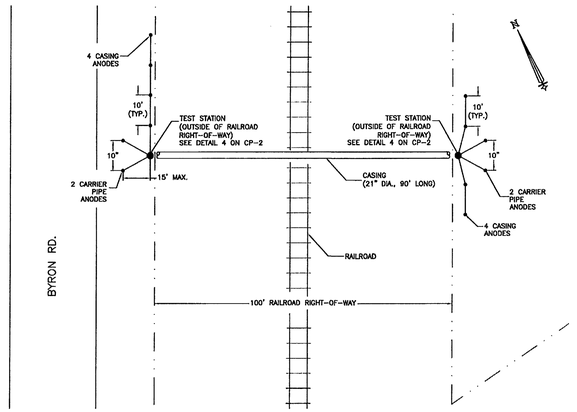
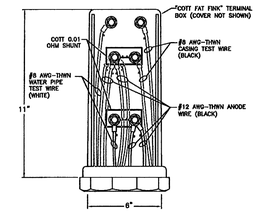
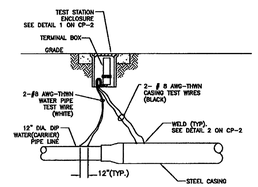


PLAN VIEW – TEST STATION & ANODE PLACEMENT
SCALE: NTS



TERMINAL BOX – COTT FAT FINK (1 / CP-1)
SCALE: NTS



NOTES:
1. IF PRACTICAL, TEST STATION SHALL BE SET BEHIND CURB OR SIDEWALK.
2. TYPICAL OF TWO, ONE ON EACH SIDE OF RAILROAD CASING.
3. SEE DETAIL 4 ON CP-2 FOR ANODE INFORMATION.

4-WIRE CASING TESTING STATION (2 / CP-1)
SCALE: NTS

WARNING!!
INSTALL ANODES AT LOCATIONS WITH NO IMPACT TO FIBER OPTIC CABLE, 12" PETROLEUM PRODUCT PIPELINE, AND TWO (6" & 10") NATURAL GAS PIPELINES.

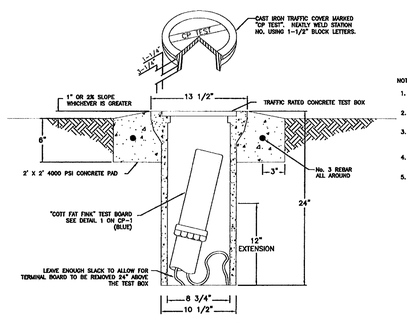
REGISTERED PROFESSIONAL ENGINEER RONALD Z. HODGMAN CR 1139 Exp. 3/31/2017 CORROSION STATE OF CALIFORNIA

0	06-03-15	ISSUED FOR REVIEW	MT	RH	RH		
NO.	DATE	REVISION DESCRIPTION	DRAWN BY	CHECKED BY	DESIGNED BY	APPROVED BY	

TRIDENT ENVIRONMENTAL & ENGINEERING, INC. — ANTIOCH, CALIFORNIA

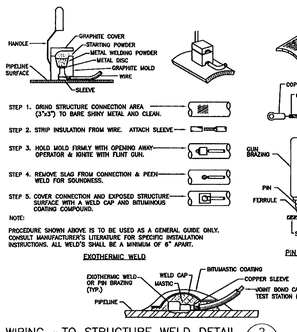
SHEET NAME	CP-1
PROJECT NO.	15-042
DATE DRAWN	6/02/2015
DRAWN BY	MT
DESIGNED BY	RH
SCALE	NTS
DRAWING NO.	1 OF 2
REV.	0

TRACY APARTMENTS
CATHODIC PROTECTION SYSTEM
UNDERGROUND WATER SERVICE
BRYON ROAD, TRACY, CA.



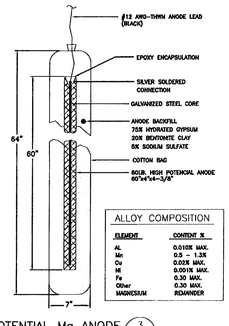
NOTES:
1. CONCRETE BODY, TRAFFIC RATED – BROOKS 3-81, CHRISTY D5 OR EQUAL.
2. ALL WIRES SHALL HAVE 24" MIN. SLACK IN BOX.
3. BOTTOM OF TEST BOX SHALL BE NATIVE SOIL. DO NOT PLACE ROCK, GRAVEL OR SAND IN TEST BOX.
4. TEST BOX TO BE FIELD LOCATED OUTSIDE OF RAILROAD RIGHT-OF-WAY.
5. PROVIDE 2' X 2' X 6" THICK REINFORCED CONCRETE PAD AROUND TEST BOXES AT UNPAVED SITES. CONCRETE PAD SHALL BE LEVEL AND SURFACE SHALL BE FLUSH WITH TRAFFIC BOX.

