DSA **140**

APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval.This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the DSA Forms or DSA Publications webpages.

1. SUBMITTAL TYPE: (Is this a resubmittal? Yes ☐ No ☒)

Deferred Submittal ☐	Addendum Number:	Revision Number: 1	CCD Number:	Category A ☐ or B ☐

2. PROJECT INFORMATION:

School District/Owner: Imperial Community College District	DSA File Number: 13-C1
Project Name/School: Imperial Valley College	DSA Application Number 04 118941

3. APPLICANT INFORMATION:

Date Submitted: 12/01/20	Attached Pages? No ☐ Yes ☑ Number of pages? 7		
Firm Name: Michael Wall Engineering	Contact Name: Shahab Salehi		
Work Email: ssalehi@mwalleng.com	Work Phone: (858) 638-0600		
Firm Address: 2550 Fifth Avenue #810	City: San Diego	State: CA	Zip Code: 92103

4. REASON FOR SUBMITTAL: (Check applicable boxes)

☐ For revision or addendum prior to construction.

☐ For a project currently under construction.

☐ For a project that has a form *DSA 301-N: Notification of Requirement for Certification*, *DSA 301-P: Posted Notification of Requirement for Certification* or a 90-Day Letter issued.

☐ To obtain DSA approval of an existing uncertified building or buildings.

☐ For Category B CCD this is: ☐ a voluntary submittal, ☐ a DSA required submittal (attach DSA notice requiring submission).

5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:

Name of the Design Professional In General Responsible Charge: Shahab Salehi

Professional License Number: 18803	Discipline: Electrical

Design Professional in General Responsible Charge Statement: The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project.

Signature: _____

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE

6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:

For addenda, revisions, or CCDs: CHECK THIS BOX ☐ to confirm that *all* post-approval documents have been stamped and signed by the Responsible Design Professional listed on form *DSA 1: Application for Approval of Plans and Specifications* for this project. (For *Deferred Submittals*, refer to *IR A-18: Use of Construction Documents Prepared by Other Professionals,* and *IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents*, when applicable, for signature and seal requirements.)

Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed):

Revised primary power source feed from campus loop to IID transformer. Transformers and switchboards moved to the new location.

List of DSA-approved drawings affected by this post-approval document:

E1.0, E1.1, E2.0, E3.0, E3.1

DSA USE ONLY

SSS GL Date 12/02/2020 ☒Approved ☐Disapproved ☐Not Required

Comments: _____

FLS JA Date 12/04/2020 ☒Approved ☐Disapproved ☐Not Required

Comments: _____

ACS _____ Date _____ ☐Approved ☐Disapproved ☒Not Required

Comments: _____

Returned	
Date:	12/04/2020
By:	DP

DSA STAMP

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-118941 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 12/04/2020

IMPERIAL COMMUNITY COLLEGE DISTRICT

IMPERIAL VALLEY COLLEGE

BUILDING 700 TRANSFORMER UPGRADE

PROJECT LOCATION
380 EAST ATEN RD.
IMPERIAL, CA 92251
(760) 352-8320

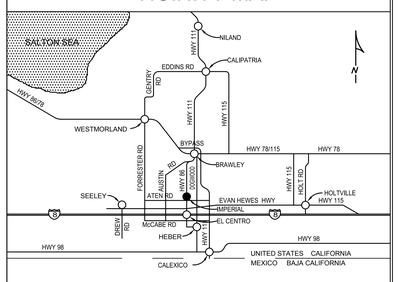
PROJECT TEAM

OWNER
IMPERIAL VALLEY COLLEGE
JOSEPH JACKSON
18575 JAMBOREE ROAD #600
IRVINE, CA 92612
(760) 355-6427

ELECTRICAL ENGINEER
MICHAEL WALL ENGINEERING
SHAHAB SALEHI
4114 SORRENTO VALLEY BLVD
SAN DIEGO, CA 92121
(858) 638-0600

STRUCTURAL
MIYAMOTO INTERNATIONAL INC.
PETER CARLSON
5151 SHOREHAM PLACE #280
SAN DIEGO, CA 92122
(858) 457-3001

VICINITY MAP



GENERAL NOTES

1. EXAMINATION OF SITE AND CONTRACT DOCUMENTS:

EACH BIDDER SHALL VISIT THE SITE OF THE PROPOSED WORK AND FULLY ACQUAINT HIMSELF WITH THE CONDITIONS RELATING TO THE CONSTRUCTION AND LABOR SO THAT HE MAY FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES AND RESTRICTIONS ATTENDING THE EXECUTION OF THE WORK UNDER THE CONTRACT. BIDDERS SHALL THOROUGHLY EXAMINE AND BE FAMILIAR WITH THE DRAWINGS AND PROJECT MANUAL. THE FAILURE OR OMISSION OF ANY BIDDER TO RECEIVE OR EXAMINE ANY CONTRACT, FORM, INSTRUMENT, ADDENDUM, OR OTHER DOCUMENT OR TO VISIT THE SITE AND ACQUAINT HIMSELF WITH CONDITIONS THERE EXISTING SHALL IN NO-WISE RELIEVE ANY BIDDER FROM OBLIGATIONS WITH RESPECT TO HIS BID OR TO THE CONTRACT. THE SUBMISSION OF A BID SHALL BE TAKEN AS PRIMA FACIE EVIDENCE OF COMPLIANCE WITH THIS SECTION. THE ENGINEER SHALL BE NOTIFIED, PRIOR TO BID, OF ANY UNUSUAL CONDITIONS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR INTENT OF WORK TO BE ACCOMPLISHED, WHEREIN;

2. SCOPE OF WORK:

THE BUILDING 700 TRANSFORMER UPGRADE PROJECT SHALL INCLUDE ALL WORK SHOWN ON CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. REMOVE EXISTING 5KV AIR SWITCHES, TRANSFORMER, SWITCHBOARDS AND ASSOCIATED 600V CABLES AND CONDUITS.
2. PROVIDE NEW TRANSFORMER AND SWITCHBAORDS.
3. PROVIDE NEW PULL BOX.
4. PROVIDE NEW 15KV CABLE FROM 3-WAY SECTIONAL CABINET AND EXTEND TO NEW TRANSFORMER T-HP.
5. PROVIDE NEW 5KV CABLE BETWEEN THE TRANSFORMERS.
6. PROVIDE NEW 600V FEEDERS BETWEEN THE NEW TRANSFORMERS AND NEW SWITCHBOARDS.
7. INTERCEPT THE EXISTING BRANCH CIRCUITS AND RECONNECT TO NEW SWITCHBOARDS.

3. CODES AND STANDARDS:

APPLICABLE CODES:

ALL WORK SHALL CONFORM TO 2016 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CCR
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR
2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR
2016 CALIFORNIA ENERGY CODE, PART 6, TITLE 24, CCR
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART II, TITLE 24, CCR
2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, CCR

GENERAL NOTES

4. CHANGES TO APPROVED DRAWINGS:

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

A DSA CERTIFIED PROJECT INSPECTOR CLASS 3 EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

SHEET INDEX

SHEET INDEX

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-118941 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 12/04/2020

Revisions

REVISIONS 11.16.2020

IMPERIAL COMMUNITY COLLEGE DISTRICT
BUILDING 700
TRANSFORMER
UPGRADE

Drawn	MJM
Checked	EB
Project No.	192-037
Date	2019.11.01

REGISTERED PROFESSIONAL ENGINEER
SHAHAB SALEHI
E18803
EXP. 6/30/2021
ELECTRICAL
STATE OF CALIFORNIA

MICHAEL WALL ENGINEERING
858-638-0600
858-638-0640 (fax)
www.mwalleng.com
4115 Sorrento Valley Blvd.
San Diego, CA 92121
REGISTERED ELECTRICAL ENGINEERS

