

DESIGN DATA:**LOADS:**

LIVE LOAD: HS-20
EARTH LOAD: DESIGNED FOR NO FILL
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 190 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY DECK REPAIR $f'_c = 4,000$ PSI
CONCRETE SUPERSTRUCTURE $f'_c = 4,000$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT $F_y = 60,000$ PSI
POLYESTER POLYMER CONCRETE OVERLAY $f'_c = 5,000$ PSI

TRAFFIC DATA

A.D.T. (2019) = 28,500
A.D.T. (2039) = 30,000
DESIGN SPEED = 25 MPH

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. EXISTING CROSS SECTION, QUANTITIES, & NOTES
3. CONSTRUCTION STAGING - 1
4. CONSTRUCTION STAGING - 2
5. CONSTRUCTION STAGING - 3
6. SUPERSTRUCTURE DETAILS

LEGEND

- SEE GENERAL NOTE REGARDING PREPARATION DECKS
TYPE 1 AND 2 AND FULL DEPTH DECK REPAIR.

STRUCTURE DESIGN CONTACTS

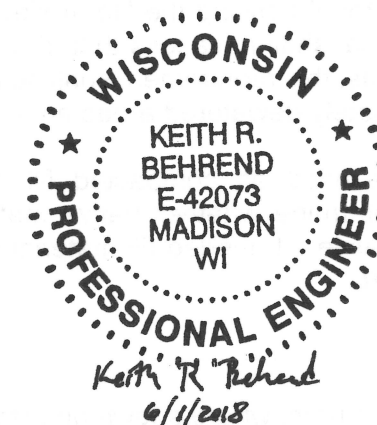
BRIDGE OFFICE CONTACT:
WILLIAM DREHER (608) 266-8489

DESIGN CONSULTANT CONTACT:
KEITH BEHREND (608) 251-4843

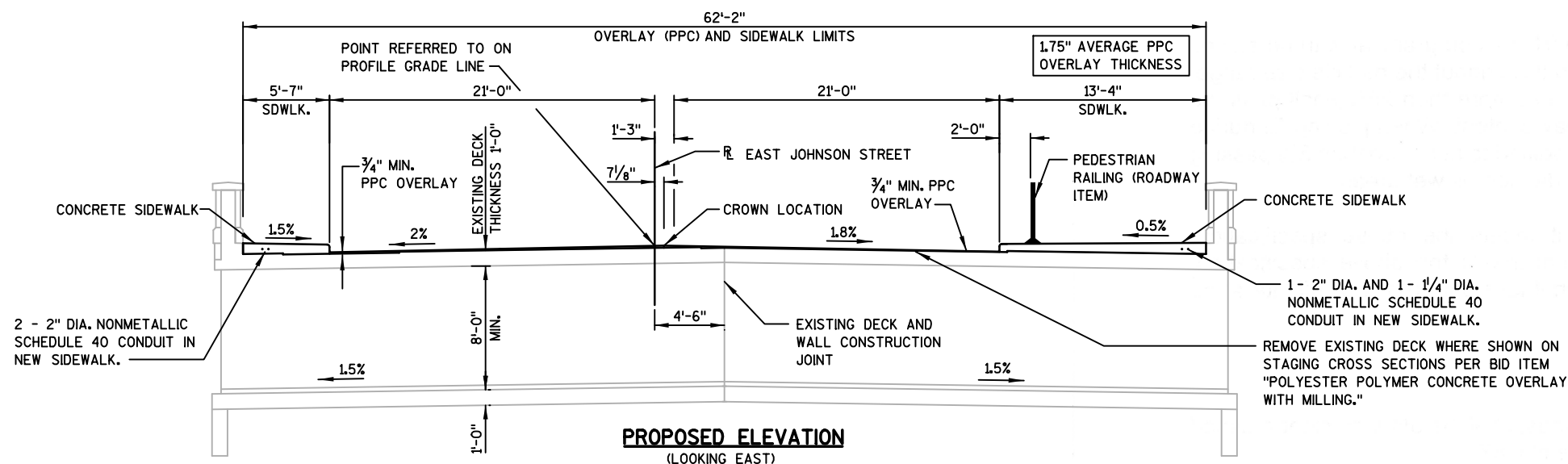
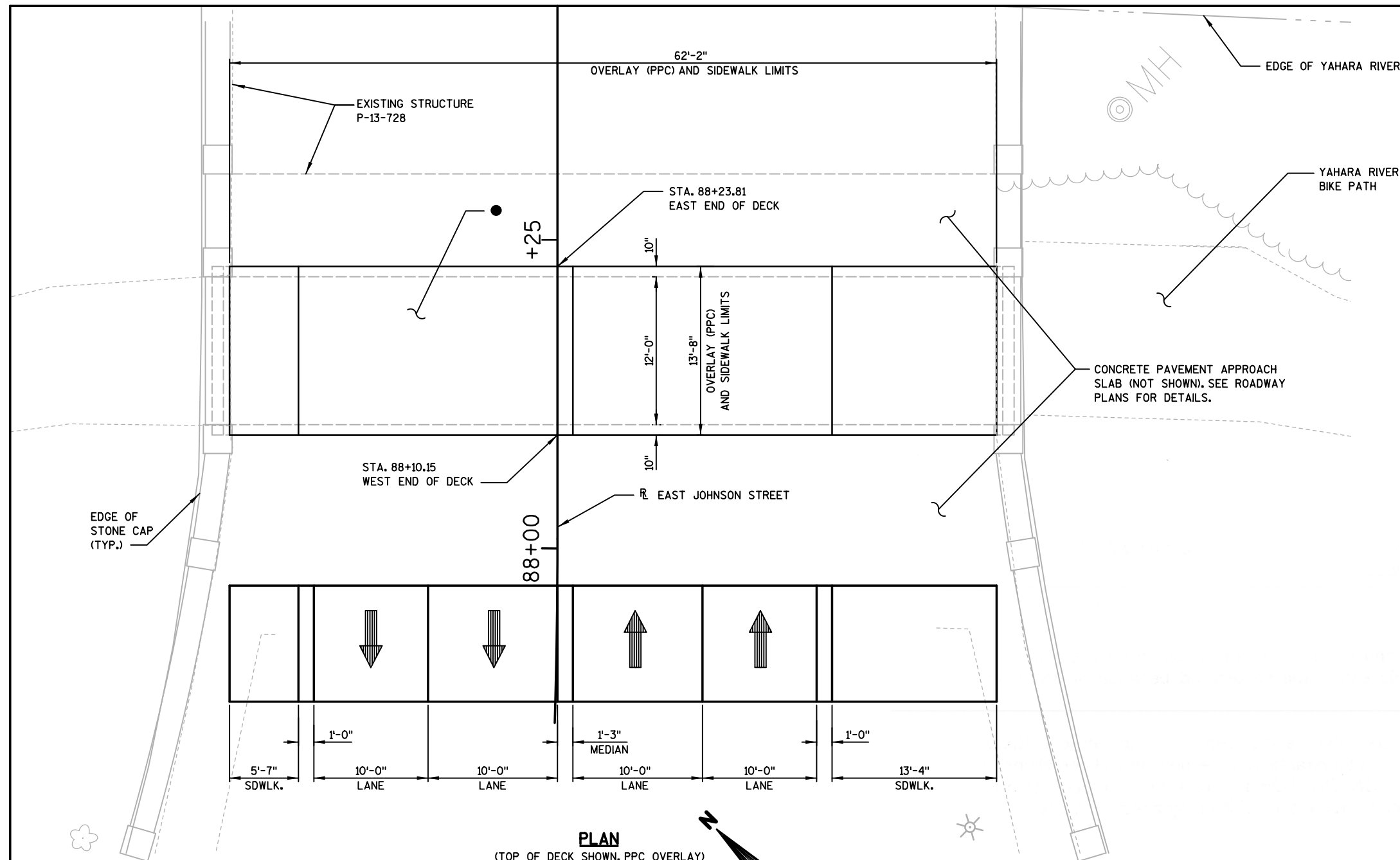
BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
BM #1	87+20, 44' RT	MARKER SQ. SW CORNER W. END RETAINING WALL THORNTON DEAD END & E. JOHNSON BACK OF WALK	851.01
BM #2	92+49, 41' RT	TOP NUT HYDRANT, E. JOHNSON STREET @ TRAIN CROSSING SIGN	856.21

