1"C-4#10+1#10 GND

PROVIDE A CUTTER HAMMER

300A AUTO TRANSFER SWITCH

SERVICE ENTRANCE RATED

NEMA 3R, 42,000 A.I.C. 120/208V, 3ø, 4W

# ONE LINE DIAGRAM

PANEL

- INTERCEPT FEEDER FROM METER TO PANEL "A" AND EXTEND TO NEW AUTOMATIC TRANSFER SWITCH. PROVIDE NEW CABLES AND MAKE ALL RECONNECTIONS.
- PROVIDE A 25A2P CB (BLOCK HEATER) AND A 20A1P CB (BATTERY CHARGER).

(e)——

TO PG&E

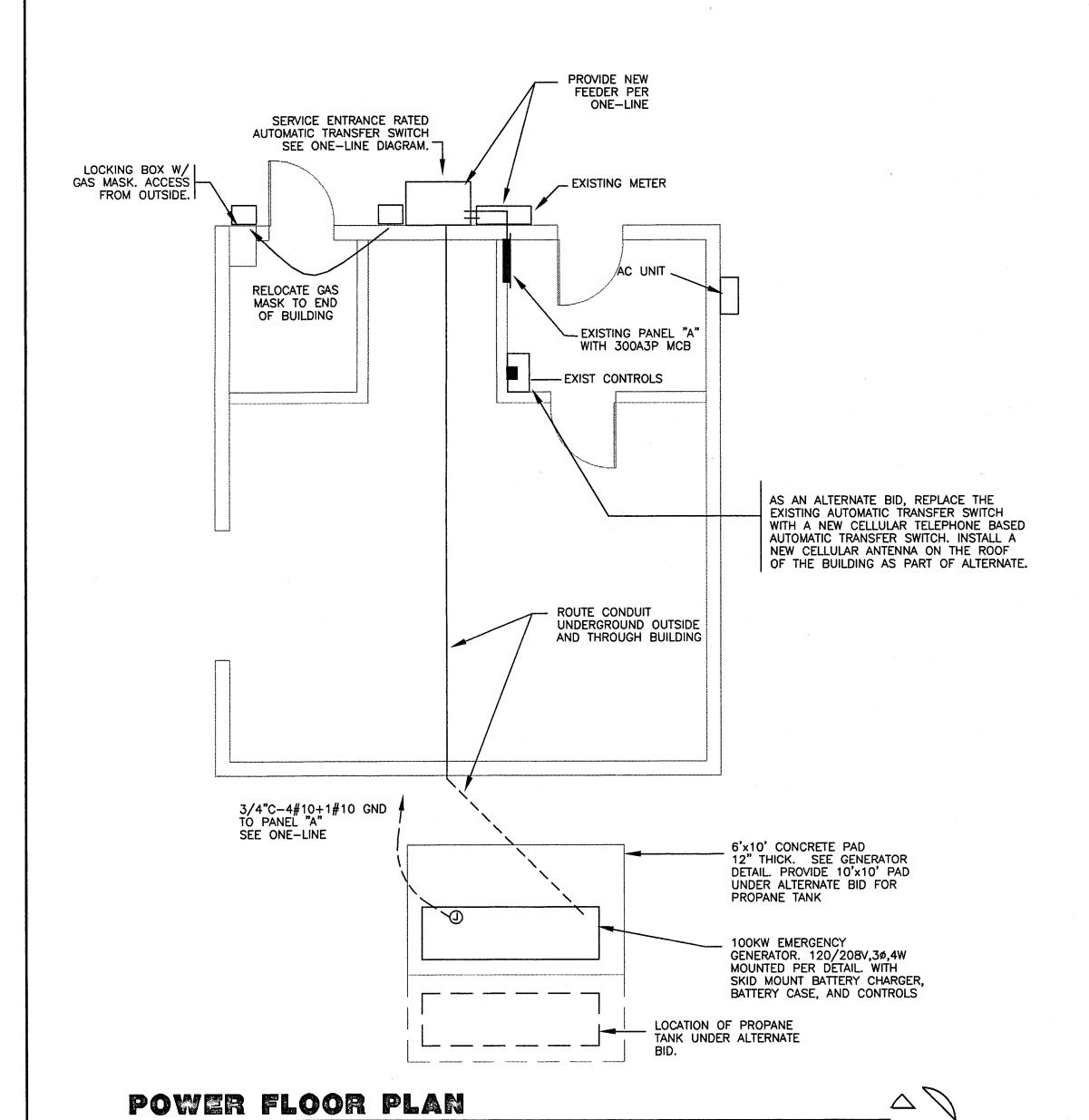
ATS TO HAVE MECHANICAL

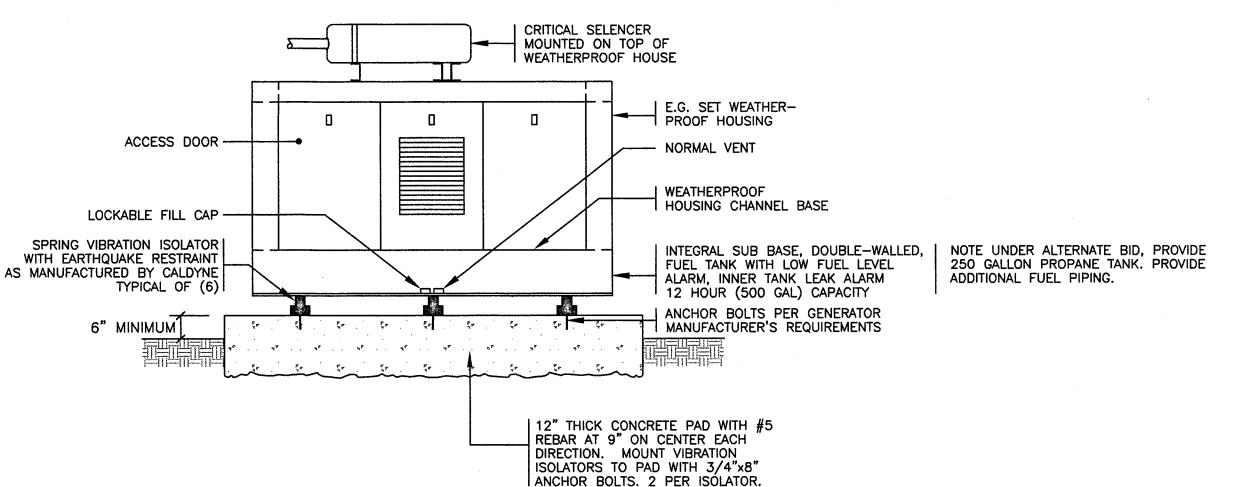
AND ELECTRICAL INTERLOCKS

AND MAIN CIRCUIT BREAKERS

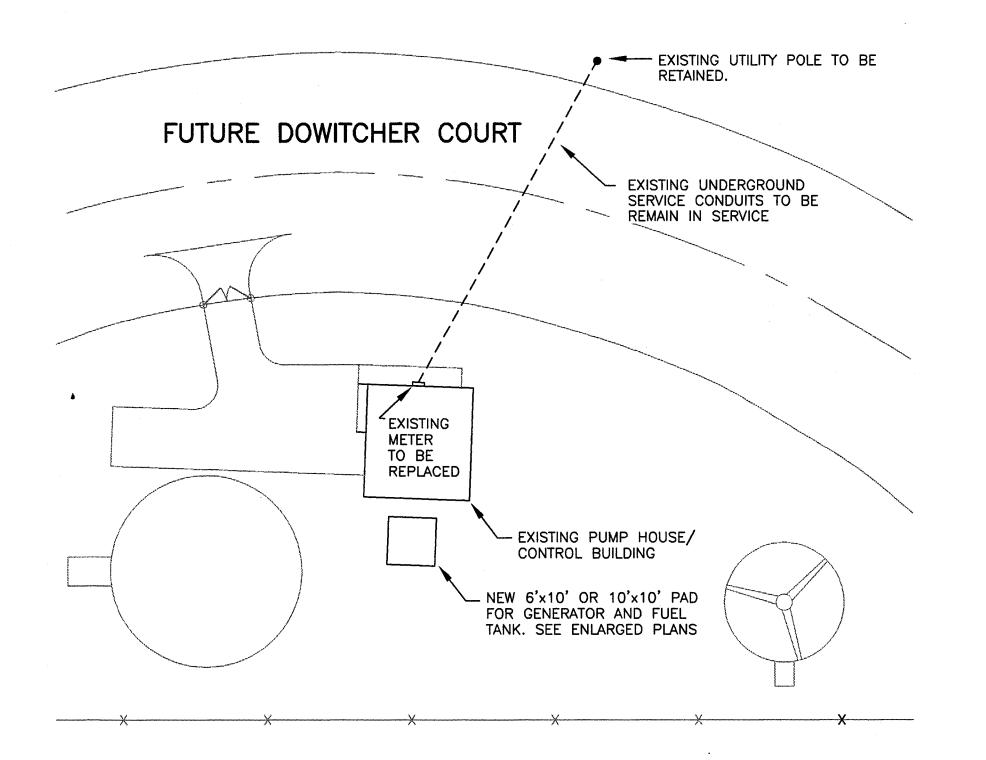
3"C-3#350MCM+1#2GRD.--

MAKE ALL CONNECTIONS TO BLOCK HEATER AND BATTERY CHARGER.





