



Initial Environmental Examination

June 2022

India : Madhya Pradesh Urban Services Improvement Project - Additional Financing

Package : Sewerage Improvement in Dhamnood Town (MPUSIP- 2I)
Part 4 of 4 : Appendix 17 continued

Prepared by Urban Development and Environment Department, Bhopal (Madhya Pradesh) for the Asian Development Bank.

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Asian Development Bank

GUIDELINES FOR PLANTING TREES AT WTP, OHT, GSR, CWR, STP, MPS, IPS AND ALONG ROAD RIGHT-OF-WAY WITHIN PROPOSED WATER SUPPLY & SEWERAGE PROJECTS UNDER MPUSIP

- There should be 2.5 m spacing between two trees when planting. Trees can be planted about 2.0 m apart, depending on site space and plan
- Planting trees all around the WTP, OHT/GSR/CWR and specially all around the STP, IPS and MPS sites with a combination of tall and densely growing trees in multi rows and landscaping as per the land availability to control odour and noise.
- Plantation should have a minimum of 3 rows where possible, with height hierarchy, to withstand strong winds and barrier against noise, odour and suspended particulate matters at STP, IPS and MPS sites. Typical examples of tree plantation in multiple rows as shown in figure 4 to figure 6. These patterns should be followed in sewerage project sites (i.e. STP, IPS, MPS etc.).

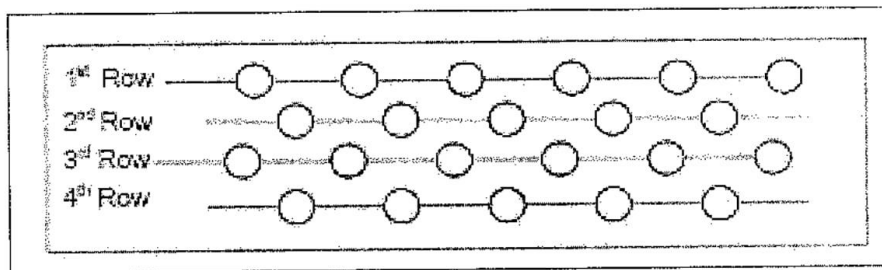


Figure 4: Staggered Alignment of the Pits in Plain Area

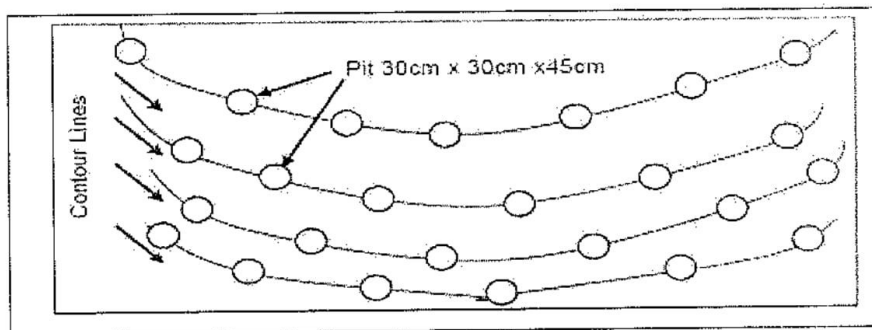


Figure 5: Alignment of the Pits in Hilly Area

GUIDELINES FOR PLANTING TREES AT WTP, OHT, GSR, CWR, STP, MPS, IPS AND ALONG ROAD RIGHT-OF-WAY WITHIN PROPOSED WATER SUPPLY & SEWERAGE PROJECTS UNDER MPUSIP

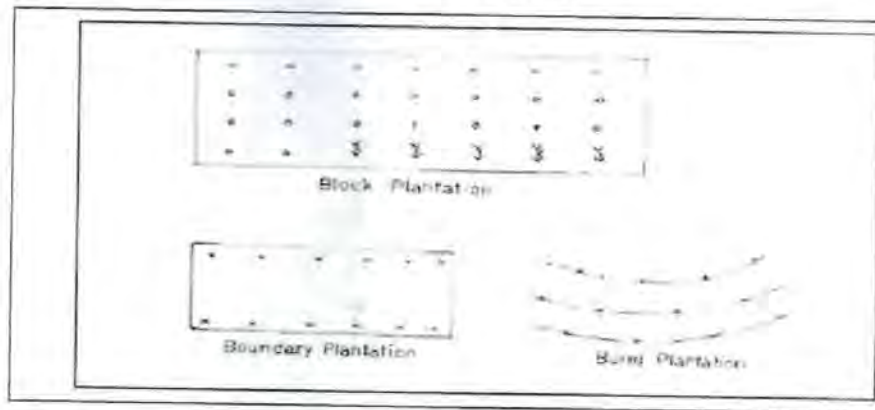


Figure 6: Geometry of Plantation

IMPORTANT POINTS TO BE FOLLOWED DURING SUBMISSION OF LANDSCAPING PLAN:

- In view of solar panel to be provided within the premises, the tree plantation should be planned accordingly to avoid shadow of trees on the solar panel.
- Planting trees all around the WTP /STP with a combination of tall and densely growing trees in multi rows and landscaping as per the land availability.
- Wherever land is available along outside boundary including drain bank, plantation with suitable trees should be done.
- Planting trees in a circle, we should create flower beds in available spaces, around a tree, or in a space between walkways.
- Planting trees along service road/ approach road.
- Planting trees in parking area should include evergreen type tree with spreading canopy and compact leaves to create a natural shed.
- Planting trees in space earmarked for future augmentation work.
- While selecting types of plants keep in mind environmental condition of the area.
- Normally for WTP & STP space for 15 year is left. Hence, no plantation should be in this space; only grass, small bushes & small flower trees may be proposed in the space.

MPUDC- Ankur Plantation Drive																								
Sl. No.	Name of PUI	Name of Project	Name of L&B	Name of the Contractor	WTP/STP				IPSI/MPS				OHTI/GLSR				Others			Total		Updated By		
					Plan Submission Date	Plan Approval Date	Approved no. of plants	No. of saplings planted	Plan Submission Date	Plan Approval Date	Approved no. of plants	No. of saplings planted	Plan Submission Date	Plan Approval Date	Approved no. of plants	No. of saplings planted	Plan Submission Date	Plan Approval Date	Approved no. of plants	No. of saplings planted	Approved	Planted	Name	Date
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	Shoel	ADB	Karveer	M/s. Swan Watertech Pvt. Ltd.																				
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Note: Please updated the plantation progress daily in the prescribed format (only mention no/s (numeric) in the column no. 8, 9, 12, 13, 16, 17, 20, 21, 22, 23) and submit to the office on daily basis.
 Col. no. 03- Name of the project ADB/ WB/ VNI/ KIWI Mini Smart City

WTP/ STP- Water Treatment Plant/ Sewage Treatment Plant site
 IPS/ MPS- Intermediate Pumping Station/ Main Pumping Station site
 OHTI/ GLSR- Over Head tanks/ Ground Level Service Reservoir
 Other means areas of the project territory except WTP/STP/IPS/MPS/OHTI/GLSR designated site
 Updation responsibility is of Project Manager- PIUs