

1 MECHANICAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

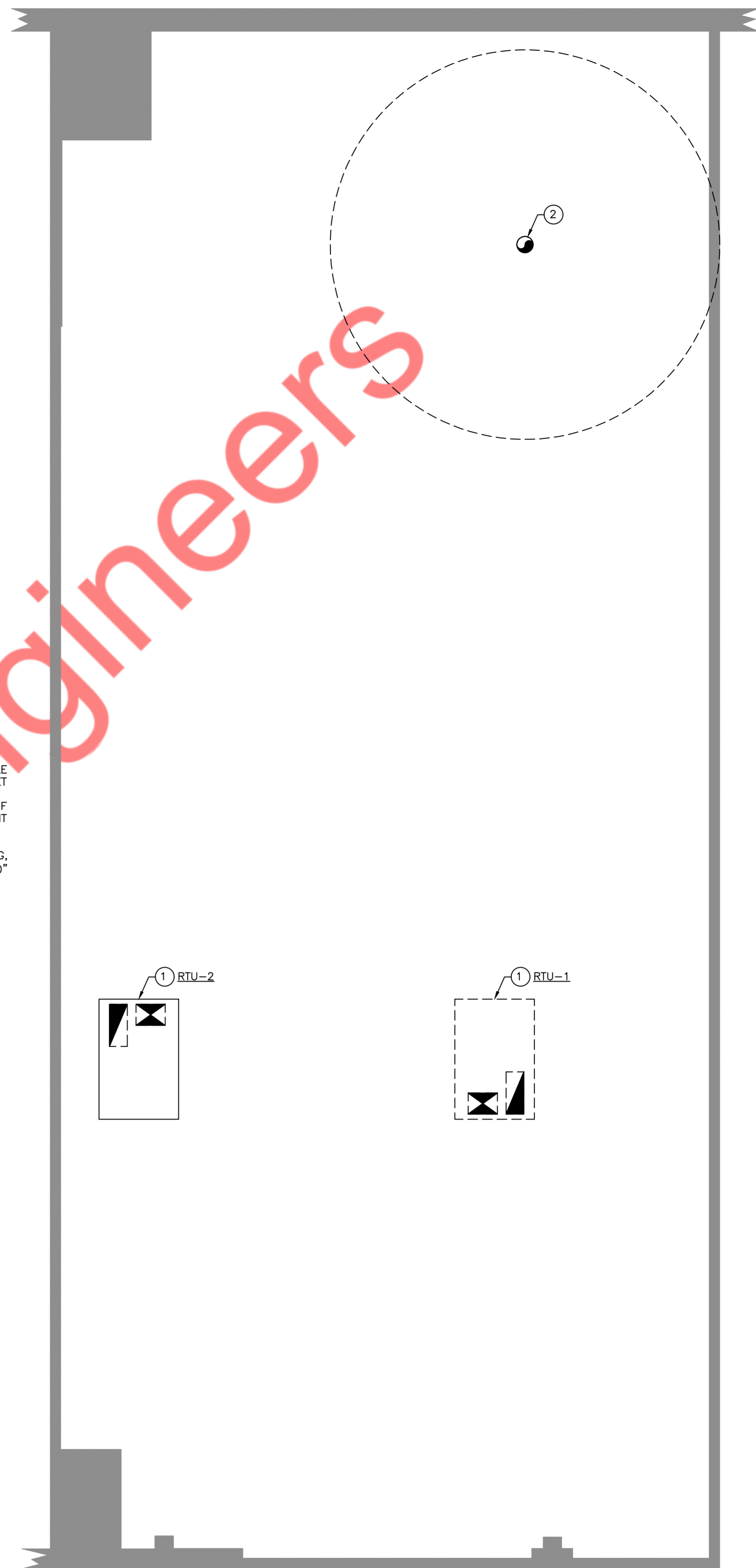
MECHANICAL PLAN NOTES

- EXTEND FULL SIZE SUPPLY & RETURN DUCTWORK FROM 4-TON ROOFTOP UNIT TO SPACE. EXTEND AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
- INSTALL AND WIRE NEW 7-DAY PROGRAMMABLE THERMOSTAT. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- ROUTE 10" EXHAUST DUCT UP THROUGH ROOF WITH TALL CONE FLASHING, WEATHER SKIRT, AND VENT CAP. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES AND TERMINATES 36" ABOVE ROOF.
- PROVIDE 4" DRYER VENT & RECESSED DRYER BOX. EXTEND TO EXTERIOR WITH DRYER VENT CAP. PROVIDE INLINE BOOSTER FAN AS NECESSARY PER MANUFACTURER INSTRUCTIONS.

BRANCH DUCT SIZE	CFM	DUCT SIZE
	0-100	6"
	101-250	8"
	251-400	10"
	401-650	12"

MECHANICAL ROOFTOP PLAN NOTES

- PROVIDE AND INSTALL NEW ROOFTOP UNIT. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCT CONNECTIONS. SET OUTSIDE AIR AS INDICATED ON ROOFTOP UNIT SCHEDULES. MECHANICAL CONTRACTOR SHALL SCRIBE INTO UNIT POSITION OF OUTSIDE AIR DAMPER AND LABEL OUTSIDE AIR VOLUME AND PERCENT OF OUTSIDE AIR.
- 10" EXHAUST DUCT UP THROUGH ROOF WITH TALL CONE FLASHING, WEATHER SKIRT, AND VENT CAP. MAINTAIN A MINIMUM OF 10'-0" FROM ALL OUTSIDE AIR INTAKES AND TERMINATES 36" ABOVE ROOF.



2 MECHANICAL ROOF FLOOR PLAN
SCALE: 1/4" = 1'-0"

Property of NY Engineers

LUMINAIRE SCHEDULE:

Fixture Type	LAMP	WATTAGE	VOLTAGE	DESCRIPTION	CATALOG NUMBER
A	MPFEL LED	50W	120	MPFEL LED FLAT PANEL 2X4 WITH FROSTED LENS AND WHITE, ALUMINUM HOUSING.	MOBERN LIGHTING #MFPEL24-LED50-DMVWH40
B	MPFEL LED	40W	120	MPFEL LED FLAT PANEL 2X2 WITH FROSTED LENS AND WHITE, ALUMINUM HOUSING.	MOBERN LIGHTING #MFPEL22-LED40-DMVWH40
C	700MHU D	9W	120	4" DIAMETER PENDANT LIGHT FIXTURE. VERIFY SUSPENSION HEIGHT WITH ARCHITECT.	TECH LIGHTING #700MP-WS-LED5930
EX1	LED	2W	120	CEILING MOUNTED EXIT (TYPE X) SIGN FIXTURE LED ILLUMINATED, EMERGENCY BATTERY PACK BACKUP.	COMPASS #CER
BP1	LED	1W	120	WALL MOUNTED EMERGENCY LIGHT FIXTURE. ADJUSTABLE HEADS EBU TYPE.	COMPASS #CU2
BP2	LED	5W	120	EXTERIOR WALL MOUNTED EMERGENCY LIGHT FIXTURE.	EXITRONIX #LL6-18-0-W-NO HEADS

LUMINAIRE SCHEDULE GENERAL NOTES:

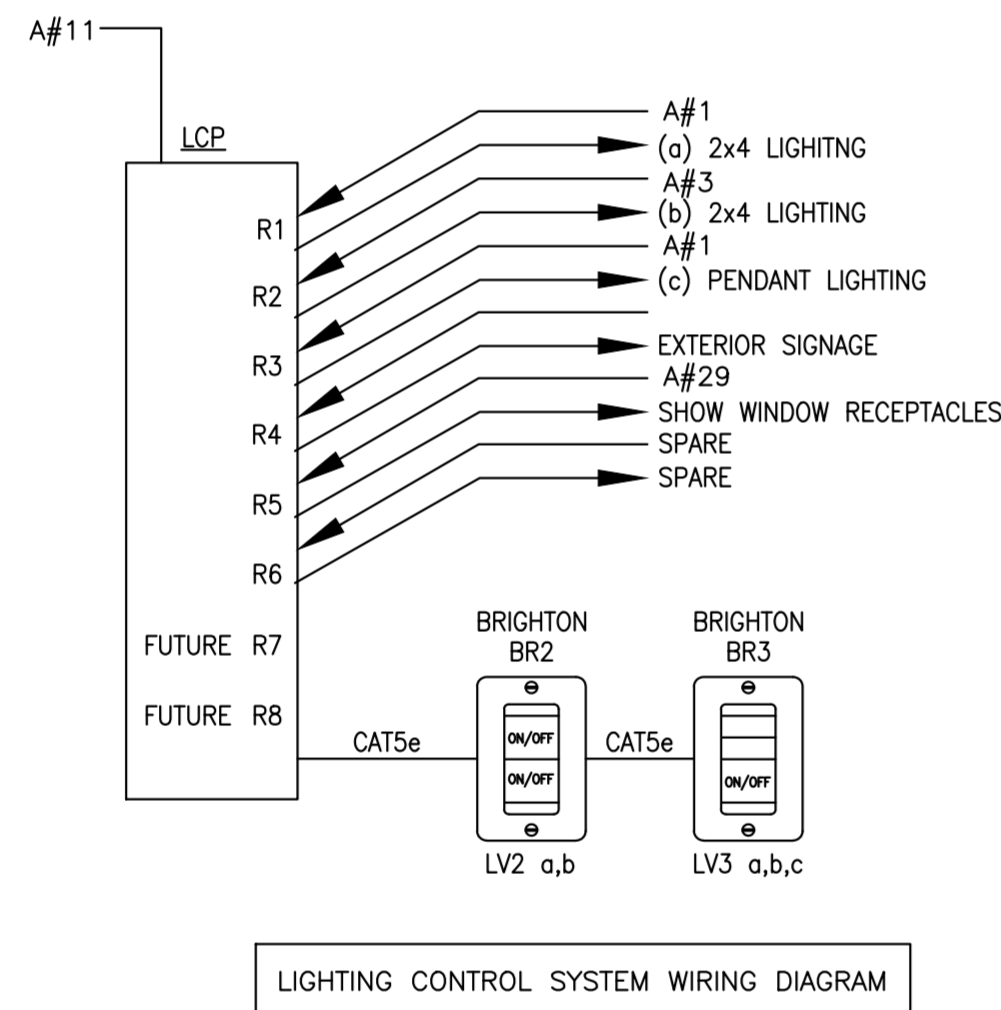
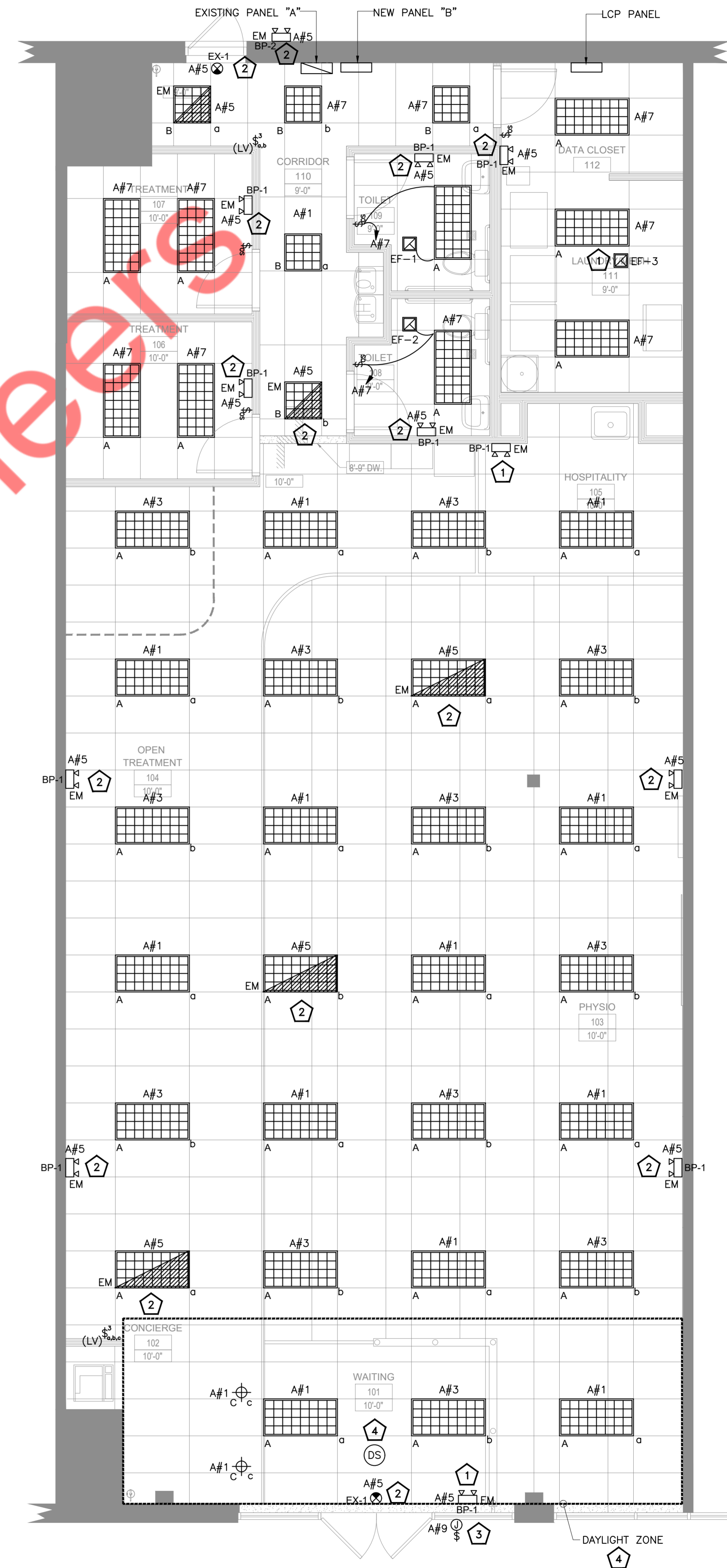
- VERIFY ALL LUMINAIRE COLORS, TRIMS, LENGTHS, ETC. WITH THE ARCHITECT PRIOR TO PLACING FINAL PURCHASE ORDERS. SUBMISSION OF SHOP DRAWINGS WILL BE INTERPRETED AS HAVING BEEN COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- PROVIDE ALL LENGTHS, FEEDS, ACCESSORIES, CONNECTORS, WIRING, POWER SUPPLIES, DRIVERS ETC. FOR A COMPLETE INSTALLATION. THE E.C. SHALL VERIFY THE COMPLETE BILL OF MATERIAL WITH MANUFACTURER'S REPRESENTATIVE AND ENSURE ALL EQUIPMENT ARE INCLUDED IN BID PRICE. COORDINATE INSTALLATION WITH ARCHITECTURAL DETAILS.
- VERIFY FINAL LUMINAIRE LOCATIONS WITH OTHER CEILING MOUNTED EQUIPMENTS SUCH AS DIFFUSER WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF ALL WALL MOUNTED LUMINAIRE WITH ARCHITECTURAL PLANS AND ELEVATIONS PRIOR TO ROUGH-IN.
- CONNECTIONS TO RECESSED LUMINAIRES SHALL BE MADE WITH MINIMUM 1/2" FLEXIBLE METAL CONDUIT (FMC) FROM LUMINAIRE TO OUTLET BOX. LENGTH OF FMC SHALL NOT EXCEED 6'-0". RECESSED LUMINAIRES SHALL BE MADE WITH MINIMUM 1/2" FLEXIBLE METAL CONDUIT (FMC) FROM LUMINAIRE TO OUTLET BOX. LENGTH OF FMC SHALL NOT EXCEED 6'-0".
- AT THE CONCLUSION OF WORK, EACH LUMINAIRE SHALL BE CLEANED AND EQUIPPED WITH THE PROPER TYPE, NUMBER OF LAMPS, INCLUDING KELVIN TEMPERATURE AND WATTAGE, AT THE CONCLUSION OF WORK, EACH LUMINAIRE SHALL BE CLEANED AND EQUIPPED WITH THE PROPER TYPE, NUMBER OF LAMPS, INCLUDING KELVIN TEMPERATURE AND WATTAGE, ALL IN GOOD OPERATING CONDITION.
- ALL LIGHTING SUPPLIES MUST BE PURCHASED FROM "CED NATIONAL ACCOUNTS". CONTACT JEREMY WEST, NATIONAL ACCOUNTS REPRESENTATIVE, (817) 923-1983. ALL LIGHTING SUPPLIES MUST BE PURCHASED FROM "CED NATIONAL ACCOUNTS". CONTACT JEREMY WEST, NATIONAL ACCOUNTS REPRESENTATIVE, (817) 923-1983, JEREMY.WEST@CED.COM.

ELECTRICAL LIGHTING PLAN KEYED WORK NOTES:

- EXHAUST FAN IN THIS ROOM SHALL BE CONTROLLED ALONG WITH THE LIGHT FIXTURES.
- CONNECT ALL EMERGENCY EGRESS AND NIGHT LIGHTING FIXTURES TO NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES. EXIT SIGNS SHALL NOT EXCEED 5 WATTS PER FACE.
- PROVIDE POWER/JUNCTION BOX(ES) FOR EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION WITH SIGNAGE PROVIDER. CIRCUIT EXTERIOR SIGN(S) THROUGH LCP. VERIFY QUANTITY AND LOCATION WITH ARCHITECTURAL DRAWINGS.
- LIGHT FIXTURES IN THIS AREA SHALL BE CONTROLLED BY DAYLIGHT SENSOR.

