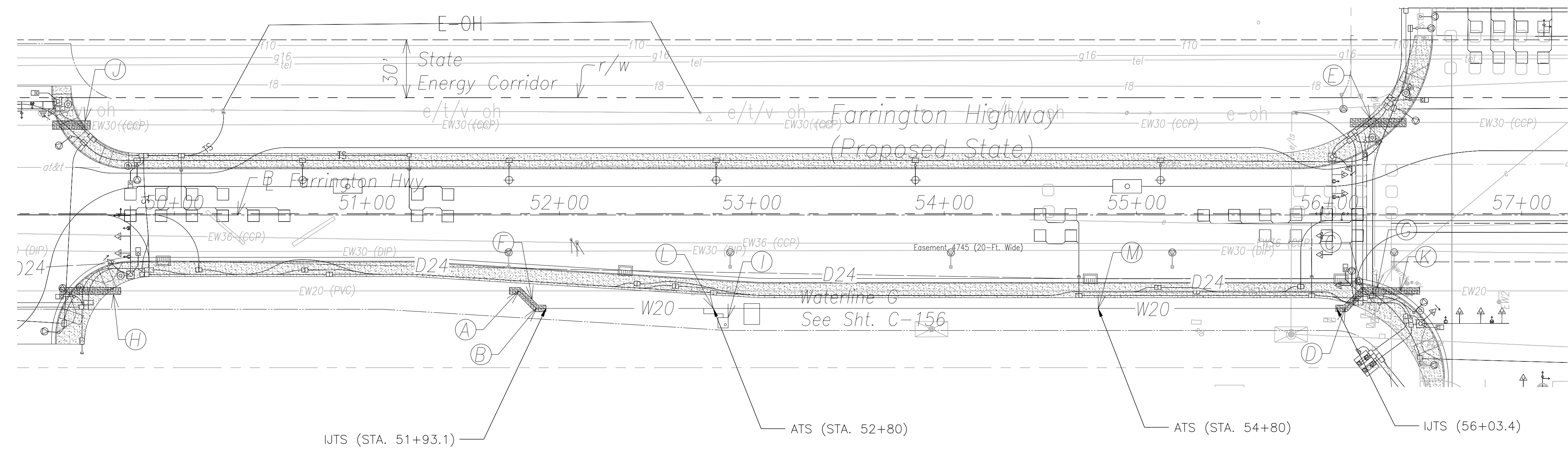


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	251S-1	767

TEST STATION SCHEDULE							
NO.	PIPELINE/STREET NAME	STATION	TEST STATION TYPE	NUMBER OF ANODES	TYPE OF ANODES	NOTES	REFERENCE DETAILS
1	W20	51+93.1	IJTS	N/A	N/A	INSULATING JOINT BEFORE RCJ	3/CP-2, B/CP/2, 3/CP-3
2	W20	52+80.0	ATS	4	HIGH-POTENTIAL MAGNESIUM (60 LB)		1/CP-2, A/CP-2, 1/CP-3
3	W20	54+80.0	ATS	4	HIGH-POTENTIAL MAGNESIUM (60 LB)		1/CP-2, A/CP-2, 1/CP-3
4	W20	56+03.4	IJTS	N/A	N/A	INSULATING JOINT BEFORE RCJ	3/CP-2, B/CP/2, 3/CP-3

NOTES:

- TEST STATIONS TO BE LOCATED ON THE FAR EDGE OF THE ROW AND IN AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, SUCH AS SIDEWALKS.
- WHEN AVAILABLE, TEST STATIONS TO BE LOCATED BEHIND NEAREST CURB AND WITHIN 5 FT OF FIRE HYDRANT.
- IJTS STATIONING TAKEN FROM INSULATING JOINT.
- ELECTRICALLY ISOLATE ALL METALLIC LATERAL PIPING (INCLUDING ARVs) FROM PROJECT PIPELINES. IF METALLIC LATERAL PIPING IS NOT PROPERLY ISOLATED FROM THE PROJECT PIPELINES, THEN THE CATHODIC PROTECTION SYSTEM COULD BE PREMATURELY DEPLETED.
- THE CATHODIC PROTECTION SYSTEM DESIGN IS DEPENDENT ON THE DIP HAVING A BONDED DIELECTRIC COATING PER THE BWS WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS. IF THE DIP DOES NOT HAVE A BONDED DIELECTRIC COATING, THEN THE CATHODIC PROTECTION SYSTEM COULD BE PREMATURELY DEPLETED.



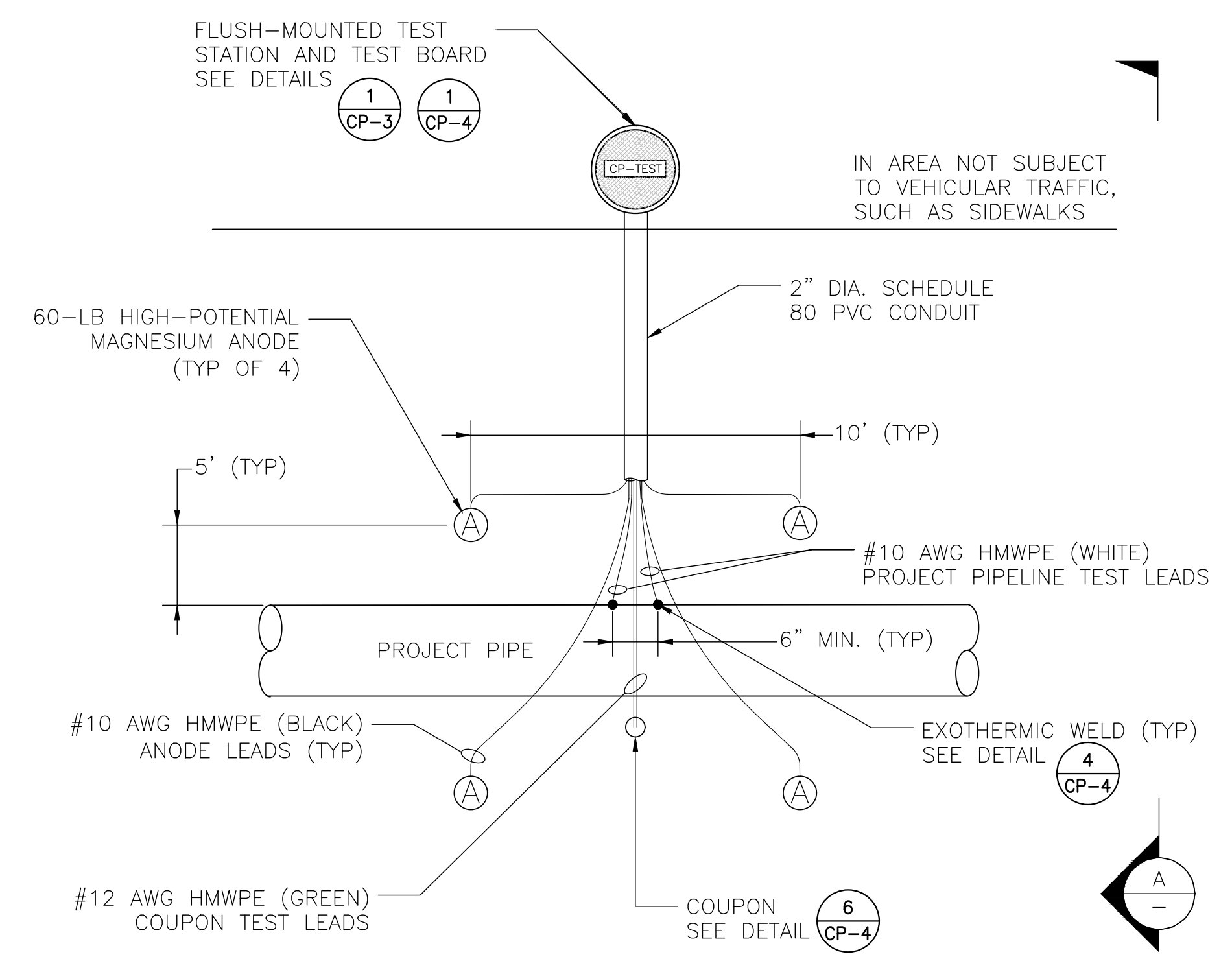
ORIGINAL PLAN	DATE
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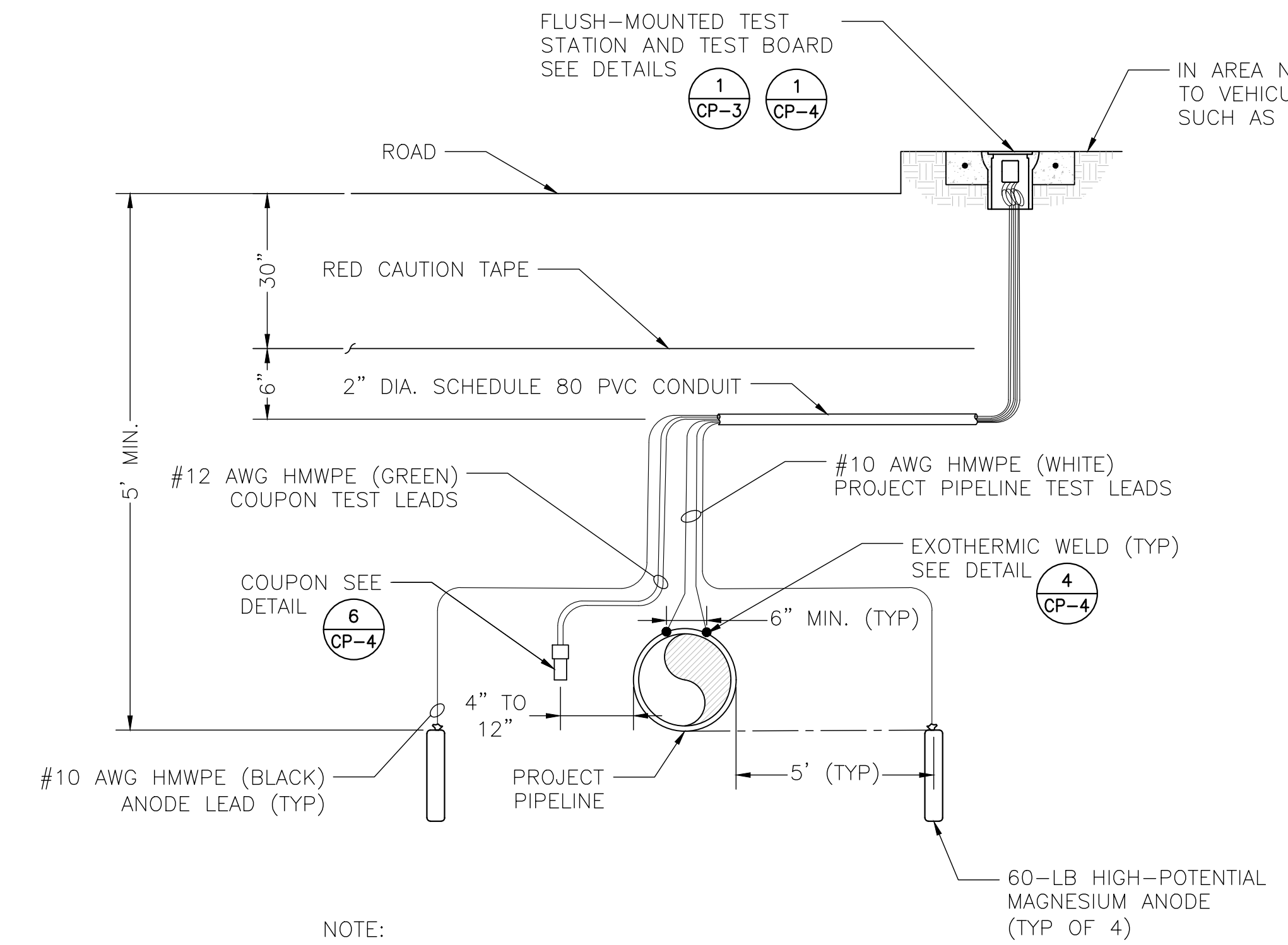
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 SIGNATURE _____ DATE: April 30, 2022
 EXPIRATION DATE OF THE LICENSE _____

