



Progressive Design Collaborative, Ltd

3101 Poplarwood Court, Suite 320

Raleigh, North Carolina 27604

919-790-9989

ADDENDUM 01 – ELECTRICAL

DATE: June 27, 2023

PROJECT: ENCSD Alford Hall HVAC Upgrades
PDC Project No. 22034
SCO # 22-24313-01

This Addendum, applicable to the work designed below, shall be understood to be and is a change to the bid documents and shall be part of and included in the contract for the above referenced project. All General, Supplementary and Special Conditions, etc., as originally specified or as modified below shall apply to these items.

Changes to Drawings:

E1.00 – Added keynote to electrical 107 to remove lighting and ceiling mounted devices.

E2.00 – Added keynote 10 to list and mechanical room for new DDC Circuit, and Added keynote 11 to reinstall lighting and ceiling mounted devices to new gyp board ceiling.

END OF ADDENDUM 02 – ELECTRICAL

Attachments: See list above



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06/27/2023

TBUTKOVICH@PDCENGINEERS.COM

DRAWN BY: RB CHECKED BY: JPT

PDC 22034 06/09/2023

REVISIONS

| NUMBER | DATE | DESCRIPTION |
|--------|----------|-------------|
| 1 | 06/27/23 | Addendum 01 |
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| | | |
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BID/PERMIT

ENCSD Alford Hall HVAC

NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION
1311 US Hwy 301 South,
Wilson, NC 27893
SCO# 22-24313-01A