COVER SHEET

E0.0

SINGLELINE SYMBOLS AND DESCRIPTIONS

	DRAWOUT CIRCUIT BREAKER	A	AMP METER
		V	VOLT METER
	CIRCUIT BREAKER		CURRENT TRANSFORMER
		GFI	GROUND FAULT CIRCUIT INTERRUPTER
	FUSED SWITCH	M	MOTOR OR EQUIPMENT AS NOTED
			UGPS LANDING LUGS
	TRANSFORMER	ATS 1 / N / E / L / NEMA 1	AUTOMATIC TRANSFER SWITCH
	GROUNDING ELECTRODE AND CONDUCTOR	G / NEMA 1	GENERATOR
	EXTERNALLY OPERATED CIRCUIT BREAKER	DM	DIGITAL METER BY POWER MEASUREMENTS ION-7350
PANEL	PANELBOARD	LSIG	CIRCUIT BREAKER WITH ELECTRONIC SENSING, TIMING AND TRIPPING CONTROL WITH FIELD INTERCHANGEABLE TRIP UNITS. PROVIDE TRUE RMS FUNCTIONS WITH DESCRETE FIELD ADJUSTABLE SETTINGS INDEPENDENT OF OTHER ADJUSTMENTS. L. LONG TIME TRIP S. SHORT TIME OVERCURRENT TRIP I. INSTANTANEOUS TRIP G. GROUND FAULT TRIP, GROUND FAULT SENSING INTEGRAL WITH CIRCUIT BREAKER.
PANEL TT DL	THROUGH FED OR DOUBLE LUG PANELBOARD	LSI	CIRCUIT BREAKER WITH ELECTRONIC SENSING, TIMING AND TRIPPING CONTROL WITH FIELD INTERCHANGEABLE TRIP UNITS. PROVIDE TRUE RMS FUNCTIONS WITH DESCRETE FIELD ADJUSTABLE SETTINGS INDEPENDENT OF OTHER ADJUSTMENTS. L. LONG TIME TRIP S. SHORT TIME OVERCURRENT TRIP I. INSTANTANEOUS TRIP
ST	SHUNT TRIP	IC	INSULATED CASE CIRCUIT BREAKER
M	UTILITY METER WITH C.T.s.	SPD	SURGE PROTECTIVE DEVICE
M	IN-LINE UTILITY METER-200A MAXIMUM		

ELECTRICAL CONSTRUCTION DOCUMENTS GENERAL INFORMATION

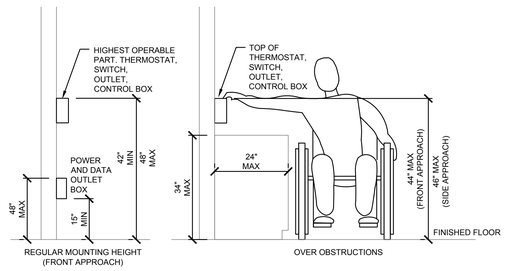
1. THE DRAWINGS CONTAINED WITHIN THESE CONSTRUCTION DOCUMENTS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS, EQUIPMENT, MATERIALS, ETC. REQUIRED FOR A COMPLETE, FUNCTIONAL, AND CODE-COMPLIANT INSTALLATION.
2. THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS WITH ALL OTHER TRADES.
3. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT, ETC. SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM THE ARCHITECT. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM ELECTRICAL DRAWINGS.
4. THESE DRAWINGS ARE SUPPLEMENTED BY PRINTED DIVISION 26 ELECTRICAL SPECIFICATIONS. THE COMPLETE ELECTRICAL CONSTRUCTION DOCUMENT PACKAGE CONTAINS BOTH SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL OBTAIN AND REVIEW THE COMPLETE ELECTRICAL CONSTRUCTION DOCUMENT PACKAGE PRIOR TO THE COMMENCEMENT OF ANY WORK AND INCLUDE ALL COST IN THIS BID.
5. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, NATIONAL ELECTRICAL CODE, STATE OF CALIFORNIA ENERGY CONSERVATION STANDARDS AND ALL REQUIREMENT OF THE AUTHORITY HAVING JURISDICTION (AHJ).
6. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT LOCATIONS WITH ARCHITECTURAL, MECHANICAL, STRUCTURAL, PLUMBING AND ALL APPROPRIATE DISCIPLINES.
7. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND/OR ENGINEER PRIOR TO THE START OF CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF EXISTING SURFACES, AREAS, AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF ANY ELECTRICAL DEMOLITION AND/OR NEW WORK.
9. PROVIDE WEATHERPROOF (NEMA 3R) JUNCTION BOXES, CONDUIT, FITTINGS AND ENCLOSURES AT ALL EXTERIOR LOCATIONS AND ALL WET OR DAMP INTERIOR LOCATIONS. ALL EXTERIOR LIGHTING FIXTURES SHALL BE UL LISTED FOR WET OR DAMP LOCATION AS APPROPRIATE FOR THE LOCATION
10. VERIFY EXISTING CONDITIONS PRIOR TO BID AND INCLUDE ALL COSTS AS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
11. THE CONTRACTOR SHALL REVIEW EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PROVIDE FUSE SIZES AS INDICATED, RELAYS, CONNECTIONS OR OTHER RELATED WORK TO COMPLETE THE ELECTRICAL SYSTEM.
12. ALL DEVICES AND EQUIPMENT SHALL BE INSTALLED IN COMPLIANCE WITH A.D.A. REQUIREMENTS.
13. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.
14. CONTRACTOR SHALL ENSURE THAT ALL CONDUIT, FIXTURES, FITTINGS, AND DEVICES LOCATED IN PUBLIC AREAS ARE TAMPERPROOF AND PROTECTED FROM PHYSICAL DAMAGE.
15. ALL CURRENT CARRYING CONDUCTORS SHALL BE COPPER. INSULATION SHALL BE TYPE THHN/THWN FOR ALL BRANCH CIRCUITS UP TO AND INCLUDING SIZE #2AWG. INSULATION FOR CONDUCTORS OVER SIZE #2AWG SHALL BE XHHW.
16. ALL GROUND CONDUCTORS SHALL BE INSULATED COPPER.
17. ALL CONDUIT SHALL BE EMT (INSTALLED IN INTERIOR CONCEALED SPACES) OR SCHEDULE-40 PVC (INSTALLED UNDERGROUND) UNLESS OTHERWISE NOTED.
18. ALL AMPACITIES ARE BASED UPON TABLE 310.15(B)(16) OF THE 2016 C.E.C.
19. FEEDER SCHEDULES INDICATE DATA FOR COPPER CONDUCTORS RATED UP TO 600V AT 75 DEGREES CELSIUS.
20. ALL MULTI-WIRE BRANCH CONDUCTORS SHALL ORIGINATE FROM THE SAME PANELBOARD. THE GROUNDED AND UNGROUNDED CONDUCTORS SHALL BE GROUPED WITHIN THE PANELBOARD AND THEY SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS. THE CONTRACTOR SHALL PROVIDE THE DISCONNECTING MEANS BASED UPON THE FINAL FIELD WIRING, CIRCUITING, HOMERUNS, ETC. AS REQUIRED TO SATISFY THIS REQUIREMENT.
21. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE ELECTRICAL INSTALLATION. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THE ABOVE ITEMS.
22. ALL ROOF-MOUNTED EQUIPMENT SHALL BE SERVED BY CIRCUITS ROUTED BELOW THE ROOF STRUCTURE. DO NOT ROUTE CONDUITS EXPOSED ON THE ROOF. LIMIT FINAL CONNECTIONS TO ROOF EQUIPMENT FROM ROOF PENETRATION TO 10 FEET.
23. FOR ALL EXTERIOR CONDUITS EXPOSED TO DIRECT SUNLIGHT, THE CONTRACTOR SHALL ADJUST CONDUCTOR AND CONDUIT SIZES AS NECESSARY TO COMPLY WITH CODE-REQUIRED AMBIENT TEMPERATURE AMPACITY DE-RATING.