MOUNTING DETAIL: ENGINE GENERATOR



POWER SITE PLAN

#### **GENERAL NOTES:**

ELECTRICAL INSTALLATION SHALL COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, INCLUDING THE FOLLOWING: TITLE 24, CCR, PART 2, 1995 CBC (1994 UBC W/CALIF. AMENDMENTS) TITLE 24, CCR, PART 3, 1995 CEC (1993 NEC W/CALIF. AMENDMENTS)
TITLE 24, CCR, PART 4, 1995 CMC (1994 UMC W/CALIF. AMENDMENTS) TITLE 24, CCR, PART 9, 1995 CFC (1994 UFC W/CALIF. AMENDMENTS) ALL APPLICABLE LOCAL CODES.

THE CONTRACTOR IS REMINDED THIS PROJECT IS A REMODEL TO AN EXISTING FACILITY. EXISTING CIRCUITING HAS NOT BEEN ENTIRELY VERIFIED AND THESE DRAWINGS MUST BE ACCEPTED WITH THIS UNDERSTANDING. CONTRACTOR SHALL FURNISH LABOR AND MATERIALS TO ACHIEVE INDICATED RESULTS EVEN THOUGH ALL DETAILS ARE NOT SHOWN.

ELECTRICAL CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS. LICENSES. ETC. REQUIRED TO CARRY ON AND COMPLETE THE WORK.

PROVIDE ALL LABOR, MATERIALS, TOOLS, PLANT EQUIPMENT, TRANSPORTATION AND PERFORM ALL OPERATIONS NECESSARY FOR ANY REASONABLE INCIDENTAL TO PROPER EXECUTION AND COMPLETION OF ALL "ELECTRICAL WORK" WHETHER SPECIFICALLY MENTIONED OR NOT; ALL AS INDICATED, SPECIFIED HEREIN, AND/OR IMPLIED THEREBY TO CARRY OUT THE APPARENT INTENT THEREOF.

ALL ELECTRICAL MATERIALS SHALL BE NEW AND LISTED WITH THE UNDERWRITERS' LABORATORIES, INC., SHALL MEET THEIR REQUIREMENTS AND SHALL BEAR THEIR LABEL WHEREVER STANDARDS HAVE BEEN ESTABLISHED AND LABEL SERVICE IS REGULARLY FURNISHED BY THAT AGENCY.

6. ELECTRICAL DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH THE SIZE AND LOCATIONS OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION AT THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT AND INSTALLING HIS WORK TO AVOID INTERFERENCE WITH OTHER TRADES.

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THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID, ALL DEMOLITION WORK IN CONNECTION WITH EXISTING ELECTRICAL INSTALLATION IN REMODEL AREAS.

FLASH AND COUNTERFLASH ALL ITEMS PASSING THROUGH THE ROOF.

#### NAMEPLATES & IDENTIFICATION:

INSTALL ENGRAVED NAMEPLATES FOR EACH PANELBOARD, CABINET, DISCONNECT, ETC. NAMEPLATES SHALL BE SECURELY FASTENED TO THE EQUIPMENT WITH #4 PHILLIPS ROUND HEAD CADMIUM PLATED SELF-TAPPING SCREWS, BRASS BOLT, OR WITH A PLASTIC RESIN ADHESIVE GLUE, GOODYEAR "PLIEBOND" OR EQUAL. **WIRING METHODS:** 

ALL WIRING SHALL BE INSTALLED IN STEEL CONDUITS CONCEALED IN WALL AND CEILING U.O.N.

MINIMUM CONDUIT SIZE SHALL BE 1/2". MINIMUM ACCEPTABLE CONDUITS

GALVANIZED STEEL EMT - NOT APPROVED ON ROOF C. LIQUID TIGHT STEEL FLEX - FOR FINAL CONNECTION TO OUTDOOR

EQUIPMENT. FLEXIBLE STEEL CONDUIT - FOR INDOOR FINAL CONNECTIONS TO

MECHANICAL EQUIPMENT (NOT TO EXCEED 36")

PVC CONDUIT SCHEDULE 40 FOR UNDERGROUND

## **SUPPORTS:**

FURNISH ALL NECESSARY FOUNDATIONS, SUPPORTS, BACKING, ETC., FOR ALL ELECTRICAL ENCLOSURES, CONDUITS AND EQUIPMENT.

