

**LIVE LOAD:**  
DESIGN LOADING \_\_\_\_\_ HS20  
INVENTORY RATING \_\_\_\_\_ HSXX  
OPERATING RATING \_\_\_\_\_ HSXX  
WISCONSIN STANDARD PERMIT  
VEHICLE (WIS-SPV) \_\_\_\_\_ XXX KIPS

**MATERIAL PROPERTIES:**

CONCRETE SUPERSTRUCTURE _____	$f'c = 4,000$ PSI
CONCRETE SUBSTRUCTURE _____	$f'c = 3,500$ PSI
CONCRETE MASONRY OVERLAY DECKS _____	$f'c = 4,000$ PSI
HIGH STRENGTH BAR STEEL _____	
REINFORCEMENT (GRADE 60) _____	$f_y = 60,000$ PSI

USH 53  
A.D.T. (2023) = 7,320  
DESIGN SPEED = 80 MPH

\* LOCATION OF ANCHOR ASSEMBLIES FOR THRIE BEAM ATTACHMENT.

(X) DENOTES WINGWALL NUMBER.

▲ HIGH WATER ELEVATION TAKEN FROM HSI SITE.


1. GENERAL PLAN
2. CROSS SECTIONS & QUANTITIES
3. CONSTRUCTION STAGING

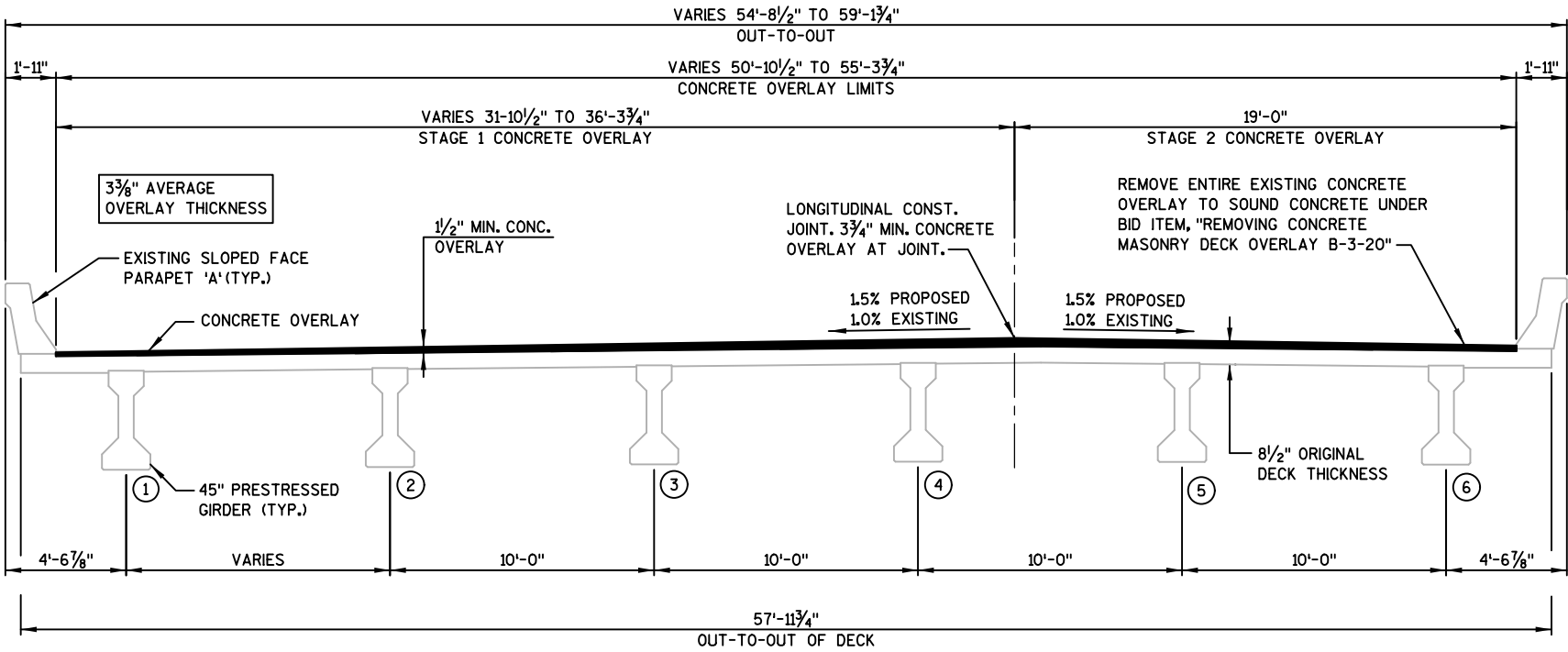
BRIDGE OFFICE CONTACT:  
WILLIAM DREHER (608) 266-8489  
DESIGN CONSULTANT CONTACT:  
BRETT OFTEDAHL (608) 251-4843



BM NO.	COORDINATES	DESCRIPTION	ELEV.
BM 1	Y: 62,128.59 X: 354,745.03	NW CORNER BRIDGE DECK B-3-24 (CTH 1)	1065.33
BM 2	Y: 61,303.85 X: 355,782.67	NW CORNER BRIDGE DECK B-3-20 (CHETEK RIVER)	1043.96
BM 3	Y: 66,181.31 X: 349,955.75	NW CORNER BRIDGE DECK B-3-26 (KNAPP STREET)	1077.68

NOTE: BM 1 AND BM 3 ARE OUTSIDE OF PLAN EXTENTS. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.

