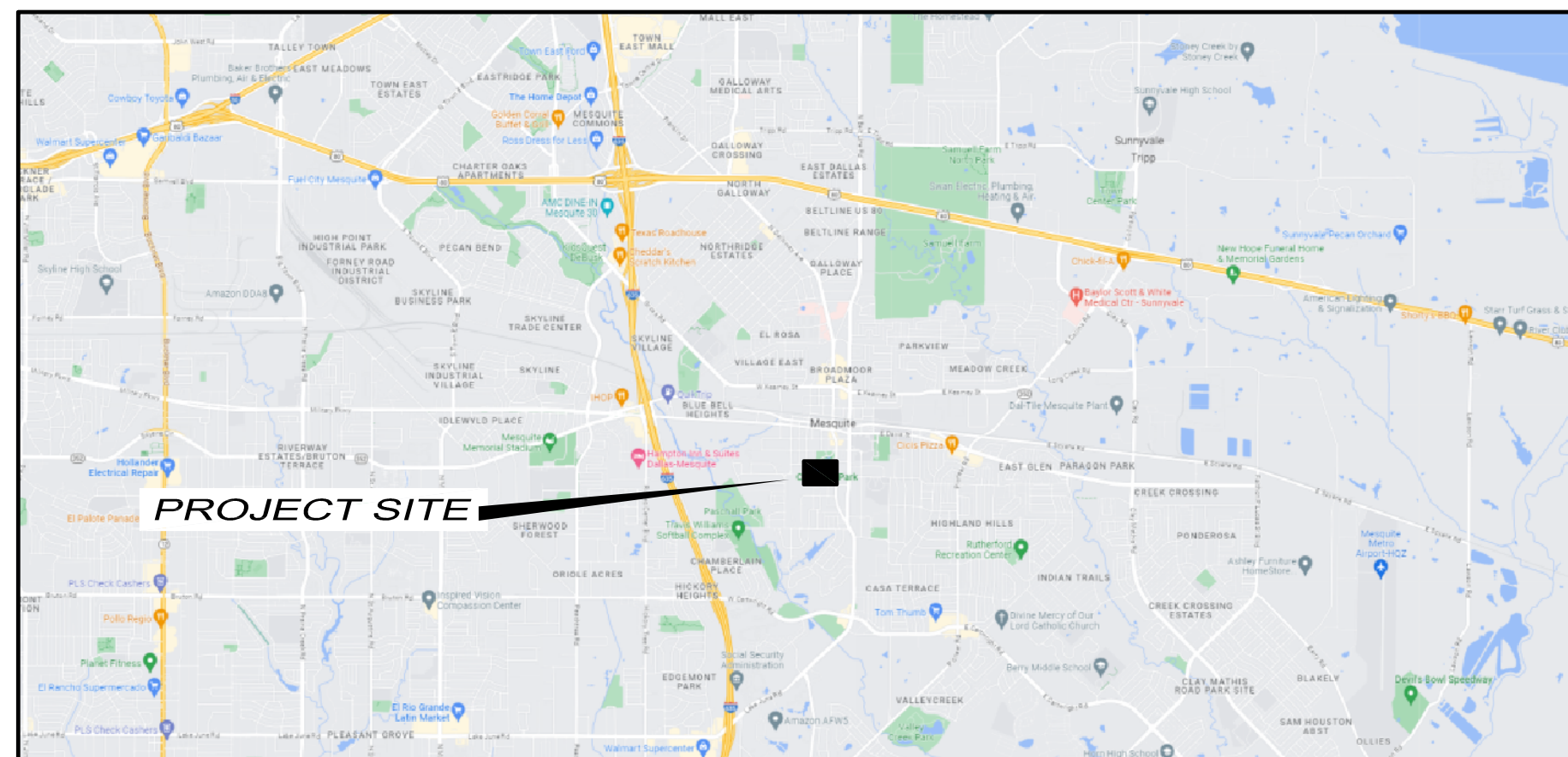


# ***CITY LAKE AQUATIC CENTER RENOVATION: SITE AMENITIES BID # 2024-019 BUILDING & SITE IMPROVEMENTS PACKAGE***

## ***ISSUED FOR PRICING***

***NOVEMBER 28, 2023***



***LOCATION MAP***

***PROJECT ADDRESS: 200 PARKVIEW STREET  
MESQUITE, TEXAS***



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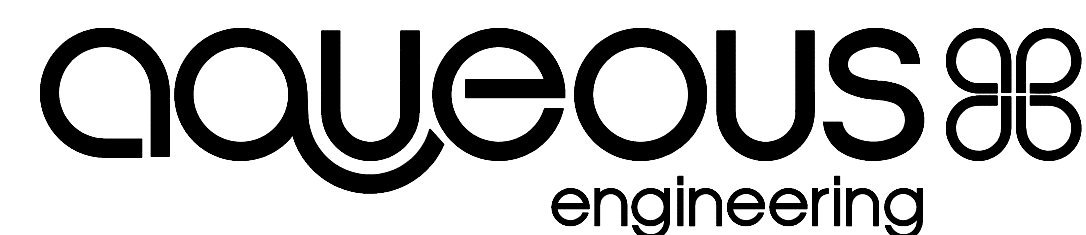
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**ELECTRICAL SYMBOLS LEGEND**

