

DIVISION 00

SECTION 00 91 15: SUPPLEMENTAL SHEETS

**Goldsboro High School – HVAC Renovations & Window Replacement
Goldsboro, North Carolina**

00 91 13.01: GENERAL

1. These supplemental sheets are a part of the Specifications and are intended to give additional information on items which may or may not be noted in the specifications or on the drawings. It is suggested that the Contractor carefully read these sheets and note changes, additions, etc., in the corresponding section of these specifications.
2. The specifications are typical and only those parts applicable to this project will be considered.
3. All items in prior Addenda are still pertinent unless said item has been modified or changed in this Addendum.

00 91 15.02: MODIFICATION

RESERVED FOR FUTURE MODIFICATIONS

00 91 15.03: ADDITIONAL SPECIFICATION

Add the following:

- A. SECTION 00 91 15 SUPPLIMENTAL SHEETS – Addendum #2 dates June 9, 2023
- B. SECTION 23 05 05 – CHAIN LINK FENCE

00 91 15.04: DRAWINGS

Add the following:

- A. SHEET ME100 FIRST FLOOR PLAN – DEMOLITION-
 1. Remove metal troughs associated with window AC unit piping and conduit. Block fill and paint to newly exposed wall to match existing.
 2. Provide refrigerant cylinders as required to reclaim refrigerant and turn over to owner.

B. SHEET M200 FIRST FLOOR PLAN – AREA A –

1. Provide fire damper type A at outside air duct floor penetration.
2. Fan coil units FC-3-1, FC-3-2 and FC-3-6 are horizontal recessed. Provide supply duct and diffuser (similar to FC-3-4).
3. Provide space sensors for all fan coil units and unit ventilators.
4. Spill condensate drain to janitors sink.

C. SHEET M201 FIRST FLOOR PLAN – AREA B –

1. Registers in Existing Library shall be 48X6 in lieu of 10X8.
2. Provide hot water coil for SSAH-1. Extend 1" HWS and R to boiler room and connect to DTS&R mains. Provide isolation valves in mechanical room for both supply and return pipe.
3. FC-1-1 through 1-12 in auditorium replace existing vertical recessed units. Remove existing units and install new. Replace existing panel as required.
4. Piping in auditorium and existing library runs in existing tunnel. Remove existing steam and chilled water piping to install new.
5. MSAH-1. Duct and grille sizes shall be 14X12. Extend unit condensate drain to spill to grade.
6. Fan coil units FC-3-6 in West Lobby is horizontal recessed. Provide supply duct and diffuser (similar to FC-3-4/sheet M200).

D. SHEET M202 FIRST FLOOR PLAN – AREA C – Delete this Sheet in its entirety and replace with SHEET M202 FIRST FLOOR PLAN – AREA C – Addendum #2 dated June 9, 2023

E. SHEET M203 FIRST FLOOR PLAN – AREA D –

1. SSAH-1G Replaces existing unit. Connect to existing ductwork as required.
2. Provide outside air to all UV-2. Refer to OA schematic for building on sheet M504.
3. Fan coil in Existing Office shall be type FC-2.

F. SHEET M204 2nd FLOOR PLAN – AREA A –

1. Delete requirement for fire damper at roof penetration. Damper required only at floor penetration.

G. SHEET M205 2nd FLOOR PLAN – AREA B –

1. Extend refrigerant piping to roof mounted heat pumps as shown. Pipe to be sized per manufacturer's recommendation. New heat pumps to be mounted on existing roof curbs. Provide adaptors as required.
2. Extend 3/4" HWS and R to boiler room and connect to DTS&R mains. Provide isolation valves in mechanical room for both supply and return pipe.
3. BC-3 through BC-5. Mechanical room is used as return and relief plenum to match existing condition. Provide mixing box for unit economizer. Extend 18X18 duct for OA from unit to exiting 40X40 roof hood.
4. Provide EWH-3 and EWH-4 in existing auditorium toilets.

H. SHEET M206 2nd FLOOR PLAN – AREA C & D –

1. Fan coil units in prep rooms shall be type FC-3.
2. Route condensate piping to existing drain in Storage 21.
3. Provide roof hood (24X24 Neck Size) for outside air. Hood to be located at rectangle above Existing Storage 17. Continue duct down to lower level for Unit vents on that floor. Provide fire damper at floor penetration.

