

CENTRAL DESIGNS ORGANISATION, NASHIK.

POWER HOUSE CIRCLE	Document No.: PR / L.I / 01	Page No: 2/8
Cross Ref.: ISO-9001-2000.	Issue/Rev. No. 1/0	Date: 01-04-2004

Process : STAGE WISE RISING MAIN AND PUMPING CAPACITY DETAILS

- v) Average ground level @ the location of various stages
- vi) Length of Rising Main for each stage
- vii) Type of Rising Main i.e. over ground or under ground

1.0 MATERIAL SPECIFICATION :

Not Required.

1.00 DESIGN APPROACH :

i) The material to be used for Rising Main shall be finalised in consultation with field authorities. [As per present practice M.S. Rising Main is being proposed for all Lift Irrigation Scheme.]

ii) Permissible velocities in Rising Main shall be considered conforming to table No. 6.4 P.No. 114 of Water Supply manual. { Edition May-1999 }. (For M.S. Rising Main permissible maximum & minimum velocities shall be 2.10 m/sec & 1.00 m/sec respectively)

iii) Static head for pumps shall be worked out as difference between pump operating level & delivery level in delivery chamber. Static head for Rising Main shall be calculated as difference between delivery point level in delivery chamber and pump delivery pipe level in pump house. The POL { Pump Operating Level } shall be calculated as under.

a) For source from tank/reservoir

$POL = M.D.D.L + (2/3)^{rd} \text{ of } \{ F.R.L - M.D.D.L \}$

b) For source from river or stream; POL shall be considered as MDDL or as intimated by field officers

c) For source for canal; P.O.L = C.B.L + 2/3<sup>rd</sup> F.S.D. of canal or as intimated by field officers.

iv) 1 mm towards corrosion allowance shall be added in the thickness computed for positive & negative pressures for M.S. Rising Main.

Prepared by:-  <i>[Signature]</i> Executive Engineer Designs Division (PH-4) C.D.O. Nashik-4	Approved by:-  <i>[Signature]</i> Superintending Engineer, Power House Circle, C.D.O. Nashik-4	Issued by:-  <i>[Signature]</i> Management Representative C.D.O. Nashik-4
---	---	---

MASTER COPY