NOT ALL SYMBOLS NECESSARILY USED

SYMBOL	DESCRIPTION	ON CENTER MTG. HT.
	WALL MOUNTED SIMPLEX RECEPTACLE	SEE PLANS
	WALL MOUNTED DUPLEX RECEPTACLE	18" UNO
	WALL MOUNTED ISOLATED GROUND DUPLEX RECEPTACLE	18" UNO
	WALL MOUNTED G.F.C.I. DUPLEX RECEPTACLE	18" UNO
	WALL MOUNTED DUPLEX RECEPTACLE WITH (2) USB PORTS	18" UNO
	WALL MOUNTED DOUBLE DUPLEX RECEPTACLE	18" UNO
	WALL MOUNTED SPECIAL RECEPTACLE	18" UNO
	FLUSH MOUNTED DUPLEX RECEPTACLE - SPECIFIED ON PLANS	
	ABOVE CEILING JUNCTION BOX - SIZE AS REQUIRED	AS REQUIRED
	WALL MOUNTED JUNCTION BOX - SIZE AS REQUIRED	PER PLANS
	WALL MOUNTED TELEPHONE OUTLET-PLASTER RING AND STRING U.N.O.	18" UNO
	WALL MOUNTED DATA OUTLET-PLASTER RING AND STRING U.N.O.	18" UNO
	FLUSH FLOOR MOUNTED DATA/TELEPHONE COMBINATION OUTLET	FLOOR
	TV CABLE OUTLET	PER PLANS
	PANEL BOARD with WORKING CLEARANCES	AS REQUIRED
	MAIN DISTRIBUTION PANEL OR MAIN SWITCH BOARD	AS REQUIRED
	WALL MOUNTED TOGGLE SWITCH	48" AFF
	WALL MOUNTED ON/OFF 3-WAY TOGGLE SWITCH	48" AFF
	WALL MOUNTED VACANCY SENSOR SWITCH	48" AFF
	WALL MOUNTED OCCUPANCY SENSOR SWITCH	48" AFF
	WALL MOUNTED DIMMER SWITCH (600W. U.N.O.)	48" AFF
	NON-FUSED DISCONNECT SWITCH (FRAME/POLES/NEMA RATING)	AS REQUIRED
	FUSED DISCONNECT SWITCH (FRAME/POLES/FUSES/NEMA RATING)	AS REQUIRED
	FIRE ALARM PULL STATION	42" AFF
	FIRE ALARM ANNUNCIATION DEVICE-WALL MOUNTED	84" AFF
	CEILING MOUNT HORN/STROBE	CEILING
	FIRE ALARM CONTROL PANEL	
	FIRE ALARM ANNUNCIATION PANEL	
	DOOR/WINDOW CONTACT SWITCH	AS REQUIRED
	PANIC BUTTON	VARIES
	CEILING MOUNTED OCCUPANCY SENSOR	CEILING
	SMOKE DETECTOR	CEILING
	CEILING MOUNTED DAYLIGHT SENSOR	
	DUCT MOUNTED SMOKE DETECTOR	SEE MECH.
	WALL MOUNTED TEMPERATURE SENSOR/THERMOSTAT	SEE MECH.
	ANSUL PULL STATION	42" AFF
	BELL ANNUNCIATOR	78" AFF
	BUZZER ANNUNCIATOR	78" AFF
	WALL MOUNTED PUSH BUTTON	48" AFF
	CCTV SECURITY CAMERA	CEILING
	LOW VOLTAGE TRANSFORMER - SPECIFIED ON PLANS	VARIES
	PLYWOOD BACKBOARD	

**ABBREVIATIONS**

ABV CTR	6" ABOVE COUNTERTOP
GFCI	GROUND FAULT CIRCUIT INTERRUPTING
GFEP	GROUND FAULT EQUIPMENT PROTECTION
AFF	ABOVE FINISHED FLOOR
WP	WEATHER PROOF
IG	ISOLATED GROUND
NL	NIGHT LIGHT
EM	EMERGENCY
UNO	UNLESS NOTED OTHERWISE
AHJ	AUTHORITY HAVING JURISDICTION

**ELECTRICAL DEVICE MOUNTING HEIGHT NOTE:**

- SEE "MOUNTING HEIGHT ELEVATION DETAIL" IN ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS REGARDING DEVICE MOUNTING HEIGHTS. ALL MOUNTING HEIGHTS SHOWN ON ARCHITECTURAL PLANS TAKE PRECEDENCE OVER THOSE INDICATED ON THE ELECTRICAL PLANS.

