

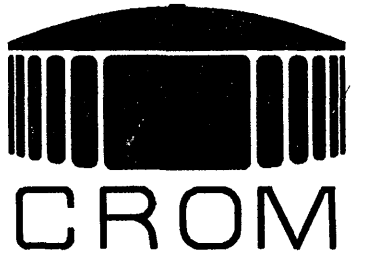
NOTES

Material & Services Furnished by Others:

1. Provide all necessary trade permits.
2. Clearing of the site and subgrade excavation to an elevation 10 1/2" below top of floor slabs on a 149' diameter circle.
3. Furnish adequate working and open storage space for construction equipment and materials.
4. Water for construction.
5. Final backfill and landscaping.

Materials & Services Furnished by The Crom Corporation:

- Concrete:** Use Type I Cement
 1. Floor: 3500 psi pump mix with superplasticizer (HRWR), 3/4" aggregate, 5% to 7% air content, 3" slump (6" with HRWR), and soft broom finish except smooth trowel finish under tank wall.
 2. Dome: 3500 psi pump mix with 3/8" aggregate, 5% to 7% air content, 4" slump, and soft broom finish.
 3. Pipe Encasement: 2500 psi mix with 1" aggregate, no air, and 6" slump.
- Shotcrete Mixes:** Use Type I Cement
 1. 1st coat on steel shell & prestress wire: 1:3 mix
 2. All other shotcrete: 1:4 mix
 3. Strength: f'g = 5000 psi, f'gi = 2000 psi
- Material Testing:**
 1. **Concrete:**
 - (a) Slump (ASTM C143)
 - (b) Air Content (ASTM C138, C173, or C231)
 - (c) Compression Tests (ASTM C31 and C39) - Five cylinders per set (for each set, test two at 7 days, two at 28 days, and hold one)
 - i. 3 sets for floor
 - ii. 2 sets for dome
 - iii. 2 sets for dome pump pad
 2. **Shotcrete:**
 - (a) Compression Tests (ASTM C39, C42, and C192) - Five cylinders (or cores) per set (for each set, test two at 7 days, two at 28 days, and hold one)
 - i. 3 sets for outside core wall
 - ii. 2 sets for inside core wall
 - iii. 2 sets for cover coat
- Curing:** (7 days minimum)
 1. Continuously water-cure floor and walls during tank construction.
 2. Water-cure dome until prestressing is complete.
- Reinforcing Steel:**
 1. ASTM A-615 grade 60, lap splices 32 bar diameters.
 2. Use 2-SBP-3 wire bar supports under floor resteel.
- Prestressing Wire:** Meets ASTM Spec. A821-93 TYPE B
 1. Diameter: 0.162 in. (8 gauge)
 2. Area: 0.0208 sq-in.
 3. Ultimate Strength: 231,000 psi
 4. Initial Stress: 145,600 psi
 5. Working Stress: wall 115,000 psi, dome 120,000 psi
- Steel Shell Diaphragm:** Meets ASTM Spec. A-366 26 gauge
- Paint Schedule:**
 1. Exterior concrete surfaces: One coat of Thoroseal with Acryl 60. Finish Color: #8510 Pearl Gray
 2. Interior concrete surfaces: None.
- Standard Accessories:**
 1. 50" fiberglass ventilator
 2. 675 square-inch precast overflow, 6 req.
 3. 7'-square fiberglass hatch cover, 2 req.
 4. Interior fiberglass ladder with TS safety rail, 2 req.
 5. Exterior aluminum ladder
 6. TS belt and sleeve set, 2 req.
 7. Stainless steel wall manhole
 8. Fiberglass liquid level indicator
- Special Accessories:**
 1. Aluminum handrail
 2. Piping:
 - (a) 42" DIP inlet
 - (b) 6" DIP drain
 - (c) 10" DIP surge relief valve line, 2 req.
 3. Stainless steel wall pipe sleeve with Link-Seals for:
 - (a) 42" DIP inlet
 - (b) 14" DIP pump discharge line (6 req.)
 - (c) 10" DIP surge relief valve line (2 req.)
 4. Fiberglass hood for 675 square-inch overflow, 6 req.
 5. Fiberglass pump intake baffle, 5 req.
 6. 36-mil Hypalon baffle curtain
 7. 6" PVC dome pipe with precast curb for level sensor
- Testing and Disinfection:** Use AWWA Chlorination Method 3 (Fill/Fill). Place water combined with 70# minimum of HTH (or equivalent) in the reservoir to a depth of 1'6" to give 50 ppm minimum available chlorine. Let stand for 24 hours then fill reservoir to give 2 ppm minimum. Let stand an additional 24 hours, and test.



DATE: 03-21-95

DRAWN: PTH

CHECKED: [Signature]

APPROVED: [Signature]

DESIGNED: JSW

TANK DESCRIPTION:

2.0-MG CLEAR WELL

TANK DIMENSIONS:

112'0" ID x 28'0" SWD

TANK BUILDER:

THE CROM CORPORATION
GAINESVILLE, FLORIDA

OWNER:

COUNTY OF
ROANOKE
VIRGINIA

CONSULTING ENGINEER:

ROANOKE COUNTY
UTILITY DEPARTMENT

REV.	DESCRIPTION	DATE CHK BY

WHERE STANDARD SPECIFICATIONS ARE IN CONFLICT WITH CROM CORPORATION SPECIFICATIONS OR WITH GOOD PRE-STRESSING OR SHOTCRETE PRACTICES THE STANDARD SPECIFICATIONS SHALL BE SUBORDINATED. THIS DESIGN AND DRAWING ORIGINATED BY AND THE EXCLUSIVE PROPERTY OF THE CROM CORPORATION.

BAR IS ONE INCH ON ORIGINAL DRAWINGS 0 1"

SCALE:
4' 0" 10' 20'
1/16" = 1'0"

FILE NO. **9449.2**

SHEET **2** OF **19**