

LEGEND & ABBREVIATIONS

Table with columns for ABBREVIATION, SYMBOL, and DESCRIPTION. Includes sections for PIPING, VALVES / FITTINGS / SPECIALTIES, DUCTWORK, DAMPERS, CONTROLS, MISCELLANEOUS, and AIR DISTRIBUTION DEVICES.

GENERAL NOTES:

- 01. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
02. DUCT SIZES SHOWN ARE ACTUAL INSIDE DIMENSIONS.
03. RUNOUTS TO AIR DISTRIBUTION DEVICES SHALL BE NOMINAL NECK SIZE OF AIR DISTRIBUTION DEVICE UNLESS NOTED OTHERWISE.
04. ALL SUPPLY RUNOUTS, BRANCH DUCTS, OR TAKE-OFFS TO AIR DISTRIBUTION DEVICES SHALL BE PROVIDED WITH MANUAL DAMPERS.

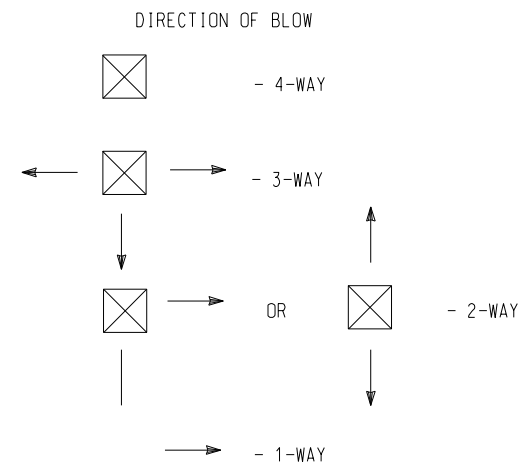
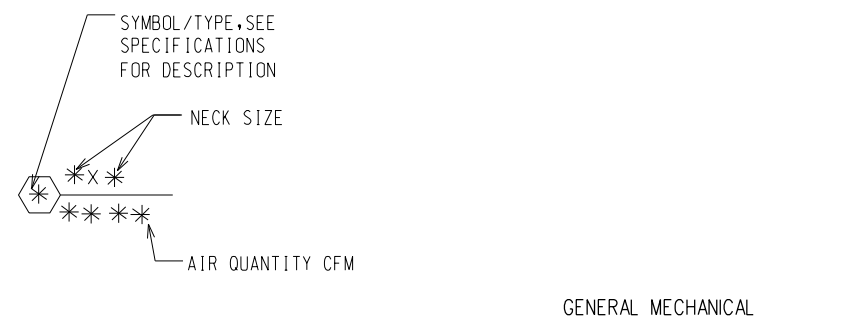
DEMOLITION NOTES:

- 01. EXISTING DUCTWORK, CONTROL LINES, AND EQUIPMENT SHOWN ARE BASED ON LIMITED FIELD OBSERVATIONS.
02. CAP, PATCH, SEAL, AND INSULATE ALL UNUSED DUCT TAKEOFFS WHERE DUCTWORK HAS BEEN REMOVED.

TEST AND BALANCE NOTES:

- 01. EXISTING DUCTWORK, AIR DEVICES, AND EQUIPMENT SHOWN ARE BASED ON LIMITED AS BUILT INFORMATION.
CONTRACTOR SHALL TEST AND RECORD AIRFLOW READINGS OF EXISTING GRILLES AND DIFFUSERS BEFORE DEMOLITION.

Table titled AIR DISTRIBUTION DEVICES with columns: SYMBOL, LOCATION, FUNCTION, TYPE, SURFACE TYPE. Includes symbols for Exhaust (A), Supply (B), and Transfer (C).



QUALITY ASSURANCE

- A. The mechanical equipment and installation shall conform to the following codes:
1. The Georgia State Building Code
2. The Georgia State Mechanical Code
B. The mechanical equipment and installation shall conform to the following standards:
1. Associate Air Balance Council (AABC)
2. National Fire Protection Association (NFPA)
C. Publication dates: where the date of issue of a reference standard is not specified, comply with the standard that is effective as of date of contract document.

GUARANTY

- A. The components of the mechanical system furnished under this division of the specifications shall be guaranteed for a period of one year from the date of acceptance thereof, either for beneficial use or final acceptance, whichever is earlier, against defective material, design, and workmanship.

PAINTING

- A. Factory painted equipment that has been scratched or marred shall be repainted to match original color.
B. Steel equipment hangars, supports, and uninsulated black steel pipe exposed to sight inside the building which are not provided with a factory applied prime coat shall be cleaned of rust, grease and scale.

CLEANING AND ADJUSTING

- A. All equipment, pipe, valves, and fittings shall be cleaned of grease, oil, paint spots, metal cuttings, sludge, and construction debris.
B. Ducts, plenums and casings shall be cleaned of all debris and blown free of all particles of rubbish and dust before installing outlet faces.

TESTING PIPE AND DUCT SYSTEMS

- A. GENERAL
Concealed piping and duct work and insulated piping and duct work shall be tested in place before concealing or covering.
B. AIR DISTRIBUTION SYSTEMS
1. Other ductwork shall be made airtight prior to covering or concealing to the point that no leakage can be detected by the senses of hearing or feeling at all duct joints and seams.

DUCTWORK

- A. General
1. Ductwork shall be constructed of lock forming quality galvanized steel sheets except ductwork indicated to be pre-manufactured flexible duct.
2. Ductwork shall be square, rectangular, round, or flat oval, as indicated on the drawings.
3. Turning vanes shall be installed in all 90 degree square and rectangular elbows and at other locations shown on the drawings.
4. Ductwork shall be classified and constructed in the following SMACNA pressure classes, or 150% of the scheduled fan S.P., whichever is greater:

Table with columns: System or Zone, Pressure Class, Exhaust air ductwork. Shows -2 for Exhaust air ductwork.

- B. Galvanized Steel Ductwork
1. Except where indicated otherwise, herein or on the drawings, duct construction shall conform to the recommendations of the SMACNA HVAC Duct Construction Manual for pressure classes specified hereinbefore.
2. All galvanized areas damaged by welding shall be coated with a rust inhibitive aluminum paint.
3. Round and flat oval ductwork shall be spiral lock-seam construction. Round and flat oval ductwork shall be the products of United McGill Sheet Metal Corporation or Monroe Manufacturing Company.
4. Duct sealant shall be Kingco Type 10-526 or United McGill Type WP Duct Sealant.

INSTALLATION

- A. Galvanized Steel Ductwork
1. Ductwork shall be installed in accordance with recommendations of SMACNA HVAC Duct Construction Standards Manual or as recommended by duct manufacturer (spiral duct only).
2. All duct joints (longitudinal, transverse) and duct penetrations shall be sealed using methods outlined in SMACNA HVAC Air Duct Leakage Test Manual.

CEILING HEATERS

- A. Ceiling heaters shall be recessed ceiling mounted as shown on the drawings. Unit cabinet shall include a panel to fit in a 2x2 T bar ceiling grid, resistance heating element, controls, and mounting brackets.
1. Enclosure shall have 18 gauge steel front cover with factory baked white enamel finish, and integral supply and return grilles.
2. Heating element shall be sheathed finned tubular coil, 80Z nickel, 20Z chromium Type A resistance wire helically wound and centered in a copper or stainless steel sheath with compacted magnesium oxide.
3. Ceiling Heaters shall be:
Mark/Marley EFF Series
Barko/Marley QFF Series
Indeco
Reddi-Heat