**aqueous** engineering



**CITY LAKE PARK  
MESQUITE, TEXAS**



Release/Revision	Date

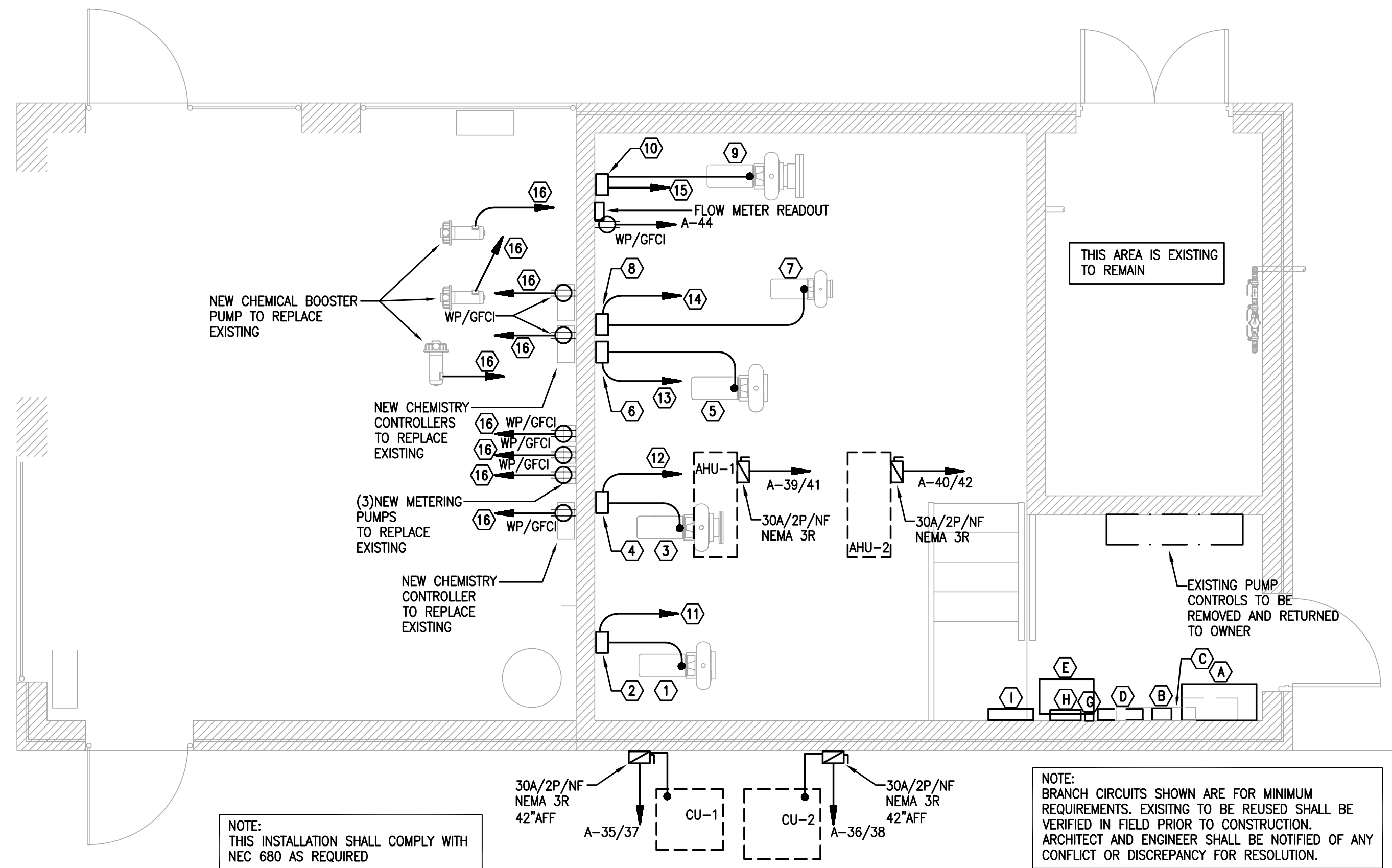
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Sheet Title:  
**GENERAL ELECTRICAL SYMBOLS & NOTES**

