

# **ADDENDUM 3**

**PROJECT NAME: Frank Garrett HVAC Project** 

DATE: 11/27/2023

PROJECT NO: 35-00282-02-03

This addendum is separated into sections for convenience; however, all respondents, bidders, contractors, subcontractors, material men, and other parties must be responsible for reading the entire addendum. The failure to list an item or items in all affected sections of this addendum does not relieve any party affected from performing as per instructions, providing that the information is set forth one time any place in this addendum. These documents will be attached to and will become part of the Contract Documents for this project. The respondent/bidder is required to acknowledge the receipt of this addendum.

#### **GENERAL:**

- 1. The following changes and/or additions to the Contract Documents, via this addendum, must apply to proposals made for and to the execution of the various parts of the work affected thereby.
- 2. Careful note of the Addendum must be taken by all interested parties and all trades affected must be fully advised in their performance of the work involved.
- 3. This Addendum is hereby made part of the project requirements and contract documents for the above reference project. Ensure to acknowledge this Addendum in CivCast when downloading this Addendum. Acknowledgement of this Addendum is a requirement in order to submit bid in CivCast. This addendum consists of the items and their associated attachments as listed below:

## A. ADMINISTRATIVE CHANGES TO BID DOCUMENTS:

**1.** Adding additional drawings to the bid documents.

#### **B. CHANGES TO PLANS / SPECIFICATIONS:**

1.

### **C. QUESTIONS & RESPONSES:**

Question #1: Will there be an opportunity to walk the site?

Answer: A Site Visit was held on 11/13/2023.

Question #2: Is the existing chiller operational? At what point will the temporary chiller be needed and for what duration?

Answer: Yes. The temporary chiller will only be required while the existing chiller play is being replaced.

Question #3: The current lead time on the Trane Scroll chiller is 30 weeks (210 calendar days). Would like a time extension from the granted 210 days to account for submittal review, installation, commissioning for an additional 60 days (270 total calendar days from NTP).

Answer: A split NTP will be provided to allow for the long lead time of the chiller.

Question #4: Will a building permit be required or just trade permits? if a building permit is required, who is paying for the permit review and building permit?

Answer: Trade permit only.

Question #5: Will COSA be providing lab testing for the new chiller pad?

Answer: Yes.

Question #6: Pipe sizes for the domestic cold water and sanitary sewer are the only pipe sizes shown. Pipe sizes for the domestic hot water and hot water return are not shown. In order to price these systems, all pipe sizes will be required, and site visit is not enough time for us to do this.

Answer: See Addendum #3 drawings for pipe sizes.

Question #7: What are the pipe sizes to all new chilled water piping? Not shown on drawings.

Answer: See Addendum #3 drawings for pipe sizes.

# SIGNED AND SEALED BY CONSULTANT (Engineer/Architect of Record)

By signing and sealing this addendum, the Engineer/Architect of Record acknowledges that the sign/seal is only for changes/clarifications to the items associated with the Engineer's/Architect's work referenced in this addendum.



# **END OF ADDENDUM NO. 3**



Date: 11/27/2023

Client: MARMONMOK ARCHITECTURE

Project Name: FRANK GARRETT COMMUNITY CENTER RENOVATION—PACKAGE 2

Project Number: 23002

This addendum is generally separated into sections for convenience; however, all contractors, subcontractors, material men and other parties shall be responsible for reading the entire addendum. The failure to list an item or items in all affected sections of this addendum does not relieve any part affected from performing as per instructions, providing that the information is set forth one time any place in this addendum. These documents shall be attached to and become part of the Contract Documents for this project.

#### **PLAN ITEMS**

#### RE: Plan Sheet M101:

Item 1: Added keyed notes.

Item 2: Added demolition work.

Item 3: Added new work.

#### RE: Plan Sheet M201:

Item 1: Added note

#### RE: Plan Sheet E102:

Item 1: Added keyed notes 9, 10, and 11.

Item 2: Revised floor plan, as indicated.

#### RE: Plan Sheet E103:

Item 1: Added keyed notes 6, and 7.

<u>Item 2</u>: Revised One-line diagram, as indicated.

### RE: Plan Sheet E202:

Item 1: Revised floor plan, as indicated.

#### RE: Plan Sheet E302:

Item 1: Added keyed note 2.

<u>Item 2</u>: Revised One-line diagram, as indicated.

GENERAL NOTES:

3. ALL UNITS MUST BE INSTALLED LEVEL.

INSTALLATION. SEE SPECIFICATIONS.

MOVING PARTS.

WITH SAID WORK.

MECHANICAL EQUIPMENT.

EQUIPMENT/ITEMS TO REMAIN.

OTHERWISE NOTED.

KEYED NOTES:

APPURTENANCES.

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, THE INTERNATIONAL MECHANICAL CODE, AND THE OTHER CODES AND

2. PROVIDE AND INSTALL VIBRATION ISOLATORS ON ANY EQUIPMENT WITH

4. COORDINATE LOCATIONS OF NEW MECHANICAL EQUIPMENT WITH GENERAL CONTRACTOR AND STRUCTURE, TYPICAL. WHERE SIGNIFICANT CHANGES ARE REQUIRED, THE CONTRACTOR SHALL PRESENT POTENTIAL MODIFICATIONS TO, AND OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO PROCEEDING

5. CAREFULLY PROTECT ALL EQUIPMENT AND MATERIAL PRIOR TO

6. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES FOR ALL

SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

8. COORDINATE ALL WORK WITH OTHER TRADES AND OWNERS

9. THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL EXISTING

7. DEMOLITION DOCUMENTATION WAS OBTAINED FROM EXISTING BUILDING RECORD DRAWINGS AND SURVEY OF THE FACILITY. PRIOR TO

CONSTRUCTION, THE CONTRACTOR SHALL VISIT THE PROJECT SITE AND

REPRESENTATIVE FOR APPROVAL PRIOR TO REMOVING EXISTING ITEMS.

10. ALL EQUIPMENT THAT IS REMOVED BUT NOT REUSED SHALL BE MADE AVAILABLE TO THE OWNER. ANY SUCH ITEMS SHALL BE STORED AT THE SITE FOR A MINIMUM OF (1) WEEK UNLESS INDICATED OTHERWISE BY OWNER'S REPRESENTATIVE. ALL EQUIPMENT/ITEMS NOT RETAINED BY THE

OWNER SHALL BE DISCARDED AT THE CONTRACTOR'S EXPENSE.

11. ALL EXISTING SYSTEMS/EQUIPMENT SHALL REMAIN IN SERVICE UNLESS

TEMPORARY CHILLER REQUIREMENTS

A TEMPORARY AIR COOLED CHILLER WITH PACKAGED PUMPING SYSTEM SHALL

MANAGER. A MINIMUM NOTICE OF 2 WEEKS SHALL BE PROVIDE FOR ANY

1. REMOVE EXISTING CHILLER, ASSOCIATED REFRIGERANT PIPING, CONTROLS,

3. REMOVE EXISTING CHILLED WATER SYSTEM POT FEEDER AND ASSOCIATED

4. REMOVE EXISTING PIPING BACK TO POINT SHOWN, AND CAP. FIELD VERIFY

13. REMOVE EXISTING CHILLED WATER EXPANSION TANK AND ASSOCIATED PIPING.

14. REMOVE EXISTING CHILLED WATER AIR SEPARATOR AND ASSOCIATED PIPING.

15. REMOVE EXISTING CHILLER SYSTEM MAKEUP WATER PIPING BACK TO DOMESTIC

18. ROUTE NEW 1/2" VENT PIPE ABOVE, AND 1" DRAIN PIPE BELOW, TO NEAREST

19. PROVIDE NEW BLIND VALVES FOR CONNECTION TO TEMPORARY CHILLER.

20. REMOVE EXISTING CHILLED WATER SUPPLY/RETURN PIPING BACK TO POINT SHOWN. FIELD VERIFY PIPING SYSTEM BÉFORE REMOVING ANY PIPE. PROVIDE NEW BUTTERFLY VALVES FOR RECONNECTION DURING NEW WORK

22. LOCATE NEW EQUIPMENT ON 3-1/2" THICK CONCRETE HOUSEKEEPING PAD.

25. ROUTE PIPING THROUGH EXISTING WALL. PENETRATE WALL AT 10'-0" A.F.F.

27. REMOVE CONDENSATE PIPING BACK TO WALL PENETRATION. LEAVE STUB TO

28. CONNECT NEW CONDENSATE PIPE AT THIS APPROXIMATE LOCATION. MACH

30. REMOVE CONTROL PANEL AND SAVE FOR RELOCATION. REFER TO NEW WORK.

31. RELOCATE CONTROL PANEL TO INDICATED LOCATION. COORDINATE WITH ELECTRICAL ON APPROPRIATE CLEARANCES.

29. ROUTE CONDENSATE PIPING AS INDICATED. TERMINATE AT FD.

26. MOUNT CHILLED WATER PIPING TO EXTERIOR WALL.

23. INSTALL NEW PUMP ON INERTIA BASE. RE:#2/M201 FOR DETAILS.

COLD WATER ISOLATION VALVE IN THIS APPROXIMATE LOCATION (NOT SHOWN

2. REMOVE EXISTING CHILLED WATER PUMP, ASSOCIATED BASE AND ALL

HOUSEKEEPING PAD AND CHILLED WATER PIPING.

