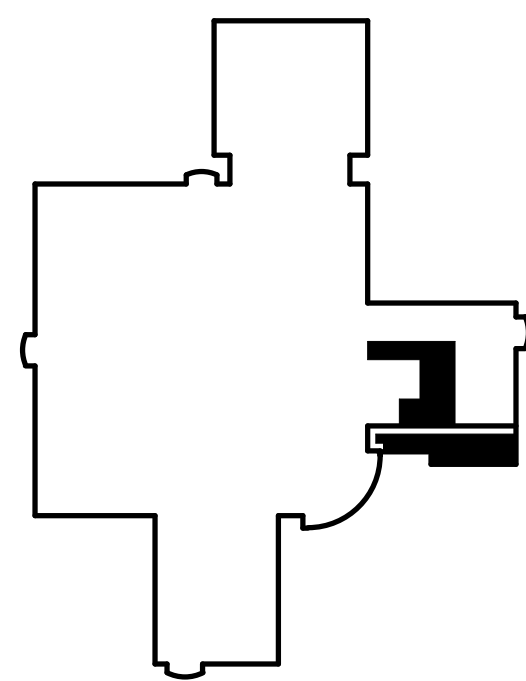


SHEET NOTES

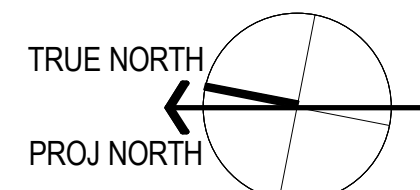
- FOR ALL SPECIAL HEIGHT RECEPTACLES REFER TO ARCHITECTURAL ELEVATION DETAILS.
- RECEPTACLES IN PUBLIC AREAS SHALL BE TAMPER RESISTANT.

KEYNOTES

- FOR PHYSIOLOGICAL PATIENT MONITOR, 120V, ITEM #MO13.
- PROVIDE CONNECTION TO PATIENT HEADWALL ASSEMBLY.
- FOR AUTO DOOR, 120V.
- FOR COUNTERTOP PRINTER, 120V, ITEM #PR03X.
- FOR #ET01, REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
- FOR PATIENT LIFT #LI06.
- FOR DIAGNOSTIC SET WALL TRANSFORMER & SPECULA HOLDER #DI01.
- FOR TV PANEL #TV32, REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
- FOR RECEPTION DESK TASK LIGHTING ON 120V POWER, REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION, MOUNTING HEIGHTS AND DETAILS.
- PROVIDE AN EMPTY J-BOX FOR THE CARD READER KEYPAD.
- PROVIDE A 1/2" C FOR LV WIRING BETWEEN THE ACCESS PANEL AND THE CARD READER KEYPAD. ALL CONDUIT RUNS SHALL BE CONCEALED.
- FOR PUMP/IV INFUSION, DUAL W/MOBILE STAND #PU10 #COB4X.
- FOR EKG MACHINE, 120V, 5A, ITEM #EK01X.
- FOR I-STAT STATION, 120V, #IS02.2A.2B.
- FOR MONITOR POWER SUPPLY #MO73X.
- HARDWARE CONNECTION TO PADICETS SENSORS.
- DEDUCT ALTERNATE - PROVIDE ONLY POWER TO CUBICLE WORKSTATIONS. PROVIDE (5) 20A BRANCH CIRCUITS FROM NL16C AND (1) 20A BRANCH CIRCUIT FROM CL16A. CONNECT NO MORE THAN (3) WORKSTATIONS ON A CIRCUIT. ONE WORKSTATION TO BE ON CRITICAL/EMERGENCY BACK-UP.
- DEDUCT ALTERNATE - ELIMINATE ELECTRICAL SCOPE IN THIS AREA. CIRCUITS TO REMAIN AS SPARE IN PANELBOARD.



FULLY SPRINKLERED
CONSTRUCTION DOCUMENTS



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

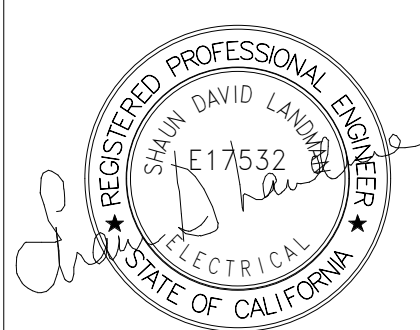
1 Level 1 Power Plan
1/8" = 1'-0"

CONSULTANTS:

ARUP

Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

Seals and Signatures



ARCHITECT/ENGINEERS:

THE DESIGN PARTNERSHIP
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

Associate Architect:
CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

Drawing Title
POWER PLAN - LEVEL 1

Approved: Project Director

Project Title
VA PALO ALTO HEALTH CARE SYSTEM
EXPAND EMERGENCY DEPT. FACILITIES

Location
3801 Miranda Ave., Palo Alto CA
Date
June 20, 2016

Checked
RP

Drawn
DS

Project Number
640-369

Building Number
100

Drawing Number
EP2.1.1

Office of
Construction
and Facilities
Management



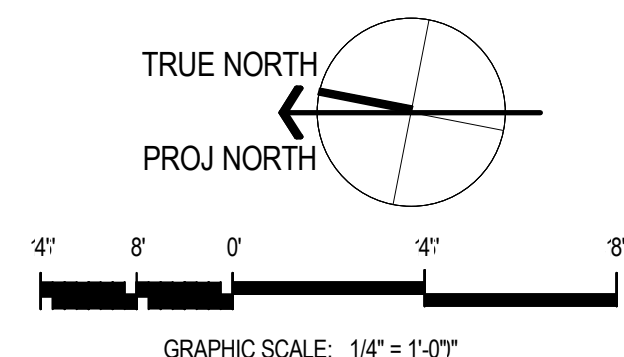
PRINTED ON: 5/19/2017 4:47:43 PM
VA FORM 08-6231

- 1 PROVIDE NEW 100A 208/120V PANEL. LOCATE IN EXISTING ELECTRICAL ROOM.
- 2 PROVIDE NEW FEEDER FOR NEW PANEL NL16C- 4#3 + #6G- 1-1/4".
- 3 CONNECT NEW FEEDER TO (E) XFMR SECONDARY. FEEDER SHALL NOT EXCEED 25' PER CEC 240.21(C)(6).