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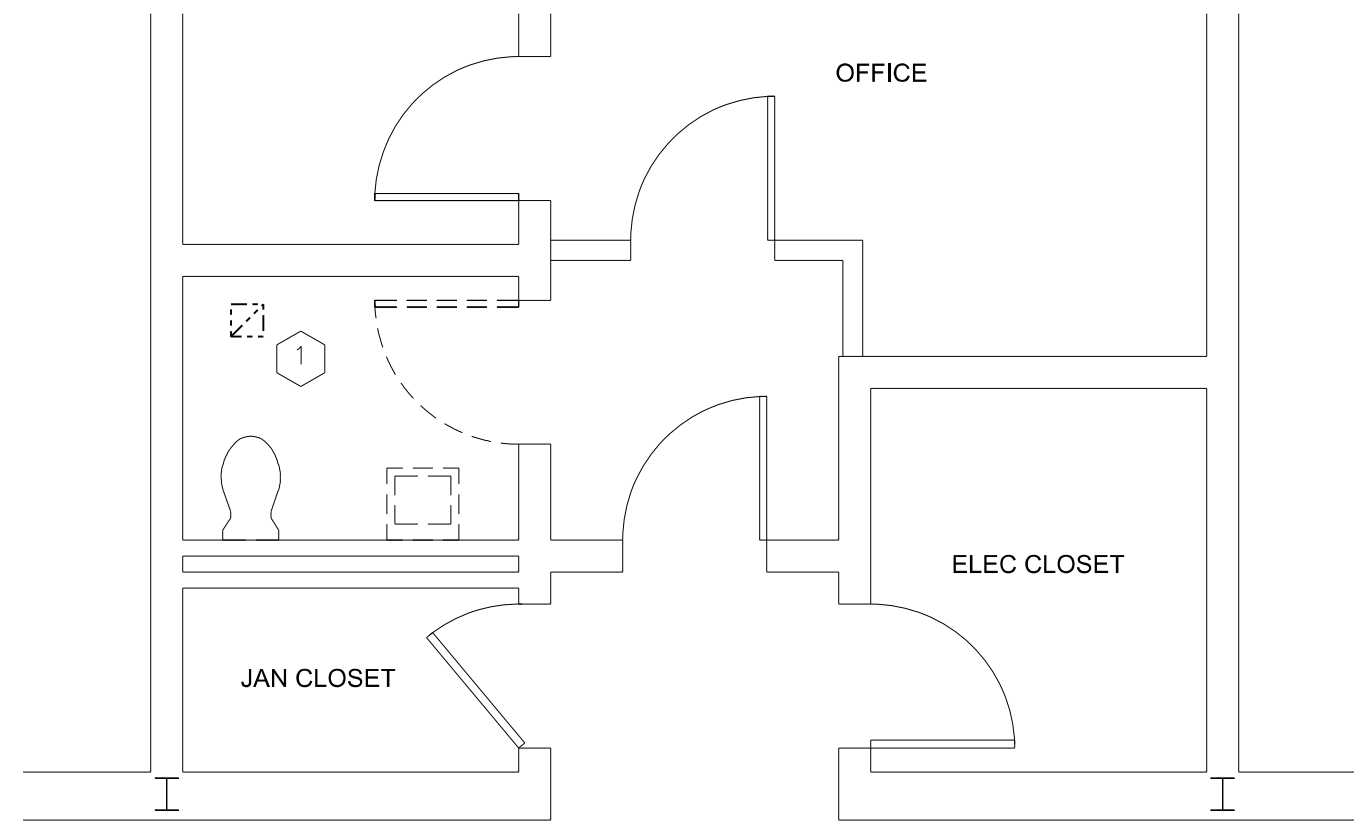
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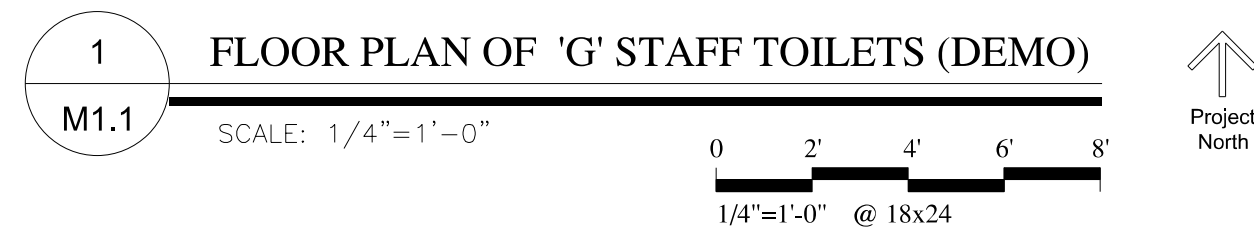
**STEM ACADEMY (AT BARTLETT)
TOILET RENOVATION (PHASE 2)**