ABBREVIATIONS AND DESCRIPTIONS

A	AMPERES	KCM	KILO - CIRCULAR - MIL
AC	ALTERNATING CURRENT	KS	KNEE SPACE
A/C	AIR CONDITIONING	KVA	KILO-VOLTAMPERE
AIC	AMPERES INTERRUPTING CAPACITY	KW	KILO-WATT
AFC	AVAILABLE FAULT CURRENT	KWH	KILO-WATT-HOUR
AFF	ABOVE FINISHED FLOOR		
AFG	ABOVE FINISHED GRADE	LBS	POUNDS
AF	AMP FRAME/AMP FUSE	LED	LIGHT EMITTING DIODE
ABV	ABOVE	LF	LINEAL FEET
AL	ALUMINUM	LOC	LOCATION
ARCH	ARCHITECT OR ARCHITECTURAL	LT	LIGHT
AS	AMP SWITCH	LTG	LIGHTING
AT	AMP TRIP	LV	LOW VOLTAGE
ATS	AUTOMATIC TRANSFER SWITCH		
AWG	AMERICAN WIRE GAUGE	MH	MOUNTING HEIGHT
		MANUF	MANUFACTURER
B/G	BELOW GRADE	MAX	MAXIMUM
BKBD	BACKBOARD	MC	MECHANICAL CONTRACTOR
BEL	BELOW	MCC	MOTOR CONTROL CENTER
		MCP	MOTOR CIRCUIT PROTECTION
C	CONDUIT WITH WIRE	MECH	MECHANICAL
CATV	CABLE TELEVISION	MIN	MINIMUM
CCTV	CLOSED CIRCUIT TELEVISION	MLO	MAIN LUGS ONLY
CB	CIRCUIT BREAKER	MTD	MOUNTED
CLG	CEILING	MTG	MOUNTING
CLF	CURENT LIMITING FUSE		
CLR	CLEAR	N	NEUTRAL
CO	CONDUIT ONLY WITH NYLON PULLCORD	NC	NORMALLY CLOSED
COAX	COAXIAL CABLE	NEC	NATIONAL ELECTRICAL CODE
CONC	CONCRETE	NIC	NOT IN CONTRACT
CONN	CONNECT OR CONNECTION	NL	NIGHT LIGHT
CONT	CONTINUATION	NTS	NOT TO SCALE
CONTR	CONTRACTOR	NO	NORMALLY OPEN
CPT	CONTROL POWER TRANSFORMER		
CU	COPPER	OC	ON CENTER
CT	CURRENT TRANSFORMER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CW	COLD WATER	OFOI	OWNER FURNISHED OWNER INSTALLED
D	DEDICATED OUTLET	PB	PULLBOX
DC	DIRECT CURRENT	PC	PHOTOCELL CONTROL
DIA	DIAMETER	PCTC	PHOTOCELL/TIMECLOCK CONTROL
DISC	DISCONNECT	PE	PNEUMATIC-ELECTRIC
DIST	DISTRIBUTION	PH	PHASE
DL	DAMP LOCATION	PIV	POST INDICATING VALVE
DB	DISTRIBUTION SWITCHBOARD	PL	PILOT LIGHT
DWGS	DRAWINGS	PLBG	PLUMBING
		PNL	PANEL
EA	EACH	PVC	POLYVINYL CHLORIDE
EB	90-MINUTE BATTERY CONNECTED TO UNIT	PWR	POWER
EC	ELECTRICAL CONTRACTOR	PP	POWER POLE
EDF	ELECTRICAL DRINKING FOUNTAIN	PS	POWER SENTRY EMERGENCY BATTERY UNIT
EG	CONNECTED TO EMERGENCY GENERATOR		
EF	EXHAUST FAN	Q	FIXTURE WITH QUARTZ RESTRIKE
EI	CONNECTED TO EMERGENCY INVERTER	QTY	QUANTITY
ELECT	ELECTRICAL		
ELEV	ELEVATION/ELEVATOR	REC	RECESSED
EMER, EM	EMERGENCY	RECEPT	RECEPTACLE
EMT	ELECTRO-METALLIC TUBING	REF	REFRIGERATOR
EQUIP	EQUIPMENT	REQ	REQUIREMENTS
EXIST, EX	EXISTING	RGS	RIGID GALVANIZED STEEL
		RM	ROOM
F	DEGREES FAHRENHEIT		
FA	FIRE ALARM	SB	STANDBY
FF	FURNITURE FEED, FINISHED FLOOR	SD	SMOKE DETECTOR
FFE	FINISH FLOOR ELEVATION	SPEC	SPECIFICATION
FIN	FINISH OR FINISHED	SQ FT	SQUARE FEET OR SQUARE FOOT
FIXT	FIXTURE	STRUCT	STRUCTURAL
FLUOR	FLUORESCENT	SW	SWITCH
FT	**FEET OR FOOT**	SWBD	SWITCHBOARD
FTG	FOOTING	SWGR	SWITCHGEAR
FVNR	FULL VOLTAGE NON-REVERSING		
		TEMP	TEMPERATURE OR TEMPORARY
G	GROUND BUS OR WIRE	TV	TELEVISION
GA	GAUGE	TEL, TELE	TELEPHONE
GALV	GALVANIZED	TC	TIMECLOCK
GC	GENERAL CONTRACTOR	TRANSF	TRANSFORMER
GD	GARBAGE DISPOSAL	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTER		
GFR	GROUND FAULT RELAY	UGPS	UNDERGROUND PULL SECTION
GG	GREEN GROUND	UL	UNDERWRITERS LABORATORIES
GND	GROUND	UNO	UNLESS NOTED OTHERWISE
H	HORIZONTAL	V	VOLTS
HAZMAT	HAZARDOUS MATERIAL	VA	VOLTAMPERE
HR	HOUR	VFD	VARIABLE FREQUENCY DRIVE
HP	HORSEPOWER		
HOA	HAND-OFF-AUTOMATIC	W/	WITH
HT	HEIGHT	WH	WATER HEATER
HTR	HEATER	WP	WEATHER PROOF
HZ	HERTZ	WT	WEIGHT
IG	ISOLATED GROUND	X	EXISTING
IMC	INTERMEDIATE METAL CONDUIT	XFMR	TRANSFORMER
INCAND	INCANDESCENT	XL	EXISTING TO BE RELOCATED
		XN	NEW LOCATION OF RELOCATED FIXTURE
J-BOX	JUNCTION BOX	XR	EXISTING TO BE REMOVED

SYMBOLS AND DESCRIPTIONS

	PANELBOARD SURFACE MOUNTED
	SWITCHBOARD
T	TRANSFORMER
	FUSED DISCONNECT SWITCH
	CONCEALED EMT CONDUIT WITH WIRE 2#12AWG + 1#12AWG GREEN GROUND, 3/4"C MINIMUM.
	CONCEALED EMT CONDUIT WITH WIRE 3#12AWG + 1#12AWG GREEN GROUND, 3/4"C MINIMUM.
#10	CONCEALED EMT CONDUIT WITH WIRE 3#10AWG + 1#10AWG GREEN GROUND, 3/4"C MINIMUM.
	UNDERGROUND CONDUIT AND #10 WIRE, UNO. 3/4"PVC MIN.
C	TELECOMMUNICATIONS CONDUIT ONLY, 1" TO ACCESSIBLE CEILING SPACE ON SAME FLOOR.
	HOMERUN
	HATCHED CONDUIT AND WIRE TO BE REMOVED
	CODE SIZED PULLBOX AS INDICATED ON PLANS.
	CODE SIZED PULLBOX OR SPLICE BOX AS INDICATED ON PLANS.
	INDICATES CONDUIT STUB-UP OR STUB-OUT LOCATION.



1 ADA SWITCH MOUNTING DETAIL
NO SCALE

600V FEEDER SCHEDULE 3Ø 4W
FOR TRANSFORMER SECONDARY FEEDERS

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
T50Y	50A-4W	1	3 # 6	1 # 6	1 # 8	1"
T100Y	100A-4W	1	3 # 1	1 # 1	1 # 6	1 1/2"
T150Y	150A-4W	1	3 # 1/0	1 # 1/0	1 # 6	1 1/2"
T225Y	225A-4W	1	3 # 4/0	1 # 4/0	1 # 2	2 1/2"
T350Y	350A-4W	1	3 #500KCM	1 #500KCM	1 # 1/0	4"
T400Y	400A-4W	1	3 #600KCM	1 #600KCM	1 # 1/0	4"
T700Y	700A-4W	2	3 #500KCM	1 #500KCM	1 # 2/0	4"
T800Y	800A-4W	2	3 #600KCM	1 #600KCM	1 # 3/0	4"

FEEDER SCHEDULE
600V BRANCH CIRCUITS 1Ø 2W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20S	20A-2W	1	2 # 12	N/A	1 # 12	3/4"
30S	30A-2W	1	2 # 10	N/A	1 # 10	3/4"
40S	40A-2W	1	2 # 8	N/A	1 # 10	3/4"
50S	50A-2W	1	2 # 6	N/A	1 # 10	3/4"