GENERAL LIGHTING PLAN NOTES

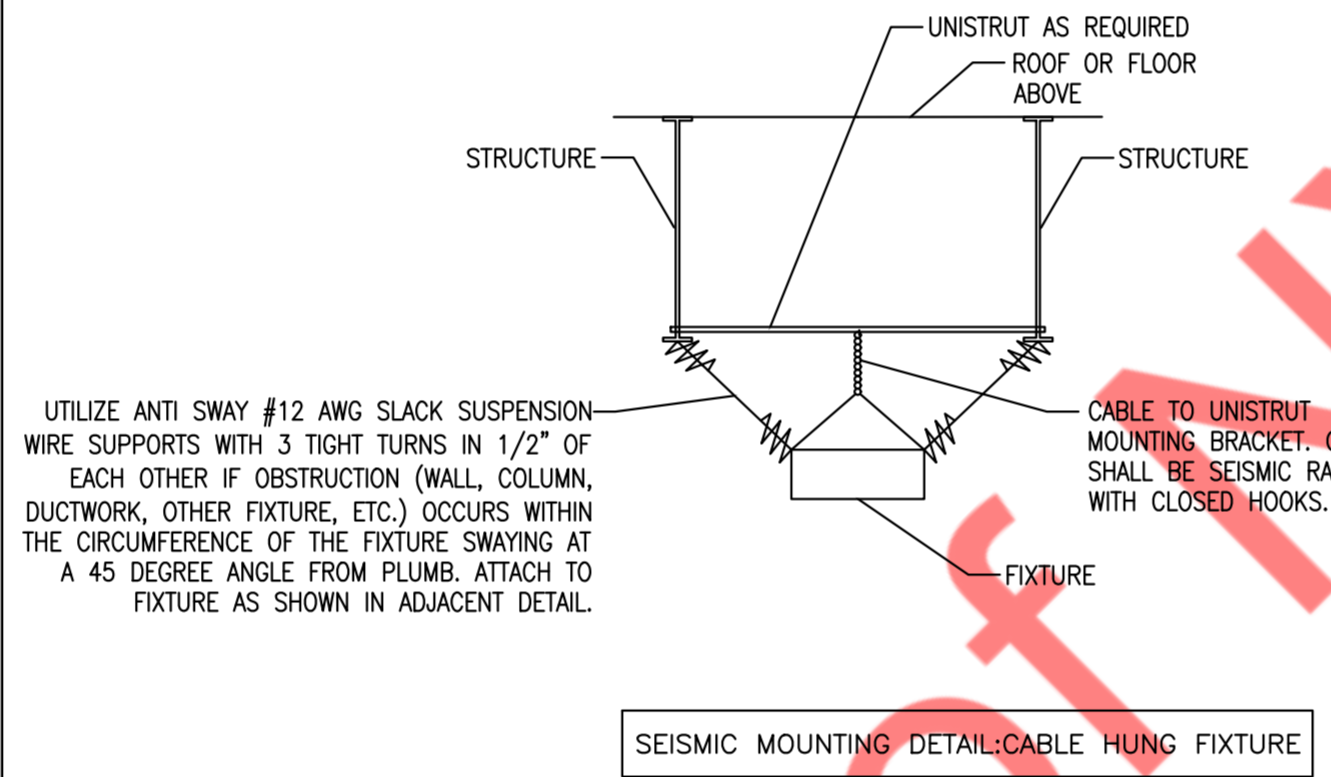
- ALL EXIT SIGNS, EMERGENCY LIGHTING BATTERY PACKS, EMERGENCY LUMINAIRES (ON GENERATOR OR EMERGENCY LIGHTING BATTERY PACKS INTEGRAL TO LUMINAIRES), AND NIGHT LIGHTS (DENOTED "NL") SHALL BE CONNECTED TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY CONTROLS SUCH AS: SWITCHES (DEVICE), OCCUPANCY SENSORS AND/OR RELAY CONTROLS.
- EXACT LOCATION OF ALL LUMINAIRES, AND EXACT MOUNTING HEIGHT OF ALL PENDANT MOUNTED LUMINAIRES SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS PRIOR TO ANY ROUGH-INS.
- MINIMUM CONDUCTOR SIZE FOR 120 VOLT BRANCH CIRCUITS SHALL BE 12-AWG. FOR 120 VOLT BRANCH CIRCUITS WITH HOMERUNS OVER 100 LINEAR FEET, A MINIMUM WIRE SIZE OF 10-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD. FOR 120 VOLT BRANCH CIRCUITS WITH HOMERUN OVER 150 LINEAR FEET, A MINIMUM WIRE SIZE OF 8-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD.
- ALL WIRING SHALL BE IDENTIFIED BY PANELBOARD AND CIRCUIT NUMBER(S) IN ALL CABINETS, JUNCTION BOXES, WIRING TROUGHS, ENCLOSURES, SPLICE OR TERMINATION POINTS, ETC.
- A NEW TYPED PANELBOARD DIRECTORY CARD SHALL BE PROVIDED FOR ALL PANELS INSTALLED OR MODIFIED UNDER THIS CONTRACT. NEW DIRECTORY CARDS SHALL BE LOCATED ON THE INSIDE DOOR OF ASSOCIATED PANELS.



SCALE: NOT TO SCALE

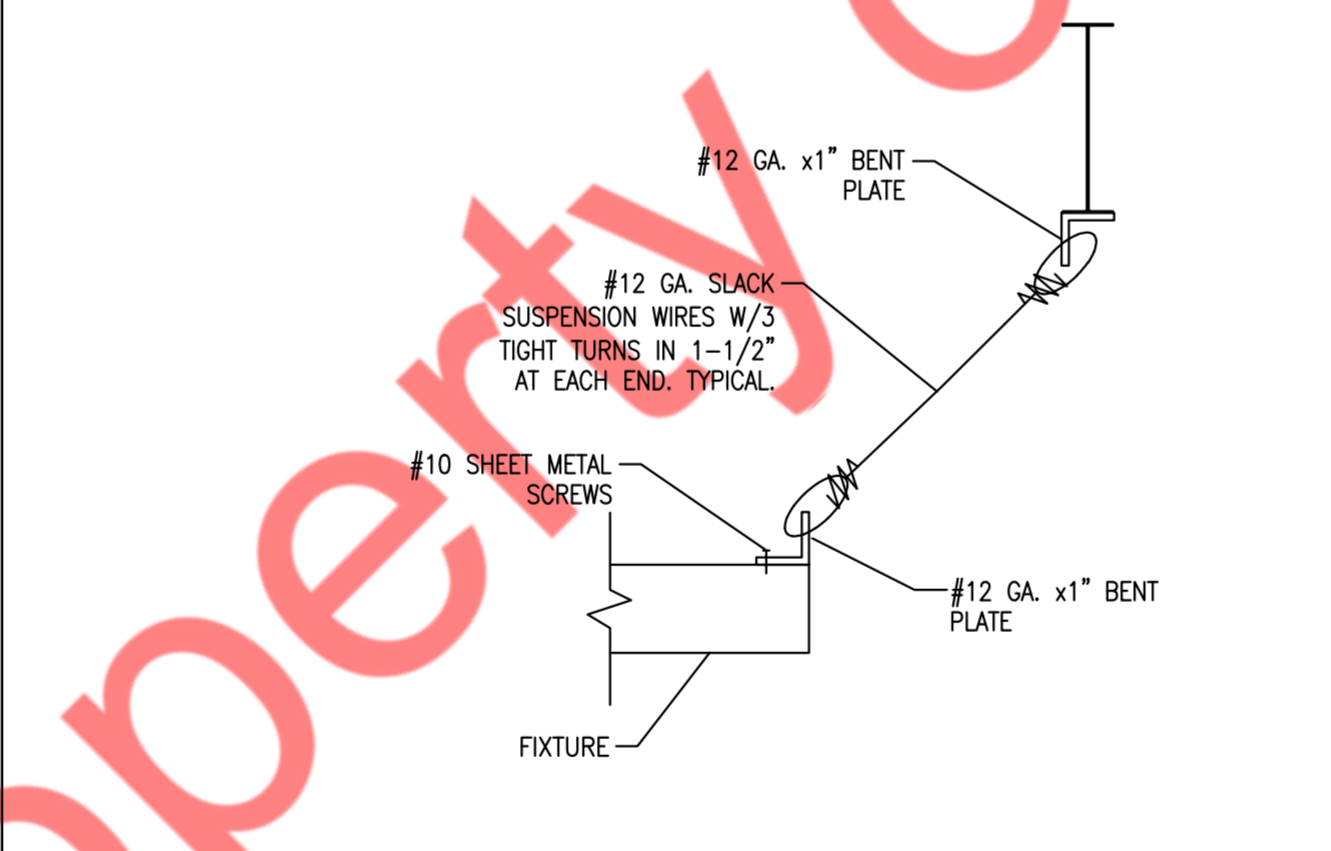
BLUE BOX #GR1408-SMNE1-GR1408LINT-NCL-DTC-DV
NOTES:

- PROVIDE WIRING FROM LOW VOLTAGE SWITCH TO RELAY CABINET REQUIRED FOR EACH RELAY AS REQUIRED.
- HEADEND SHALL CONTAIN ASTRONOMICAL TIME CLOCK, PROGRAMMABLE MATRIXING AND OCCUPANCY WARNING VIA LIGHT FLASHING.
- PROVIDE LIGHTING RELAYS IN PANELS AS SHOWN. REFER TO DRAWINGS FOR BRANCH CIRCUITS WIRED VIA RELAY PANELS.
- PROGRAM LIGHTING SCHEDULE AND HOURS OF OPERATION WITH OWNER.
- PROVIDE LOW-VOLTAGE MULTIBUTTON OVERRIDE SWITCH CONTROLS AS REQUIRED FOR EACH RELAY. LCA&D "CH" SERIES. LOW-VOLTAGE OVERRIDE SWITCH CONTROLS SHALL INITIATE AN OVERRIDE OF A MAXIMUM TIME OF NO MORE THAN FOUR (4) HOURS.
- PROVIDE TWO (2) HOUR TRAINING ON PROGRAMMING OF SYSTEM AND SYSTEM OPERATION.
- SHORT-CIRCUIT CURRENT RATING SHALL BE 18K (MINIMUM).
- SYSTEM SHOWN IS BASIS OF DESIGN BY ACUTY BRANDS. PROVIDE ACCESSORIES AS REQUIRED TO ACCOMMODATE ZONES AND LOAD TYPES SHOWN ON PLAN AND IN LUMINAIRE SCHEDULE. ALTERNATE SYSTEM(S) MAY BE SUBMITTED FOR REVIEW AND APPROVAL BY ARCHITECT AND ENGINEER PRIOR TO BID. ALTERNATE SYSTEM(S) SHALL BE PRICED AS ALTERNATE TO BASIS OF DESIGN SYSTEM AND LISTED AS SUCH IN SUBMITTED BID. CONFIRM FINAL SYSTEM REQUIREMENTS WITH MANUFACTURER PRIOR TO ORDERING.



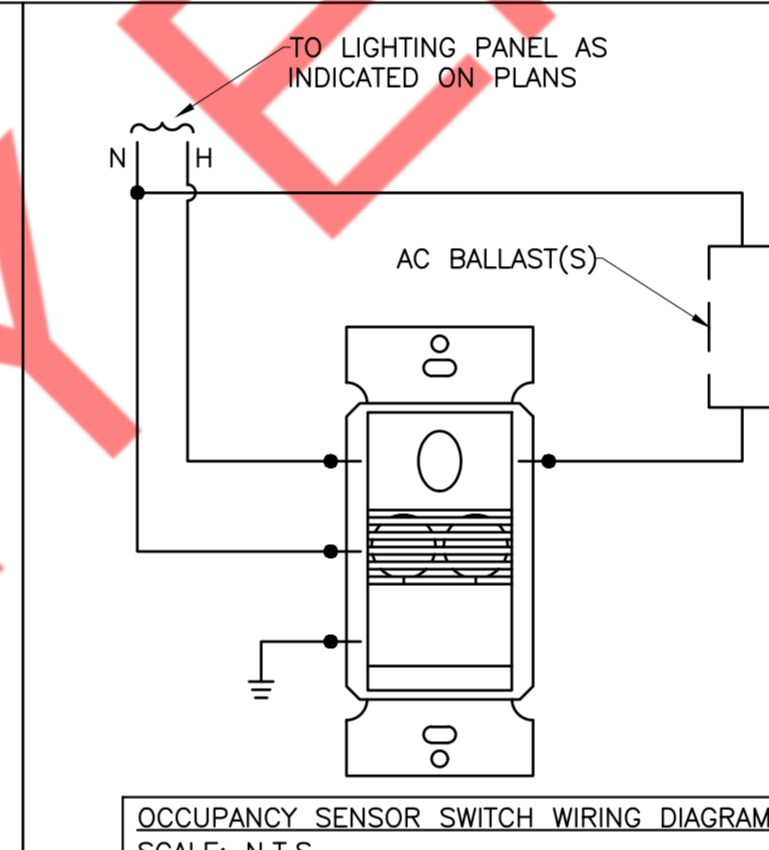
SEISMIC MOUNTING DETAIL: CABLE HUNG FIXTURE

SCALE: NOT TO SCALE



ATTACHMENT OF ANTI SWAY SUSPENSION WIRES TO FIXTURES DETAIL

SCALE: NOT TO SCALE



NOTES:

- ALL LOW VOLTAGE WIRING AND TERMINATIONS TO BE BY ELECTRICAL CONTRACTOR.
- OCCUPANCY/VACANCY SENSOR SHALL BE "SENSOR SWITCH" WSX-PDT-SA-WH OR APPROVED EQUAL. ALL EXPOSED CONTROL WIRING SHALL BE IN CONDUIT.

