

**CDBG – PF GRANT #1137-21-050-PF-01
2021 CDBG Public Facility Project –
Building Improvements to Neshoba General Nursing Home
Philadelphia, MS**

**From: Foil Wyatt Architects & Planners, PLLC
1510 North State Street, Suite 200
Jackson, MS 39202**

Addendum No. 1

March 16, 2022

This addendum forms a part of the contract documents and modifies the original plans and specifications dated February 7, 2022.

Specifications:

Item 1.1: Advertisement for Bids

Change: The bid time from 10:00 AM to 2:00 PM.

Plans:

Item 1.2: A104 and E1.1 RCP-Hall Bath 3/A104

Note: Provide new lighting fixtures at Rooms 100E and 100F equal to Lithonia #2GTL-F-4-48L-FW-A19-120/277-GZ1-LP840-PWS1836 switched at existing switches.

Mechanical:

Item 1.3: See attached Mechanical Addendum dated March 16, 2022

End of Addendum No. 1

March 16, 2022

ADDENDUM NO. 1

PROJECT: 2021 CDBG Public Facility Project
Improvements to Neshoba General Nursing Home
Philadelphia, MS

FROM: Dewberry|Edmonds
1900 Lakeland Drive
Jackson, Mississippi 39216

The following additions, changes, clarifications and/or substitutions to the Project Drawings/Specifications as indicated are hereby made a part of the Contract Documents. Acknowledge receipt of this Addendum by inserting its number and date in the Proposal Form where indicated.

Item No. 1: Specifications: Add attached Section 224200, Plumbing Fixtures, Trim and Specialties, to Project Specifications.

Item No. 2: Specifications: Add attached Section 230810, Testing and Balancing Air and Water Systems, to Project Specifications.

Item No. 3: Drawings: Add attached Sheets M301 and M302 to Project Drawings for additional mechanical/plumbing.

END OF ADDENDUM NO. 1



SECTION 224200

PLUMBING FIXTURES, TRIM AND SPECIALTIES

PART 1 - GENERAL

1.1 Fixture Supports

- A. All fixtures must be securely fastened to the floor or walls by means of inserts or expansion bolts in concrete work, and by means of expansion bolts, toggle bolts or through bolts in masonry work, and by means of framing and screws in frame construction, to the satisfaction of the Architect.
- B. Wall hung fixtures where scheduled on drawings are to be supported by Wade, Zurn, Smith or approved equal chair carriers with integral adjustable fittings.
- C. Fixture heights will be defined on the Architectural Drawings. Where the mounting heights vary, the defined heights as shown on the Architectural Drawings shall prevail.

PART 2 - PRODUCTS

2.1 Plumbing Fixture and Trim

- A. Furnish and install all plumbing fixtures and equipment as scheduled and shown on drawings. All plumbing fixture brass trim shall be so designed that all wearing parts are to be in a standardized renewable operating unit which can be removed without detaching the supply fixture or faucet proper. The standardized renewable operating units are to be interchangeable with all supply fixtures and faucets. All exposed metal parts of all fixtures, including faucets, waste fittings, waste plugs, strainers, flush valves, traps, supplies, nipples, and escutcheons shall be chromium plated brass, unless other materials or finish is specified. Angle sops with S.P.S. brass nipples from wall to stops shall be provided on all water supplies to fixtures. Fixture trim must be that of the fixture manufacturer wherever possible and must bear a permanent impression of the manufacturer. No "competitive grade" trim will be permitted.
- B. Furnish and install all plumbing fixtures specified herein and shown on plans. Kohler fixtures are specified, however, Zurn or Sloan may be used if they are equal in all respects to those specified. Contractor shall submit on trim as well as fixtures. Fixtures to be as follows or approved equal.

WC-1 (Water Closet, Handicap): Kohler (K-96057) vitreous china, siphon jet, elongated closet bowl with 2-1/4 inch passageway, 1-1/2 inch top spud, bolt covers, Sloan 111 flush valve, Beneke 523SS open front, elongated seat with stainless steel hinges and posts. Provide trap primer as required.

