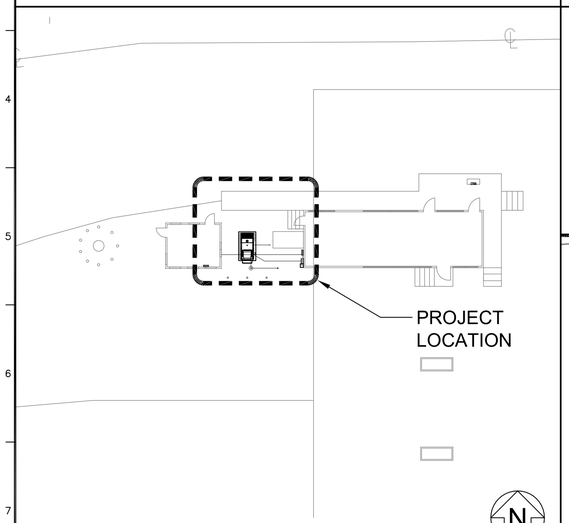
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

WINTERHAVEN BORDER STATION
GENERATOR REPLACEMENT

3510 I-8, WINTERHAVEN, CALIFORNIA 92283
PROJECT NUMBER: 000000000013525

SITE PLAN



NOT TO SCALE

VICINITY MAP

NOT TO SCALE

SCOPE OF WORK

1. DEMOLISH (E) PROPANE GENERATOR AND INTEGRATED ATS/PANELBOARD.
2. DEMOLISH (E) CONDUITS AND CONDUCTORS ASSOCIATED TO GENERATOR.
3. PROVIDE 20kW/25kVA, 240/120V, 1Ø, 3W, 80% PF, OPTIONAL STANDBY PROPANE GENERATOR, WITH NEMA 3R LEVEL II SOUND ATTENUATED ENCLOSURE AND 20'-0" EXHAUST PIPE EXTENSION WITH ASSOCIATED SUPPORT BRACKETS.
4. PROVIDE RECONNECTION OF (E) ABOVE GROUND PROPANE TANK PIPES TO GENERATOR.
5. PROVIDE POWER AND CONTROL CONDUITS AND CONDUCTORS TO GENERATOR.
6. PROVIDE AN INTEGRATED ATS/PANELBOARD RATED 100A, 240/120V, 1PH, 3W, 10KAIC, 16 CIRCUIT, NEMA 3R, SWITCHED NEUTRAL.

DRAWING INDEX

TOTAL NUMBER OF SHEETS = 13

PROJECT INFORMATION

PREPARED FOR:

DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION
PROJECT MANAGEMENT AND
DEVELOPMENT BRANCH
707 3rd STREET, 4th FLOOR,
WEST SACRAMENTO, CA 95605

PROJECT DIRECTOR
JOYESH CHANDRA
PHONE: (916) 926-8906
EMAIL: JOYESH.CHANDRA@DGS.CA.GOV

ADMINISTRATIVE SERVICES DIVISION BUILDING AND PROPERTY MANAGEMENT UNIT
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
1220 NORTH STREET, ROOM 120,
SACRAMENTO, CA 95814

FACILITY PROJECTS AND CONTRACTS LEAD
DONOVAN HARRELL
PHONE: 916-879-6240
EMAIL: DONOVAN.HARRELL@CDFA.CA.GOV

PREPARED BY:

J.C. CHANG & ASSOCIATES, INC.
ENGINEERS, ARCHITECTS AND PLANNERS
385 VAN NESS AVENUE, SUITE 208
TORRANCE, CALIFORNIA 90501
PHONE: (310) 212-7644

ELECTRICAL ENGINEER OF RECORD
SEVAG AVANESSIAN
LIC. NO. E22793
385 VAN NESS AVE. #208
TORRANCE, CALIFORNIA 90501

ELECTRICAL LEAD ENGINEER
ORLANDO NAJERA -
ONAJERA@JCCAINC.COM

APPLICABLE CODES AND STANDARDS

ALL WORK MUST COMPLY WITH THE LATEST APPLICABLE FOLLOWING CODES AND REGULATIONS, AS ADOPTED AND AMENDED BY LOCAL, CITY, COUNTY, MUNICIPAL AND STATE REGULATIONS:

- 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
- 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. NFPA 70 - 2020 EDITION
- 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
- 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
- 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
- 2022 CALIFORNIA REFERENCE STANDARDS, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- 2021 NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE.
- 2024 NFPA 37 INSTALLATION AND USE OF STATIONARY COMBUSTION ENGINES AND GAS TURBINES.
- 2022 NFPA 110 STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEM.

REFERENCE CODE SECTION FOR NFPA STANDARDS ARE IN 2022 CBC CHAPTER 35 OR 2022 CFC CHAPTER 80. SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.
AMERICANS WITH DISABILITIES ACT TITLE II.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
SINGLE TABS
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
SEVAG AVANESSIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA
Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA#: 25690-1

Issue		
No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
TITLE COVER

Project Number
000000000013525

Reference North | Sheet Scale: AS SHOWN | Sheet Number: T0.1

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_T0.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

BASIC SIGNAGE REQUIREMENTS FOR FIRE AND LIFE SAFETY

BATTERY/EQUIPMENT/ELECTRICAL/MECHANICAL ROOMS: SIGNAGE AT METERED SERVICE PANELBOARD, PER 2022 CFC 604.3.1.
STORAGE TANK AND FLAMMABILITY AREAS: SIGNAGE AT GENERATOR & ADJACENT BUILDINGS, PER 2022 CFC 5704.2.3 AND 2017 NFPA 704.
NO SMOKING: SIGNAGE NEAR THE PROPANE & ADJACENT BUILDINGS, PER 2022 CFC SECTION 5703.5.
PORTABLE FIRE EXTINGUISHERS, PER 2022 CFC 1203, 2022 CFC CH. 57, 2022 CFC 1204.10, AND 2022 CCR TITLE 19. A LISTED PORTABLE FIRE EXTINGUISHER COMPLYING WITH 906 WITH A MIN. RATING OF 2-A:20-B:C SHALL BE PROVIDED NOT MORE THAN 50 FEET FROM THE GENERATOR, PER 2022 CFC SECTION 1204.10.
2017 NFPA 704 SIGNAGE FOR HAZARDOUS SYMBOLS

OPTIONAL STANDBY GENERATOR

ITEM	SUBMITTAL REQUIREMENTS	SUBMITTAL RESPONSE	REFERENCE
1	PROXIMITY TO STRUCTURE & PROPERTY LINES	4'-0" FEET FROM NEAREST BUILDING, 67'-0" FEET FROM PROPERTY LINE	E0.5, E2.1
2	OPEN OR ENCLOSED ENCLOSURE	LEVEL 2 ENCLOSED ALUMINUM ENCLOSURE (CUMMINS MODEL#C20 N6, LEVEL 2 F217-2), OUTDOORS. (OVERALL WEIGHT: 1,081 LBS) (OVERALL DIMENSIONS: L6'-9",W2'-10",H3'-9")	E0.5, E2.1, E3.3, PDF ATTACHMENT
3	CLASS, LEVEL, TYPE AND PURPOSE	CLASS 39, LEVEL 2, TYPE 10, OPTIONAL STANDY-BY	PDF ATTACHMENT
4	LOCATION/PROTECTION OF TRANSFER SWITCHES	ATS LOCATED OUTDOORS, ADJACENT TO GENERATOR AND INTEGRATED INTO PANELBOARD ENCLOSURE. PROTECTED BY BOLLARDS AND BUILDINGS.	E0.5, E2.1
5	ELEVATION/LOCATION OF EXHAUST	LOCATED OUTDOORS, ADJACENT BUILDINGS	E0.5, E2.1, E3.3
6	FUEL SOURCE TYPE, CONTENTS AND QUANTITY	GENERATOR IS SUPPLIED BY ABOVE GROUND 120-GAL PROPANE TANK. (@100% LOAD, 2.43-GPH (1-GAL = 43.1-CF @125°F AMBIENT TEMP.) AND PER NFPA 58 - 80% TANK FILL LIMIT, (E) 120 GAL PROPANE TANK HAS THE CAPACITY RUN TIME FOR 39-HOURS)	PDF ATTACHMENT
7	FUEL TANK LOCATION AND SET BACKS	LOCATED OUTDOORS, ADJACENT TO BUILDINGS AND PROTECTED BY BOLLARDS	E0.5
8	GENERATOR/TANK PAD DETAILS & LOAD CALCULATIONS	SEE ON DWG E0.4, E3.3, AND PDF ATTACHMENTS	E0.4, E3.3, PDF ATTACHMENT
9	SECONDARY CONTAINMENT	GENERATOR IS SUPPLIED TO ABOVE GROUND PROPANE TANK, THERE ARE NO SECONDARY SPILL CONTAINMENTS.	E3.3, PDF ATTACHMENTS
10	PIPING TYPE, FITTING AND METHOD OF JOINING	PIPING TYPE, FITTING, AND METHOD OF JOINING N.A., PRE-INSTALLED & PACKAGED BY GENERATOR MANUFACTURER	PDF ATTACHMENT
11	VEHICLE IMPACT PROTECTION	PROTECTED BY BUILDINGS AND BOLLARDS	E0.5, E2.1
12	GROSS AREA OF THE NEW IMPROVEMENTS	275 SQ/FT	E0.5, E2.1

TRIAGE LIST AND SIGNAGE REQUIREMENTS - GENERATOR

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
ARTAG AVANESIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 11/18/2025

JCCA
Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
SFM TRIAGE LIST

Project Number
000000000013525

Reference North | Sheet Scale: AS SHOWN | Sheet Number: T0.2

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_T0.2.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES
0 1 2 3

TYPICAL PLAN LEGEND

- LIGHT, DASHED THIN LINES INDICATE EXISTING UNDERGROUND CONDUITS AND CONDUCTORS.
- LIGHT, CONTINUOUS THIN LINES INDICATE EXISTING OR EXISTING ABOVE GROUND CONDUITS AND CONDUCTORS.
- MEDIUM, SHORT DASHED LINES INDICATE DEMOLITION OR REMOVAL.
- HEAVY, DASHED THICK LINES INDICATE NEW UNDERGROUND CONDUITS AND CONDUCTORS.
- HEAVY, CONTINUOUS THICK LINES INDICATE NEW OR NEW ABOVE GROUND CONDUITS AND CONDUCTORS.
- G — G — HEAVY, LINES WITH "G" TEXTS INDICATE NEW UNDERGROUND BARE COPPER CONDUCTOR.
- OH — OH — LIGHT LINE WITH "OH" TEXTS INDICATE EXISTING OVERHEAD CONDUIT AND CONDUCTORS.
- GAS — GAS — HEAVY, LINES WITH "GAS" TEXTS INDICATE NEW UNDERGROUND GAS PIPE.

THIS SYMBOLOGY TO BE USED BY ELECTRICAL AND LAYOUT FOR ALL FLOOR PLANS, EQUIPMENT, DEVICES, UTILITIES, ETC..., SHOWN ON DRAWINGS.

ELECTRICAL LEGENDS

- P4-10 — BRANCH CIRCUIT DESTINATION (PANEL NAME-CIRCUIT NUMBER)
  HOMERUN INDICATES PROVIDING CONDUIT AND CONDUCTORS
  MINIMUM CONDUIT SIZE: 3/4"
  MINIMUM CONDUCTOR SIZE: #12AWG
  PROVIDE 3/4"C-2#12+1#12G WHERE NO CONDUIT/WIRE SIZE IS STATED.
  PROVIDE DEDICATED NEUTRAL FOR ALL BRANCH CIRCUIT WIRING.
  CONTRACTOR RESPONSIBLE FOR DE-RATING CONDUIT WITH MORE THAN SIX CURRENT CARRYING CONDUCTORS PER CEC 310.
  #12 AWG FOR CIRCUITS UP TO 100'
  #10 AWG FOR CIRCUITS FROM 100' TO 200'
  #8 AWG FOR CIRCUIT GREATER THAN 200'
- 1 — DEMOLITION KEY NOTE
- 1 — NEW WORK KEY NOTE
- DETAIL NO. / SHEET WHERE DETAIL IS DRAWN
- GROUNDING
- M — MOTOR
- M — MULTIFUNCTION POWER METER
- T OR — TRANSFORMER
- F — FUSE W/ DISCONNECT SWITCH
- FUSE
- CIRCUIT BREAKER
- SWITCHBOARD, DISTRIBUTION BOARD OR MOTOR CONTROL CENTER
- 480Y/277V, 3Ø, 4W PANELBOARD
- (208Y/120V OR 240Y/120V) 3Ø, 4W OR (240/120V) 1Ø, 3W PANELBOARD
- INTEGRATED ATS AND PANELBOARD (240/120V) 1Ø, 3W
- J — JUNCTION BOX OR PULL BOX
- RJ45 ETHERNET PORT - WALL MOUNTED
- 120V 20A - DUPLEX - WALL MOUNTED - RECEPTACLE
- 120V 20A - QUADPLEX - WALL MOUNTED - RECEPTACLE
- NO / OE / L — AUTOMATIC TRANSFER SWITCH (A.T.S.)
- G — GENERATOR

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
AMP./A	AMPERE
BKR	BREAKER
CKT	CIRCUIT
CB	CIRCUIT BREAKER
CU	COPPER
(D)	DEMOLISH
DWG	DRAWING
(E)	EXISTING
EA.	EACH
EGC	EQUIPMENT GROUNDING CONDUCTOR
EM.	EMERGENCY
EQUIP	EQUIPMENT
FIN	FINISHED
L	LENGTH
LV	LOW VOLTAGE
G, GND	GROUND
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CURRENT INTERRUPTER
NEGL	NEGLIGIBLE
(N)	NEW
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MIN.	MINIMUM
OS	OCCUPANCY SENSOR
NTS	NOT TO SCALE
P	POLE
PB	PULL BOX
PC	PHOTOCELL SENSOR
PLC	PROGRAMMABLE LOGICAL CONTROLLER
PNL	PANELBOARD
(R)	RELOCATED
SCE	SOUTHERN CALIFORNIA EDISON
SLD	SINGLE LINE DIAGRAM
SUB	SUBSTATION
SW	SWITCH
SWB	SWITCHBOARD
TYP.	TYPICAL
TD	TIME DELAY
THRU	THROUGH
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
VD	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
WP	WEATHER PROOF
XFMR, TRANSF.	TRANSFORMER

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER — SERAG AVANESIAN — No. E22793 Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA#: 25690-1

Issue		
No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL COVER SHEET

Project Number
000000000013525

Reference North | Sheet Scale: AS SHOWN | Sheet Number: E0.1

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E0.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

ELECTRICAL NOTES

1. GENERAL:

   A. THE PROVISIONS OF THE GENERAL CONDITIONS ARE PART OF THIS SECTION AS THOUGH FULLY SET FORTH HEREIN. BEFORE SUBMITTING THE BID, THE BIDDER SHALL VISIT THE SITE AND DETERMINE ANY EXISTING CONDITIONS WHICH MAY AFFECT THE COST OF WORK UNDER THIS SECTION; AND SHALL INCLUDE IN THE BID ALLOWANCE FOR SUCH COST.

   B. THE ELECTRICAL GENERAL NOTES ARE PROVIDED ONLY TO EMPHASIZE PORTIONS OF WORK OR INFORMATION REQUIRED FOR THE SCOPE OF WORK. CONTRACTOR TO REFER TO ALL OTHER INFORMATION INCLUDED IN THE COMPLETE DRAWINGS PACKAGE FOR ALL DISCIPLINES IN THE PROJECT, PROJECT MANUALS AND SPECIFICATIONS AS WELL AS ALL OTHER DOCUMENTS AND INFORMATION PROVIDED OR REFERENCED IN CONTRACT DOCUMENTS.

2. WORK INCLUDED:

   PROVIDE MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED TO, THESE MAJOR ITEMS:

   A. MAINTAIN ALL EXISTING ELECTRICAL WORK WITHIN THE CONSTRUCTION AREA REQUIRED TO CONTINUE EXISTING ELECTRICAL SYSTEMS OPERATION BEYOND THE CONSTRUCTION AREA.

   B. PROVIDE "AS-BUILT" DRAWINGS SHOWING CHANGES FROM THE CONTRACT DOCUMENTS.

   C. TEST THE COMPLETED WORK. CORRECT ANY DEFECTS TO THE SATISFACTION OF PROJECT REPRESENTATIVE.

3. DRAWINGS:

   A. ALL DRAWINGS IN THE PACKAGE ARE INCLUDED IN THE SCOPE OF WORK. DRAWINGS FROM EVERY TRADE SHOULD BE CAREFULLY REVIEWED AND COORDINATED WITH THE ELECTRICAL DRAWINGS TO ESTABLISH AN UNDERSTANDING OF THE PROJECT AS A WHOLE. WHERE THERE ARE ITEMS SHOWN ON DRAWINGS OF OTHER TRADES THAT REQUIRE ELECTRICAL PROVISIONS, SUCH PROVISIONS SHALL BE DETERMINED BY THE CONTRACTOR AND THE COST SHALL BE INCLUDED IN THE BID.

   B. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE LOCATIONS OF EQUIPMENT, DEVICES AND OTHER LOADS AS WELL AS THE CIRCUIT ARRANGEMENT OR THE REQUIRED CONDUIT AND WIRING, ALTHOUGH NOT NECESSARILY INDICATING THE ACTUAL RUNS OF CONDUIT THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS COORDINATION WITH THE WORK OF OTHER TRADES AND THE STAGES AVAILABLE WILL PERMIT. ANY DISCREPANCIES, CONFLICTS OR QUESTIONABLE POINTS SHALL BE IMMEDIATELY REPORTED TO PROJECT MANAGER.