PIPING SYSTEM BEFORE REMOVING ANY PIPE.

6. EXISTING HOT WATER PUMP TO REMAIN IN SERVICE.

8. EXISTING HOT WATER PIPING TO REMAIN IN SERVICE.

10. REMOVE EXISTING ABANDONED AIR COMPRESSOR.

11. EXISTING EXHAUST FAN TO REMAIN IN SERVICE.

12. EXISTING WATER HEATER TO REMAIN IN SERVICE.

FOR CLARITY).

FLOOR DRAIN.

9. EXISTING TRANE CONTROL PANELS TO REMAIN IN SERVICE.

16. EXISTING HOT WATER AIR SEPARATOR TO REMAIN IN SERVICE.

17. EXISTING HOT WATER EXPANSION TANK TO REMAIN IN SERVICE.

21. EXISTING CHILLED WATER PIPING TO REMAIN IN SERVICE.

24. REMOVE EXISTING REFRIGERANT MONITORING SYSTEM.

CONNECT BACK TO, REFER TO NEW WORK.

EXISTING PIPE SIZE.

7. EXISTING HOT WATER SYSTEM POT FEEDER TO REMAIN IN SERVICE.

5. EXISTING BOILER TO REMAIN IN SERVICE.

(APPLIES TO THIS SHEET)

BE REQUIRED TO MAINTAIN BUILDING SPACE CONDITIONS DURING CONSTRUCTION (WHILE THE EXISTING CHILLED WATER PLANT IS BEING UPGRADED AND OUT OF SERVICE). AT NO TIME DURING CONSTRUCTION SHALL THE FACILITY BE WITHOUT CHILLED WATER PRODUCTION CAPABILITIES UNLESS COORDINATED WITH THE COSA CONSTRUCTION AGENT AND THE BUILDING

POTENTIAL SHUTDOWN THAT IS PROPOSED/REQUESTED.

ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.

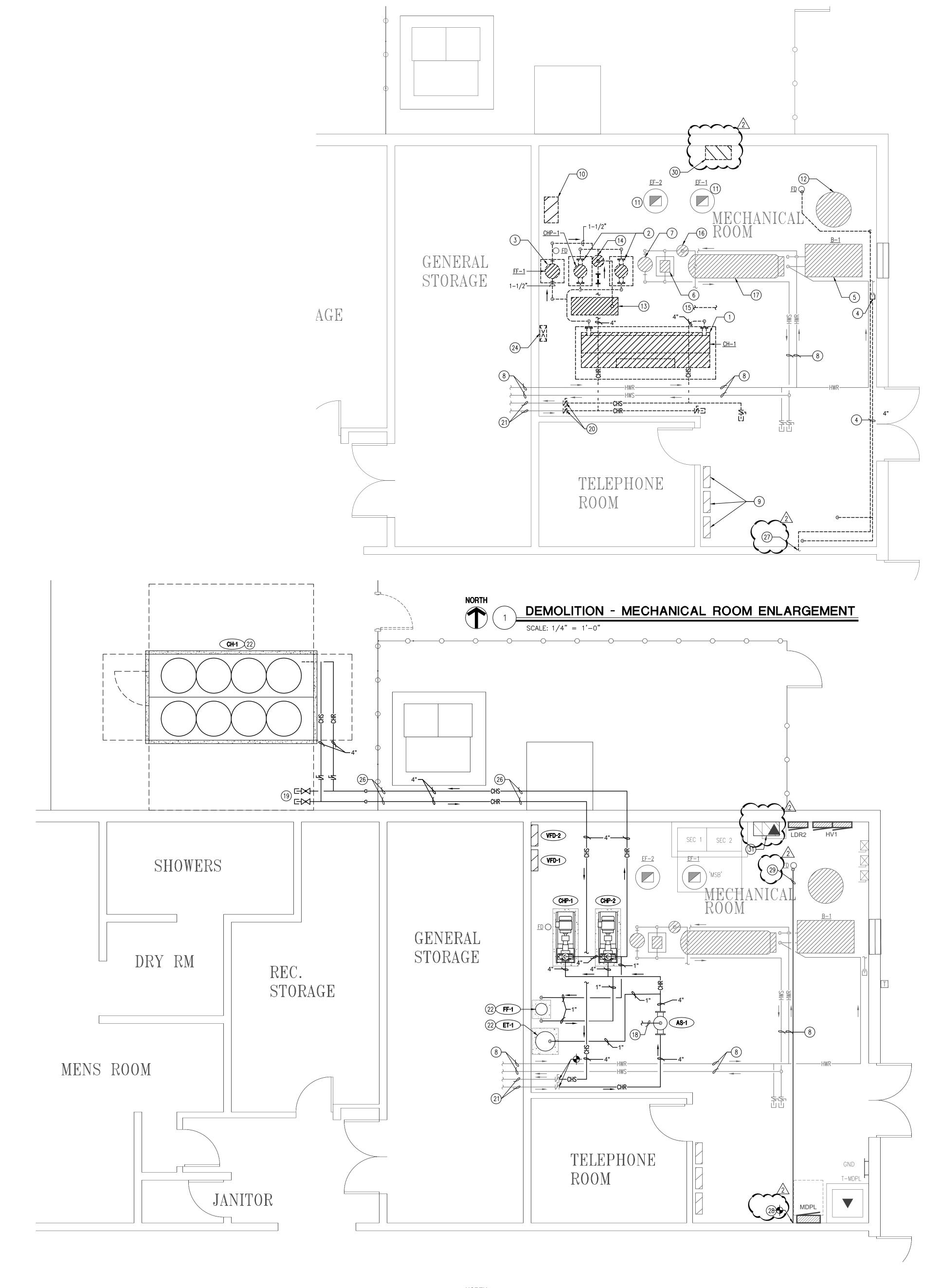
is prohibited. Drawn MEB Checked 10/13/23

Date Project No. 23002

Revisions 11-27-2023 Addendum #03 2 11-27-2023 Addendum #03

SHEET TITLE MECHANICAL NEW **WORK & DEMOLITION ENLARGEMENT** 

SHEET NO. M101



# NEW WORK - MECHANICAL ROOM ENLARGEMENT





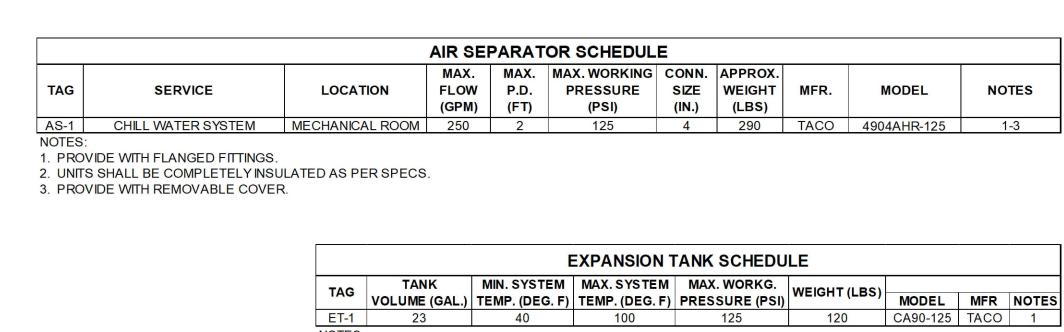
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Drawn MEB Checked PEP Date

Project No. Revisions 11-27-2023 Addendum #03

SHEET TITLE **MECHANICAL** SCHEDULES

SHEET NO.



