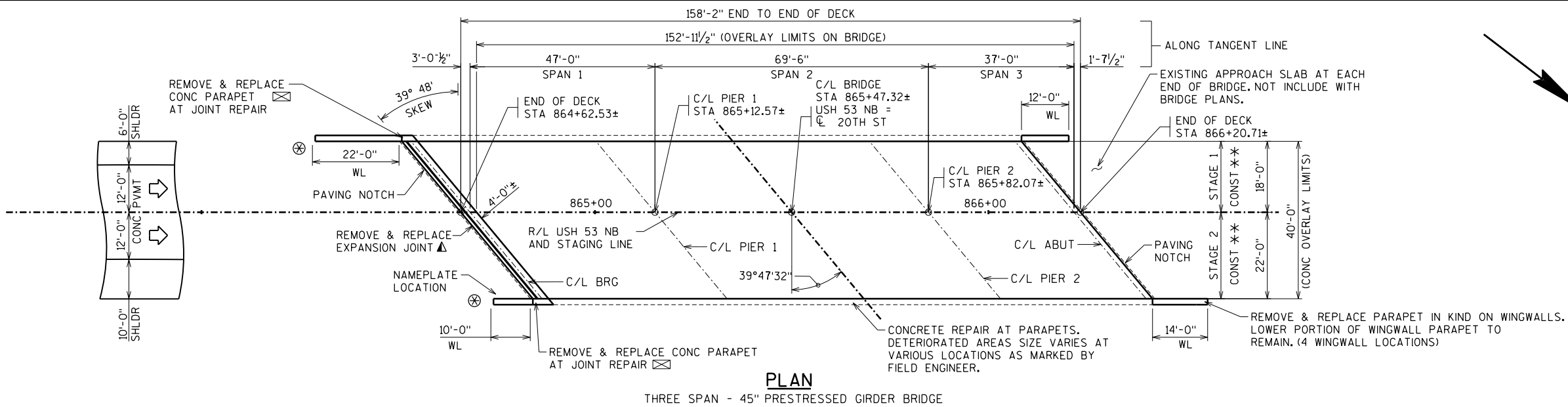


PLOT TIME: 3/25/17 PM

PLOT DATE: 2/2/2019

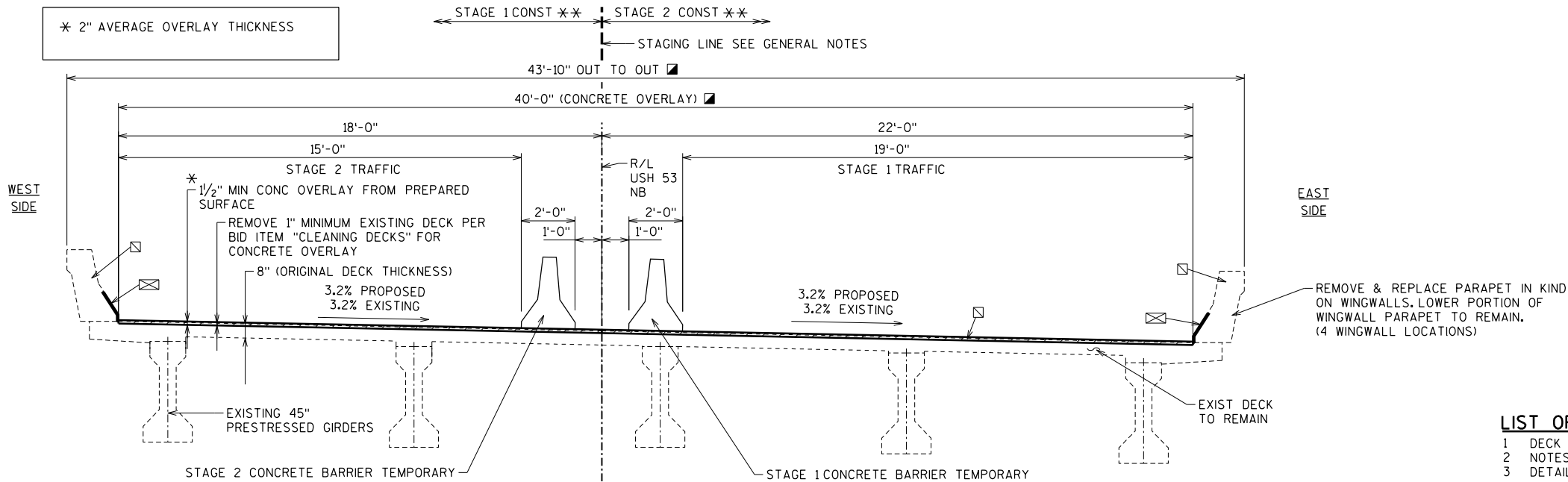
FILE NAME : \\SP3020-projects\UZ\W\WIT\w\46423\5-final-dsgn\51-drawings\20-Struct\B-3-31\bridge\03031gld.dgn