06/08/22	New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CATHODIC PROTECTION TEST STATION SCHEDULE	
FARRINGTON HIGHWAY WIDENING Kapolei Golf Course Road to Fort Weaver Road Project No. 7101A-01-20	
Scale: As Shown	Date: January 2022
SHEET No. CP-1 OF 767 SHEETS	

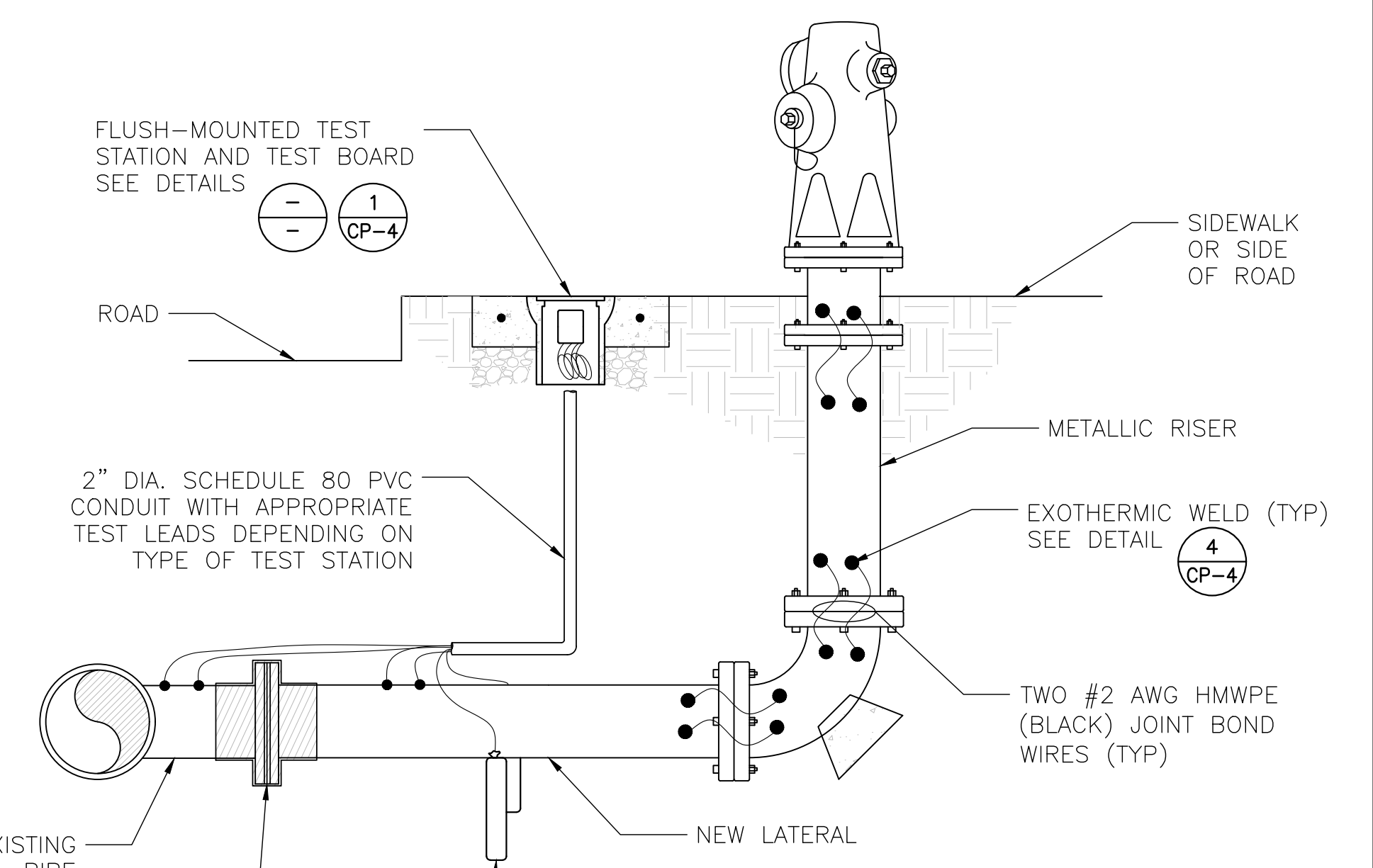
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	251S-2	767



