

_OT DATE: Jul 25, 2022 - 4:41pm LENAME: X:\2022-24 Cerillos Senior Center II\CAD\02_ARCH_SHEET\2009_A502.dw

DOOR HARDWARE SCHEDULE

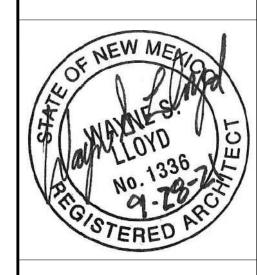
HARDWARE SET: 01					
DOOR NUMBER:	F0045				
FS01A	FS01B				
EACH TO HAVE:		LUNOT	EDD4 4.5 V.4.5	055	n
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EΑ	ENTRANCE LOCK PERMANENT CORE	ND92HD RHO	626	SCI
<u>1</u> 1	EA EA	PERMANENT CORE SURFACE CLOSER	1C-7 4011	626 689	BES
<u>.</u> 1	EA	WALL STOP	WS406/407CCV	630	IVE
<u>'</u> 1	SET	SEALS	8303AA X D.S.	AA	ZEF
<u>. </u>	EA	DOOR BOTTOM	111AA X D.W.	AA	ZEF
<u>.</u> 1	EA	THRESHOLD	548A X D.W.	A	ZEF
HARDWARE SET: 02					
DOOR NUMBER:					
FS01C	FS01D				
FS01E	FS01F				
FS01G	FS01H				
SC06C					
EACH TO HAVE:					
ALL HARDWARE BY DOOR					
MANUFACTURER					
HARDWARE SET: 03					
DOOR NUMBER:					
FS03					
EACH TO HAVE:					-
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
	EA	PASSAGE SET	ND10S RHO	626	SCI
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
HADDWADE OFT A					
DOOR NUMBER:					
DOOR NUMBER:	SCOE				
FS04 EACH TO HAVE:	SC05				
	E^	HINGE	5BB1 4 5 V 4 5	GEO	1, /-
3 1	EΑ	HINGE ENTRANCE LOCK	5BB1 4.5 X 4.5	652	IVE SCI
<u>1</u> 1	EA EA	PERMANENT CORE	ND92HD RHO	626 626	BES
<u>1</u> 1	EA	WALL STOP	1C-7 WS406/407CCV	630	IVE
3	EA	SILENCER	WS406/407CCV SR64	GRY	IVE
•	<u> </u>	CILLINOLIX	OI VOT	GRI	175
HARDWARE SET: 05					
DOOR NUMBER:					
FS06					
EACH TO HAVE:					
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
<u> </u>	EA	STOREROOM LOCK	ND96HD RHO	626	SCI
<u>.</u> 1	EA	PERMANENT CORE	1C-7	626	BES
<u>. </u>	EA	SURFACE CLOSER	4111 CUSH	689	LCN
 1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
					-
1	SET	SEALS	188S X D.S.	BLK	ZEF
HARDWARE SET: 06					
DOOR NUMBER:					
FS07	SC08				
SC09	3300				
EACH TO HAVE:					
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
<u></u>	EA	PUSH PLATE	8200 4" X 16"	630	IVE
<u>'</u> 1	EA	PULL PLATE	8302 6" 4" X 16"	630	IVE
<u>.</u> 1	EA	SURFACE CLOSER	4011	689	LCN
<u>. </u>	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
					-
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
HADDWARE OFT AT					
DOOR NUMBER:					
FS08	SC13				
	0013				
EACH TO HAVE: 3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
<u>3</u> 1	EA	STOREROOM LOCK	5BB1 4.5 X 4.5 ND96HD RHO	652	SCH
<u>1</u> 1	EA	PERMANENT CORE	1C-7	626	BES
<u>1</u> 1	EA	WALL STOP	WS406/407CVX	630	IVE
<u>1</u> 3	EA	SILENCER	WS406/407CVX SR64	630 GRY	IVE
<u>-</u>		CILLINOLIX	OI VOT	GRI	17
HARDWARE SET: 08					
DOOR NUMBER:					
SC01A					
EACH TO HAVE:	-				
1	EA	CONT. HINGE	112XY	628	IVE
<u>'</u> 1	EA	CONT. HINGE	112XY EPT	628	IVE
<u>. </u>	EA	POWER TRANSFER	EPT2 ~	689	VOI
•		. STEIN HANNIEN	KR4954-STAB-ANGLE		
4		DELIC:	IXIX4304-0 AD-AIXC		10V
1	EA	REMOVABLE MULLION	PLATE	689	VOI
1 1	EA EA	PANIC HARDWARE		626	100

2	EA	PERMANENT CORE	1C-7		626	BES
					+	
1	EA	SFIC MORTISE CYL.	80-132		626	SCH
1	EA	SFIC RIM CYLINDER	80-159		626	SCH
2	EA	OFFSET PULL	8190EZHD-10"		630	IVE
2	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4021		689	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC	~	689	LCN
1	EA	MOUNTING PLATE	4020-18G		689	LCN
1	EA	ACTUATOR KIT	8310-3853WB	~	630	LCN
			@ BOLLARD			
1	EA	ACTUATOR KIT	8310-3853WS	~	630	LCN
1	EA	RECEIVER	8310-865	~		LCN
1	EA	BOLLARD	8310-866			LCN
1	EA	MULLION SEAL	8780N X D.H.		BK	ZER
2	EA	DOOR SWEEP	39A X D.W.		А	ZER
1	EA	THRESHOLD	8655A X D.W.		Α	ZER
1	SET	SEALS	BY ALUM DOOR/FRAME MFG			
1	EA	WIRING DIAGRAM	POINT TO POINT / RISER	~		

NOTE: WALL PLATE SWITCHES SHALL BE WIRED IN SERIES WITH THE "LX" SWITCH IN THE EXIT DEVICE
SUCH THAT WHEN THE EXIT DEVICE IS "DOGGED" (UNLOCKED) THE WALL PLATE SWITCHES ARE ACTIV
AND THE OPERATOR WILL OPEN THE DOOR. WHEN THE EXIT DEVICE IN NOT "DOGGED" (LOCKED) THE
WALL PLATE SWITCHES ARE NOT ACTIVE AND THE OPERATOR WILL NOT OPEN THE DOOR

HARDWARE SET: 09					
DOOR NUMBER:					
SC01B	SC15				
EACH TO HAVE:					
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
1	EA	PANIC HARDWARE	99-L-06	626	VON
1	EA	PERMANENT CORE	1C-7	626	BES
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
 1	EA	WALL STOP	WS406/407CVX	630	IVE
<u>'</u> 1	EA	RAIN DRIP	142A X D.W. +4"	AA	ZER
<u>'</u> 1	SET	SEALS	8303AA X D.S.	AA	ZER
<u> </u>	EA	DOOR SWEEP	39A X D.W.	A	ZER
1	EA	THRESHOLD	8655A X D.W.	A	ZER
<u> </u>	LA	TTINESTIOLD	0033A X D.W.		ZLIV
HARDWARE SET: 10					
DOOR NUMBER:					
SC04					
EACH TO HAVE:					
1	EA	CONT. HINGE	112XY	628	IVE
1	EA	CLASSROOM LOCK	ND94HD RHO	626	SCH
1	EA	PERMANENT CORE	1C-7	626	BES
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	SET	SEALS	BY ALUM DOOR/FRAME MFG		
HADDWADE CET. 44					
DOOR NUMBER:					
DOOR NUMBER: SC06B					
DOOR NUMBER: SC06B EACH TO HAVE:	FA	HINGE	5BB1 4 5 X 4 5 NRP	652	IVE
DOOR NUMBER: SC06B EACH TO HAVE:	EA	HINGE ENTRANCE LOCK	5BB1 4.5 X 4.5 NRP	652	IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3	EA	ENTRANCE LOCK	ND92HD RHO	626	SCH
DOOR NUMBER: SC06B EACH TO HAVE: 3 1	EA EA	ENTRANCE LOCK PERMANENT CORE	ND92HD RHO 1C-7	626 626	SCH
HARDWARE SET: 11 DOOR NUMBER: SC06B EACH TO HAVE: 3 1	EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER	ND92HD RHO 1C-7 4111 SCUSH	626 626 689	SCH BES LCN
DOOR NUMBER: SC06B EACH TO HAVE: 3 1	EA EA	ENTRANCE LOCK PERMANENT CORE	ND92HD RHO 1C-7	626 626	SCH
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1	EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER	ND92HD RHO 1C-7 4111 SCUSH	626 626 689	SCH BES LCN
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3	EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12	EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER:	EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10	EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12	EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE:	EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS	626 626 689 630	SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3	EA EA EA SC11	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64	626 626 689 630 GRY	SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1	EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5	626 626 689 630 GRY	SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1	EA EA EA SC11 EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO	626 626 689 630 GRY	SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1	EA EA EA SC11 EA EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7	626 626 689 630 GRY 652 626 626	SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1	EA EA EA SC11 EA EA EA EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011	626 626 689 630 GRY 652 652 626 626 689	SCH BES LCN IVE IVE IVE SCH BES LCN
DOOR NUMBER: SC06B EACH TO HAVE: 3 1	EA EA EA SC11 EA EA EA EA EA EA EA EA EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS	626 626 689 630 GRY 652 626 626 689 630	SCH BES LCN IVE IVE SCH BES LCN IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1	EA EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX	626 626 689 630 GRY 652 626 626 626 630 630	SCH BES LCN IVE IVE IVE SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1 1 HARDWARE SET: 13	EA EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX	626 626 689 630 GRY 652 626 626 626 630 630	SCH BES LCN IVE IVE IVE SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1 1 1 1 1 1 1 DOOR NUMBER:	EA EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX	626 626 689 630 GRY 652 626 626 626 630 630	SCH BES LCN IVE IVE IVE SCH BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EA EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX	626 626 689 630 GRY 652 626 626 626 630 630	SCH-BES LCN IVE SCH-BES LCN IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP SEALS	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX 188S X D.S.	626 626 689 630 GRY 652 626 626 630 BLK	IVE IVE SCH IVE IVE IVE IVE IVE
DOOR NUMBER: SC06B EACH TO HAVE: 3 1 1 1 1 3 HARDWARE SET: 12 DOOR NUMBER: SC10 SC12 EACH TO HAVE: 3 1 1 1 1 1 1 1	EA EA EA EA SC11 EA	ENTRANCE LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE SILENCER HINGE STOREROOM LOCK PERMANENT CORE SURFACE CLOSER KICK PLATE WALL STOP	ND92HD RHO 1C-7 4111 SCUSH 8400 10" X 2" LDW B-CS SR64 5BB1 4.5 X 4.5 ND96HD RHO 1C-7 4011 8400 10" X 2" LDW B-CS WS406/407CVX	626 626 689 630 GRY 652 626 626 626 630 630	SCH BES LCN IVE IVE IVE SCH BES LCN IVE

1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
HARDWARE SET: 14	ı				
DOOR NUMBER:					
SC16					
EACH TO HAVE:					
3	EA	HINGE	5BB1HW 5 X 4.5 NRP	652	IVE
1	EA	ENTRANCE LOCK	ND92HD RHO	626	SCH
1	EA	PERMANENT CORE	1C-7	626	BES
1	EA	LOCK GUARD	LG13	630	IVE
1	EA	SURFACE CLOSER	4111 SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142A X D.W. +4"	AA	ZER
1	SET	SEALS	8303AA X D.S.	AA	ZER
1	EA	DOOR SWEEP	39A X D.W.	А	ZER
1	EA	THRESHOLD	8655A X D.W.	Α	ZER



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& TURQUOI
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PERMIT & BID R E V I S I O N S

Checked by:

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DOOR HARDWARE SCHEDULE

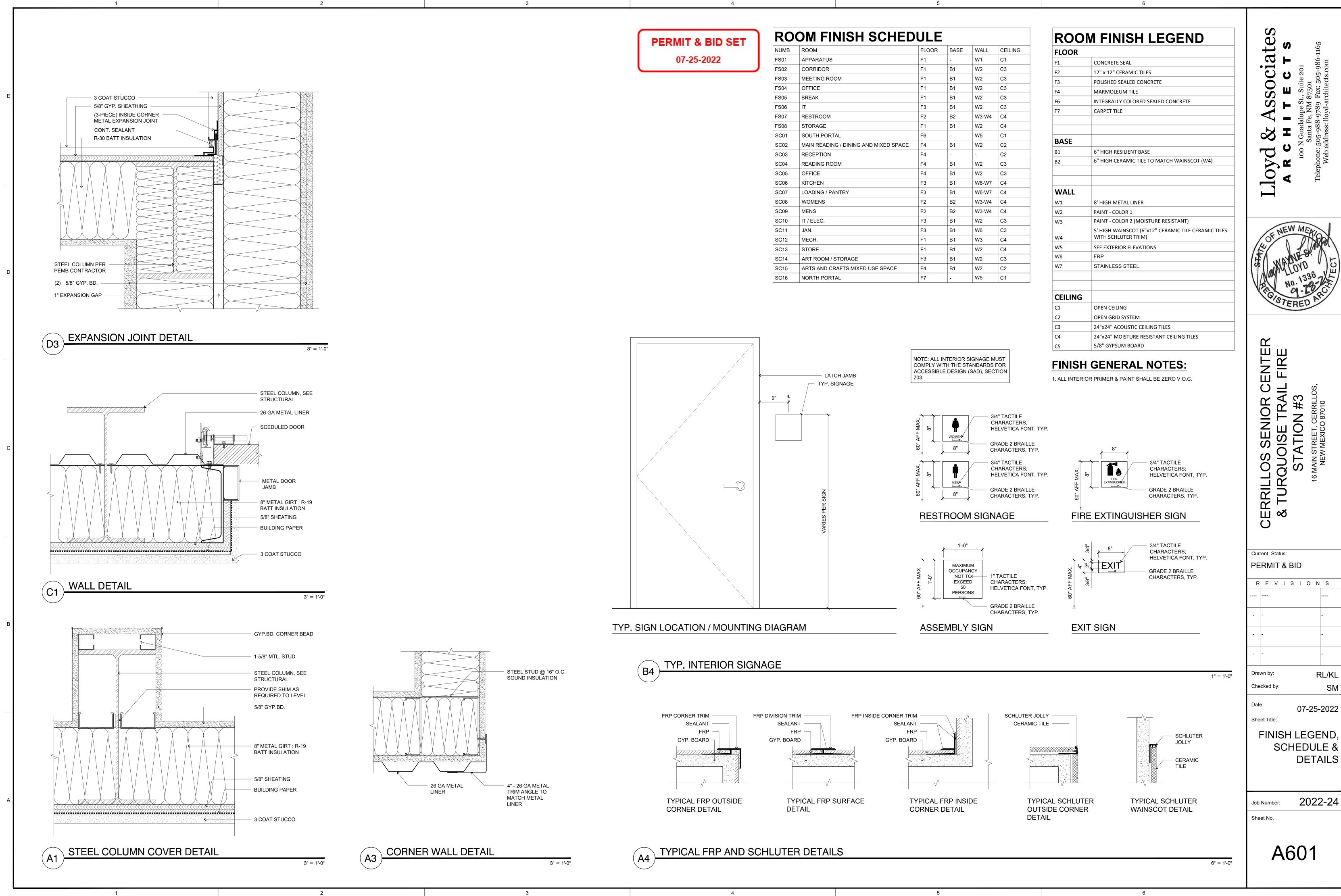
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MECHANICAL SYMBOL LEGEND

DUCTWORK SYMBOLS

MECHANICAL PIPING FLEXIBLE DUCT ACOUSTICAL DUCT LINING —— HWR ——— HEATING WATER RETURN ——— CHS ——— CHILLED WATER SUPPLY MANUAL BALANCING DAMPER ——— CD ———— CONDENSATE DRAIN FIRE DAMPER VENT ——— MU ———— MAKE-UP WATER **SMOKE DAMPER** REFRIGERATION SUCTION REFRIGERATION LIQUID COMBINATION FIRE/SMOKE DAMPER REFRIGERATION TOWER WATER RETURN TOWER WATER RETURN 1 HR. FIRE BARRIER — TWB — TOWER WATER BYPASS **VERIFY WITH** 2HR. FIRE BARRIER STEAM - HIGH PRESSURE SUPPLY > ARCHITECTURAL STEAM - HIGH PRESSURE RETURN DRAWINGS SMOKE BARRIER STEAM - MEDIUM PRESSURE SUPPLY ------ MPR ------ STEAM - MEDIUM PRESSURE RETURN 2HR. SMOKE BARRIER STEAM - LOW PRESSURE SUPPLY CONDENSER WATER CONNECT NEW DUCT TO EXISTING DUCT —— PC —— PUMPED CONDENSATE GEOTHERMAL SUPPLY — GWR— GEOTHERMAL RETURN EXISTING DUCT TO BE REMOVED DIRECTION PITCH FLEXIBLE CONNECTION DIRECTION OF FLOW EXISTING RISE IN DUCT

VANED ELBOW (PROVIDE ALL SQUARE OR

OR RECTANGULAR ELBOWS WITH VANES

EXCEPT TRANSFER AIR SOUND ELBOW)

TRANSFER AIR SOUND ELBOW)

STANDARD LONG RADIUS ELBOW

STAMPED FACE CEILING DIFFUSERS

PERFORATED FACE CEILING DIFFUSERS

CEILING RETURN AIR REGISTER OR GRILLE

SIDEWALL EXHAUST OR RETURN AIR GRILLE

DUCT TRANSITION FROM RECTANGULAR TO ROUND

INDICATES A 24"x12" FLAT OVAL DUCT (WIDTH x DEPTH)

INDICATES A 24"x12" RECTANGULAR DUCT (WIDTH x DEPTH)

ROOM THERMOSTAT/TEMP. TRANSMITTER LOCATION ONLY

ROOM HUMIDISTAT/HUMIDITY TRANSMITTER LOCATION ONLY

ROOM CARBON DIOXIDE TRANSMITTER LOCATION ONLY

CEILING EXHAUST REGISTER

OR REGISTER

12"Ø

24x12Ø

SIDEWALL SUPPLY REGISTER

INDICATES A 12" ROUND DUCT

DUCT MOUNTED SMOKE DETECTOR

SEE CONTROL DRAWINGS FOR TYPE

SEE CONTROL DRAWINGS FOR TYPE

SEE CONTROL DRAWINGS FOR TYPE

DUCT MOUNTED STATIC PRESSURE PROBE

DUCT TRANSITION

ACCESS DOOR

SUPPLY DUCT

RETURN DUCT

EXHAUST DUCT

RECTANGULAR ELBOWS WITH VANES EXCEPT

SHORT RADIUS ELBOW (PROVIDE ALL SQUARE

VALVE SYMBOLS

PIPING SYMBOLS

SINGLE LINE PIPE SYMBOLS

3/4" GATE VALVE WITH ADAPTER TO 3/4"

HOSE THREAD

BUTTERFLY VALVE

VALVE ASSEMBLY

CIRCUIT SETTER

-**◯** DIAPHRAGM VALVE

WATER FLOW MEASURING DEVICE

VALVE - BUTTERFLY MOTORIZED

VALVE - PRESSURE REGULATING

VALVE - GLOBE MANUAL

VALVE - GLOBE LEVER

VALVE - PLUG LEVER

VALVE - PLUG MANUAL

VALVE - PRESSURE RELIEF

VALVE - CHECK

SECTION SYMBOLS

DETAIL REFERENCE

DRAWING NUMBER WHERE DETAILED ———

SECTION LOCATION —— (X#) SECTION

SECTION AND DETAIL TITLES

SECTION NUMBER ———

DETAIL LOCATION ————

DETAIL LOCATION -

— SWITCH - TEMPERATURE GATE VALVE — TEMPERATURE - PRESSURE TEST FITTING GLOBE VALVE CHECK VALVE THERMOMETER ——IVI—— PLUG VALVE —— THERMOMETER WELL PRESSURE REDUCING VALVE BASKET STRAINER THREE-WAY MODULATING CONTROL VALVE STEAM TRAP INVERTED BUCKET — METER - TOTALIZING BTU — METER - TOTALIZING FLOW TWO-WAY CONTROL VALVE SAFETY VALVE OR PRESSURE RELIEF

GENERAL NOTES

- A. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS. UNLESS OTHERWISE NOTED.
- B. PROVIDE ACCESS PANELS OR DOORS IN INACCESSIBLE CEILINGS AND/OR CHASES FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, COILS, FANS, CONTROLS, ETC. THEY SHALL BE FURNISHED UNDER DIVISION 23 AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATION. ACCESS DOOR RATING SHALL MATCH CLASSIFICATION OF WALL AND CEILING FIRE RATING.
- C. WATER PIPE CONNECTIONS TO WATER COILS SHALL BE MADE SO THERE WILL BE COUNTER FLOW BETWEEN WATER AND AIR.
- D. COORDINATE THE LOCATION OF ALL DIFFUSERS, GRILLES, REGISTERS, ACCESS DOORS, ETC., WITH THE ARCHITECTURAL REFLECTED CEILING PLAN(S).
- E. ALL ROUND RUNOUTS AND DROPS TO DIFFUSERS SHALL BE THE SAME NOMINAL SIZE AS THE SCHEDULED DIFFUSER NECK SIZE.
- F. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. ALL DUCT SIZES SHOWN ON DRAWINGS ARE NET INSIDE DIMENSIONS. PROVIDE ONE INCH, ACOUSTICAL LINING (TYPE D3 INSULATION) IN LOW VELOCITY RECTANGULAR DUCTWORK FOR THE FIRST 10 DIAMETERS OF DUCTWORK CONNECTED TO DEVICE, OR AS INDICATED ON DRAWINGS, WHICHEVER IS GREATER. THE REMAINDER OF THIS DUCTWORK PROVIDE AS INDICATED IN THE INSULATION SPECIFICATIONS.
- G. PROVIDE 1/2" MANUAL AIR VENTS AT ALL HIGH POINTS OF CLOSED SYSTEM PIPING AND 1/2" MANUAL DRAIN VALVES WITH HOSE CONNECTION AT LOW POINTS AS REQUIRED TO PROVIDE COMPLETE SYSTEM DRAINAGE. WHERE DRAIN VALVES OCCUR ABOVE CEILING AREAS AND IN AREAS OUTSIDE MECHANICAL RANGE PROVIDE HOSE CONNECTION ON VALVE.
- H. PROVIDE TURNING VANES IN ALL SQUARE ELBOWS. EXCEPT TRANSFER AIR SOUND ELBOWS.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND/OR SMOKE RATED WALLS AND ASSEMBLIES. PROVIDE APPROVED FIRE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS AND DIFFUSERS. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE PROOF CAULKING
- J. CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, PLUMBING AND FIRE PROTECTION PIPING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND SHALL PROVIDE NECESSARY OFFSETS TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.
- K. CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES, INSERTS, SLEEVES, AND HANGING DEVICES FOR INSTALLATION OF MECHANICAL AND PLUMBING EQUIPMENT, DUCTWORK AND PIPING, ETC. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND ALL BUILDING TRADES TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.
- L. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS ANGLES, CHANNELS, UNISTRUT, ETC., AS MAY BE REQUIRED TO ADEQUATELY SUPPORT THE MECHANICAL PIPING, DUCTWORK, AND EQUIPMENT IN A MANNER APPROVED BY THE ARCHITECT WHICH WILL NOT OVERLOAD THE BUILDING STRUCTURAL SYSTEM.
- M. CONTRACTOR SHALL PROVIDE RETURN AIR OR TRANSFER AIR OPENINGS IN FULL HEIGHT WALLS SIZED AT 350 FPM (UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE DRAWINGS) TO CREATE AND/OR MAINTAIN A RETURN AIR PATH AS REQUIRED. FIRE DAMPERS AND/OR SMOKE DAMPERS SHALL BE PROVIDED IN SUCH OPENINGS WHERE REQUIRED BY NOTE "J".
- N. SEAL ALL TRANSVERSE JOINTS, LONGITUDINAL SEAMS, DUCT WALL PENETRATIONS AND FITTING CONNECTIONS ON ALL DUCT SYSTEMS.
- O. MECHANICAL ITEMS SUCH AS ROOF DRAINS, FLOOR DRAINS, PLUMBING FIXTURES, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS BUT NOT SHOWN ON THE MECHANICAL DRAWINGS SHALL BE INCLUDED IN THE PROJECT. THESE ITEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR INCLUSION IN ADDENDUM.