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		
<h1>STRUCTURE B-3-20</h1>				
USH 53 SB OVER CHETEK RIVER				
COUNTY		TOWN/CITY/VILLAGE		
BARRON		CHETEK		
DESIGN SPEC. REHABILITATION N/A				
DESIGNED BY	EJC	DESIGN CK'D.	BMO	DRAWN BY
				DTH
				PLANS CK'D.
				BMO
<h1>GENERAL PLAN</h1>				SHEET 1 OF



TYPICAL CROSS SECTION  
(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	E. ABUT	W. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
203.0200	REMOVING OLD STRUCTURE STA. 415+75 SB	---	---	---	1	LS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-3-20	---	---	---	1	LS
210.1500	BACKFILL STRUCTURE TYPE A	---	---	---	0	TON
502.0100	CONCRETE MASONRY BRIDGES	---	---	---	0	CY
502.0717.S	CRACK SEALING EPOXY	---	---	---	0	LF
502.3200	PROTECTIVE SURFACE TREATMENT	---	---	---	0	SY
502.3210	PIGMENTED SURFACE SEALER	---	---	---	0	SY
502.4205	ADHESIVE ANCHORS NO. 5 BAR	---	---	---	0	EACH
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	---	---	---	0	LB
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	---	---	---	0	LB
509.0301	PREPARATION DECKS TYPE 1	---	---	100	100	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	50	50	SY
509.0505.S	CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY	---	---	---	0	SY
509.1500	CONCRETE SURFACE REPAIR	25	25	60	110	SF
509.2000	FULL-DEPTH DECK REPAIR	---	---	15	15	SY
509.2500	CONCRETE MASONRY OVERLAY DECKS	---	---	---	0	CY
509.9005.S	REMOVING CONCRETE MASONRY DECK OVERLAY B-3-20	---	---	---	0	SY
509.9050.S	CLEANING PARAPETS	---	---	---	0	LF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	---	---	---	0	SY
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	---	---	---	0	EACH
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	---	---	---	0	SY
SPV.0180.XX	EPOXY SEALER	---	---	---	0	SY
NON-BID ITEMS						
	FILLER	---	---	---	1/2", 3/4"	SIZE

GENERAL NOTES

THE PROPOSED WORK INCLUDES REMOVING EXISTING CONCRETE OVERLAY, PLACING A NEW CONCRETE OVERLAY, CONCRETE SURFACE REPAIR AT ABUTMENTS AND PARAPETS, REPLACING WINGWALLS, EPOXY SEALING GIRDER ENDS, AND CLEANING PARAPETS.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND SUBSEQUENT REHABILITATION PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS ARE IN FEET.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

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

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

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

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

PARAPETS SHALL BE CLEANED PER "CLEANING PARAPETS" BID ITEM.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP, ENDS, AND ROADWAY FACES OF CONCRETE PARAPET AFTER ALL WORK IS COMPLETED FOR "CLEANING PARAPETS" AND "CONCRETE SURFACE REPAIR" BID ITEMS.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

THE ORIGINAL CONCRETE OVERLAY SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "REMOVING CONCRETE MASONRY DECK OVERLAY B-3-20".

AFTER REMOVAL OF THE EXISTING CONCRETE OVERLAY AND PRIOR TO NEW CONCRETE WORK, THE ENTIRE BRIDGE DECK SHALL BE CLEANED PER BID ITEM, "CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY".

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS IN DECK (AFTER DECK PREPARATION AND PRIOR TO CONCRETE OVERLAY) WITH PENETRATING EPOXY AS DIRECTED BY THE FIELD ENGINEER PER BID ITEM, "CRACK SEALING EPOXY".

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS 1/2-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

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

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

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWING. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1972.

PERFORM CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITY SHOWN IS APPROXIMATE.