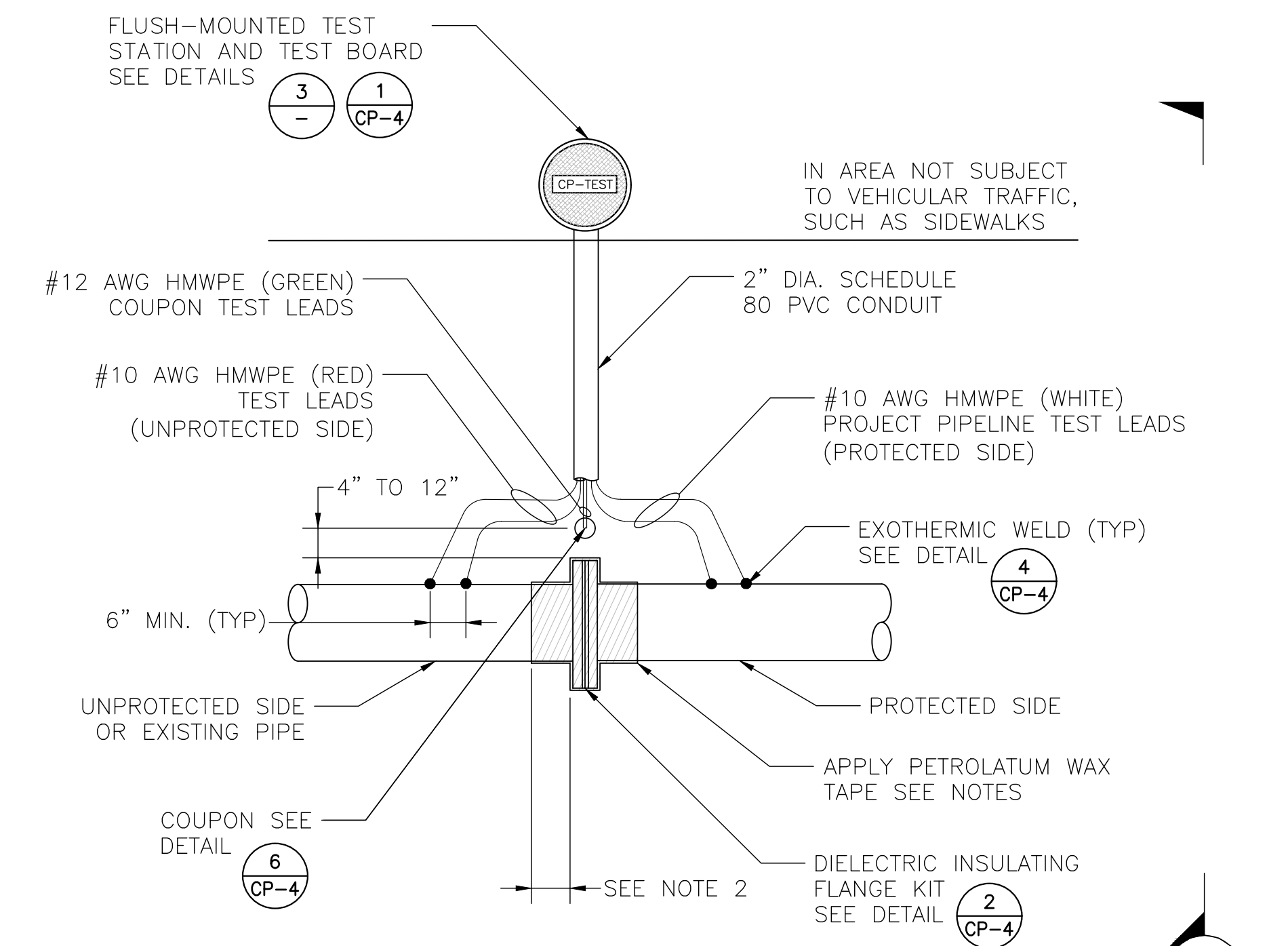
ANODE TEST STATION (ATS)
PLAN VIEW
SCALE: NTS



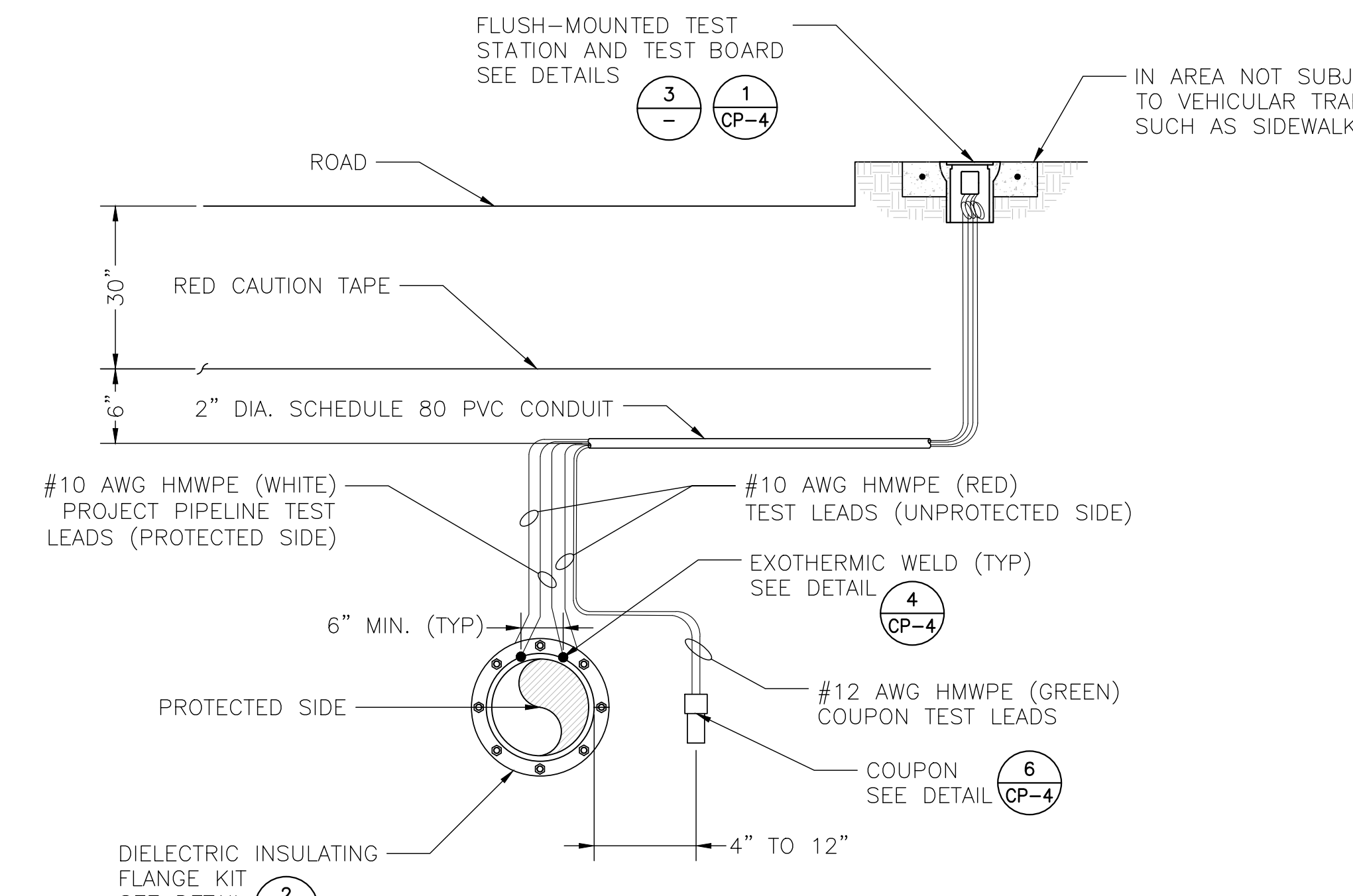
ANODE TEST STATION (ATS)
SECTION VIEW
SCALE: NTS



INSULATING JOINT ANODE TEST STATION (IJATS)
SCALE: NTS



INSULATING JOINT TEST STATION (IJTS)
PLAN VIEW
SCALE: NTS



INSULATING JOINT TEST STATION (IJTS)
SECTION VIEW
SCALE: NTS

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
NOTED BY	_____
APPROVED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