   C. IF RELOCATION OR ADJUSTMENT OF ANY PORTION OF WORK IS REQUIRED, IT SHALL BE MADE BY THE CONTRACTOR WITHOUT EXTRA COST, PROVIDED THE NEW LOCATION IS NOT MORE THAN FIVE FEET FROM THE LOCATION SHOWN ON THE DRAWINGS.

   D. ALL ITEMS NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS OR NOTED ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION SHALL BE INCLUDED.

4. SPECIFICATIONS:

   A. A SEPARATE SPECIFICATION PACKAGE IS PROVIDED IN ADDITION TO THE DRAWINGS. THE SPECIFICATIONS ARE PART OF THE CONTRACT SCOPE. ALL SECTIONS OF THE SPECIFICATION PACKAGE SHALL BE CAREFULLY REVIEWED BY THE CONTRACTOR. NOT ALL ELECTRICAL WORK IS NECESSARILY STATED IN THE ELECTRICAL SECTIONS, THEREFORE IT IS NECESSARY TO CAREFULLY REVIEW ALL SECTIONS TO DETERMINE ELECTRICAL PROVISIONS THAT ARE REQUIRED.

   B. ALL REQUIREMENTS STATED IN THE SPECIFICATIONS PACKAGE SHALL APPLY TO THE PROJECT, WHETHER OR NOT SHOWN ON THE DRAWINGS. COORDINATE ALL INFORMATION SHOWN ON DRAWINGS AND SPECIFICATION PRIOR TO BID AND REPORT ANY DISCREPANCY, CONFLICT OR QUESTIONS IMMEDIATELY TO THE PROJECT MANAGER. WHERE A CONFLICT EXISTS BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT, SAFE AND/OR COSTLY OF THE ITEMS SHALL BE USED AS BASIS FOR THE BID AND INCLUDED IN WORK.

5. DELEGATED DESIGN DRAWINGS, PRODUCT DATA AND SPECIFICATIONS:

   DELEGATED DESIGN SHALL INCLUDE DRAWINGS, SPECIFICATIONS AND SPECIFIC PRODUCT DATA / CUT-SHEETS FOR PRODUCTS THAT ARE USED. SUBMIT TO PROJECT MANAGER FOR APPROVAL.

6. SHOP DRAWINGS:

   SUBMIT TO PROJECT MANAGER FOR APPROVAL. SHOP DRAWING SHOWING COMPLETE DETAILS AND DIMENSIONS FOR ALL ELECTRICAL POWER, LIGHTING AND CONTROL EQUIPMENT AND DEVICES SHALL BE PROVIDED. REFER TO SPECIFICATIONS FOR DETAILED INFORMATION ON SHOP DRAWING REQUIREMENTS.

7. ORDINANCE REQUIREMENTS:

   THE ELECTRICAL WORK SHALL COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LOCAL AND STATE CODES AND ALL OTHER LEGAL REQUIREMENTS. IN CASE OF CONFLICTS BETWEEN CODE REQUIREMENTS, THE MOST RESTRICTIVE SHALL APPLY; EXCEPT WHERE THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED CODE REQUIREMENTS, IN WHICH CASE THE CONTRACT DOCUMENTS SHALL GOVERN.

8. PERMITS AND INSPECTIONS:

   A. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND FEES REQUIRED FOR THE EXECUTION OF HIS WORK, AND SHALL ARRANGE FOR AND PAY FOR ALL REQUIRED TESTS AND INSPECTIONS, AND SHALL GIVE ALL NOTICES REQUIRED BY ANY AND ALL LAWS, RULES, REGULATIONS, AND ORDINANCES WHICH PERTAIN TO THE CONTRACTOR'S WORK.

   B. CONTRACTOR SHALL PERFORM THE FOLLOWING LISTED ABOVE FOR AUTHORITY HAVING JURISDICTION AND IMPERIAL COUNTY APCD.

   C. OBTAIN A PERMIT AND REGISTRATION FOR BACKUP GENERATOR. MEET ALL REQUIRED COMPLIANCE WITH STATE AND FEDERAL EMISSION LIMITS, AND SPECIFIC OPERATIONAL AND TESTING PROTOCOLS.

9. TESTING AND COMMISSIONING:

   A. CONTRACTOR SHALL CONDUCT SUCH TESTING AND COMMISSIONING OF ANY PORTION OF INSTALLATIONS AS MAY BE NECESSARY TO ENSURE FULL COMPLIANCE WITH PLANS AND SPECIFICATIONS. COST OF TESTING AND COMMISSIONING SHALL BE BORNE BY CONTRACTOR AND CONTRACTOR SHALL PROVIDE ALL THE INSTRUMENTS, EQUIPMENT, LABOR AND MATERIALS TO COMPLETE TESTS.

   B. TESTING AND COMMISSIONING SHALL BE DONE IN A COMPREHENSIVE MANNER APPLIED TO THE ENTIRE SYSTEM AS A WHOLE. FOR EXAMPLE, THE ELECTRICAL, MECHANICAL AND PLUMBING SYSTEM AS WELL AS THEIR INTERCONNECTION AND FUNCTIONALITY WITH THE CONTROL AND COMMUNICATIONS SYSTEM SHALL BE TESTED AND COMMISSIONED IN THEIR ENTIRETY TO DEMONSTRATE A COMPLETE AND FUNCTIONAL SYSTEM.

   C. SHOULD THESE TESTS DEVELOP ANY DEFECT IN MATERIALS OR POOR WORKMANSHIP OR VARIANCE WITH REQUIREMENTS OF SPECIFICATIONS, THEN CONTRACTOR SHALL MAKE ANY CHANGES NECESSARY AND REMEDY ANY DEFECTS AT THE CONTRACTOR'S OWN EXPENSE.

   D. WHERE ANY FAILURE OR UNSATISFACTORY RESULTS FROM THE TESTING AND COMMISSIONING PROCESS ARE RECORDED OR OBSERVED, THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL AS NECESSARY TO RESOLVE THE ISSUE IN SUCH A WAY THAT TESTING AND COMMISSIONING IS COMPLETED SUCCESSFULLY. TESTING AND COMMISSIONING OF THE SYSTEM AS A WHOLE SHALL BE REPEATED IN SUCH CASES UNTIL ALL ISSUES HAVE BEEN RESOLVED, SATISFACTORY RESULTS ARE ACHIEVED AND RECORDED AND SYSTEM FUNCTIONALITY IS ITS ENTIRETY IS DEMONSTRATED AND PROVEN.

10. WARRANTY / GUARANTEE:

    EQUIPMENT AND ACCESSORIES INSTALLED UNDER THIS SECTION SHALL CARRY THE MANUFACTURER'S WARRANTY AND/OR GUARANTEE FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE EQUIPMENT. THE CONTRACTOR SHALL GUARANTEE IN WRITING, IN A FORM ACCEPTABLE TO THE PROJECT MANAGER, THE ENTIRE ELECTRICAL INSTALLATION AGAINST DEFECTIVE MATERIALS AND/OR IMPROPER WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. DURING THE PERIOD COVERED BY THE GUARANTEE CONTRACTOR SHALL MAKE NECESSARY REPLACEMENTS AND REPAIR AT NO COST TO THE CITY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS ON WARRANTY/GUARANTEE FOR SPECIFIC EQUIPMENT, DEVICES AND SYSTEMS.

11. COOPERATION WITH OTHERS:

    THE CONTRACTOR SHALL CONSULT AND COOPERATE FULLY WITH ALL OTHER CONTRACTORS AND SUB-CONTRACTORS FURNISHING LABOR, MATERIALS OR SERVICES, SO THAT THE WORK AS A WHOLE, SHALL BE EXECUTED IN THE MOST EFFICIENT MANNER, AND WITHOUT CONFLICT OR DELAY.

12. MATERIAL:

    ALL MATERIALS AND EQUIPMENT USED IN THE WORK SHALL BE NEW (UNLESS OTHERWISE NOTED OR SCHEDULED), AND SUITED TO THE INTENDED USE, AND SHALL BE LISTED BY THE UNDERWRITERS LABORATORIES INC. AND SHALL MEET THEIR REQUIREMENTS AND BEAR THEIR LABEL WHENEVER STANDARDS HAVE BEEN ESTABLISHED AND LABEL SERVICE IS REGULARLY FURNISHED BY THAT AGENCY. ALL MATERIALS AND EQUIPMENT SHALL BE OF THE MAKES AND TYPES SPECIFIED, AND NO SUBSTITUTIONS WILL BE ALLOWED UNLESS APPROVED IN WRITING. THE PROJECT MANAGER RESERVES THE RIGHT TO REJECT ANY MATERIAL OR EQUIPMENT, EITHER BEFORE OR AFTER INSTALLATION, WHICH, IN THE PROJECT MANAGER'S OPINION IS NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS OR INTENDED USE.

13. CONDUIT INSTALLATION:

    A. USE RIGID METAL CONDUIT FOR ALL EXPOSED EXTERIOR WORK.

    B. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40. ALL TRANSITIONS FROM UNDERGROUND TO ABOVE GROUND, EXPOSED CONDUIT SHALL UTILIZE RIGID METAL ELBOWS AND FITTINGS.

    C. PENETRATE AND SEAL ACCESS TO MANHOLES, WELL, VAULTS, ETC. AS REQUIRED TO ROUTE POWER AND CONTROL CONDUCTORS TO VALVES AND OTHER COMPONENTS. SUCH PENETRATIONS SHALL BE SEALED TO COMPLETE WATERTIGHT CONDITIONS. IN ADDITION, ALL CONDUIT PENETRATIONS TO AND FROM WELLS AND VAULTS SHALL BE EQUIPPED WITH EXPLOSION-PROOF FITTING, SIMILAR TO "COOPER INDUSTRIES" TYPE "EYS AND EZS" FITTING. SUCH FITTINGS SHALL BE PROVIDED WITH APPROPRIATE LISTED SEALANT TO PREVENT GASSES TRAVELING THROUGH CONDUITS TO AND FROM WELLS TO VAULTS AND OTHER PARTS OF THE SYSTEM.

    D. WHERE UNDERGROUND BORING IS REQUIRED, CONTRACTOR SHALL PROVIDE ALL NECESSARY SITE PREPARATION, EQUIPMENT, STAGING, ETC. TO ROUTE THE CONDUIT AS INDICATED ON PLANS.

    E. WHEN ROUTING ANY UNDERGROUND CONDUIT, CAREFULLY COORDINATE WITH UTILITIES SHOWN ON CIVIL SHEETS. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING A COMPLETE SURVEY TO CONFIRM EXISTING UTILITIES SHOWN, VERIFY ALL OTHER EXISTING UTILITIES AND ADJUST WORK TO AVOID DISRUPTION OF ALL EXISTING UTILITIES IN WORK AREA.

    F. THE SCOPE OF THIS PROJECT INCLUDES EXTENSIVE UNDERGROUND TRENCHING AND UNDERGROUND CONDUIT SYSTEMS.

    G. THE EXISTING UNDERGROUND UTILITIES ARE UNKNOWN, HOWEVER IT SHOULD BE ASSUMED THAT THERE ARE MANY EXISTING UNDERGROUND UTILITIES, MANY OF WHICH ARE INSTALLED AT VERY SHALLOW DEPTHS.

    H. THE CONTRACTOR IS RESPONSIBLE FOR USING SCANNING/LOCATING, UTILIZE SMALL TOOLS, AND PERFORM WORK CAREFULLY AS PART OF THE EXCAVATION AND EARTHWORK EFFORTS.

    I. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. EXISTING UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
    - ELECTRICAL POWER
    - LOW-VOLTAGE (FIBER AND COPPER)
    - HOT/COLD WATER LINES
    - GAS LINES
    - SEWER LINES

14. WIRE AND CABLE:

    A. PROVIDE WIRES AND CABLES OF THE SIZE AND TYPE SHOWN ON DRAWINGS AND AS SPECIFIED HEREIN. UNLESS OTHERWISE SPECIFIED ALL WIRE AND CABLE SHALL BE U.L. STANDARD ANNEALED COPPER WIRE WITH U.S. 600 VOLT INSULATION. THE MINIMUM SIZE WIRE FOR LIGHTING OR POWER CIRCUITS SHALL BE NO.12 AWG. ALL CONDUCTORS SHALL BE STRANDED. INSULATION OF CONDUCTORS SHALL BE TYPE THHN/THWN.

    B. COLOR CODE NO. 12 THROUGH NO. 8 BRANCH CIRCUIT WIRES. USE BLACK, RED, BLUE & WHITE FOR 120/208V CIRCUITS. USE YELLOW, ORANGE, BROWN & GRAY FOR 277/480V CIRCUITS. USE GREEN WIRES FOR EQUIPMENT GROUNDS ONLY.

    C. WIRES AND CABLES FOR CONTROL AND COMMUNICATIONS FOR SPORTS LIGHTING SYSTEM HAVE NOT BEEN SHOWN ON THE DRAWINGS AS THESE ITEMS ARE A PART OF THE DELEGATED DESIGN SCOPE OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING TYPE, SIZE AND QUANTITY OF WIRES AND CABLES AS REQUIRED TO PROVIDE THE COMPLETE SYSTEMS DESCRIBED IN THE DELEGATED DESIGN SCOPE OF WORK.

15. CONDUCTOR IDENTIFICATION:

    A. ALL FEEDERS SHALL BE TAGGED AT EACH POINT WHERE THE CONDUIT RUN IS BROKEN. ALL BRANCH CIRCUIT CONDUCTORS AT PANELBOARDS AND SWITCHBOARDS SHALL BE IDENTIFIED WITH "E-Z" CODE MARKERS.

    B. ALL CONTROL AND COMMUNICATION WIRING SHALL BE TAGGED NEAR THE POINT OF TERMINATION OF THE EQUIPMENT TO WHICH THE WIRING IS CONNECTED. THE TAGS SHALL BE TYPEWRITTEN, UV RESISTANT AND WATERPROOF.

16. BOXES AND ENCLOSURES:

    A. ALL OUTDOOR BOXES AND ENCLOSURES SHALL BE NEMA 3R.

    B. ALL BOXES AND ENCLOSURES USED IN VAULTS AND WELLS SHALL BE NEMA 4X STAINLESS STEEL TYPE.

17. WIRING DEVICES:

    A. ALL WIRING DEVICES SHALL BE FIRST QUALITY, HEAVY-DUTY "SPECIFICATION" GRADE, AND SHALL BE OF WHITE COLOR, GFCI TYPE.

    B. ALL WIRING DEVICES IN VAULTS AND WELLS SHALL BE HOUSED IN WEATHERPROOF NEMA 4X STAINLESS STEEL BOX OR ENCLOSURE.

    C. COMPLY WITH ALL APPLICABLE GROUNDING REQUIREMENTS SPECIFIED IN NFPA 70 ARTICLE 250 FOR GROUNDING AND BONDING ALL METAL DEVICES, LIGHTING POLES, AND CONDUIT RACEWAYS.

18. CODE COMPLIANCE:

    ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST APPLICABLE FOLLOWING CODES AND REGULATIONS, AS ADOPTED AND AMENDED BY LOCAL, CITY, COUNTY, MUNICIPAL AND STATE REGULATIONS:

    - 2022 CALIFORNIA BUILDING CODE, VOLUMES I, II, III
    - 2022 CALIFORNIA ELECTRICAL CODE
    - 2022 CALIFORNIA ENERGY CODE
    - 2022 CALIFORNIA FIRE CODE
    - 2022 CALIFORNIA MECHANICAL CODE
    - 2022 CALIFORNIA PLUMBING CODE
    - ALL OTHER CODES AND REGULATIONS AS REQUIRED BY DRAWINGS OF OTHER TRADES OR INCLUDED IN THE SPECIFICATIONS

19. SAFETY:

    A. ALL ELECTRICAL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH CAL/OSHA "LOCK OUT / TAG OUT " PROCEDURES.

20. TRAINING:

    A. AT THE CONCLUSION OF WORK, AFTER ALL POWER AND CONTROL EQUIPMENT HAVE BEEN INSTALLED, ENERGIZED, PROGRAMMED, TESTED/COMMISSIONED AND READY FOR USE, PROVIDE TRAINING FOR THE CITY STAFF.

    B. TRAINING SESSION SHALL BE NO LESS THAN 8 HOURS AND SHALL COVER THE OPERATION AND MAINTENANCE OF THE LIGHTING CONTROL, COMMUNICATIONS AND MONITORING SYSTEM.

