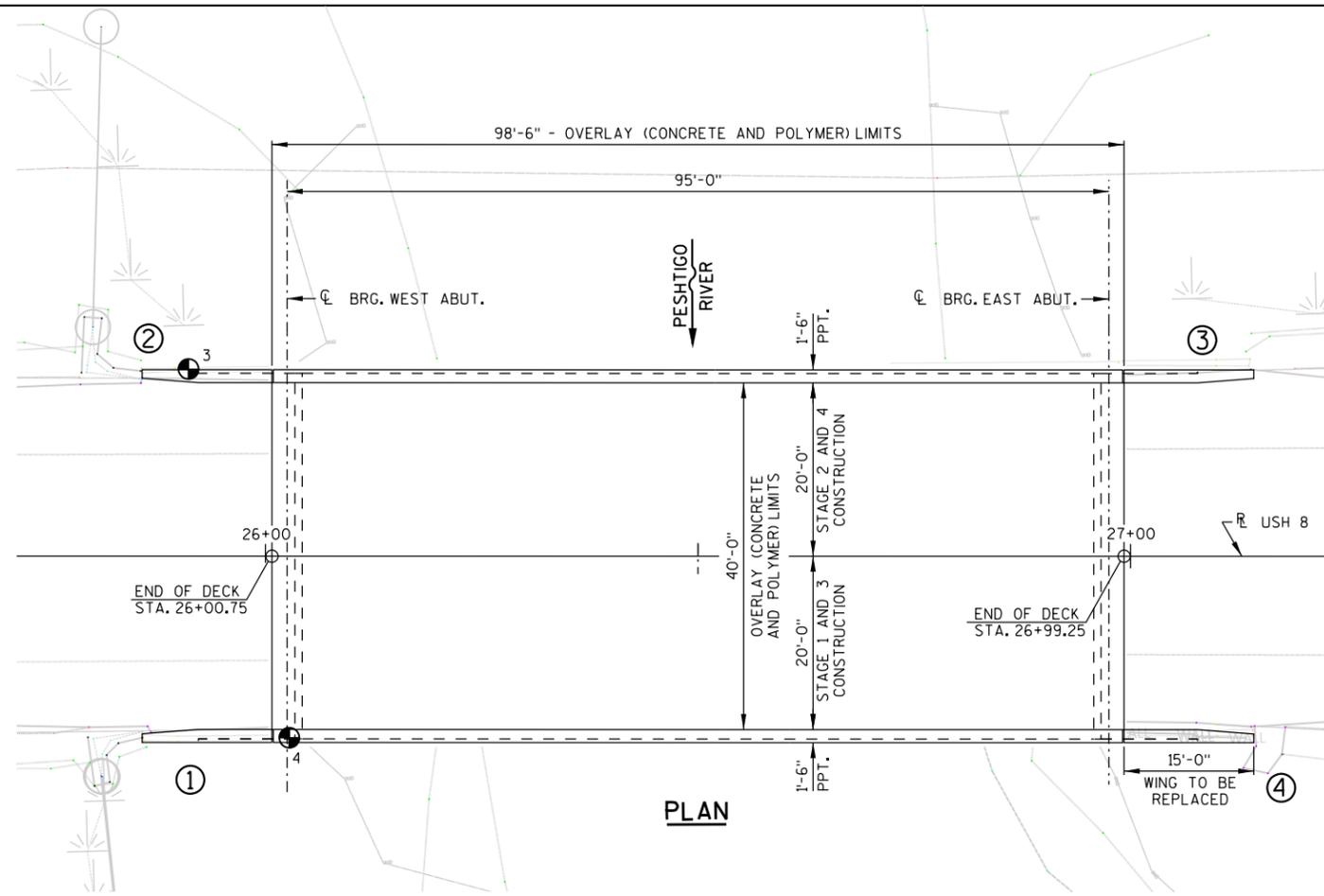
USH 8
 A.D.T. (2015) = 2,200
 A.D.T. (2042) = 2,240
 DESIGN SPEED = 60 MPH

