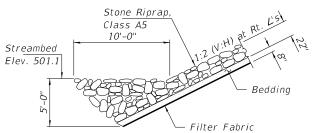


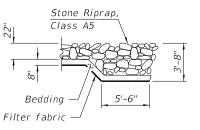
\*Included in the cost of Pipe Underdrains for Structures, 4"

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).

Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures 4".



#### SECTION A-A



## SECTION B-B

### GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts \(^{7}\/8''\'\Omega\), holes 15/16"Ø, unless otherwise noted.

Calculated weight of Structural Steel = 149,600 lbs. All structural steel shall be AASHTO M 270 Grade 50W.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Structural steel shall only be painted from distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be reauired.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

The top surface of the deck shall be screeded with a straight edge. Further finishing shall be delayed until the water sheen appears, but not to the point of rendering further manipulation ineffective. The surface then shall be roughened with a suitable stiff bristled broom or wire brush drawn in transverse direction—removing any laitance present and breaking up the water sheen. The corrugations formed shall be uniform in appearance and in no case more than ¼" in depth.

## TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			275
Porous Granular Embankment	Cu. Yd.			120
Stone Riprap, Class A5	Ton			945
Filter Fabric	Sg. Yd.			837
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		268	268
Concrete Structures	Cu. Yd.		43.6	43.6
Concrete Superstructure	Cu. Yd.	136.8		136.8
Bridge Deck Grooving	Sq. Yd.	387		387
Protective Coat	Sq. Yd.	426	38	464
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	915		915
Reinforcement Bars, Epoxy Coated	Pound	27,650	7,480	35,130
Steel Railing, Type S-1	Foot	252		252
Furnishing Metal Shell Piles 12"x0.250"	Foot		665	665
Driving Piles	Foot		665	665
Test Pile Metal Shells	Each		1	1
Name Plates	Each		1	1
Anchor Bolts, 1"	Each		20	20
Geocomposite Wall Drain	Sq. Yd.			104
Pipe Underdrains for Structures 4"	Foot			160

# 9+27.2 9+70.0 9+99.9 $B \blacktriangleleft$ 10+42.7 30.0' Lt. 30.0' Lt. 30.0' Lt. 30.0' Lt. $B \blacktriangleleft$ **€** Bridge Sta. 10+06 10+84.7 9+69.2 10+12.0 10+41.9 30.0' Rt. 30.0' Rt. 30.0' Rt. 30.0' Rt.

#### RIPRAP LAYOUT

FILE NAME = 180640-sht-bridge.dgn	USER NAME = tlmk	DESIGNED - P.R.R.	REVISED - 1/04/2023	
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -	1
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE = \$SCALE\$	DRAWN - R.D.H.	REVISED -	SA
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 1/4/2023	CHECKED - S.W.M.	REVISED -	1

STATE OF ILLINOIS						
SANGAMON COUNTY	HIGHWAY DEPARTMENT					

GENERAL DATA STRUCTURE NO. 084-3447	F.A.S.	SECTION			COUNTY	TOTAL SHEETS	SH N
	1636	16-13113-00-BR			SANGAMON	37	
	GARDNER ROAD DISTRICT			CONTRACT NO. 93785			
SHEET NO. 2 OF 14 SHEETS			ILLINOIS	FED. AID	PROJECT ZAGJ (4	18)	