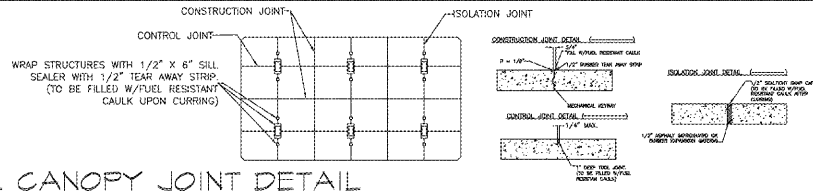
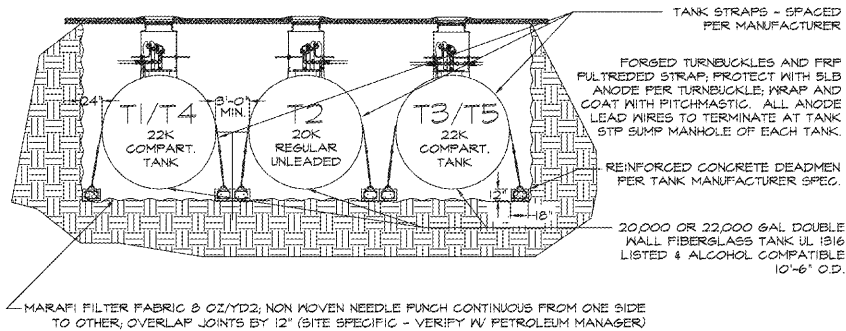


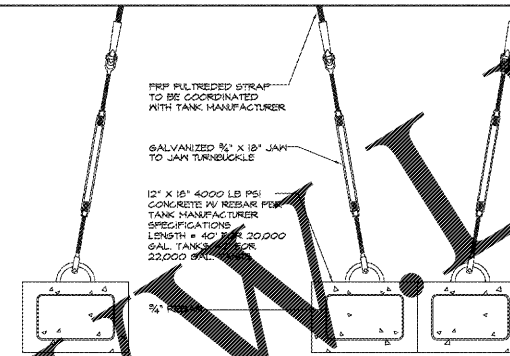
**D** TANKFIELD REINFORCING DETAIL  
G-1 SCALE: 1/4" = 1'-0"



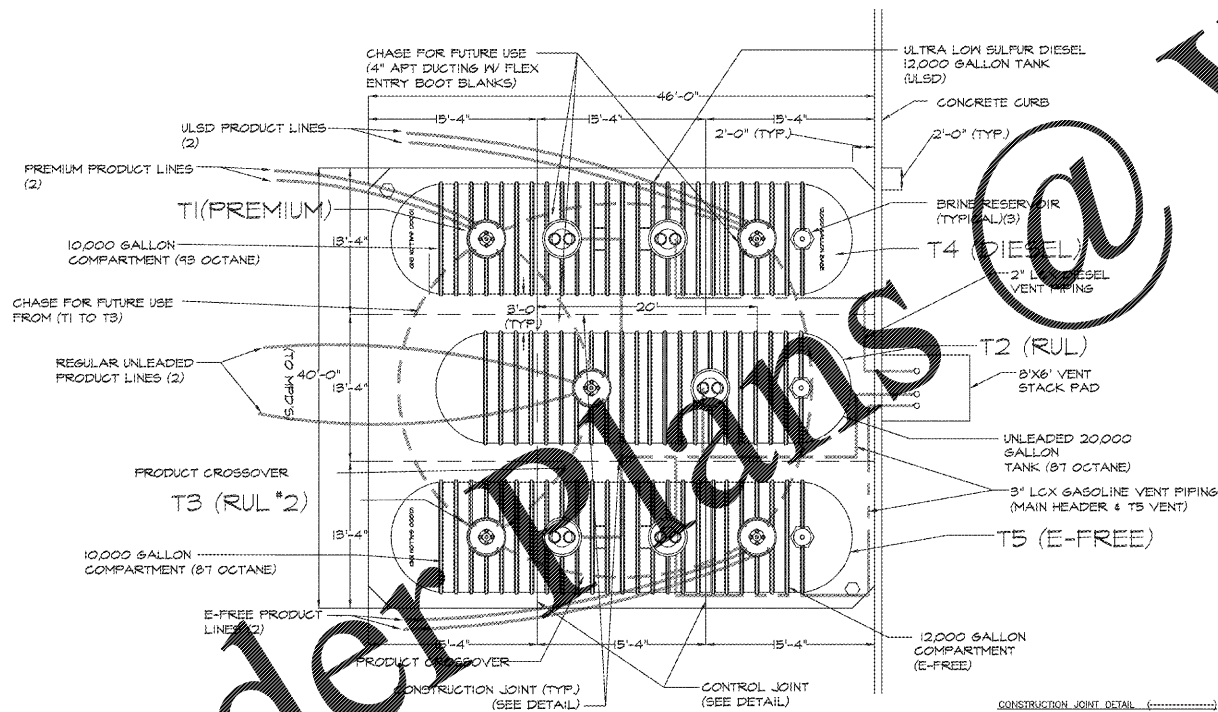
**C** TYPICAL CANOPY JOINT DETAIL  
G-1 SCALE: NTS



