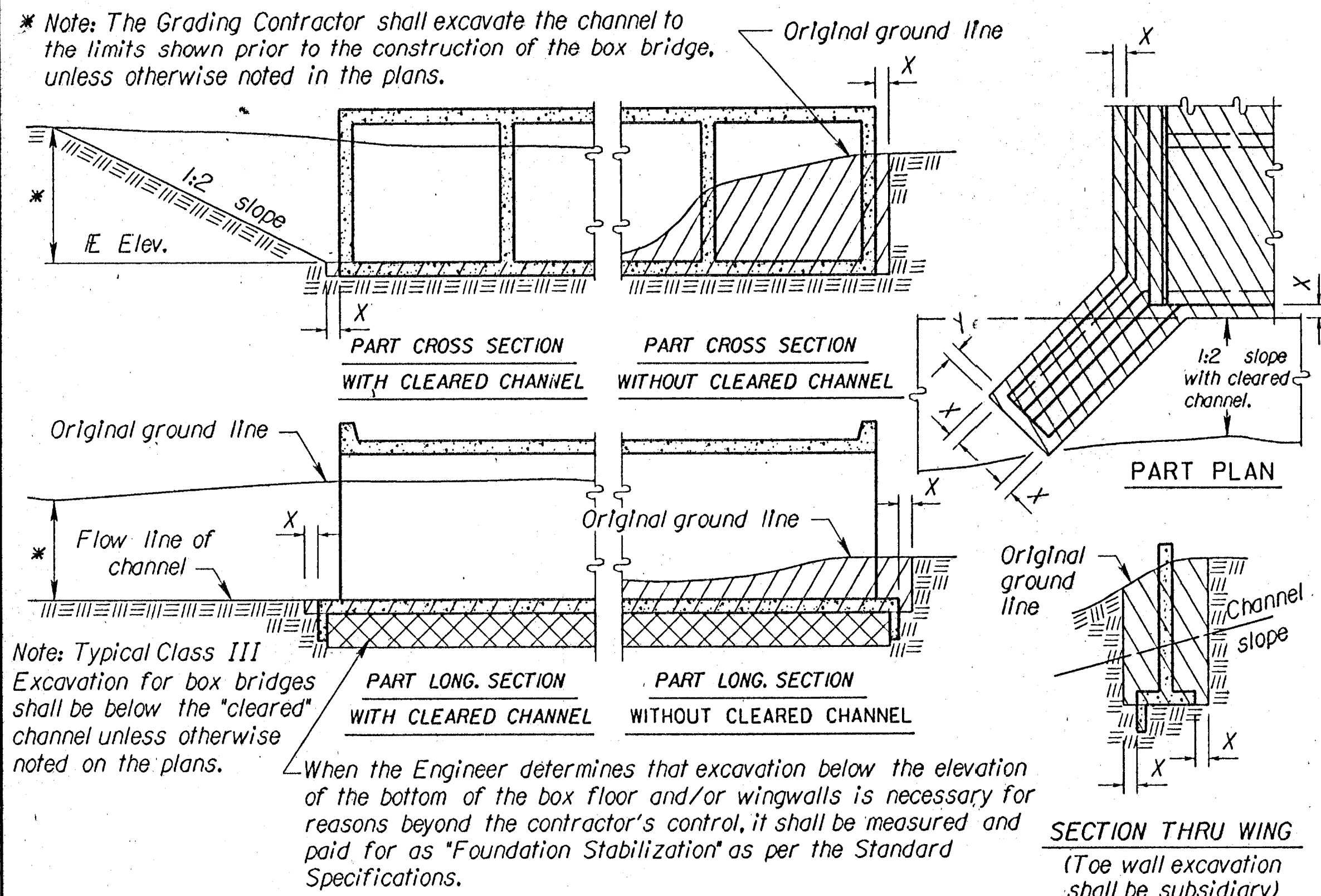


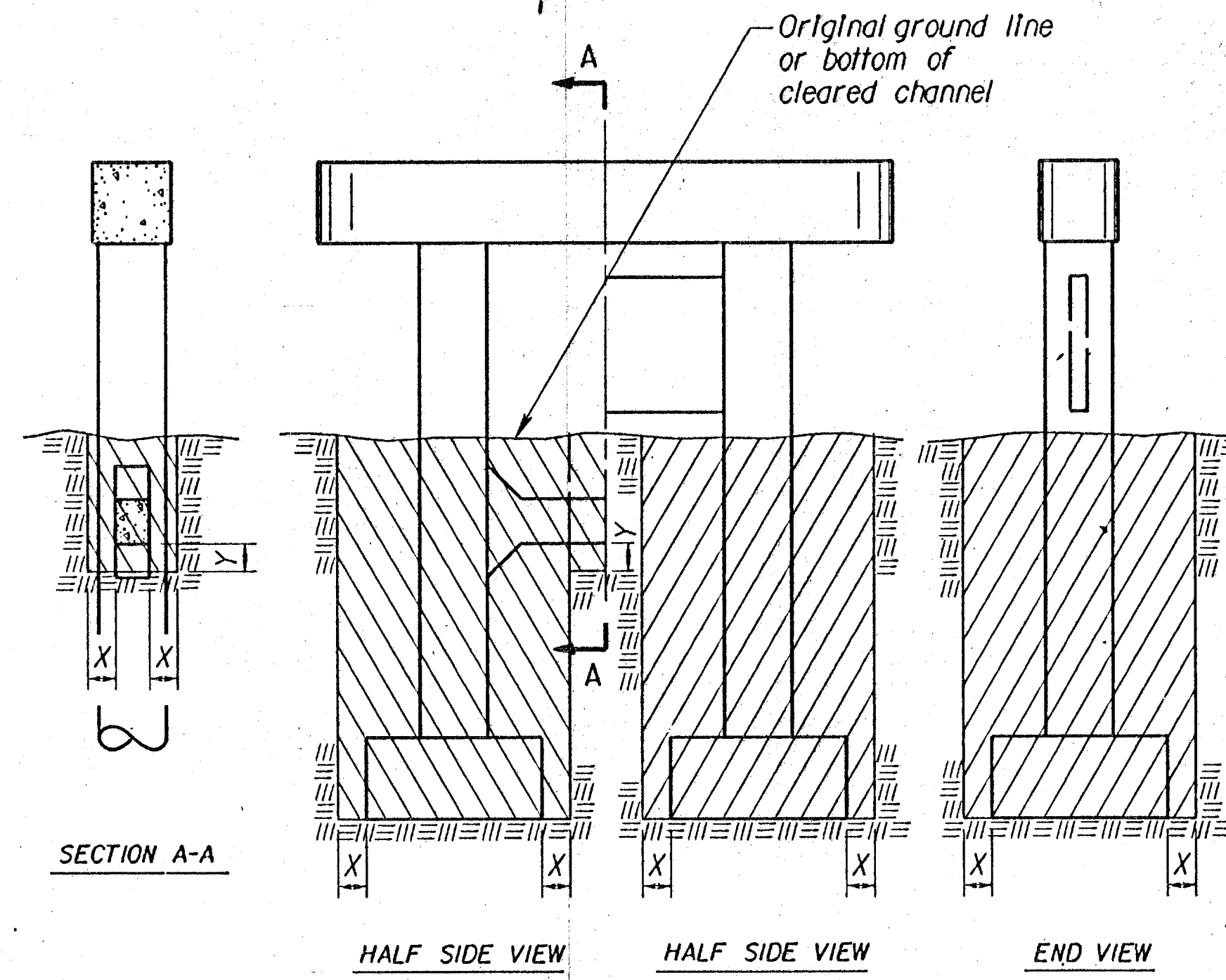
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 C-0230-01	2003	37	73

* Note: The Grading Contractor shall excavate the channel to the limits shown prior to the construction of the box bridge, unless otherwise noted in the plans.



