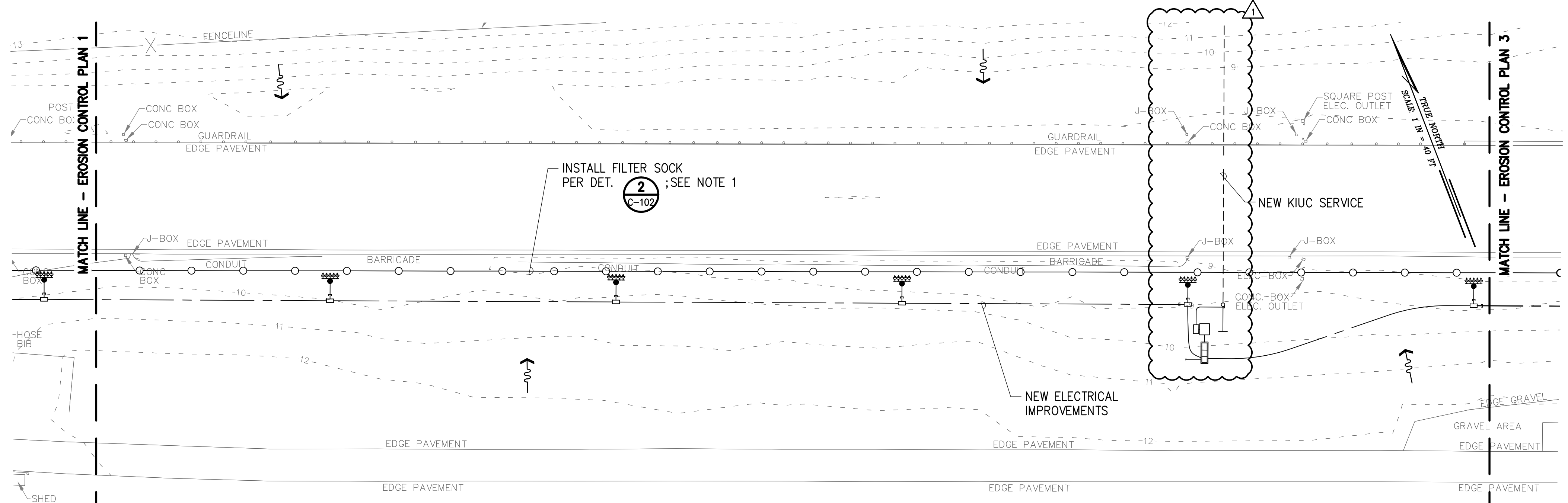
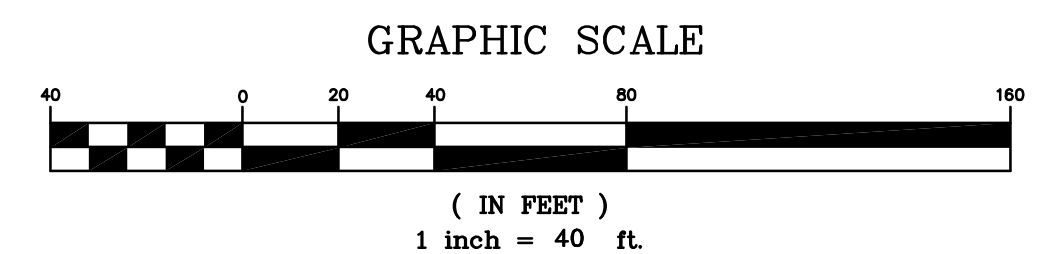


EROSION CONTROL PLAN 1
SCALE: 1"=40'

- LEGEND**
- FILTER SOCK
 - CONCRETE WASHDOWN BIN
 - CONSTRUCTION ACCESS
 - FLOW DIRECTION

- NOTES:**
- THE CONTRACTOR SHALL INSTALL TEMPORARY FILTER SOCKS AS SHOWN ON PLAN AROUND THE AREA OF WORK AWARDED/ANTICIPATED AND AS DIRECTED BY THE ENGINEER.



EROSION CONTROL PLAN 2
SCALE: 1"=40'

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISED KIUC, ELECTRICAL, AND BMP LOCATION		5-11-16	

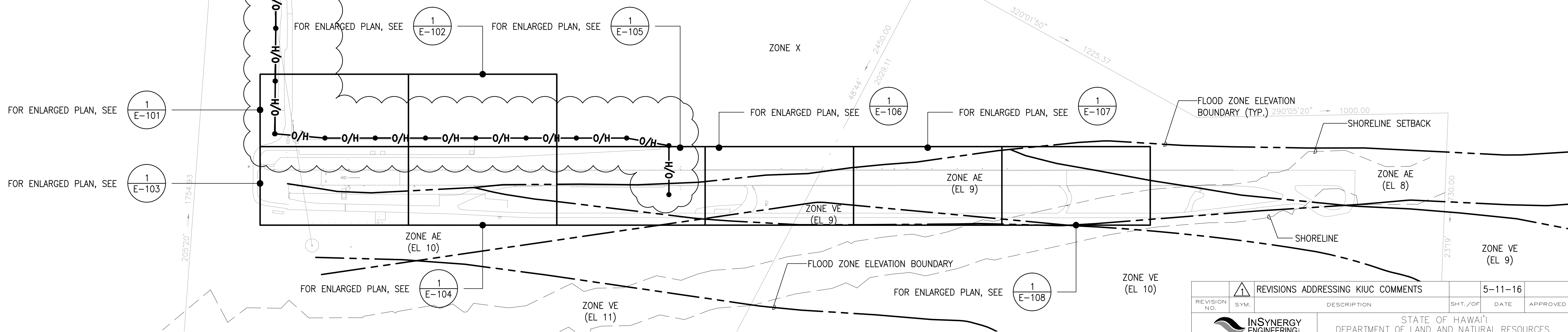
	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	MĀNĀ DRAG RACING STRIP IMPROVEMENTS PAHSE 2 ELECTRICAL UPGRADES KAUAI, HAWAII	
EROSION CONTROL PLAN 1 & 2		
DESIGNED: JN	SUBMITTED:	
DRAWN: JN	DATE: APRIL 2016	
CHECKED: KHK	SCALE: AS SHOWN	
APPROVED:	DRAWING NO.	
CHIEF ENGINEER	C-101	

L:\1. PROJECTS\63 - DLNR\16307 - Mana Elect Imp\DRAWING\EROSION CONTROL.dwg - 5/13/2016 9:34 AM

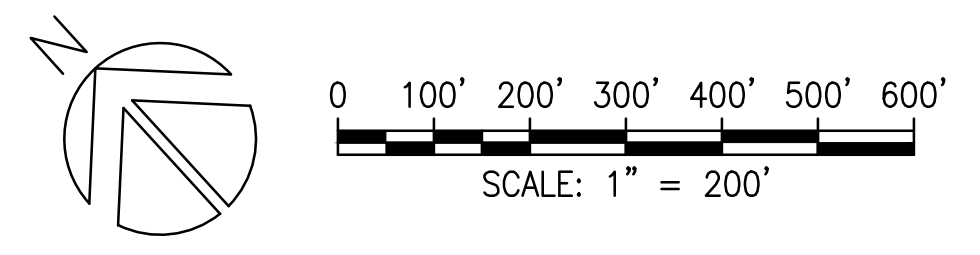
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OVERHEAD SERVICE POLES
(PROVIDED BY KIUC),
TYPICAL
INCOMING KIUC SERVICE WITH
10'-0" WIDE EASEMENT

KAUMUALI'I HIGHWAY



1 OVERALL SITE PLAN
E-100 SCALE: 1"=200'-0"



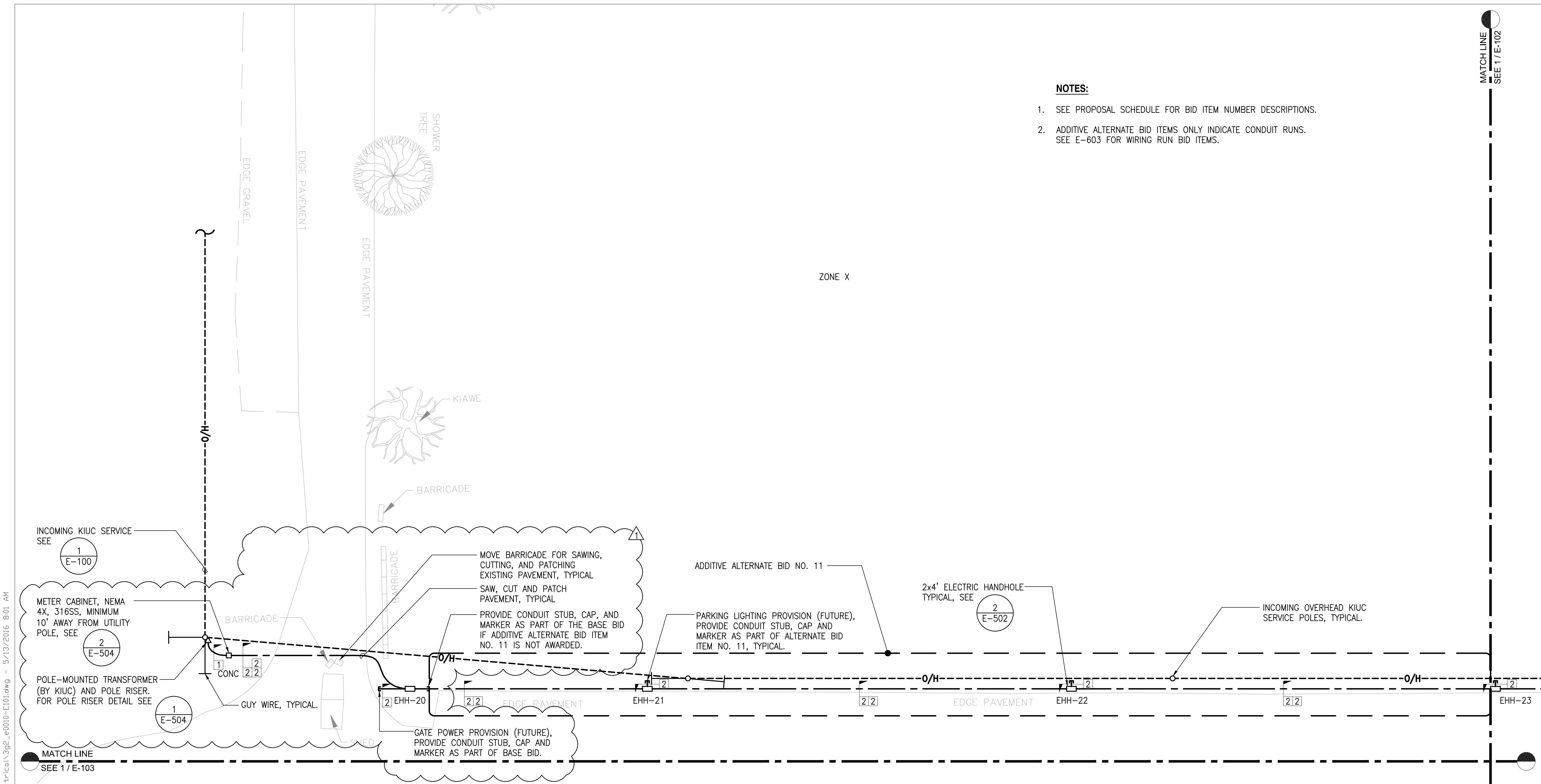
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	