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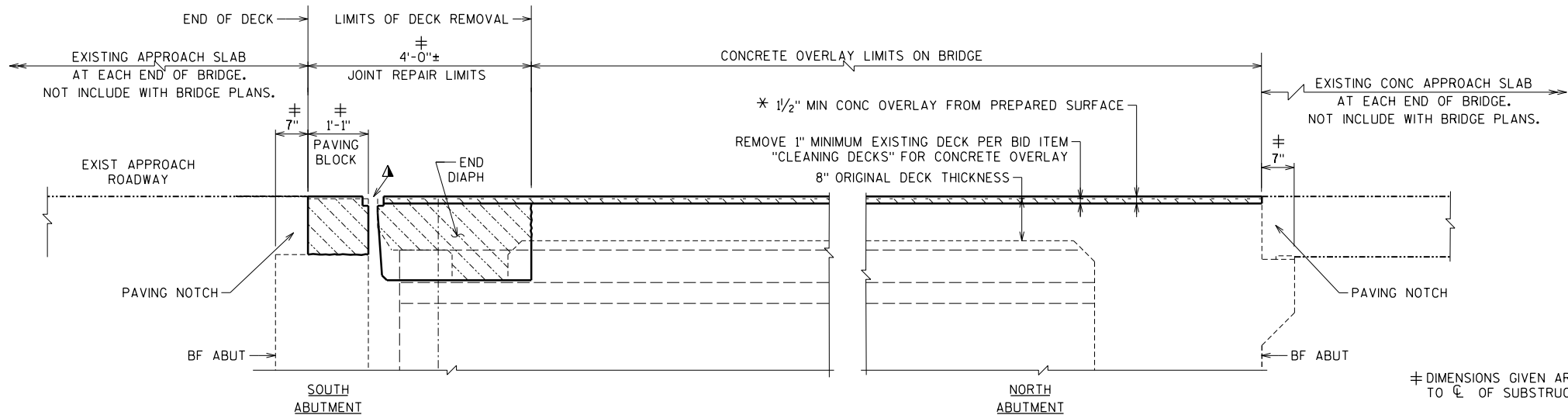
### PLAN

THREE SPAN - 45" PRESTRESSED GIRDER BRIDGE



### CROSS SECTION THRU ROADWAY

(LOOKING NORTH)



### TYPICAL LONGITUDINAL SECTION AT END OF DECK

± DIMENSIONS GIVEN ARE NORMAL TO C/L OF SUBSTRUCTURE UNIT.

STATE PROJECT NUMBER

1196-04-78

### LEGEND

\*\* SEE ROADWAY PLANS FOR TRAFFIC CONTROL STAGING.

INDICATES REMOVAL

COAT PARAPET WITH "PIGMENTED SURFACE SEALER" AND COAT CONCRETE OVERLAY WITH "PROTECTIVE SURFACE TREATMENT" PER THE STANDARD SPECIFICATIONS, SEE NOTES ON SHEETS 2.

LOCATION OF ANCHOR ASSEMBLIES FOR THRIE BEAM

COVER PLATES REQUIRED AT STRIP SEAL ON PARAPETS

STRIP SEAL EXPANSION DEVICE

ON RADIAL LINES

WL = WING LENGTH

### DESIGN DATA

LIVE LOAD: HS20

DESIGN LOADING:

INVENTORY RATING RF = -

OPERATING RATING RF = -

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = - KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY - SUPERSTRUCTURE f'c = 4,000 psi  
- OVERLAY f'c = 4,000 psi  
- ALL OTHER f'c = 3,500 psi


HIGH STRENGTH BAR STEEL REINFORCEMENT  
AASHTO GRADE 60 fy = 60,000 psi  
ALL BAR STEEL SHALL BE EPOXY COATED

### LIST OF DRAWINGS

- DECK OVERLAY
- NOTES AND QUANTITIES
- DETAILS

### TRAFFIC DATA

ADT (2020) = 5625  
ADT (2040) = 6925  
DHV = 720  
DD = 61/39  
T = 25.33 %  
DESIGN SPEED = 70 MPH

NO.	DATE	REVISION	BY
 SHORT ELLIOTT HENDRICKSON INC.			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		CHIEF STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE B-3-31			
U.S.H. 53 NB OVER 20TH STREET			
COUNTY	BARRON	TOWN/VILLAGE	PRAIRIE LAKE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
		AMJ	CJB
DECK OVERLAY			SHEET 1 OF 3

SEH CONTACT: CHRIS BLUM, PE, 608.620.6192

WISDOT BRIDGE OFFICE CONTACT: BILL DREHER, PE, 608.266.8489

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND INSPECTION REPORTS. EXISTING BRIDGE PLANS AVAILABLE AT WISDOT.

