

### \* KEYED NOTES

- 1. EXISTING ELEMENTS SHOWN LIGHT, TYPICAL.
- CONTRACTOR RESPONSIBLE FOR COORDINATING AND LOCATING ALL CLEANOUTS PER CODE IN ADDITION TO CLEANOUTS CALLED OUT ON PLANS, TYPICAL.
- 3. WALLS SHOWN FROM ABOVE, TYPICAL.



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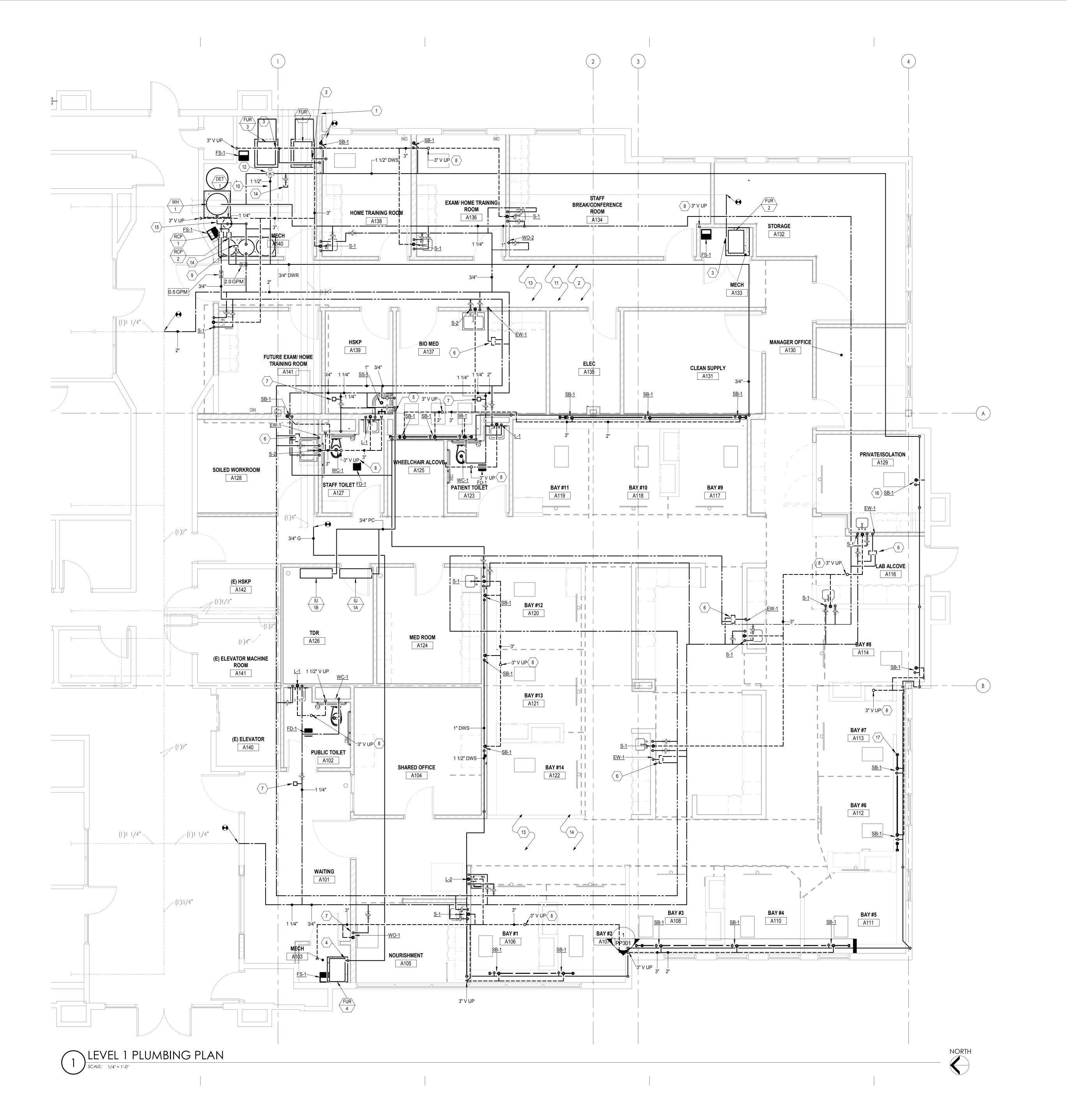


Dialysis Clinic Expansion

NJRA Project # 19230.00 Construction Documents February 03, 2020

> BELOW GRADE PLUMBING PLAN

PP100



#### **KEYED NOTES**

- 1. EXISTING ELEMENTS SHOWN LIGHT TO REMAIN, TYPICAL.
- 2. INSTALL NEW FIRE SPRINKLERS.
- 3. RELOCATE EXISTING PRV
- 4. INSTALL NEW 4 OZ PRV.
- 5. DROP DOWN WALL AND TERMINATE IN SERVICE SINK.
- 6. THERMOSTATIC MIXING VALVE INSTALLED IN CEILING.
- PROVIDE HAMMER ARRESTOR ON ALL FAST ACTING VALVES,
- 8. FIELD VERIFY LOCATION OF EXISTING VENT LINES PENETRATING LEVEL 2 FLOOR. CONNECT NEW VENT LINES TO EXISTING VENT LINES PENETRATING LEVEL 2 FLOOR. RUN ADDITIONAL PIPING AS NECESSARY.
- 9. OWNER PROVIDED WATER SOFTENER.
- 10. CONNECT TO OWNER PROVIDED WATER SOFTENER.
- 11. ALL SPRINKLER HEADS SHALL BE QUICK RESPONSE
  THROUGHOUT EACH REMODELED COMPARTMENT, TYPICAL.
  FIRE SPRINKLERS SHALL BE INSTALLED TO MEET NFPA 13-2016
  REQUIREMENTS, TYPICAL.
- 12. INSTALL THERMOSTATIC MIXING VALVE FOR REVERSE OSMOSIS APPLICATIONS.
- 13. INSTALL FIRE SPRINKLER SPRINKLERS AND PIPING AS NECESSARY FOR THE REMODELED SPACE, INCLUDING NEW FLOOR PLAN, CEILING PLAN, AND CEILING HEIGHT ADJUSTMENTS. REFER TO THE ARCHITECTURAL SHEETS FOR COMPLETE SCOPE OF THE PROJECT.
- 14. VALVE AND CAP FOR OWNER TO CHLORINATE LINE.
- 15. CONNECT RETURN LINE TO WATER HEATER PER MANUFACTURER RECOMMENDATIONS.
- 16. SEE ARCHITECTURAL PLANS FOR ELEVATION AND EXACT LOCATION OF SUPPLY BOX, TYPICAL.
- 17. TYPICAL CLEANOUT, SEE PP301 FOR SECTION.



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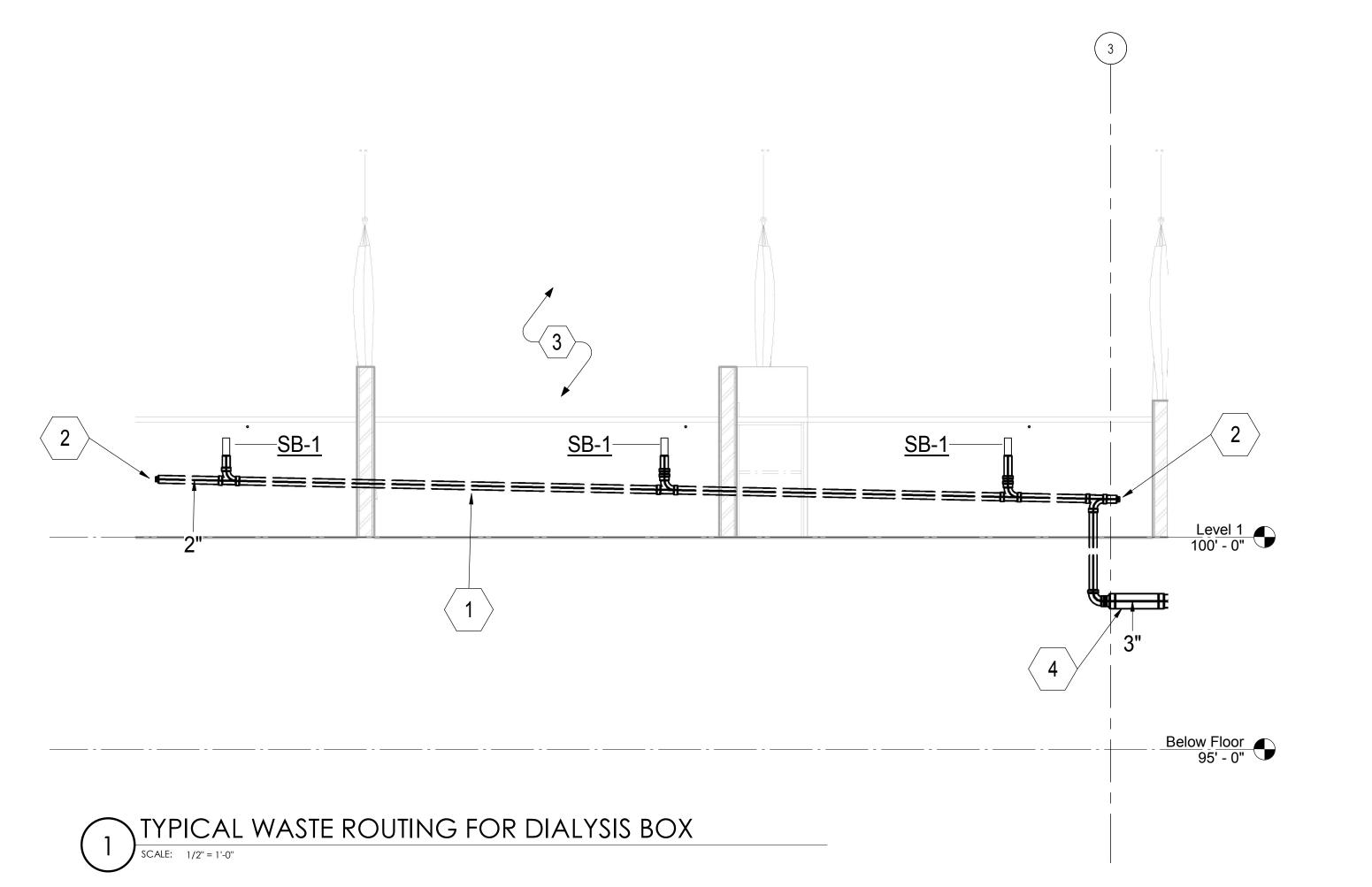
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LEVEL 1 PLUMBING PLAN

PP101



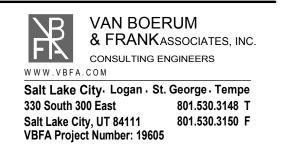
### **KEYED NOTES**

- 1. INSTALL PIPE WITH A 1/4 INCH PER FOOT SLOPE.
- 2. PROVIDE CLEANOUT ON BOTH THE HIGH AND LOW SIDE. COORDINATE FINISHED LOCATION WITH ARCHITECT.
- 3. CONTRACTOR RESPONSIBLE FOR COORDINATING DIALYSIS LOOP PIPING AND VENT LINES WITH ALL OTHER PIPE LINES IN WALL, TYPICAL.
- BELOW GRADE PIPING SHALL BE SIZED AT 3" WITH A 1/8 INCH PER FOOT SLOPE.



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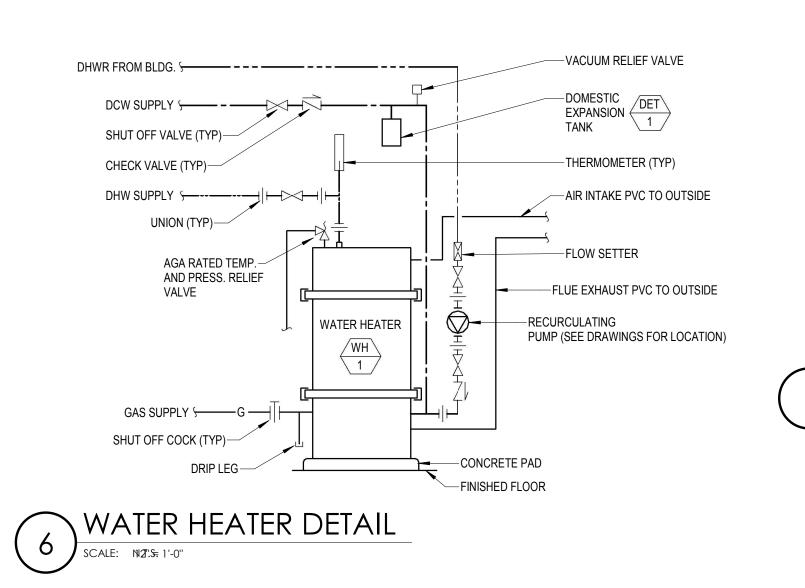
Dialysis Clinic Expansion

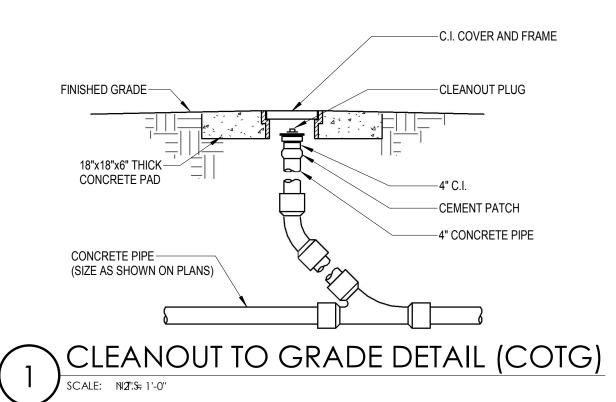
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PLUMBING SECTIONS

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\_\_PP301





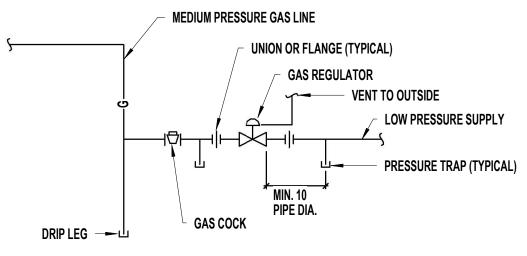




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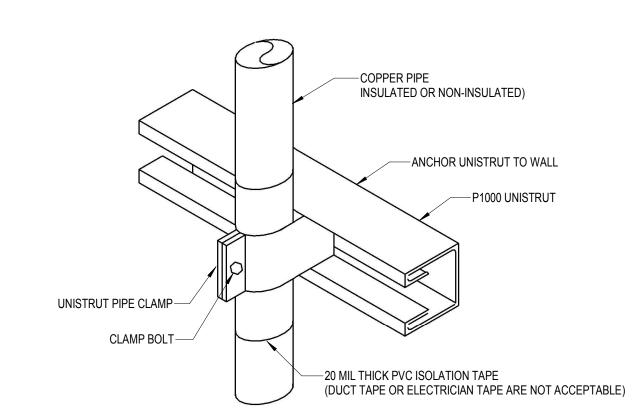
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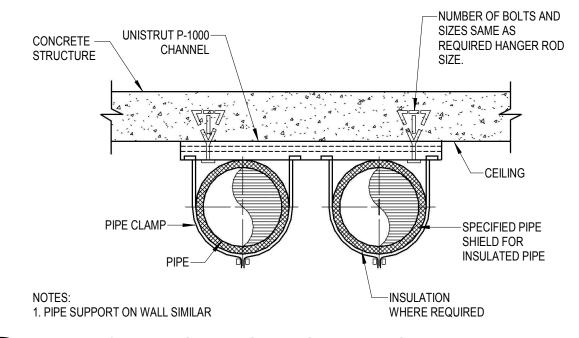
MEDIUM-TO-LOW PRESSURE GAS REGULATOR DETAIL

SCALE: NVZI:SF 1'-0"



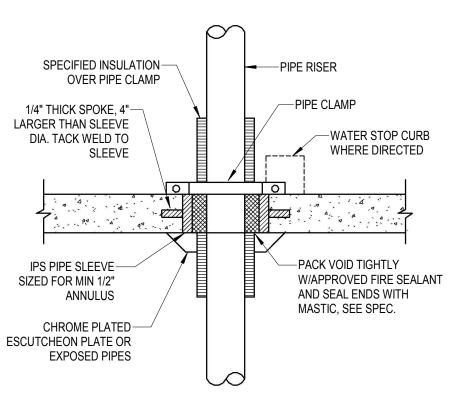
PIPE SUPPORT DETAIL

SCALE: N27:5= 1'-0"



PIPE SUPPORT ON CEILING

SCALE: N2":5- 1'-0"



PIPE THROUGH FLOOR SLAB DETAIL

SCALE: NIZT'S= 1'-0"

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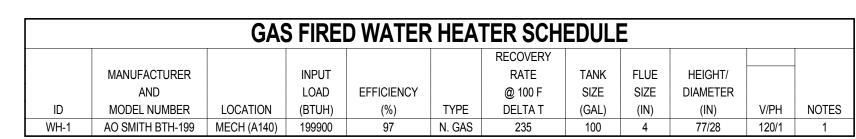
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PLUMBING DETAILS

PP501

					PLUMBING FIXTURE SCI	HEDULE
wt	FIXTURE			W V (IN) (IN)	DESCRIPTION	SPECIFICATION
EW-1	EMERGENCY EYEWASH	1/2	1/2		COUNTER MOUNTED, TEPID WATER	GUARDIAN G5022BP EYEWASH/DRENCH HOSE DECK MOUNTED UNITS WITH SLOAN ETF-470-A SINGLE CHECK VALVES ON HOT AND COLD LINES AND GUARDIAN G3600LF THERMOSTATIC MIXING VALVE. INSTALL THE EYEWASH/DRENCH HOSE UNIT ON THE COUNTER NEXT TO THE SINK. INSTALL THE MIXING VALVE ABOVE THE CEILING WITH THE OUTLET TEMPERATURE SET TO 75-80°F.
FD-1	FLOOR DRAIN			2 1-1/2	FLOOR DRAIN	FLOOR DRAIN: SMITH FIGURE 2005Y-P050 FLOOR DRAIN WITH CAST IRON BODY AND FLASHING COLLAR WITH 6-INCH ROUND NICKEL BRONZE ADJUSTABLE STRAINER HEAD WITH SECURED GRATE. PROVIDE TRAP GUARD TYPE TRAP SEAL DEVICE.
FS-1	MECHANICAL ROOM FLOOR SINK			3 1-1/2	MECHANICAL ROOM FLOOR SINK	FLOOR SINK: SMITH FIGURE 3100Y CAST IRON FLANGED RECEPTOR WITH ACID RESISTANT INTERIOR COATING, NICKEL BRONZE RIM AND SECURED 1/2 GRATE AND ALUMINUM DOME BOTTOM STRAINER.
L-1	PUBLIC TOILET ROOM LAVATORY	1/2	1/2	1-1/2 1-1/2	WALL HUNG, VITREOUS CHINA, GOOSENECK FAUCET WITH WRISTBLADES	LAVATORY: KOHLER K2030, GREENWICH, 20" X 18", VITREOUS CHINA, WITH FRONT OVERFLOW, 8" CENTERS. CHICAGO 786-GN2FCXKABCP FAUCET, WITH WRIST BLADE HANDLES, GN2 5-1/4" RIGID/SWING GOOSENECK WITH PLAIN END SPOUT AND 0.5 GPM LAMINAR FLOW CONTROL IN SPOUT INLET. WATTS LFUSG-B-M2 THERMOSTATIC MIXING VALVE WITH SLOAN ETF-470-A SINGLE CHECK VALVES ON HOT AND COLD LINES. FLEXIBLE STAINLESS STEEL SUPPLIES WITH 1/4 TURN ANGLE STOPS. CHICAGO 327-XCP OPEN-GRID STRAINER AND CAST BRASS P-TRAP WITH CLEANOUT PLUG. SMITH 0700-Z CONCEALED ARM CHAIR CARRIER WITH FOOT SUPPORT. PROVIDE ADA COMPLIANT UNDER COUNTER PIPING WRAP BY TRUE-BRO, COLOR TO BE WHITE.
L-2	LAVATORY	1/2	1/2	1-1/2 1-1/2	WALL HUNG, VITREOUS CHINA, GOOSENECK FAUCET WITH WRISTBLADES	LAVATORY: KOHLER K2030, GREENWICH, 20" X 18", VITREOUS CHINA, WITH FRONT OVERFLOW, 8" CENTERS. CHICAGO 786-GN2FCXKABCP FAUCET, WITH WRIST BLADE HANDLES, GN2 5-1/4" RIGID/SWING GOOSENECK WITH PLAIN END SPOUT AND 1.5 GPM LAMINAR FLOW CONTROL IN SPOUT INLET. WATTS LFUSG-B-M2 THERMOSTATIC MIXING VALVE WITH SLOAN ETF-470-A SINGLE CHECK VALVES ON HOT AND COLD LINES. FLEXIBLE STAINLESS STEEL SUPPLIES WITH 1/4 TURN ANGLE STOPS. CHICAGO 327-XCP OPEN-GRID STRAINER AND CAST BRASS P-TRAP WITH CLEANOUT PLUG. SMITH 0700-Z CONCEALED ARM CHAIR CARRIER WITH FOOT SUPPORT. PROVIDE ADA COMPLIANT UNDER COUNTER PIPING WRAP BY TRUE-BRO, COLOR TO BE WHITE.
S-1	TYPICAL SINK	1/2	1/2	2 1-1/2	INTEGRAL, GOOSENECK FAUCET WITH WRISTBLADES	SINK: INTEGRAL SINK. CHICAGO 895-317GN2FCXKABCP FAUCET, WITH WRIST BLADE HANDLES, 5-1/4" GN2 RIGID/SWING GOOSENECK SPOUT WITH 1.5 GPM LAMINAR FLOW CONTROL IN SPOUT INLET. WATTS LFUSG-B-M2 THERMOSTATIC MIXING VALVE WITH SLOAN ETF-470-A SINGLE CHECK VALVES ON HOT AND COLD LINES. FLEXIBLE STAINLESS STEEL SUPPLIES WITH 1/4 TURN ANGLE STOPS AND CAST BRASS P-TRAP WITH CLEANOUT PLUG. REPLACE QUATURN COMPRESSION OPERATING CARTRIDGE WITH CERAMIC 1/4-TURN OPERATING CARTRIDGE. PROVIDE WITH PLAIN END SPOUT.
S-2	WORKROOM SINK	1/2	1/2	2 1-1/2	ADA, COUNTER MOUNTED, STAINLESS STEEL, GOOSENECK FAUCET WITH WRISTBLADES	SINK: JUST SLN-ADA-2131-A-GR 16" X 28" X 6-1/2" I.D. COUNTER MOUNT 18 GA. STAINLESS STEEL SINK WITH 3 HOLE 8" CENTERS DRILLING, INTEGRA STAINLESS STEEL FLAT GRID AND REAR CENTER DRAIN LOCATION. CHICAGO 786-GN8FCXKABCP FAUCET, WITH WRIST BLADE HANDLES, 8" GN8 RIGID/SWING GOOSENECK SPOUT WITH 1.5 GPM LAMINAR FLOW CONTROL IN SPOUT INLET. WATTS LFUSG-B-M2 THERMOSTATIC MIXING VALVE WITH SLOAN ETF-470-A SINGLE CHECK VALVES ON HOT AND COLD LINES. FLEXIBLE STAINLESS STEEL SUPPLIES WITH 1/4 TURN ANGLE STOPS AND CAST BRASS P-TRAP WITH CLEANOUT PLUG.
SB-1	SUPPLY BOX	3/4		2 1-1/2	SINGLE TEMP HOSE BOX, WASTE OUTLET, VACUM BREAKER	HOSE AND SUPPLY BOX: ACORN 8181 STAINLESS STEEL RECESSED SUPPLY AND WASTE HOSE BOX WITH VACUUM BREAKER 3/4" MALE HOSE THREAD AND WHEEL HANDLE. PROVIDE WITH ABS P-ASSEMBLY.
SS-1	CORNER MOUNTED SERVICE SINK	1/2	1/2	3 1-1/2	CORNER FLOOR MOUNTED	SERVICE SINK (FLOOR MOUNTED): KOHLER K6710, WHITBY, 28 X 28-INCH, ENAMELED CAST IRON FLOOR-MOUNTED CORNER MODEL, K9146-3" DRAIN WITH STRAINER, NO. K8940 REMOVABLE VINYL-COATED RIM GUARD; CHICAGO 897-CP FAUCET WITH VACUUM BREAKER, SCREWDRIVER STOPS IN SHANKS, 5 FOOT RUBBER HOSE AND CHICAGO 853 WALL HOOK. WATTS LFUSG-B-M2 THERMOSTATIC MIXING VALVE. WATTS # 7 DUAL CHECK VALVES ON HOT AND COLD LINES, INSTALLED IN CEILING ABOVE SERVICE SINK WITH ACCESS DOOR IF HARD CEILING.
WC-1	TYPICAL FLOOR MOUNTED WATER CLOSET	1		4 2	FLOOR MOUNTED	WATER CLOSET: KOHLER K-96057 HIGHCLIFF ULTRA VITREOUS CHINA, FLOOR MOUNTED, ELONGATED BOWL, 1-1/2" TOP SPUD, ADA TOILET WITH K-4670-C LUSTRA OPEN-FRONT SEAT. SLOAN ROYAL-111-1.28 GPF FLUSH VALVE; INSTALL ACTUATOR ON WIDE SIDE OF FIXTURE.
WO-1	WATER OUTLET	1/2		2 1-1/2	FLUSH MOUNTED IN WALL, WATER SUPPLY, DRAIN	WATER OUTLET BOX: WATER-TITE 82148 WASHING MACHINE OUTLET BOX WITH DRAIN QUARTER TURN BALL VALVE WITH WATER ARRESTOR FOR USE WITH ICE MACHINE. INSTALL ONLY COLD WATER BALL VALVE. NOTCH COUNTERTOP BACK-SPLASH AND INSTALL OUTLET BOX DRAIN FLUSH WITH COUNTERTOP. MATCH ARCHITECTURAL ELEVATIONS.
WO-2	WATER OUTLET	1/2			FLUSH MOUNTED IN WALL, WATER SUPPLY	FRIDGE CONNECTION: WATER-TITE AB9700HACP WATER OUTLET BOX WITH QUARTER TURN BALL VALVE AND WATER HAMMER ARRESTOR.



PROVIDE WITH CONECENTRIC VENT SET.
 SET LEAVING DISCHARGE TEMPERATURE FOR WATER HEATER TO 140 DEGREE FAHRENHEIT.

			RECIR	CUL	ATION	PUM	P SCHEDULE	! !			
				FLUID				ELECTRICA	AL.		
	MANUFACTURER			FLOW		HEAD		MOTOR	MOTOR		1
	AND			RATE	WORKING	LOSS		SIZE	SPEED		
ID	MODEL NUMBER	LOCATION	TYPE	(GPM)	FLUID	(FT)	CONSTRUCTION	(HP)	(RPM)	VOLT/PH/HZ	NOTE
RCP-1	B&G PR 3/4	MECH A140	DOMESTIC	0.5	WATER	5	LEAD-FREE BRONZE	1/6	1725	115/1/60	
RCP-2	B&G PR3/4	MECH A140	DOMESTIC	2	WATER	5	LEAD-FREE BRONZE	1/6	1725	115/1/60	

			<b>DOMES</b>	TIC EXPAI	NSION TAN	K SCHEDU	ILE			
				FLUID		PHYSICAL				
	MANUFACTURER				MIN. TANK/	TANK	RELIEF	DIA./	NPT	1
	AND			WORKING	ACCEPTANCE	SIZE	VALVE	HEIGHT	FITTING	
ID	MODEL NUMBER	LOCATION	TYPE	FLUID	(GAL)	(GAL)	(PSIG)	(IN)	(IN)	NOTE
DET-1	AMTROL ST-12-C	MECH A140	DOMESTIC	WATER	0.9	2	150	12/18	0.75	1

1. TANK LINER SUITABLE FOR POTABLE WATER

		PIPING MI	NIMUN	INSULA	TION TH	IICKNE:	SS	
TEMPERATURE	CONDUCTIVITY,	MEAN RATING				PIPE SIZE (IN)	)	
RANGE (OF)	BTU·IN/H·FT2·OF	TEMPERATURE OF	<1	1 to >1-1/2	1-1/2 to <4	4 to <8	8 & Larger	NOTES
>350	0.32 TO 0.34	250	4.5	5.0	5.0	5.0	5.0	1,2,3,4
251-350	0.29 TO 0.32	200	3.0	4.0	4.5	4.5	4.5	1,2,3,4
201-250	0.27 TO 0.30	150	2.5	2.5	2.5	3.0	3.0	1,2,3,4
141-200	0.25 TO 0.29	125	1.5	1.5	2.0	2.0	2.0	1,2,3,4
105-140	0.22 TO 0.28	100	1.0	1.0	1.5	1.5	1.5	1,2,3,4
40-60	0.21 TO 0.27	75	0.5	0.5	1.0	1.0	1.0	1,2,3,4
>40	0.20 TO 0.26	50	1.0	1.0	1.0	1.0	1.5	1,2,3,4

1. INSULATION THICKNESS FOR RUNOUT PIPING BETWEEN THE CONTROL VALVE AND HVAC EQUIPMENT MAY BE REDUCED TO 1"
2. INSULATION THICKNESS FOR PIPING LOCATED OUTDOORS OR EXPOSED TO OUTSIDE AIR SHALL BE INCREASED BY 1".
3. WHERE SCHEDULED THICKNESS DIFFERS FROM SPECIFICATIONS THE THICKER DIMENSION SHALL BE USED.