EQUIPMENT SYMBOLS

FITTING SYMBOLS

ELBOW - DOWN

ELBOW - UP TO TEE

— AIR VENT - AUTOMATIC

AIR VENT - MANUAL

— GAUGE - DIFFERENTIAL

— GAUGE - PRESSURE

— GAUGE - PRESSURE WITH COCK

— GAUGE - TEMPERATURE

END CAP

PIPE REDUCER - CONCENTRIC

PIPE REDUCER - ECCENTRIC

ELBOW - UP

——— PIPE RISE - DROP

—

→

—

—

ELBOW - TO TEE

FLEX CONNECTION

PIPE STRAINER

-----UNION - SCREWED

GAUGE - PRESSURE

PIPE GUIDE

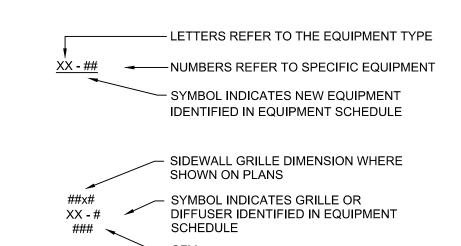
———— PIPE EXPANSION JOINT

— SENSOR - FLOW

— SWITCH - FLOW

SWITCH - PRESSURE

SINGLE LINE PIPE SYMBOLS



SEISMIC NOTE

THE BUILDING HOUSES EMERGENCY VEHICLES AND SHALL BE CONSIDERED A RISK CATEGORY IV FACILITY. THE SEISMIC DESIGN CATEGORY IS D. THE MECHANICAL AND PLUMBING EQUIPMENT SHALL BE BRACED SUCH THAT THE FACILITY IS OPERATIONAL AFTER A SEISMIC EVENT. A SEISMIC ANALYSIS SHALL BE PERFORMED BY A REGISTERED STRUCTURAL ENINGEER AND BRACING SHALL BE PROVIDED AND INSTALLED PER THE DOCEUMENTS PROVIDIED BY THAT ENGINEER. ACCEPTABLE SEISMIC PROVIDERS ARE VMC, VIBRO-ACOUSTICS AND AMBER BOOTH.

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CERILL AND TU

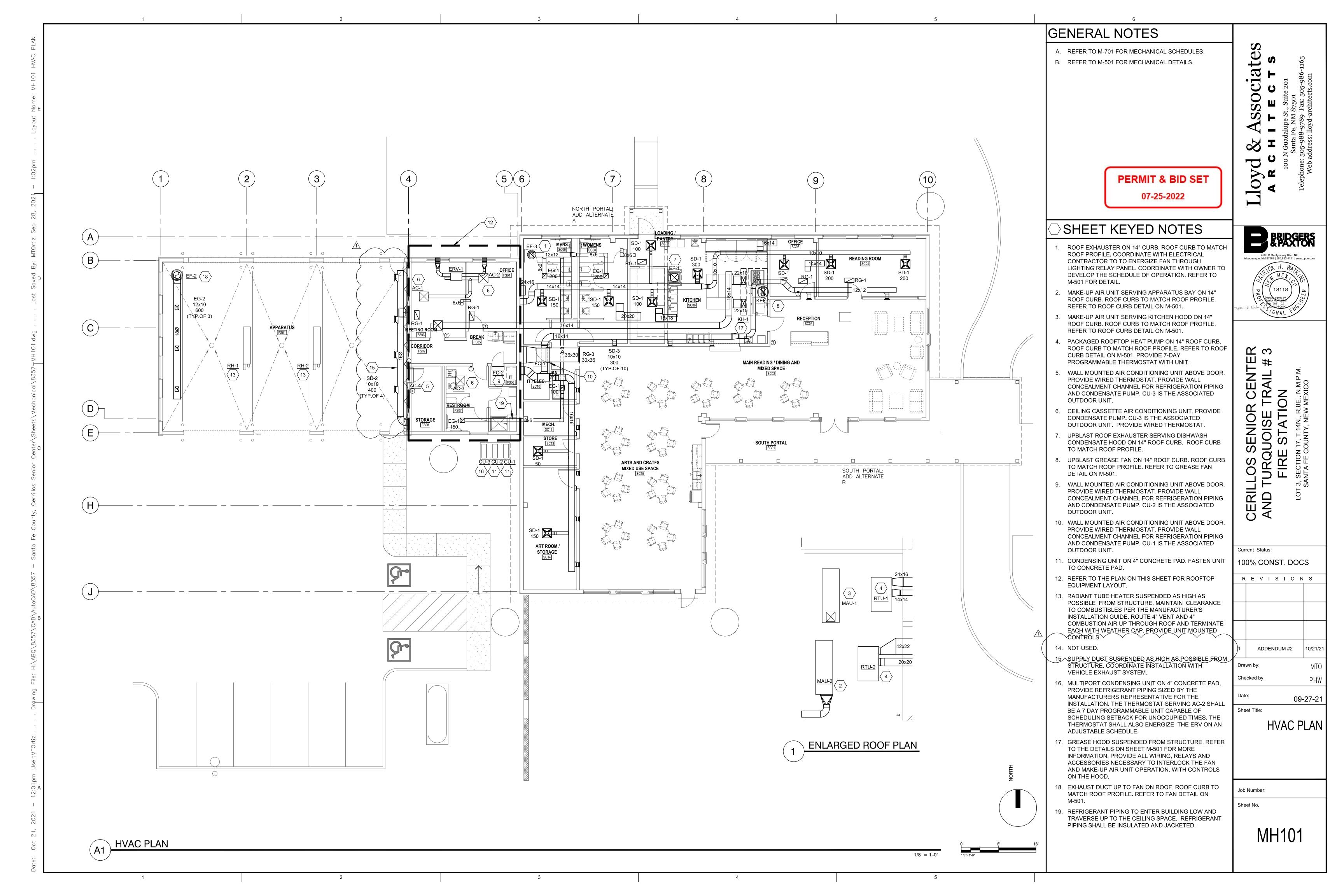
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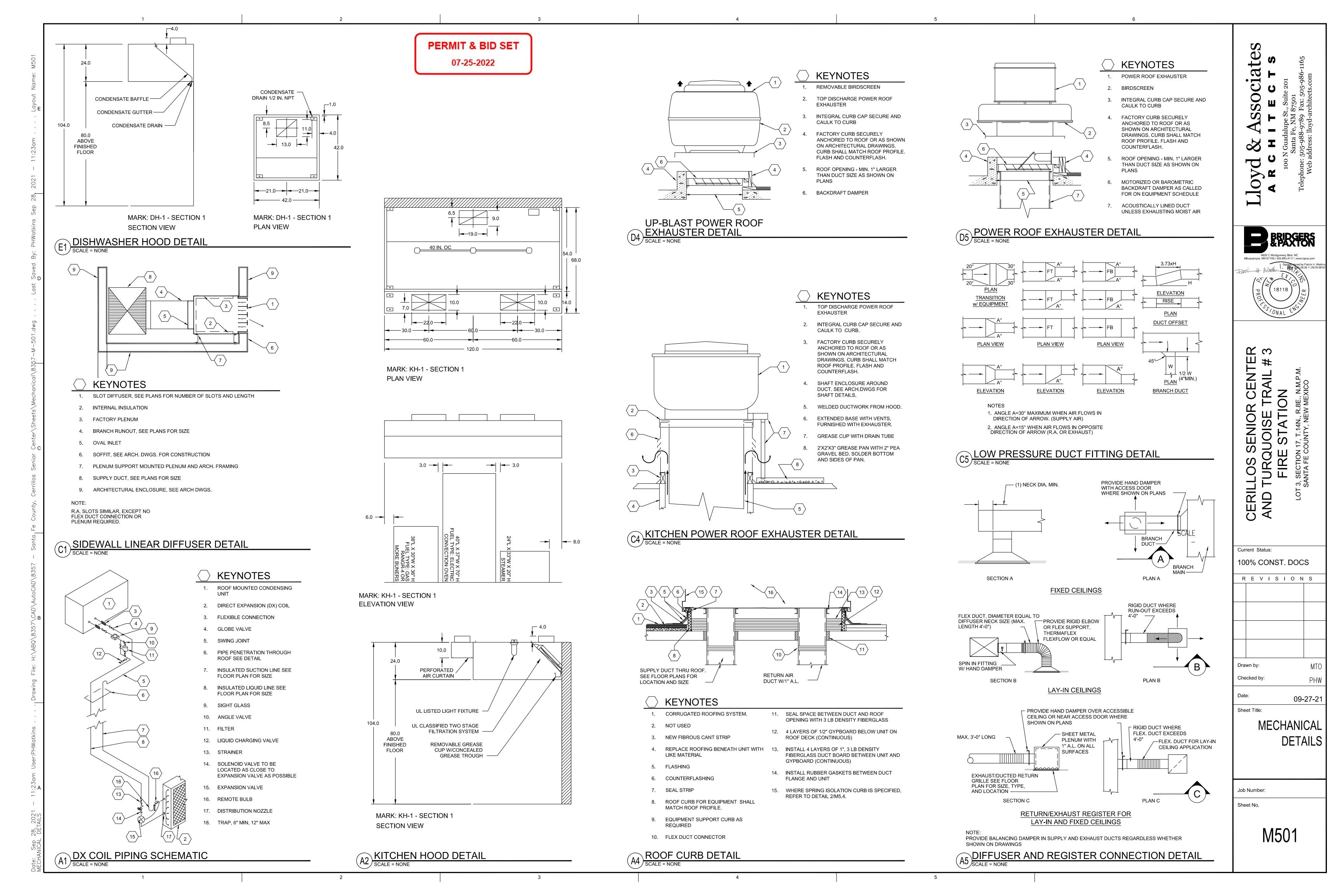
Current Status:

MECHANICAL LEGEND

Job Number: Sheet No.

M001





PERMIT & BID SET 07-25-2022

												ROC	OFT	OP UN	NIT SC	HEDULE													
		GENER	RAL UNIT DATA					SUPPLY	FAN DATA	A				GAS	HEATING	DATA				DX COOL	ING DATA				ELECTRIC	AL DATA		OPERATING	REFER TO SPEC
SYMBOL NO.	MANUFACTURER	MODEL NO.	SERVICE	TYPE	NOMINAL CAPACITY (TONS)	FILTER TYPE	AIRFLOW (CFM)	TYPE	HP	ВНР	ESP (IN. W.C.)	EAT (°F)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)	CAPACITY CONTROL	AMBIENT TEMP. (°F)	DB (°F)	AT WB (°F)	DB WB	TOTA CAPAC (MBH	SENSIBLE TY CAPACITY (MBH)	EFFICIENCY @ ARI (%)		ASE H	Z MC/	MOCP	WEIGHT	SECTION (XXXXXX)
RTU-1	TRANE	YHC047E3RMA**06D			4	MERV 13	1325	CENTRIFUGAL	1	0.21	0.50	55	100	96	57.6	MICRO PROCESSOR	95	80	61	49.37 49.0	1 41.98	35.62		208-230	3 6	30	40	976	
RTU-2	TRANE	YHC102F3RMA**06D			8.5	MERV 13	3200	BC PLENUM	2.75	0.52	0.5	55	90	200	118	MICRO PROCESSOR	95	80	61	51.68 50.7	1 86.66	77.59		208-230	3 6) 42	50	1300	

							M	AKE	UP AIR	UNIT	SC	HEDL	JLE										
	GENERAL UNIT DATA				F	AN DATA				GAS HE	ATING	DATA		EVAP	ORATIVE	COOLING	DATA	EL	ECTRICAL	DATA	4	OPERATING	
SYMBOL MANUFACTURER	MODEL NO.	AREA SERVED	FILTER	AIRFLOW (CFM)	RPM	ESP (IN. W.G.)	ВНР	HP	TYPE	EAT (°F)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)		AT WB (°F)		AT WB (°F)	VOLTS	PHASE	HZ		WEIGHT	NOTES
MAU-1 GREENHECK	IGX-P112-H12-MF-G	KITCHEN	MERV 8	1,600	1764	0.5	0.33	3/4	INDIRECT	4	94	149.1	119.3	90	61	63	61	208-230	3	60	7.9	1,410	
MAU-2 GREENHECK	IGX-P112-H12-MF-G	APPARATUS	MERV 8	1,600	1764	0.5	0.33	3/4	INDIRECT	0	95	149.1	119.3	90	61	63	61	208-230	3	60	7.9	1,410	

	M	AKE U	P AIR	UNIT	SCHE	DULE	CON	T.	
SYMBOL			SOU	ND POWE	R BY OCTA	VE BAND	(DB)		
NO.		64 HV	125 HZ	250 HZ	500HZ	1K HZ	2K HZ	4K HZ	8K HZ
MAU-1	Inlet	89	81	76	72	71	69	64	56
MAU-2	Inlet	89	81	76	72	71	69	64	56

NOTE: MAU-2 SHALL BE PROVIDED WITH A MICROPROCESSOR CONTROLLER WITH DISPLAY AND ROOM CONTROL.

								F	FAN S	CHEDUL	E													
				GENERA	L UNIT DAT	A							ELECTRIC	AL DATA	٩	INLE	TSOU	ND PC	WER	BY O	CTAVE	BAND	(DB)	,
SYMBOL NO.	MANUFACTURER	MODEL NO.	SERVICE / LOCATION	FAN TYPE	AIRFLOW (CFM)	ESP (IN. W.G.)	FAN RPM	MOTOR BHP	MOTOR HP	OPERATING WEIGHT (LBS)	DAMPER TYPE	VOLT	PHASE	HZ	FLA	63 HZ	125 HZ	250 HZ	500 HZ	1K HZ	2K HZ	4K HZ	8K HZ	NOTES
KEF-1	GREENHECK	USGF-160XP-15	KITCHEN	DIRECT	2000	1.25	2449	1.16	1 1/2	219		208	3	60	6.5	79	79	81	83	79	77	72	67	
EF-1	GREENHECK	CUE-095-VG	DISHWASHER	DIRECT	600	0.5	1642	0.12	1/6	36		115	1	60	2.2	74	75	74	67	57	59	54	34	
EF-2	GREENHECK	G-143-VG	APPARATUS	DIRECT	1800	0.5	1245	0.33	3/4	58		115	1	60	8.8	78	76	76	70	63	62	57	51	
EF-3	GREENHECK	G-090-VG	RESTROOMS	DIRECT	650	0.5	1676	0.12	1/6	32		115	1	60	2.2	81	80	74	67	62	59	51	44	

				ENER	RGY RE	ECOVE	ERY VEN	TILATOR	SCH	HEDU	LE			
			SUPPL	Y FAN	EXHAU:	STFAN	ENERGY HX PE	ERFORMANCE		ELECT	RICAL			
SYMBOL	MANUFACTURER &	AREA	AIRFLOW	ESP	AIRFLOW	ESP	SUMMER	WINTER					WEIGHT	NOTES
NO.	MODEL NO.	SERVED	ll I	(IN. W.G.)		(IN. W.G.)	EFF. %	EFF. %	VOLTS	PHASE	HZ	FLA	(LBS)	NOTES
ERV-1	RENEWAIRE EV130	FS ADMIN	105	0.5	105	0.5	54	69	120.0	1.0	60.0	1.3	75.0	PROVIDE BACKDRAFT DAMPERS, PTL CONTROLLER AND LOUVERED WALL VENTS.

						VRF INDO	OR U	NIT S	CHE	DUL	E					
			GENERAL UNI	ΓDATA			INDOOR	UNIT				RATED COOL	ING CAPACITY	HEATING RATED	MEIGHT	
	SYMBOL NO.	MANUFACTURER	MODEL NO.	LOCATION	AREA SERVED	SUPPLY AIRFLOW (CFM)	VOLT	MOTOR PHASE	DATA HZ	MCA	SEER	CAPACITY (BTUH)	AMBIENT DB (DEG F)	CAPACITY (BTUH)	WEIGHT (LBS)	NOTES
	FC-1	MITSUBISHI	MSZ-GL-12NA	WALL MOUNTED	SC10 IT/ELEC	400	208-230	1	60	1	23.1	12,000	95	12,000	22	
	FC-2	MITSUBISHI	MSZ-GL-12NA	WALL MOUNTED	FS06 IT	400	208-230	1	60	1	23.1	12,000	95	12,000	22	
	AC-1	MITSUBISHI	PLFY-P18NFMU-E	CEILING CASSETTE	MEETING FS03	460	208-230	1	60	0.5		18,000	95	20,000	35	
-	AC-2	MITSUBISHI	PLFY-P12NFMU-E	CEILING CASSETTE	OFFICE FS04	335	208-230	1	60	0.29		12,000	95	13,500	35	
	AC-3	MITSUBISHI	PLFY-P12NFMU-E	CEILING CASSETTE	RESTROOM FS07	335	208-230	1	60	0.29		12,000	95	13,500	35	
	AC-4	MITSUBISHI	PKFY-P08NLMU-E	WALL MOUNTED	STORAGE FS08	235	208-230	1	60	0.24		8,000	95	9,000	30	

					V	RF OUTDO	OR U	NITS	SCH	IEDU	LE							
			GENERAL U	NIT DATA				Е	LECTRIC	CAL DATA	A		CO	MPRESSORS			WEIGHT	
SYMBOL NO.	MANUFACTURER	MODEL NO.	LOCATION	AREA SERVED	COOLING RATED CAPACITY (BTU/H)	HEATING RATED CAPACITY (BTU/H)	VOLT	PHASE	HZ	MCA	МОСР	FLA	COMPRESSOR TYPE	REFR. TYPE	LIQUID LINE	SUCTION LINE	(LBS)	NOTES
CU-1	MITSUBISHI	MUZ-GL12NA	GRADE	SC10 IT/ELEC	12,000	12,000	208-230	1	60	9	15		DC-INVERTER	R-410A	1/4	3/8	81	
CU-2	MITSUBISHI	MUZ-GL12NA	GRADE	FS06 IT	12,000	12,000	208-230	1	60	9	15		DC-INVERTER	R-410A	1/4	3/8	81	
CU-3	MITSUBISHI	PUMY-P60NKMU3	GRADE	FIRE	60,000	66,000	208-230	1	60	36	45		DC-INVERTER	R-410A	3/8	3/4	350	

			GAS FI	RED UNIT H	HEAT	ER S	CHE	DULE	
	GENERAL	UNIT DATA		HEATING DATA	I	ELECTRIC	AL DATA	4	
SYMBOL NO.	MANUFACTURER	MODEL NO.	LOCATION	NOMINAL INPUT @ SEA LEVEL (MBH)	VOLT	PHASE	HZ	FLA	NOTES
RH-1	SPACE RAY	CB30-15-P5	APARATUS BAY	30	120	1	60	2.6	PROVIDE FACTORY THERMOSTAT AND WIRING FOR A COMPLETE AND FUNCTIONAL INSTALLATION
RH-2	SPACE RAY	CB30-15-P5	APARATUS BAY	30	120	1	60	2.6	PROVIDE FACTORY THERMOSTAT AND WIRING FOR A COMPLETE AND FUNCTIONAL INSTALLATION

					Κľ	TCHEN	HOOD S	CHEDU	LE					
OOD INFORMAT	TION		H00'	D DIMENSIONS	S (INL)				EXHALIST			SUP	DIV	
HOOD NO. MARK MODEL NO. HOOD DIMENSIONS (IN.) HOOD NO. MARK MODEL NO. COLLAR(S)										301	1 61	TOTAL		
NOOD NO.	WARK	WODEL NO.	LENGTH	WIDTH	HEIGHT	CONSTR.	TOTAL CFM	WIDTH	LENGTH	CFM	S.P	MUA CFM	AC CFM	WEIGHT LBS.
1	KH-1	GGEW	120	54	24	430 SS	1,970	9	19	1,970	0.848	1576	0	

SUPPLY PLEN	IUM INFORMA	TION																
HOOD NO.	MARK	POS.	TYPE		SIZE (IN.)		INSULATED	DAMPER(S)	TOTAL CFM				COLL	ARS				
HOOD NO.	IVIAIXIX	1 00.	1111	LENGTH	WITDH	HEIGHT	INOULATED	DAMI LING)	TOTAL OF W	TYPE	MOUNTING	QTY	WIDTH	LENGTH	DIA.	CFM	S.P	VEL.
1	KH-1	FRONT	ASP	120	14	10	NO	NO	1576	MUA	FACTORY	2	10	22		788	0.11	516

HOOD OPTIONS	
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UL 762 LISTED W/OUT EXHAUST FIRE DAMPER

FACTORY MOUNTED EXHAUST COLLAR(S)

PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY

STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

				VEHICL	E EX	HAUS	T SYSTEI	M SCHE	DUL	E			
									E	ELECTRIC	AL DATA	4	
SYMBOL NO.	MANUFACTURER	MODEL NO.	SERVICE / LOCATION	FAN TYPE	AIRFLOW (CFM)	MOTOR HP	TRACK LENGTH (FT.)	HOSE LENGTH (FT.)	VOLT	PHASE	HZ	FLA	NOTES
VES-1	NEDERMAN	MAGNATRACK ST GREEN	APARATUS BAY	CENTRIFUGAL	600	2	32	36	230	1	60		PROVIDE AUTO START PANEL, TRANSMITTER AND RECEIVER FOR A COMPLETE STAND ALONE INSTALLATION.

						_						_			
					DISH	IWASHE	R HOOD	SCHEI	DULE						F
HOOD INFORM	IATION														
			Н00	D DIMENSIONS	3 (IN.)				EXHAUST			SUP	PPLY		
HOOD NO.	MARK	MODEL NO.	LENGTH	WIDTH	HEIGHT	HOOD CONSTR.	TOTAL CFM		COLL	AR(S)		MUA CFM	AC CFM	TOTAL WEIGHT LBS.	
			LENGIA	VVIDIA	neiGni		TOTAL CFINI	WIDTH	LENGTH	CFM	S.P	- MUA CFM	AC CFW		
1	DH-1	GD2	42	42	24	430 SS	525	11	13	525	0.034	N/A	N/A		
,		,				,	,						,		
HOOD FEATUR	RES														
FACTORY MO	JNTED EXHAL	JST COLLAR(S)													
STAINLESS ST	EEL FINISH F	OR HIGHER CC	RROSION RES	SISTANCE											
0.5 INCH NPT	STAINLESS ST	TEEL DRAIN FIT	TING												F

			GRILLE A	AND DIFF	USER S	CHEDU	JLE .		
SYMBOL NO.	MANUFACTURER & MODEL NO.	TYPE	FRAME STYLE	FACE DIMENSIONS (IN)	NECK DIMENSIONS (IN)	AIRFLOW RANGE (CFM)	PRESSURE DROP (IN. W.G.)	MAXIMUM NC	NOTES
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12X12 24X24	6	91-130	0.02-0.06	24	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12X12 24X24	8	131-210	0.02-0.06	28	
SD-1	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	10	211-320	0.03-0.06	30	
3D-1 =	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	12	321-420	0.03-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	14	421-530	0.04-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	15	531-630	0.03-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	12X12 24X24	6	91-130	0.02-0.06	24	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	12X12 24X24	8	131-210	0.02-0.06	28	
SD-2	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	10	211-320	0.03-0.06	30	DROVIDE ODDOCED BLADE DAMBED
SD-2	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	12	321-420	0.03-0.06	30	PROVIDE OPPOSED BLADE DAMPER
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	14	421-530	0.04-0.06	30	
Γ	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	15	531-630	0.03-0.06	30	
	PRICE 520	SIDEWALL SUPLLY	FLAT MARGIN	SEE PLAN	SEE PLAN	SEE PLAN	0.03-0.06	26	
SD-3	PRICE 520D	SIDEWALL SUPPLY	FIXED CEILING	SEE PLAN	SEE PLAN	SEE PLAN	0.03-0.06	26	PROVIDE OPPOSED BLADE DAMPER
	PRICE 520	SIDEWAL SUPPLY	SURF MOUNTED	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	22	
SD-4	PRICE SDS	LINEAR SUPPLY	SURF MOUNTED	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	30	PROVIDE LINEAR SLOT PLENUM
RG-1	PRICE 80	RETURN GRILLE	LAY-IN CEILING	12X12 24X24	SEE PLAN	-	N/A	N/A	
RG-2	PRICE 80	RETURN GRILLE	FIXED CEILING	12X12 24X24	SEE PLAN	-	N/A	N/A	
RG-3	PRICE 530	RETURN GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	-	N/A	N/A	
KG-3 -	PRICE 91	RETURN GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	-	N/A	N/A	
EG-1	PRICE 80D	EXHAUST GRILLE	LAY-IN CEILING	12X12 24X24	SEE PLAN	SEE PLAN	0.01-0.08	25	
EG-2	PRICE 80D	EXHAUST GRILLE	FIXED CEILING	12X12 24X24	SEE PLAN	SEE PLAN	0.01-0.08	25	PROVIDE OPPOSED BLADE DAMPER
EG-3	PRICE 530D	EXHAUST GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	25	

d&Associates снітеств

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SENIOR CENTER
UOISE TRAIL # 3
STATION
17, T.14N., R.8E., N.M.P.M.

Current Status:

Drawn by:

Checked by:

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MECHANICAL SCHEDULES

Job Number:
Sheet No.

