ESTIMATED BRIDGE QUANTITIES - DESIGN 420

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUANTITY
1	2402-2720000	EXCAVATION, CLASS 20	CY	535	
2	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	136.7	
3	2403-7000210	HIGH PERFORMANCE STRUCTURAL CONCRETE	CY	660.6	
4	2403-7303000	STRUCTURAL CONCRETE COATING	SY	87.6	
5	2404-7775000	REINFORCING STEEL	LB	43023	
6	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	193395	
7	2404-7775009	REINFORCING STEEL, STAINLESS STEEL	LB	8041	
8	2408-7800000	STRUCTURAL STEEL	LB	855346	
9	2413-1200000	STEEL EXTRUSION JOINT WITH NEOPRENE	LF	27.5	
10	2413-1200100	NEOPRENE GLAND INSTALLATION AND TESTING	LF	27.5	
11	2414-6424119	CONCRETE BARRIER RAILING, AESTHETIC	LF	1187.0	
12	2434-0000100	DISC BEARING ASSEMBLIES	EACH	16	
13	2499-2300001	DECK DRAINS	LS	1.0	
14	2501-0201253	PILES, STEEL, HP 12 X 53	LF	2100	
15	2501-0201473	PILES, STEEL, HP 14 X 73	LF	3515	
16	2507-2638620	MACADAM STONE SLOPE PROTECTION	SY	66	
17	2507-2638660	BRIDGE WING ARMORING - MACADAM STONE	SY	22	
18	2526-8285000	CONSTRUCTION SURVEY	LS	1.0	
19	2533-4980005	MOBILIZATION	LS	1.0	
20	2599-9999010	GIRDER ERECTION PLAN	LS	1.0	

ITEM NO. ESTIMATE REFERENCE INFORMATION

1 EXCAVATION QUANTITIES HAVE BEEN COMPUTED ASSUMING THE PROPOSED GRADING FOR PROJECT NUMBER IM-080-6(243)239--13-52 IS COMPLETED PRIOR TO BRIDGE CONSTRUCTION. IN ALL OTHER LOCATIONS PIER EXCAVATION QUANTITIES ARE BASED ON EXISTING GROUND CONDITIONS.

2 ALL PIER FOOTING CONCRETE IS TO BE CLASS "C".

3 THIS BID ITEM INCLUDES THE CONCRETE FOR THE DECK, ABUTMENT, WINGWALLS, PIER COLUMNS AND PIER CAPS. REFER TO THE DEVELOPMENTAL SPECIFICATION FOR "HIGH PERFORMANCE CONCRETE FOR STRUCTURES" FOR ADDITIONAL INFORMATION. INCLUDES FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION), FLOODABLE BACKFILL, POROUS BACKFILL, GEOTEXTILE FABRIC, WATER FLOODING AND SUBDRAIN OUTLET AT SOUTH ABUTMENT AND TOE OF BERM. INCLUDES FURNISHING AND PLACING CONCRETE SEALER AT SOUTH ABUTMENT. INCLUDES THE LABOR AND MATERIAL ASSOCIATED WITH CONSTRUCTING THE CONCRETE RUSTICATION AND AESTHETIC TREATMENTS AT THE SOUTH ABUTMENT AND PIERS. INCLUDES FURNISHING AND PLACING 3 INCH DIAMETER PVC PLASTIC PIPE AND EXPANDING FOAM IN THE ABUTMENT WINGS. INCLUDES ALL RESILIENT JOINT FILLER REQUIRED.

4 REFER TO "CONCRETE PAINTING NOTES" ON DESIGN SHEET 11 FOR MORE INFORMATION.

8 INCLUDES MATERIAL AND LABOR ASSOCIATED WITH PROVIDING AND INSTALLING INSPECTION CABLES AND ATTACHMENTS PER PLAN. INCLUDES 4471 FEET OF $\frac{1}{2}$" DIAMETER GALVANIZED WIRE ROPE FOR GIRDER INSPECTION CABLES. WEIGHT OF GALVANIZED COATING IS NOT INCLUDED IN WEIGHT TOTAL AND IS INCIDENTAL TO THE BID ITEM QUANTITY "STRUCTURAL STEEL".