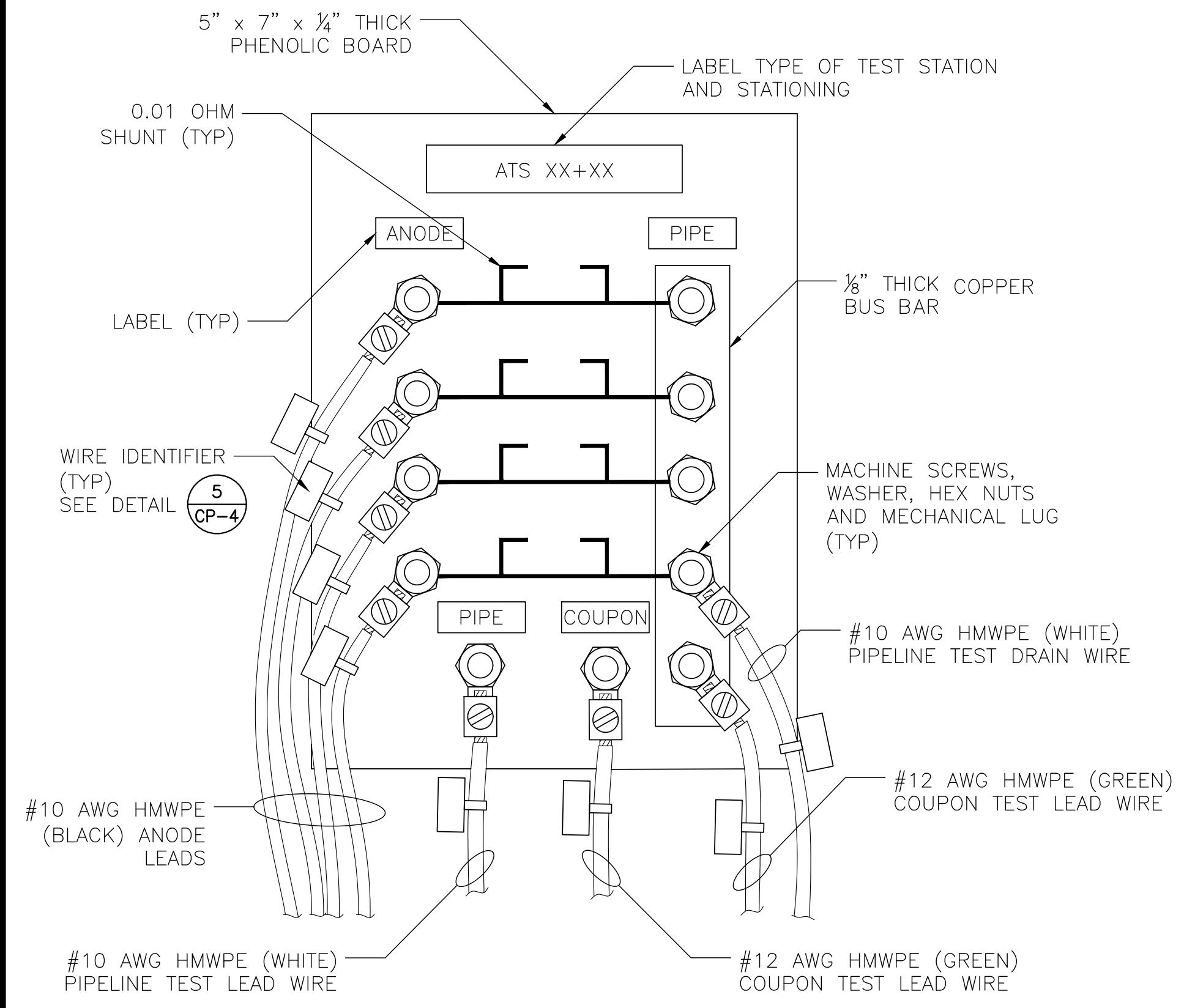
- NOTES:
1. REINFORCED CONCRETE JACKETING NOT SHOWN FOR CLARITY.
 2. COAT THE EXTERIOR OF THE INSULATING FLANGE WITH PETROLATUM WAX TAPE FOR A MINIMUM OF 3 FEET BEYOND THE GASKET WITH A MINIMUM OF 6 INCHES OF OVERLAP WITH THE FACTORY-APPLIED COATING ON THE PIPELINE.

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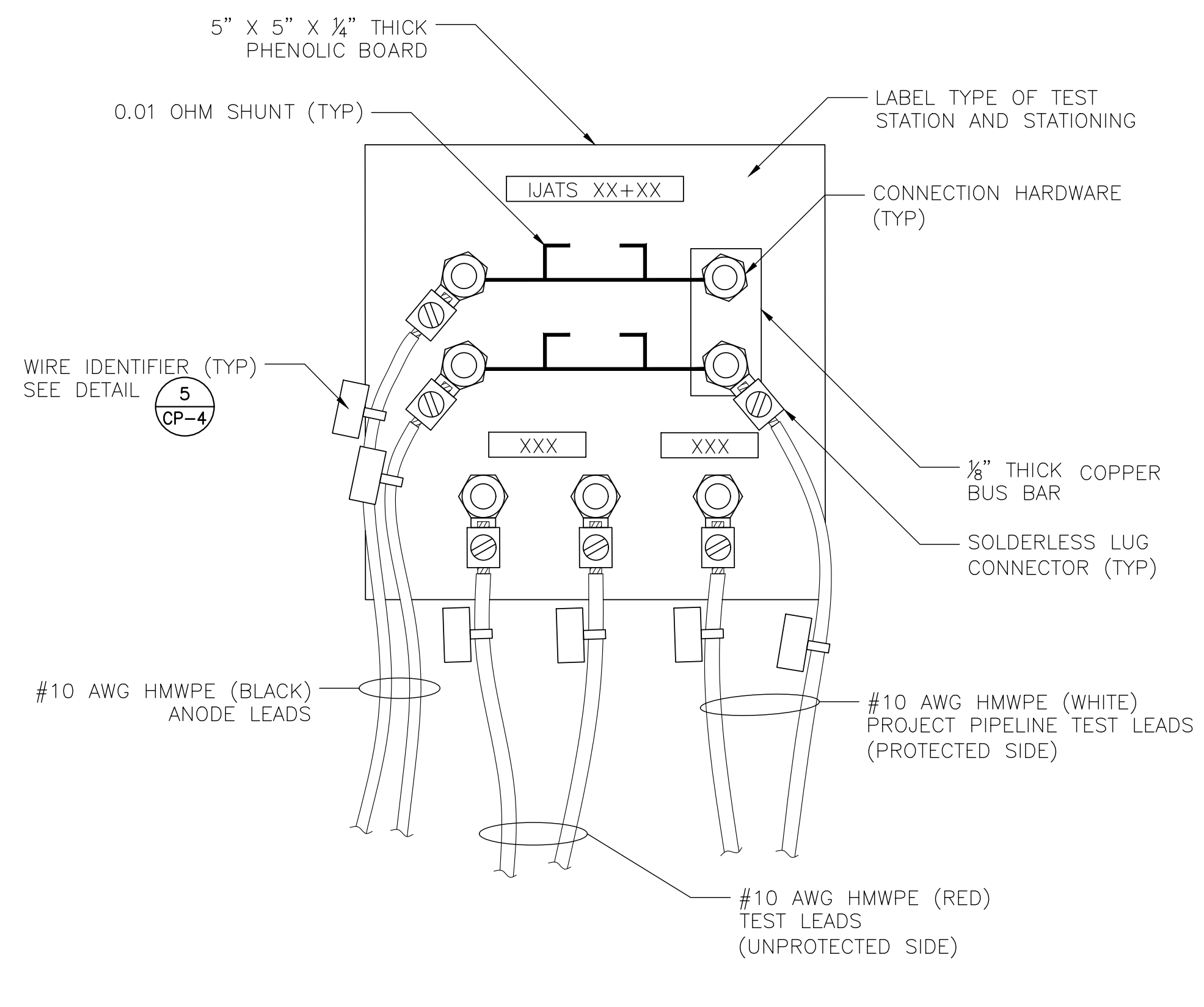
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06/08/22	New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CATHODIC PROTECTION DETAILS	
FARRINGTON HIGHWAY WIDENING Kapolei Golf Course Road to Fort Weaver Road Project No. 7101A-01-20	
Scale: As Shown	Date: January 2022
SHEET No. CP-2 OF 767 SHEETS	