Sheet No.:  
**E0.0**

### ELECTRICAL GENERAL NOTES

- ALL WORK IN THIS DIVISION SHALL COMPLY WITH NEC 680 AND ALL LOCAL BUILDING CODES, LAWS, REGULATIONS, ORDINANCES.
- THE CONTRACTOR SHALL KEEP A RECORD OF ANY CHANGES WHICH ARE IN CONFLICT WITH THESE DRAWINGS AND SPECIFICATIONS, AT THE COMPLETION OF HIS WORK HE SHALL SUBMIT "AS BUILT" DOCUMENTS TO THE OWNER.
- THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY COMPONENT, FITTING AND DETAIL FOR A COMPLETE AND FUNCTIONING PROJECT.
- ALL WORK SHALL BE INSTALLED SO THAT JUNCTION BOXES AND COMPONENTS WILL BE ACCESSIBLE FOR SERVICE.
- ALL SYSTEMS, EQUIPMENT, COMPONENTS, WORK, ETC. PROVIDED UNDER THIS DIVISION SHALL BE COVERED BY A ONE YEAR GUARANTEE STARTING AT THE TIME OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER. ANY DEFECTS IN THE WORK, SYSTEMS, EQUIPMENT OR COMPONENTS FOUND DURING THIS YEAR SHALL BE CORRECTED AT NO CHARGE. THE GUARANTEE SHALL INCLUDE PROVIDING ALL NECESSARY CUTTING, PATCHWORK, REPAINTING, ETC. TO MAKE THE WORK COMPLETE AND NEW.
- AS APPLICABLE, ALL CONDUIT SHALL BE CONCEALED IN THE WALLS, UNDERFLOOR OR ABOVE THE CEILING AS MUCH AS POSSIBLE UNLESS OTHERWISE NOTED OR SHOWN. MINIMUM CONDUIT SIZE IS 3/4" UNLESS NOTED OTHERWISE.
- ALL CONDUCTORS SHALL BE COPPER WITH TYPE "THW" OR "THHN" INSULATION. THE MINIMUM WIRE SIZE SHALL BE #12AWG WITH A 75° C TEMPERATURE RATING.
- ALL WORK MUST BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER ACCORDING TO GENERALLY ACCEPTED PRINCIPALS OF FIRST CLASS WORKMANSHIP.
- ALL ROOF PENETRATIONS SHALL BE PERFORMED BY GENERAL CONTRACTOR. MAINTAIN ROOF WATER TIGHT INTEGRITY. COORDINATE WITH OWNER.
- FASTEN ALL RECESSED LIGHTING FIXTURES TO STRUCTURE OR GRID PER N.E.C. 410.10 & 410.36.
- DUPLEX RECEPTACLES SHALL BE PLASTIC, TWO-POLE, THREE WIRE, SELF-GROUNDING, SIDE-WIRED, 125 VOLTS AND 20A RATED, UNLESS NOTED OTHERWISE. COLOR TO BE SPECIFIED BY ARCHITECT UNLESS OTHERWISE NOTED.
- ALL PENETRATIONS THRU FIRE RATED WALLS, FLOORS AND CEILINGS SHALL BE FIRE STOPPED PER N.E.C. 300-21.
- PROVIDE ALL GROUNDING AS REQUIRED BY N.E.C.
- ALL WALL MOUNTED SWITCHES FOR FANS, LIGHTS, ETC. WHICH ARE SHOWN TO BE MOUNTED IN THE SAME GENERAL AREA SHALL SHARE A MULTI-GANG COVER PLATE AS REQUIRED.
- PROVIDE A TYPE-WRITTEN PANEL DIRECTORY CARD FOR ALL PANELS MODIFIED DURING CONSTRUCTION. HAND LETTERED DIRECTORY CARDS WILL NOT BE ACCEPTED. DIRECTORY INFORMATION SHALL INDICATE "AS-INSTALLED" BRANCH CIRCUIT ASSIGNMENTS AND ALL SPARES AND SPACES.
- PROVIDE #12AWG GROUND FOR ALL MECHANICAL EQUIPMENT UNLESS SHOWN OTHERWISE. ALL EQUIPMENT SHALL BE GROUNDED AT THE PANEL WHICH FEEDS THE EQUIPMENT.
- PROVIDE A SEPARATE GREEN, INSULATED, #12AWG EQUIPMENT GROUNDING CONDUCTOR ROUTED WITH THE BRANCH CIRCUIT HOMERUN CONDUCTORS.
- ARMORED CABLE MAY BE USED IN WALLS AND MILLWORK AND MUST BE "MC" TYPE (WITH GROUND). VERIFY INSTALLATION WITH AHJ PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL CLEAN SITE AT END OF PROJECT. ALL DUST, DEBRIS, OILS, SPRAYS, FINGERPRINTS, AND LABELS SHALL BE REMOVED FROM ALL EXPOSED FINISHED SURFACES. ELECTRICAL AND TELEPHONE ROOM FLOORS ARE TO BE SWEEP, MOPPED, AND REPAINTED AS REQUIRED.
- ALL LAY IN TYPE LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING SYSTEM.
- 20 AMP BRANCH CIRCUIT HOME RUNS EXCEEDING 75 LINEAR FEET FROM THE PANEL BOARD SHALL UTILIZE #10 CONDUCTORS IN 3/4" CONDUIT, MINIMUM.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES, AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS AND FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY SUPPLIERS.
- ELECTRICAL EQUIPMENT SHALL BE INSTALLED SUCH THAT REQUIRED NEC SERVICE CLEARANCES ARE MET.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY THE ELECTRICAL SERVICE ARRANGEMENTS WITH THE LOCAL POWER COMPANY AND PROVIDE THE NECESSARY EQUIPMENT FOR A COMPLETE INSTALLATION.
- CIRCUIT BREAKERS AND PANEL BOARDS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SITE AS DETERMINED BY FAULT CURRENT ANALYSIS STUDY AND COORDINATION WITH THE LOCAL UTILITY COMPANY.
- ALL BUILDING SYSTEM GROUND RODS SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING SYSTEM PER NEC 250.
- MC CABLE OR FLEX CONDUIT IS PERMITTED FOR FINAL CONNECTIONS TO EQUIPMENT AND IS LIMITED TO MAXIMUM LENGTH OF 72". REFER TO NOTE #19 ABOVE.
- SEE ARCHITECTURAL DETAILS AND ELEVATIONS FOR DEVICES TO BE MOUNTED HORIZONTALLY.
- REFERENCE ARCHITECTURAL PLANS FOR COLOR/FINISH OF ALL FIXTURES, DEVICES, ETC.



