

A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: June 21, 2016
Date of Addendum: May 26, 2016

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
011	97-3761-006-A	BRIDGE REPLACEMENT - PPCB	WOODBURY	BRF-376-1(6)--38-97	21JUN011.A02

Make the following change to the PLAN:

SHEET 2:

Change the following note of the GENERAL NOTES:

From: REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 2401,
OF THE STANDARDSPECIFICATIONS.

To: REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 2401,
OF THE STANDARDSPECIFICATIONS, EXCEPT THE REMOVAL
LIMIT FOR THE TWO EXISTING PIERS WITHIN THE CN R.O.W.
SHALL BE TAKEN AT THE TOP OF THE EXISTING PIER
FOOTINGS.

SHEETS 4 AND 5:

ADD NOTE:

REMOVE PIER COLUMNS FOR THIS PIER TO TOP OF EXISTING PIER
FOOTINGS

Replace SHEETS 2, 4 and 5 with the attached SHEETS 2, 4 and 5.

GENERAL NOTES:

THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING N.B. 1A376 507'-0 x 28'-0 STEEL I-BEAM BRIDGE, DESIGN NO. 555. PLANS OF THE EXISTING STRUCTURE WILL BE MADE AVAILABLE TO THE CONTRACTOR. CONTACT THE OFFICE OF CONTRACTS - HIGHWAY DIVISION - IOWA D.O.T. - AMES.

THE LUMP SUM BID FOR "REMOVAL OF EXISTING BRIDGE" SHALL INCLUDE REMOVAL OF THE CONCRETE DECK, BEAMS, ABUTMENTS AND FRAME PIERS.

REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 2401, OF THE STANDARD SPECIFICATIONS, EXCEPT THE REMOVAL LIMIT FOR THE TWO EXISTING PIERS WITHIN THE CN R.O.W. SHALL BE TAKEN AT THE TOP OF THE EXISTING PIER FOOTINGS.

THIS BRIDGE IS DESIGNED FOR HL-93 LOADING, PLUS 20 LBS. PER SQUARE FOOT OF ROADWAY FOR FUTURE WEARING SURFACE.

THE CITY AND UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS SHALL BE NOTIFIED BY THE BRIDGE CONTRACTOR OF THE STARTING DATE.

THE CONTRACTOR SHALL NOTE THE STANDARD ABUTMENT DETAILS HAVE BEEN MODIFIED TO OFFSET THE ABUTMENT FOOTING FROM THE WINGWALL AND THE ABUTMENT FOOTING FROM THE BACKWALL TO AID IN TYING THE REINFORCING STEEL BETWEEN THE FOOTING TO WINGWALL AND THE FOOTING TO BACKWALL.

IT SHALL BE THE BRIDGE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SITES FOR EXCESS EXCAVATED MATERIAL. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES.

A SCRAPE SAMPLE WAS TAKEN FROM AN AREA OF THIS BRIDGE TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. ANALYSIS OF TOTAL LEAD ON THIS SAMPLE WAS 157 PARTS PER MILLION (PPM) (INCLUDES LESS THAN 0.010 PPM LEACHABLE). ANALYSIS OF TOTAL CHROMIUM ON THIS SAMPLE WAS 3860 PPM (INCLUDES 9.47 PPM LEACHABLE). THESE ANALYSES SHOW THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. LEVELS INDICATED BY THESE TESTS COULD CREATE CONDITIONS ABOVE REGULATORY LIMITS FOR HEALTH AND SAFETY REQUIREMENTS. NO OTHER CONSTITUENTS WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE DEPARTMENT'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AS AN INDICATION OF THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS.

THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS IN SUCH A MANNER THAT ANY PAINT REMOVED DURING DEMOLITION IS CONTAINED, COLLECTED, AND DISPOSED OF IN ACCORDANCE WITH SECTION 2508 OF THE STANDARD SPECIFICATIONS. COST OF THIS WORK SHALL BE INCIDENTAL TO THE BID ITEM "REMOVAL OF EXISTING BRIDGE". BEFORE DELIVERY OF ANY SCRAP STEEL THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE TO THE RECEIVING FACILITY. THIS NOTICE SHALL AT A MINIMUM INCLUDE:

- 1. A NOTICE THAT THE SCRAP STEEL IS COATED WITH PAINT THAT HAS REGULATED MATERIALS AT LEVELS WHICH COULD BE HAZARDOUS TO EMPLOYEES OR THE ENVIRONMENT.
- 2. A COPY OF THE SCRAPE SAMPLE PROVIDED IN THE CONTRACT DOCUMENTS.
- 3. A SIGNATURE BLOCK FOR THE RECEIVING FACILITY TO CONFIRM THEIR RECEIPT OF THIS INFORMATION.