    C. TRAINING SHALL BE PERFORMED BY A FACTORY TECHNICIAN OR AUTHORIZED VENDOR OF THE SPECIFIC PRODUCTS USED IN THE SYSTEM.

GENERAL NOTES

1. PROVIDE EXTENSIVE SIGNAGE AT EVERY ELECTRICAL ENCLOSURE TO IDENTIFYING THE POWER SOURCE AND RATING OF THE CONDUCTORS DUE TO MULTIPLE POWER SOURCES.
2. CONDUIT ROUTING IS SHOWN DIAGRAMMATICALLY UNDERGROUND CONDUIT ROUTING BASED ON SITE CONDITIONS.
3. GROUNDING SYSTEM IS SHOWN DIAGRAMMATICALLY. PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE GROUNDING SYSTEM TO ALL ELECTRICAL ENCLOSURE AND DEVICES.
4. ALL EXISTING UNDERGROUND UTILITIES INCLUDING BUT NOT LIMITED TO, POWER, COMMUNICATION WATER, SEWER AND GAS LINES, WHETHER SHOWN OR NOT ON THIS PLAN, SHALL REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
5. FEEDER LENGTHS ARE SHOWN FOR SIZING PURPOSES. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LENGTHS IN FIELD AND MAKING ADJUSTMENTS ACCORDINGLY.
6. CAREFULLY COORDINATE POWER SHUT-DOWN REQUIREMENTS WITH SITE MANAGEMENT REPRESENTATIVES AND PROJECT MANAGER.
7. UPDATE ALL PANEL SCHEDULES TO REFLECT FINAL CONDITIONS.
8. ALL CIRCUIT BREAKERS SHALL BE FULLY RATED AND SHALL HAVE THE CAPABILITY TO BE LOCKABLE FOR SAFETY MAINTENANCE PURPOSES.
9. ALL (E) EQUIPMENT IS TO REMAIN AND BE PROTECTED IN PLACE UNLESS NOTED. ALL (E) UNDERGROUND AND ABOVEGROUND FEEDERS WHETHER SHOWN OR NOT ON THIS PLAN SHALL REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
10. ALL SPARE CONDUITS SHALL BE CAPPED OFF AND LABELED FOR FUTURE USE.
11. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LENGTHS IN FIELD AND MAKING ADJUSTMENTS ACCORDINGLY. CONDUIT ROUTINGS ARE DIAGRAMMATICALLY REPRESENTING A PROPOSED LOCATION OF TRENCH. IF THERE ARE OBSTRUCTIONS IN PATH, USE FACTORY 22.5°, 45°, AND 90° BENDS AS NEEDED TO OFFSET OBJECTS IN PATH. DO NOT EXCEED MORE THAN 360° BENDS.
12. ALL PANELS, DISCONNECTS, TRANSFORMER, CONTROL PANELS, EQUIPMENT/DEVICES, AND INSTRUMENTS SHALL BE FIELD MARKED WITH LOCATION OF PRIMARY SOURCE, VOLTAGE CLASS, AND CIRCUITS #.

SEQUENCE OF CONSTRUCTION

1. CONTRACTOR SHALL COORDINATE WITH PROJECT MANAGER, OWNER, FACILITY MAINTENANCE, AND ELECTRICAL ENGINEER TO HOST AN ON-SITE PRE-CONSTRUCTION MEETING TO REVIEW REQUIREMENTS OF PROVIDING AN EFFICIENT SEQUENCE OF CONSTRUCTION AND MAINTAIN FACILITY DAILY OPERATIONS TO MINIMIZE DOWNTIME/POWER OUTAGE TO FACILITY.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THEIR OWN TEMPORARY POWER SUPPLY IN PERFORMING THEIR WORK TO AVOID DISRUPTION ON THE CLIENTS FACILITY OPERATIONS DURING CONSTRUCTION.
3. ONCE ALL PROVISIONS HAVE BEEN MADE, START DEMOLITION OF ALL EQUIPMENT AS SHOWN ON DEMOLITION PLANS. COORDINATE WITH PROJECT MANAGER AND OTHER TRADES FOR INDIVIDUAL TASKS AND RESPONSIBILITIES TO NOT DISRUPTS OR CAUSE CONFLICT/INTERFERENCE DURING CONSTRUCTION.
4. AFTER ALL ASSOCIATED EQUIPMENT WITHIN SCOPE OF WORK HAS BEEN DEMOLISHED, BEGIN TRENCHING GROUND AND PROVIDING ALL NECESSARY EQUIPMENT.
5. AFTER INSTALLATION OF CONDUITS AND CONDUCTORS WITHIN ALL TRENCHED DUCTBACKS ON SITE. COORDINATE WITH FIELD INSPECTOR TO INSPECT AND APPROVE UNDERGROUND CONDUITS. AFTER INSPECTION APPROVAL PROPERLY BACKFILL ALL TRENCHES AND REPAIR GROUND SURFACE AREAS TO MATCH EXISTING CONDITIONS.
6. CONTRACTOR SHALL BE RESPONSIBLE TO CAREFULLY COORDINATE LEAD TIMES WITH CONSTRUCTION TIMELINES. COORDINATE WITH PROJECT MANAGER FOR APPROPRIATE ONSITE STORAGE LOCATIONS FOR BOTH EQUIPMENT AND TOOLS.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITY LINES BY VIA DIG ALERT 811 PRIOR TO EXCAVATING EXISTING ASPHALT DRIVEWAY, DRIVEWAYS, AND SIDE WALKS TO AVOID INTERFERENCE AND DAMAGE TO EXISTING INFRASTRUCTURES.

CONTRACTOR NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, WAREHOUSING, AND ANY OTHER SERVICES REQUIRED TO COMPLETE THE WORK IN A TIMELY AND EFFICIENT MANNER.
2. INDIVIDUAL ITEMS OF WORK ARE DETAILED IN THE VARIOUS SECTIONS OF THIS SCOPE OF WORK, THE ATTACHED DRAWINGS, AND THE NOTES AND LEGENDS ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO COMPLETE THE REQUIREMENTS FOUND IN ANY OF THE ABOVE.
3. CONTRACTOR BIDS ARE TO BE BASED UPON COMPLETING THE WORK WITHIN THE AMOUNT BID. ANY QUESTIONS PERTAINING TO UNKNOWN CONDITIONS, CHANGES IN DESIGN, OMISSIONS IN THE DESIGN OR SCOPE OF WORK, MATERIALS, AND INSTALLATION TECHNIQUE ARE TO BE DISCUSSED WITH THE PROJECT MANAGER. THE PROJECT MANAGER WILL GET THE ANSWERS TO QUESTIONS, AS SOON AS POSSIBLE, IF "ON-THE-SPOT" ANSWERS CAN NOT BE PROVIDED. UNKNOWN CONDITIONS ENCOUNTERED DURING THE COURSE OF WORK, WHICH MAY DELAY WORK OR ADD COST, WILL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY-SO THAT PROPER ARRANGEMENTS CAN BE MADE WITHOUT WORK STOPPAGE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL APPLICABLE SAFETY LAWS ARE STRICTLY ENFORCED AND TO MAINTAIN A SAFE CONSTRUCTION PROJECT.
5. THE CONTRACTOR SHALL REPAIR AND/OR REPAINT ALL AREAS DAMAGED BY DEMOLITION OR CONSTRUCTION, AND FINISH TO MATCH EXISTING ADJACENT SURFACES.
6. THE CONTRACTOR SHALL SUBMIT "AS-BUILT" DRAWINGS TO THE PROJECT MANAGER UPON COMPLETION OF CONSTRUCTION.
7. DAILY, AND UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE DEBRIS, RUBBISH, WASTE, AND SURPLUS MATERIAL FROM PREMISES.
8. THE CONTRACTOR SHALL PROTECT AND COVER ALL FIXTURES AND EQUIPMENT IN AREAS AFFECTED BY WORK, AND UPON COMPLETION OF WORK, SHALL THOROUGHLY CLEAN ALL FIXTURES, EQUIPMENT, WALLS, FLOOR, AND HARDWARE.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS AT THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
10. ALL COMMUNICATION CONDUIT SHALL BE INSTALLED IN COMPLIANCE WITH ANSI STANDARDS AND INDUSTRY BEST PRACTICES.
11. ANY POWER OUTAGES SHALL BE APPROVED BY THE OWNER. A 7-DAY WRITTEN NOTICE SHALL BE GIVEN PRIOR TO FOR ANY OUTAGE REQUEST.
12. VERIFY EXACT LOCATION OF OUTLET, SWITCHES, EQUIPMENT, ETC WITH THE PROJECT MANAGER & USER PRIOR TO INSTALLATION. COUNTY RESERVES THE RIGHT TO RELOCATE ANY UNINSTALLED OUTLET IN ANY DIRECTION.
13. ALL NEW WIRING SHALL BE COPPER WITH "THHN" OR "THWN-2" 600 VOLT INSULATION COLOR CODE ALL BRANCH CIRCUIT WIRING.
14. UPON COMPLETION OF THE WORK, COOPERATE IN CONDUCTING AN OPERATING TEST TO DEMONSTRATE THAT ALL EQUIPMENT IS OPERATING IN A SATISFACTORY MANNER.
15. ALL ELECTRICAL WORK SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE OWNER.
16. ALL OUTLETS & DEVICE SHALL BE FLUSH WITH WALL, UNLESS OTHERWISE NOTED AS SURFACE MOUNTED.
17. ALL DEVICE COLOR SHALL BE WHITE U.O.N.
18. CONTRACTOR SHALL CORE DRILL, SAW CUT, PATCH TO MATCH ADJACENT SURFACES, AND PAINT ALL EXPOSED CONDUITS & BOXES TO MATCH ROOM FINISH.
19. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, WAREHOUSING, AND ANY OTHER SERVICES REQUIRED TO COMPLETE THE WORK IN A TIMELY AND EFFICIENT MANNER.
20. INDIVIDUAL ITEMS OF WORK ARE DETAILED IN THE VARIOUS SECTIONS OF THIS SCOPE OF WORK, THE ATTACHED DRAWINGS, AND THE NOTES AND LEGENDS ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO COMPLETE THE REQUIREMENTS FOUND IN ANY OF THE ABOVE.
21. ALL WORK SHALL BE IN COMPLIANCE WITH THE MOST CURRENT VERSION OF EDITION OF 2022 CALIFORNIA ELECTRICAL CODE AND ALL LOCAL ORDINANCES AND REQUIREMENTS.
22. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ALL TEMPORARY BARRIERS TO INSURE THE SAFETY OF THE WORK UNTIL IT IS IN ITS COMPLETED FORM.
23. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL APPLICABLE SAFETY LAWS ARE STRICTLY ENFORCED AND TO MAINTAIN A SAFE CONSTRUCTION PROJECT.
24. THE CONTRACTOR SHALL UPDATE "AS-BUILT" DRAWINGS DAILY.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
CRAIG A VANESSEN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272
JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No. 03-E00486
SFM Permit No. 25-S-3919-C-DR

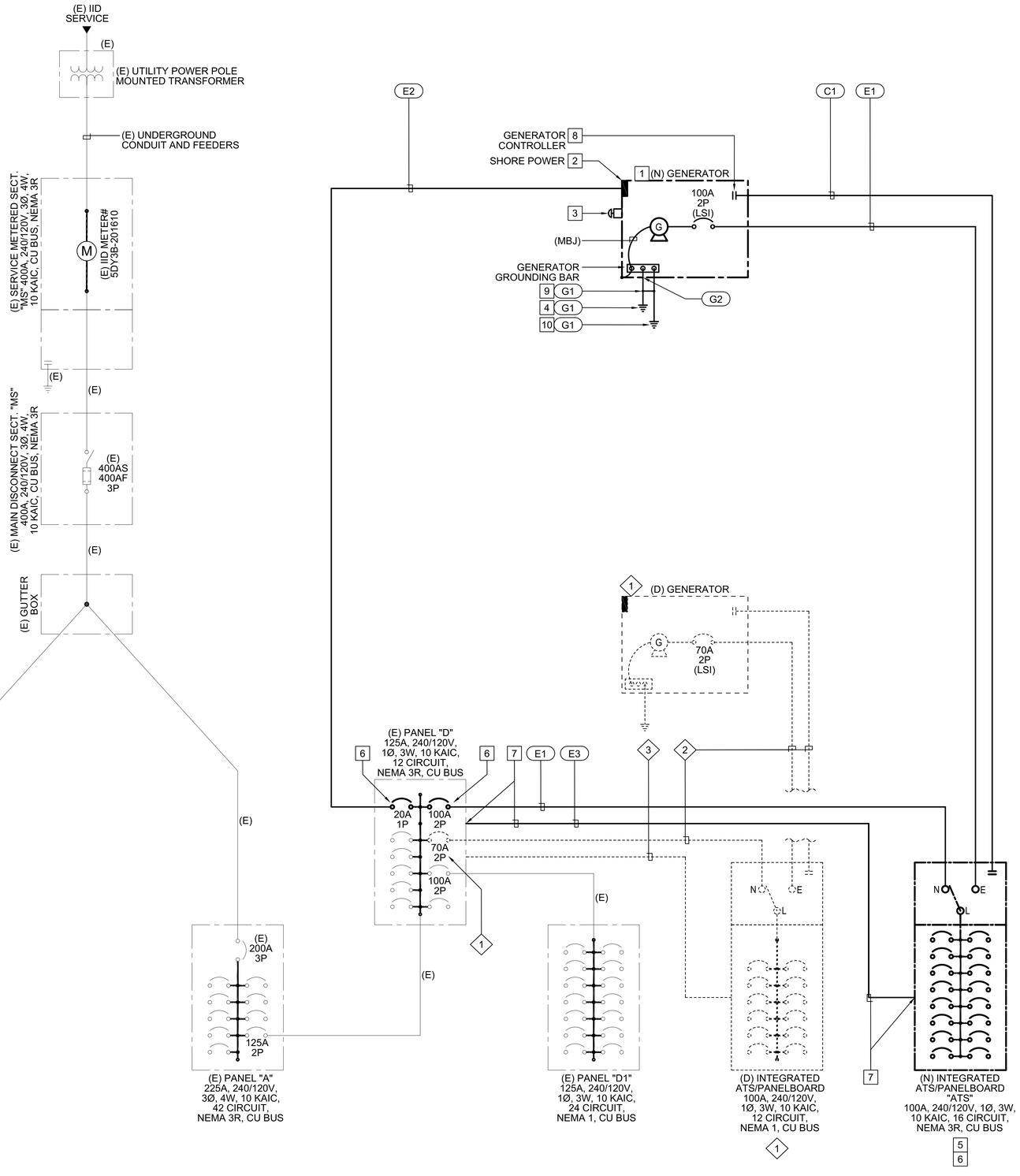
Sheet Title
ELECTRICAL NOTES

Project Number
000000000013525

Reference North
Sheet Scale AS SHOWN
Sheet Number E0.2

RELATIVE BORDER SCALE IN INCHES
0 1 2 3

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\25690-1_E0.2.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera



1 E0.3 ELECTRICAL SINGLE LINE DIAGRAM

NO SCALE

NEW WORK KEYNOTES:

1. PROVIDE 20kW/25kVA OPTIONAL STANDBY PROPANE GENERATOR RATED 240/120V, 1PH, 3W. PROVIDE AN F217-2 SOUND ATTENUATED LEVEL II ALUMINUM ENCLOSURE.
2. PROVIDE POWER SUPPLY TO GENERATOR CONTROLLER (20A, 120V, 1P, 2W). GENERATOR MANUFACTURER SHALL DELIVER ON SITE COMPLETE WITH WIRING TO BLOCK/ENGINE HEATER, BATTERY CHARGER, ETC.
3. GENERATOR MANUFACTURER SHALL PROVIDE EMERGENCY LOCKOUT SWITCH AND SHALL BE DELIVERED ON SITE COMPLETE WITH WIRING TO SWITCH. EMERGENCY SHUT DOWN OF PRIME MOVER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION.
4. PROVIDE CONCRETE ENCASED GROUNDING ELECTRODE CONDUCTOR (UFER). REFER TO DETAILS #/E3.# AND #/E3.#4.
5. PROVIDE AN INTEGRATED ATS/PANELBOARD RATED 100A, 240/120V, 1PH, 3W, 10KAIC, NEMA 3R, 16 CIRCUIT, WITH CIRCUIT BREAKERS SIZED AS SHOWN ON PANEL SCHEDULES. AUTOMATIC TRANSFER SWITCH (ATS) SHALL BE NEUTRAL SWITCHED WITH OPEN TRANSITION.
6. PROVIDE CIRCUIT BREAKER SIZED AS SHOWN ON SINGLE LINE DIAGRAM AND PANEL SCHEDULE.
7. PROVIDE CONDUITS FROM PANELBOARD "D" TO NEW ATS. EXTEND (E) CONDUCTORS TO (N) LOCATION. TERMINATE CONDUCTORS TO THERE (E) BREAKER SIZES.
8. PROVIDE CONTROL WIRING PER EQUIPMENT MANUFACTURER RECOMMENDATION.
9. BOND ALL SYSTEM GROUNDING ELECTRODES PRESENT AT EACH BUILDING OR STRUCTURE. PROVIDE BONDING JUMPERS TO ALL GROUNDING ELECTRODES IN ACCORDANCE WITH CEC 250.53(C) AND 250.66. REFER TO DETAIL #/E#.#.
10. PROVIDE A MINIMUM OF (2) TWO 3/4"Ø x 10' COPPER CLAD GROUND RODS SPACED A MINIMUM OF 6" APART, WITH A GROUNDING TEST INSPECTION WELL. REFER TO DETAILS #/E3.# AND #/E3.#.

DEMOLITION KEYNOTES:

1. DISCONNECT AND DEMOLISH EQUIPMENT.
2. DISCONNECT AND DEMOLISH CONDUCTORS AND CONDUITS.
3. DISCONNECT (E) BRANCH CIRCUIT CONDUCTORS FROM GENERATOR. PROTECT IN PLACE (E) BRANCH CIRCUIT CONDUCTORS WITHIN PANELBOARD "D". CONDUCTORS ARE TO BE RE-USED AND EXTENDED TO NEW EQUIPMENT. SEE NEW WORK.

FEEDER SCHEDULE KEYNOTES:

REFER TO FEEDER SCHEDULE KEYNOTES (--) ON SHEET E0.4 FOR CONDUIT AND CONDUCTOR SIZES.

