

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
FAP 773 IL 121	(108BR- 3)B-1	CUMBERLAND	96	37	22 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-			

Contract # 74237

GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

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

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 embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 (as applicable).

The Contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced 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 structure. An Existing Structure Information Package is available upon request as noted in the Special Provisions.

The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction. See Special Provisions.

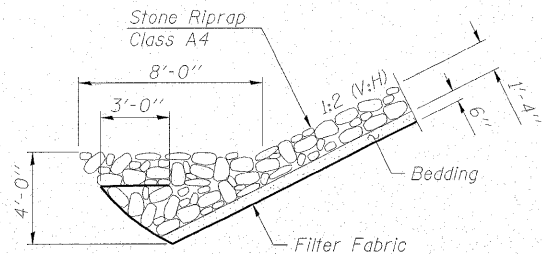
The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Highway Bridges-Typical for preparation of the Structural Assessment Report(s). Contractor's pre-approval shall not be applicable for this project. See Special Provision.

Current Ratings on file for Existing Structure

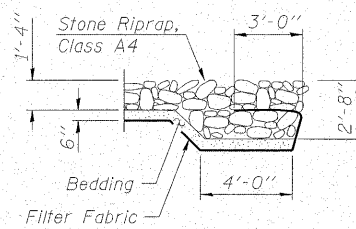
Inventory: HS 15.9
Operating: HS 26.5
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

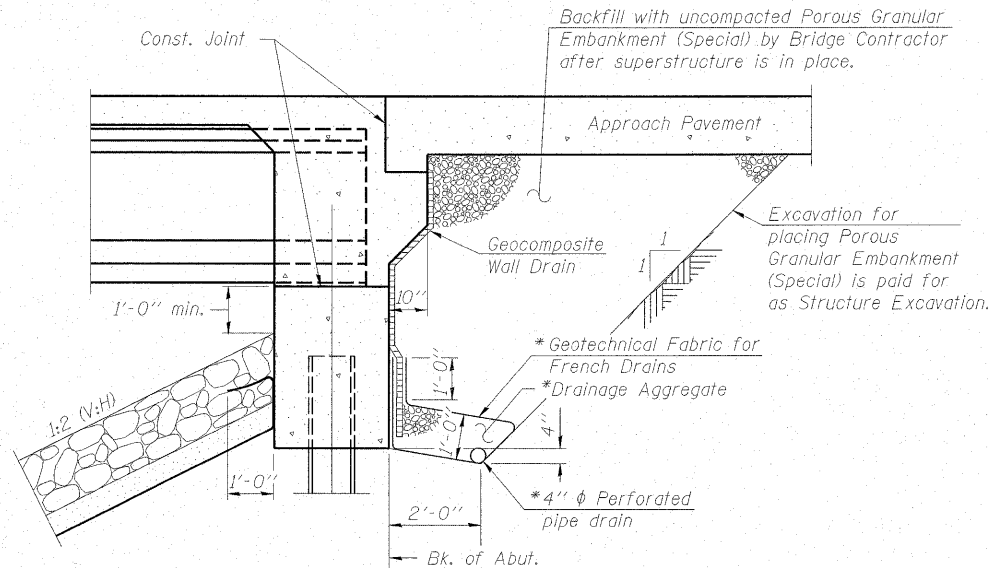
Slipforming of parapets shall not be permitted.



SECTION A-A



SECTION B-B



SECTION THRU INTEGRAL ABUTMENT

*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).

A quantity for Pipe Drain 4" has been provided to extend the Pipe Underdrains for Structures, 4" from the edge of wingwalls to the toe of the proposed slope.

WATERWAY INFORMATION

Proposed Low Grade Elev. = 569.76 @ Sta. 396+20
Existing Low Grade Elev. = 569.32 @ Sta. 398+00
Drainage Area = 11.2 mi.²

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	2165	430	596	562.9	1.3	0.6	564.2	563.5	
Design	50	3510	492	698	563.8	2.0	1.3	565.8	565.1
Base	100	4118	526	756	564.3	2.2	1.5	566.5	565.8
Overtopping									
Max. Calc.	500	5617	588	864	565.2	2.7	2.0	567.9	567.2

10-Year Velocity through Existing Bridge = 4.65 fps
10-Year Velocity through Proposed Bridge = 3.21 fps

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		90	90
Stone Riprap, Class A4	Sq. Yd.		852	852
Filter Fabric	Sq. Yd.		852	852
Removal of Existing Structures No. 1	Each			1
Structure Excavation	Cu. Yd.		168	168
Concrete Structures	Cu. Yd.		89.7	89.7
Concrete Superstructure	Cu. Yd.	183.4		183.4
Bridge Deck Grooving	Sq. Yd.	657		657
Concrete Encasement	Cu. Yd.		7.0	7.0
Protective Coat	Sq. Yd.	602		602
Furnishing and Erecting Precast Prestressed Concrete I Beams, 42"	Foot	812		812
Reinforcement Bars, Epoxy Coated	Pound	41680	8620	50300
Bar Splicers	Each	457	58	515
Furnishing Steel Piles HP12x63	Foot		639	639
Driving Piles	Foot		335	335
Test Pile Steel HP12x63	Each		2	2
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		72	72
Pipe Underdrains for Structures, 4"	Foot		146	146
Temporary Soil Retention System	Sq. Ft.		748	748
Underwater Structure Excavation Protection, Location 1	Each		1	1
Asbestos Bearing Pad Removal	Each		44	44
Setting Piles in Rock	Each		8	8



DESIGNED - BAS
CHECKED - KEF
DRAWN - LAD
CHECKED - RJA

GENERAL NOTES, TOTAL BILL OF MATERIAL

IL ROUTE 121 OVER MULE CREEK
F.A.P. RTE. 773 - SECTION (108BR-3)B-1
CUMBERLAND COUNTY
STATION 399+34.00
STRUCTURE NO. 018-0062