General Notes

1. These plans are diagrammatic in nature and do not show all materials needed to construct a complete and functioning electrical system.
2. These plans are intended to show the general scope of work, and general location of devices, lighting and equipment. They are not intended to show exact locations (UON).
3. Contractor is responsible for working out the exact locations of all devices, lighting and equipment during rough installation and to ensure that the job foreman coordinates with the other trades to ensure a system that will meet the requirements of all other aspects of the job, including all finishes.
4. These plans do not show exact conduit routing. Contractor is to coordinate with other trades and owner to make sure the routing of conduit, whether exposed or not exposed is acceptable.
5. These plans do not show device types, or color. This will need to be coordinated with owner.
6. Cutting, Chopping or Boring of structural building members shall only be done in accordance with recommendations for the structural engineer.
7. All conduit racks or "Trapeze" shall be constructed of Uni-strut, and 3/8 threaded rod, and will require lateral support.

Electrical Notes

1. Installation shall comply with all sections NEC and CEC. Including but not limited to Article 110-1 thru 110-79.
2. Nothing in these plans is intended to show or imply anything other than an installation that meets strict NEC compliance.
3. System Type. Contractor shall determine the type of and materials required to construct an electrical system that is code compliant for the space or area it is installed.
4. Access to all connections made in junction or device boxes is required.
5. Attention should be made to ensure strict adherence to NEC 300-13A+B.
6. All load calculations, individual circuit loads, wire size and de-rates are based on all conductors being copper. (UON).
7. All Equipment grounding shall comply with NEC article 250.
8. Any installation done in a Food Process area requires the electrical shall comply with all standards of food process installations and to be NEMA 4X.
9. No 120 volt Loads connected to "B" phase on 120/240 volt 3 phase panels.
10. All Electrical Distribution Boards, Panels and Transformers shall be properly mounted, bolted and secured to meet Manufacturer's spec's.
11. All wire and connections shall be rated 75° C or better.
12. Per NEC 210.4(B), all multi-wire branch circuits shall be provided with a means to be simultaneously disconnected all ungrounded conductors at the panel.
13. Per the 2008 Energy Code, Section 111, any appliance or equipment regulated by the Appliance Efficiency Regulations shall be certified by the manufacturer or the Commission as meeting or exceeding all requirements. This includes dry-type transformers.
14. All electrical equipment and materials shall be listed, labeled and installed as per a recognized electrical testing agency.

Existing Electrical System

1. Any visible code errors found in the existing system shall be corrected whether on this plan or not.
2. Contractor shall perform all code corrections shown on plans to the existing system.
3. Any electrical system code violations that were not visible or inaccessible during the inspection are unknown and thus are not shown on this plan to be corrected.
4. All additional breakers or switchboard disconnect buckets shall be of the same make as the equipment they are being added to.
5. All additional breakers or switchboard disconnect buckets shall be of equal or greater fault current rating as the existing equipment.

Customer's Equipment

1. If any equipment being installed is in used condition. The equipment may have been altered or changed from the condition it was supplied in when new. The condition of all safety and electrical parts or circuits on the equipment is unknown at this time and no repair or upgrades required by the "Authority Having Jurisdiction" are part of this scope of work.
2. Contractor is to supply an electrical system that will feed all the equipment. Power to the equipment and its connection to the circuit is the extent of the scope of work required.
3. Customer shall provide an equipment operator to properly set up and run each piece of equipment to test rotational direction and functions once the power and connection to the equipment is made.
4. Contractor shall not run, or set up and any equipment.
5. Transportation and installation of all equipment is provided by others.
6. In some cases the supply voltage to some of the equipment is being changed. Please check each piece of equipment and verify that it's required voltage is the same as the supply voltage. Contractor is responsible for re-wiring motor connections, changing the control voltage transformer taps, and properly sizing the overloads for the new supply voltage.

Utility Scope

1. All work for the serving utility shall comply with all utility requirements and plans.
2. All materials used shall comply with utility requirements.
3. Contact the Service Planner or Utility Engineer for a set of plans that show their locations, requirement and specified materials to use.
4. Coordinate with the Service Planner or Utility Engineer for complete scope of work, and exact locations and materials required.
5. Contractor shall obtain a maximum fault current letter from the utility system engineer when required.

