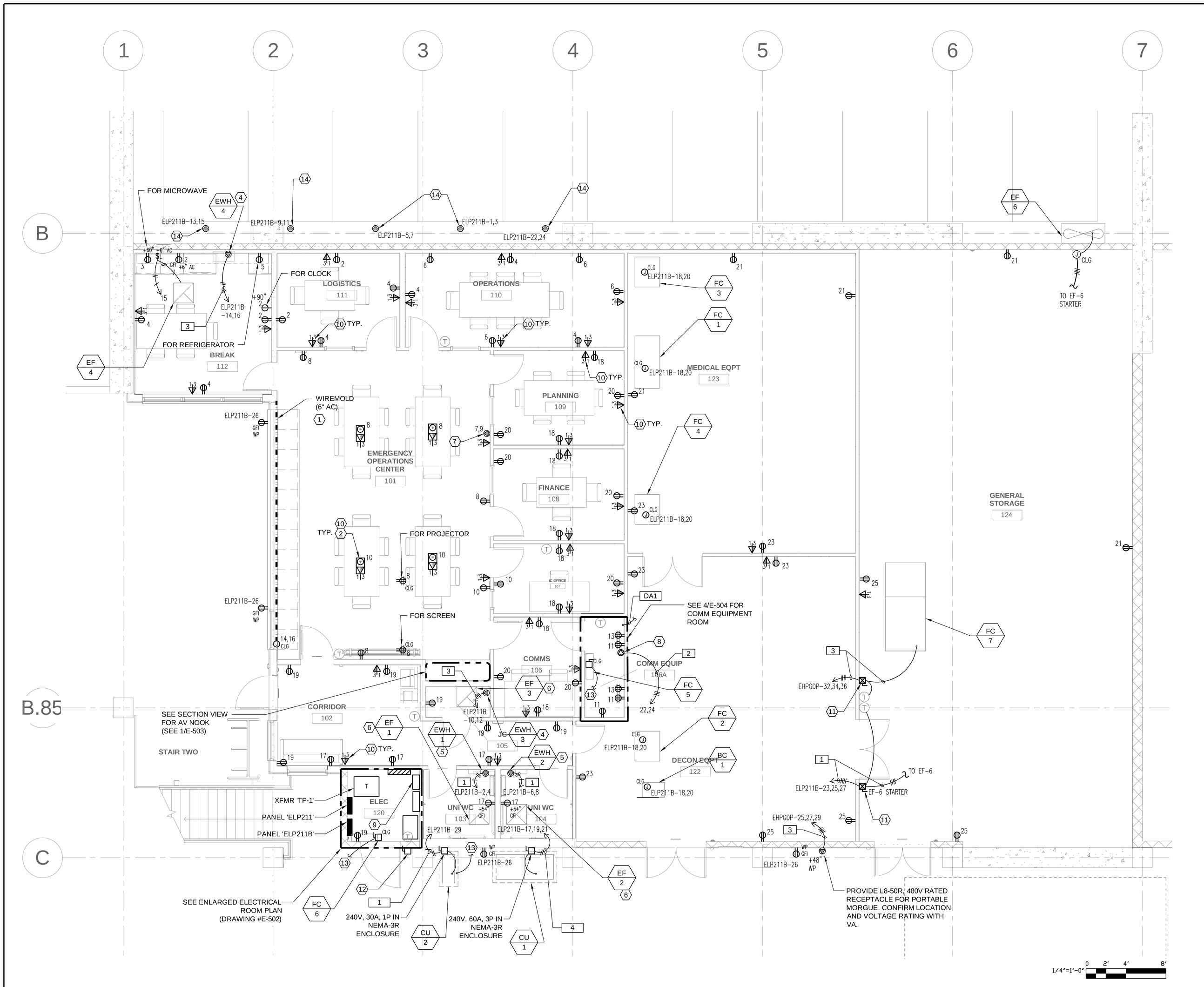

SHEET GENERAL NOTES

1. ALL WIRING AND CONDUIT SHALL BE A MINIMUM 12 AWG (PHASE, NEUTRAL, GROUND AND CONTROLS) IN MINIMUM 3/4-INCH RGS UNLESS OTHERWISE NOTED, IN ACCORDANCE WITH THE LATEST NEC REQUIREMENTS.
2. SEE DRAWING M-601 FOR SUPPLY FANS, EXHAUST FANS AND FAN COIL UNIT SEQUENCE OF OPERATION.
3. FOR ALL MECHANICAL EQUIPMENT, SEE INSTALLATION MANUALS FOR INSTALLATION INSTRUCTIONS.
4. ALL ELECTRICAL CIRCUIT NUMBERS ON THIS DRAWING REFER TO PANEL 'ELP211' IN ELECTRICAL ROOM #120 UNLESS INDICATED OTHERWISE.
5. 2 REFERS TO FEEDER TAGS LISTED ON CONDUIT AND CABLE SCHEDULE ON DRAWING E-602.
6. REFER TO DRAWING E-603 FOR TELEPHONE, DATA & FIRE ALARM CONDUIT AND CABLE SCHEDULE.

KEYNOTES

1. PROVIDE WIREMOLD 5400 SERIES (OR SIMILAR) IN 6' SECTIONS WITH DUAL COMPARTMENTS FOR POWER AND DATA WIRING. POWER DUPLEX RECEPTACLES SHALL BE SPACED AT 24" ON CENTER. DATA/TELEPHONE OUTLETS SHALL BE SPACED AT 48" ON CENTER WITH EACH OUTLET HAVING 3 DATA JACKS AND ONE PHONE JACK. PROVIDE PROPER WIRING TO EACH OUTLET.
2. PROVIDE TWO GANG, STEEL, RECESSED, IN FLOOR BOXES WITH ONE (1) DUPLEX POWER, THREE (3) DATA RECEPTACLES AND ONE (1) PHONE RECEPTACLE. COORDINATE LOCATION OF BOXES SO THAT THE BOXES ARE LOCATED UNDERNEATH THE DESKS IN THE EOC AREA. COVER OF BOXES TO MATCH CARPET COLOR IN THE EOC ROOM. WIREMOLD CATALOG #RFB4 OR SIMILAR.
3. NOT USED.
4. PROVIDE NEMA 6-50R, 208V, 50 AMP, 2 POLE RECEPTACLE FOR ELECTRIC WATER HEATER. PROVIDE A NEMA 6-50P MATCHING PLUG.
5. PROVIDE NEMA 6-30R, 208V, 30 AMP, 2 POLE RECEPTACLE FOR ELECTRIC WATER HEATER. PROVIDE 6-30P MATCHING PLUG.
6. EXHAUST FANS EF-1, EF-2 & EF-3 SHALL BE CONNECTED TO OCCUPANCY SENSOR. SEE 2/E-503 FOR SCHEMATIC DIAGRAM.