NOTE: BENCHMARKS ARE OUTSIDE OF PLAN EXTENTS. SEE ROADWAY PLAN AND PROFILE SHEETS FOR BENCHMARK LOCATIONS.



NO.	DATE	REVISION	BY
		910 WEST WINGRA DRIVE MADISON, WISCONSIN 53715 (608)-251-4843 (608) 251-8655 FAX WWW.STRAND.COM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____		_____ DATE _____	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE C-13-147			
EAST JOHNSON ST.OVER YAHARA RIVER BIKE PAT			
COUNTY	DANE	TOWN/CITY/VILLAGE	MADISON
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	EJC	DESIGN CK'D.	KRB
DRAWN BY	DTH	PLANS CK'D.	KRB
GENERAL PLAN & ELEVATION			SHEET 1 OF



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

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

THE FIRST DIGIT OF THE BAR MARKS SIGNIFY THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF SIDEWALKS AND INSIDE FACE OF CURBS ON SIDEWALKS.

CONCRETE SHALL BE REMOVED FROM THE BRIDGE DECK AS DETAILED IN THE STAGING CROSS SECTIONS UNDER THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE ESTIMATED. ACTUAL QUANTITIES AND LOCATIONS SHALL BE COORDINATED IN THE FIELD WITH THE FIELD ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIR SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR" OR POLYESTER POLYMER CONCRETE. SEE SECTION C.2 OF "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING" SPECIAL PROVISION.