A COPY OF THIS NOTICE, SIGNED BY THE RECEIVING FACILITY, SHALL BE RETURNED TO THE ENGINEER BEFORE ANY SCRAP STEEL IS REMOVED FROM THE PROJECT.

CONCRETE BARRIER RAILS PLACED USING THE SLIPFORM METHOD WILL REQUIRE THE USE OF A CLASS BR CONCRETE IN ACCORDANCE WITH ARTICLE 2513.03, A, 2 OF THE STANDARD SPECIFICATIONS. CAST-IN-PLACE BARRIER RAILS SHALL USE CLASS C MIX. CLASS D CONCRETE IS NOT PERMITTED FOR CONCRETE BARRIER RAILS (CAST-IN-PLACE OR SLIPFORMED METHOD).

KEYWAY DIMENSIONS SHOWN ON THE PLANS ARE BASED ON NOMINAL DIMENSIONS UNLESS STATED OTHERWISE. IN ADDITION, THE BEVEL USED ON THE KEYWAY SHALL BE LIMITED TO A MAXIMUM OF 10 DEGREES FROM VERTICAL.

THE BRIDGE CONTRACTOR SHALL WORK IN SUCH A MANNER THAT EQUIPMENT AND MATERIALS SHALL NOT BE ALLOWED TO INTERFERE WITH TRAIN TRAFFIC OR BE ALLOWED TO FALL ON THE RAILROAD TRACKS. INTERFERENCE ABOVE THE RAILROAD TRACK AREA SHALL BE COORDINATED WITH THE RAILROAD.

SOUTH ABUTMENT PILES SHALL NOT BE DRIVEN FOR A MINIMUM OF 14 DAYS FOLLOWING COMPLETION OF APPROACH FILLS. THE TIME PERIOD BETWEEN COMPLETION OF FILLS AND OF DRIVING PILES MAY BE CHANGED AS ORDERED BY THE ENGINEER.

ALL REINFORCING BARS AND BARS NOTED AS DOWELS SUPPLIED FOR THIS STRUCTURE SHALL BE DEFORMED REINFORCEMENT UNLESS OTHERWISE NOTED OR SHOWN.

THESE BRIDGE PLANS LABEL ALL REINFORCING STEEL WITH ENGLISH NOTATION (5d1 IS 5#8 INCH DIAMETER BAR). ENGLISH REINFORCING STEEL RECEIVED IN THE FIELD MAY DISPLAY THE FOLLOWING "BAR DESIGNATION". THE "BAR DESIGNATION" IS THE STAMPED IMPRESSION ON THE REINFORCING BARS, AND IS EQUIVALENT TO THE BAR DIAMETER IN MILLIMETERS.

ENGLISH SIZE	3	4	5	6	7	8	9	10	11
BAR DESIGNATION	10	13	16	19	22	25	29	32	36

DURING CONSTRUCTION OF THIS PROJECT THE BRIDGE CONTRACTOR WILL BE REQUIRED TO COORDINATE OPERATIONS WITH THOSE OF OTHER CONTRACTORS WORKING WITHIN THE SAME AREA. OTHER WORK IN PROGRESS DURING THE SAME PERIOD OF TIME WILL INCLUDE, BUT IS NOT LIMITED TO, CONSTRUCTION OF THE FOLLOWING PROJECTS:

- MB-376-3(501)99--77-97 BRIDGE PAINTING

SHOP DRAWING SUBMITTALS

SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS SHOWN IN THE TABLE BELOW. (NOTE ADDITIONAL SHOP DRAWINGS MAY BE REQUIRED IN ACCORDANCE WITH ARTICLE 1105.03 OF THE STANDARD SPECIFICATIONS.)

SUBMITTAL REQUIREMENTS FOR SHOP DRAWINGS SHOULD BE IN ACCORDANCE WITH ARTICLE 1105.03, OF THE STANDARD SPECIFICATIONS, FOR HIGHWAY AND BRIDGE CONSTRUCTION OF THE IOWA DEPARTMENT OF TRANSPORTATION.

1	BRIDGE DECK DRAINS
2	INTERMEDIATE DIAPHRAGMS
3	PIER & ABUTMENT BEARINGS
4	EXPANSION DEVICES

SPECIFICATIONS:

DESIGN:
AASHTO LRFD 6th Ed, SERIES OF 2012, EXCEPT AS NOTED IN THE CURRENT IOWA BRIDGE DESIGN MANUAL.