**01 ELECTRICAL FLOOR PLAN**  
Scale: 1/4" = 1'-0"

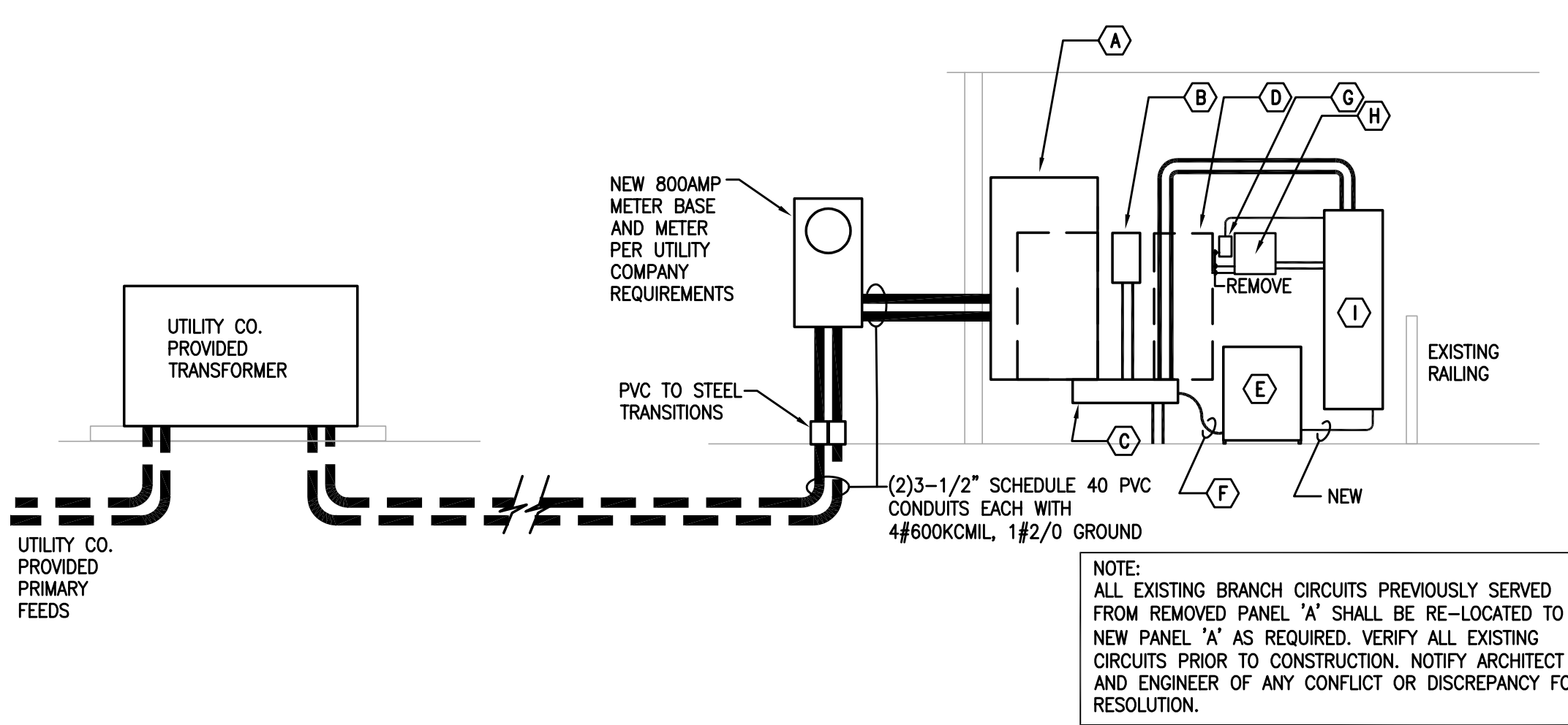
SERVES		N	T	POLES	VA	WIRE - CONDUIT	CK	Φ	CK	Φ	WIRE - CONDUIT	VA	POLES	N	T	SERVES
M	WATERSLIDE PUMP	3/60	6000	3Φ	6000	3Φ16- #10G - 1" C.	1	A	2	7000	3/80	EXISTING TO REMAIN	M			
M	ACTIVITY FILTER PUMP	3/60	6000	3Φ	6000	3Φ16- #10G - 1" C.	9	B	10	10000	3/70	TRANSFORMER	M			
M	SPLASHPAD FEATURE	3/30	3300	3Φ	3300	3Φ10- #10G - 3/4" C.	13	A	14	2200	3/30	SPLASHPAD FILTER	M			
M	FITNESS FILTER PUMP	3/35	4600	3Φ	4600	3Φ8- #10G - 3/4" C.	21	B	22	960	2/15	AHU-2	M			
M	AHU-1	2/15	600	2Φ	600	2Φ12- #12G - 3/4" C.	25	A	26	2850	1/20	NEW BREAKER	M			
M	NEW BREAKER	2/30	2160	2Φ	2160	2Φ10- #10G - 3/4" C.	29	C	30	1500	1/20	EXISTING TO REMAIN	M			
M	NEW BREAKER	2/30	2160	2Φ	2160	2Φ10- #10G - 3/4" C.	31	A	32	1500	1/20	EXISTING TO REMAIN	M			
M	EXISTING TO REMAIN	1/20	1500	2Φ	1500	2Φ12- #12G - 3/4" C.	33	B	34	1500	1/20	EXISTING TO REMAIN	M			
M	EXISTING TO REMAIN	1/20	1500	2Φ	1500	2Φ12- #12G - 3/4" C.	35	C	36	500	1/20	EXISTING TO REMAIN	M			
M	EXISTING TO REMAIN	1/30	1500	2Φ	1500	2Φ10- #10G - 3/4" C.	37	A	38	500	1/20	EXISTING TO REMAIN	M			
M	EXISTING TO REMAIN	1/30	2000	2Φ	2000	2Φ10- #10G - 3/4" C.	39	B	40	4800	2/50	EXISTING TO REMAIN	M			
M	EXISTING TO REMAIN	1/20	1500	2Φ	1500	2Φ12- #12G - 3/4" C.	41	C	42	200	1/20	FLOW METER READOUT	C			
SPACE							43	A	44	1/20	SPARE					
SPACE							45	B	46	1/20	SPARE					
SPACE							47	C	48	1/20	SPARE					
SPACE							49	A	50	1/20	SPARE					
SPACE							51	B	52	1/20	SPARE					
SPACE							53	C	54	1/20	SPARE					