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

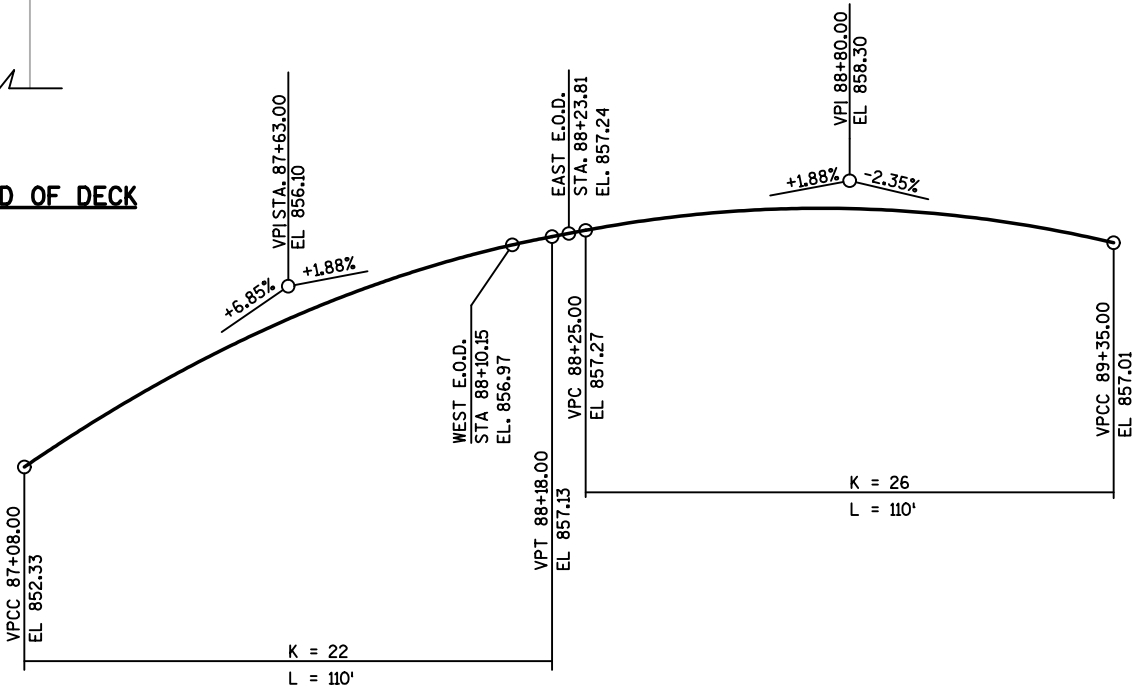
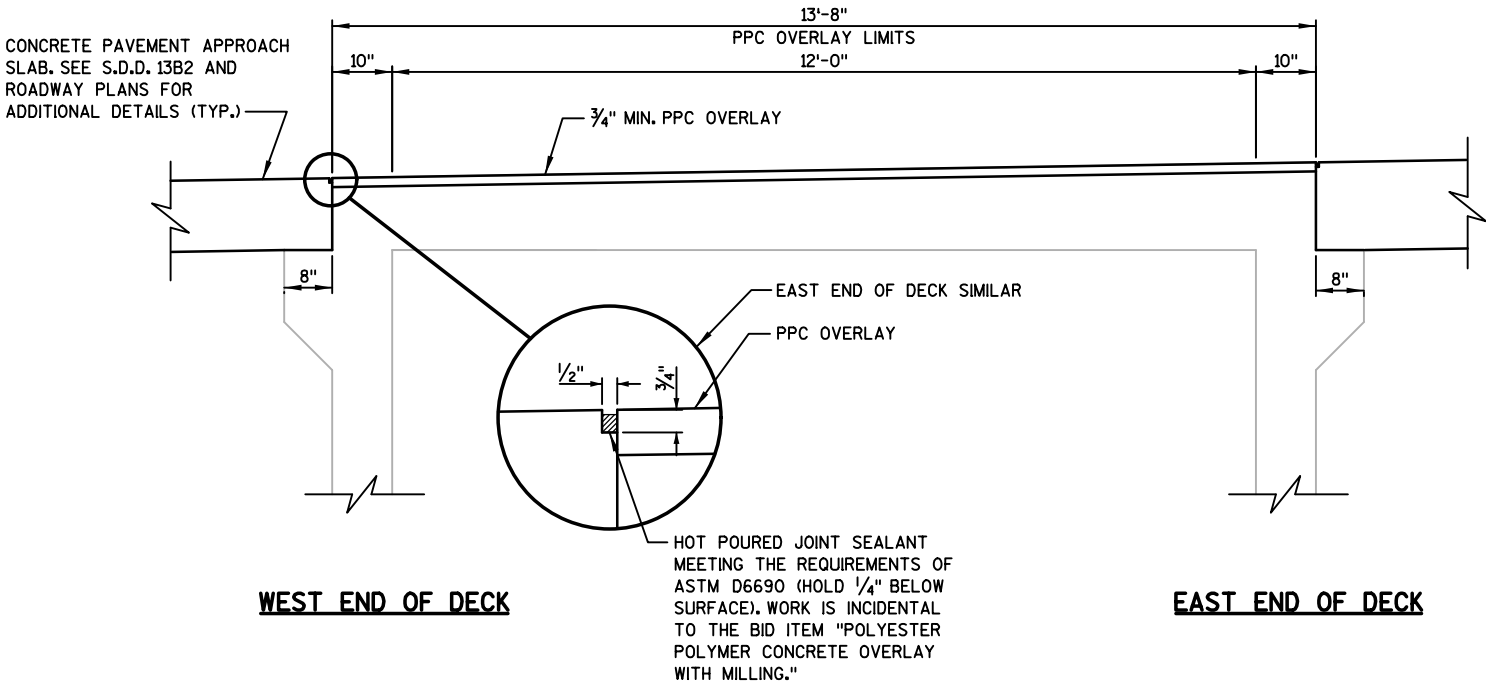
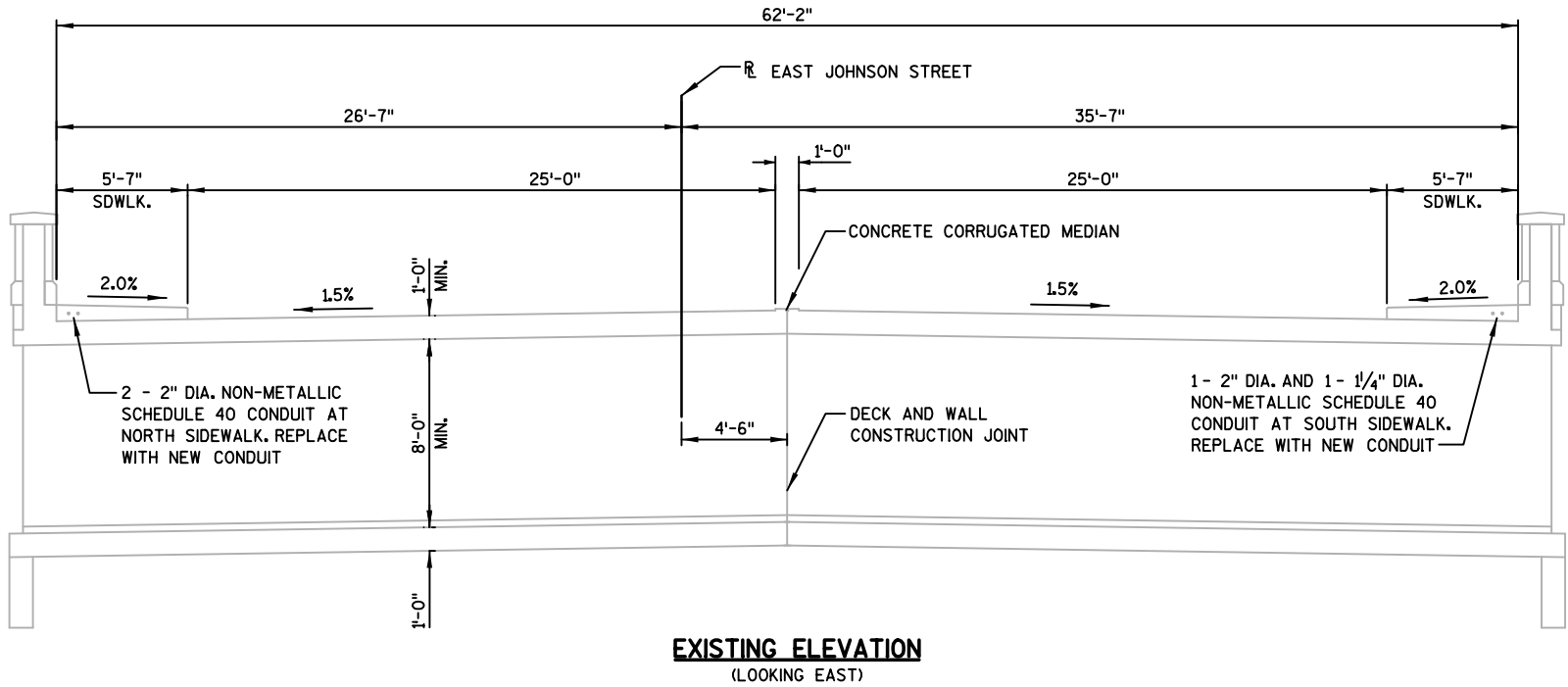
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."