GENERAL NOTES:

1. ALL EXISTING EQUIPMENT IS TO REMAIN AND BE PROTECTED IN PLACE UNLESS NOTES OTHERWISE.
2. ALL NEW CIRCUIT BREAKERS SHALL BE FULLY RATED AND HAVE THE CAPABILITY TO BE LOCKABLE FOR SAFETY MAINTENANCE PURPOSES.
3. ABOVE GROUND PROPANE PIPES SHALL REMAIN AND BE PROTECTED IN PLACE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LENGTHS IN FIELD AND MAKING ADJUSTMENTS ACCORDINGLY.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH GENERATOR MANUFACTURER TO CONFIRM EACH GENERATOR'S SHORE POWER AUXILARY REQUIREMENTS AND MODIFY SIZE AND TYPE OF CIRCUIT BREAKER, CONDUIT, CONDUCTORS, AND OUTLET BOX ACCORDINGLY.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES

Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
ARAG AVANESIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 11/18/2025

JCCA Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No. 03-E00486
SFM Permit No. 25-S-3919-C-DR

Sheet Title
ELECTRICAL SINGLE LINE DIAGRAMS

Project Number 000000000013525

Reference North

Sheet Scale AS SHOWN

Sheet Number E0.3

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E0.3.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

GENERAL NOTES:

1. PANEL SCHEDULES AND LOAD CALCULATIONS ARE PROVIDED BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING AVAILABLE SPACES, AND MAKING ADJUSTMENTS AS REQUIRED TO PROVIDE THE NEW BRANCH CIRCUITS SHOWN IN THE SCHEDULES.
2. UPDATE ALL SCHEDULES TO REFLECT FINAL CONDITIONS. CONTRACTOR SHALL PROVIDE EXACT QUANTITIES AND SIZES OF BREAKERS TO MATCH (D) ATS/PANELBOARD. RECONNECT (E) CONDUCTORS TO THERE ORIGINAL BREAKER SIZES.

(N) ATS/PANEL: "ATS"

LOCATION : OUTDOORS
FLOOR : FIRST FLOOR
MOUNTING : SURFACE
VOLTAGE/ PHASE : 240/120V, 1PH, 3W
BUS AMPS : 100A
MAIN BREAKER : 100A
FED FROM : PANEL "D"
KAIC RATING: 10

LOADS	OUTLETS LTG	OUTLETS REC	OUTLETS MISC	VOLT-AMPS A	VOLT-AMPS B	VOLT-AMPS	CKT	BKR/ POLE	A B	BKR/ POLE	CKT	VOLT-AMPS A	VOLT-AMPS B	VOLT-AMPS	OUTLETS LTG	OUTLETS REC	OUTLETS MISC	LOADS
(N)							1	20/ 1	*_	20/ 2	2							(N)
(N)							3	20/ 1	_*		4							(N)
(N)							5	20/ 1	*_	20/ 1	6							(N)
(N)							7	20/ 1	_*	20/ 1	8							(N)
(N)							9	20/ 1	*_	20/ 1	10							(N)
(N)							11	20/ 1	_*	20/ 1	12							(N)
							13		*_		14							
							15		_*		16							

NOTES: 0 0 0 0

TOTAL ØA =	0 VOLT-AMPS		0.00 AMPS
TOTAL ØB =	0 VOLT-AMPS		0.00 AMPS
TOTAL LML & LCL=	0 VOLT-AMPS		0.00 AMPS
TOTAL PANEL =	0 VA @ 240V, 1Ø =		**0 AMPS**

LARGEST MOTOR LOAD (LML) = 0 x 25% = 0
LONG CONTINUED LOAD (LCL) = 0 x 25% = 0

FEEDER SCHEDULE KEYNOTES:

(E1) (1) 1-1/2"C - 3#1 + 1#8 GND.
(E2) (1) 3/4"C - 2#12 + 1#12 GND.
(E3) (1) 1"C - WITH (E) CONDUCTORS.
(G1) (1) 1#6 CONTINUOUS BARE COPPER.
(G2) (1) 1"C - 1#6 CONTINUOUS BARE COPPER.
(C1) (1) 1"C - WITH CONTROL SIGNAL WIRING PER EQUIPMENT MANUFACTURER RECOMMENDATION.

KEYNOTE SYMBOL CLARIFICATION

SYMBOL	DESCRIPTION
(--) OR (--)(#) (#)	SUBSCRIPT "#" INDICATES THE QUANTITY OF FEEDER SCHEDULE KEYNOTES.

FEEDER SCHEDULE GENERAL NOTES:

PROVIDE LOW-VOLTAGE COMMUNICATION CONDUCTORS FOR ALL FEEDER KEYNOTES DENOTING (C#) . COORDINATE WITH MANUFACTURER OF EACH PRODUCT REQUIRING LOW-VOLTAGE CONDUCTORS TO VERIFY SIZE, QUANTITY, AND INSTALLATION REQUIREMENTS.

PANEL SCHEDULE

FEEDER SCHEDULE

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
SINGLE TABS
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER ARAG AVANESIAN No. E22793 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL SCHEDULES

Project Number
000000000013525

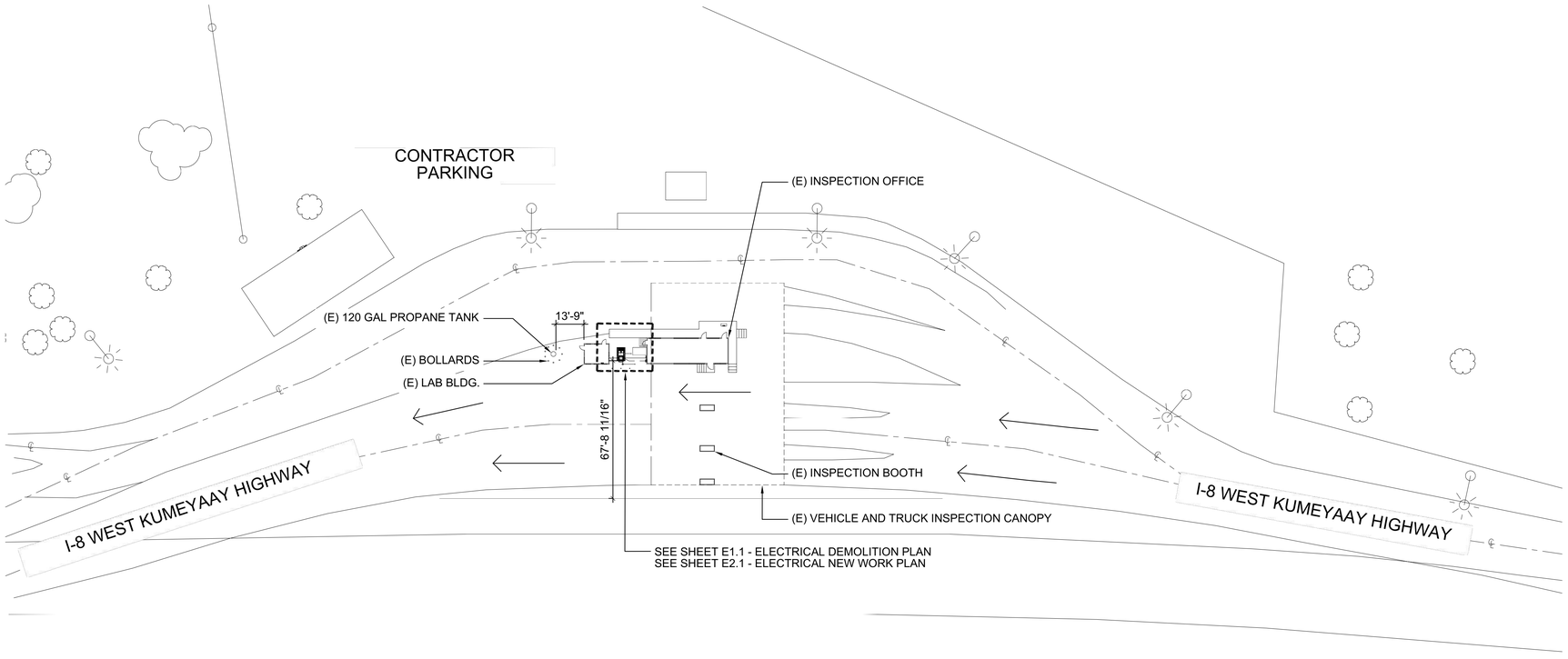
Reference North

Sheet Scale
AS SHOWN

Sheet Number
E0.4

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E0.4.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES



1 / E0.5 ELECTRICAL OVERALL SITE PLAN

SCALE: 0 10 20 40 FEET 60

1/32" = 1'-0"

N

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY

01/21/26
25-3919

Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES

Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
ARTAG AVANESIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

DATE SIGNED: 11/18/2025

JCCA
Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT

WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL OVERALL SITE PLAN

Project Number
000000000013525

Reference North

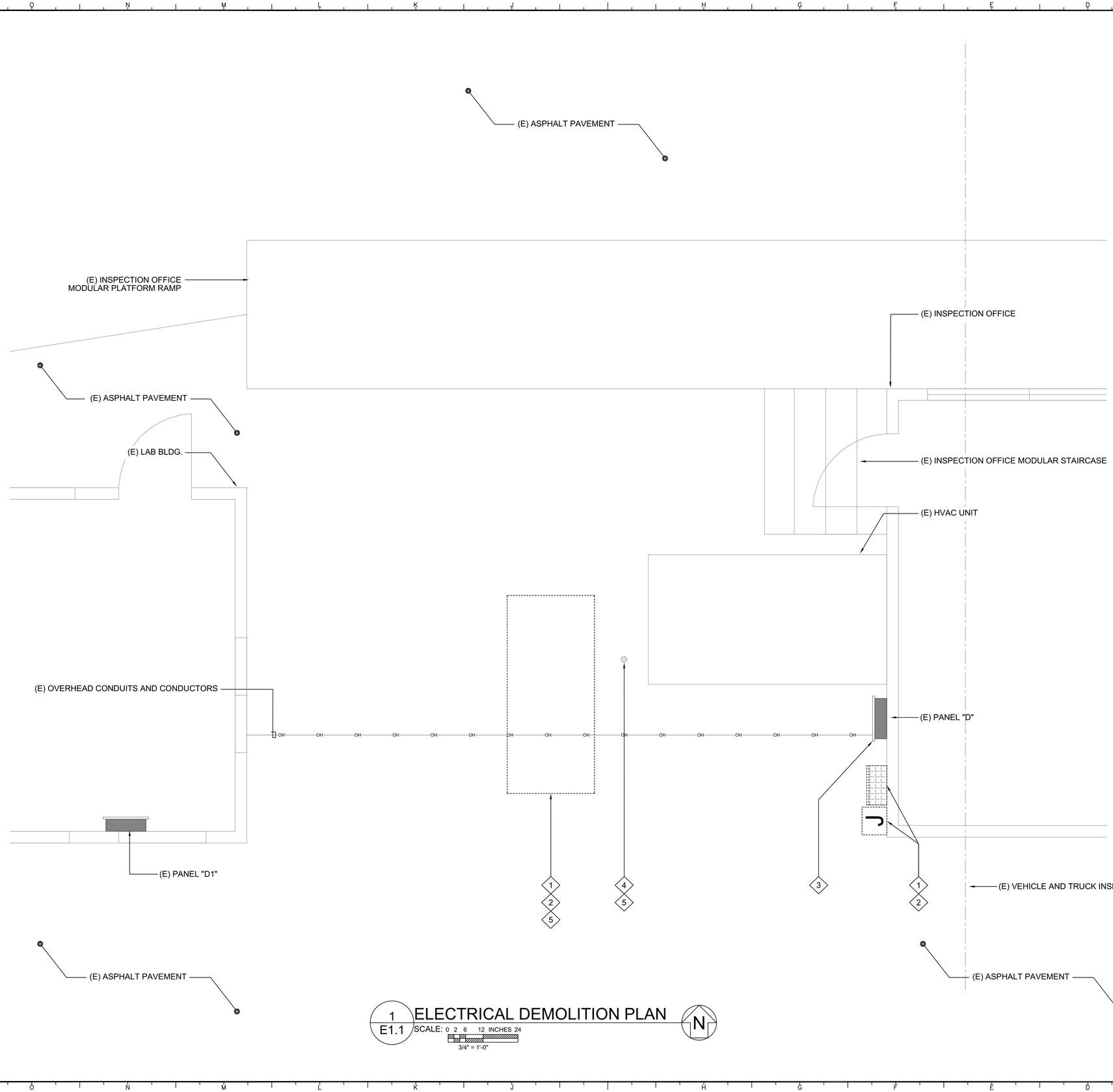
Sheet Scale
AS SHOWN

Sheet Number
E0.5

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\25690-1_E0.5.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

0 1 2 3



1 E1.1 ELECTRICAL DEMOLITION PLAN

SCALE: 0 2 6 12 INCHES 24

3/4" = 1'-0"

N

DEMOLITION KEYNOTES:

1. DISCONNECT AND DEMOLISH EQUIPMENT.
2. DISCONNECT AND DEMOLISH CONDUCTORS AND CONDUITS.
3. DISCONNECT (E) BRANCH CIRCUIT CONDUCTORS FROM GENERATOR. PROTECT IN PLACE (E) BRANCH CIRCUIT CONDUCTORS WITHIN PANELBOARD "D". CONDUCTORS ARE TO BE RE-USED AND EXTENDED TO NEW EQUIPMENT. SEE NEW WORK.
4. DISCONNECT AND DEMOLISH FLEXIBLE PROPANE GAS LINE FROM GENERATOR. PROTECT IN PLACE (E) PROPANE PIPE STUB UP, TO BE RE-USED IN NEW WORK.
5. SAW CUT (E) ASPHALT PAVEMENT IN PREPARATION FOR NEW CONCRETE EQUIPMENT PAD. PRIOR TO EXCAVATION, VERIFY IF ANY (E) UNDERGROUND UTILITY AND PROPANE PIPING ARE PRESENT. PROVIDE ALL REQUIRED PIPING, FITTINGS, AND SITE PREPARATIONS TO RELOCATE THESE PIPES AS NEEDED TO INSTALL NEW CONCRETE PAD. REFER TO DETAIL 1/E3.4.

GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE SEQUENCE OF CONSTRUCTION TO MINIMIZE DOWNTIME/POWER OUTAGE. CAREFULLY COORDINATE SEQUENCE OF CONSTRUCTION WITH OWNER AS REQUIRED TO COMPLETE THE WORK IN A TIMELY AND EFFICIENT MANNER. CAREFULLY COORDINATE POWER SHUT-DOWN REQUIREMENTS WITH FACILITY REPRESENTATIVES.
2. ALL (E) UNDERGROUND FEEDERS WHETHER SHOWN OR NOT ON THIS PLAN SHALL REMAIN AND BE PROTECTED IN PLACE U.O.N.
3. CAREFULLY COORDINATE WORK WITH (E) UTILITIES. PERFORM ALL REQUIRED SITE INVESTIGATION TO AVOID INTERFERENCE WITH OTHER UTILITIES DURING CONSTRUCTION.
4. REPAIR ALL (E) SURFACES WHERE DAMAGE HAS OCCURRED DURING (D) OF MATERIAL.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
SETAG AVANESIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA
Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL DEMOLITION PLAN

Project Number
000000000013525

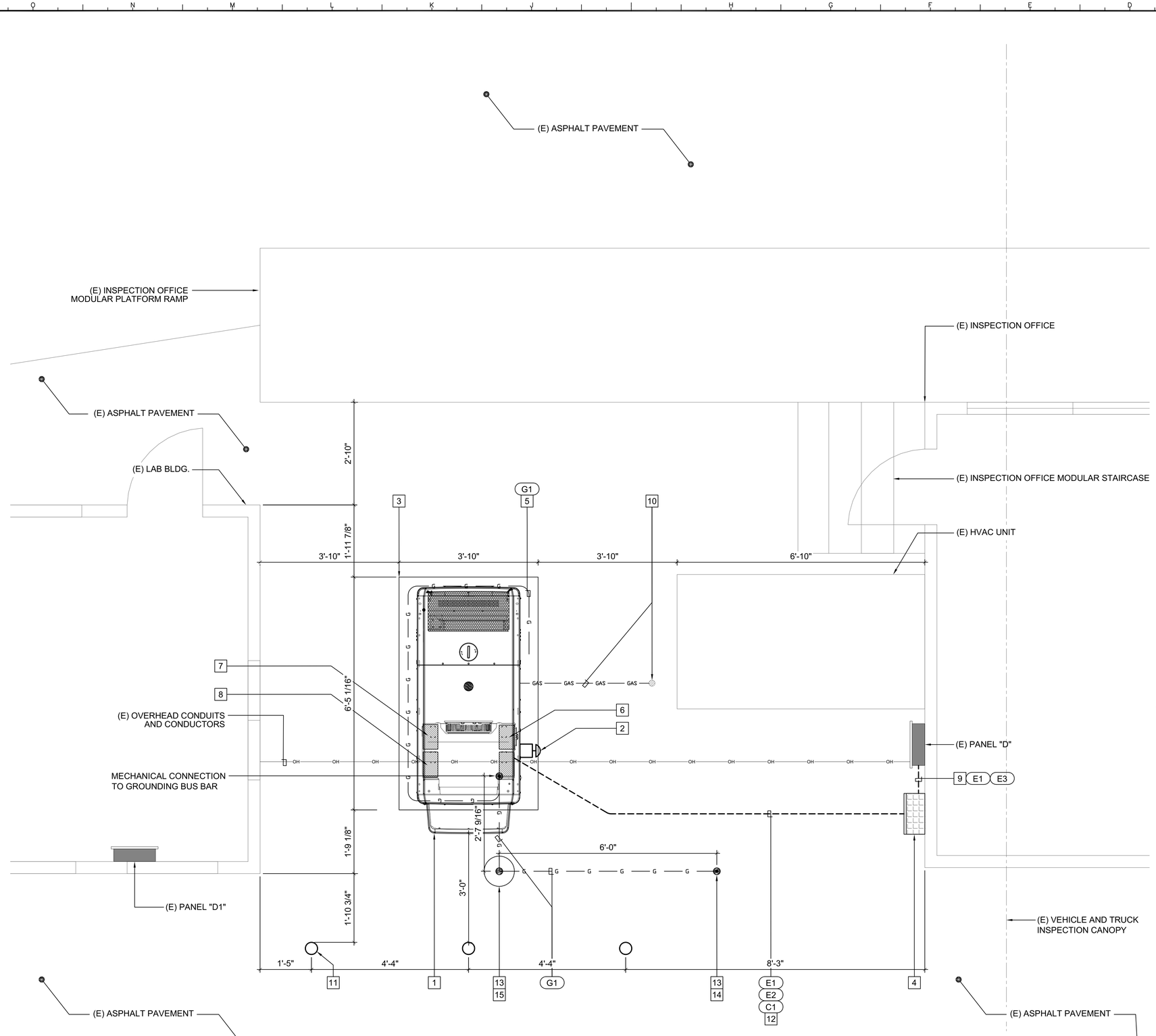
Reference North

Sheet Scale
AS SHOWN

Sheet Number
E1.1

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E1.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES



1 E2.1 ELECTRICAL NEW WORK PLAN

SCALE: 0 2 6 12 INCHES 24

3/4" = 1'-0"

N

NEW WORK KEYNOTES:

1. PROVIDE 20kW/25kVA OPTIONAL STANDBY PROPANE GENERATOR.
2. PROVIDE EMERGENCY LOCKOUT SWITCH.
3. PROVIDE EQUIPMENT HOUSE KEEPING POUR IN PLACE CONCRETE PAD. REFER TO DETAILS 3/E3.1, 3/E3.2 AND 1/E3.4.
4. PROVIDE A SURFACE MOUNTED INTEGRATED ATS/PANELBOARD.
5. PROVIDE CONCRETE ENCASED ELECTRODE (UFER) SIZED AS SHOWN ON SINGLE LINE DIAGRAM. REFER TO DETAILS 1/E3.1.
6. STUB UP GENERATOR FEEDER CONDUITS AND TERMINATE CONDUCTORS AT GENERATOR CIRCUIT BREAKER TERMINALS.
7. STUB UP COMMUNICATION CONDUITS AND TERMINATE AT GENERATOR CONTROLLER SECTION.
8. STUB UP SHORE POWER CONDUITS AND TERMINATE AT GENERATOR ACCESSORIES DISTRIBUTION BAR.
9. PROVIDE CONDUITS FROM PANELBOARD "D" TO NEW INTEGRATED ATS/PANELBOARD. EXTEND (E) CONDUCTORS TO (N) LOCATION. TERMINATE CONDUCTORS TO THERE (E) BREAKER SIZES.
10. PROVIDE CONNECTION OF PROPANE LINE PIPING TO GENERATOR FUEL INLETS. PROVIDE ALL NECESSARY MATERIAL FOR CONNECTION AND SUPPORT OF (N) PIPES. COORDINATE WITH EQUIPMENT MANUFACTURER FOR INSTALLATION SPECIFICATIONS, AND CONNECTIONS.
11. PROVIDE NEW BOLLARD, 4"Ø CONCRETE FILLED. REFER TO DETAIL 4/E3.2.
12. PROVIDE UNDERGROUND CONDUITS AND TRENCH, SIZED AS SHOWN ON FEEDER SCHEDULE. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL REQUIRED SITE INVESTIGATIONS AND PREPARATIONS AS SHOWN ON DETAIL 1/E3.2.
13. PROVIDE EXOTHERMIC WELDING CONNECTIONS. REFER TO DETAIL 2/E3.1.
14. PROVIDE A MINIMUM OF (2) TWO 3/4"Ø x 10' COPPER CLAD GROUND RODS SPACED A MINIMUM OF 6" APART. REFER TO DETAIL 4/E3.1.
15. PROVIDE GROUNDING TEST INSPECTION WELL. REFER TO DETAIL 4/E3.1.
16. PROVIDE ALL REQUIRED SUPPORT SYSTEMS, SUCH AS BRACKETS, CLAMPS, BOLTS, GUY WIRES, PIPES, FITTINGS, COUPLINGS AND EXPANSION FITTINGS NEEDED TO SUPPORT AND EXTEND EXHAUST PIPE AT AN ELEVATION THAT EXCEEDS THE (E) VEHICLE AND TRUCK INSPECTION CANOPY. OVERALL HEIGHT ELEVATION OF EXHAUST PIPE SHALL BE FIELD VERIFIED BASED ON SELECTED EQUIPMENT AND PER FIELD CONDITIONS. REFER TO DETAIL 1/E3.3.

FEEDER SCHEDULE KEYNOTES:

REFER TO FEEDER SCHEDULE KEYNOTES (- -) ON SHEET E0.4 FOR CONDUIT AND CONDUCTOR SIZES.

GENERAL NOTES:

1. PROVIDE ALL NECESSARY EQUIPMENT TO PROPERLY TRANSPORT (N) GENERATOR WITHOUT CAUSING DAMAGE TO GENERATOR OR BUILDINGS. REPAIR ANY DAMAGES CAUSED DURING TRANSPORTATION AND INSTALLATION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING AND COORDINATING WITH ALL EQUIPMENT MANUFACTURERS TO IDENTIFY EXACT LOCATION OF CONDUIT TERMINATION LOCATIONS PRIOR TO POURING EQUIPMENT CONCRETE PAD FOUNDATIONS.
3. CONTRACTOR SHALL COORDINATE WITH EQUIPMENT MANUFACTURER TO OBTAIN SHOP DRAWINGS FOR COMPLETE PACKAGE AND ADJUST CONDUIT STUB-UP LOCATIONS AS NEEDED PRIOR TO STARTING WORK.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED MATERIAL AND HARDWARE TO SECURELY FASTEN ALL ENCLOSURES, EQUIPMENT, AND CONDUITS.
5. ALL NEW EQUIPMENT SHALL BE CAPABLE OF WITHSTANDING THE MAXIMUM AMBIENT TEMPERATURE OF 125°F.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER ARTAG AVANESIAN No. E22793 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED: 11/18/2025

JCCA Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No. 03-E00486
SFM Permit No. 25-S-3919-C-DR

Sheet Title
ELECTRICAL NEW WORK PLAN

Project Number
000000000013525

Reference North

Sheet Scale
AS SHOWN

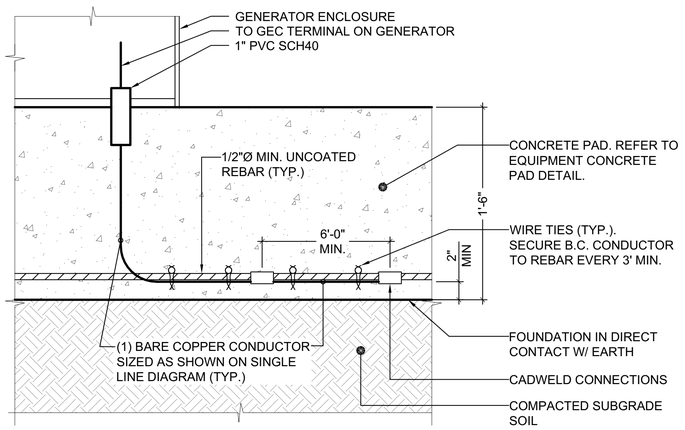
Sheet Number
E2.1

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E2.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

NOTES:

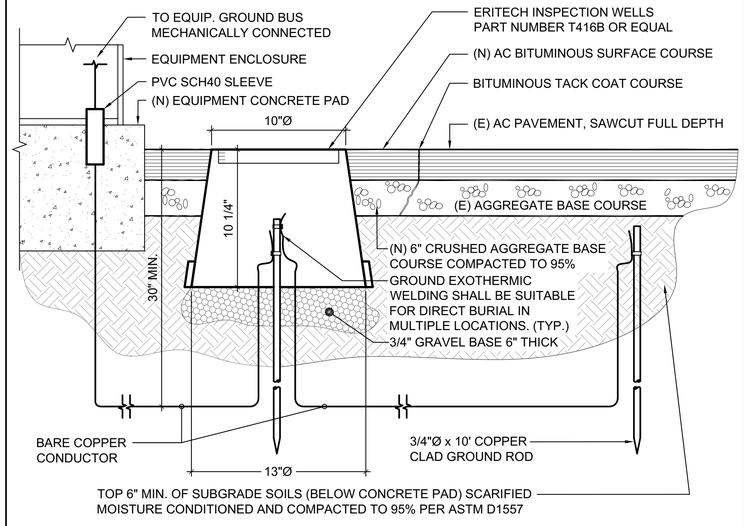
1. INSTALL 25' MIN. OF (1) STRANDED B.C. CONDUCTOR SIZED AS SHOWN ON SINGLE LINE DIAGRAM, 20' MIN. ENCASED WITHIN CONCRETE, MAINTAIN 2" MINIMUM SPACING FROM EDGES EXCEPT WHEN (E) CONCRETE THROUGH SLEEVE.
2. SECURE B.C. CONDUCTOR TO REBAR EVERY 3' MIN. VIA STANDARD WIRE TIES AND VIA CADWELD (TWO) AT THE 7' AND 14' POINTS ON CONDUCTOR. CADWELD CONNECTIONS SHALL BE U.L. LISTED AND RATED FOR DIRECT BURIAL IN CONCRETE.
3. INSTALL 1" PVC SCH40 SLEEVE EXITING CONCRETE WITHIN EQUIPMENT SECTION CONTAINING GEC TERMINAL. EXTEND B.C. CONDUCTOR 5' MIN. PAST SLEEVE.
4. REBAR SHALL NOT BE EPOXY COATED AND THERE SHALL NOT BE A VAPOR BARRIER INSTALLED. EQUIPMENT CONCRETE PAD SHALL BE IN DIRECT CONTACT WITH EARTH.



1 E3.1 — GENERATOR GROUNDING UFER DETAIL
NO SCALE

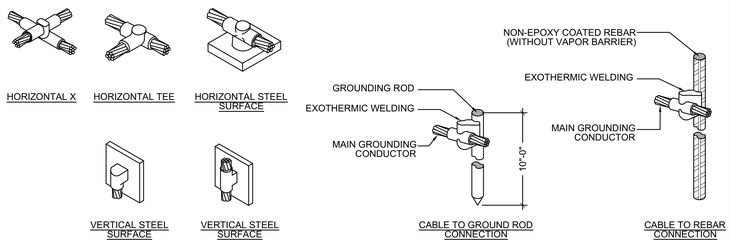
NOTES:

1. GROUND ROD SHALL BE INSTALLED TO THE CENTER OF THE WELL.
2. MAINTAIN MIN. 3" CLEARANCE FROM THE TOP OF THE GROUND ROD TO THE LID OF THE WELL.
3. PROVIDE ADDITIONAL GROUND ROD AS REQUIRED IF SINGLE ELECTRODE DOES NOT HAVE A RESISTANCE TO GROUND OF 5 OHMS OR LESS. WHERE MULTIPLE ROD ARE INSTALLED TO MEET THE REQUIREMENT, THEY SHALL NOT BE LESS THAN 6 FEET APART.

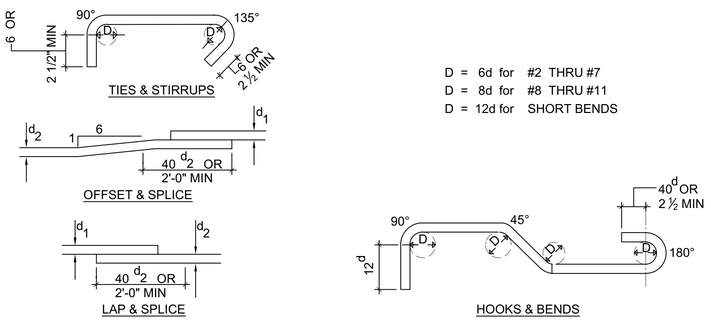


4 E3.1 — GROUNDING TEST INSPECTION WELL DETAIL
NO SCALE

6 E3.1 — -
NO SCALE



2 E3.1 — EXOTHERMIC WELDING TYPICAL DETAIL
NO SCALE



3 E3.1 — REINFORCEMENT BAR DETAILS
NO SCALE

5 E3.1 — -
NO SCALE

7 E3.1 — -
NO SCALE

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER — ARTAG AVANESIAN — No. E22793 — Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA#: 25690-1

Issue

No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No. 03-E00486
SFM Permit No. 25-S-3919-C-DR

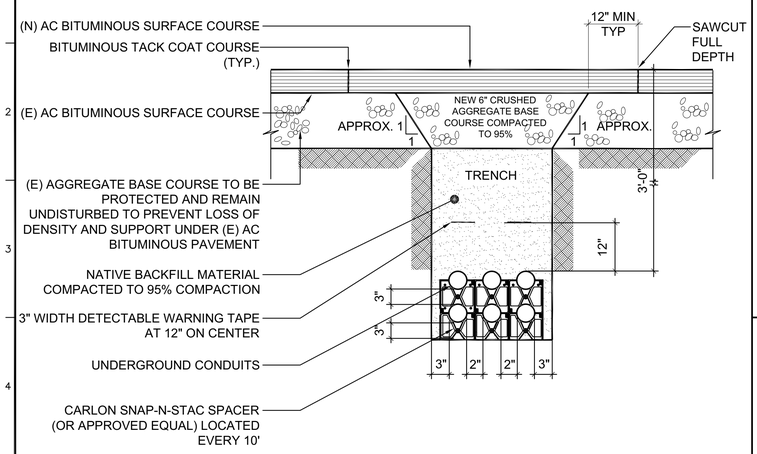
Sheet Title
ELECTRICAL GROUNDING DETAILS

Project Number
000000000013525

Reference North
Sheet Scale AS SHOWN
Sheet Number E3.1

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E3.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

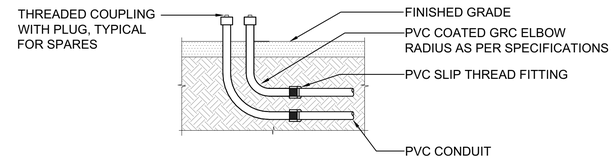
RELATIVE BORDER SCALE IN INCHES



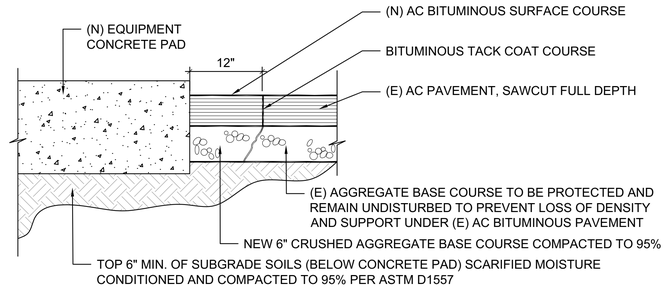
SITE WORK NOTES:

1. TRENCH WIDTH SHALL BE DICTATED IN THE FIELD BY THE QUANTITIES OF CONDUITS WITHIN EACH TRENCH.
2. ADDITIONAL OR LESS CONDUIT REQUIRE SAME SPACING.
3. REPAIR AND PATCH ALL SURFACES.
4. MINIMUM CONDUIT SWEEP RADIUS SHALL BE 24" OR APPROVED FACTORY 22.5°, 45°, AND 90° BENDS ARE ACCEPTABLE TO USE.
5. THE UTILITIES SHOWN ON THE DRAWINGS ARE BASE ON RECORD DRAWINGS AND SURVEY OF SURFACE FEATURES. THE ACCURACY OF THE RECORD DRAWINGS IS VERY LIMITED AND MANY ASSUMPTIONS WERE MADE REGARDING THE LOCATION OF UNDERGROUND UTILITIES. THERE ARE MANY UTILITIES, SUCH AS WATER, GAS, SEWER, STORM DRAIN, ELECTRICAL AND COMMUNICATION LINES THAT EXIST BUT ARE NOT SHOWN ON THE DRAWINGS. FOR THIS REASON THE CONTRACTOR SHALL PERFORM A GEOPHYSICAL SURVEY AND POTHOLING AS NECESSARY TO VERIFY THE UNDERGROUND UTILITY LOCATIONS PRIOR TO STARTING WORK.
6. THE CONTRACTOR SHALL PERFORM A GEOPHYSICAL SURVEY IN ALL AREAS OF PROPOSED TRENCHING TO LOCATE UNKNOWN ACTIVE OR ABANDONED UTILITIES OR UNDERGROUND STRUCTURES. THE GEOPHYSICAL SURVEY WILL BE UTILIZED TO SUPPLEMENT AND VERIFY THE INFORMATION PROVIDED IN THE DRAWINGS.
7. THE CONTRACTOR SHALL ENGAGE A PERSON OF ENTITY WITH A MINIMUM OF TWO YEARS OF PROFESSIONAL EXPERIENCE IN GEOPHYSICAL LOCATION TO CONDUCT A GEOPHYSICAL SURVEY OF ALL WORK AREAS WITH EXISTING IMPROVEMENTS WITHIN THE PROJECT SITE. THE SURVEY SHALL INCLUDE FULL COVERAGE WITH THE FOLLOWING LOCATING EQUIPMENT:
   - EM61
   - M-SCOPE/EM31
   - GROUND PENETRATING RADAR
   - LINETRACER (60 HZ RF)
8. MEMBERS OF THE CONTRACTORS TEAM WITH A MINIMUM OF TWO YEARS EXPERIENCE SHALL BE PRESENT DURING THE GEOPHYSICAL SURVEY IN ORDER TO DIRECT THE SCOPE AND INTERPRET RESULTS.
9. THE CONTRACTOR SHALL COORDINATE WITH OWNER'S FACILITIES MANAGEMENT AS A RESOURCE FOR INFORMATION REGARDING EXISTING UTILITIES AND TO ENSURE FACILITY OPERATIONS ARE NOT INTERRUPTED.
10. THE INVESTIGATION SHALL IDENTIFY THE LOCATION OF KNOWN AND UNKNOWN UTILITIES WITHIN THE PROJECT SITE. ALL LOCATED UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE LOCATED ON THE SITE PLAN. RESULTS OF THE GEOPHYSICAL INVESTIGATION REPORT SHALL BE SUBMITTED TO THE OWNER AND FACILITIES MANAGEMENT REPRESENTATIVE FOR REVIEW AND APPROVAL.
11. ALL LOCATED UTILITIES SHALL BE PROTECTED IN PLACE DURING THE TRENCHING AND BACKFILLING PROCESS. CONTRACTOR SHALL HAND DIG AS REQUIRED WITHIN THE VICINITY OF ALL EXISTING UNDERGROUND UTILITIES. DEPTH OF NEW CONDUIT INSTALLATION SHALL VARY AS REQUIRED TO AVOID EXISTING UTILITIES.
12. ANY DAMAGE TO REMAINING ROAD IMPROVEMENTS, EXISTING UTILITIES, BUILDING ELEMENTS AND OTHER EXISTING FACILITIES TO REMAIN CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
13.