600V FEEDER SCHEDULE 1Ø 3W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20S	20A-3W	1	2 # 12	1 # 12	1 # 12	3/4"
30S	30A-3W	1	2 # 10	1 # 10	1 # 10	3/4"
40S	40A-3W	1	2 # 8	1 # 8	1 # 10	1"
50S	50A-3W	1	2 # 6	1 # 6	1 # 10	1"
60S	60A-3W	1	2 # 4	1 # 4	1 # 10	1"
100S	100A-3W	1	2 # 1	1 # 1	1 # 8	1 1/4"

600V FEEDER SCHEDULE 3Ø 3W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20	20A-3W	1	3 # 12	N/A	1 # 12	3/4"
30	30A-3W	1	3 # 10	N/A	1 # 10	3/4"
40	40A-3W	1	3 # 8	N/A	1 # 10	1"
50	50A-3W	1	3 # 6	N/A	1 # 10	1"
60	60A-3W	1	3 # 4	N/A	1 # 10	1"
70	70A-3W	1	3 # 4	N/A	1 # 8	1 1/4"
80	80A-3W	1	3 # 2	N/A	1 # 8	1 1/4"
90	90A-3W	1	3 # 2	N/A	1 # 8	1 1/4"
100	100A-3W	1	3 # 1	N/A	1 # 8	1 1/4"
125	125A-3W	1	3 # 1	N/A	1 # 6	1 1/2"
150	150A-3W	1	3 # 1/0	N/A	1 # 6	1 1/2"
175	175A-3W	1	3 # 2/0	N/A	1 # 6	2"
200	200A-3W	1	3 # 3/0	N/A	1 # 6	2"
225	225A-3W	1	3 # 4/0	N/A	1 # 4	2 1/2"
250	250A-3W	1	3 #250KCM	N/A	1 # 4	2 1/2"
300	300A-3W	1	3 #350KCM	N/A	1 # 4	3"
350	350A-3W	1	3 #500KCM	N/A	1 # 2	4"
400	400A-3W	1	3 #600KCM	N/A	1 # 2	4"
450	450A-3W	2	3 # 4/0	N/A	1 # 2	3"
500	500A-3W	2	3 #250KCM	N/A	1 # 2	3"
600	600A-3W	2	3 #350KCM	N/A	1 # 1/0	4"
700	700A-3W	2	3 #500KCM	N/A	1 # 1/0	4"
800	800A-3W	2	3 #600KCM	N/A	1 # 1/0	4"
1000	1000A-3W	3	3 #500KCM	N/A	1 # 2/0	4"
1200	1200A-3W	3	3 #600KCM	N/A	1 # 3/0	4"
1600	1600A-3W	4	3 #600KCM	N/A	1 # 4/0	4"
2000	2000A-3W	5	3 #600KCM	N/A	1#250KCM	4"
2500	2500A-3W	6	3 #600KCM	N/A	1#350KCM	4"
3200	3200A-3W	8	3 #600KCM	N/A	1#500KCM	4"
4000	4000A-3W	10	3 #600KCM	N/A	1#500KCM	4"

600V FEEDER SCHEDULE 3Ø 4W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20Y	20A-4W	1	3 # 12	1 # 12	1 # 12	3/4"
30Y	30A-4W	1	3 # 10	1 # 10	1 # 10	3/4"
40Y	40A-4W	1	3 # 8	1 # 10	1 # 10	1"
50Y	50A-4W	1	3 # 6	1 # 6	1 # 10	1"
60Y	60A-4W	1	3 # 4	1 # 4	1 # 10	1"
70Y	70A-4W	1	3 # 4	1 # 4	1 # 8	1 1/4"
80Y	80A-4W	1	3 # 2	1 # 2	1 # 8	1 1/4"
90Y	90A-4W	1	3 # 2	1 # 2	1 # 8	1 1/4"
100Y	100A-4W	1	3 # 1	1 # 1	1 # 8	1 1/2"
125Y	125A-4W	1	3 # 1	1 # 1	1 # 6	1 1/2"
150Y	150A-4W	1	3 # 1/0	1 # 1/0	1 # 6	1 1/2"
175Y	175A-4W	1	3 # 2/0	1 # 2/0	1 # 6	2"
200Y	200A-4W	1	3 # 3/0	1 # 3/0	1 # 6	2"
225Y	225A-4W	1	3 # 4/0	1 # 4/0	1 # 4	2 1/2"
250Y	250A-4W	1	3 #250KCM	1 #250KCM	1 # 4	2 1/2"
300Y	300A-4W	1	3 #350KCM	1 #350KCM	1 # 4	3"
350Y	350A-4W	1	3 #500KCM	1 #500KCM	1 # 2	4"
400Y	400A-4W	1	3 #600KCM	1 #600KCM	1 # 2	4"
450Y	450A-4W	2	3 # 4/0	1 # 4/0	1 # 2	3"
500Y	500A-4W	2	3 #250KCM	1 #250KCM	1 # 2	3"
600Y	600A-4W	2	3 #350KCM	1 #350KCM	1 # 1/0	4"
700Y	700A-4W	2	3 #500KCM	1 #500KCM	1 # 1/0	4"
800Y	800A-4W	2	3 #600KCM	1 #600KCM	1 # 1/0	4"
1000Y	1000A-4W	3	3 #500KCM	1 #500KCM	1 # 2/0	4"
1200Y	1200A-4W	3	3 #600KCM	1 #600KCM	1 # 3/0	4"
1600Y	1600A-4W	4	3 #600KCM	1 #600KCM	1 # 4/0	4"
2000Y	2000A-4W	5	3 #600KCM	1 #600KCM	1#250KCM	4"
2500Y	2500A-4W	6	3 #600KCM	1 #600KCM	1#350KCM	4"
3200Y	3200A-4W	8	3 #600KCM	1 #600KCM	1#500KCM	4"
4000Y	4000A-4W	10	3 #600KCM	1 #600KCM	1#500KCM	4"

AA-8000 ALUMINUM FEEDER SCHEDULE
600V FEEDER SCHEDULE 3Ø 3W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
A100A	100A-3W	1	3 # 1/0	N/A	1 # 6	2"
A125A	125A-3W	1	3 # 2/0	N/A	1 # 4	2"
A150A	150A-3W	1	3 # 3/0	N/A	1 # 4	2"
A175A	175A-3W	1	3 # 4/0	N/A	1 # 4	2 1/2"
A200A	200A-3W	1	3 #250KCM	N/A	1 # 4	2 1/2"
A225A	225A-3W	1	3 #300KCM	N/A	1 # 2	2 1/2"
A250A	250A-3W	1	3 #350KCM	N/A	1 # 1	2 1/2"

AA-8000 ALUMINUM GENERAL NOTES:

1. ALL GROUND CONDUCTORS SHALL BE STRANDED COPPER.
2. ALL CONDUIT SHALL BE EMT (INSTALLED IN INTERIOR CONCEALED SPACES) OR SCHEDULE-40 PVC (INSTALLED UNDERGROUND OR INCASED IN SLAB) UNLESS OTHERWISE NOTED.
3. ALL AMPACITIES ARE BASED UPON TABLE 310.15(B)(16) OF THE 2017 N.E.C.
4. FEEDER SCHEDULES INDICATED DATA FOR CONDUCTOR RATED UP TO 600V.
5. ALL CONDUCTOR TERMINATIONS SHALL COMPLY WITH THE TERMINATION MANUFACTURER'S INSTALLATION AND TORQUING REQUIREMENTS.
6. FINAL LUG TERMINATIONS FOR AA-8000 SERIES STRANDED ALUMINUM ALLOY CONDUCTORS SHALL UTILIZE UL-468B COMPLIANT MECHANICAL FITTINGS.
7. TERMINATIONS FOR AA-8000 SERIES STRANDED ALUMINUM ALLOY CONDUCTORS SHALL INCLUDE THE USE OF OXIDE-INHIBITING COMPOUND, APPLIED AFTER THE BARE CONDUCTORS HAVE BEEN WIRE BRUSHED AND THOROUGHLY CLEANED.
8. NO BARE CONDUCTORS SHALL BE EXPOSED TO THE AIR.