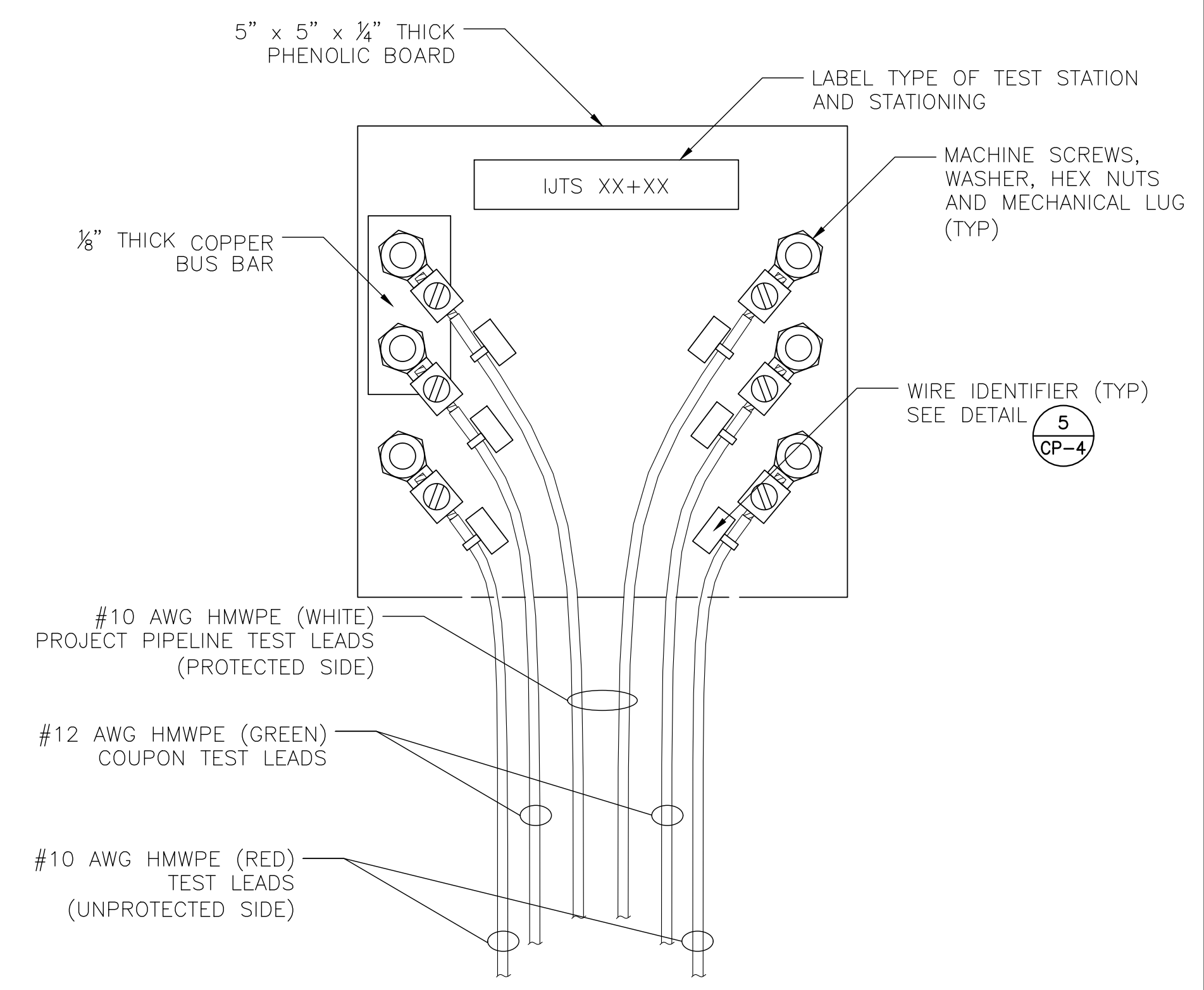
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	251S-3	767