2. ATTACH ALL BOXES, CABINETS, ETC. TO WOOD WITH WOOD OR LAG SCREWS, TO METAL WITH MACHINE SCREWS OR BOLTS AND TO CONCRETE WITH EXPANSION ANCHORS AND MACHINE SCREWS OR BOLTS.

## **GROUNDING:**

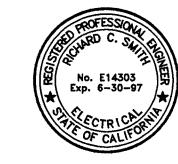
GROUND AND BOND ALL EQUIPMENT AS REQUIRED BY GOVERNING CODES AND SPECIFICALLY INCLUDING HUBS, RACK AND CABLE TV DISTRIBUTION.

THE ENTIRE ELECTRICAL INSTALLATION SHALL BE FREE FROM SHORT CIRCUITS AND IMPROPER GROUNDS. TEST ALL WIRING AND CONNECTIONS FOR CONTINUITY AND GROUNDS BEFORE ANY FIXTURES OR EQUIPMENT ARE CONNECTED AND WHETHER SUCH TESTS INDICATE FAULTY INSULATION OR OTHER DEFECTS, THEY SHALL BE LOCATED, REPAIRED AND RETESTED AT THE CONTRACTOR'S EXPENSE. ROTATION OF ALL MOTORS SHALL BE CHECKED AND CORRECTED, IF NECESSARY, AFTER FINAL CONNECTIONS ARE

DEMONSTRATE TO THE OWNER AND THE ENGINEER, THAT THE ENTIRE INSTALLATION IS COMPLETE, IN PROPER OPERATING CONDITION AND THAT THE CONTRACT HAS BEEN PROPERLY AND FULLY EXECUTED. PROVIDE ALL INSTRUMENTS TO MAKE SUCH TESTS.

BASE BID: 6'x10' PAD WITH DIESEL GENERATOR AND SUB BASE TANK.

ALTERNATE BID: 10'x10' PAD WITH PROPANE GENERATOR AND STAND ALONE FUEL TANK.



HCS ENGINEERING, INC.

CONSULTING ELECTRICAL ENGINEERS 4651 QUAIL LAKES DRIVE STOCKTON, CA 95207 (209)478-8270 PROJ. 98041 DES. KL ENG. RCS

THIS DRAWING IS NOT FINAL AND IS NOT TO BE USED FOR CONSTRUCTION

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required a assume sale and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professiona harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

UNTIL STAMPED AND WET-SIGNED BY THE PROJECT ENGINEER.

