

THIS DETAIL IS INCLUDED FOR INFORMATION ONLY

SHEET NO. 2	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
OF 18 SHEETS	*	MCLEAN	77	77
STA. TO STA.		FED. AID PROJECT		
* 57-7(1) HBR-1; HBR-2		D-93-04B-84		
57-20(1) HBR, HBR-1, HBR-3				

BENCH MARK: TOP OF CONCRETE HEADWALL FOR SLOPE DRAIN AT N.W. QUARTER AT STRUCTURE NO. 0060. ELEV. = 784.49.

EXISTING STRUCTURES: TWIN BRIDGES AT STA 635+75.15, VETERANS PARKWAY OVER N.W. - F.A.I. ROUTE 74 SECTION 57-20HBR, BUILT IN 1963 AND 1964, STRUCTURE NO. 057-0061 AND 057-0062, SUPERSTRUCTURE-3 SIMPLE COMPOSITE SPANS W/R.C. SLAB ON STEEL BEAMS, SUBSTRUCTURE - STANDARD PILE BENT ABUTMENTS; PIERS - MULTIPLE COLUMNS (3,4) ON PILES.

SALVAGE: METAL RAILING AND EXPANSION JOINT MATERIAL TO IDOT MAINTENANCE.

SUPERSTRUCTURE: TO BE RETROFITTED WITH NEW CONCRETE PARAPETS, DECK SCARIFICATION, 2" CONCRETE OVERLAY, NEW DRAINAGE SCUPPERS, REPLACE NEOPRENE EXPANSION JOINTS, REMOVE EXISTING LONGITUDINAL SEPARATION JOINT, ADD NEW DIAPHRAGMS FOR BEAMS AT SEPARATION JOINT, PARTIAL AND FULL DEPTH DECK REPAIRS, CLEAN AND PAINT BRIDGES, REPOSITION BEARINGS, AND REPLACE NUTS AND WASHERS ON EXISTING ANCHOR BOLTS, AND REMOVE AND REPLACE FIVE DIAPHRAGMS.

SUBSTRUCTURE: REP CONC. STRUCT., EPOXY CRACK SEALING AND FORM CONC. REP FOR PIERS & ABUT'S. SEE SHEET #14 AND #15 OF 18 FOR DETAILS. REPAIR AND EXTEND SLOPE WALLS TO 5' BEYOND FACE OF PARAPETS AND PLACE SLOPE WALL BETWEEN STRUCTURES 0061 AND 0062, SEE SHEET #17 OF 18 FOR DETAILS.

STAGE CONSTRUCTION: TRAFFIC TO BE MAINTAINED USING STAGE CONSTRUCTION. CLOSE HALF OF EACH STRUCTURE AT A TIME WITH TEMPORARY CONCRETE BARRIER AS INDICATED ON SHEET #3 OF 18.

GENERAL NOTES

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4"Ø, OPEN HOLES 15/16"Ø, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 3180 LBS. (M-183)

THE THREE COAT LEAD AND CHROMATE FREE ALKYL PAINT SYSTEM SHALL BE USED FOR SHIP AND FIELD PAINTING OF NEW STRUCTURAL STEEL AND FOR PAINTING OF EXISTING STRUCTURAL STEEL. THE COLOR OF THE FINAL FINISH COAT SHALL BE MUNSSELL STANDARD 7.564/8 INTERSTATE GREEN.

ALL CONTACT SURFACES OF EXISTING STRUCTURAL STEEL TO WHICH NEW STRUCTURAL STEEL IS TO BE CONNECTED SHALL BE FREE OF PAINT OR LACQUER.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.

SLOPE WALLS SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" X 6" - W4.0 X W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,000 LBS., AND 3/4" Ø X 12" HOOKED BOLTS.

THE CONTRACTOR WILL BE REQUIRED TO MARK ON TOP OF THE CONCRETE DECK THE LOCATIONS OF THE TOP FLANGE OF ALL THE STEEL BEAMS OR GIRDERS, PRIOR TO ANY REMOVAL OF THE BRIDGE CONCRETE DECK. SAW CUTTING DIRECTLY OVER THE TOP OF THE BEAM OR GIRDER FLANGES IS NOT PERMITTED.

