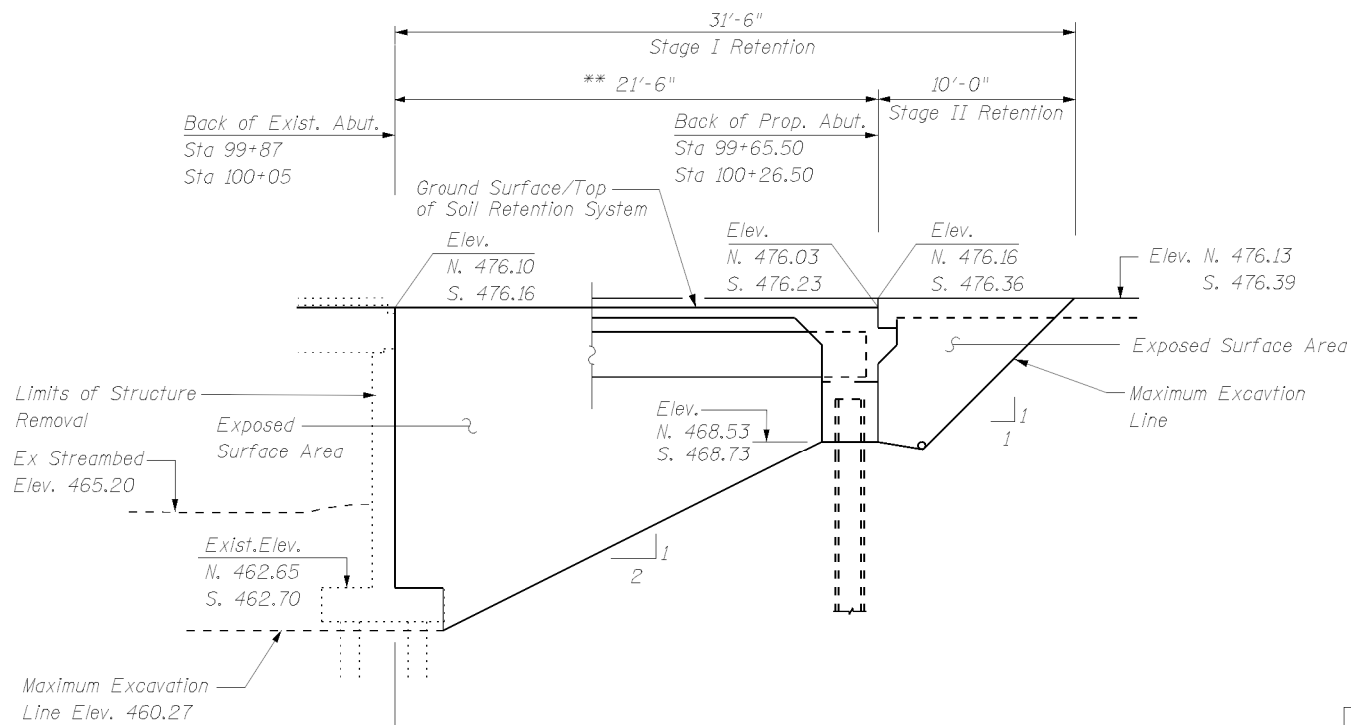


SECTION THRU INTEGRAL ABUTMENT
(Horiz. Dim @ Rt. L's)

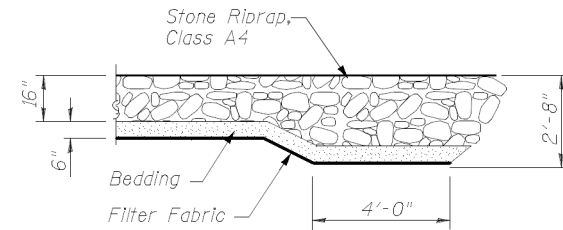


TEMPORARY SOIL RETENTION SYSTEM
(S. Abut. shown, N. Abut. similar)

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

All horizontal dimensions are given along centerline of roadway.

** This Portion of Temporary Soil Retention System shall be removed after completion of Stage I Construction.



SECTION A-A

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164, Type 3, in unpainted areas. Bolts 7/8" diameter, open holes 5/16" diameter, unless otherwise noted.
- Calculated weight of Structural Steel = 103650 lbs.
- All Structural steel shall be AASHTO M270, GRADE 50W.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Structural steel shall only be painted, for a 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 required.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- Slipforming of the parapet is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		216	216
Stone Riprap, Class A4	Sq. Yd.		829	829
Filter Fabric	Sq. Yd.		829	829
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		344	344
Floor Drains	Each	6		6
Concrete Structures	Cu. Yd.		123.6	123.6
Concrete Superstructure	Cu. Yd.	277.6		277.6
Bridge Deck (Shrinkage Compensating Concrete)	Cu. Yd.	191.7		191.7
* Bridge Deck Grooving	Sq. Yd.	1106		1106
* Protective Coat	Sq. Yd.	1214		1214
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3612		3612
Reinforcement Bars, Epoxy Coated	Pound	96070	19040	115110
Bar Splicers	Each	425	204	629
Furnishing Metal Shell Piles, 14" x 0.250"	Foot		1196	1196
Driving Piles	Foot		1196	1196
Test Pile Metal Shells	Each		2	2
Pile Shoes	Each		26	26
Temporary Soil Retention System	Sq. Ft.		588	588
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		56	56
Geocomposite Wall Drain	Sq. Yd.		160	160
Pipe underdrains for Structures 4 inch	Foot		263	263
Temporary Support System	L. Sum		1	1

* Includes Bridge Approach Slabs.

Item	Unit	Qty
Temporary Soil Retention System	Sq. Ft.	588