LIST OF DRAWINGS

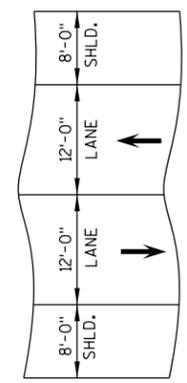
1. CONCRETE & POLYMER OVERLAY
2. CONSTRUCTION DETAILS & QUANTITIES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
 BILL DREHER (608) 266-8489
 CONSULTANT:
 BETH NEMEC (715) 342-3069
 AECOM PROJECT NO. 60572011



(X) INDICATES WING NUMBER



BATCH PRINT SHEET 1 OF 2

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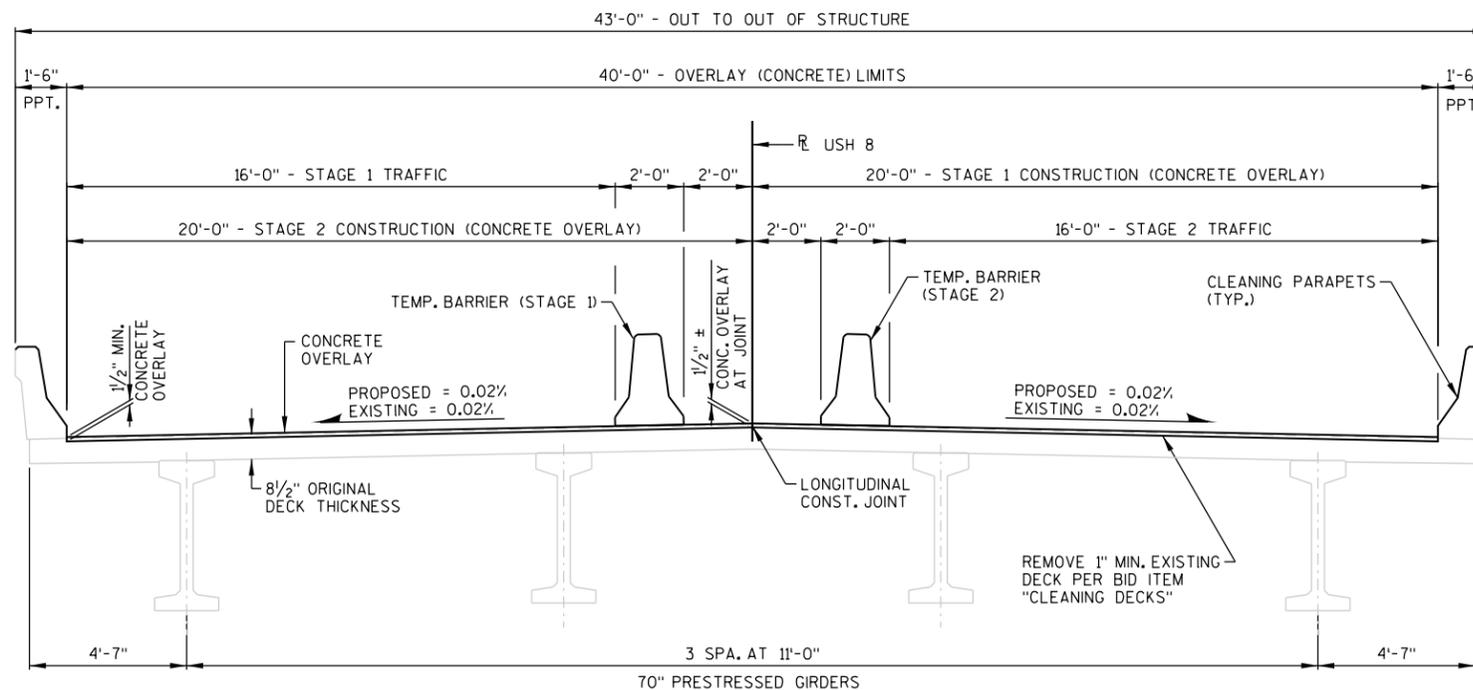
BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
3	25+91 LT.	METAL DISK IN TOP WING WALL NW CORNER OF BRIDGE	1493.85
4	26+03 RT.	METAL DISK IN TOP WING WALL SW CORNER OF BRIDGE	1494.07
5	28+43 RT.	60d SPIKE IN RED PINE SE QUAD. BRIDGE	1491.66