Office of
Construction
and Facilities
Management



- ① DRAWOUT, ADJUSTABLE TRIP, MOLDED CASE MAIN BREAKER AND COMPARTMENT PER SPECIFICATION SECTION 16462.
- ② GROUP MOUNTED, ADJUSTABLE TRIP, MOLDED CASE FEEDER BREAKER PER SPECIFICATION SECTION 16462.
- ③ PROVIDE BUSSED SPACE AND MOUNTING HARDWARE FOR FUTURE FEEDER BREAKER TO MATCH NEW BREAKERS.
- ④ PROVIDE BUS BAR EXTENSION FOR FUTURE SECTION.
- ⑤ EXTEND CRITICAL FEEDER FROM MANUAL TRANSFER SWITCH CMTS16A (SEE DRAWING E5.2.0) TO BUSWAY SWITCH CBST16C. (SEE DRAWING E5.3.0).
- ⑥ PROVIDE TRANSFORMER WITH COOLING FANS AND ASSOCIATED CONTROLS.
- ⑦ TYPE I SWITCHBOARD PER SECTION 16462.
- ⑧ REFER TO DRAWING 103-E5.1.0 FOR FEEDER SIZE.
- ⑨ PROVIDE LOCAL POWER DISTRIBUTION METERING EQUIPMENT PER SECTION 16430, 2.2, METERING.
- ⑩ PROVIDE PMDAS REMOTE MONITORING PER SECTION 16430, 2.2, METERING.



Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

THE DESIGN PARTNERSHIP ■
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

ELECTRICAL SINGLE LINE DIAGRAM

Approved: Project Director

EXPAND EMERGENCY DEPT. FACILITIES

Alto CA

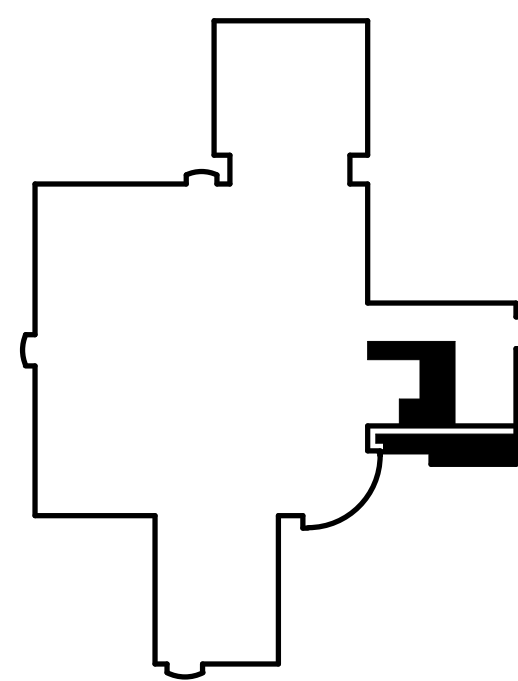
Building Number
100

EP5.0

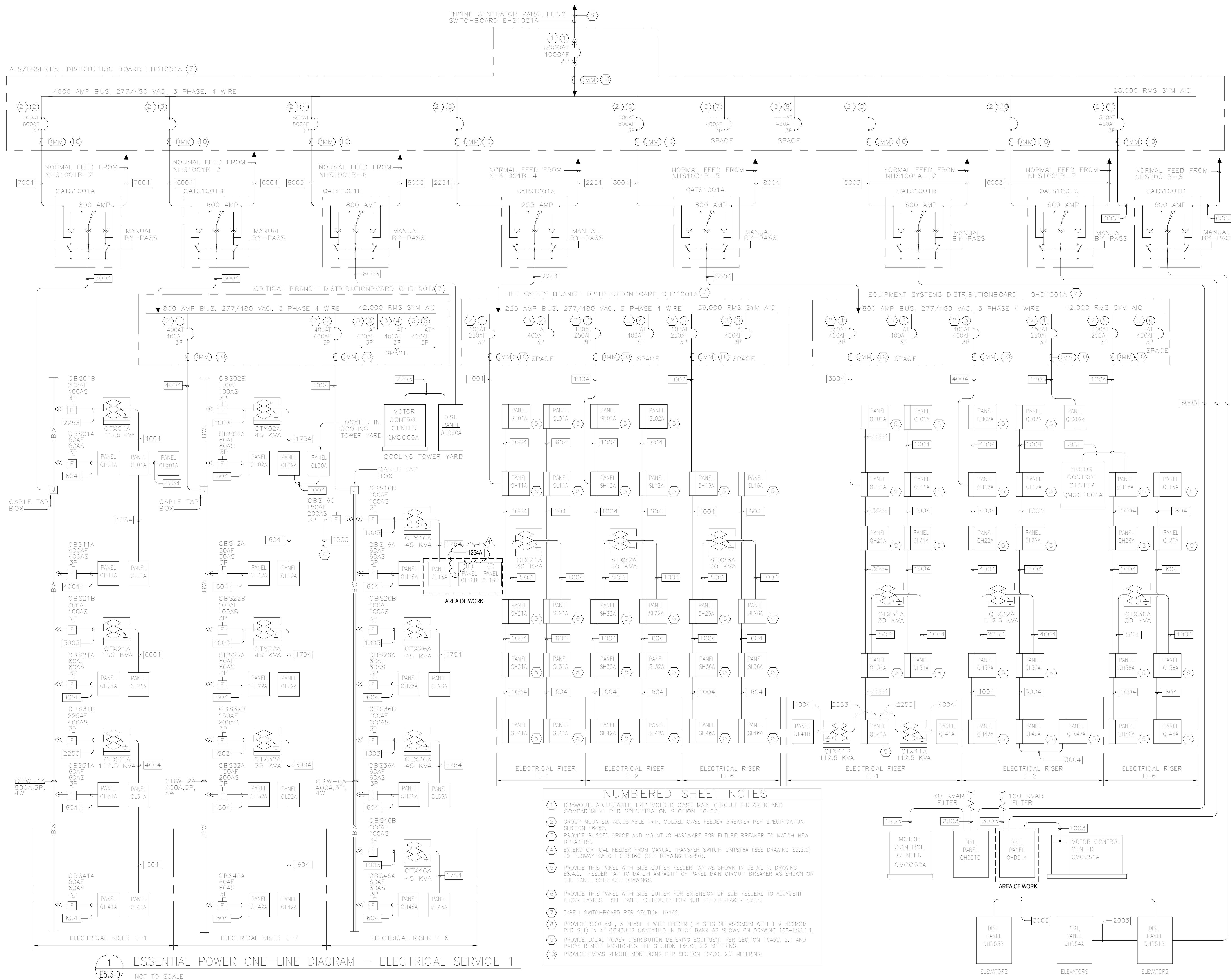
SHEET NOTES

1. CONTRACTOR SHALL INSPECT AND FIELD VERIFY ALL EXISTING SWITCHBOARDS AND PANELBOARDS, IN SCOPE OF WORK, TO CONFIRM SPARE BREAKER AND SPACE AVAILABILITY.