M701

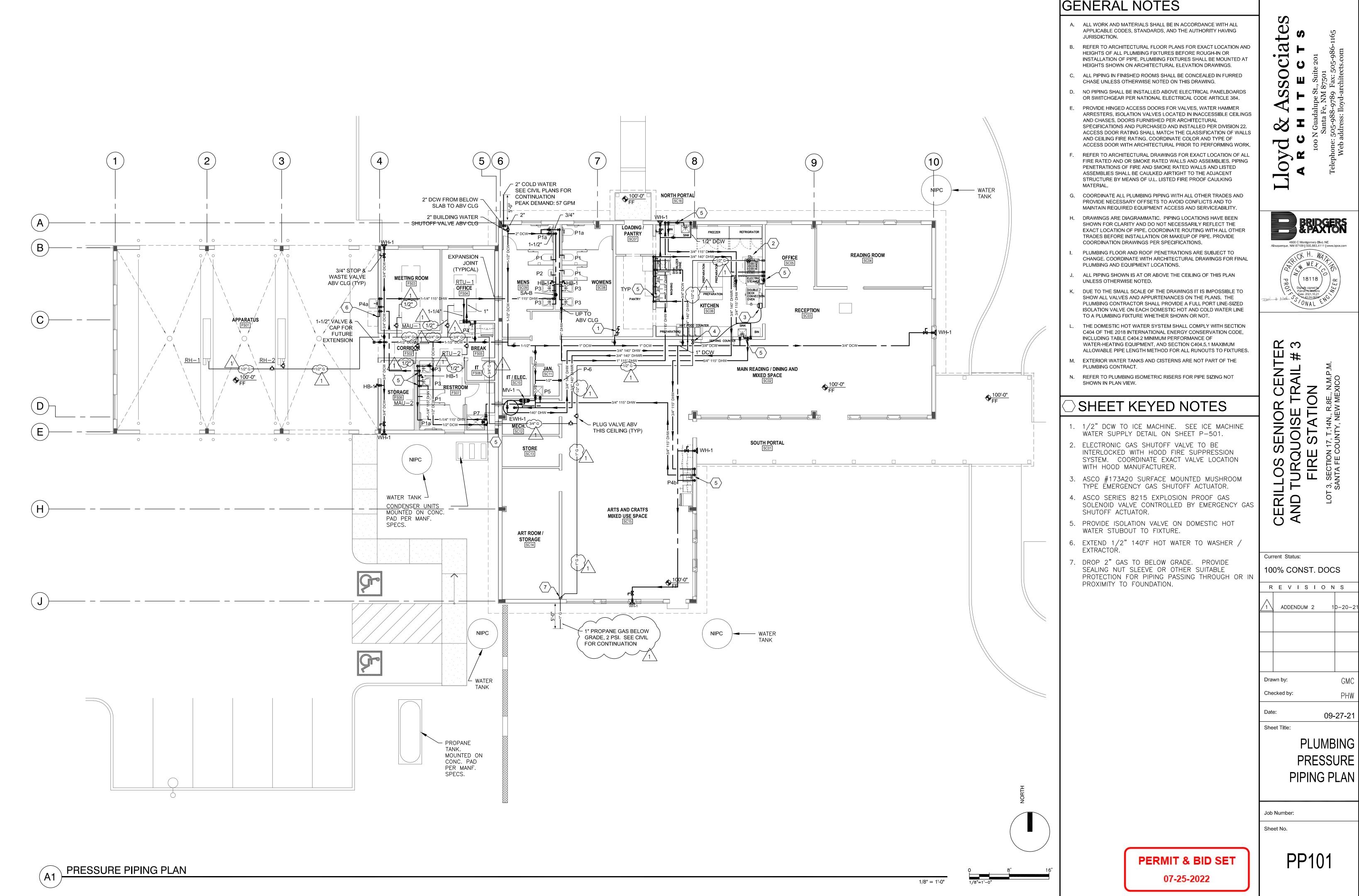
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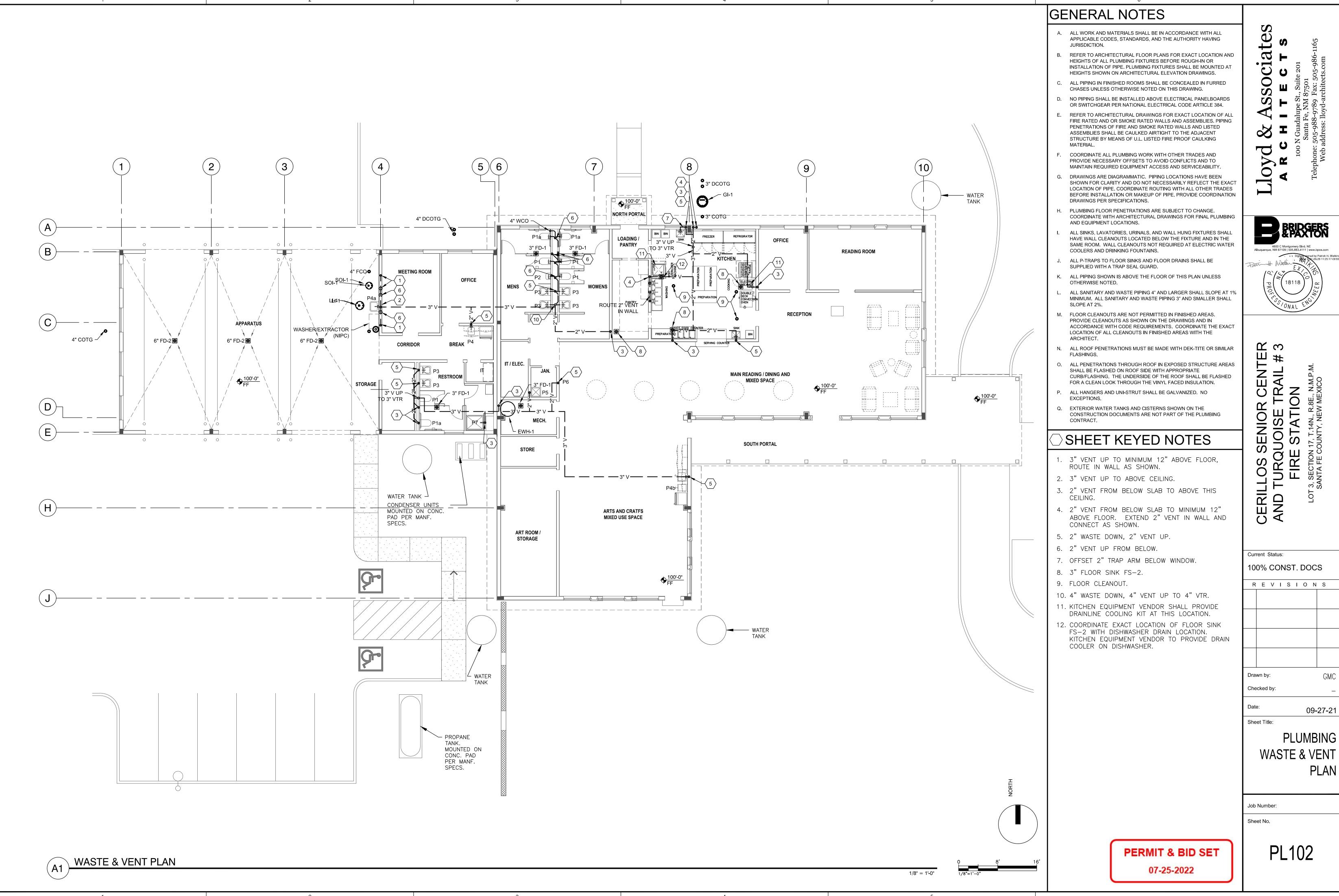
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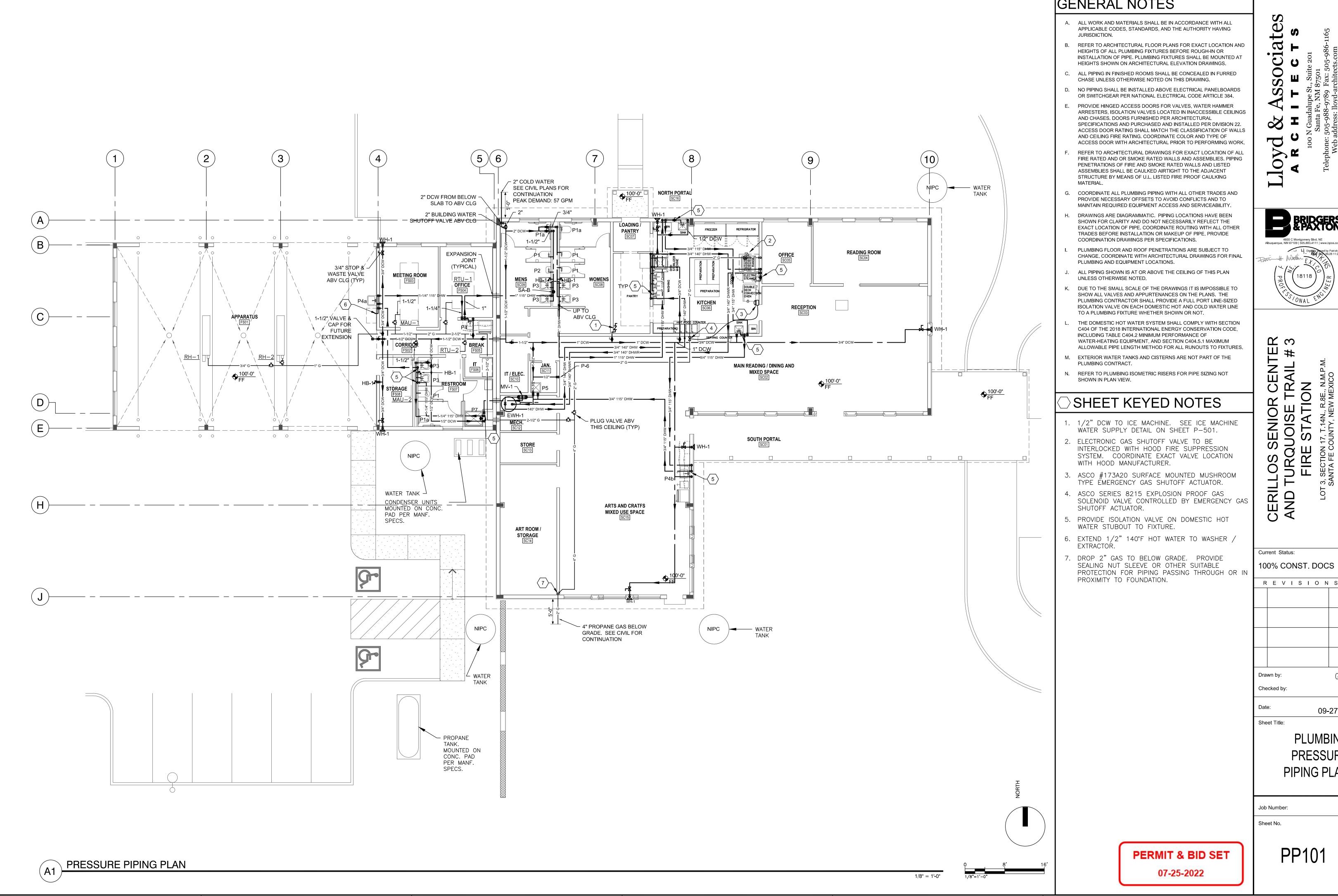
PLUMBING SYMBOLS & **ABBREVIATIONS**

P001

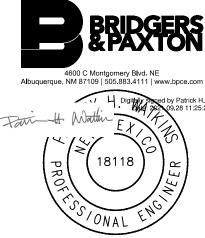


GENERAL NOTES



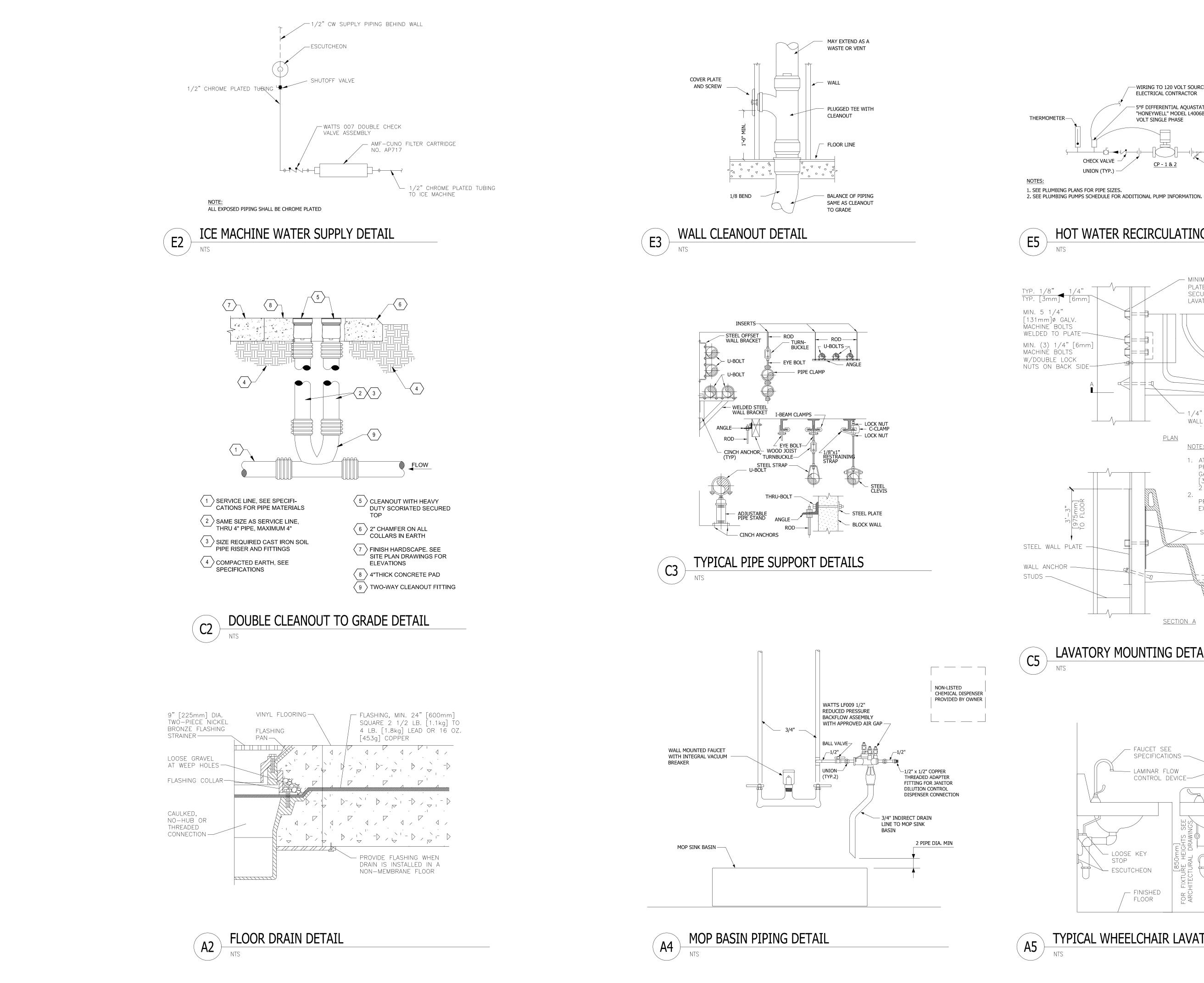


GENERAL NOTES

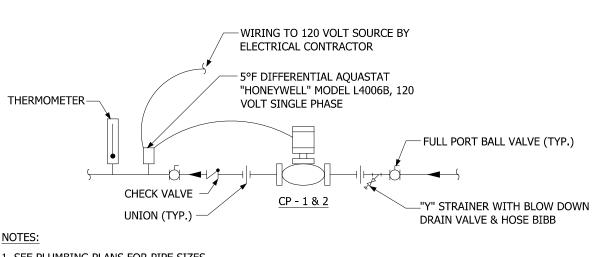


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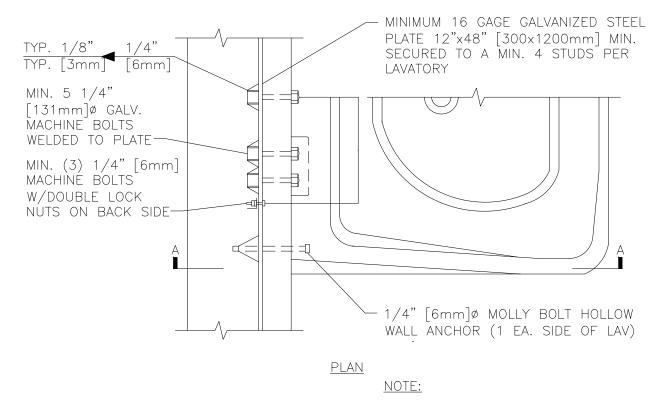
> **PLUMBING** PRESSURE PIPING PLAN

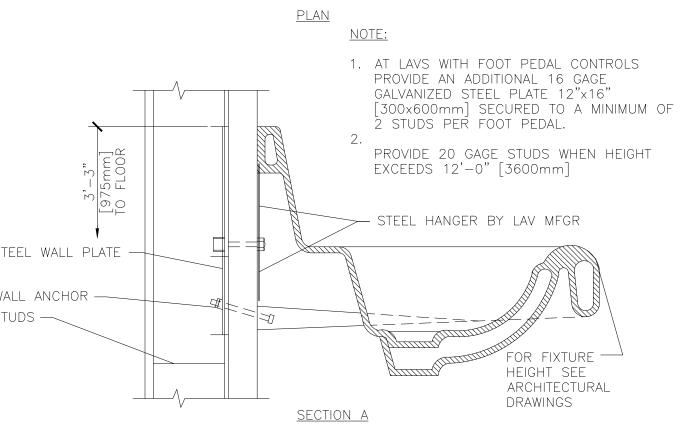


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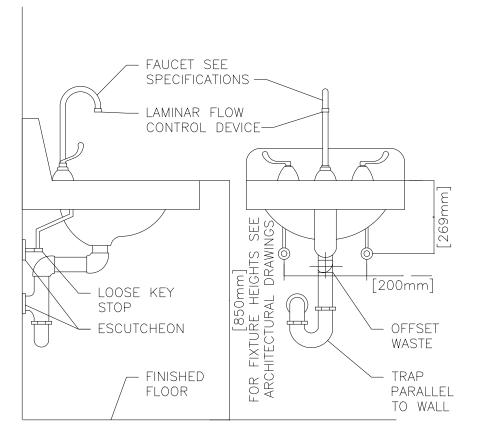


WATER RECIRCULATING PUMP DETAIL





LAVATORY MOUNTING DETAIL



TYPICAL WHEELCHAIR LAVATORY DETAIL

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Current Status: 100% CONST. DOCS REVISIONS Drawn by:

Checked by: 09-27-21

Sheet Title: **PLUMBING**

DETAILS

Job Number:

Sheet No.

P501

GREASE INTERCEPTOR SIZING

DESIGN CRITERIA

PLUMBING CODE: 1. 2015 UNIFORM PLUMBING CODE, SECTION 1014.2

SIZING METHODOLOGY

STEP 1. FLOW RATE TO GREASE INTERCEPTOR

Fixture flow rate: $(cu in / 231) = g$	$al \times 0.75 / 2 min = 2 min$	flow rate			
GREASE PRODUCING FIXTURE	DIMENSIONS	QUANTITY	CU IN.	FLOW RATE	
3 COMPARTMENT SINK	21" X 21" X 14" (3)	1	18,522	30 GPM	
DISHWASHER	N/A	1	N/A	12.5 GPM	
TOTAL:				42.5 GPM	

STEP 2. GREASE PRODUCTION

Servings per day x grease production value x days between pumping = Grease Output MEALS SERVED PER DAY: 100

GREASE PRODUCTION VALUE: 0.0455 lbs per serving (Cafeteria - Full Serve: High / Flatware) DAYS BETWEEN PUMP-OUT = 90

 $100 \times 0.0455 \times 90 = 409.5$ lbs of FOG

GREASE INTERCEPTOR REQUIRED: Flow Rate: 50 gpm Grease Capacity: 440 lbs Liquid Capacity: 65 gal

SAND/OIL INTERCEPTOR SIZING

CRITERIA

PLUMBING CODE:

1. 2015 UNIFORM PLUMBING CODE, SECTION 1017.2

SPACE PROTECTED:

1-1/4" 120° F DHW

1" DCW -

1" DHWR -

1. 3-BAY FIRE APPARATUS GARAGE, 1,897 SQUARE FEET.

2. ONE FLOOR DRAIN PER BAY (3 DRAINS TOTAL).

3. STORAGE ONLY, NO SERVICE WILL BE PERFORMED.

SIZING METHODOLOGY

1. SINCE THIS IS A VEHICLE STORAGE (NOT SERVICE) AREA, THE INTERCEPTOR WILL BE SIZED ACCORDING TO UPC SECTION 1016.0, SAND INTERCEPTORS. OIL AND/OR FLAMMABLE LIQUID LEAKAGE IS NOT EXPECTED BUT THE INTERCEPTOR IS DESIGNED TO CONTAIN ANY SUCH LIQUIDS.

2. DRAINAGE SYSTEM WILL BE DESIGNED AS A COMBINATION WASTE AND VENT. PER UPC SECTION 910.4, EACH WASTE PIPE AND TRAP SHALL BE NOT LESS THAN TWO PIPE SIZES EXCEEDING SIZES REQUIRED BY CHAPTER 7. SINCE 5" PIPE IS NOT COMMONLY AVAILABLE THIS DRAINAGE SYSTEM WILL BE 6" IN SIZE WITH A 3" VENT.

4. BASED ON PROJECT USAGE, GPM FLOW FOR EACH FLOOR DRAIN IS EXPECTED TO BE MINIMAL. THEREFORE THREE (3) 6" FLOOR DRAINS = 10 DFU / 5 GPM PER TRAP X 3 TRAPS = 15 GPM PEAK FLOW.

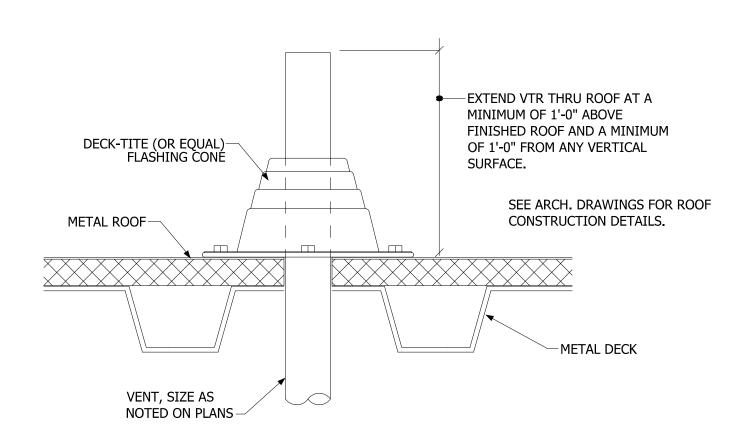
1" DCW -

5. SPECIFIED SAND / OIL INTERCEPTOR SHALL BE RATED AT NOT LESS THAN 25 GPM CAPACITY.

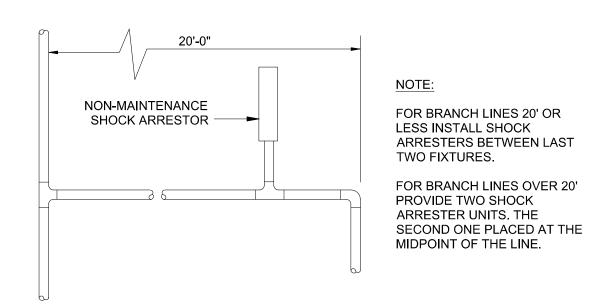
LUBRICATED PLUG VALVE -ROOFTOP UNIT DECK-TITE FLASHING BOOT -**▲**ROOF SEE PLAN FOR SIZES

GAS EQUIPMENT CONNECTION DETAIL

NTS NOTE: ALL ROOF PENETRATIONS SHALL BE MADE USING DECK-TITE OR EQUAL FLASHING BOOTS.



NTS NOTE: ALL ROOF PENETRATIONS SHALL BE MADE USING DECK-TITE OR EQUAL FLASHING BOOTS.



SHOCK ARRESTORS: SIOUX CHIEF 650 SERIES PISTON-TYPE SHOCK ARRESTER, COPPER TUBE, MAX WORKING PRESSURE TEMPERATURE 150°F, MAX PRESSURE 350 PSIG. ANSI/ASSE1010, 2004 CERTIFIED. THE CONTRACTOR SHALL SIZE AND INSTALL SHOCK ARRESTORS AS SHOWN ON THE DRAWINGS AND AS PRESCRIBED BY SIOUX CHIEF AND/OR PDI STANDARD WH-201.

FOR BRANCH LINES EXCEEDING 20'-0" IN LENGTH, AN ADDITIONAL SHOCK ARRESTER SHALL BE INSTALLED AT THE 20' MARK. THIS SHOCK ARRESTOR SHALL BE SIZED FOR THE FIXTURE UNIT DEMAND UPSTREAM OF THIS POINT.

PROVIDE ACCESS PANEL(S) FOR ALL SHOCK ARRESTORS. ROUTE PIPING AS REQUIRED TO ENSURE THAT ACCESS PANEL IS FULLY OPERATIONAL.

NUMBER	FIXTURE UNIT RATING	CONNECTION SIZE	SIOUX CHIEF SYMB
SA-A	1 - 11	1/2"	Α
SA-B	12 - 32	3/4"	В
SA-C	33 - 60	1"	С
SA-D	61 - 113	1-1/4"	D
SA-E	114 - 154	1-1/2"	Е
SA-F	155 - 330	2"	F

SHOCK ARRESTOR DETAIL

 $\langle 2 \rangle$ EXPANSION TANK. SEE SCHEDULE FOR MORE INFORMATION. THERMOSTATIC MIXING VALVE. SEE SCHEDULE FOR MORE INFORMATION. INSTALL PIPING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(1) ELECTRIC WATER HEATER. SEE SCHEDULE FOR MORE INFORMATION

 $\langle 4 \rangle$ 4" CONCRETE HOUSEKEEPING PAD.