NOT MORE THAN 1/3 OF THE TOP BAR STEEL IN DECK SHALL BE EXPOSED AT THE WEST AND EAST ENDS OF DECK IF DECK REPAIR IS REQUIRED.

ANY EXCAVATION REQUIRED TO COMPLETE THE WORK TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 3/4" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 1 3/4". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURES DESIGN SECTION.

POLYESTER POLYMER CONCRETE (PPC) OVERLAY PLACEMENT AND OTHER PROPOSED WORK ITEMS MUST CONFORM TO TRAFFIC CONTROL RESTRICTIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS. PPC OVERLAY CONTRACTOR JOINTS TO BE APPROVED BY THE ENGINEER. SEE TRANSVERSE AND LONGITUDINAL JOINT DETAILS ON "SUPERSTRUCTURE DETAILS" SHEET.



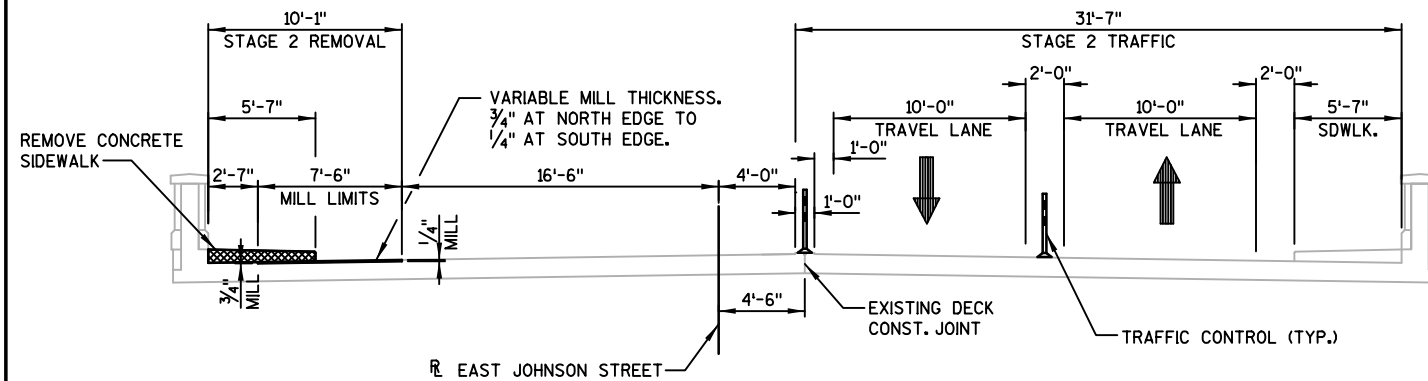
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
502.0100	CONCRETE MASONRY BRIDGES	CY	6
502.3200	PROTECTIVE SURFACE TREATMENT	SY	31
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EA	20
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	280
509.0301	PREPARATION DECKS TYPE 1	SY	5
509.0302	PREPARATION DECKS TYPE 2	SY	2
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	50
509.2000	FULL-DEPTH DECK REPAIR	SY	1
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	1
652.0215	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1 1/4-INCH	LF	14
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	41
SPV.0025.01	POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING	CF	86

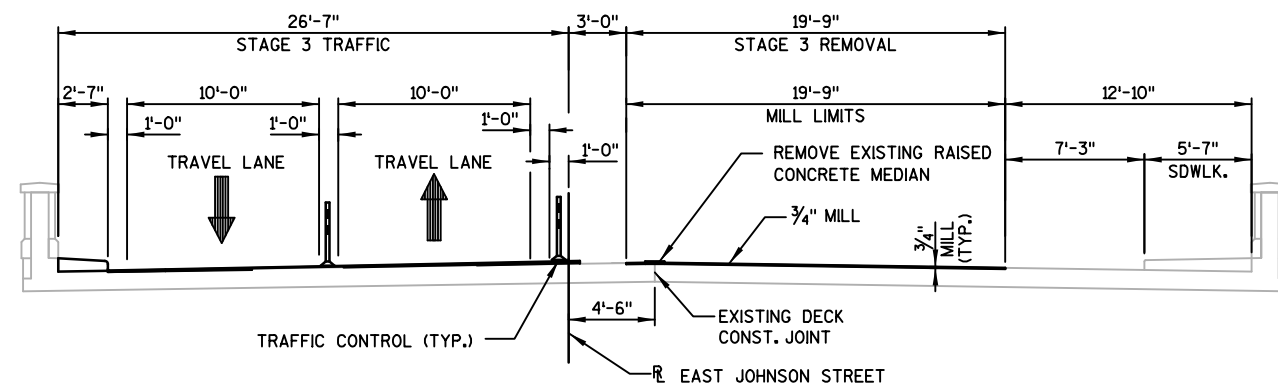
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-147			
DRAWN BY		DTH	PLANS CK'D. KRB
EXISTING CROSS SECTION, QUANTITIES, & NOTES		SHEET 2	