207 EAST MONTGOMERY CROSS RD.
SAVANNAH, GA

CONSTRUCTION DOCUMENTS

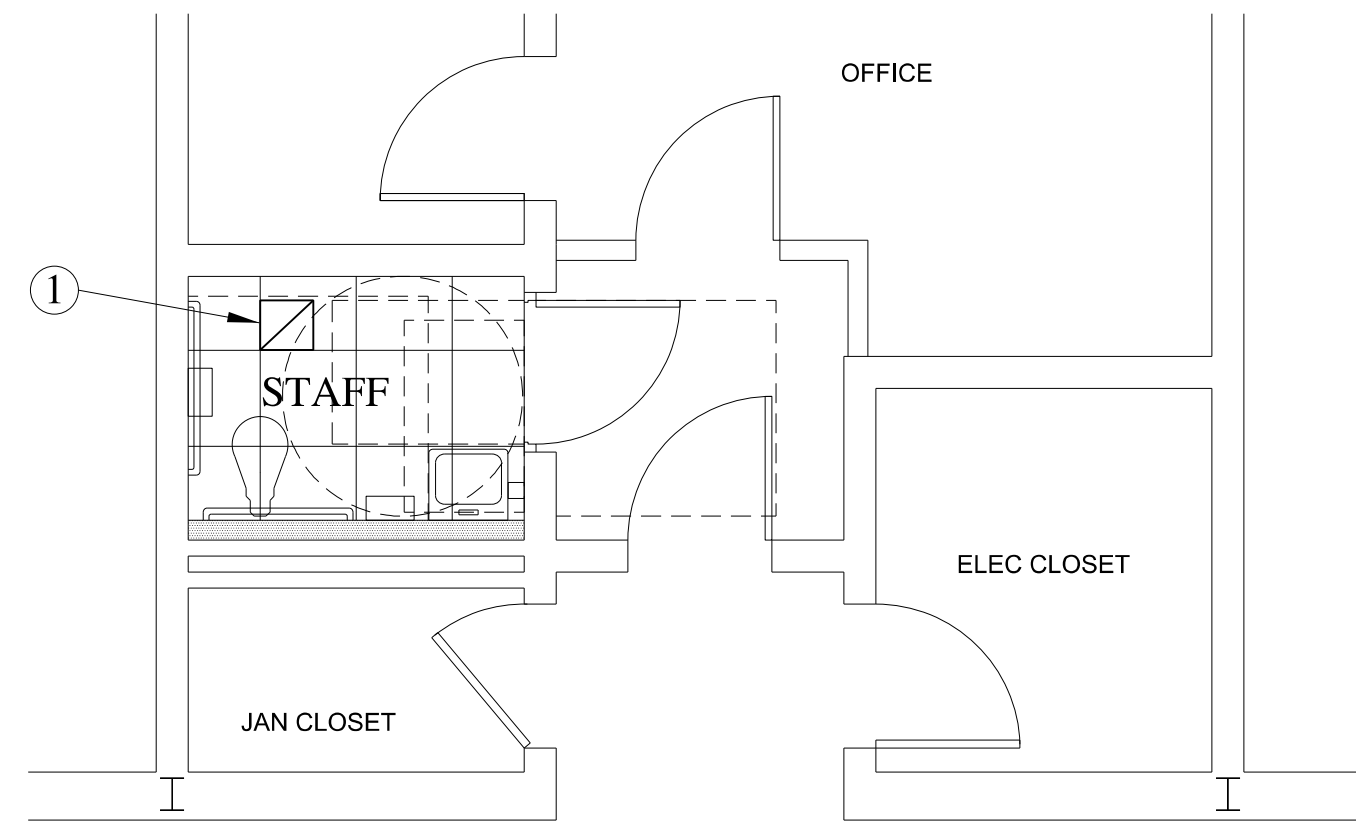


HALL

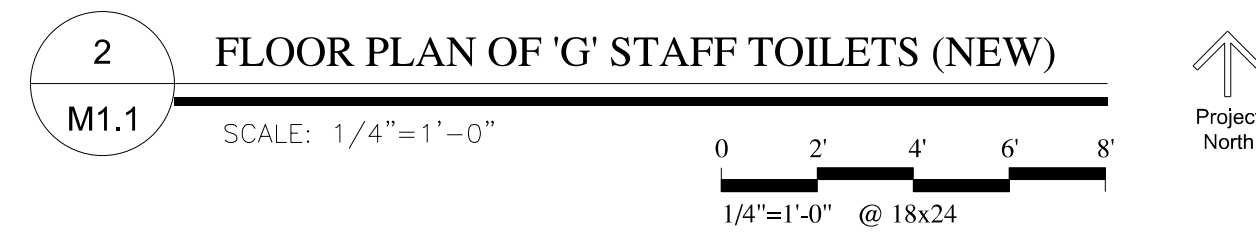


DEMO NOTES

- 1 REMOVE EXISTING AIR DEVICE

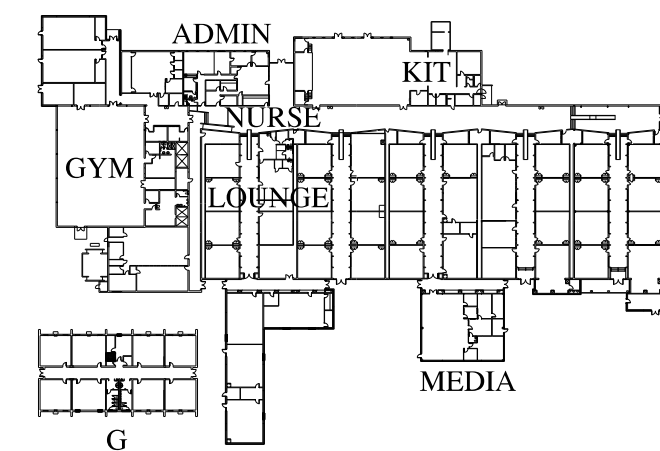


HALL



NEW WORK NOTES

- 1 INSTALL NEW AIR DEVICE
TRANSITION DUCTWORK AS NEEDED.
AIR DEVICE TO BE TYPE 'A' 8"X8" AND SET
AT 50 CFM.



KEY PLAN (not to scale)

PRINTING AND REVISIONS

MARK	DATE	DESCRIPTION

MARK DATE DESCRIPTION

ROSSER PROJECT NUMBER 17002.23

DRAWN BY CAH

CHECKED BY CAH

DATE RELEASED FOR CONSTRUCTION 09-20-2018

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CADD SHEET FILE NAME

SHEET TITLE

HVAC FLOOR PLANS -
"G" STAFF

SHEET NUMBER

M1.1

SHEET XX OF XX

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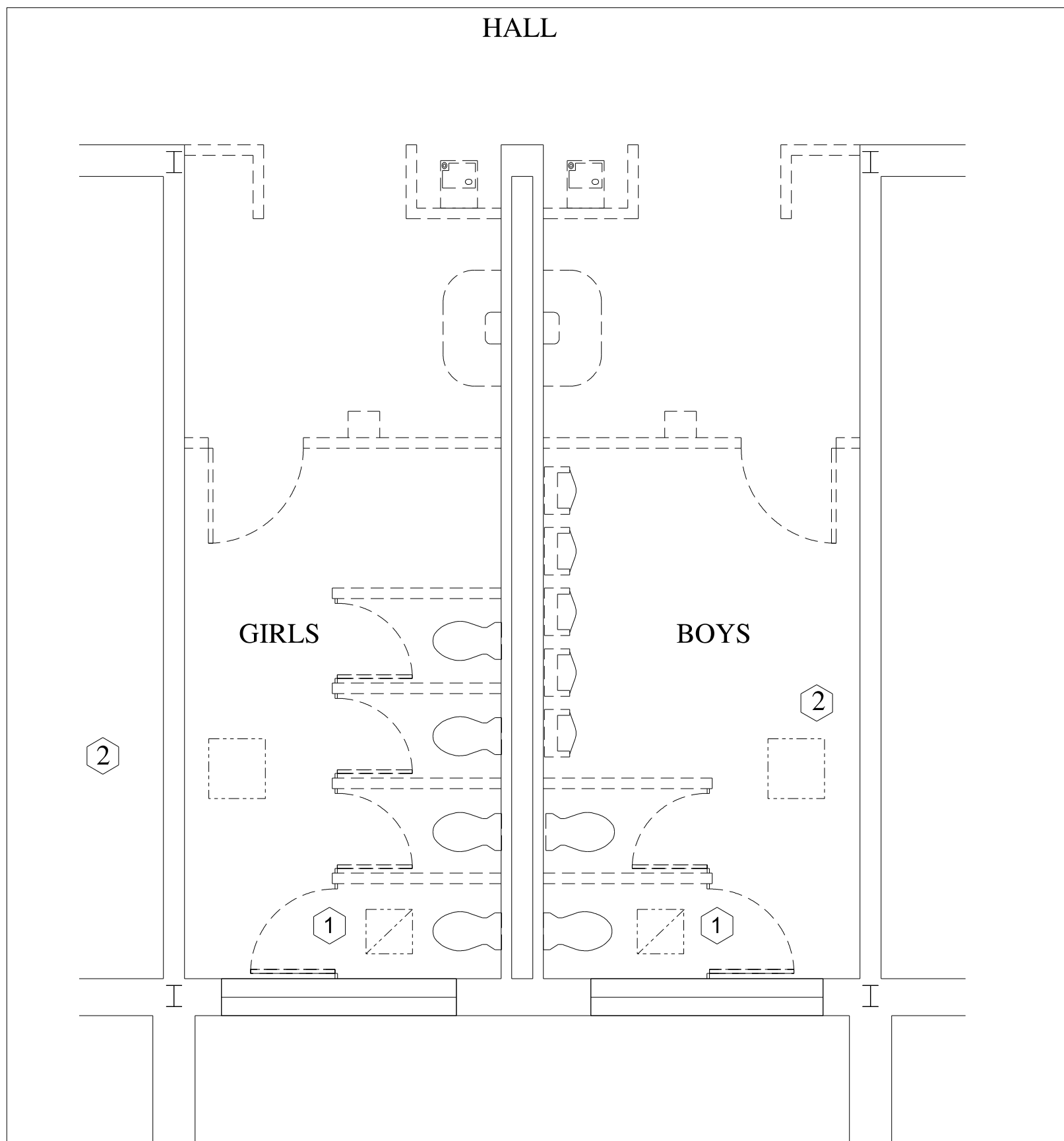
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 TOILET RENOVATION (PHASE 2)**

