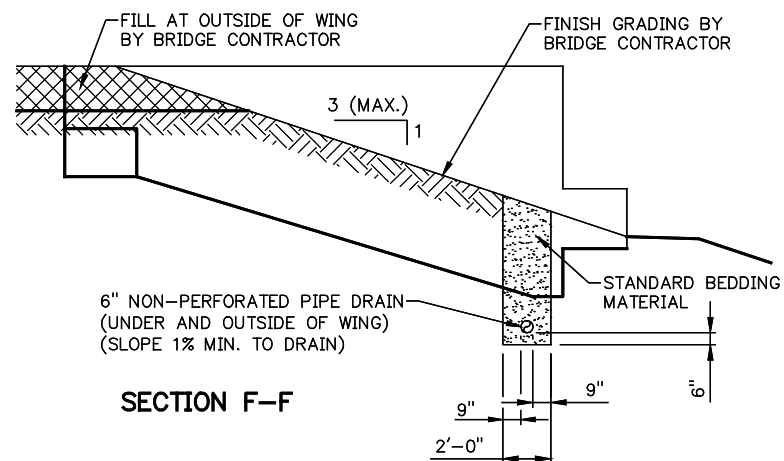


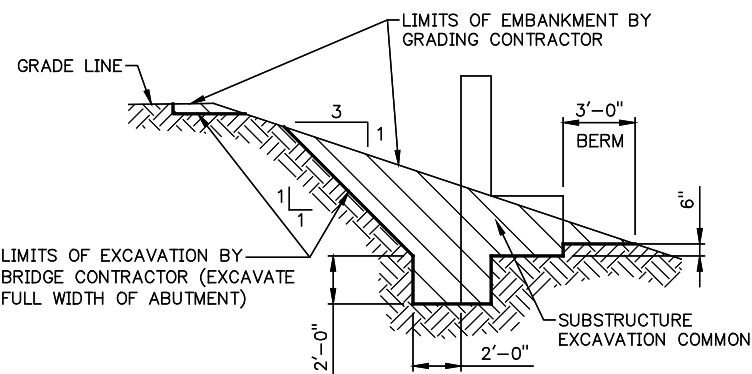
NOTE:  
CONCRETE MAY BE PLACED AGAINST THE LIMITS OF EXCAVATION IF THE MATERIAL IS EXCAVATED TO THE NEAT LINES OF THE ABUTMENT AND APPROVED BY ENGINEER. IF NECESSARY, FORMS SHALL BE USED ON THE BACK VERTICAL FACE OF THE ABUTMENT AND REMOVED AFTER CONCRETE IS SET. IF THE CONTRACTOR CHOOSES TO PLACE CONCRETE AGAINST THE SOIL, THE DEPARTMENT WILL PAY FOR SUBSTRUCTURE EXCAVATION COMMON IN ACCORDANCE WITH THE DIAGRAM ON PLANS.

**EXCAVATION PLAN**

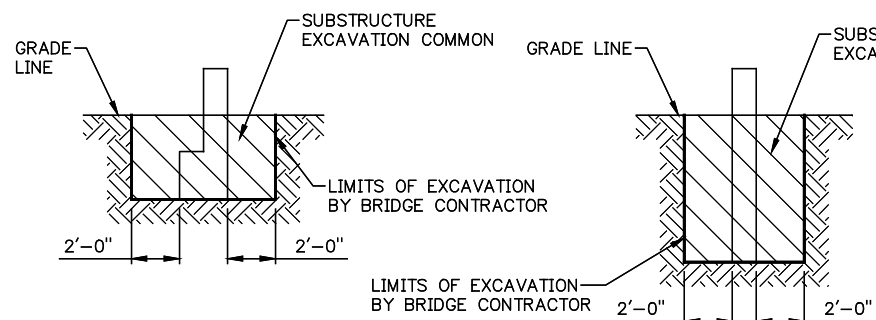
ABUTMENT 1 PIPE UNDERDRAIN SHOWN. MIRROR FOR ABUTMENT 2.