GENERAL NOTES

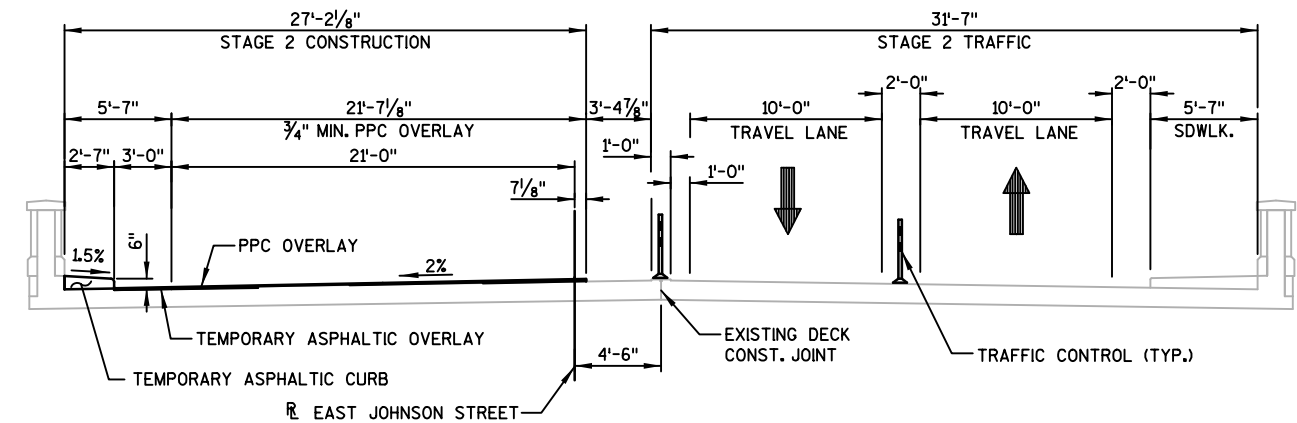
TEMPORARY ASPHALTIC CURB AND OVERLAY TO BE INCLUDED IN THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."



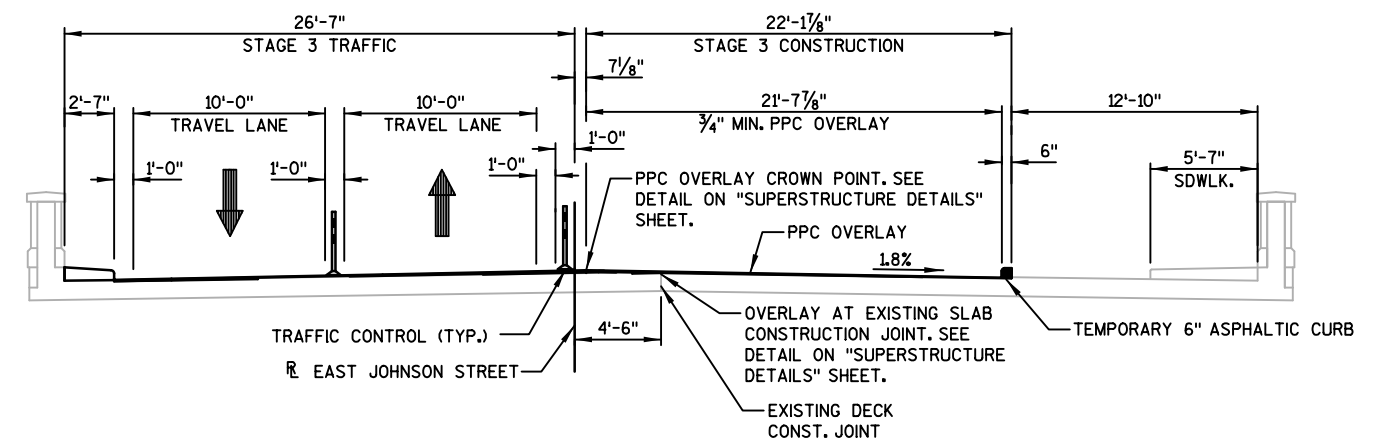
STAGE 2 TRAFFIC AND REMOVAL
(LOOKING EAST)



STAGE 3 TRAFFIC AND REMOVAL
(LOOKING EAST)



STAGE 2 TRAFFIC AND CONSTRUCTION
(LOOKING EAST)

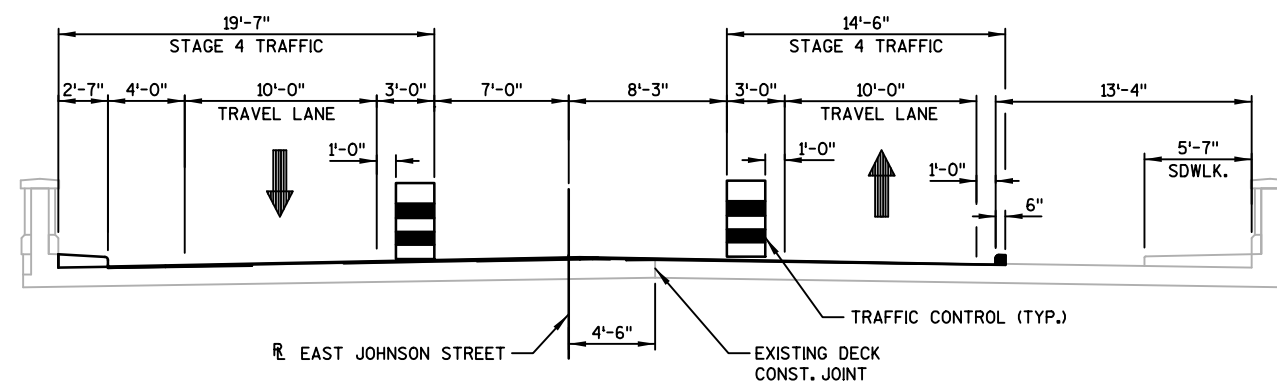


STAGE 3 TRAFFIC AND CONSTRUCTION
(LOOKING EAST)