DEMOLITION
PLAN

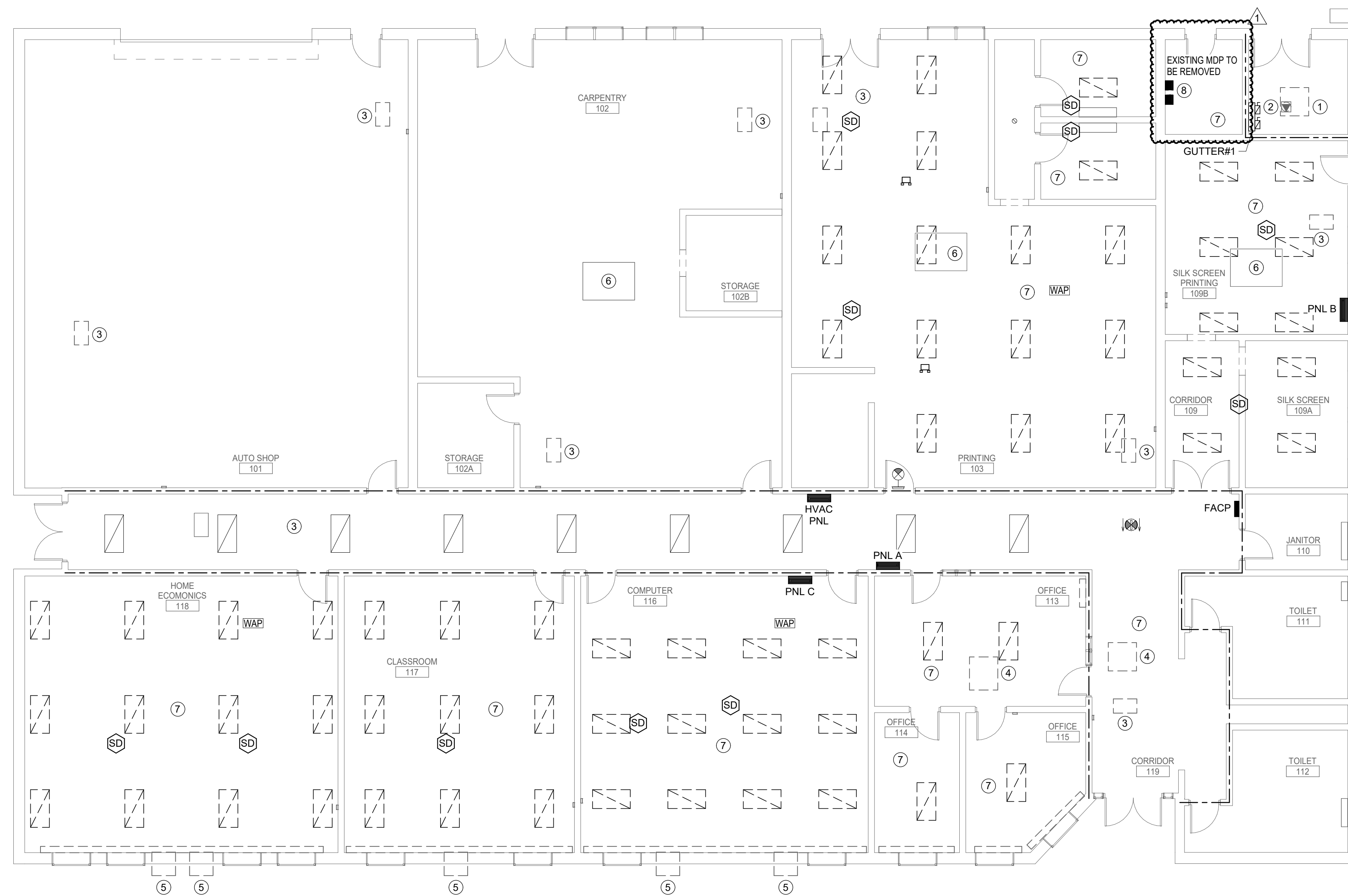
E1.00

GENERAL NOTES:

- A. EXISTING PANELS SHOWN FOR REFERENCE, UNLESS OTHERWISE NOTED.
- B. REMOVE ALL CONDUIT, WIRING, AND ACCESSORIES ASSOCIATED WITH MECHANICAL EQUIPMENT BACK TO SOURCE.

KEY NOTES:

- 1. REMOVE EXISTING WIRING AND DISCONNECT FOR BOILER BACK TO EXISTING GUTTER #1. PRESERVE CONDUIT TAP HOLE FOR NEW WORK.
- 2. REMOVE EXISTING WIRING AND DISCONNECT FOR HOT WATER PUMP BACK TO EXISTING GUTTER #1 IN BOILER ROOM. RETAIN CONDUIT TAP HOLE FOR NEW WORK.
- 3. DISCONNECT FEEDER FOR EXISTING HOT WATER UNIT HEATER AND LEAVE IN PLACE FOR NEW WORK. DEMOLISH EXISTING HOT WATER UNIT HEATER AND TURN OVER TO OWNER.
- 4. REMOVE EXISTING DISCONNECT, WIRING, AND CONDUIT BACK TO PANEL FOR EXISTING SPLIT SYSTEM HVAC UNITS.
- 5. UNPLUG EXISTING WALL AC UNITS AND DEMOLISH EXISTING RECEPTACLE. WIRING AND CONDUIT BACK TO EXISTING PANEL.
- 6. EXISTING ROOF TOP UNIT TO REMAIN IN PLACE.
- 7. REMOVE EXISTING CEILING GRID, LIGHTS, AND CEILING MOUNTED DEVICES AND STORE FOR ADDITION OF NEW DUCTWORK. KEEP ALL WIRING IN PLACE FOR RECONNECTION. PRESERVE EXISTING STRUCTURAL SUPPORTS, FIRE RATED BOXES AND OTHER ITEMS NOT DISTURBED BY DEMOLITION. PROVIDE SUPPORT FOR ANY CABLING NOT REMOVED VIA DEMOLITION OF EXISTING DEVICES. REMOVAL OF CEILING GRID AND REINSTALLATION IS PER BASE BID. ALTERNATE BID#1 IS FOR REMOVAL OF GRID AND REPLACEMENT WITH NEW GRID AND GRID TILE. REFERENCE SHEET G1.01
- 8. DISCONNECT ALL EXISTING FEEDERS. SERVICE ENTRANCE FEEDER, GROUNDING AND BONDING CONDUCTORS FROM EXISTING PANEL 'MDP' REMOVE EXISTING MDP AND TURN OVER TO OWNER FOR DISPOSAL. RETAIN ALL EXISTING WIRING IN SPACE AND SECURE/PROTECT FOR INSTALLATION OF NEW MDP UNDER NEW CONSTRUCTION.