CONSTRUCTION:
THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2015, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT, INCLUDING:

- DEVELOPMENTAL SPECIFICATIONS FOR MASS CONCRETE - CONTROL HEAT OF HYDRATION
- DEVELOPMENTAL SPECIFICATIONS FOR HIGH PERFORMANCE CONCRETE FOR STRUCTURES
- DEVELOPMENTAL SPECIFICATIONS FOR MAINTENANCE WORK ON RAILROAD RIGHT-OF-WAY (UNION PACIFIC)
- SPECIAL PROVISIONS FOR WORK ON RAILROAD RIGHT-OF-WAY (BNSF)
- SPECIAL PROVISIONS FOR WORK ON RAILROAD RIGHT-OF-WAY (CANADIAN NATIONAL)

DESIGN STRESSES:

DESIGN STRESSES FOR THE FOLLOWING MATERIALS ARE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6th Ed, SERIES OF 2012, EXCEPT AS NOTED IN THE CURRENT IOWA BRIDGE DESIGN MANUAL.

REINFORCING STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 5, GRADE 60.

CONCRETE IN ACCORDANCE WITH LRFD AASHTO SECTION 5, f'c = 4.0 KSI, EXCEPT PRESTRESSED BEAM CONCRETE AS NOTED.

PRESTRESSED CONCRETE BEAMS, SEE DESIGN SHEETS 31 - 34.

STRUCTURAL STEEL IN ACCORDANCE WITH LRFD AASHTO SECTION 6. ASTM A709 GRADE 36 AND GRADE 50.

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNITS	QUANTITY	AS BUILT QUANTITY
1	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS	1	
2	2402-2720000	EXCAVATION, CLASS 20	CY	1812	
3	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	773.8	
4	2403-7000210	HIGH PERFORMANCE STRUCTURAL CONCRETE	CY	792.5	
5	2404-7775000	REINFORCING STEEL	LB	85,272	
6	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	260,511	
7	2404-7775009	REINFORCING STEEL, STAINLESS STEEL	LB	8842	
8	2407-0564075	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTD75	EACH	10	
9	2407-0564135	BEAMS, PRETENSIONED PRESTRESSED CONCRETE, BTD135	EACH	15	
10	2408-7800000	STRUCTURAL STEEL	LB	26,123	
11	2413-1200000	STEEL EXTRUSION JOINT WITH NEOPRENE	LF	134	
12	2413-1200100	NEOPRENE GLAND INSTALLATION AND TESTING	LF	134	
13	2414-6424038	CONCRETE BARRIER RAIL, 3'-8"	LF	1233.5	
14	2501-0201057	PILES, STEEL, HP 10 X 57	LF	8605	
15	2507-2638620	MACADAM STONE SLOPE PROTECTION	SY	1135	
16	2507-2638660	BRIDGE WING ARMORING - MACADAM STONE	SY	45.0	
17	2533-4980005	MOBILIZATION	LS	1	

ITEM NO.	ESTIMATE REFERENCE INFORMATION
3	INCLUDES FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), FLOODABLE BACKFILL, POROUS BACKFILL, GEOTEXTILE FABRIC, WATER FLOODING AND SUBDRAIN OUTLET AT ABUTMENTS AND TOE OF BERM. INCLUDES FURNISHING AND PLACING CONCRETE SEALER. INCLUDES ALL PREFORMED EXPANSION JOINT FILLER REQUIRED.
4	THIS BID ITEM INCLUDES THE CONCRETE FOR THE SLAB, ABUTMENT AND PIER DIAPHRAGMS. REFER TO THE DEVELOPMENTAL SPECIFICATION FOR "HIGH PERFORMANCE CONCRETE FOR STRUCTURES" FOR ADDITIONAL INFORMATION.
8, 9	INCLUDES ANCHORED CURVED SOLE PLATES AT ABUTMENTS AND PIERS. INCLUDES ALL NEOPRENE BEARING PADS.
10	INCLUDES NEOPRENE SHEETS AT ABUTMENT BEARINGS. INCLUDES 4 DECK DRAINS AT 120 LB EACH.
11	INCLUDES ALL NECESSARY HARDWARE AND ACCESSORIES INCLUDING THE ANCHORAGE SYSTEM, TEMPORARY ERECTION MATERIAL AND THE 3⁄8" BARRIER PLATES WITH THEIR ANCHORAGE SYSTEM. EXCLUDES INSTALLATION OF NEOPRENE GLAND.
12	INCLUDES INSTALLATION OF NEOPRENE GLAND AND WATER TESTING OF JOINT.
13	INCLUDES 2472 FT OF 2" DIA. RIGID STEEL CONDUIT. INCLUDES MATERIAL AND LABOR ASSOCIATED WITH PROVIDING AND INSTALLING RIGID STEEL CONDUIT, JUNCTION BOXES AND FITTINGS. IF PLACEMENT OF CONCRETE IS DONE BY THE SLIPFORMING METHOD, CLASS BR CONCRETE IS REQUIRED. CAST-IN-PLACE BARRIER RAILS SHALL USE CLASS C MIX. PRICE BID FOR THIS ITEM SHALL INCLUDE THE COST OF CAST-IN-PLACE FORMS IF REQUIRED FOR PLACEMENT OF THE CONCRETE.
15	INCLUDES FURNISHING AND PLACING ENGINEERING FABRIC, MACADAM STONE, 4" X 6" TREATED TIMBERS, 1⁄2" DIAMETER STEEL PINS (OR REBARS), POROUS BACKFILL OR GRANULAR SUBBASE BACKFILL AT FRONT FACE OF ABUTMENT FOOTING, AND ALL REQUIRED EXCAVATING, SHAPING, AND COMPACTING.
16	INCLUDES FURNISHING AND PLACING ENGINEERING FABRIC, MACADAM STONE, 4" X 6" TREATED TIMBERS, 1⁄2" DIAMETER STEEL PINS (OR REBARS), AND ALL REQUIRED EXCAVATING, SHAPING, AND COMPACTING FOR WING ARMORING.