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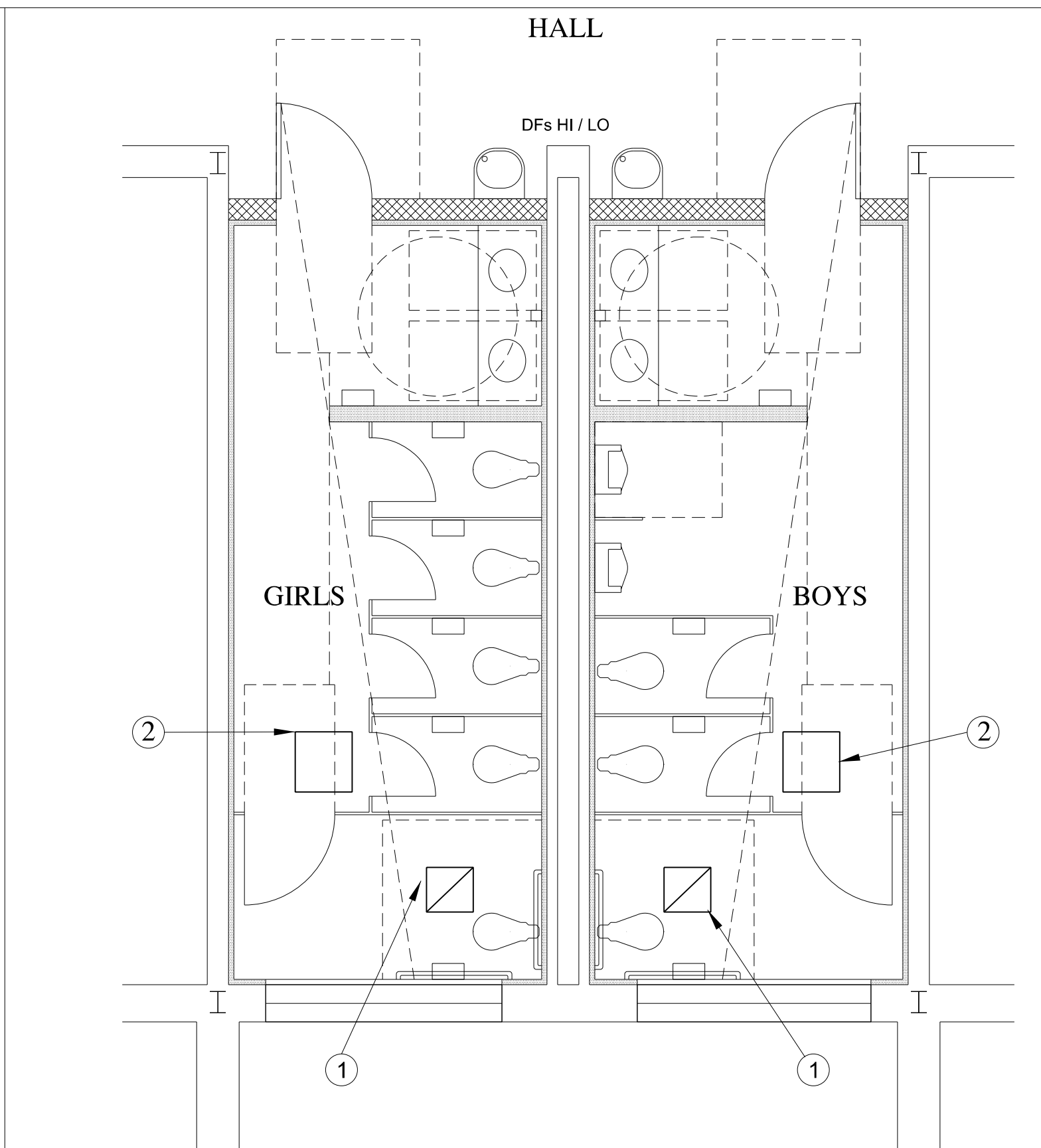


1 PLAN OF 'G' STUDENT TOILETS (DEMO)
 M1.2 SCALE: 1/4"=1'-0"
 0 2' 4' 6' 8'
 1/4"=1'-0" @ 18x24

Project North ↑

DEMO NOTES

- 1 REMOVE EXISTING AIR DEVICE
- 2 REMOVE EXISTING CEILING HEATERS

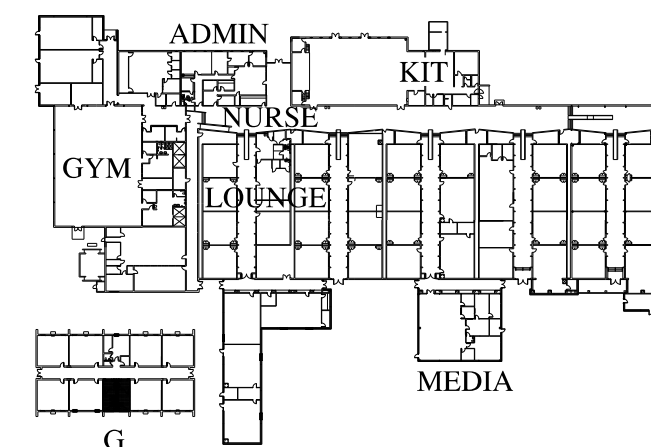


2 PLAN OF 'G' STUDENT TOILETS (NEW)
 M1.2 SCALE: 1/4"=1'-0"
 0 2' 4' 6' 8'
 1/4"=1'-0" @ 18x24

Project North ↑

NEW WORK NOTES

- 1 INSTALL NEW AIR DEVICE
 TRANSITION DUCTWORK AS NEEDED.
 NEW AIR DEVICE TO BE TYPE 'A' 18"x18" AND
 SET AT 350 CFM.
- 2 INSTALL NEW 1KW CEILING HEATERS TO
 MATCH EXISTING. EXISTING CONTROLS AND
 SEQUENCE OF OPERATION TO REMAIN.
 CONTRACTOR SHALL VERIFY CAPACITY
 PRIOR TO BIDDING.



KEY PLAN (not to scale)

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SHEET NUMBER	M1.2
SHEET	XX OF XX

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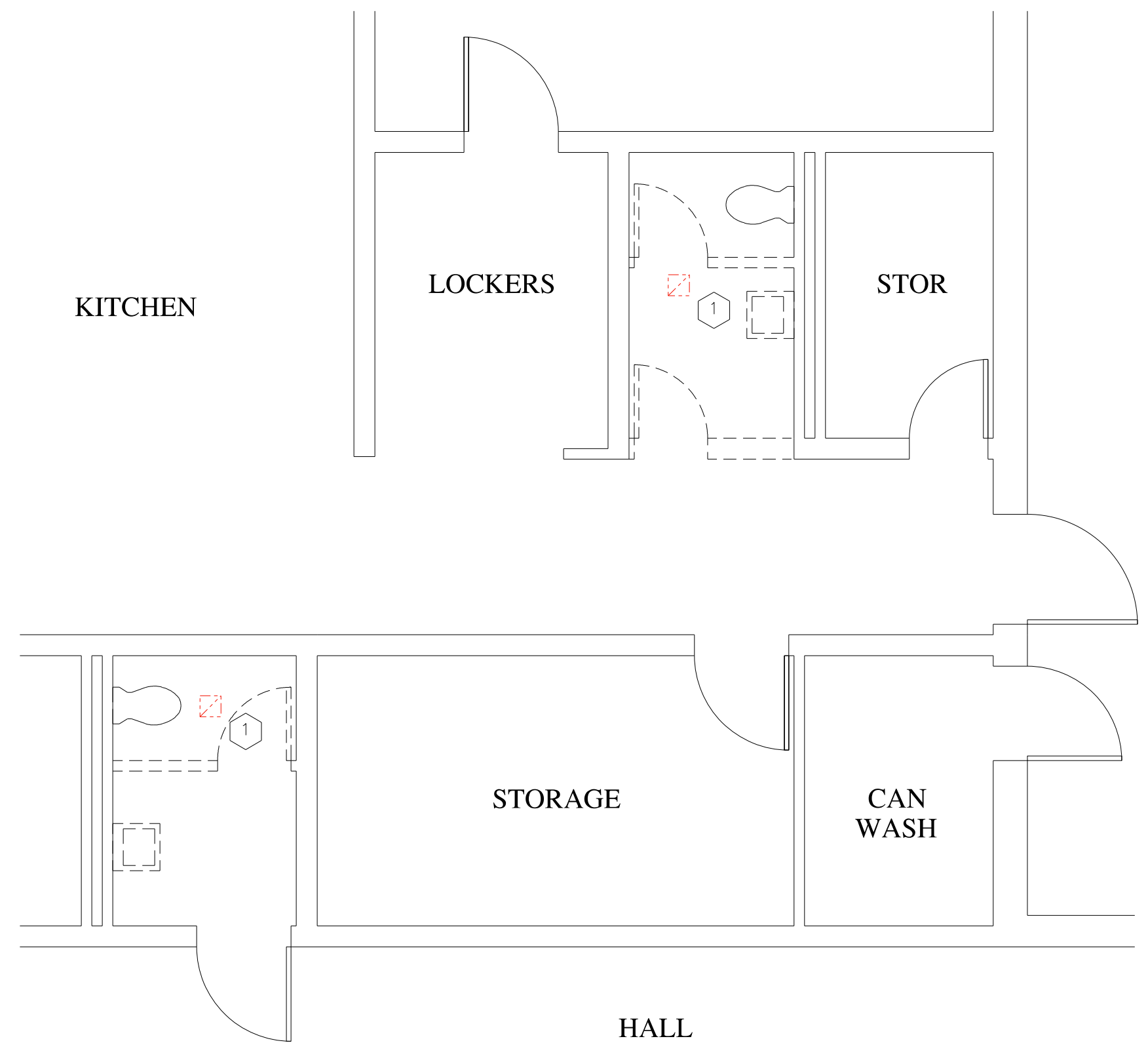
HVAC FLOOR PLAN –
HALL AND KITCHEN