1 ELECTRICAL DEMOLITION PLAN



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BID/PERMIT

ENCSD Alford Hall HVAC

NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION
1311 US Hwy 301 South,
Wilson, NC 27893
SC0# 22-24313-01A

NEW WORK
PLAN

E2.00

GENERAL NOTES:

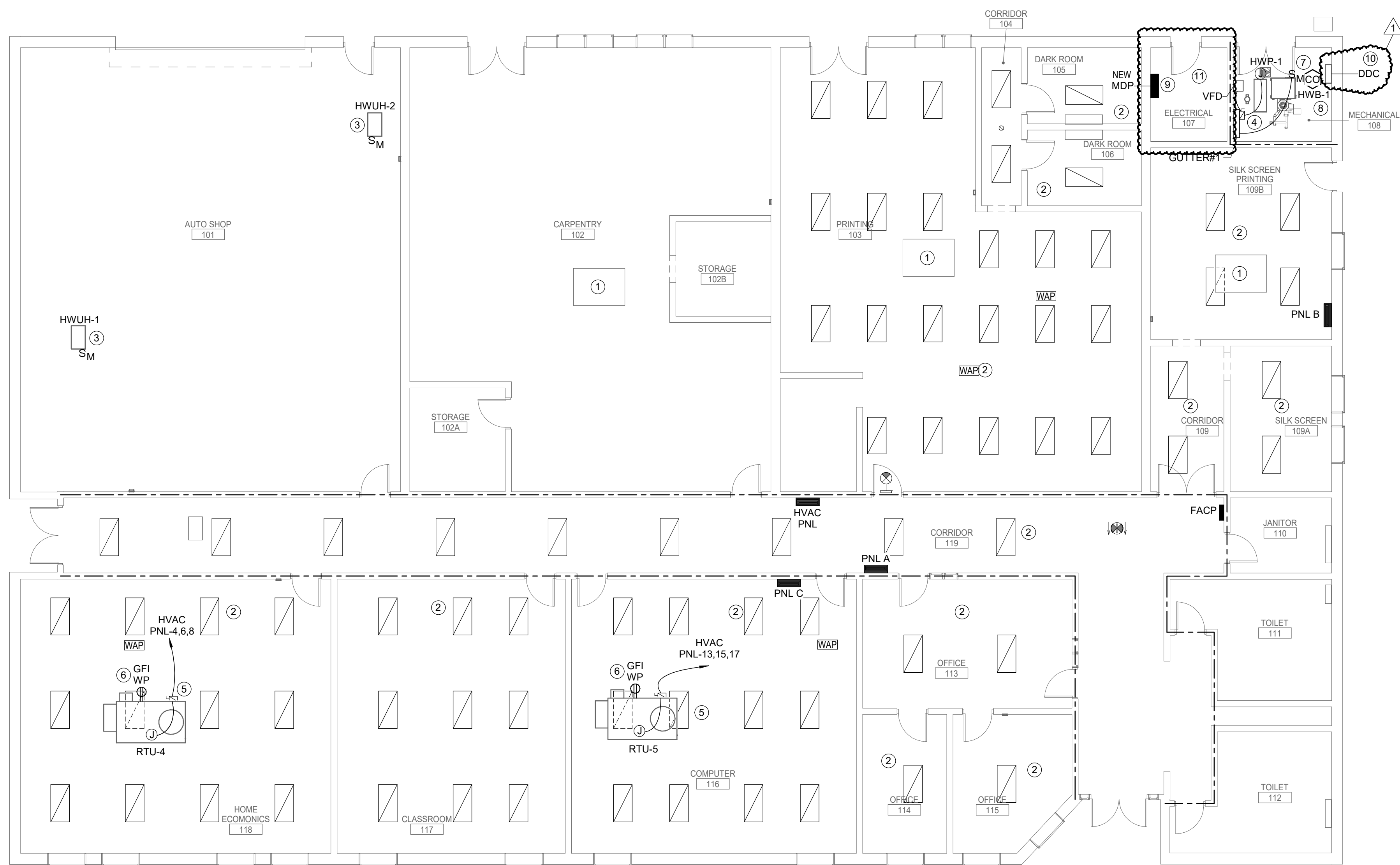
- A. EXISTING PANELS SHOWN FOR REFERENCE, UNLESS OTHERWISE NOTED.
- B. LIGHTING REPLACEMENT AND FCAP DEFICIENCY LIFE SAFETY/EGRESS ISSUES WILL BE ADDRESSED DURING CONCURRENT CAMPUS WIDE LIGHTING REPLACEMENT PROJECT - SCO ID# 22-25348-01A.