KEYNOTES



FULLY SPRINKLERED
CONSTRUCTION DOCUMENTS



1 ES.3.0 ESSENTIAL POWER ONE-LINE DIAGRAM - ELECTRICAL SERVICE 1
NOT TO SCALE

NUMBERED SHEET NOTES

- ① DRAWING: ADJUSTABLE TRIP MOLDED CASE MAIN CIRCUIT BREAKER AND COMPARTMENT PER SPECIFICATION SECTION 16462.
- ② GROUP MOUNTED, ADJUSTABLE TRIP, MOLDED CASE FEEDER BREAKER PER SPECIFICATION SECTION 16462.
- ③ PROVIDE BUSSED SPACE AND MOUNTING HARDWARE FOR FUTURE BREAKER TO MATCH NEW BREAKERS.
- ④ EXTEND CRITICAL FEEDER FROM MANUAL TRANSFER SWITCH CMTS16A (SEE DRAWING ES.2.0) TO BUSWAY SWITCH CRS16C (SEE DRAWING ES.3.0).
- ⑤ PROVIDE THIS PANEL WITH SIDE GUTTER FEEDER TAP AS SHOWN IN DETAIL 7, DRAWING CR.4.2. FEEDER TAP TO MATCH IMPACT OF PANEL MAIN CIRCUIT BREAKER AS SHOWN ON THE PANEL SCHEDULE DRAWINGS.
- ⑥ PROVIDE THIS PANEL WITH SIDE GUTTER FOR EXTENSION OF SUR FEEDERS TO ADJACENT FLOOR PANELS. SEE PANEL SCHEDULES FOR SUR FEEDER BREAKER SIZES.
- ⑦ TYPE 1 SWITCHBOARD PER SECTION 16462.
- ⑧ PROVIDE 3000 AMP, 3 PHASE 4 WIRE FEEDER (8 SETS OF #500MCM WITH 1 # 400MCM PER SET) IN 4" CONDUITS CONTAINED IN DUCT BANK AS SHOWN ON DRAWING 100-ES3.1.1.
- ⑨ PROVIDE LOCAL POWER DISTRIBUTION METERING EQUIPMENT PER SECTION 16430, 2.1 AND PMDAS REMOTE MONITORING PER SECTION 16430, 2.2 METERING.
- ⑩ PROVIDE PMDAS REMOTE MONITORING PER SECTION 16430, 2.2 METERING.

CONSULTANTS:

ARUP

Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

Seals and Signatures



ARCHITECT/ENGINEERS:

THE DESIGN PARTNERSHIP
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

Associate Architect:
CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

Drawing Title
ELECTRICAL SINGLE LINE DIAGRAM

Approved: Project Director

Project Title
VA PALO ALTO HEALTH CARE SYSTEM
EXPAND EMERGENCY DEPT. FACILITIES

Location
3801 Miranda Ave., Palo Alto CA

Date
June 20, 2016

Checked
RP

Drawn
Author

Project Number
640-369

Building Number
100

Drawing Number
EP5.0.1

Office of
Construction
and Facilities
Management



A

B

C

D

E

F

A

B

C

D

E

F

Branch Panel: SH16A

Location: (E) CONFERENCE A1-422
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 100
MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Lighting	20	1	40	0		1	20	EXISTING	2	
3	EXISTING	20	1		0	0		1	20	SPARE	4
5	Lighting	20	1			347	0	1	20	SPARE	6
7	Lighting	20	1	183	0			--	--	SPACE	8
9	SPACE	--	--		0	0		--	--	SPACE	10
11	SPACE	--	--			0	0	--	--	SPACE	12
13	SPACE	--	--	0	0			--	--	SPACE	14
15	SPACE	--	--		0	0		--	--	SPACE	16
17	SPACE	--	--			0	0	--	--	SPACE	18
19	SPACE	--	--	0	0			--	--	SPACE	20
21	SPACE	--	--		0	0		--	--	SPACE	22
23	EXISTING	20	1			0	0	--	--	SPACE	24
25	SPACE	--	--	0	0			--	--	SPACE	26
27	SPACE	--	--		0	0		--	--	SPACE	28
29	SPACE	--	--			0	0	--	--	SPACE	30
31	SPACE	--	--	0	0			--	--	SPACE	32
33	SPACE	--	--		0	0		--	--	SPACE	34
35	SPACE	--	--			0	0	--	--	SPACE	36
37	SPACE	--	--	0	0			--	--	SPACE	38
39	EXISTING	0	2		0	0		--	--	SPACE	40
41						0	0	--	--	SPACE	42
Total Load:		223 VA		0 VA		347 VA					
Total Amps:		1		0		1					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	572 VA	125.00%	714 VA	Total Conn. Load: 572 VA Total Est. Demand: 714 VA Total Conn.: 1 Total Est. Demand: 1

Notes:

Branch Panel: SL16A

Location: (E) CONFERENCE A1-422
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 100
MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	EXISTING	20	1	0	0		1	20	SPARE	2	
3	EXISTING	20	1		0		1	20	SPARE	4	
5	EXISTING	20	1			0	0	1	20	EXISTING	6
7	EXISTING	20	1	0	0			1	20	SPARE	8
9	SPARE	20	1		0	0		--	--	SPACE	10
11	SPARE	20	1			0	0	--	--	SPACE	12
13	EXISTING	20	1	0	0			--	--	SPACE	14
15	EXISTING	20	1		0	0		--	--	SPACE	16
17	EXISTING	20	1			0	0	1	20	EXISTING	18
19	EXISTING	20	1	0	0			--	--	SPACE	20
21	EXISTING	20	1		0	0		--	--	SPACE	22
23	Power	20	1			1000	0	--	--	SPACE	24
25	Power	20	1	1000	0			--	--	SPACE	26
27	SPACE	--	--		0	0		--	--	SPACE	28
29	SPACE	--	--			0	0	--	--	SPACE	30
31	SPACE	--	--	0	0			--	--	SPACE	32
33	SPACE	--	--		0	0		--	--	SPACE	34
35	SPACE	--	--			0	0	--	--	SPACE	36
37	SPACE	--	--	0	0			--	--	SPACE	38
39	SPARE	0	2		0	0		--	--	SPACE	40
41						0	0	--	--	SPACE	42
Total Load:		1000 VA		0 VA		1000 VA					
Total Amps:		10		0		10					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Power	2000 VA	100.00%	2000 VA	Total Conn. Load: 2000 VA Total Est. Demand: 2000 VA Total Conn.: 6 Total Est. Demand: 6

Notes:

Branch Panel: CH16A

Location:
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 100
MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	Lighting - A1-203	20	1	79	96		1	20	E-1.6 / T-1.6 LIGHTING	2	
3	SPARE	20	1		0	0		1	0	EXISTING	4
5	SPARE	20	1			0	0	1	0	EXISTING	6
7	SPACE	--	--	0	0			1	0	EXISTING	8
9	SPACE	--	--		0	0		--	--	SPACE	10
11	SPACE	--	--			0	0	--	--	SPACE	12
13	SPACE	--	--	0	0			--	--	SPACE	14
15	SPACE	--	--		0	0		--	--	SPACE	16
17	SPACE	--	--			0	0	--	--	SPACE	18
19	SPACE	--	--	0	0			--	--	SPACE	20
21	SPACE	--	--		0	0		--	--	SPACE	22
23	SPACE	--	--			0	0	--	--	SPACE	24
25	SPACE	--	--	0	0			--	--	SPACE	26
27	SPACE	--	--		0	0		--	--	SPACE	28
29	SPACE	--	--			0	0	--	--	SPACE	30
31	SPACE	--	--	0	0			--	--	SPACE	32
33	SPACE	--	--		0	0		--	--	SPACE	34
35	SPACE	--	--			0	0	--	--	SPACE	36
37	SPACE	--	--	0	0			--	--	SPACE	38
39	SPACE	--	--		0	0		--	--	SPACE	40
41	SPACE	--	--			0	0	--	--	SPACE	42
Total Load:		175 VA		0 VA		0 VA					
Total Amps:		1		0		0					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	175 VA	125.00%	219 VA	Total Conn. Load: 175 VA Total Est. Demand: 219 VA Total Conn.: 0 Total Est. Demand: 0

Notes:

Branch Panel: QL16A

Location: (E) CONFERENCE A1-422
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 100
MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	EXISTING	20	1	0	0		1	20	EXISTING	2	
3	EXISTING	20	1		0	0		1	20	EXISTING	4
5	AHU-1 (SUPPLY) LIGHTS AND RECEPT.	20	1			500	0	1	20	EXISTING	6
7	SPARE	20	1	0	0			--	--	SPACE	8
9	SPARE	20	1		0	0		--	--	SPACE	10
11	SPARE	20	1			0	0	--	--	SPACE	12
13	SPARE	20	1	0	0			--	--	SPACE	14
15	SPARE	0	1		0	0		--	--	SPACE	16
17	SPARE	0	1			0	0	--	--	SPACE	18
19	SPARE	0	1	0	0			--	--	SPACE	20
21	SPARE	0	1		0	0		1	20	EXISTING	22
23	SPARE	0	1			0	500	1	20	AHU-1 (EXHAUST) LIGHTS AND RECEPT.	24
25	SPARE	0	1	0	0			--	--	SPACE	26
27	SPARE	0	1		0	0		--	--	SPACE	28
29	SPARE	0	1			0	0	--	--	SPACE	30
31	SPARE	0	1	0	0			--	--	SPACE	32
33	SPARE	0	1		0	0		--	--	SPACE	34
35	SPARE	0	1			0	0	--	--	SPACE	36
37	EXISTING	0	1	0	0			--	--	SPACE	38
39	EXISTING	0	1		0	0		--	--	SPACE	40
41	EXISTING	0	1			0	0	--	--	SPACE	42
Total Load:		0 VA		0 VA		1000 VA					
Total Amps:		0		0		8					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Power	1000 VA	100.00%	1000 VA	Total Conn. Load: 1000 VA Total Est. Demand: 1000 VA Total Conn.: 3 Total Est. Demand: 3

Notes:

Branch Panel: QHD51A

Location: (E) CONFERENCE A1-422
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 800
MCB Rating: 800

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	EXISTING	20	1	0	0		1	20	EXISTING	2
3	EXISTING	20	1		0	0		1	20	EXISTING
5	EXISTING	20	1			0	0	1	20	EXISTING
7	EXISTING	20	1	0	0			1	20	EXISTING
9	EXISTING	20	1		0	0		1	20	EXISTING
11	EXISTING	20	1			0	0	1	20	EXISTING
13	EXISTING	20	1	0	0			1	20	EXISTING
15	EXISTING	20	1		0	0		1	20	EXISTING
17						0	1	20	EXISTING	
19				0			1	20	EXISTING	
21										
23										
25										
27										
29						3880				
31	AHU-1 EXHAUST/RETURN UNIT	25	3	3880	443			3	15	EF-1
33					3880	443				
35						6651	443			
37	AHU-1 SUPPLY UNIT	40	3	6651	443					
39					6651	443				
41	SPACE	0	1			0	443			
Total Load:				11417 VA		11417 VA				
Total Amps:				41		41				

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Motor	34251 VA	114.56%	39239 VA	
				Total Conn. Load: 34251 VA
				Total Est. Demand: 39239 VA
				Total Conn.: 41
				Total Est. Demand: 47

A

B

C

D

E

F

A

B

C

D

E

F

GENERAL NOTE:

1. CONTRACTOR SHALL INSPECT AND FIELD VERIFY ALL EXISTING SWITCHBOARDS AND PANELBOARDS, IN SCOPE OF WORK, TO CONFIRM SPARE BREAKER AND SPACE AVAILABILITY.

Branch Panel: NH16A

Location: (E) ELECTRICAL ROOM E-1.6

Volts: 480/277 Wye

Phases: 3

Wires: 4

A.I.C. Rating:

Mains Type: MCB

Supply From:

Mounting: SURFACE

Mains Rating: 100

Enclosure: TYPE 1

MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	EXISTING	0	1	0	0		1	0	EXISTING	2	
3	EXISTING	0	1		0	0	1	0	EXISTING	4	
5	EXISTING	0	1			0	0	1	0	EXISTING	6
7	SPARE	0	1	0	0		1	0	EXISTING	8	
9	SPARE	0	1		0	0	1	0	EXISTING	10	
11	SPARE	0	1			0	80	1	20	Lighting	12
13	SPARE	0	1	0	48		1	20	Lighting	14	
15	SPARE	0	1		0	710	1	20	Lighting	16	
17	SPARE	0	1			0	330	1	20	Lighting	18
19	SPARE	0	1	0	356		1	20	Lighting	20	
21	SPARE	0	1		0	504	1	20	Lighting	22	
23	SPARE	0	1			0	167	1	20	Lighting	24
25	SPARE	0	1	0	16		1	20	Lighting	26	
27	SPARE	0	1		0	0	--	--	SPACE	28	
29	SPARE	0	1			0	0	--	SPACE	30	
31	SPARE	0	1	0	0		--	--	SPACE	32	
33					0	0	--	--	SPACE	34	
35	EXISTING	0	3		0	0	--	--	SPACE	36	
37				0	0		--	--	SPACE	38	
39	SPARE	0	1		0	0	--	--	SPACE	40	
41	SPARE	0	1			0	0	--	SPACE	42	
Total Load:				420 VA	1213 VA	577 VA					
Total Amps:				2	4	2					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	2211 VA	125.00%	2763 VA	
Other	0 VA	0.00%	0 VA	Total Conn. Load: 2211 VA
				Total Est. Demand: 2763 VA
				Total Conn.: 3
				Total Est. Demand: 3

Notes:

Branch Panel: NL16C

Location: (E) ELECTRICAL ROOM E-1.6

Supply From: (E) XFMR NTX16A

Mounting: SURFACE

Enclosure: TYPE 1

Volts: 120/208 Wye

Phases: 3

Wires: 4

A.I.C. Rating:

Mains Type: MCB

Mains Rating: 100

MCB Rating: 100

Notes:

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT	
1	A1-203 GP	20	1	1500	720		1	20	OPEN OFFICE/CONFERENCE	2	
3	A1-203 HEADWALL	20	1		0	1080		1	20	OPEN OFFICE/CONF. FLR BOXES	
5	A1-203 PATIENT LIFT	20	1			0	540	1	20	A1-151 RECEPTACLES	
7	SPARE	0	1	0	900			1	20	A1-141 RECEPTACLES	
9	A1-203 IV INFUSION PUMP	20	1		180	1080		1	20	A1-143/145 RECEPTACLES	
11	A1-140	20	1			720	1080	1	20	A1-147/149 RECEPTACLES	
13	A1-140	20	1	1440	900			1	20	A1-144/146 RECEPTACLES	
15	A1-140	20	1		1080	720		1	20	A1-146 RECEPTACLES	
17	A1-C002/150/152	20	1			1720	0	1	0	SPARE	
19	A1-140/142	20	1	1080	0			1	0	SPARE	
21	A1-140/142	20	1		1080	0		1	0	SPARE	
23	A1-142 COPY MACHINE	20	1			1000	0	1	0	SPARE	
25	RECEPTACLE	20	1	360	0			1	0	SPARE	
27	SPARE	0	1		0	0		1	0	SPARE	
29	SPARE	0	1			0	0	1	0	SPARE	
31	SPARE	0	1	0	0			1	0	SPARE	
33	SPARE	0	1		0	0		1	0	SPARE	
35	SPARE	0	1			0	0	1	0	SPARE	
37	SPARE	0	1	0	0			1	0	SPARE	
39	SPARE	0	1		0	0		1	0	SPARE	
41	SPARE	0	1			0	0	1	0	SPARE	
Total Load:				6900 VA	5220 VA	5060 VA					
Total Amps:				58	44	42					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Power	1000 VA	100.00%	1000 VA	Total Conn. Load: 17180 VA Total Est. Demand: 14090 VA Total Conn.: 48 Total Est. Demand: 39
Receptacle	16180 VA	80.90%	13090 VA	

Notes:

LOAD VERIFICATION

LOAD JUSTIFICATION FOR (E) PANEL 'CH16A' - CRITICAL
(E) BUS RATING ----- 100A

(E) DEMAND LOAD PER AS-BUILT DWGS ----- 12A
MAX DEMAND = 1.25 x DEMAND ----- 15A

LOAD TO BE ADDED: ----- 0.08KVA

(N) EST. MAX. DEMAND ----- 12.55KVA
MAX. DEMAND + ADDED LOAD ----- 15.1A
AMPS @ 480V/277V, 3ø

THEREFORE THE (E) PANEL "CH16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD JUSTIFICATION FOR (E) PANEL 'CL16A' - CRITICAL
(E) BUS RATING ----- 225A

(E) DEMAND LOAD PER AS-BUILT DWGS ----- 118A
MAX DEMAND = 1.25 x DEMAND ----- 147.5A

LOAD TO BE ADDED: ----- 9.72KVA

(N) EST. MAX. DEMAND ----- 62.86KVA
MAX. DEMAND + ADDED LOAD ----- 174.5A
AMPS @ 208V/120V, 3ø

THEREFORE THE (E) PANEL "CL16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD VERIFICATION

LOAD JUSTIFICATION FOR (E) PANEL 'SH16A' LIFE SAFETY
(E) BUS RATING ----- 100A

(E) DEMAND LOAD RECORDED FOR 30 DAYS
FROM 06/13/16 TO 07/13/16 ----- 5A
RECORDED MAX LOAD ----- 6.25A
MAX DEMAND = 1.25 x DEMAND ----- 6.25A

LOAD TO BE ADDED: ----- 1.2KVA

(N) EST. MAX. DEMAND ----- 6.4KVA
MAX. DEMAND + ADDED LOAD ----- 7.7A
AMPS @ 480V/277V, 3ø

THEREFORE THE (E) PANEL "SH16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD JUSTIFICATION FOR (E) PANEL 'SL16A' - LIFE SAFETY
(E) BUS RATING ----- 100A

(E) DEMAND LOAD PER AS-BUILT DWGS ----- 36A
MAX DEMAND = 1.25 x DEMAND ----- 45A

LOAD TO BE ADDED: ----- 1.00KVA

(N) EST. MAX. DEMAND ----- 17.2KVA
MAX. DEMAND + ADDED LOAD ----- 46A
AMPS @ 208V/120V, 3ø

THEREFORE THE (E) PANEL "SL16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD VERIFICATION

LOAD JUSTIFICATION FOR (E) PANEL 'NH16A' - NORMAL
(E) BUS RATING ----- 100A

(E) DEMAND LOAD RECORDED FOR 30 DAYS
FROM 06/13/16 TO 07/13/16 ----- 5.7A
RECORDED MAX LOAD ----- 7.125A
MAX DEMAND = 1.25 x DEMAND ----- 7.125A

LOAD TO BE ADDED: ----- 4.5KVA

(N) EST. MAX. DEMAND ----- 10.4KVA
MAX. DEMAND + ADDED LOAD ----- 12.5A
AMPS @ 480V/277V, 3ø

THEREFORE THE (E) PANEL "NH16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD JUSTIFICATION FOR (E) PANEL 'QH051A' - EQUIPMENT
(E) BUS RATING ----- 800A

(E) DEMAND LOAD PER AS-BUILT DWGS ----- 461A
MAX DEMAND = 1.25 x DEMAND ----- 577A

LOAD TO BE ADDED: ----- 48KVA

(N) EST. MAX. DEMAND ----- 528KVA
MAX. DEMAND + ADDED LOAD ----- 635A
AMPS @ 480V/277V, 3ø

THEREFORE THE (E) PANEL "QH051A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD VERIFICATION

LOAD JUSTIFICATION FOR (E) XFMR 'NTX16A' - NORMAL
(E) XFMR RATING ----- 75KVA

(E) DEMAND LOAD RECORDED FOR 30 DAYS
FROM 06/13/16 TO 07/13/16 ----- 61.2A
RECORDED MAX LOAD ----- 76.5A
MAX DEMAND = 1.25 x DEMAND ----- 76.5A

LOAD TO BE ADDED: ----- 14.1KVA

(N) EST. MAX. DEMAND ----- 41.64KVA
MAX. DEMAND + ADDED LOAD ----- 115.7A
AMPS @ 208V/120V, 3ø

THEREFORE THE (E) XFMR "NTX16A" IS SUFFICIENT FOR THE ADDED LOAD.