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**ELECTRICAL** PLANS AND

FILE NO. D DRAWN BY

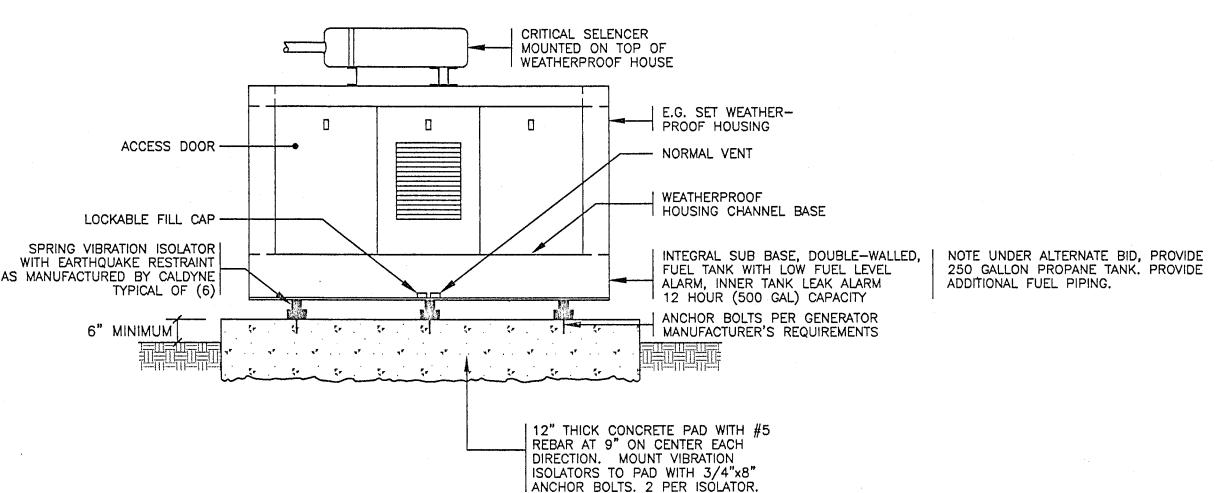
SCALE AS NOTED

# ONE LINE DIAGRAM

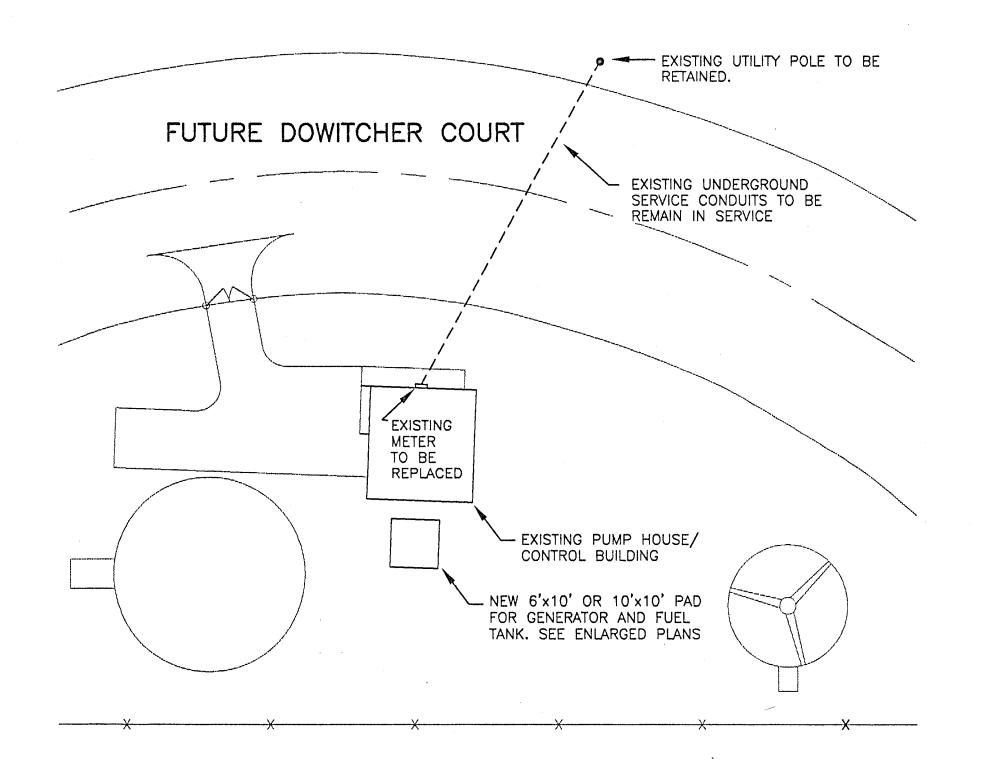
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- PROVIDE A 25A2P CB (BLOCK HEATER) AND A 20A1P CB (BATTERY CHARGER).
- MAKE ALL CONNECTIONS TO BLOCK HEATER AND BATTERY CHARGER.

PROVIDE NEW FEEDER PER ONE-LINE SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH SEE ONE-LINE DIAGRAM. LOCKING BOX W/ GAS MASK. ACCESS - EXISTING METER FROM OUTSIDE. AC UNIT RELOCATE GAS MASK TO END OF BUILDING EXISTING PANEL "A WITH 300A3P MCB --- EXIST CONTROLS AS AN ALTERNATE BID, REPLACE THE EXISTING AUTOMATIC TRANSFER SWITCH WITH A NEW CELLULAR TELEPHONE BASED AUTOMATIC TRANSFER SWITCH, INSTALL A NEW CELLULAR ANTENNA ON THE ROOF OF THE BUILDING AS PART OF ALTERNATE. ROUTE CONDUIT UNDERGROUND OUTSIDE AND THROUGH BUILDING 3/4"C-4#10+1#10 GND TO PANEL "A" SEE ONE-LINE 6'x10' CONCRETE PAD 12" THICK. SEE GENERATOR DETAIL. PROVIDE 10'x10' PAD UNDER ALTERNATE BID FOR PROPANE TANK GENERATOR. 120/208V,3ø,4W MOUNTED PER DETAIL. WITH SKID MOUNT BATTERY CHARGER, BATTERY CASE, AND CONTROLS LOCATION OF PROPANE TANK UNDER ALTERNATE

SCALE: 1/4" = 1'-0"



# MOUNTING DETAIL: ENGINE GENERATOR



POWER SITE PLAN

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- GALVANIZED STEEL EMT NOT APPROVED ON ROOF
- C. LIQUID TIGHT STEEL FLEX FOR FINAL CONNECTION TO OUTDOOR **EQUIPMENT.**
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POWER FLOOR PLAN

A I L I N G
WEATHERB
ATTN: GRAM
206 PEED
WALLACE,

WAR

ELECTRICAL PLANS AND

FILE NO. *D3981* 

DRAWN BY RCS 3-98 SCALE AS NOTED