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IMPERIAL COMMUNITY COLLEGE DISTRICT
BUILDING 700
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SHAHAB SALEHI
E18803
EXP. 6/30/2021
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NOTE SHEET

E0.1

1 OVERALL SITE PLAN
1" = 100'-0"

REF. NORTH

KEY NOTES:

1. EXISTING 3-WAY SECTIONALIZING CABINET #1. THIS SECTIONALIZING CABINET SHALL BE USED TO DE-ENERGIZE FEEDER TO TRANSFORMERS THAT ARE SCHEDULED TO BE REMOVED. ELECTRICAL CONTRACTOR TO REMOVE 5KV FEEDERS (FEEDING BLDG. 700) AND ABANDON CONDUIT IN PLACE.
2. AREA OF WORK.
3. 5KV PRIMARY FEEDER TO TRANSFORMER, SEE TRENCH DETAILS #2 ON SHEET E3.1.
4. SECONDARY FEEDER FROM TRANSFORMER, SEE TRENCH DETAILS #1 ON SHEET E3.1

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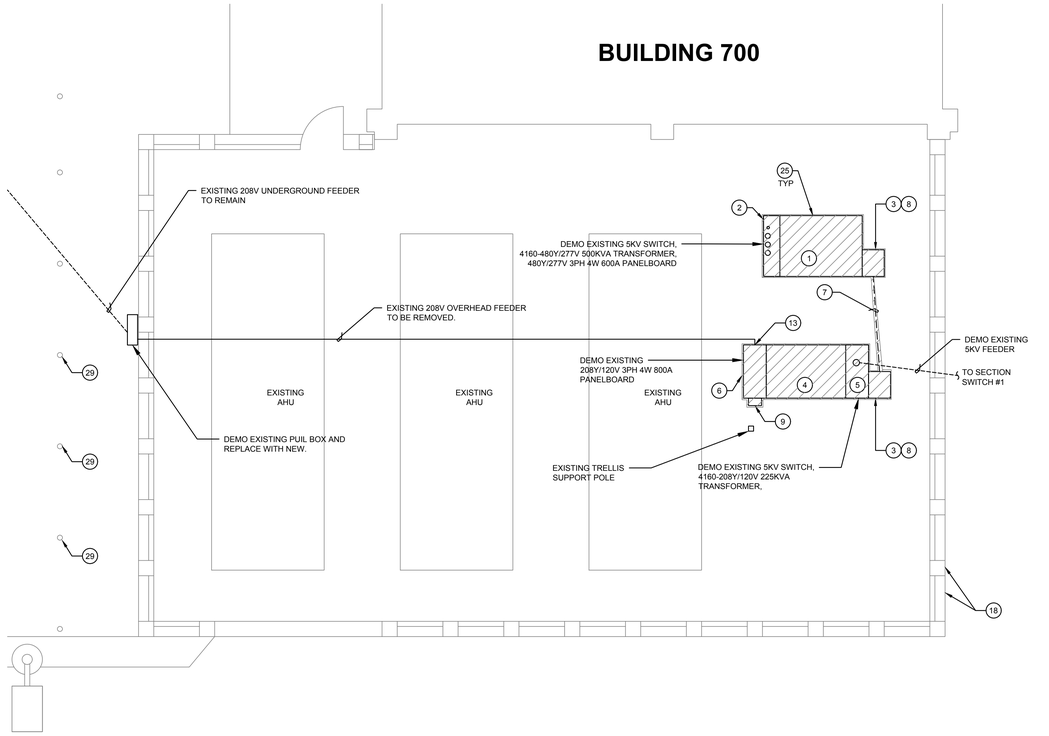
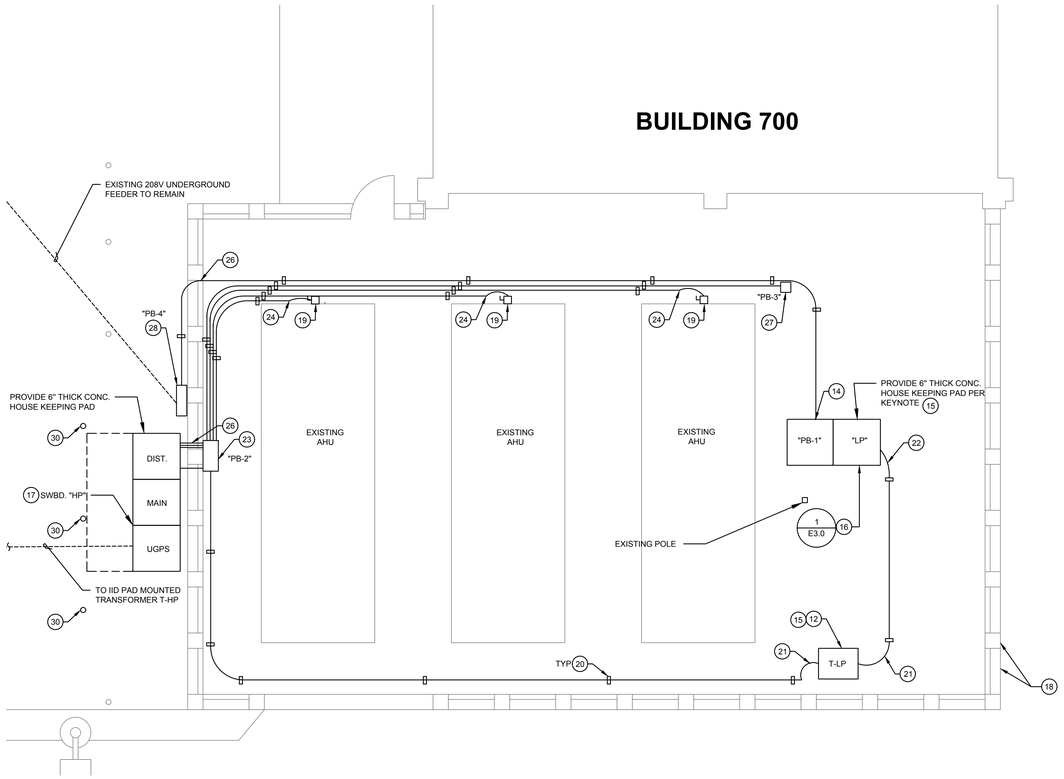
OVERALL SITE PLAN

E1.0



1 ENLARGED PARTIAL SITE PLAN - DEMO
1/4" = 1'-0"



2 ENLARGED PARTIAL SITE PLAN - NEW
1/4" = 1'-0"

GENERAL NOTES:

1. THE ONLY WAY TO REMOVE THE EXISTING EQUIPMENT AND INSTALL NEW ELECTRICAL EQUIPMENT IS TO REMOVE THE OVERHEAD TRELLIS AND LIFT THE ELECTRICAL EQUIPMENT OVER THE WALLS. CONTRACTOR SHALL PROVIDE CRANE TO PERFORM THE REMOVAL OF THE EXISTING AND INSTALLATION OF THE NEW EQUIPMENT AS NEEDED. REMOVE EXISTING TRELLIS AND REINSTALL TO MATCH EXISTING AFTER NEW EQUIPMENT HAS BEEN INSTALLED.
2. WHEN 600V CONDUITS ARE CROSSING THE 5KV CONDUITS THE 600V CONDUITS MUST BE INSTALLED ABOVE THE 5KV CONDUITS.
3. HATCHING INDICATES EQUIPMENT SCHEDULED FOR DEMOLITION.
4. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF THE OIL-FILLED TRANSFORMERS, SWITCHBOARDS AND ASSOCIATED MATERIAL THAT IS PART OF THE DEMOLITION.
5. SCHEDULE AND COORDINATE ALL POWER OUTAGES WITH IVC FACILITIES BEFORE START OF ANY WORK.
6. MAXIMUM HEIGHT OF THE NEW SWITCHBOARDS IS 72"

KEY NOTES:

1. REMOVE EXISTING 500kVA TRANSFORMER.
2. REMOVE EXISTING 600A, 480Y/277V 3PH, 4W DISTRIBUTION BOARD.
3. REMOVE EXISTING 5kV AIR SWITCH.
4. REMOVE EXISTING 225kVA TRANSFORMER.
5. REMOVE EXISTING PULLBOX FOR INCOMING 5kV FEEDER.
6. REMOVE EXISTING 800A 208Y/120V 3PH, 4W DISTRIBUTION BOARD.
7. REMOVE EXISTING 5kV CONDUIT INTERCONNECT BETWEEN TRANSFORMERS.
8. RETURN 5kV AIR SWITCH TO IVC FACILITIES.
9. REMOVE EXISTING TIMECLOCK AND ASSOCIATED WIRES AND CONDUITS BACK TO PANEL.
10. NOT USED..
11. NOT USED.
12. NEW 225KVA TRANSFORMER "T-LP". MAXIMUM WEIGHT 1,900LBS.
13. DISCONNECT THE EXISTING FEEDER AND REMOVE EXISTING CONDUIT AND LB CONDUIT BODY.
14. PROVIDE 48"W.x18"D.x72"H. PULL BOX 'PB-1' AND INTERCEPT THE EXISTING 208V FEEDERS. PROVIDE NEW UNDERGROUND CONDUITS FROM THE NEW PULL BOX TO NEW SWITCHBOARD "LP" AND EXTEND WIRES AS NEEDED.
15. PROVIDE NEW 6" THICK CONCRETE SLAB (FLUSH WITH EXISTING SLAB) WITH #3 @ 18" ON CENTER EACH WAY AND 2" CLEAR . SEE DETAIL #2 ON SHEET E3.0.
16. 800A, 208Y/120V 3PH, 4W DISTRIBUTION BOARD LP.
17. 1000A 480Y/277V 3PH, 4W DISTRIBUTION BOARD.
18. EXISTING PERMANENT METAL FENCE WITH CONCRETE/BRICK COLUMN.
19. EXISTING ELECTRICAL FUSED DISCONNECT. CONNECT TO NEW FEEDER. SEE SINGLELINE DIAGRAM FOR MORE INFORMATION.
20. PROVIDE CONDUIT SUPPORT BY COOPER B-LINE DB20 DURA-BLOK EVERY 12'-0" MAXIMUM SPACING. SECURE TO FLOOR.
21. PROVIDE WATER SEAL-TIGHT FLEXIBLE CONDUIT FROM TRANSFORMER TO EMT CONDUIT.
22. PROVIDE WATER SEAL-TIGHT FLEXIBLE CONDUIT FROM SWITCHBOARD TO EMT CONDUIT.
23. PROVIDE 24"x14"x12" NEMA 3R PULLBOX.
24. PROVIDE WATER SEAL-TIGHT FLEXIBLE CONDUIT FROM DISCONNECT TO EMT CONDUIT.
25. PATCH & REPAIR CONCRETE TO MATCH EXISTING AS REQUIRED.
26. DRILL EXISTING FENCE TO ALLOW FOR NEW CONDUITS.
27. INTERCEPT AND SPLICE EXISTING 40A FEEDER IN 8x8x8 NEMA 3R PULLBOX. SECURE PULLBOX TO SLAB.
28. PROVIDE 24"x24"xX8 NEMA 3R PULLBOX, INTERCEPT AND SPLICE UNDEGROUND FEEDER AND ROUTE TO NEW PULLBOX " PB-1", CONNECT TO SWBD. "LP".
29. DEMO EXISTING CONCRETE FILLED BOLLARD POST.
30. PROVIDE NEW 4" DIAMETER X 42" CONCRETE FILLED BOLLARD POST TO MATCH EXISTING.

3 SITE PHOTO INFORMATION OF EQUIPMENT
SCALE: NONE

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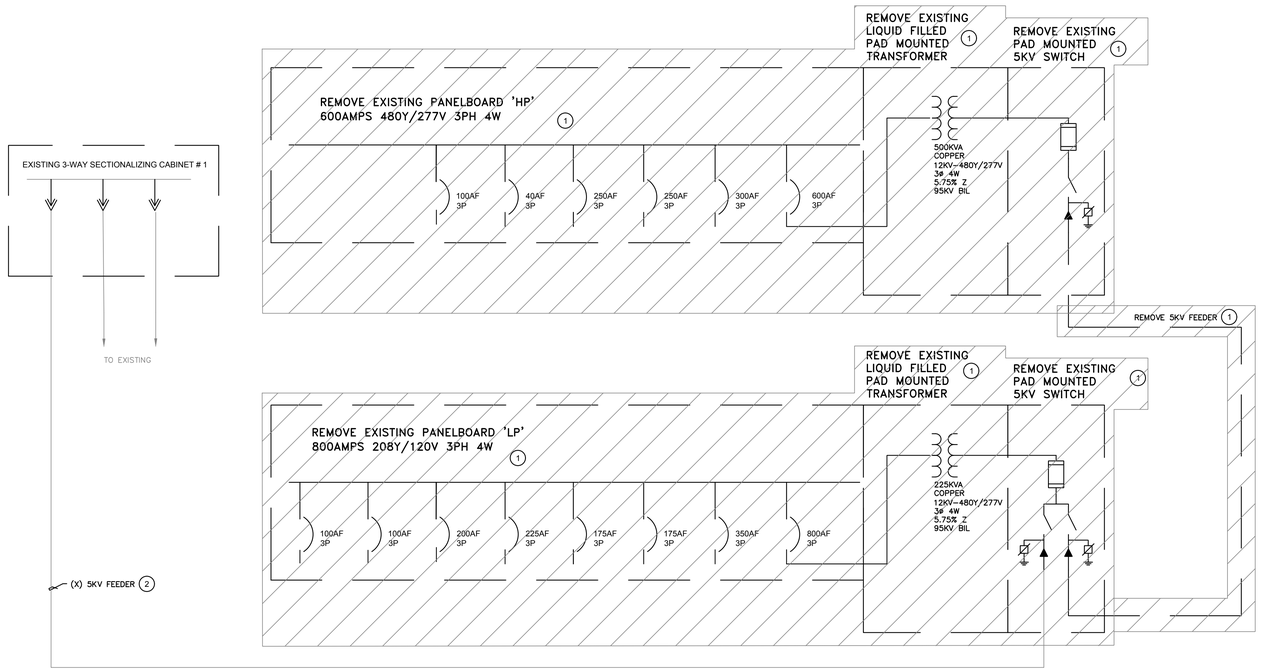
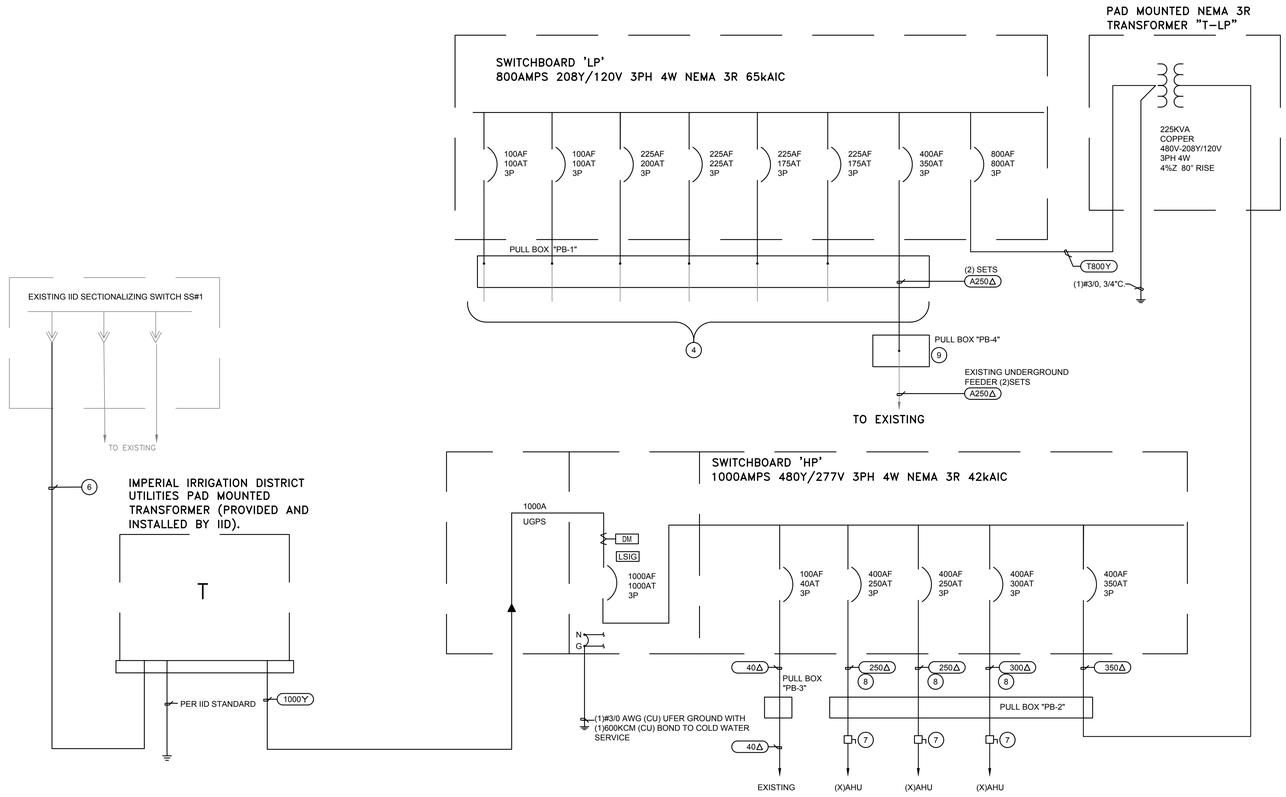
ENLARGED PLANS