I. SHEET M207 FIRST FLOOR PLAN – BOILER ROOM –

1. Provide UV-3 in Existing Building room. Refer to electrical plans for location. Extend 1 1/4" DTS&R from unit to DTS&R mains in boiler room. Spill 1" condensate drain to adjoining grade.

J. SHEET M501 MECHANICAL DETAILS –

1. Detail 6. Provide heat tape to maintain pipe at 40F at 0F ambient. Wattage shall be as recommended by the heat tape supplier for piping being protected.

K. SHEET M502 MECHANICAL DETAILS –

1. Detail 1. Delete Reference to CHW system. Change references for HW system to Dual Temp System. PRV Setpoint shall be 20 PSI. Relief valve shall be set at 50 PSI. Expansion tank shall be Amtrol AX-280V, floor mounted. Acceptance volume 84 gallon.
2. Detail 7. Motorized damper shall be closed through BAS during unoccupied time.

L. SHEET M503 MECHANICAL DETAILS –

1. Detail 2. Delete reference to Carnes L-33 Louver. Refer to louver specification 23 37 26 for louver requirements.

M. SHEET M504 MECHANICAL DETAILS – Delete this Sheet in its entirety and replace with SHEET M504 MECHANICAL DETAILS – Addendum #2 dated June 9, 2023

N. SHEET M600 MECHANICAL SCHEDULE –

1. Air cooled chiller schedule. R410 machines will be considered as a substitution.
2. Fan coil schedule. FC-1 units are vertical recessed in lieu of horizontal recessed.

O. SHEET M601 MECHANICAL DETAILS – Addendum #2 dated June 9, 2023

P. SHEET E305 2nd FLOOR PLAN – AREA B POWER –

1. 1/E305 – “SECOND FLOOR PLAN – AREA B – POWER” – Add the following note to the two existing toilets plan east and plan west of “EXISTING STUDENT ACTIVITIES ROOM”: IN SPACE AVAILABLE IN EXISTING PANEL HC3, PROVIDE TWO NEW 15/2 CIRCUIT BREAKERS AND CONNECT TO NEW **1500W** ELECTRIC WALL HEATER IN EACH TOILET WITH 2#12,1#12G,1/2”C.

00 91 15.05: PRIOR APPROVAL

The following products/manufacturers are approved only if items supplied and submitted meet or exceed the Construction Documents:

A. SECTION 23 21 23 Pumps

1. Patterson

B. SECTION 23 82 23 Unit Ventilators

1. Daikin

**End of Addendum #2
Issued June 9, 2023**

DIVISION 23

SECTION 23 05 05: CHAIN LINK FENCE

23 05 05.01 GENERAL

A. SCOPE

1. The provisions of Section 23 05 00 apply to all the work in this Section.
2. Furnish all labor, material, equipment as necessary for the proper installation of chain link fence. Fence shall be 7'-0" in height and shall be sized as indicated on drawing. Provide gate as indicated on drawing.

23 05 05.02 PRODUCTS

A. FENCE

1. Chain link fabric shall be aluminum coated conforming to ASTM-A491. Fabric shall be woven from not less than 9 gauge coated wire in 2" mesh. Fabric shall be knuckled at one selvage and twisted and barbed at the other selvage.
2. Line posts shall be C-Section roll formed from steel conforming to ASTM-A570, Grade 45, 1.875" X 1.625" coated with zinc aluminum alloy in accordance with ASTM-A525, or 2 3/8" O.D. standard weight galvanized pipe coated with hot dipped zinc in accordance with ASTM-A120.
3. Top and brace rails shall be formed section of 1 5/8" X 1 1/4" channel shaped rail coated with zinc-aluminum alloy in accordance with ASTM-A525 or 1.66" O.D. standard weight galvanized pipe coated with hot dipped zinc in accordance with ASTM-A120. Top rail couplings 6" minimum in length shall be spaced at maximum 21' centers. Fabric tie wire shall be spaced at 24" maximum centers.
4. All end, corner and pull posts shall be roll formed section 3.5" X 3.5" coated with hot dipped zinc or 2 7/8" O.D. galvanized standard weight pipe similarly coated.
5. Gate posts will be the same as end and corner posts provided gate leaf width does not exceed 6'0".
6. All fittings shall be pressed steel or malleable iron and shall be hot dipped galvanized conforming to ASTM-A153. Tie wires shall be minimum 9 gauge aluminum or 11 gauge galvanized steel. Line and terminal posts to be of sufficient length to allow for approximately 36" settings into concrete footing. Diameter of the footing to be 10" for line posts, and 12" for terminal posts. Maximum spacing of line posts to be 10'-0" unless noted on the drawings. Fence to follow ground line.