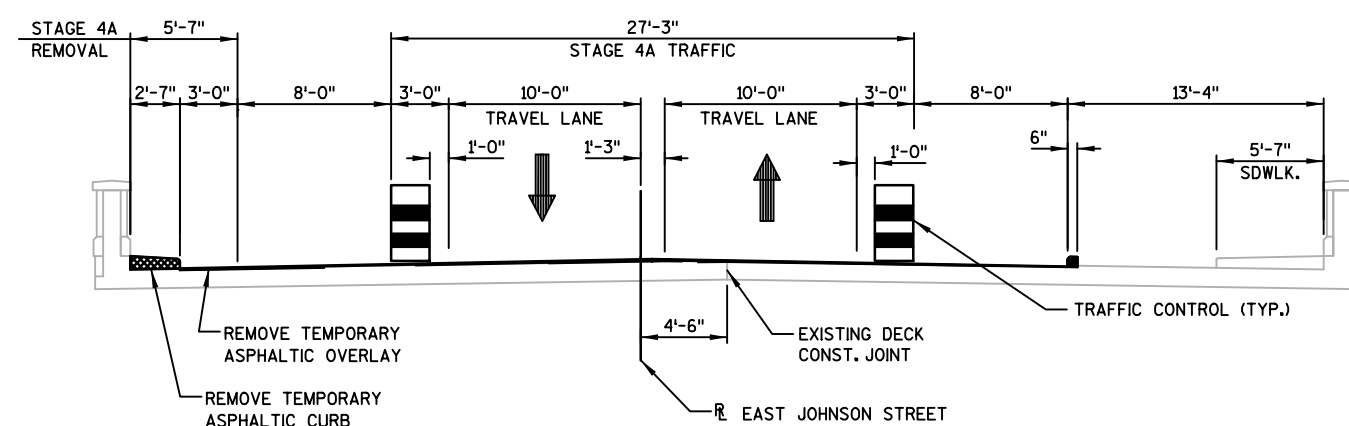
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-147			
DRAWN BY		OTH	PLANS CK'D. KRB
CONSTRUCTION STAGING - 1			SHEET 3

GENERAL NOTES

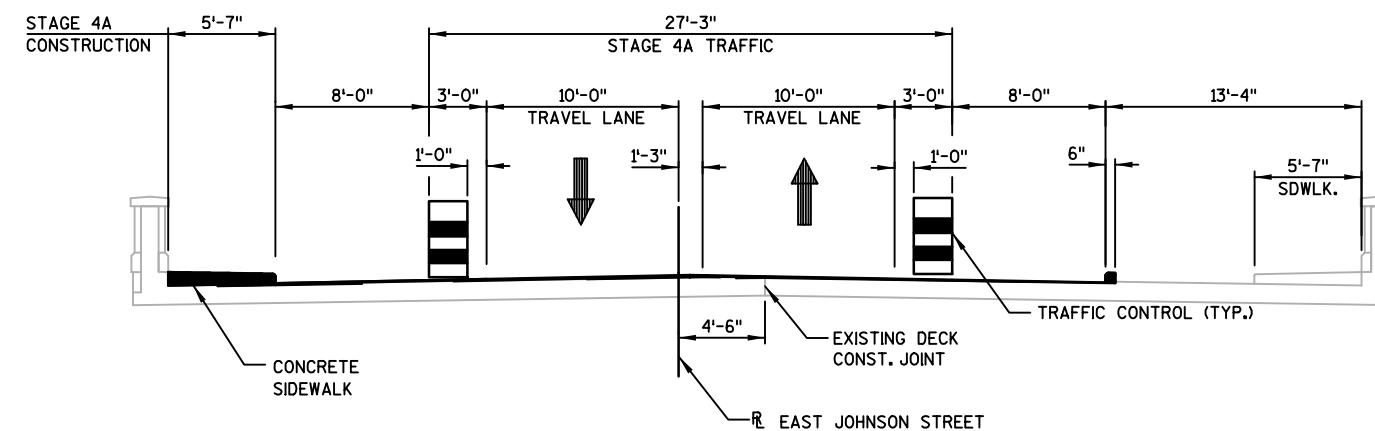
TEMPORARY ASPHALTIC CURB AND OVERLAY TO BE INCLUDED IN THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."



STAGE 4 TRAFFIC
(LOOKING EAST)



STAGE 4A TRAFFIC AND REMOVAL
(LOOKING EAST)