WHERE SCHEDULED THICKNESS DIFFERS FROM SPECIFICATIONS THE THICKER DIMENSI
 REFER TO ASHRAE-90.1-2016 TABLE 6.8.3-1 AND 6.8.3-2 FOR ADDITIONAL INFORMATION.

ARCHITECTS

NJRA Architects, Inc. 5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



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Salt Lake City. Logan · St. George · Tempe
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Dialysis Clinic Expansior

NJRA Project #

PLUMBING SCHEDULES

Construction Documents February 03, 2020

\_\_PP601

		SYMBOLS LEGEND
	YMBOL	1
<b>VV I</b>	RING DE	
02	Ф	RECEPTACLE, SINGLE: NEMA 5-20R.
03	<u> </u>	RECEPTACLE, DUPLEX: NEMA 5-20R.
04	<u></u>	RECEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.
05	<u></u> С	RECEPTACLE, DUPLEX, CEILING: NEMA 5-20R.
06	Фъ	RECEPTACLE, DUPLEX, DEDICATED CIRCUIT: NEMA 5-20R.  RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT
	∯ DF	INTERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER RECEPTACLE BEHIND WATER COOLER. SEE MECHANICAL/PLUMBING SHOP DRAWINGS FOR INSTALLATION
07		REQUIREMENTS.
09	∬ IG	RECEPTACLE, DUPLEX, ISOLATED GROUND: NEMA 5-20R.  RECEPTACLE, DUPLEX, FLOOR, UNDER CARPET: NEMA 5-20R.
10	₩ ис	
	₩w	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WET LABEL, "WEATHERPROOF IN USE": NEMA 5-20R.
11	₩P	RECEPTACLE, DUPLEX, WEATHERPROOF: NEMA 5-20R.
12	<u> </u>	RECEPTACLE, DUPLEX, HOSPITAL GRADE: NEMA 5-20R.
13	<del> </del>	RECEPTACLE, DUPLEX ON EMERGENCY POWER: NEMA 5-20R.
14	<u> </u>	RECEPTACLE, DUPLEX, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
15	<u> </u>	RECEPTACLE, DUPLEX, CONNECTED TO UPS: NEMA 5-20R.
16	<del></del>	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
17	<u> </u>	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
18	11	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT
10	•	INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
19	₩ <sub>WP</sub>	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5-20R.
20 21	Ш	RECEPTACLE, DUPLEX, RECESSED: NEMA 5-20R.
	Шs	RECEPTACLE, DUPLEX, SWITCHED, RECESSED: NEMA 5-20R.
22	#	RECEPTACLE, QUADRAPLEX: NEMA 5-20R.
	•	RECEPTACLE, QUADRAPLEX ON EMERGENCY POWER: NEMA 5-20R.
24	₩	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE: NEMA 5-20R.
25	<b>+</b>	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
26	<b>4</b>	RECEPTACLE, QUADRAPLEX, CONNECTED TO UPS: NEMA 5-20R.
27	<b>₩</b>	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
28	<u></u>	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
29	•	RECEPTACLE, SPECIAL PURPOSE ON EMERGENCY POWER. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
30	<b>₽</b> D	RECEPTACLE, DRYER: NEMA 14-30R.
31 32	₿R	RECEPTACLE, RANGE: NEMA 14-50R.
33	<u> </u>	RECEPTACLE, CLOCK HANGER: NEMA 5-15R.
34		MULTI-OUTLET ASSEMBLY: NEMA 5-20R.
35	(D)	DROP CORD. SEE DETAIL.
36	(T)	THERMOSTAT.
	FB#	FLUSH FLOOR BOX. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
37		POWER POLE. "#" SHOWN ON DRAWINGS. REFER TO WIRING
	PP#	DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
38		FLUSH FIRE RATED POKE THRU. "#" SHOWN ON DRAWINGS.
	PT#	REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
39	Ф	SWITCH, DIMMER.
40	X \$	SWITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).
41	X \$2	SWITCH, DOUBLE POLE ("x" INDICATES FIXTURES CONTROLLED).
42	X \$3	SWITCH, THREE-WAY ("x" INDICATES FIXTURES CONTROLLED).
43	X \$4	SWITCH, FOUR-WAY ("x" INDICATES FIXTURES CONTROLLED).
44	\$DS	SWITCH, DOOR.
45	\$K	SWITCH, KEY OPERATED.
46	\$LM	SWITCH, LOW VOLTAGE MASTER.
47	\$М	SWITCH, MOMENTARY.
48	\$os	SWITCH, OCCUPANCY SENSOR.
49	\$P	SWITCH, PILOT LIGHT.
50	\$Т	SWITCH, TIMER OPERATED.
51	\$WP	SWITCH, WEATHERPROOF.
F^	<b>∯</b> т	RECEPTACLE, DUPLEX, TAMPER RESISTANT: NEMA 5-20R.
	<b>#</b>	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
53		RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT
53	<u></u>	INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER:
52 53 54	<b>#</b>	NEMA 5-20R.
53 54 55	<b>4</b>	
53 54 55 56	•	NEMA 5-20R.  RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT
53 54 55 56	<b>+</b>	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, CONNECTED TO UPS: NEMA 5-20R.  RECEPTACLE, SINGLE PLEX, WITH USB OUTLET  RECEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED
53 54 55 56	# #	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, CONNECTED TO UPS: NEMA 5-20R.  RECEPTACLE, SINGLE PLEX, WITH USB OUTLET  RECEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY
53 54 55	# #	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, CONNECTED TO UPS: NEMA 5-20R.  RECEPTACLE, SINGLE PLEX, WITH USB OUTLET  RECEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)  RECEPTACLE, QUADRAPLEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY
553 554 555 556 557	<b>♣ ★ ★</b>	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, CONNECTED TO UPS: NEMA 5-20R.  RECEPTACLE, SINGLE PLEX, WITH USB OUTLET  RECEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)  RECEPTACLE, QUADRAPLEX, RECESSED, NEMA 5-20R,

SITE EL CO	DESCRIPTION  FRICAL AND COMMUNICATIONS UTILITIES
O1	ELECTRIC LINE: THIN LINE. 1Ø = SINGLE PHASE,
—3ØUP—	2Ø = 2-PHASE, 3Ø = 3-PHASE, O = OVERHEAD, U = UNDERGROUND, P = PRIMARY, S = SECONDARY
02	LIGHTNING ARRESTOR.
03 —	UTILITY POLE.
05	UTILITY, DISTRIBUTION SWITCH OR SWITCHING STATION.
06 M	UTILITY, PRIMARY ELECTRICAL HAND HOLE.  UTILITY SERVICES, MANHOLE.
07 (C)	UTILITY, COMMUNICATIONS MANHOLE.
08 E	UTILITY, ELECTRICAL MANHOLE.
09 T	UTILITY, TELEPHONE MANHOLE.
10 (C)	PRECAST CONCRETE, COMMUNICATION VAULT.
11 E	PRECAST CONCRETE, ELECTRICAL VAULT.
T T 13	PRECAST CONCRETE, TELEPHONE VAULT.
14 TP	PRECAST CONCRETE, MANHOLE, TRANSFORMER VAULT.
15 H	PRECAST CONCRETE, TRANSFORMER PAD.  HAND HOLE.
16 S	SUBSTATION.
17 T	TRANSFORMER.
	L POWER AND DISTRIBUTION
01 ———	FUSE WITH RATING (ONE-LINE DIAGRAM).
00 	DISCONNECT, FUSED (ONE-LINE DIAGRAM).
03	
04	DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
부	
\$	DISCONNECT WITH FUSE AND MOTOR STARTER COMBINATION (ONE-LINE DIAGRAM).
05	OVERLOAD RELAY (ONE-LINE DIAGRAM).
	STARTER (ONE-LINE DIAGRAM).
5	
(	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
08 <u> </u>	
<b>▼</b>	CIRCUIT BREAKER, MOLDED CASE WITH SHUNT TRIP (ONE-LINE DIAGRAM).
09 MCP	CIRCUIT BREAKER, MOTOR CIRCUIT PROTECTION
1	(ONE-LINE DIAGRAM).
10	CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
11 ,	
, <sup>[</sup> - ]	CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
GFP GFP	
13	MOTOR.  COMBINIATION DESIDENTIAL EVHALIST FAN/LIGHT
14 (F)	EXHAUST FAN OUTLET.
15	HEATER, ELECTRIC RESISTANCE.
16 WW	TRANSFORMER (OVER 1997)
<b>*************************************</b>	TRANSFORMER (ONE-LINE DIAGRAM).
<sup>17</sup> → ←	TRANSFORMER, CURRENT (ONE-LINE DIAGRAM).
18 <b>-+ -</b> -	BATTERY (ONE-LINE DIAGRAM).
$\stackrel{19}{\longrightarrow} {\longmapsto}$	CAPACITOR (ONE-LINE DIAGRAM).
21	DELTA CONNECTION (ONE-LINE DIAGRAM).
=	WYE CONNECTION (ONE-LINE DIAGRAM).
22	
"1H"	PANELBOARD (ONE-LINE DIAGRAM).
23	
"1H"	PANELBOARD WITH MAIN LUGS ONLY. BUS SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
24 225/3	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE
"1H"	AS SHOWN (ONE-LINE DIAGRAM).
25	
225/3	
"1H"	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER (ONE-LINE DIAGRAM).
60/3	
60/3	

WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).

	DESCRIPTION
SYMBOL LIGHTING	DESCRIPTION (REFER TO FIXTURE SCHEDULE FOR SYMBOLS)
01 (W-3)	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
02 (W-3)	FIXTURE IDENTIFICATION, EMERGENCY WITH BATTERY PACK, CONNECTED TO GENERATOR AS INDICATED: (W-3) INDICATES
02	FIXTURE TYPE AS SCHEDULED.
03 EM	EMERGENCY.
05 NL	NIGHT LIGHT: DO NOT SWITCH.
↑ 06 □	EGRESS DIRECTION ARROW (EXIT SIGNS).
07 <b>LV</b>	LOW VOLTAGE LIGHTING TRANSFORMER.
08	EXIT SIGN: SINGLE FACE; CEILING MOUNTED
<u>9</u> 9	EXIT SIGN: SINGLE FACE; WALL MOUNTED
10	EXIT SIGN: DOUBLE FACE; CEILING MOUNTED
	EXIT SIGN: DOUBLE FACE; WALL MOUNTED
LIGHTING	OCCUPANCY SENSOR, DUAL TECHNOLOGY,
02	OMNI-DIRECTIONAL, CEILING.
* 03	OCCUPANCY SENSOR, DUAL TECHNOLOGY, WALL.  OCCUPANCY SENSOR, DUAL TECHNOLOGY, DIRECTIONAL.
04	OCCUPANCY SENSOR, ULTRASONIC, OMNI-DIRECTIONAL,
* <sub>U</sub>	CEILING.  OCCUPANCY SENSOR CONTROL RELAY.
06	VACANCY SENSOR, DUAL TECHNOLOGY,
07	OMNI-DIRECTIONAL, CEILING.  VACANCY SENSOR, DUAL TECHNOLOGY, WALL.
08 (P)	PHOTOCELL.
09 <b>(</b> ) TC	TIME CLOCK.
10	
HR 1	HOUSE RELAY SCHEDULE INDICATOR.
101	LITE TOUCH STATION INDICATOR.
12	CEILING FAN.
13 SP	OCCUPANCY SENSOR, SWITCH PACK.
14	SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WA
15 \$	SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL
16 <b>*</b>	DIMMER SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
18	DIMMER SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
a,b	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATIO AND PROGRAMMING REQUIREMENTS)
19 DC	DIGITAL LIGHTING DIMMING CONTROLLER
20 LC	DIGITAL PLUG LOAD CONTROLLER
21 LS	LIGHTING NETWORK SWITCH.
22 NR	LIGHTING NETWORK ROUTER.
23 RC	DIGITAL LIGHTING ROOM CONTROLLER
25 SM	LIGHTING NETWORK SEGMENT MANAGER
	LIGHTING SPACE CONTROL TYPE. X INDICATES TYPE. SEE SCHEDULE / DIAGRAM.
01	RED CABLING TELEPHONE, WALL MOUNTED ("X" INDICATES QUANTITY OF
$\frac{\nabla^{X}}{\nabla^{2}}$	CABLES).  DATA CONNECTION: WIRELESS ACCESS POINT
03	(WAP). REQUIRES (2) DATA DROPS PER DEVICE
V W 04	TELEPHONE, WALL MOUNTED: WALL PHONE.  OUTLET, DATA COMMUNICATION ("X" INDICATES QUANTITY OF
05 <b>▼</b> X	CABLES).  OUTLET, BUILDING STANDARD COMBINATION TELEPHONE/ DATA
<b>V</b> 06 ▼	COMMUNICATION.  TWO-WAY EMERGENCY COMMUNICATION DEVICE PER IBC,
07	WALL MOUNTED IN RECESSED BOX.  TELEPHONE TERMINAL BOARD, FIRE TREATED PLYWOOD
08	PAINTED.  LAN RACK, FLOOR STANDING.
09 ——D——	DATA CABLE, CATEGORY 5 (ONE-LINE DIAGRAM).
10V	VOICE CABLE, CATEGORY 3 (ONE-LINE DIAGRAM).
•	RED CABLING IHC
01 V	IHC COMMUNICATIONS DEVICE (1 DATA).
02	IHC COMMUNICATIONS DEVICE (1 DATA / 1 ANALOG).
<b>V</b> 03 <b>▼</b>	IHC COMMUNICATIONS DEVICE (1 DATA / 1 ANALOG).  IHC COMMUNICATIONS DEVICE (1 DATA WALL PHONE).
04 <b>V</b>	IHC COMMUNICATIONS DEVICE (1 DATA WALL PHONE).  IHC COMMUNICATIONS DEVICE (2 DATA).
V 05 <b>▼</b> 3	IHC COMMUNICATIONS DEVICE (2 DATA).  IHC COMMUNICATIONS DEVICE (3 DATA).
06 <b>▼</b> 4	IHC COMMUNICATIONS DEVICE (4 DATA).
▼	
<sup>07</sup> <b>▼</b> 6	IHC COMMUNICATIONS DEVICE (6 DATA)
07 <b>▼</b> 6	IHC COMMUNICATIONS DEVICE (6 DATA).  IHC COMMUNICATIONS DEVICE PHYSIOLOGICAL MONITOR (1 DATA).

WAP IHC COMMUNICATIONS DEVICE WIRELESS ACCESS POINT (2

	ABBREV	IATI	ONS
	NOTE: ALL ABBREVIAT	IONS MAY	NOT BE USED.
1P	SINGLE POLE	kV	KILOVOLT
1PH 1WAY	SINGLE-PHASE ONF-WAY	kVA kVAR	KILOVOLT AMPERE KILOVOLT AMPERE REACTIVE
2/C	TWO-CONDUCTOR	kW	KILOWATT
2WAY	TWO-WAY	kWh	KILOWATT HOUR
3/C 3WAY	THREE-CONDUCTOR THREE-WAY	LED LFMC	LIGHT EMITTING DIODE LIQUID TIGHT FLEXIBLE METAL
4OUT	QUADRUPLE RECEPTACLE	LFIVIC	CONDUIT
	OUTLET	LFNC	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
4PDT 4PST	FOUR-POLE DOUBLE THROW FOUR-POLE SINGLE THROW	LPS	LOW PRESSURE SODIUM
4W	FOUR-WIRE	LRA	LOCKED ROTOR AMPS
4WAY	FOUR-WAY	LTG I V	LIGHTING LOW VOLTAGE
A AC	ABOVE COUNTER ARMORED CABLE	MATV	MASTER ANTENNA TELEVISION
ADA	AMERICANS WITH DISABILITIES	14437	SYSTEM
ADJ	ACT ADJACENT	MAX MC	MAXIMUM METAL CLAD
AFF	ABOVE FINISHED FLOOR	MCA	MINIMUM CIRCUIT AMPS
AFG	ABOVE FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
AIC	AMPERE INTERRUPTING CAPACITY	MCC MCP	MOTOR CONTROL CENTER MOTOR CIRCUIT PROTECTION
ALUM	ALUMINUM	MDP	MAIN DISTRIBUTION PANEL
AMP	AMPERE	MG	MOTOR GENERATOR
ANN AP	ANNUNCIATOR ACCESS POINT (WIRELESS	MH MIN	MANHOLE MINIMUM
7.4	DATA)	MLO	MAIN LUGS ONLY
AR ASC	AS REQUIRED  AMPS SHORT CIRCUIT	MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER	NA	NOT APPLICABLE
A) /	SWITCH	NC	NORMALLY CLOSED
AV AWG	AUDIO VISUAL AMERICAN WIRE GAGE	NEC NEMA	NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL
ВВ	BUCK-BOOST TRANSFORMER	INEW/	MANUFACTURERS
XFMR C	CEILING MOUNTED	NFC	ASSOCIATION NATIONAL FIRE CODE
CATV	COMMUNITY ANTENNA	NFPA	NATIONAL FIRE PROTECTION
СВ	TELEVISION CIRCUIT BREAKER	NIC	ASSOCIATION NOT IN CONTRACT
CCBA	CUSTOM COLOR AS SELECTED	NL	NIGHT LIGHT
	BY ARCHITECT	NO	NORMALLY OPEN
CCTV CF/CI	CLOSED CIRCUIT TELEVISION CONTRACTOR FURNISHED/	NTS OC	NOT TO SCALE ON CENTER
	CONTRACTOR INSTALLED	OCP	OVER CURRENT PROTECTION
CF/OI CFBA	CONTRACTOR FURNISHED/ OWNER INSTALLED CUSTOM FINISH AS SELECTED	OF/CI	OWNER FURNISHED/ CONTRACTOR INSTALLED
CKT	BY ARCHITECT CIRCUIT	OF/OI	OWNER FURNISHED/ OWNER INSTALLED
СМ	CONSTRUCTION MANAGER	OFP OH DR	OBTAIN FROM PLANS OVERHEAD (COILING) DOOR
CND CO	CONDUIT CONVENIENCE OUTLET	OL	OVERLOAD
COR	CONTRACTING OFFICER'S	PB PF	PUSHBUTTON POWER FACTOR
OD	REPRESENTATIVE	PH	PHASE
CP CT	CONTROL PANEL CURRENT TRANSFORMER	PNL	PANEL
CTV	CABLE TELEVISION	PT PTZ	POTENTIAL TRANSFORMER PAN/TILT/ZOOM
CU dBA	COPPER UNIT OF SOUND LEVEL	QTY	QUANTITY
DPDT	DOUBLE POLE, DOUBLE	R	REMOVE
DC	THROW	RCP RMC	REFLECTED CEILING PLAN RIGID METAL CONDUIT
DS EA	DISCONNECT SWITCH EACH	RNC	RIGID NONMETAL CONDUIT
EM	EMERGENCY	RPM	REVOLUTIONS PER MINUTE REMOVE AND RELOCATE
EMT ENT	ELECTRICAL METALLIC TUBING ELECTRIC NONMETALLIC	RR S/S	START/STOP
EINI	TUBING	SCA	SHORT CIRCUIT AMPS
EPO	EMERGENCY POWER OFF	SCBA	STANDARD COLOR AS SELECTED BY ARCHITECT
EQUIP EX	EQUIPMENT EXISTING	SF	SQUARE FOOT (FEET)
F	FURNITURE MOUNTED	SFBA	STANDARD FINISH AS SELECTED BY ARCHITECT
FA	FIRE ALARM	SPD	SURGE PROTECTIVE DEVICE
FCP FLA	FIRE ALARM CONTROL PANEL FULL LOAD AMPS	SPDT	SINGLE POLE, DOUBLE THROW
FMC	FLEXIBLE METAL CONDUIT	SPEC SPST	SPECIFICATION SINGLE POLE, SINGLE THROW
FOB	FREIGHT ON BOARD	ST	SINGLE THROW
FVNR	FULL VOLTAGE NON-REVERSING	SWBD	SWITCHBOARD
FVR	FULL VOLTAGE REVERSING	SWGR TL	SWITCHGEAR TWIST LOCK
G GEN	GROUND GENERATOR	TP	TELEPHONE POLE
GFCI	GROUND FAULT INTERRUPTER	TP	TWISTED PAIR
GFP	GROUND FAULT PROTECTION	TTB TV	TELEPHONE TERMINAL BOARD TELEVISION
HD HID	HEAVY DUTY HIGH INTENSITY DISCHARGE	TVSS	TRANSIENT VOLTAGE SURGE
HOA	HAND-OFF-AUTOMATIC	TYP	SUPPRESSER TYPICAL
HP	HORSE POWER	UF	UNDERFLOOR
HPF HPS	HIGH POWER FACTOR HIGH PRESSURE SODIUM	UGND	UNDERGROUND
HV	HIGH VOLTAGE	UPS	UNINTERRUPTIBLE POWER SUPPLY
HZ I/O	HERTZ INPUT/ OUTPUT	V	VOLTS
I/O IG	ISOLATED GROUND	VA VFC/VF	VOLT AMPERE VARIABLE FREQUENCY MOTOR
IMC	INTERMEDIATE METAL	D VFC/VF	CONTROLLER

## **DEFINITIONS**

INSULATED/ ISOLATED

CONDUIT

INFRARED

J-BOX JUNCTION BOX

NOTE: ALL DEFINITIONS MAY NOT BE USED.

WITH

WITHOUT

WP WEATHERPROOF

XFMR TRANSFORMER

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY

THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE

AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

#### GENERAL ELECTRICAL NOTES

CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.

- OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
- A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
- B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES. AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
- C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE. INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.
- EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.
- SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.
- REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.
- ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

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EC601	SYSTEMS DIAGRAMS & DETAILS

FA101 FIRE ALARM PLAN LEVEL 1

**ARCHITECTS** 

NJRA Architects, Inc. 5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



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NJRA Project # Construction Documents

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SHEET INDEX, ABBREVIATIONS, AND GENERAL NOTES

	SYMBOLS LEGEND
SYMBOL	DESCRIPTION
© ELECTRICA	AL POWER AND DISTRIBUTION
30	
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).
31	TRANSFER SWITCH (ONE-LINE DIAGRAM).
DMM	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
<sup>33</sup> <b>←↓</b>  ı	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).
34 <b>G</b>	GENERATOR, ANNUNCIATOR (ONE-LINE DIAGRAM).
35 G	GENERATOR, POWER (ONE-LINE DIAGRAM).
36 (M)	METER.
37 BBF	BROAD BAND FILTER (ONE-LINE DIAGRAM).
38 IVFC VFD	VARIABLE FREQUENCY MOTOR CONTROLLER (ONE-LINE
39	DIAGRAM).  DIODE (ONE-LINE DIAGRAM).
40	AERIAL SERVICE WEATHER HEAD (ONE-LINE DIAGRAM).
41	<u> </u>
42	DISCONNECT SWITCH, FUSED.
43	DISCONNECT SWITCH, UNFUSED.
<b>⊠</b> ₁	STARTER, COMBINATION WITH DISCONNECT SWITCH.
45	STARTER OR MOTOR CONTROLLER.
46 —	PUSHBUTTON.
•	PUSHBUTTONS, MOTOR CONTROL.
47	PANELBOARD CABINET, FLUSH MOUNTED.
48	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
49	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
50 DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
51 LP	LIGHTING RELAY, CONTACTOR PANEL, OR DIMMING ENCLOSURE.
52 <b>=</b>	LIGHTING CONTROL STATION.
53	DIMMING ENTRY STATION OR CONTROL STATION, FLUSH MOUNTED.
54	CENTRAL PROCESSOR UNIT.
55 \$ST	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
56 75	TRANSFORMER: NUMBER INDICATES kVA.
57 B B	BUSWAY.
58  T   T	DUCT, TROLLEY.
59	RELAY CONTACT, NORMALLY CLOSED (ONE-LINE DIAGRAM).
60	
→ <b>-</b>	RELAY CONTACT, NORMALLY OPEN (ONE-LINE DIAGRAM).
62	PUSHBUTTON, NORMALLY CLOSED (ONE-LINE DIAGRAM).
63 0 0	PUSHBUTTON, NORMALLY OPEN (ONE-LINE DIAGRAM).
64	PRESSURE SWITCH, CLOSE ON INCREASE (ONE-LINE DIAGRAM).
	PRESSURE SWITCH, OPEN ON INCREASE (ONE-LINE DIAGRAM).
6	SWITCH, NORMALLY CLOSED FLOAT (ONE-LINE DIAGRAM).
66	SWITCH, NORMALLY OPEN FLOAT (ONE-LINE DIAGRAM).
67	SWITCH, NORMALLY CLOSED LIMIT (ONE-LINE DIAGRAM).
68	SWITCH, NORMALLY OPEN LIMIT (ONE-LINE DIAGRAM).
69 -0-50-	SWITCH, NORMALLY CLOSED TEMPERATURE ACTIVATED (ONE-LINE DIAGRAM).
70 -0-	SWITCH, NORMALLY OPEN TEMPERATURE ACTIVATED (ONE-LINE DIAGRAM).
71 -0-	SWITCH, NORMALLY CLOSED TIME DELAY (ONE-LINE DIAGRAM).
72 -0_TO-	SWITCH, NORMALLY OPEN TIME DELAY (ONE-LINE DIAGRAM).
73 –07.0-	SWITCH, NORMALLY CLOSED FOOT OPERATED (ONE-LINE
74	DIAGRAM).  SWITCH, MULTIPOSITION (ONE-LINE DIAGRAM).
75	SWITCH, SINGLE BREAK (ONE-LINE DIAGRAM).
76	SPECIALIZED TRANSFER SWITCH (ONE-LINE DIAGRAM).
77 HC	ACCESSIBLE DOOR ENTRY PUSH PLATE OPERATOR.
78	CIRCUIT BREAKER, DRAW OUT (ONE-LINE DIAGRAM).

