

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All new structural steel shall conform to AASHTO Classification M-270 Gr. 36 unless otherwise noted.
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts - 3/4 in. ϕ , holes - 13/16 in. ϕ , unless otherwise noted.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Joint openings shall be adjusted according to Article 520.04(c) of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.
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 cannot be removed by grinding 1/4 inch 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.

The contractor shall grease all zerks of all bearings at all piers. Cost included with Furnishing and Erecting Structural Steel.

Reinforcement bars designated (E) shall be epoxy coated.
The quantity for Joint Or Crack Filling is to seal the open joints between the wingwalls and the approach slabs.

The quantity for Structural Repair of Concrete is mainly for SB Pier 3 (50sf), NB Pier 4 (10sf), and NB Pier 12 (40sf). An additional 100sf was assumed at various areas of the other abutment and pier caps under joints.

The full depth and partial depth deck slab repair quantities are estimated. Actual quantities will be determined by the Engineer. The Contractor shall use extreme care during concrete removal so as not to damage the existing 2 1/2" precast, prestressed stay-in-place deck forms.
Calculated weight of new structural steel = 5,840 Pounds (M-270 Gr. 36)
= 312,570 Pounds (M-270 Gr. 50)

Reinforcement bars designated (E) shall be epoxy coated.
Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

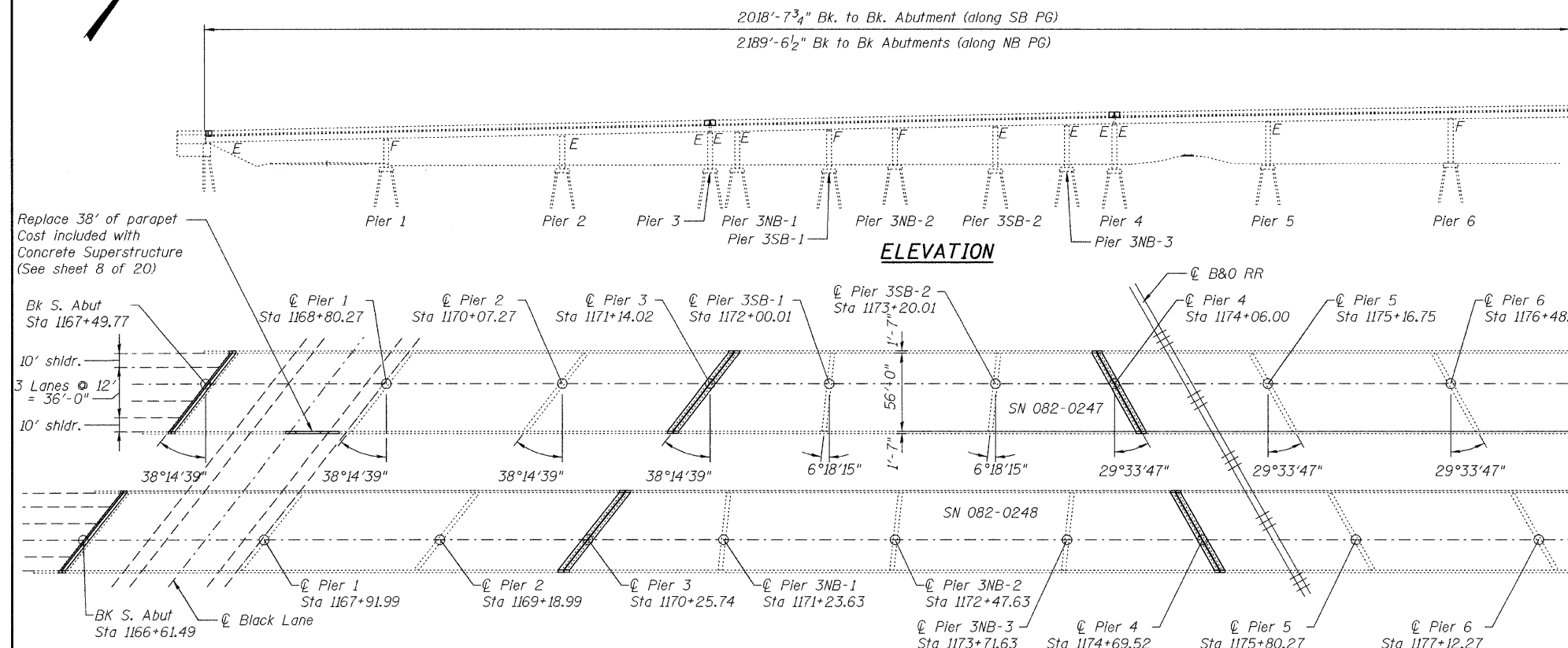
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The finger plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.