23 05 05.03 EXECUTION

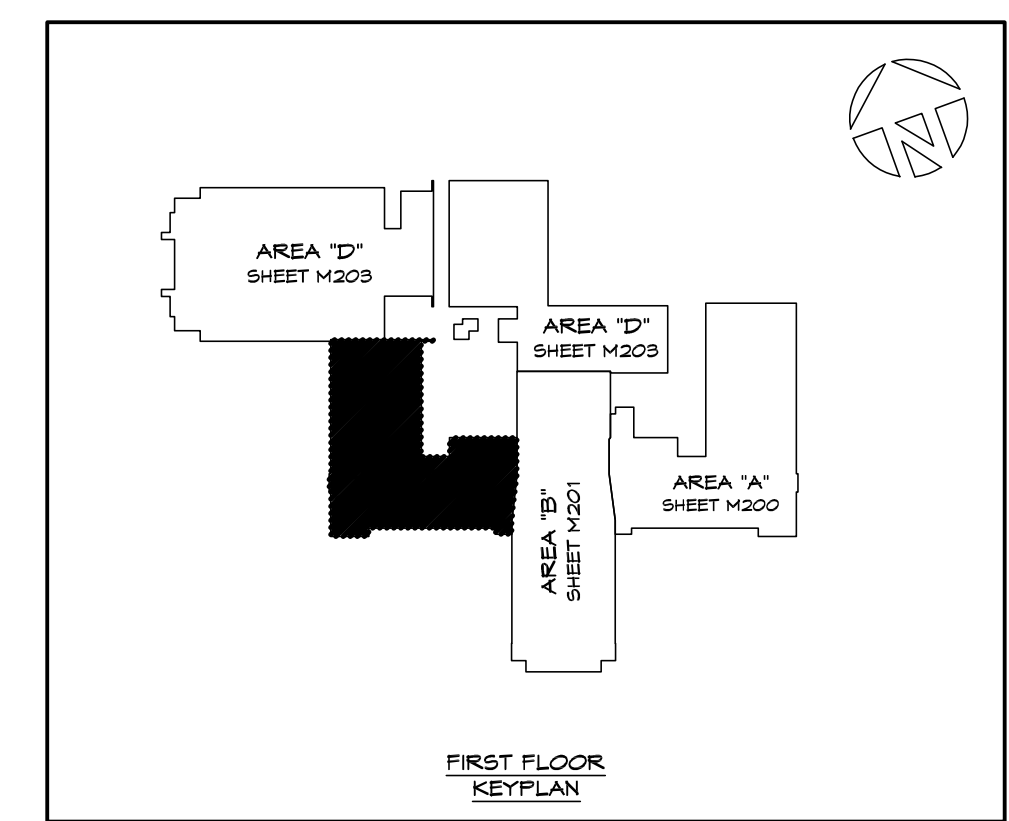
A. EXPERIENCE

1. Erector shall have a minimum of two years experience installing similar fencing.

— · — · — · — · — CONDENSATE DRAIN

— — — — — OUTSIDE AIR DUCT

————— MECHANICAL PIPING



CONTRACTOR TO VERIFY ALL DIMENSIONS.