SHEET NUMBER

M1.3

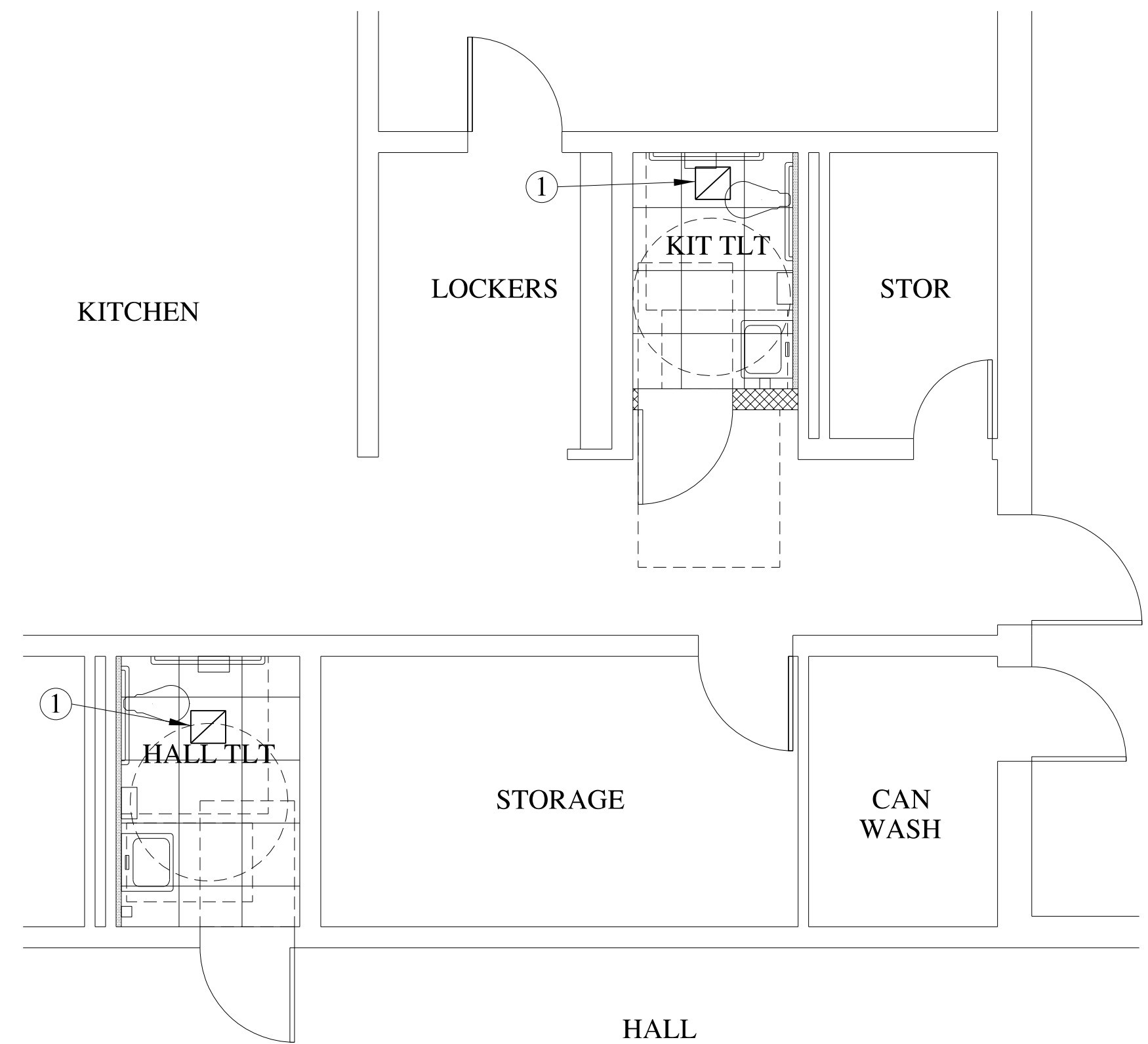
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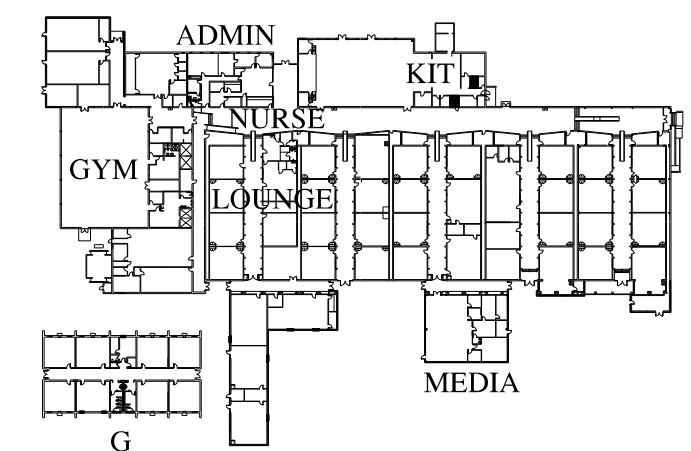
1 FLOOR PLAN OF HALL AND KITCHEN TOILETS (DEMOLITION)
M1.3 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24
Project North

DEMO NOTES
1 REMOVE EXISTING AIR DEVICE



2 FLOOR PLAN OF HALL AND KITCHEN TOILETS (NEW)
M1.3 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24
Project North

NEW WORK NOTES
1 INSTALL NEW AIR DEVICE
TRANSITION DUCTWORK AS NEEDED.
AIR DEVICE TO BE TYPE 'A' 8"X8" AND SET
AT 50 CFM.



KEY PLAN (not to scale)