AT-GRADE – TEST STATION (1 / CP-2)
SCALE: NTS



1. DEGREASE AND CLEAN STRUCTURE TO BARE, BRIGHT METAL WITH MECHANICAL DEVICES.
2. STRIP WIRE INSULATION AND ATTACH FROM WIRE AND ATTACH A BAC M1 COMPRESSION TERMINAL OR APPROVED EQUAL.
3. LOAD THE BRAZING GUN WITH A DIRECT BRAZING PIN AND FERRULE. USE A THREADED TYPE CONNECTION FOR ABOVE-GROUND USE ONLY.
4. BRAZE THE CABLE TO THE PIPE. EXTRA MATERIAL REQUIRED FOR DI OR CI PIPE.
5. TEST BRAZE BY BREAKING OFF THE SHANK OF THE PLAIN PIN WITH A HAMMER.
6. COVER CONNECTION WITH MASTIC FILLED WELD CAP AND BITUMASTIC COATING BOX SOLIDS BY VOLUME OVER WELD CAP AND ALL EXPOSED METAL.
7. ALL WELDS SHALL BE A MINIMUM OF 8" APART.
8. ALLOW WELD COATING TO CURE PER MANUF. REQUM. BEFORE BURIAL.

WIRING –TO STRUCTURE WELD DETAIL (2 / CP-2)
SCALE: NTS

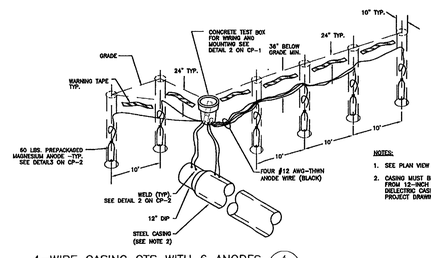


NOTE:
1. ANODE CAN BE INSTALLED VERTICALLY OR HORIZONTALLY. A MINIMUM OF 3" DEEP.
2. ANODE PACKAGES SHALL BE SOAKED WITH TEN GALLONS OF WATER AFTER BACKFILLING TO A POINT 12" ABOVE TOP OF THE ANODE.
3. ANODE WIRES SHALL BE CAREFULLY RAN AND PROTECTED AGAINST DAMAGE DURING INSTALLATION AND BACKFILLING OPERATIONS.
4. ANODE WIRE SHALL NOT BE USED FOR LOWERING OR HANDLING THE ANODE.
5. NO SPLICING OF ANODE WIRE BETWEEN ANODE AND TEST STADIUM.

ALLOY COMPOSITION

ELEMENT	CONTENT %
AL	0.010% MAX.
Mn	0.5 – 1.3%
Cu	0.02% MAX.
NI	0.001% MAX.
Fe	0.30 MAX.
Other	0.30 MAX.
MAGNESIUM	REMAINDER

60 LB. HIGH POTENTIAL Mg ANODE (3 / CP-2)
SCALE: NTS



NOTES:
1. SEE PLAN VIEW ON CP-1.
2. CASING MUST BE METALLICALLY ISOLATED FROM 12-INCH DIP WATER MAIN. USE DIELECTRIC CASING SPACERS – PER PROJECT DRAWINGS FOR CASED CROSSING.

4-WIRE CASING CTS WITH 6 ANODES (4 / CP-2)
SCALE: NTS

GENERAL NOTE:
ENCASE BURIED DUCTILE IRON PIPE AND FITTINGS WITH POLYETHYLENE ENCASEMENT PER ANSI/AWWWA C10S.

REGISTERED PROFESSIONAL ENGINEER RONALD Z. HODGMAN CR 1139 Exp. 3/31/2017 CORROSION STATE OF CALIFORNIA

0	06-03-15	ISSUED FOR REVIEW	MT	RH	RH		
NO.	DATE	REVISION DESCRIPTION	DRAWN BY	CHECKED BY	DESIGNED BY	APPROVED BY	

TRIDENT ENVIRONMENTAL & ENGINEERING, INC. — ANTIOCH, CALIFORNIA

SHEET NAME	CP-2
PROJECT NO.	15-042
DATE DRAWN	6/02/2015
DRAWN BY	MT
DESIGNED BY	RH
SCALE	NTS
DRAWING NO.	2 OF 2
REV.	0

TRACY APARTMENTS
CATHODIC PROTECTION SYSTEM
UNDERGROUND WATER SERVICE
BRYON ROAD, TRACY, CA.

CITY OF TRACY

APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER OF THE RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN, IF DURING THE COURSE OF CONSTRUCTION OF THE IMPROVEMENTS PUBLIC INTEREST REQUIRES MODIFICATIONS OR A DEPARTURE FROM THE SPECIFICATIONS AND DETAILS OF THE CITY OF TRACY ON THESE PLANS, THE CITY ENGINEER SHALL HAVE AUTHORITY TO REQUIRE SUCH MODIFICATIONS OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE AT NO COST TO THE CITY. APPROVED AS TO DESIGN ONLY BASED ON THE INFORMATION SUBMITTED HEREON. APPROVED FOR THE CITY OF TRACY.

KULDEEP SHARMA — CITY ENGINEER — DATE:

CATHODIC PROTECTION SYSTEM

COUNTY SUBMITTAL 6/29/2015

SYMBOL	DATE	REVISIONS DESCRIPTION	APPROVED

DESIGNED BY E.Y.S.
DRAWN BY N.L.H.
CHECKED BY C.R.M.
SCALE AS SHOWN

IMPROVEMENT PLAN BYRON ROAD WATER LINE

TRACY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER DAVID T. SARTEDDITTE No. C65112 CIVIL STATE OF CALIFORNIA

SHEET C6 OF 8 SHEETS

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