Replace 38' of parapet
Cost included with
Concrete Superstructure
(See sheet 8 of 20)

Bk S. Abut
Sta 1167+49.77
10' shldr.
3 Lanes @ 12'
= 36'-0"
10' shldr.
38°14'39"
38°14'39"
38°14'39"
38°14'39"
6°18'15"
1'-7"
6°18'15"
29°33'47"
29°33'47"
29°33'47"
Bk S. Abut
Sta 1166+61.49
Black Lane

ELEVATION

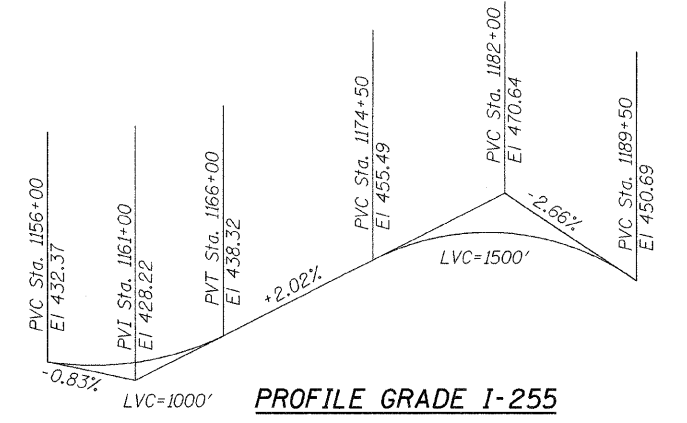
PLAN

BILL OF MATERIAL

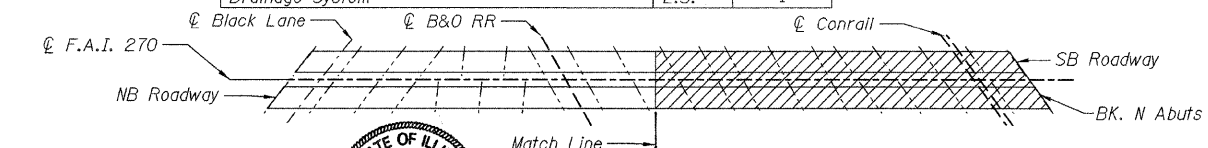
ITEM	UNIT	QUANTITY
Polymerized HMA Surface Course, Mix "E", NI05	Ton	2,167
Joint Or Crack Filling	Pound	330
Concrete Removal	Cu. Yd.	171.7
Concrete Superstructure	Cu. Yd.	164.1
Protective Coat	Sq. Yd.	61
Furnishing and Erecting Structural Steel	Pound	5,840
Jack and Remove Existing Bearings	Each	28
Reinforcement Bars, Epoxy Coated	Pound	14,780
Bar Splicers	Each	144
Preformed Joint Strip Seal	Foot	289.5
Finger Plate Expansion Joint, 5"	Foot	129.0
Finger Plate Expansion Joint, 6"	Foot	410.5
Fabric Reinforced Elastomeric Trough	Foot	550
Elastomeric Bearing Assembly, Type I	Each	14
Elastomeric Bearing Assembly, Type II	Each	14
Anchor Bolts, 1/4"	Each	56
Waterproofing Membrane System	Sq. Yd.	25,800
Structural Repair of Concrete (Depth <= 5")	Sq. Ft.	200
Deck Slab Repair-Full Depth Type II	Sq. Yd.	31
Deck Slab Repair (Partial)	Sq. Yd.	60
Drainage System	L.S.	1

INDEX OF SHEETS

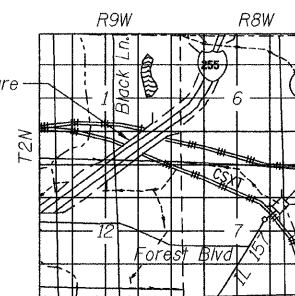
1. Plan & Elevation
2. Plan & Elevation
3. South Abutment Concrete Removal & Replacement
4. North Abutment Concrete Removal & Replacement
5. Strip Seal Details
6. Pier 3 Concrete Removal & Replacement
7. Piers 4 & 8 Concrete Removal & Replacement
8. Pier 12 & Span 1 Concrete Removal & Replacement
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12. Pier 8 Finger Plate Details
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18. North Abutment Type II Bearings
19. Temporary Concrete Barrier
20. Bar Splicer Details



PROFILE GRADE I-255



KEY PLAN



LOCATION SKETCH

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009
EXAMINED *D. Carl Pany*
PASSED *Ralph E. Anderson*



EXPIRES 11-30-2010

PLAN & ELEVATION
SN 082-0247 & 0248

SHEET NO. 1	F.A.I. RTE. 255	SECTION 82-1HVB-I-1	COUNTY ST. CLAIR	TOTAL SHEETS 45	SHEET NO. 26
20 SHEETS	FED. ROAD DIST. NO. ILLINOIS		CONTRACT NO. 76926		
FED. AID PROJECT					

Revised 12-30-09, JAU