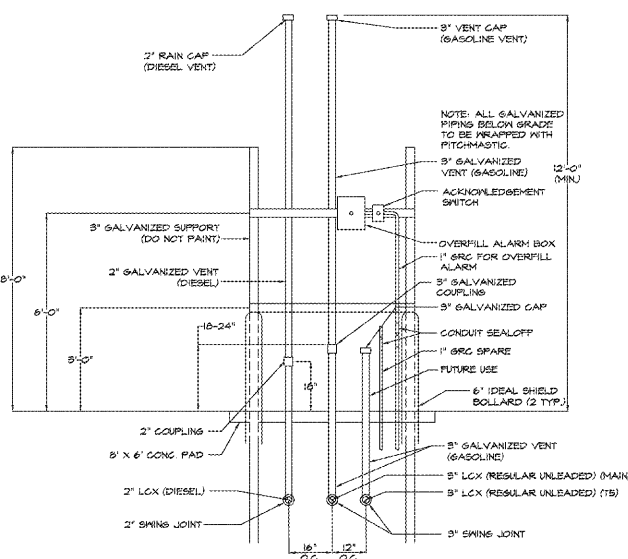
**B** TANK BURIAL  
G-1 SCALE: 1/8" = 1'-0"



**E** TANK HOLD DOWN DETAIL  
G-1 SCALE: 1/2" = 1'-0"



**A** TANK FIELD LAYOUT  
G-1 SCALE: 1/8" = 1'-0"



**F** VENT STACK  
G-1 SCALE: 3/8" = 1'-0"

XERXES® a zcc company		DEADMAN BURIAL WATER AT GRADE		Wawa	
				JWL 10/31/14	
<b>TANK DATA</b>		<b>INSTALLATION</b>		<b>INSTALLATION</b>	
NOM. CAP. (GAL.)	22000	(12k x 10k.)	TOTAL COVER INCLUDING SOIL &	4.50	
TYPE (SINGLEWALL=1;DOW=3)	3		TOP SLAB (FT)	8.00	
DRY=1; WET=2	2		TOP SLAB THICKNESS (IN)	8.00	
NOM. TANK DIA. (FT.)	10		TOP SLAB LENGTH (FT)	13.00	
PROD. STORED (GAL.)	0		TOP SLAB WIDTH (FT)	18.00	
SPEC. GRAV. USED	1.00		DEADMAN ENG (FT)	18.00	
BRINE FILL (GAL.)	224		DEADMAN THK (IN)	12.00	
<b>SAFETY FACTOR</b>		# OF 42" DIAMETER SUMPS		4	
DOWN FORCE/UP FORCE =		<b>1.47 :1</b>			
<b>DOWN FORCES</b>		<b>TOTAL WEIGHTS</b>			
CONCRETE WEIGHT	47070.22 LBS.	CONCRETE WEIGHT		47070.22 LBS.	
BACKFILL WEIGHT	23712.83 LBS.	BACKFILL WEIGHT		23712.83 LBS.	
TANK WEIGHT	11500.00 LBS.	TANK WEIGHT		11500.00 LBS.	
PRODUCT WEIGHT	0.00 LBS.	PRODUCT WEIGHT		0.00 LBS.	
<b>TOTAL DOWN FORCE</b>		<b>TOTAL UP FORCE</b>		295692.03 LBS.	
TANK DSP. FORCE		TANK DSP. FORCE		295692.03 LBS.	
<b>TOTAL UP FORCE</b>		<b>TOTAL UP FORCE</b>		306517.43 LBS.	
