

- ### REFERENCE NOTES
- DISCONNECT AND REMOVE EXISTING ONAN DIESEL GENERATOR (DGDB SERIES), 277/480V, 3φ, 4 WIRE.
 - EXISTING PUMP CONTROL PANEL TO REMAIN USED IN AUTO. SEE CIVIL PLANS FOR ADDITIONAL REQUIREMENTS.
 - EXISTING 15 HP IRRIGATION PUMP TO REMAIN.
 - NEW CUSTOMER OWNED METERED SERVICE WITH UTILITY APPROVED TERMINAL SECTION. SEE SITE PLAN ON SHEET E2.
 - CONTINUATION PER PG&E HAND OUT PACKAGE.
 - CONDUIT SEAL.
 - SKID MOUNTED BOOSTER CONTROL (BY OTHERS).
 - STUB TO WATER STORAGE TANK. SEE CIVIL ENGINEERING PLANS.
 - 480V INPUT/240V OUTPUT, SINGLE PHASE TRANSFORMER WITH INTEGRAL TEN CIRCUIT PANEL BOARD. (SQUARE-D, CUTLER HAMMER/EATON OR ENGINEER APPROVED EQUAL) WITH NEMA 3R ENCLOSURE.
 - TANK FLOAT SWITCH PER CIVIL ENGINEER.
 - LOCATE AT CONDUIT PENETRATION AT TOP OF TANK PER CIVIL ENGINEER.

- ### LEGEND
- NOTE: INTERPRET IN CONTEXT
- #### LIGHT FIXTURES
- WALL SURFACEMOUNT
- #### POWER/COMM.
- ⊕ SINGLE RECEPT.
 - ⊕ DUPLX RECEPT.
 - ⊕ DUPLX- HALF SWITCHED
 - ⊕ DOUBLE DUPLX
 - ⊕ SPECIAL CONFIGURATION
 - ⊕ DUPLX- FLOOR OUTLET
 - ⊕ JUNCTION BOX
 - ▽ TELEPHONE OUTLET
 - ▽ DATA OUTLET
 - ▽ PHONE/DATA COMBO OUTLET
 - ⊕ SAFETY DISCONNECT
 - ⊕ COMBINATION MOTOR DISCONNECT/STARTER
- #### CONDUIT/WIRE
- NEW
 - UNDERGROUND
 - ⊕ NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
 - ⊕ EXISTING TO REMAIN
 - ⊕ (E) POWER HOMERUN
 - ⊕ CONDUIT STUB (W/MARKER)
 - ⊕ VERTICAL CONDUIT RUN
 - ⊕ CONDUIT SEAL
 - ⊕ FLEXIBLE CONNECTION
 - ⊕ LOW VOLTAGE
 - SURFACEMOUNT RACEWAY
- #### SWITCHES
- \$ SPST
 - \$ DPST
 - 3-WAY
 - 4-WAY
 - DIMMER
 - TIMER SWITCH
 - W/THERMAL OVERLOAD
 - W/PILOT LIGHT
 - KEY OPERATED
 - DUAL LEVEL SWITCHING
 - SWITCHLEG DESIGNATION
 - OCCUPANCY SENSOR
- #### MISCELLANEOUS
- ⊕ MOTOR
 - ⊕ THERMOSTAT
 - ⊕ CIRCUIT BREAKER
 - ⊕ FUSIBLE SWITCH
 - ⊕ PHASE
 - ⊕ GROUND

- ### ABBREVIATIONS
- A AMPERE
 - AF AMP FUSE RATING
 - AFB ABOVE FINISH FLOOR
 - AFG ABOVE FINISH GRADE
 - AIC AMPERES INTERRUPT CAPACITY
 - AS AMP SWITCH RATING
 - BFG BELOW FINISH GRADE
 - CB CIRCUIT BREAKER
 - CEC CA. ELECTRICAL CODE
 - CKT CIRCUIT
 - C CONDUIT
 - E EXISTING
 - EC ELECTRICAL CONTRACTOR
 - EF-# EXHAUST FAN
 - (EXN) (E) IN (N) LOCATION
 - (EXR) (E) TO BE (R)
 - (F) FUTURE
 - FA FIRE ALARM
 - FACP FIRE ALARM CONTROL PANEL
 - G GROUNDING CONDUCTOR
 - GC GENERAL CONTRACTOR
 - GFI GROUND FAULT CKT INTERRUPTER
 - GND GROUND
 - GRS GALVANIZED RIGID STEEL
 - GWS GANGED WITH SWITCH
 - IG ISOLATED GROUND
 - LTG LIGHTING
 - MC MECHANICAL CONTRACTOR
 - MCB MAIN CIRCUIT BREAKER
 - MLO MAIN LUGS ONLY
 - MSB MAIN SWITCHBOARD
 - MTTB MAIN TELEPHONE TERMINAL BOARD
 - (N) NEW
 - NIC NOT IN CONTRACT
 - NL NIGHT LIGHT
 - P POLE
 - (R) RELOCATE(D)
 - TBR TO BE REMOVED
 - TYP TYPICAL
 - UC UNDERCABINET
 - UG UNDERGROUND
 - UN UNLESS OTHERWISE NOTED
 - V VOLT
 - VA VOLT AMPERES
 - W WATT, WIRE
 - WP WEATHERPROOF (NEMA 3R)

- ### GENERAL NOTES
- CODE COMPLIANCE: ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS, AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:
 - CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES 2005 NATIONAL ELECTRICAL CODE AND 2006 INTERNATIONAL FIRE CODE, INTERNATIONAL BUILDING CODE, ETC. WITH CALIFORNIA AND OTHER LOCAL AMENDMENTS AS APPLICABLE.
 - AMERICANS WITH DISABILITIES ACT (ADA).
 - SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENCE SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.
 - MOUNTING HEIGHTS IN INCHES ABOVE FINISH FLOOR SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
 - +18" AFF TO BOTTOM OF OUTLET BOX: RECEPTACLES,
 - +48" AFF TO TOP OF OUTLET BOX: LIGHT SWITCHES.
 BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS.
 - LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES).