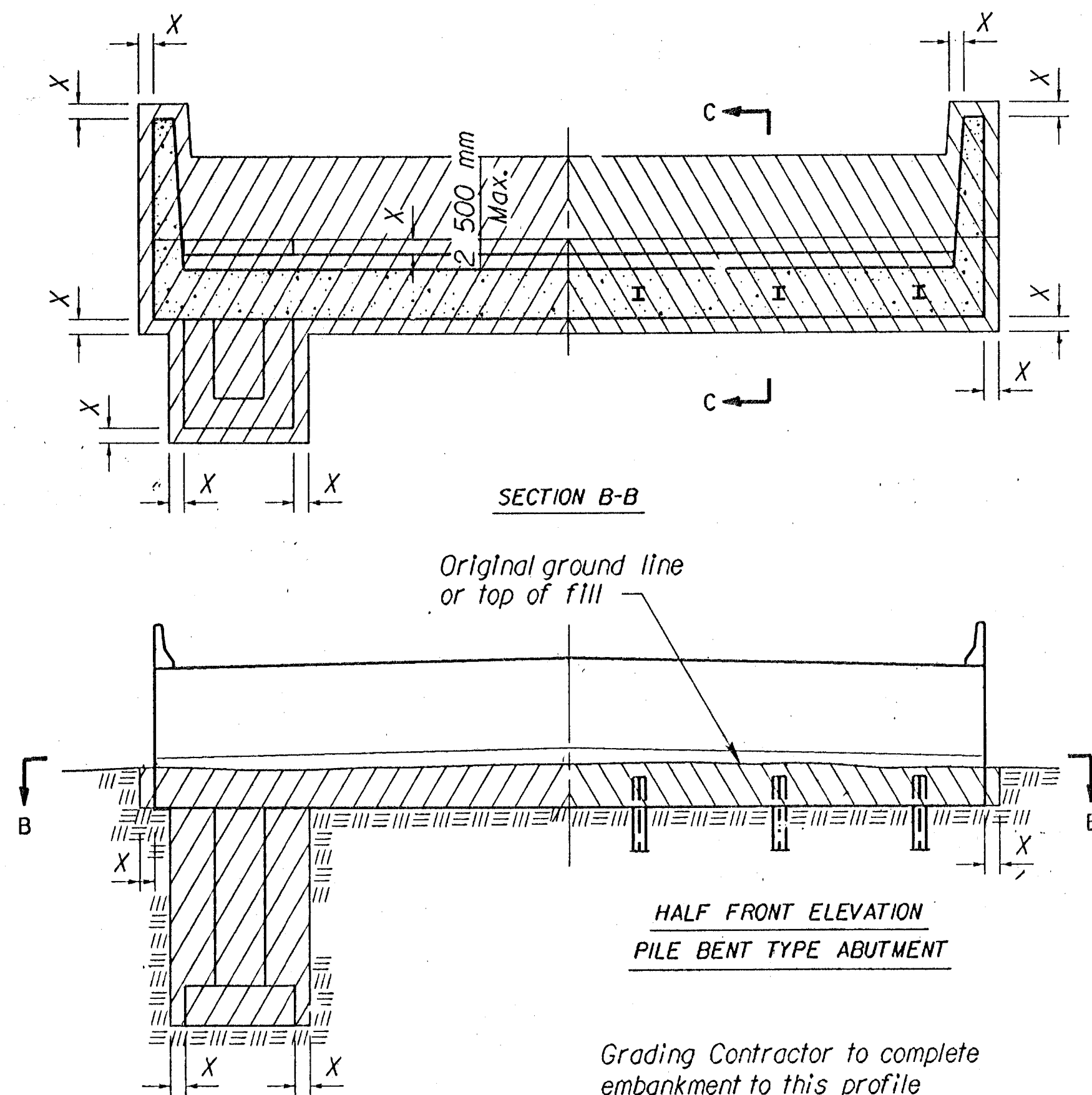
EXCAVATION DETAILS FOR REINFORCED CONCRETE BOX CULVERT

Note: Excavation for culverts less than bridge length shall not be paid for as Class III Excavation but shall be subsidiary to Grade 28 Concrete.