NORMALLY CLOSED

FULL SIZE BYPASS-

 \langle 5 \rangle ASME T&P RELIEF VALVE, PIPE FULL SIZE TO FLOOR. $\binom{6}{6}$ BALL VALVE (TYPICAL).

7 CHECK VALVE (TYPICAL).

EWH-1

 $\langle 8 \rangle$ UNION (TYPICAL).

SECTION C404.4.

(9) THERMOMETER (TYPICAL)

⟨10⟩ WATTS LFN36 VACUUM RELIEF VALVE.

ET-1

 \langle 11 \rangle IF REQUIRED, PROVIDE SIESMIC STRAPPING PER UPC 508.2 OR IPC 502.4.

 \langle 12 \rangle PROVIDE HEAT TRAP PER 2018 IECC SECTION C404.4. FIRST 8 FEET OF INLET AND OUTLET PIPING SHALL BE INSULATED IN ACCORDANCE WITH 2018 IECC

DOMESTIC WATER HEATER DETAIL

FINISH FLOOR

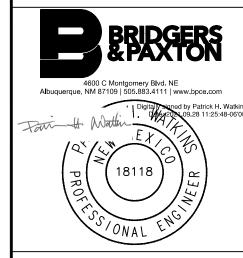
PERMIT & BID SET

- 1**-**1/4" 120° F DHW ———

— 1-1/4"DCW —

→ 1" DHWR -

07-25-2022



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Current Status: 100% CONST. DOCS R E V I S I O N S

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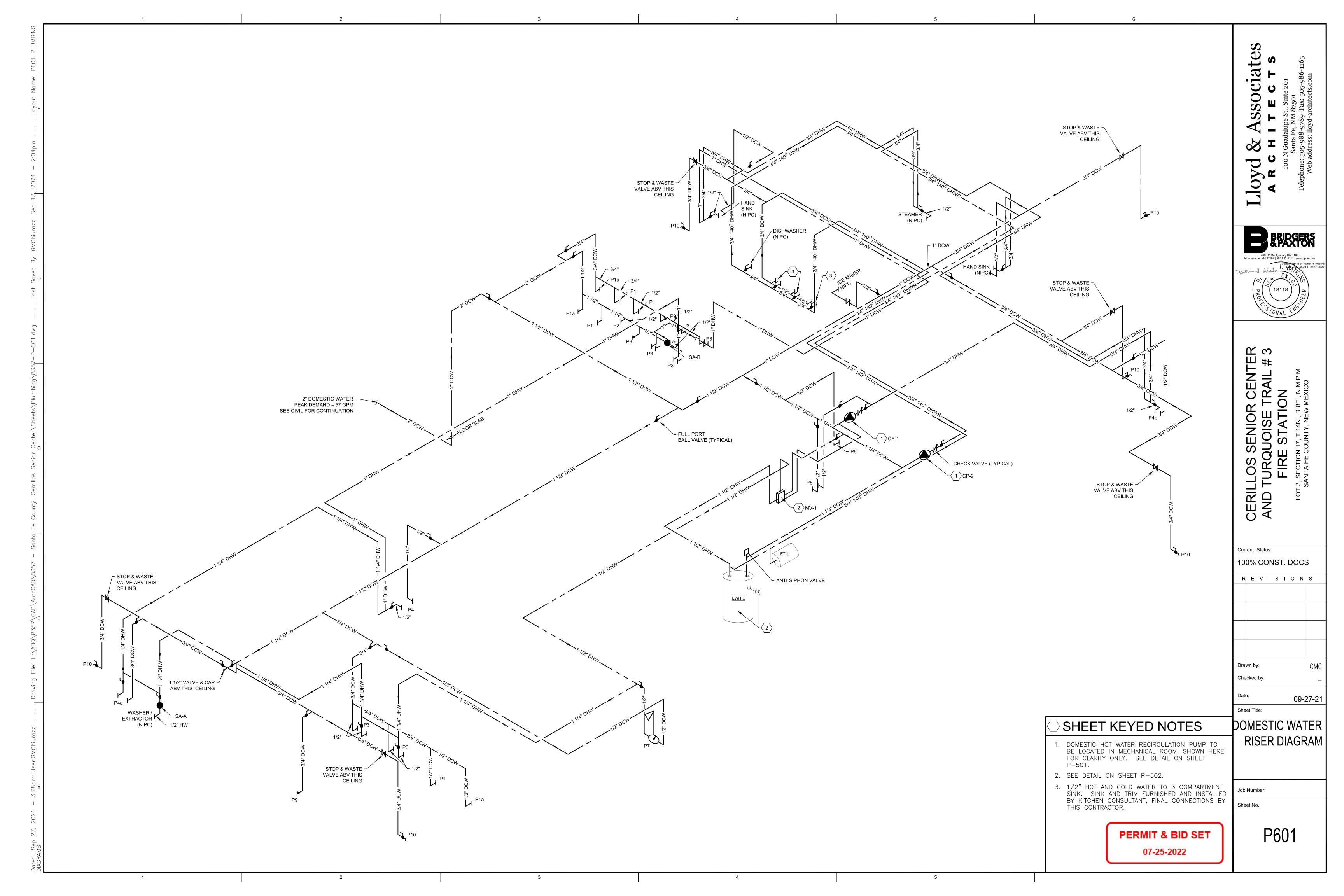
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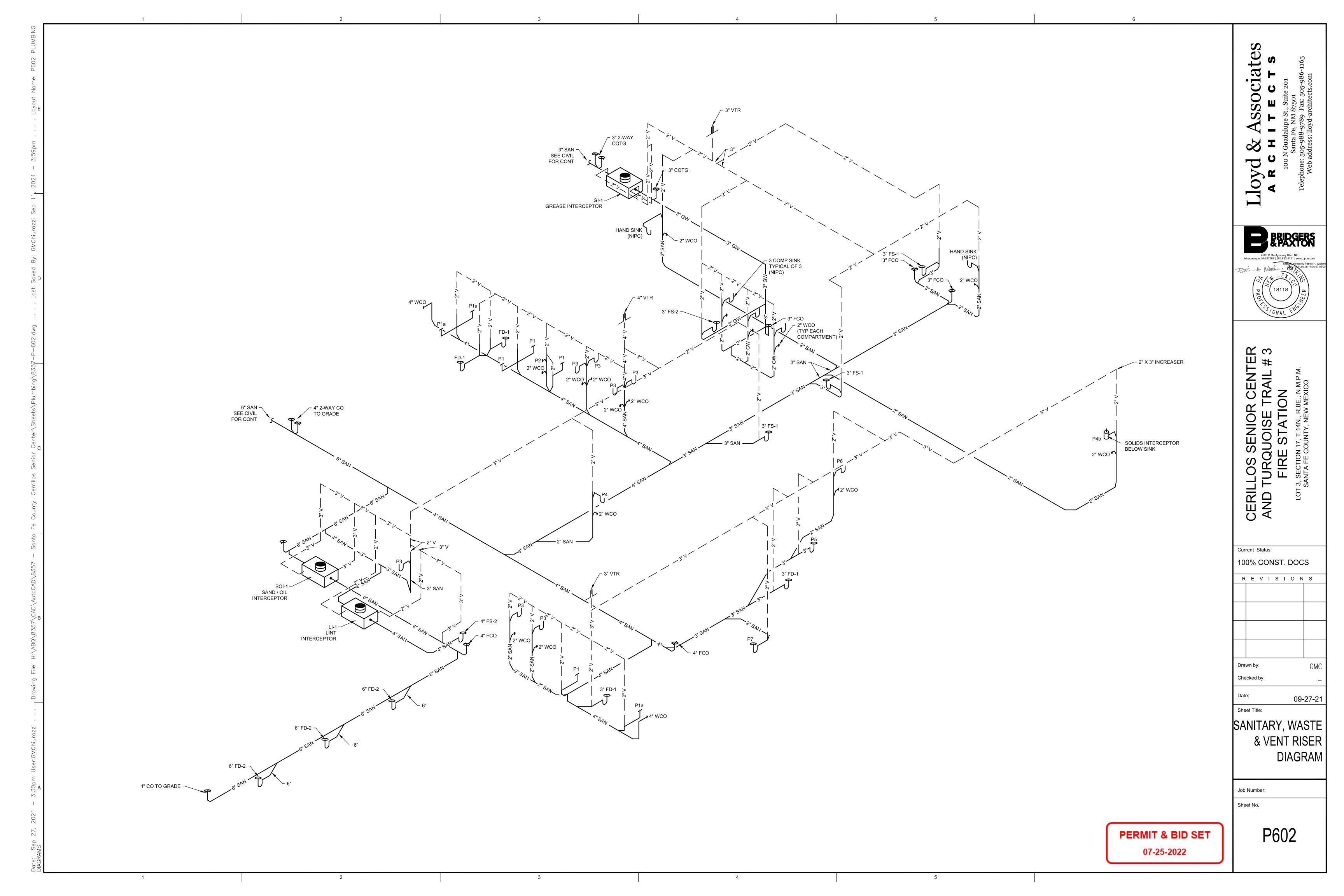
PLUMBING DETAILS

Job Number:

Sheet No.

Sheet Title:





NOTE:ALL EQUIPMENT SELECTED AT 7,000 FEET ELEVATION

PERMIT & BID SET 07-25-2022

												ROOF	TOP	UN	IT SC	HEDULE													
		GENER	al unit data					SUPPLY	FAN DATA	4				GAS H	HEATING I	DATA				DX COOLII	NG DATA			ELE(CTRICAL	DATA		ODEDATING	REFER TO SPEC
SYMBOI					NOMINAL	FILTER	VIDEI U/V				ESP	FAT 1	T IND	DIT (OUTPUT		AMBIENT	E/	AT.	LAT	TOTAL	SENSIBLE EFFICIENC	·v					WEIGHT	SECTION
3 I MIDOI	MANUFACTURER	MODEL NO.	SERVICE	TYPE	CAPACITY (TONS)	1	(CFM)	TYPE	HP	BHP	(IN. W.C.)		E) /ME		(MBH)	CAPACITY CONTROL	TEMP.	DB	WB	DB WB	CAPACI	TY CAPACITY @ ARI (%	','∥ ∧ort	PHASE	HZ	MCA	MOCP	(LBS)	
INO.					CAPACITI (TONS)	1175	(CI WI)				(IIV. VV.C.)	(1)	i) (ivit	DI 1)	(IVIDIT)		(°F)	(°F)	(°F)	(°F) (°F)	(MBH)	(MBH)	<u> </u>					(LDS)	(XXXXXX)
RTU-1	TRANE	YHC047E3RMA**06D			4	MERV 13	1325	CENTRIFUGAL	1	0.21	0.50	55 10	00 9	6	57.6	MICRO PROCESSOR	95	80	61	49.37 49.01	41.98	35.62	208-230	3	60	30	40	976	
RTU-2	TRANE	YHC102F3RMA**06D			8.5	MERV 13	3200	BC PLENUM	2.75	0.52	0.5	55 9	0 20	00	118	MICRO PROCESSOR	95	80	61	51.68 50.71	86.66	77.59	208-230	3	60	42	50	1300	

								M	AKE	UP AIR	UNIT	SC	HEDL	JLE										
		GENERAL UNIT DATA				F	AN DATA				GAS HE	ATING	DATA		EVAP	ORATIVE	COOLING	DATA	ELI	ECTRICAL	L DATA	4	OPERATING	
SYMBOL	MANUFACTURER	MODEL NO.	AREA	FILTER	AIRFLOW (CFM)	RPM	ESP (IN. W.G.)	ВНР	HP	TYPE	EAT	LAT	INPUT	OUTPUT		AT	LA		VOLTS	PHASE	HZ		WEIGHT	NOTES
NO.			SERVED		(CFM)		VV.G.)				(°F)	(°F)	(MBH)	(MBH)	DB (°F)	WB (°F)	DB (°F)	WB (°F)					(LBS)	
MAU-1	GREENHECK	IGX-P112-H12-MF-G	KITCHEN	MERV 8	1,600	1764	0.5	0.33	3/4	INDIRECT	4	94	149.1	119.3	90	61	63	61	208-230	3	60	7.9	1,410	
MAU-2	GREENHECK	IGX-P112-H12-MF-G	APPARATUS	MERV 8	1,600	1764	0.5	0.33	3/4	INDIRECT	0	95	149.1	119.3	90	61	63	61	208-230	3	60	7.9	1,410	

	M	4KE U	P AIR	UNIT	SCHE	DULE	CON	T.	
SYMBOL			SOU	ND POWE	R BY OCTA	VE BAND	(DB)		
NO.		64 HV	125 HZ	250 HZ	500HZ	1K HZ	2K HZ	4K HZ	8K HZ
MAU-1	Inlet	89	81	76	72	71	69	64	56
MAU-2	Inlet	89	81	76	72	71	69	64	56

NOTE: MAU-2 SHALL BE PROVIDED WITH A MICROPROCESSOR CONTROLLER WITH DISPLAY AND ROOM CONTROL.

								F	FAN S	CHEDUL	E													
				GENERA	L UNIT DAT	A							ELECTRIC	AL DATA	4	INLE	TSOU	ND PC	WER	BY OC	TAVE	BAND	(DB)	
SYMBOL NO.	MANUFACTURER	MODEL NO.	SERVICE / LOCATION	FAN TYPE	AIRFLOW (CFM)	ESP (IN. W.G.)	FAN RPM	MOTOR BHP	MOTOR HP	OPERATING WEIGHT (LBS)	DAMPER TYPE	VOLT	PHASE	HZ	FLA	63 HZ	125 HZ	250 HZ	500 HZ	1K HZ	2K HZ	4K HZ	8K HZ	NOTES
KEF-1	GREENHECK	USGF-160XP-15	KITCHEN	DIRECT	2000	1.25	2449	1.16	1 1/2	219		208	3	60	6.5	79	79	81	83	79	77	72	67	
EF-1	GREENHECK	CUE-095-VG	DISHWASHER	DIRECT	600	0.5	1642	0.12	1/6	36		115	1	60	2.2	74	75	74	67	57	59	54	34	
EF-2	GREENHECK	G-143-VG	APPARATUS	DIRECT	1800	0.5	1245	0.33	3/4	58		115	1	60	8.8	78	76	76	70	63	62	57	51	
EF-3	GREENHECK	G-090-VG	RESTROOMS	DIRECT	650	0.5	1676	0.12	1/6	32		115	1	60	2.2	81	80	74	67	62	59	51	44	

				ENER	RGY RE	ECOVI	ERY VEN	TILATOR	SCH	HEDU	LE			
			SUPPL	Y FAN	EXHAU:	ST FAN	ENERGY HX PE	ERFORMANCE		ELECT	RICAL			
SYMBOL	MANUFACTURER &	AREA	AIRFLOW	ESP	AIRFLOW	ESP	SUMMER	WINTER					WEIGHT	NOTES
NO.	MODEL NO.	SERVED	(CFM)	(IN. W.G.)	1	(IN. W.G.)	EFF. %	EFF. %	VOLTS	PHASE	HZ	FLA	(LBS)	NOTES
														PROVIDE BACKDRAFT
ERV-1	RENEWAIRE EV130	FS ADMIN	105	0.5	105	0.5	54	69	120.0	1.0	60.0	1.3	75.0	DAMPERS, PTL CONTROLLER AND LOUVERED WALL VENTS.
														AND EGOVERED WILL VENTO.

					VRF INDO	OR U	NIT S	CHE	DULI	=					
		GENERAL UNI	T DATA			INDOOR	UNIT				RATED COOL	ING CAPACITY	HEATING RATED	WEIGHT	
SYMBOL	MANUFACTURER	MODEL NO.	LOCATION	AREA SERVED	SUPPLY AIRFLOW		MOTOR	DATA		SEER	CAPACITY	AMBIENT DB	CAPACITY	WEIGHT (LBS)	NOTES
NO.	MANUFACTURER	MODEL NO.	LOCATION	AREA SERVED	(CFM)	VOLT	PHASE	HZ	MCA		(BTUH)	(DEG F)	(BTUH)	(LBO)	
FC-1	MITSUBISHI	MSZ-GL-12NA	WALL MOUNTED	SC10 IT/ELEC	400	208-230	1	60	1	23.1	12,000	95	12,000	22	
FC-2	MITSUBISHI	MSZ-GL-12NA	WALL MOUNTED	FS06 IT	400	208-230	1	60	1	23.1	12,000	95	12,000	22	
AC-1	MITSUBISHI	PLFY-P18NFMU-E	CEILING CASSETTE	MEETING FS03	460	208-230	1	60	0.5		18,000	95	20,000	35	
AC-2	MITSUBISHI	PLFY-P12NFMU-E	CEILING CASSETTE	OFFICE FS04	335	208-230	1	60	0.29		12,000	95	13,500	35	
AC-3	MITSUBISHI	PLFY-P12NFMU-E	CEILING CASSETTE	RESTROOM FS07	335	208-230	1	60	0.29		12,000	95	13,500	35	
AC-4	MITSUBISHI	PKFY-P08NLMU-E	WALL MOUNTED	STORAGE FS08	235	208-230	1	60	0.24		8,000	95	9,000	30	

					V	RF OUTDO	OR U	NITS	SCH	IEDU	LE							
			GENERAL U	NIT DATA					LECTRI	CAL DATA	4		CO	MPRESSORS			MEIGLIE	
SYMBOL NO.	MANUFACTURER	MODEL NO.	LOCATION	AREA SERVED	COOLING RATED CAPACITY (BTU/H)	HEATING RATED CAPACITY (BTU/H)	VOLT	PHASE	HZ	MCA	МОСР	FLA	COMPRESSOR TYPE	REFR. TYPE	LIQUID LINE	SUCTION LINE	WEIGHT (LBS)	NOTES
CU-1	MITSUBISHI	MUZ-GL12NA	GRADE	SC10 IT/ELEC	12,000	12,000	208-230	1	60	9	15		DC-INVERTER	R-410A	1/4	3/8	81	
CU-2	MITSUBISHI	MUZ-GL12NA	GRADE	FS06 IT	12,000	12,000	208-230	1	60	9	15		DC-INVERTER	R-410A	1/4	3/8	81	
CU-3	MITSUBISHI	PUMY-P60NKMU3	GRADE	FIRE	60,000	66,000	208-230	1	60	36	45		DC-INVERTER	R-410A	3/8	3/4	350	

		A							
		Ř	ADIAN	IT HEAT HE	EATE	RSC	CHE	DULE	
	GENERAL	. UNIT DATA		HEATING DATA	ام	ELECTRIC	CAL DATA	١	
SYMBOL NO.	MANUFACTURER	MODEL NO.	LOCATION	NOMINAL INPUT @ SEA LEVEL (MBH)	VOLT	PHASE	HZ	FLA	NOTES
RH-1	SPACE RAY	CB30-15-P5	APARATUS BAY	30	120	1	60	2.6	PROVIDE FACTORY THERMOSTAT AND WIRING FOR A COMPLETE AND FUNCTIONAL INSTALLATION
RH-2	SPACE RAY	CB30-15-P5	APARATUS BAY	30	120	1	60	2.6	PROVIDE FACTORY THERMOSTAT AND WIRING FOR A COMPLETE AND FUNCTIONAL INSTALLATION

HOOD INFORM	AATION				KI	TCHEN	HOOD S	CHEDU	LE					
HOOD INFORM	MATION		НОО	D DIMENSIONS	S (IN.)				EXHAUST			SUP	PLY	T
HOOD NO.	MARK	MODEL NO.	LENGTH	WIDTH	HEIGHT	HOOD CONSTR.	TOTAL CFM		COLLAR(S)			MUA CFM	AC CFM	TOTAL WEIGHT LBS.
			LLITOTT	***************************************	11210111		101712 01 111	WIDTH	LENGTH	CFM	S.P	Work or m	710 OT III	
1	KH-1	GGEW	120	54	24	430 SS	1,970	9	19	1,970	0.848	1576	0	

SUPPLY PLEN	IUM INFORMA	TION																
HOOD NO.	MARK	POS.	TYPE		SIZE (IN.)		INSUI ATED	DAMPER(S)	TOTAL CFM				COLL	ARS				
TIOOD NO.	IVIAIXIX	F03.	1176	LENGTH	WITDH	HEIGHT	INSOLATED	DAMPLN(3)	TOTAL CI W	TYPE	MOUNTING	QTY	WIDTH	LENGTH	DIA.	CFM	S.P	VEL.
1	KH-1	FRONT	ASP	120	14	10	NO	NO	1576	MUA	FACTORY	2	10	22		788	0.11	516

HOOD OPTIONS UL 762 LISTED W/OUT EXHAUST FIRE DAMPER COMPLETE ANSUL FIRE PROTECTION SYSTEM

FACTORY MOUNTED EXHAUST COLLAR(S) PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY

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TANDING SEAM CONSTRUCTION FOR SUPERIOR S	STRENGTH

^ ^		\wedge \wedge \wedge	^ <i>^</i>	\wedge \wedge	^ ^	^ ^	\		\wedge \wedge \wedge		<
	<u> </u>									<u> </u>	
					DISH	IWASHE	R HOOD	SCHEDULE			
HOOD INFORM	MATION				DISH	IWASHE	R HOOD	SCHEDULE			
HOOD INFORM	//ATION		HOO	D DIMENSION		IWASHE	R HOOD	SCHEDULE	SUI	PPLY	TOTAL

			НОО	D DIMENSIONS	3 (IN.)				EXHAUST			SUF	PPLY	
HOOD NO.	MARK	MODEL NO.	LENGTH	WIDTH	HEIGHT	HOOD CONSTR.	TOTAL CFM		COLL	AR(S)		MUA CFM	AC CFM	TOTAL WEIGHT LBS
			LENGIH	VVIDIO	пеівні		TOTAL CENT	WIDTH	LENGTH	CFM	S.P	- WOA CFW	AC CFIVI	
1	DH-1	GD2	42	42	24	430 SS	525	11	13	525	0.034	N/A	N/A	

STAINLESS STEEL FINISH FOR HIGHER CORROSION RESISTANCE
0.5 INCH NPT STAINLESS STEEL DRAIN FITTING

FACTORY MOUNTED EXHAUST COLLAR(S)

			GRILLE A	AND DIFF	USER S	CHEDU	JLE		
SYMBOL NO.	MANUFACTURER & MODEL NO.	TYPE	FRAME STYLE	FACE DIMENSIONS (IN)	NECK DIMENSIONS (IN)	AIRFLOW RANGE (CFM)	PRESSURE DROP (IN. W.G.)	MAXIMUM NC	NOTES
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12X12 24X24	6	91-130	0.02-0.06	24	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	12X12 24X24	8	131-210	0.02-0.06	28	
SD-1	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	10	211-320	0.03-0.06	30	
ו-טס	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	12	321-420	0.03-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	14	421-530	0.04-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	LAY-IN CEILING	24X24	15	531-630	0.03-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	12X12 24X24	6	91-130	0.02-0.06	24	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	12X12 24X24	8	131-210	0.02-0.06	28	
CD 2	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	10	211-320	0.03-0.06	30	
SD-2	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	12	321-420	0.03-0.06	30	PROVIDE OPPOSED BLADE DAMPER
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	14	421-530	0.04-0.06	30	
	PRICE SPD, TYPE 3	SUPPLY DIFFUSER	FIXED CEILING	24X24	15	531-630	0.03-0.06	30	
	PRICE 520	SIDEWALL SUPLLY	FLAT MARGIN	SEE PLAN	SEE PLAN	SEE PLAN	0.03-0.06	26	
SD-3	PRICE 520D	SIDEWALL SUPPLY	FIXED CEILING	SEE PLAN	SEE PLAN	SEE PLAN	0.03-0.06	26	PROVIDE OPPOSED BLADE DAMPER
	PRICE 520	SIDEWAL SUPPLY	SURF MOUNTED	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	22	
SD-4	PRICE SDS	LINEAR SUPPLY	SURF MOUNTED	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	30	PROVIDE LINEAR SLOT PLENUM
RG-1	PRICE 80	RETURN GRILLE	LAY-IN CEILING	12X12 24X24	SEE PLAN	-	N/A	N/A	
RG-2	PRICE 80	RETURN GRILLE	FIXED CEILING	12X12 24X24	SEE PLAN	-	N/A	N/A	
RG-3	PRICE 530	RETURN GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	-	N/A	N/A	
KG-3	PRICE 91	RETURN GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	-	N/A	N/A	
EG-1	PRICE 80D	EXHAUST GRILLE	LAY-IN CEILING	12X12 24X24	SEE PLAN	SEE PLAN	0.01-0.08	25	
EG-2	PRICE 80D	EXHAUST GRILLE	FIXED CEILING	12X12 24X24	SEE PLAN	SEE PLAN	0.01-0.08	25	PROVIDE OPPOSED BLADE DAMPER
EG-3	PRICE 530D	EXHAUST GRILLE	SIDEWALL	SEE PLAN	SEE PLAN	SEE PLAN	0.01-0.08	25	



