STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 314	111BR-1	MADISON	123	92
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
17 SHEETS

Contract No. 76454

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts $^{7}/_{8}$"ϕ, open holes $^{15}/_{16}$"ϕ. unless otherwise noted.

Calculated weight of Structural Steel = 13,130 lbs. (M270 Grade 36)
Calculated weight of Structural Steel = 175,380 lbs. (M270 Grade 50)

Field welding of construction accessories will not be permitted to beams or girders.

Anchor bolts shall be set before bolting diaphragms adjacent to supports.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

The Contractor shall drive 1 HP12x63 test pile in a permanent location at each abutment as directed by the Engineer before ordering the remainder of piles.

In addition to all other requirements of section 512 of the Standard Specifications, splices for steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.

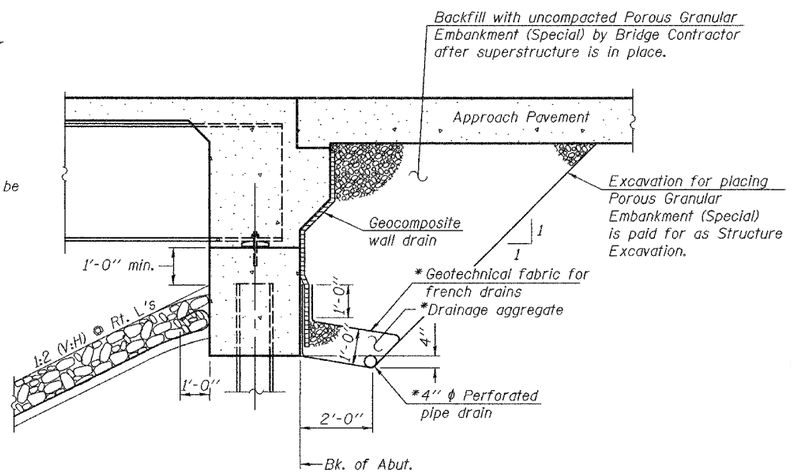
All Construction joints shall be bonded.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

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. 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. See special provision for "Cleaning and Painting New Metal Structures".

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, (Special)	Cu. Yd.		188	188
Stone Riprap, Class A5	Sq. Yd.		1153	1153
Filter Fabric	Sq. Yd.		1153	1153
Removal of Existing Structures, N2	Each			1
Structure Excavation	Cu. Yd.		625	625
Floor Drains	Each	12		12
Bridge Deck Grooving	Sq. Yd.	448		448
Protective Coat	Sq. Yd.	560		560
Concrete Structures	Cu. Yd.		43.2	43.2
Concrete Superstructure	Cu. Yd.	174.4		174.4
Furnishing and Erecting Structural Steel	L. Sum	0.35		0.35
Stud Shear Connectors	Each	2520		2520
Reinforcement Bars, Epoxy Coated	Pound	36420	5260	41680
Furnishing Steel Piles HP12x63	Foot		1070	1070
Driving Steel Piles	Foot		1070	1070
Test Pile Steel HP12x63	Each		2	2
Metal Shoes	Each		10	10
Temporary Sheet Piling	Sq. Ft.			902
Name Plates	Each	1		1
Bar Splicers	Each	434	12	446
Pipe Underdrains for Structures, 4"	Foot		176	176
Geocomposite Wall Drain	Sq. Yd.		106	106

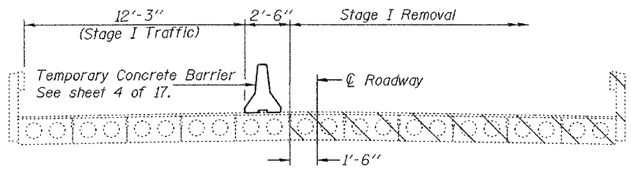


SECTION THRU INTEGRAL ABUTMENT

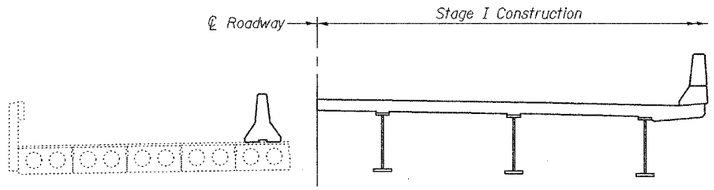
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.

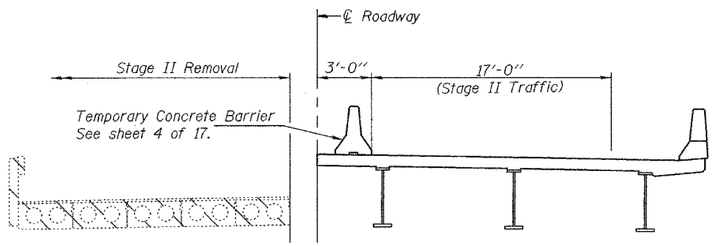
Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



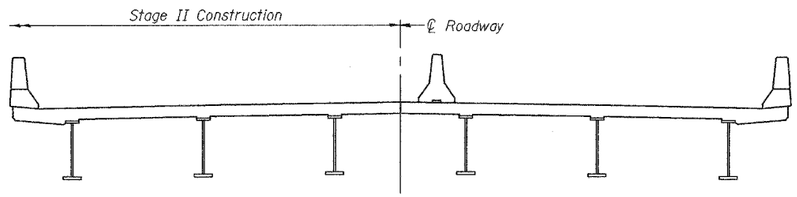
STAGE I REMOVAL



STAGE I CONSTRUCTION



STAGE II REMOVAL



STAGE II CONSTRUCTION

Note:
All cross sections are looking south.
Hatching indicates Removal of Existing Structures.
See Roadway Plans for quantity of Temporary Concrete Barrier.

DESIGNED	CEH
CHECKED	DHC
DRAWN	BECKY M. LEACH
CHECKED	CEH & DHC

November 10, 2005
EXAMINED Thomas J. Domagalski
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL DATA & STAGE CONSTRUCTION DETAILS
F.A.P. ROUTE 314 - SECTION 111BR-I
MADISON COUNTY
STATION 161+40.00
STRUCTURE NO. 060-0339

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