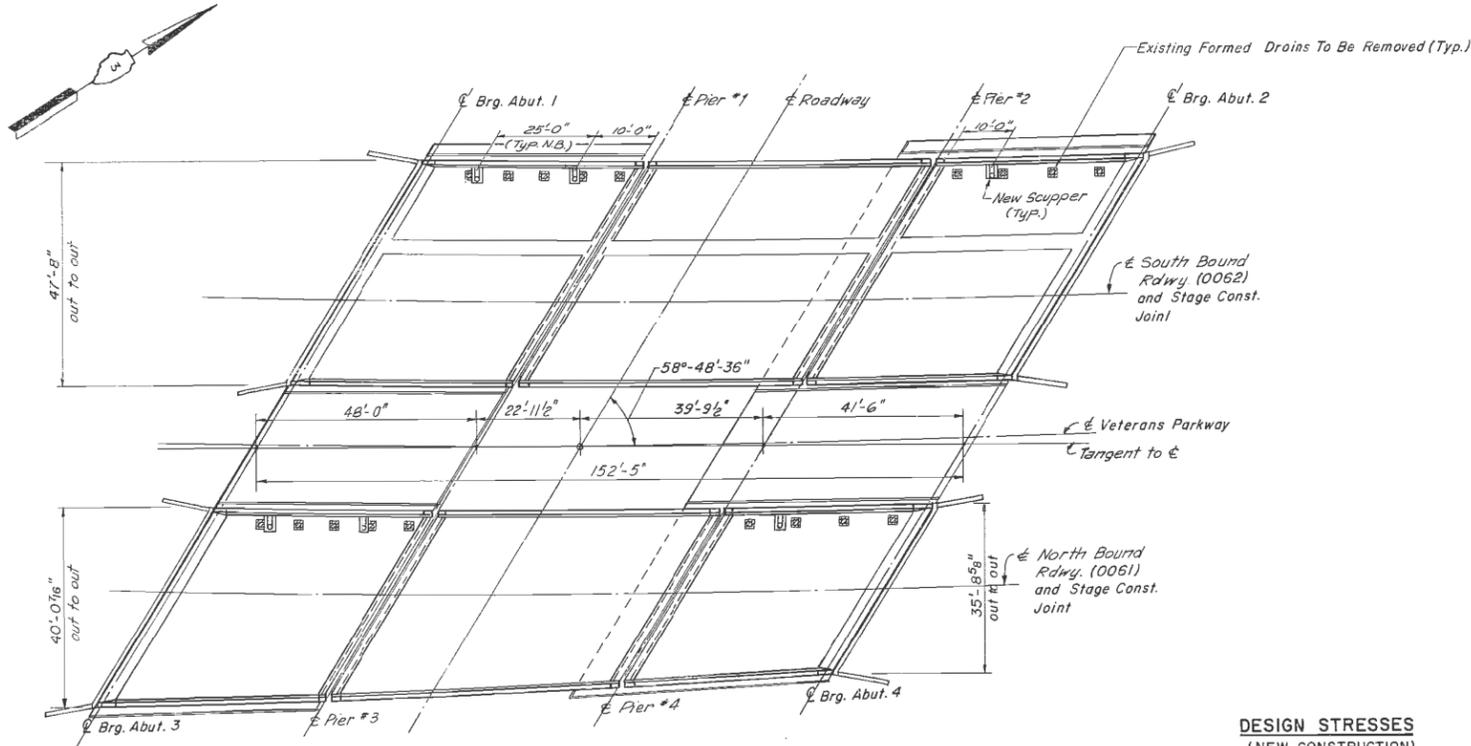
THE MAXIMUM HEIGHT THAT A BEAM CAN BE RAISED FOR REPOSITIONING A BEARING IS 1/8". THE COST OF JACKING AND CRIBBING IS INCIDENTAL TO "BEARING REPOSITIONING". SEE SPECIAL PROVISIONS FOR "BEARING REPOSITIONING".

