		1		fill. Use at least two full passes of the equipment to leve	the Roller - Static Mode	12,	
				layer. Continue until 24 inches of total fill thickness has		hicles (NOTE 2) 20,	000
				1 ·			
				placed above the tank. For AASHTO M145 soils, a minim			
FINAL FILL	Suitable Fill Materials as noted in the	See Project Geotec	chnical Report and Site	of 95% of the Standard Proctor Maximum Dry Density is	Dump Trucks and Pans		NOTE.3
Fill starting from the top of the	Project Geotechnical Report and noted on	-	gineer's Plans	recommended.	NOTE 1: Vehicles shall make straight	runs only across tank footprint.	
embedment fill layer. (NOTE 1 and 2)	the Site Design Engineer's Plans	Design Eng	gilleer s Fialls		NOTE 2: Maximum track pressure 7 p		
				After 24 inches of fill is placed, place fill in accordance w		not traverse or park over the system during	
				the engineer of record's relative compaction requiremen	unioaded near the excavation. Mater	ial shall not be stockpiled near the excavation	n for longer than 24
				to 95% of the Standard Proctor Maximum Dry Density -			
						<i></i>	—Cut Geotextile
			1	whichever is greater.			and wrap are
EMBEDMENT FILL							
Fill Immediately Surrounding the sides and				Plate Compact or Static Roll up to 8-inch loose lifts to de	ensify Stainless		
top of tank (NOTE 4)	Sand-Gravel Mixtures or Open-Graded	AASHTO M145	AASHTO M43	fill. Use at least two full passes of the equipment to leve	I the Steel Bands		
BEDDING FILL	Crushed Aggregate Blends	A-1, A-2-4, A-3 or	3, 357, 4, 467, 5, 56, 57	' layer. For AASHTO M145 soils, a minimum of 95% of the			
Fill Immediately below the tank		, ,		Standard Proctor Maximum Dry Density is recommended	, , , , , , , , , , , , , , , , , , ,		-30 mil Imperr
					·· 🔛		Geomembrar
(NOTE 4)						I	entire tank by
NOTE 1: This layer can include pavement subbase					1 Sector Review		0 N M/s
NOTE 2: If open-graded aggregates are used for e NOTE 3: See Construction Equipment Table for m			reduced by installing a layer	of 6 oz non-woven geotextile fabric at the final and embedment fil	I Interface.	DETAIL A	6 oz Non-Wo
	soils meet the material classification listed. Fill ma		based on classification arou	indwater conditions, and tank invert elevation		PIPE WRAP	(outer) arour
			giot				by Others
						NTS	
							#214052)
						or Solid (Part #314043) - See NOTE	
						Extension Shaft (Part #314038	
	Surface Material (Devement Sed	ion or				Concrete Load Distributior	Plate
	Surface Material (Pavement Sect		HD Side Panel (Part # 3	14062)		by Others - See NOTE 2	
	Topsoil) as Specified by Site Des	ign Engineer	TYP. for all exterior side	es			
,				FINAL FILL (See Fill Chart)		Remote Access Plate	
						(Part #314075) - See NOT	E 3
	///////////////////////////////////////			– EMBEDMENT FILL (See Fill Chart)			7
Cover Depth as	\times \times \times \times \times \times \times \times \times	$\langle \mathcal{K} \times \times \times \rangle$					¥ ×
Specified By Site	\times \times \times \times \times \times \times \times				≺́́́∧́́∧́́́́ ∎≠≠∎ ∕́∽́́∕∕	\times \times \times \setminus	Ν.
Design Engineer			$\wedge \wedge \wedge \times$			$\times \times \times \times \land$	×
(See Cover Chart)		$ \land \land$	\sim				/
						$\times \times \times \times \times$, X
6" Minimum							×
6" Minimum							
6" Miņimum							
6" Minimum				BEDDING FILL (See Fill Chart)			
6" Minimum				BEDDING FILL (See Fill Chart)			
				Engineer of Record responsible		HD Side Pan	el
				Engineer of Record responsible for checking that subgrade soils		(Part # 31406	el
				Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement		(Part # 31406 A A A A A A A A A A A A A A A A A A A	əl 2)
2-0"				Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and		(Part # 31406	əl 2)
2-0"				Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement		(Part # 31406 A A A A A A A A A A A A A A A A A A A	əl 2)
2'-0" 6" Minimum		permeable Geomembr		Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction		(Part # 31406 TYP. for all exterior sides	əl 2)
2'-0" 6" Minimum			rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and		(Part # 31406 TYP. for all exterior sides	al 2)
2'-0"	and the second s	permeable Geomember round entire tank by Ot		Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction		(Part # 31406 TYP. for all exterior sides	əl 2)
2'-0" 6" Minimum	se	apermeable Geomembround entire tank by Ot	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction		(Part # 31406 TYP. for all exterior sides	əl 2)
2'-0" 6" Minimum	and the second s	apermeable Geomembround entire tank by Ot	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction		(Part # 31406 TYP. for all exterior sides	əl 2)
2'-0" 6" Minimum	Be 1 6 oz Non-Woven Geotexti around entire tank by Oth	permeable Geomember round entire tank by Ot le (outer) ers	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point	əl 2)
2'-0" 6" Minimum	are 1 6 oz Non-Woven Geotexti around entire tank by Oth 1 LAYER HE	permeable Geomembround entire tank by Ot le (outer) ers	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point	əl 2)
2'-0" 6" Minimum	Be 1 6 oz Non-Woven Geotexti around entire tank by Oth	permeable Geomembround entire tank by Ot le (outer) ers	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point	əl 2)
2'-0" 6" Minimum	Be E 1 30 mil In (inner) a 6 oz Non-Woven Geotexti around entire tank by Oth 1 LAYER HE DETENTION CROSS	permeable Geomembround entire tank by Ot le (outer) ers	rane thers	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point	əl 2)
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2'-0" 6" Minimum Se NOT	ent ent ent ent ent ent ent ent	permeable Geomembround entire tank by Ot le (outer) ers SECTION I is 12" or large enough	rane thers TYP.	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac <u>ACCESS POINT CROS</u> NOTE 1: Ventilation may be crucial t	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point D SS SECTION or reducing the pressure build	əl 2)
2'-0" 6" Minimum Se NOT	are 1 30 mil In (inner) a 6 oz Non-Woven Geotexti around entire tank by Oth 1 LAYER HE DETENTION CROSS NTS	permeable Geomembround entire tank by Ot le (outer) ers SECTION I is 12" or large enough	rane thers TYP.	Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction	HD Half-Modul TYP. under ac <u>ACCESS POINT CROS</u> NOTE 1: Ventilation may be crucial t up within the system. If solid access	(Part # 31406 TYP. for all exterior sides le (Part #314061) ccess point D SS SECTION o reducing the pressure build covers are used, alternative	əl 2)
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Compaction/Density Requirement (NOTE 3)

