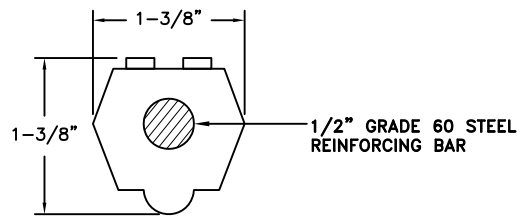


**ELEVATION**

**PLAN**




**STEP REINFORCING BAR DETAIL**

## MANHOLE STEPS DETAIL

**NOTES:**

1. MANHOLE STEPS ARE NOT PERMITTED IN TEXAS AND OKLAHOMA.
2. ALL STEPS MUST MEET ASTM C-478 AND ASSHTO M-199 SPECIFICATIONS, POLYPROPYLENE ASTM D-40104, THE 1/2" GRADE 60 DEFORMED REINFORCING BAR ASTM-A-615.
3. INSTALLATION METHOD MUST RESIST 1,500 LB HORIZONTAL PULL OUT FORCE AND 500 LB VERTICAL LOAD.
4. LOCATE STEPS OVER BENCH WHENEVER POSSIBLE (NOT OVER THE MAIN).

	<b>REVISIONS</b> 6/13 - MSG EDITS	<b>AMERICAN WATER MILITARY SERVICES GROUP</b> <b>CIVIL</b> <b>MANHOLE STEPS</b> <b>DETAIL</b>
		AMERICAN WATER MILITARY SERVICES GROUP CAMDEN, NJ 08102
		AMERICAN WATER M.S.G. 1 WATER STREET CAMDEN, NJ 08102
		
		DRAWN BY Z. ALAM PROJECT ENG'R PDK APPROVED
		DATE 04-30-2010 PROJECT N/A
		USE DIMENSIONS ONLY SCALE N.T.S.
		USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
		<b>MSG-WW-13</b>