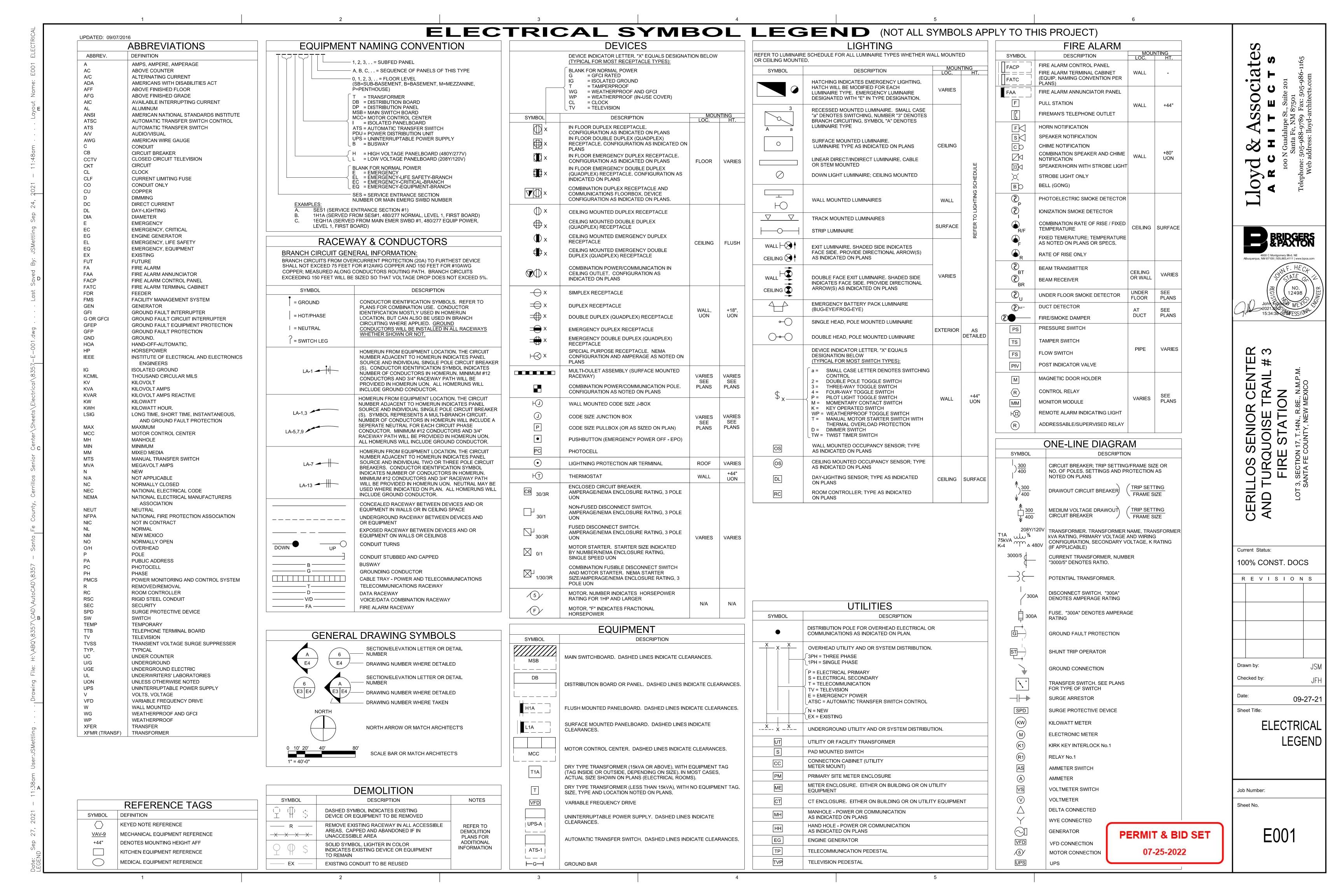
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Current Status: 100% CONST. DOCS REVISIONS ADDENDUM #2 | 10/21/21

> 09-27-21 Sheet Title: MECHANICAL

SCHEDULES

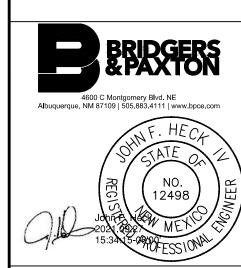
Job Number: Sheet No.



ELECTRICAL SYMBOLS APPLY TO THIS PROJECT)

	SPECIAL SYSTEMS			
SYMBOL	DESCRIPTION	MOUN LOC.	ITING HT.	
	FLOOR BOX WITH POWER AND DATA	FLOOR	VARIES SEE PLANS	
4	VOICE\DATA OUTLET	WALL	+18" UON	
← AC	VOICE\DATA OUTLET ABOVE COUNTER TOP	WALL	+44" UON	
⋖ w	TELEPHONE OUTLET WALL MOUNTED			
IC	INTERCOM CALL SWITCH	WALL	+44" UON	
ICM	INTERCOM MASTER STATION			
\bigcirc S \triangleleft	COMMUNICATION HORN	WALL	+84"	
ВО	COMMUNICATION BELL	VVALL	UON	
⊬® ic	INTERCOM WALL SPEAKER	WALL	+96"	
⊬s⊲ıc	INTERCOM SPEAKER HORN	VVALL	UON	
• DA	DURESS ALARM PUSHBUTTON	WALL	SEE	
• LD	LOCK DOWN PUSHBUTTON	VVALL	PLANS	
$\begin{array}{c} (1) \\ (1) \\ (2) \\ (3) \end{array}$	WALL MOUNTED CODE SIZE J-BOX WALL MOUNTED CODE SIZE J-BOX STACKED VERTICALLY	WALL	SEE PLANS	
ÇŞ	COMBINATION CLOCK/SPEAKER	WALL	SEE PLANS	
DSVD	DIGITAL SIGNAGE VIDEO DISPLAY	WALL	SEE PLANS	
VP	VIDEO PROJECTOR	REFER T	O PLANS	
(S) _x	CEILING SPEAKER: LOCAL SOUND SYSTEM	CEILING	FLUSH	
(S) _{IC}	CEILING SPEAKER: INTERCOM SYSTEM	CLILING	LUGH	
J	J-HOOK ROUTING PATH			
	CEILING VOICE/DATA	ABOVE CEILING	SEE PLANS	
WAP	WIRELESS ACCESS POINT		, ,,,,	
J	CODE SIZE JUNCTION BOX			

	SECURITY								
SYMBOL	DESCRIPTION	MOUN LOC.	NTING HT.						
CR	CARD READER								
KP	KEY PAD	WALL	+44" UON						
KS	KEY SWITCH								
М	WALL MOUNTED MOTION DETECTOR	WALL	+84" UON						
	SECURITY CAMERA (BOX, FIXED)								
\triangle	SECURITY CAMERA (DOME, FIXED OR PTZ)		SEE						
25/2	SECURITY CAMERA 180°	VARIES	PLANS						
	SECURITY CAMERA 360°								
©	GLASS BREAK DETECTOR	WINDOW	SEE PLANS						
∭	CEILING MOTION DETECTOR	CEILING	SEE PLANS						
DC	DOOR CONTACT								
DS	DOOR SWITCH		CEE						
ES	ELECTRIC STRIKE	DOOR	SEE PLANS						
LD	LOCK DOWN		. 2, 10						
ML	MAGNETIC LOCK								



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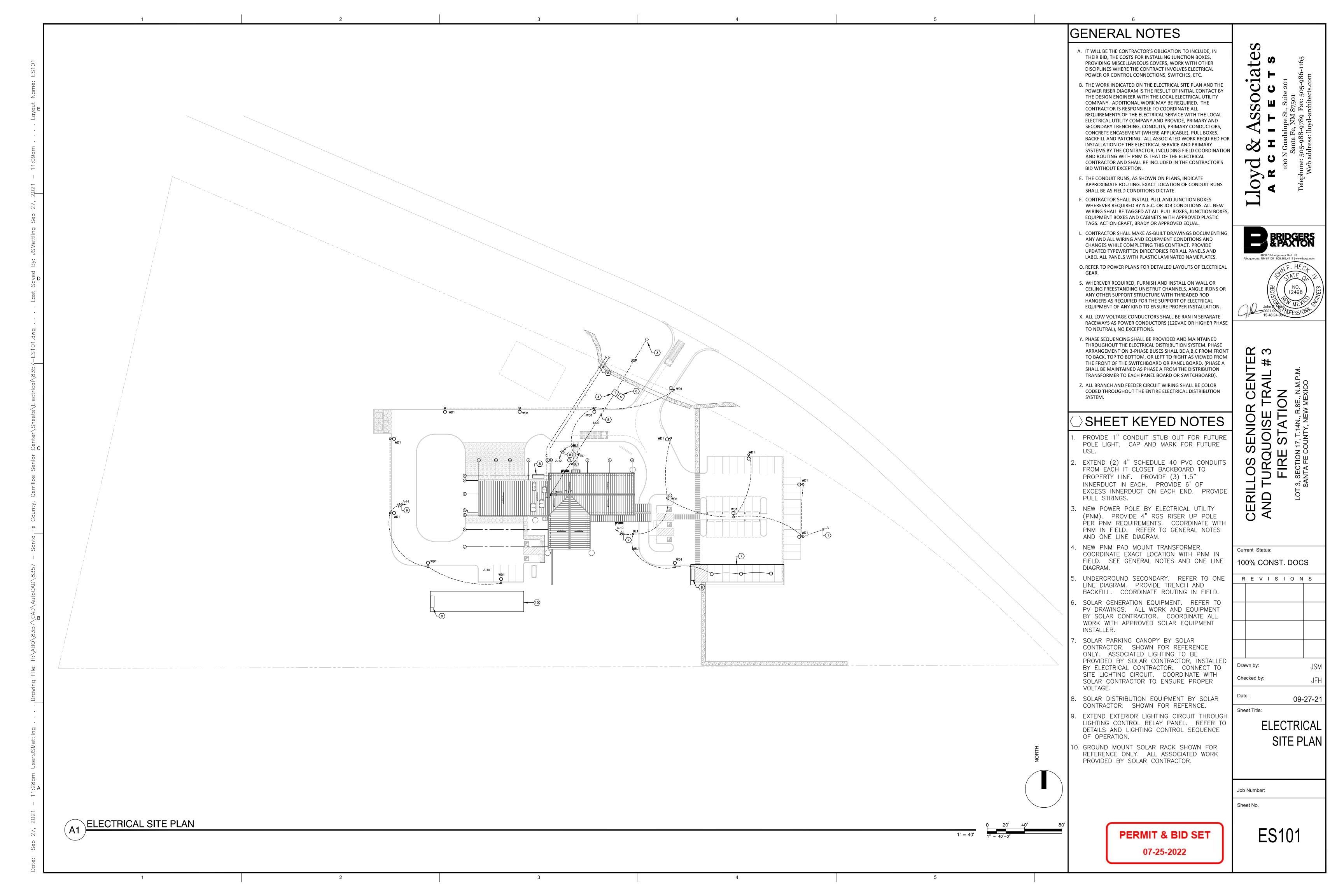
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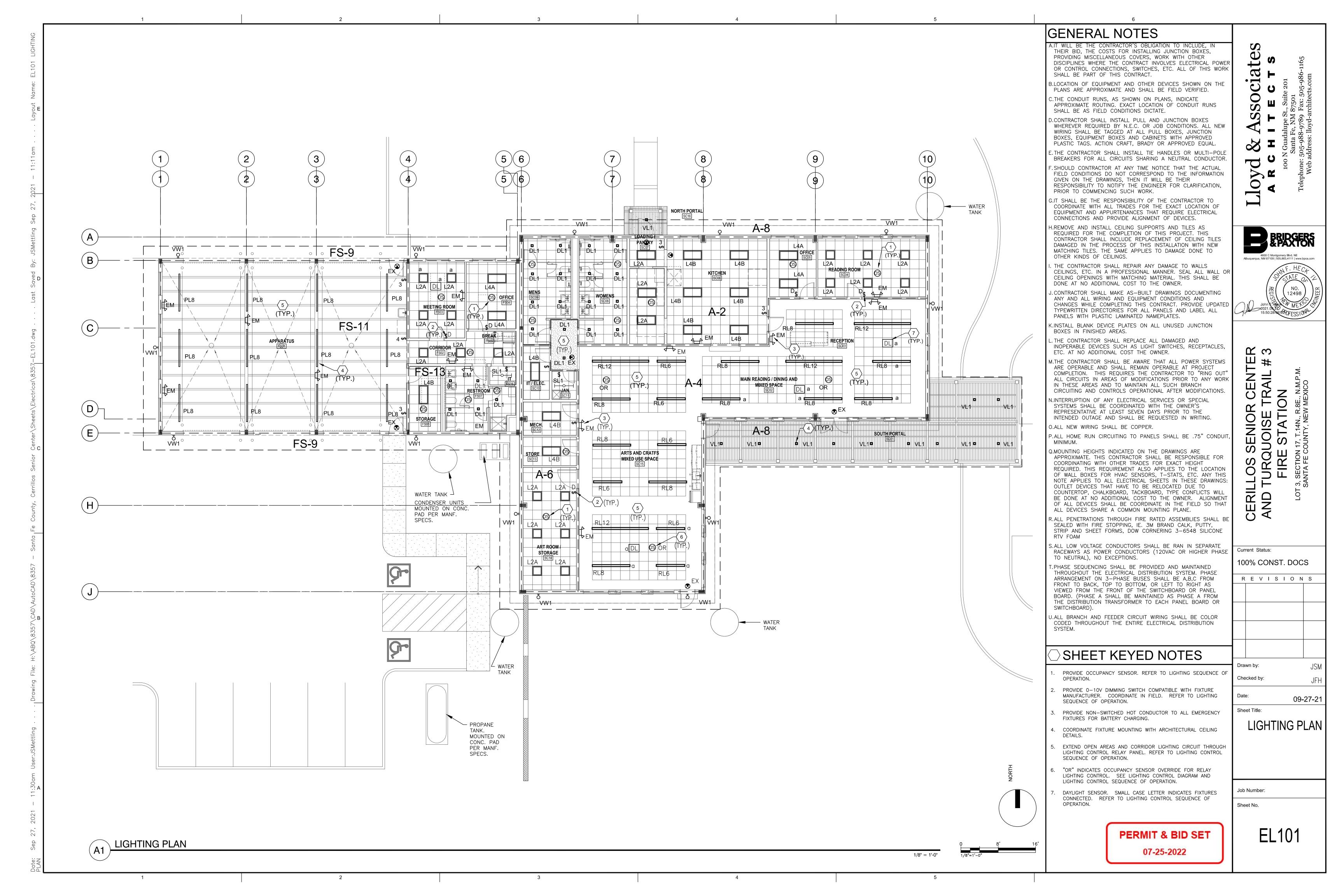
TECHNOLOGY LEGEND

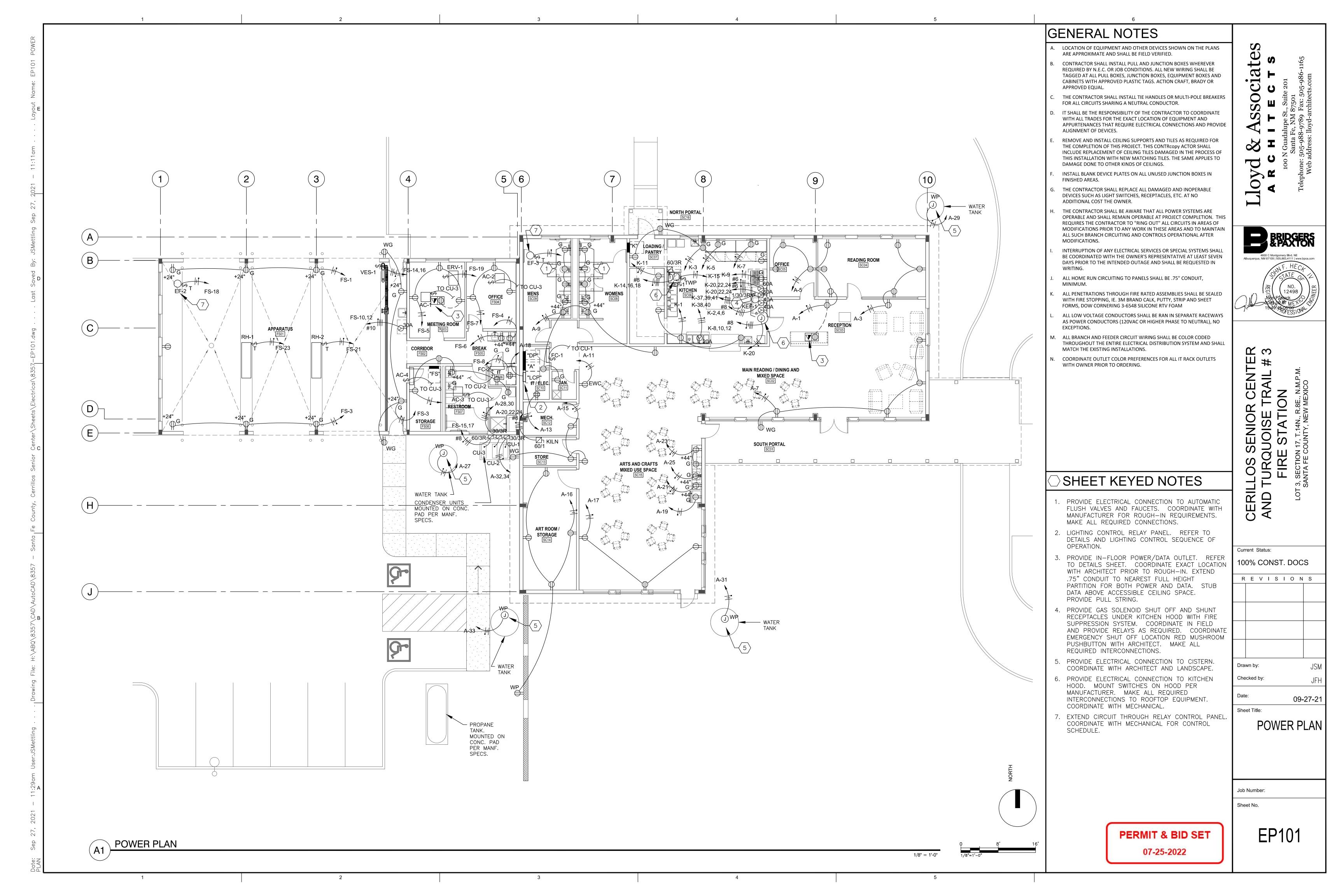
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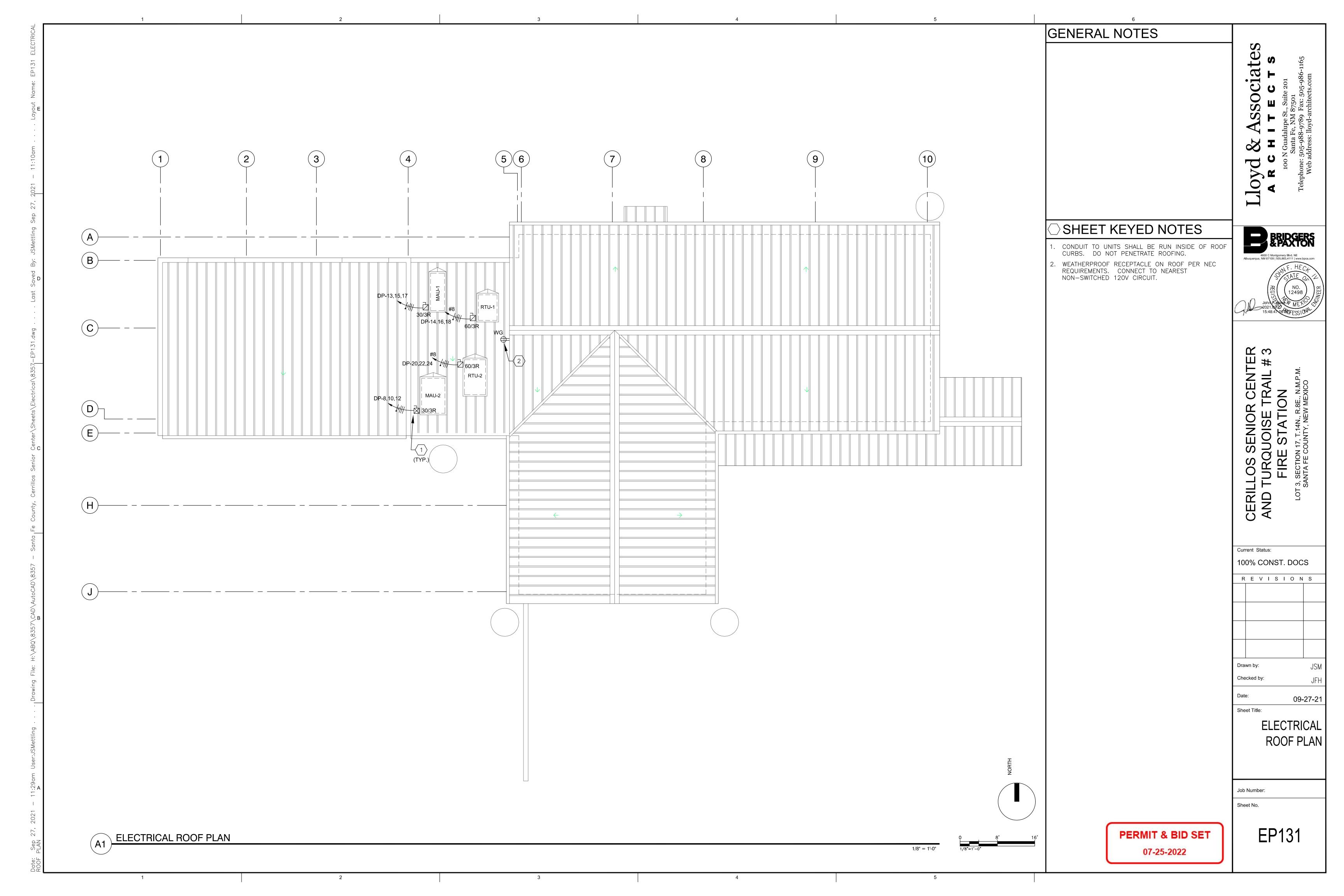
Job Number: Sheet No.