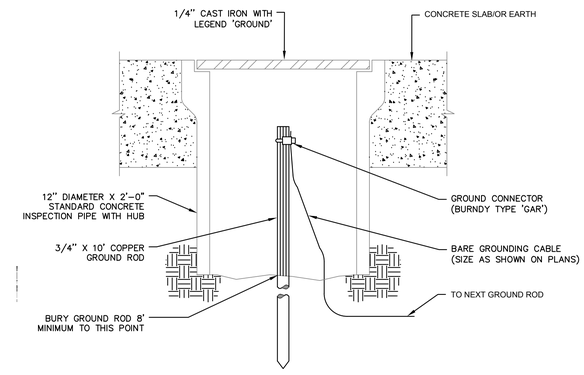
E1.1



1 SINGLE LINE DIAGRAM – DEMO
NONE



2 SINGLE LINE DIAGRAM – NEW
NONE



3 GROUND ROD DETAIL
NONE

KEY NOTES:

1. REMOVE EXISTING 5KV SWITCHES, TRANSFORMERS, SWITCHBOARDS AND 5KV CABLE BETWEEN THE 5KV SWITCHES.
2. REMOVE EXISTING 5KV FEEDER CONDUCTORS AND ABANDON CONDUIT.
3. PROVIDE JENSEN PRECAST 48X48 PULLBOX MODEL PB4848836.
4. RECONNECT THE EXISTING SUB-FEEDERS TO THE NEW CIRCUIT BREAKERS. SPLICE WIRES INSIDE THE NEW PULL BOXES.
5. 1-1/2"C - 1# 3/0 TO COLD WATER PIPE.
   3/4"C - 1# 4 TO GROUND ROD.
6. PROVIDE (3) 1/C #1/0 AWG CU 15kV MV-105 EPR+1#4 B.C.G. IN 5" C.
7. INTERCEPT AND CONNECT TO EXISTING ELECTRICAL FUSED DISCONNECT, VERIFY EXACT LOCATION IN FIELD.
8. VERIFY FEEDER IN FIELD.
9. PROVIDE 24"x24'xX8 NEMA 3R PULLBOX, INTERCEPT AND SPLICE UNDEGROUND FEEDER AND ROUTE TO NEW PULLBOX " PB-1", CONNECT TO SWBD. "LP".

GENERAL NOTES:

1. EACH TRANSFORMER SHALL USE THE NEAREST ELECTRODE AS THE SECONDARY GROUNDING SYSTEM. (I.E. BUILDING STEEL, COLD WATER PIPE).
2. ALL EQUIPMENT IS NEW UNLESS NOTED OTHERWISE.
3. ALL CONDUCTORS RATED 600V OR 250V SHALL HAVE 'THW', 'THHN' OR 'THWN' INSULATION WITH EMT CONDUIT. UNLESS NOTED OTHERWISE.
4. ALL SWITCHGEAR AND EQUIPMENT SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT.

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SINGLE LINE DIAGRAM

E2.0

CONRETE NOTES:

1. CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION, AND PROJECT SPECIFICATIONS.

2. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES, HOPPERS AND VERTICAL CHUTES OR TRUNKS SHALL BE USED. CHUTES OR TRUNKS SHALL BE OF VARIABLE LENGTHS SO THAT FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET. A SUFFICIENT NUMBER OF CHUTES OR TRUNKS SHALL BE USED TO ENSURE THE CONCRETE IS KEPT LEVEL AT ALL TIMES.

3. STRUCTURAL CONCRETE SHALL MEET THE FOLLOWING DESIGN CRITERIA:

LOCATION	MIN 28 DAY COMP STRENGTH	CONCRETE TYPE	MAX AGGREGATE SIZE	MAX W/C RATIO
FOUNDATION	3000 PSI	NWC	1-1/2"	0.55
SLAB-ON-GRADE	4000 PSI	NWC	1"	0.50

a. WHEN THE USE OF PLASTICIZER (ASTM C1017, TYPE I OR II) OR WATER REDUCER (ASTM C494, TYPE F OR G) IS USED, MAXIMUM SLUMP SHALL BE 4" PRIOR TO ADMIXTURE AND 8" INCLUDING ADMIXTURE AT THE POINT OF DELIVERY. IN THE ABSENCE OF PLASTICIZER AND WATER REDUCER, SLUMP AT THE POINT OF DELIVERY SHALL NOT EXCEED 4".
b. W/C RATIO INDICATES WATER TO CEMENTITIOUS MATERIALS RATIO.
c. SEE ACI 318 FOR ADDITIONAL REQUIREMENTS REGARDING MAXIMUM AGGREGATE SIZE.AGGREGATE GRADATION OF 3/8" MAXIMUM (PEA GRAVEL) SHALL NOT BE USED WHERE FINISHED CONCRETE SURFACE IS EXPOSED TO VIEW.

4. CONCRETE MIX DESIGN AND TESTING SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE, AND SPECIFICATIONS. ALL CONCRETE MIXES SHALL BE DESIGNED PER ACI 318 SECTION 26.4.3 BY A RECOGNIZED TESTING LAB STAMPED AND SIGNED BY A LICENSED CALIFORNIA CIVIL ENGINEER AND SUBMITTED TO THE EOR FOR REVIEW PRIOR TO CONCRETE PLACEMENT. STRUCTURAL CONCRETE MIXES SHALL CONSIST OF 5 SACK MINIMUM UNO.

5. AGGREGATES IN NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33 (HARDROCK).

6. COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO DSA AND THE EOR.

7. PORTLAND CEMENT SHALL BE TYPE II AND SHALL CONFORM TO ASTM C150, LOW ALKALI. MILL TESTS WITH CERTIFICATES OF COMPLIANCE SHALL BE SUBMITTED.

8. FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618 CLASS F MAY BE USED AS A PARTIAL SUBSTITUTION FOR PORTLAND CEMENT UP TO A MAXIMUM OF 25% TOTAL CEMENTITIOUS MATERIALS BY WEIGHT IF THE MIX DESIGN IS PROPORTIONED BY FIELD EXPERIENCE OR TRIAL MIXTURES.

9. CONCRETE MIXING OPERATIONS, ETC. SHALL CONFORM TO ASTM C94.

10. DRYPACK OR NONSHRINK GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI, AND CONSIST OF MASTERFLOW 713, EUCON NS GROUT, SIKA GROUT 212, OR APPROVED EQUAL. FOR THICK GROUT LAYERS FOLLOW MANUFACTURER'S GUIDELINES TO ATTAIN THE REQUIRED STRENGTH, WHICH MAY INCLUDE THE ADDITION OF PEA GRAVEL. FOR BASE PLATES LARGER THAN 6 SQUARE FEET, USE HI-FLOW GROUT OR MASTERFLOW 928.

11. DO NOT USE ANY CONCRETE OR GROUT CONTAINING CHLORIDES. WATER USED IN MIX SHALL BE CLEAN AND POTABLE.

12. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY EOR.

13. PROVIDE SLEEVES FOR ALL PIPES THROUGH CONCRETE WALLS AND FOOTINGS WHERE SHOWN ON THESE DRAWINGS. CORING IS NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE EOR.

14. EXPOSED CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH 3/4" CHAMFER OR 1/2" RADIUS TOOLED EDGE, UNO.

REINFORCING NOTES:

1. REINFORCING GRADES FOR CONCRETE:
   a. ALL BARS UNLESS NOTED OTHERWISE.....ASTM A615 OR A706, GRADE 60
   b. TIES AND STIRRUPS ..... ASTM A615 OR A706, GRADE 60
   NOTE: ALL BARS SHALL BE DEFORMED.