STATIONING MAY VARY BASED ON EXACT LOCATION OF BRIDGE TO PROPOSED ALIGNMENT.

CONTRACTOR TO VERIFY EXISTING UTILITY LOCATIONS.

ANY EXCAVATION REQUIRED TO COMPLETE THE DECK OVERLAY AT THE ABUTMENTS, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

STAGING LINE LOCATION TO BE DETERMINED BY THESE PLANS AND BY THE FIELD ENGINEER. COORDINATE WITH STAGING PLANS.

A MINIMUM OF 1"-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS". CONTRACTOR TO VERIFY COMPLETENESS OF REMOVALS WITH THE FIELD ENGINEER.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, CONCRETE SURFACE REPAIR AND FULL-DEPTH DECK REPAIR AS DETERMINED, LOCATED, MARKED AND MEASURED BY THE FIELD ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

BOTTOM OF THE EXISTING DECK WILL BE INSPECTED FOR AREAS OF FULL-DEPTH DECK REPAIR PRIOR TO DECK PREPARATION OPERATIONS.

BOTTOM OF THE EXISTING DECK IS TO BE INSPECTED FOR AREAS OF DISTRESS AFTER COMPLETION OF THE DECK PREPARATION AND PRIOR TO OVERLAYING THE BRIDGE.

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

THESE STRUCTURE PLANS ARE ONLY THE STRUCTURE REPAIR WORK. ANY ADDITIONAL REMOVAL REQUIRED, OUTSIDE OF THE LIMITS SHOWN IN THESE PLANS MUST BE COORDINATED WITH THE FIELD ENGINEER. FIELD ENGINEER SHOULD BE CONTACTED FOR APPROVAL OF ADDITIONAL REMOVAL.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM CONCRETE OVERLAY THICKNESS OF 1 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2" OR AS GIVEN ON THE PLANS. IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURES DESIGN SECTION.

CLEAN ALL LOOSE MATERIAL ON THE DECK AFTER CLEANING OPERATIONS USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO PLACEMENT OF THE CONC OVERLAY, PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER.

AT THE NORTH ABUTMENT THE DECK JOINT IS COMPRISED OF A FILLER AND SEALANT. THERE IS NO STRIP SEAL OR COVER PLATE EXPANSION JOINT.

AT THE SOTH ABUTMENT THE DECK JOINT IS COMPRISED OF A STRIP SEAL EXPANSION JOINT. EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID FOR IN THE LUMP SUM PRICE BID AS "EXPANSION DEVICE B-3-31".

APPLY "PIGMENTED SURFACE SEALER" TO THE CONCRETE PARAPETS PER THE STANDARD SPECIFICATIONS AND AS SHOWN IN THIS PLAN SET.

APPLY PROTECTIVE SURFACE TREATMENT TO THE DECK AFTER THE CONCRETE OVERLAY HAS BEEN APPLIED PER THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE PLAN SET.

THE CONTRACTOR SHALL SUPPLY A NEW NAMEPLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAMEPLATE TO SHOW ORIGINAL CONSTRUCTION YEAR. SEE EXISTING NAMEPLATE FOR DATE.

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

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

SEE ROADWAY PLAN FOR LANE STAGING AND TRAFFIC SHIFT. COORDINATE THESE STRUCTURE PLANS WITH THE ROADWAY STAGING.