1 / E3.2 — UNDERGROUND ELECTRICAL CONDUITS
NO SCALE



2 / E3.2 — CONDUIT STUB-UP DETAIL
NO SCALE

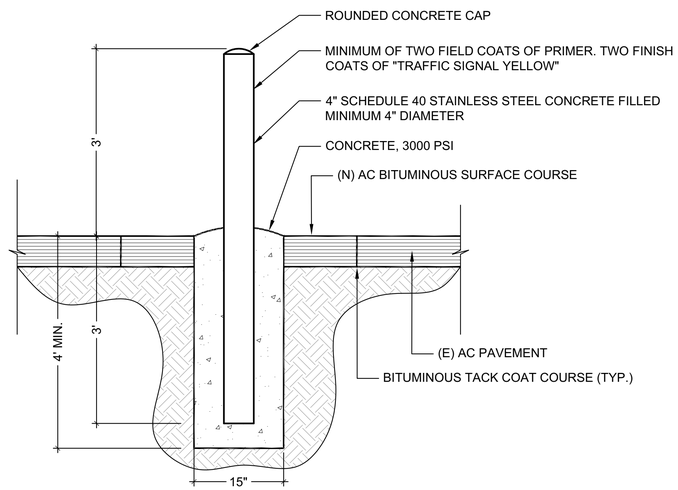


3 / E3.2 — AC PATCHBACK DETAIL
NO SCALE

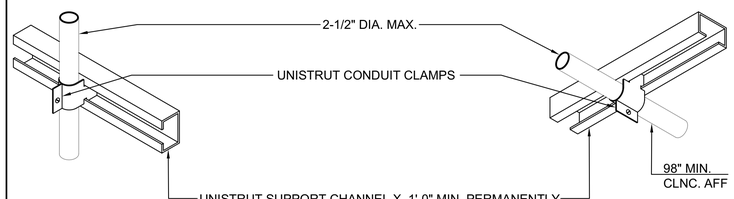
NOTES:

GUARD POSTS SHALL COMPLY WITH ALL OF THE FOLLOWING:

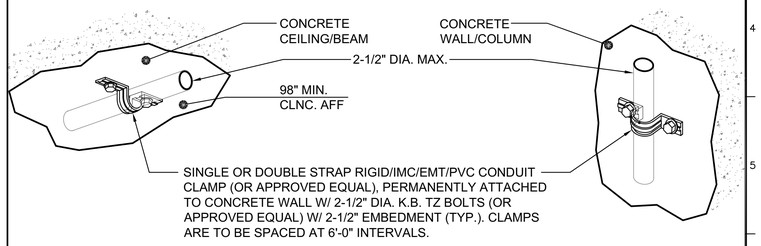
- CONSTRUCTED OF STEEL NOT LESS THAN 4 INCHES (102 mm) IN DIAMETER AND CONCRETE FILLED.
- SPACED NOT MORE THAN 4 FEET (1219 mm) BETWEEN POST ON CENTER.
- SET NOT LESS THAN 3 FEET (914 mm) DEEP IN A CONCRETE FOOTING OF NOT LESS THAN A 15 INCH (381 mm) DIAMETER.
- SET WITH THE TOP OF THE POSTS NOT LESS THAN 3 FEET (914 mm) ABOVE GROUND.
- LOCATED NOT LESS THAN 3 FEET (914 mm) FROM THE PROTECTED OBJECT.



4 / E3.2 — BOLLARD DETAIL
NO SCALE



5 / E3.2 — WALL MOUNTED SUPPORT (TYPICAL) DETAIL
NO SCALE



6 / E3.2 — CONDUIT CLAMP SUPPORT (TYP.) DETAIL
NO SCALE

7 / E3.2 — -
NO SCALE

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER — LEAG AVANESIAN — No. E22793 Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 I F:310.212.5272
JCCA#: 25690-1

Issue		
No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

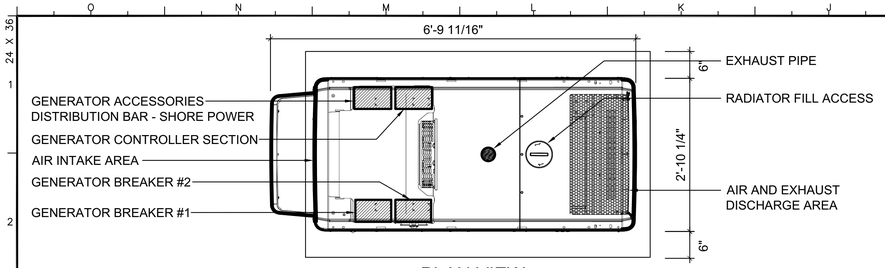
Sheet Title
ELECTRICAL GENERAL DETAILS

Project Number
000000000013525

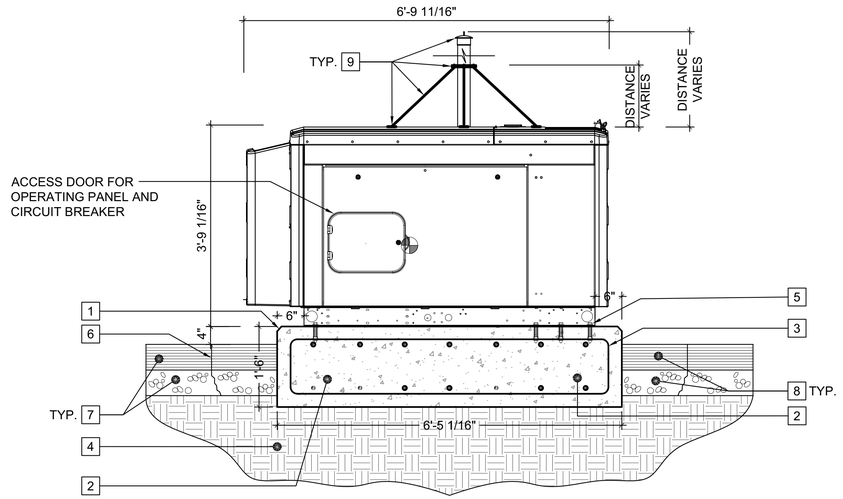
Reference North | Sheet Scale: AS SHOWN | Sheet Number: E3.2

RELATIVE BORDER SCALE IN INCHES
0 1 2 3

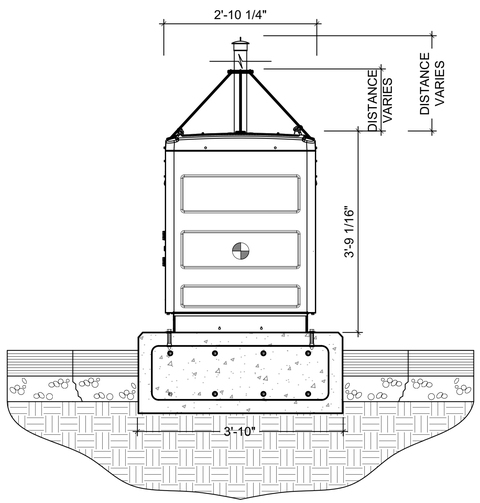
CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E3.2.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera



PLAN VIEW



FRONT VIEW



RIGHT SIDE VIEW

1 / E3.4 GENERATOR CONCRETE PAD DETAILS

SCALE: 0 2 6 12 INCHES 24

3/4" = 1'-0"

NEW WORK KEYNOTES:

1. PROVIDE 1% CROSS SLOPE ON PAD. PROVIDE SMOOTH STEEL TROWEL FINISH. PROVIDE 45° BEVEL AT EDGES (TYP. ALL AROUND).
2. CONC. SHALL HAVE A MIN. COMPRESSIVE STRENGTH @ 28 DAYS OF 3000 Psi. MAX W/C RATIO AT 0.5.
3. REBAR SHALL CONFORM TO ASTM A615 GRADE 60. PROVIDE #5 AT 10" O.C. EACH WAY AT TOP AND BOTTOM. PROVIDE STD HOOK AT ENDS OF REBAR.
4. TOP 6" MIN OF SUBGRADE SOILS (BELOW CONCRETE PAD) SCARIFIED MOISTURE CONDITIONED AND COMPACTED TO 95% PER ASTM D1557.
5. PROVIDE 3/4"Ø SS304 HILTI KWIK BOLT TZ ANCHORS, 4" EMBED (ESR 4266). WATER SEAL ALL AROUND EQUIPMENT.
6. PROVIDE BITUMINOUS TACK COAT COURSE.
7. CONTRACTOR TO PROTECT IN PLACE EXISTING ASPHALT. DAMAGE TO EXISTING GROUND LEVEL SHALL BE FURNISHED AT THE EXPENSE OF THE CONTRACTOR.
8. PROVIDE NEW ASPHALT (AC) BITUMINOUS SURFACE COURSE. REFER TO AC PATCHBACK DETAIL 3/E3.2.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED SUPPORT SYSTEMS, SUCH AS BRACKETS, CLAMPS, BOLTS, GUY WIRES, PIPES, FITTINGS, COUPLINGS AND EXPANSION FITTINGS NEEDED TO SUPPORT AND EXTEND EXHAUST PIPE AT AN ELEVATION THAT EXCEEDS THE (E) VEHICLE AND TRUCK INSPECTION CANOPY. OVERALL HEIGHT ELEVATION OF EXHAUST PIPE IS ROUGHLY 20'-"0, HOWEVER, SHALL BE FIELD VERIFIED BASED ON SELECTED EQUIPMENT AND PER FIELD CONDITIONS.

GENERAL NOTES:

1. BASIS OF DESIGN PRODUCT IS BASED ON CUMMINS INC. EQUIPMENT, MODEL C20 N6, LEVEL II F217-2 ALUMINUM ENCLOSURE. REFER TO SHEET T0.2, TRIAGE LIST AND SIGNAGE REQUIREMENTS FOR ADDITIONAL GENERATOR SPECIFICATIONS AND REQUIREMENTS. SUBMITTAL OF EQUIVALENT PRODUCTS AND MATERIAL ARE ACCEPTABLE, SUBJECT TO REVIEW AND APPROVAL. CONTRACTOR IS RESPONSIBLE FOR MAKING ALL REQUIRED ADJUSTMENTS NEEDED TO HAVE A FUNCTIONAL SYSTEM AT NO COST TO THE OWNER, WHERE SUBSTITUTIONS ARE USED. CONTACT INFORMATION FOR BASIS OF DESIGN EQUIPMENT:
   - JOHN T. CHEN, SENIOR SALES APPLICATION ENGINEER
   - (949) 337-5268
   - JOHN.T.CHEN@CUMMINS.COM
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH AHJ FIELD INSPECTOR, TO PROVIDE ALL REQUIRED LABELS AND SIGNAGE ON EQUIPMENT AND WITHIN THE PARAMETER OF THE PROPOSED GENERATOR AS INDICATED IN 2022 CFC 5704.2.3, 2017 NFPA 704.
4. MANUFACTURER SHALL DELIVER ONSITE COMPLETE WITH ALL HARDWARE REQUIRED TO SAFELY SECURE AND ASSEMBLE ALL COMPRISED COMPONENTS TOGETHER TO MEET MANUFACTURERS SATISFACTORY INSTALLATION AND PROPER TORQUE PRESSURE TO ALL BOLTS AND ANCHORS.
5. CONTRACTOR SHALL PROVIDE ALL REQUIRED MARKINGS/PLACECARDS FOR THE GENERATOR THAT ARE IN ACCORDNACE WITH CEC 445.11:

   EACH GENERATOR SHALL BE PROVIDED WITH A NAMEPLATE GIVING THE MANUFACTURER'S NAME, THE RATED FREQUENCY, THE NUMBER OF PHASES IS AC, THE RATING IN KILOWATTS OR KILOVOLT-AMPERES, THE POWER FACTOR, THE NORMAL VOLTS AND AMPERES CORRESPONDING TO THE RATING, AND THE RATED AMBIENT TEMPERATURE.

   NAMEPLATES OR MANUFACTURER'S INSTRUCTIONS SHALL PROVIDE THE FOLLOWING INFORMATION FOR ALL STATIONARY GENERATORS AND PORTABLE GENERATORS RATED MORE THAN 15kW:

   A. SUBTRANSIENT, TRANSIENT, SYNCHRONOUS, AND ZERO SEQUENCE REACTANCES.
   B. POWER RATING CATEGORY.
   C. TEMPERATURE RISE AT RATED LOAD AND INSULATION SYSTEM CLASS.
   D. INDICATION IF THE GENERATOR IS PROTECTED AGAINST OVERLOAD BY INHERENT DESIGN, AN OVERCURRENT PROTECTIVE RELAY, A CIRCUIT BREAKER, OR A FUSE.
   E. AVAILABLE FAULT CURRENT FOR INVERTER-BASED GENERATORS, IN LIEU OF THE SYNCHRONOUS, SUBTRANSIENT, AND TRANSIENT REACTANCES.

   MARKING SHALL BE PROVIDED BY THE MANUFACTURER TO INDICATE WHETHER OR NOT THE GENERATOR NEUTRAL IS BONDED TO ITS FRAME. WHERE THE BONDING IS MODIFIED IN THE FIELD, ADDITIONAL MARKING SHALL BE REQUIRED TO INDICATE WHETHER THE NEUTRAL IS BONDED TO THE FRAME.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED REGULATOR, PIPING, SHUT OFF VALVES, AND FLEXIBLE CONNECTIONS TO THE GENERATOR. ENSURE THAT THE FOLLOWING REQUIREMENTS AND PROVISIONS ARE MET:
   A. ENSURE PROPER VAPORIZATION THROUGH AMBIENT TEMPERATURE ARE SUITABLE FOR GENERATOR'S FUEL SUPPLY.
   B. ADJUST FLOW RATES AND PRESSURES THAT ARE SUITABLE FOR GENERATORS 100% DEMAND LOAD.
   C. PROVIDE SHUTOFF VALVES NEAR THE TANK AND AT OTHER POINTS IN THE SYSTEM TO ALLOW FOR QUICK EMERGENCY ISOLATION AND SAFETY MAINTENANCE. PROVIDE FILL VALVE WITH AN INTEGRAL MANUAL SHUTOFF VALVE.
   D. REFER TO NFPA 58 SECTION 6.30.3 THROUGH 6.30.5.
7. ALL DEVICES REQUIRING DRILLING OR INSERTION IN MOUNTING PAD SUCH AS CONDUIT, ANCHORING STUDS, SLEEVE INSERTS, ETC. SHOULD BE INSTALLED BEFORE SETTING EQUIPMENT IN PLACE.
8. A MINIMUM OF 2.00/[51] CLEARANCE BEHIND THE SWITCHBOARD IS REQUIRED FOR TOP COVER OVERHANG.
9. EXHAUST PIPES, PROPANE PIPES, SUPPORT SYSTEMS AND ASSOCIATED FITTINGS AND HARDWARE ARE A DELEGATED DESIGN DONE BY OTHERS.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DGS GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
ARTAG AVANESIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA
Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272
JCCA#: 25690-1

Issue		
No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL EQUIPMENT DETAILS

Project Number
000000000013525

Reference North | Sheet Scale: AS SHOWN | Sheet Number: E3.3

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E3.3.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera

RELATIVE BORDER SCALE IN INCHES

ELECTRICAL NOTES

A. SCOPE

1. REFER TO SCOPE OF WORK SHOWN ON SHEET E0.1.

B. SITE VISIT

1. CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT HIS WORK AND MAKE THE NECESSARY ALLOWANCES IN HIS BID TO COMPENSATE FOR THESE CONDITIONS. BY THE ACT OF SUBMITTING A BID FOR THIS PROJECT, THE CONTRACTOR ACCEPTS ALL CONDITIONS AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT SHALL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS WHICH MAY EXIST.