NOTES: 1. MOUNT ON 3 1/2" (	CONCRETE HOUSER	(EEPING PAD.							
	VARIABLE FREQUENCY DRIVE SCHEDULE								
	EQUIPMENT TAG	VOLTS/PHASE	MOTOR HP	MANUFACTURER	MODEL#	NOTE			
	CLID 4	460 / 2	7.5	ADD	A CLIEGO	4 E			

- 1. REFER TO SPEC SECTION 23 05 14 FOR ADDITIONAL REQUIREMENTS. 2. PROVIDE WITH INTEGRAL DISCONNECT.
- 3. PROVIDE WITH 3-CONTACTOR BY-PASS. 4. PROVIDE WITH NEMA 3R ENCLOSURE. 5. FURNISHED BY DIVISION 23, INSTALLED BY DIVISION 26.

AIR COOLED CHILLER SCHEDULE					
MARK	CH-1				
MANUFACTURER	TRANE				
MODEL NO.	CGAM120F2				
UNIT OPERATING WEIGHT (LBS)	6,900				
NOMINAL CAPACITY (TONS)	120.0				
AMBIENT TEMPERATURE (F)	105.0				
NO. OF COMPRESSORS	4				
TYPE	SCROLL				
NO. OF REFRIGERANT CIRCUITS	2				
REFRIGERANT TYPE	R-410A				
STEPS OF UNLOADING	4				
FOULING FACTOR	0.0001				
WATER FLOW (GPM)	250				
ENTERING WATER TEMPERATURE (F)	54.0				
LEAVING WATER TEMPERATURE (F)	44.0				
MAXIMUM WATER PRESSURE DROP (FT)	15.30				
VOLTS / PHASE / HZ	460/3/60				
UNIT MCA	243.0				
UNIT MOP	250				

IPLV.IP @ AHRI CONDITIONS MAXIMUM 'A' WEIGHTED SOUND POWER (DBA) 1. DDC CONTROLS, WITH BACNET PROTOCOL, TO INTERFACE WITH BAS. 2. PROVIDE WITH CONDENSER COIL HAIL GUARDS.

EER @ AHRI CONDITIONS

3. INSTALL ACOUSTICAL BLANKETS ON EACH COMPRESSOR. 4. PROVIDE WITH DISCONNECT AND SINGLE POINT POWER CONNECTION. 5. PROVIDE WITH PHASE FAILURE/VOLTAGE PROTECTION. 6. PROVIDE WITH EVAPORATOR FREEZE PROTECTION.

7. PROVIDE WITH WATER FLOW SWITCH. 8. PROVIDE WITH NEOPRENE IN-SHEAR VIBRATION ISOLATORS.

> FILTER FEEDER SCHEDULE MAXIMUM OPERATING PRESSURE (PSIG) INLET/OUTLET SIZE (IN.) DRAIN SIZE (IN.) MANUFACTURER NOTES 1. PROVIDE WITH 2 REPLACEABLE CARTRIDGES. 2. PROVIDE WITH AUTOMATIC FLOW CONTROL

> > 3. PROVIDE WITH SITE FLOW INDICATOR.

PUMP SCHE	DULE
MARK	CHP-1&2
MANUFACTURER	TACO
MODEL NO.	2511D
SERVICE	CHILLED WATER
TYPE	END SUCTION
DESIGN WATER FLOW (GPM)	250
DESIGN HEAD (FT)	85
MINIMUM EFFICIENCY (%)	50
IMPELLER DIA. (IN)	9.85
SHUT-OFF HEAD (FT)	105
MAXIMUM FLOW (GPM)	360
HEAD AT MAX. FLOW (FT)	45
MOTOR SIZE (HP)	10
MOTOR SPEED (RPM)	1760
VOLTS-PHASE	460 / 3
NOTES:	1-3

1. MOUNT ON INERTIA BASE PER DETAILS. 2. PROVIDE SHAFT GROUNDING RING. 3. PROVIDE PREMIUM EFFICIENCY MOTOR SUITABLE

FOR USE WITH VFD CONTROLLER.

THE NEW CHILLER SYSTEM SHALL BE

INTEGRATED INTO THE EXISTING TRANE TRACER SUMMIT BUILDING

AUTOMATION SYSTEM

WEEKLY FOR THE PUMPS.

**CONTROL SEQUENCE FOR CHILLED WATER SYSTEM:** SYSTEM DESCRIPTION: THE CHILLED WATER SYSTEM CONSISTS OF ONE AIR COOLED SCROLL CHILLER AND TWO VFD CONTROLLED CHILLED WATER PUMPS PIPED IN PARALLEL FOR LEAD/STAND BY OPERATION. LEAD/STAND-BY STATUS SHALL BE ROTATED BY THE BAS

CHILLER START: UPON CHILLER ENABLE, THE BAS SHALL ENABLE (SOFT START) THE LEAD PUMP, RAMP THE SPEED OF THE PUMP TO THE DESIGN FLOW RATE AND MONITOR STATUS VIA CURRENT SENSOR. ONCE CHILLED WATER FLOW IS PROVEN VIA THE FLOW SWITCH, THE BAS SHALL ENABLE THE CHILLER. THE BAS SHALL MONITOR THE CHILLER VIA BACNET MS/TP AND ALARM IF THE CHILLER FAILS. THE CHILLER'S FACTORY CONTROLS SHALL MAINTAIN THE LEAVING WATER TEMPERATURE SET POINT OF 44F (ADJ.). THE BAS SHALL ENABLE THE STAND-BY PUMP IN THE EVENT OF A LEAD PUMP FAILURE. THE BAS SHALL ALARM IN THE EVENT OF EQUIPMENT FAILURE.

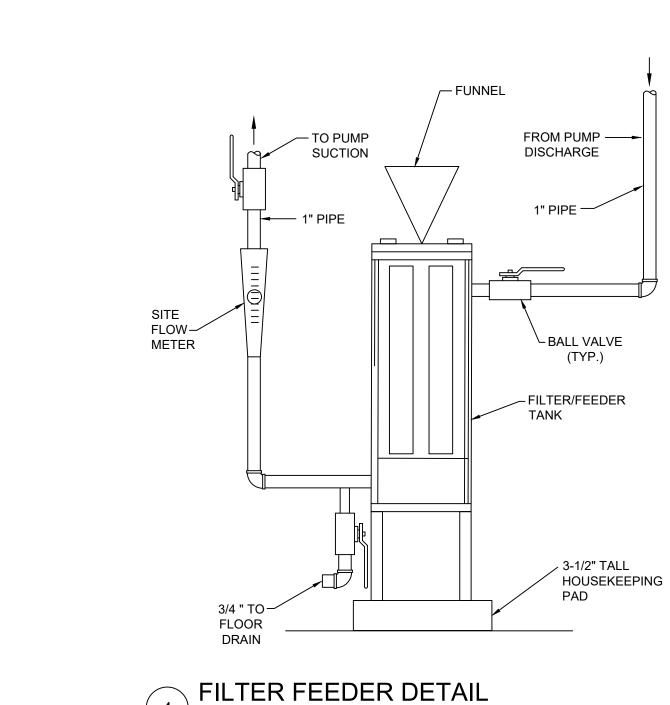
CHILLER STOP: WHEN THE CHILLER IS COMMANDED TO STOP, THE BAS SHALL DISABLE THE

CHILLER AND DISABLE THE CHILLED WATER PUMP.

4. FREEZE PROTECTION: IN THE EVENT OF AN EVAPORATOR LOW TEMPERATURE ALARM, THE BAS SHALL ENABLE THE CHILLED WATER PUMP AND OPERATE IT AT THE DESIGN FLOW

DISCHARGE SUCTION BUTTERFLY VALVE W/ MEMORY STOP (TYP.) -\_Y-STRAINER W/ ELBOW CHECK VALVE (NON-SLAM TYPE) — ☐ I / ELBOW DOWN VALVE FLEXIBLE PIPE CONNECTION (TYP.) CONCENTRIC REDUCER -PRESSURE GAUGE ----— BALL VALVE (TYP.) ECCENTRIC REDUCER MANUAL AIR VENT — —SUCTION DIFFUSER DRIP RIM BASE MOTOR (STEEL & GROUTABLE) — -3/4" DRAIN VALVE (N.C.) ─VIBRATION ISOLATION PUMP INERTIA PER SPECIFICATIONS BASE-FLEXIBLE HOSE 1" DRAIN TO FLOOR DRAIN 3-1/2" HOUSE-\_FLOOR KEEPING PAD -

END SUCTION PUMP DETAIL



STRAP SADDLES WITH STAINLESS STEEL

ALLOW ROOM FOR— FUTURE PIPE ADDITION

PIPE CLAMPS PER SPECS, TYP.