**SECTION F-F**

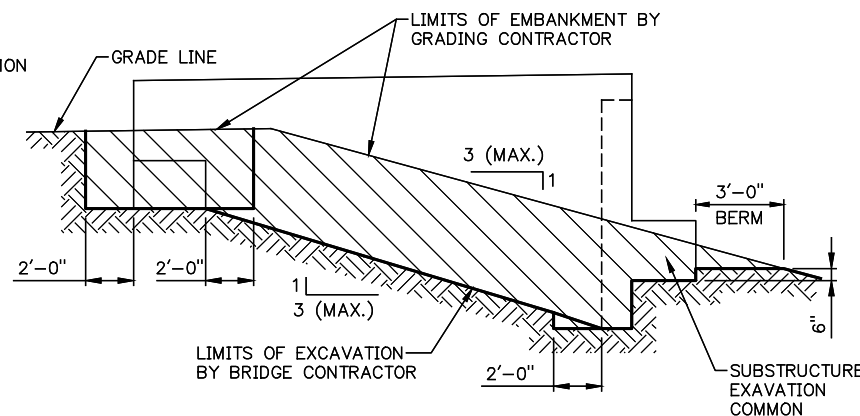


**SECTION A-A**



**SECTION D-D**

**SECTION C-C**

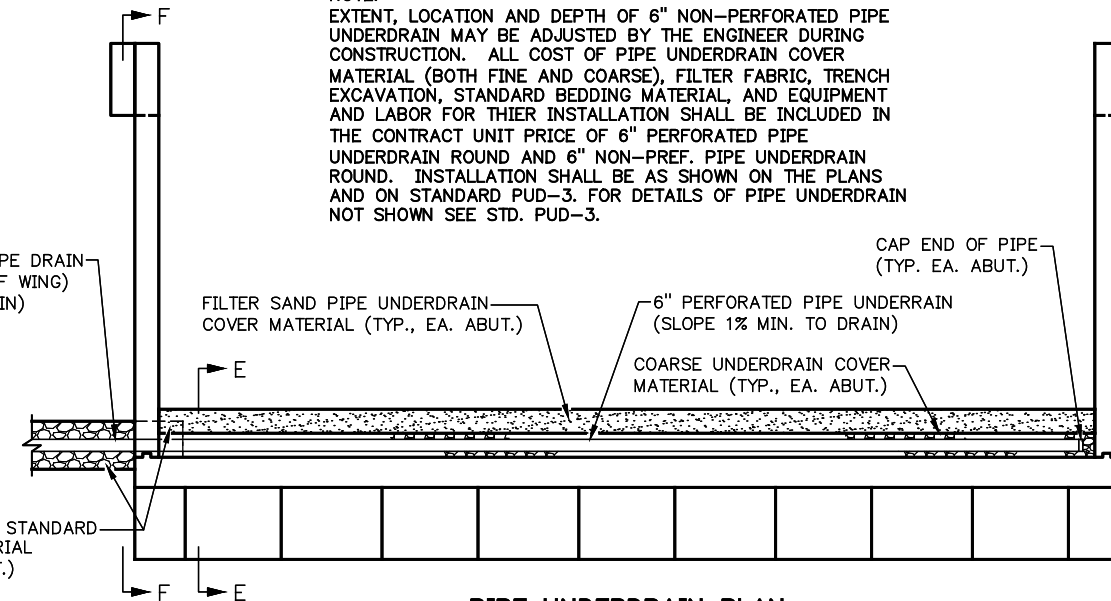


**SECTION B-B**

6" NON-PERFORATED PIPE DRAIN (UNDER AND OUTSIDE OF WING) (SLOPE 1% MIN. TO DRAIN)