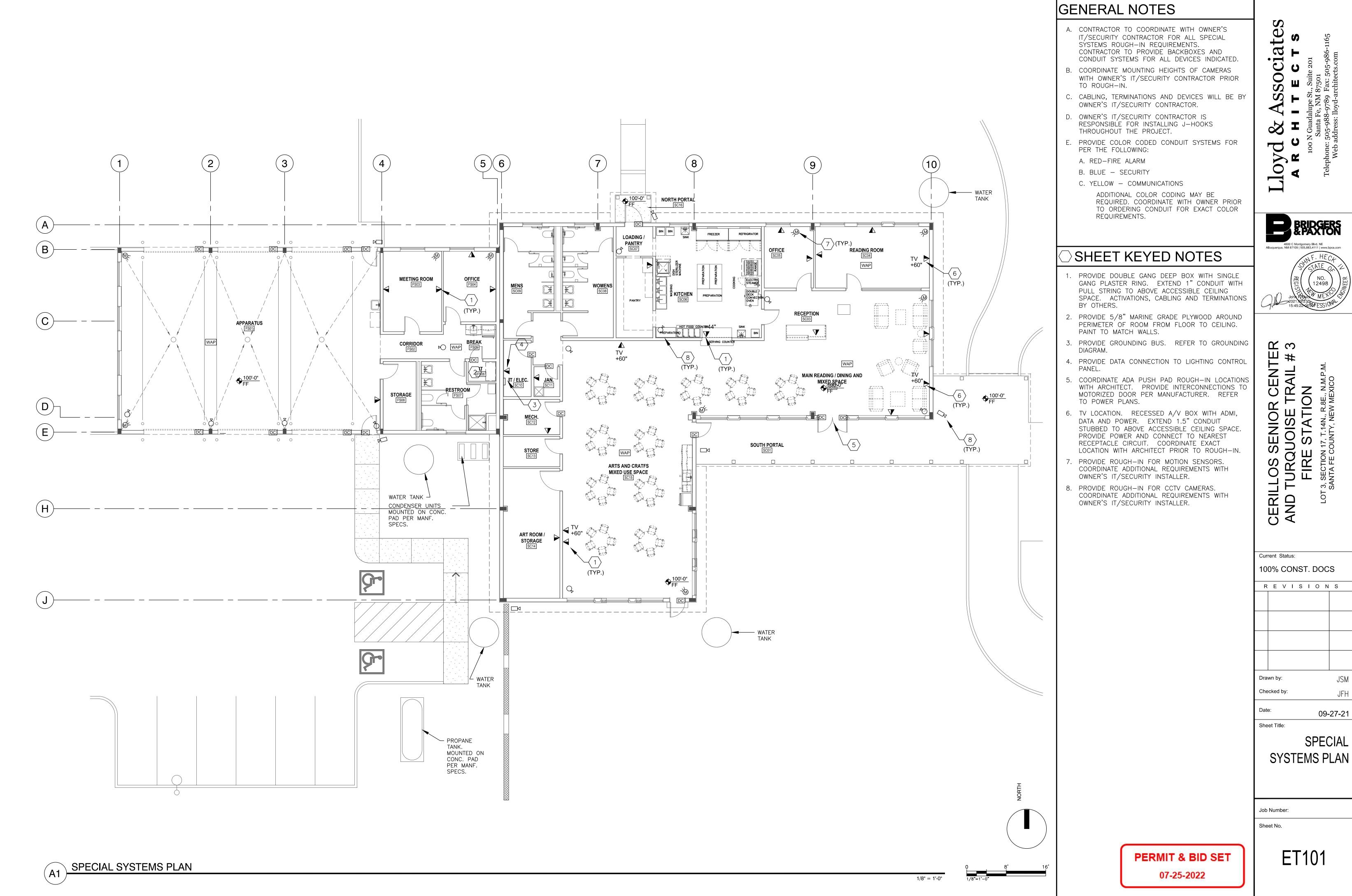
E002

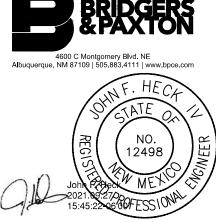




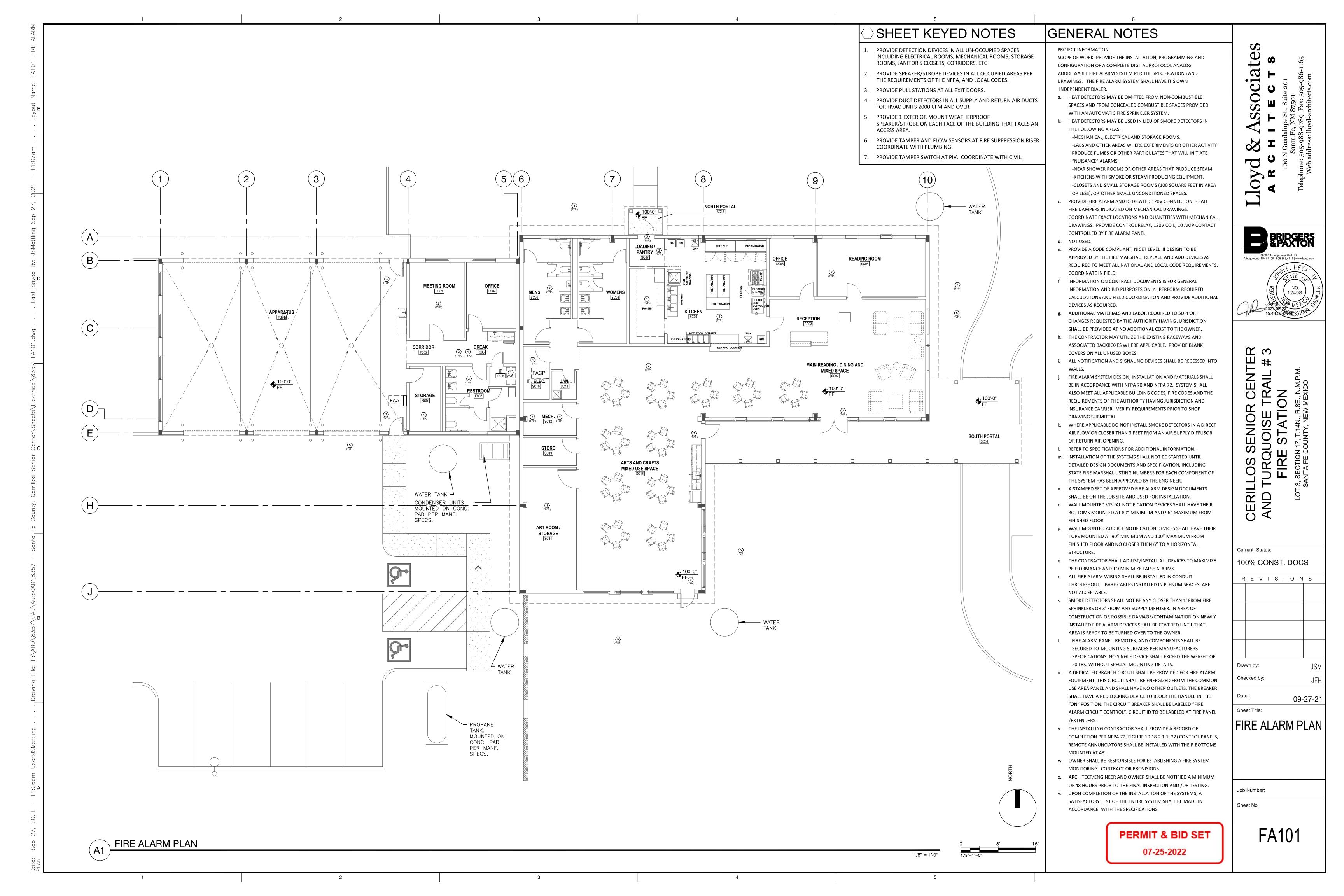


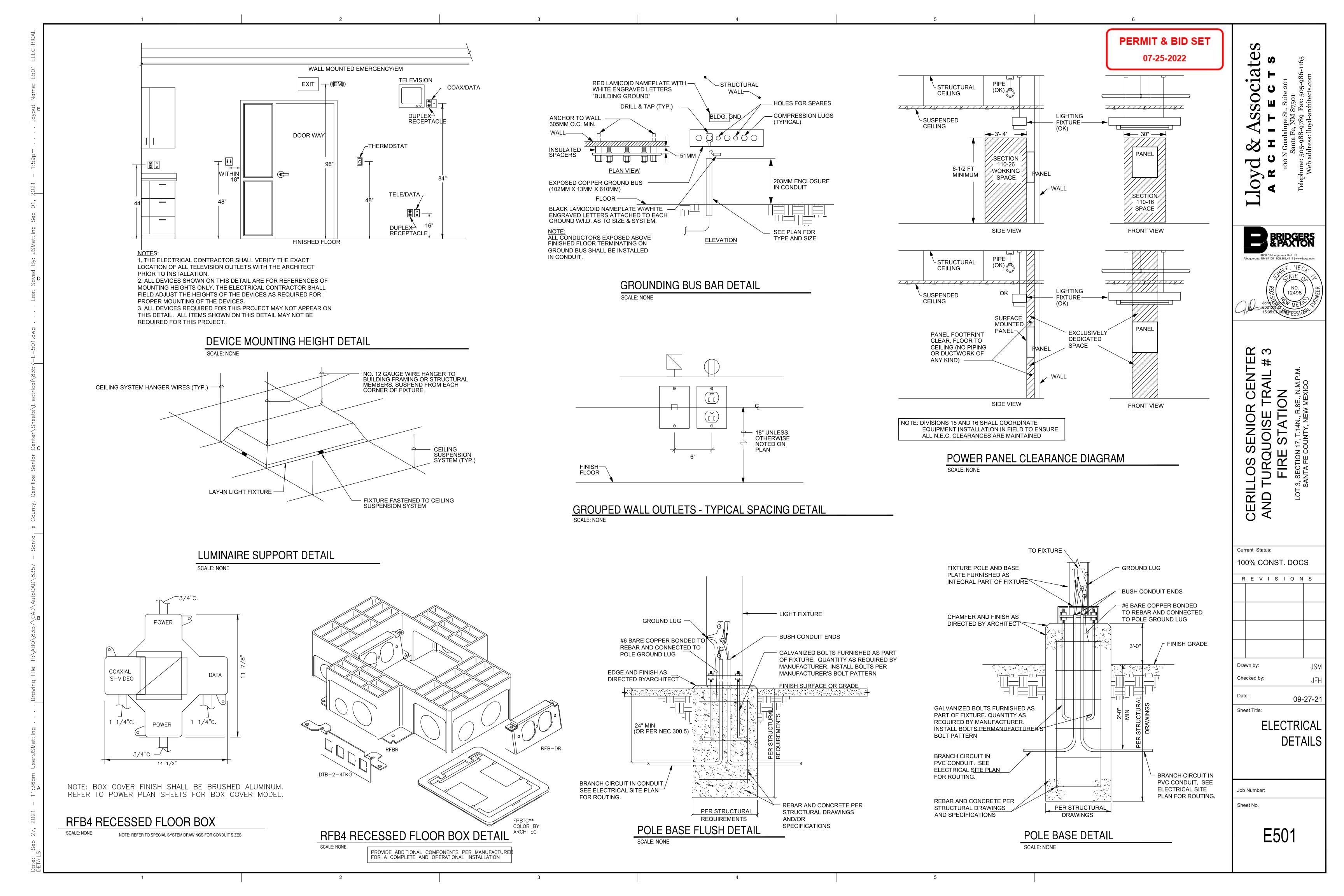






SPECIAL





IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL COMPONENTS ENSURE A COMPLETE AND OPERATIONAL INSTALLATION. WHERE LIGHTING CONTROL EQUIPMENT DETAILS OR DIAGRAMS HAVE BEEN INDICATED ON REFERENCED AS A BASIS OF DESIGN ONLY UNLESS SPECIFICALLY STATED OTHERWISE. IT SHALL BE THE CONTRACTOR'S RESPONSILITY TO PROVIDE ADDITIONAL COMPONENTS AND EQUIPMENT WHERE REQUIRED TO MEET THE INTENT OF THE SYSTEMS DESCRIBED BELOW. WHERE STATED, THE SYSTEMS DESCRIBED OR INDICATED AS "NO EQUAL" SHALL BE PROVIDED AS DESCRIBED WITHOUT SUBSTITUTION. THE CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL FOR ALL LIGHTING CONTROLS BEING PROVIDED TO THE PROJECT. IT IS THE RESONSIBILITY OF THE CONTRACTOR TO EQUIPMENT TO ENSURE COMPATIBLITY TO THE FIXTURE MANUFACTURERS THEY ARE MEANT TO CONTROL.

SHOP DRAWINGS SHALL BE PROVIDED BY THE MANUFACTURER OR THEIR REPRESENTATIVES INDICATING RANGE AND PLACEMENT OF THE OCCUPANCY SENSORS FOR EACH SPACE PRIOR TO ROUGH-IN AND SHALL INCLUDE WIRING DIAGRAMS FOR EACH SYSTEM DESCRIBED BELOW. ADDITIONAL SENSORS OR EQUIPMENT MAY BE REQUIRED BASED ON THE MANUFACTURER'S RECOMMENDATIONS. OCCUPANCY SENSORS SHALL NOT BE LOCATED ADJACENT HVAC REGISTERS OR RETURN AIR GRILLES. THIS SHALL BE COORDINATED IN THE FIELD PRIOR TO ROUGH-IN WITHOUT

WHERE PHOTOSENSORS ARE INDICATED, THE PHOTOSENSORS SHALL CONTROL THE LIGHTING LEVELS OF THE FIXTURES INDICATED AT A MAXIMUM LIGHTING LEVEL INDICATED. PLACEMENT OF THE PHOTOSENSORS SHALL BE COORDINATED WITH THE MANUFACTURER SHOP DRAWINGS.

COORIDORS/OPEN OFFICE AREAS

COORIDORS SHALL BE CONTROLLED THROUGH A MULTI POLE LINE VOLTAGE RELAY PANEL WITH INTEGRAL TIME CLOCK AS INDICATED ON THE DRAWINGS OR SPECIFICATIONS. ADDITIONAL SUB RELAY PANELS SHALL BE LOCATED AS INDICATED ON THE DRAWINGS. THE RELAY PANEL SHALL BE CONNECTED TO THE LOCAL NETWORK PER THE MANUFACTURER AND OWNER'S IT DEPARTMENT. THE CONNECTIONS SHALL BE COORDINATED WITH THE OWNER'S IT DEPARTMENT FOR A STATIC IP ADDRESS PROVIDED AND PROGRAMMED BY THE OWNER.

ALL COORIDORS, OPEN OCCUPANT AREAS SHALL BE CONTROLLED WITH THE TIMECLOCK FUNCTION. AS AN EXAMPLE, LIGHTING FIXTURES SHALL TURN ON AT 7:00AM AND OFF AT 8:00PM ON WEEKDAYS AND SHALL REMAIN OFF DURING WEEKENDS. FINAL HOURS OF OPERATION SHALL BE COORDINATED WITH THE BUILDING OWNER OR OCCUPANTS AND SHALL BE ADJUSTED ACCORDINGLY. KEYED SWITCHES AND OR OCCUPANCY SENSOR OVERRIDE SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS TO TURN THE ASSOCIATED LIGHTING ON DURING NON WORKING HOURS FOR A 2 HOUR PERIOD. AT THE END OF THIS PERIOD, THE ASSOCAITED LIGHTING SHALL BLINK TWICE TO ALERT THE OCCUPANTS THAT THE SYSTEM IS RETURNING TO A NON-OCCUPIED STATE. NIGHT LIGHTING FIXTURES CONNECTED NON SWITCHED SHALL BE PROVIDED THROUGHOUT THE CORRIDORS AND OPEN OFFICE AREAS TO ALLOW OCCUPANTS TO FIND THEIR WAY TO THE KEYED SWITCH OVERRIDES TO OVERRIDE THE SYSTEM BACK TO AN ENERGIZED STATE IF NECESSARY.

OFFICES, CONFERENCE SPACES

THESE AREAS SHALL BE CONTROLLED "LOCALLY" WITHOUT INTERCONNECTION TO ANY OTHER CONTROLS SYSTEM. EACH SPACE SHALL BE PROVIDED WITH IT'S OWN DUAL TECHNOLOGY OCCUPANCY SENSORS SET IN VACANCY MODE AND A LOCALIZED OVERRIDE SWITCH TO TURN THE FIXTURES OFF ONLY. THE SWITCH SHALL NOT OVERRIDE THE FUNCTION OF THE OCCUPANCY SENSOR. SENSORS SHALL BE SET FOR 10 MINUTES OF UNOCCUPIED TIME BEFORE TURNING THE ASSOCIATED FIXTURES OFF. 0-10V DIMMING SWITCHES SHALL BE INSTALLED WHERE INDICATED TO PROVIDE ADDITIONAL LIGHTING LEVEL CONTROLS.

CLASSROOMS, SEMINAR ROOMS

THESE AREAS SHALL BE CONTROLLED "LOCALLY" WITHOUT INTERCONNECTION TO ANY OTHER CONTROLS SYSTEM IN THE BUILDING UNLESS SPECIFICALLY INDICATED. MULTIPLE ZONES SHALL BE PROVIDED AS INDICATED ON THE PLANS. EACH SPACE SHALL BE PROVIDED WITH IT'S OWN DUAL TECHNOLOGY OCCUPANCY SENSORS SET IN VACANCY MODE WITH LOCALIZED 0-10V DIMMING SWITCHES PROVIDED AS INDICATED ON THE PLANS. STEPPED DIMMING IS NOT ACCEPTABLE. ADDITIONAL OCCUPANCY SENSORS SHALL BE PROVIDED IN LARGE AREAS THAT EXCEED THE OCCUPANCY SENSOR'S RANGE OF MOTION AND SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.

KITCHEN AREAS SHALL BE CONTROLLED VIA AN ON OFF SWITCH ONLY FOR SAFETY.

RESTROOMS

RESTROOMS SHALL BE EQUIPPED WITH DUAL-TECHNOLOGY OCCUPANCY SENSORS AS INDICATED ON THE DRAWINGS. LOCAL SWITCHING SHALL BE OMITTED FROM THESE AREAS UNLESS INDICATED OTHERWISE. SENSORS SHALL BE SET FOR 15 MINUTES.

STORAGE AREAS SHALL BE EQUIPPED WITH INFRA-RED TYPE OCCUPANCY SENSORS SET FOR 5 MINUTES.

EXTERIOR LIGHTING

EXTERIOR LIGHTING SHALL BE CIRCUITED THROUGH THE ASSOCIATED RELAY LIGHTING CONTROL PANEL. EXTERIOR LIGHTING SHALL TURN ON VIA PHOTOCELL CONTROL AND OFF WITH THE INTEGRAL TIMECLOCK IN THE LIGHTING CONTROL PANEL. REFER TO ELECTRICAL SITE PLAN FOR LOCATION OF FIXTURES AND ASSOCIATED CIRCUITING. WHERE INDICATED PROVIDE DIMMING RELAYS TO ACCOMMODATE PARKING LOT DIMMING.

LOCAL CONTROL SHALL CONSIST OF ON-OFF SWITCHING ONLY FOR

PERMIT & BID SET

07-25-2022

LIGHTING SEQUENCE OF OPERATION

OF THE LIGHTING CONTROL EQUIPMENT DESCRIBED HEREIN AND TO THE DRAWINGS IT IS THE INTENT THAT THOSE SYSTEMS ARE BEING COORDINATE 0-10V DIMMING AND OTHER ELECTRONIC SWITCHES AND

KITCHEN

STORAGE AREAS/JANITORS CLOSETS

MECHANICAL AND ELECTRICAL ROOMS

ELECTRICAL

09-27-21

DETAILS

Job Number: Sheet No.

Checked by:

Sheet Title:

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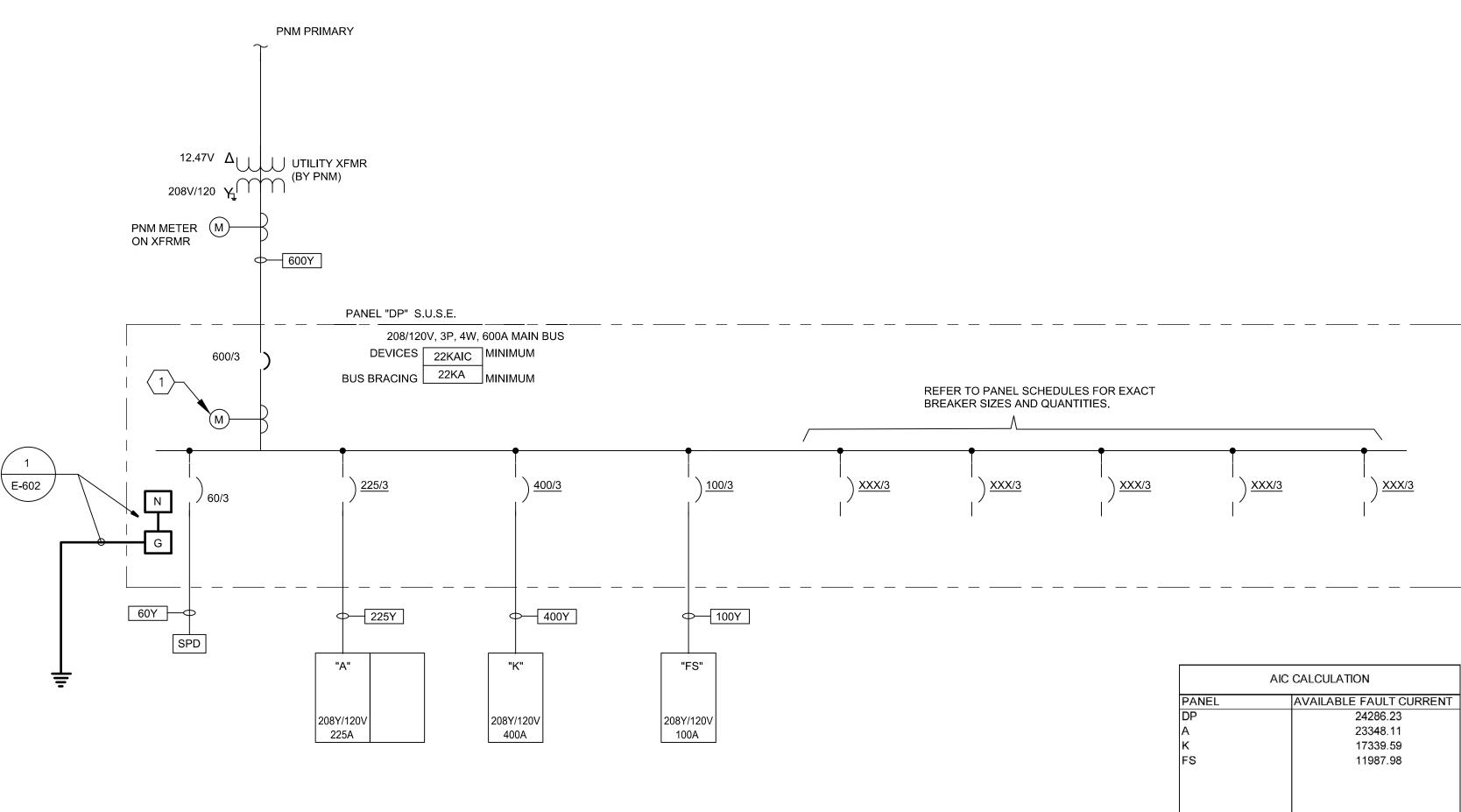
ENIOR

CERILLOS AND TUR FIF

100% CONST. DOCS

REVISIONS

Current Status:



SHEET KEYED NOTES COPPER FEEDER SCHEDULE NOTE: ALL CONDUCTORS ARE COPPER, TYPE THWN/THHN UNLESS OTHERWISE NOTED.

DESIGNATION CONDUCTORS GROUND CONDUIT NOTE CONDUIT NOTES

THREE PHASE THREE WIRE & GROUND FEEDER

10

10

(2) 2

(2) 2

(2) 1

(2) 1/0

(3) 1/0

(3) 2/0

(4) 3/0

(5) 4/0

(6)250 KCMIL

(7)350 KCMIL

(8)400 KCMIL

10

(2) 2

(2) 1

(3) 2/0

(4) 3/0

(5) 4/0

(6) 250 KCMIL

(7) 350 KCMIL

(8) 400 KCMIL

(11) 500 KCMIL

(11)500 KCMIL

THREE PHASE FOUR WIRE & GROUND FEEDER

3/4"

3/4"

3/4"

3/4"

3/4"

3/4"

3/4"

1"

1 1/4"

1 1/4"

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(11) 4"

(14) 4"

(2) 3" (2) 3"

2 1/2"

3#12

3#10

3#10

3#8

3#8

3#2

3#2

3#1/0

3#2/0

3#3/0

3#4/0

3-350 KCMIL

3-500 KCMIL

3-500 KCMIL

(2) 3-250 KCMIL

(2) 3-350 KCMIL

(2) 3-500 KCMIL

(3) 3-300 KCMIL

(3) 3-400 KCMIL

(4) 3-350 KCMIL

(5) 3-400 KCMIL

(6) 3-400 KCMIL

(7) 3-500 KCMIL

(8) 3-500 KCMIL

(11) 3-500 KCMIL

4#12

4#10

4#8

4#8

4#4

4#4

4#2

4#1/0

4#2/0

4#3/0

4#4/0

4-250 KCMIL

4-350 KCMIL

4-500 KCMIL

4-500 KCMIL

(2) 4-250 KCMIL

(2) 4-350 KCMIL

(2) 4-500 KCMIL

(3) 4-300 KCMIL

(3) 4-400 KCMIL

(4) 4-350 KCMIL

(5) 4-400 KCMIL

(6) 4-400 KCMIL

(8) 4-500 KCMIL

5000Y (14) 4-500 KCMIL (14) 700 KCMIL

2500Y (7) 4-500 KCMIL

4000Y (11) 4-500 KCMIL

(2) 4#4/0

(2) 3#4/0

3-250 KCMIL

25Δ

30Δ

35∆

40Δ

45∆

50Δ

70Δ

Δ08

90Δ

100Δ

125∆

150Δ

175∆

200Δ

225∆

250Δ

300Δ

350∆

400Δ

450∆

500Δ

600Δ

700Δ

Δ008

1000Δ

1200Δ

1600Δ

2000Δ

2500Δ

3000Δ

4000Δ

20Y

25Y

30Y

35Y

40Y

45Y

50Y

60Y

70Y

80Y

90Y

100Y

125Y

150Y

175Y

200Y

225Y

250Y

300Y 350Y

400Y

450Y

500Y

1000Y

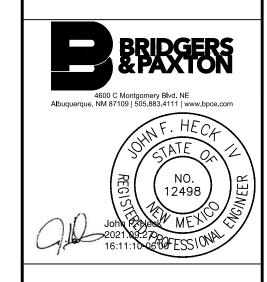
1200Y

1600Y

600Y

PROVIDE AND INSTALL MULTI FUNCTION SUB METERING CAN TO HOUSE 4 METERS. PROVIDE DATA/NETWORK CONNECTIONS PER MANUFACTURER REQUIREMENTS AND COA COMMUNICATION REQUIREMENTS. EXTEND CONDUIT AND CT WIRING AS REQUIRED. PROVIDE CT'S FOR PANEL FEEDERS TO MEASURE ASSOCIATED LOADS FOR SYSTEMS INDICATED. CT'S SHALL BE PROVIDED BY METERING MANUFACTURER. INTERGRATED MULTIPLE METER ENCLOSURE. METERSHALL BE REVENUE CERTIFIED WITH .2% ACCURACY. INTEGRAL FUSE BLOCK AND SHORTING BLOCKS. COMMUNICATION SERVER TO ALLOW CONNECTION TO NETWORK FOR ACCESS TO METER DATA VIA AN INTEGRATED WEBSERVER. NO SOFTWARE SHALL BE RQEUIRED OR ALLOWED. DIRECT CONNECTION TO POWERSMITHS WOW SUSTAINABILITY PLATFORM. INTEGRAL SUPPORT FOR COMMUNICATING WITH BAS VIA INTEGRAL MODBUS RTU. MODBUS TCP AND BACNET IP. 6 DIGITAL INPUTS TO MONITORING/REPORT VALUES FROM EXTERNAL SOURCES. CYBERHAWK-200M-6P-240/120-.2%-EM.