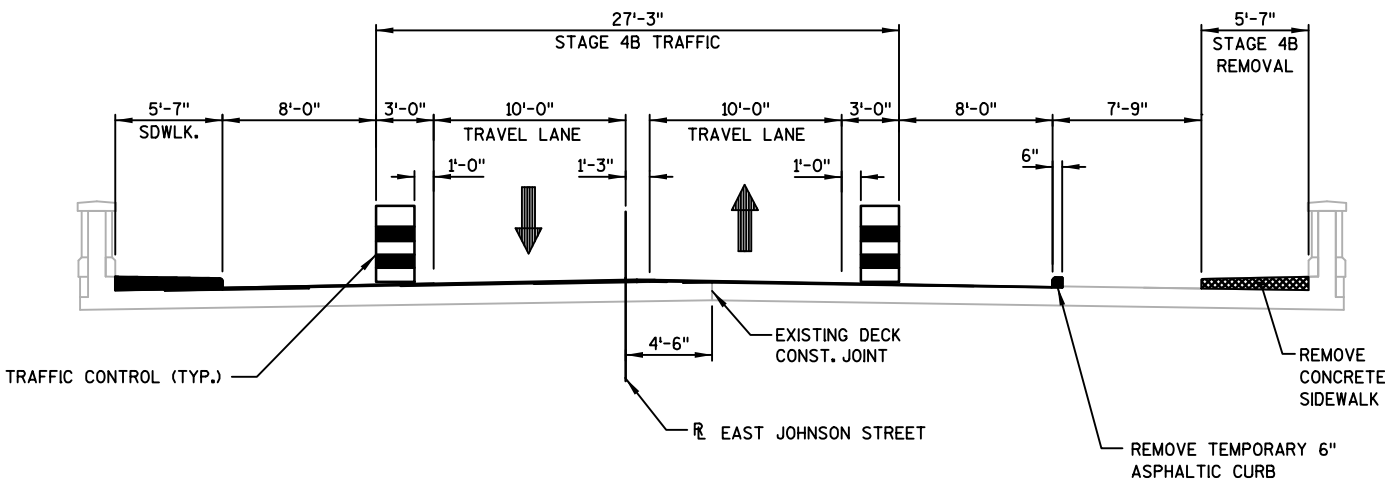


STAGE 4A TRAFFIC AND CONSTRUCTION
(LOOKING EAST)

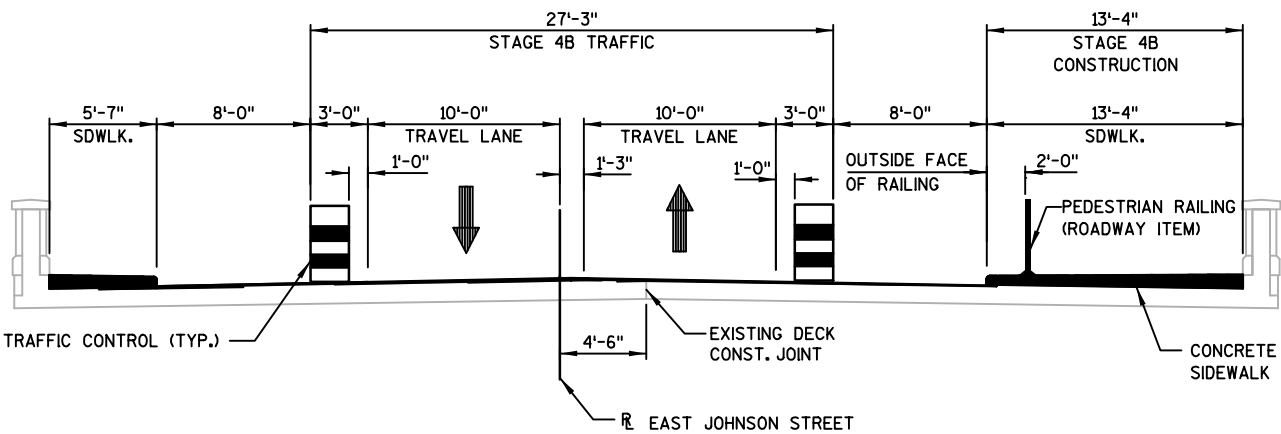
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-147			
DRAWN BY		DTH	PLANS CK'D. KRB
CONSTRUCTION STAGING - 2			SHEET 4

GENERAL NOTES

TEMPORARY ASPHALTIC CURB AND OVERLAY TO BE INCLUDED IN THE BID ITEM "POLYESTER POLYMER CONCRETE OVERLAY WITH MILLING."



STAGE 4B TRAFFIC AND REMOVAL
(LOOKING EAST)



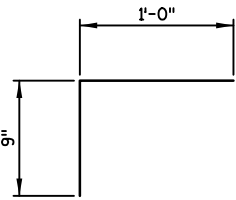
STAGE 4B TRAFFIC AND CONSTRUCTION
(LOOKING EAST)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-147			
DRAWN BY		DTH	PLANS CK'D. KRB
CONSTRUCTION STAGING - 3			SHEET 5

