

LAYING OF PIPELINE:

The laying of pipeline should be done according to the following stages

1. Detailed map preparation.
2. Centre line marking.
3. Unloading.
4. Storing.
5. Cutting.
6. Trenches.
7. Laying
8. Back filling and tamping

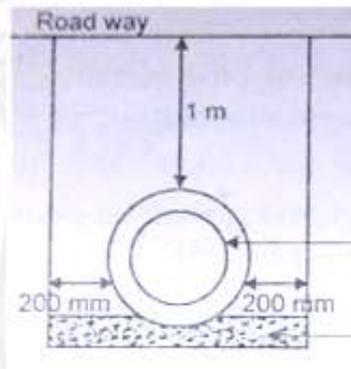
1. Detailed map preparation.
 - Map showing all roads, cable lines, lanes etc., is prepared.
 - Pipe line with size and length is marked.
 - The position of existing pipe lines, curb lines, sewer lines will also be marked
2. Centre line marking.
 - Transformation from map to site.
 - Stakes driven at 30m interval on straight line .
 - stakes will be 7-15m on curves.
3. Unloading.
 - Up to 60kg – 2persons .
 - Above 60 kg – wagon/truck by holding it in rope and slides over planks set not steeper than 45°.
 - One pipe at a time.
 - It may use carriers or be dragged or rolled along hard surfaces
4. Storing.
 - To avoid damage.
 - It should be stored horizontally .
 - It should be stored in layer

5. Cutting.

- Mark with a chalk at the point o cut.
- Cut with carpenter's saw or hack saw .
- It must be a proper uniform cut.

6. Trenches.

- Mark with a chalk at the point o cut.
- Cut with carpenter's saw or hack saw .
- It must be a proper uniform cut.
- It may be done either hand or machine.



- It must be done with required gradient and depth.
- When it is under a road way minimum cover of 1m is recommended.
- Width at the base not less than 200mm on both side of the pipe.
- Width may extend for joints .

7. LAYING

- Pipes shall be lowered into the trenches by means of suitable pulley blocks , shear legs, chains, ropes .
- in no case the pipe shall be rolled and

8. Dropped into the trench.

- Spigot of one pipe is carefully centred into the socket of other pipe.
- In some clay soil (black cotton soil) envelope of 10 cm minimum tamped sand shall be made around the pipe line.

9. Back filling and tamping

- Back filling must be done carefully to avoid damages in pipe form falling of boulders, lifting of pipes from sudden floods.
- Soil under and around the pipe line is tamped to give continuous supports to the pipe.
- It may be done by tamping rod or water consolidation.
- The initial backfill done for 10 cm thick.

TESTING OF PIPE:

Step 1: From section to section. One section at a time.

Step 2: Downstream valve is closed, upstream valve is opened to fill the water. Air valves must be properly operated during filling.

Step 3: Both the sluice gates are closed.

Step 4: Pressure gauge is fitted along the length of the pipes at holes which is left for this purpose.

Step 5: Section is connected to the delivery side of the pump through a small By- pass valve to develop pressure in the section.

Step 6: By-pass valve is closed.

Step 7: It kept under pressure for 24 hours and inspected for possible defects ,leakages and joints.

Step 8: Pipe line is disinfected . Add chlorine 50mg/l for 12 hours and the pipe is emptied and flushed with treated water.