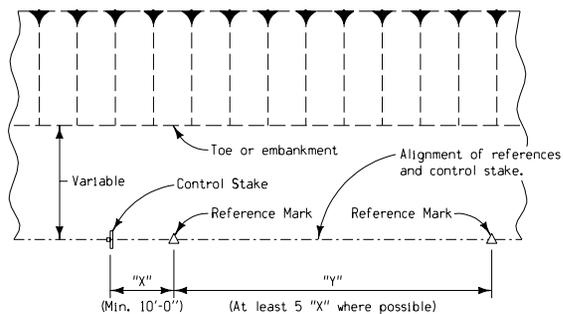
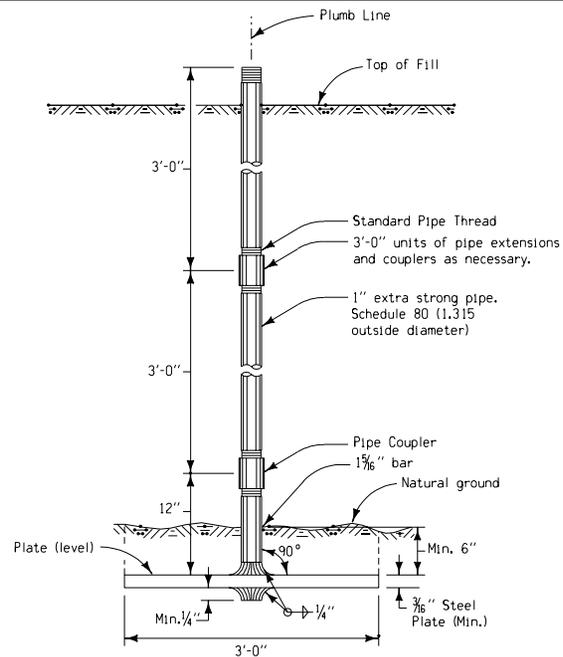


EMBANKMENT CONTROL STAKE



TYPICAL CONTROL STAKE INSTALLATION



SETTLEMENT PLATE

**SPECIAL NOTE:**  
Instructions to the Engineer for inspection of the specific settlement plates tabulated hereon.

As necessary, permanent bench marks shall be established in the adjacent area before settlement plates are installed. Elevation readings shall be recorded daily during normal construction and weekly during any delays and after the construction of the fill is complete. Readings shall be reported to the Soils Design Engineer in Ames weekly during construction and after completion of fill at such time interval as may be advised by the Soils Design Engineer.

The readings shall be reported in the following manner.

SETTLEMENT PLATE DATA:					
COUNTY _____			PROJECT NO. _____		
PLATE NO.	LOCATION STATION	SIDE	DATE	TOTAL FILL	TOTAL SETTLEMENT

**GENERAL NOTES:**

**CONTROL STAKES CONSTRUCTION NOTE:**  
All Embankment Control Stakes shall be furnished and installed by the Contractor. Control stake (including the graduated cross-piece) construction and installation shall be subject to the approval of the Engineer. Control Stakes shall be placed at the time and location directed by the Engineer. (See Estimate of Quantities and other soils information sheets). The cost of furnishing and installing necessary embankment control stakes will not be paid for directly but shall be considered incidental to and included with other work on the project.

**INSPECTION NOTE:**  
Control stakes shall be firmly embedded in natural ground outside the limit of the proposed fill and as indicated on the plan. Pavement bench marks and necessary alignment reference markers shall be established at the time the control stakes are placed. Elevation and alignment readings of the control stakes shall be recorded by the Resident Engineer and reported to the Soils Design Engineer in Ames at time intervals advised by the Soils Design Engineer.

**SETTLEMENT PLATES CONSTRUCTION NOTE:**  
All settlement plates and all necessary pipe extensions shall be furnished and installed by the Contractor. Plates and extensions shall be approved by the Engineer before construction is begun on the fill where individual settlement plates are to be located. Installation shall be made as indicated hereon or as directed by the Engineer. Settlement plates shall be placed at locations specified in the detail project plans (see Estimate of Quantities and other soils information sheets). The settlement plate shall be installed at least 6 inches below surface of natural ground firmly seated and level to ensure installation of the extensions in a plumb line. Necessary extensions shall be installed as construction of the fill progresses. The cost of furnishing and installing settlement plate with extensions will not be paid for directly but shall be considered to be incidental to and included with other work on the project.

**Iowa Department of Transportation**  
Project Development Division

**STANDARD ROAD PLAN** | **RL-6**

REVISION: Redrawn in CAD. | REVISION NO. 5

APPROVED BY: *James C. Christ* 05-24-99 | REVISION DATE 09-21-99

DESIGN METHODS ENGINEER

SOILS MEASUREMENT AND RECORDING DEVICES