 MECHANICAL • ELECTRICAL • FIRE PROTECTION 2000 PINE STREET SUITE 200, HONOLULU, HAWAII 96813 Phone: (808) 521-1272 Fax: (808) 521-0880		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUA'I, HAWAII	
OVERALL SITE PLAN			
DESIGNED: KH	SUBMITTED:		
DRAWN: KH	DATE: APRIL 2016		
CHECKED: GM	SCALE: AS SHOWN		
APPROVED:	DATE:	DRAWING NO. E-100	
CHIEF ENGINEER			

MATCH LINE
SEE 1/E-102

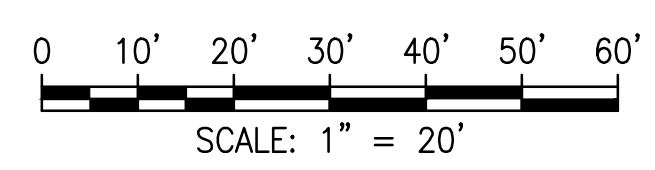
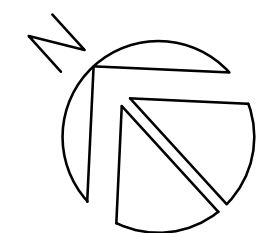
NOTES:

1. SEE PROPOSAL SCHEDULE FOR BID ITEM NUMBER DESCRIPTIONS.
2. ADDITIVE ALTERNATE BID ITEMS ONLY INDICATE CONDUIT RUNS. SEE E-603 FOR WIRING RUN BID ITEMS.



Z:\#Projects (numbered)\2013\13072\Drawing Files\Electrical\3g2_e010-E101.dwg - 5/13/2016 8:01 AM

1 ENLARGED ELECTRICAL PLAN - 1
SCALE: 1" = 20'-0"



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	

		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUĀI, HAWAII	
ENLARGED ELECTRICAL PLAN - 1			
DESIGNED: KH	SUBMITTED:		
DRAWN: KH	DATE: APRIL 2016		
CHECKED: GM	SCALE: AS SHOWN		
APPROVED:	DATE:	DRAWING NO. E-101	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		CHIEF ENGINEER _____ DATE _____	

MATCH LINE
SEE 1/E-104

MATCH LINE
SEE 1/E-106

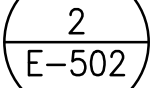
NOTES:

1. SEE PROPOSAL SCHEDULE FOR BID ITEM NUMBER DESCRIPTIONS.
2. ADDITIVE ALTERNATE BID ITEMS ONLY INDICATE CONDUIT RUNS. SEE E-603 FOR WIRING RUN BID ITEMS.

ZONE X

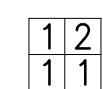
FOR ENLARGED PLAN, SEE 

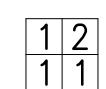
FLOOD ZONE ELEVATION BOUNDARY

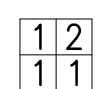
2'x4' ELECTRIC HANDHOLE, TYPICAL. SEE 

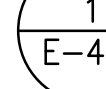
ADDITIVE ALTERNATE BID ITEM NO. 9

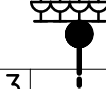
PROVIDE CONDUIT STUB, CAP, AND MARKER AS PART OF BASE BID IF ADDITIVE ALTERNATE BID ITEM NO. 9 IS NOT AWARDED.











PROVIDE CONDUIT STUB, CAP, AND MARKER AS PART OF ADDITIVE ALTERNATE BID ITEM NO. 1 IF ADDITIVE ALTERNATE BID ITEM NO. 9 IS NOT AWARDED, TYPICAL.

ADDITIVE ALTERNATE BID ITEM NO. 1

PROVIDE CONDUIT STUB, CAP, AND MARKER AS PART OF BASE BID IF ADDITIVE ALTERNATE BID ITEM NO. 1 IS NOT AWARDED.

SCOREBOARD PROVISION (FUTURE), PROVIDE CONDUIT STUB, CAP, AND MARKER AS PART OF BASE BID IF ADDITIVE ALTERNATE BID ITEM NO. 2 IS NOT AWARDED.

GUY WIRE.

SWITCHBOARD 4A

3'x5' HANDHOLE WITH 2-4" C (CONCRETE ENCASED) TO TRANSFORMER PAD

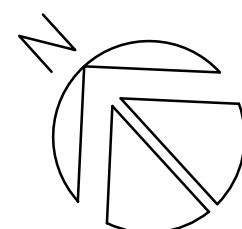
ZONE AE (EL 9)

ZONE AE (EL 10)

FLOOD ZONE ELEVATION BOUNDARY



ZONE VE (EL 10)

 **ENLARGED ELECTRICAL PLAN - 5**
SCALE: 1" = 20'-0"

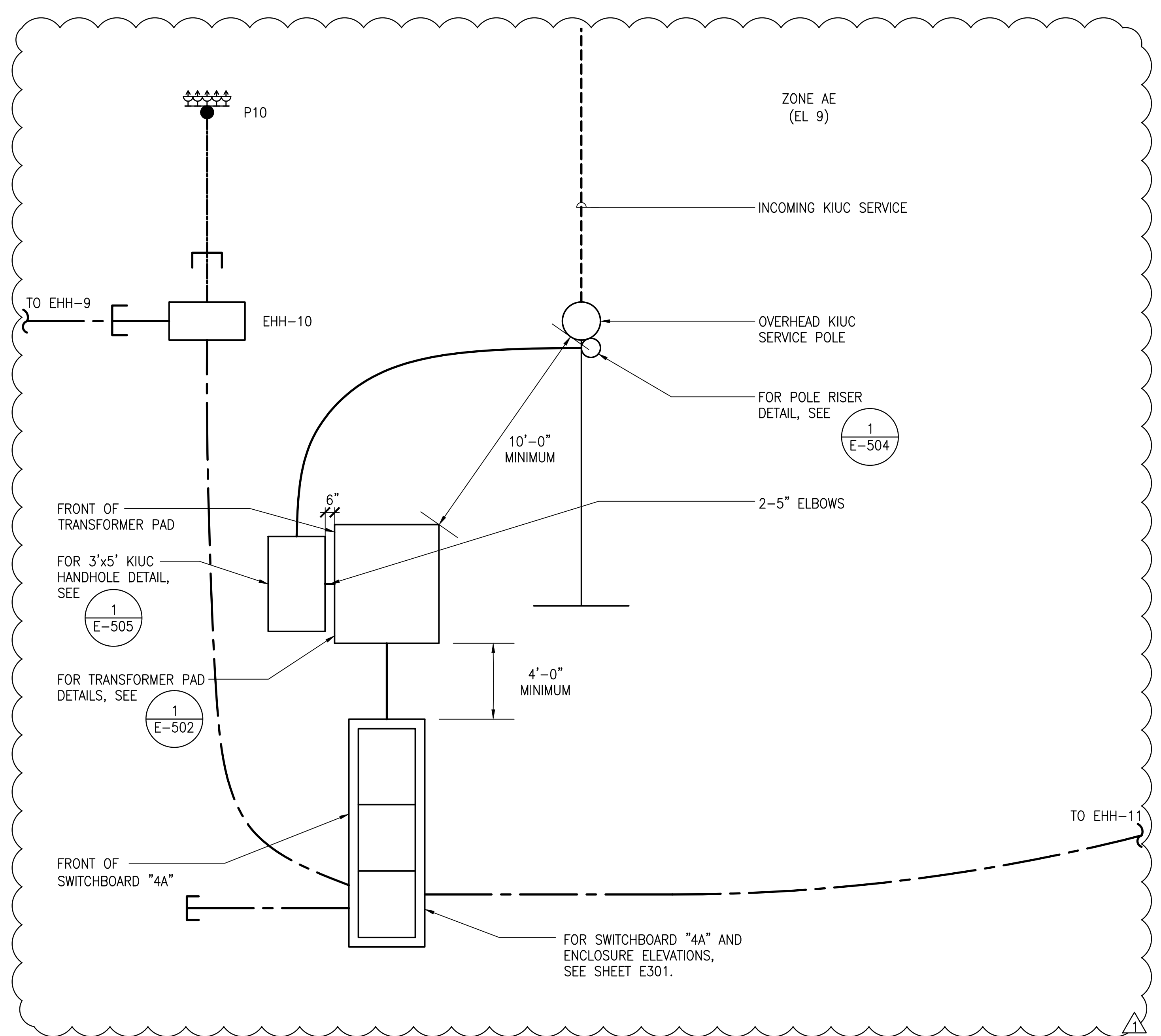


0 10' 20' 30' 40' 50' 60'
SCALE: 1" = 20'