L-1 (Lavatory, Handicap): Kohler (K-2005) 21"x18" vitreous china wall hung with Delta 27C4954 faucet assembly with 0.5 gpm vandal resistant head, 1-1/4" offset drain with open strainer, 3/8" supplies with stop, 1-1/4" straight tailpiece and 1-1/4" adjustable "P" trap. Provide Wade floor carrier. Mount at handicap height.

FD-1 (Floor Drain): Wade (1000-DB) cast iron body and flashing collar with 6" nickel bronze strainer and trap primer connection, 3" outlet.

SH-1 (Shower): TempGard (Z-7500-DV-HW-TC) stainless steel shower unit, surface mounted, diverter valve, hand/wall shower heads, 24" mounting bar, 60" metal hose. Shroud extension to ceiling for piping.

1.3 Floor Drains

- A. Floor drains shall be in accordance with ANSI A112.21.1. Provide caulking flange for connection to cast iron pipe, screwed outlets for connection to steel pipe, and side outlet when shown. Provide suitable clamping device and extensions if required, where installed in connection with waterproofing membrane. (Submit detailed shop drawings for these drains). Double drainage pattern floor drains shall have integral seepage pan for embedding in floor construction, and weep holes to provide adequate drainage from pan to drain pipe.

1.4 Traps

- A. Provide cast brass "P" traps on all sanitary branch waste connections from fixtures or equipment not provided with traps. Exposed traps shall be polished brass chromium plated with nipple and set screw escutcheons. Concealed traps may be wrought cast brass. Slip joints not permitted on sewer side of trap. Traps shall correspond to fittings on cast iron soil pipe or steel pipe respectively, and size shall be as required by connected service or fixture, or as scheduled.
- B. All drains, overflow, condensate and relief, to be routed to nearest trapped hub or floor drain if not shown on drawings.

1.5 Drains

- A. Contractor shall install all floor and roof drains according to manufacturer's recommendations. Provide and install all flashing and weatherproofing as required. Adjust extension sections on all drains as required for proper height adjustment.
- B. All floor drains to be trapped. Connect floor drains to sanitary waste piping as indicated on plans.
- C. Each AC equipment drain opening which normally discharges water (such as air conditioning unit drains, overflows, and similar drips and drains) shall be connected to the drain openings by means of an indirect drain or piped down directly over the floor drains which are provided for this purpose.

- D. Each water relief valve discharge shall be piped down to 6 inches above floor, but not necessarily over a floor drain or connected to a drain opening, unless otherwise indicated. No drain piping is required from the discharges or drain valves, unless otherwise indicated.

END OF SECTION

SECTION 230810

TESTING AND BALANCING AIR AND WATER SYSTEMS

PART 1 - GENERAL

1.1 General

- A. Applicable publications: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE):

1977 ASHRAE Handbook of Fundamentals

2. Associated Air Balance Council (AABC):

71679 National Standards for Field Measurements and Instrumentation, Total System Balance, Air Distribution - Hydronic Systems - Air Pollution - Sound Vibration, 1979 Edition; 2nd Edition

- B. General Requirements

1. Definitions:

Adjust: To regulate the specified fluid flow rate and air patterns at the terminal equipment, (e.g., reduce fan speed, throttling, etc.).

Balance: To proportion flows within the distribution system (submains, branches and terminals) in accordance with specified design quantities.

Procedure: Standardize approach and execution of sequence of work operations to yield reproducible results:

Report Forms: Test data sheets arranged for collection of test data in logical order for submission and review. This data should also form the permanent record which shall be used as the basis for any future testing, adjusting, and balancing required.

Test: To determine quantitative performance of equipment.