		SYMBOLS LEGEND
5	SYMBOL	DESCRIPTION
DO FII	RE ALAR	M
)1	FSA	FIRE SYSTEM ANNUNCIATOR.
)2	FCP	FIRE ALARM CONTROL PANEL, SEMI-RECESSED.
)3	FPS	FIRE ALARM NOTIFICATION POWER SUPPLY.
)4	FTR	FIRE ALARM TRANSPONDER OR TRANSMITTER.
)5	HVA	SMOKE CONTROL PANEL
06	С	AUTOMATIC DOOR CLOSERS: DOOR CLOSERS SHALL BE FURNISHED WITH DOOR HARDWARE AND CONNECTED TO BY FIRE ALARM INSTALLERS.
)7	СМ	CONTROL MODULE.
8(	MM	MONITOR MODULE.
)9		
10	Р	FIRE ALARM MANUAL PULL STATION.
	R	SHUT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE.
11	₽	MAGNETIC DOOR HOLDER.
12	<b>C</b> <sub>A</sub>	FIRE SERVICE OR EMERGENCY TELEPHONE STATION, ACCESSIBLE.
13		FIRE SERVICE OR EMERGENCY TELEPHONE STATION, HANDSET.
14		FIRE SERVICE OR EMERGENCY TELEPHONE STATION, JACK.
15	<u>S</u>	DETECTOR, SMOKE.
16	<b>S</b> <sup>A</sup>	DETECTOR, SMOKE WITH AUXILIARY CONTACT.
17	2 <sub>BR</sub>	DETECTOR, SMOKE, BEAM RECEIVER.
18	S BL	DETECTOR, SMOKE, BEAM TRANSMITTER.
19	S E	
20		DETECTOR, SMOKE, ELEVATOR RECALL DESIGNATION.
21	<b>S</b> G	DETECTOR, SMOKE WITH GUARD.
22	<b>?</b> R	DETECTOR, SMOKE, RESIDENTIAL.
	<u>\$</u>	DETECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.
23		DETECTOR, HEAT.
24	$\geqslant$	INDICATOR LAMP.
25	$\boxtimes$	STROBE.
26	75	STROBE. SUBSCRIPT INDICATES CANDELA RATING.
27	WP	ALARM, HORN/SPEAKER, WEATHERPROOF.
28		ALARM, HORN/STROBE, ONE ASSEMBLY.
29	75	ALARM, HORN/STROBE, ONE ASSEMBLY. SUBSCRIPT
30		INDICATES CANDELA RATING.  ALARM, CHIME/STROBE, ONE ASSEMBLY.
31		ALARM, HORN/STROBE WITH GUARD, ONE ASSEMBLY.
32		
33		ALARM, MINI HORN/STROBE, ONE ASSEMBLY.
34	E -	SPEAKER, EVACUATION.
35	ME .	SPEAKER, EVACUATION, COMBINATION STROBE.
	$\Diamond$	DETECTOR, FLOW SWITCH: FLOW SWITCHES SHALL BE PROVIDED AND INSTALLED WITH FIRE SPRINKLER SYSTEM AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.
36		DETECTOR, TAMPER SWITCH WITH VALVE: TAMPER SWITCHES SHALL BE PROVIDED AND INSTALLED WITH FIRE SPRINKLER SYSTEM AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.
37	SD	SMOKE DAMPER.
38	│ <b>③</b> FSD	FIRE AND SMOKE DAMPER.
39	$\overline{\Box}$	BELL (GONG).
10	co	DETECTOR, CARBON MONOXIDE.
11	<u></u>	DETECTOR, SMOKE/STROBE, RESIDENTIAL.
12	<u></u>	ALARM, HORN/STROBE, ONE ASSEMBLY, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
13	75	ALARM, HORN, CEILING MOUNTED. SUBSCRIPT INDICATES
	<b>\rightarrow</b>	CANDELA RATING.

00	DESCRIPTION
	OGY SYSTEMS
01	TECHNOLOGY SYSTEM CABLE. SEE SPECIFIC JOB EQUIPMENT LIST FOR APPLICABLE DESIGNATIONS.
	EXAMPLES:
X	C = CONTROL CABLE G = GROUND CABLE, 10 AWG, 1 CONDUCTOR, GREE INSULATED
	M = MICROPHONE CABLE S = SPEAKER CABLE, 70 VOLT SYSTEM
	Z = SPEAKER CABLE, 8 OHM SYSTEM
<sup>02</sup> S <sub>#</sub>	SPEAKER, CEILING MOUNTED.
<sup>03</sup> +S <sub>#</sub>	SPEAKER, WALL MOUNTED.
<sup>04</sup> S <sub>4</sub>	SPEAKER, 4".
<sup>05</sup> § <sub>6</sub>	SPEAKER, 6".
<sup>06</sup> § <sub>8</sub>	SPEAKER, 8".
<sup>07</sup> S <sub>12</sub>	SPEAKER, 12".
08 S <sub>B</sub>	SPEAKER, BLIND MOUNT.
09 S <sub>E</sub>	SPEAKER, EXISTING.
10 S <sub>H</sub>	HORN.
11 S <sub>HW</sub>	HORN, WEATHER RESISTANT.
12 S <sub>M</sub>	SPEAKER, MASKING.
13 S <sub>R</sub>	SPEAKER, RECESSED.
1.1	SPEAKER, SURFACE.
15 Jyy	
16 HXX	SPEAKER, USER DEFINED.
17	SPEAKER, HIGH FREQUENCY.
18	SPEAKER, LOW FREQUENCY.
	SPEAKER ENCLOSURE (CLUSTER).
19 .	
19 -	CALL SWITCH, INTERCOM.
20	MICROPHONE, TABLE OR LECTERN MOUNTED.
21	EQUIPMENT CABINET.
22	MEDIA CONNECTION PLATE.
23	AUDIO/VISUAL OUTLET.
24 ======	SCREEN, PROJECTION, CEILING MOUNTED.
25	DDO IECTOD CENTUC MONTES
	PROJECTOR, CEILING MOUNTED.
26 V	VIDEO CONFERENCING CAMERA.
27 (CP)	CONTROL PANEL.
28 M	MICROPHONE INPUT.
29 M	MICROPHONE INPUT, FLOOR MOUNTED.
30 R	REMOTE CONTROL INPUT.
31 (\$)	POWER SWITCH.
32 S	SPEAKER SWITCH OR INPUT.
33 (SV)	SOURCE SWITCH/VOLUME CONTROL.
34 _	
35 (V)	TAPE RECORD OUTPUT.
36 III	VOLUME CONTROL.
37 S	HUB CABINET.
	VIDEO MONITOR.
39	AUDIO DISTRIBUTION AMPLIFIER.
40	AUDIO PATCH PANEL.
CP#	CONNECTION PANEL.
41 DVD	DIGITAL VERSATILE DISC (DVD) PLAYER.
42 EP	ASSISTED LISTENING EMITTER PANEL.
43 K	SIGNAL RELAY DPDT WITH SOCKET.
44 LD	LINE DRIVER (VARIZONE DIGITAL PAGING SYSTEM).
45 PAM	POWER AMP MODULE (VARIZONE DIGITAL PAGING SYSTEM).
46 RDA	RGBHV DISTRIBUTION AMPLIFIER.
47 RM	REMOTE CONTROL PANEL.
48 RMS	RGBHV MATRIX SWITCHER.
49 TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER, AC LINE CONDITIONER.
50 VCR	VIDEO CASSETTE RECORDER.
51 VDA	COMPOSITE VIDEO DISTRIBUTION AMPLIFIER.
52 VMS	COMPOSITE VIDEO MATRIX SWITCHER.
53	
VPP 54 VMC	VIDEO PATCH PANEL.
55 YMS	S-VIDEO MATRIX SWITCHER.
PA	AMPLIFIER (ONE-LINE DIAGRAM).
56	
1	POWER BRIDGE (VARIZONE DIGITAL PAGING SYSTEM).
РВ	
57 -WV-	TERMINATOR (VARIZONE DIGITAL PAGING SYSTEM).
57 -WV- 58 <b>†</b>	TERMINATOR (VARIZONE DIGITAL PAGING SYSTEM).  DIODE (ONE-LINE DIAGRAM).
57 -W- 58 <b>*</b> 59 W/M	
57 -WV- 58 <b>*</b> 59	DIODE (ONE-LINE DIAGRAM).

SYMBOL	SYMBOLS LEGEND  DESCRIPTION
©LOCK	DEGORIT HOR
01 _	
02 (C)	CLOCK.
+C) <sub>G</sub>	CLOCK, SURFACE WITH WIRE GUARD.
NURSE CA	LL
<sup>01</sup>	JUNCTION BOX.
02	CORRIDOR LIGHT.
03 <b>A</b> B	BATHROOM PULL CORD STATION.
04 <b>P</b>	DUTY STATION.
05 <b>P</b>	EMERGENCY ASSISTANCE CALL STATION.
06	
00 E CB	EMERGENCY ASSISTANCE CODE BLUE CALL STATION.
P	PATIENT STATION.
Ś	STAFF STATION.
NCM	TOUCH SCREEN NURSE CALL MASTER STATION.
10 ZLC	ZONE LIGHT CONTROLLER.
11 CU	NURSE CALL AREA CONTROL UNIT & POWER SUPPLIES.
CCTV	
01—P	CCTV CABLE, POWER.
02V	
03	CCTV CABLE, VIDEO SIGNAL.
O4 C	CCTV HEADEND EQUIPMENT.
М	CCTV MONITOR.
05	CCTV CAMERA/ENCLOSURE WITH LENS, TYPICAL. SEE SCHEDULE
06 PTZ>	CCTV CAMERA WITH PAN, TILT AND ZOOM.
07	
360°	PANNING CAMERA TRANSVERSE ANGLE.
SECURITY	<u> </u>
01—x_	SECURITY CABLE. SEE EQUIPMENT SCHEDULE FOR CABLE
02	TYPE.
O3 ACC	ACCESS CONTROL HEADEND EQUIPMENT.
CTR	SECURITY CONTROL PANEL.
04 SEC	INTRUSION DETECTION HEADEND EQUIPMENT.
05 #1	CARD ACCESS DOOR TYPE #1 OR AS NOTED. SEE SCHEDULE.
06 CR	CARD READER.
07 KCR>	KEYPAD/CARD READER COMBINATION.
08	DOOR SWITCH, BALANCED MAGNETIC CONTROL.
09	EXIT REQUEST.
<sup>09</sup>	
• RL	REMOTE DOOR RELEASE BUTTON.
12	BELL.
	BUZZER.
13	BUZZER, COMBINATION BELL.
14	SENSOR, BURIED VEHICULAR.
15	SENSOR, GLASS BREAK.
16	SENSOR, VOLUMETRIC.
17 (CA)	CONTROLLED ACCESS POINT.
18 (IC)	INTERCOM STATION.
10	DUAL TECHNOLOGY PASSIVE INFRARED SENSOR AND
13 (IRU) 20	ULTRASONIC MOTION DETECTOR.
21 (IR)	PASSIVE INFRARED SENSOR.
P	PANIC DURESS SWITCH.
22 U	ULTRASONIC MOTION DETECTOR.
23 AP	ANNUNCIATOR PANEL.
24 MSI	MASTER STATION, INTERCOM.
TV DISTRIE	BUTION
01T	TV DISTRIBUTION CABLE, INDIVIDUAL DROPS.
02—TR.	TV DISTRIBUTION CABLE, TRUNK.
03	
04	COMBINER.
05 N	DIRECTIONAL COUPLER.
DA	DISTRIBUTION AMPLIFIER (ONE-LINE DIAGRAM).
06 SPL	SPLITTER (ONE-LINE DIAGRAM).
07	TV OUT I ST
08 (1)	TV OUTLET.
Y	SATELLITE ANTENNA.
09	TV ANTENNA (ONE-LINE DIAGRAM).
10	





**Fooele Valley Dialysis Clinic Expansic** 

19230.

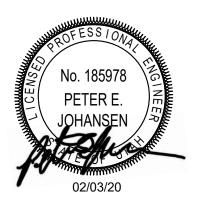
NJRA Project # 19230.00

Construction Documents Feb 03, 2020

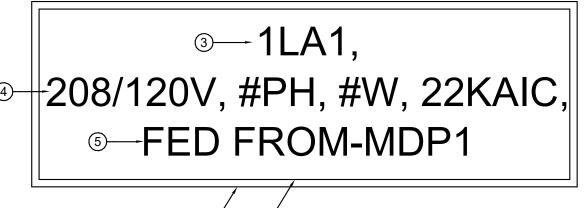
SYMBOLS LEGEND

\_\_EE002





- (1) LABEL TO BE PROVIDED AT EACH SWITCHBOARD, PANELBOARD, DISCONNECT/STARTER. LABEL IS TO BE 3" X REQUIRED LENGTH X 1/16" LAMINATED 2-PLY PLASTIC LAMACOID. LETTERS SHALL BE FORMED BY ENGRAVING OUTER WHITE PLY, EXPOSING BLACK PLY BENEATH.
- (2) LABEL IS TO BE MOUNTED USING DOUBLE SIDED ADHESIVE TAPE COVERING THE BACK OF THE LABEL.
- (3) FIRST LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. REPLACE THE LETTER/NUMBER WITH THOSE FOUND ON THE ONE-LINE DIAGRAM.
- 4 SECOND LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. THE FOLLOWING SHALL BE PROVIDED, VOLTAGE, PHASE, NUMBER OF WIRES, AND AIC RATING OF DEVICE.
- (5) THIRD LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. PROVIDE "FED FROM-" AND REPLACE MDP1 WITH THE DEVICES NAME THAT FEEDS THE PANELBOARD.



NOTE: EMERGENCY PANELS SHALL USE LAMACOID WITH RED OUTERPLY, EXPOSING WHITE LETTERING BENEATH. CONTRACTOR TO USE SAME LABEL SCHEME EXCEPT FIRST 'X' IS REPLACED WITH 'E' FOR EMERGENCY. SECOND 'X' TO BE 'L' FOR LOW OR 'H' FOR HIGH VOLTAGE (480/277V). LAST '#' TO BE REPLACED WITH LETTER INDICATING LOCATION OF PANEL.

# TYPICAL PANELBOARD/SWITCHBOARD LABEL SCALE: NTS

(1) LABEL TO BE PROVIDED THAT IS TO BE 4" X REQUIRED LENGTH X 1/16" LAMINATED 2-PLY PLASTIC LAMACOID. LETTERS SHALL BE FORMED BY ENGRAVING OUTER WHITE PLY, EXPOSING BLACK PLY BENEATH.

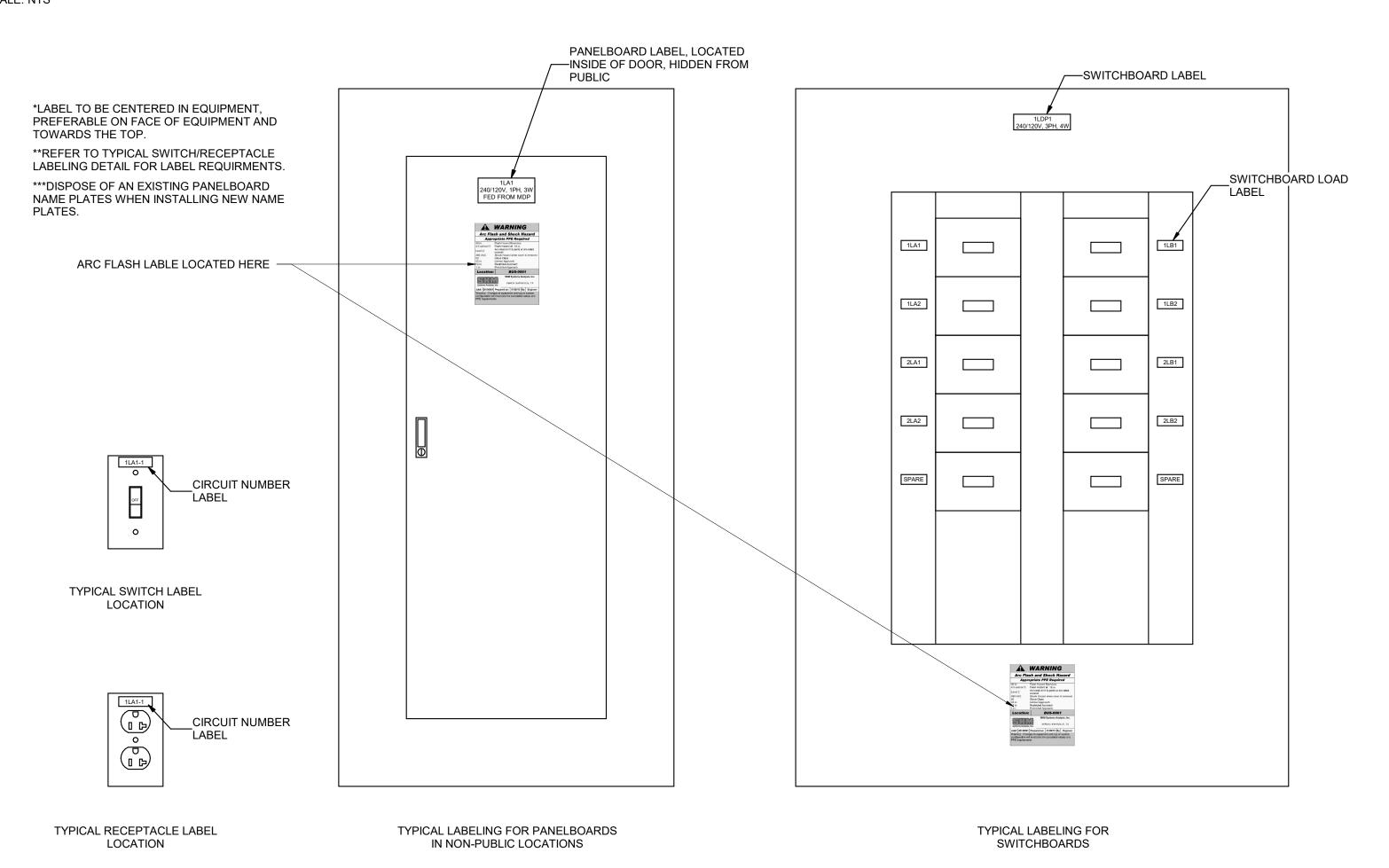
2 LABEL IS TO BE MOUNTED USING DOUBLE SIDED ADHESIVE TAPE COVERING THE BACK OF THE LABEL.

(3) FIRST LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, WITH THE EQUIPMENT ID MATCHING PLANS.

(4) SECOND LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. THE FOLLOWING SHALL BE PROVIDED, VOLTAGE, PHASE, NUMBER OF WIRES, AND AIC RATING OF GEAR. (5) THIRD & FOURTH LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. LABEL WITH ACTUAL AVAILABLE FAULT CURRENT AND ASSOCIATED CLEARING TIME.

₃—MDP1, -480Y/277V, 3PH, 4W, 22KAIC, 5 AVAILABLE FAULT CURRENT - XX,XXX A MCB CLEARING TIME - X.XX SECONDS

# TYPICAL MAIN SERVICE EQUIPMENT/GEAR LABEL SCALE: NTS



TYPICAL SWITCH, RECEPTACLE AND PANELBOARD LABELING LOCATION DETAIL

Dialysis

NJRA Project # 19230.00 Construction Documents Feb 03, 2020

> TYPICAL LABELING DETAILS

						PA	11	ΙE	L:	"1		1"						-	
/OLTS	S/PHA	SE/WIRE:		PAN	EL SIZ	ZE & TYPE: MAIN SIZE AND T					FROI		CABINET: LOCATION:		NO	TES:			
		PH 4 WIRE				D, BOLT-ON 225 AMPERE MAI		GS					SURFACE ELEC A135						
	SSORI					RECTORY, IDENTIFICATION, GROUN								RATIN	G: 220	200			
						T							Ale	-			OCD		01/5
CKT		OCP		OAD (k					HASE						AD (k\	, ,	OCP		CKT
NO		POLE BKR		_	CO	DESCRIPTION		4		3	_		DESCRIPTION	CO			BKR POLE		NO
1	20	1	0.0	0.0	0.7	CO HOME TRAINING ROOM A138	0.7	1.3	0.7	4.4			CO ROOM A104, A102	1.3	0.0	0.0	1	20	2
3	20	1	0.0	0.0	0.7	CO EXAM/ HOME TRAINING ROO			0.7	1.1	0.7	0.5	CO SHARED OFFICE A104	1.1	0.0	0.0	1	20	4
5 7	20	1	0.0	0.0	0.7	CO ROOM A146, A145 CO STAFF BREAK/CONFERENCE	0.0	4.4			0.7	0.5	CO ROOM A121, A122 CO WAITING A101	0.5	0.0	0.0	1	20	6 8
9	20	1	0.0	0.0	0.2	CO STAFF BREAK/CONFERENCE	0.2	1.1	0.2	0.4			CO WATTING A101	0.4	0.0	0.0	1	20	10
11	20	1	0.0	0.0	0.2	CO STAFF BREAK/CONFERENCE			0.2	0.4	0.2	0.2	CO NOURISHMENT A105	0.4	0.0	0.0	1	20	12
13	20	1	0.0	0.0	1.1	CO MANAGER OFFICE A130	1.1	0.2			0.2	0.2	CO NOURISHMENT A105	0.2	0.0	0.0	1	20	14
15	20	1	0.0	0.0	0.9	CO STORAGE A132	1.1	0.2	0.9	0.2			CO NOURISHMENT A105	0.2	0.0	0.0	1	20	16
17	20	1	0.0	0.0	1.3	CO STAFF BREAK/CONFERENCE			0.9	0.2	1.3	0.5	CO ROOM A142, A104	0.2	0.0	0.0	1	20	18
19	20	1	0.0	0.0	1.1	CO ROOM A131, A135	1.1	0.4			1.5	0.0	CO EXTERIOR	0.4	0.0	0.0	1	20	20
21	20	1	0.0	0.0	0.7	ROOM A123, A128, A127, A125	1.1	0.4	0.7	0.4			LIGHTING ROOM A146, A145, A144,	0.0	0.0	0.4	1	20	22
23	20	1	0.0	0.0	1.1	CO ROOM A139, A137			0.7	0.4	1.1	0.8	LIGHTING ROOM A128, A127, A104,	0.0	0.0	0.8	1	20	24
25	20	1	0.0	0.0	0.7	CO FUTURE EXAM/ HOME	0.7	1.0				0.0	LIGHTING ROOM A134, A133, A141,	0.0	0.0	1.0	1	20	26
27	20	1	0.0	0.0	0.5	CO PRIVATE/ISOLATION A129	0.7	1.0	0.5	0.2			CO NOURISHMENT A105	0.2	0.0	0.0	1	20	28
29	20	1	0.0	0.0	1.1	CO LAB ALCOVE A116			0.0	0.2	1.1	0.7	CO ROOM A106, A107	0.7	0.0	0.0	1	20	30
31	20	1	0.0	0.0	0.4	CO ROOM A117, A118	0.4	0.7				0	CO ROOM A108, A110	0.7	0.0	0.0	1	20	32
33	20	1	0.0	0.0	0.7	CO ROOM A117, A118, A119	0.1	0.1	0.7	0.9			CO ROOM A112, A111	0.9	0.0	0.0	1	20	34
35	20	1	0.0	0.0	0.9	CO ROOM A114, A113			0	0.0	0.9	0.0	SPARE				1	20	36
37	20	1	0.0	0.0	0.9	CO ROOM A145, A109, A115	0.9	0.0			0.0	0.0	SPARE	<b>+</b>			1	20	38
39	20	1	0.0	0.0	0.8	CO ROOM A142, A115, A143			0.8	0.0			SPARE				1	20	40
41	20	1	0.0	0.0	0.5	CO ROOM A120, A121, A124					0.5	0.0	SPARE				1	20	42
43	20	1	0.0	0.2	0.5	CO ROOM A128, A127	0.7	0.0					SPARE				1	20	44
45	20	1	0.0	0.0	0.4	CO BAY #12 A120			0.4	0.0			SPARE				1	20	46
47	30	2	0.0	2.1	0.0	POWER TDR A126					1.0	0.0	SPARE				1	20	48
49							1.0	0.0					SPARE				1	20	50
51	20	1	0.0	1.2	0.0	POWER TDR A126			1.2	0.0			SPARE				1	20	52
53	30	2	0.0	2.1	0.0	POWER TDR A126					1.0	0.0	SPARE				1	20	54
55							1.0	0.0					SPARE				1	20	56
57	30	2	0.0	2.1	0.0	POWER TDR A126			1.0	0.0			SPARE				1	20	58
59											1.0	0.0	SPARE				1	20	60
61	20	1				SPARE	0.0	0.0					SPARE				1	20	62
63	20	1				SPARE			0.0	0.0			SPARE				1	20	64
65	20	1				SPARE					0.0	0.0	SPARE				1	20	66
67	20	1				SPARE	0.0	0.0					SPARE				1	20	68
69	20	1				SPARE			0.0	0.0			SPARE				1	20	70
71	20	1				SPARE					0.0	0.0	SPARE		-		1	20	72
73	20	1				SPARE	0.0	0.0					SPARE		-		1	20	74
75	20	1				SPARE			0.0	0.0			SPARE		-		1	20	76
77	20	1				SPARE					0.0	0.0	SPARE				1	20	78
79	20	1				SPARE	0.0	0.0					SPARE				1	20	80
81	20	1_		L		SPARE			0.0	0.0			SPARE				1	20	82
83	20	1				SPARE					0.0	0.0	SPARE				1	20	84
OTAI	S:					CONNECTED KVA PER PHASE	1	2	1	0	1	2	CONNEC	CTED TO	OTAL k	(VA =	34		

LIGHTING & CONTINUOUS LOADS: 2.2 kVA @ 125% = 2.8 kVA - 100% CONNECTED LOAD PLUS 25% AVERAGE AMPS PER PHASE = 77 RECEPTACLES: **24.6 kVA @ 70% = 17.3 kVA** - FIRST 10kVA @ 100%, REMAINDER @ 50% MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC ALL OTHER LOADS @ 100% : 7.6 kVA BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCAKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI

CONNECTED AMPS PER PHASE 105 86 99

NEC DIVERSIFIED LOAD CALCULATIONS

AVERAGE CONNECTED AMPS PER PHASE = 95

OLT!	S/PHA	SE/WIR	E:			MAIN SIZE & TYPE:	LOCATION:	NOTES:			
20/2	18, V80	PH, 4 W	'IRE			225 AMPERE MAIN	ELEC A135				
	SSOR					FICATION, GROUNDING BAR		AIC RATING:			
KT	00			LOAD (kVA						SE LOAD	<del>`                                    </del>
NO		POLE	LTG	PWR	СО		PANEL / EQUIPMENT		Α	В	С
1	60	3	0.5	1.7	0.0		ELS		0.7	1.0	0.5
2	125	3	2.0	0.2	21.4		EC1		8.7	8.0	7.5
3	125	3	0.0	37.3	0.5		EQ1		13.0	11.2	13.7
4											
5											
6											
7											
8											
OTA	LS:				l.			CONNECTED kVA PER PHASE	22.4	20.2	21.7
							C	CONNECTED AMPS PER PHASE	189	168	183
								TOTAL CONNECTED kVA =	63.8		
							AVERAGE CC	NNECTED AMPS PER PHASE =	177		
IEC I	DIVERS	SIFIED I	LOAD CA	LCULATIO	ONS						
LIGH	ITING 8				_	<b>125% = 3.2 kVA</b> - 100% CONNEC <b>@ 73% = 16.0 kVA</b> - FIRST 10kVA	CTED LOAD PLUS 25%	TOTAL DIVERSIFIE	D kVA =	58.6	