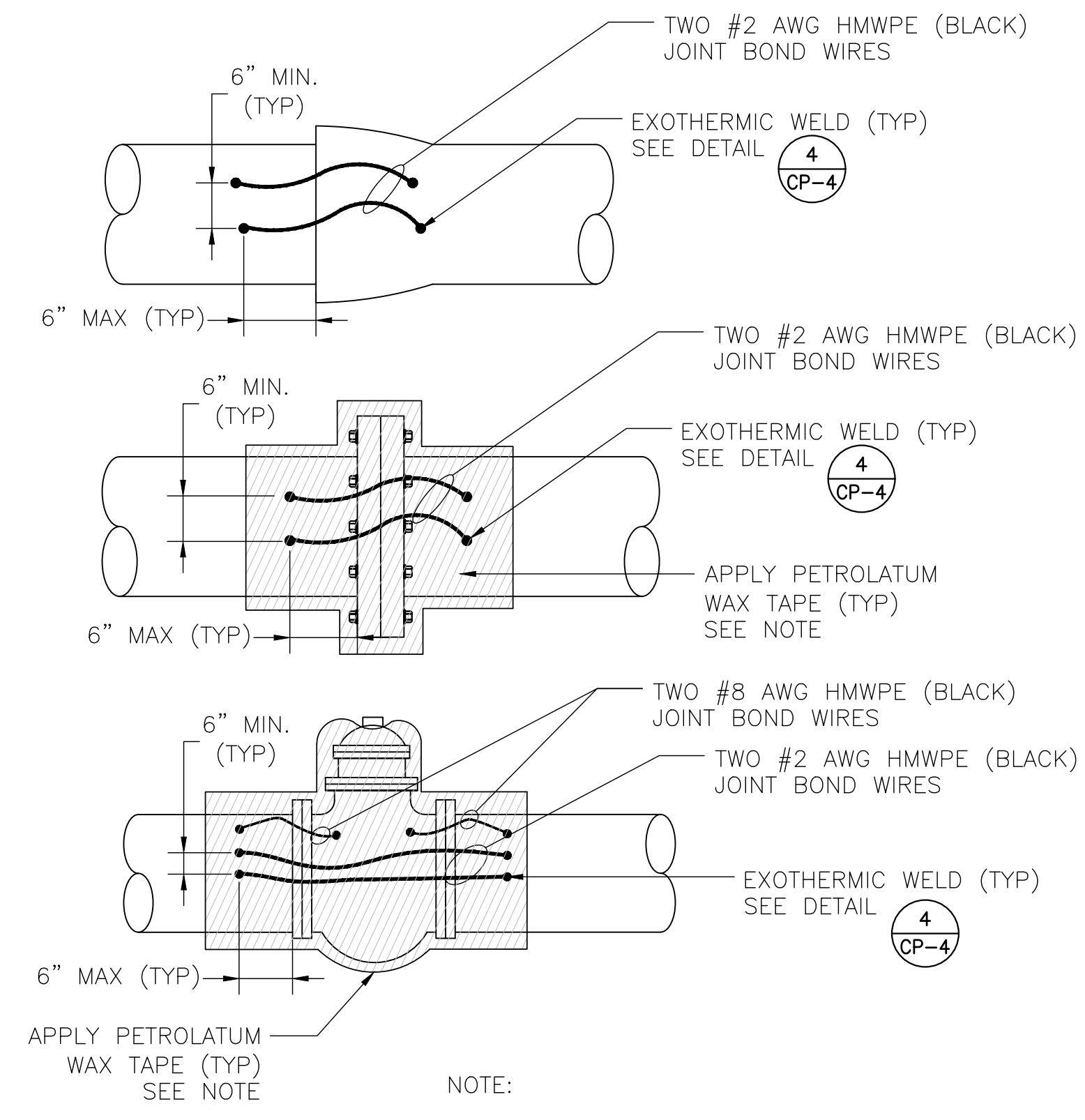
ANODE TEST STATION (ATS) TERMINAL BOARD DETAIL
SCALE: NTS



INSULATING JOINT ANODE TEST STATION (IJATS) TERMINAL BOARD DETAIL
SCALE: NTS

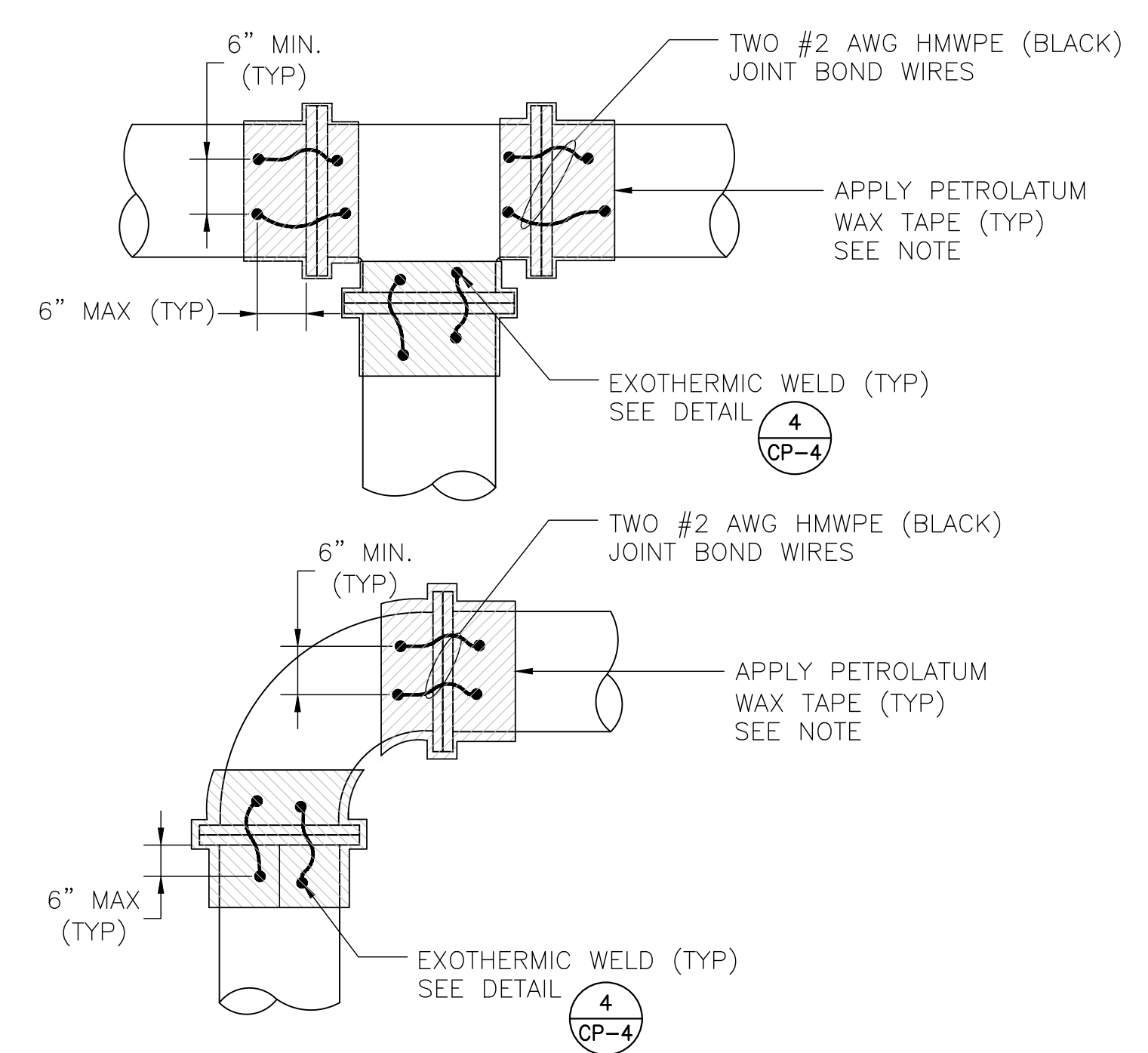


INSULATING JOINT TEST STATION (IJTS) TERMINAL BOARD DETAIL
SCALE: NTS



NOTE:
COAT THE EXTERIOR OF THE JOINT WITH PETROLATUM WAX TAPE FOR A MINIMUM OF 3 FEET BEYOND THE JOINT WITH A MINIMUM OF 6 INCHES OF OVERLAP WITH THE FACTORY-APPLIED COATING ON THE PIPELINE.

PIPE JOINT BONDING DETAILS FOR NON-INSULATED JOINTS
SCALE: NTS



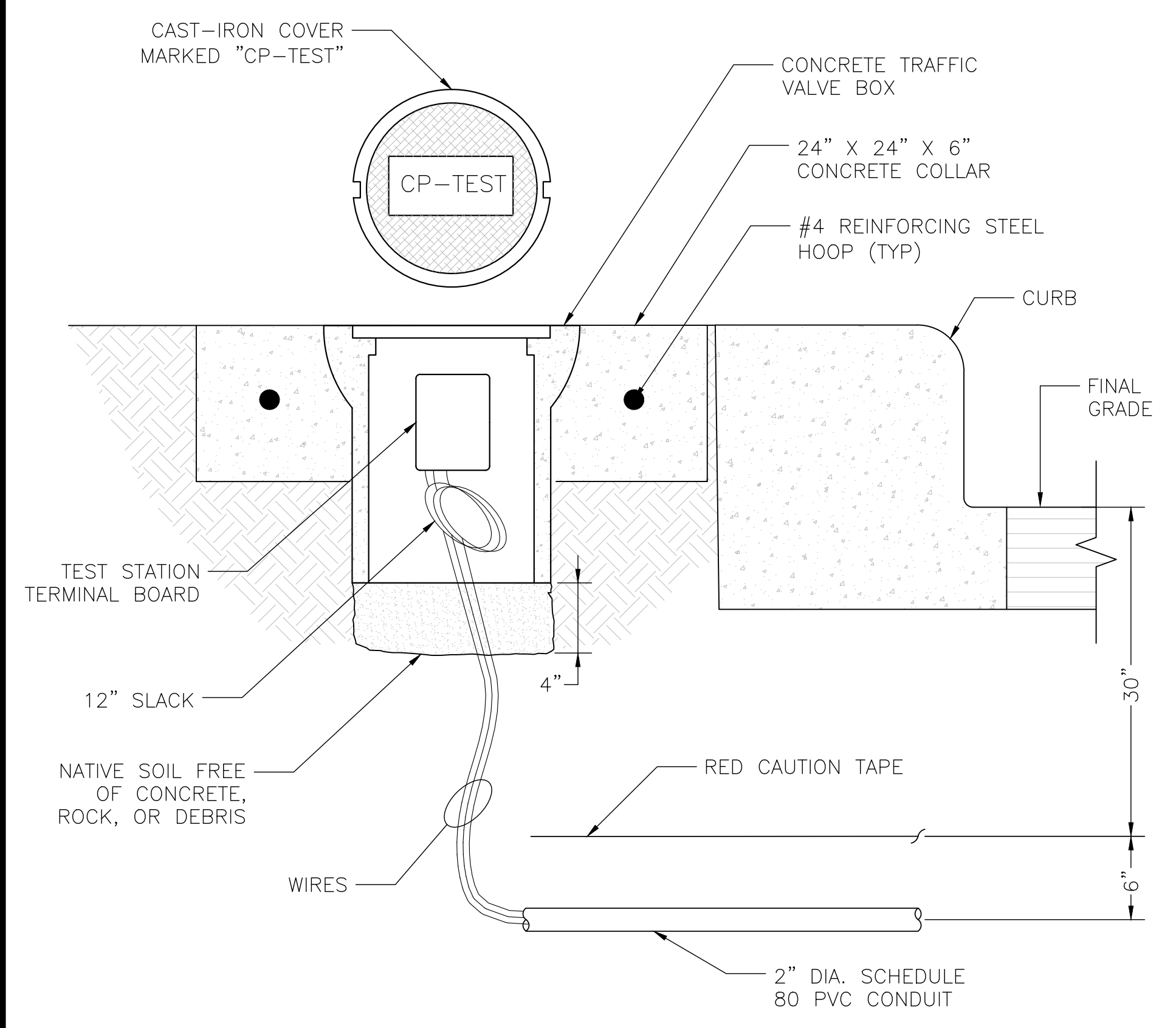
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SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
APPROVED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

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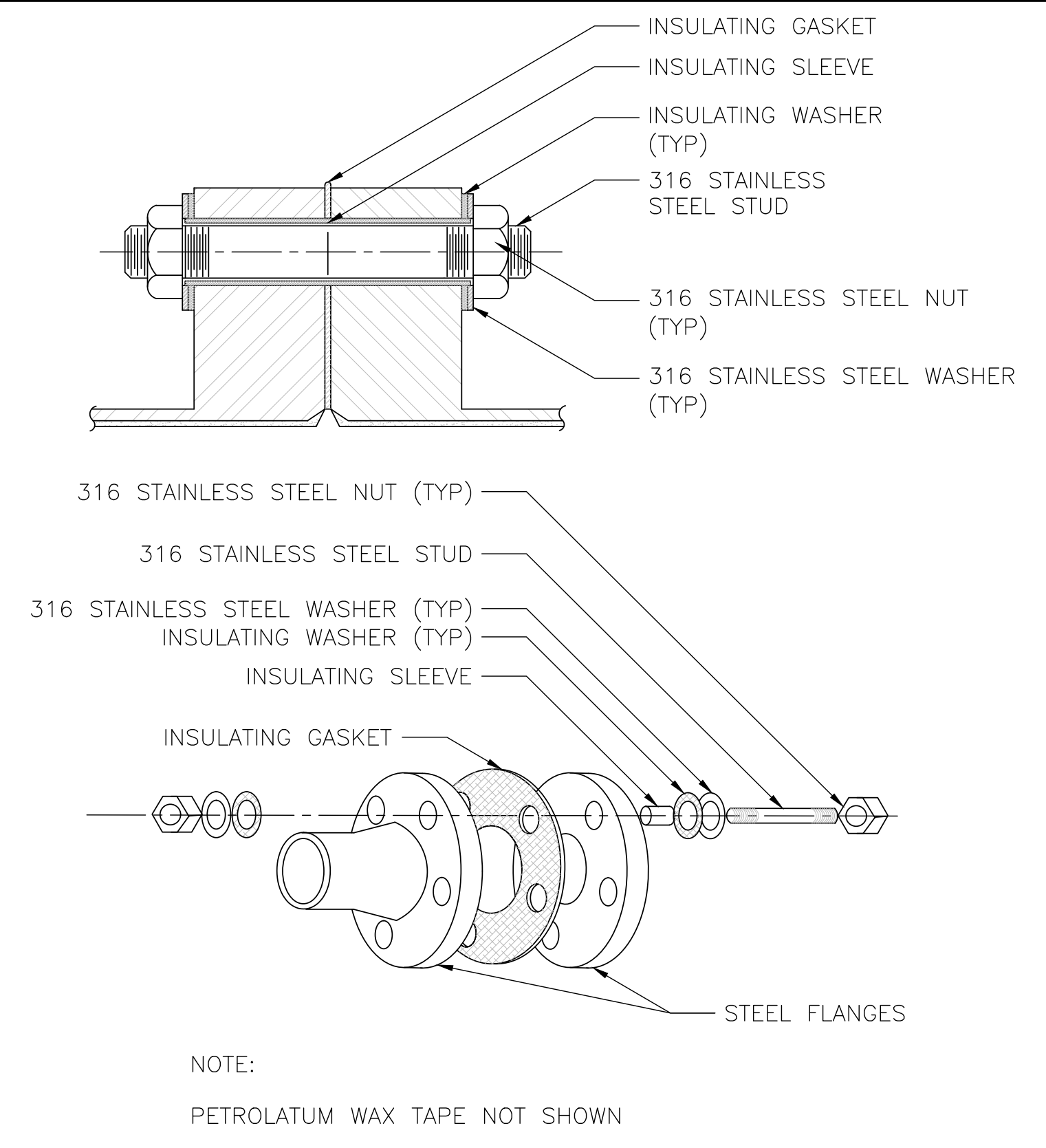
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06/08/22	New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CATHODIC PROTECTION DETAILS	
FARRINGTON HIGHWAY WIDENING Kapolei Golf Course Road to Fort Weaver Road Project No. 7101A-01-20	
Scale: As Shown	Date: January 2022
SHEET No. CP-3 OF 767 SHEETS	