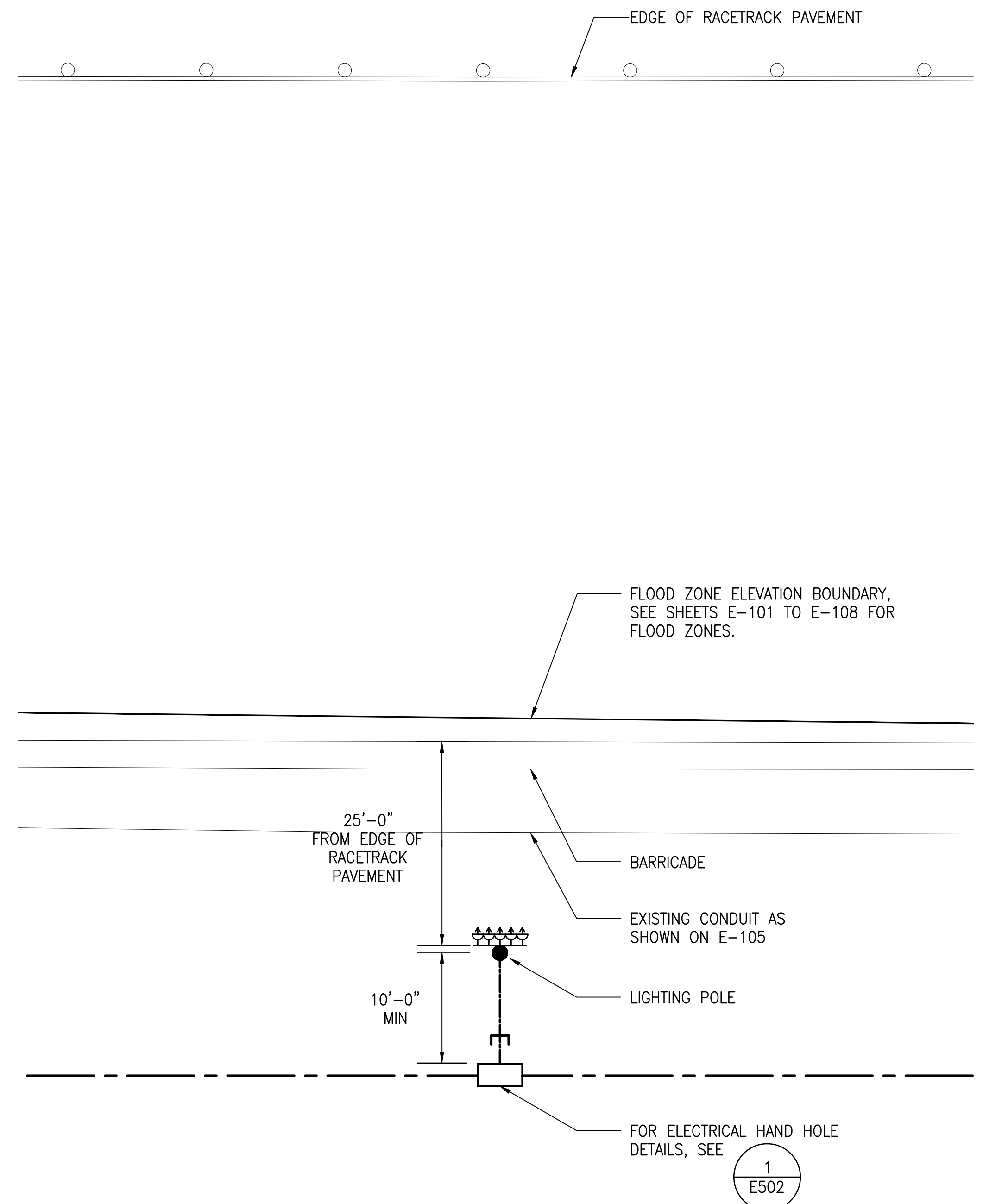
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS	5-11-16		

  EXP. 04-30-2018	STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
	MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUAI, HAWAII	
	ENLARGED ELECTRICAL PLAN - 5	
	DESIGNED: KH	SUBMITTED:
DRAWN: KH	DATE: APRIL 2016	
CHECKED: GM	SCALE: AS SHOWN	
APPROVED:	DRAWING NO. E-105	
CHIEF ENGINEER	DATE	

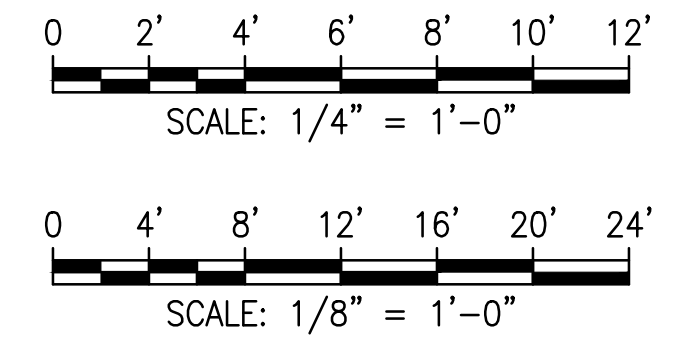
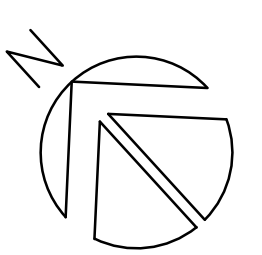
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1
E-401 **ELECTRICAL EQUIPMENT LAYOUT**
SCALE: 1/4" = 1'-0"



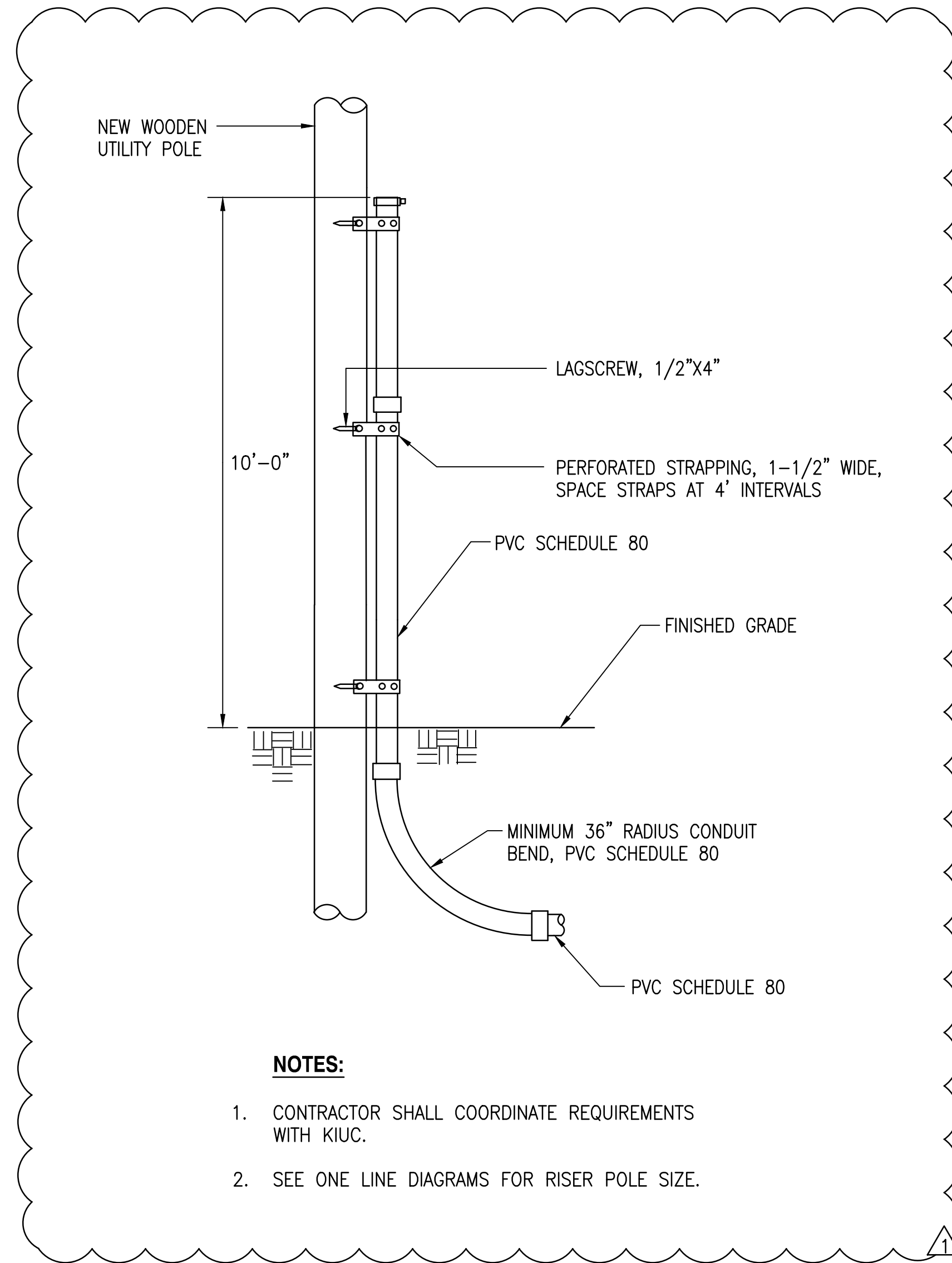
2
E-401 **ENLARGED TYPICAL LIGHT POLE LAYOUT**
SCALE: 1/8" = 1'-0"



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	

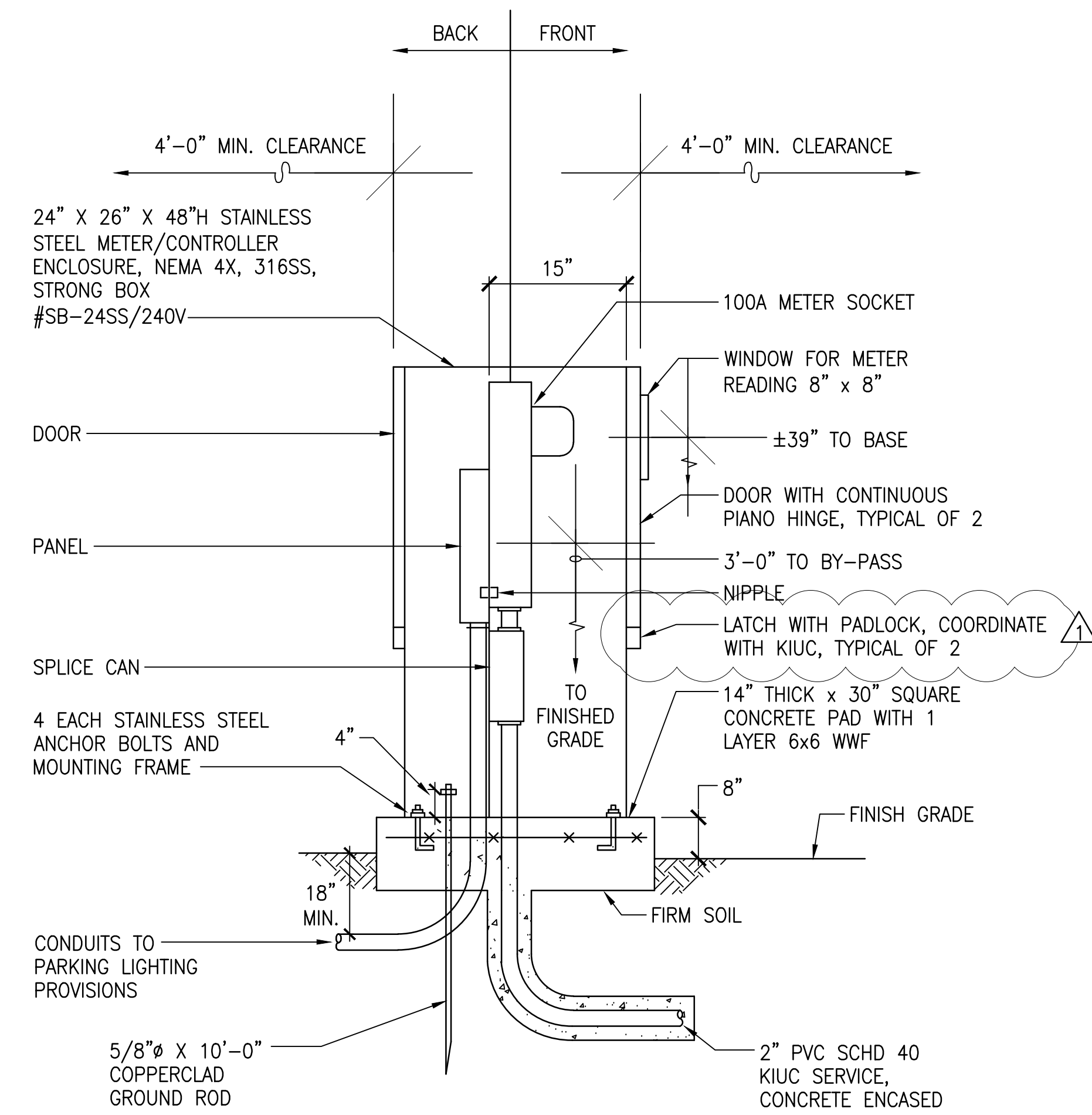
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUĀI, HAWAII	
ENLARGED ELECTRICAL PLANS			
DESIGNED: KH	SUBMITTED:		
DRAWN: KH	DATE: APRIL 2016		
CHECKED: GM	SCALE: AS SHOWN		
APPROVED:	DATE:	DRAWING NO. E-401	
CHIEF ENGINEER			