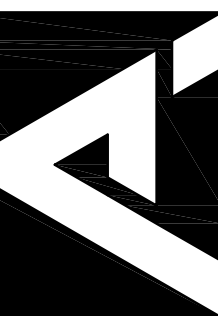
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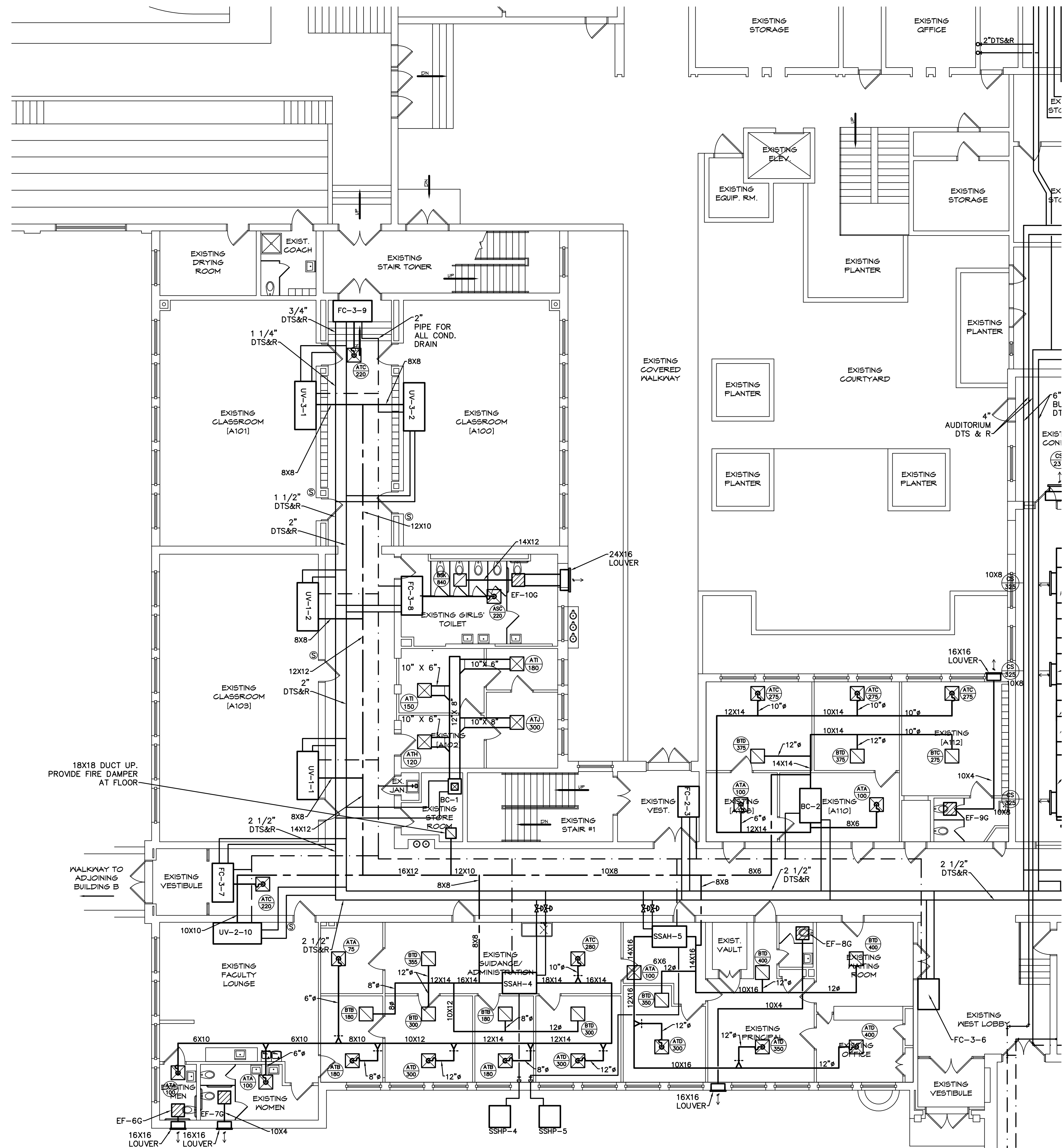


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**GOLDSBORO HIGH SCHOOL
RENOVATIONS
GOLDSBORO, NORTH CAROLINA
1st FLOOR PLAN - AREA C**

REVISION SCHEDULE		
△	DATE	REFERENCE
1	6/8/23	ADDENDUM #2

M202



1 1st FLOOR PLAN - AREA C
M202 SCALE: 1/8" = 1'-0"