1 LIGHTING PLAN
E1.0 SCALE: 1/4" = 1'-0"

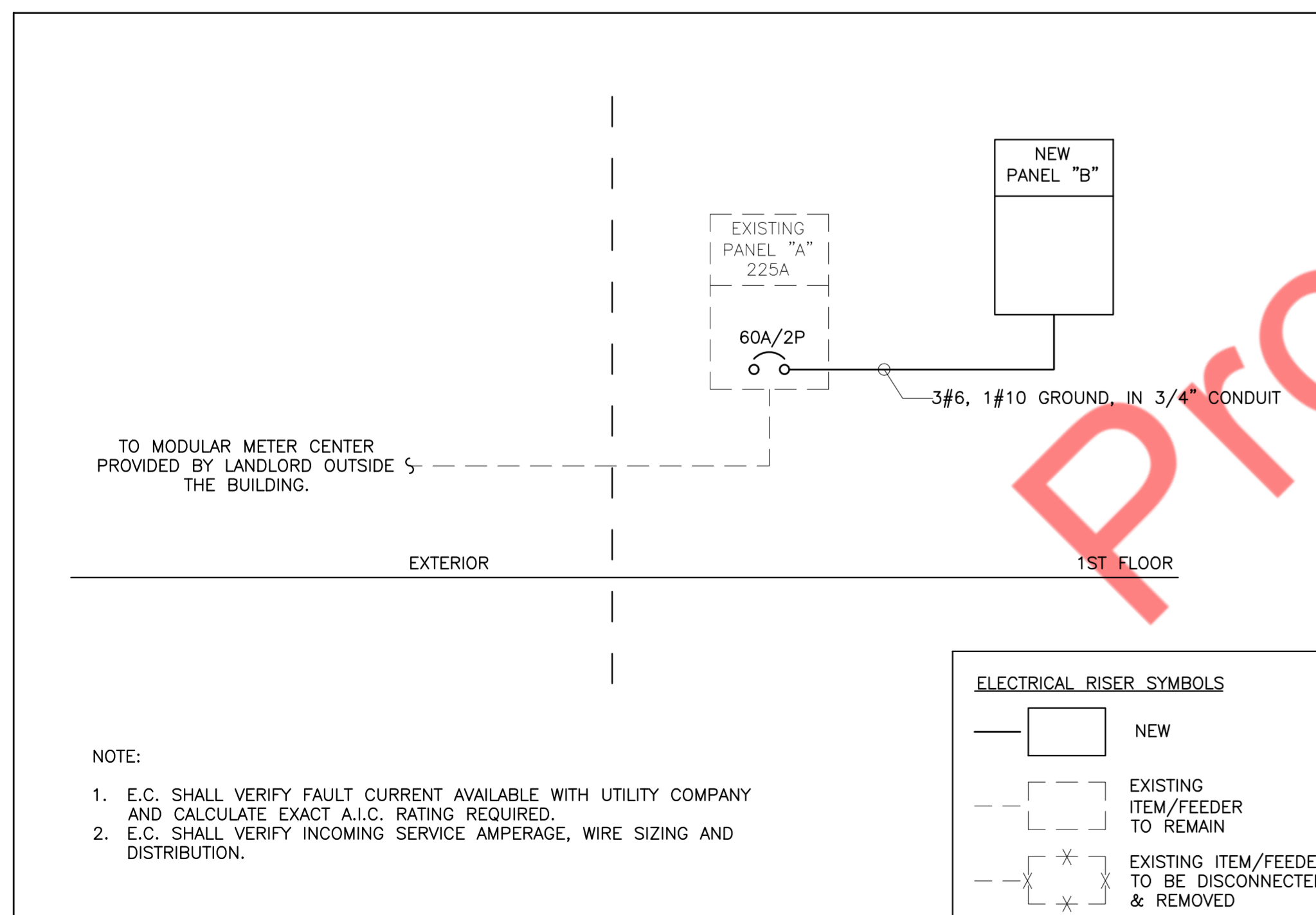
PANELBOARDS

PANEL: A (EXISTING)										MOUNTING: SURFACE			
208Y/120	VOLTS,	3	PHASE,	4	WIRE								
MAIN CB	225A	BUS	225A	MIN.	INTERRUPTING RATING	22 KAIC							
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	PER PHASE (KVA)			LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.	
					A	B	C						
1	20	LIGHTING	L	0.65	1.65			1.00	E	COLDPACK FRIDGE	20	2	
3	20	LIGHTING	L	0.60		1.6		1.00	E	HYDROCOLLATOR/COLD PACK	20	4	
5	20	EM/NIGHT LIGHTING	L	0.20			0.56	0.36	R	BOH RECEPTACLE	20	6	
7	20	RESTROOM+BOH LIGHTING	L	0.55	1.75			1.20	E	ELECTRIC WATER COOLER	20*	8	
9	20	EXTERIOR SIGNAGE	L	0.10		0.46		0.36	R	RESTROOM RECEPTACLES	20*	10	
11	20	LCP	E	0.10			1.3	1.20	E	MICROWAVE	20	12	
13	20	WAITING AREA/DESK RECEPTACLE	R	0.54	1.74			1.20	E	FRIDGE	20*	14	
15	20	PRINTER RECEPTACLE	R	0.36		1.56		1.20	R	LAUNDRY RECEPTACLE	20*	16	
17	20	HOSPITALITY RECEPTACLE	R	0.36			1.56	1.20	R	DATA CLOSET/LCP	20	18	
19	20	TREATMENT RECEPTACLE	R	1.08	2.28			1.20	R	TTB	20	20	
21	20	TO PANEL B	E	6.11		7.31		1.20	R	LAUNDRY/MECH RECEPTACLE	20*	22	
23	20		E	6.11			8.99	2.88	H			24	
25	20	RECEPTACLES	R	0.36	3.24			2.88	H	RTU-1		26	
27	20	TREATMENT RECEPTACLE	R	0.36		3.24		2.88	H			28	
29	20	SHOW WINDOW RECEPTACLE	R	0.36			3.24	2.88	H			30	
31	20	TV RECEPTACLE	R	0.36	3.24			2.88	H	RTU-2		32	
33	20	TREATMENT RECEPTACLE	R	1.08		3.96		2.88	H			34	
35	20	COUNTER RECEPTACLE	R	0.18			0.28	0.10	L	EXTERIOR LIGHTING	20	36	
37	20	ICE MAKER DISPENSER	R	0.18	0.18					SPARE	20	38	
39	20	HOSPITALITY RECEPTACLE	R	0.18		0.18				SPARE	20	40	
41	20	SPARE								SPARE	20	42	
TOTAL LOAD (KVA)				14.08	18.31		15.93						
TOTAL LTG	2.2	X	1.00 DEM	=	2.2	PANEL DATA		TOTAL	LTG	HVAC	REC	EQUI.	MISC.
TOTAL HVAC	17.28	X	1.00 DEM	=	15.52	KW PHASE A	14.08	1.20	5.76	3.72	3.40	0.00	
TOTAL RECEPT.	10.92	X	1.00 DEM	=	5.46	KW PHASE B	18.31	0.70	5.76	4.74	7.11	0.00	
TOTAL EQUI.	17.92	X	0.65 DEM	=	12.544	KW PHASE C	15.93	0.30	5.76	2.46	7.77	0.00	
TOTAL MISC.	0	X	0.70 DEM	=	0								

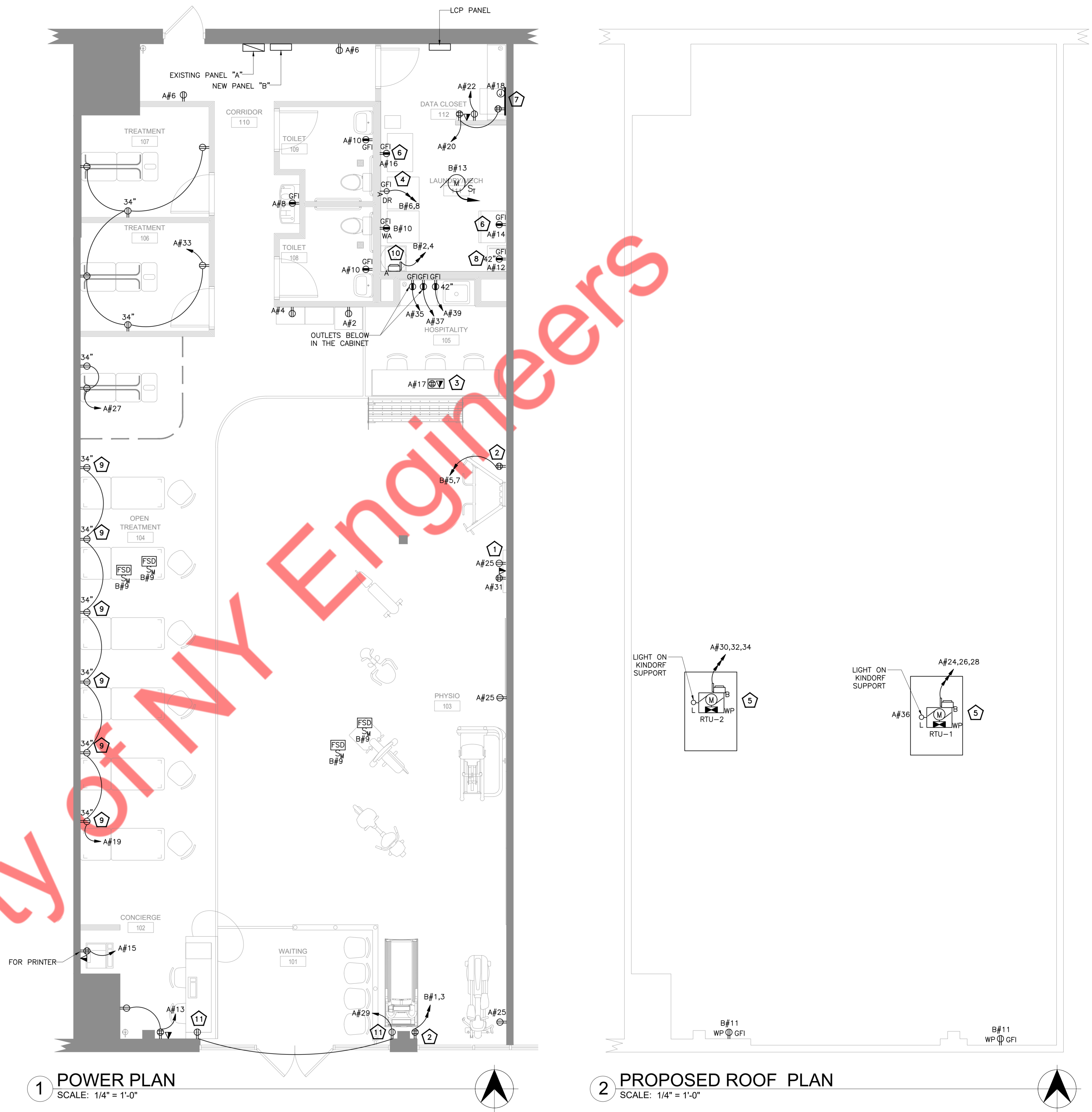
PANEL: B (NEW)										MOUNTING: SURFACE			
208Y/120	VOLTS,	1	PHASE,	3	WIRE								
MAIN CB	60A	BUS	100A	MIN.	INTERRUPTING RATING	22 KAIC							
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	PER PHASE (KVA)			LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.	
					A	B	C						
1	20/2P	TREADMILL RECEPTACLE	R	0.18	2.68			2.50	E	WATER HEATER (WH-1)	30/1P	2	
3	20/2P	TREADMILL RECEPTACLE	R	0.18		2.68		2.50	E			4	
5	20/2P	TREADMILL RECEPTACLE	R	0.18	2.68			2.50	E	DRYER	30/1P	6	
7	20/2P	TREADMILL RECEPTACLE	R	0.18		2.68		2.50	E			8	
9	20	FSD	H	0.10	1.6			1.50	E	WASHER	20*	10	
11	20*	ROOF RECEPTACLE	R	0.36		0.36				SPARE	20	12	
13	20	SPARE			0					SPARE	20	14	
15	20	SPARE			0					SPARE	20	16	
17	20	SPARE			0					SPARE	20	18	
19	20	SPARE			0					SPARE	20	20	
21	20	SPARE			0					SPARE	20	22	
23	20	SPARE			0					SPARE	20	24	
25	20	SPARE			0					SPARE	20	26	
27	20	SPARE			0					SPARE	20	28	
29	20	SPARE			0					SPARE	20	30	
TOTAL LOAD (KVA)				0	6.96		5.72						
TOTAL LTG	0.00	X	1.00 DEM	=	0.00	PANEL DATA		TOTAL	LTG	HVAC	REC	EQUI.	MISC.
TOTAL HVAC	0.10	X	0.90 DEM	=	0.09	KW PHASE A	6.96	0.00	0.10	0.36	6.50	0.00	
TOTAL RECEPT.	1.08	X	0.50 DEM	=	0.54	KW PHASE B	5.72	0.00	0.00	0.72	5.00	0.00	
TOTAL EQUIP.	11.50	X	0.70 DEM	=	8.05								
TOTAL MECH.	0.00	X	0.80 DEM	=	0.00								

ABBREVIATIONS: L = LIGHTING, R = RECEPTACLE, H = HVAC, E = EQUI., M = MISCELLANEOUS
 NOTE: - * INDICATES GFCI CIRCUIT BREAKERS.