CLEAN AND PAINT ALL STRUCTURAL STEEL. ALL EXISTING STRUCTURAL STEEL SHALL BE CLEANED USING METHOD II, WITH THE EXCEPTION OF THE FOLLOWING WHICH SHALL BE CLEANED BY METHOD I: THE END 10 FEET OF EACH BEAM AT THE ABUTMENTS AND AT THE PIERS; AND THE BEARINGS. FOLLOWING THE REMOVAL OF THE CONCRETE DECK IN THE DESIGNATED AREAS, THE TOP FLANGES OF THE BEAMS AND THE END DIAPHRAGMS SHALL BE CLEANED USING METHOD II. THE STEEL THIS EXPOSED SHALL BE FIELD PRIMED PRIOR TO FORMING THE NEW DECK. SEE SPECIAL PROVISIONS FOR CLEANING AND PAINTING STEEL STRUCTURES.

BY THE SURFACE OF THE ROADWAY SHALL BE MAINTAINED TO THE ORIGINAL GRADE. SEE SHEET #3 OF 18 FOR DETAILS.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
FURNISHING & ERECTING STRUCTURAL STEEL	LB.	3180	-	3180
REINFORCEMENT BARS (EPOXY COATED)	LB.	28,000	1,995	29,995
CONCRETE REMOVAL (SPECIAL)	CU. YD.	70	-	70
CLASS X CONCRETE, SUPERSTRUCTURE	CU. YD.	135.1	-	135.1
BRIDGE DECK CONCRETE OVERLAY OPTION	SQ. YD.	1363	-	1363
BRIDGE DECK CONCRETE SCARIFICATION 1/4"	SQ. YD.	1363	-	1363
BITUMINOUS CONCRETE SURFACE REMOVAL	SQ. YD.	1103	-	1103
PROTECTIVE COAT	SQ. YD.	1,770	-	1,770
EXPANSION BOLTS 3/4 INCH	EACH	-	24	24
DRAINAGE SCUPPERS	EACH	6	-	6
NEOPRENE EXPANSION JOINT 2"	LIN. FT.	392	-	392
CONCRETE REMOVAL	CU. YD.	646	18.2	82.8
EPOXY CRACK SEALING	LIN. FT.	-	239	239
FORM CONC REP > 1.5	SQ. FT.	-	628	628
BEARING REPOSITIONING	EACH	12	-	12
SLOPE WALL REMOVAL	SQ. YD.	-	363	363
SLOPE WALL, 4"	SQ. YD.	-	661	661
CLEANING AND PAINTING STEEL BRIDGE NO. 5	LUMP SUM	1	-	1
BRIDGE HANDRAIL REMOVAL	LIN. FT.	620	-	620
EXPANSION DEVICE REMOVAL	LIN. FT.	372	-	372
TEMPORARY CONCRETE BARRIER	LIN. FT.	310	-	310
DECK SLAB REPAIR (PARTIAL DEPTH)	SQ. YD.	162	-	162
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ. YD.	1.8	-	1.8
CLEANING AND PAINTING STEEL BRIDGE NO. 6	LUMP SUM	1	-	1
1" ANCHOR BOLTS			83	83
CONTROLLED LOW STRENGTH MATERIAL	SQ. YD.		14	14



PLAN

DESIGN STRESSES (NEW CONSTRUCTION)

Concrete: $f'c = 3,500$ p.s.i.
 Reinforcement: $f_y = 60,000$ p.s.i.
 Structural Steel: $f_y = 36,000$ p.s.i.
 AASHTO M-183
 Existing and Proposed Structural Steel
 Design Loading: H20-S16-44 and Alternate
 Design Specifications: AASHTO (1983) plus 1984 thru 1988 Interims



DESIGNED	Qul
CHECKED	M.J.H.
DRAWN	R.L.S.
CHECKED	Qul



P. Amin
11/20/19

REVISIONS	
NAME	DATE



GENERAL DATA

VETERANS PARKWAY OVER W.B.-F.A.I. RT. 74
 SECTION 57-20HBR
 MCLEAN COUNTY
 STATION 635+75.15
 STRUCTURE NO. 057-0061
 STRUCTURE NO. 057-0062



FILE NAME =	USER NAME = detersbj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-0061 & S.N. 057-0062 EXISTING GP&E BRIDGE PLANS (1990)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ei:\pw\work\p\idot\detersbj\d0157116\0570570-sht-details.dgn	DRAWN -	REVISED -	704			57-20(HB,HB-1BR-1	MCLEAN	440	267	
PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70570							
PLOT DATE = 8/13/2013	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							