VOLTS	S/PHA	SE/WIRE:		PAN	EL SIZ	ZE & TYPE: MAIN SIZE AND T	YPE:	;		FED	FROM:	CABINET:	LOCATION:		NC	OTES:				
120/20	8V, 3	PH 4 WIRE		22" \	W x 6"	D, BOLT-ON 125 AMPERE MAI	IN LU	GS		EDP		SURFACE	ELEC A135							
ACCE	SSOR	ES:		PAN	EL DIF	RECTORY, IDENTIFICATION, GROUN	IDING	BAR	1				AIC	RATIN	NG: 22	.000				
СКТ		ОСР	LC	DAD (k	VA)			P	HASE	LOA	D			LC	OAD (k\	<b>VA</b> )		ОСР		T
NO	AMP	POLE BKR				DESCRIPTION		A		 В	С	DES	CRIPTION		PWR		BKR	POLE	АМР	Ť
1	20	1	0.5	0.0	_	LTG A129, A116, A114, A113, A11		_					TATION WEST A109	1.1	0.0	0.0		1	20	$^{+}$
3	20	1	1.5	0.0	0.0	LTG A140, A138, A136, A137, A13			1.8	1.1		CO NURSE S	TATION EAST A115	1.1	0.0	0.0		1	20	$^{\dagger}$
5	20	1	0.0	0.0	0.7	CO ROOM A138, A136					0.7 1	.8 CO ME	D ROOM A124	1.8	0.0	0.0		1	20	+
7	20	1	0.0	0.0	0.2	CO STAFF BREAK/CONFERENCE	0.2	0.5				CO MEI	D ROOM A124	0.5	0.0	0.0		1	20	t
9	20	1	0.0	0.0	0.5	CO FUTURE EXAM/ HOME			0.5	0.4			O MED A137	0.4	0.0	0.0		1	20	+
11	20	1	0.0	0.0	0.2	CO CLEAN SUPPLY A131					0.2 0		O MED A137	0.2	0.0	0.0		1	20	$^{+}$
13	20	1	0.0	0.0	0.2	CO TDR A126	0.2	0.2					O MED A137	0.2	0.0	0.0		1	20	+
15	20	1	0.0	0.0	0.2	CO TDR A126	0.2	V	0.2	0.2			O MED A137	0.2	0.0	0.0		1	20	$\dagger$
17	20	1	0.0	0.0	0.2	CO TDR A126			-		0.2 0		SAY #3 A108	0.2	0.0	0.0		1	20	t
19	20	1	0.0	0.2	0.4	CO ROOM A105, A142	0.5	0.5			0.2		SAY #2 A107	0.5	0.0	0.0		1	20	t
21	20	1	0.0	0.0	0.5	CO BAY #11 A119	0.0	0.0	0.5	0.2			SAY #2 A107	0.2	0.0	0.0		1	20	$^{+}$
23	20	1	0.0	0.0	0.2	CO BAY #11 A119			0.0	0.2	0.2 0		OM A106, A107	0.9	0.0	0.0		1	20	$\dagger$
25	20	1	0.0	0.0	0.9	CO BAY #10 A118	0.9	0.2			0.2		SAY #1 A106	0.2	0.0	0.0		1	20	t
27	20	1	0.0	0.0	0.2	CO BAY #10 A118	0.0	V	0.2	0.5			AY #14 A122	0.5	0.0	0.0		1	20	t
29	20	1	0.0	0.0	0.5	CO BAY #9 A117			J	0.0	0.5 0		AY #14 A122	0.2	0.0	0.0		1	20	+
31	20	1	0.0	0.0	0.2	CO BAY #9 A117	0.2	0.9			0.0		OM A122, A121	0.9	0.0	0.0		1	20	+
33	20	1	0.0	0.0	0.9	CO ROOM A116, A129	U	0.0	0.9	0.2			AY #13 A121	0.2	0.0	0.0		1	20	+
35	20	1	0.0	0.0	0.2	CO PRIVATE/ISOLATION A129			0.0	0.2	0.2 0		AY #12 A120	0.5	0.0	0.0		1	20	+
37	20	1	0.0	0.0	0.5	CO LAB ALCOVE A116	0.5	0.2			0.2 0		AY #12 A120	0.2	0.0	0.0		1	20	+
39	20	1	0.0	0.0	0.5	CO BAY #8 A114	0.0	0.2	0.5	0.0			SPARE					1	20	+
41	20	1	0.0	0.0	0.2	CO BAY #8 A114			0.0	0.0	0.2 0		SPARE		<b>-</b> -	<b></b>		1	20	+
43	20	1	0.0	0.0	0.9	CO BAY #7 A113	0.9	0.0			0.2 0		SPARE			<del></del>		1	20	+
45	20	1	0.0		0.2	CO BAY #7 A113	0.0	0.0	0.2	0.0			SPARE		+	<del></del>		1	20	$\dagger$
47	20	1	0.0	0.0	0.5	CO BAY #6 A112			0.2	0.0	0.5 0		SPARE					1	20	$\dagger$
49	20	1	0.0	0.0	0.2	CO BAY #6 A112	0.2	0.0					SPARE					1	20	$\dagger$
51	20	1	0.0	0.0	0.5	CO BAY #5 A111			0.5	0.0			SPARE					1	20	T
53	20	1	0.0	0.0	0.2	CO BAY #5 A111					0.2 0	.0	SPARE					1	20	T
55	20	1	0.0	0.0	0.5	CO BAY #4 A110	0.5	0.0					SPARE					1	20	T
57	20	1	0.0	0.0	0.2	CO BAY #4 A110			0.2	0.0		:	SPARE					1	20	T
59	20	1	0.0	0.0	0.9	CO ROOM A108					0.9 0	.0	SPARE					1	20	T
TOTAI	LS:					CONNECTED kVA PER PHASE	9	9		8	8		CONNEC	CTED T	OTAL I	kVA =		24		
						CONNECTED AMPS PER PHASE	7	<b>7</b> 3	6	7	63	AVE	RAGE CONNECTED AN	MPS PI	ER PH/	\SE =		67		
NEC D	IVERS	SIFIED LOAD	CALC	CULAT	IONS	OCHINED / WILL OF ENTINGE	•					7(0)	VICE CONNECTED A	VII OT I						
LIC	SHTIN	G & CONTINU	JOUS	LOAD	S: <b>2.0</b>	<b>kVA @ 125% = 2.5 kVA</b> - 100%	6 CO1	NNEC	TED I	LOAD	PLUS 2	5%	DIVE	ERSIFII	ED TOT	ΓAL k\	/A = 1!	Э		
						•						R @ 50%	AVERAG							
	AL	OTHER LOA	ADS @	<u>)</u> 100%	<b>6</b> :							L OTHER LOADS W @ 125% PER NEC	/ITH							

OLT	S/PHAS	SE/WIF	RE:		PAN	EL SIZ	ZE & TYPE: MAIN SIZE AND	TYPI	Ξ:		FED	FRO	M:	CABINET: LOCATION:		NO	OTES:			
20/2	08V, 3 F	PH 4 W	'IRE		22" V	N x 6"	D, BOLT-ON 100 AMPERE MA	AIN L	JGS		EDP			SURFACE ELEC A135						
CCE	SSORI	ES:			PAN	EL DIF	RECTORY, IDENTIFICATION, GROU	INDIN	IG BAR	}					AIC RATII	NG: 22	000			
KT		OCP		LO	AD (k	VA)			Р	HASE	E LOA	\D			LC	OAD (k	VA)	ОСР		CK1
10	AMP	POLE	BKR	LTG	PWR	СО	DESCRIPTION		Α	ı	В	(	С	DESCRIPTION	СО	PWR	LTG	BKR POLE	AMP	NO
1	20	1		0.5	0.0	0.0	LIGHTING ROOM A144, A142, A10.	0.5	5 0.0					SPARE				1	20	2
3	30	2		0.0	1.0	0.0	POWER GENERATOR			1.0	0.0			SPARE				1	20	4
5												0.0	0.0	SPARE				1	20	6
7	20	2		0.0	0.2	0.0	POWER GENERATOR	0.2	2 0.0					SPARE				1	20	8
)										0.0	0.0			SPARE				1	20	10
1	20	1		0.0	0.5	0.0	FPS ELEC A135					0.5	0.0	SPARE				1	20	12
3	20	1					SPARE	0.0	0.0					SPARE				1	20	14
5	20	1					SPARE			0.0	0.0			SPARE				1	20	16
7	20	1					SPARE					0.0	0.0	SPARE				1	20	18
9	20	1					SPARE	0.0	0.0					SPARE				1	20	20
1	20	1					SPARE			0.0	0.0			SPARE				1	20	22
3	20	1					SPARE					0.0	0.0	SPARE				1	20	24
5	20	1					SPARE	0.0	0.0					SPARE				1	20	26
7	20	1					SPARE			0.0	0.0			SPARE				1	20	28
9	20	1					SPARE					0.0	0.0	SPARE				1	20	30
1	20	1					SPARE	0.0	0.0					SPARE				1	20	32
3	20	1					SPARE			0.0	0.0			SPARE				1	20	34
5	20	1					SPARE					0.0	0.0	SPARE				1	20	36
7	20	1					SPARE	0.0	0.0					SPARE				1	20	38
9	20	1					SPARE			0.0	0.0			SPARE				1	20	40
1	20	1					SPARE					0.0	0.0	SPARE				1	20	42
TΑ	LS:						CONNECTED kVA PER PHASI		1		1		1		NNECTED 1					
							CONNECTED AMPS PER PHASI		6		9		4	AVERAGE CONNECT	ED AMPS P	ER PH	ASE =	5		
C I	DIVERS	IFIED	LOAD	CALC	ULAT	IONS														

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCAKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI

ALL OTHER LOADS @ 100% : 1.2 kVA

ALL OTHER LOADS @ 100%: 37.3 kVA

MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

OLT	S/PHA	SE/WIF	RE:		PAN	EL SIZ	E & TYPE:	MAIN SIZE AND	TYPE:	:		FED	FRON	<b>/</b> 1:	CABINET:	LOCATION:		NC	TES:				
20/20	08V, 3	PH 4 W	IRE		22" \	N x 6" [	O, BOLT-ON	125 AMPERE MA	IN LU	GS		EDP			SURFACE	ELEC A135							
CCE	SSOR	IES:			PAN	IEL DIR	ECTORY, IDENT	FICATION, GROUN	NDING	3 BAR						Al	C RATIN	<b>IG</b> : 22	000				
CKT		ОСР		LO	AD (k	VA)				Р	HASE	LOA	D				LC	AD (k\	/A)		ОСР		СКТ
NO	AMP	POLE	BKR	LTG	PWR	со	DESCI	RIPTION		A	Е	3	C	;	DES	CRIPTION	СО	PWR	LTG	BKR	POLE	AMP	NO
1	20	1		0.0	0.2	0.2	CO ME	CH A140	0.4														2
3	20	1		0.0	0.4	0.4	CO ME	CH A140			0.8												4
5	30	1		0.0	1.8	0.0	POWER N	MECH A140					1.8	0.0	;	SPARE					1	20	6
7	30	1		0.0	1.8	0.0	POWER N	MECH A140	1.8	0.0					;	SPARE					1	20	8
9	20	1		0.0	0.5	0.0	POWER CO	RRIDOR A146			0.5	0.0			;	SPARE					1	20	10
11	30	2		0.0	3.9	0.0	POWE	R OU-1B					2.0	0.0	;	SPARE					1	20	12
13									2.0	0.0					:	SPARE					1	20	14
15	20	2		0.0	3.9	0.0	POWE	R OU-1A			2.0	0.0			:	SPARE					1	20	16
17													2.0	0.0	:	SPARE					1	20	18
19	20	1		0.0	1.8	0.0	POWER N	MECH A133	1.8	0.0					:	SPARE					1	20	20
21	40	2		0.0	5.3	0.0	POWE	R CU-3			2.7	0.0			:	SPARE					1	20	22
23													2.7	0.0	:	SPARE					1	20	24
25	40	2		0.0	5.3	0.0	POWE	R CU-4	2.7	0.0					;	SPARE					1	20	26
27											2.7	0.0			;	SPARE					1	20	28
29	40	2		0.0	5.3	0.0	POWE	R CU-2					2.7	0.0	;	SPARE					1	20	30
31									2.7	0.0					;	SPARE					1	20	32
33	40	2		0.0	5.3	0.0	POWE	R CU-1			2.7	0.0			;	SPARE					1	20	34
35													2.7	0.0	:	SPARE					1	20	36
37	30	1		0.0	1.8	0.0	POWER N	MECH A103	1.8	0.0					:	SPARE					1	20	38
39	20	1			1		SP	ARE			0.0	0.0			;	SPARE					1	20	40
41	20	1			-		SP	ARE					0.0	0.0		SPARE					1	20	42
ОТА	LS:						CONNECTE	O kVA PER PHASE	1	13	1	1	1	4		CONNE	CTED T	OTAL I	«VA =		38		
							CONNECTED A	AMPS PER PHASE	1	11	9	3	11	16	AVEF	RAGE CONNECTED A	AMPS PE	ER PH	SE =		105		

LIGHTING & CONTINUOUS LOADS: - 100% CONNECTED LOAD PLUS 25% RECEPTACLES: **0.5 kVA @ 100% = 0.5 kVA** - FIRST 10kVA @ 100%, REMAINDER @ 50% MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

DIVERSIFIED TOTAL kVA = 38 AVERAGE AMPS PER PHASE = 105

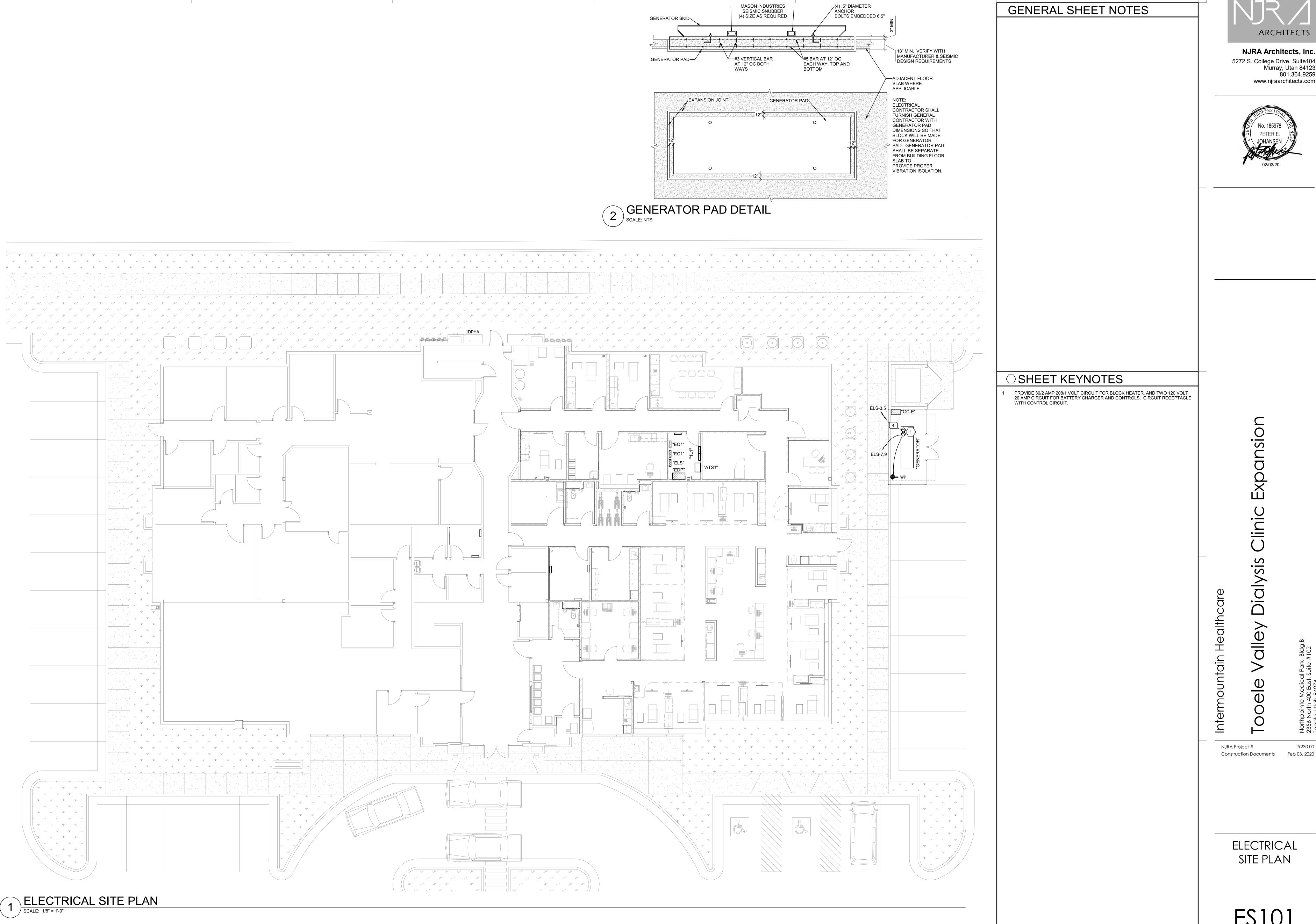
BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCAKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI

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PANEL SCHEDULES



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SITE PLAN

ES101

UNLESS OTHERWISE INDICATED, REMOVE ALL LIGHTING FIXTURES, OUTLETS, DEVICES AND EQUIPMENT IN HATCHED AREAS. REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO THE PANELBOARD OF ORIGINATION. SYSTEMATICALLY CHECK EACH BRANCH PANELBOARD CIRCUIT TO VERIFY EACH THAT CIRCUIT BREAKER NO LONGER HAS ANY ACTIVE LOADS, DISCONNECT THE WIRING AND TURN THE CIRCUIT BREAKER OFF. ANY REMAINING ACTIVE LOADS SHALL BE LABELED AT THE PANELBOARD AS TO WHAT LOAD IS SERVED.

UNLESS NOTED OTHERWISE REMOVE ALL LIGHTING FIXTURES DEVICES AND EQUIPMENT SHOWN DASHED. REMOVE CONDUIT AND WIRING BACK TO PANELBOARD OF ORIGIN OR TO FIRST ACTIVE DEVICE THAT REMAINS.

SALVAGE ALL POWER POLES, LIGHT FIXTURES, TWIST-LOCK RECEPTACLES AND WALLPLATES, CEILING SPEAKERS AND SECURITY AND FIRE ALARM DEVICES TO OWNER. PROTECT SALVAGED EQUIPMENT FROM DAMAGE.

PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID.

PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE.

REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, REROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL.

REMOVE ALL FIRE ALARM DEVICES WHERE EXISTING WALLS AND CEILINGS ARE BEING REMOVED, WITH ASSOCIATED CONDUIT AND WIRING. EXISTING FIRE ALARM DEVICES AND SYSTEM NOT INDICATED FOR REMOVAL SHALL REMAIN ACTIVE THROUGHOUT DEMOLITION AND CONSTRUCTION UNTIL THE NEW SYSTEM IS TESTED AND OPERATIONAL. MAINTAIN ALL CLASS A FIRE ALARM INITIATING AND INDICATING LOOPS WHERE EXISTING DEVICES ARE REMOVED.

REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED.

DEVICES MARKED "RR" ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION.

- REMOVE STRUCTURAL CABLING AND VOICE/DATA EQUIPMENT.
- BRANCH PANEL LOCATION.
- REMOVE POWER TO CONDENSING UNIT DISCONNECTS WHICH CORRESPOND TO THE FURNACES BEING DEMOLISHED IN THE CONSTRUCTION AREA.
- 6 EXISTING "SILENT KNITE" FIRE ALARM CONTROL PANEL TO REMAIN.
- EXISTING FIBER AND COPPER MDF EQUIPMENT TO REMAIN.

8 EXISTING TV HEAD-END.

ARCHITECTS

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○ SHEET KEYNOTES

REMOVE 208/1 VOLT 200 AMP FUSED DISCONNECT WHICH PREVIOUSLY FED X-RAY EQUIPMENT. REMOVE ALL CORRESPONDING X-RAY CONDUIT AND CABLING.

- REMOVE 200 AMP PANEL A. FEEDER WILL BE SPLICED AND EXTENDED TO NEW
- 4 REMOVE POWER TO FURNACE.

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DEMOLITION POWER PLAN LEVEL 1

EDP101

UNLESS OTHERWISE INDICATED, REMOVE ALL LIGHTING FIXTURES, OUTLETS, DEVICES AND EQUIPMENT IN HATCHED AREAS. REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO THE PANELBOARD OF ORIGINATION. SYSTEMATICALLY CHECK EACH BRANCH PANELBOARD CIRCUIT TO VERIFY EACH THAT CIRCUIT BREAKER NO LONGER HAS ANY ACTIVE LOADS, DISCONNECT THE WIRING AND TURN THE CIRCUIT BREAKER OFF. ANY REMAINING ACTIVE LOADS SHALL BE LABELED AT THE PANELBOARD AS TO WHAT LOAD IS SERVED.

UNLESS NOTED OTHERWISE REMOVE ALL LIGHTING FIXTURES DEVICES AND EQUIPMENT SHOWN DASHED. REMOVE CONDUIT AND WIRING BACK TO PANELBOARD OF ORIGIN OR TO FIRST ACTIVE DEVICE THAT REMAINS.

SALVAGE ALL POWER POLES, LIGHT FIXTURES, TWIST-LOCK RECEPTACLES AND WALLPLATES, CEILING SPEAKERS AND SECURITY AND FIRE ALARM DEVICES TO OWNER. PROTECT SALVAGED EQUIPMENT FROM DAMAGE.

PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID.

PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE.

REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, REROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL.

REMOVE ALL FIRE ALARM DEVICES WHERE EXISTING WALLS AND CEILINGS ARE BEING REMOVED, WITH ASSOCIATED CONDUIT AND WIRING. EXISTING FIRE ALARM DEVICES AND SYSTEM NOT INDICATED FOR REMOVAL SHALL REMAIN ACTIVE THROUGHOUT DEMOLITION AND CONSTRUCTION UNTIL THE NEW SYSTEM IS TESTED AND OPERATIONAL. MAINTAIN ALL CLASS A FIRE ALARM INITIATING AND INDICATING LOOPS WHERE EXISTING DEVICES ARE REMOVED.

8 REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED.

9 DEVICES MARKED "RR" ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION.

○SHEET KEYNOTES



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oele Valley Dialysis Clinic Expansior

JRA Project #

NJRA Project # 19230.00

Construction Documents Feb 03, 2020

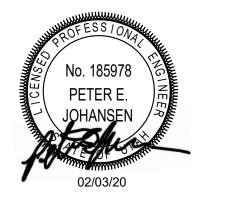
DEMOLITION LIGHTING PLAN LEVEL 1

EDL101

1 GROUNDING FOR ALL CIRCUITS TO MEET NEC 517-13 (a) & (b) REQUIREMENTS.

ARCHITECTS

NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



### ○ SHEET KEYNOTES

- RUN .75" CONDUIT FROM IN-FLOOR SCALE TO MONITOR RECESSED IN WALL.
- POWER AND DATA FOR U/C FRIDGE. FRIDGE WILL HAVE TEMP TRACKING.
- PROVIDE 120 VOLT POWER TO SAFE-ZONE CLOSER.

  CIRCUIT WITH OUT DOOR SPLIT SYSTEM UNIT.
- L6/30 RECEPTACLE MOUNTED AT 7'6".
- 6 L5/20R RECEPTACLE MOUNTED AT 7'6".
- 7 L14/30 RECEPTACLE MOUNTED AT 7'1" AFF TO BOTTOM OF BOX.

Intermountain Healthcare

Expansion

NJRA Project # 19230.00

Construction Documents Feb 03, 2020

POWER PLAN LEVEL 1

2 TDR A126 POWER PLAN

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

5

EP101

PROVIDE FULLY RATED CIRCUIT BREAKERS IN PANELBOARDS FOR THE FAULT CURRENT SHOWN. SERIES RATINGS WITH NEXT LEVEL UPSTREAM OVERCURRENT PROTECTIVE DEVICES ARE PERMITTED SUBJECT TO FACTORY UL DOCUMENTATION OF SERIES RATING SUBMITTED TO ENGINEER. IF DEVICE OR EQUIPMENT FAULT CURRENT RATING IS NOT SHOWN, ASSUME 100,000 AIC.

FAULT CURR	ENT TABLE
BUS	FAULT CURRENT
1L1	13,561 SCA
EC1	9,073 SCA
EDP	13,814 SCA
ELS	10,274 SCA
EQ1	8,113 SCA

1.	CONTRACTOR SHALL SUBMIT VARIATIONS FROM ASSUMPTIONS PRIOR TO ORDERING EQUIPMENT.
2.	THE SERVICE EQUIPMENT SHALL BE PROVIDED WITH A PERMANENT LABEL INCLUDING: NOMINAL SYSTEM VOLTAGE, AVAILABLE FAULT CURRENT, AND CLEARING TIME ON MAIN OVERCURRENT PROTECTIVE DEVICE BASED ON THE AVAILABLE FAULT CURRENT.

○SHEET KEYNOTES

#### GENERAL SHEET NOTES

 PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.

2. REFER TO PLANS FOR EQUIPMENT LOCATIONS.

2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC

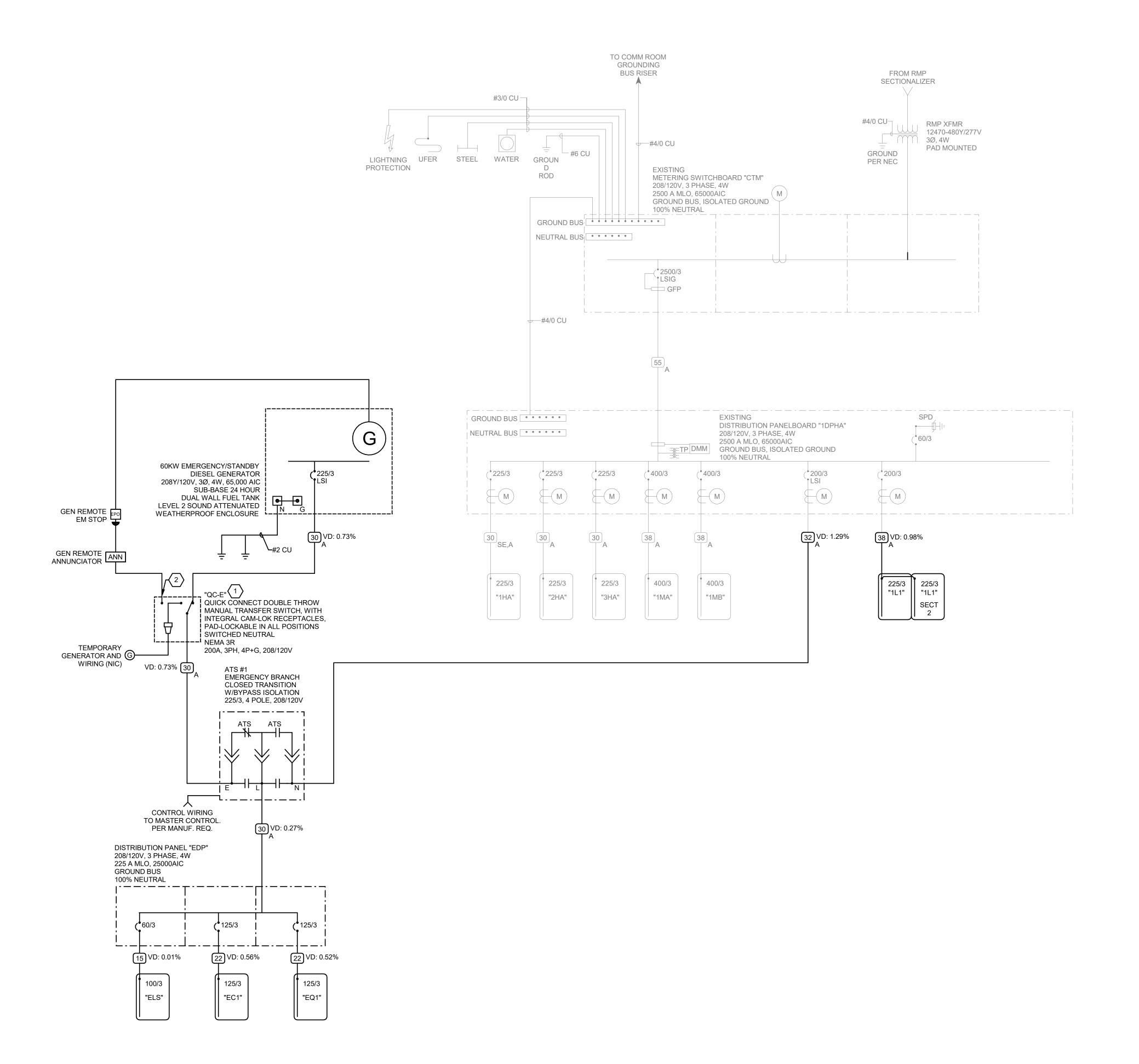
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.

PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER 2011 NEC 230.95(C).



NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
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# ALUMINUM CONDUCTOR AND CONDUIT SCHEDULE SCHEDULE NUMBER (E.G.) 5 \*--SUBSCRIPT (NOTE 5) SYM AMP SIZE QTY SIZE G SE NOTES 130 | 2 | 3 | 2/0 | 4 | 1/0 | 4 | Δ 130 2 4 2/0 4 1/0 4 2 A 150 2 3 3/0 4 1/0 4 2,7 A 150 2 4 3/0 4 1/0 2 2,7 A 175 2 3 4/0 4 1/0 2 2,7 A 175 2.50 4 4/0 4 1/0 2 2,7 A 200 2.50 3 250 4 1/0 2 2,7 200 3 4 250 4 1/0 2 9<sub>A</sub> 230 2.50 3 300 2 1/0 1/0 2 30A 250 3A 250 3 4 550 2 250 1 3/0 1/0 2,7 3A 310 4 4 500 1 3/0 1/0 2,7 5A 380 2 EA 2.50 3 250 1 4/0 3/0 2,7 3BA 380 2 EA 3 4 250 1 4/0 3/0 2,7 3BA 400 2 EA 2.50 3 250 1/0 4/0 3/0 2,7 3BA 400 2 EA 2.50 4 250 1/0 4/0 3/0 2,7 3BA 400 2 EA 2.50 4 250 1/0 4/0 3/0 2,7 500 2 EA 3 3 350 1/0 300 3/0 2,4,7 40A 500 2 EA 3 4 350 1/0 300 3/0 2,4,7 41A 620 2 EA 3 3 500 3/0 300 3/0 2,4,7 42A 620 2 EA 4 4 500 3/0 300 3/0 2,4,7 43A 750 3 EA 3 3 350 3/0 300 4/0 2,4,7 44A 750 3 EA 3 4 350 3/0 300 4/0 2,4,7 5A 810 3 EA 3 3 400 4/0 300 250 2,4,7 BA 810 3 EA 4 4 400 4/0 300 250 2,4,7 47<sub>A</sub> 1000 4 EA 3 3 350 4/0 300 250 4,7 48<sub>A</sub> 1000 4 EA 3 4 350 4/0 300 250 4,7 DA 1000 4 EA 3 4 350 4/0 300 250 4,7 DA 1140 4 EA 4 3 500 250 300 250 4,7 DA 1140 4 EA 4 4 500 250 300 250 4,7 A 1240 4 EA 4 3 500 350 300 250 4,7 A 1240 4 EA 4 3 500 350 300 250 4,7 )<sub>A</sub> | 1240 | 4 EA 4 | 4 | 500 | 350 | 300 | 250 | 4,7 $3_{A}$ 1620 | 6 EA 4 | 4 | 400 | 400 | 350 | 250 | 4,7 $\left(\frac{1}{2}\right)_{A} = 2170 = 7 \text{ EA 4} = 4 = 500 = 400 = 500 = 250 = 4.7$ A 2695 7 EA 4 4 750 600 750 750 4,7 A 3080 8 EA 4 4 750 600 750 750 4,7 A 4235 11 EA 4 4 750 800 750 750 4,7 - 5 EA 4 - -CONDUIT AND CONDUCTOR SCHEDULE NOTES

1 CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.

- 2 PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
- 3 PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
   4 GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
   5 SYMBOL SUBSCRIPTS:
- 7 ALUMINUM CONTRUCTORS OR MOTOR DRIVEN EQUIPMENT.

  "FG" FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING

  CONDUCTOR TO BE SAME SIZE AS THE PHASE

  CONDUCTORS.

6 RACEXWAY ONUCLUDENTOVIC NERS FRALOCYONEDUBY ORBUTSYZED AS

- "HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC
  "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS
  DERATED ACCORDINGLY.
- "IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR)
  SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT
  GROUND CONDUCTOR.
- "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.

		SCHEE	DULE NUM	BER					
**						(E.C	<u> </u>		
	·-	SUBSC	CRIPT (NOT	ΓE 5)		(⊏.0	5.)[5] IG		
			,						
		HH	CONDUIT		JCTOR (N				
SYM	AMP	AMPS	SIZE	QTY	SIZE	G	IG/HH	SE	NOTES
1	20	-	.75	2	12	12	12	8	2
2	20	-	.75	3	12	12	12	8	2,3
3	20	24	.75	4	12	12	12	8	2,3
4	30	-	.75	2	10	10	10	8	2
5	30	-	.75	3	10	10	10	8	2
6	30	32	.75	4	10	10	10	8	2
7	40	-	1	2	8	10	8	6	2
8	40	-	1	3	8	10	8	6	2
9	40	44	1	2	8 6	10	8	6	2
(10) (11)	55	-	1	3		10	8		2
(12)	55 55	- 60	1.25	4	6	10 10	8	4	2
_=	55	60					8	-	2
(13) (14)	70 70	-	1 1.25	2	4	8 8	4	2	2
15	70	- 76	1.25	4	4	8	4	2	2
(16)	85	-	1.25	2	3	8	3	2	2
(17)	85	_	1.25	3	3	8	3	2	2
(18)	85	92	1.25	4	3	8	3	2	2
(19)	95	-	1.25	3	2	8	2	2	2
20	95	104	1.50	4	2	8	2	2	2
21	130	-	1.50	3	1	6	2	2	2
22	130	116	1.50	4	1	6	2	2	2
23	150	-	2	3	1/0	6	2	1/0	2
24	150	136	2	4	1/0	6	2	1/0	2
25	175	-	2	3	2/0	6	2	2/0	2
26	175	156	2	4	2/0	6	2	2/0	2
27	200	-	2	3	3/0	6	2	2/0	2
28	200	180	2.50	4	3/0	6	2	2/0	2
29	230	-	2.50	3	4/0	4	2	2/0	2
30	230	208	2.50	4	4/0	4	2	2/0	2
31	255	-	2.50	3	250	4	1	2/0	2
32	255	232	2.50	4	250	4	1	2/0	2
33	310	-	3	3	350	3	1/0	3/0	2
34	310	280	3	4	350	3	1/0	3/0	2
35	380	-	3.50	3	500	3	3/0	3/0	2
<u>36</u>	380	344	4 2 E A 2	4	500	3	3/0	3/0	2
37	400	360	2 EA 2 2 EA 2.50	3	3/0 3/0	3	3/0 3/0	3/0 3/0	2
<u>38</u> 39	400 510		2 EA 2.50 2 EA 2.50	3	250	1	4/0	3/0	2
40	510	- 464	2 EA 2.50	4	250	1	4/0	3/0	2
41	620	-	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	560	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	-	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	688	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	-	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	768	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	-	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	912	3 EA 3.50	4	400	2/0	4/0	3/0	4
49	1140	-	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	1032	3 EA 4	4	500	3/0	4/0	3/0	4
51	1240	-	4 EA 3	3	350	3/0	4/0	3/0	4
52	1240	1120	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	1520	5 EA 4	4	400	4/0	4/0	4/0	4
54	2010	1824	6 EA 4	4	400	250	250	250	4
55	2660	2408	7 EA 4	4	500	350	350	350	4
56	3040	2752	8 EA 4	4	500	500	500	500	4

COPPER CONDUCTOR AND

CONDUIT SCHEDULE

CONDUIT AND CONDUCTOR SCHEDULE NOTES

CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.

PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN

CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN

TABLE.
 PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
 GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
 SYMBOL SUBSCRIPTS:

4180 3784 11 EA 4 4 500 500 500

"2N": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #1/0 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDCUTOR IS BELOW #1/0 IN SIZE

"FG" FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.

"HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC
"NONLINEAR" LOADS. CURRENT CARRYING
CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE
IG/HH SIZE FOR THE EQUIPMENT GROUNDING
CONDUCTOR.

"IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.

"SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.

RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

oele Valley Dialysis Clinic Ex

NJRA Project # 19230.00

Construction Documents Feb 03, 2020

ONE-LINE DIAGRAM

EP601

												<del>Q</del> U		ENT S		OLL	•											
MARK	ITEM DESCRIPTION		LOAI	DATA			WIRE AND	COND.		OVERCU	RRENT		DISCONNE	CT							STARTER DA	TA					NOTES	MARK
							CONDUIT SIZE	AND		PROTEC			_									_		_				
		HP	kW MCA	FLA VOL	T PH	Hz		CONDUIT	FURN	DEVICE	LOCATION		DEVICE	LOCATION	FURN DEV	ICE LOC	CATION S	SIZE S		RL SELECTO		PILOT	NORMALLY NORMALLY		SCHEMATIC			
								SCHED.	BY			BY			BY				VC	LT SWITCH	BUTTON	LAMP	OPEN CLOSED	FAILURE	REFERENCE	CTRL		
																							CONTACTS CONTACTS	RELAY				
CU-1	CONDENSING UNIT,		34	208	3   1	60	2 #8, #10 GR	7	E	40A/2P	PANEL	E	60A/2P	ADJ TO	Q												2	CU-1
	AIR COOLED						1" CND			СВ			FRN 40	EQUIP														
FUR-1	FURNACE	1	17.9	120	)   1	60	2 #10, #10 GR	4	E	30A/1;	PANEL	E	30A/1P	ADJ TO	Q													FUR-1
011.0	0010510110110				+ -		0.75" CND		+	CB	BANE		FRN 30	EQUIP													•	011.0
CU-2	CONDENSING UNIT,		34	208	3   1	60	2 #8, #10 GR	7	E	40A/2P	PANEL	=	60A/2P	ADJ TO	Q												2	CU-2
EUD 0	AIR COOLED	4	47.0	400		00	1" CND		+	CB	DANEL		FRN 40	EQUIP														FUD
FUR-2	FURNACE	1	17.9	120	)   1	60	2 #10, #10 GR	4	=	30A/1;	PANEL	=	30A/1P	ADJ TO	Q													FUR-2
CU-3	CONDENSING UNIT,		34	208	1	60	0.75" CND	7	+ -	CB 40A/2P	PANEL	+-	FRN 30 60A/2P	EQUIP	Q							1		1			2	CU-3
CU-3	AIR COOLED		34	200	)   '	60	2 #8, #10 GR 1" CND		-	CB	PANEL	-	FRN 40	ADJ TO EQUIP	4												2	CU-3
FUR-3	FURNACE	1	17.9	120	1	60	2 #10, #10 GR	4	+-	30A/1;	PANEL	+-	30A/1P	ADJ TO	Q									<u> </u>				FUR-3
1011-5	TORNAGE	'	17.9	120	'     '		0.75" CND	1	-	CB	IANLL	-	FRN 30	EQUIP	"													1 014-3
CU-4	CONDENSING UNIT,		34	208	1	60	2 #8, #10 GR	7	F	40A/2P	PANEL	F	60A/2P	ADJ TO	Q													CU-4
	AIR COOLED						1" CND	'	-	CB	174422	-	FRN 40	EQUIP	~													
FUR-4	FURNACE	1	17.9	120	) 1	60	2 #10, #10 GR	4	E	30A/1:	PANEL	<del> </del> E	30A/1P	ADJ TO	Q													FUR-4
							0.75" CND			СВ			FRN 30	EQUIP														
IU-1A	VRF INDOOR			208	3 1	60	2 #10, #10 GR	4	E	30A/2P	PANEL	E	30A/2P	ADJ TO	Q												1	IU-1A
	TDR A125						0.75" CND			СВ			FRN 4	EQUIP														
IU-1B	VRF INDOOR			208	3 1	60	2 #10, #10 GR	4	Е	30A/2P	PANEL	E	30A/2P	ADJ TO	Q												1	IU-1B
	TDR A125						0.75" CND			СВ			FRN 4	EQUIP														
OU-1A	VRF OUTDOOR UNIT		25	208	3 1	60	2 #10, #10 GR	4	Е	30A/2P	PANEL	Е	30A/2P	ADJ TO	Q												1	OU-1A
							0.75" CND			СВ			FRS 30	EQUIP														
OU-1B	VRF OUTDOOR UNIT		25	208	3 1	60	2 #10, #10 GR	4	E	30A/2P	PANEL	E	30A/2P	ADJ TO	Q												1	OU-1B
							0.75" CND			СВ			FRS 30	EQUIP														
DEF-1	FAN EXHAUST		.5	120	) 1	60	2 #12, #12 GR	1	E	20A/1P	PANEL	Q	THERM	ADJ TO	Q												1	DEF-1
	LEVEL 1						0.75" CND			СВ			SWITCH	EQUIP														
RCP-1	RECIRC PUMP	0.2		120	) 1	60	2 #12, #12 GR	1	E	20A/1P	PANEL	E	THERM	ADJ TO	Q													RCP-1
							0.75" CND			СВ			SWITCH	EQUIP														
RCP-2	RECIRC PUMP	0.2		120	) 1	60	2 #12, #12 GR	1	E	20A/1P	PANEL	E	THERM	ADJ TO	Q													RCP-2
							0.75" CND			СВ			SWITCH	EQUIP														
WH-1	WATER HEATER			120	) 1	60	2 #12, #12 GR	1	E	20A/1P	PANEL	E	PLUG	ADJ TO	Q													WH-1
							0.75" CND			СВ				EQUIP														
WH-2	WATER HEATER			120	)   1	60	2 #12, #12 GR	1	E	20A/1P	PANEL	E	PLUG	ADJ TO	Q													WH-2
							0.75" CND			СВ				EQUIP														

(1) Circuit indoor split system unit with outdoor condensing unit

(2) Run new circuit to existing condensing unit. Re-use existing disconnect.

EQUIP	MENT SCHEDULE KEY
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FURNISHED WITH THE EQUIPMENT COORDINATE WITH THE DIVISION 15 TEMPERATURE

CONTROL INSTALLER AUTOMATIC CONTROL WIRING BY DIVISION 15 NJRA Architects, Inc.

5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com

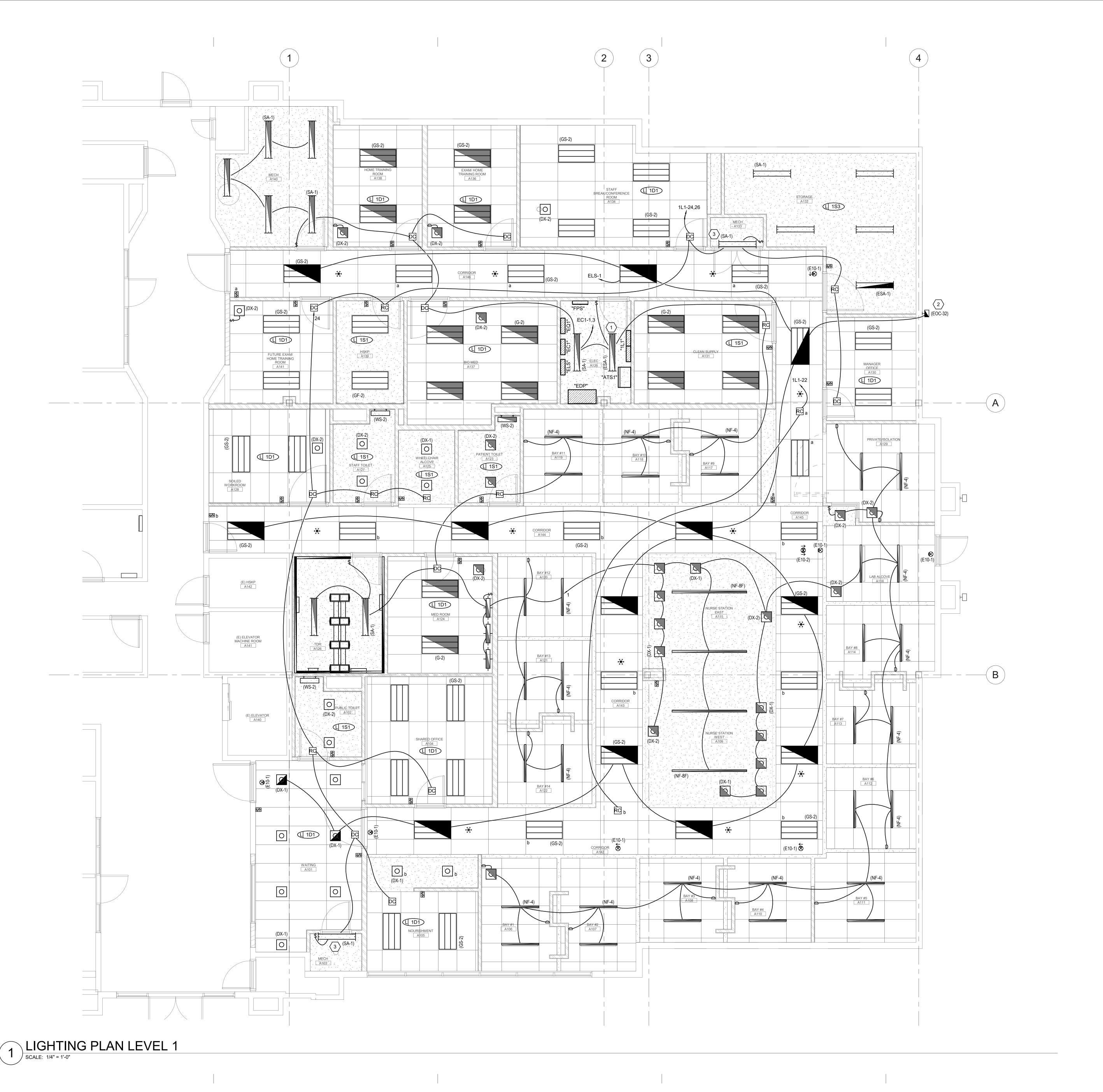


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EQUIPMENT SCHEDULE

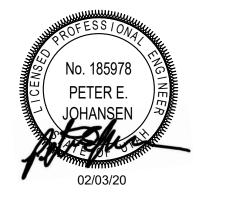
EP602



- 1 CIRCUIT ALL EXIT SIGNS TO ELS-14. DO NOT SWITCH.
- SET DURATION FOR OCCUPANCY SENSORS IN HALLWAYS TO MAXIMUM SETTING.



NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



### ○SHEET KEYNOTES

- 1 PROVIDE BATTERY PACK IN FIXTURE OVER TRANSFER SWITCH.
- 2 PROVIDE BATTERY PACK AND PHOTO CELL IN WALL PACK BY GENERATOR.
- 3 WALL MOUNT STRIP LIGHT ABOVE DOOR.

ic Expansion

ele Valley Dialysis Cli

NJRA Project # 19230.0

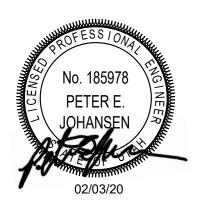
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LIGHTING PLAN LEVEL 1

EL101

						INT	ERI	OR I	_IGH	ITING F	IXTL	RE S	SCH	EDU	LE					
				A	BBR	EV	IATI	ONS	) 									GENEI	RAL NOTE	S
MOUNTI  B - BASE C - CEIL F - FLAN G - GRID P - PENI PL - POLE R - RECI S - SURI W - WALI	ARHR - A ING DL - D IGE EQC - E DANT HLD - H ESSED PS - P FACE QRS - Q WG - W	IR RETURN AMP LOCA <sup>-</sup> ARTHQUAK USING	I AND HEAT TION (E CLIPS D LATCHED I E SHIELD SWITCH STRIKE		N		BL - SL - GL - PW - EA - S - GS - C - CBA - SCBA - SCBA -  CCA -	MATTE WHIT BLACK SILVER GOLD CLEAR PAINTED WH EXTRUDED A STEEL GALVANIZED CAST COLOR BY AI STANDARD O ARCHITECT CUSTOM COI ARCHITECT MEETS FEDE STANDARD 2	ITE ILUMINUM STEEL RCHITECT COLOR BY LOR BY	DIFFUSER/LI  #A - ACRYLIC # #OA - ACRYLIC # GC - GLASS (OF GF - GLASS (FF SGL - SOFT GLO HPL - HIGH PERI DO - DROP OPA CGL - CONVEX G S - SATIN LEN	THICK THICK (OPAL) EAR) PAL) OSTED) W LENS FORMANCE LE	NS	REF OP SP SS D SC PR FDR DS LI IR SL GL CA	<ul><li>SPECULA</li><li>PRISMAT</li><li>FULL DEF</li></ul>	EN R CULAR (WHITE EN/ R (COLORE C TH REFLEC (SEMI SPEC ESCENT NT	D) TOR	/ER 3. SU BIE PR	ROVIDE UNIT PRICES AND FIXTURD REACH FIXTURE TYPES SHOWN AILURE TO COMPLY WITH THIS REND EMPOWER THE ENGINEER TO STALLATION CHANGES, WITHOU'S TALLER.  ONTRACTOR ALLOWANCE PRICE PECIFIED, CONTRACTOR AND ELE LOWANCE AND REPORT ANY PRICE MAY OR MAY NO DO NOT INCLUDE ANY TAXES.  JBSTITUTIONS AND/OR EQUAL FIND DING, THEY MUST BE SUBMITTER RIOR TO BID OPENING.  AMPLES MUST BE PROVIDED FOR RIOR TO RELEASING FIXTURES.	I WITHIN 48 BUSINESS HOUS QUIREMENT MAY DISQUADETERMINE FAIR VALUE FOR THE FURTHER INPUT FROM TO SECTRICAL DISTRIBUTOR SHOULD BE LAMP(S) OR FOR THE ENGINEER OF THE ENGINEER OF THE ENGINEER MUST RECEIVE AFOR THE ENGINEER NO LONG THE ENGINEER LONG THE LONG THE ENGINEER LONG THE ENGINEER LONG THE	JRS OF THE BID DATE. LIFY THE PRODUCTS FOR FIXTURE AND HE CONTRACTOR OR HIS JOB WAS HALL VERIFY THIS R BEFORE THE BID. FREIGHT AS NOTED, PPROVAL PRIOR TO ESS THAN 2 WEEKS
DIAMET		•	GTH	OI SIZE			FL - R -	THERMALLY PROTECTED FLUSH REGRESS MITERED		NOTES							5. AL LO 6. VE INS 7. CO 8. RE LIO 9. AL	LL FIXTURES SHALL BE LISTED AND DEATION.  ERIFY THE PROPER MOUNTING K STALLATION AS SHOWN AT EACH DMPLY WITH THE "INTERIOR LIGHTER TO SPECIFICATIONS FOR INGHTING FIXTURES, DRIVERS, AND LL LIGHT FIXTURES TO BE EITHER PPROVED BY ARCHITECT/ENGINE	TS OR ACCESSORIES TO ITS OR ACCESSORIES TO ITS	FACILITATE VINGS. PECIFICATIONS. QUIREMENTS FOR TS" LISTED OR TO BE
ID	DESCRIPTION	LENGTH	<b>ДЕРТН</b>	AL SIZE	DIAMETER/ APERTURE	MOUNTING	YPE	COLOR TEMP	CRI	RIVER CONFIGURATION	VOLTAGE	VATTS	HSINI:	XTURE LUMENS	DIFFUSER/LENS		OPTIONS	MAN  OPTION 1	OPTION 2	OPTION 3
(DX-1)	6" ROUND, RECESSED LED DOWNLIGHT, SEMI-SPECULAR REFLECTOR, WHITE TRIM FINISH	-	-	-	0' - 6"	CR	LED	3500K	0	0-10V DIMMING (10%)	120/277	19	<u> </u>	1500		•	-	GOTHAM (EVO-35/15-6AR-WD-LSS- MVOLT-EZ10)	LITON	HALO (PD6)
(DX-2) (DX-6)	6" ROUND, RECESSED LED DOWNLIGHT, SEMI-SPECULAR REFLECTOR, WHITE TRIM FINISH  6" ROUND, RECESSED LED LENSED DOWNLIGHT, WET LOCATION, REGRESSED LENS, WHITE REFLECTOR,	-	-	-	0' - 6"	CR	LED	3500K 3500K		0-10V DIMMING (10%) 0-10V DIMMING (<1%)	120/277	23	-	2000			-	GOTHAM (EVO-35/20-6AR-WD-LSS-MVOLT-EZ10)  GOTHAM (EVO-35/20-6WR-WD-MVO	LITON (LHALD625C034UE-D10P1 /LRA LD6SWF160-B60-T35) INTENSE (SS6G3DR)	HALO PD6  PRESCOLITE (LF6SL)
(E10-2)	WHITE TRIM FINISH  EXIT SIGN, EDGE LIT LED ACRYLIC, DUAL FACE, GREEN LETTERING, BRUSHED ALUMINUM FINISH, UNIVERSAL	-	-	-	-	UNV	LED	GREEN		NO DIMMING		3		0		AC	ONLY	LT-EZ10)  DUAL-LITE (LECDGWA)	EVENLITE (TEX-AC-G-2M)	CHLORIDE (44RLU-2-G)
(ESA-1)	MOUNTING  4' LED STRIP LIGHT, WHITE FINISH, INTEGRAL EMERGENCY BATTERY PACK	4' - 0"	-	-	-	CS	LED	3500K		NO DIMMING		42	-	3000			TTERY PACK	LITHONIA (ZL2N-L48-3000LM-MDD-N VOLT-40K-80CRI-WH)	DAYBRITE (LF4FR3140UDZT)	METALUX (4SNLED-LD4-30SL-LW-U NV-L840-CD1-U)
(G-1)	2' X 2' LED FLAT PANEL, GRID LAY-IN	2' - 0"	2' - 0"	-	-	CR	LED	3500K		0-10V DIMMING (10%)	120/277	40	-	3400			-	VIVIDLEDS (VVDES2240-35-UNV-WH-		1117-E040-0B1-0)
(G-2)	2' X 4' LED FLAT PANEL, GRID LAY-IN	4' - 0"	2' - 0"	-	-	CR	LED	3500K		0-10V DIMMING (10%)	120/277	50	-	4300			-	D1)  VIVIDLEDS (VVDES2450-35-V27-WH-		
(GS-2)	2' X 4' LED TROFFER, EDGE LIT PANELS, GRID LAY-IN	4' - 0"	2' - 0"	-	-	CR	LED	3500K		0-10V DIMMING (10%)	120/277	38	-	4300			-		LEDALITE (4224-D1-ST-L-8B-D-S-7-2-	
(NF-4)	4" X 4' LINEAR RECESSED SLOT, GRID MOUNT	4' - 0"	0' - 4"	-	-	CR	LED	3500K		0-10V DIMMING (10%)	120/277	19	-	1500			-	D1-U) PINNACLE (E4A-835-4'-GX-U-OL1-1-	E)	
(NF-8F)	4" X 8' LINEAR RECESSED SLOT, GRID MOUNT	8' - 0"	0' - 4"	-	-	CR	LED	3500K		0-10V DIMMING (10%)	120/277	19	-	1500			-	W) PINNACLE (E4A-835-4'-GX-U-OL1-1-		
(OC-32)	LED WALLPACK, RECESSED JBOX, FULLY GASKETED, WET LABEL, PROVIDE WITH INTEGRAL EMERGENCY BATTERY	-	-	-	-	WS	LED	4000K		0-10V DIMMING (10%)		52	BRZ	5000			TTERY PACK	W) LITHONIA (WST LED P3 40K VW MVOLT E7WC DDBXD)	MCGRAW EDISON (IST-C02-LED-E1-BL3-CBA )	` WM-SCBA-EBPL)
(SA-1)	4' LED STRIP LIGHT, WHITE FINISH	4' - 0"	-	-	-	CS	LED	3500K		NO DIMMING	120/277	42	WH	3000			-	LITHONIA (ZL2N L48 MDD MVOLT 40K 80CRI WH)	DAYBRITE (LF4FR3140UDZT)	METALUX (4SNLED-LD4-30SL-LW-U NV-L840-CD1-U)
(UC-5)	UNDER CABINET	2' - 0"	-	-	-		LED	3500K		ELV DIMMING	120/277	8		600				DAY-BRITE (LINCS100E-L28-935-UNV- WHG-DIM)	KENALL (AUCLED-1-MW-11L35K-2 4-277)	AIREY-THOMPSON (13HC-N-35K-24-2-3-D11)
(W-3)	4' NARROW BODY WRAPAROUND, OPAL ACRYLIC LENS	4' - 0"	-	-	-	CS	LED	3500K		NO DIMMING	120/277	32	WH	4200			-	LITHONIA (LBL4-LP835)	COLUMBIA (LWC4-35VL-EU)	METALUX (WNLED-LD1-41-1-UNV-L8 35-CD1-U)





**Tooele Valley Dialysis Clinic Expan** 

NJRA Project # 19230.00

Construction Documents Feb 03, 2020

INTERIOR LIGHTING FIXTURE SCHEDULE

EL601





Tooele Valley Dialysis Clinic Expansior

NJRA Project #

Construction Documents Feb 03, 2020

LIGHTING CONTROL SCHEDULES

\_\_EL602

	CABLE/OUTLET COLOR SCHEDULE
COLOR	TYPE
BLUE	ANALOG PHONE
BLUE	DATA
BLUE	IP SECURITY CAMERAS
YELLOW	WIRELESS

## **EQUIPMENT/CABLE LIST**

THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". THIS LIST IDENTIFIES ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE CABLING INSTALLATION. WHERE THE ITEMS INDICATED ARE ONE PORTION OF AN ASSEMBLY, THE ENTIRE ASSEMBLY SHALL BE PROVIDED UNLESS SPECIFIED OTHERWISE. PROVIDE ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE, FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTIONS AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID. IF CATALOG NUMBERS DO NOT MATCH DESCRIPTIONS, THE DESCRIPTIONS TAKE PRECEDENCE. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL

REQUIREN SYMBOL	MENTS. ITEM DESCRIPTION	ACCEPTABLE TYPES
	STATION CABLE, DATA - CATEGORY 6A FUTP RISER, BLUE, DATA	SIEMON 9A6R4-A5-06-R1A
	STATION CABLE, DATA - CATEGORY 6A FUTP PLENUM, YELLOW, WIRELESS DATA	SIEMON 9A6P4-A5-05-R1A
	50 PAIR CATEGORY 3 RISER CABLE, GRAY	GENERAL CABLE 2133161.99 OR EQUAL
	FIBER OPTIC CABLE, SINGLEMODE, 24 STRAND, ARMORED, RISER CABLE, YELLOW	SIEMON 9BC8R024LE205A
	LC CONNECTOR, SIMPLEX SINGLEMODE	SIEMON FC1-LC-SM-B02
	VOICE OUTLET, SINGLE GANG FACEPLATE, WHITE W/WALL HUNG PHONE	SIEMON MX-WP-Z6AS-SS
₩	MOUNTING STUDS, ONE POSITION W/CATEGORY 6A INSERT	5.25.1
	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 2 POSITION	SIEMON 10GMX-FPS02-02
	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	BLANK INSERT, WHITE	SIEMON MX-BL-02
4	DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 2 POSITION	SIEMON 10GMX-FPS02-02
<b>V</b>	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
2 2 4	DATA OUTLET, FURNITURE FACEPLATE, BLACK	SIEMON MX-UMA-01
$\sqrt{\frac{2}{\sqrt{4}}} \sqrt{\frac{2}{4}} A$	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
	BLANK MODULE, BLACK	SIEMON MX-BL-01
C	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION	SIEMON MX-SMZ2-02
•	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
$((\bullet))$	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION	SIEMON MX-SMZ2-02
`₩c	CATEGORY 6A JACK - DATA, YELLOW	SIEMON Z6A-S05
	DATA OUTLET, SURFACE MOUNT BOX, WHITE, 1 POSITION	SIEMON MX-SMZ1-02
	CATEGORY 6A JACK - DATA, BLUE	SIEMON Z6A-S06
SPP1	48 PORT, 1RU ANGLE PATCH PANEL WITH OUTLETS	SIEMON Z6AS-PA-48
RPP1	48 PORT, 2RU ANGLE PATCH PANEL, 110 STYLE	SIEMON HD5-48A
	FIBER PATCH PANEL, 3RU	SIEMON RIC3-48E-01
FPP1	FIBER SPLICE CASSETTE, 12 FIBER, LC CONNECTOR	SIEMON RSC12-LCUSMA1
	BLANK ADAPTER PLATE, BLACK	SIEMON RIC-F-BLNK-01
HWM	HORIZONTAL WIRE MANAGERS, 4RU	PANDUIT NCMHAEF4
VWM	VERTICAL WIRE MANAGERS, DOUBLE SIDED, BLACK, 8' TALL x 10" WIDE	CHATSWORTH 40096-715
	EQUIPMENT RACK 19" x 8', 52 RU, BLACK	CHATSWORTH 55053-715
	CABLE RUNWAY - 24", BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES	CHATSWORTH 10250-724
	CABLE RUNWAY - 18", BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES	CHATSWORTH 10250-718
	BUTT SPLICE KIT, BLACK	CHATSWORTH 11301-701
	JUNCTION SPLICE KIT, BLACK	CHATSWORTH 11302-701
	FOOT KIT, BLACK	CHATSWORTH 11309-701
	6" CHANNEL RACK TO RUNWAY, BLACK	CHATSWORTH 12409-724
	TRIANGLE BRACKETS, BLACK	CHATSWORTH 11746-724
	END CLOSING KIT, CABLE RUNWAY, BLACK	CHATSWORTH 11700-724
	WALL ANGLE SUPPORT KIT, CABLE RUNWAY, BLACK	CHATSWORTH 11421-724
	CABLE RUNWAY ELEVATION KIT, 6"	CHATSWORTH 10506-706
	CABLE RUNWAY RADIUS DROP	CHATSWORTH 12100-712
	PLYWOOD BACKBOARD, 4' X 8', GRADE AC, FIRE TREATED & PAINTED	
	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR	-
i .		

TELECOMMUNICATIONS GROUNDING BUS BAR NOTE: ALL RACKS, LADDER, PATCH PANELS AND ACCESSORIES SHALL BE BLACK IN COLOR.

#### GENERAL PROJECT NOTES

- 1. UNLESS OTHERWISE NOTED, INSTALL ALL CABLE INSIDE RACEWAY SYSTEMS. WHERE RACEWAY SYSTEMS HAVE NOT BEEN PROVIDED OR SPECIFIED, INSTALL CABLE THROUGH THE SPECIFIED "CADDY" CLIPS AT THE MINIMUM INTERVALS IDENTIFIED IN THE SPECIFICATIONS. SUPPORT "CADDY" CLIPS DIRECTLY FROM THE BUILDING STRUCTURE, NOT FROM OTHER BUILDING SYSTEM SUPPORT WIRES OR CABLE.
- 2. PROVIDE PLENUM RATED CABLE IN ALL AIR PLENUMS. IF A PLENUM RATED CABLE IS NOT SPECIFIED, PROVIDE THE PLENUM RATED EQUIVALENT TO THE SPECIFIED
- 3. LABEL ALL CABLE INSTALLED UNDER THIS CONTRACT REGARDLESS OF LENGTH.
- 4. THE EQUIPMENT LABELING IDENTIFIED ON DETAILS IN THESE DRAWINGS ARE EXAMPLES ONLY OF THE ACTUAL LABELING WHICH IS REQUIRED AS PART OF THIS CONTRACT. PRIOR TO FABRICATION, SUBMIT THE NOMENCLATURE FOR ALL LABELS TO THE OWNER FOR REVIEW. THIS REQUIREMENT INCLUDES BUT IS NOT LIMITED TO ALL CABLE LABELING, AND ALL EQUIPMENT LABELING.
- 5. IF OUTLET IS TERMINATED IN CEILING SPACE, LABEL THE T-BAR GRID WITH THE OUTLET NUMBER FOR EASY LOCATION AND IDENTIFICATION.
- 6. GROUND ALL EQUIPMENT RACKS INSTALLED UNDER THIS CONTRACT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- 7. FOR EVERY CABLE PULL SPECIFIED, COIL 15' OF EXCESS CABLE AT THE STATION END FOR FUTURE USE. NEATLY COIL 15' ABOVE THE CEILING OR BELOW FLOOR WHERE APPLICABLE.
- 8. PROVIDE THE QUANTITY OF PATCH PANELS REQUIRED +20% FOR THE TOTAL DATA OUTLETS SHOWN ON FLOOR PLANS FOR THE PARTICULAR LEVEL.
- 9. RACK SPACE ALLOCATION SHOULD BE FOLLOWED PER DRAWINGS. IF YOU HAVE A SYSTEM THAT HAS NOT RACK ALLOCATION PLEASE CALL BOE SAUSEDO AT
- 10. ALL DATA LOCATIONS ARE NOT SHOWN IN ET SHEETS. REFER TO ENLARGED POWER PLANS FOR DATA LOCATIONS IF NOT SHOWN ON ET SHEETS.

#### **ABBREVIATIONS**

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

AUGMENTED CATEGORY ENHANCED EQUIPMENT ROOM FIBER PATCH PANEL GIGA HERTZ

HORIZONTAL WIRE MANAGEMENT HWM NOT IN CONTRACT OWNER ELECTRONICS PLENUM PR PAIR POWER SUPPLY RISER PATCH PANEL

STATION PATCH PANEL TELECOMMUNICATIONS ROOM VWM VERTICAL WIRE MANANGEMENT

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION,

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

DATA CABLING SYSTEMS, ETC...



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### **DEFINITIONS**

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

ELECTRONIC SYSTEMS: THE TERM "ELECTRONIC SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND

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> TELECOM SCHEDULES AND NOTES

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Tooele Valley Dialysis Clinic Expan

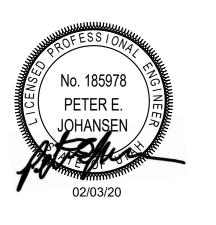
NJRA Project # 19230.00

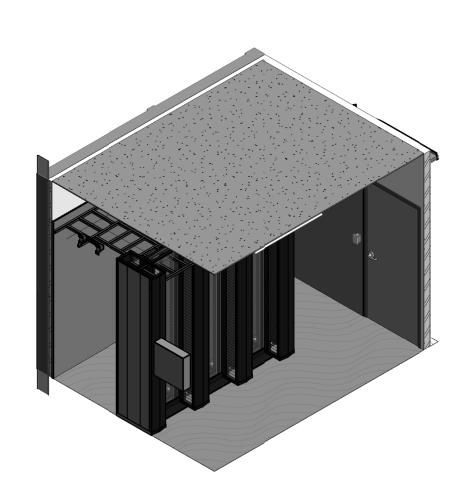
Construction Documents Feb 03, 2020

TELECOM

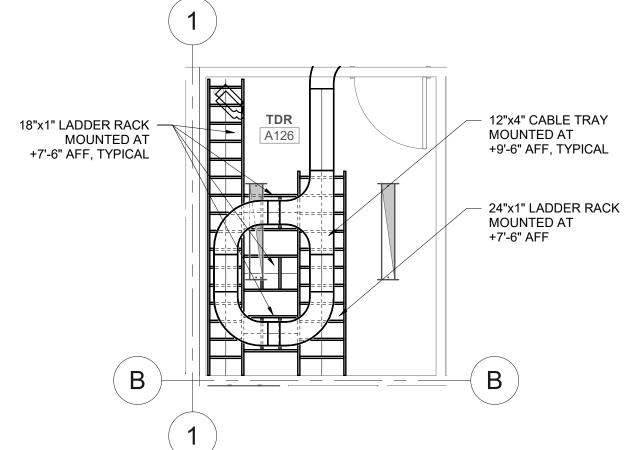
PLAN LEVEL 1



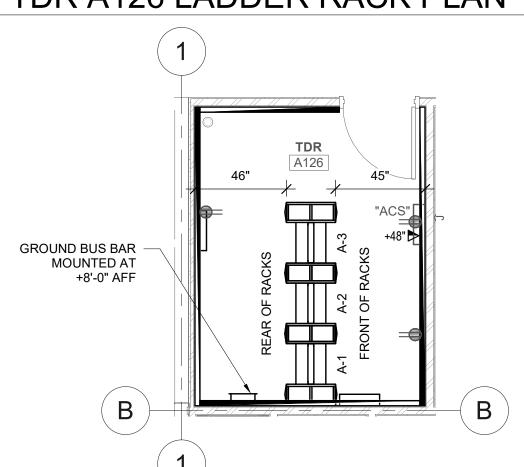




3 ENLARGED TDR A126 ISOMETRIC PLAN SCALE:



2 ENLARGED TDR A126 LADDER RACK PLAN
SCALE: 1/4" = 1'-0"



1 ENLARGED TDR A126 EQUIPMENT RACK PLAN
SCALE: 1/4" = 1'-0"

ntermountain Healthcare

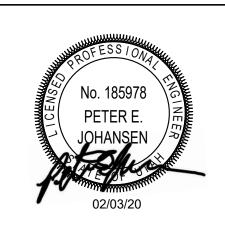
NJRA Project # 192

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ENLARGED TELECOM PLANS

DATA DEVIC	E DROP S	SCHEDUL	1 L	JK A126
DATA DEVICE TYPE	DETAIL LOCATION	COMM ROOM LOCATION	TOTAL BY FLOOR	Num of Drops
LEVEL 1			1	1
CEILING DATA - CAMERA (1-DROP)	SEE DETAIL 7/ET502	TDR A126	2	2
CEILING WIRELESS ACCESS POINT (2-DROP)	SEE DETAIL 6/ET502	TDR A126	11	22
FLOOR DATA (2-DROP)	SEE DETAIL 2/ET502	TDR A126	1	2
WALL DATA (1-DROP)	SEE DETAIL 5/ET502	TDR A126	11	11
WALL DATA (2-DROP)	SEE DETAIL 1/ET502	TDR A126	40	80
WALL DATA - ABOVE COUNTER (2-DROP)	SEE DETAIL 1/ET502	TDR A126	10	20
WALL DATA - PHONE (1-DROP)	SEE DETAIL 2/ET502	TDR A126	1	1
Grand total			76	138





SIEMONS FIBER CAN (3RU) 50 PAIR RISER CABLE BLANK PANEL SIEMONS 48 PORT PANEL BLANK PANEL VERTICAL WIRE
MANAGEMENT,
8' TALL x 10" WIDE, SIEMONS 48 PORT PANEL BLANK PANEL SIEMONS 48 PORT PANEL TYPICAL BLANK PANEL DAS SIEMONS 48 PORT PANEL BLANK PANEL SIEMONS 48 PORT PANEL BLANK PANEL SIEMONS 48 PORT PANEL — EQUIPMENT RACK, 8' TALL, TYPICAL BLANK PANEL SIEMONS 48 PORT PANEL BLANK PANEL SIEMONS 48 PORT PANEL BLANK PANEL BLANK PANEL PANDUIT CABLE MANAGER (4 RU) PANDUIT CABLE MANAGER (4 RU) PANDUIT CABLE MANAGER (4 RU) EATON PDU EATON PDU EATON PDU EATON PDU EATON PDU CISCO 4510 (14 RU) NCPP1 (2RU) NCPP1 (2RU) EATON 9PX UPS NURSE CALL SWITCH (OE)

NURSE CALL SWITCH (OE)

NURSE CALL SWITCH (OE) BLANK PANEL BLANK PANEL BLANK PANEL A-1 (AGAINST WALL) A-2

Intermountain Healthcare

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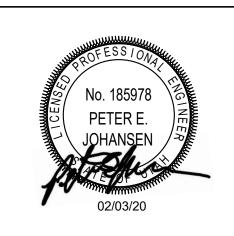
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Dialysis

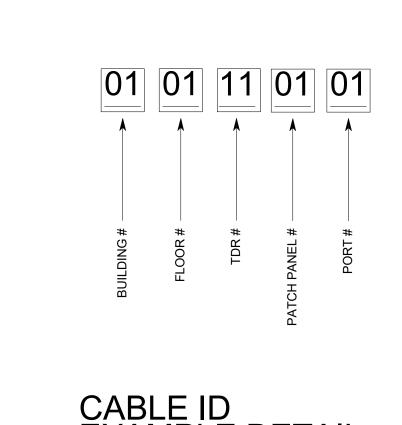
alley

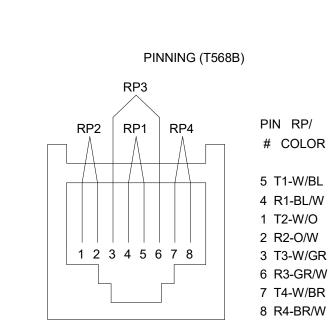
TELECOM EQUIPMENT RACK ELEVATIONS





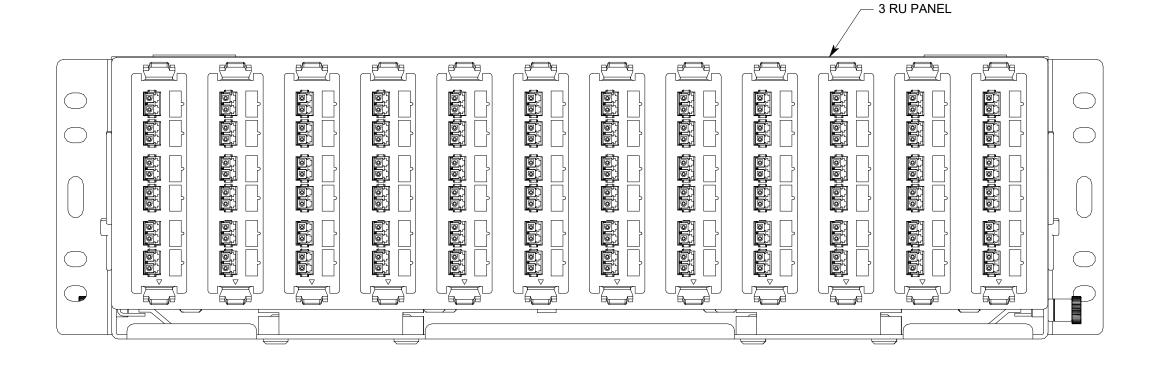
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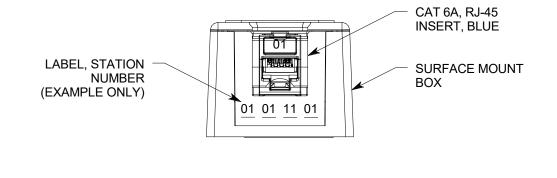


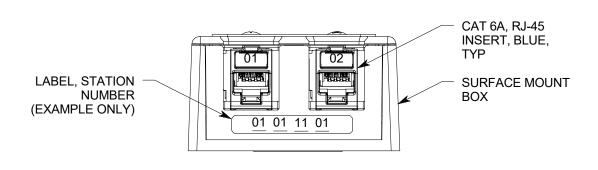


— CAT 6A JACKS, TYPICAL

\_ 2 RU PANEL

CAT 5E JACKS, TYPICAL

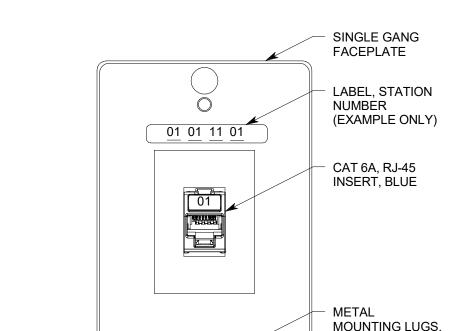


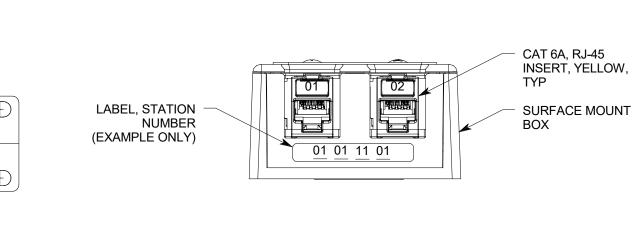


FIBER PATCH PANEL, (FPP1), TEC/TSER





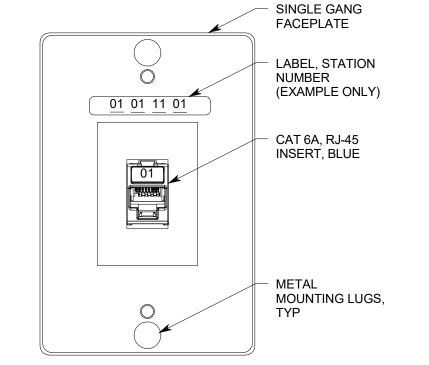




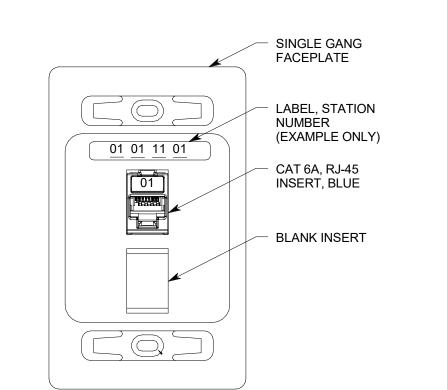
TYPICAL 'WAP' DATA OUTLET

6

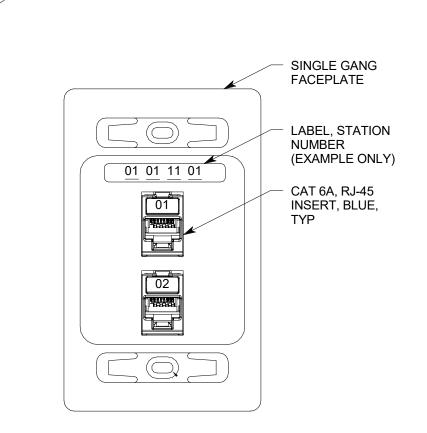
NO SCALE



STATION PATCH PANEL, (SPP1), TDR







Intermountain Healthcare Tooele NJRA Project # 19230.00 Construction Documents Feb 03, 2020

Clinic Expansion

Dialysis

Valley

TELECOM DETAILS

RISER PATCH PANEL, (RPP1), TDR, TEC/TSER

TYPICAL WALL DATA OUTLET

TYPICAL WALL DATA OUTLET

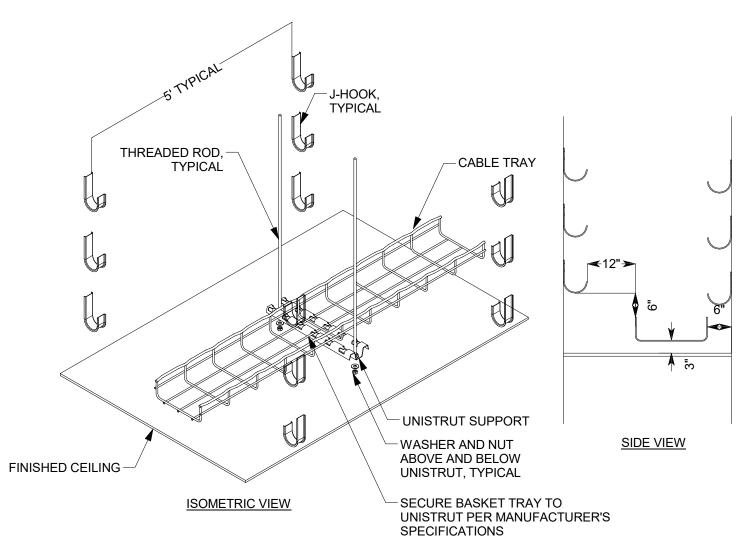
ET502

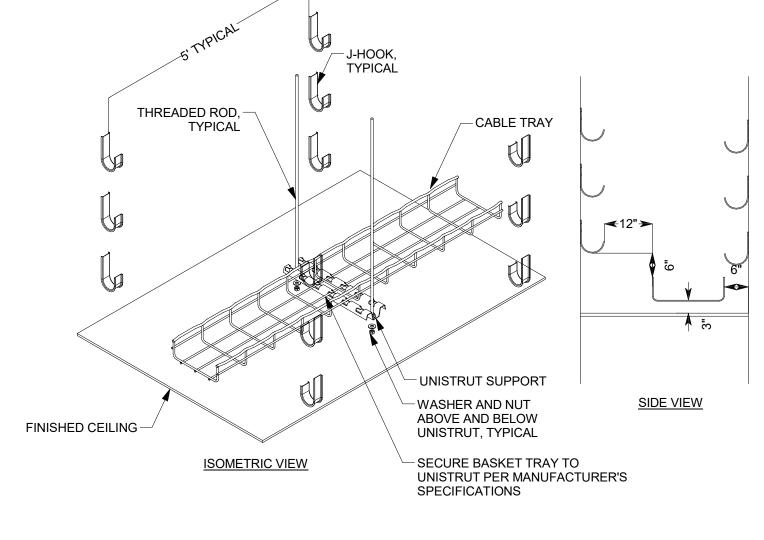
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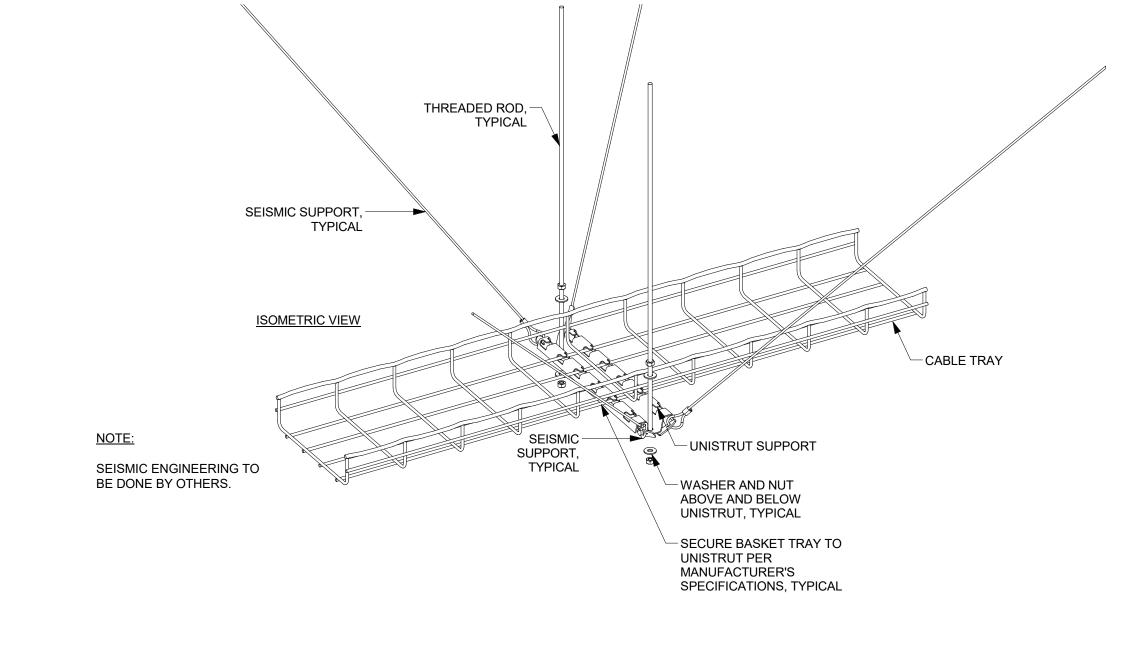