ELECTRICAL RISER DIAGRAM



PATIENT CARE AREA WIRING NOTE:
 WIRING IN PATIENT CARE AREAS AND EXAM ROOMS SHALL COMPLY WITH NEC ARTICLE 517.13. ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH AN EFFECTIVE GROUND-FAULT CURRENT PATH BY INSTALLATION IN A METAL RACEWAY SYSTEM OR CABLE HAVING A METALLIC ARMOR ASSEMBLY. THE ASSEMBLY OR RACEWAY SHALL ITSELF QUALIFY AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.118. PROVIDE INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR WITHIN OR PART OF THE ASSEMBLY OR RACEWAY AND BOND RECEPTACLES AND ALL NON-CURRENT CARRYING CONDUCTIVE SURFACES OR FIXED ELECTRICAL EQUIPMENT. SIZE GROUNDING CONDUCTOR IN ACCORDANCE WITH TABLE 250.122.



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

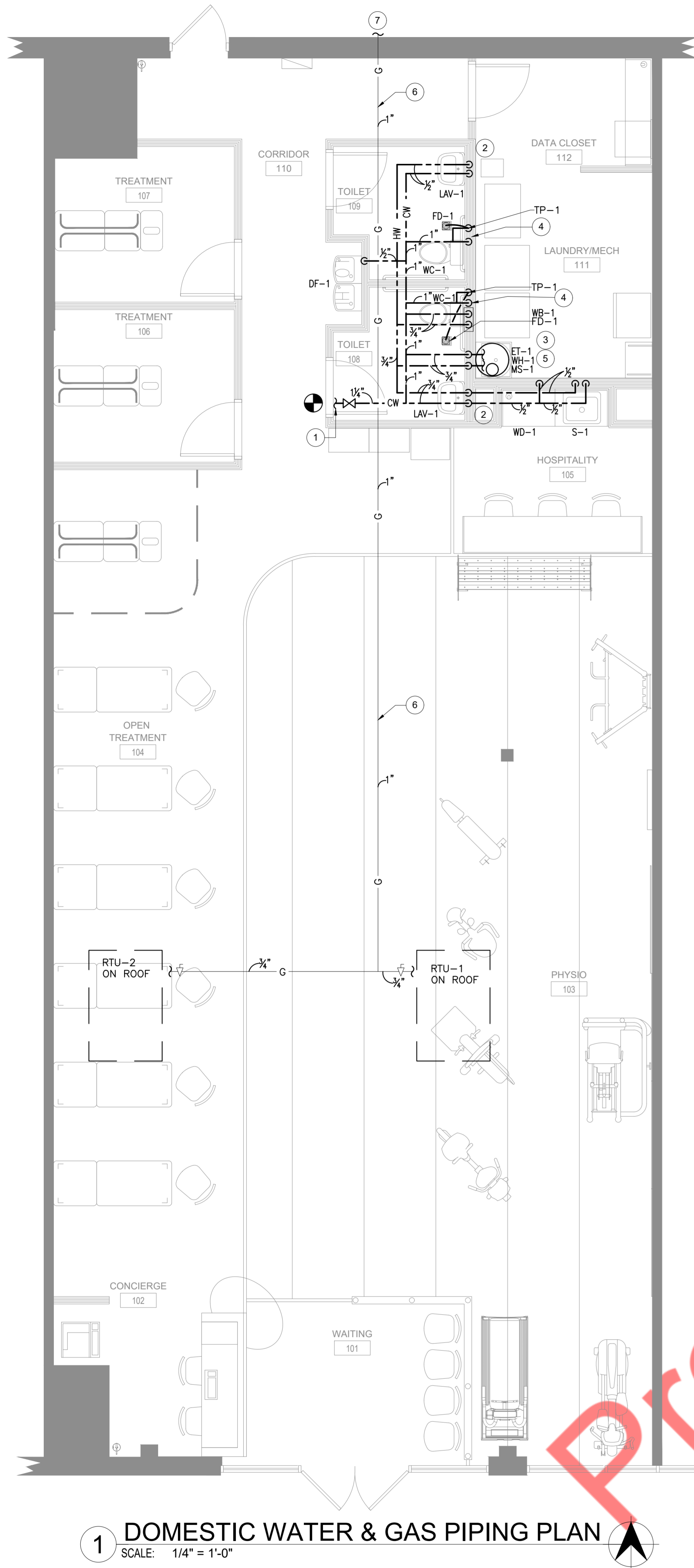
2 PROPOSED ROOF PLAN
 SCALE: 1/4" = 1'-0"

ELECTRICAL POWER PLAN KEYED WORK NOTES:

- DATA AND POWER FOR TV. STUB DATA CONDUIT TO 6" ABOVE CEILING WITH PULL STRING. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH IN.
- RECEPTACLE FOR EXERCISE EQUIPMENT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN. CONFIRM POWER REQUIREMENT OF THE EQUIPMENTS WITH OWNER/VENDOR.
- ELECTRICAL FLOOR BOX TO BE LEGRAND (RFB4E) WITH EVOLUTION COVER. ENSURE CONCRETE ABOVE FLOOR BOX IS SMOOTH AND LEVEL. PROVIDE (3) RFB6DP AND (1) RFB8B BRACKETS FOR EQUIPMENT INSTALLATION (NO SUBSTITUTIONS).
- ELECTRICAL DRYER (208V, 1-PH, 5KW): PROVIDE A NEMA 6-30R RECEPTACLE AND TYPE "SO" CORD AND MATCHING PLUG. WIRING SHALL BE 2#10, 1#10(G), 3/4"C. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN.
- ROOFTOP UNITS RTU-1 & RTU-2 (30MCA-208V-3 PH): PROVIDE A 60A-3P UNFUSED DISCONNECT SWITCH MOUNTED ON/AT UNIT AS REQUIRED. COORDINATE FINAL LOCATION IN FIELD. WIRING SHALL BE 3#8, 1#10 (G), 3/4"C. TO THE 45A-3P CIRCUIT BREAKER INDICATED ON DRAWING. COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION OF ROOFTOP UNITS.
- COORDINATE EQUIPMENT RECEPTACLE LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- RECEPTACLE FOR TELECOM EQUIPMENT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH IN.
- MICROWAVE RECEPTACLE. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN.
- TREATMENT TABLE RECEPTACLE. COORDINATE EXACT LOCATION WITH ARCHITECT.
- WATER HEATER (208V-1, 5 KW): PROVIDE 30A 2-POLE HEAVY DUTY DISCONNECT SWITCH AT UNIT. WIRING SHALL BE 2#10, 1#10(G), 3/4"C. COORDINATE EXACT LOCATION WITH ARCHITECT.
- RECEPTACLE FOR THE SHOW WINDOW. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

GENERAL POWER PLAN NOTES:

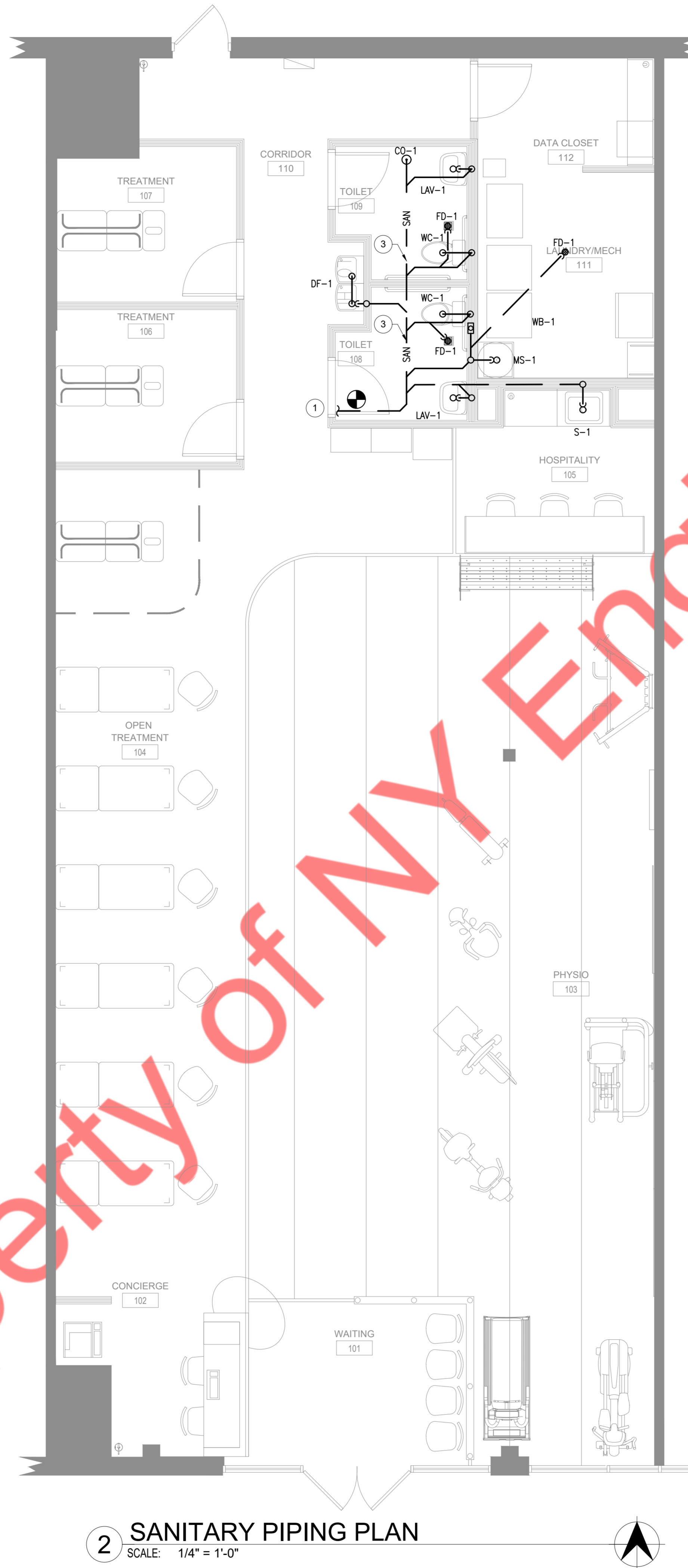
- EXACT LOCATION OF MECHANICAL, PLUMBING, KITCHEN, FURNITURE SYSTEMS, OWNER FURNISHED EQUIPMENT ETC. THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL, PLUMBING, AND/OR ARCHITECTURAL DRAWINGS. COORDINATE EXACT LOCATIONS WITH RESPECTIVE CONTRACTORS AND/OR VENDORS PRIOR TO ANY ROUGH-INS.
- REVIEW AND COORDINATE WITH ALL TRADES CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR EQUIPMENT WITH ELECTRICAL CONNECTIONS. COORDINATE EXACT MOUNTING LOCATIONS WITH THE SPECIFIC TRADE AND ARCHITECT.
- MINIMUM CONDUCTOR SIZE FOR 120V BRANCH CIRCUITS SHALL BE 12-AWG. FOR 120V BRANCH CIRCUITS WITH HOMERUN OVER 100 LINEAR FEET, A MINIMUM WIRE SIZE OF 10-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD. FOR 120V BRANCH CIRCUITS WITH HOMERUN OVER 150 LINEAR FEET, A MINIMUM OF 8-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD.
- ALL WIRINGS SHALL BE IDENTIFIED BY PANELBOARD AND CIRCUIT NUMBERS IN ALL CABINETS, JUNCTION BOXES, WIRING TROUGHS, ENCLOSURES, SPLICE OR TERMINATION POINTS, ETC.
- A NEW TYPED PANELBOARD DIRECTORY CARD SHALL BE PROVIDED FOR ALL PANELS INSTALLED OR MODIFIED UNDER THIS CONTRACT. NEW DIRECTORY CARDS SHALL BE LOCATED ON THE INSIDE DOOR OF ASSOCIATED PANELS.



1 DOMESTIC WATER & GAS PIPING PLAN
SCALE: 1/4" = 1'-0"

DOMESTIC WATER AND GAS PIPING PLAN NOTES:

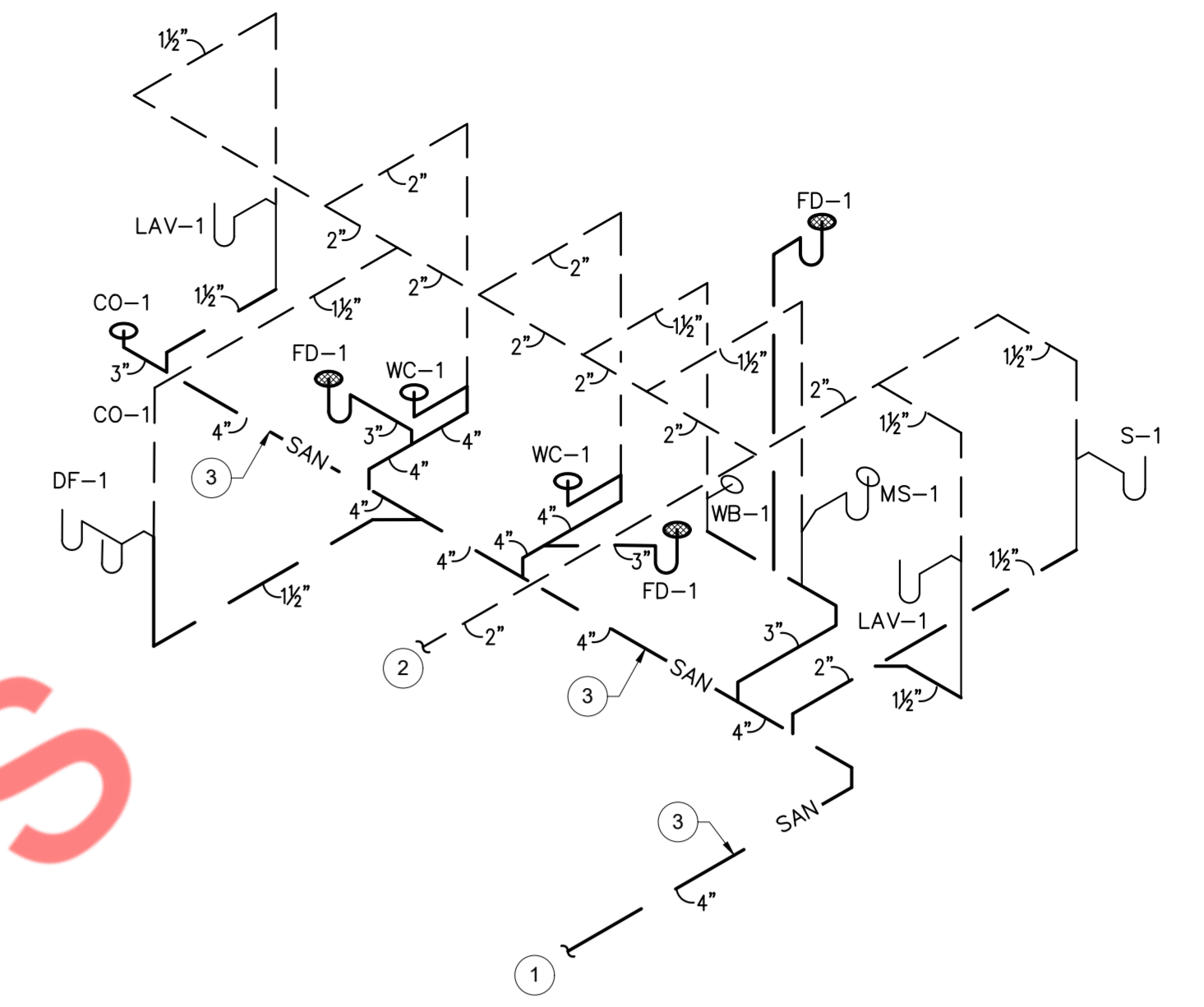
- ROUTE NEW 1" CW PIPING WITH SHUT OFF VALVE AND TIE-INTO THE EXISTING WATER SERVICE. CONTRACTOR TO FIELD VERIFY SIZE, ROUTING AND ANY WATER SUBMETER REQUIREMENTS WITH LANDLORD PRIOR TO BID.
- PROVIDE A TEMPERING VALVE FOR LAVATORIES. POWER HYFROGUARD SERIES LM495, ASSE. 1070 OR EQUAL. SET TEMPERATURE TO A MAXIMUM OF 110° F.
- ROUTE T&P RELIEF TO DRAIN IN MOP SINK.
- TRAP PRIMER (TP-1) EXTEND AND CONNECT 1/2" TRAP PRIMER PIPING TO FLOOR DRAINS WITH TRAP PRIMER CONNECTIONS. COORDINATE ROUTING.
- CONTRACTOR TO INSTALL NEW EXPANSION TANK THERM-X-TROL MODEL ST-5, 2 GAL PER LOCAL CODE REQUIREMENTS.
- ALL EXISTING GAS PIPING IS RUNNING ON ROOF, SHOWN ON PLAN FOR REFERENCE ONLY.
- CONTINUE EXISTING GAS PIPE LINE TO EXISTING GAS METER.