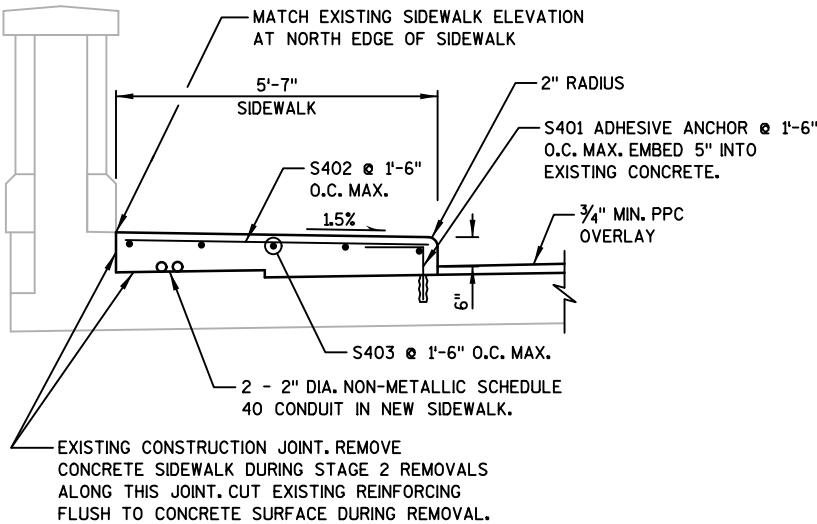
SUPERSTRUCTURE
BILL OF BARS

COATED: 280 LBS

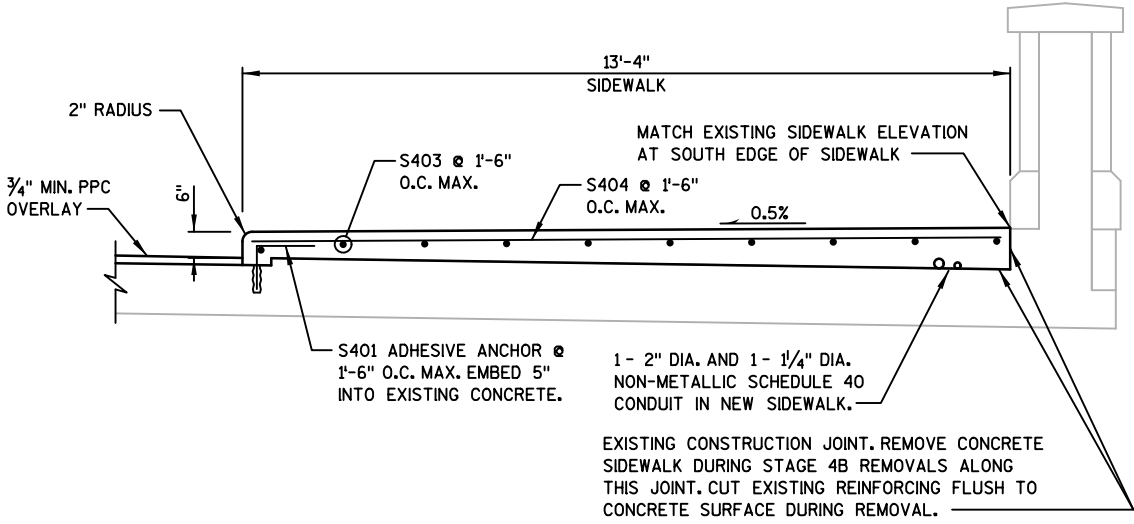
BAR MARK	NO. REQ'D	LENGTH	BENT	COAT	LOCATION
S401	20	1'-8"	X	X	SIDEWALK - DOWEL - VERT.
S402	10	5'-3"		X	SIDEWALK - TRANS. - HORIZ. - NORTH
S403	15	13'-4"		X	SIDEWALK - LONG. - HORIZ.
S404	10	13'-0"		X	SIDEWALK - TRANS. - HORIZ. - SOUTH



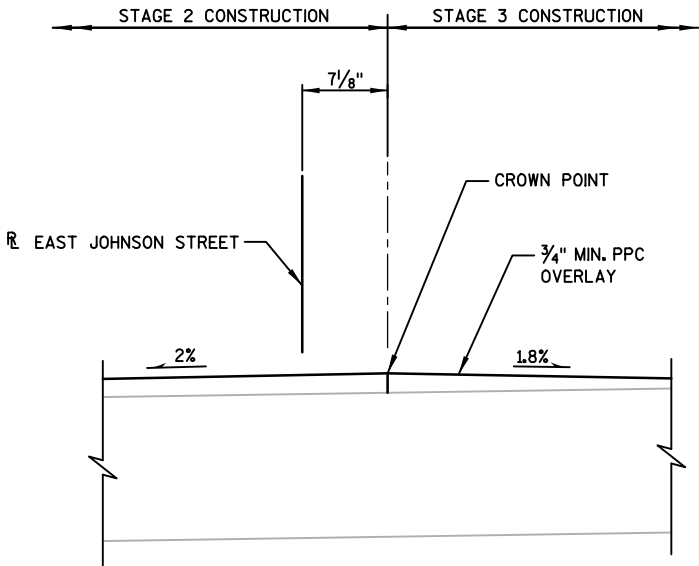
S401



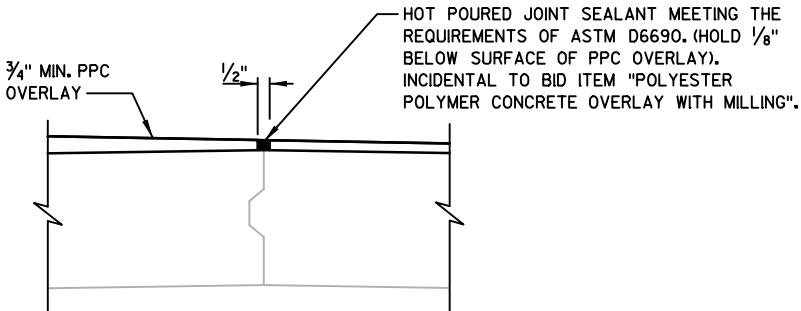
SECTION AT NORTH SIDEWALK



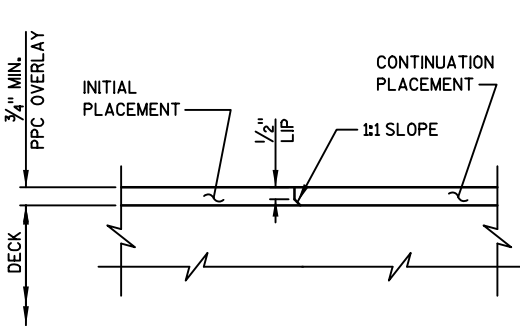
SECTION AT SOUTH SIDEWALK



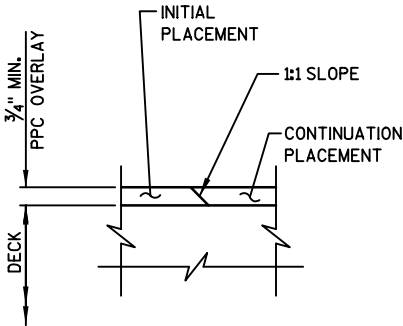
CROSS SECTION THRU STAGED
CONSTRUCTION JOINT
(LOOKING EAST)



CROSS SECTION THRU EXISTING
DECK CONSTRUCTION JOINT



TRANSVERSE JOINT



LONGITUDINAL JOINT

PPC OVERLAY JOINTS

DETAIL REQUIRED WHEN OVERLAY IS NOT COMPLETED WITHIN THE WORK PERIOD OR IF STAGED CONSTRUCTION IS USED. OPTIONAL (CONTRACTOR) JOINTS TO BE APPROVED BY THE ENGINEER.

AVOID WHEN POSSIBLE PLACING LONGITUDINAL JOINTS NEAR WHEEL PATHS (PLACE AT PROPOSED LANE LINES OR IN THE MIDDLE OF THE PROPOSED LANE).

LEGEND

△ ADHESIVE ANCHOR NO. 4 BAR, EMBED 5".

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE C-13-147			
DRAWN BY		DTH	PLANS CK'D. KRB
SUPERSTRUCTURE DETAILS		SHEET 6	