

ITEM 203.1401 17 - THERMISTOR

DESCRIPTION

This work consists of furnishing and installing thermistors and appurtenances at the locations and elevations in accordance with the contract documents and as directed by the Engineer.

MATERIALS

- A. Thermistor - Furnish, factory assembled, a thermistor point and a cable suitable for direct burial.
Operating Range: -10° to +80°C or better
Accuracy: 0.5°C or better
- B. Appurtenances - Furnish a nominal 4 x 4 wood post conforming to the requirements contained in §710-13 to support a terminal box. Furnish one post at each station specified in the contract documents. The State will furnish and install terminal boxes on posts.
- C. Concrete Sand - Furnish concrete sand conforming to the requirements contained in §703-07 to backfill thermistor and cable trenches.

APPROVED VENDORS:

Geokon 48 Spencer Street Lebanon, NH 03766 (603) 448-1562	Slope Indicator 12123 Harbour Reach Drive Mukilteo, WA 98275 (425) 493-6200	Roctest, Inc. P.O. Box 310 Charlotte, VT 05445 (802) 425-2510	Geonor, USA P.O. Box 903 Milford, PA 18337 (570) 296-4884
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CONSTRUCTION DETAILS

The installation of all thermistors shall be inspected by a representative of the Geotechnical Engineering Bureau.

INSTALLATION PROCEDURE (See Figure 1)

- A. Excavate a 100 mm minimum deep trench from the thermistor location to the side of the embankment.
- B. Excavate a 300 mm minimum deep trench from the side of the embankment to the terminal box location.
- C. Place the thermistor inside the trench.
- D. Run the thermistor cable along the bottom of the trench to the terminal box location.
- E. Allow at least two (2) meters of cable at the terminal box for proper connection to the monitoring equipment.
- F. Backfill the trench with concrete sand or excavated embankment material and hand tamp.
- G. Embed the wood post at the toe of the embankment.
- H. Embed the wood post at least one (1) meter into the ground.

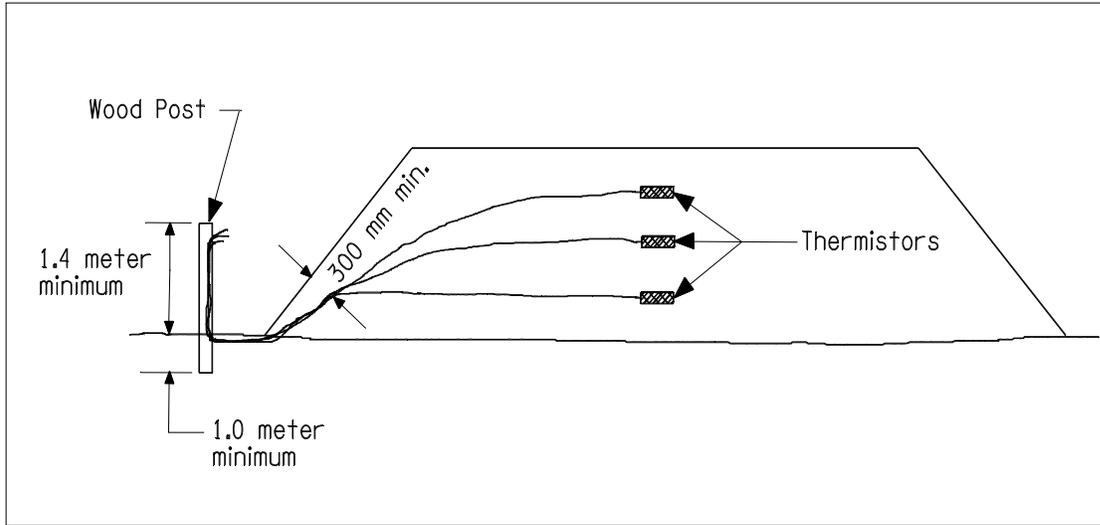


Figure 1

METHOD OF MEASUREMENT

The quantity to be paid is the number of thermistors satisfactorily installed in accordance with the contract documents and as directed by the Engineer.

BASIS OF PAYMENT

Include in the unit price bid the cost of furnishing all labor and materials necessary to satisfactorily install the thermistor and appurtenances. The Contractor will receive full payment after the thermistors have been tested and approved by the State. At the end of the contract the thermistors and appurtenances become property of the State.

No separate payment will be made for the cost of excavation and backfill of the trench to install the thermistor cable. The cost of the work will be included in the price bid for this item.