TOTAL ESTIMATED QUANTITIES - B-3-31

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
⑧	502.0100	CONCRETE MASONRY BRIDGES	CY	
	502.3100	EXPANSION DEVICE B-3-31	LS	
④	502.3200	PROTECTIVE SURFACE TREATMENT	SY	
④	502.3210	PIGMENTED SURFACE SEALER	SY	
	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EA	
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	
③	509.0301	PREPARATION DECKS TYPE 1	SY	
③	509.0302	PREPARATION DECKS TYPE 2	SY	
①	509.0500	CLEANING DECKS	SY	
	509.1000	JOINT REAIR	SY	
⑤	509.1500	CONCRETE SURFACE REPAIR	SF	
⑤⑥	509.2000	FULL-DEPTH DECK REPAIR	SY	
②	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	
⑦	509.9050.S	CLEANING PARAPETS	LF	
		RAILING TUBULAR REPAIR	LF	
		EPOXY COAT GIRDER ENDS	LF	
		NON-BID ITEMS		
		FILLER	SIZE	1/2"
		NAMEPLATE	EACH	1

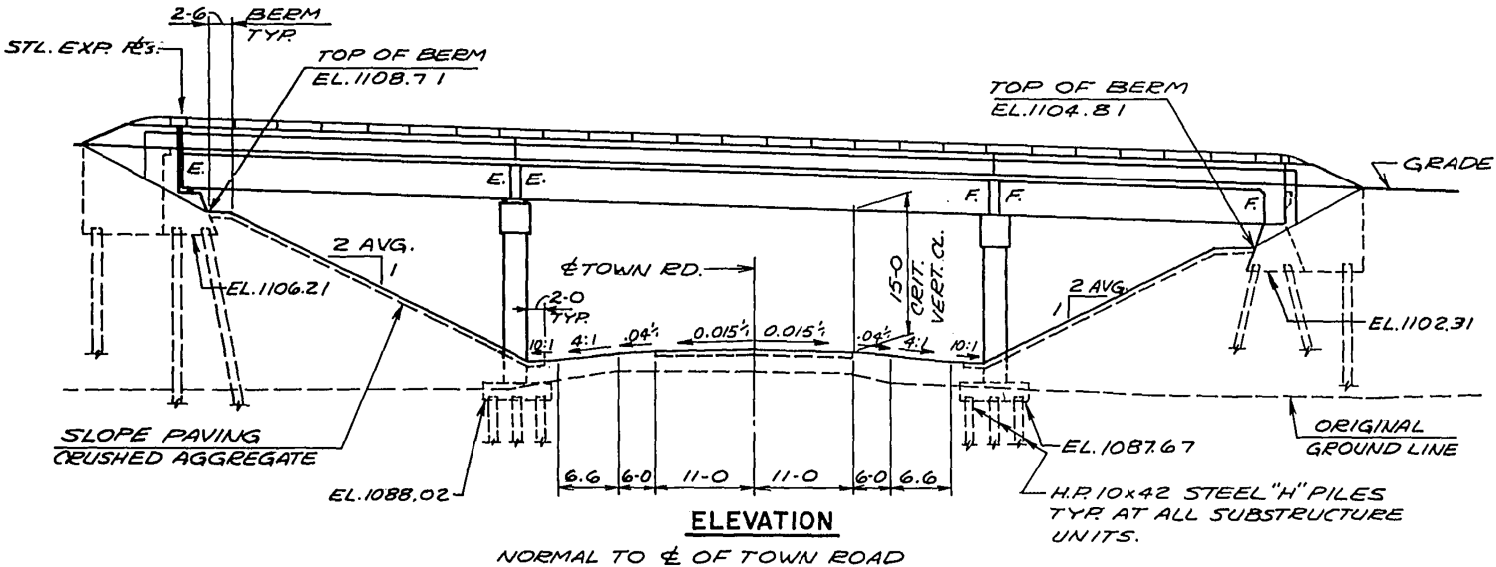
QUANTITIES NOTES

- ① BASED ON 1" DEEP BY LIMITS OF OVERLAY ON DECK.
- ② CONCRETE FOR:  
\* PREPARATION DECKS TYPE 1 & 2, \*FULL-DEPTH DECK REPAIR AND OVERLAY, AND JOINT REPAIR INCLUDING PAVING BLOCK AND OVERLAY.
- ③ PERTAINS TO DECK.
- ④ FURNISH AND APPLY PIGMENTED SEALER TO FRONT FACE, TOP, AND ENDS OF PARAPETS. CLEAN THE INSIDE FACE, TOP AND ENDS OF PARAPET PER BID ITEM "CLEANING PARAPETS". APPLICATION AND QUANTITY FOR PIGMENTED SURFACE SEALER ARE CONSIDERED INCIDENTAL TO BRIDGE BID ITEM " PIGMENTED SURFACE SEALER".
- FURNISH AND APPLY A PROTECTIVE SURFACE TREATMENT TO THE ENTIRE TOP SURFACE OF THE DECK OVERLAY AND PAVING BLOCK. APPLICATION AND QUANTITY FOR PROTECTIVE SURFACE TREATMENT ARE CONSIDERED INCIDENTAL TO BRIDGE BID ITEM "PROTECTIVE SURFACE TREATMENT".
- ⑤ AS LOCATED BY FIELD ENGINEER.
- ⑥ UNDISTRIBUTED AMOUNT.
- ⑦ INCLUDES PARAPETS ON DECK.
- ⑧ INCLUDES CONCRETE FOR WING PARAPETS AND JOINT REPAIR AT PARAPETS ONLY.