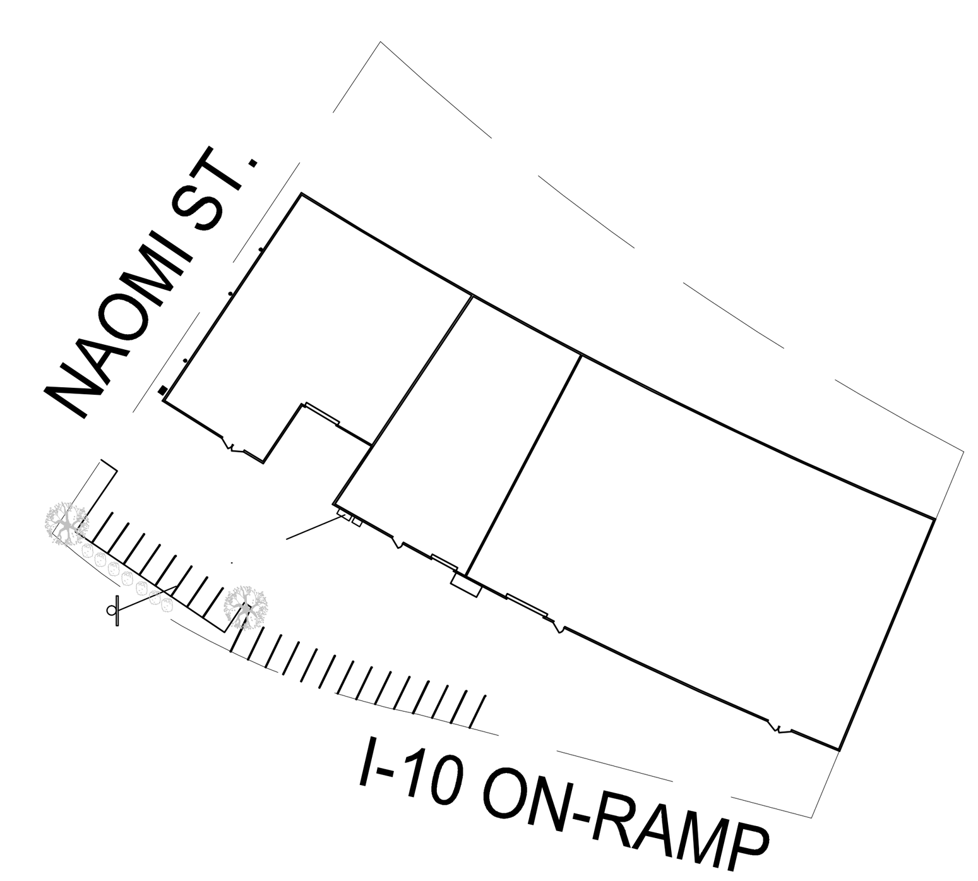
Electrical Service and Distribution Equipment

1. All Electrical Service and Distribution Equipment shall be rated for the stated utility maximum fault current rating.
2. All Electrical Service and Distribution Equipment shall be series rated and a fault current rating shall be shown on each panel.
3. All electrical loads (customer equipment) installed shall be approved by the AHJ and identified, labeled and listed as required by the AHJ. Per NEC 110.2 and 110.3
4. All transformers shall have 100% rated neutral connections U.O.N.

Grounding

1. If applicable, Contractor shall thoroughly inspect the existing system Grounding Electrode Conductors, and Grounding Electrodes and ensure they meet the requirements of NEC Article 250.

MAP OF PROJECT SITE



ELECTRICAL LEGEND

LIGHTING FIXTURES

NOTE: SEE FIXTURE SCHEDULE FOR SPECIFIC LIGHTS AND PART NUMBERS

- 4' INDUSTRIAL STRIP FIXTURE
- 8' INDUSTRIAL STRIP FIXTURE
- CEILING MOUNTED TRACK
- CEILING MOUNTED FIXTURE
- WALL MOUNTED FIXTURE
- EXIT SIGN (CEILING MOUNTED)
- EXIT SIGN (WALL MOUNTED)
- RECESSED LIGHT
- RECESSED LIGHT W/SPECIAL TRIM
- UNDER CABINET LIGHTING
- BATTERY BACK-UP EGRESS LIGHT
- HID WALL PACK
- T-BAR TROFFER
- T-BAR TROFFER W/90 MIN BATT.

LIGHTING SWITCHES AND CONTROLS

NOTE: ALL SWITCHES ARE TO BE MOUNTED @ 46" ON CENTER A.F.F. U.O.N.

- $ — SINGLE POLE SWITCH
- $D — DIMMER
- $3W — 3 WAY SWITCH
- $OCC — WALL MOUNTED OCCPANCY SENSOR
- O — CEILING MOUNTED OCCUPANCY SENSOR
- $ab — LOWER CASE LETTERS INDICATE SWITCH LEGS
- $M — MOTOR RATED SWITCH

POWER RECEPTACLES AND BOXES

NOTE: ALL RECEPTACLES ARE TO BE MOUNTED @ 18" ON CENTER A.F.F. U.O.N

ALL COUNTER TOP RECEPTACLES ARE TO BE 6" ABOVE SPLASH. COORDINATE WITH ARCHITECTURAL DRAWINGS.