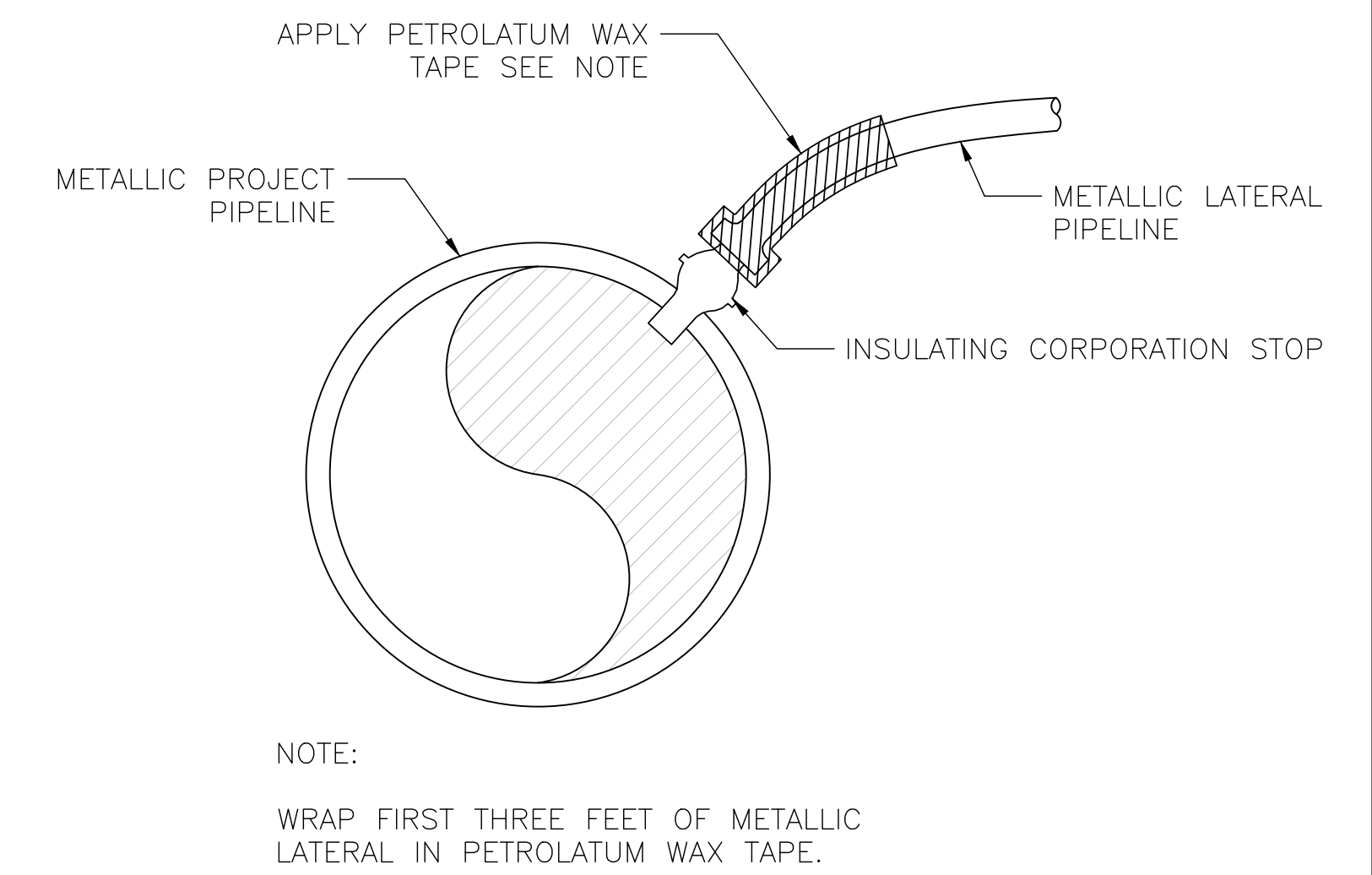
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-20	2021	251S-4	767



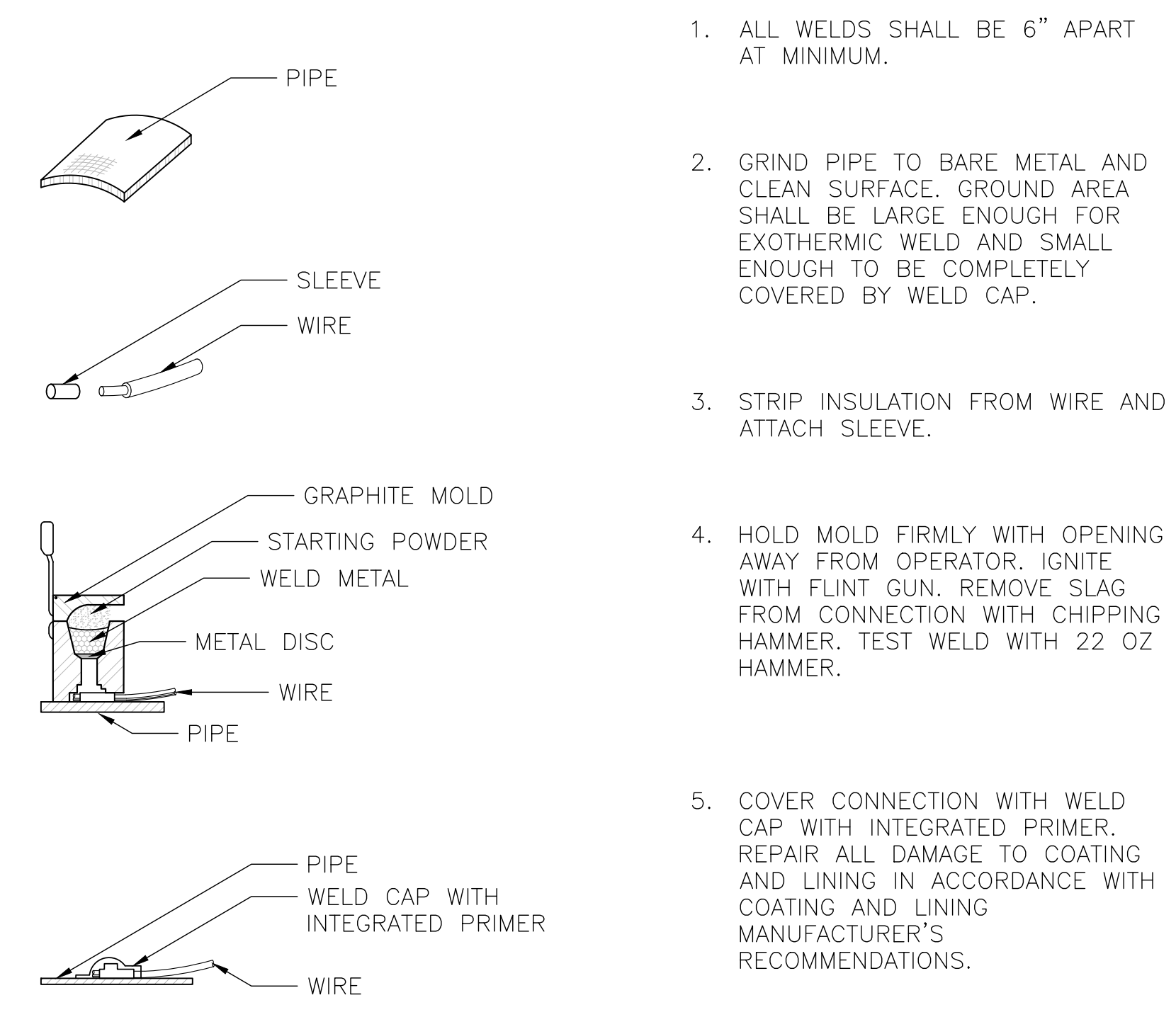
FLUSH-MOUNTED TEST STATION DETAIL ①
SCALE: NTS