C. CLEANING PREMISES

1. KEEP JOB SITE, BUILDING AND SITE FREE FROM RUBBISH AND WASTE MATERIALS, REMOVE SAME FROM SITE ON A DAILY BASIS.

D. EXAMINATION OF DRAWINGS

1. CONTRACTOR SHALL STUDY ALL DRAWINGS AND SPECIFICATIONS. SHOULD ANY OF THE WORK SHOWN OR INDICATED BY THE DRAWINGS BE CONTRARY TO OR IN CONFLICT WITH ANY CODE REQUIREMENTS, THE SAME SHALL BE REPORTED TO THE OWNER BEFORE SUBMITTING A BID. CONTRACTOR WILL BE ADVISED AS TO HOW TO PROCEED.

E. COORDINATION

1. COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.
2. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED AND DETERMINED IN FIELD, AND APPROVED BY THE OWNER.

F. SHOP DRAWINGS

1. ALL EQUIPMENT TO BEAR U.L. LABEL OR CERTIFIED BY NATIONALLY RECOGNIZED TESTING LABORATORY. SHOP DRAWINGS MUST BE STAMPED BY THE CONTRACTOR FOR CONFORMANCE PRIOR TO SUBMITTAL. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO PURCHASING. SHOP DRAWINGS ARE REQUIRED FOR ALL PANEL BOARDS, RECEPTACLES, DISCONNECT SWITCHES, GENERATOR, LOAD BANK SWITCHGEAR AND TRANSFORMERS.

G. CONTRACTOR BID

1. CONTRACTOR'S BID SHALL BE BASED ON ALL WORK SHOWN ON THE PLANS AND AS SPECIFIED. ALL PREMIUM, TIME COSTS REQUIRED SHALL BE INCLUDED IN THE BID. NO OBSOLETE OR OUT OF MANUFACTURING EQUIPMENT SHALL BE ACCEPTED. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER IN WRITING. SUCH A REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE, AT HIS OWN EXPENSE, FOR ANY CHANGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK OR THE WORK OF OTHER CONTRACTORS.

H. "AS-BUILT" DRAWINGS

1. CONTRACTOR SHALL KEEP A SET OF PRINTS WHICH SHALL BE CORRECTED DAILY TO SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND SPECIFICATIONS. UNDERGROUND RUNS SHALL BE ACCURATELY DIMENSIONED ON THESE PRINTS (REFERENCED TO BUILDING WALLS OR COLUMNS). ADDENDA AND CHANGE ORDERS SHALL ALSO BE INCLUDED ON THESE PRINTS. DELIVER "AS- BUILT" PRINTS TO OWNER PRIOR TO ACCEPTANCE OF THE JOB. "AS-BUILT" PRINTS SHALL BE SIGNED AND DATED BY CONTRACTOR.
2. THESE DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL. AFTER APPROVAL, THEY SHALL BECOME THE PROPERTY OF THE OWNER. FINAL PAYMENT WILL BE WITHHELD UNTIL RECEIPT OF THE APPROVED DRAWINGS.

I. DEMOLITION

1. PERFORM ALL DEMOLITION WORK AS NOTED ON THE DRAWINGS AND/OR AS REQUIRED TO CLEAR THE AREA FOR THE NEW WORK. DELIVER ALL SALVABLE EQUIPMENT TO THE OWNER AS DIRECTED.
2. FOR ALL EQUIPMENT TO BE REMOVED, REMOVE ALL WIRING BACK TO THE POWER SUPPLY OR TO THE LAST DEVICE TO REMAIN. MAINTAIN CIRCUIT CONTINUITY TO ALL DEVICES AND EQUIPMENT TO REMAIN. REMOVE ALL UNUSED CONDUIT AND WIRES.
3. OVERCURRENT PROTECTIVE DEVICES VACATED SHALL BE LABELED "SPARE". UPDATE ALL PANEL AND SWITCHBOARD DIRECTORIES TO CLEARLY REFLECT NEW CONDITIONS.

J. PROTECTION & SAFEGUARDS

1. THE CONTRACTOR SHALL ERECT AND MAINTAIN SUITABLE BARRIERS, PROTECTIVE DEVICES, LIGHT AND WARNING SIGNS WHERE REQUIRED FOR THE PROTECTION OF THE PUBLIC AND EMPLOYEES ABOUT THE BUILDING. HE SHALL BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSON OR PROPERTY RESULTING FROM HIS NEGLECT OF THESE PRECAUTIONS, HIS OWN CARELESSNESS, OR THE CARELESSNESS OR NEGLECT OF HIS EMPLOYEES, OR HIS SUB-CONTRACTOR AND/OR THEIR EMPLOYEES.

K. POWER SHUTDOWN

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY EMERGENCY POWER SUPPLY IN PERFORMING THEIR WORK TO AVOID POWER OUTAGE AND CAUSE DISRUPTION ON CLIENT OPERATION. POWER SHUTDOWN ARE NOT TO OCCUR UNDER ANY CIRCUMSTANCES.

L. EQUIPMENT AND DEVICES

1. THE ELECTRICAL CONSTRUCTION DRAWINGS PROVIDED HEREIN ARE DIAGRAMMATIC AND SYMBOLIC IN REPRESENTATION. LOCATIONS DEPICTED ON THE DRAWINGS FOR ELECTRICAL EQUIPMENT/DEVICES (MOTORS, STARTERS, DISCONNECT SWITCHES, RECEPTACLES, JUNCTION/OUTLET BOXES, CONTROL SWITCHES, ETC.. ARE ONLY APPROXIMATE. FURTHERMORE, THE EQUIPMENT/DEVICE DEPICTIONS ARE GENERALLY SYMBOLIC AND NOT TO SCALE.
2. ELECTRICAL DRAWINGS INDICATE NEW MATERIALS AND NEW WORK, UNLESS OTHERWISE NOTED. EXISTING ELECTRICAL SYSTEMS ARE NOT SHOWN EXCEPT WHERE INTERFACE IS REQUIRED.
3. ALL NEW BOXES, PANELS, OUTLET COVERS, ENCLOSURES, ETC. MOUNTED ON THE EXTERIOR OF ANY STRUCTURE SHALL BE WEATHERPROOF (NEMA 3R MIN) & ALSO PAINTED TO MATCH THE EXISTING BUILDING/STRUCTURE.
4. USE "DYMO" LABEL ON FACE OF RECEPTACLE AND SWITCH COVER PLATE AND JUNCTION BOXES INDICATING THE SOURCE PANEL AND CIRCUIT USED. DYMO LABEL TAPE SHALL MATCH THE COLOR OF THE COVER PLATE ON RECEPTACLES AND SWITCHES.
5. ALL DEVICE SHALL BE WHITE U.O.N.
6. ALL WIRING DEVICES SHALL BE FIRST QUALITY, HEAVY-DUTY "SPECIFICATION" GRADE, AND SHALL BE OF WHITE COLOR, GFCI TYPE.
7. ALL WIRING DEVICES IN VAULTS AND WELLS SHALL BE HOUSED IN WEATHERPROOF NEMA 4X STAINLESS STEEL BOX OR ENCLOSURE.
8. COMPLY WITH ALL APPLICABLE GROUNDING REQUIREMENTS SPECIFIED IN NFPA 70 ARTICLE 250 FOR GROUNDING AND BONDING ALL METAL DEVICES, LIGHTING POLES, AND CONDUIT RACEWAYS.
9. ALL OUTLETS & DEVICE SHALL BE FLUSH WITH WALL, UNLESS OTHERWISE NOTED AS SURFACE MOUNTED.
10. VERIFY EXACT LOCATION OF OUTLET, SWITCHES, EQUIPMENT, ETC WITH THE PROJECT MANAGER & USER PRIOR TO INSTALLATION. COUNTY RESERVES THE RIGHT TO RELOCATE ANY UNINSTALLED OUTLET IN ANY DIRECTION.
11. PROVIDE SLEEVES AS REQUIRED FOR ALL CONTROL CABLES.

M. RACEWAYS AND WIRING

1. ALL CABLE/WIRE, CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY & THEY SHALL BE ROUTED TO SUIT ACTUAL FIELD CONDITIONS, EXCEPT WHERE LOCATION ARE EXPLICITLY DIMENSIONED ON THE DWGS.
2. CONTRACTOR TO LIMIT THE NUMBER OF 90° BENDS BETWEEN PULL POINTS TO COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA ELECTRICAL CODE, CEC.
3. FLEXIBLE CONDUIT SHALL BE USED ONLY FOR SHORT CONNECTIONS TO LIGHT FIXTURES OR IN EXISTING WALLS.
4. WATERTIGHT FLEXIBLE CONDUIT (TYPE "UA") SHALL BE USED FOR CONNECTIONS TO MOTORS, TRANSFORMERS OR OTHER EQUIPMENT THAT MAY VIBRATE DURING OPERATION.
5. MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL BE LIMITED TO 6 FT.
6. RIGID GALVANIZED STEEL (RGS) SHALL BE USED FOR EXPOSED OUTDOOR WIRING, UNLESS OTHERWISE NOTED.
7. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40. ALL TRANSITIONS FROM UNDERGROUND TO ABOVE GROUND, EXPOSED CONDUIT SHALL UTILIZE PVC RIGID METAL ELBOWS AND FITTINGS.
8. UNDERGROUND CONDUIT SHALL BE PVC SCHED #40 WITH INITIAL BACKFILL OF SAND MINIMUM OF 3" BELOW AND ABOVE CONDUIT.
9. EMT MAYBE USED INDOOR AND WITH COMPRESSION COUPLING CONNECTIONS.
10. MINIMUM SIZE OF EMT SHALL BE 3/4".
11. THE MINIMUM SIZE OF CONDUITS INSTALLED BELOW GRADE SHALL BE 1", UON. THE MINIMUM SIZE OF ALL HOME RUN CONDUITS SHALL BE 3/4", UON. 1/2" CONDUIT SHALL ONLY BE ALLOWED AT FINAL INDIVIDUAL CONNECTIONS EQUIPMENT/DEVICES.
12. ALL CONDUITS PENETRATING SLABS SHALL BE WATERPROOF.
13. PENETRATE AND SEAL ACCESS TO MANHOLES, WELL, VAULTS, ETC. AS REQUIRED TO ROUTE POWER AND CONTROL CONDUCTORS TO VALVES AND OTHER COMPONENTS. SUCH PENETRATIONS SHALL BE SEALED TO COMPLETE WATERTIGHT CONDITIONS. IN ADDITION, ALL CONDUIT PENETRATIONS TO AND FROM WELLS AND VAULTS SHALL BE EQUIPPED WITH EXPLOSION-PROOF FITTING, SIMILAR TO "COOPER INDUSTRIES" TYPE "EYS AND EZS" FITTING. SUCH FITTINGS SHALL BE PROVIDED WITH APPROPRIATE LISTED SEALANT TO PREVENT GASES TRAVELING THROUGH CONDUITS TO AND FROM WELLS TO VAULTS AND OTHER PARTS OF THE SYSTEM
14. CONDUITS TERMINATED AT PANEL BOARDS, CONTROL CABINETS, ETC. SHALL BE EQUIPPED WITH GROUNDING BUSHINGS AND SHALL BE EFFECTIVELY BONDED TO THEIR SOURCE GROUND BUS.
15. ALL BENDS IN CABLES SHALL BE MADE SO THAT THE PROTECTIVE COVERING ON THE CABLE WILL NOT BE INJURED. NO BEND SHALL HAVE A RADIUS LESS THAN THE MINIMUM RECOMMENDED BY THE CABLE MANUFACTURER.
16. WHERE UNDERGROUND BORING IS REQUIRED, CONTRACTOR SHALL PROVIDE ALL NECESSARY SITE PREPARATION, EQUIPMENT, STAGING, ETC. TO ROUTE THE CONDUIT AS INDICATED ON PLANS.
17. WHEN ROUTING ANY UNDERGROUND CONDUIT, CAREFULLY COORDINATE WITH UTILITIES SHOWN ON CIVIL SHEETS. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING A COMPLETE SURVEY TO CONFIRM EXISTING UTILITIES SHOWN, VERIFY ALL OTHER EXISTING UTILITIES AND ADJUST WORK TO AVOID DISRUPTION OF ALL EXISTING UTILITIES IN WORK AREA.
18. THE EXISTING UNDERGROUND UTILITIES ARE UNKNOWN, HOWEVER IT SHOULD BE ASSUMED THAT THERE ARE MANY EXISTING UNDERGROUND UTILITIES, MANY OF WHICH ARE INSTALLED AT VERY SHALLOW DEPTHS.
19. THE CONTRACTOR IS RESPONSIBLE FOR USING SCANNING/LOCATING, UTILIZE SMALL TOOLS, AND PERFORM WORK CAREFULLY AS PART OF THE EXCAVATION AND EARTHWORK EFFORTS.
20. ALL COMMUNICATION CONDUIT SHALL BE INSTALLED IN COMPLIANCE WITH ANSI STANDARDS AND INDUSTRY BEST PRACTICES.
21. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. EXISTING UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
    - ELECTRICAL POWER
    - LOW-VOLTAGE (FIBER AND COPPER)
    - HOT/COLD WATER LINES
    - GAS LINES
    - SEWER LINES

N. CONDUCTORS

1. WIRES AND CABLES FOR CONTROL AND COMMUNICATIONS FOR SENSORS, INSTRUMENTS, AND DEVICES HAVE NOT BEEN SPECIFIED ON THE DRAWINGS AS THESE ITEMS ARE A PART OF THE DELEGATED DESIGN SCOPE OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING TYPE, SIZE AND QUANTITY OF WIRES AND CABLES AS REQUIRED TO PROVIDE THE COMPLETE SYSTEMS DESCRIBED IN THE DELEGATED DESIGN SCOPE OF WORK.
2. UL LISTED. CONDUCTORS SHALL BE COPPER, 600 VOLT, "THHN/THWN-2" INSULATION, STRANDED, MINIMUM SIZE #12 EXCEPT FOR CONTROLS. CONTRACTOR TO VERIFY ROTATION AND PHASING. COLOR CODE ALL BRANCH CIRCUIT WIRING:

   COLOR CODES

   NEUTRAL - WHITE

   a) 208/120VOLT SYSTEM
      PHASE A - BLACK
      PHASE B - RED
      PHASE C - BLUE 208V

   b) 480/277VOLT SYSTEM
      PHASE A - BROWN
      PHASE B - ORANGE
      PHASE C - YELLOW

O. BOXES/ENCLOSURES

1. OUTLET, JUNCTION AND PULL BOXES SHALL BE SIZED PER APPLICABLE VERSION OF CALIFORNIA ELECTRICAL CODE ARTICLE 314, TABLES 314.16 (a) AND (b) AND 314.28.
2. ALL OUTDOOR BOXES AND ENCLOSURES SHALL BE NEMA 3R.
3. ALL BOXES AND ENCLOSURES USED IN VAULTS AND WELLS SHALL BE NEMA 4X STAINLESS STEEL TYPE.
4. ELECTRICAL BOXES OR FITTINGS SHALL BE FLUSH WITH FINISH SURFACE OR RECESSED NO MORE THAN 1/4 INCH IN NON-COMBUSTIBLE WALLS OR CEILING.
5. ALL JUNCTION BOXES SHALL BE LABELED WITH RESPECTIVE CIRCUIT NUMBERS.

P. GROUNDING AND BONDING

1. ALL NEW (ADDITIONAL) METALLIC STRUCTURES AND EQUIPMENT FABRICATED WITH METALLIC MATERIALS SUCH AS MOTOR FRAMES, ENCLOSURES, CABINETS, MISC. ELECTRIC EQUIPMENT, METALLIC RACEWAYS, STAIRS, FENCES & HANDRAILS ETC.. SHALL ALL BE PERMANENTLY & EFFECTIVELY GROUNDED.
2. ALL ABOVE GROUNDING CONDUCTORS SHALL BE INSULATED STRANDED SOFT DRAWN COPPER, CLASS B, UON. THE GROUNDING CONDUCTORS WHEREVER POSSIBLE, SHALL BE ROUTED BENEATH SLABS, ATTACHED TO THE BUILDING STEEL, OR RUN IN RACEWAYS AS SHOWN.
3. CONDUIT RUNS AND EQUIPMENT/DEVICE ENCLOSURES SHALL BE BONDED TOGETHER TO FORM A CONTINUOUS ELECTRICAL CONDUCTOR. NON-METALLIC RACEWAYS & ENCLOSURES SHALL INCLUDE BONDING JUMPERS,
4. ALL SYSTEM GROUNDING CONDUCTORS SHALL BE COPPER. ALL GROUND CONNECTIONS SHALL BE ACCESSIBLE AND MADE WITH COPPER ALLOY FITTINGS.
5. A GROUND WIRE IS REQUIRED FOR ALL CONDUITS.