2 SANITARY PIPING PLAN
SCALE: 1/4" = 1'-0"

SANITARY PIPING PLAN NOTES:

- CONNECT NEW 4" SANITARY WASTE PIPING TO EXISTING SANITARY WASTE LINE OF ADEQUATE SIZE. CONTRACTOR TO FIELD VERIFY SIZE, ROUTING AND INVERT ON SITE.
- CONTRACTOR TO FIELD VERIFY AND CONNECT NEW 2" VENT TO EXISTING VENT IN EXISTING TOILET AREA.
- SANITARY PIPING RUNNING UNDERGROUND SHOWN FOR REFERENCE. CONTRACTOR TO COORDINATE WITH EXISTING STRUCTURAL AND REROUTE AS REQUIRED TO AVOID ANY CONFLICTS AS PER FILED CONDITIONS.

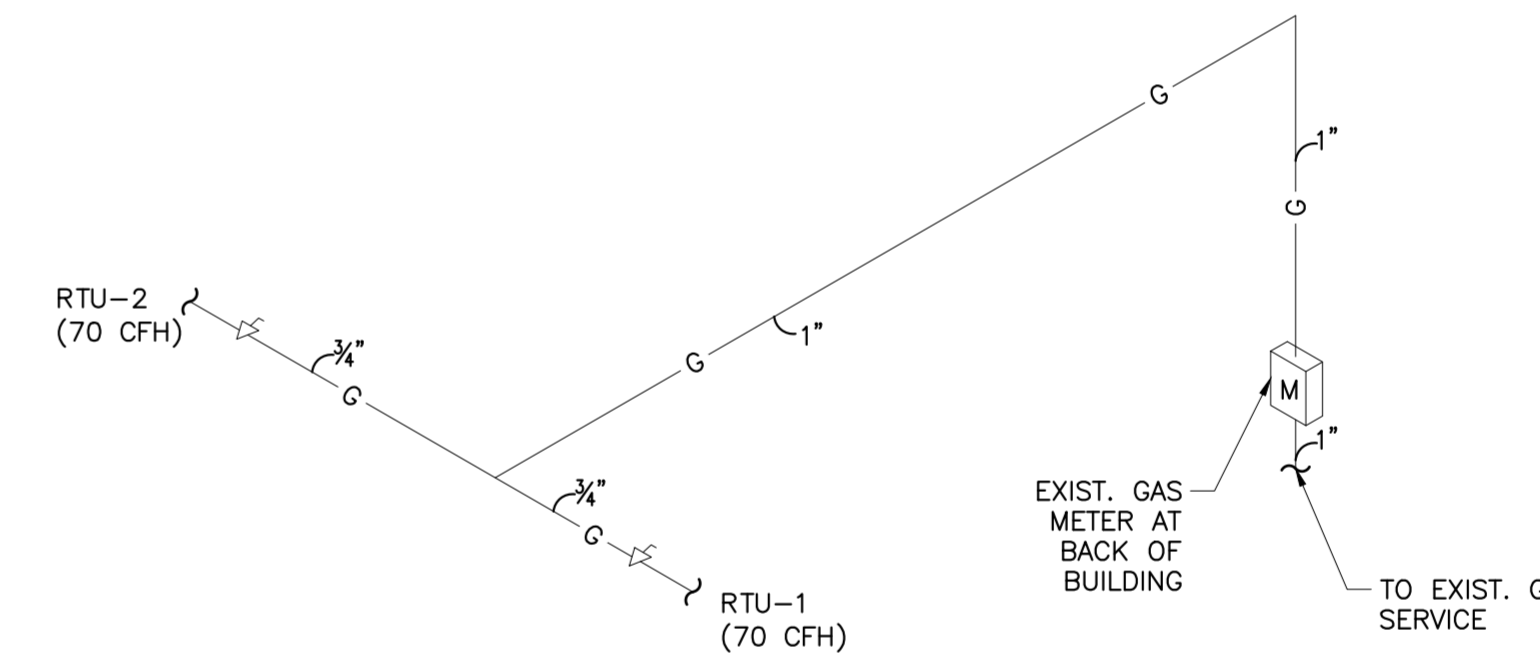


SANITARY ISOMETRIC DIAGRAM NOTES:

- CONNECT NEW 4" SANITARY WASTE PIPING TO EXISTING SANITARY WASTE LINE OF ADEQUATE SIZE. CONTRACTOR TO FIELD VERIFY SIZE, ROUTING AND INVERT ON SITE.
- CONTRACTOR TO FIELD VERIFY AND CONNECT NEW 2" VENT TO EXISTING VENT IN EXISTING TOILET AREA.
- SANITARY PIPING RUNNING UNDERGROUND SHOWN FOR REFERENCE. CONTRACTOR TO COORDINATE WITH EXISTING STRUCTURAL AND REROUTE AS REQUIRED TO AVOID ANY CONFLICTS AS PER FILED CONDITIONS.

3 SANITARY ISOMETRIC RISER
SCALE: N.T.S.

- GAS PIPING NOTES:**
- CONTRACTOR TO FIELD VERIFY AND CONNECT EXISTING GAS PIPING TO NEW ROOFTOP UNITS. VERIFY EXACT LOCATION OF BOTH THE RTU IN FIELD.
 - VERIFY EXACT PRESSURE REQUIRED FOR THE NEW RTU.
 - PROVIDE NEW SHUT-OFF VALVE, IF NOT EXISTING/DAMAGED/NOT IN GOOD CONDITION.
 - CONTRACTOR TO FIELD VERIFY EXISTING AVAILABLE GAS PRESSURE AND MAKE SURE TO PROVIDE ADEQUATE INLET PRESSURE REQUIRED TO RTU-1 AND RTU-2. PROVIDE GAS BOOSTER PUMP IF INLET PRESSURE IS LESS THAN 7" W.C. BASE BID ACCORDINGLY.
 - CONTRACTOR TO FIELD VERIFY EXISTING PIPE ROUTING AND ITS CONDITION, ACCORDINGLY PROVIDE NEW IF EXISTING IS DAMAGED OR NOT IN GOOD CONDITION.



4 GAS ISOMETRIC RISER
SCALE: N.T.S.

PLUMBING SYMBOLS LIST

— SAN —	SANITARY PIPING
— SAN —	SANITARY UNDERGROUND PIPING
— VENT —	VENT PIPING
— CWP —	COLD WATER PIPING
— HWP —	HOT WATER PIPING
— HWRP —	HOT WATER RETURN PIPING
— G —	EXISTING GAS PIPING
— ○ —	PIPE UP
— ∩ —	PIPE DROP
— ⊗ —	SHUT-OFF VALVE
— ⊕ —	EXIST. PLUG VALVE
— ● —	POINT OF NEW CONNECTION

GAS LOAD SUMMARY

EQUIPMENT TAG	CFH LOAD
RTU-1	70
RTU-2	70
TOTAL GAS LOAD	140

FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	HW	CW	SAN	VENT
WC-1	ADA WATER CLOSET	--	3/4	4	2
LAV-1	ADA LAVATORY	1/2	1/2	1-1/2	1-1/2
MS-1	MOP SINK	1/2	1/2	3	1-1/2
DF-1	DRINKING FOUNTAIN	1/2	1/2	1-1/2	1-1/2
WH-1	WATER HEATER	3/4	3/4	--	--
FD-1	FLOOR DRAIN	--	--	3	--
CO-1	CLEANOUT	--	--	3	--
S-1	SINK	1/2	1/2	1-1/2	1-1/2
WB-1	WASHING MACHINE BOX	1/2	1/2	1-1/2	1-1/2
WD-1	WATER DISPENSER	--	1/2	--	--

EXPANSION TANK SCHEDULE

TAG	LOCATION	SERVICE	CAPACITY (GALLONS)	MANUFACTURER & MODEL	DIMENSION (DIA X HEIGHT)	WEIGHT (LBS)	NO. OF EXPANSION TANK
ET-1	REFER FLOOR PLANS	HW	2	THERM-X-TROL ST-5	8" X 13"	5	1

ELECTRIC STORAGE WATER HEATER SCHEDULE

HEATER TAG	NO. OF ELEMENTS	LOCATION	MAX. INPUT (KW)	STORAGE CAPACITY (GAL)	RECOVERY CAPACITY (GPH) @100° F RISE	TYPE	ELECTRICAL CHARACTERISTICS CONTROL	NO. OF HEATERS	EFFICIENCY (%)	MANUFACTURER & MODEL NO.	REMARKS
WH-1	1	ABOVE MOP SINK	5	30	20	ELECTRIC	208V/3Ø/60Hz	1	97	A.O.SMITH MODEL DEL-30	-DIMENSIONS: 22"DIA X 31"HIGH -PROVIDE ET-1 AS PER SCHEDULE -CEILING MOUNTED HEATER

NOTE: NSF RATED. PROVIDE CONDENSATE COLLECTOR, DRAIN TO MOP SINK. PROVIDE WITH VACUUM RELIEF VALVE. MOUNT ON CEILING & COORDINATE EXACT LOCATION WITH OWNER IN FIELD. PIPE INSULATION : PROVIDE HOT WATER PIPING WITH 1" INSULATION HAVING CONDUCTIVITY OF MINIMUM OF 0.27 BTU PER INCH.