



**4. INSTALLATION TRAINING MATERIAL**

It is highly recommended that all tanks be filled with water immediately after installation or immediately after pumping for existing tanks.

Roth tanks can be “anchored” by pouring a concrete apron around the midpoint of the tank using the excavation as a form. This detail is shown below.

Details Provided by APPIAN Consulting Engineers – www.applanengineers.com

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**RESTRAINING COLLAR FOR HIGH GROUNDWATER**

**TOP**

**GENERAL NOTE:**

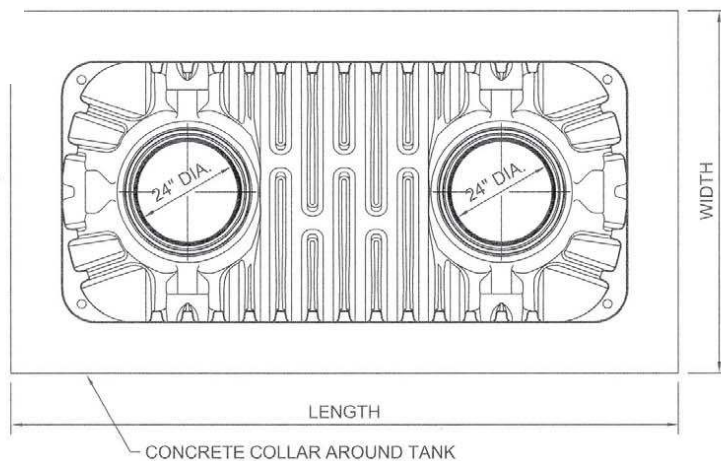
1. THE BUOYANCY RESTRAINING COLLAR DESIGN IS BASED ON BUOYANCE CALCULATIONS AVAILABLE ON REQUEST FROM ROTH

**CONCRETE NOTES:**

1. PROVIDE CONCRETE TO OBTAIN THE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH ACI-318-99 (BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE) AND ACI-301-LATEST EDITION (SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS).

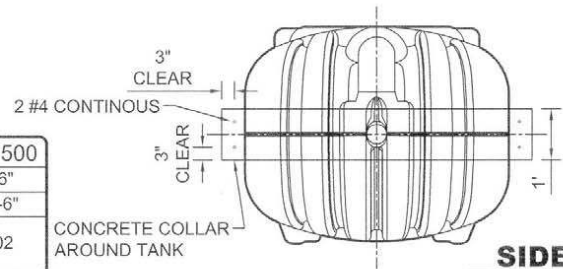
**REINFORCING STEEL:**

1. ALL REINFORCING STEEL SHALL BE BILLET STEEL CONFORMING TO STANDARDS OF ASTM A615, GRADE 60.



**CONCRETE COLLAR SPECS**

TANK MODEL	ST-500	ST-750	ST-1060	ST-1250	ST-1500
WIDTH (FEET)	7'-0"	7'-0"	7'-6"	7'-6"	7'-6"
LENGTH (FEET)	7'-0"	10'-6"	12'-0"	14'-0"	16'-6"
FACTOR-OF-SAFETY AGAINST FLOATING	2.96	2.15	2.09	2.10	2.02



DWG SCALE: 1:1  
PLOT SCALE: 1:2  
SHEET #: 1 OF 1

**Roth MultiTank Buoyancy Restraining System**