PROVIDE DIELECTRIC

SPECS AT UN-INSULATED

SEPARATION PER

COPPER PIPING

PIPE HANGER DETAIL

OF INCOMPRESSABLE INSULATION AT EACH

INSULATED PIPE DIAMETER

- WHERE INSULATION

GRINNEL FIG. #167

STRUT USE

IS IN CONTACT WITH

INSULATION PROTECTION

HANGER POINT

-SHEET METAL SHIELD FOR INSULATION - MIN. LENGTH 1.5 TIMES

CLEVIS TYPE-

PIPE HANGER

INSULATION -

3/8" THREAD ROD,

STRUCTURE

P-4000 UNISTRUT-OR EQUAL

NO SCALE

BUTTERFLY VALVE (TYP.)

- AIR DIRT SEPERATOR

(WITHOUT LADDER).

- ROUTE TO NEAREST FLOOR DRAIN

SCHEMATIC ELEVATION VIEW

AIR/DIRT SEPARATOR DETAIL

- LOCATE DRAIN VALVE FOR EASY ACCESS FROM FLOOR

1/2" AIR VENT

TO FLOOR DRAIN

SUSPEND FROM STRUCTURE

OVERHEAD (PROVIDE ANGLE

DISTRIBUTE LOAD) (PROVIDE

ECCENTRIC TRANSITION, -

(TOP FLAT, TYPICAL)

SPRING VIBRATION ISOLATOR ——

**→** 

BETWEEN JOISTS TO

HANGERS)

SECURE FROM BLDG.

— GAUGE W/ COCK (TYP.) SWITCH -—THERMOMETER (TYP.) HOUSEKEEPING PAD — P/T PORT (TYP.) CONNECTOR,

AIR COOLED CHILLER DETAIL

S/S STATUS CHW SUPPLY TEMP SPEED AI IMMER CH-1 BACnet MS/TP (CONNECT TO BAS) **CHW FLOW** AIR COOLED BI DPS CHILLER S/S STATUS ALARM CHW RETURN TEMP AI IMMER

PRESSURE GAUGE— DIGITAL FLOW METER W/ ---PRESSURE RELIEF VALVE— PULSE OUTPUT CAPABILITY. CONNECT TO BAS FOR PRESSURE REDUCING-MONITORING PURPOSES. BALL VALVE -(N.O.) TO EXPANSION TANK FEED L<sub>3/4"</sub> LINE CHECK BFP ASSY — TO DRAIN DOMESTIC BALL VALVE — MAKEUP PIPING CONNECT NEW MAKEUP WATER PIPING TO EXISTING

MAKE-UP WATER PIPING DETAIL

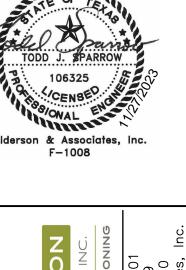
ISOLATION

✓ NO SCALE

CHILLER PLANT CONTROL DIAGRAM

**CHILLED WATER** PUMP (2 THUS)

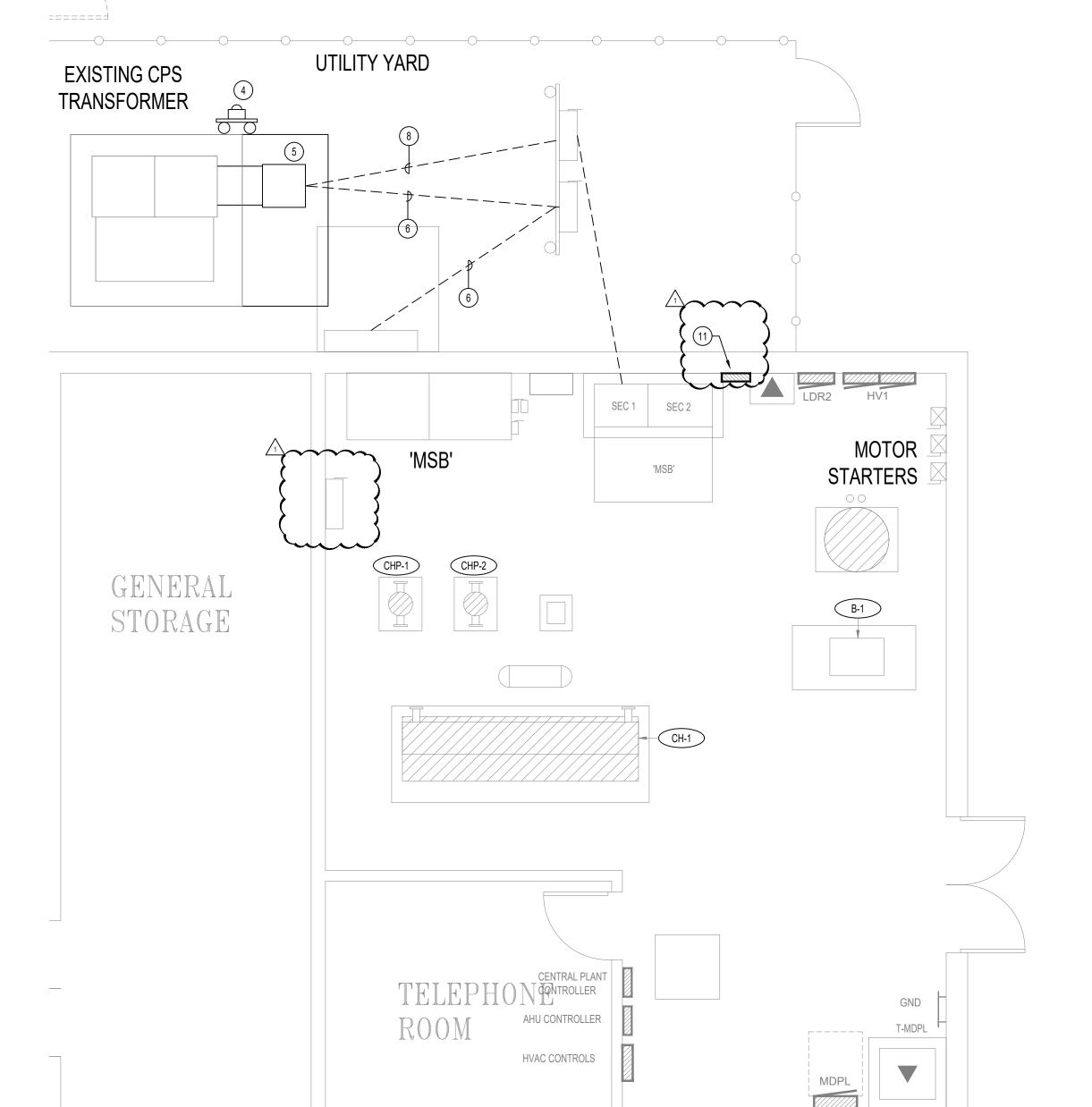
**BUILDING LOAD** AHUS WITH **EXISTING 3-WAY CHILLED WATER** CONTROL VALVES





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WIRING. EXTEND WIRING AS REQUIRED FOR A COMPLETE FUNCTIONAL SYSTEM.



ENLARGED ELECTRICAL PLAN - MECH RM - STEP 2 - PHASE 1

GENERAL ELECTRICAL **DEMOLITION NOTES:** 

(APPLIES TO ALL ELECTRICAL SHEETS) 1. DRAWINGS INDICATE APPROXIMATE LOCATION AND QUANTITY OF TELEPHONE OUTLETS, DATA OUTLETS, FLOOR OUTLETS, RECEPTACLES, AND ELECTRICAL CONNECTIONS TO BE REMOVED. FIELD VERIFY LOCATION AND QUANTITY OF ITEMS TO BE REMOVED, AS NO ALLOWANCE WILL BE

MADE BECAUSE OF UNFAMILIARITY WITH THESE DETAILS. 2. EXISTING CIRCUITS INDICATED WERE OBTAINED FROM AS-BUILT DRAWINGS AND MAY NOT BE CORRECT. IDENTIFY AND LOCATE EXISTING BRANCH CIRCUITRY.

3. REMOVE BRANCH CIRCUITS SERVING EQUIPMENT, RECEPTACLES, LIGHT FIXTURES, MOTORS, AND OTHER ITEMS SHOWN TO BE REMOVED BACK TO OCPD IN SWITCHBOARD, PANEL, LOAD CENTER, OR J-BOX GRID SYSTEM, EXCEPT AS OTHERWISE REQUIRED BY NOTES BELOW. 3.1. BRANCH CIRCUIT: CONDUCTORS, RACEWAYS, BOXES, WIREWAYS, WIRING DEVICES,

COVERPLATES, DISCONNECTING MEANS, STARTERS, CONTROLLERS, AND SUPPORTS. OCPD SHALL REMAIN AS AN INTEGRAL PART OF EXISTING SWITCHBOARD, PANEL, OR LOAD CENTER, AND IF NOT BEING REUSED, SHALL BE LABELED AS SPARE.

