

**TYPE 1 - TEST STATION WITH ANODE DETAIL**  
NOT TO SCALE

**TYPE 3 - UNINSULATED FITTING DETAIL**  
NOT TO SCALE

**TEST STATION WITH ANODE NOTES:**

1. ANODES MAY BE INSTALLED VERTICALLY OR HORIZONTALLY IN SOIL WITH THE TOP OF THE ANODE BELOW THE SPRINGLINE OF THE PIPE. ANODES MUST BE PLACED IN NATIVE SOIL, NOT IN SELECT BACKFILL SUCH AS SAND, SQUEEGEE OR CRUSHED ROCK USED FOR PIPE BEDDING.
2. THE TEST STATION SHALL BE CENTERED IN A CONCRETE PAD THAT IS PLACED FLUSH WITH GRADE.
3. THE TEST STATION WIRES SHALL BE ATTACHED A MINIMUM OF ONE FOOT APART TO THE TOP CENTERLINE OF THE PIPE  $\pm 10^\circ$ .
4. A MINIMUM OF TWO FEET OF SLACK SHALL BE INSTALLED AT EACH END OF ALL WIRES.
5. CAUTION SHALL BE EXERCISED WHEN BACKFILLING THE EXCAVATION SO AS NOT TO DAMAGE OR STRESS ANY OF THE WIRES OR CONNECTIONS.
6. REFER TO TEST STATION LOCATION SCHEDULE TO IDENTIFY WHERE ANODES ARE REQ'D.

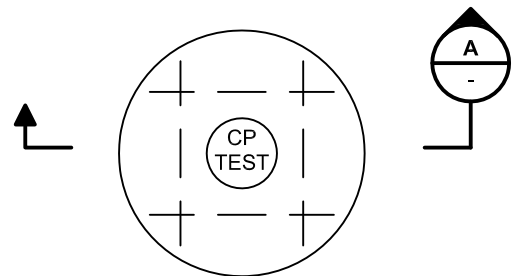
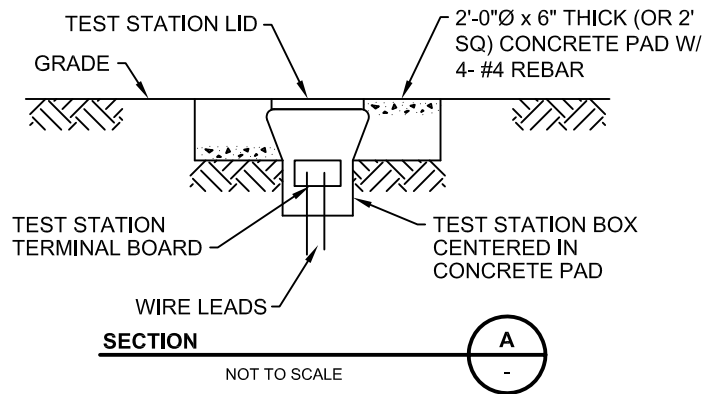
**KEYED NOTES:**

- 1 NEW PROTECTED PIPE.
- 2 48 LB. HIGH POTENTIAL MAGNESIUM ANODE
- 3 CONCRETE PAD-TWO FOOT DIAMETER BY SIX INCHES THICK W/ FOUR #4 REBAR
- 4 CADWELD WIRES TO TOP OF PIPE AND COAT
- 5 TEST STATION
- 6 TEST STATION SHUNT - 0.01 OHM - 8 AMPERE (YELLOW)
- 7 TEST STATION TERMINAL BOARD
- 8 TEST STATION WIRES:  
WIRE A- #8 AWG STRANDED (RED).  
WIRE B- #8 AWG STRANDED (RED).  
WIRE C- #12 AWG STRANDED (BLUE).  
WIRE D- #12 AWG STRANDED (BLUE).
- 9 BONDING CABLE - #4 AWG/HMWPE (RED)
- 10 BONDING CABLE - #8 AWG/HMWPE (RED)

<b>REVISED</b>		 <b>Southgate</b> WATER & SANITATION DISTRICTS	SCALE
BY	DATE		<b>NOT TO SCALE</b>
		<b>CATHODIC PROTECTION &amp; TEST STATION</b>	ISSUE DATE
			<b>FEBRUARY 2016</b>
			SHEET <b>1 OF 2</b> DRAWING NO. <b>SS-19</b>

**CORROSION PROTECTION GENERAL NOTES:**

1. THIS DRAWING IS A GENERAL INTERPRETATION OF THE PROJECT SPECIFICATION. EXACT LOCATION AND QUANTITY OF METALLIC COMPONENTS SUBJECT TO CHANGE DUE TO FIELD CONDITIONS, ETC.
2. AVOID ELECTRICAL CONTACT BETWEEN PROTECTED PIPELINE AND STRUCTURAL REBAR, CONDUITS, AND ALL OTHER FOREIGN METALLIC STRUCTURES.
3. ANODE AND TEST STATION LOCATION MAY BE SHIFTED TO AVOID OBSTRUCTIONS. ANODES SHALL BE LOCATED 5 FEET AWAY FROM THE PROTECTED PIPELINE AND AT THE SAME DEPTH.
4. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR KEEPING A LOG OF ALL ANODES AND TEST STATIONS WITH THEIR DIMENSIONED LOCATIONS. LOG SHALL BE SUBMITTED TO OWNER FOR AS-BUILT DRAWINGS.
5. ALL UNDERGROUND METALS WITH CATHODIC PROTECTION SHALL BE COATED IN COMPLIANCE WITH SPECIFICATIONS.
6. REPAIR DAMAGE TO PIPE COATING AFTER INSTALLATION OF EXOTHERMIC WELDS. PROVIDE PRIMER, PLASTIC SHIELD CAP, AND SEAL WATERTIGHT WITH WAX TAPE, AS SPECIFIED.
7. ALL LEADS ENTERING TEST STATIONS SHALL HAVE SUFFICIENT COILED SLACK TO FACILITATE COVER REMOVAL FOR TESTING.
8. ALL UNDERGROUND METALLIC FITTINGS IN ANY GIVEN AREA, INCLUDING STUBOUTS OR MECHANICALLY JOINTED PIPE SECTIONS SHALL BE BONDED TOGETHER WITH #4 AWG JOINT BONDS.
9. INSTALLATION CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH OWNER SUCH THAT TESTING AND INSPECTION CAN BE CONVENIENTLY COMPLETED.



**NOTES:**

1. TEST STATION SHALL BE CENTERED IN CONCRETE PAD.
2. CONCRETE PAD SHALL BE REINFORCED WITH FOUR #5 REBAR.

**FLUSH MOUNTED TEST STATION**

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