GPS - WCCS 83/11 NAVD 88 R8, CRANDON GPS

NO.	DATE	REVISION	BY
AECOM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		CHIEF STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE B-21-10			
USH 8 OVER WOLF RIVER			
COUNTY	FOREST	TOWN/CITY/VILLAGE	CASWELL
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
		KAM	EAN
CONCRETE & POLYMER OVERLAY			SHEET 1 OF 2

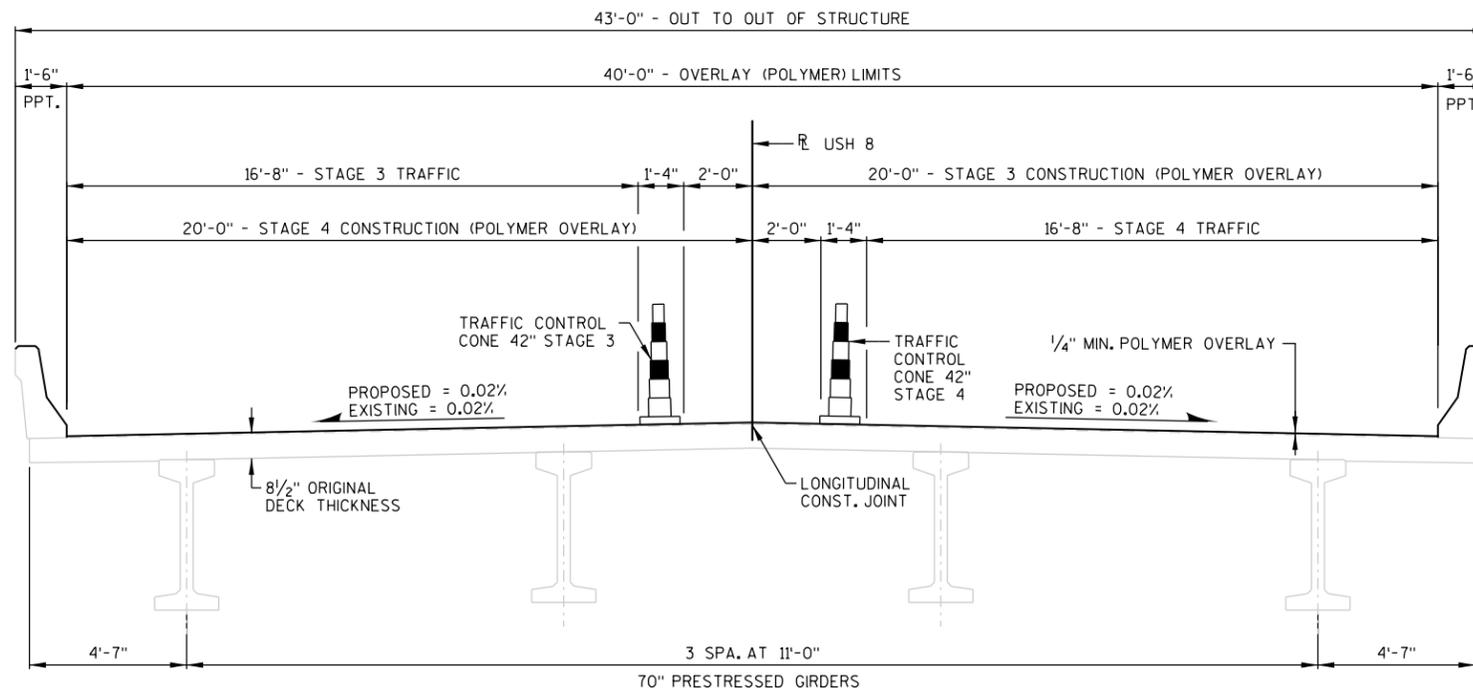
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CROSS SECTION THRU ROADWAY