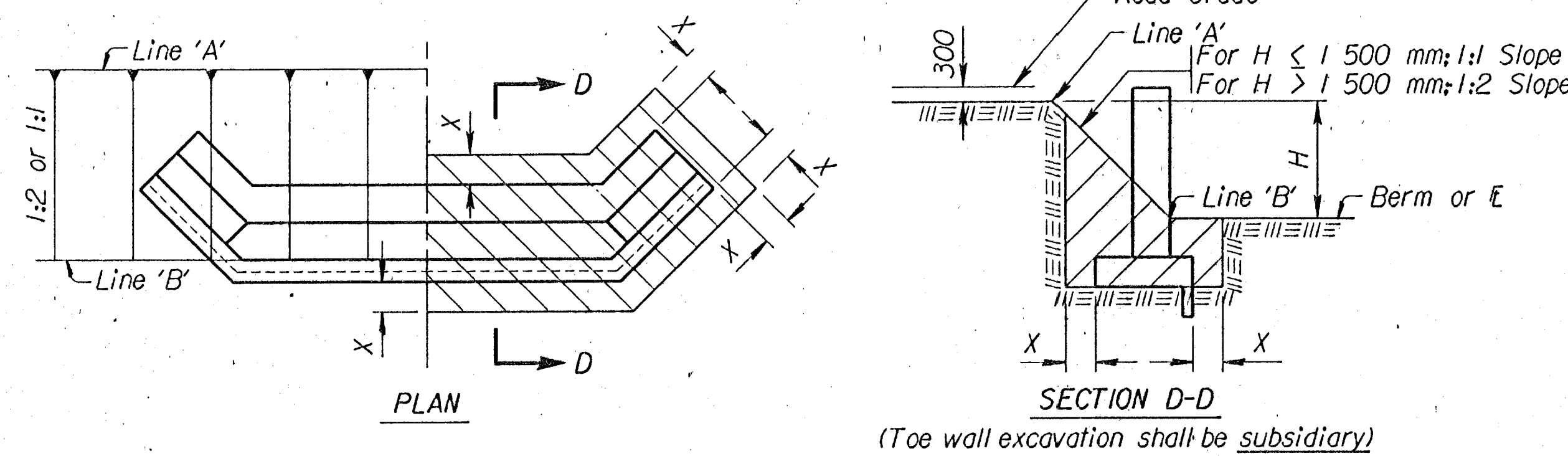
EXCAVATION DETAILS FOR TYPICAL PIERS

See detail when rock or shale (rock) is encountered.



EXCAVATION DETAILS FOR TYPICAL ABUTMENTS

See detail when rock or shale (rock) is encountered.