BRIDGE DECK DIMENSIONS TABLE

NO.	ITEM	UNIT	QUANTITY
1	DECK LENGTH	L.F.	572.6
2	MINIMUM DECK WIDTH	L.F.	43.2
3	MAXIMUM DECK WIDTH	L.F.	43.2
4	DECK AREA	S.F.	24,736

- 1. DECK LENGTH IS MEASURED FROM FACE-TO-FACE OF PAVING NOTCHES ALONG THE CENTERLINE OF THE ROADWAY.
- 2, 3. DECK WIDTHS ARE MEASURED FROM OUT-TO-OUT OF DECK PERPENDICULAR TO THE CENTERLINE OF ROADWAY.
- 4. DECK AREA IS TO BE BASED ON THE FACE-TO-FACE PAVING NOTCH DISTANCE AND OUT-TO-OUT DECK DIMENSIONS.

NOTE:
ROADWAY QUANTITIES SHOWN ELSEWHERE IN THESE PLANS.

NOTE:
POLLUTION PREVENTION PLAN SHOWN ELSEWHERE IN THESE PLANS.

TRAFFIC CONTROL PLAN
NOTE: THE ROADWAY WILL BE CLOSED TO THRU TRAFFIC. REFER TO THE TRAFFIC CONTROL PLAN IN THE J-SHEETS OF THE ROAD PLANS IN THIS PLAN.

DESIGN FOR 52° SKEW (R.A.)

562'-7¹/₄ x 40'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

76'-0 END SPANS (3) 137'-0 INTERIOR SPANS

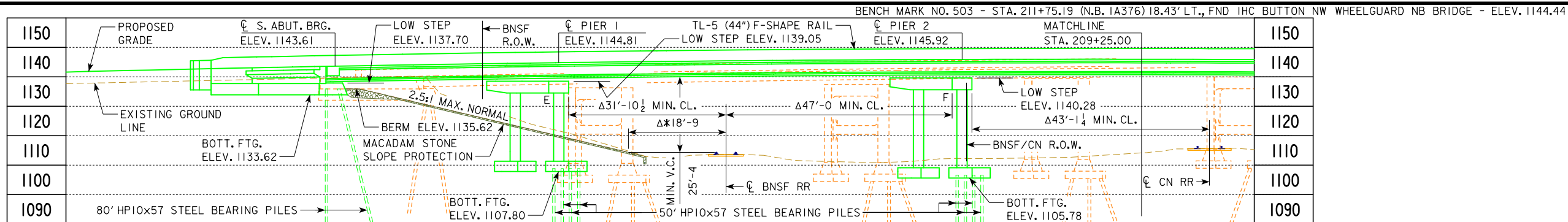
ESTIMATED QUANTITIES AND NOTES

STATION: 209+32.30 OCTOBER 2015

WOODBURY COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 53 FILE NO. 30859 DESIGN NO. 215



LONGITUDINAL SECTION ALONG CL N.B. IA376

Δ MEASURED PERPENDICULAR TO CL RR.
* PROPOSED DIMENSION IS GREATER THAN EXISTING DIMENSION.