CONDUITS IN INACCESSIBLE AREAS: REMOVE CONDUCTORS AND ABANDON IN PLACE, CAPPED AND SEALED. IN A FINISHED SPACE, REMOVED CONDUIT TO BELOW FINISHED SURFACE, FILL VOID WITH NON-SHRINKING GROUT, AND RESURFACED TO MATCH SURROUNDING SURFACES.

4. MAINTAIN INTEGRITY OF BRANCH CIRCUITS WITH A PORTION OF THE LOAD REMOVED. REMOVE PORTION OF BRANCH CIRCUIT ASSOCIATED WITH REMOVED DEVICE TO A POINT AS NECESSARY TO SERVE REMAINING LOAD.

5. EXTEND BRANCH CIRCUITS WHERE INDICATED TO SERVE NEW LOADS OR TO RECONNECT RELOCATED EQUIPMENT. RUN CONDUIT CONCEALED WHERE POSSIBLE, AND ROUTE TO AVOID INTERFERENCE WITH EQUIPMENT OR AESTHETICS. REPLACE WITH NEW CONDUCTORS FROM

6. INCLUDE IN BID COSTS RESULTING FROM OVERTIME, EVENING, AND WEEKEND WORK. COORDINATE WITH OWNER ON OPERATION SCHEDULES AND ASSOCIATED REQUIREMENTS.

7. SALVAGED ITEMS AND MATERIALS SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED TO OWNER'S DESIGNATED STORAGE FACILITY.

8. REMOVE FROM PROJECT SITE DEMOLISHED MATERIALS AND EQUIPMENT. DISPOSE OF IN ACCORDANCE WITH APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS. REMOVE PCB CONTAINING BALLASTS AND DISPOSE OF THROUGH AUTHORIZED DISPOSAL FACILITY.

9. PROVIDE CLOSURE CAPS IN EXISTING CORE DRILLED HOLES. FILL IN REMAINING HOLES WITH FLOOR STONE CEMENT FLUSH WITH SURROUNDING AREA.

10. SEAL OPENINGS IN FIRE RESISTANCE RATED PARTITIONS TO PRESERVE RATING OF PARTITION. 11. DAMAGE CAUSED BY THE WORK, WHICH IS NOT CONCEALED BY NEW CONSTRUCTION, SHALL BE

REPAIRED TO MATCH EXISTING SURFACES. 12. IDENTIFY AND LOCATE EXISTING UTILITIES THAT MAY CONFLICT WITH NEW WORK, AND INCLUDE IN BID COSTS NECESSARY TO COORDINATE THE INSTALLATION OF THE NEW WORK WITH THE EXISTING UTILITIES.

13. COORDINATE AND VERIFY ACTUAL LENGTHS AND ROUTES OF CONDUIT AND FEEDER RUNS WITH ENGINEERED DRAWINGS AS WELL AS EXISTING SITE CONDITIONS PRIOR TO SUBMISSION

OF BID OR PROPOSAL. 14. COORDINATE AND SCHEDULE ELECTRICAL AND COMMUNICATION SERVICE OUTAGES TO

EXISTING FACILITIES WITH OWNER IN ADVANCE OF OUTAGE. 15. PERFORM WORK IN A MANNER TO MINIMIZE INTERRUPTION OF SERVICES TO OCCUPIED SPACES

AND TO MAINTAIN SERVICE TO ROOMS NOT UNDERGOING ACTIVE CONSTRUCTION. 16. PRIOR TO BID, VISIT THE PROJECT SITE, BECOME FAMILIAR WITH THE CONDITIONS AS THEY EXIST, AND CONFIRM LOCATIONS, SIZES, AND QUANTITIES OF MATERIALS AND ITEMS TO BE REMOVED OR INSTALLED. LOOK ABOVE CEILINGS IN AREAS TO BE RENOVATED, AND IDENTIFY

**GENERAL POWER NOTES:** 

(APPLIES TO ALL ELECTRICAL SHEETS)

COMPLETE WORK IN ACCORDANCE WITH APPLICABLE CODES, ORDINANCES, AND INTERPRETATIONS OF AHJ.

COORDINATE WORK WITH OTHER TRADES AS REQUIRED TO PROVIDE COMPLETE SYSTEMS AND AVOID CONFLICTS.

QUANTITIES MATERIALS TO BE REMOVED.

COORDINATE INSTALLATION OF ELECTRICAL WORK ABOVE THE CEILING TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR PLUMBING AND MECHANICAL EQUIPMENT BOTH CURRENT AND FUTURE. CONDUITS SHALL BE KEPT TIGHT TO STRUCTURE OR ROUTED THROUGH STRUCTURAL TRUSSES WHEREVER POSSIBLE.

4. COORDINATE LOCATION OF ALL DISCONNECT SWITCHES TO ENSURE THAT ALL NEC MINIMUM WORKING CLEARANCES ARE MAINTAINED.

5. SINGLE HOMERUNS ARE SHOWN FOR CIRCUIT IDENTIFICATION ONLY. CIRCUITS MAY BE GROUPED UP TO THREE (3) PHASE CONDUCTORS PER RACEWAY, UNLESS NOTED

HOMERUNS AND RUNS BETWEEN JUNCTION BOXES SHALL BE MINIMUM OF 3/4" CONDUIT AND SHALL INCLUDE #10 (MINIMUM) CONDUCTORS AND INSULATED GROUNDING CONDUCTOR. CIRCUIT SHALL EXTEND FROM OCPD TO A JUNCTION BOX IN THE AREA OF THE RECEPTACLES OR UTILIZATION EQUIPMENT. DROPS TO INDIVIDUAL 20-AMP WIRING DEVICES SHALL INCLUDE #12 (MINIMUM) CONDUCTORS.

VOLTAGE DROP TO LAST DEVICE ON BRANCH CIRCUIT SHALL NOT EXCEED 3 PERCENT FROM PANEL. INCREASE BRANCH CIRCUIT CONDUCTOR SIZES AS REQUIRED TO ALLOW

FOR CIRCUIT LENGTH. 8. FMC OR LFMC SHALL BE USED FOR CONNECTIONS TO VIBRATION PRODUCING EQUIPMENT,

SUCH AS MOTORS, TRANSFORMERS, AND HVAC EQUIPMENT. LFMC SHALL BE USED IN DAMP

9. PROVIDE UL LISTED FIRE STOP SYSTEMS AT ALL PENETRATIONS THROUGH RATED

10. WIRING DEVICES SHALL BE SPECIFICATION-GRADE DEVICES, LISTED AND LABELED BY A

11. ALL FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER.

12. MARK JUNCTION BOX COVERS USING PERMANENT MARKER INDICATING THE PANEL AND

CIRCUIT NUMBERS SERVING THE JUNCTION BOX.

**KEYED NOTES:** 

(APPLIES TO THIS SHEET)

1. PROVIDE NEW ELECTRICAL EQUIPMENT, AS INDICATED. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E103 FOR ADDITIONAL INFORMATION.

2. REMOVE AND RELOCATE EXISTING CPS METER. SALVAGE ASSOCIATED FEEDERS FOR RECONNECTION. REFER TO DETAIL 2 ON THIS SHEET AND ELECTRICAL ONE-LINE DIAGRAM ON SHEET E103 FOR ADDITIONAL INFORMATION.

3. PROVIDE GALVANIZED ELECTRICAL RACK FOR MOUNTING OF ELECTRICAL EQUIPMENT. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E103 FOR ADDITIONAL INFORMATION. NEW LOCATION OF SALVAGED CPS METER.

5. EXTEND PAD PER CPS STANDARD TO ALLOW FOR THE INSTALLATION OF NEW TAP BOX. 6. RECONNECT SALVAGED FEEDERS, AS INDICATED. EXTEND FEEDERS TO CONNECT TO DISCONNECT, AS INDICATED.

7. PROVIDE CONDUIT, AS INDICATED. FIELD COORDINATE ROUTING WITH EXISTING CONDITIONS. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E103 FOR ADDITIONAL INFORMATION. 8. PROVIDE NEW FEEDERS TO EXISTING DISCONNECT TO FEED NEW 'MSB'. REFER TO ELECTRICAL ONE-LINE DIAGRAM ON SHEET E103 FOR ADDITIONAL INFORMATION.