2) SCALE: $1/8" = 1'-0"$

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

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- | Unit Tag | SEER
(EER) | CFM | OA | ESP | Air Handling Unit | | | | | | | DX Coil Performance | | | Heating Performance | | | | | | | | Remarks | |
|----------------|---------------|------|-----|-----|-------------------|-------|-------|------------------------|-----|-----|-----|---------------------|-------|-----------|---------------------|-----|-------|-------------------|-------|-------|------|------|----------|-------|
| | | | | | Fan Motor | | | Hot Water Heating Coil | | | MBH | Model | EAT | MBH Total | MBH Sens. | EAT | LAT | Capacity MBH@47 F | Volts | Phase | MCA | MOCP | | Model |
| | | | | | HP | Volts | Phase | GPM | EAT | EWI | | | Total | Sens. | Total | Lat | Capac | Volt | Phas | MCA | MOCP | Modl | | |
| SSAH-1/SSH-P-1 | 14 | 4000 | 800 | 1 | 3 | 230 | 3 | 4.5 | 70 | 180 | 87 | TWE120 | 80/67 | 114 | 90 | 70 | 86.73 | 105 | 230 | 3 | 42 | 50 | TWA120 | 1-5 |
| SSAH-2/SSH-P-2 | 14 | 1950 | 120 | 0.4 | 1 | 208 | 1 | 2.5 | 70 | 180 | 42 | GAM5B0C60 | 80/67 | 59 | 42.3 | 70 | 86.73 | 52.5 | 460 | 3 | 10 | 15 | 4TWA4060 | 1-5 |
| SSAH-3/SSH-P-3 | 14 | 1950 | 120 | 0.4 | 1 | 208 | 1 | 2.5 | 70 | 180 | 42 | GAM5B0C60 | 80/67 | 59 | 42.3 | 70 | 86.73 | 52.5 | 460 | 3 | 10 | 15 | 4TWA4060 | 1-5 |
| SSAH-4/SSH-P-4 | 14 | 1600 | 240 | 0.5 | 3/4 | 208 | 1 | 2 | 70 | 180 | 35 | GAM5B0C48 | 80/67 | 47.5 | 35.1 | 70 | 85.8 | 48.2 | 460 | 3 | 8 | 15 | 4TWA4048 | 1-6 |
| SSAH-5/SSH-P-5 | 14 | 1200 | 180 | 0.4 | 1/2 | 208 | 1 | 1.5 | 70 | 180 | 26 | GAM5B0B36 | 80/67 | 34 | 25.7 | 70 | 85.66 | 31.4 | 460 | 3 | 8 | 15 | 4TWA4036 | 1-6 |

- | ELECTRIC WALL HEATER SCHEDULE | | | | | | |
|-------------------------------|-----|-------|-------|-------|-------|---------|
| Unit Tag | CFM | Watts | Volts | Phase | Model | Remarks |
| EWB-1 | 175 | 1000 | 120 | 1 | 3320 | 1-4 |
| EWB-2 | 175 | 1000 | 120 | 1 | 3320 | 1-4 |
| EWB-3 | 175 | 1500 | 240 | 1 | 3320 | 1-4 |
| EWB-4 | 175 | 1500 | 240 | 1 | 3320 | 1-4 |
| ECH-1 | 250 | 5000 | 208 | 3 | 6300 | 1-4 |
| ECH-2 | 250 | 5000 | 208 | 3 | 6300 | 1-4 |
| | | | | | | |