LOAD JUSTIFICATION FOR (E) PANEL 'CL16A' - EQUIPMENT
(E) BUS RATING ----- 100A

(E) DEMAND LOAD RECORDED FOR 30 DAYS
FROM 06/13/16 TO 07/13/16 ----- 9.3A
RECORDED MAX LOAD ----- 11.6A
MAX DEMAND = 1.25 x DEMAND ----- 11.6A

LOAD TO BE ADDED: ----- 4.6KVA

(N) EST. MAX. DEMAND ----- 8.8KVA
MAX. DEMAND + ADDED LOAD ----- 24.4A
AMPS @ 208V/120V, 3ø

THEREFORE THE (E) PANEL "CL16A" IS SUFFICIENT FOR THE ADDED LOAD.

FULLY SPRINKLERED
FOR CONSTRUCTION

CONSULTANTS:

ARUP

Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

Seals and Signatures



ARCHITECT/ENGINEERS:

THE DESIGN PARTNERSHIP
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

Associate Architect:
CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

Drawing Title
PANELBOARD SCHEDULES

Approved: Project Director

Project Title
VA PALO ALTO HEALTH CARE SYSTEM
EXPAND EMERGENCY DEPT. FACILITIES

Location
3801 Miranda Ave., Palo Alto CA

Date
June 20, 2016

Checked
RP

Drawn
DS

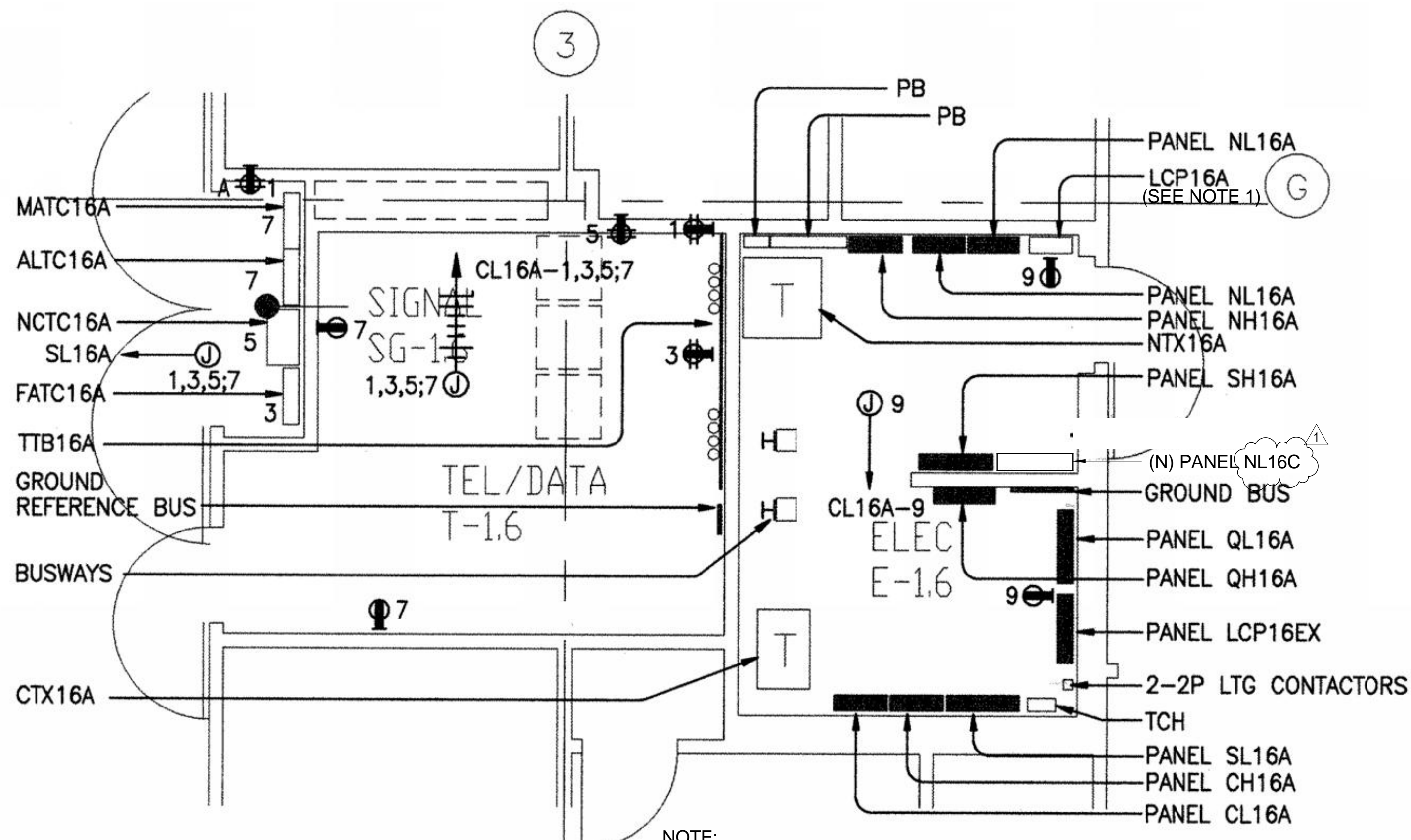
Project Number
640-369

Building Number
100

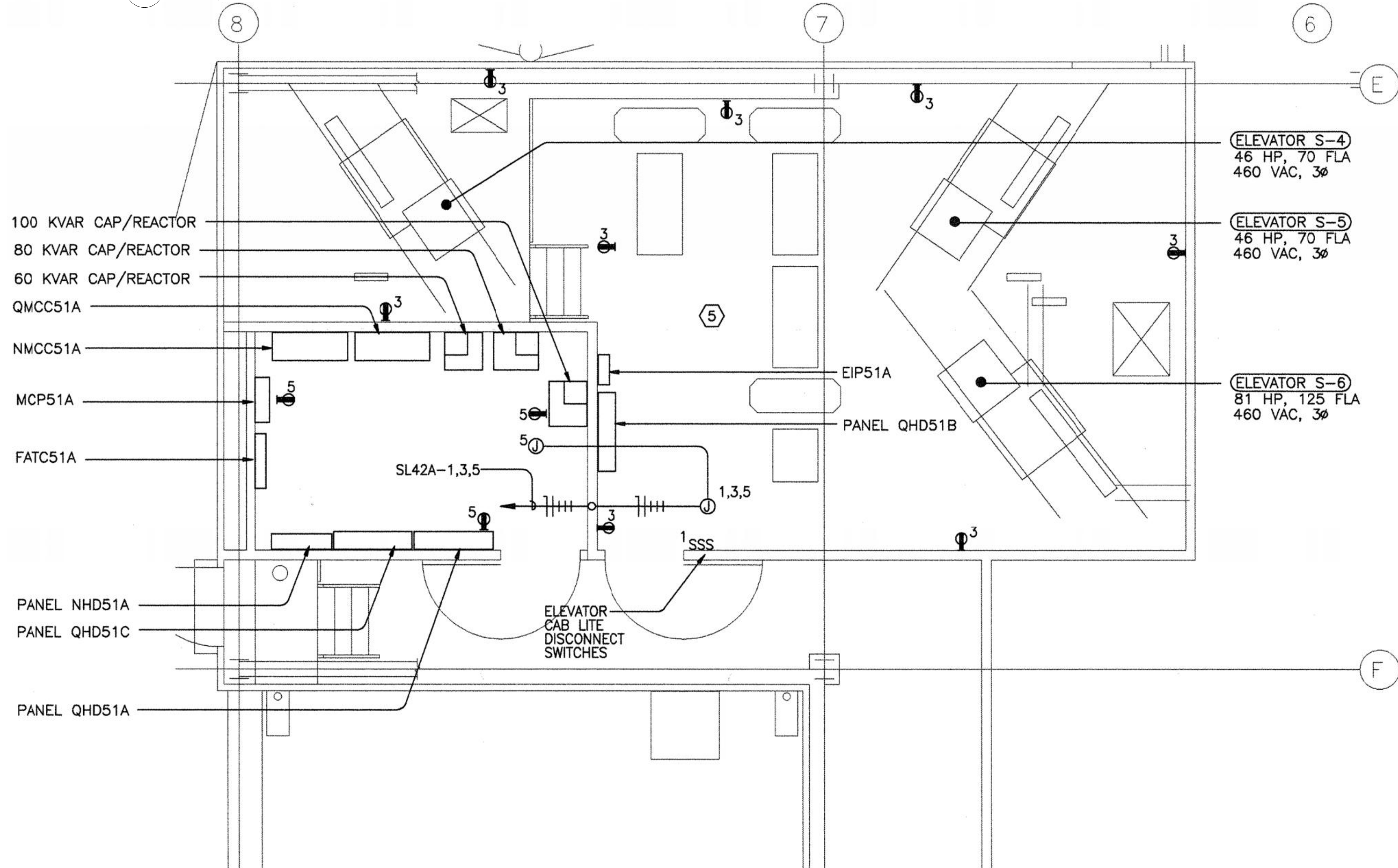
Drawing Number
EP6.2.2

Office of
Construction
and Facilities
Management

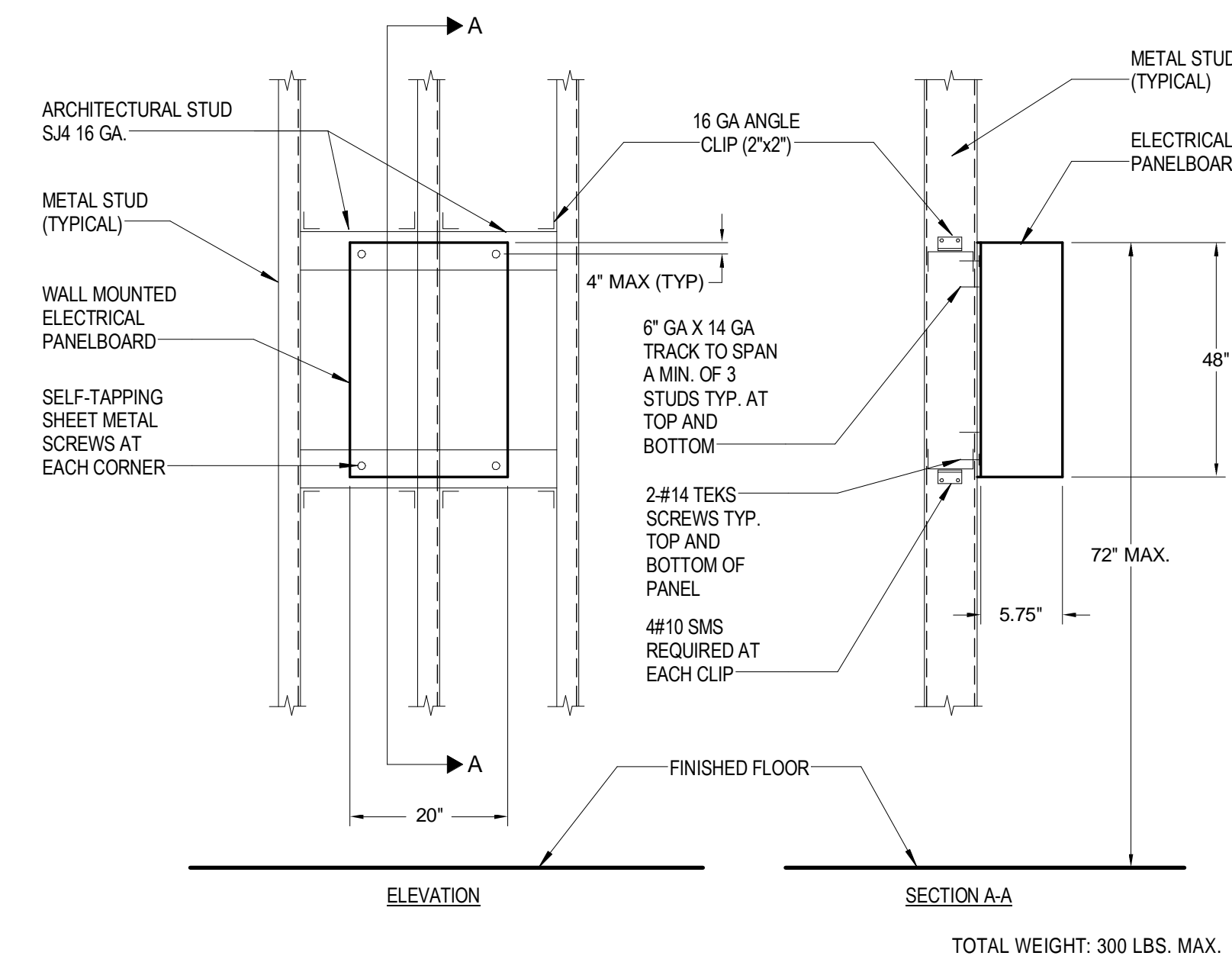




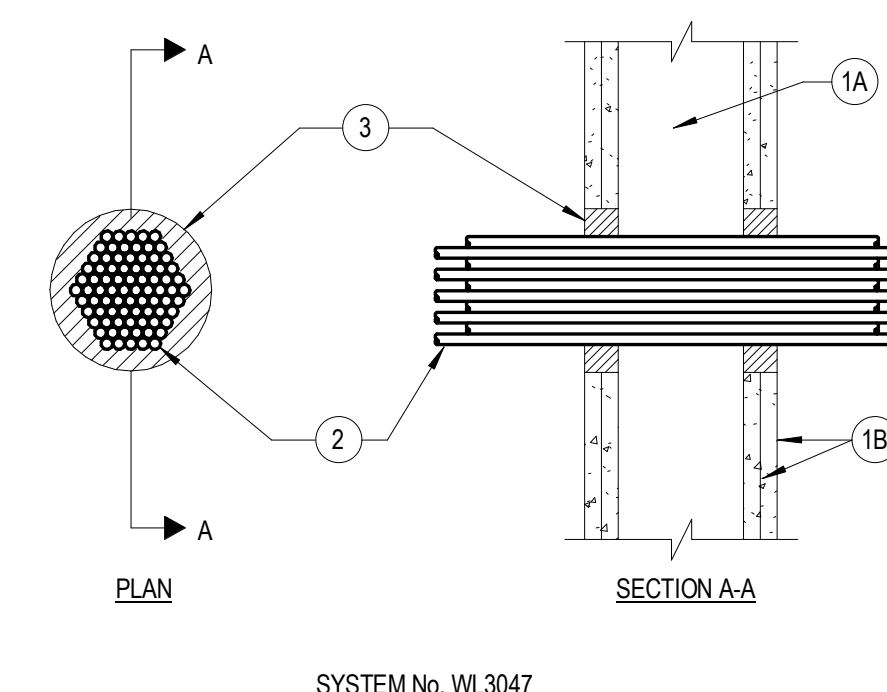
3 ELECTRICAL CLOSET E-16
12" = 1'-0"