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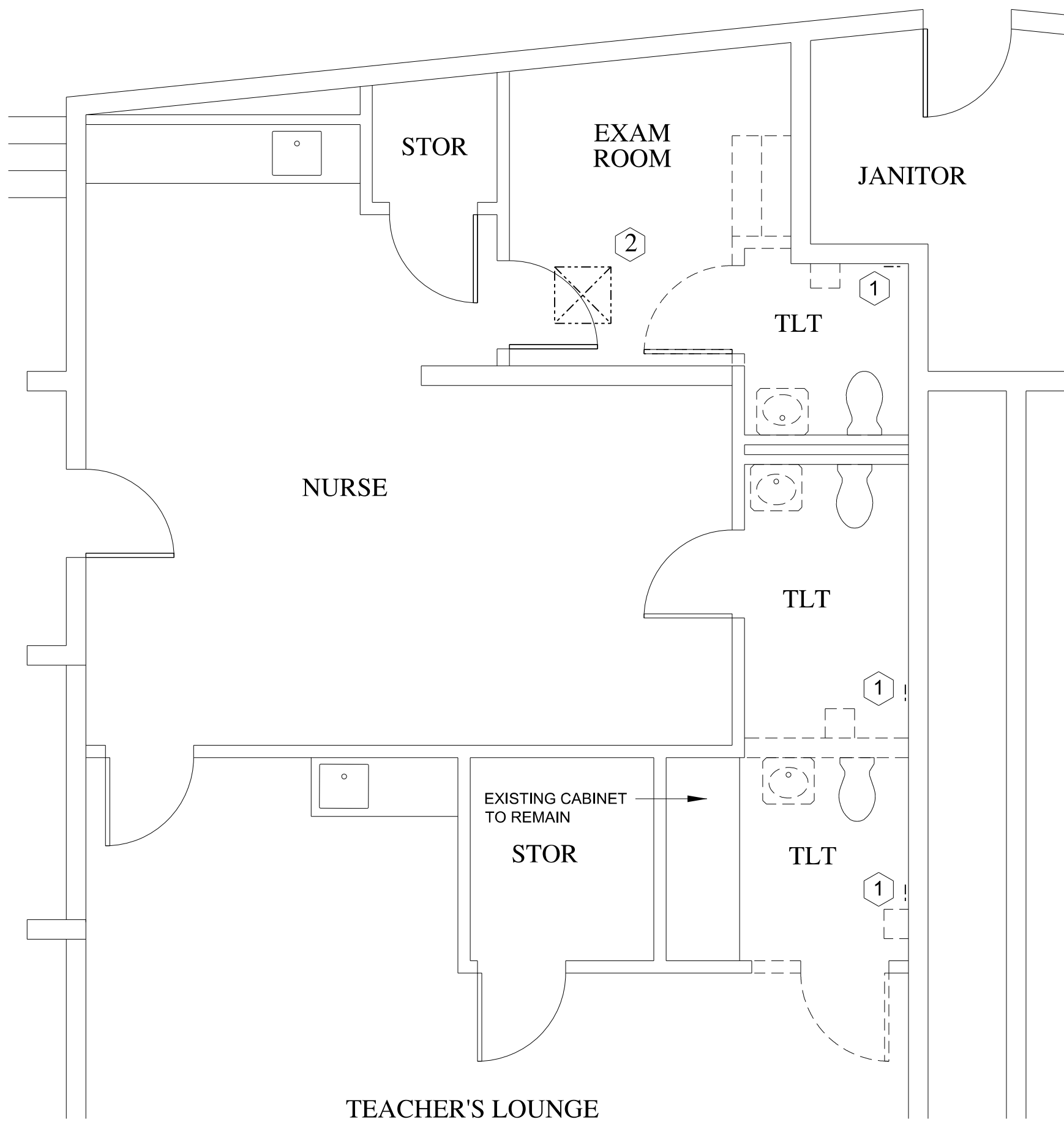
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HVAC FLOOR PLANS –
TEACHERS AND NURSES

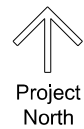
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M1.4

SHEET XX OF XX

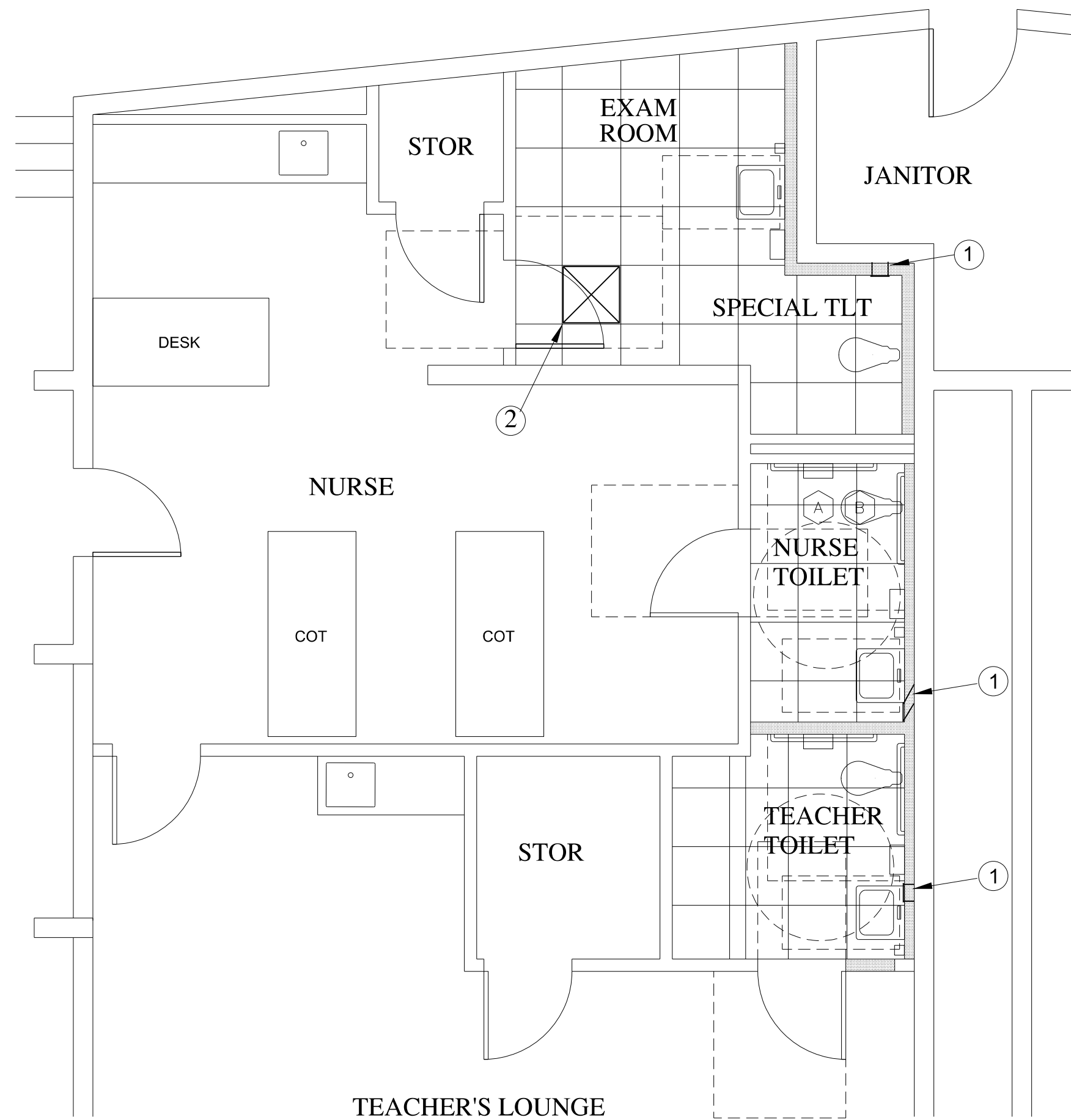


1 FLOOR PLAN OF TEACHER'S AND NURSES' TOILETS (DEMOLITION)
M1.4 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24

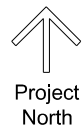


DEMO NOTES

- ① REMOVE EXISTING WALL AIR DEVICE MOUNTED NEAR FLOOR
- ② REMOVE EXISTING DIFFUSER. MEASURE AIR FLOW BEFORE REMOVAL AND RESET NEW DIFFUSER TO CURRENT AIR FLOW