2. MAINTAIN CONCRETE COVER FROM FACE OF CONCRETE TO EDGE OF ALL REINFORCEMENT AS FOLLOWS (UNO):

CONDITION	COVER
CAST AGAINST & PERMANENTLY EXPOSED TO EARTH	3"
STRUCTURAL SLAB-ON-GRADE	
-FROM BOTTOM OF SLAB	2"
-FROM TOP OF SLAB	1-1/2"

PROVIDE THE LARGEST COVER REQUIRED FOR ALL APPLICABLE CONDITIONS. WHERE #3 STIRRUPS OR TIES ARE USED, ENSURE THAT THE COVER FOR LONGITUDINAL BARS IS ADEQUATE.

3. REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE". EACH REINFORCING BAR SHALL BE WIRED TO A CROSS BAR AT A MAXIMUM SPACING OF 24"OC. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING IN POSITIONS SHOWN ON THE PLANS. DO NOT USE WOOD OR BRICK TO SUPPORT REINFORCING.

4. ALL DOWELS, ANCHOR BOLTS AND OTHER HARDWARE TO BE SET IN CONCRETE SHALL BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. NO WET SETTING, STABBING, RODDING OR OTHER MOVEMENT OF EMBEDDED ITEMS SHALL BE PERFORMED DURING PLACEMENT OF CONCRETE.

5. BEND REINFORCING BARS COLD.

6. STEEL SHALL BE KEPT CLEAN AND FREE OF RUST.

7. DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE MAIN REINFORCING UNO.

8. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN PLACE INSPECTION IS MADE.

9. CHAIRS OR SPACERS FOR REINFORCING SHALL BE PLASTIC WHEN RESTING ON EXPOSED SURFACES.

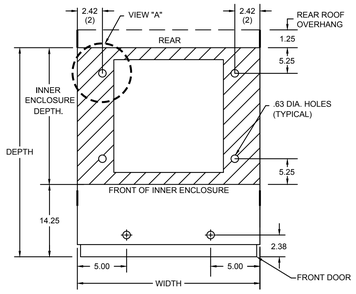
10. ALL BENDS WITHIN STIRRUPS, HOOPS, AND CROSS-TIES SHALL ENGAGE A LONGITUDINAL BAR. PROVIDE #4 SPACER BAR WHERE A LONGITUDINAL BAR IS NOT SPECIFICALLY DETAILED.

FOUNDATION NOTES:

1. ALLOWABLE FOUNDATION VALUES BASED ON CODE MINIMUM (CBC TABLE 1806A.2).
2. ALLOWABLE SOIL PRESSURES FOR FOOTINGS:
   DEAD LOAD + LIVE LOAD ..... 1500 PSF
   DEAD LOAD + LIVE LOAD + LATERAL LOAD ..... 2000 PSF
3. ALLOWABLE LATERAL SOIL BEARING PRESSURE PER FOOT OF DEPTH .....100 PSF
4. ALL EXCAVATIONS SHALL COMPLY WITH APPLICABLE OSHA REQUIREMENTS.
5. POLE FOOTINGS ARE CENTERED UNDER COLUMNS, UNO.

REVISION	
RR#6117	2
ADDED DETAIL A, REVISED DEPTH DIMS. MLA/DSF 5/21/14	
UPDATED FILE TO RELOAD IN ENOVIA BA/DSF 10/30/14	3
UPDATED FILE TO RELOAD IN ENOVIA BA/DSF 12/2/14	4

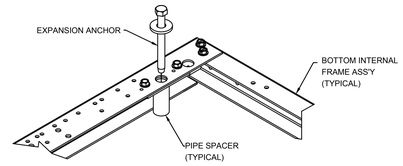
NEMA 3R FLAT ROOF ENCLOSURE



SINGLE STRUCTURE OR FIRST STRUCTURE IN LINEUP

FLOOR ANCHOR PLAN

(TYPICAL INNER ENCLOSURE)



VIEW "A"

NOTES:

1. (6) 1/2" DIA. SS HILTI KB-TZ W/ 2-1/2" EMBED. TYP @ SINGLE SWITCHBOARD. ON (E) 4" THICK SOG (ICC ESR 1917) TORQUE TEST TO 40FT-LBS. TEST 50% OF ANCHORS IN A GROUP. ANCHORS MUST ATTAIN REQUIRED TORQUE WITHIN 1/2 TURN OF THE NUT. LOCATE ANCHORS IN PRE-DRILLED PER SUPPLIER.
2. (6) 1/2" DIA. SS HILTI KB-TZ W/ 3-3/4"" EMBED. TYP @ EA OF (3) SECTIONS FOR EXTERIOR SWITCHBOARD ON CONC. PAD PER PLAN. SEE NOTE #1 FOR REMAINDER.

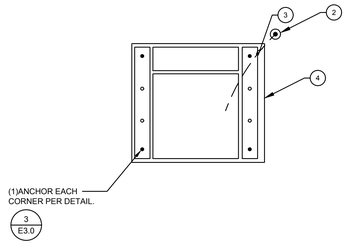
INNER ENCLOSURE DEPTH	DEPTH
24D	38.25
30D	44.25
36D	50.25
48D	62.25
54D	----
66D	----

DFTR DATE | APPD DATE | APPD DATE | TITLE | TYPE

FEDERAL ID NO. | PRODUCT CODE | REVISION | G.O. | DWG | SHEET

1 600V SWITCHBOARD ANCHORING DETAIL (MAX. WEIGHT 600LBS)

NO SCALE



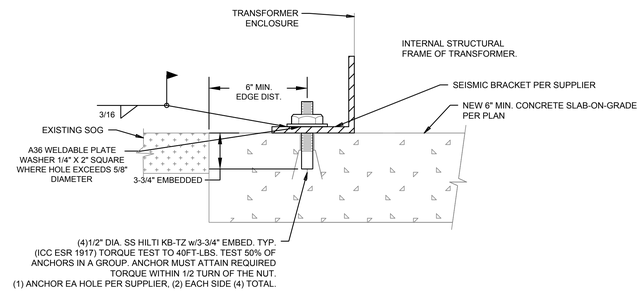
KEY NOTES:

1. PAD MOUNTED TRANSFORMER
2. 5/8"x 8' COPPER CLAD GROUND ROD
3. GROUNDING ELECTRODE CONDUCTOR PER SINGLE LINE DIAGRAM.
4. NEW CONCRETE PAD PER PLAN.

REGISTERED PROFESSIONAL ENGINEER — ERIC A. CARLSON — No. S 4937 — STRUCTURAL — STATE OF CALIFORNIA

2 CONCRETE PAD LAYOUT FOR PAD MOUNT TRANSFORMER

NO SCALE



3 ANCHORING DETAIL

NO SCALE

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-118941 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 12/04/2020

Revisions

REVISIONS 11.16.2020

IMPERIAL COMMUNITY COLLEGE DISTRICT BUILDING 700 TRANSFORMER UPGRADE

Drawn	MJM
Checked	EB
Project No.	192-037
Date	2019.11.01

REGISTERED PROFESSIONAL ENGINEER — SIHANB SALEH — E18803 EXP. 6/30/2021 — ELECTRICAL — STATE OF CALIFORNIA

MICHAEL WALL ENGINEERING
858-638-0600
858-638-0640 (fax)
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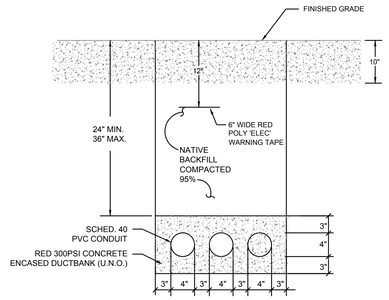
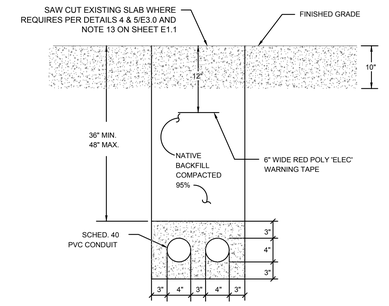
4115 Sorrento Valley Blvd,
San Diego, CA 92121
REGISTERED ELECTRICAL ENGINEERS

ELECTRICAL DETAILS

E3.0



1 600V ELECTRICAL TRENCH DETAIL
NO SCALE



2 5KV ELECTRICAL TRENCH DETAIL
NO SCALE

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ELECTRICAL
DETAILS

E3.1