<b>WORKSHEET</b>		<b>TANK DATA</b>		<b>ACTUAL CAP (GAL.)</b> 2376.00	
SHELL DIAMETER	10.00 FT.	SHELL LENGTH		31.90 FT.	
SHELL LENGTH	31.90 FT.	DOME PROTECTION DIA. (FT.)		5.00 FT.	
DOME PROTECTION DIA. (FT.)	5.00 FT.	MID POINT HEIGHT		8.83 FT.	
MID POINT HEIGHT	8.83 FT.	COLUMN HEIGHT		13.83 FT.	
COLUMN HEIGHT	13.83 FT.	RIB VOLUME		2631.00 CU. IN.	
RIB VOLUME	2631.00 CU. IN.				
<b>REINFORCED CONCRETE VOLUMES (CU. FT.)</b>		<b>DEADMEN</b>		126.90	
TOP SLAB	405.89	FORCE (LBS) = VOL. X 88 LBS/CF		11088.00	
FORCE = VOL. X 88 LBS/CF	35922.23	TOP SLAB & DEADMEN FORCE		47070.22 LBS.	
<b>BACKFILL VOLUMES (CU. FT.)</b>		<b>OVER TANK SHELL</b>		1417.39	
OVER TANK SHELL	1417.39	OVER TANK DOMES		431.97	
OVER TANK DOMES	431.97	<b>TOTAL WET VOLUME</b>		2952.36	
<b>TOTAL WET VOLUME</b>	2952.36	FORCE = VOL. X 60 LBS/CF		177138.33 LBS.	
<b>BUOYANCY</b>		SHELL VOLUME		2632.62 CUBIC FT.	
SHELL VOLUME	2632.62 CUBIC FT.	DOME VOLUME		323.60 CUBIC FT.	
DOME VOLUME	323.60 CUBIC FT.	RIB VOLUME		38.90 CUBIC FT.	
RIB VOLUME	38.90 CUBIC FT.	<b>TOTAL VOLUME</b>		3244.22 CUBIC FT.	
<b>TOTAL VOLUME</b>	3244.22 CUBIC FT.	VOL. X 7.48 GAL/CU.FT.		24042.86 GALLONS	
VOL. X 7.48 GAL/CU.FT.	24042.86 GALLONS	FORCE = GAL. X 8.34 (LBS./GAL.)		199517.43 LBS.	