KEYED NOTES (INT):	1	2
GFCI BREAKER		
VIA CONTACTOR/TIME CLOCK		

SUMMARY	CONN. LOAD	DEMAND	DEMAND LOAD	MOUNTED	SURFACE
KVA	AMPS	FACTOR	KVA	VOLTS	120/240
C CONTINUOUS (215.2)	0.2	125%	0.3	PHASE WIRE:	3Φ
R RECEPTACLE (TABLE 220.44)	30.0	10-50% 120/0	20.0	BUS RATED AMPS:	400
M MOTORS (430)	125.1	100% 120/0	125.1	MAIN TYPE:	M.C.B.
K KITCHEN EQUIP. (TABLE 220.56)	0.0	100% 0/0	0.0	BUS TYPE:	COPPER
A AIR CONDITIONING (440)	0.0	100% 0/0	0.0	FULLY RATED:	22 KAIC
H HEAT (ELECTRICAL) (220.60)	0.0	0% 0/0	0.0	VA	
NON-CONTINUOUS (215.2)	0.0	100% 0/0	0.0	CONN. PHASE A:	4900 5%
0 TOTAL LOAD	155.3	374	145.4	CONN. PHASE B:	5190 0%
				CONN. PHASE C:	5340 -4%



**02 ELECTRICAL RISER DIAGRAM**  
Scale: NONE

- ### NOTES BY SYMBOL (X)
- NEW 10HP PUMP FOR FITNESS FILTER TO REPLACE EXISTING.
  - NEW EVENFLOW #EF-C-31-12-2 WALL MOUNTED 42" AFF VARIABLE FREQUENCY DRIVE FOR FITNESS FILTER PUMP.
  - NEW 15HP PUMP FOR WATERSLIDE TO REPLACE EXISTING.
  - NEW EVENFLOW #EF-C-46-12-2 WALL MOUNTED 42" AFF VARIABLE FREQUENCY DRIVE FOR WATERSLIDE PUMP.
  - NEW 15HP PUMP FOR ACTIVITY FILTER TO REPLACE EXISTING.
  - NEW EVENFLOW #EV-C-46-12-2 WALL MOUNTED 42" AFF VARIABLE FREQUENCY DRIVE FOR ACTIVITY FILTER PUMP.
  - NEW 5HP PUMP FOR SPLASHPAD FILTER TO REPLACE EXISTING.
  - NEW EVENFLOW #EF-C-18-12-2 WALL MOUNTED 42" AFF VARIABLE FREQUENCY DRIVE FOR SPLASHPAD FILTER PUMP.
  - NEW 7.5HP PUMP FOR SPLASHPAD FEATURE TO REPLACE EXISTING.
  - NEW EVENFLOW #EF-C-26-12-2 WALL MOUNTED 42" AFF VARIABLE FREQUENCY DRIVE FOR SPLASHPAD FILTER PUMP.
  - A-19/21/23 NEW 3P-35A BRANCH CIRCUIT. ALL FINAL CONNECTIONS TO BE MADE BY CONTRACTOR PER MANUFACTURERS REQUIREMENTS. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.
  - A-1/3/5 NEW 3P-60A BRANCH CIRCUIT. ALL FINAL CONNECTIONS TO BE MADE BY CONTRACTOR PER MANUFACTURERS REQUIREMENTS. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.
  - A-7/9/11 NEW 3P-60A BRANCH CIRCUIT. ALL FINAL CONNECTIONS TO BE MADE BY CONTRACTOR PER MANUFACTURERS REQUIREMENTS. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.
  - A-22/24/26 3P-25A BRANCH CIRCUIT. ALL FINAL CONNECTIONS TO BE MADE BY CONTRACTOR PER MANUFACTURERS REQUIREMENTS. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.
  - A-13/15/17 3P-30A BRANCH CIRCUIT. ALL FINAL CONNECTIONS TO BE MADE BY CONTRACTOR PER MANUFACTURERS REQUIREMENTS. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.
  - EXISTING BRANCH CIRCUIT SERVING EQUIPMENT BEING RELOCATED SHALL BE REUSED. VERIFY EXISTING CONDITIONS IN FIELD. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICT OR DISCREPANCY FOR RESOLUTION.

- ### RISER DIAGRAM NOTES BY SYMBOL (X)
- NEW 800AMP SERVICE ENTRANCE SWITCH TO REPLACE EXISTING IN SAME LOCATION. PROVIDE WITH NEW CLASS 'J' 800AMP FUSES. REMOVED EXISTING SWITCH TO BE RETURNED TO OWNER OR PLACED IN OWNER APPROVED STORAGE.
  - EXISTING 200AMP OFFICE PANEL 'B' CIRCUIT BREAKER AND ENCLOSURE TO REMAIN.
  - EXISTING SERVICE ENTRANCE WIREWAY TO REMAIN.
  - EXISTING 225A PANEL BOARD TO BE REMOVED AND RETURNED TO OWNER OR PLACED IN OWNER APPROVED STORAGE.
  - EXISTING TRANSFORMER TO REMAIN. RE-FEED FROM NEW PANEL 'A'. SEE PANEL 'A' SCHEDULE.
  - EXISTING FEEDER TO 'B' ABOVE TO REMAIN.
  - EXISTING TIME CLOCK TO REMAIN AND BE RE-FEED FROM NEW PANEL 'A'. SEE PANEL 'A' SCHEDULE.
  - EXISTING LOAD CENTER TO REMAIN AND BE RE-FEED FROM NEW PANEL 'A'. SEE PANEL 'A' SCHEDULE.
  - NEW SQUARE 'D'/SCHNEIDER SURFACE MOUNTED 400AMP MAIN CIRCUIT BREAKER 120/240V, 3Φ, 4W PANEL BOARD. SEE PANEL SCHEDULE 'A'

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REGISTERED PROFESSIONAL ENGINEER  
F-17316 11/15/23