2. Submittals: Submit the following:
Standards Compliance:

Testing Agency
Testing Agency Personnel
Professional Engineers

Instrument Calibration

Schedules:

Testing Agenda

C. Testing and Balancing Agency

1. Air and Water Systems Testing and Balancing: Upon completion of the installation and field testing, performance test and adjust the supply, return, make-up, and exhaust air systems, and chilled/heating water systems to provide the air volume and water flow quantities indicated. Accomplish all work in accordance with the agenda and procedures specified in AABC 71679. Correct air and water system performance deficiencies disclosed by the test before balancing the systems.
2. The Contractor, as part of this contract, shall obtain the services of a qualified testing organization to perform the testing and balancing work as herein specified. Prior to commencing work under this section of the specifications, the testing organization shall have submitted proof to satisfy the Architect/Engineer that the organization is a member in good standing and meets the technical standards for membership of the AABC as published in the AABC 71679. The testing organization shall be independent of the installing Contractors or equipment suppliers for this project.
3. Test and Balance Contractor shall be considered an extension of the Engineer, and will report directly to the Engineer any and all deficiencies that will impair the balance of the systems involved. This shall include, but not be limited to, reporting balancing valves, or dampers not installed as called for on the plans or in the Specifications. The TAB Contractor shall correspond with the Engineer as required to indicate irregularities in the performance of equipment, piping, ductwork, valves, dampers, etc., that will impair the proper performance of the system(s). After control sequence of all mechanical equipment has been reviewed and checked, report the Engineer any deficiencies discovered.

D. Agenda

1. Preliminary Report: Review plans and specifications prior to installation of any of the affected system. Submit a written report to the Architect/Engineer indicating any deficiencies in the system that would preclude the proper adjusting, balancing, and testing of the systems.
2. Submittal: An agenda shall be submitted and approved by the Architect/Engineer prior to start of testing and balancing work. Include the following:

General description of each air and water system with its associated equipment, and operation cycles for heating, intermediate, and cooling. Where different cycles are used for day and night, they shall be described independently.

A complete listing of all air and water flow and air terminal measurements to be performed.

Specific test procedures and parameters for determining specified quantities; e.g., flow drafts, etc., from the actual field measurements to establish compliance with contract requirements.

Samples of forms showing applications of procedures and calculations to typical systems.

3. Procedure Reporting: Provide specific test procedures for measuring air quantities at terminals. Specify type of instrument to be used, method of instrument application (by sketch), and factors for:

Air terminal configuration.

Flow direction (supply or exhaust).

Velocity corrections.

Effective area applicable to each size and type of air terminal.

Density corrections (unless applicable data are covered elsewhere).

4. Area and Application Factors: Will not be required where pilot tubes are employed to determine terminal capacity.

E. Procedures, General

1. Requirements: Adjust systems and components thereof that perform as required by drawings and specifications.
2. Test Duration: Operating tests of heating and cooling coils, fans and other equipment shall be of not less than four hours duration, after stabilized operating conditions have been established. Capacities shall be based on temperatures and air and water quantities measured during such tests.
3. Instrumentation: Method of application of instrumentation shall be in accordance with the approved agenda. Furnish all personnel, instruments, and equipment for tests specified herein.

Accuracy of Instruments: Instruments used for measurements shall be accurate. Provide calibration histories for each instrument for examination. Calibrate each test instrument by an approved laboratory or by the

manufacturer. The Architect/Engineer has the right to request instrument recalibration, or the use of other instruments and test methodology, where accuracy of readings is questionable.

Application of Instruments: Comply with manufacturer's certified instructions.

Permanently-Installed Instruments: Do not install permanently-installed equipment used for the tests, e.g., gages, thermometers, etc., until just prior to the tests to avoid damage and changes in calibration.

Accuracy of all Thermometers: Plus or minus one graduation at the temperature to be measured. Graduations shall conform with the following schedule:

<u>Medium</u>	<u>Design Temperature Differential (F)</u>	<u>Maximum Graduation (F)</u>
Air	10 or less	1/2
Air	over 10	1
Water	10 or less	1/10
Water	10-20	1/2
Water	over 20	1

PART 2 - PRODUCTS NOT USED

PART 3 – EXECUTION

3.1 Execution

A. Air System Procedures

1. Adjustments: Adjust all air handling systems to provide the required design air quantity to, or through, each component. Conduct adjusting and balancing of systems during periods of the year approximating maximum seasonal operation.
2. Equalizers: Adjust equalizing devices to provide uniform velocity across the inlets duct side for supply of terminals, prior to measuring flow rates.
3. Balance: Use flow adjusting (volume control) devices to balance air quantities only; i.e., proportion flow between various terminal comprising system, and only to the extent that their adjustments do not create objectionable air motion or sound, i.e., in excess of specified limits.