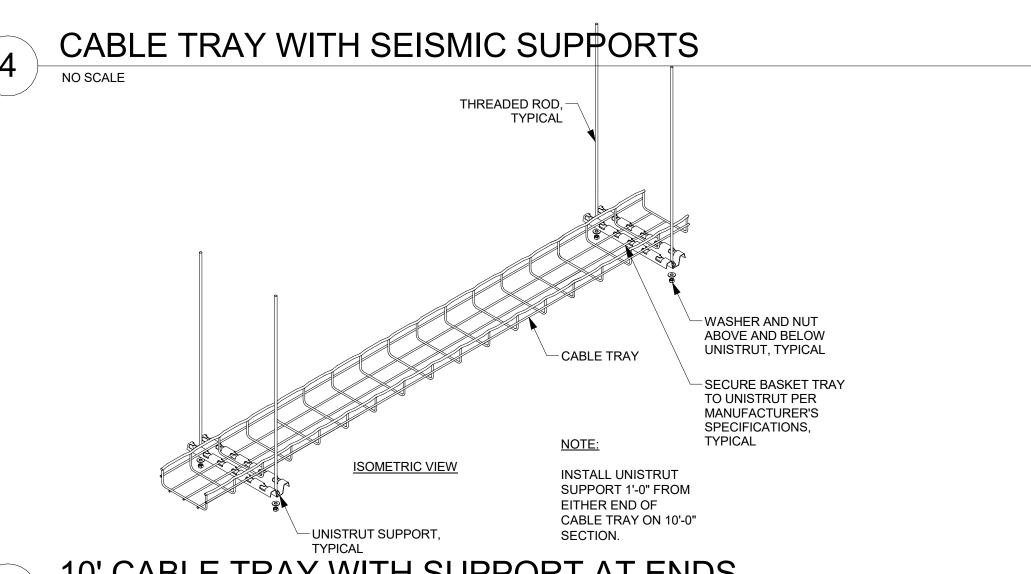


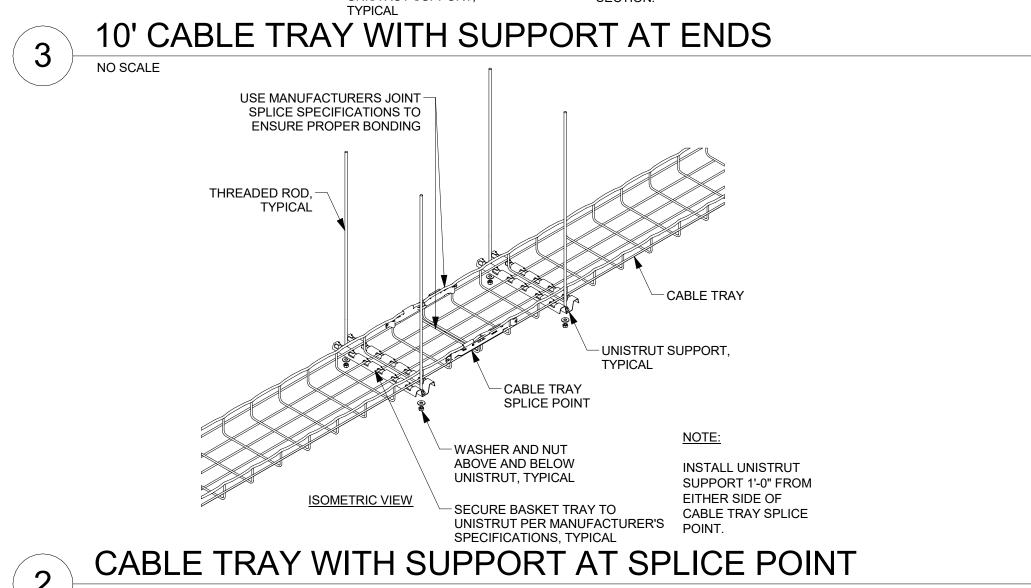


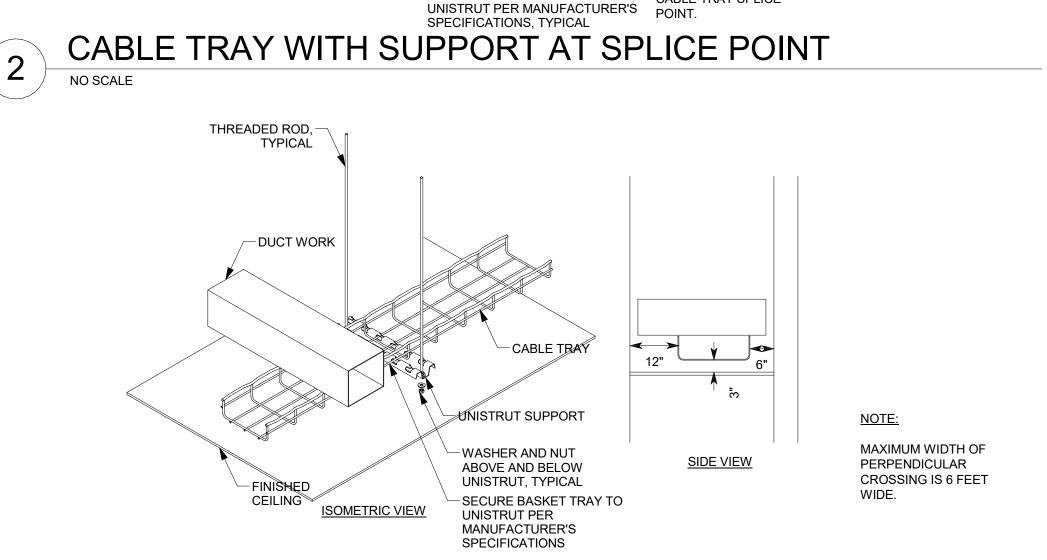




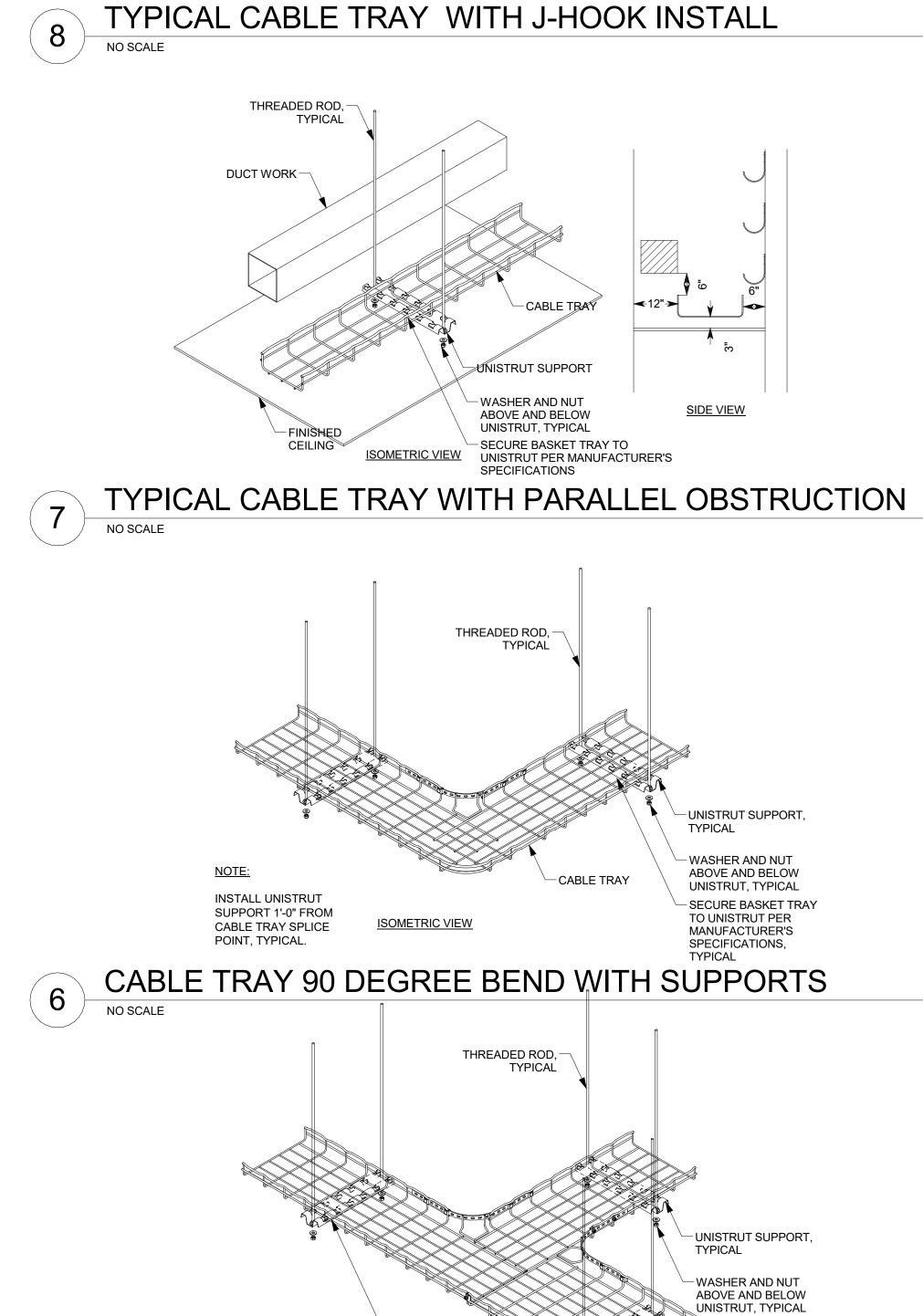












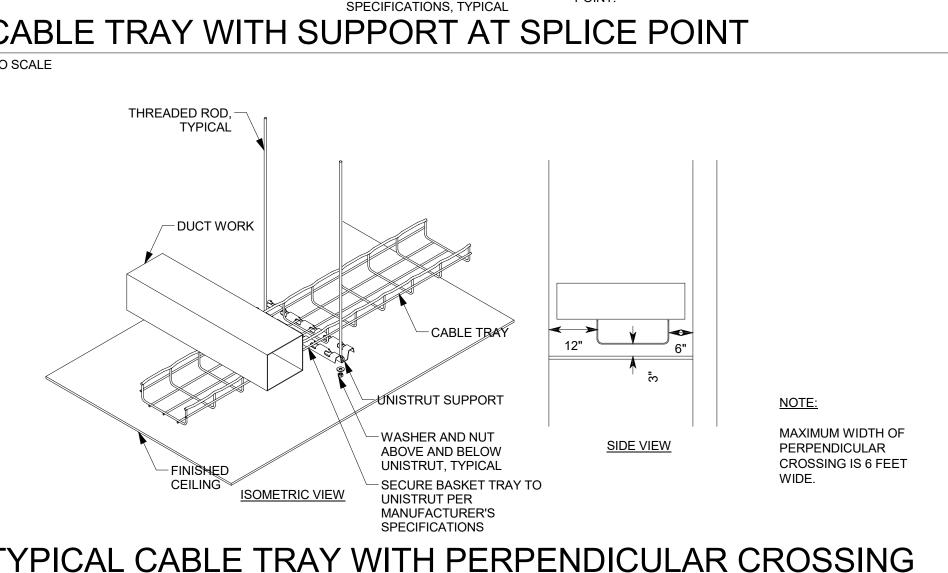
SECURE BASKET TRAY

TO UNISTRUT PER
MANUFACTURER'S
SPECIFICATIONS,
TYPICAL

CABLE TRAY INTERSECTION WITH SUPPORTS

NOTE:

INSTALL UNISTRUT SUPPORT 1'-0" FROM CABLE TRAY SPLICE POINT, TYPICAL.



TELECOM

DETAILS

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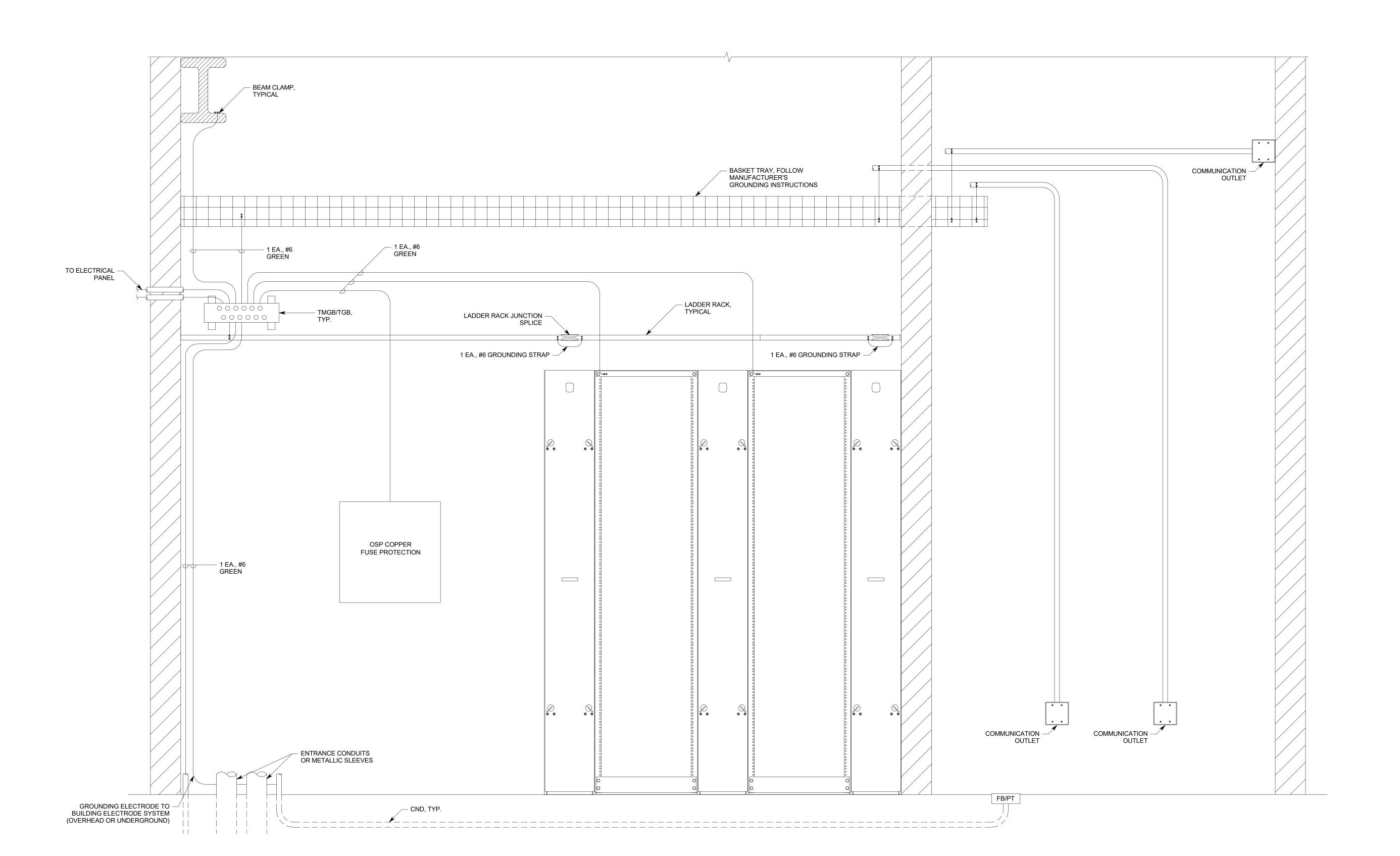
Construction Documents



#### **GENERAL NOTES:**

- ALL LOW VOLTAGE COMMUNICATIONS CONDUIT SHALL BE GROUNDED TO BASKET TRAY OR TELECOMMUNICATIONS GROUNDING BUS BAR.
- 2. "TMGB" SHOULD BE 1/4"x4"x24".
- 3. "TGB" SHOULD BE 1/4"x2"x24".

- 4. EMT CONDUIT GROUNDING CLAMP SHOULD BE ELECTROLYTIC CAST BRONZE. PANDUIT PART NUMBER GPL-"X"-"X", OR EQUAL.
- RIGID CONDUIT GROUND CLAMP SHOULD BE O-Z/GEDNEY BLG-XXXX, OR HBLG-XXXX, OR EQUAL.
- GROUNDING LUGS SHOULD BE TWO HOLE LONG BARREL LUGS. PANDUIT PART NUMBER LCC6, OR EQUAL.



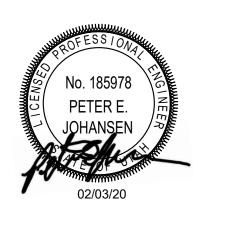
TELECOM EQUIPMENT RACK GROUNDING DETAIL
NO SCALE

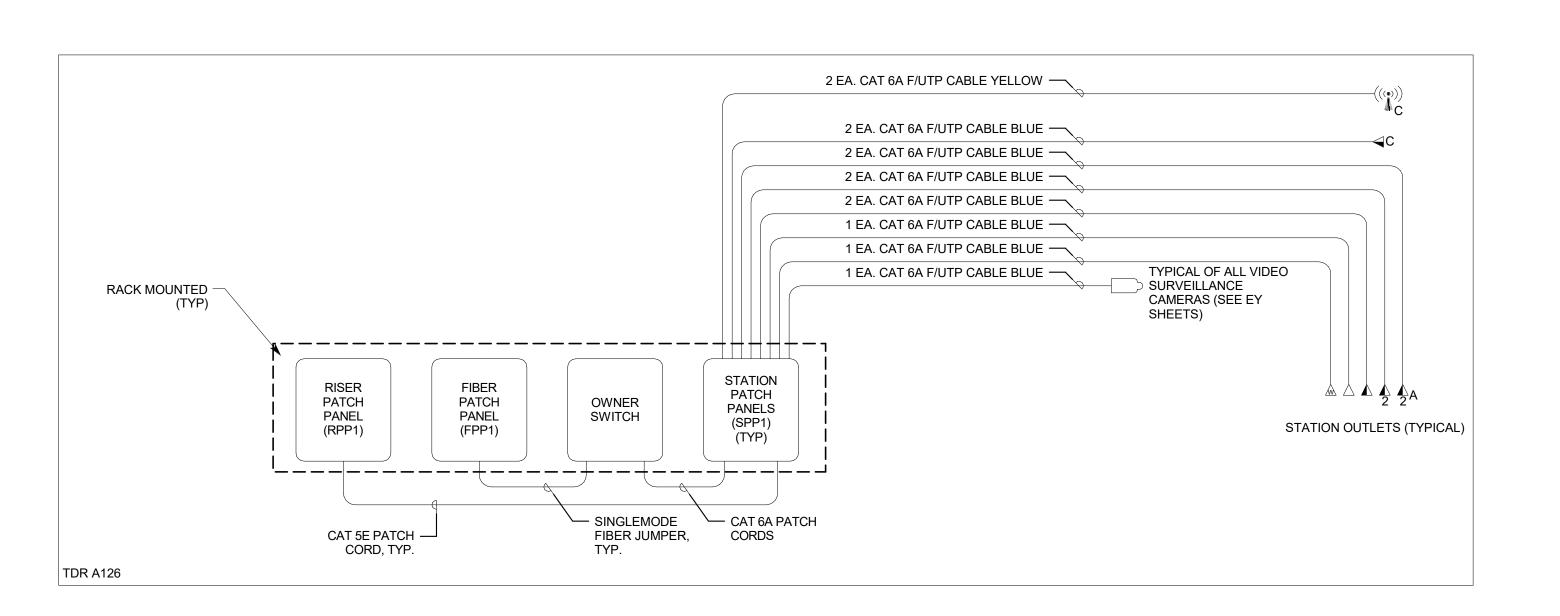
TELECOM
EQUIPMENT
RACK
GROUNDING
DETAIL
ET504

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NJRA Project #

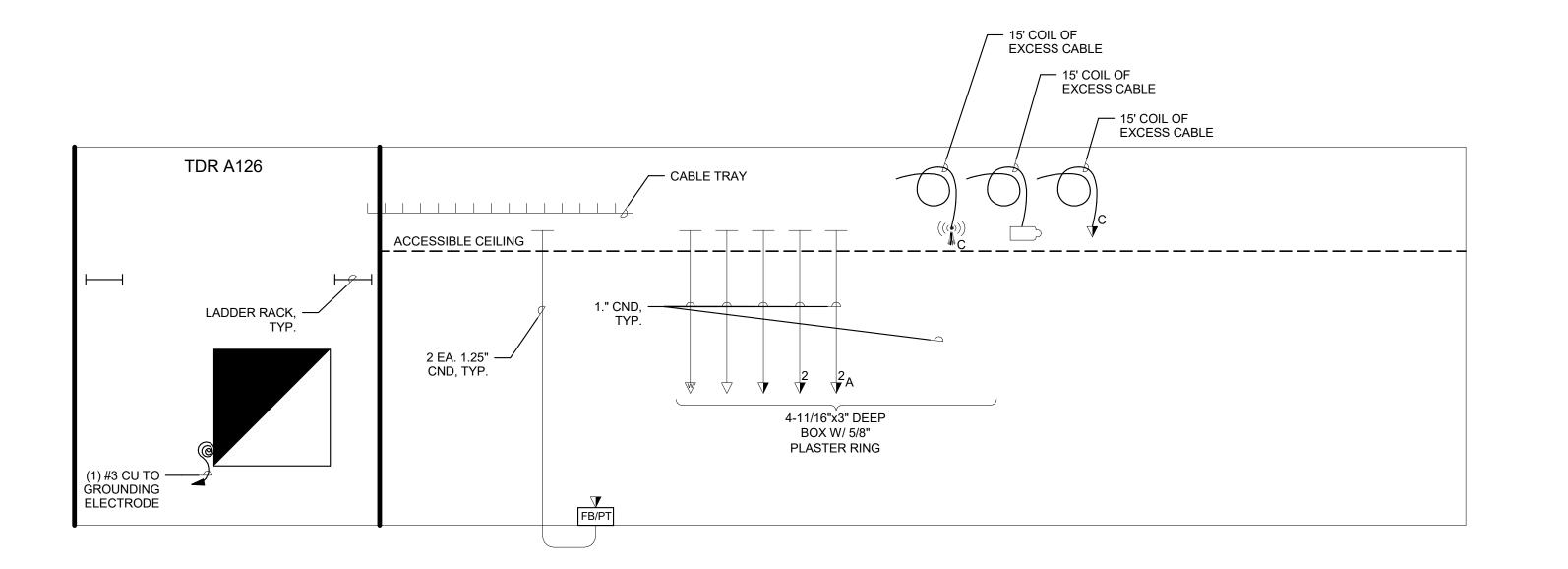






TELECOM CABLE RISER DIAGRAM

NO SCALE



TELECOM RISER DIAGRAMS

NJRA Project #

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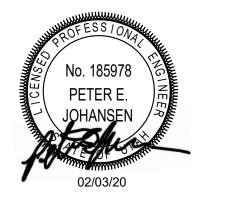
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TELECOM CONDUIT RISER DIAGRAM

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○ SHEET KEYNOTES

1 PROVIDE NEW 8 DOOR ACCESS CONTROL PANEL.

oele Valley Dialysis Clinic Expar

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SECURITY PLAN LEVEL 1

EY101



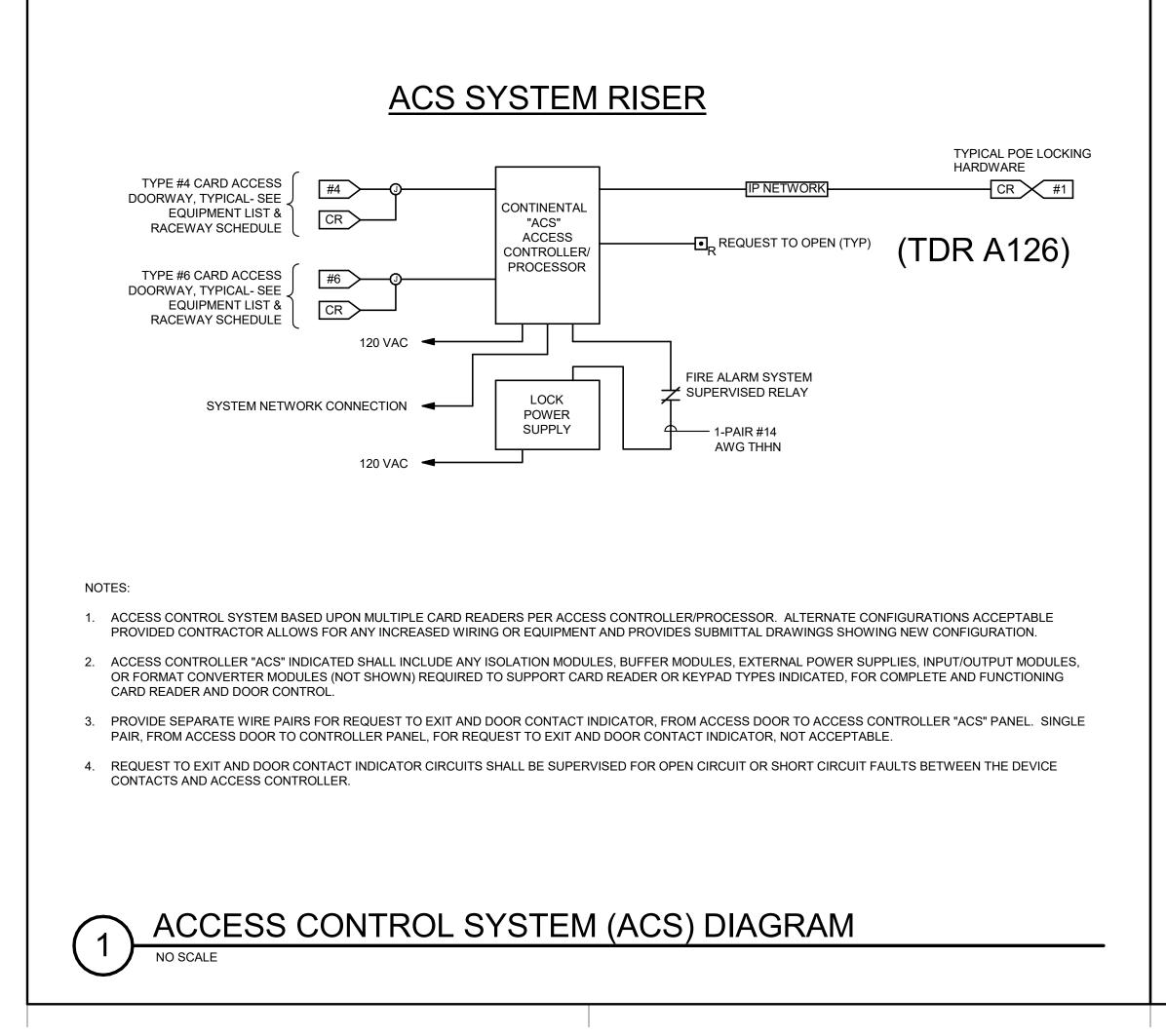


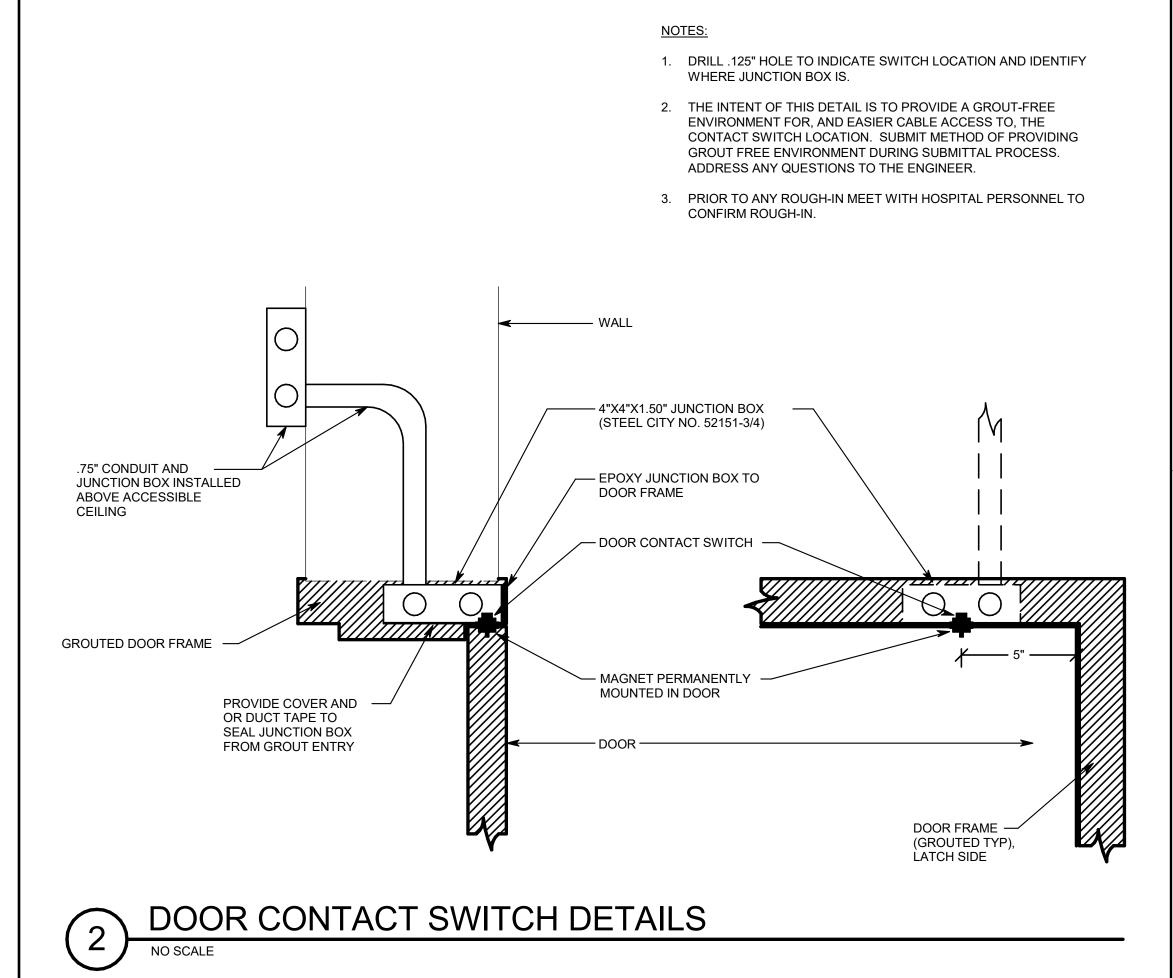
	SECURITY	'EQUIPN	/IENT SC	HED	ULE
SYMBOL	DESCRIPTION	MOUNTING *	ROUGH-IN	QTY	ACCEPTABLE TYPES
CR	CARD READER	40"	4SQ W/ 1G RING	OFP	SEE SECTION 281300
CRF	CARD READER FOR FRIDGE AND/OR FREEZER	40"	4SQ W/ 1G RING	OFP	PROVIDE HID READER WITH HES 660 SERIES LOCKSET
#1	CARD ACCESS DOOR TYPE, TYPICAL. REFER TO CARD ACCESS DOOR TYPE SCHEDULE.	SEE SCHEDULE	SEE SCHEDULE	OFP	REFER TO CARD ACCESS DOOR TYPE SCHEDULE & SECTION 281300
AH	APERIO HUB (IP)	CEILING	1G BOX	OFP	PROVIDE APERIO HUB MODEL AH-40-IN2-NNNN
CR	WIRELESS READER AND LOCKSET FOR MED CABINET	ON CABINET	SURFACE MOUNTED	OFP	PROVIDE HES K100 WIRELESS READER/LOCKSET
	IP INTERCOM WALL STATION	54"	4SQ W/ 1G RING	OFP	PROVIDE AXIS A8004-VE NETWORK VIDEO DOOR STATION
#1>	VSS CAMERA/ENCLOSURE TYPE, TYPICAL. REFER TO VSS CAMERA/ENCLOSURE TYPE SCHEDULE.	SEE SCHEDULE	SEE SCHEDULE	OFP	SEE VSS CAMERA/ENCLOSURE TYPE SCHEDULE
P	PANIC BUTTON	DESK	SURFACE MOUNT	OFP	SEE SECTION 281300
ACS	CARD ACCESS CONTROLLERS & PWR SUPPLIES	72"	4"x4" GUTTER & STUBS A/R	A/R	SEE SECTION 281300
VSS	VIDEO SURVEILLANCE SYSTEM	RACK MOUNTED			COORDINATE WITH OWNER

 $<sup>^{\</sup>star}$  COORDINATE MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS BEFORE INSTALLATION.