- STANDARD DUPLEX OUTLET
- FOURPLEX OUTLET
- GFI — GROUND FAULT INTERUPTER CIRCUIT
- C — CEILING MOUNTED DUPLEX
- FB — FLOOR BOX WITH DUPLEX
- 240 VOLT OUTLET
- DATA LOCATION
- TELEPHONE LOCATION
- L5-20R — SPECIAL RECEPTACLE ANNOTATION INDICATES NEMA #
- J — J-BOX
- DD — DUCT MOUNTED SMOKE DETECTOR

DISTRIBUTION EQUIPMENT

NOTE: ALL RATINGS OF ELECTRICAL DISTRIBUTION EQUIPMENT SHALL MEET LOCAL UTILITY COMPANY REQUIREMENTS

- PANELBOARD OR LOAD CENTER (REFER TO PNL SCHEDULE)
- SWITCHGEAR / DISTRIBUTION BOARD / MAIN GEAR
- T1 — TRANSFORMER
- MOTOR CONTROL CENTER

SINGLE LINE DIAGRAMS

- M — UTILITY COMPANY METER
- M — UTILITY COMPANY METER W/CT'S
- SERVICE MAIN 1200 AF 800A PLUG SKM-3-F1200 — BREAKER (ANNOTATION INDICATES TYPE AND SIZE)
- "L-2" 100 AS 100 AF — FUSED DISCONNECT (ANNOTATION INDICATES TYPE AND SIZE)
- CONNECTION TO GROUND
- GEB — GROUNDING ELECTRODE BUSS
- PANEL "LB" RELABEL "H2" 125 A 480/277 V — PANEL (ANNOTATION INDICATES TYPE AND SIZE)
- 400A 480V EXO 3P NF — EXO (ANNOTATION INDICATES TYPE AND SIZE)
- FUSED EXO (ANNOTATION INDICATES TYPE AND SIZE)
- PAD MOUNTED UTILITY TRANSFORMER
- TRANSFORMER (ANNOTATION INDICATES TYPE AND SIZE)

ABBREVIATIONS

AFF - ABOVE FINISH FLOOR
AIC - AMP INTERRUPTING CAPACITY
AF/AT - AMP FRAME, AMP TRIP
AS/AF - AMP SWITCH, AMP FUSE
ATS - AUTOMATIC TRANSFER SWITCH
AWG - AMERICAN WIRE GAUGE

BATT - BATTERY
BKR - BREAKER
BLDG - BUILDING

C - CONDUIT
CB - CIRCUIT BREAKER
CKT - CIRCUIT
CT - CURRENT TRANSFORMER

Δ - DELTA CONNECTED
DIST - DISTRIBUTION

EF - EXHAUST FAN
EG - EQUIPMENT GROUND
EMER - EMERGENCY
EMT - ELECTRICAL METALLIC TUBING

FDR - FEEDER
FIXT - FIXTURE
FLA - FULL LOAD AMPS
FT - FEET

GEB - GROUNDING ELECTRODE BUSS
GEC - GROUNDING ELECTRODE CONDUCTOR
GND - GROUND
GFI - GROUND FAULT INTERRUPTER

HOA - HAND OFF AUTO
HP - HORSEPOWER
HVAC - HEATING VENTILATION AND AIR CONDITIONING

IG - ISOLATED GROUND

KVA - KILOVOLT AMPS
KW - KILOWATT

M - METER
MCC - MOTOR CONTROL CENTER
MFR - MANUFACTURER
MLO - MAIN LUGS ONLY

N - NEUTRAL
NC - NORMALLY CLOSED
NEC - NATIONAL ELECTRICAL CODE
NO - NORMALLY OPEN

P - POLE
PB - PULL BOX
PC - PHOTO CELL
ϕ - PHASE

PRI - PRIMARY
PT - POTENTIAL TRANSFORMER
PWR - POWER

QTY - QUANTITY

RECPT - RECEPTACLE
RM - ROOM

SEC - SECONDARY
SF - SQUARE FOOT
SQ - SQUARE
ST - SHUNT TRIP
SW - SWITCH

TC - TIME CLOCK
TEL - TELEPHONE
TYP - TYPICAL

UG - UNDERGROUND
UON - UNLESS OTHERWISE NOTED
UPS - UNINTERRUPTIBLE POWER SUPPLY

V - VOLTS
VA - VOLT-AMPS
VD - VOLTAGE DROP
VFD - VARIABLE FREQUENCY DRIVE

XFMR - TRANSFORMER
XFR - TRANSFER

WYE - WYE CONNECTED

FOR QUESTIONS ABOUT THE DESIGN OR ENGINEERING CALL JOE URSINI AT PROFESSIONAL ELECTRICAL SERVICES (818) 612 3922

DESIGN/BUILD NOTES:

2. THESE PLANS WERE PREPARED UNDER THE EXEMPTION TO DIVISION 3 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE BY SECTION 5537.2. AS THE LICENSED CONTRACTOR RESPONSIBLE FOR THE PREPARATION OF THESE DRAWINGS, ONLY PROFESSIONAL ELECTRICAL SERVICES, INC. MAY UTILIZE THEM.

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REVIEWS: REVISIONS:
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DRAWING TITLE:
TITLE SHEET & NOTES

DRAWN BY:
D.M.

SCALE:
N.T.S

DRAWN DATE:
28 MAR 2015

SHEET NO.
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