Balancing Between Runs (submains, branch mains, and branches): Use flow regulating devices at, or in, the divided - flow fitting. Minimize restriction imposed by flow regulating devices in or at terminals. Final Measurements of Air Quantity: Make final measurements of air quantity, after the air terminal has been adjusted to provide the optimum air patterns of diffusion.

4. Fan Adjustment: Total air system quantities, generally shall be varied by adjustment of fan speeds. For systems with direct-connected fans (without adjustable pitch blades), damper restrictions for a system's total flow may be used.
5. Air Measurement: Contractor shall adjust, test and balance ventilation and air distribution systems.

Pitot Tube: Except as specifically indicated herein, make pitot tube traverses of each duct to measure air flow therein. Pitot tubes, associated instruments, traverses, and techniques shall conform with the ASHRAE Handbook Fundamentals.

Pitot Tube Traverse: In lieu of pitot-tube, traverse determine air flow in the duct by totaling volume of individual terminals served, measured as described herein.

Measurements of Air Quantity: Where duct's design velocity and air quantity are both less than 100 (fpm/cfm), air quantity may be determined by measurements at terminals served.

Test Holes: Test holes shall be in a straight duct, as far as possible downstream from elbows, bends, take-off, and other turbulence generating devices, to optimize reliability of flow measurements.

Air Terminal Balancing: Measurement of flow rates by means of velocity meters applied to individual terminals, with or without cones or other adapters, shall be used only for balancing. Measurement of air quantities at each type of air terminal (inlet and outlet) shall be determined by the method approved for balancing agenda.

B. Certified Reports

1. Submittal: Submit three copies of the reports described herein, covering air and water system performance, to the Architect/Engineer prior to final tests and inspection.
2. Instrument Records: Include types, serial numbers, and dates calibration of all instruments.
3. Reports: Reports shall identify conspicuously items not conforming to contract requirements, or obvious maloperation and design deficiencies.

4. Certification: The reports shall be certified by an independent testing and balancing Contractor who is versed in the field of air and water balancing and who is not affiliated with any firm involved in the design or construction phases of the project. Certification shall include checking or adherence to agenda of calculations, procedures, and evaluation of final summaries.

