

DESCRIPTION	TANK DEPTH BURY CALCULATION	FURTHEST ISLAND	LOWEST ISLAND
1. Elevation at Top of Island	559.87	558.83	
2. Min. Slope of Piping = (L) x 1/8" per foot	1.98	0.52	
Where L1 = 190 ft., L2 = 50 ft.			
FL Concrete Dike Slab	6"		
Pipe Diameter	8"	2.75 ft	2.75 ft
Tank Construction	3"		
Total	10"		
4. Grade Differential = (#2) + (#3)	4.73 ft	3.27 ft	
5. Top of Tanks = (#1 - #4)	555.14	555.14	555.56
6. Top of Tanks = Lowest Calculated Elevation	557.52	557.52	
7. Lowest Elevation of Slab Above Tank	557.52	557.52	
8. Depth of Bury = (#7 - #6)	2.38	2.38	
Note: If #8 < 4 ft., Set Top of Tanks at (#7 - 4.0 ft.) = 553.52 ...			
If #8 > 7 ft., Contact Owner for Certification of Burial Depth with Tank Mgr.			

### LEGEND

EXISTING	PROPOSED
--- BOUNDARY LINE	--- BOUNDARY LINE
--- RIGHT OF WAY LINE	--- CONSTRUCTION FENCE
--- STORM DRAIN	--- CONTROL ELEVATIONS
--- GAS	--- GRADE BREAK LINE
--- OVERHEAD ELECTRIC	--- FLOW
--- OVERHEAD ELECTRIC AND TELEPHONE	--- SPOT ELEVATIONS:
--- OVERHEAD TELEPHONE	TC = TOP OF CURB
--- OVERHEAD TV	TO = TOP OF ISLAND
--- OVERHEAD TV	TI = TOP OF TANKS
--- SENER	TM = TOP OF MOUNTABLE CURB
--- UNDERGROUND ELECTRIC AND TELEPHONE	HP = HIGH POINT
--- UNDERGROUND TELEPHONE	
--- UNDERGROUND TV	
--- WATER	
--- EAST OR ELECTRIC	
--- OVERHEAD	
--- SOUTH OR SENER	
--- TELEPHONE	
--- UNDERGROUND	
--- WEST OR WATER	

**GENERAL GRADING NOTES**

A. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF DESIGN CONFLICTS.

B. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AVAILABLE ON SITE. THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

C. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE COMPLETE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO THE CONSTRUCTION OF THE PROPOSED UTILITY LINE TO BE LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION OF UTILITIES.

D. LEVEL CONCRETE LANDING AT DOOR, SLOPE SHALL BE LESS THAN 2% IN ALL DIRECTIONS.

**GRADING NOTES**

9A. DOWN SPOUTS (PER ARCH PLANS)

9B. MATCH EXISTING PAVEMENT ELEVATIONS.

9C. CONNECT TO EXISTING STORM DRAIN PIPES FOR DRAWING PURPOSES.

9D. CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO THE CONSTRUCTION OF THE PROPOSED UTILITY LINE TO BE LOCATED.

9E. ASSOCIATES, INC. IF THE DESIGN AS SHOWN IS NOT ADEQUATE, LEVEL CONCRETE LANDING AT DOOR, SLOPE SHALL BE LESS THAN 2% IN ALL DIRECTIONS.

**GRADING DETAILS**

21A. CURB INLET

21B. STORM DRAIN CLEAN OUT

21C. S CURB INLET PER STRECOB STANDARD DETAIL (CITY'S REVISION)

21D. CONTRACTOR TO CONTACT UTILITY COMPANIES FOR CONTROL POINTS SUPPLY # 489-433-0002 FOR ORDERING INFORMATION.

21E. MORRISON SUPPLY ORDER # 084412783

21F. IRON FRAME & ADA WHEEL PROOF SLOTTED GRATE (PART #25164F)

21G. CONTRACT APT. INC. AT 800-438-6057 TO ORDER.

