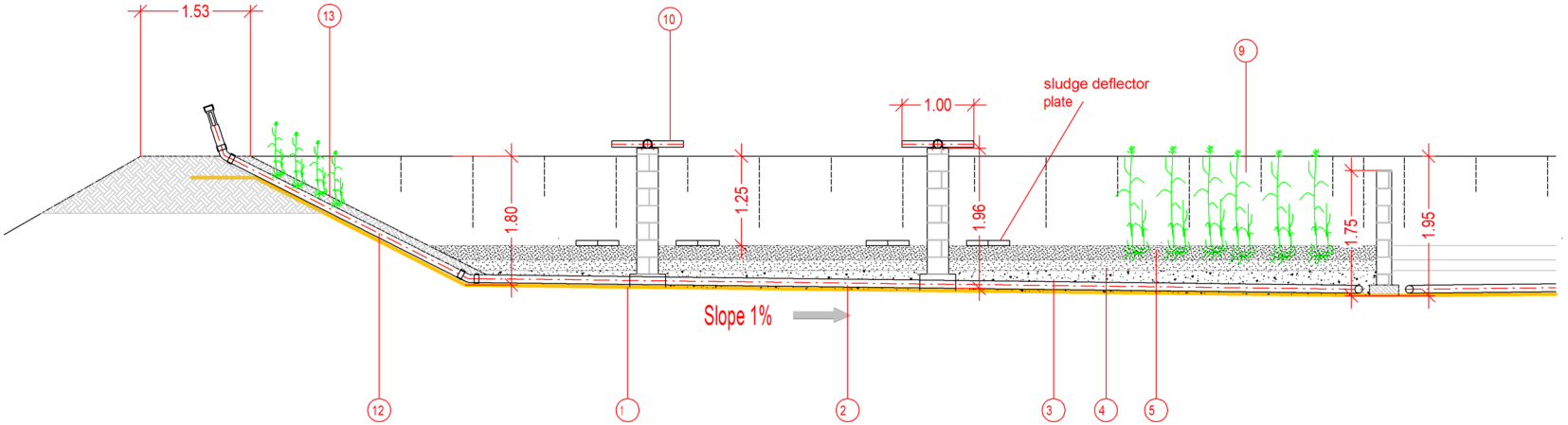
1. Dam line sandwich system consist of first layer Geotextile 300 g/m², second layer 1,5 mm PE-membrane wastewater resistant with pipe connection for D 110, third layer Geotextile 300 g/m²
2. Drainage pipe HDPE D 110 mm opening 1,2 mm, area for water to entre > 50 cm² per m, product type DRAINEX or equal with conncetor fit to drainage pipe; 426 m; T-junction fit to pipe 21 itmes
3. Drainage layer type 1: 8.0 - 12.0 mm washed, < 1% smaller 0,06 mm (silt lay), height 200 - 350 mm
4. Filter gravel type 2: 2.0 - 8.0, < 1% smaller 0.06 mm (silt lay), height 150 mm
5. Filter sand type 2: 0.06 - 4,0 mm (60-80%) washed with d10 =0.25 to 0.4 mm, < 1% smaller 0.06 mm (silt lay), organic content < 1%, uniformity U = d60 / d10 = 3 to 5; carbonate perferable 20%; height 200 mm
6. Connection from perforrated drainage pipe D 110 mm to sewer pipe D 110 mm UPVC (plug-in soket)
7. Water level control, operational used mainly during startup phase, UPVC pipe D 110 mm PN 10 Mpa, 1x elbow 90° to pipe, DON´T GLUE joints
8. Prefabricated composite manhole lid with frame, class medium duty (MD), or equal
9. Living local reed plants shots or one year old plants; 5 items per m² (FOLLOW STARTUP PROCEEDURE)
10. Distribution pipe, D 90 mm galvanized steel pipe metric thread soket; 1x galvanized steel lfange soket welded on one side, 1x T-junction; pipe mounted onto the wall and columns
11. Butterfly valve D 90 mm with steanless steel blade and flange connection to UPVC pipe PN 10 - 12 MPa D 90 mm
12. Ventilation pipe consisting of PVCU pipe D 110 mm, 2x 45° elbow fitting, perforrated end cap, connector, fit to D 110 mm drainage pipe;
13. Soil cover, 300 mm top soil to cover dame liner against UV exposure, planted with Vetiver gras to prevent errosion



Notice:

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2. All dimensions are in [m] unless mentioned otherwise
3. Dimensions related with the structural design are not given in this layout drawings
4. All dimensions have to be checked and co-related with the structural design and any discrepancy or omission shall be brought to the notice
5. According to the DEWATS quality management all indicated tolerances have to be kept and will be checked on site

Legend:

WL - Water level GL - Ground level
BL - Bottom level BR - Baffled Reactor
PGF- Planted gravel filter
ABR- Anerobic baffled reactor
PBL- Pipe inner bottom level

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Work out:	06/09/2019	
Proved:	.	.

Scale:

File: OXFAM_CxB_Phase 2

Document: DR 5.4

Project phase: Detail Engineering

Client: Oxfam Bangladesh

Title:

Planted drying bed - plan view
Distribution level

Project:

OXFAM-CxB FSPT Phase II