7. PROVIDE 208V, 20A, 2 POLE RECEPTACLE (NEMA 6-20R) FOR COPIER UNIT. CONFIRM WITH VA FOR EXACT LOCATION.
8. PROVIDE 208V, 30A, 2 POLE TWISTLOCK RECEPTACLE (NEMA L5-30R) IN COMM EQUIP ROOM #106A.
9. PROVIDE 200A, 480V, 3 POLE FUSED DISCONNECT SWITCH FOR PV ARRAY CONNECTION. SEE SINGLE LINE DIAGRAM ON DRAWING E-601 FOR DETAILS.
10. PROVIDE DATA/TELEPHONE JACKS AS INDICATED. SEE 2/E-502. PROVIDE 3/4" CONDUIT IN WALL TO 12" ABOVE CEILING TILES. PROVIDE CAT 6 CABLES BETWEEN EACH DATA/TELEPHONE JACK, DATA PATCH PANEL & TELEPHONE TERMINAL BLOCKS IN ROOM #106A. CABLES IN CEILING SPACE SHALL BE BUNDLED, TIED AND SUPPORTED EVERY FIVE FEET USING INSULATED J-HOOKS.
11. PROVIDE COMBINATION MOTOR STARTER AS INDICATED. SEE DETAIL 3/E-503 FOR SCHEMATIC DIAGRAM.
12. PROVIDE 480V, 400 AMP, 3 POLE HEAVY-DUTY DISCONNECT SWITCH IN NEMA-3R ENCLOSURE. PROVIDE ENGRAVED PHENOLIC RED WITH WHITE LETTERING NAMEPLATE TO READ "WARNING. SYSTEM NEUTRAL CONDUCTOR IS SOLIDLY CONNECTED TO THE SERVICE PANEL 'HDE-2' IN BUILDING 205. GENERATOR NEUTRAL CONDUCTOR MUST NOT BE BONDED TO THE GENERATOR FRAME OR TO THE EQUIPMENT GROUNDING CONDUCTOR." AT THE GENERATOR DISCONNECT SWITCH.
13. PROVIDE INTERCONNECTION (POWER & CONTROL) WIRING BETWEEN CU-2 AND FC-5 AND FC-6 AS INDICATED. SEE DRAWING M-501 FOR CONNECTION DETAIL.
14. THE ELECTRIC VEHICLE CHARGING STATION SHALL BE MODEL 8EM1114 – FAMILY/COMMUNITY LEVEL 2 SERIES FROM SIEMENS OR PRE-APPROVED EQUAL. THE ELECTRIC VEHICLE CHARGING SYSTEM (EVCS) SHALL CONSIST OF TWO MAIN COMPONENTS, THE ELECTRIC VEHICLE CHARGE STATION (STATION) AND THE ELECTRIC VEHICLE NETWORK (NETWORK). THE EVCS SHALL BE RATED 7.2 KW AND CONNECTED TO A 120/208 VOLT, 1-PHASE, 3-WIRE, 60 HZ SYSTEM. THE OUTPUT CHARGING CONNECTOR SHALL BE SAEJ1772 CONNECTOR WITH 18-FOOT CABLE. THE COMPLETE SYSTEM SHALL BE IN A NEMA 3R ENCLOSURE.

