STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB ABUT.	SUB PIER	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.		240		240
Porous Granular Embankment	Cu. Yd.		235		235
Concrete Removal	Cu. Yd.	42.1	6.4		48.5
Slope Wall Removal	Sq. Yd.		359		359
Protective Shield	Sq. Yd.	172			172
Structure Excavation	Cu. Yd.		12		12
Concrete Structures	Cu. Yd.	10.7	22.2	10.7	43.6
Rubbed Finish	Sq. Ft.			414	414
Concrete Superstructure	Cu. Yd.	82.1			82.1
Bridge Deck Grooving	Sq. Yd.	80			80
Protective Coat	Sq. Yd.	199			199
Furnishing and Erecting Structural Steel	Pound	9839			9839
Jack and Remove Existing Bearings	Each		8		8
Cleaning and Painting Steel Bridge - No. 2	L. Sum	1			1
Reinforcement Bars, Epoxy Coated	Pound	16350	2520	1640	20510
Bar Splicers	Each		31		31
Slope Wall 4 Inch	Sq. Yd.		352		352
Preformed Joint Strip Seal	Foot	59			59
Neoprene Expansion Joint, 2"	Foot	121			121
Elastomeric Bearing Assembly, Type I	Each	8			8
Anchor Bolts, $1\frac{1}{4}$"	Each		62		62
Anchor Bolts, $1\frac{1}{2}$"	Each		16		16
Concrete Sealer	Sq. Ft.		1002	460	1462
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	11.0			11.0
Drainage System	L. Sum	1			1
Unsound Concrete Removal	Sq. Yd.		4	1	5
Seismic Restrainer	Each	16			16
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.		60	414	474
Containment and Disposal of Non-Lead Paint Cleaning Residues, Location 2	L. Sum				1

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$" ϕ, holes $\frac{15}{16}$" ϕ, unless otherwise noted.

All structural steel shall be AASHTO M 270 Grade 50.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that can not be removed by grinding $\frac{1}{4}$ in deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Concrete Sealer shall be applied to the designated areas of the abutments and piers.

No field welding is permitted except as specified in the contract documents.

The existing structural steel does not contain lead paint.

Cleaning and painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 and shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams, brackets and bumper steel shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Any reinforcement bars damaged during Concrete Removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifcations when the deck is poured at an ambient temperature other than 50°F.

The Contractor is advised that cribbing may be necessary to support the existing structure during the replacement of the bearings and the reconstruction of the concrete bearing seats at the East and West Abutments. Cost included with Jack and Remove Existing Bearings.

SCOPE OF WORK

1. Install temporary cribbing & shoring system to support bridge dead & construction live loads. Jacking and cribbing required at East & West Abutments. (see sheet 16 of 36)
2. Remove the existing bearings and bearing extensions at each abutment.
3. Extend the abutment cap heights and seat widths, and perform concrete repair.
4. Install new elastomeric bearings at abutments.
5. Construct new elevated pier cap at Pier 1. The pier cap extension should encase the existing bolster supporting spans 1 and 2.
6. Construct new elevated pier cap at Pier 4. The pier cap extension should encase the existing bolster supporting span 4 at Pier 5.
7. Install Bumper & Cable assemblies at all piers.
8. Install new Side Retainers at Abutments and Piers 1 & 4.
9. Complete Deck Slab Repairs.
10. Complete Structural Repair of Concrete on the piers, Rubbed Finish & construct crashwalls.
11. Remove and Replace the existing expansion joints.
12. Install Drainage System.
13. Remove existing pavement at West Abutment and construct West Bridge Approach Slab.
14. Remove and replace existing Concrete Slopewalls.
15. Clean & paint structure at designated locations.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

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GENERAL DATA
STRUCTURE NO. 025-0018

SHEET NO. 2 / 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1383
	SN 025-0018		CONTRACT NO. 74296		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		