9. PROVIDE FUSED DISCONNECT AND ASSOCIATED LINE-SIDE FEEDER FOR CONNECTION TO

TEMPORARY CHILLER. COORDINATE FUSE SIZE WITH TEMPORARY CHILLER PROVIDER PRIOR TO INSTALLATION. 10. REMOVE EXISTING AHU CONTROLLER. SALVAGE ASSOCIATED CIRCUITRY AND CONTROL

11. NEW LOCATION OF AHU CONTROLLER. RECONNECT SALVAGE CIRCUITRY AND CONTROL 

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ENLARGED ELECTRICAL FLOOR PLANS - PHASE 1

EXISTING CPS

TRANSFORMER

GENERAL

STORAGE

UTILITY YARD

PULLBOX

TELEPHONONTROLLER

AHU CONTROLLER

**HVAC CONTROLS** 

ENLARGED ELECTRICAL PLAN - MECH RM - STEP 1 - PHASE 1

SEC 1

ROOM

WATER VALVES & BACKFLOW PREV



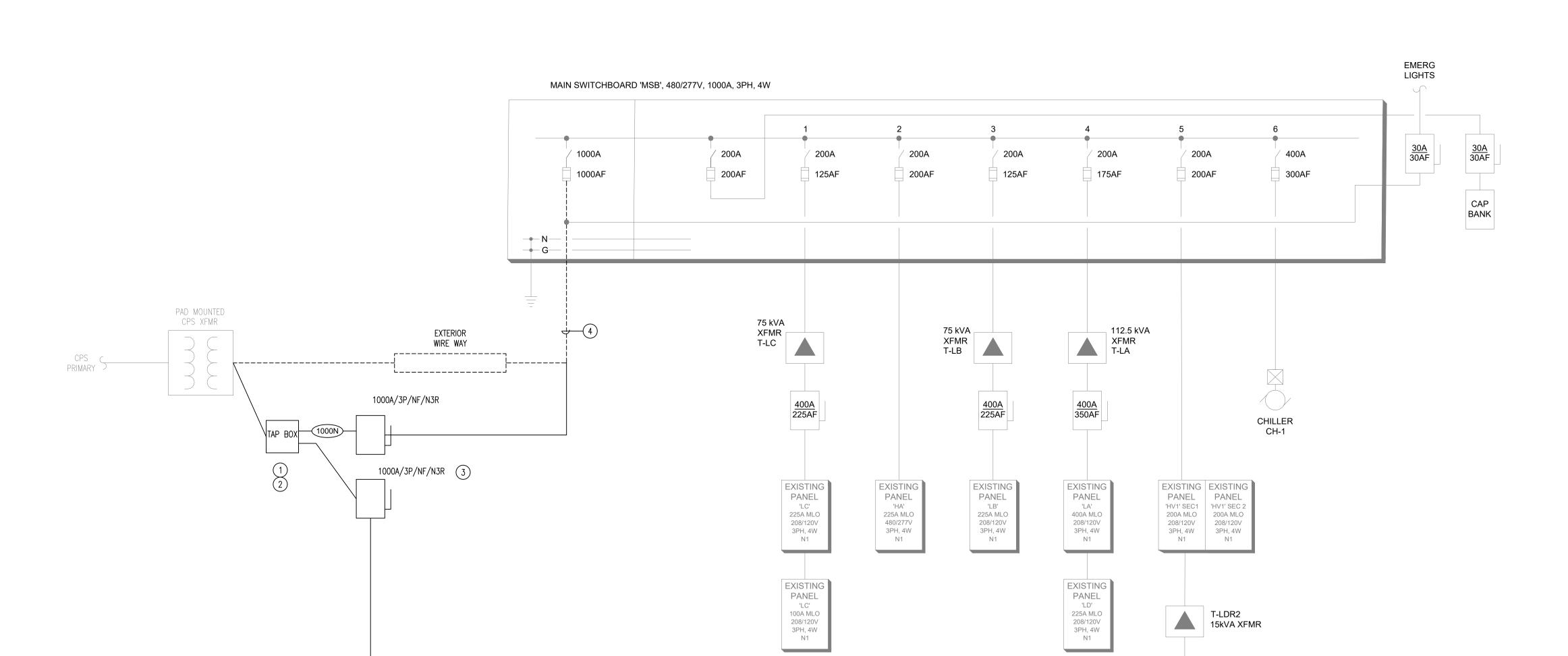


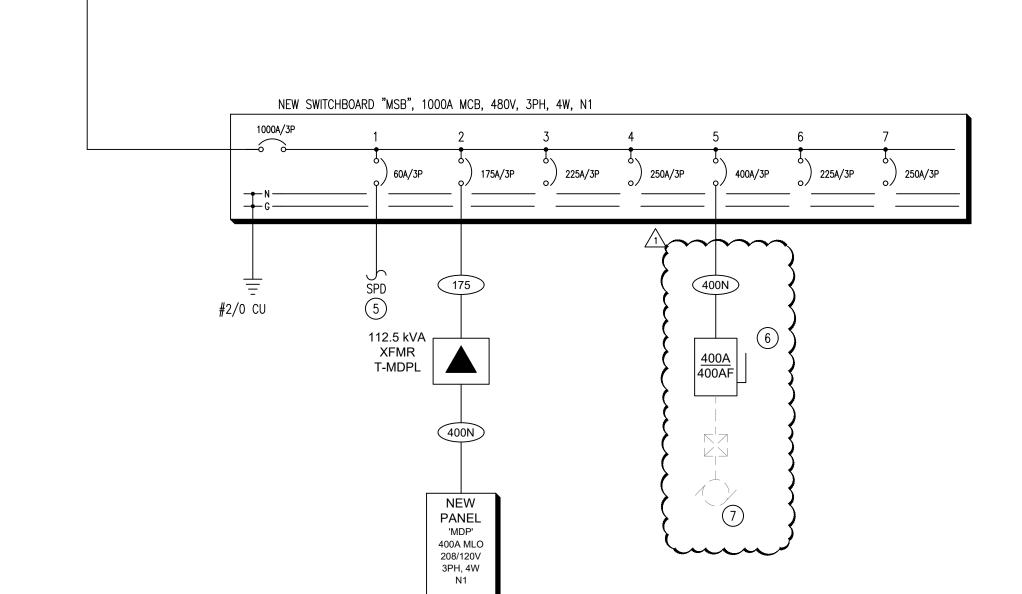


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Project No. 23002 Revisions 11-27-2023 Addendum #03

SHEET TITLE ELECTRICAL ONE - LINE DIAGRAM PHASE 1





			FEEDER SCHEDULE		
3 PHASE, 4 WIRE					
TAG	CONDUIT		PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCT
1000N	(3)3"	EACH WITH	(3)#400 KCMIL	(1)#400 KCMIL	(1)# 2/0 GND.
400N	(1)4"	EACH WITH	(3)#600 KCMIL	(1)#600 KCMIL	(1)# 3 GND.
3 PHASE, 3 WIRE			1		
TAG	CONDUIT		PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCT
175	(1)1-1/2"	EACH WITH	(3)2/0 AWG	NA	(1)#3 GND.

1. CONDUIT SIZES ARE FOR CONDUIT INDICATED WITH THHN, THWN INSULATED COPPER CONDUCTORS WITH MAXIMUM 40% FILL. CONTRACTOR SHALL ADJUST CONDUIT SIZE AS REQUIRED PER NEC APPENDIX C, CONDUIT FILL TABLES FOR ALL OTHER CONDUIT AND INSULATION TYPES. 2. REFER TO SPECIFICATIONS FOR ADDITIONAL CONDUIT APPLICATION AND INSTALLATION REQUIREMENTS.

3. PROVIDE LUGS AS REQUIRED FOR FEEDERS INDICATED.

KEYED NOTES:

(APPLIES TO THIS SHEET)

1. PROVIDE NEW TAP BOX, AS INDICATED.

2. SERVICE TRANSFORMER'S PAD TO BE EXTENDED. PAD TO FOLLOW CPS

3. PROVIDE NEW DISCONNECT PRIOR TO POWER SHUT DOWN FOR FEEDER

RECONNECTION TO NEW SWITCHBOARD. 4. REMOVE AND SALVAGED SERVICE FEEDERS FOR RECONNECTION. COORDINATE ALL OUTAGES WITH OWNER'S REPRESENTATIVE PRIOR TO WORK ON EQUIPMENT.

5. PROVIDE EXTERNAL SPD EQUAL TO THOR #ISRC-250-IZ-3Y4-P201-XFL 6. PROVIDE FUSED DISCONNECT AND ASSOCIATED LINE—SIDE FEEDER FOR CONNECTION TO TEMPORARY CHILLER. COORDINATE FUSE SIZE WITH TEMPORARY

CHILLER PRIOR TO INSTALLATION. FEEDER AND ASSOCIATED CONNECTION TO TEMPORARY CHILLER TO BE PROVIDED BY TEMPORARY CHILLER PROVIDER.