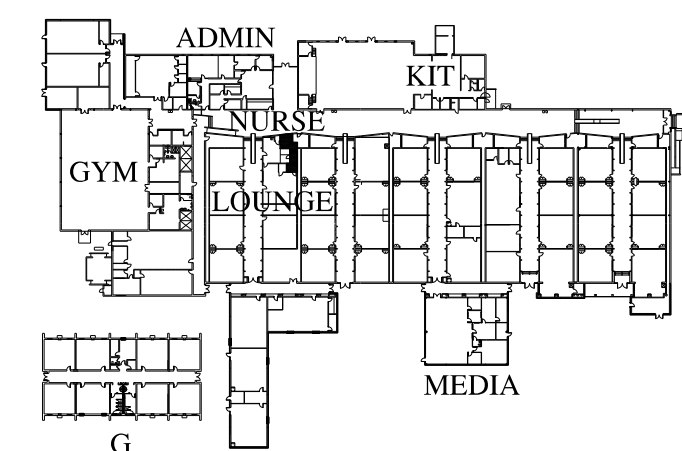


2 FLOOR PLAN OF TEACHER'S AND NURSES' TOILETS (NEW)
M1.4 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24

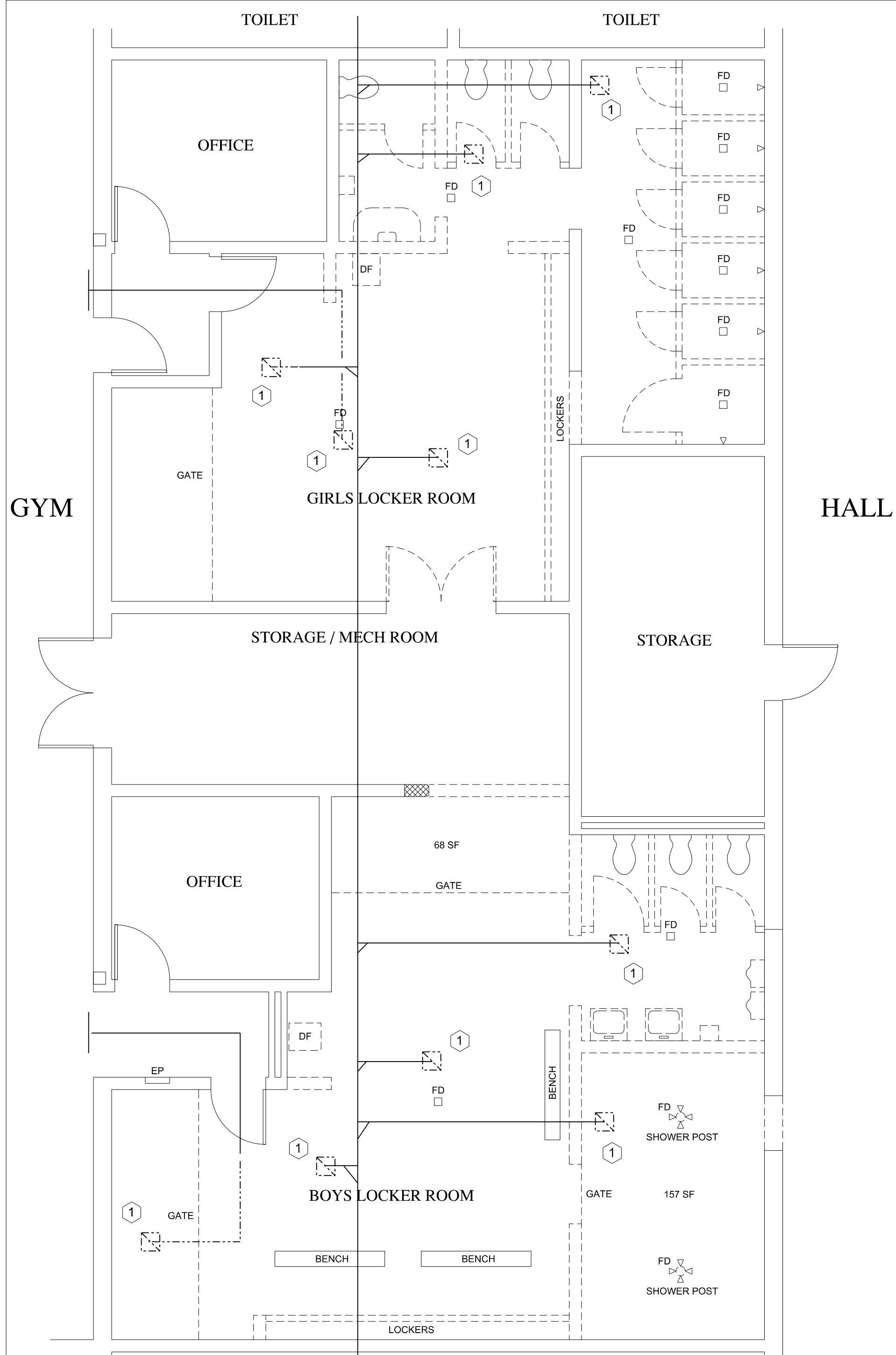


NEW WORK NOTES

- ① INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. AIR DEVICE TO BE TYPE 'A' 8"x8" AND SET AT 50 CFM.
- ② INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. AIR DEVICE TO BE TYPE 'B' 8" DIA. AND SET AT CFM MEASURED DURING DEMO.



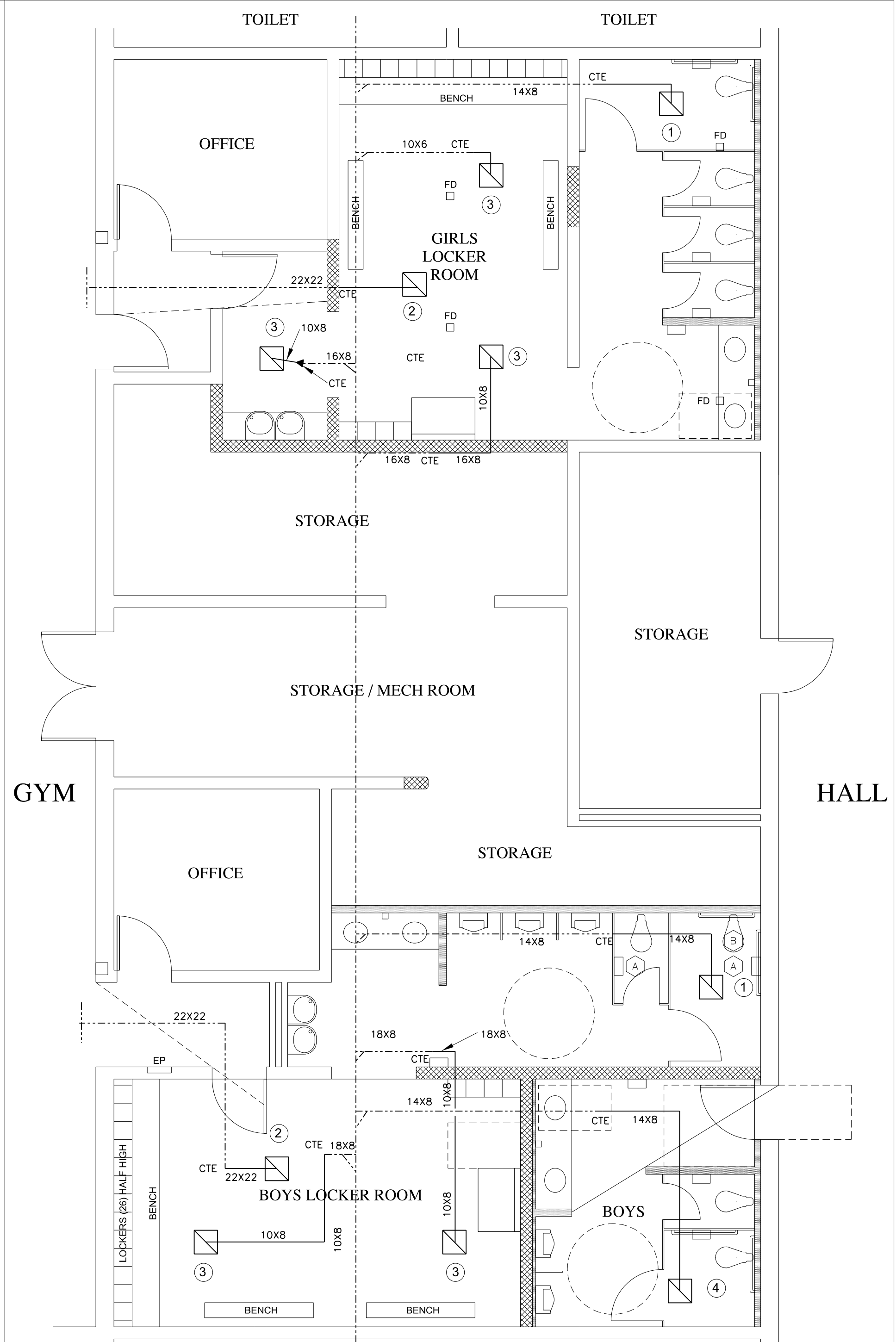
KEY PLAN (not to scale)



1 FLOOR PLAN OF LOCKERS AT GYM (DEMOLITION)
 M1.5

SCALE: 3/16"=1'-0"
 0 3' 6' 9' 12'

DEMO NOTES
 1 REMOVE EXISTING AIR DEVICE AND INDICATED DUCTWORK



2 FLOOR PLAN OF LOCKERS AT GYM (PROPOSED)
 M1.5

SCALE: 3/16"=1'-0"
 0 3' 6' 9' 12'

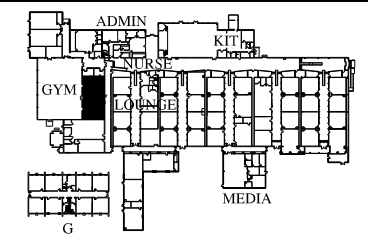
- NEW WORK NOTES**
- 1 INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. AIR DEVICE TO BE TYPE 'A' 14"x14" AND SET AT 360 CFM.
 - 2 INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. AIR DEVICE TO BE TYPE 'C' 22"x22" DIA.
 - 3 INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. NEW AIR DEVICE TO BE TYPE 'A' 10"x10" AND SET AT 150 CFM.
 - 4 INSTALL NEW AIR DEVICE TRANSITION DUCTWORK AS NEEDED. NEW AIR DEVICE TO BE TYPE 'A' 14"x14" AND SET AT 300 CFM.