4 ELECTRICAL CLOSET E-51
12" = 1'-0"



2 ELECTRICAL PANEL ANCHORAGE DETAIL
12" = 1'-0"



1. WALL ASSEMBLY - THE FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
- A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACE 16 IN. OC. STEEL STUDS TO BE MIN 2-1/2 IN. WIDE AND SPACED MAX 24 IN. OC.
 - B. GYPSUM BOARD - TWO LAYERS OF 5/8 IN. THICK GYPSUM WALLBOARD, AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN. MAX DIA OF OPENING IS 6 IN.
2. CABLES - MAX 7/8 IN. 12 AWG CABLES WITH POLYVINYL CHLORIDE JACKET AND INSULATION. AGGREGATE CROSS - SECTIONAL AREA OF TIGHTLY BUNDLED CABLE GROUP TO BE 33 PERCENT OF THE AGGREGATE CROSS-SECTIONAL AREA OF THE OPENING. CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.
3. FILL, VOID OR CAVITY MATERIAL - SEALANT - MIN 1-1/4 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. SEALANT TO BE FORCED INTO INTERSTICES OF CABLE GROUP TO MAX EXTENT POSSIBLE.

1 FIRE RATED WALL CABLE PENETRATION DETAIL
12" = 1'-0"

FULLY SPRINKLERED
FOR CONSTRUCTION

CONSULTANTS:
ARUP
Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

Seals and Signatures

ARCHITECT/ENGINEERS:
THE DESIGN PARTNERSHIP
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

Associate Architect:
CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

Drawing Title
ELECTRICAL DETAILS

Approved: Project Director

Project Title
VA PALO ALTO HEALTH CARE SYSTEM
EXPAND EMERGENCY DEPT. FACILITIES

Location
3801 Miranda Ave., Palo Alto CA

Date
June 20, 2016

Checked
RP

Drawn
DS

Project Number
640-369
Building Number
100

Drawing Number
EP7.2.2

Office of
Construction
and Facilities
Management

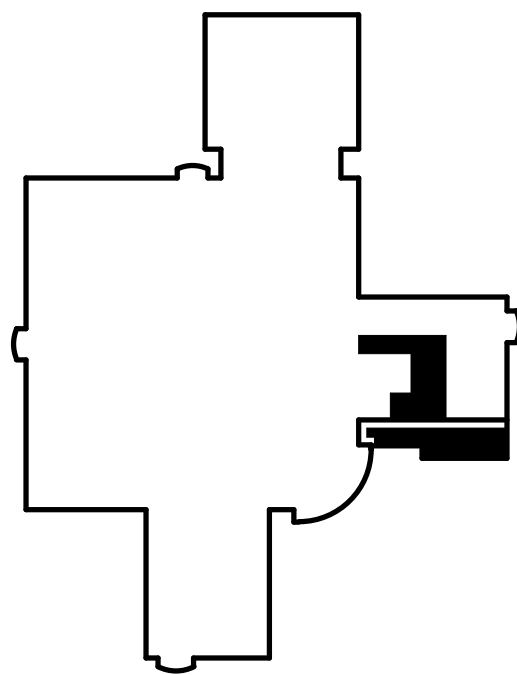
1 Bid Revisions
Revisions:
05/11/17
Date

SHEET NOTES

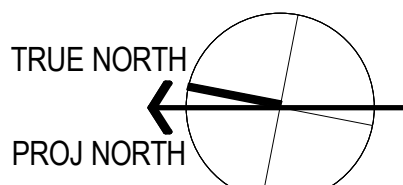
- NURSE CALL AND TELECOM OUTLETS IN TRIAGE ROOMS TO BE INTEGRATED IN HEAD-WALL AND COORDINATED WITH HEAD-WALL DESIGN. NEW NURSE CALL DEVICES TO BE COORDINATE WITH EXISTING SYSTEM (EZCARE).
- GC TO SCHEDULE WORK TO MINIMUM INTERRUPTION OF HOSPITAL ACTIVITY. WORK TO BE SCHEDULED BETWEEN 8:00AM TO 4:30PM. ANY WORK OUTSIDE OF REGULAR HOURS REQUIRES VA PRIOR APPROVAL.

KEYNOTES

- CARD ACCESS SYSTEM AND SECURITY CAMERAS TO BE WIRED BACK TO EXISTING TELECOM CLOSET T-1.4
- DEDUCT ALTERNATE - PROVIDE (1) WORKSTATION OUTLET FOR (16) WORKSTATIONS
- DEDUCT ALTERNATE - ELIMINATE TELECOMMUNICATION SCOPE IN THIS AREA.



FULLY SPRINKLERED
CONSTRUCTION DOCUMENTS



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

1 Phase 3 - Level 1 Telecom Plan
1/8" = 1'-0"

CONSULTANTS:

ARUP

Arup North America Ltd.
560 Mission Street, Suite 700
San Francisco, CA 94105
Tel (415) 957 9445 Fax (415) 957 9096
www.arup.com ©

Seals and Signatures



ARCHITECT/ENGINEERS:

THE DESIGN PARTNERSHIP
1629 Telegraph Avenue, Suite 500 | Oakland, CA 94612
Phone: 415-777-3737 | Fax: 415-777-3476
www.dpsf.com

Associate Architect:

CANNONDESIGN
595 Market Street, 12th Floor | San Francisco, CA 94105
T 415.243.4170 | F 415.243.4176
www.cannondesign.com

Drawing Title

TELECOM PLAN - LEVEL 1

Approved: Project Director

Project Title

VA PALO ALTO HEALTH CARE SYSTEM
EXPAND EMERGENCY DEPT. FACILITIES

Location

3801 Miranda Ave., Palo Alto CA

Date

June 20, 2016

Checked

TY

Drawn

BM

Project Number

640-369

Building Number

100

Drawing Number

TP2.1.1

Office of
Construction
and Facilities
Management