    THE STATION SHALL BE WALL MOUNTED USING THE WALL BRACKET ASSEMBLY AND ASSOCIATED PARTS PER THE INSTRUCTION GUIDE. THE STATION'S HOLSTER, CABLE ASSEMBLY AND HEAD ASSEMBLY SHALL BE INSTALLED PER THE INSTRUCTION GUIDE.

    THE EVCS SHALL BE COMPLETE WITH CARD READER: ISO 15693, 14443, GROUND FAULT DETECTION, PLUG OUT DETECTION, POWER MEASUREMENT, LOCAL AREA NETWORK CONNECTION, WIDE AREA NETWORK CONNECTION CAPABILITIES AND SURGE PROTECTION.

    THE STATION SHALL HAVE AN LED DISPLAY (ENGLISH) THAT CAN GIVE INSTRUCTIONS AND CHARGING STATUS - VEHICLE NOT CHARGING; DEMAND RESPONSE; PLUG OUT; GFCI TRIP; OVERCURRENT DETECTED: ETC.

    THE ELECTRIC VEHICLE (EV) CHARGERS SHALL BE CAPABLE OF BEING CONNECTED TO THE NETWORK VIA CELLULAR NETWORK INTERFACES. THE CONTRACTOR SHALL LOCATE GATEWAY UNITS TO PROVIDE CONSTANT CELLULAR NETWORK RECEPTION THAT IS FREE FROM INTERFERENCES. THE NETWORK SHALL BE CAPABLE OF MONITOR EACH STATION IN REAL TIME. ALARMING AND MAINTENANCE INFORMATION SHALL BE TRANSMITTED TO THE STATION MANAGER VIA THE NETWORK. THE STATION MANAGER SHALL CLEAR THE ALARM AFTER MAINTENANCE IS FINISHED NETWORK. FIRMWARE SHALL BE UPGRADEABLE OVER THE NETWORK.

ISSUED FOR BIDS	10/11/12
Revisions:	Date

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REGISTERED PROFESSIONAL ENGINEER — No. E13224 — Exp. 12/31/11 — ELECTRICAL — STATE OF CALIFORNIA

DATE SIGNED: 4/28/2011

KEY PLAN

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Drawing Title: EOC AREA POWER AND TELECOM PLAN

Approved: Project Director
Medical Center Director: LAWRENCE H. CARROLL
Chief Engineer: DIRK MINNEMA

Project Title: PARKING AND EMERGENCY RESPONSE STRUCTURE

Location: SFVA MEDICAL CENTER

Date	Checked	Drawn
APRIL 2011	SMD	BAT

Project Number: 662-611
Building Number: 211
Drawing Number: E-107
Dwg. 109 of 120

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231