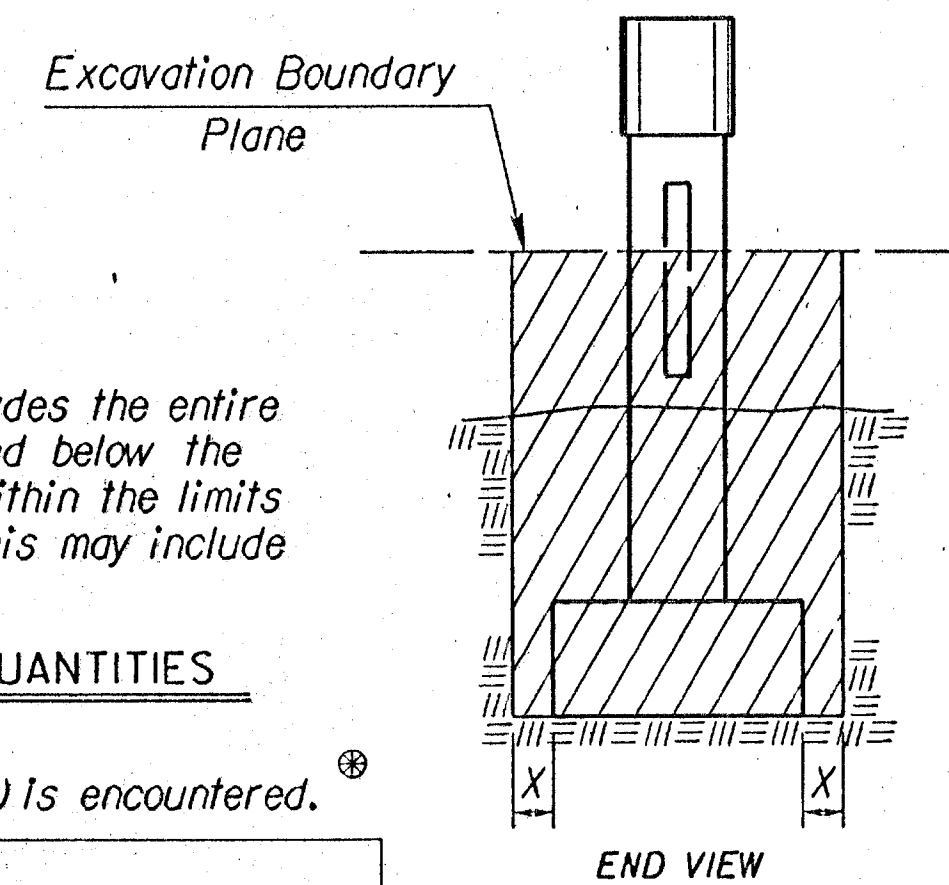


EXCAVATION DETAILS FOR ABUTMENTS WITH FLARED WINGWALLS

Note: Class II Excavation includes the entire volume of whatever nature found below the "Excavation Boundary Plane", within the limits specified for measurement. This may include water or air.

CLASS II EXCAVATION QUANTITIES

See detail when rock or shale (rock) is encountered.

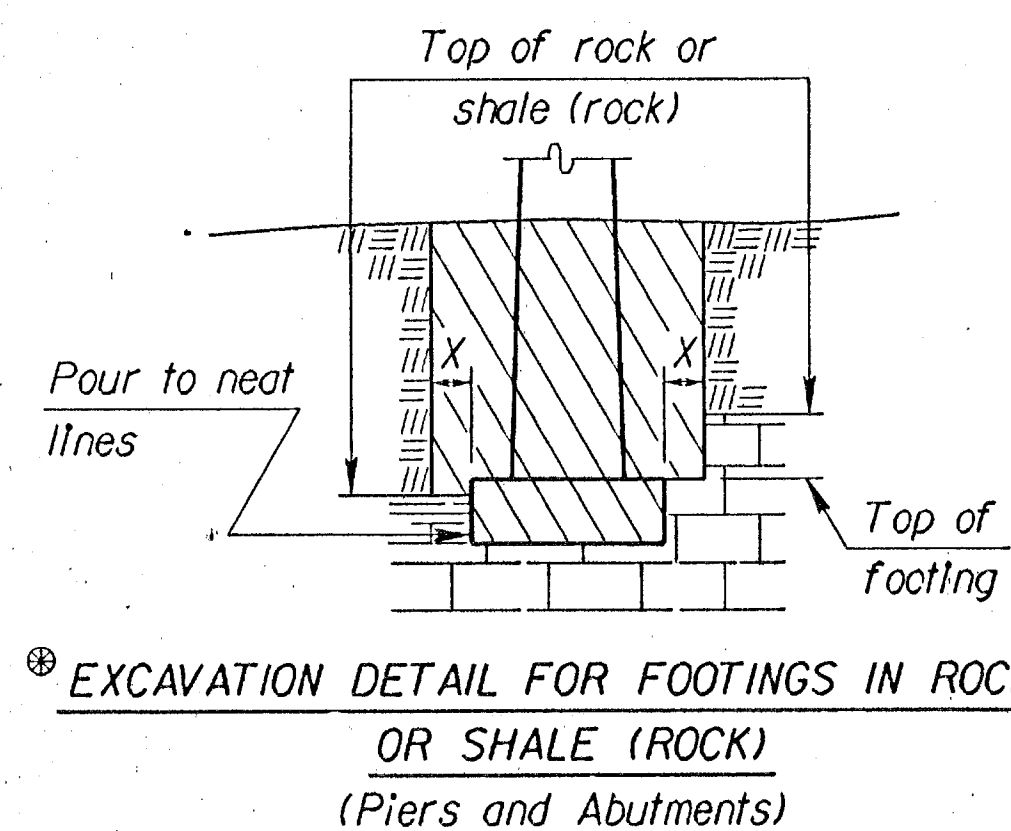


Note: Compute bridge excavation on the basis of the cross-hatch areas and boundary lines indicated on this sheet and the Excavation Boundary Plane on the Construction Layout.