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TOILET RENOVATION (PHASE 2)**

207 EAST MONTGOMERY CROSS RD.
SAVANNAH, GA

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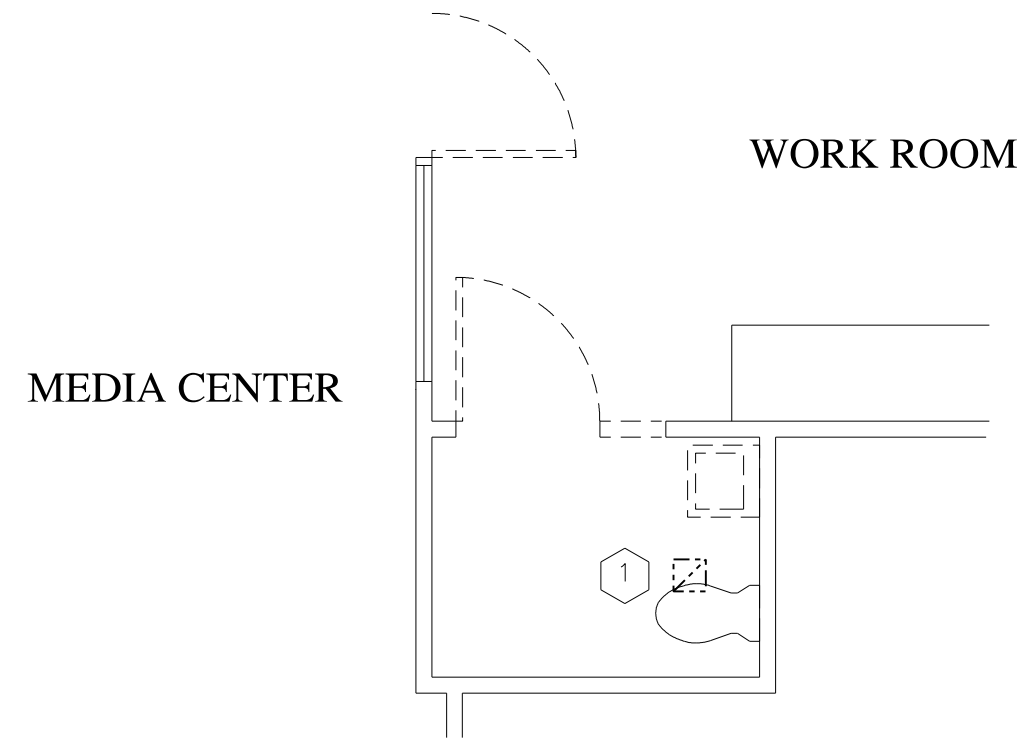
SHEET TITLE

HVAC FLOOR PLANS –
MEDIA CENTER TOILETS

SHEET NUMBER

M1.7

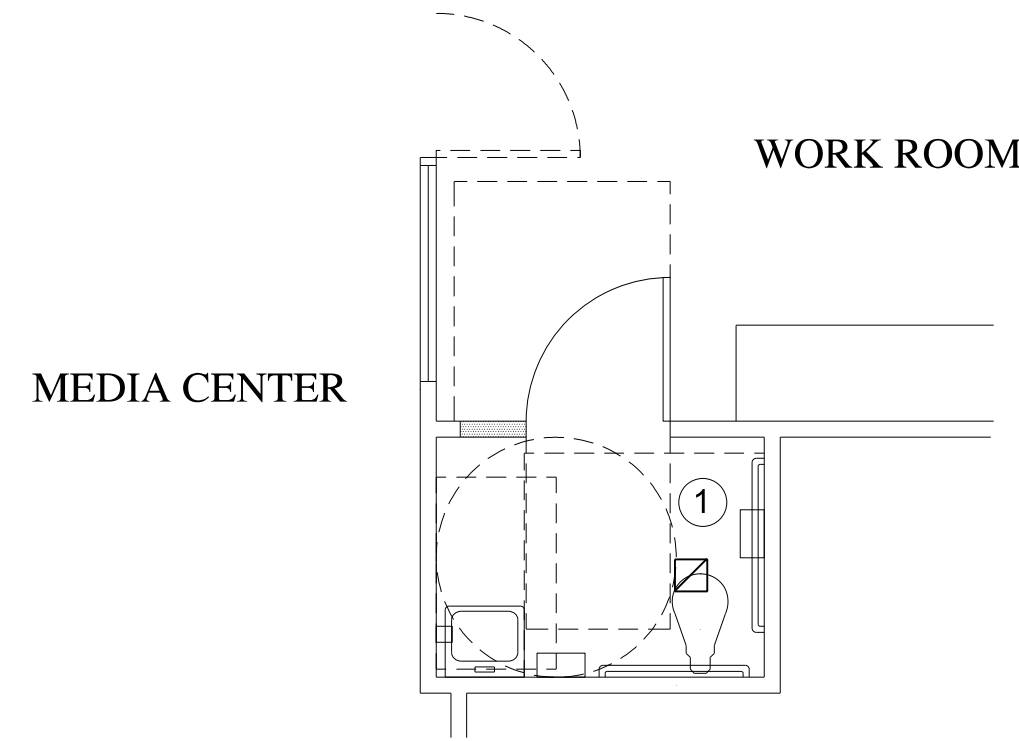
SHEET XX OF XX



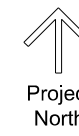
1 FLOOR PLAN OF MEDIA CENTER TOILET (DEMO)
A1.7 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24



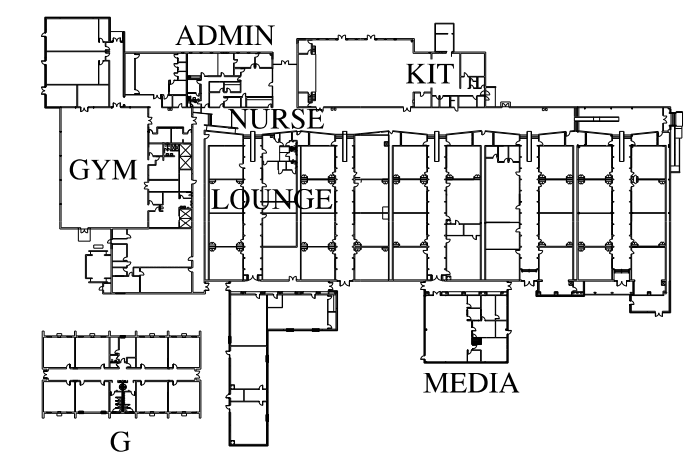
DEMO NOTES
1 EXISTING AIR DEVICE SHALL REMAIN



2 FLOOR PLAN OF MEDIA CENTER TOILET (NEW)
A1.7 SCALE: 1/4"=1'-0"
0 2' 4' 6' 8'
1/4"=1'-0" @ 18x24



NEW WORK NOTES
1 BALANCE EXISTING AIR DEVICE TO 50 CFM.



KEY PLAN (not to scale)