Q. FEEDERS AND BRANCH CIRCUITS IDENTIFICATION

1. IDENTIFY FEEDERS WITH THE CORRESPONDING CIRCUIT DESIGNATION AT THE OVER-CURRENT DEVICE, LOAD END, AND IN PULL BOXES WITH E-Z CODE OR OTHER APPROVED WIRE MARKER.
2. IDENTIFY BRANCH CIRCUITS WITH I.D. MARKERS, THE CORRESPONDING CIRCUIT DESIGNATION AT THE OVER-CURRENT DEVICE, AT ALL SPLICES, AND IN JUNCTION BOXES, AND IN OUTLETS. USE PLASTIC COATED SELF-STICKING MARKERS SUCH AS THOMAS & BETTS E-Z CODE FOR IDENTIFICATION OF CONDUCTORS.
3. ALL CONTROL AND COMMUNICATION WIRING SHALL BE TAGGED NEAR THE POINT OF TERMINATION OF THE EQUIPMENT TO WHICH THE WIRING IS CONNECTED. THE TAGS SHALL BE TYPEWRITTEN, UV RESISTANT AND WATERPROOF.
4. CIRCUIT DESIGNATION MEANS PANEL AND CIRCUIT NUMBER, I.E. 4ALR-3.
5. ALL EQUIPMENT SHALL BE LABELED WITH PHENOLIC PERMANENT MARKER ENGRAVED LABEL AND MOUNT WITH SCREWS. ADHESIVE MOUNTING IS NOT ACCEPTABLE.
6. LARGER DISTRIBUTION PANELS SHALL HAVE PHENOLIC NAMEPLATES MADE FOR EACH BREAKER. BLACK BACKGROUND WITH WHITE LETTERS.
7. CHECK PANEL SCHEDULES IDENTIFICATION FOR VALIDITY. REIDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD. WHILE PANEL COVER IS REMOVED TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES ARE INDICATED ON PANEL SCHEDULE CARD.

R. EXECUTION

1. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE CONFINED SPACE AS POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
2. EQUIPMENT, MATERIALS AND SUPPLIES REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
3. DO ALL DRILLING, CUTTING, CHANNELING AND PATCHING REQUIRED TO INSTALL ELECTRICAL WORK, AS INDICATED OR HEREIN SPECIFIED. ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED TO MATCH ADJACENT SURFACE, UNLESS INDICATED OTHERWISE. PAINT ALL NEW ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTINGS TO MATCH COLOR OF ADJACENT SURFACES.
4. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, FLOORS, ETC., TO MAINTAIN THE FIRE RATING. FURNISH AND INSTALL FIRE RATED ENCLOSURES FOR ALL EQUIPMENT PENETRATING INTO FIRE RATED ENVELOPES, SPACES, ETC.
5. ALL DISCONNECT AND TRANSFORMERS SHALL BE LABELED WITH PERMANENT ENGRAVED LABELS WITH PANEL DESIGNATION FED FROM AND ROOM LOCATION.
6. CHECK PANEL SCHEDULES IDENTIFICATION FOR VALIDITY. REIDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD. WHILE PANEL COVER IS REMOVED TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES ARE INDICATED ON PANEL SCHEDULE CARD.

S. MISCELLANEOUS

1. CONTRACTOR SHALL PROVIDE ALL MATERIAL UNLESS NOTED OTHERWISE IN THE CONTRACT AND/OR CONSTRUCTION DOCUMENT. ALL MATERIAL SHALL BE NEW AND NOTED BY UNDERWRITER'S LABORATORIES, FACTORY MUTUAL, OR TESTED BY THE APPROVED THIRD PARTY TESTING FACILITY.
2. CONVENIENCE OUTLET RECEPTACLES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO LOCATIONS SHOWN ON PLANS. CONTRACTOR RESPONSIBLE FOR EXACT LOCATION BASED ON FIELD CONDITIONS.
3. DURING CONSTRUCTION, DO NOT INTERRUPT OR IMPEDE OPERATION AND WORK IN ADJACENT AREAS.
4. UPON COMPLETION OF WORK, REPLACE SURFACE MATERIAL, PAVING AND PAVING BASE, COURSE TO MATCH ORIGINAL. ALL CONDUIT PENETRATIONS SHALL BE SEALED WITH AN APPROPRIATE RATED SEALANT. PENETRATIONS EXPOSED TO WEATHER AND THROUGH ROOF SHALL BE FLASHED AND CAULKED TO FORM A FIRE RATED AND WATERTIGHT PENETRATION.
5. UPON COMPLETION OF ALL WORK, THOROUGHLY CLEAN ALL EQUIPMENT AND DUCTS FROM INSIDE AND OUTSIDE OF EQUIPMENT. REMOVE ALL TRACES OF SOIL, DUST, LABELS, GREASE, OIL AND FOREIGN MATERIALS. CLEANUP AND REMOVE FROM THE PREMISES ALL DEBRIS AND SURPLUS MATERIAL CAUSED BY THIS WORK.
6. ALL EXISTING SURFACES DAMAGED BY NEW CONSTRUCTION, SHALL BE PATCHED, OR REPAINTED TO MATCH EXISTING CONDITIONS, PAINTED SURFACE SHALL BE PAINTED FROM BREAK TO BREAK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PATCH & REPAIR ALL DAMAGE TO EXISTING SURFACES AND FINISHES FURTHERMORE, THE AFFECTED AREA(S) OF WORK SHALL BE REPAIRED TO MATCH THE FINISH THAT WAS PREVIOUSLY EXISTING, PRIOR TO THE COMMENCEMENT OF WORK.
7. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, WHICH REQUIRE PENETRATIONS, SUCH AS ROOFS, HAZARDOUS AREAS, MASONRY AND FIRE RATED WALLS, ETC.. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED OPENINGS & CORE DRILL AS REQUIRED FOR NEW ELECTRICAL WORK. THE CONTRACTOR SHALL PATCH & FIRE STOP (SEAL) ALL PENETRATIONS (BOTH SIDES) PER SPECIFICATIONS.
8. WHERE THERE IS A CONFLICT BETWEEN THE DRAWINGS & ANY RELEVANT CODES, THE CODES SHALL GOVERN, EXCEPT WHERE THE DRAWINGS INDICATE A QUALITY LEVEL SUPERIOR TO THAT SPECIFIED BY THE CODES.
9. IN THE EVENT OF CONFLICT OR DISCREPANCY IN DRAWINGS/PLANS, IN SPECIFICATIONS, BETWEEN DRAWINGS AND SPECIFICATIONS, BETWEEN SITE CONDITIONS AND DRAWINGS, THE CONTRACTOR SHALL PROVIDE THE MORE STRINGENT REQUIREMENTS.

T. ACCEPTANCE TESTING AND COMMISSIONING.

1. THE CONTRACTOR SHALL PROVIDE A THIRD PARTY TESTING.
2. CONTRACTOR SHALL PROVIDE DOCUMENTATION THAT THE CONDUCTOR, SWITCHBOARDS, SWITCHGEAR, AND DEVICES HAVE BEEN COMMISSIONED AND PASSED THE ACCEPTANCE TESTING AND READY FOR OPERATION PRIOR TO HANDOVER TO END USER.
3. AT THE CONCLUSION OF WORK, AFTER ALL POWER AND CONTROL EQUIPMENT HAVE BEEN INSTALLED, ENERGIZED, PROGRAMMED, TESTED/COMMISSIONED AND READY FOR USE, PROVIDE TRAINING FOR CAL FIRE STAFF.
4. TRAINING SESSION SHALL BE NO LESS THAN 8 HOURS AND SHALL COVER THE OPERATION AND MAINTENANCE OF THE GENERATOR AND A.T.S. SYSTEMS.
5. TRAINING SHALL BE PERFORMED BY A FACTORY TECHNICIAN OR AUTHORIZED VENDOR OF THE SPECIFIC PRODUCTS USED IN THE SYSTEM.

EQUIPMENT NOTES

1. ALL CIRCUIT BREAKERS SHALL BE "FULLY RATED" AND SIZED AS SHOWN ON SINGLE LINE DIAGRAM AND PANEL SCHEDULES. BREAKERS SHALL HAVE THE CAPABILITY TO BE LOCKABLE FOR SAFETY MAINTENANCE PURPOSES.
2. ALL (N) TRANSFORMERS SHALL BE OF CLASS 155 OR HIGHER AND SHALL BE COMPLETELY ENCLOSED EXCEPT FOR VENTILATION OPENING.
3. COORDINATE WITH EQUIPMENT MANUFACTURER TO PROVIDE AND DELIVER MINI POWER-ZONE WITH INTEGRATED PANELBOARD AND TRANSFORMER COMPLETE WITH PRE-WIRED CONNECTIONS BETWEEN BOTH EQUIPMENTS.
4. PROVIDE COLD SHRINK SPLICE KIT RATED FOR OUTDOOR CONDITIONS WITHIN ALL UNDERGROUND PULL BOXES. EXTEND POWER CONDUCTOR LEADS FROM WELLS, VAULTS, AND MANHOLES TO PULL BOX. SPLICE EQUIPMENT FEEDERS FROM POWER SOURCE WITH POWER LEADS FROM ASSOCIATED EQUIPMENT LOCATED WITHIN WELLS, VAULTS, AND MANHOLES. FIELD VERIFY CONDUIT LENGTHS AND COORDINATE WITH EQUIPMENT MANUFACTURER TO PROVIDE ACCURATE LENGTHS OF EQUIPMENT CONDUCTOR LEADS TO REACH UNDERGROUND PULL BOXES.
5. CONTRACTOR SHALL REFER TO CIVIL PLANS FOR EQUIPMENT SPECIFICATIONS AND EXACT LOCATIONS FOR ALL DEVICES AND EQUIPMENT. CAREFULLY COORDINATE TYPE, SIZE, AND QUANTITY OF CONDUCTORS AND CONDUITS SHOWN ON SITE PLANS WITH MANUFACTURER'S RECOMMENDATION OF EACH EQUIPMENT AND DEVICES. ADJUST CONDUIT & CONDUCTOR SIZES IF NECESSARY TO ACCOMMODATE MANUFACTURER'S WIRING REQUIREMENTS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING AND COORDINATING WITH ALL EQUIPMENT MANUFACTURERS TO IDENTIFY EXACT LOCATION OF CONDUIT STUB-UP LOCATIONS PRIOR TO POURING EQUIPMENT CONCRETE PAD FOUNDATIONS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROVIDING ADDITIONAL CONDUITS & CONDUCTORS TO PLC, SCADA, DEVICES/INSTRUMENTS AND CONTROLLERS THAT ARE NOT SHOWN ON PLANS. REFER TO CIVIL PLANS AND MANUFACTURERS SHOP DRAWINGS FOR EXACT LOCATION AND INSTALLATION DETAILS.
8. PROVIDE RIGID METALLIC EXPLOSION PROOF CONDUIT SEAL FITTINGS FOR ALL CONDUITS LOCATED WITHIN VALVE VAULTS, WET WELLS, MAN HOLES, AND U.G. INFRASTRUCTURES.
9. COORDINATE WITH CIVIL FOR EXACT LOCATIONS OF ALL SENSORS, PUMPS, AND VALVES. COORDINATE WITH MANUFACTURER'S WIRING AND HARDWARE MOUNTING REQUIREMENTS FOR SENSORS, PUMPS, AND VALVES.
10. CAREFULLY COORDINATE WORK WITH (E) UTILITIES. PERFORM ALL REQUIRED SITE INVESTIGATION TO AVOID INTERFERENCE WITH OTHER UTILITIES DURING INSTALLATION OF UNDERGROUND CONDUITS AND CONDUCTORS.
11. INFORMATION PROVIDED IS DIAGRAMMATIC AND INTENDED TO GENERALLY PORTRAY THE SCOPE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ELEMENTS SHOWN HEREIN AND PRODUCE DETAILED SHOP DRAWINGS, INCLUDING BUT NOT LIMITED TO POWER AND CONTROL PROVISIONS, INSTRUMENTATION, MOUNTING AND ANCHORAGE DETAILS AS WELL AS MISCELLANEOUS PROVISIONS REQUIRED FOR COMPLETE AND FUNCTIONAL SYSTEMS.
12. SWITCHBOARD MANUFACTURER SHALL PROVIDE EACH SECTION COMPLETE WITH INTEGRATED HEATERS WITH CONTROL POWER TRANSFORMERS WITHIN THE EQUIPMENT. EACH SECTION SHOULD HAVE ITS OWN THERMOSTATICALLY CONTROLLED SPACE HEATER.
13. PUMP MANUFACTURER SHALL PROVIDE A VFD WITH MOTOR OVERLOAD AND OVER TEMPERATURE PROTECTION. SET THE OVERLOAD RELAY TO CORRESPOND WITH THE NEW LOAD. COORDINATE WITH PUMP MANUFACTURER TO PROVIDE SUITABLE VFD FOR THIS APPLICATION TO CONTROL FUNCTIONS REQUIRED FOR SYSTEM OPERATION. PROVIDE APPROPRIATE PROVISIONS SUCH AS LINE REACTOR AND DV/DT CONTROLLERS AS NEEDED BASED ON DISTANCE OF CONDUCTORS TO LOAD. COORDINATE WITH PUMP MANUFACTURER TO SELECT AND ADJUST OVER CURRENT PROTECTION DEVICE ACCORDINGLY TO VFD'S INPUT AND OUTPUT REQUIREMENTS. FIELD VERIFY WITH PROJECT MANAGER FOR EXACT LOCATION OF EQUIPMENT.
14. EACH VARIABLE FREQUENCY DRIVE MUST HAVE SEPARATE CONDUITS FOR INPUT POWER, CONTROL WIRING, AND OUTPUT WIRING AND SHALL INTERFACE THROUGH THE PLC. CONTRACTOR SHALL COORDINATE WITH PLC MFR. AND PROJECT SITE TECHNICIAN REPRESENTATIVES FOR TYPE AND QUANTITY OF PLC INPUTS/OUTPUTS WITH TYPE AND QUANTITY OF INSTRUMENTS, INPUT/OUTPUT DEVICES, FIELD DEVICES AND FIELD EQUIPMENT.
15. EQUIPMENT MANUFACTURER SHALL DELIVER PRODUCT ONSITE COMPLETE WITH ALL PRE-MANUFACTURED WIRING TO ALL INTERNAL COMPONENTS FOR ALL EQUIPMENT CONTROL PANELS. COORDINATE WITH MANUFACTURER TO PROVIDE PROPER INTERNAL MOUNTING PROVISIONS FOR ALL NEW EQUIPMENT THAT IS PROPOSED TO BE INSTALLED WITHIN THE ENCLOSURE.
16. CONTRACTOR SHALL SUBMIT APPLICATION FOR CONSTRUCTION AND OPERATION OF GENERATOR TO LOCAL A.H.J., INCLUDING A.Q.M.D.
17. GENERATOR MANUFACTURER SHALL PROVIDE EMERGENCY LOCKOUT SWITCH. EQUIPMENT SHALL BE DELIVERED ON SITE COMPLETE WITH WIRING TO SWITCH. EMERGENCY SHUT DOWN OF PRIME MOVER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION.
18. GENERATOR MANUFACTURER SHALL DELIVER ON SITE COMPLETE WITH WIRING TO AUXILIARY LOAD DISTRIBUTION TERMINAL BLOCK, BLOCK HEATER, BATTERY CHARGER, LOAD BANK, AND ALL APPLICABLE CONTROLLER ACCESSORIES, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH GENERATOR MANUFACTURER TO OBTAIN SHOP DRAWINGS AND CONFIRM SHORE POWER AUXILIARY REQUIREMENTS AND MODIFY SIZE AND TYPE OF CIRCUIT BREAKER, CONDUIT, AND CONDUCTORS ACCORDINGLY.
19. LOAD BANK SHALL BE USED TO MEET THE EXHAUST GAS TEMPERATURE AS REQUIRED BY THE MANUFACTURER. ALL WIRING AND OVER CURRENT PROTECTIONS BETWEEN LOAD BANK AND GENERATOR SHALL BE BY GENERATOR MANUFACTURER. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO PROVIDE SHOP DRAWINGS FOR CUSTOM STRUCTURAL STEEL SUPPORT FOR FREESTANDING HORIZONTAL RADIATOR DISCHARGE AIR COOLED 150KW LOAD BANK. MANUFACTURER SHALL PROVIDE ALL REQUIRE HARDWARE AND MOUNTING PROVISIONS TO CONSTRUCT STRUCTURAL STEEL SUPPORT ON SITE OR DELIVERED ON SITE FULLY CONSTRUCTED GENERATOR. PROVIDE RESISTIVE AC LOAD BANK, WITH AUTOMATIC 10KW LOAD STEP, AUTO LOAD DUMP, AND THERMOSTATIC CONTROLLED ENCLOSURE HEATER.
20. PROVIDE ALL BASIC FIRE AND LIFE SAFETY SIGNAGE AS DESCRIBED IN TABLE 2 ON SHEET T0.2.

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
01/21/26
25-3919
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

GENERAL SERVICES
Department of General Services
Architecture & Engineering Sections
State of California
Real Estate Services Division
Project Management & Development Branch
707 Third Street, Suite 4-105
West Sacramento, California 95605

REGISTERED PROFESSIONAL ENGINEER
SEVAG AVANESSIAN
No. E22793
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED: 11/18/2025

JCCA
Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA#: 25690-1

Issue		
No.	Date	Description

Project
GENERATOR REPLACEMENT
WINTERHAVEN FOOD AND AGRICULTURAL INSPECTION STATION
3510 I-8, WINTERHAVEN, CALIFORNIA 92283

Supervisor	Designed	Drawn
SA	ON	ON

DSA App No.	SFM Permit No.
03-E00486	25-S-3919-C-DR

Sheet Title
ELECTRICAL SPECIFICATIONS

Project Number
000000000013525

Reference North

Sheet Scale
AS SHOWN

Sheet Number
E4.1

V1

RELATIVE BORDER SCALE IN INCHES

24 X 36

CAD File: L:\2025\25690-1 Generator Replacement, CDFA Winterhaven\CAD\256901_E4.1.dwg Plot Date: Nov 18, 2025 - 2:29pm Plotted by: OrlandoNajera