

DAKSHIN HARYANA BIJLI VITRAN NIGAM

Instruction No.5 /2011/P&D

From

The Chief Engineer/P&D,
DHBVN, Hisar.

To

All Superintending Engineers/ Op./Construction/M&P,
Under DHBVN.

Memo No.: Ch- *4144/DD-169/Val-II* Dated: *22.3.11*

Subject: Guidelines for laying of under ground cables in outdoor trenches.

The following guidelines have been formulated for laying of under ground cables in outdoor trenches.

1. The design of cable trench shall be as per drawing no. CE/P&D- 15 (Copy attached).
2. The slab, over the trenches, has been designed for 200 lbs/sq. ft load. For load more than 200 lbs/sq. ft, the slab shall be redesigned on the basis of actual load.
3. Wherever the trench passes under the road, suitable size of culvert shall be provided.
4. Plastering is to be done inside and outside the trenches.
5. A slope of 1 in 700 may be provided in all sections of trench unless otherwise specified.
6. 12mm thick expansion joint should be provided after every 10m interval and at end.
7. After erection of all the cable racks (angle) and steel members be painted with black anti-corrosive paint.
8. 'E' type trench is meant for service road and 'F' type trench for main road.
9. Suitable drainage arrangement of trench shall be made. The rain water collected in the trenches shall be disposed of as per site feasibility.
10. The sign board, duly painted, displaying "danger 11 kV Cable inside trench shall be provided by concrete grouting at suitable locations.
11. In case the depth of trench is more than as specified in the drawing due to slope, the trench shall be suitably designed to take load of earth fill out

side the trench. The trench shall also be redesigned for any specific loads outside the trench.

12. The lifting hooks shall be provided on every alternate slab.
13. **Selection of route:-** While selecting the route the following guideline may be kept in view:-
 - (a) The route should be away from parallel running gas, water pipes & telephone/telecommunication cables as far as possible.
 - (b) The route should be selected in such a manner that involves minimum obstacles such as road crossing, railway crossing etc.
 - (c) If possible the cable should be laid along the footpath rather than the carriage way.
 - (d) The cable route should not involve sharp bends.

The ISS 1255-1983 and the Nigam's drawing no: CE/ P&D-15 shall also to be consulted viz-a-viz the above guidelines.

Note: - Necessary consent shall be obtained from the concerned authorities while laying U/G cable across railway, roads and water-pipe lines.

The above instruction supersedes the earlier Instruction No 19/2008/P&D.

The above guidelines shall be noted from all concerned for meticulous compliance.

DA/As above.



**Chief Engineer/P&D,
DHBVN, Hisar.**

1. Sr.P.S. to Managing Director, DHBVN, Hisar for the kind information of the M.D.
2. Sr.P.S. to the Director(OP)/Projects, DHBVN, Hisar for the kind information of the Directors.
3. All Chief Engineers in DHBVN.
4. CGM/Finance/Accounts/Audit,DHBVN,Hisar.
5. GM/IT,DHBVN,Hisar for putting the same on the Nigam's website.
6. All GM in DHBVN except GM/OP/Const./M&P.
7. All XEN/Works and Op under DHBVN.
8. Chief Communication Officer,DHBVN,Hisar.
9. Xen/Monitoring, DHBVN, Hisar .