

SUMMARY OF QUANTITIES

RURAL - FRANKLIN COUNTY
 SN 02B-0046(E), SN 02B-0077(P)
 HBP FUNDING
 85% FEDERAL, 20% STATE
 X171-2A

CODE NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70101805	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	EACH	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	15
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	136
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3,340
70500100	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	537.5
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3,100
* 78200405	GUARDRAIL MARKERS	EACH	32
* 78200500	BARRIER WALL MARKERS	EACH	12
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10
XX004093	CONCRETE SLOPEWALL REMOVAL	SQ FT	4,052
XX006661	UNINTERRUPTIBLE POWER SUPPLY	EACH	2
X0321430	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) SPECIAL	SQ YD	114
X0914000	PRECAST CONCRETE BOX CULVERT END SECTIONS 2' x 2'	EACH	2
X7050167	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	4
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	36
Z0022800	FENCE REMOVAL	FOOT	460
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1
70500670	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4

*SPECIALTY ITEMS

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Rev.

10/15/07
 58,000 / In.
 dsr:dmg

Bench Mark: Square cut in N.W. wingwall of 028-0046, Elevation 442.486
 Square cut in the center of west edge of east pier base
 under S.N. 028-0046, Elevation 422.576.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 869	(10IVB) B-1	FRANKLIN	48	30

18 SHEETS

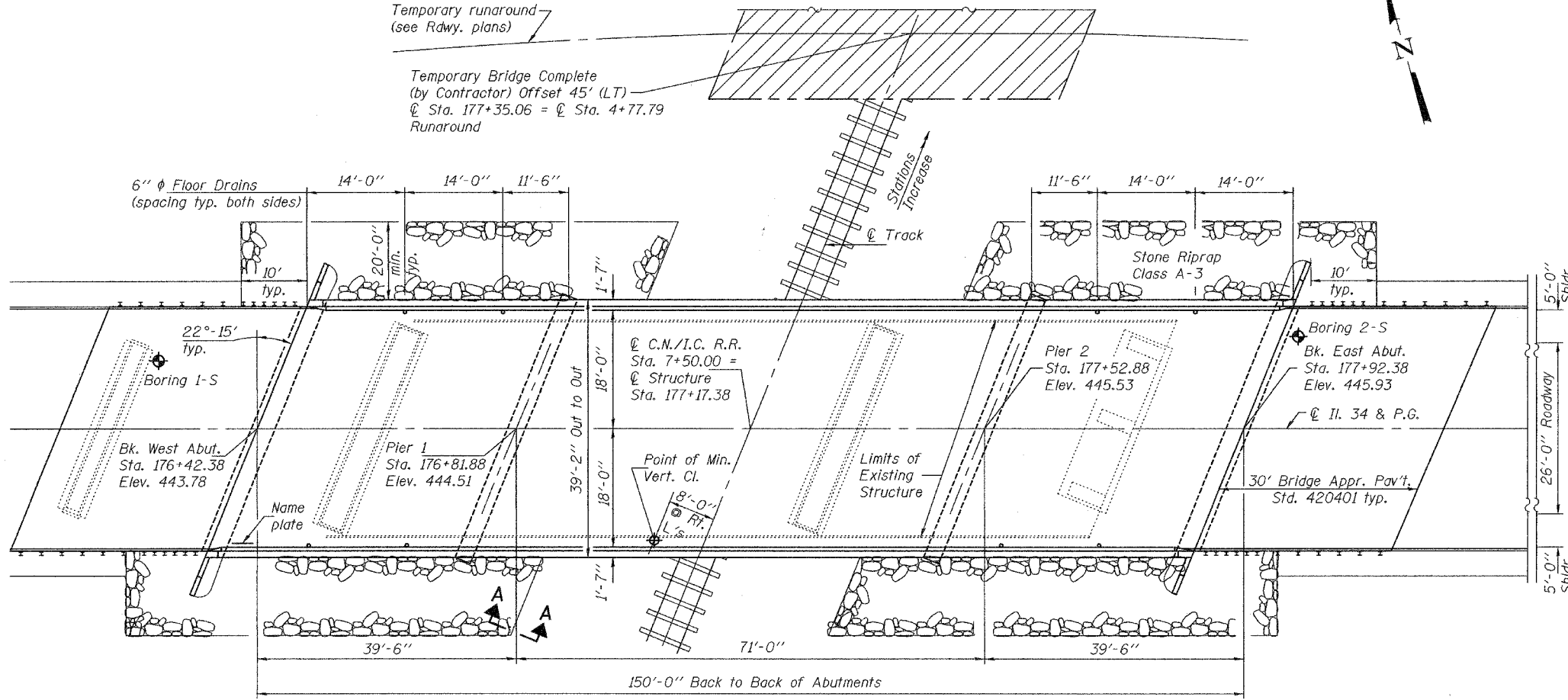
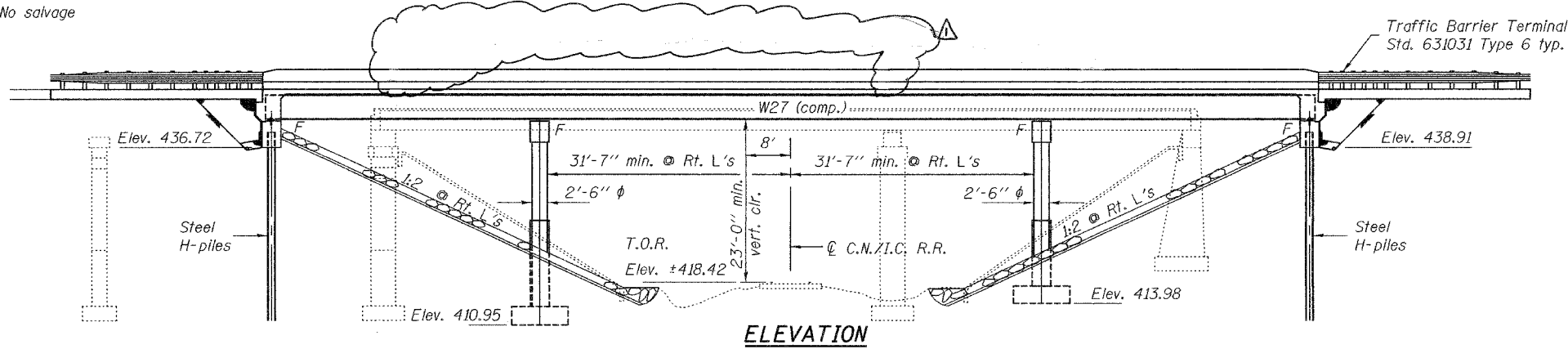
Contract No. 98821