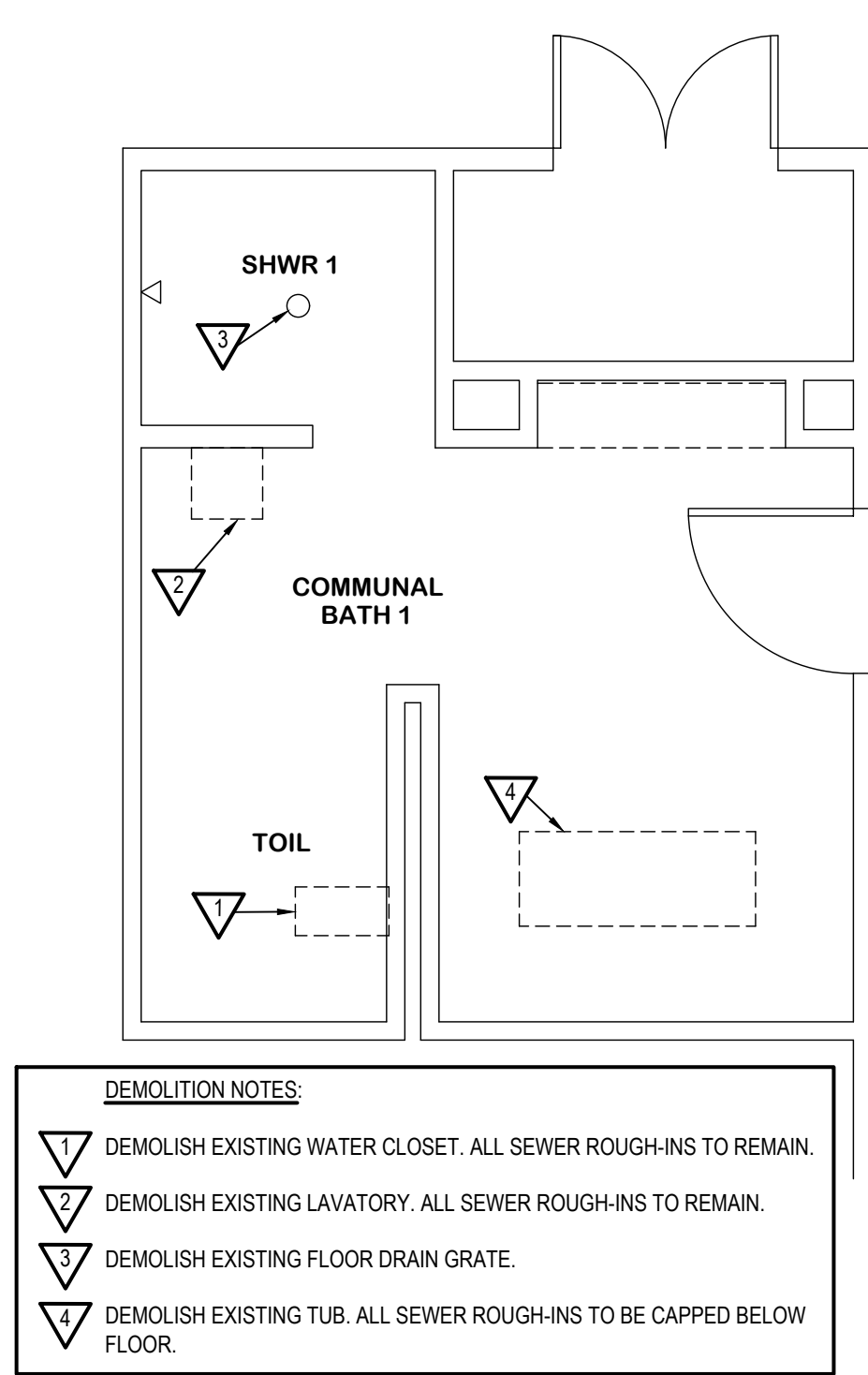
C. Air System Data

1. Report: The certified report shall include for each air-handling system the data listed below:
 - a. Installation Data:
 - (1) Manufacturer and Model
 - (2) Size
 - (3) Arrangement, Discharge, and Class
 - (4) Motor H.P., Voltage, Phase, Cycles, and Full Load Amps.
 - (5) Location and Local Identification Data
 - b. Design Data: Data listed in schedules on drawings and specifications.
 - c. Fan Recorded (Test) Data
 - (1) C.F.M.
 - (2) Static Pressure
 - (3) R.P.M.
 - (4) Motor Operating Amps.
 - (5) Motor Operating B.H.P.
 - (6) Air pressure drop of components and dampers;
2. Air Heating and Cooling Equipment:
 - a. Design Data:
 - (1) Load in BTU per hr.
 - (2) G.P.M.
 - (3) Entering and Leaving Water Temperature
 - (4) Entering and Leaving Air Conditions (D.B. and W.B.)
 - (5) C.F.M.
 - (6) Water Pressure Drop
 - b. Recorded Data:
 - (1) Type of Equipment and Identification (locate or number designation)
 - (2) Entering and Leaving Air Conditions (D.B. and W.B.)
 - (3) Entering and Leaving Water Temperatures
 - (4) G.P.M. (if metered)
 - (5) Temperature Rise or Drop