KEY NOTES:

- EXISTING ROOF TOP UNIT TO REMAIN IN PLACE.
- PROVIDE NEW ACT TYPE CEILING AND GRID PER ALTERNATE BID #1, REINSTALL AND RECONNECT ALL LIGHTING AND CEILING MOUNTED DEVICES REMOVED IN DEMOLITION PHASE TO EXISTING WIRING LEFT IN PLACE. ENSURE ALL EXISTING ITEMS HAVE BEEN STORED AND ANY EXISTING CEILING CABLES, STRUCTURE SUPPORTS, AND FIRE RATED BOXES HAVE BEEN REINSTALLED WITH DEVICES AS REQUIRED.
- PROVIDE 120V, MOTOR RATED TOGGLE SWITCH AND RECONNECT TO EXISTING WIRING LEFT IN PLACE FROM REMOVAL OF EXISTING UNIT HEATERS.
- PROVIDE 30A, 240V, 3P FUSED DISCONNECT FOR NEW HOT WATER PUMP. PROVIDE 3# 12 & 1#12G IN 3/4" FEEDER FROM NEW HOT WATER PUMP TO NEW DISCONNECT AND EXISTING TAPS IN EXISTING GUTTER #1 UTILIZING EXISTING CONDUIT SPACE LEFT OVER FROM DEMOLITION. FUSE DISCONNECT PER MANUFACTURER SPECIFICATIONS.
- PROVIDE 60A, 240V, 3P FUSED DISCONNECT FOR NEW ROOF TOP UNIT. EXTEND NEW CONDUIT AND FEEDER FROM NEW 40A, 3P BREAKER IN EXISTING PANEL AND PROVIDE NEW CONDUCTORS PER PANEL SCHEDULE. FUSE DISCONNECT PER MANUFACTURER SPECIFICATIONS. VERIFY CIRCUITS IN PANELS PRIOR TO ROUGH-IN AND COORDINATE ANY REQUIRED CHANGES WITH ENGINEER. PER RECORD DRAWINGS FAULT CURRENT RATING OF EXISTING EQUIPMENT SHALL NOT EXCEED 10,000KAIC. PROVIDE BREAKER AND DISCONNECT WITH MAX 10,000KAIC RATING AND LABEL BREAKER AND DISCONNECT PER NEC ART. 440.10. LABEL PANEL HVAC WITH AVAILABLE FAULT CURRENT AT 9841A
- WIRE FACTORY PROVIDED RECEPTACLE TO EXISTING LOCAL EXTERIOR RECEPTACLE CIRCUIT.
- PROVIDE 120V, MOTOR RATED TOGGLE SWITCH AT BOILER. PROVIDE 2#12 & 1#12G IN 3/4" FEEDER FROM NEW BOILER TO EXISTING TAPS IN EXISTING GUTTER #1 UTILIZING EXISTING CONDUIT SPACE LEFT OVER FROM DEMOLITION.
- PROVIDE NEW CEILING MOUNTED CARBON MONOXIDE DETECTOR IN BOILER RM. PROVIDE UPGRADE MODULE AND WIRING PER FIRE ALARM RISER AND CONNECT TO EXISTING BUILDING FIRE ALARM CONTROL PANEL PER 2018 NC EXISTING BUILDING CODE SECTION 403.11.
- PROVIDE NEW 800A MCB, 208/120V, 3PHASE, 22,000KAIC RATED, S.E. RATED MAIN DISTRIBUTION PANEL AT LOCATION OF EXISTING MDP REMOVED UNDER DEMOLITION. RECONNECT EXISTING SERVICE ENTRANCE FEEDERS, PANEL FEEDERS, GROUND AND BONDING JUMPERS TO NEW PANEL. PROVIDE NEW BREAKERS WITH PANEL MATCHING EXISTING LAYOUT OF BREAKERS IN PREVIOUS MDP PANEL THAT WAS DEMOLISHED. FAULT CURRENT CALCULATIONS PERFORMED ON 5/11/23 BY THIS OFFICE STATE THAT 22,000KAIC RATING IS SUFFICIENT. PER NEC ART. 440.10 LABEL NEW MDP WITH LABEL SHOWING AVAILABLE FAULT CURRENT AT MDP AT 15,331.5A
- PROVIDE 120V POWER CIRCUIT FOR DDC PANEL. PROVIDE ETHERNET DROP FOR SAME.
- REINSTALL AND RECONNECT ALL LIGHTING AND CEILING MOUNTED DEVICES REMOVED IN DEMOLITION PHASE TO EXISTING WIRING LEFT IN PLACE. ENSURE ALL EXISTING ITEMS HAVE BEEN STORED AND ANY EXISTING CEILING CABLES, STRUCTURE SUPPORTS, AND FIRE RATED BOXES HAVE BEEN REINSTALLED WITH DEVICES AS REQUIRED.