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

AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES

LEGEND

(X) DENOTES GIRDER NUMBER

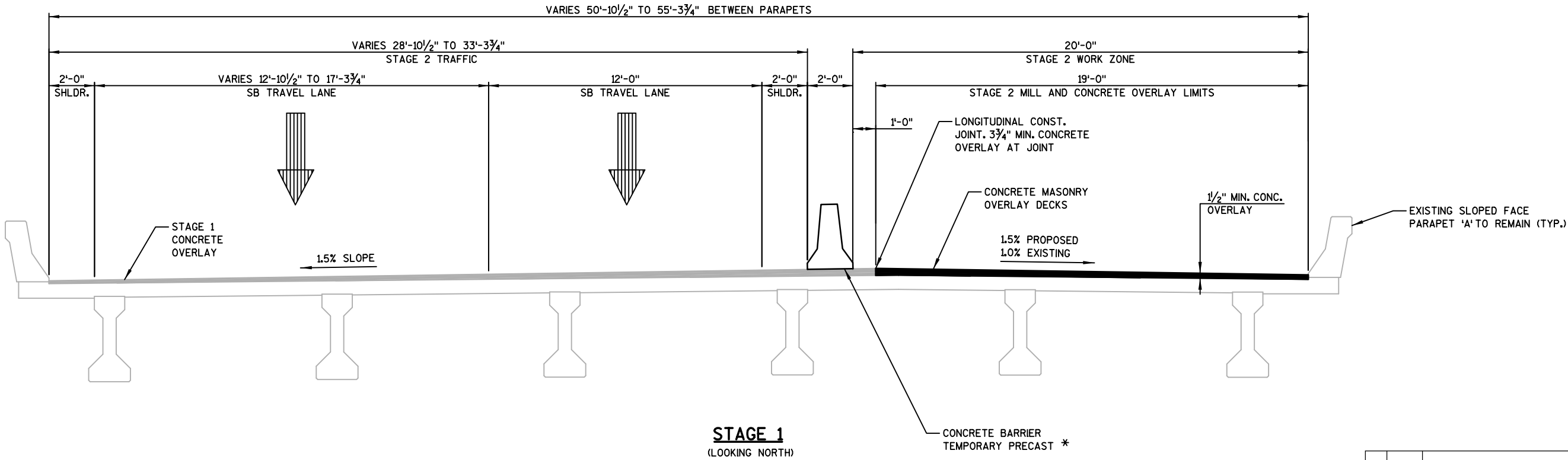
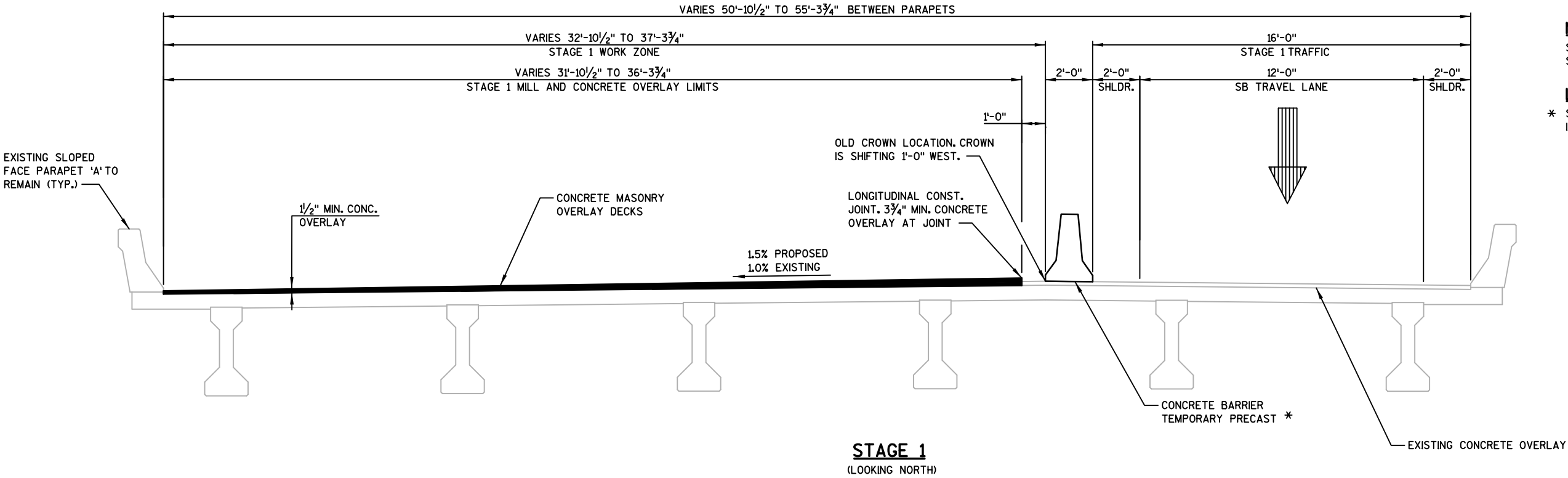
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-20			
DRAWN BY		DTH	PLANS CK'D. BMO
CROSS SECTION AND QUANTITIES			SHEET 2 OF 3

NOTES

SEE ROADWAY PLANS FOR ADDITIONAL STAGING INFORMATION.

LEGEND

\* SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-20			
DRAWN BY		DTH	PLANS CK'D. BMO
CONSTRUCTION STAGING		SHEET 3 OF 3	