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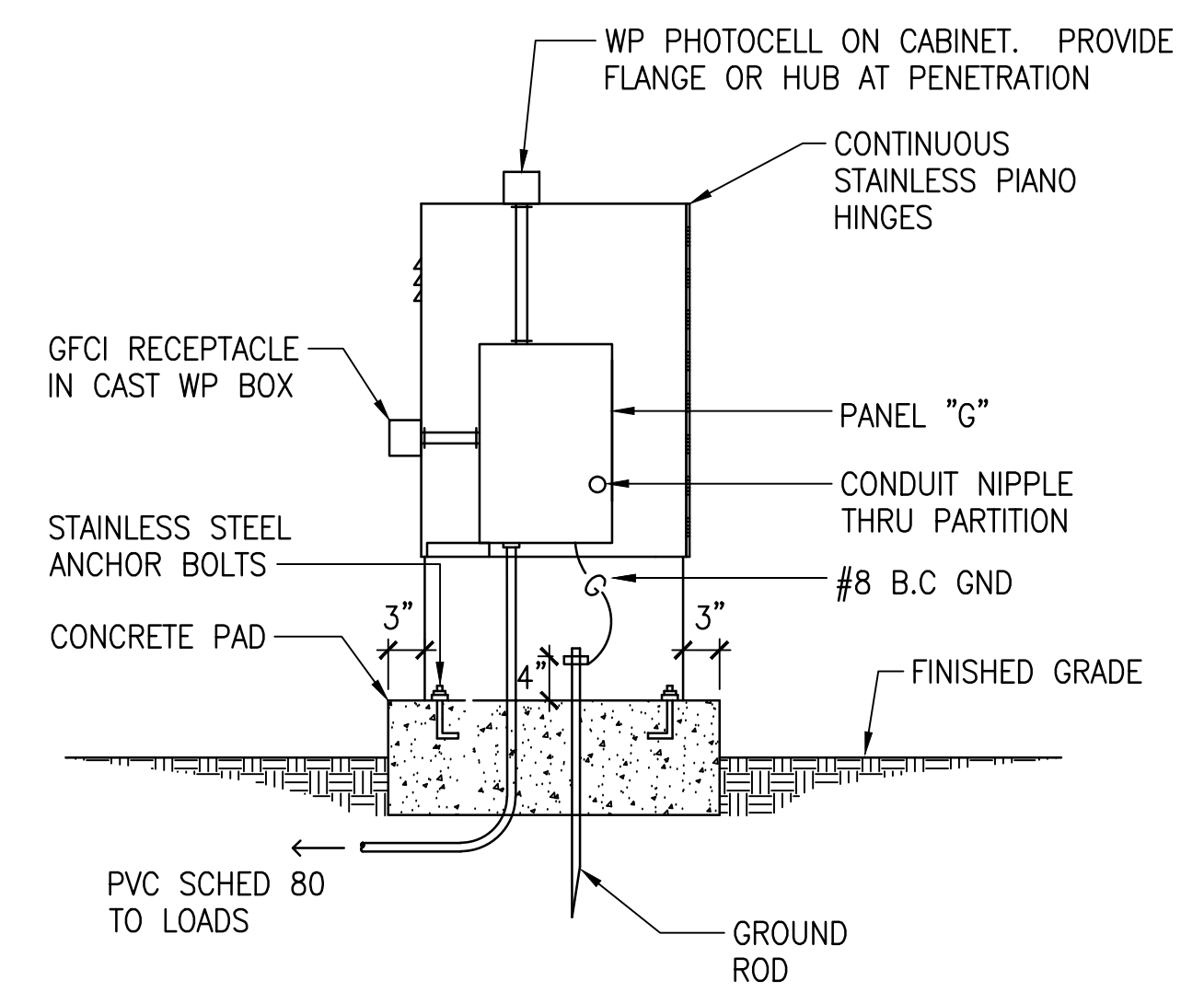
- NOTES:**
1. CONTRACTOR SHALL COORDINATE REQUIREMENTS WITH KIUC.
 2. SEE ONE LINE DIAGRAMS FOR RISER POLE SIZE.

1 RISER POLE DETAIL
E-504 NOT TO SCALE

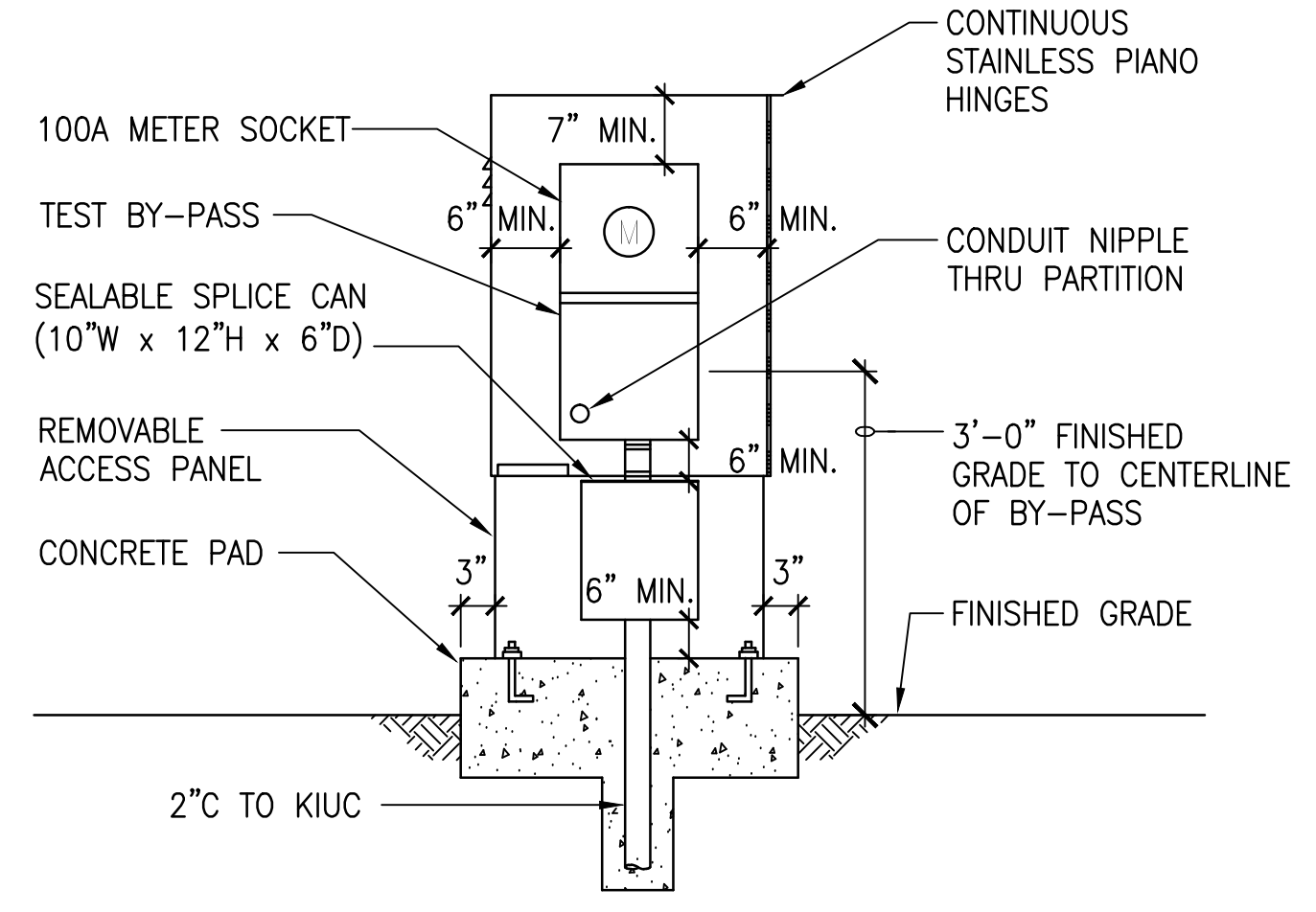


- NOTES:**
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER AND KIUC PRIOR TO ORDERING ANY EQUIPMENT.
 2. A KIUC PURCHASED KEY BOX WITH KEY IS REQUIRED TO BE MOUNTED ON CABINET FOR KIUC'S ACCESS TO METER.