| CKT | LOAD TYPE | LOAD DESCRIPTION | WIRE SIZE | CONDUIT | POLES | TRIP AMPS | A | B | C | TRIP AMPS | POLES | CONDUIT | WIRE SIZE | LOAD DESCRIPTION | LOAD TYPE | CKT |
|-------------|-----------|---------------------------------|-----------------|-----------------|-------|-----------|-----------|-----------|-----------|-----------|-------|---------|-----------|-------------------------------------|-----------|-----|
| 1 | | | | | | | 15 | 10 | | | | | | | | 2 |
| 3 | E | EXISTING PANEL B NEW BREAKER | -- | EXISTING FEEDER | 3 | 150 A | | 15 | 10 | | | | | EXISTING GUTTER #2 NEW BREAKER | E | 4 |
| 5 | | | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | 16.64 | 15 | | | | | | | | 8 |
| 9 | E | EXISTING PANEL HVAC NEW BREAKER | EXISTING FEEDER | EXISTING FEEDER | 3 | 225 A | | 16.64 | 15 | | | | | EXISTING PANEL A NEW BREAKER | E | 10 |
| 11 | | | | | | | | | 15.64 | 15 | | | | | | 12 |
| 13 | | | | | | | 0 | 0 | | | | | | EXISTING SPARE NEW BREAKER | E | 14 |
| 15 | E | EXISTING SPARE NEW BREAKER | -- | -- | 3 | 200 A | | | 0 | 0 | | | | | | 16 |
| 17 | | | | | | | | | | | | | | | | 18 |
| 19 | | | | | | | -- | 1 | | | | | | EM BACKUP FA CONTROLLER NEW BREAKER | | 20 |
| 21 | | SPACE | -- | -- | 3 | -- | | | 1 | | | | | | | 22 |
| 23 | | | | | | | | | | | | | | | | 24 |
| 25 | | | | | | | | | | | | | | | | 26 |
| 27 | | SPACE | -- | -- | 3 | -- | | | | | | | | | | 28 |
| 29 | | | | | | | | | | | | | | | | 30 |
| TOTAL LOAD: | | | | | | | 57.64 kVA | 57.64 kVA | 55.64 kVA | | | | | | | |

| Load Classification | Connected Load (VA) | Demand Factor | Estimated Demand | Panel Totals |
|---------------------|---------------------|---------------|------------------|---------------------------------------|
| Receptacle | 0 kVA | 0.00% | 0 kVA | Total Connected Load: 170.92 kVA |
| Motor | 0 kVA | 0.00% | 0 kVA | |
| HVAC | 19 kVA | 100.00% | 19 kVA | Total Connected Amps: 474.43 A |
| Lighting | 0 kVA | 0.00% | 0 kVA | Total Estimated Demand: 170.92 kVA |
| Equipment | 0 kVA | 0.00% | 0 kVA | Total Estimated Demand Amps: 474.43 A |
| Kitchen Equipment | 0 kVA | 0.00% | 0 kVA | |



1 ELECTRICAL NEW WORK PLAN