**CITY LAKE PARK  
MESQUITE, TEXAS**

Release/Revision: \_\_\_\_\_ Date: \_\_\_\_\_

Designed: \_\_\_\_\_  
Drawn: \_\_\_\_\_  
Checked: \_\_\_\_\_  
AE Project No: \_\_\_\_\_

Sheet Title: **ELECTRICAL FLOOR PLAN PUMP ROOM**

Sheet No: \_\_\_\_\_

**E1.0**

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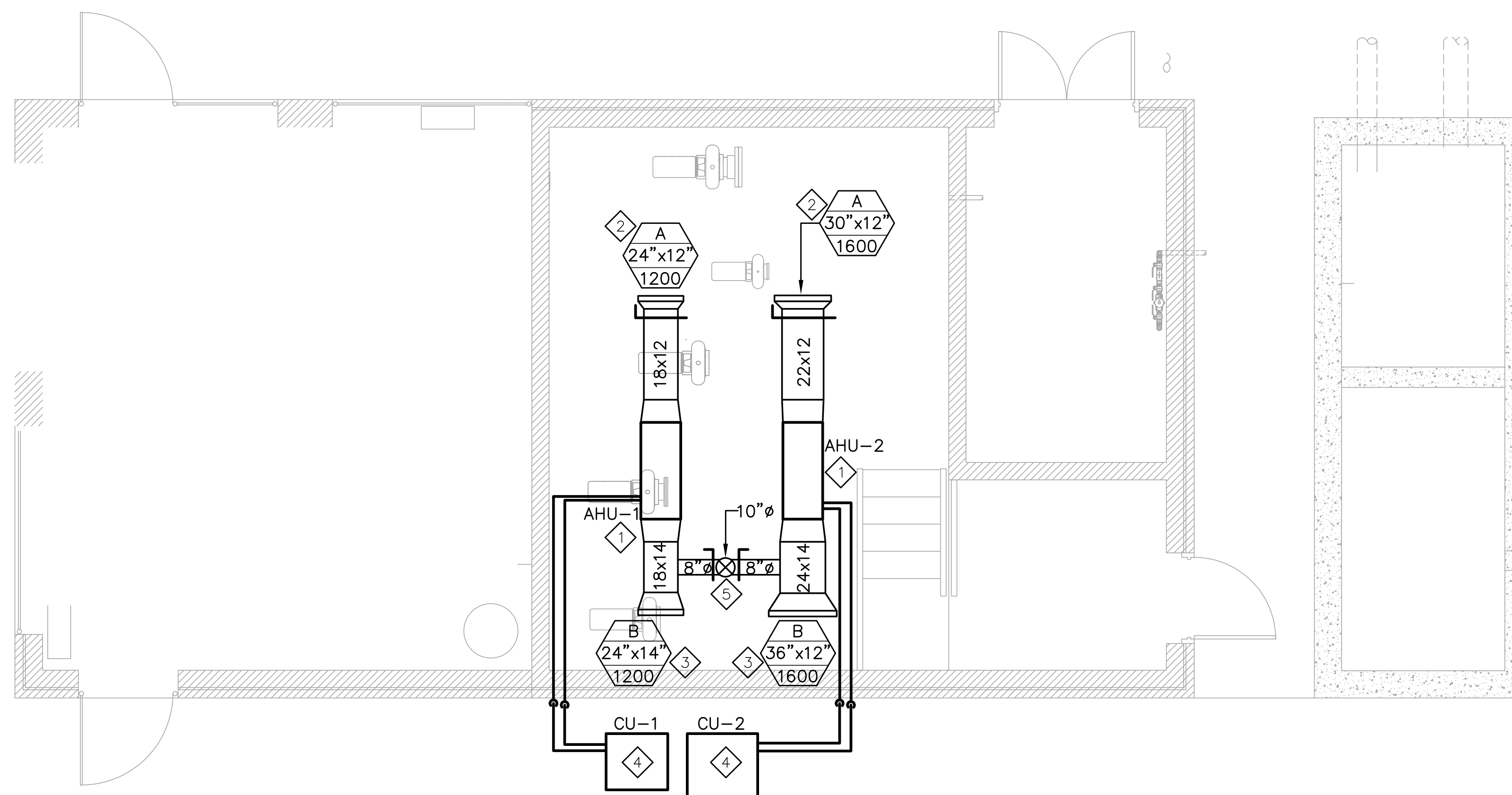
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### GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL VERIFY THAT ALL EQUIPMENT, AS SHOWN ON THESE DRAWINGS, WILL NOT CONFLICT WITH ANY DRAINS, SCUTTLES, JOINT, VENTS, PIPING OR EQUIPMENT.
2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADMINISTERING ALL WARRANTIES ON EQUIPMENT HE INSTALLS. THIS INCLUDES, BUT IS NOT LIMITED TO, REFRIGERANT LINES, ETC.
4. ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" FROM ANY EXHAUST FANS OR PLUMBING VENTS.
5. ALL DUCT DIMENSIONS SHOWN ON THE DRAWINGS ARE CLEAR INSIDE DIMENSIONS. NO ALLOWANCE HAS BEEN MADE FOR LINER OR WRAP.
6. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND OTHER TRADES, ALL REQUIRED OPENINGS AND EXCAVATIONS. ALL REQUIRED OPENINGS IN FOUNDATIONS, FLOORS, WALLS AND ROOFS SHALL BE CONSTRUCTED INTO THE STRUCTURE WITH THE USE OF SLEEVES, CURB, ETC. CUTTING AND PATCHING SHALL BE HELD TO A MINIMUM.
7. ALL ITEMS PROJECTING THRU ROOFS SHALL BE FLASHED THRU CURBS OR PIPE SEALS A MINIMUM OF 12" ABOVE THE ROOF. THE PIPE CURBS AND SEALS SHALL BE SUPPLIED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ROOFING CONTRACTOR. INSURE THAT AMPLE BOOT OPENINGS ARE PROVIDED TO ACCOMMODATE ANY ELECTRICAL CONDUIT PENETRATIONS REQUIRED. UTILIZE LL'S REQUIRED ROOFER.
8. ALL SUPPLY, RETURN AND EXHAUST AIR DEVICES SHALL BE PAINTED AS REQUIRED BY THE OWNER.