2 METER CABINET DETAIL
E-504 NOT TO SCALE

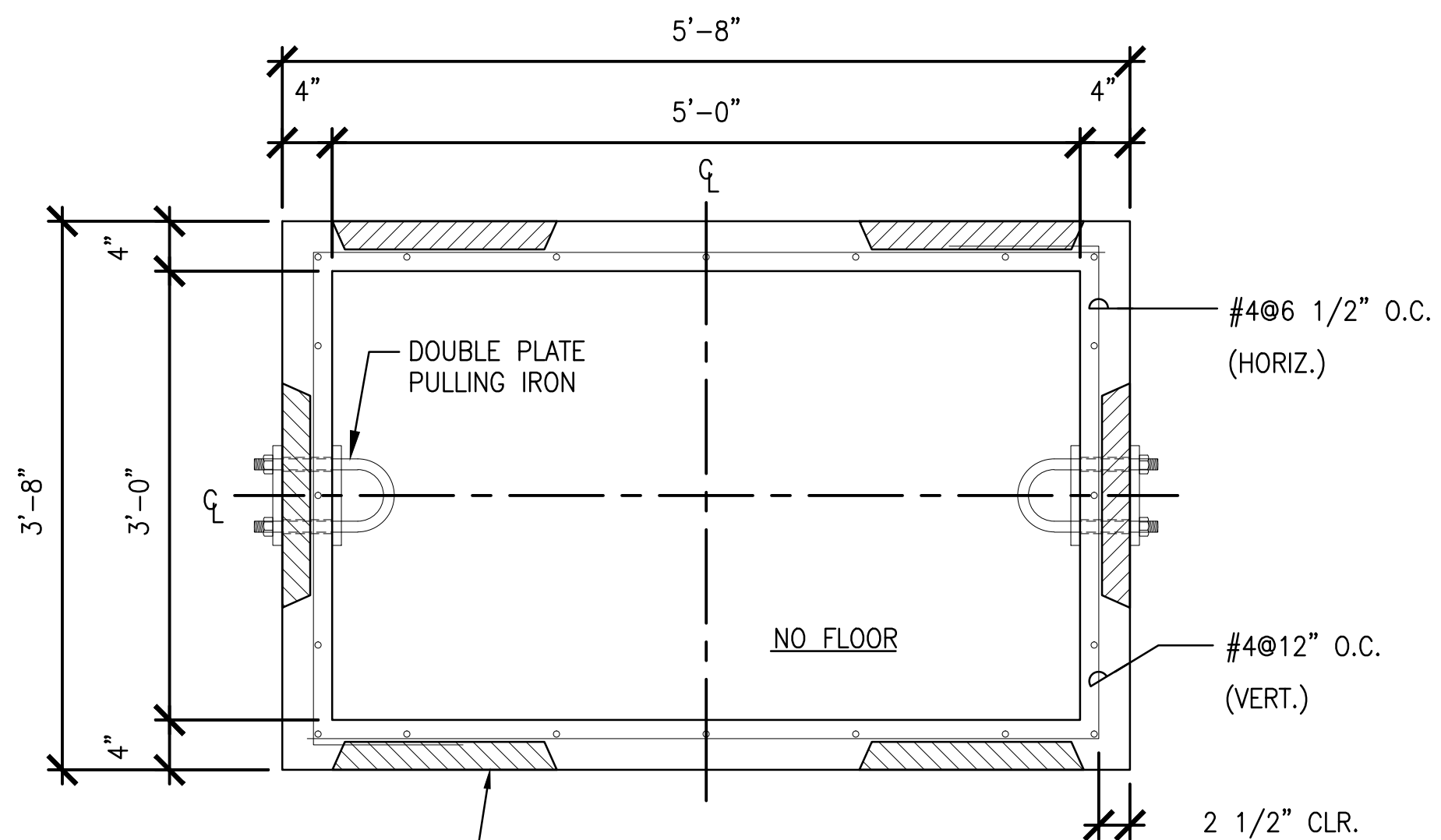


BACK ELEVATION
SCALE: 3/4" = 1'-0"

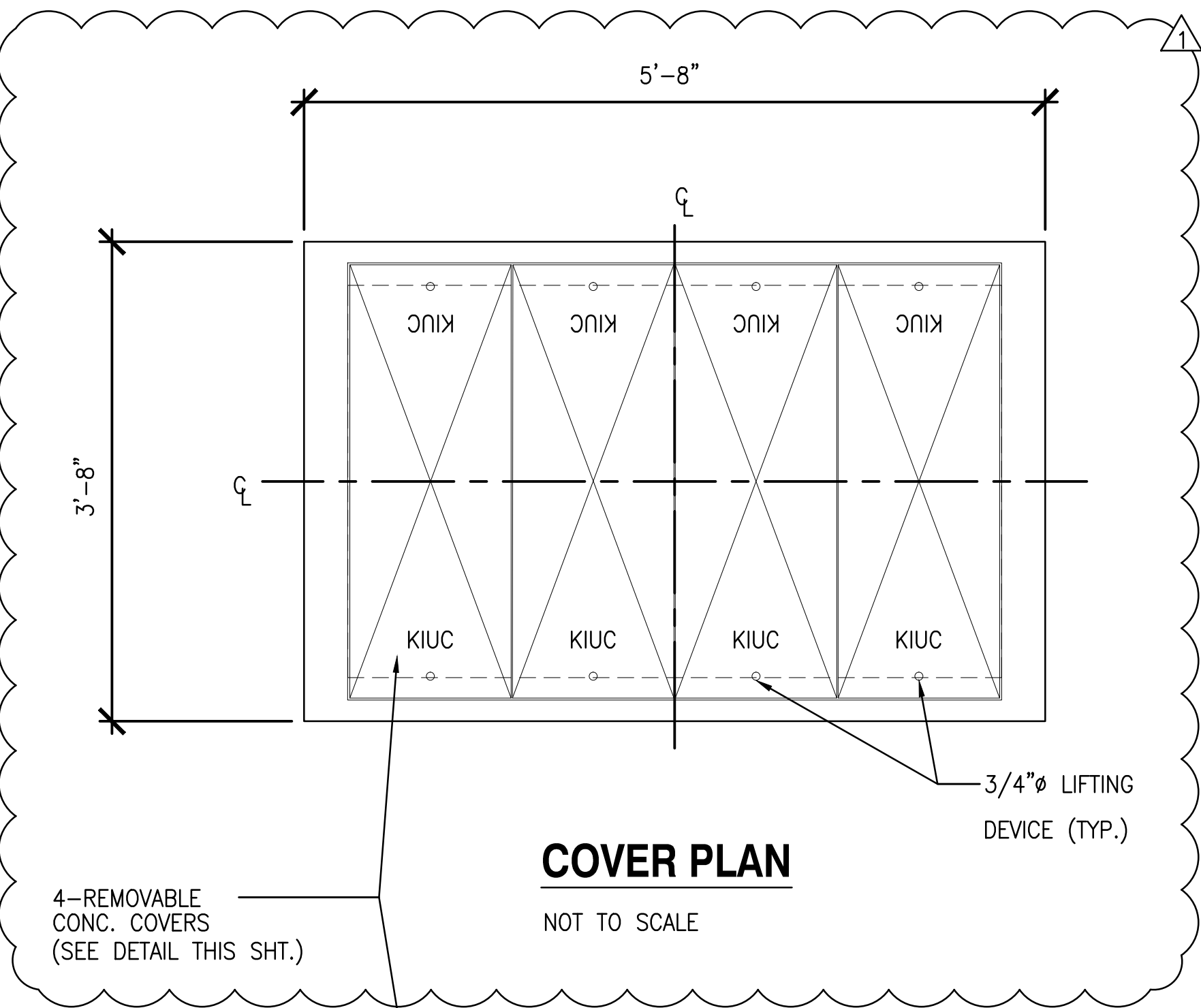


FRONT ELEVATION
SCALE: 3/4" = 1'-0"

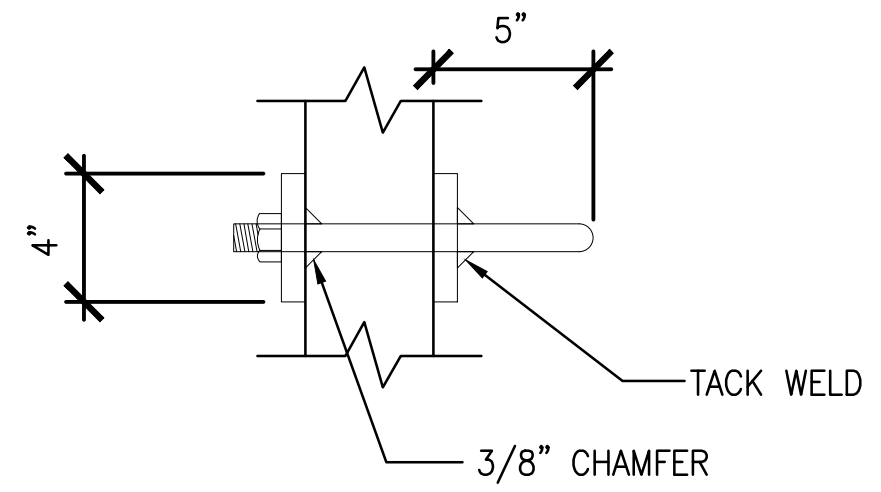
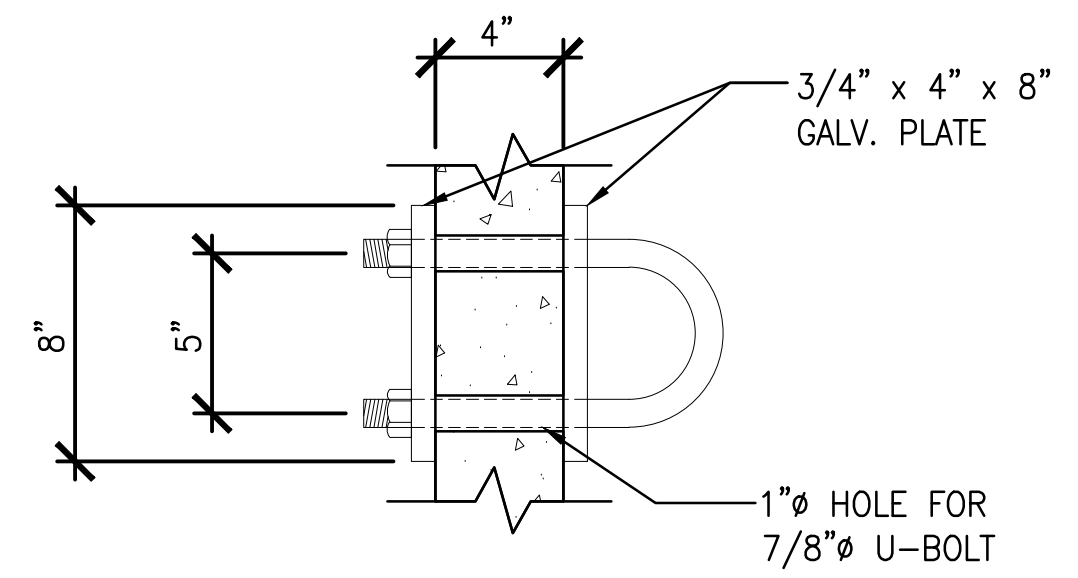
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	
 STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUAI, HAWAII METER ENCLOSURE AND RISER DETAILS					
DESIGNED: KH		SUBMITTED:			
DRAWN: KH		DATE: APRIL 2016			
CHECKED: GM		SCALE: AS SHOWN			
APPROVED: _____					DRAWING NO.
CHIEF ENGINEER _____					E-504
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION					DATE _____