\* THESE QUANTITIES TOTALS ARE AN ESTIMATE AND ARE INCLUDED IN BID ITEM "CONCRETE MASONRY OVERLAY, DECKS".

-PREPARATION DECKS TYPE 1 = CY  
-PREPARATION DECKS TYPE 2 = CY  
-FULL-DEPTH DECK REPAIR = CY

NOTE:  
THIS ELEVATION VIEW  
TAKEN FROM EXISTING  
PLANS, REFERENCE  
ONLY, NOT FOR  
CONSTRUCTION. INTENT  
IS TO SHOW CONTRACTOR  
BENEATH THE BRIDGE

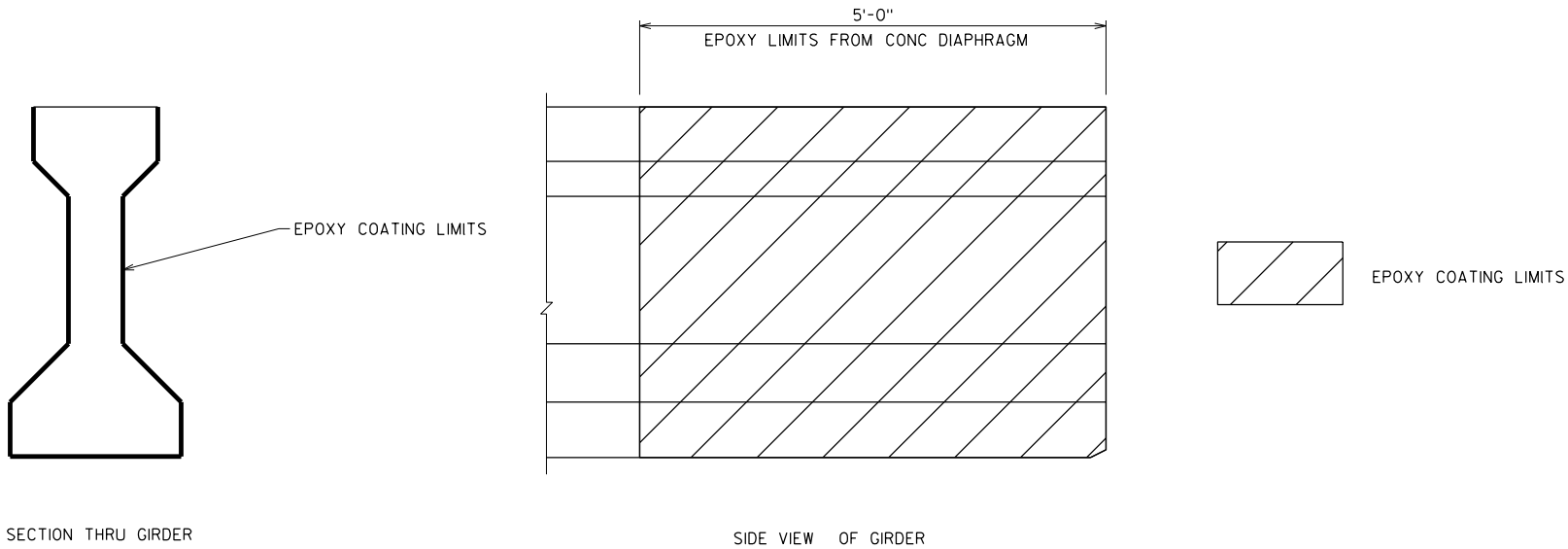


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-31			
DRAWN BY		AMJ	PLANS CK'D. CJB
NOTES AND QUANTITIES			SHEET 2 OF 3

FILE NAME : \\SP3020-1\projects\UZ\W\Wtrnw\146423\5-final-dsgn\51-drawings\20-Struct\B-3-3\Nbridge\B0303lg2.dgn PLOT DATE: 2/2/2019 PLOT TIME: 2:38:33 PM

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STATE PROJECT NUMBER
1196-04-78



**EPOXY COAT GIRDER DETAIL**  
(TYP AT ABUTMENT LOCATIONS ONLY)

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NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-31			
		DRAWN BY AMJ	PLANS CK'D. CJB
DETAILS		SHEET 3 OF 3	