XERXES® a zcc company		DEADMAN BURIAL WATER AT GRADE		Wawa	
				JWL 11/16/11	
<b>TANK DATA</b>		<b>INSTALLATION</b>		<b>INSTALLATION</b>	
NOM. CAP. (GAL.)	20000	(12k x 10k.)	TOTAL COVER INCLUDING SOIL &	4.50	
TYPE (SINGLEWALL=1;DOW=3)	3		TOP SLAB (FT)	8.00	
DRY=1; WET=2	2		TOP SLAB THICKNESS (IN)	8.00	
NOM. TANK DIA. (FT.)	10		TOP SLAB LENGTH (FT)	13.00	
PROD. STORED (GAL.)	0		TOP SLAB WIDTH (FT)	18.00	
SPEC. GRAV. USED	1.00		DEADMAN ENG (FT)	18.00	
BRINE FILL (GAL.)	194		DEADMAN THK (IN)	12.00	
<b>SAFETY FACTOR</b>		# OF 42" DIAMETER SUMPS		2	
DOWN FORCE/UP FORCE =		<b>1.57 :1</b>			
<b>DOWN FORCES</b>		<b>TOTAL WEIGHTS</b>			
CONCRETE WEIGHT	41046.67 LBS.	CONCRETE WEIGHT		41046.67 LBS.	
BACKFILL WEIGHT	224301.69 LBS.	BACKFILL WEIGHT		224301.69 LBS.	
TANK WEIGHT	8900.00 LBS.	TANK WEIGHT		8900.00 LBS.	
PRODUCT WEIGHT	0.00 LBS.	PRODUCT WEIGHT		0.00 LBS.	
<b>TOTAL DOWN FORCE</b>		<b>TOTAL UP FORCE</b>		274268.36 LBS.	
TANK DSP. FORCE		TANK DSP. FORCE		274268.36 LBS.	
<b>TOTAL UP FORCE</b>		<b>TOTAL UP FORCE</b>		175216.07 LBS.	
<b>WORKSHEET</b>		<b>TANK DATA</b>		<b>ACTUAL CAP (GAL.)</b> 19782.00	
SHELL DIAMETER	10.00 FT.	SHELL LENGTH		22.73 FT.	
SHELL LENGTH	22.73 FT.	DOME PROTECTION DIA. (FT.)		5.00 FT.	
DOME PROTECTION DIA. (FT.)	5.00 FT.	MID POINT HEIGHT		8.83 FT.	
MID POINT HEIGHT	8.83 FT.	COLUMN HEIGHT		13.83 FT.	
COLUMN HEIGHT	13.83 FT.	RIB VOLUME		2631.00 CU. IN.	
RIB VOLUME	2631.00 CU. IN.				
<b>REINFORCED CONCRETE VOLUMES (CU. FT.)</b>		<b>DEADMEN</b>		120.00	
TOP SLAB	349.67	FORCE (LBS) = VOL. X 88 LBS/CF		10566.00	
FORCE = VOL. X 88 LBS/CF	30506.67	TOP SLAB & DEADMEN FORCE		41046.67 LBS.	
<b>BACKFILL VOLUMES (CU. FT.)</b>		<b>OVER TANK SHELL</b>		1286.73	
OVER TANK SHELL	1286.73	OVER TANK DOMES		431.97	
OVER TANK DOMES	431.97	<b>TOTAL WET VOLUME</b>		2735.36	
<b>TOTAL WET VOLUME</b>	2735.36	FORCE = VOL. X 60 LBS/CF		164016.99 LBS.	
<b>BUOYANCY</b>		SHELL VOLUME		2251.61 CUBIC FT.	
SHELL VOLUME	2251.61 CUBIC FT.	DOME VOLUME		323.60 CUBIC FT.	
DOME VOLUME	323.60 CUBIC FT.	RIB VOLUME		38.90 CUBIC FT.	
RIB VOLUME	38.90 CUBIC FT.	<b>TOTAL VOLUME</b>		2888.71 CUBIC FT.	
<b>TOTAL VOLUME</b>	2888.71 CUBIC FT.	VOL. X 7.48 GAL/CU.FT.		21409.12 GALLONS	
VOL. X 7.48 GAL/CU.FT.	21409.12 GALLONS	FORCE = GAL. X 8.34 (LBS./GAL.)		175216.07 LBS.	

**G** BUOYANCY CALCULATIONS  
G-1 SCALE: N.T.S.

<b>GASOLINE DETAILS</b> <b>FLORIDA</b> <b>TANK DETAILS</b> <b>(22,000 GALS. COMPARTMENTALIZED TANKS)</b>			
SCALE: AS NOTED DATE: 4/01/14 DRAWN BY: DCV CHECKED BY: REK		260 WEST BALTIMORE PIKE WAWA, PA 19383 PHONE: 610-338-8000 FAX: 610-338-8685	
1 OF 5 SHEETS		DRAWING NO.	

Order Plans