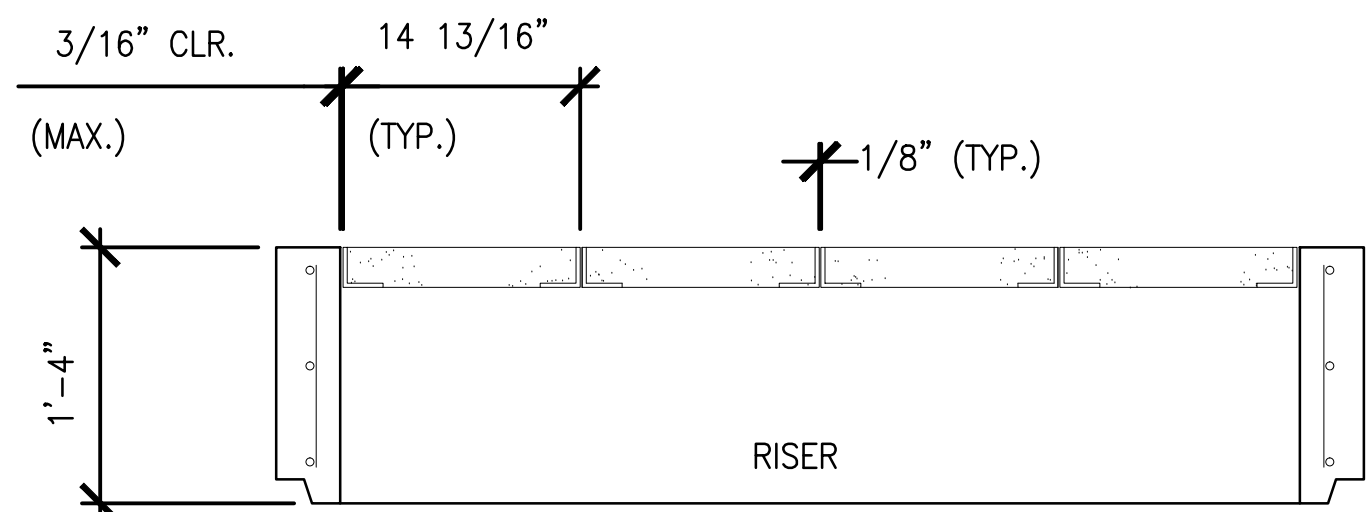
WALL PLAN
NOT TO SCALE



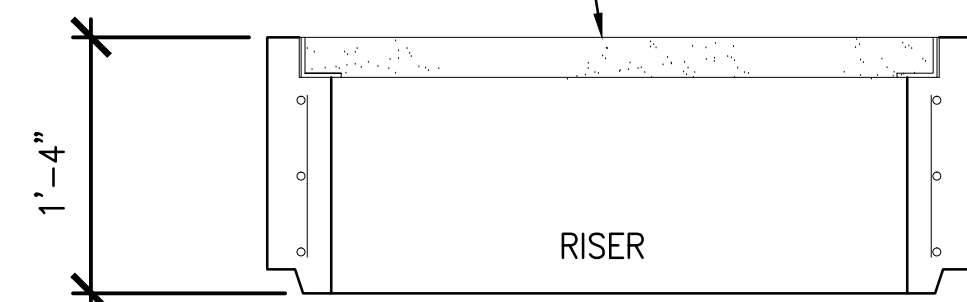
COVER PLAN
NOT TO SCALE



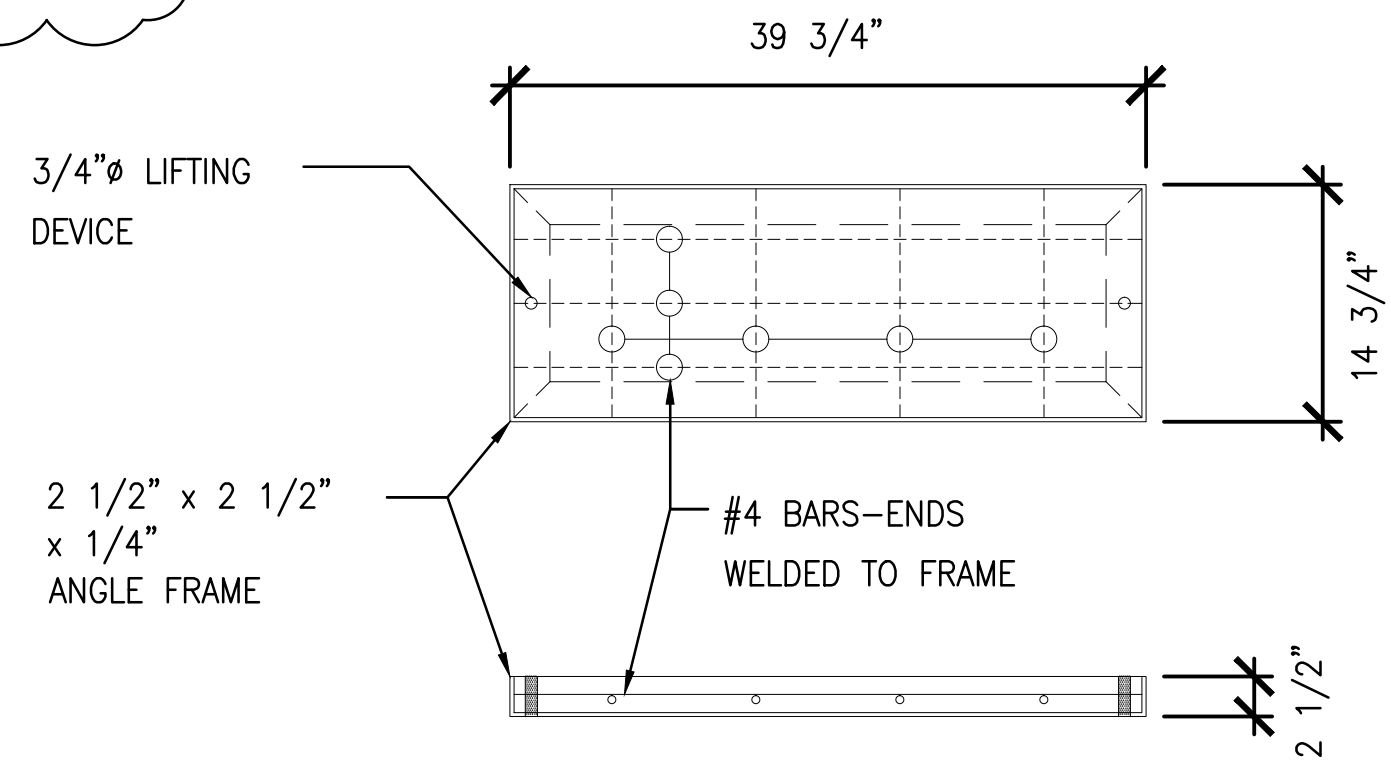
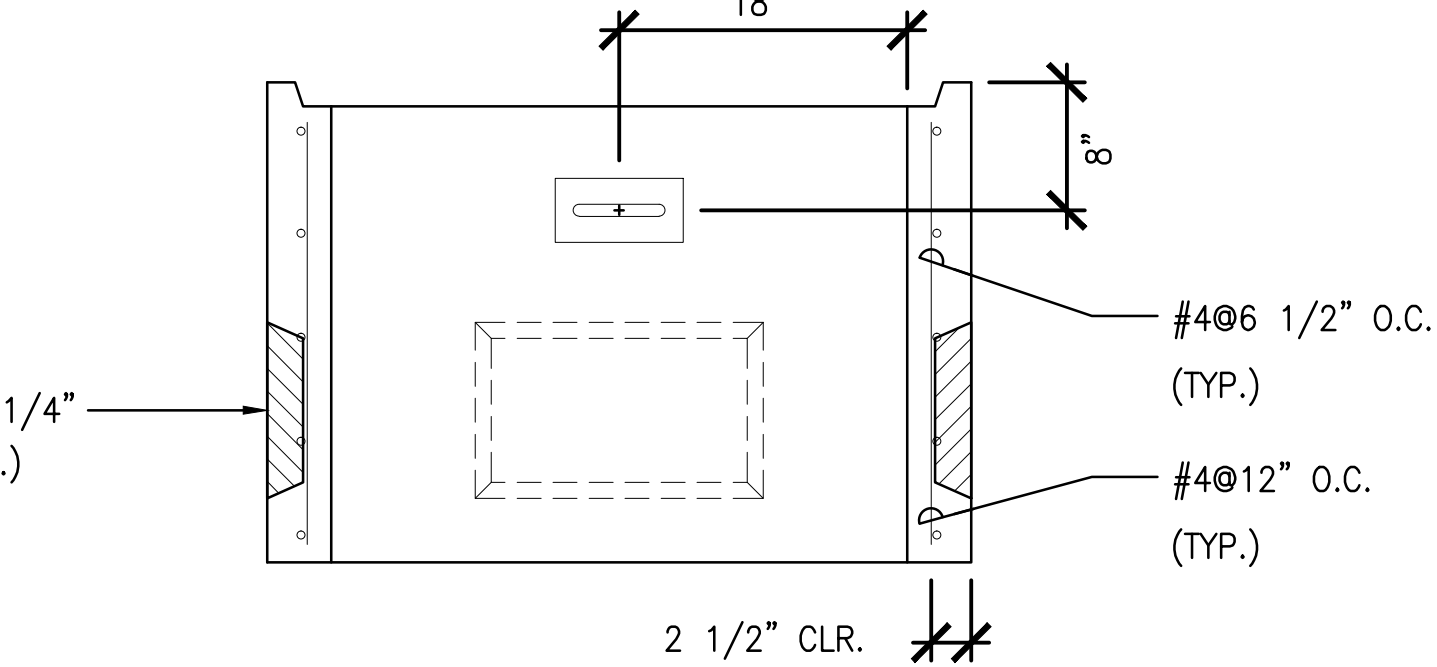
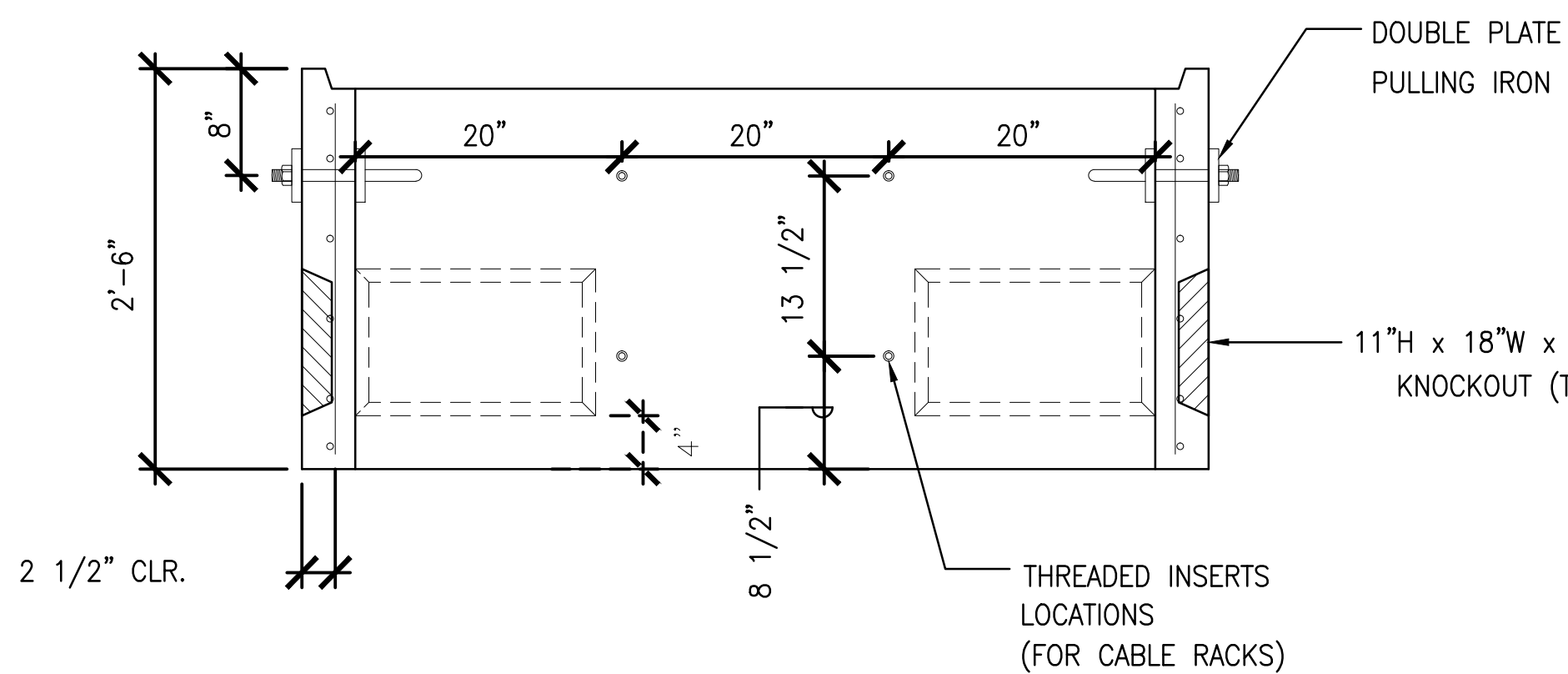
PULLING IRON DETAILS
NOT TO SCALE