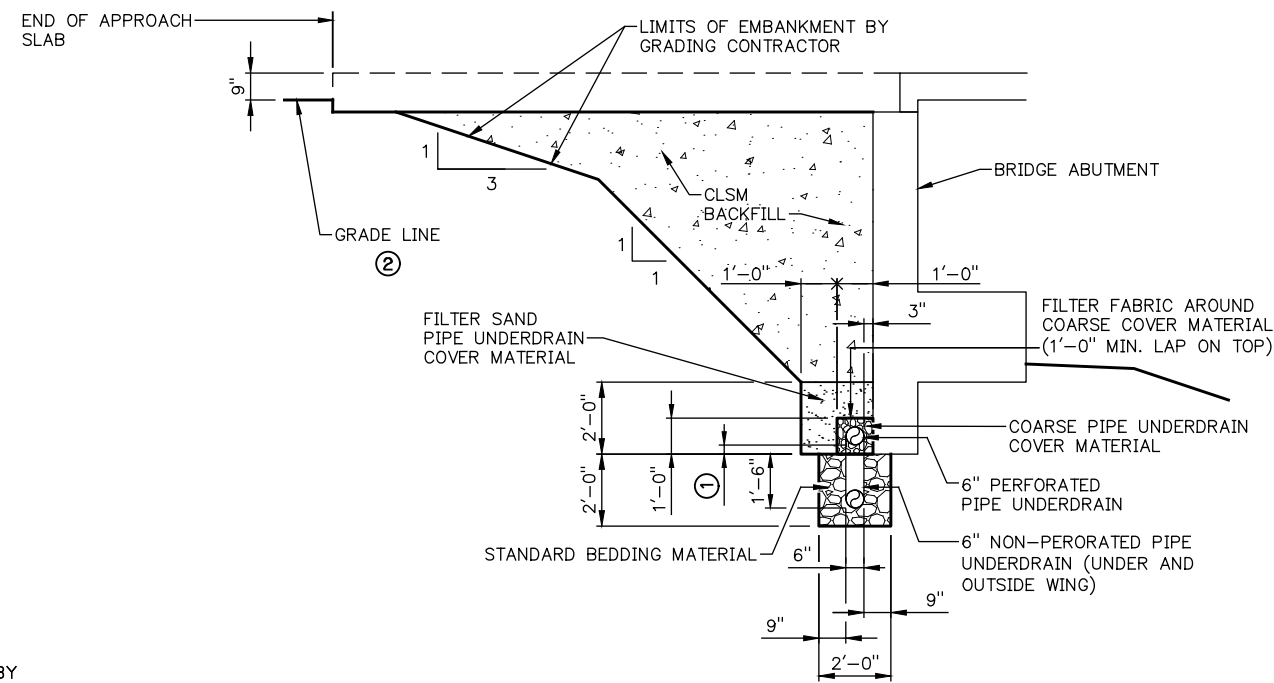
BACKFILL WITH STANDARD BEDDING MATERIAL (TYP. EA. ABUT.)

NOTE:  
EXTENT, LOCATION AND DEPTH OF 6" NON-PERFORATED PIPE UNDERDRAIN MAY BE ADJUSTED BY THE ENGINEER DURING CONSTRUCTION. ALL COST OF PIPE UNDERDRAIN COVER MATERIAL (BOTH FINE AND COARSE), FILTER FABRIC, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, AND EQUIPMENT AND LABOR FOR THEIR INSTALLATION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF 6" PERFORATED PIPE UNDERDRAIN ROUND AND 6" NON-PREF. PIPE UNDERDRAIN ROUND. INSTALLATION SHALL BE AS SHOWN ON THE PLANS AND ON STANDARD PUD-3. FOR DETAILS OF PIPE UNDERDRAIN NOT SHOWN SEE STD. PUD-3.



**PIPE UNDERDRAIN PLAN**

ABUTMENT 1 PIPE UNDERDRAIN SHOWN. MIRROR FOR ABUTMENT 2.



**SECTION E-E**

- ① SET BOTTOM OF PIPE 3" ABOVE THE BOTTOM OF THE ABUTMENT AT THE LOW END.
- ② GRADE LINE ASSUMED TO BE LOCATED 9" BELOW TOP OF APPROACH SLAB FOR COMPUTING CLSM BACKFILL QUANTITY SHOWN ON PLANS. THE DEPARTMENT WILL PAY FOR CLSM BACKFILL IN ACCORDANCE WITH THE PLAN QUANTITY AND NO ADJUSTMENT WILL BE MADE FOR ACTUAL LOCATION OF GRADE LINE.

**BACKFILL NOTE:** CLSM BACKFILL SHALL NOT BE PLACED UNTIL THE ABUTMENT WINGS HAVE ATTAINED A STRENGTH OF 3000 P.S.I.

THE OUTSIDE FACES OF THE WINGS SHALL BE BACKFILLED TO THE ORIGINAL EMBANKMENT LIMITS (MIN.), PRIOR TO PLACING CLSM BACKFILL.

**SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN ASSEMBLY DETAILS**

BRIDGE "A" C.R.L. STA. 586+80.46  
State Job No. 28768(04) Sheet No. 44