- | Unit Tag | CFM High | CFM Low | Fan Motor | | | Cooling Performance | | | Heating Performance | | Outdoor Unit | | | | | | Model
(Indoor Unit) |
|----------|----------|---------|-----------|---------|-------|---------------------|-----------|-----------------|---------------------|--------------|--------------|-----|-------|---------|-------|-------------------------|------------------------|
| | | | FLA | Volts | Phase | EAT | MBH Total | Efficiency SEER | EAT | Capacity MBH | Unit Tag | MCA | MOCPP | Volts | Phase | Model
(Outdoor Unit) | |
| MSAH-1 | 380 | 240 | 0.9 | 208/230 | 1 | 80/67 | 12 | 19 | 70 | 18 | MSHP-1 | 14 | 24 | 208/230 | 1 | SUZ-KA12NAHZ | SEZ-KD12NA |
| MSAH-2 | 328 | 117 | 1 | 208/230 | 1 | 80/67 | 9 | 22 | 70 | 14 | MSHP-2 | 10 | 15 | 208/230 | 1 | MSZF-FS06NA | MSZ-FS06NA |
| MSAH-3 | 328 | 117 | 1 | 208/230 | 1 | 80/67 | 9 | 22 | 70 | 14 | MSHP-3 | 10 | 15 | 208/230 | 1 | MUZ-FS06NA | MSZ-FS06NA |
| MSAH-4 | 364 | 174 | 1 | 208/230 | 1 | 80/67 | 9 | 18 | 70 | 12 | MSHP-4 | 12 | 15 | 208/230 | 1 | MUZ-HM09NA | MSZ-HM09NA |
| MSAH-5 | 364 | 174 | 1 | 208/230 | 1 | 80/67 | 9 | 18 | 70 | 12 | MSHP-5 | 12 | 15 | 208/230 | 1 | MUZ-HM09NA | MSZ-HM09NA |
| MSAH-6 | 632 | 318 | 1 | 208/230 | 1 | 80/67 | 22.5 | 18 | 70 | 26 | MSHP-6 | 14 | 15 | 208/230 | 1 | MUZ-HM24NA | MSZ-HM24NA |
| MSAH-7 | 632 | 318 | 1 | 208/230 | 1 | 80/67 | 22.5 | 18 | 70 | 26 | MSAC-1 | 14 | 15 | 208/230 | 1 | MUZ-HM24NA | MSZ-HM24NA |
| MSAH-8 | 632 | 318 | 1 | 208/230 | 1 | 80/67 | 22.5 | 18 | 70 | 26 | MSAC-2 | 14 | 15 | 208/230 | 1 | MUZ-HM24NA | MSZ-HM24NA |
| MSAH-9 | 632 | 318 | 1 | 208/230 | 1 | 80/67 | 22.5 | 18 | 70 | 26 | MSAC-9 | 14 | 15 | 208/230 | 1 | MUZ-HM24NA | MSZ-HM24NA |

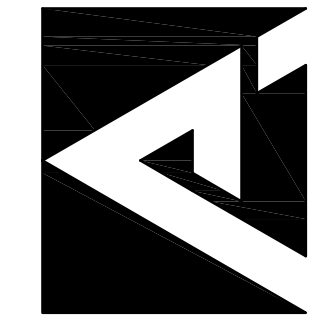
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- | BLOWER COIL SCHEDULE | | | | | | | | | | | | | | | | | |
|----------------------|------|---------|-----|-------|-------|-----|---------------------|-----------|-----------|-----|---------|-------|-----|-----------------|------------|------------------|---------|
| Unit Tag | CFM | | ESP | Motor | | | Cooling Performance | | | | | Mount | H/V | Pipe Sizes (in) | | Mfrg & Model No. | Remarks |
| | Unit | Min. OA | | HP | Volts | Phs | EAT DB/WB | MBH Total | MBH Sens. | GPM | EW (FT) | | | Coils | CD w/ Trap | | |
| BC-1 | 750 | 100 | 1 | 1 | 240 | 3 | 80/67 | 30 | 20 | 5 | 45 | FLOOR | V | 1-1/4" | 1.00" | TRANE BCHE036 | 1-8 |
| BC-2 | 1025 | 150 | 1 | 1 | 240 | 3 | 80/67 | 40 | 27 | 7 | 45 | - | H | 1-1/2" | 1.00" | TRANE BCVE090 | 1-8 |
| BC-3 | 2915 | 350 | 1 | 3 | 240 | 3 | 80/67 | 115 | 79 | 20 | 45 | FLOOR | V | 2" | 1.00" | TRANE BCVE090 | 1-9 |
| BC-4 | 2915 | 350 | 1 | 3 | 240 | 3 | 80/67 | 115 | 79 | 20 | 45 | FLOOR | V | 2" | 1.00" | TRANE BCVE090 | 1-9 |
| BC-5 | 2915 | 350 | 1 | 3 | 240 | 3 | 80/67 | 115 | 79 | 20 | 45 | FLOOR | V | 2" | 1.00" | TRANE BCVE090 | 1-9 |

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**GOLDSBORO HIGH SCHOOL
RENOVATIONS
GOLDSBORO, NORTH CAROLINA
MECHANICAL DETAILS**

DATE	REFERENCE
6/8/23	ADDENDUM #2

M601