CAMERA TYPE NUMBER	SYMBOL	DESCRIPTION	INCLUDES
TYPE 1 &, TYPE 4	VSS# <b>■</b> #1	INTERIOR CAMERA (CEILING MOUNTED)	* JUNCTION BOX ABOVE ACCESSIBLE CEILING WITH 1" CONDUIT TO VSS OR NEAREST CABLE TRAY. PROVIDE 1 EACH, CAT 6, PLENUM RATED CABLE PER CAMERA LOCATION, UNLESS OTHERWISE NOTED
TYPE 2	VSS# <b>▼</b>	INTERIOR CAMERA (WALL MOUNTED)	* JUNCTION BOX AT +90" ABOVE FINISHED FLOOR, WITH 1" CONDUIT BACK TO VSS OR NEAREST CABLE TRAY. PROVIDE 1 EACH, CAT 6, PLENUM RATED CABLE PER CAMERA LOCATION, UNLESS OTHERWISE NOTED.
TYPE 3	VSS# <b>4</b> 3	EXTERIOR CAMERA (WALL MOUNTED)	* JUNCTION BOX AT +138" ABOVE FINISHED FLOOR, WITH 1" CONDUIT BACK TO VSS OR NEAREST CABLE TRAY. PROVIDE 1 EACH, CAT 6, PLENUM RATED CABLE PER CAMERA LOCATION, UNLESS OTHERWISE NOTED.

		VSS CAMERA SCHEDULE	
TYPE	INTERIOR (INT)/ EXTERIOR (EXT)	DESCRIPTION	AXIS MODEL#
1	INT	FIXED DOME, VARIFOCAL, CEILING MOUNT	P3374
2	INT	FIXED DOME, VARIFOCAL, WALL MOUNT	P3374
3	EXT	FIXED DOME, VARIFOCAL, WALL MOUNT	Q3505-VE
4	INT/EXT	FIXED DOME, CEILING MOUNT (360°)	P3707-PE





Tooele Valley Dialysis Clinic Expansion

NJRA Project # 19230.00

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SECURITY DETAILS & DIAGRAM

EY601

LOCATION. PROVIDE COVER FOR J-BOX.

ON PROTECTED SIDE AND UNPROTECTED SIDE ELEVATIONS.

3. CONFIRM CORRECT CARD ACCESS DOOR RACEWAY, LOCK VOLTAGE, AND EXIT SWITCH CURRENT RATING (2 AMPS MIN.) WITH DIV. 8 FURNISHED CARD ACCESS DOOR HARDWARE PER DIV. 8 DOOR HARDWARE SPECIFICATIONS.

PROVIDE CONCEALED .75" C TYPICAL FOR LINES SHOWN TO DEVICE BOXES

4. LOCATE CARD READER BOX AS INDICATED ON FLOOR PLANS. RACEWAY AND BOXES BY DIV. 26. REFER TO 281300 FOR CARD ACCESS SYSTEM REQUIREMENTS.

6. ELECTRIC LOCKING HARDWARE (MAG LOCKS, ELECTRIC STRIKES, POWER TRANSFER HINGES, ETC.) BY DIV 8. REVIEW DOOR HARDWARE FURNISHED AND VERIFY LOCK VOLTAGES AND OPERATIONAL FUNCTIONALITY OF LOCKS. CONTACT ENGINEER WITH QUESTIONS OR CONCERNS.

DOUBLE 4SQ J-BOX ON PROTECTED SIDE OF DOORWAY (SIDE OPPOSITE OF

CARD READER) ABOVE ACCESSIBLE CEILING OR IN OTHER ACCESSIBLE

**ABBREVIATIONS** = 1-GANG OR SINGLE GANG FOUR SQUARE JUNCTION BOX = AUTO OPENER = AS REQUIRED = ACCESSIBLE = ACCESS CONTROL SYSTEM CONTROLLER = ASSISTED DISABILITY OPENER = ELECTRIC EXIT DEVICE/CR COMBO ON DOOR = ELECTRIC LOCK/CR COMBO ON DOOR = CONDUIT = DOOR CONTACT INDICATOR SWITCH = CARD READER = DOOR HARNESS = DOUBLE = DELAYED EXIT DEVICE = DIRECTION = EXIT DEVICE = ELECTRIC HINGE = ELECTRIC LOCKSET = ELECTRIC STRIKE = ELECTRIC DEADLATCH = ELECTRIFIED EXIT DEVICE = EMERGENCY LOCK CONTROL = ELECTRIC POWER TRANSFER = FIRE ALARM SYSTEM = FRAME HARNESS HDWR = HARDWARE = INTRUSION DETECTION SYSTEM = KEY SWITCH = LOCK INDICATOR SWITCH IN HARDWARE = PANIC HARDWARE LATCH POSITION SWITCH = LOCK POWER SUPPLY = MOTION DETECTOR = ELECTROMAGNETIC LOCK = OBTAIN FROM PLANS = PUSH BUTTON RELEASE = PANIC HARDWARE = PUSH PAD ACTUATOR = POWER SUPPLY

= POE EXIT DEVICE

RS = REMOTE OPEN SWITCH

= TYPICAL = WITH

TLC = TIME/SYSTEM LOCK CONTROL

PWR = POWER QTY = QUANTITY

= POE ELECTRIC LOCKSET

REX = REQUEST TO EXIT SWITCH/FUNCTION

= INTERFACE BOARD FOR COMBO LOCKING HARDWARE

CARD ACCESS DOOR TYPE SCHEDULE DOOR SYMBOL TYPE# DESCRIPTION PROTECTED SIDE ELEVATION UNPROTECTED SIDE ELEVATION LOCK TYPE(S) DIVISION OF WORK AND COMMENTS TYPE 1 TO ACS SINGLE DOOR, 1 CARD READER ELECTRIC SECURITY CONTRACTOR PROVIDES: 4SQ J-BOX ----LOCKSET 4SQ J-BOX ───────────────── DOOR RELEASE • CR, ABOVE ACC .75" C (TYP) ABOVE ACC HARDWARE CONTRACTOR PROVIDES: CEILING CEILING • EL, EH, L/PS, FH, DH **#1** HARNESS IN CARD READER 4SQ BOX W/1G LOCK CONTROLLED BY: .75" C (TYP) • CR 5 RING POWER TRANSFER ELECTRIC — 1G BOX IN FRAME LOCKSET — DOOR HARNESS **HARDWARE SETS:** IN DOOR AUTO OPENER TYPE 2 TO ACS AUTO OPENER SINGLE DOOR, 1 CARD READER ELECTRIC STRIKE | SECURITY CONTRACTOR PROVIDES: 4SQ J-BOX — WITH AUTO OPENER ABOVE ACC CR, FH, DH CEILING HARDWARE CONTRACTOR PROVIDES: FRAME HARNESS ES, L/PS .75" C (TYP) LOCK CONTROLLED BY: • CR CARD READER 4SQ BOX W/1G ELECTRIC STRIKE DOOR HARNESS — HARDWARE SET: TYPE 3 SINGLE DOOR, 1 CARD READER SECURITY CONTRACTOR PROVIDES: 4SQ J-BOX ─────────── 4SQ J-BOX →J LOCKSET • CR, ABOVE ACC ---- .75" C (TYP) ABOVE ACC HARDWARE CONTRACTOR PROVIDES: CEILING CEILING FRAME • EL, EH, L/PS, FH, DH **#3** HARNESS IN CARD READER 4SQ BOX W/1G LOCK CONTROLLED BY: .75" C (TYP) • CR RING POWER TRANSFER ELECTRIC — 1G BOX IN FRAME LOCKSET — DOOR HARNESS HARDWARE SETS: IN DOOR



NJRA Architects, Inc.
5272 S. College Drive, Suite104
Murray, Utah 84123
801.364.9259
www.njraarchitects.com



ele Valley Dialysis Clinic Expansion

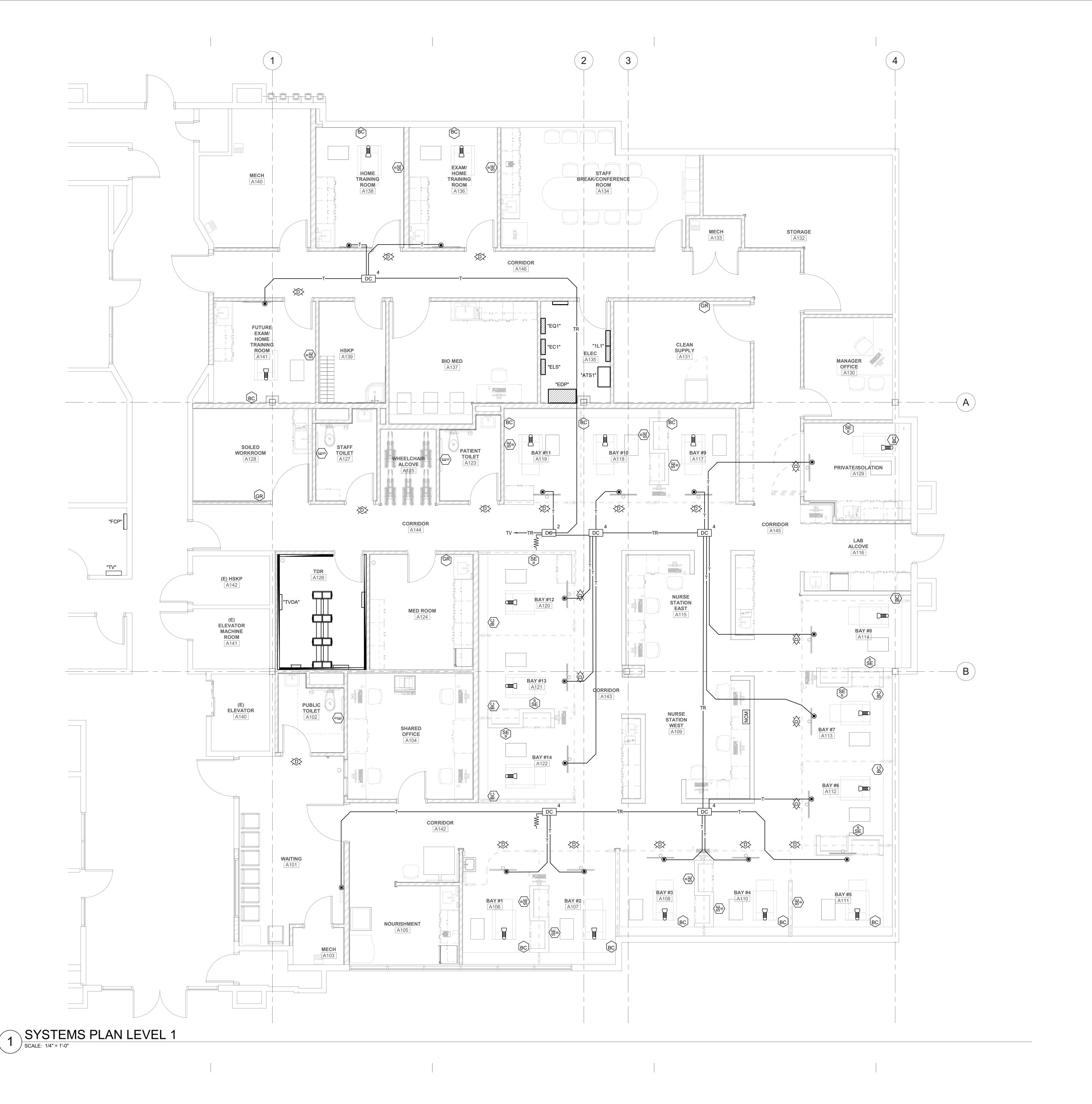
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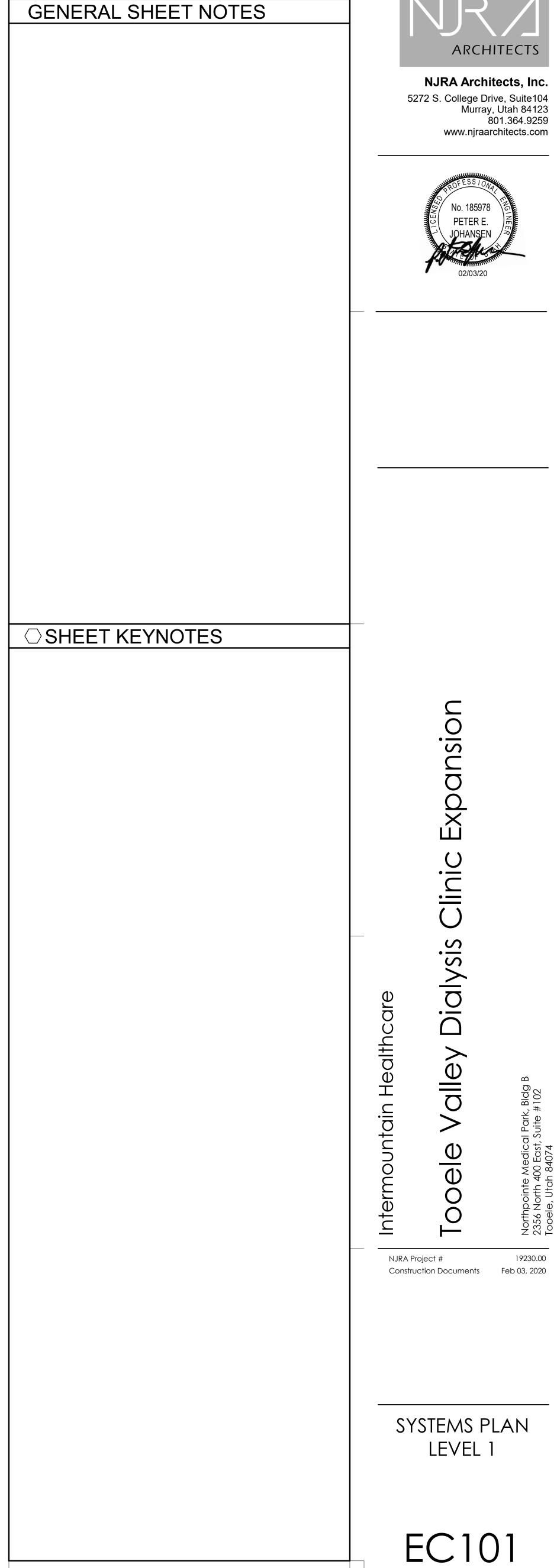
NJRA Project # 19230.00

Construction Documents Feb 03, 2020

SECURITY DETAILS & DIAGRAM

EY602





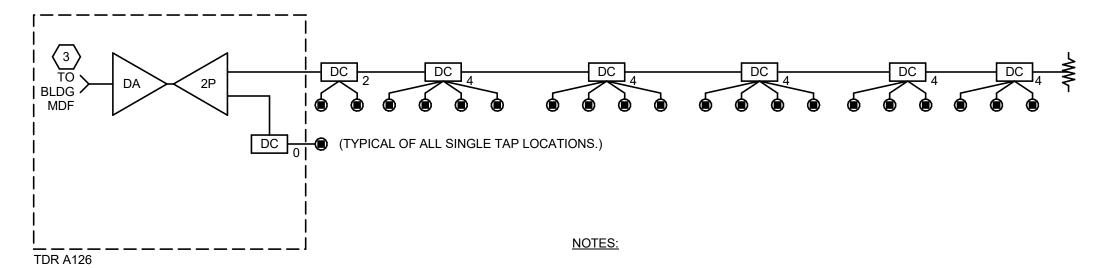
ARCHITECTS

NJRA Architects, Inc. 5272 S. College Drive, Suite104 Murray, Utah 84123 801.364.9259 www.njraarchitects.com



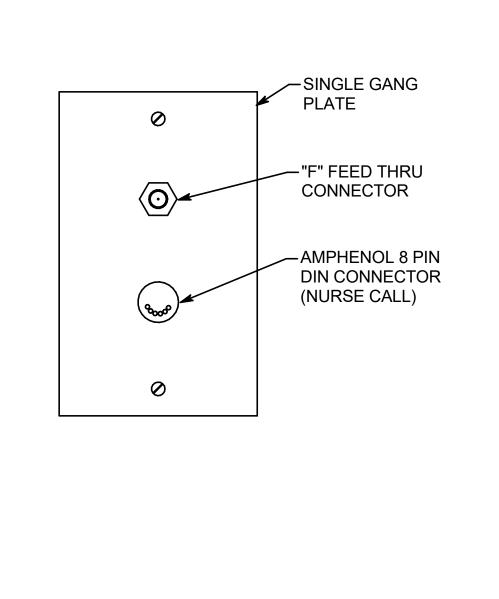
			NURSE CALL SY	MBOL LIST	
SYMBOL	MANUF.	PART#	DESCRIPTION	BACKBOX	BOX MOUNTING HEIGHT
NCM	HILL-ROM	P2500NNC1B00	STAFF CONSOLE, DESK MOUNT	STEEL CITY 58371 3/4R, RACO 561, OR ANY OTHER SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
NCM	HILL-ROM	P2594NNC3A00	STAFF CONSOLE, WALL MOUNT	STEEL CITY 58371 3/4R, RACO 561, OR ANY OTHER SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
GA	HILL-ROM	P2594NNC3B00	GRAPHICAL ANNUNCIATOR	STEEL CITY 58371 3/4R, RACO 561, OR ANY OTHER SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
₿Ĉ	HILL-ROM	P2505NNC1B00	AUDIO STATION BED CONNECTOR (ASBC)	GARVIN 52181-3/4, WITH GARVIN 52C13 RING, OR ANY OTHER 4" SQUARE 3.5" DEEP BACK BOX WITH SINGLE GANG MUD RING.	REFER TO ELEVATION DRAWINGS
<b>€</b>	HILL-ROM	P2516A01	EQUIPMENT RECEPTACLE, WITH CALL CORD	STEEL CITY 58371 3/4R, RACO 561, OR ANY OTHER SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
<b>₹</b> D <sub>s</sub> <b>&gt;</b>	HILL-ROM	P2506NNC1B00	DOME LIGHT, SINGLE LED	RACO 231, WITH RACO 778 RING, OR ANY OTHER 4" SQUARE 2 1/8" DEEP BACK BOX.	REFER TO ELEVATION DRAWINGS
<b>\pi</b>	HILL-ROM	P2506NNC8A00-D	ICON BASED-LIGHT LED DOME LIGHT	STEEL CITY CYLE-3/4, RACO 591, OR ANY OTHER 3.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
	HILL-ROM	P2506NNC8A00-7	ICON BASED-LIGHT LED ZONE LIGHT	STEEL CITY CYLE-3/4, RACO 591, OR ANY OTHER 3.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
POE-24	HILL-ROM	P2519NNC1A24	POE SWITCH		REFER TO ELEVATION DRAWINGS
<b>©</b> B	HILL-ROM	P2520A07	CODE BLUE PUSH BUTTON SWITCH	RACO 561 BACK BOX,	REFER TO ELEVATION
	HILL-ROM	P2520A07	CODE PINK PUSH BUTTON SWITCH	RACO 561 BACK BOX,	REFER TO ELEVATION
	HILL-ROM	P2520A07	PUSH FOR ASSISTANCE PUSH BUTTON SWITCH	RACO 561 BACK BOX, OR ANY OTHER 2.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
	HILL-ROM	P2520A08	STAFF EMERGENCY PUSH BUTTON SWITCH	RACO 561 BACK BOX, OR ANY OTHER 2.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
Ē	HILL-ROM	P2520B01	BATH SWITCH, W/CANCEL, SUPERVISED	RACO 561 BACK BOX, OR ANY OTHER 2.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
<b>(</b>	HILL-ROM	P2520B02	BATH SWITCH, W/O CANCEL, SUPERVISED	RACO 561 BACK BOX, OR ANY OTHER 2.5" DEEP SINGLE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
UPS, APC ackmount Non-Seis	HILL-ROM	P2521B02	UPS, RACK MOUNTABLE, 2U - NON-SEISMIC		REFER TO ELEVATION DRAWINGS
CB SR	HILL-ROM	P2594NNC1B01	STAFF STATION - STANDARD ROOM STATION W/ CODE	STEEL CITY GW-225G, RACO 691 OR ANY OTHER 2.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
<b>SR</b>	HILL-ROM	P2594NNC1B01	STAFF STATION - STANDARD ROOM STATION W/O CODE	STEEL CITY GW-225G, RACO 691 OR ANY OTHER 2.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
<b>GR</b>	HILL-ROM	P2594NNC2C00	GRAPHICAL ROOM STATION (GRS) - STAFF	STEEL CITY GW-225G, RACO 691 OR ANY OTHER 2.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
GR (B)	HILL-ROM	P2594NNC2C11	GRAPHICAL ROOM STATION (GRS) - PATIENT	STEEL CITY GW-225G, RACO 691 OR ANY OTHER 2.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
RAD	HILL-ROM	P2594NNC4A10	REMOTE AUDIO DEVICE	STEEL CITY GW-225G, RACO 691 OR ANY OTHER 2.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
RCB2	HILL-ROM	P2599NNC2A00	RCB2 ROOM CONTROL BOARD	STEEL CITY GW-235G, RACO 696 OR ANY OTHER 3.5" DEEP, TWO OR THREE GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
Staff	HILL-ROM	RTLS-CLOSED	RTLS - STAFF LOCATING LOCATION-CLOSED AREA	STEEL CITY GW-225G, RACO 691 OR ANY OTHER TWO GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
Staff	HILL-ROM	RTLS-OPEN	RTLS - STAFF LOCATING LOCATION-GLASS/OPEN AREA	STEEL CITY GW-225G, RACO 691 OR ANY OTHER TWO GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
Staff	HILL-ROM	RTLS-BAY	RTLS - STAFF LOCATING LOCATION-BAY	STEEL CITY GW-225G, RACO 691 OR ANY OTHER TWO GANG BACK BOX.	REFER TO ELEVATION DRAWINGS
	HILL-ROM		PILLOW SPEAKER, REQUIRES ASBC.		
R	CURBELL	MAP985A	REMOTE ENTERTAINMENT STATION	STEEL CITY GW-225C, RACO 691 OR ANY OTHER TWO GANG BACK BOX.	REFER TO ELEVATION DRAWINGS

SYMBOL	DESCRIPTION	QTY	ACCEPTABLE TYPES
4P	MULTI-PORT SPLITTER	OFP	2-PORT BLONDER TONGUE SXRS-2 4-PORT BLONDER TONGUE SXRS-4
DA	BROADBAND AMPLIFIER	OFP	BLONDER TONGUE MUVB-25
DCX	DIRECTIONAL COUPLER (X = NUMBER OF PORTS)	OFP	BLONDER TONGUE SRT-4A, SRT-2A
	WALL TAP PLATE	OFP	BLONDER TONGUE VERSATAP SERIES MODEL V-1GF-FT W/ COVER PLATE
- <b>/</b> W/-	RF TERMINATOR	A/R	75 OHM TERMINATOR
/ <sup>T</sup>	COAXIAL CABLE, HORIZONTAL DROP	A/R	RG-6 (SEE SPECIFICATIONS)
TR-	COAXIAL CABLE, TRUNK	A/R	RG-11 (SEE SPECIFICATIONS)



- TERMINATE ALL UNUSED DEVICE PORTS WITH 75 OHM TERMINATING CONNECTORS. ALL TV OUTLET JACKS SHALL PROVIDE AT LEAST +2dBmV OF VIDEO SIGNAL.
- 3. PROVIDE A SIGNAL GREATER THAN OR EQUAL TO 25dbm.

TV DISTRIBUTION SYSTEM DIAGRAM



#### NOTES:

1. PROVIDE AMPHENOL CONNECTOR ON TV PLATES IN PATIENT ROOMS. NON-PATIENT LOCATIONS HAVE THE "F" CONNECTOR ONLY. CABLE TERMINATION TO AMPHENOL CONNECTOR WILL BE BY NURSE CALL INSTALLER.



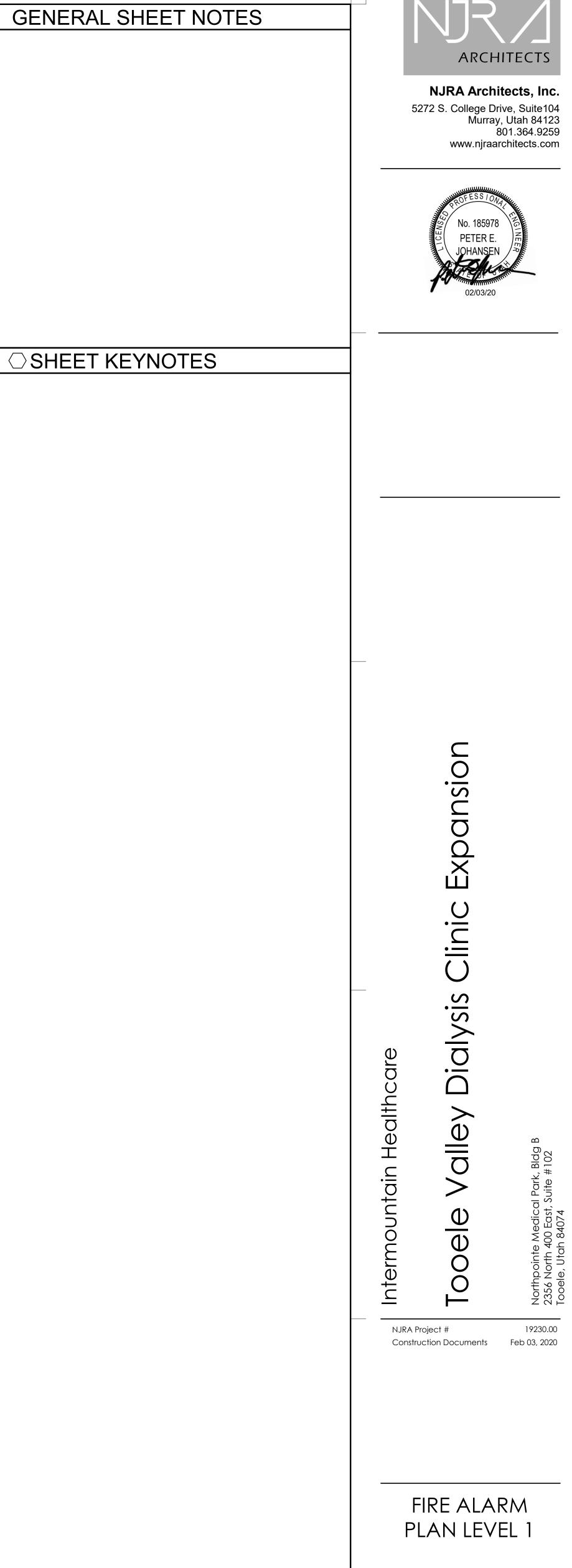


EC601

SYSTEMS DIAGRAMS &

DETAILS





FA101