Existing Structure: S.N. 028-0046 Built in 1934 as S.B.I. Rt. 143, Sec. 101-VB NRS at Sta. 176+73.87 as a 4 span steel plate girder structure 196'-8" Bk.-Bk. abutments supported on spread footing. Superstructure replacement and widening with PPC deck beam in 1972 - new bridge length = 117'-11 5/8" Bk.-Bk. abutments. Existing bridge to be removed and replaced. Traffic to be maintained utilizing temporary runaround.

No salvage

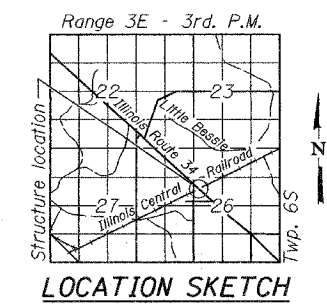
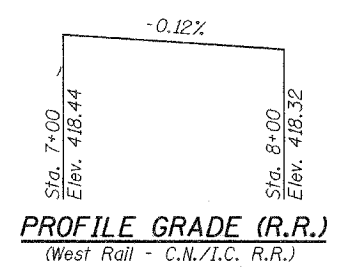
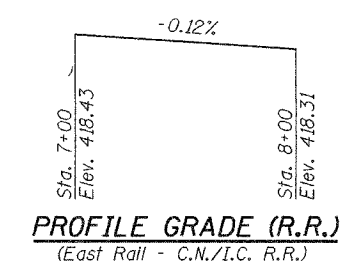
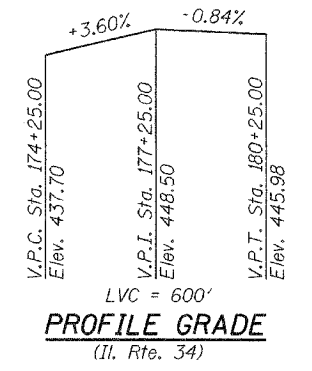
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STATION 177+17.38
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.P. RTE. 869 SEC. (10IVB)B-1
 LOADING HL-93
 STRUCTURE NO. 028-0077

NAME PLATE
 See Std. 515001



GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 34 OVER
C.N./I.C. RAILROAD
F.A.P. RTE. 869 - SEC. (10IVB)B-1
FRANKLIN COUNTY
STATION 177+17.38
STRUCTURE NO. 028-0077

DESIGNED	Denny N. Culltan
CHECKED	Ray Abancini
DRAWN	h.t. duong
CHECKED	DHC/KGA

November 30 2007
 EXAMINED
 PASSED



EXPIRES 11-30-2008

Notes: See sheet 2 of 18 for Section A-A.

LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2004 LRFD AASHTO w/2005 & 2006 Interims

DESIGN STRESSES
FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural steel M270 Gr. 50W)

SEISMIC DATA
 Seismic Performance Zone (SPZ) = 2
 Bedrock Acceleration Coefficient (A) = .12g
 Site Coefficient (S) = 1.0

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATE	SHEET NO.
FAP 869	(10IVB) B-1	FRANKLIN	46	31
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2

18 SHEETS

Contract No. 98821

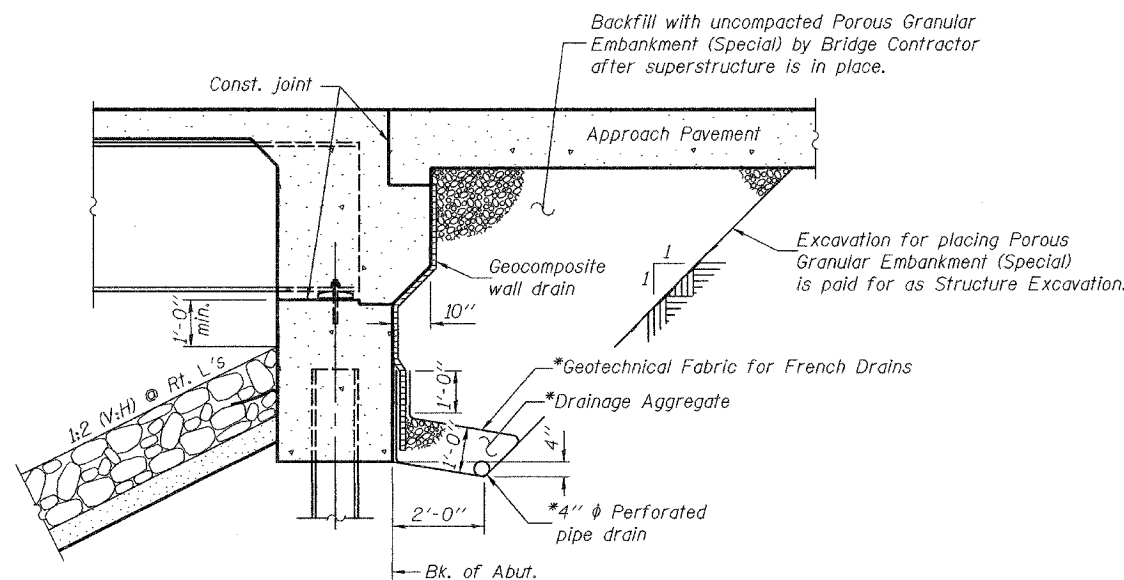
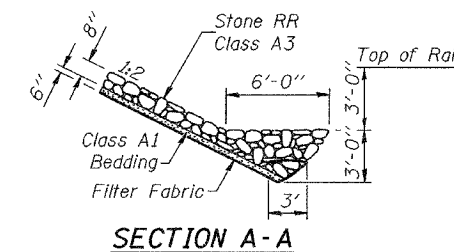
GENERAL NOTES

Fasteners shall be AASHTO M164 Type 3. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.
 Calculated weight of Structural Steel = 118,930 pounds
 No field welding is permitted except as specified in the contract documents.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
 Reinforcement bars designated (E) shall be epoxy coated.
 Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
 Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
 All structural steel shall be AASHTO M 270 Grade 50W.
 The Contractor is advised that the existing PPC Deck beams are in a deteriorated condition with reduce load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.
 Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL	
Porous Granular Embankment (Special)	Cu. Yd.		108	108	
Stone Riprap, Class A3	Sq. Yd.		1150	1150	
Filter Fabric	Sq. Yd.		1150	1150	
Removal of Existing Structures	Each		1	1	
Structure Excavation	Cu. Yd.		756	756	
Concrete Structures	Cu. Yd.		295.4	295.4	
Concrete Superstructure	Cu. Yd.	209.0		209.0	
Rock Excavation for Structures	Cu. Yd.		52	52	
Floor Drains	Each		8	8	
* Bridge Deck Grooving	Sq. Yd.		913	913	
* Protective Coat	Sq. Yd.		1094	1094	
Furnishing and Erecting Structural Steel	L. Sum		1	1	
Stud Shear Connectors	Each		1944	1944	
Reinforcement Bars, Epoxy Coated	Pound		49890	36610	86500
Bar Splicers	Each		72	72	
Furnishing Steel Piles HP10x42	Foot		230	230	
Driving Piles	Foot		230	230	
Test Pile Steel HP10x42	Each		2	2	
Name Plates	Each		1	1	
Anchor Bolts, 1"	Each		24	24	
Anchor Bolts, 1/4"	Each		24	24	
Geocomposite Wall Drain	Sq. Yd.		64	64	
Pipe Underdrains for Structures 4"	Foot		155	155	
Concrete Encasement	Cu. Yd.		4.2	4.2	
Asbestos Bearing Pad Removal	Each		36	36	

* Includes approach pavements and connector pavements, see Roadway Plans.



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structure 4".

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

DESIGNED	Dewey H. Coultas
CHECKED	Ray Ahanchi
DRAWN	h.f. duong
CHECKED	DHC/GRA

Nov. 30, 2007
 EXAMINED *Thomas J. Damgalaki*
 ENGINEER OF BRIDGE DESIGN
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

GENERAL DATA
F.A.P. RTE. 869 - SEC. (10IVB)B-1
FRANKLIN COUNTY
STATION 177+17.38
STRUCTURE NO. 028-0077

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