DIELECTRIC INSULATING FLANGE KIT DETAIL WITH SECTION VIEW ②
SCALE: NTS

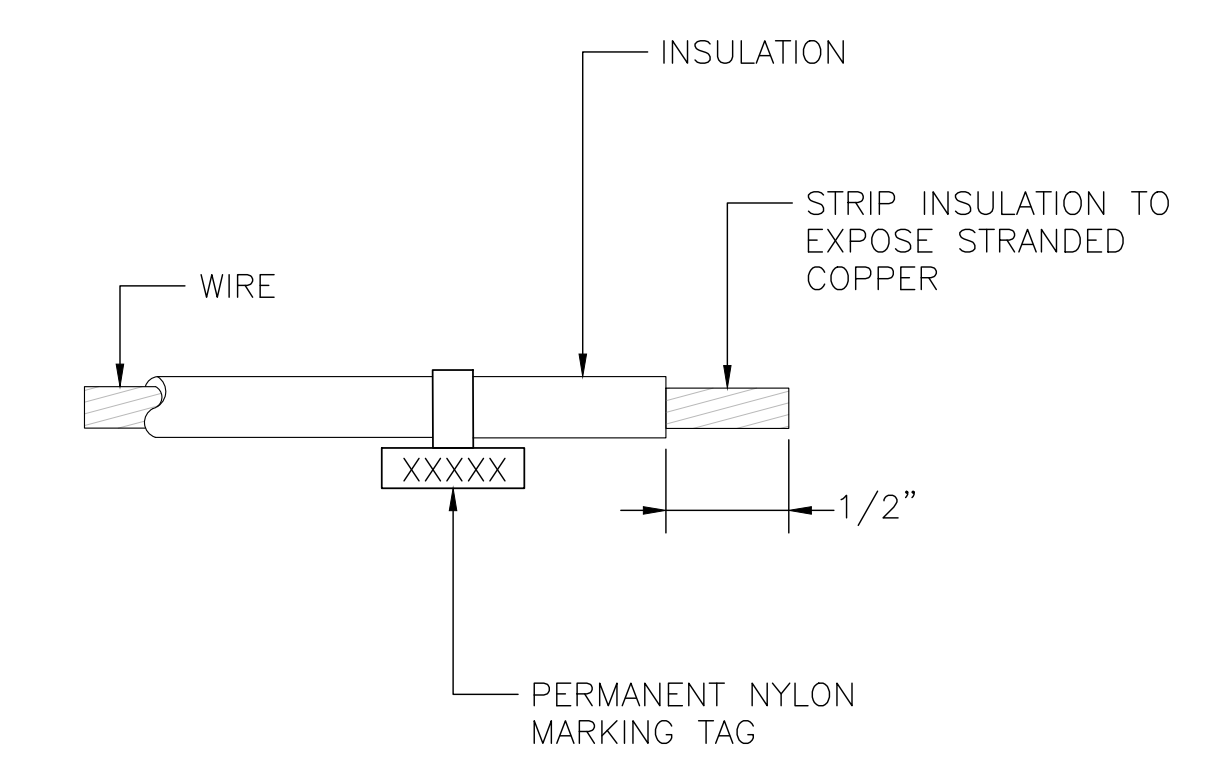


LATERAL CONNECTION DETAIL ③
SCALE: NTS



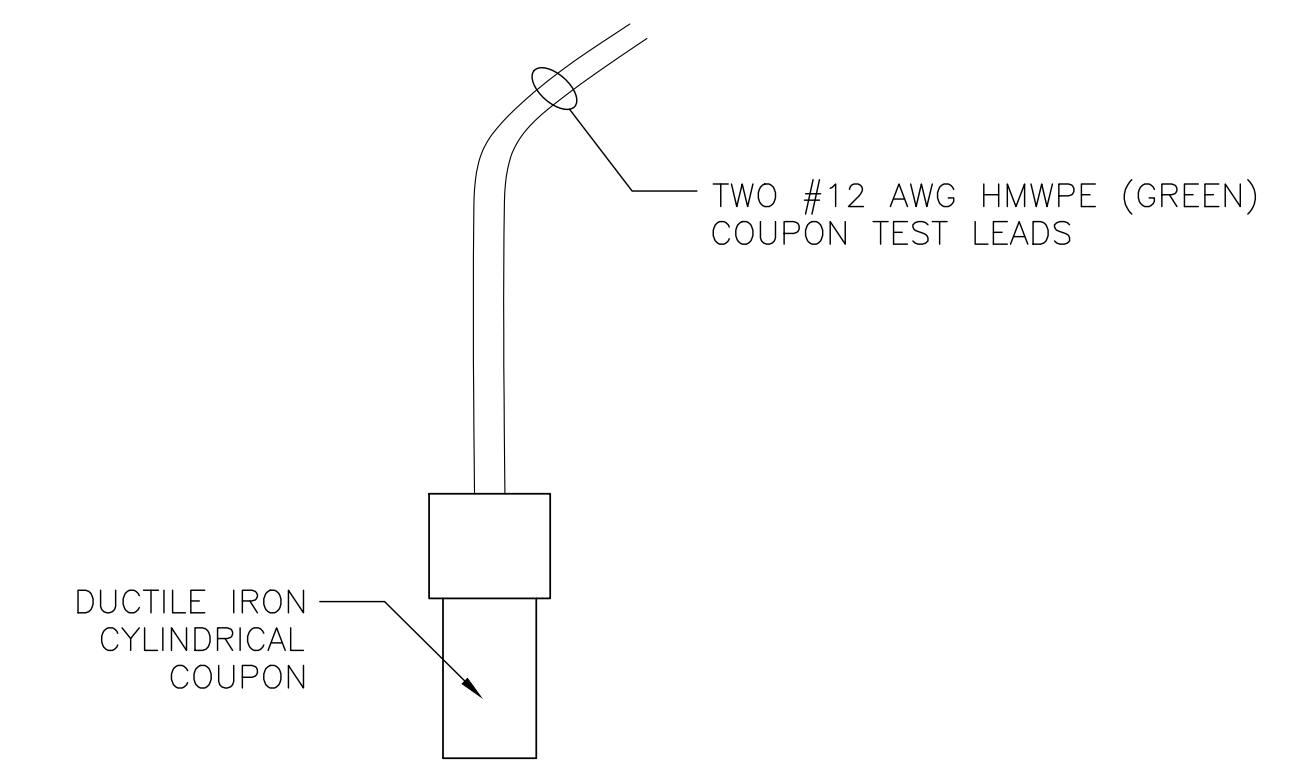
1. ALL WELDS SHALL BE 6" APART AT MINIMUM.
2. GRIND PIPE TO BARE METAL AND CLEAN SURFACE. GROUND AREA SHALL BE LARGE ENOUGH FOR EXOTHERMIC WELD AND SMALL ENOUGH TO BE COMPLETELY COVERED BY WELD CAP.
3. STRIP INSULATION FROM WIRE AND ATTACH SLEEVE.
4. HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR. IGNITE WITH FLINT GUN. REMOVE SLAG FROM CONNECTION WITH CHIPPING HAMMER. TEST WELD WITH 22 OZ HAMMER.
5. COVER CONNECTION WITH WELD CAP WITH INTEGRATED PRIMER. REPAIR ALL DAMAGE TO COATING AND LINING IN ACCORDANCE WITH COATING AND LINING MANUFACTURER'S RECOMMENDATIONS.

EXOTHERMIC WELD DETAIL FOR DUCTILE IRON PIPE ④
SCALE: NTS



WIRE IDENTIFIER SCHEDULE	
STRUCTURE	LABEL
XX" DIP WATER	XX" DI
GALVANIC ANODE	ANODE
COUPON	COUP

WIRE IDENTIFIER DETAIL ⑤
SCALE: NTS



COUPON DETAIL ⑥
SCALE: NTS

DATE	_____
SURVEY PLOTTED BY	_____
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CHECKED BY	_____
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NOTE BOOK	_____
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06/08/22	New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CATHODIC PROTECTION DETAILS	
FARRINGTON HIGHWAY WIDENING Kapolei Golf Course Road to Fort Weaver Road Project No. 7101A-01-20	
Scale: As Shown	Date: January 2022
SHEET No. CP-4 OF 767 SHEETS	