9 INCLUDES ALL NECESSARY HARDWARE AND ACCESSORIES INCLUDING THE ANCHORAGE SYSTEM, TEMPORARY ERECTION MATERIAL, AND THE $\frac{3}{8}$" BARRIER PLATES WITH THEIR ANCHORAGE SYSTEM. EXCLUDES INSTALLATION OF THE NEOPRENE GLAND.

10 INCLUDES INSTALLATION OF NEOPRENE GLAND AND WATER TESTING OF JOINT.

11 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 AND THE LABOR AND MATERIAL ASSOCIATED WITH CONSTRUCTING THE AESTHETIC TREATMENT. INCLUDES 590 FEET OF 3" DIA. AND 590 FEET OF 2" DIA. RIGID STEEL CONDUIT. INCLUDES MATERIAL AND LABOR ASSOCIATED WITH PROVIDING AND INSTALLING RIGID STEEL CONDUIT, JUNCTION BOXES, FITTINGS AND POLYPROPYLENE PULL ROPE. INCLUDES PROVIDING INTEGRAL COLOR AND RUSTICATIONS FOR CONCRETE BARRIERS.

12 INCLUDES ALL COSTS OF FURNISHING AND INSTALLING DISC BEARINGS INCLUDING DISC BEARING, SOLE PLATE, MASONRY PLATE, ANCHOR BOLTS, NEOPRENE PAD, GUIDE BARS, AND STAINLESS STEEL. INCLUDES TAPPERED MASONRY PLATES AT EXTERIOR GIRDERS. SEE DESIGN SHEETS 18 THRU 19 FOR DETAILS.

13 REFER TO THE DRAINAGE DETAIL SHEETS FOR LOCATION, MATERIALS, AND DETAILS OF CONSTRUCTION. MEASUREMENT WILL BE THE LUMP SUM FOR ALL DECK DRAINS REQUIRED AS SPECIFIED IN THE PLANS. PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, EQUIPMENT, LABOR, AND PERFORMANCE OF ALL WORK ASSOCIATED WITH THE FABRICATION AND INSTALLATION OF 4 DECK DRAINS WITH TRENCH GRATES PER PLAN. INCLUDES COST OF FURNISHING AND PLACING A TOTAL OF 2 SPLASH BASINS (INCLUDING EXCAVATION, EROSION STONE OR CLASS "E" REVETMENT AND ENGINEERING FABRIC).

14,15 PILING SHALL BE GRADE 50. INCLUDES THE COST OF DRILLING OR TORCH CUTTING HOLES IN PILING AND INSTALLING PILE UPLIFT ANCHORS AT THE ABUTMENT AS DETAILED IN THE PLANS.

16 INCLUDES FURNISHING AND PLACING ENGINEERING FABRIC, MACADAM STONE, CONCRETE CURB AND REINFORCING, POROUS BACKFILL OR GRANULAR SUBBASE BACKFILL AT FRONT FACE OF ABUTMENT FOOTING, AND ALL REQUIRED EXCAVATING, SHAPING AND COMPACTING.

17 INCLUDES FURNISHING AND PLACING ENGINEERING FABRIC, MACADAM STONE, CONCRETE CURB AND REINFORCING, AND ALL REQUIRED EXCAVATING, SHAPING AND COMPACTING FOR WING ARMORING.

ROADWAY QUANTITIES SHOWN ELSEWHERE IN THESE PLANS.

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DESIGN FOR 0° SKEW ON 3,300' RADIUS CURVE

566'-6 X VARIES CONTINUOUS WELDED GIRDER BRIDGE

171'-0, 226'-0, 169'-6 SPANS

ESTIMATED QUANTITIES

STA. 2543+48.27 (℄ RAMP B) APRIL 2018

JOHNSON COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 31 FILE NO. 30864 DESIGN NO. 420