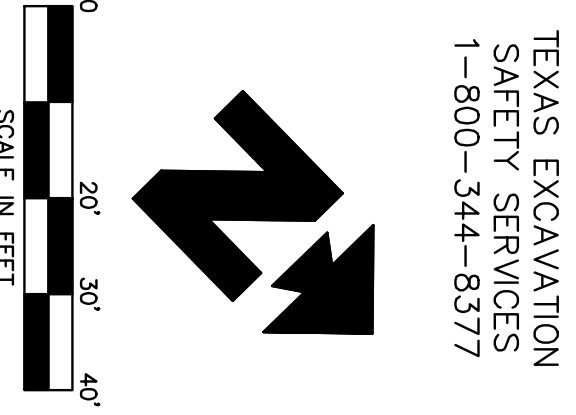
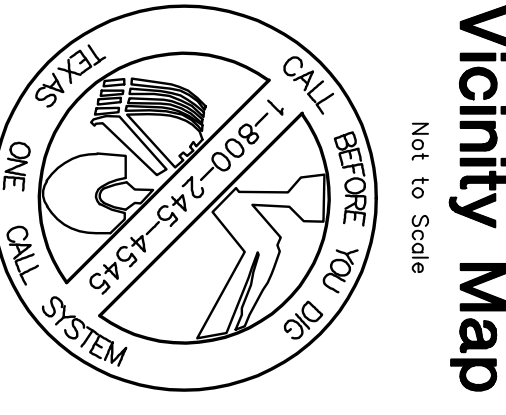
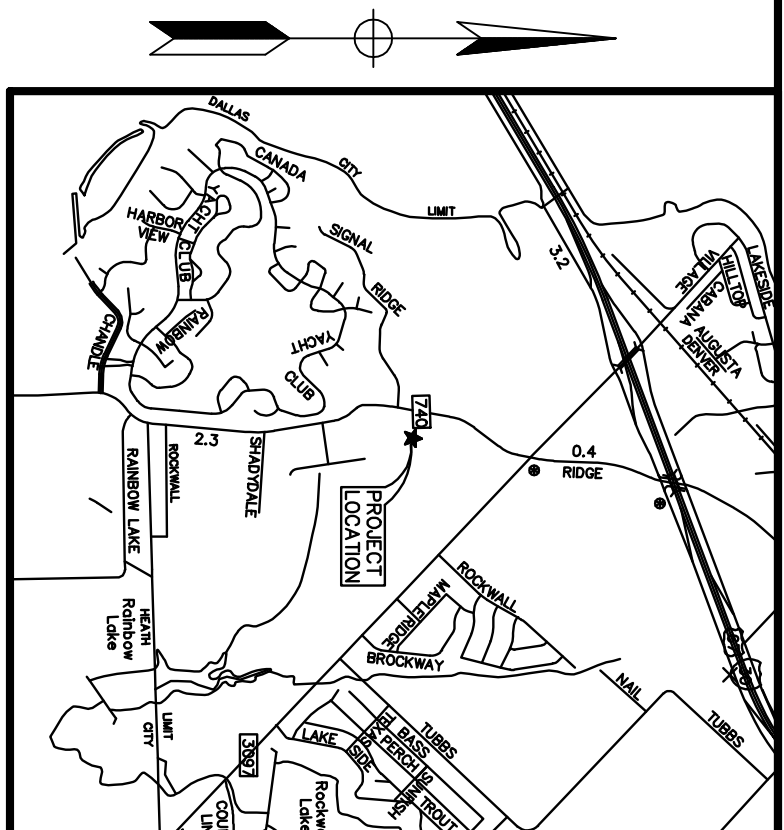
21H. FURNISH AND INSTALL 12" SLOTTED DRAIN WITH 12" GRATING - COVER BY CONCRETE AS ALTERNATE - SEE DETAIL 79B-01 - DETAIL SHEET.

**SITE CONDITIONS WITHIN CONSTRUCTION LIMITS**

TOTAL SITE AREA FOR FUEL STATION = 20,146 S.F.

SITE CONDITIONS	PERVIOUS	IMPERVIOUS
PRE-DEVELOPMENT	4,567 S.F.	15,579 S.F.
POST-DEVELOPMENT	1,290 S.F.	18,856 S.F.

\* SITE DRAINAGE WILL BE SHEET FLOW TOWARD THE CURB INLET ON SITE AND EXISTING CURB INLET IN THE KROGER STORE PARKING LOT FOLLOWING EXISTING DRAINAGE PATTERN. DRAINAGE UNDER THE CANOPY AREA WILL SHEET FLOW INTO TRENCH DRAIN THROUGH OIL/WATER SEPARATOR.



**BENCHMARK INFORMATION:**  
 BM #1 - AN "X" CUT FOUND ELEVATION = 563.79  
 BM #2 - A P.V. NAIL FOUND ELEVATION = 566.80

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

**KROGER SW-575 FUEL CENTER**

**Engineering Associates, Inc.**  
 ENGINEERS • PLANNERS • SURVEYORS  
 LANDSCAPE ARCHITECTS • ENVIRONMENTAL SCIENTISTS

**GRADING PLAN**  
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 ROCKWALL, TEXAS

**AS-BUILT**



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DATE: 12/1/11  
 10:07 AM  
 SHEET NO: 45-BULL  
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