FILL CHART CONSTRUCTION EQUIPMENT CHART Material Location Material Classification Equipment Make (NOTE 1) Maximum Gross Vehicle Weight (lbs) Description Compaction/Density Requirement (NOTE 3) 1 500 Plate Compact or Static Roll up to 8-inch loose lifts to densify Plate Compactor Roller - Static Mode 12,000 fill. Use at least two full passes of the equipment to level the Low Ground Pressure Tracked Vehicles (NOTE 2) 20.000 layer. Continue until 24 inches of total fill thickness has been Roller - Vibratory Mode 12.000 placed above the tank. For AASHTO M145 soils, a minimum **FINAL FILL** Suitable Fill Materials as noted in the of 95% of the Standard Proctor Maximum Dry Density is Dump Trucks and Pans NOTE 3 See Project Geotechnical Report and Site Fill starting from the top of the Project Geotechnical Report and noted on recommended. NOTE 1: Vehicles shall make straight runs only across tank footprint Design Engineer's Plans NOTE 2: Maximum track pressure 7 psi for tracked vehicles. embedment fill layer. (NOTE 1 and 2) the Site Design Engineer's Plans NOTE 3: Dump trucks and pans shall not traverse or park over the system during construction. Backfill material may be temporarily After 24 inches of fill is placed, place fill in accordance with unloaded near the excavation. Material shall not be stockpiled near the excavation for longer than 24 hours. the engineer of record's relative compaction requirement or to 95% of the Standard Proctor Maximum Dry Density --Cut Geotextile/ Geomembrane whichever is greater. and wrap around inlet/outlet pipe EMBEDMENT FILL -6 oz Non-Woven Geotextile Plate Compact or Static Roll up to 8-inch loose lifts to densify Fill Immediately Surrounding the sides and (outer) around entire tank Sand-Gravel Mixtures or Open-Graded AASHTO M145 AASHTO M43 fill. Use at least two full passes of the equipment to level the by Others top of tank (NOTE 4) or A-1, A-2-4, A-3 3, 357, 4, 467, 5, 56, 57 | layer. For AASHTO M145 soils, a minimum of 95% of the BEDDING FILL Crushed Aggregate Blends Steel Band by Others Fill Immediately below the tank Standard Proctor Maximum Dry Density is recommended. -30 mil Impermeable Geomembrane **DETAIL A** (inner) around entire tank by Others (NOTE 4) PIPE WRAP NOTE 1: This layer can include pavement subbase NOTE 2: If open-graded aggregates are used for embedment fill, fines migration from the final to embedment fill layer may be reduced by installing a layer of 6 oz non-woven geotextile fabric at the final and embedment fill interface. NTS NOTE 3: See Construction Equipment Table for more information for construction equipment limitations. NOTE 4: Import or native soils may be used if the soils meet the material classification listed. Fill material should be selected based on classification, groundwater conditions, and tank invert elevation -Remote Access Cover Vented (Part #314133) -Surface Material (Pavement Section or Solid (Part #314132) - See NOTE 1 -Half-Laver Top Plate Cover or Topsoil) as Specified by Site (Part # 314094) TYP Extension Shaft (Part #314038) Design Engineer -600HD Half-Layer Side Panel (Part # 314095) Concrete Load Distribution Plate -6 oz Non-Woven TYP. for all exterior sides by Others - See NOTE 2 Geotextile (outer) around entire tank by Others -FINAL FILL (See Fill Chart) Remote Access Plate (Parl #314075) - See NOTE 3 -EMBEDMENT FILL (See Fill Chart) Cover Depth as Half-Layer Top Plate Cover Specified By Site Design Engineer (Part # 314094) TYP. (See Cover Chart) 6" Minimum -600HD Half-Laver Side Panel (Part # 314095) TYP. for all exterior sides -600HD Half-Module (Part #314061) TYP -600HD Side Panel (Part # 314062) TYP. for all exterior sides BEDDING FILL (See Fill Chart) Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and 6" Minimum construction -600HD Side Panel (Part # 314062) NOTE -600HD Half-Module (Part #314061) TYP. for all exterior sides TYP, under access point -30 mil Impermeable Geomembrane (inner) around entire tank by Others 3.5 LAYER 600HD 3.5 LAYER 600HD **DETENTION CROSS SECTION** ACCESS POINT CROSS SECTION SIDE VIEW NTS NOTE 1: The minimum width of sidewall backfill is 12" or large enough to accommodate NOTE 1: Ventilation may be crucial to reducing the pressure build up within the system. If solid access covers are NTS selected compaction equipment, whichever is greater used, alternative methods of ventilation are recommended. NOTE 2: Concrete Load Plate not required for unpaved applications. Consult Engineer of Record for requirements NOTE 3: The Remote Access Plate is approximately the size of half of a half-module. The half-module at the top

CHECKED BY DRAWN BY J Jonke A Frye DATE REV. 0 10/01/2024

STORMBRIXX STANDARD DETAILS 600HD SYSTEM - 3.5 LAYER - DETENTION

of the tank must be cut in half to accommodate the Remote Access Plate

Fill Depth over Tank (in)
6
18
14
24

COVER	CHART
	•••••

Live Leeding Condition	Cover Thick	ness (inches)
Live Loading Condition	Minimum Maximum	
Non-Trafficked Areas (i.e.	12	94
Landscaping)	12	94
Passenger Vehicles Parking Lot		
(i.e. Gross Vehicle Weight	18	94
<10,000 lbs)		
Passenger Vehicle Parking Lot		
with one weekly AASHTO HS-20	20	94
vehicle		
Frequent AASHTO HS-20 Traffic	22	94
Passenger Vehicle Parking Lot		
with one weekly AASHTO HS-25	24	94
vehicle		
Frequent AASHTO HS-25 Traffic	26	94

NOTE 1: Minimum Cover Thickness in non-trafficked areas is based on landscape surface with a 40 degree load distribution. In trafficked areas, Minimum Cover Thicknesses are based on an asphalt-surfaced pavement with a 30 degree load distribution. NOTE 2: Calculations assume backfill with a minimum 32-degree angle of internal friction and a maximum density of 120 lbs per cubic foot, and a seasonal groundwater elevation at least 2 feet below the invert of the tank

SIDE PANEL PIPE **DIAMETER CHART**

Layer Height	Inlet/Outlet Pipe Diameter		
Layer neight	Minimum	Maximum	
0.5	4 inches	10 inches	
1	4 inches	15 inches	
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NOTE 1: Cut inlet / outlet pipe hole prior to side panel installation. NOTE 2: Contact ACO for guidance for inlet / outlet pipes larger than 15-inch diameter

