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 Dump Trucks and Pans NOTE 3 FINAL FILL Suitable Fill Materials as noted in the of 95% of the Standard Proctor Maximum Dry Density is See Project Geotechnical Report and Site Project Geotechnical Report and noted on Fill starting from the top of the ecommended. 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 Plate Compact or Static Roll up to 8-inch loose lifts to densify Fill Immediately Surrounding the sides and fill. Use at least two full passes of the equipment to level the AASHTO M145 AASHTO M43 top of tank (NOTE 4) Sand-Gravel Mixtures or Open-Graded Stainless or Steel Bands BEDDING FILL Crushed Aggregate Blends 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 by Others Fill Immediately below the tank Standard Proctor Maximum Dry Density is recommended. 30 mil Impermeable Geomembrane (inner) around (NOTE 4) entire tank by Others 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 -6 oz Non-Woven Geotextile NOTE 3: See Construction Equipment Table for more information for construction equipment limitations. **DETAIL A** (outer) around entire tank 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 PIPE WRAP by Others Remote Access Cover Vented (Part #314053)-NTS Surface Material -SD Side Panel (Part # 314091) or Solid (Part #314043) - See NOTE 1 (Pavement Section or TYP. for all exterior sides -Extension Shaft (Part #314038) Concrete Load Distribution Plate Topsoil) as Specified by by Others - See NOTE 2 -SD Remote Access Plate Site Design Engineer -FINAL FILL (See Fill Chart) (Part #314075) - See NOTE 3 Cover Depth as Specified By Site EMBEDMENT FILL (See Fill Chart) Design Engineer (See Cover Chart) 6" Minimum -BEDDING FILL Side Panel (Part # 314091) (See Fill Chart) TYP, for all exterior sides Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement 6" Minimum CARARARARARA E E requirements during design and construction -30 mil Impermeable -SD Half-Module See -6 oz Non-Wover -SD Half-Module (Part #314090) (Part #314090) Geotextile (outer) Geomembrane TYP. under access point around entire (inner) around entire tank by Others tank by Others 2 LAYER SD 2 LAYER SD DETENTION CROSS SECTION ACCESS POINT CROSS SECTION 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 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 of the tank must be cut in half to accommodate the Remote Access Plate CHECKED BY DRAWN BY **STORMBRIXX STANDARD DETAILS J** Jonke A Frye

SD SYSTEM - 2 LAYER - DETENTION

DATE

04/26/2024

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Fill Depth over Tank (in)		
6		
18		
14		
24		

COVER CHART

Live Loading Condition	Cover Thickness (inches)		
Eive Loading Condition	Minimum	Maximum	
Non-Trafficked Areas	12	72	
(i.e. Landscaping)		12	
Passenger Vehicles Parking Lot			
(i.e. Gross Vehicle Weight	18	72	
<10,000 lbs)			
Passenger Vehicle Parking Lot			
with one weekly AASHTO HS-	24	72	
20 vehicle			
Heavy AASHTO HS-20 Traffic	32	72	

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 bulk 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**

Inlet/Outlet Pipe Diameter			
Minimum	Maximum		
4 inches	18 inches		

NOTE 1: Cut inlet / outlet pipe hole prior to side panel installation. NOTE 2: Contact ACO for guidance for inlet / outlet pipes larger than 18-inch diamete

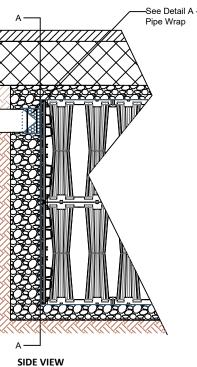
Cut template hole based on pipe

diameter and slip-fit install pipe. See Pipe Diameter Chart

30 mil Impermeable

Geomembrane (inner) around entire tank by Others 6 oz Non-Woven Geotextile (outer) around entire tank by

Others



NTS

NTS

SECTION A-A

2 LAYER SD **PIPE INSTALLATION** NTS



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