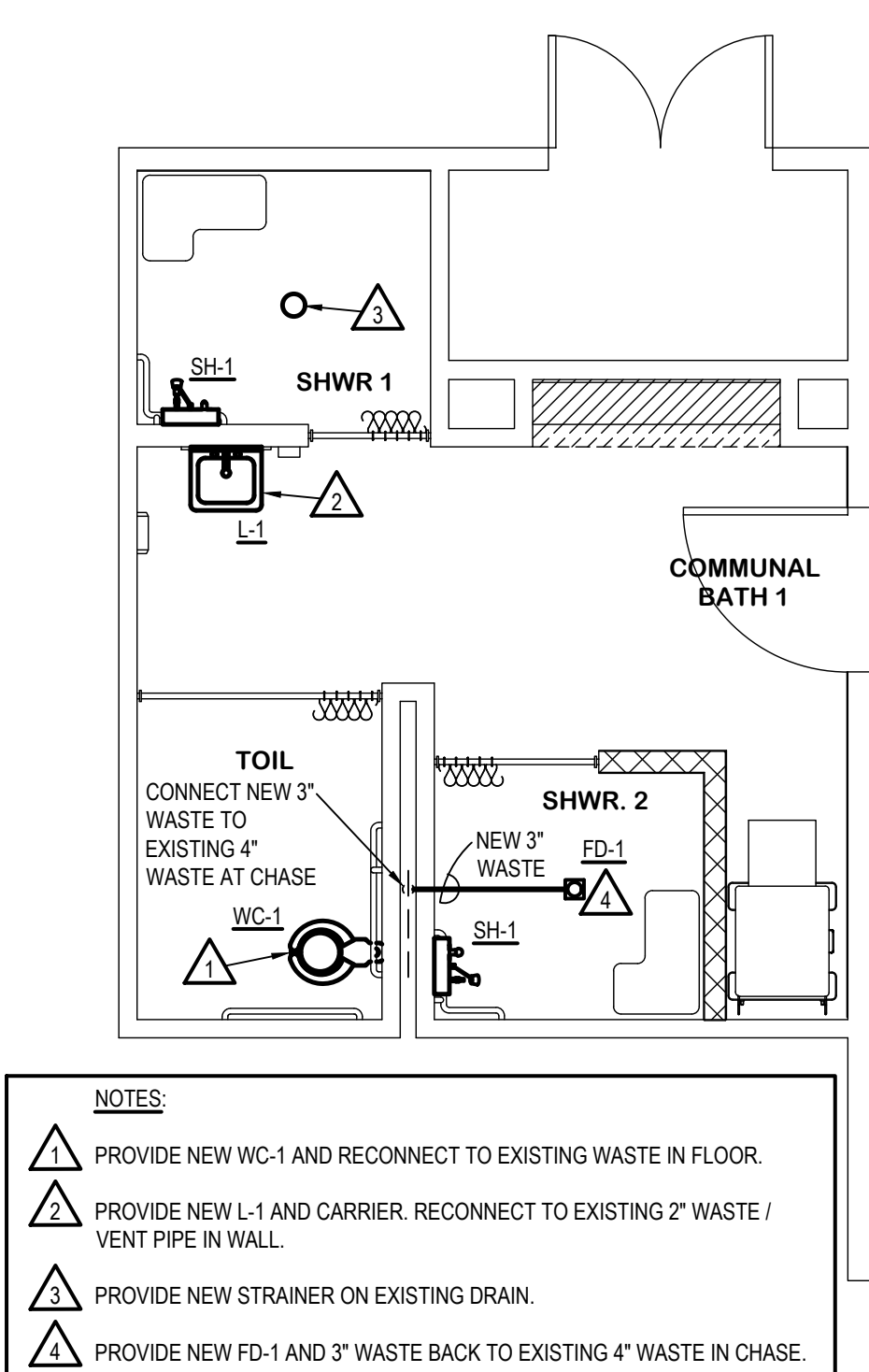
D. Final Tests, Inspections, and Acceptance

1. Capacity and Performance Tests: Make test to demonstrate that capacities and general performance of air and water systems comply with contract requirements.
2. Final Inspection: At the time of final inspection, the Contractor shall recheck, in the presence of the Architect/Engineer random selections of data water and air quantities, air motion and sound levels recorded in the certified report.
3. Points and Areas for Recheck: As selected by the Architect/Engineer.
4. Measure and Test Procedures: As approved for working forming basis of certified report.
5. Selections of Recheck: (specific plus random): In general, selections for recheck will not exceed 25 percent of the total number tabulated in the report, except that special air system may require a complete recheck for safety reasons.
6. Marking of Settings: Following final acceptance of certified reports by the Architect/Engineer the setting of all valves, splitters, dampers, and other adjustment devices shall be permanently marked by the Contractor, so that adjustment can be restored if disturbed at any time. Do not mark devices until after final acceptance.