Plate Compact or Static Roll up to 8-inch loose lifts to densify

fill. Use at least two full passes of the equipment to level the

FILL CHART

Material Classification

Description

DRAWN BY	CHECKED BY
A Frye	J Jonke
DATE	REV.
04/26/2024	0

Material Location

STORMBRIXX STANDARD DETAILS **HD SYSTEM - 1 LAYER - DETENTION**

CONSTRUCTION EQUIPMENT CHART

Equipment Make (NOTE 1) Plate Compactor

Roller - Static Mode

Maximum Gross Vehicle Weight (lbs)

1,500

12,000

Fill Depth over Tank (in)
6
18
14
24

ckfill material may be temporarily 24 hours.

tile/ Geomembrane round inlet/outlet pipe

ermeable rane (inner) around by Others

Voven Geotextile ound entire tank

COVER CHART

Live Loading Condition	Cover Thickness		
Live Loading Condition	Minimum	Maximum	
Non-Trafficked Areas (i.e.	12	134	
Landscaping)	12		
Passenger Vehicles Parking Lot			
(i.e. Gross Vehicle Weight	18	134	
<10,000 lbs)			
Passenger Vehicle Parking Lot			
with one weekly AASHTO HS-	20	134	
20 vehicle			
Heavy AASHTO HS-20 Traffic	22	134	
Passenger Vehicle Parking Lot			
with one weekly AASHTO HS-	24	134	
25 vehicle			
Heavy AASHTO HS-25 Traffic	26	134	

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: Maximum pipe diameter directly into side panel is 15 inches. Remote access unit required for pipes larger than 15 inches.

NOTE 2: Cut inlet / outlet pipe hole prior to side panel installation. *NOTE 3: Contact ACO for guidance for inlet / outlet pipes larger than 18-inch diameter