- ### SINGLE LINE DIAGRAM NOTES
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT AND COORDINATE WITH THE SERVING UTILITY TO ENSURE ALL SERVING UTILITY REQUIREMENTS ARE MET.
 - SERVICE ENTRANCE EQUIPMENT SHALL BE IN ACCORDANCE WITH THE SERVING ELECTRIC UTILITY COMPANY'S REQUIREMENTS.
 - ALL CONDUCTORS SHALL BE COPPER WITH TYPE [THHN/THWN] INSULATION UNLESS OTHERWISE NOTED.
 - ALL SWITCHES, CIRCUIT BREAKERS AND OTHER EQUIPMENT, AS SPECIFIED, SHALL HAVE TERMINATION PROVISIONS LISTED AND IDENTIFIED FOR USE WITH 75 DEG. CONDUCTORS, AND ALL FEEDER CONDUCTORS, AND CONDUITS, ARE SIZE BASED ON USE OF 75 DEG. C COPPER WIRES TYPE THWN/THHN.
 - ALL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED [UL, CSA, ETC.] (CEC 110-2).

SINGLE LINE DIAGRAM

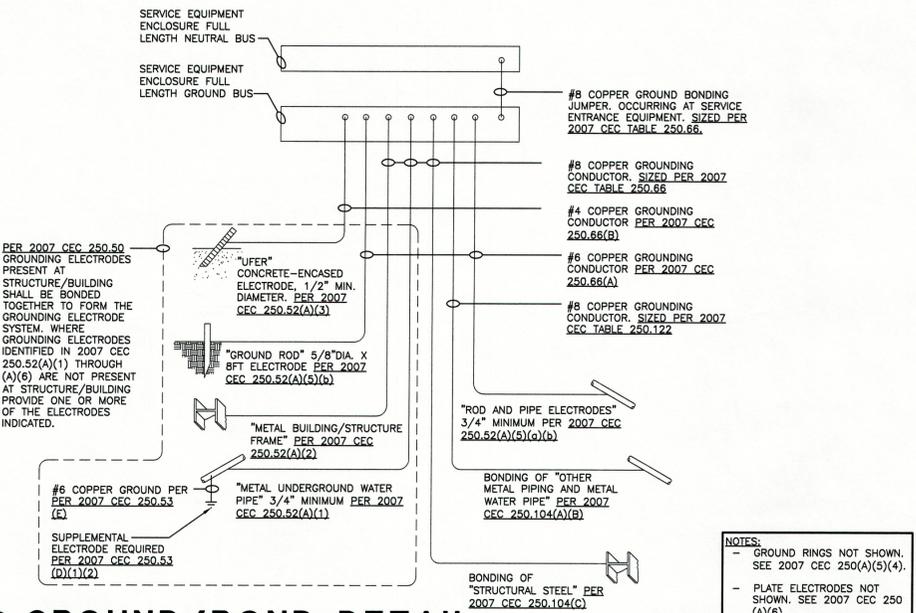
COPPER FEEDER SCHEDULE		
FEEDER NO.	RACEWAY QUANTITY/SIZE	CONDUCTORS
(0)	DEMOLISH	FIELD LOCATE, DISCONNECT, AND REMOVE.
(E)	EXISTING	EXISTING TO REMAIN.
(C0112)	(1) 1-1/2" C	CONDUIT ONLY WITH PULL ROPE.
(PGE)	N/A	PGE OVERHEAD SECONDARY CONDUCTORS PER UTILITY COMPANY HANDOUT PACKAGE.
252	(1) 3/4" C	(2) #12 THWN & (1) #12 GND.
253	(1) 3/4" C	(3) #12 THWN & (1) #12 GND.
254	(1) 1-1/4" C	(4) #12 THWN & (1) #12 GND.
353	(1) 3/4" C	(3) #10 THWN & (1) #10 GND.
1154	(1) 1-1/2" C	(4) #2 THWN & (1) #6 GND.

WARNING
POTENTIAL ARC FLASH HAZARD
Appropriate PPE and Tools Required
when working on this equipment

PPE REFERS TO *PERSONAL PROTECTIVE EQUIPMENT*.

NOTE:
IN ACCORDANCE WITH CEC 110.16, PROVIDE ARC FLASH PROTECTION WARNING LABELS ON EACH SWITCHBOARD, PANELBOARD, AND TRANSFORMER. LABELS SHALL BE PER ANSI Z535.4 GUIDELINES.

2 ARC FLASH SIGNAGE



1 GROUND/BOND DETAIL

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SIGNATURE _____
 DATE SIGNED _____
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 EXPIRES: 06/30/13
 THOMA #10-8105

Oak Woodland Habitat Creation
 for the
 Willow Road Extension and HWY 101 Interchange
 Project

JOB #: 10-8105
 DESIGNERS: HG
 DRAWN BY: DM
 DATE: 06-18-12
 DRAWING NO.
 E1
 6 OF 9

100% Submittal