SECTION "A-A"
NOT TO SCALE





SECTION "B-B"
NOT TO SCALE



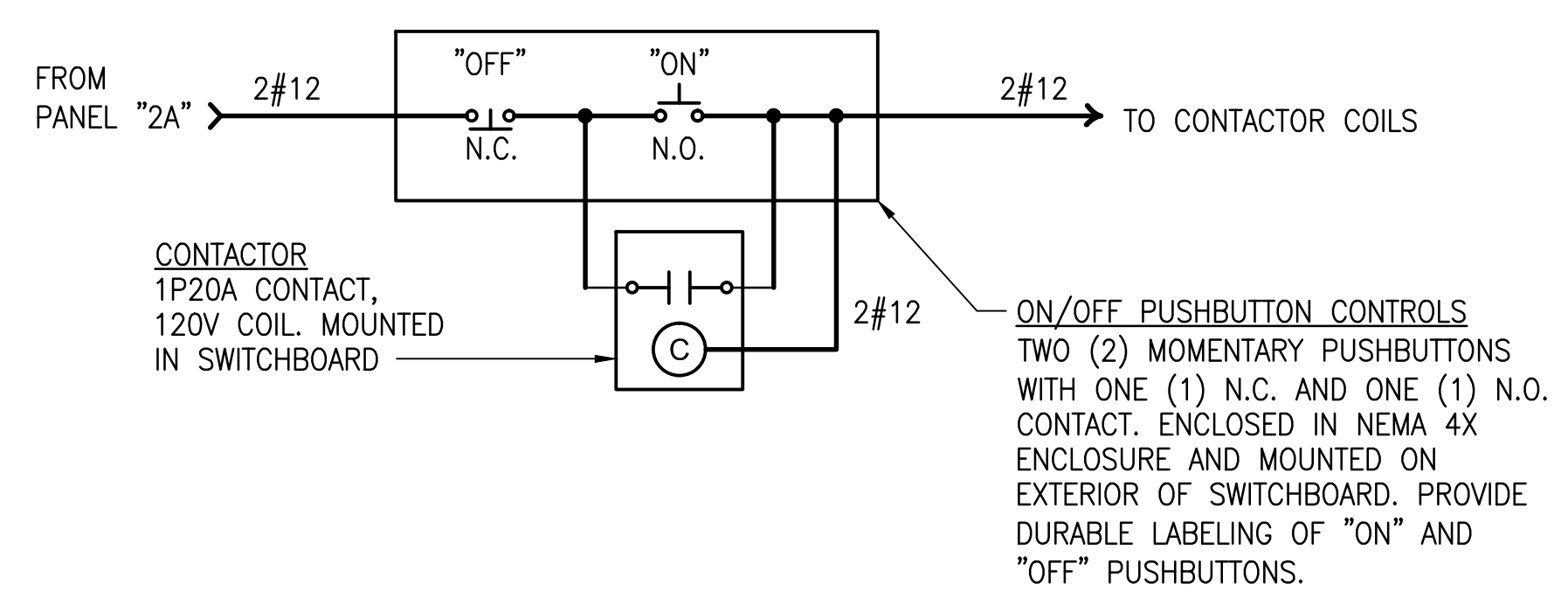
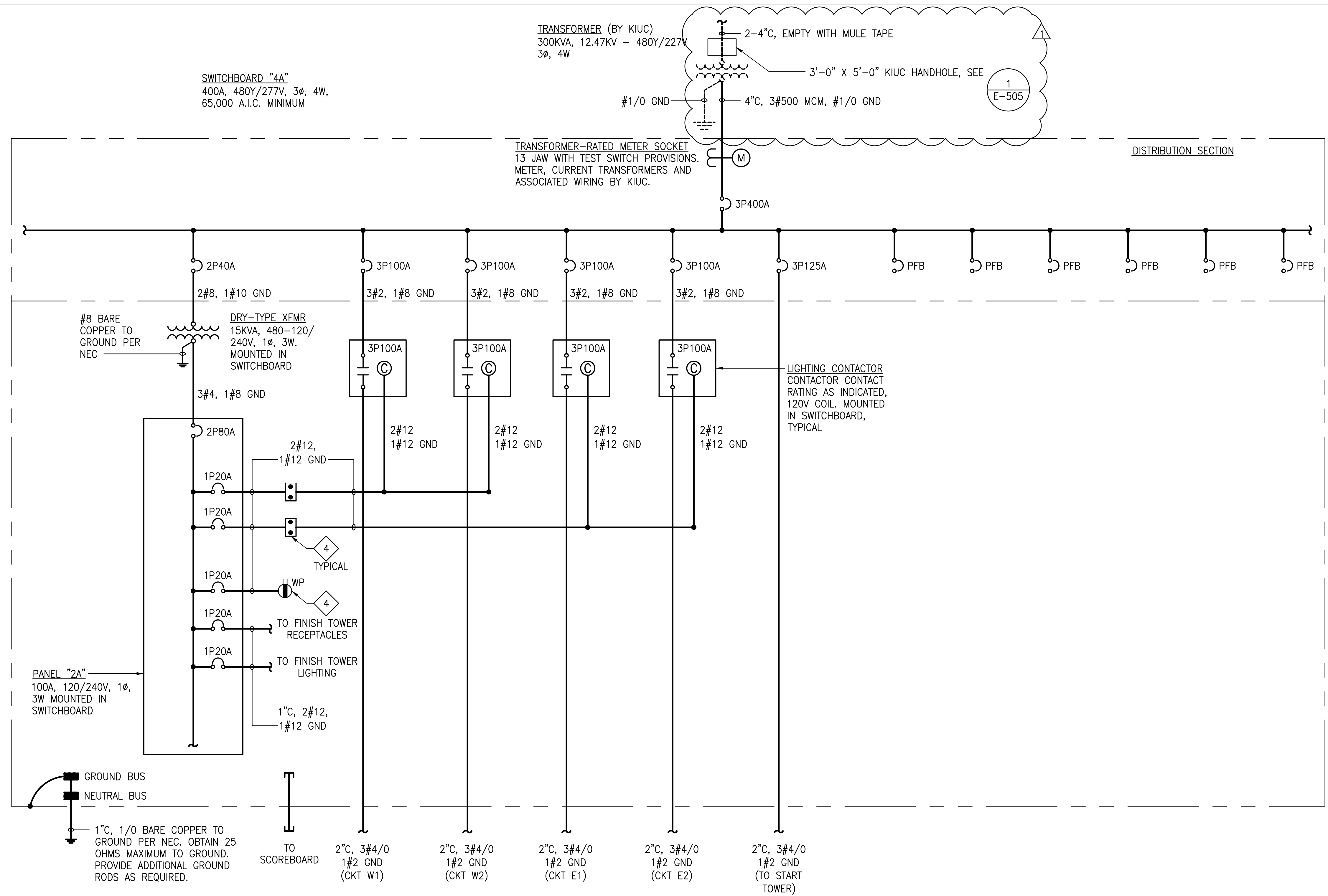
PULLING IRON DETAILS
NOT TO SCALE

1
E505 **3'-0" X 5'-0" KIUC HANDHOLE**
NOT TO SCALE

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	
 <p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION</p> <p>MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUAI, HAWAII</p> <p>3'-0" X 5'-0" KIUC HANDHOLE DETAILS</p> <p>DESIGNED: KH SUBMITTED:</p> <p>DRAWN: KH DATE: APRIL 2016</p> <p>CHECKED: GM SCALE: AS SHOWN</p> <p>APPROVED: _____ DATE: _____</p> <p>CHIEF ENGINEER</p>					
 <p>LICENSED PROFESSIONAL ENGINEER No. 9756-E HAWAII, U.S.A. EXP. 04-30-2018</p>					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p>					
<p>DRAWING NO. E-505</p>					

Z:\Projects (numbered)\2013\13072\Drawing Files\Electrical\3g2_e010-E505.dwg - 5/11/2016 1:29 PM