LOOKING EAST (STAGE 1 & 2)

AVERAGE CONCRETE OVERLAY THICKNESS = 2"

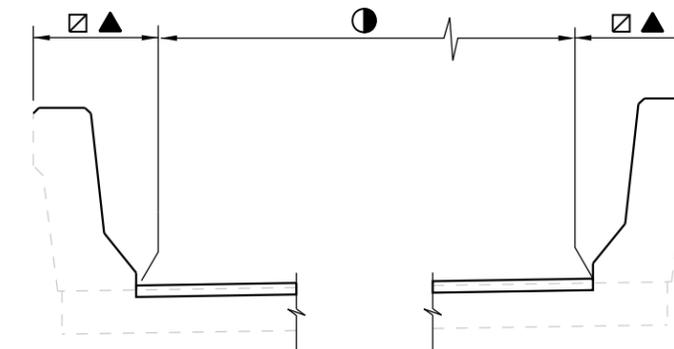


CROSS SECTION THRU ROADWAY

LOOKING EAST (STAGE 3 & 4)

LEGEND

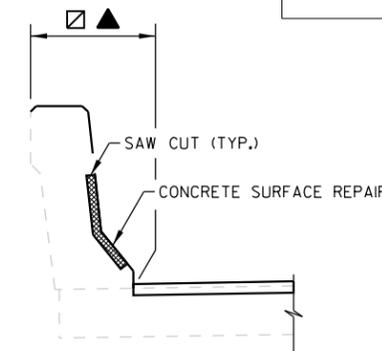
- ☆ CONCRETE SURFACE REPAIR REQUIRED AT SUBSTRUCTURE AND PARAPET. LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ▲ BID ITEM INCLUDES CONCRETE FOR PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, FULL-DEPTH DECK REPAIR. LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
- ☐ "CLEANING PARAPETS" LIMITS
- ▲ "PIGMENTED SURFACE SEALER" LIMITS
- "PROTECTIVE SURFACE TREATMENT" LIMITS



SURFACE PROTECTION DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
203.0200	REMOVING OLD STRUCTURE 27+00	LS	
206.1000.301	EXCAVATION FOR STRUCTURES BRIDGES B-21-10	LS	
210.1500	BACKFILL STRUCTURE TYPE A	TON	
502.0100	CONCRETE MASONRY BRIDGES	CY	
502.3200	PROTECTIVE SURFACE TREATMENT	SY	
502.3210	PIGMENTED SURFACE SEALER	SY	
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	
502.4208	ADHESIVE ANCHORS NO. 8 BAR	EACH	
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	
509.0301	PREPARATION DECKS TYPE 1	SY	
509.0302	PREPARATION DECKS TYPE 2	SY	
509.0500	CLEANING DECKS	SY	
509.1500	CONCRETE SURFACE REPAIR	SF	
509.2000	FULL-DEPTH DECK REPAIR	SY	
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	
509.5100.S	POLYMER OVERLAY	SY	
509.9050.S	CLEANING PARAPETS	LF	
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	
606.0300	RIPRAP HEAVY	CY	
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	
645.0120	GEOTEXTILE TYPE HR	SY	
SPV.0105.301	WING STABILIZATION	LS	



PARAPET REPAIR DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-21-10			
DRAWN BY		KAM	PLANS CK'D. EAN
CONSTRUCTION DETAILS & QUANTITIES			SHEET 2 OF 2

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