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GENERAL NOTES

- 1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts 3_4 in. dia., holes ${}^{15}_{16}$ in. dia., unless otherwise noted.
- 2. Calculated weight of structural steel = 105,530 pounds.
- 3. All structural steel shall be AASHTO M 270 Grade 50W.
- 4. No field welding is permitted except as specified in contract documents.
- 5. Reinforcement bars designated (E) shall be epoxy coated.
- 6. 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(b) 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
- 7. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 8. Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 in. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
- 9. Slipforming of the parapets is not allowed.
- 10. Foundation piles to be installed after a waiting period of at least 10 days in order to eliminate downdrag forces on the piles.
- 11. <u>Current Ratings on File for Existing Structure</u> Inventory: HS 23.2 Operating: HS 38.8 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.



NAME PLATE See Std. 515001



*Included in the cost of Pipe Underdrains for Structures.

Note:

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

ITEM	UNIT	SUPER	SUB	TOTAL
Filter Fabric	Sq. Yd.		1,168	1,168
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		120	120
Concrete Structures	Cu. Yd.		59.0	59.0
Concrete Superstructure	Cu. Yd.	241.0		241.0
Bridge Deck Grooving	Sq. Yd.	505		505
Concrete Encasement	Cu. Yd.		4.0	4.0
Protective Coat	Sq. Yd.	645		645
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,206		1,206
Reinforcement Bars, Epoxy Coated	Pound	51,010	13,240	64,250
Bar Splicers	Each		76	76
Furnishing Steel Piles, HP 12x53	Foot		275	275
Driving Piles	Foot		275	275
Test Pile Steel HP 12x53	Each		2	2
Pile Shoes	Each		12	12
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	24		24
Geocomposite Wall Drain	Sq. Yd.		72	72
Granular Backfill for Structures	Cu. Yd.		156	156
Stone Riprap, Class A5	Sq. Yd.		1,168	1,168
Asbestos Bearing Pad Removal	Each		10	10
Drainage Scuppers, DS-11	Each	2		2
Pipe Underdrains for Structures 4"	Foot		140	140

Drainage Area = 23.2 sq. mi. Exist. Low Grade Elev. = 705.15 @ Sta. 246+20 Prop. Low Grade Elev. = 711.53 @ Sta. 246+65										
Flood	Freq.	Q	Opening Sq. Ft.		Nat.	Head - Ft.		Headwater El.		
F 1000	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.	
Ten-Year	10	2150	550	620	703.6	0.1	0.1	703.8	703.7	
OVR (E)	40	3280	556		705.2	0.5		705.8		
Design	50	3420	556	760	705.4	0.5	0.1	705.9	705.5	
Base	100	3980	556	818	706.1	0.6	0.1	706.7	706.2	
Max. Calc.	500	5380	556	945	707.6	0.5	0.1	708.1	707.8	
10-Year Velocity through Existing Bridge = 3.9 fps										

7 ROKA	
engineering	

ROKA Zroka Engineering, P.C.	USER NAME = SAW	DESIGNED - PMM REVISE	ED -		GENERAL DATA	F.A.P.	SECTION	COUNTY SHEFTS	SHEET NO.
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TOTAL BILL OF MATERIAL

DESIGN SCOUR ELEVATION TABLE

E. Abut. W. Abut. 703.28 703.73

WATERWAY INFORMATION

10-Year Velocity through Proposed Bridge = 3.5 fps