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2
E601 **PUSH-BUTTON CONTROLS WIRING DIAGRAM**
NOT TO SCALE

1
E601 **SWITCHBOARD 4A ONE-LINE DIAGRAM - NEW WORK**
NOT TO SCALE

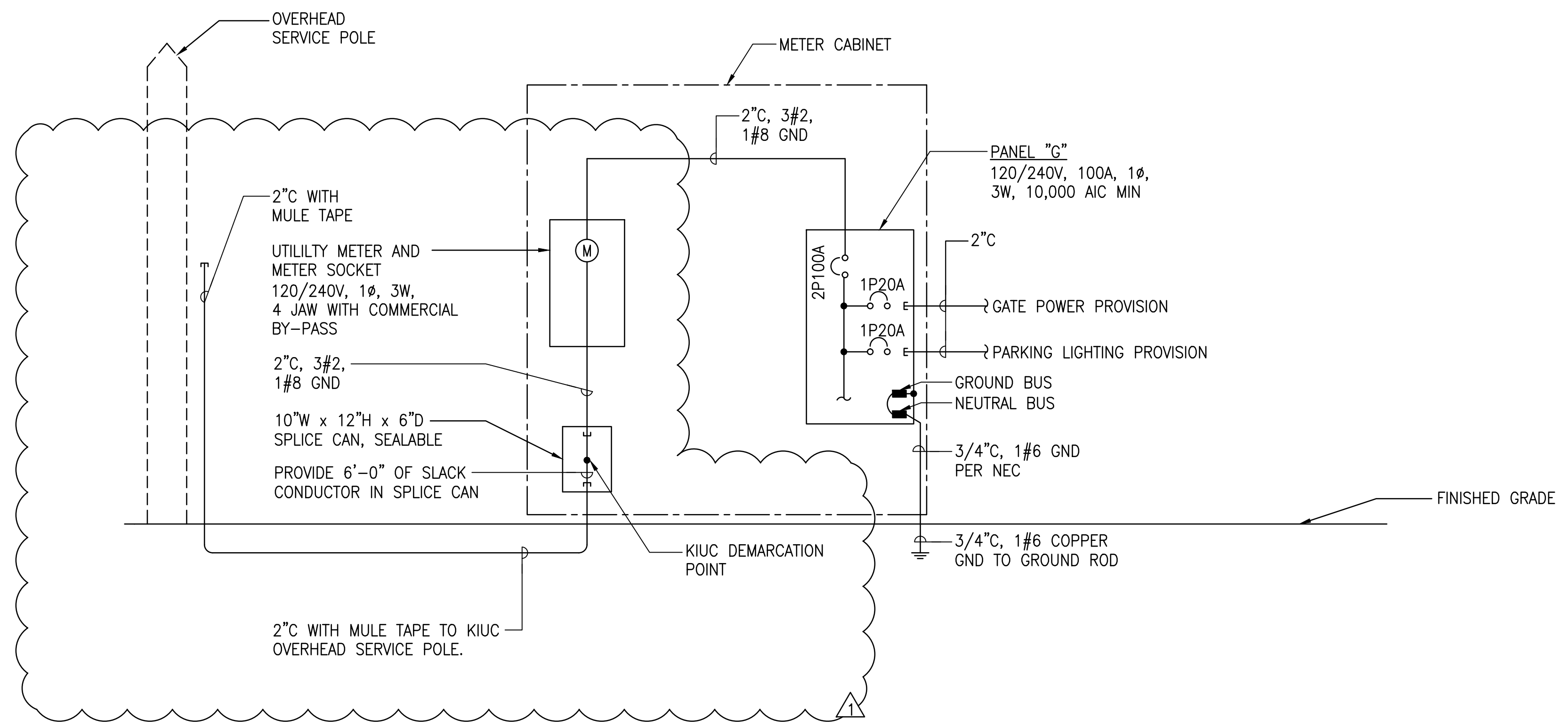
NOTES:

1. PROVIDE LABELLING FOR EACH CIRCUIT BREAKER, PANELBOARD, LIGHTING CONTACTOR AND ON/OFF PUSHBUTTON CONTROLS. LABELLING SHALL CONSIST OF A 0.125 INCH THICK BLACK LAMINATED PLASTIC PLATE WITH WHITE CORE. ENGRAVE MINIMUM 0.25 INCH HIGH LETTERING IN PLATE TO EXPOSE WHITE CORE. SECURE LABEL TO SWITCHBOARD WITH STAINLESS STEEL FASTENERS.
 2. PROVIDE TYPEWRITTEN DIRECTORIES FOR BREAKERS LOCATED IN PANELBOARD.
 3. FOR CONTINUATION OF CIRCUITS, SEE SWITCHBOARD 4A DISTRIBUTION DIAGRAM ON SHEET E-602.
- 4** MOUNT DEVICE ON EXTERIOR OF SWITCHBOARD.

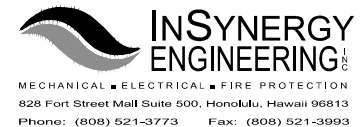
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	

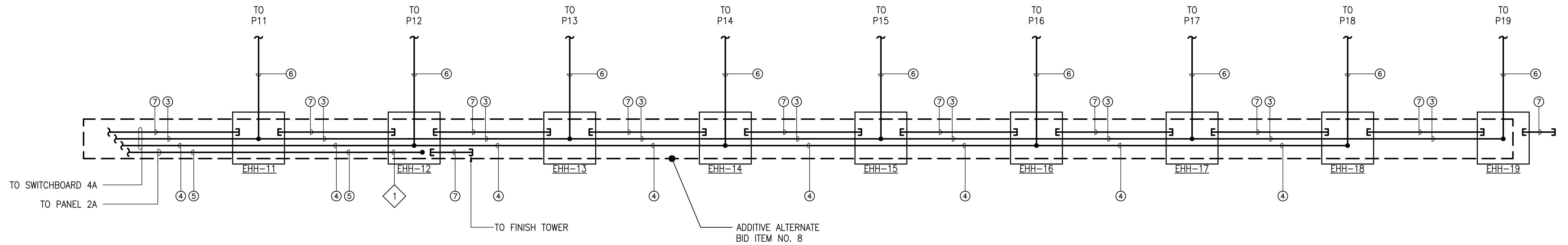
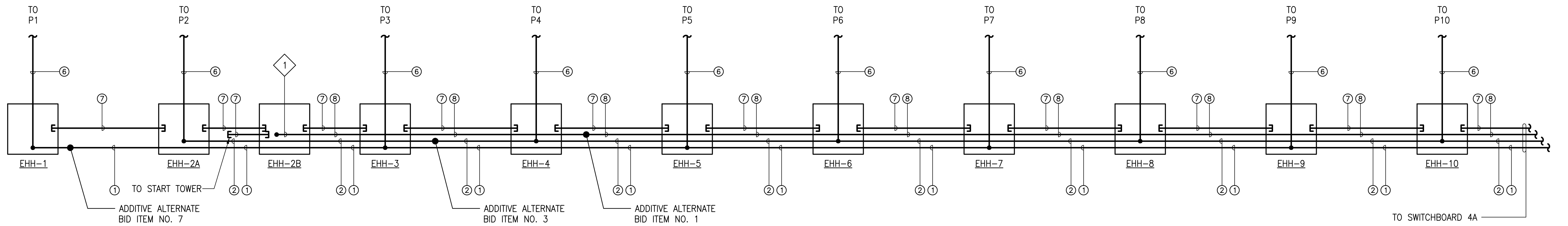
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION	
		MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUAI, HAWAII	
SWITCHBOARD ONE-LINE DIAGRAM			
DESIGNED: KH	SUBMITTED:		
DRAWN: KH	DATE: APRIL 2016		
CHECKED: GM	SCALE: AS SHOWN		
APPROVED:	DATE:		DRAWING NO. E-601
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION			CHIEF ENGINEER _____ DATE _____

Z:\Projects (numbered)\2013\13072\Drawing Files\Electrical\3g2_e010-E602.dwg - 5/11/2016 1:30 PM



1
E602 **METER CABINET ONE-LINE DIAGRAM**
NOT TO SCALE

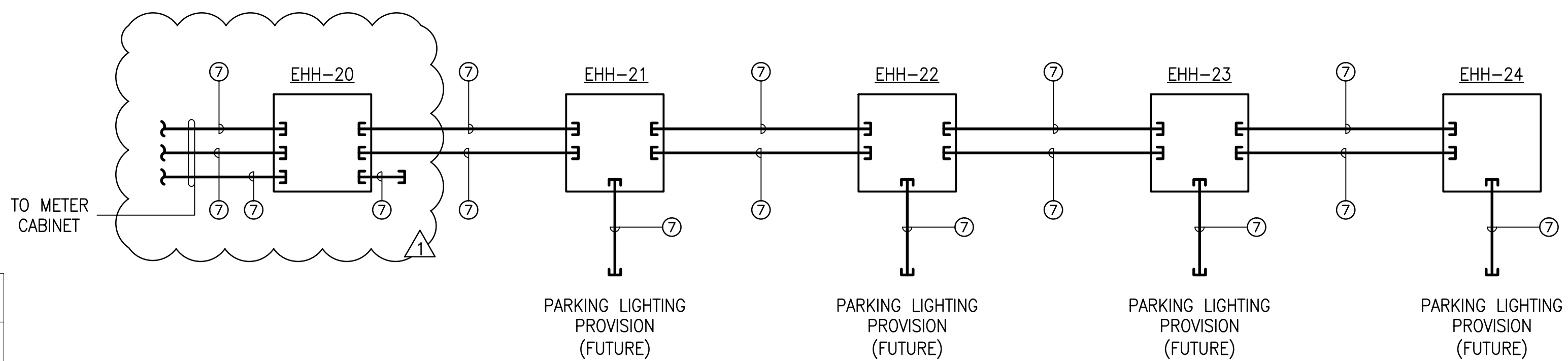
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS		5-11-16	
 STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUĀI, HAWAII METER CABINET ONE-LINE DIAGRAM					
DESIGNED: KH		SUBMITTED:			
DRAWN: KH		DATE: APRIL 2016			
CHECKED: GM		SCALE: AS SHOWN			
APPROVED:		CHIEF ENGINEER		DATE	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		DRAWING NO. E-602			



1 SWITCHBOARD 4A DISTRIBUTION DIAGRAM
E603 NOT TO SCALE

NOTES:

- 1 COIL 10' OF SLACK CONDUCTOR INSIDE HANDHOLE.
- 2. ADDITIVE ALTERNATE BID ITEMS ONLY INDICATE WIRING RUNS. SEE E-101 TO E-108 FOR CONDUIT RUN BID ITEMS.



2 SPECTATOR AREA DISTRIBUTION DIAGRAM
E603 NOT TO SCALE

SYMBOL LEGEND

1	CIRCUIT W1
2	CIRCUIT W2
3	CIRCUIT E1
4	CIRCUIT E2
5	FINISH TOWER
6	(1) 1 1/2" C, 3#3, 1#8 GND
7	(1) 2" C WITH PULLSTRING
8	START TOWER
9	NOT USED.
10	NOT USED.

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
		REVISIONS ADDRESSING KIUC COMMENTS	5-11-16		
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION MĀNĀ DRAG RACING STRIP IMPROVEMENTS PHASE 2 ELECTRICAL UPGRADES KAUAI, HAWAII			
		DISTRIBUTION DIAGRAM DESIGNED: KH DRAWN: KH CHECKED: GM APPROVED: _____ CHIEF ENGINEER			
EXP. 04-30-2018 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION		SUBMITTED: APRIL 2016 DATE: AS SHOWN SCALE: AS SHOWN		DRAWING NO. E-603 DATE	