ELECTRICAL ONE-LINE DIAGRAM - PHASE 1

EXISTING
PANEL
'LDR2'
100A MLO
208/120V
3PH, 4W
N1

SCALE: NOT TO SCALE

NOTE TO CONTRACTOR:

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE AND SCHEDULE ELECTRICAL SERVICE OUTAGES TO EXISTING FACILITIES WITH OWNER IN ADVANCE OF OUTAGE.

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL COORDINATE AND SCHEDULE ELECTRICAL SERVICE OUTAGES TO EXISTING FACILITIES WITH OWNER IN ADVANCE OF OUTAGE.

WATER VALVES & BACKFLOW PREV

MOTOR STARTERS

 $\triangle$ 

AHU —

CONTROLLER

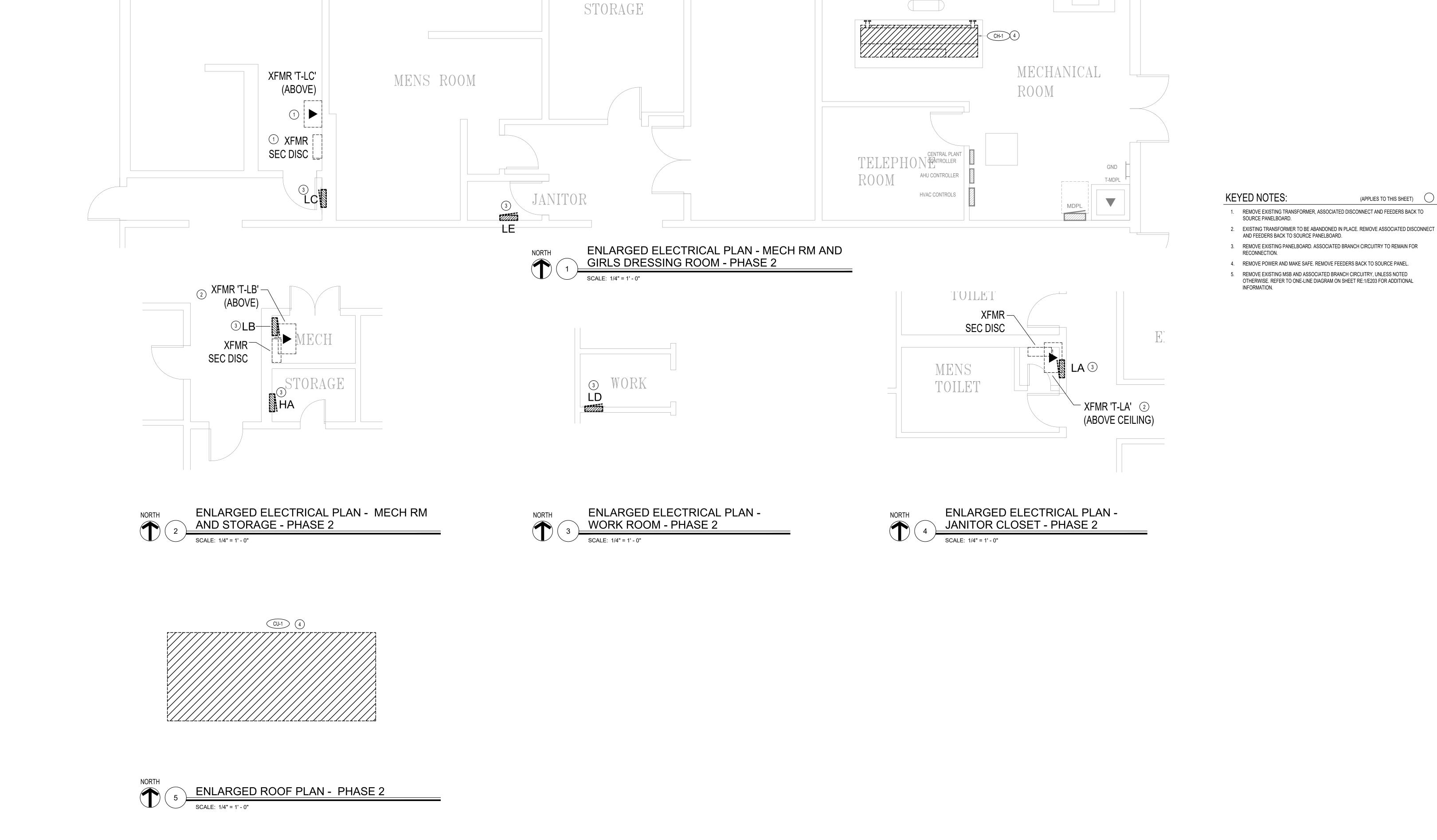
(APPLIES TO THIS SHEET)

Date Project No. 23002

Revisions 11-27-2023 Addendum #03

ENLARGED ELECTRICAL FLOOR PLANS - PHASE 2

E202



EXISTING CPS TRANSFORMER

GENERAL

STORAGE

UTILITY YARD

PULLBOX

'MSB' 5

CHP-1 4 CHP-2 4

CHILLER - SEE MECH

SHOWERS

DRY RM

GIRLS DRESSING

ROOM & SHOWERS

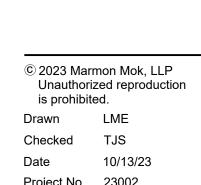
(APPLIES TO THIS SHEET)

PROVIDE NEW PANELBOARD, AS INDICATED. RECONNECT BRANCH CIRCUITRY SALVAGED DURING DEMOLITION. REFER TO PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.

2. PROVIDE POWER CONNECTION TO HVAC EQUIPMENT, AS INDICATED. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.

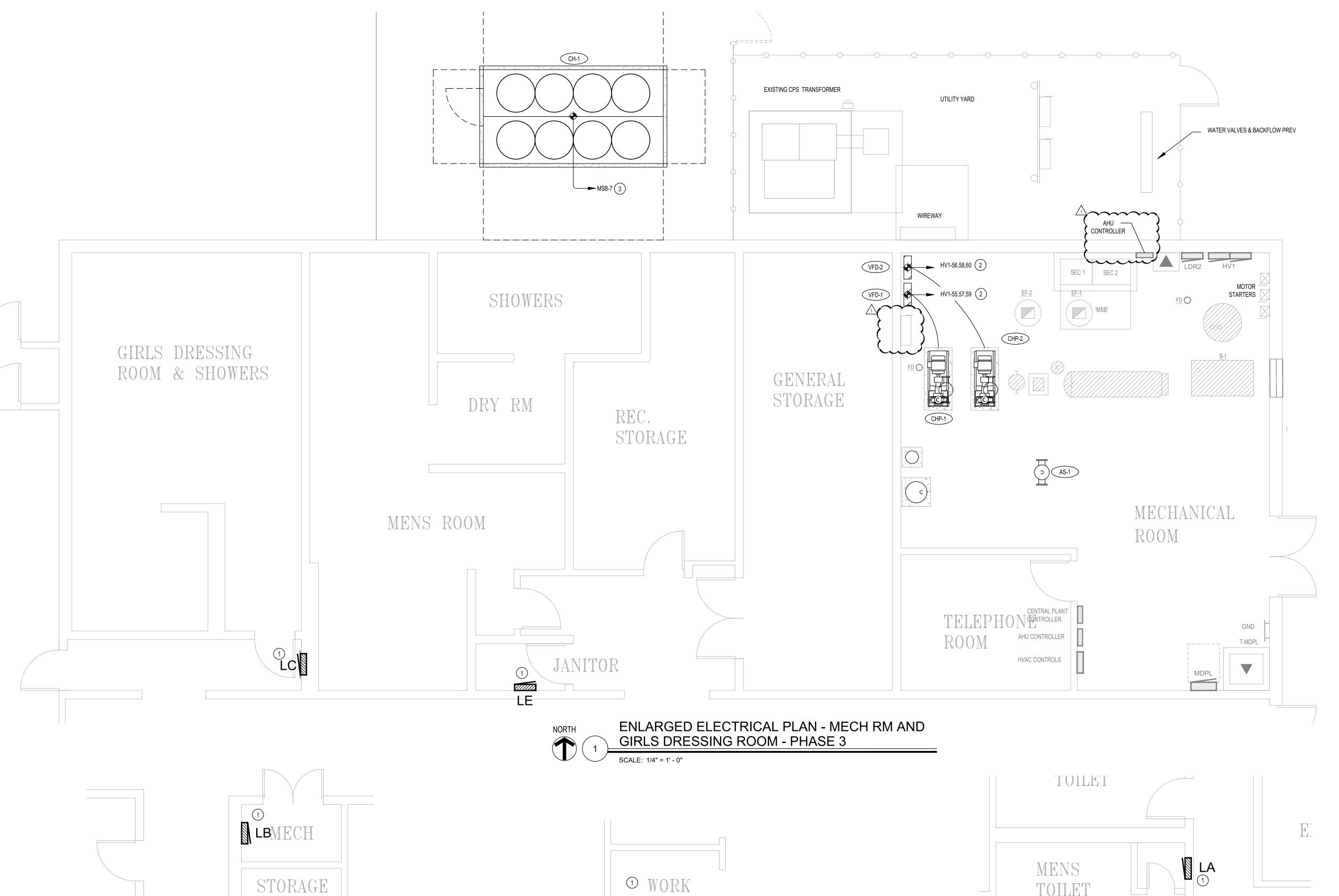
3. PROVIDE POWER CONNECTION TO CHILLER WITH INTEGRAL DISCONNECT.

