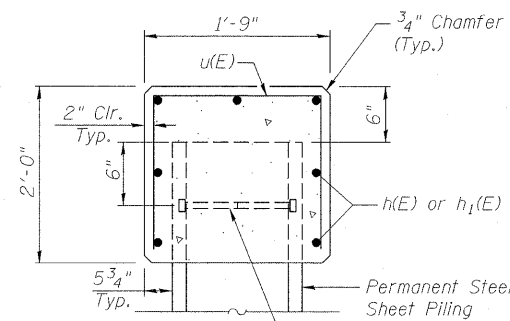


DRAINAGE DETAILS

** Pipe invert elevation to match existing grade line on opposite face of wall. Cost of any excavation required is included with Pipe Underdrains for Structures 4".

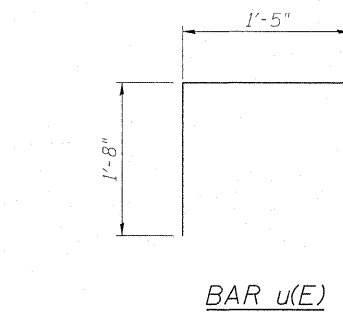
SECTION THRU WALL



DETAIL A

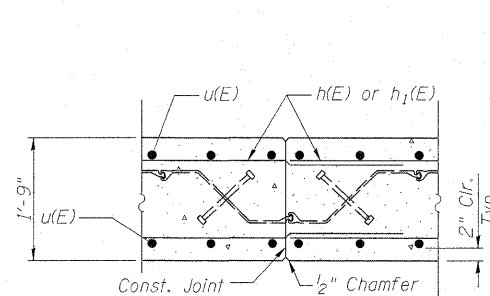
Notes:
 Cost of Geotechnical Fabric and Drainage Aggregate are included in the cost of Pipe Underdrain for Structures 4".
 Perforated pipe drain shall outlet near stations 525+00 and 526+00 thru 4 1/4" cut hole in wall.
 Cost of cutting 3 1/4" φ opening in sheet pile wall is included in the cost of Permanent Steel Sheet Piling.

1-3/4" φ x 5" Granular or Solid Flux Filled Headed Stud according to Art. 1006.32 of the Std. Spec's at center of each side of sheeting.

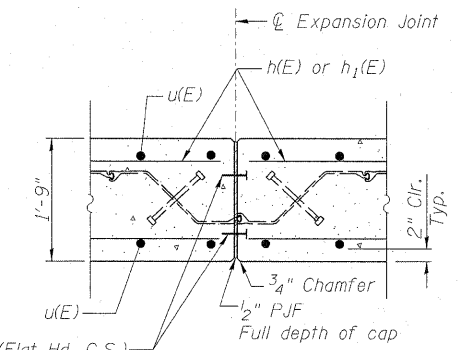


BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| h(E) | 70 | #5 | 28'-1" | — |
| h ₁ (E) | 35 | #5 | 24'-8" | — |
| u(E) | 375 | #5 | 4'-9" | U |
| Concrete Structures | | | Cu. Yd. | 48.6 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 4810 |



CONSTRUCTION JOINT DETAIL



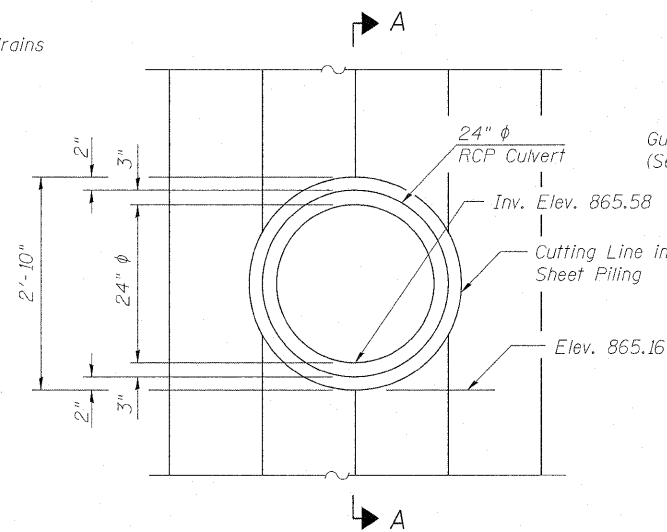
EXPANSION JOINT DETAIL

Concrete nails (Flat Hd. C.S.) 1" long at 12" cts., vertical (Cost included with Concrete Structures)

Expansion joints shall be located at the nearest sheet piling interlock to the indicated spacing shown.

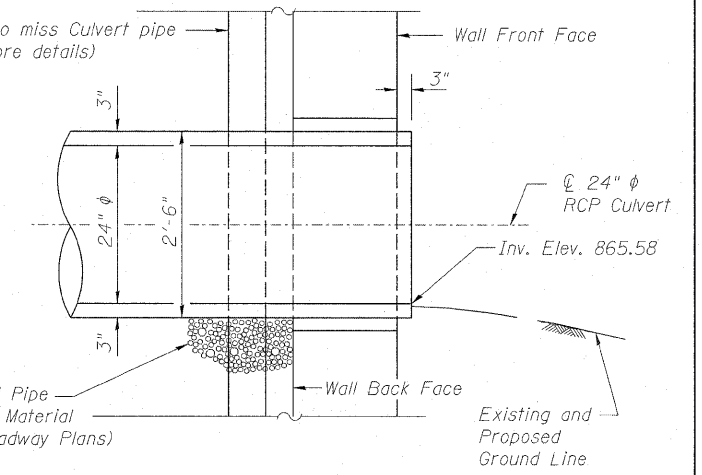
Notes:

The details for the concrete cap and reinforcement, and the required number of stud shear connectors are based on section PZ-22 sheet piling. If the Contractor chooses to use any other section, then the Contractor shall submit revised concrete cap and reinforcement configuration for approval by engineer. Such changes shall not be cause for additional compensation.



SECTION THRU PERMANENT SHEET PILING AT PIPE CULVERT

(Contractor shall seal the void around the RCP with approval by the Engineer. Cost included with Permanent Steel Sheet Piling.)



SECTION A-A