GENERAL NOTES

Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts 7_{g} ' ϕ , open holes $^{15}_{16}$ (' ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 94,910 Pounds

All structural steel shall be AASHTO M 270 Grade 50W.

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

Anchor bolts shall be set before bolting diaphragms over 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 wide flange beams and all splice plate material except fill plates.

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.

Bearing seat surfaces shall be constructed and adjusted to the designed elevations within a tolerance of l_g ". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two l_g " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

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

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All Construction joints shall be bonded.

Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before stage I removal.

| | <u>22'-7'2''</u> age I Retenti | on |
|--|-----------------------------------|---|
| Stage II Retention | | |
| Top of Stage II Retention Elev. 748.77 | | Top of Stage I Retention Elev. 748.24± |
| 1 | | |
| | | Limits of Structure Removal |
| Elev. 741.33 Elev. 74 | 1.83- | |
| | | Maximum Excavation Line |
| | | Elev. 736.98± |
| 7′-5″ | 5′-6″ | 9'-8'2'' |

001 711

<u>WEST ABUTMENT</u> TEMPORARY SOIL RETENTION SYSTEM



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.

| P.S.L. | | | |
|-----------------|--|--|--|
| A.R.K. & F.J.S. | | | |
| K.T.R. | | | |
| P.S.L. & A.R.K. | | | |
| | | | |



*Included in cost of Porous Granular Embankment.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|---------|------------|-------|--------|
| Removal of Existing Structures | Each | | | 1 |
| Structure Excavation | Cu. Yd. | | 238 | 238 |
| Test Pile Metal Shells | Each | | 3 | 3 |
| Furnishing Metal Pile Shells 14" | Foot | | 945 | 945 |
| Driving and Filling Shells | Foot | | 945 | 945 |
| Concrete Structures | Cu. Yd. | | 62.9 | 62.9 |
| Furnishing and Erecting Structural Steel | L. Sum | 1 | | 1 |
| Reinforcement Bars, Epoxy Coated | Pound | 32,870 | 7,340 | 40,210 |
| Concrete Superstructure | Cu. Yd. | 144.4 | | 144.4 |
| Name Plates | Each | 1 | | 1 |
| Stone Riprap, Class A4 | Sq. Yd. | | 895 | 895 |
| Filter Fabric for Use with Riprap | Sq. Yd. | | 895 | 895 |
| Bridge Deck Grooving | Sq. Yd. | 437 | | 437 |
| Protective Coat | Sq. Yd. | 539 | | 539 |
| Floor Drains | Each | <i>1</i> 6 | | 16 |
| Bar Splicers | Each | 425 | 56 | 481 |
| Porous Granular Embankment | Cu. Yd. | | 99 | 99 |
| Underwater Structure Excavation | | | | |
| Protection - Location 1 | Each | | 1 | 1 |
| Temporary Soil Retention System | Sq. Ft. | | 479 | 479 |
| Stud Shear Connectors | Each | 1,908 | | 1,908 |