**KEYED NOTES:** 



Project No. 23002 Revisions 11-27-2023 Addendum #03

SHEET TITLE
ENLARGED
ELECTRICAL FLOOR
PLANS - PHASE 3



ENLARGED ELECTRICAL PLAN - MECH RM

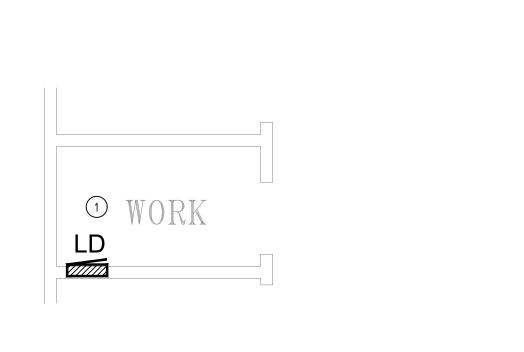
AND STORAGE - PHASE 3

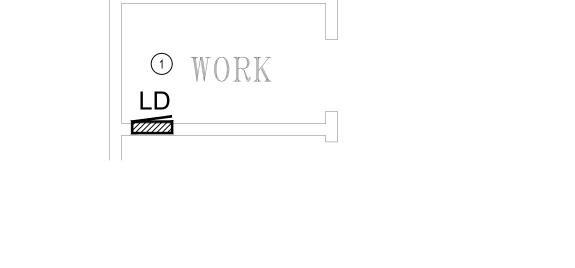


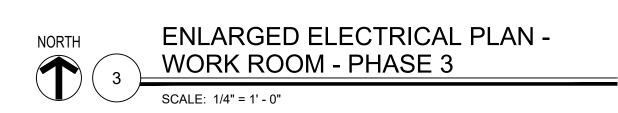


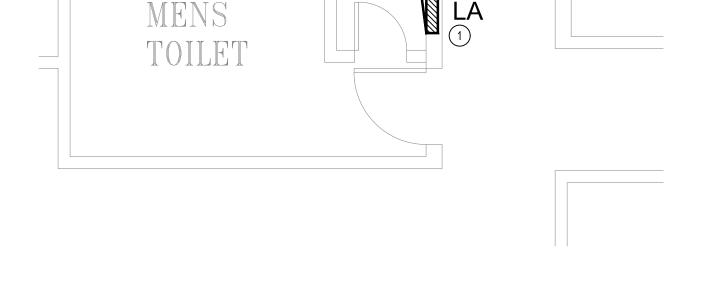




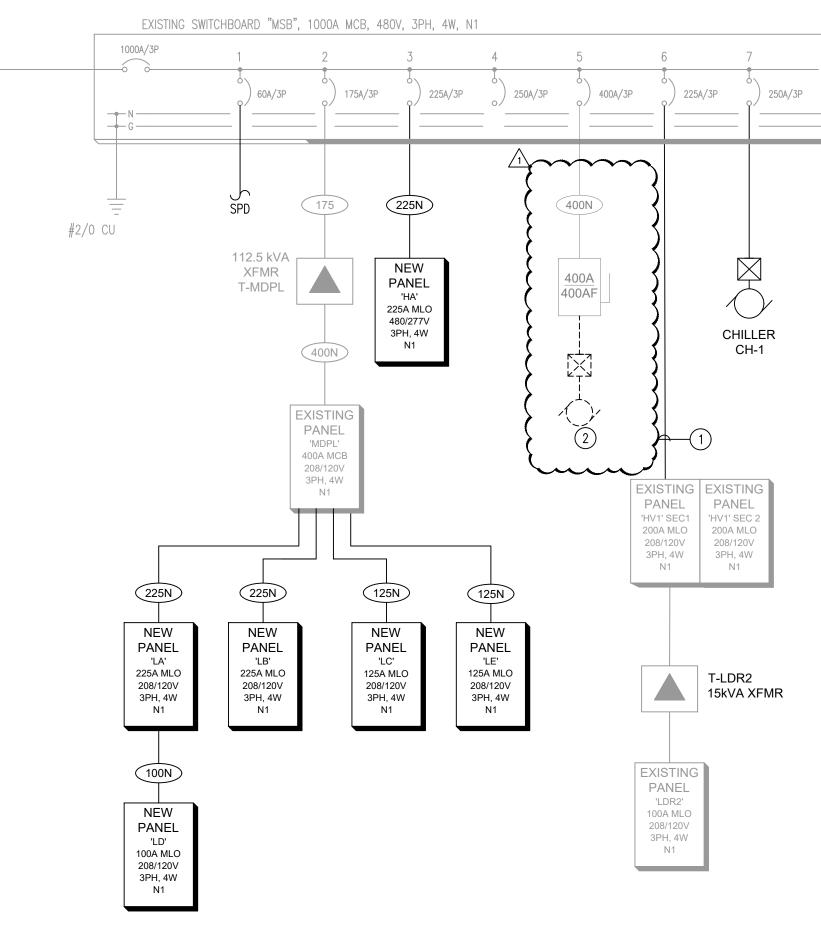








ENLARGED ELECTRICAL PLAN -JANITOR CLOSET - PHASE 3



ELECTRICAL ONE-LINE DIAGRAM - PHASE 3 SCALE: NOT TO SCALE

			FEEDER SCHEDULE		
3 PHASE, 4 WIRE					
TAG	CONDUIT		PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS
1000N	(3)3"	EACH WITH	(3)#400 KCMIL	(1)#400 KCMIL	(1)# 2/0 GND.
400N	(1)4"	EACH WITH	(3)#600 KCMIL	(1)#600 KCMIL	(1)# 3 GND.
225N	(1)3"	EACH WITH	(3)#4/0 AWG	(1)#4/0 AWG	(1)# 4 GND.
125N	(1)2"	EACH WITH	(3)#1 AWG	(1)#1 AWG	(1)# 6 GND.
100N	(1)2"	EACH WITH	(3)#3 AWG	(1)#3 AWG	(1)# 8 GND.
3 PHASE, 3 WIRE		<u> </u>			
TAG	CONDUIT		PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS
175	(1)1-1/2"	EACH WITH	(3)2/0 AWG	NA	(1)#3 GND.

1. CONDUIT SIZES ARE FOR CONDUIT INDICATED WITH THHN, THWN INSULATED COPPER CONDUCTORS WITH MAXIMUM 40% FILL. CONTRACTOR SHALL ADJUST CONDUIT SIZE AS REQUIRED PER NEC APPENDIX C, CONDUIT FILL TABLES FOR ALL OTHER CONDUIT AND INSULATION TYPES.

2. REFER TO SPECIFICATIONS FOR ADDITIONAL CONDUIT APPLICATION AND INSTALLATION REQUIREMENTS.

3. PROVIDE LUGS AS REQUIRED FOR FEEDERS INDICATED.

KEYED NOTES:

(APPLIES TO THIS SHEET) 1. RECONNECT FEEDERS TO NEW SWITCHBOARD INSTALLED IN PHASE 1. EXTEND

WIRING AS REQUIRED FOR A COMPLETE FUNCTIONAL SYSTEM 2. FEEDER AND ASSOCIATED CONNECTION TO TEMPORARY CHILLER TO BE REMOVED

BY TEMPORARY CHILLER.

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Project No. 23002 Revisions

11-27-2023 Addendum #03

SHEET TITLE
ELECTRICAL
ONE - LINE DIAGRAM
PHASE 3