When the trench is more than 1 500 mm in depth and 2 500 mm in length, shore, sheet, brace or otherwise support the sides of the trench in hard or compacted soil including embankments. In lieu of the shoring, the sides of the trench above the 1 500 mm level may be sloped to preclude collapse. The slope for average soils shall be 1:1. If the angle of repose of the soil is less, flatter slopes shall be required.

Dimension "X" shall be 600 mm unless indicated otherwise on the general plans.

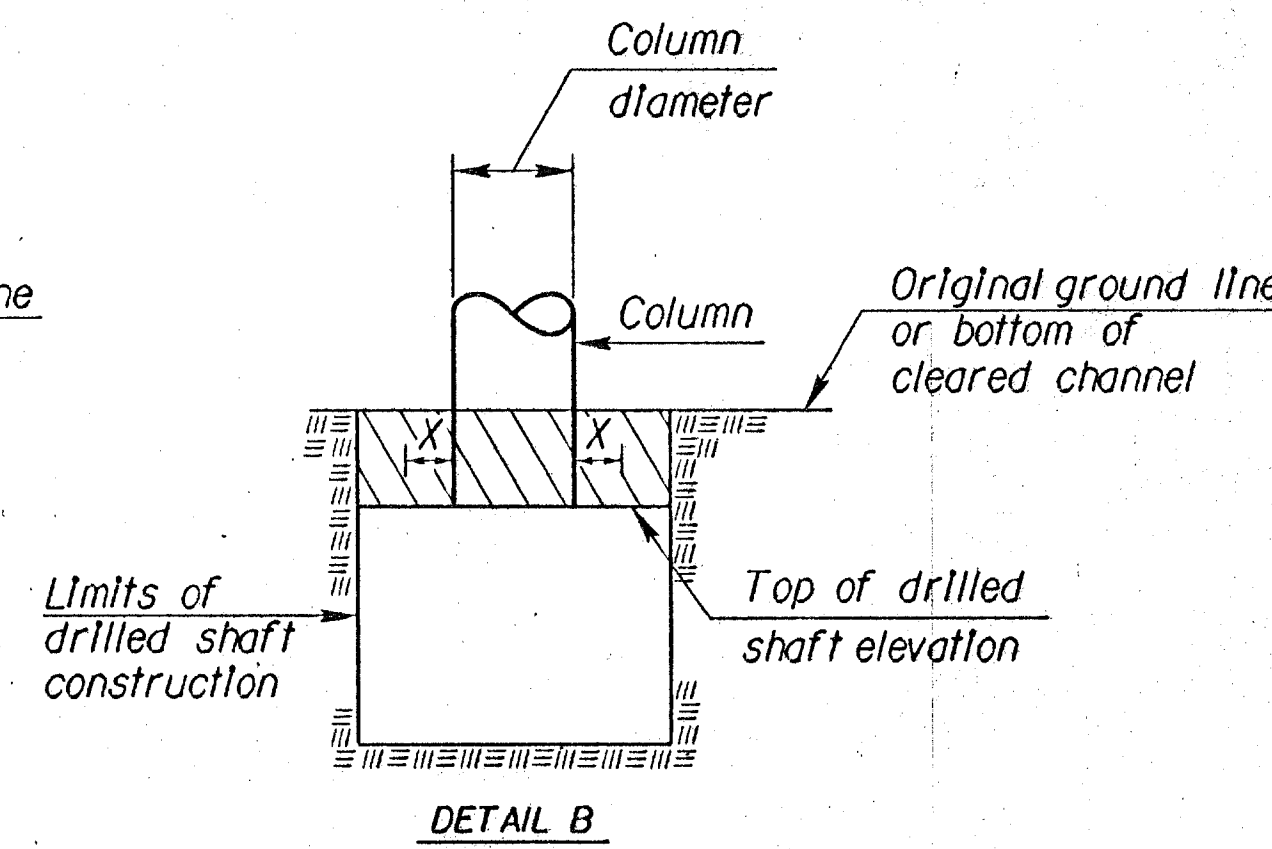
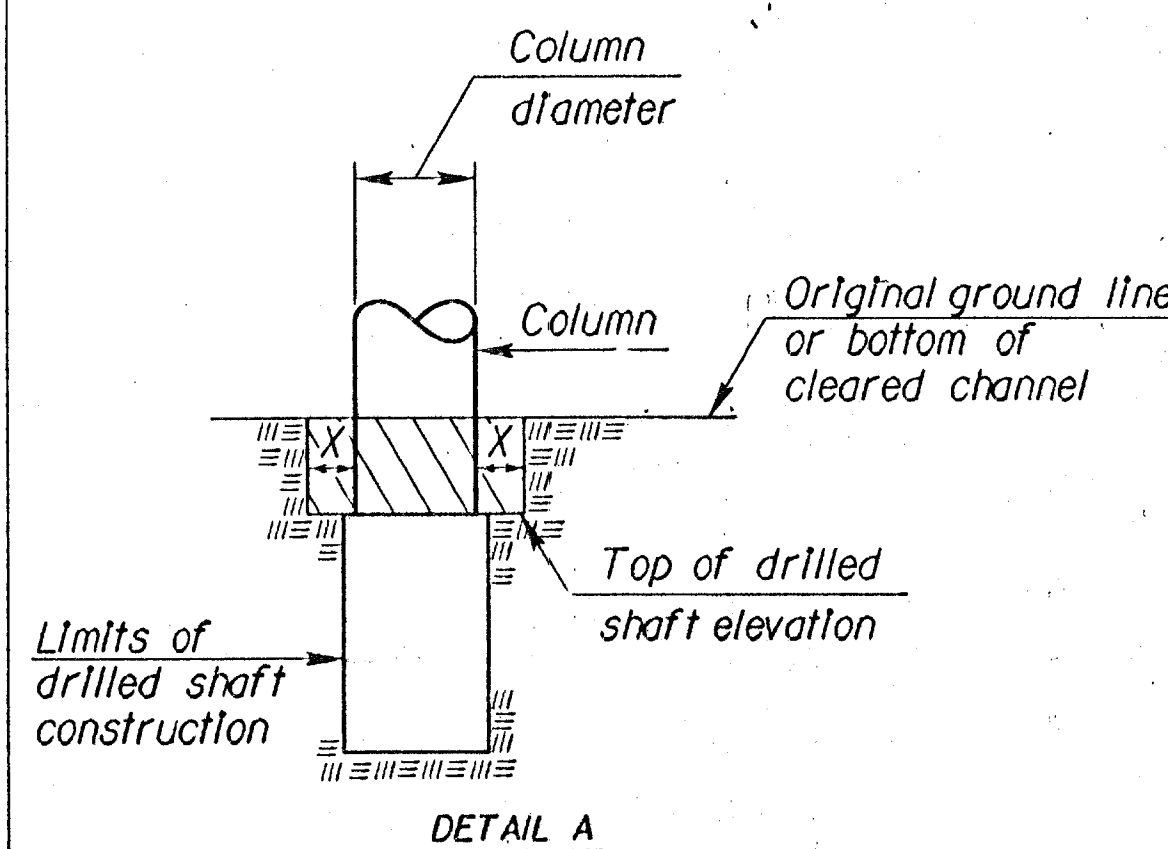
Dimension "Y" shall be 450 mm unless indicated otherwise on the general plans.



EXCAVATION DETAIL FOR FOOTINGS IN ROCK OR SHALE (ROCK)

(Piers and Abutments)

Note: Excavation below top of rock, hard shale or below top of footing, whichever is lower, shall be to neat lines of the concrete construction.



Note: Whenever the limits of the drilled shaft construction are greater than the Column Diameter + 2X, the limits of Class I, II, or III Excavation shall be the limits of the drilled shaft construction. (See Detail B)

DRILLED SHAFT DETAILS

NO.	DATE	REVISIONS	BY	APP'D
4	4-10-02	Added "Foundation Stab." Note	RAM	KFH
3	3-1-02	Concrete from Class to Grade	RAM	KFH
2	8-12-95	Correct Section BB at abutment	LRR	KFH
1	1-30-95	Drilled Shaft Excavation	LRR	KFH

KANSAS DEPARTMENT OF TRANSPORTATION

BRIDGE EXCAVATION

BRIOO SI	4-19-02	APP'D	KENNETH F. HURST
DESIGNED	DETAILED	QUANTITIES	CADD
DESIGN CK.	DETAIL CK.	LRR QUAN. CK.	CADD CK.