a C. 7



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QUOISE T CERILLOS
AND TUR
FIF

Current Status: 100% CONST. DOCS

REVISIONS

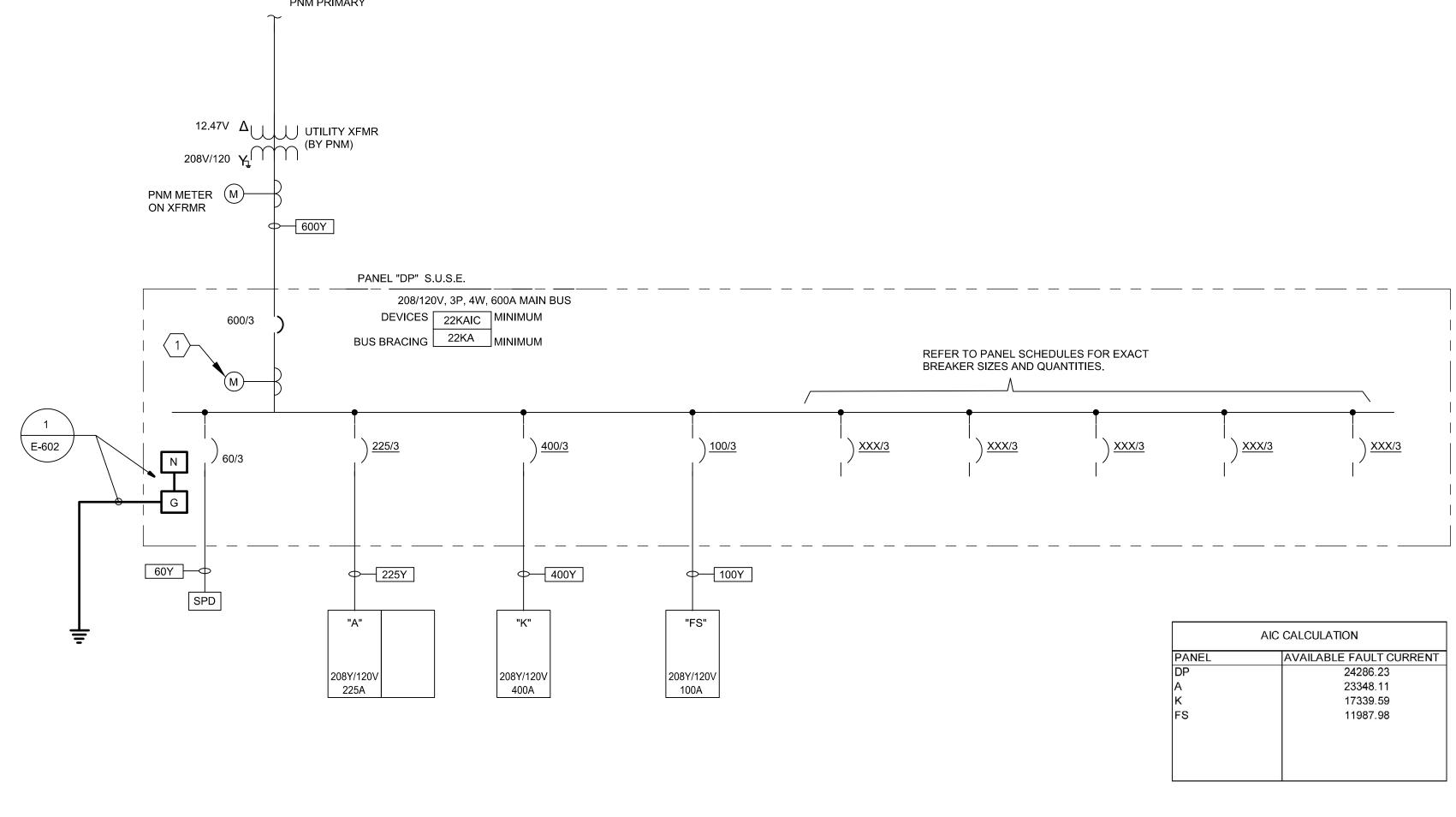
ELECTRICAL DIAGRAMS

09-27-21

Sheet No.

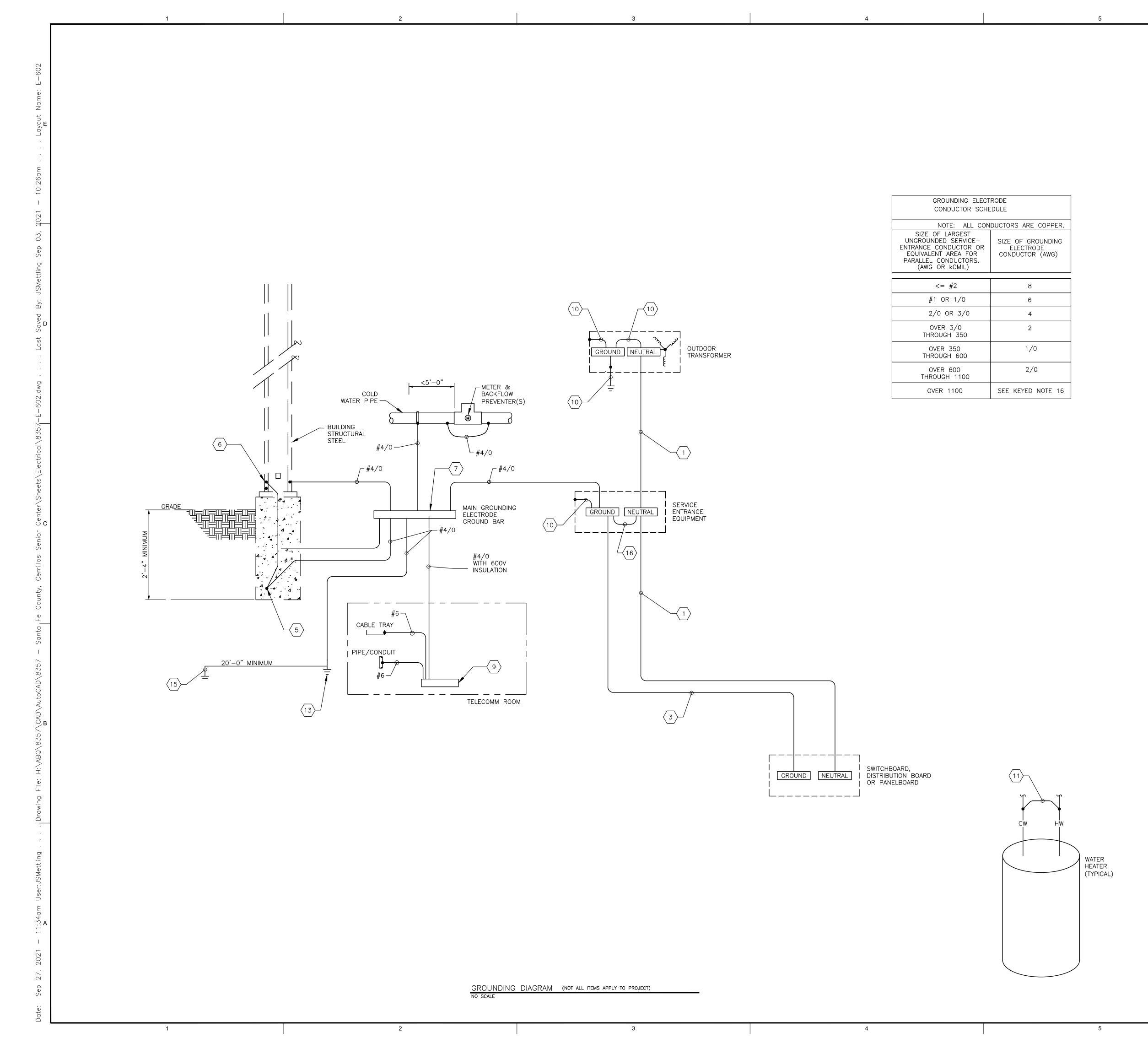
E601

PERMIT & BID SET 07-25-2022



ONE LINE DIAGRAM

NO SCALE



GENERAL NOTES

- 1. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
- 2. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO SERVICE ENTRANCE EQUIPMENT GROUND BUS USING GROUNDING ELECTRODE CONDUCTOR.
- 3. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED EQUAL TO EQUIPMENT GROUNDING CONDUCTOR.
- 4. BOND ELECTRICAL EQUIPMENT ENCLOSURES TO GROUND BAR USING SAME SIZE CONDUCTOR AS FEEDER EQUIPMENT GROUND CONDUCTOR OR FACTORY PROVIDED GREEN SCREW.
- 5. CLEAN COATED RE-BAR PRIOR TO PERFORMING ELECTRICAL CONNECTION.

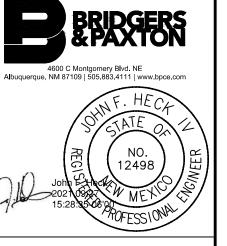
SHEET KEYED NOTES

- 1. REFER TO ONE-LINE DIAGRAM AND FEEDER SCHEDULE FOR GROUNDED CONDUCTOR SIZE.
- 2. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND
- 3. FOR EQUIPMENT GROUNDING CONDUCTOR SIZE REFER TO ONE-LINE DIAGRAM AND FEEDER SCHEDULE.
- 4. PROVIDE GROUNDING ELECTRODE CONDUCTOR SIZE BASED ON THE CONDUCTOR SIZE OF THE SECONDARY OF THE TRANSFORMER. SIZE PER NEC 250.66 AND PER SCHEDULE ON THIS SHEET.
- 5. PROVIDE A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION AROUND THE ENTIRE PERIMETER OF THE BUILDING. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 3 INCHES OF CONCRETE COVER. USE EITHER #4/0 BARE COPPER CABLE OR #6 OR LARGER STEEL REINFORCING BARS MADE ELECTRICALLY CONTINUOUS USING EXOTHERMICALLY WELDED #4/0 JUMPERS.
- 6. BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE. USE EXOTHERMIC WELDS.
- 7. PROVIDE A 1/4" X 4" X 12" "MAIN GROUNDING ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPADE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION.
- 8. NOT USED.
- 9. INSTALL A 1/4" X 4" COPPER "TELECOMMUNICATIONS GROUNDING BUSBAR" IN EACH TELECOMMUNICATIONS ROOM. CONNECT CABLES TO THE "TELECOMMUNICATIONS GROUNDING BUSBAR" USING COMPRESSION SPADE LUGS. LABEL CONDUCTORS PER ANSI-J-STD-607-A. LABEL EACH CONNECTION. SEE PLAN FOR BAR LENGTH AND LOCATIONS.
- 10. BONDING JUMPER SIZED PER GROUNDING ELECTRODE CONDUCTOR SCHEDULE THIS SHEET.
- 11. BOND HOT WATER PIPE TO COLD WATER PIPE AT EACH WATER HEATER WITH A #8 BARE COPPER CONDUCTOR.
- 12. NOT USED.
- 13. NOT USED.
- 14. BOND ALL METALLIC PIPING SYSTEMS WITHIN STRUCTURE.
- 15. PROVIDE A GROUNDING ELECTRODE SYSTEM PER 2014 NMEC.
- 16. MAIN BONDING JUMPER AND/OR SYSTEM BONDING JUMPER SIZE BASED ON UNGROUNDED CONDUCTOR SIZE AND GROUNDING ELECTRODE CONDUCTOR SCHEDULE ON THIS SHEET UNLESS UNGROUNDED CONDUCTOR SIZE OR EQUIVALENT IS GREATER THAN 1100 KCMIL. IF GREATER THAN 1100 KCMIL (OR 1750 KCMIL FOR ALUMINUM) SIZE JUMPER PER NEC TABLE 250.102 (C)(1).
- 17. NOT USED.
- 18. NOT USED.
- 19. NOT USED.

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Dra	wn by	/ :			JSN
Che	cked	by:			IEL

09-27-21

GROUNDING DIAGRAM

Job Number:

Sheet No.

E602

PERMIT & BID SET

07-25-2022

Type

BL1

DL1

EM

EX

L2A

L4A

L4B

PL8

RL6

RL8

SL1

VL1

VW1

WD1

WD2

RL12

LED BOLLARD FIXTURE

LED SURFACE STRIP

RECESSED LED DOWN LIGHTS

UNIVERSAL MOUNTED LED EMERGENCY FIXTURE

LED 2'X4' RECESSED / LAY IN FIXTURE REV LENSED

UNIVERSAL MOUNTED LED EXIT FIXTURE

LED 2'X2' RECESSED / LAY IN FIXTURE

LED 2'X4' RECESSED / LAY IN FIXTURE

6' RECESSED LED LINEAR FIXTURE

8' RECESSED LED LINEAR FIXTURE

12' RECESSED LED LINEAR FIXTURE

EXTERIOR LED RECESSED FIXTURE

EXTERIOR LED WALL MOUNTED FIXTURE

EXTERIOR POLE MOUNTED SINGLE HEAD FIXTURE

EXTERIOR POLE MOUNTED DUAL HEAD FIXTURE

LINEAR LED STRIP FIXTURE

Description

	VOLTAGE: 208/120V ▼	PH:	3			NEL: BUS RATI		▼ MA	IN: 200	0A MCB		PANELBOARD SPECIAL FEATURES 200% RATED NEUTRAL	
	AIC: 10,000 ▼	MOU	INTING:	SURFACI	E ▼		SKIRT:	NONE		•		SURGE PROTECTION DEVICE (SPD) ISOLATED GROUND BAR	
							LOAD (VA	1					
LOAD TYPE	LOAD DESCRIPTION		BKR (A)	LOAD (VA)	CKT NO	PHASE A	PHASE B	PHASE C	CKT NO	LOAD (VA)	BKR (A)	LOAD DESCRIPTION	LOA TYP
K	GENERAL RECEPTS		20	750	1	7470			2	6720	40A/3	CONVECTION OVEN	N
K	GENERAL RECEPTS		20	940	3		7660		4	6720	***	***	N
N	FREEZER		20	1200	5			7920	6	6720	***	***	N
N	REFRIGERATOR		20	1200	7	7920			8	6720	40A/3	CONVECTION OVEN	N
N	RANGE		20	250	9		6970		10	6720	***	***	N
N	ICE MACHINE		20	1200	11			7920		6720	***	***	N
N	KITCHEN HOOD/LIGHTS		20	250	13	5250			14	5000	50A/3	DISHWASHER	N
				1000	_	5255	6000		16	5000	***	***	
N	EF-1		20	1000	15	·	0000	5000	0.000		***	***	N
	SPARE		20		17	5760		3000		5000			N
	SPARE		20		19	3700			20	5760	60A/3	STEAM CABINET	K
	SPARE		20		21		5760		22	5760	***	***	K
	SPARE		20		23			5760	24	5760	***	***	K
	SPARE		20		25	6432			26	6432	70A/3	WATER HEATER	N
	SPARE		20		27		6432		28	6432	***	***	N
	SPARE		20		29			6432	30	6432	***	***	N
	SPARE		20		31	5760			32	5760	60A/3	STEAM CABINET	K
	SPARE		20		33		5760		34	5760	***	***	K
	SPARE		20		35			5760	36	5760	***	***	K
M	KEF-1		20A/3	800	37	1925			38	1125	20A/2	STEAM TABLE	K
M	***		***	800	39		1925		40	1125	***	***	K
M	***		***	800	41			800			20	SPARE	
				TOTA	L (VA)	40517	40507	39592					
									1				
						(KVA)	(AMP)	•					
			TOTAL	CONNE	CTED:	120.6	335.2						
ΟΔΟ Τ	YPE CODE LETTERS					(KVA)	(AMP)		PANE	LBOARD	NOTES		
	CONTINUOUS LOAD (125% OF CONTIN	IUOUS	I OAD)			0.0	0.0]	I ANL	LDOAILD	NOTES		ĺ
	KITCHEN DEVICES (SIX OR MORE AT 65					25.0	69.5		_	LOAD T	PE "SF"	INDICATES A SUBFED PANEL. SEE	
	LARGEST MOTOR LOAD (LARGEST MO					0.0	0.0	1				EL SCHEDULE FOR A BREAKDOWN OF	
	MOTOR LOAD (100% OF LOAD)					2.4	6.7			LOAD B	Y TYPE.		
	NON-CONTINUOUS LOAD (100% OF LO	,				79.7	221.5		-				
	RECEPTACLE LOAD (FIRST 10KVA AT 1			AT 50%)		0.0	0.0						
	OTHER 1 (SEE NOTES FOR MORE INFOR					0.0	0.0						
	OTHER 2 (SEE NOTES FOR MORE INFOR					0.0	0.0						
O3	OTHER 3 (SEE NOTES FOR MORE INFOR	RMATIO				0.0	0.0						
			TC	TAL DE	MAND:	107.1	297.7						

LIGHTING FIXTURE SCHEDULE Lumen Output (#) Color Temp (#) Apparent Load (#) Manufacturerer / Model Notes Voltage Mounting 120 VOLTS GROUND 1000 3000 22 COOPER #INVUE CPB VA1 42 830 U SY WH 45 120 VOLTS RECESSED 1000 3500 FLC44D-SO-1000L-120-LD1-T / LC44-SDO-1000L-35K-DN-FL2-CD-NP N/A N/A 120 VOLTS UNIVERSAL COOPER #ATLELD W A 100 SD N/A 25 120 VOLTS UNIVERSAL N/A DUALLITE #EVE U R W I 3500 3500 120 VOLTS RECESSED/LAY IN FEQ2-22-AC-3500L-35K-1C-UNV-Lxx-Cxx/F/G/Sx-WH FOCAL POINT #FEQ2-24-AC-6000LH-35K-1C-UNV-Lxx-Cxx/F/G/Sx-WH 6000 3500 48 120 VOLTS RECESSED/LAY IN 3500 COLUMBIA #SCLT-24-N-35-ML-L1-G-SD-FA-ED-U 5200 120 VOLTS RECESSED/LAY IN 1000 LF 3500 58 LITHONIA #TZL1N L96 14000LM FST MVOLT 35K 90 CRI 120 VOLTS SURFACE / CHAIN 3500 875 LF FOCAL POINT #FSM4AL FL-875LF-35K-1C-UNV-LD1-TF-TFW-EXE-WH-6FT 120 VOLTS RECESSED/LAY IN 3500 FOCAL POINT #FSM4AL FL-875LF-35K-1C-UNV-LD1-TF-TFW-EXE-WH-8FT 875 LF 48 120 VOLTS RECESSED/LAY IN 3500 875 LF FOCAL POINT #FSM4AL FL-875LF-35K-1C-UNV-LD1-TF-TFW-EXE-WH-12FT 120 VOLTS RECESSED/LAY IN 3500 26 RECESSED/LAY IN 3795 METALUX #SRL LE5-38SL-LC-UNV-L835-CD1-U 120 VOLTS 1000 3000 34 FOCAL POINT #FLC44D ST SW 1000L UNV LZ1 IC EM LC44EM SDT-30K 120 VOLTS RECESSED

38

60

120

COOPER #XTOR4B-Y--

GLEON-SA2A-727-U-5WQ

GLEON-SA2A-727-U-5WQ

1000

1000

1000

120 VOLTS

120 VOLTS

120 VOLTS

WALL MOUNTED

POLE MOUNTED

POLE MOUNTED

3000

2700

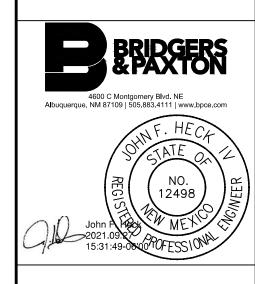
2700

					PAI	NEL:	DP						
	VOLTAGE: 208/120V ▼	PH:	3	WIRE:	4	BUS RAT	NG: 600A	▼ MA	IN: 60	0 МСВ	•	PANELBOARD SPECIAL FEATURES 200% RATED NEUTRAL	
	AIC: 35,000 ▼	МО	UNTING:	SURFAC	E 🔻		SKIRT:	NONE				SURGE PROTECTION DEVICE (SPD) ISOLATED GROUND BAR	
								V					
LOAD TYPE	LOAD DESCRIPTION		BKR (A)	LOAD (VA)	CKT	PHASE A	LOAD (VA PHASE B	PHASE C	CKT NO	LOAD (VA)	BKR (A)	LOAD DESCRIPTION	LO.
N	PANEL "A"		225A/3	13230	1	19840			2	6610	100A/3	PANEL "FS"	N
N	***		***	13620	3		23710		4	10090	***	***	N
N	***		***	10670	5			20470	6	9800	***	***	N
N	PANEL "K"		400A/3	40517	7	41517			8	1000	20A/3	MAU-2	N
N	***		***	40507	9		41507		10	1000	***	***	N
N	***		***	39592	11			40592	12	1000	***	***	N
М	MAU-1		20A/3	1000	13	3880			14	2880	40A/3	RTU-1	N
М	***		***	1000	15		3880		16	2880	***	***	N
M	***		***	1000	17			3880	18	2880	***	***	N
	SPARE		20		19	3840			20	3840	50A/3	RTU-2	N
	SPARE		20		21		3840		22	3840	***	***	N
	SPARE		20		23			3840	24	3840	***	***	N
	SPARE		20		25	0			26	550 THM 000300	20	SPARE	
	SPARE		20		27		0		28		20	SPARE	
	SPARE		20		29			0	30		20	SPARE	
	SPARE		20		31	0			32		20	SPARE	
	SPARE		20		33		0		34		20	SPARE	
	SPARE		20		35			0	36		20	SPARE	
	SPARE		20		37	0			38		20	SPARE	
	SPARE		20		39		0		40		20	SPARE	
	SPARE		20		41			0	42		20	SPARE	
				TOTA	L (VA)	69077	72937	68782					
						(12) (4)	(AMD)						
			TOTAL	CONNE	CTED:	(KVA) 210.8	(AMP) 585.8	1					
			IOIAL	CONNE	CILD.	210.0	303.0						
OAD T	TYPE CODE LETTERS					(KVA)	(AMP)		PANE	LBOARD	NOTES		
C:	CONTINUOUS LOAD (125% OF CONT.	INUO US	LOAD)			0.0	0.0]					ľ
	KITCHEN DEVICES (SIX OR MORE AT					0.0	0.0		-			'INDICATES A SUBFED PANEL. SEE	
	LARGEST MOTOR LOAD (LARGEST I	MOTOR	x125%)			0.0	0.0					EL SCHEDULE FOR A BREAKDOWN OF	
	MOTOR LOAD (100% OF LOAD) NON-CONTINUOUS LOAD (100% OF LOAD)	0401				6.0 204.8	16.7 569.1		MAGES 1	LOAD B	Y IYPE.		
	RECEPTACLE LOAD (FIRST 10KVA AT		REMAINI A	T 50%)		0.0	0.0	1	_				
	OTHER 1 (SEE NOTES FOR MORE INFO			. 00/0/		0.0	0.0	-					
	OTHER 2 (SEE NOTES FOR MORE INFO		,			0.0	0.0	1					
О3	OTHER 3 (SEE NOTES FOR MORE INFO	RMATIO	N)			0.0	0.0						
			TC	TAL DE	MAND.	210.8	585.8	I	I				1

d & Associates

A R C H I T E

100 N Guadalupe St., Suite
Santa Fe, NM 87501



S SENIOR CENTER
QUOISE TRAIL # 3
RE STATION
TON 17, T.14N., R.8E., N.M.P.M.