### NOTES BY SYMBOL '#'

- ① NEW AIR HANDLING UNIT MOUNTED FROM STRUCTURE ABOVE. MOUNT UNIT BELOW CEILING INSIDE SPACE. PROVIDE DRIP PAN UNDERNEATH AND ROUTE CONDENSATE TO NEAREST CODE APPROVED LOCATION. ROUTE REFRIGERANT LINES TO/FROM OUTDOOR CONDENSING UNIT PER MANUFACTURER'S RECOMMENDATIONS. ROUTE SUPPLY/RETURN DUCTWORK AS SHOWN. PROVIDE THERMOSTAT SET TO 80°F.
- ② NEW DUCT MOUNTED SUPPLY DIFFUSER. PROVIDE BALANCING DAMPER IN TAP. BALANCE TO CFM LISTED ON PLANS.
- ③ NEW DUCT MOUNTED RETURN DIFFUSER.
- ④ NEW OUTDOOR CONDENSING UNIT MOUNTED ON GROUND IN APPROXIMATE LOCATION. PROVIDE CONCRETE PAD FOR UNIT. ROUTE REFRIGERANT LINES TO/FROM INDOOR AIR HANDLING UNIT PER MANUFACTURER'S RECOMMENDATIONS.
- ⑤ 10" ROUND OUTSIDE AIR DUCT DOWN THROUGH ROOF. FLASH AND SEAL ROOF OPENING WATER TIGHT. PROVIDE ROOF CAP AND BIRD SCREEN FOR INTAKE.

## 01 MECHANICAL FLOOR PLAN

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

### AHU SCHEDULE

DESIGNATION	AHU-1	AHU-2
SERVES	PUMP ROOM	PUMP ROOM
TOTAL C.F.M.	1200	1600
O.A. C.F.M.	120	160
FAN		
E.S.P. (IN.W.G.)	0.5	0.5
H.P.		
COOLING		
ENTERING AIR (DB/WB °F)	80/67	80/67
TOTAL CAP. (MBH)	33.1	45.8
SENSIBLE CAP. (MBH)	25.5	35.5
ELECTRICAL		
VOLTS	230	230
PHASE	1	1
MCA	5	8
MOCP	15	15
FILTERS		
FILTER TYPE	MERV 8	MERV 8
FILTER THICKNESS (inches)	2"	2"
MANUFACTURER	TRANE	TRANE
MODEL NO.	TEM4B0C37M31	TEM4A0C48S41
WEIGHT (lbs)	144	138
REMARKS		
NOTES:	1. OR APPROVED EQUAL BY LENNOX, CARRIER OR YORK 2. PROVIDE PROGRAMMABLE THERMOSTAT. 3. PROVIDE AUXILIARY DRAIN PAN UNDER COIL FOR HORIZONTAL MOUNTED UNITS. 4. COIL TO HAVE TXV REFRIGERANT CONTROL.	

### DX CONDENSING UNIT SCHEDULE

DESIGNATION	CU-1	CU-2
INDOOR SECTION DESIGNATION	AHU-1	AHU-2
TOTAL COOLING CAP. (MBH)	36	48
AMBIENT TEMP (°F)	100	100
COMPRESSOR		
NO. OF COMPRESSORS	1	1
R.L.A. (EACH)	14.1	18.5
CONDENSER FAN		
NO. OF FANS	1	1
H.P. (EACH)	0.125	0.20
F.L.A. (EACH)	0.77	1.05
ELECTRICAL		
VOLTAGE/PHASE	230/1	230/1
MCA	18	24
MOCP	30	40
MANUFACTURER	TRANE	TRANE
MODEL NO.	4TTR4036	4TT44048
SEER/EER	14.3 / 11.7	14.3 / 11.7
NOMINAL TON.	3	4
WEIGHT (lbs)	156	189
REMARKS		
NOTES:	1. OR APPROVED EQUAL BY LENNOX, CARRIER OR YORK 2. REFRIGERANT LINES ARE TO BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.	

### AIR DEVICE SCHEDULE

DESIGNATION	A	B
MODULE SIZE	SEE PLAN	SEE PLAN
NECK SIZE	SEE PLAN	SEE PLAN
FLOW RATE (CFM)	SEE PLAN	SEE PLAN
NECK VELOCITY (FPM)	700 MAX.	600 MAX.
N.C. LEVEL	30 MAX.	25 MAX.
MANUFACTURER	TITUS	TITUS
MODEL NO.	300FL	350FL
DESCRIPTION	DUCT MOUNTED SUPPLY	DUCT MOUNTED RETURN
REMARKS	1,2	1,2
NOTES:	1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. 2. OR APPROVED ALTERNATE. ALTERNATE EQUIPMENT SUBMITTAL SHALL INCLUDE A CROSS REFERENCE GUIDE FOR APPROVAL.	