FIRE STATION 3, SECTION 17, T.14N., R.S. SANTA FE COUNTY, NEW

100% CONST. DOCS

R E V I S I O N S

awn by:

ed by:

ELECTRICAL SCHEDULES

09-27-21

Job Numbe

E701

PANEL: FS VOLTAGE: 208/120V ▼ PH: 3 WIRE: 4 BUS RATING: 400A ▼ MAIN: 400A MCB ▼ AIC: 10,000 ▼ MOUNTING: SURFACE ▼ SKIRT: NONE 20 41 0 42 20 SPARE TOTAL (VA) 4110 4090 5300
 (KVA)
 (AMP)

 TOTAL CONNECTED:
 13.5
 37.5
 LOAD TYPE CODE LETTERS PANELBOARD NOTES C: CONTINUOUS LOAD (125% OF CONTINUOUS LOAD)

K: KITCHEN DEVICES (SIX OR MORE AT 65% OF LOAD)

LM: LARGEST MOTOR LOAD (LARGEST MOTOR x125%)

M: MOTOR LOAD (100% OF LOAD)

N: NON-CONTINUOUS LOAD (100% OF LOAD) 2.9 8.0 0.0 0.0 0.0 0.0 0.0 0.0 7.6 21.1 LOAD BY TYPE. 7.6 21.1

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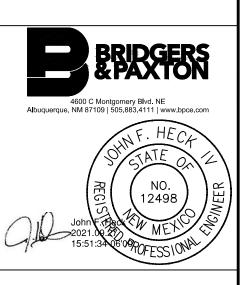
7.6 21.1

7.6 21 R: RECEPTACLE LOAD (FIRST 10KVA AT 100%, REMAIN. AT 50%)
O1 OTHER 1 (SEE NOTES FOR MORE INFORMATION) O2 OTHER 2 (SEE NOTES FOR MORE INFORMATION)
O3 OTHER 3 (SEE NOTES FOR MORE INFORMATION)

PANELBOARD SPECIAL FEATURES 200% RATED NEUTRAL
SURGE PROTECTION DEVICE (SPD)
ISOLATED GROUND BAR

						LOAD (VA	.)						
LOAD	LOAD DESCRIPTION	BKR	LOAD	СКТ	PHASE	PHASE	PHASE	СКТ	LOAD	BKR		LOAD DESCRIPTION	LOAD
TYPE		(A)	(VA)	NO	Α	В	С	NO	(VA)	(A)			TYPE
R	APPARATUS BAY RECEPTS	20	540	1	1620			2	1080	20		SENERAL RECEPTS	R
R	APPARATUS BAY RECEPTS	20	540	3		1740		4	1200	20	F	REFRIGERATOR	N
R	MEETING ROOM RECEPTS	20	900	5			2100	6	1200	20	N	MICROWAVE	N
R	OFFICE RECEPTS	20	540	7	1740			8	1200	20	Γ	T RACK	N
С	EXTERIOR BLD MTD LTG	20	350	9		2350		10	2000	30A/2	E	EXTRACTOR	N
С	APPARATUS BAY LTG	20	1200	11			3200	12	2000	***	*	**	N
С	GENERAL LIGHTING	20	750	13	750			14		20	5	SPARE	
	SPARE	20		15		0		16		20	5	SPARE	
	SPARE	20		17			0	18		20	5	PARE	
	SPARE	20		19	0			20		20	8	SPARE	
	SPARE	20		21		0		22		20	5	PARE	
	SPARE	20		23			0	24		20	9	SPARE	
	SPARE	20		25	0			26		20	5	SPARE	
	SPARE	20		27		0		28		20	5	PARE	
	SPARE	20		29			0	30		20		SPARE	
	SPARE	20		31	0			32		20	5	PARE	
	SPARE	20		33		0		34		20	5	SPARE	
	SPARE	20		35			0	36		20	5	PARE	
	SPARE	20		37	0			38		20	9	PARE	
	SPARE	20		39		0		40		20	5	SPARE	
	CDADE	20		11			^	42		20		PDADE	

- LOAD TYPE "SF" INDICATES A SUBFED PANEL. SEE INDIVIDUAL PANEL SCHEDULE FOR A BREAKDOWN OF ssociates Tects



CERILLOS SENIOR CENTER
AND TURQUOISE TRAIL # 3
FIRE STATION
LOT 3, SECTION 17, T.14N., R.8E., N.M.P.M.
SANTA FE COUNTY, NEW MEXICO

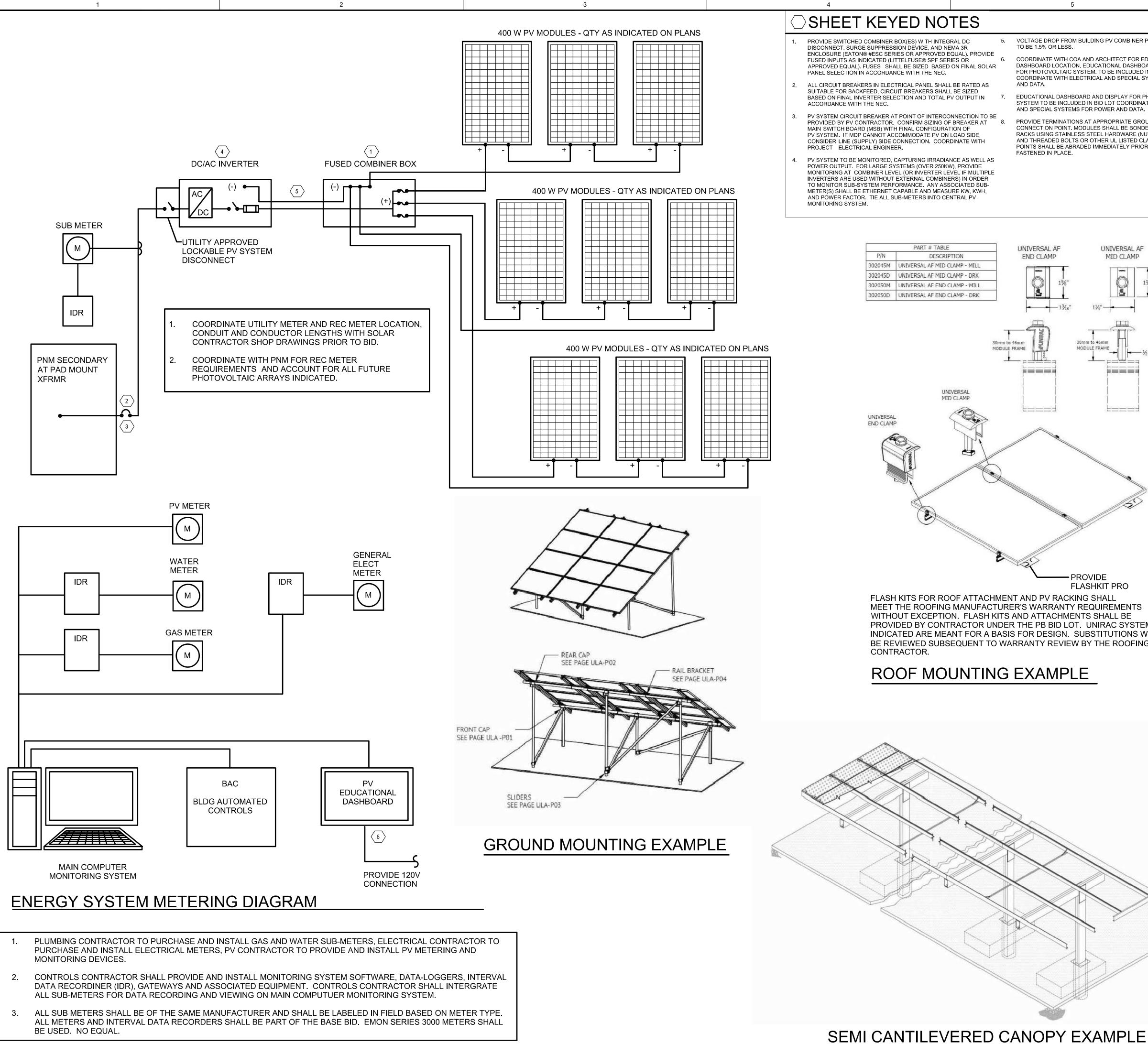
Current Status: 100% CONST. DOCS

R E V I S I O N S 09-27-21

> ELECTRICAL SCHEDULES

Sheet No.

E702



SHEET KEYED NOTES

PROVIDE SWITCHED COMBINER BOX(ES) WITH INTEGRAL DC DISCONNECT, SURGE SUPPRESSION DEVICE, AND NEMA 3R ENCLOSURE (EATON® #ESC SERIES OR APPROVED EQUAL). PROVIDE FUSED INPUTS AS INDICATED (LITTELFUSE® SPF SERIES OR APPROVED EQUAL). FUSES SHALL BE SIZED BASED ON FINAL SOLAR PANEL SELECTION IN ACCORDANCE WITH THE NEC.

ALL CIRCUIT BREAKERS IN ELECTRICAL PANEL SHALL BE RATED AS SUITABLE FOR BACKFEED. CIRCUIT BREAKERS SHALL BE SIZED BASED ON FINAL INVERTER SELECTION AND TOTAL PV OUTPUT IN ACCORDANCE WITH THE NEC.

PV SYSTEM CIRCUIT BREAKER AT POINT OF INTERCONNECTION TO BE PROVIDED BY PV CONTRACTOR. CONFIRM SIZING OF BREAKER AT MAIN SWITCH BOARD (MSB) WITH FINAL CONFIGURATION OF PV SYSTEM. IF MDP CANNOT ACCOMMODATE PV ON LOAD SIDE, CONSIDER LINE (SUPPLY) SIDE CONNECTION. COORDINATE WITH PROJECT ELECTRICAL ÉNGINEER.

PV SYSTEM TO BE MONITORED, CAPTURING IRRADIANCE AS WELL AS POWER OUTPUT. FOR LARGE SYSTEMS (OVER 250KW), PROVIDE MONITORING AT COMBINER LEVEL (OR INVERTER LEVEL IF MULTIPLE INVERTERS ARE USED WITHOUT EXTERNAL COMBINERS) IN ORDER TO MONITOR SUB-SYSTEM PERFORMANCE. ANY ASSOCIATED SUB-METER(S) SHALL BE ETHERNET CAPABLE AND MEASURE KW, KWH, AND POWER FACTOR. TIE ALL SUB-METERS INTO CENTRAL PV MONITORING SYSTEM.

PART # TABLE

302045M UNIVERSAL AF MID CLAMP - MILL

302045D UNIVERSAL AF MID CLAMP - DRK

302050M UNIVERSAL AF END CLAMP - MILL

302050D UNIVERSAL AF END CLAMP - DRK

CONTRACTOR.

DESCRIPTION

MID CLAMP

5. VOLTAGE DROP FROM BUILDING PV COMBINER PANEL TO INVERTER TO BE 1.5% OR LESS.

COORDINATE WITH COA AND ARCHITECT FOR EDUCATIONAL DASHBOARD LOCATION. EDUCATIONAL DASHBOARD AND DISPLAY FOR PHOTOVOLTAIC SYSTEM. TO BE INCLUDED IN BID LOT COORDINATE WITH ELECTRICAL AND SPECIAL SYSTEMS FOR POWER

EDUCATIONAL DASHBOARD AND DISPLAY FOR PHOTOVOLTAIC SYSTEM TO BE INCLUDED IN BID LOT COORDINATE WITH ELECTRICAL AND SPECIAL SYSTEMS FOR POWER AND DATA.

PROVIDE TERMINATIONS AT APPROPRIATE GROUNDING ROD CONNECTION POINT. MODULES SHALL BE BONDED TO SUPPORT RACKS USING STAINLESS STEEL HARDWARE (NUTS, LOCK WASHERS AND THREADED BOLTS OR OTHER UL LISTED CLAMPS), BONDING POINTS SHALL BE ABRADED IMMEDIATELY PRIOR TO LUGS BEING FASTENED IN PLACE.

UNIVERSAL AF

MID CLAMP

MODULE FRAME

PROVIDE

FLASHKIT PRO

UNIVERSAL AF

END CLAMP

30mm to 46mm

FLASH KITS FOR ROOF ATTACHMENT AND PV RACKING SHALL

ROOF MOUNTING EXAMPLE

MEET THE ROOFING MANUFACTURER'S WARRANTY REQUIREMENTS

PROVIDED BY CONTRACTOR UNDER THE PB BID LOT. UNIRAC SYSTEMS

INDICATED ARE MEANT FOR A BASIS FOR DESIGN. SUBSTITUTIONS WILL

BE REVIEWED SUBSEQUENT TO WARRANTY REVIEW BY THE ROOFING

WITHOUT EXCEPTION. FLASH KITS AND ATTACHMENTS SHALL BE

MODULE FRAME

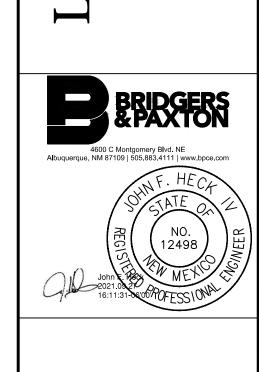
GENERAL NOTES

A. IT IS THE SOLAR CONTRACTOR'S RESPONSIBILITY TO APPLY AND OPTAIN A GENERATION METER VARIANCE TO AVOID CONDUIT INTERCONNECTING THE ROOFTOP ARRAY TO THE PRIMARY METER ENTRANCE. VARIANCE SHALL BE COMPLETED PRIOR TO FINAL ENGINEERING AND INSTALLATION

ALL AUTHORITIES HAVING JURISDICTION.

- SOLAR CONTRACTOR SHALL INCLUDE SIGNAGE AT PRIMARY METER FOR FIRST RESONDERS TO LOCATE ROOFTOP PV ARRAY, VERIFY ALL REQUIREMENTS WITH PNM PRIOR TO INSTALLATION.
 - ALL WORK INDICATED ON THIS SHEET IS FOR INTENT AND GENERAL INFORMATION USE ONLY. IT IS THE SOLAR CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL PERMITS, PROVIDE ALL SHOP DRAWINGS, ENGINEERED PERMIT DRAWINGS, ETC AND SUBMIT TO
- ALL MATERIAL AND LABOR FOR THE INSTALLATION OF THE ROOF-MOUNTED PHOTOVOLTAIC ARRAY AND ASSOCIATED MONITORING SYSTEM SHALL BE INCLUDED AS A TURN-KEY PACKAGE.
- SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED PRIOR TO THE INSTALLATION OF ANY EQUIPMENT. SHOP DRAWINGS SHALL INCLUDE GENERAL CONFIGURATION OF THE SYSTEM, WIRE AND FUSE SIZES, PROPOSED MONITORING SYSTEM, ALL NECESSARY STRUCTURAL CALCULATIONS, AND CUT-SHEETS FOR RELATED EQUIPMENT FURNISHED BY THE ELECTRICAL CONTRACTOR.
- PV CONTRACTOR MUST BE CERTIFIED AS A NORTH AMERICAN BOARD OF CERTIFIED ENERGY PRACTITIONERS (NABCEP) SOLAR INSTALLER. CONTRACTOR MUST ALSO HOLD A CURRENT NM ÉE-98 ELECTRICAL
- THE CONTRACTOR SHALL PROVIDE A TURN-KEY SYSTEM. PV PANEL LAYOUTS MUST BE COORDINATED WITH STRUCTURAL AND OTHER DISCIPLINES. ANY REVISED LAYOUT OF FOUIPMENT OR PANELS MUST BE APPROVED BY THE ROJECT ENGINEER AND/OR ARCHITECT, BE COORDINATED WITH OTHER TRADES, AND CAUSE NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PROVIDE A DETAILED SYSTEM PERFORMANCE AND LIFE-CYCLE SUMMARY WITH THEIR BID (INCLUDING ALL COSTS FOR METERING, MONITORING, ETC.), TO DEMONSTRATE EXPECTED PAYBACK SCHEDULE.
- CONTRACTOR SHALL PROVIDE TWO (2) SITE VISITS DURING THE FIRST YEAR INSTALLATION WARRANTY PERIOD TO PERFORM INSPECTION OF ELECTRICAL EQUIPMENT AND ANALYSIS OF ACTUAL POWER PRODUCTION VERSUS EXPECTED, INCLUDING ANY CLEANING AND MAINTENANCE OF SOLAR PANELS NEEDED FOR OPTIMAL ENERGY GENERATION.
- PHOTOVOLTAICS SHALL BE AN INCLUDED SYSTEM FOR OVERALL PROJECT COMMISSIONING. PV CONTRACTOR SHALL COORDINATE THEIR COMMISSIONING/STARTUP ACTIVITIES WITH OWNER'S COMMISSIONING AGENT.
- PRIOR TO INSTALLATION, EACH MODULE (PANEL) SHALL BE CONFIRMED TO HAVE A PRODUCTION TOLERANCE WITHIN 0% TO + 3% OF THE MODULE'S NAMEPLATE RATING (TO REDUCE "MODULE
- ALL ELECTRICAL COMPONENTS INCLUDING OVERCURRENT PROTECTION, DISCONNECTS, CONDUIT, WIRING AND TERMINALS MUST HAVE UL OR EQUIVALENT LISTING, AND HAVE APPROPRIATE VOLTAGE, CURRENT AND TEMPERATURE RATINGS FOR THE APPLICATION. ALL WIRE MANAGEMENT MATERIALS (CABLE TIES, ETC.) UTILIZED OUTDOORS MUST BE OF U/V- RESISTANT MATERIAL.
- WIRING SHALL BE SIZED TO MINIMIZE VOLTAGE DROP TO LESS THAN 3% FROM THE PV MODULES TO THE INVERTER, AND LESS THAN 3% FROM THE INVERTERS TO MAIN SWITCH BOARD (MSB).
- ALL WIRING SHALL BE LISTED FOR A MINIMUM OPERATION OF 600 VOLTS AND 900 C TEMPERATURE RATING. MINIMUM CONDUCTOR SIZE IS #12 AWG. ALL CURRENT-CARRYING CONDUCTORS MUST BE ENCLOSED IN CONDUIT, WITH THE EXCEPTION OF MODULE INTERCONNECTIONS PROTECTED UNDERNEATH PANELS WITHIN THE SAME GROUPING.
- O. EXPOSED CONDUIT OUTSIDE BUILDING SHALL BE ROUTED TO MINIMIZE VISIBILITY AND PAINTED TO MATCH SURROUNDING STRUCTURE. CONDUIT SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO STRUCTURAL ELEMENTS.
- SHOULD ADDITIONAL PANELS FIT WITHIN THE MODULE GROUPINGS AS SHOWN, PRESENT FIRST COST AND ANNUAL SOLAR FRACTION IMPACTS WITH APS PROJECT MANAGER.
- Q. EQUIPMENT SHALL BE LABELED TO INDICATE USAGE, VOLTAGE, AND ALL SAFETY/HAZARD WARNINGS AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) SECTION #690, AND PER LOCAL UTILITY COMPANY AND AUTHORITY HAVING JURISDICTION (AHJ) DIRECTIVES.
- ALL FRAMING MEMBERS, BOXES, METAL ENCLOSURES, PANEL BOARDS, INVERTERS, AND CONDUIT MUST BE PROPERLY GROUNDED AND TERMINATED AT APPROPRIATE GROUNDING ROD CONNECTION POINT. MODULES SHALL BE BONDED TO SUPPORT RACKS USING STAINLESS STEEL HARDWARE (NUTS, LOCK WASHERS, AND THREADED BOLTS OR OTHER UL LISTED CLAMPS). BONDING POINTS SHALL BE ABRADED IMMEDIATELY PRIOR TO LUGS BEING FASTENED
- FOR FLAT ROOF-TOP APPLICATIONS, PROVIDE UNIRAC® RM ROOF-MOUNT RACKING SYSTEM OR APPROVED EQUAL. RACKING SYSTEM SHALL BE BALLASTED TYPE WITHOUT ROOF PENETRATIONS. PROVIDE ALL NECESSARY MOUNTING ACCESSORIES FOR INSTALLATION UPON THE DESIGNED BUILDING STRUCTURE. INCLUDE AN APPROVED SACRIFICIAL MEMBRANE LAYER BETWEEN RACKING SYSTEM AND ROOF MEMBRANE.
- PROVIDE ALL NECESSARY COMPONENTS TO GIVE A COMPLETE AND OPERABLE SYSTEM IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE. ENSURE THAT PNM INTERCONNECTION REQUIREMENTS ARE
- PV CONTRACTOR IS RESPONSIBLE FOR PROCESSING INTERCONNECT AGREEMENT WITH PNM COORDINATE WITH OWNER TO OBTAIN REQUIRED SIGNATURES ON APPLICATION(S).
- PROVIDE NECESSARY DATA CONNECTIONS AND EQUIPMENT FOR WEB-BASED MONITORING OF INVERTER OUTPUT. OWNER WILL PROVIDE OPEN INTERNET ACCESS FOR PV MONITORING SYSTEM. OWNER WILL PROVIDE DATA DROP (JACK) IN AGREED-UPON
- W. PV SYSTEM SHALL BE PROVIDED WITH SOLAR RADIATION/ISOLATION, AMBIENT TEMPERATURE, AND SOLAR CELL TEMPERATURE SENSORS. THESE DEVICES SHALL BE INTEGRATED WITH MONITORING SYSTEM TO ANALYZE PV SYSTEM OUTPUT.
- PROVIDE SUITABLE COMPUTER AND SEPARATE FLAT-SCREEN MONITOR IN BUILDING LOBBY OR OTHER IDENTIFIED AREA FOR PV DATA DISPLAY, COORDINATE EXACT LOCATION WITH OWNER. COMPUTER MUST HAVE ALL NECESSARY MONITORING SYSTEM SOFTWARE PRE-INSTALLED. PROVIDE WRITTEN INSTRUCTIONS FOR HOW TO ACCESS AND NAVIGATE PV DATA AT THIS TERMINAL. DATA NETWORK ACCESS TO BE PROVIDED BY OWNER.
- COMPREHENSIVE TRAINING ON PV SYSTEM BY THE INSTALLER AND/OR MANUFACTURER'S REP, INCLUDING PV COMPONENTS, MAINTENANCE, MONITORING AND TROUBLE-SHOOTING, SHALL BE PROVIDED TO THE COA AND VERIFIED BY THE OWNER'S COMMISSIONING AGENT.
- CLEARANCES AROUND INVERTERS TO BE VERIFIED BY CONTRACTOR

PERMIT & BID SET 07-25-2022



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CERILLOS AND TUR FIF

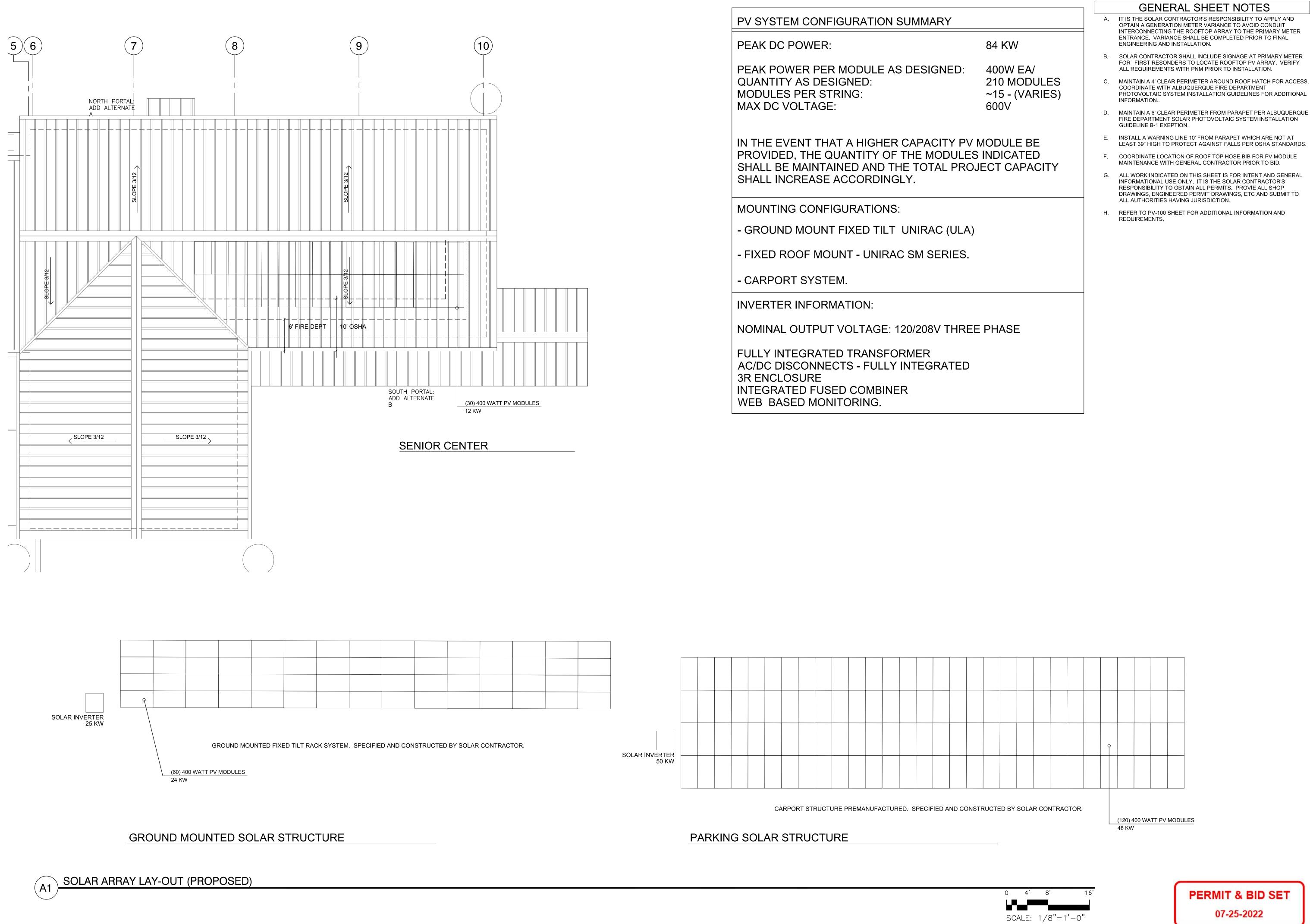
Current Status: 100% CONST. DOCS REVISIONS 09-27-21

> PV DIAGRAMS AND NOTES

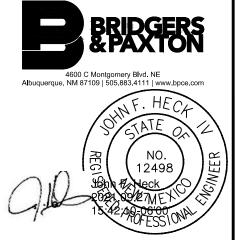
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Sheet No.

PV100



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OS SENIOR CENTER IRQUOISE TRAIL # 3 IRE STATION

CERILLOS AND TUR FIF

Current Status:

100% CONST. DOCS									
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SOLAR ARRAY

LAY-OUT (PROPOSED)

09-27-21

Sheet No.

PV101