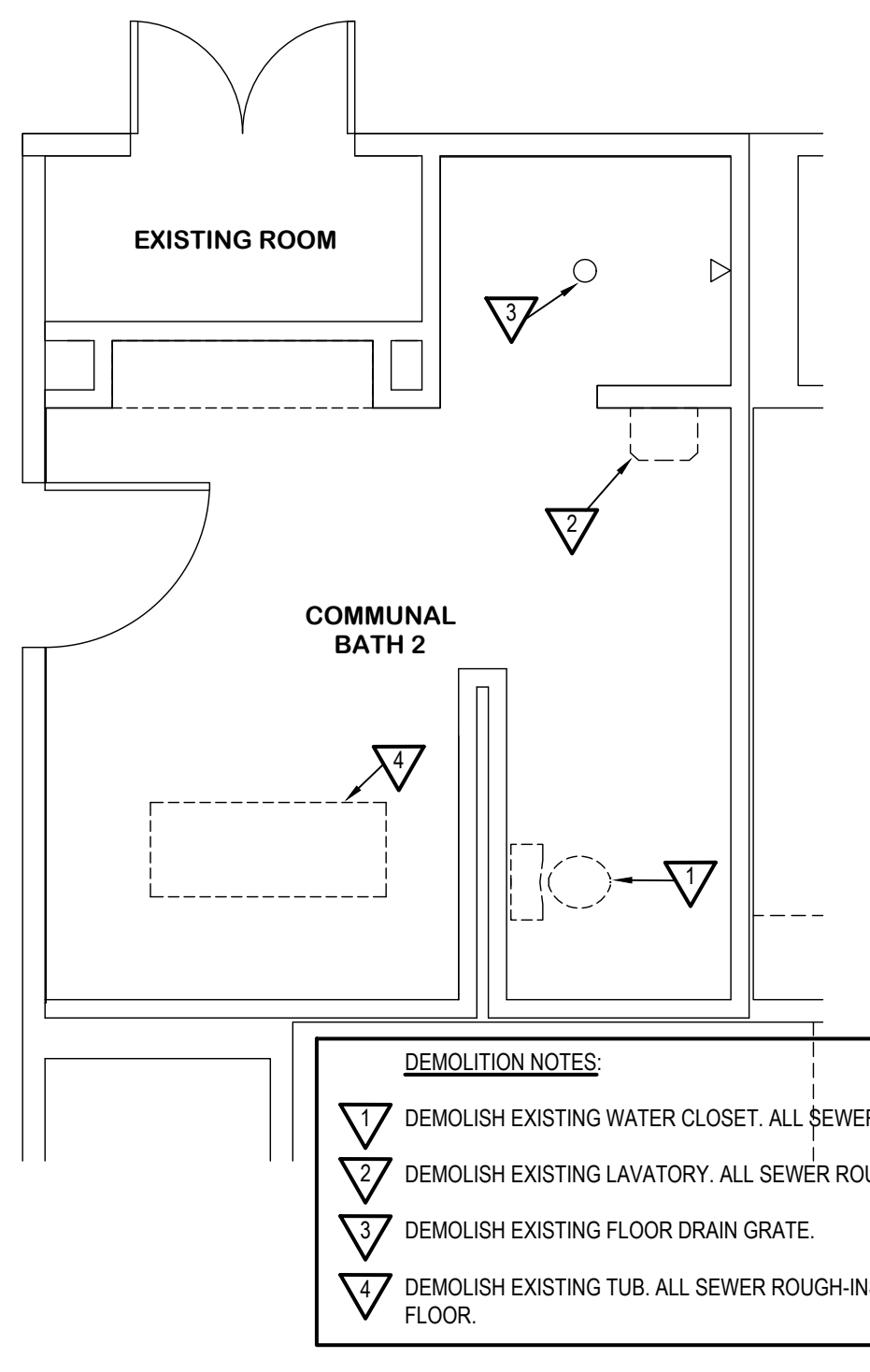
END OF SECTION



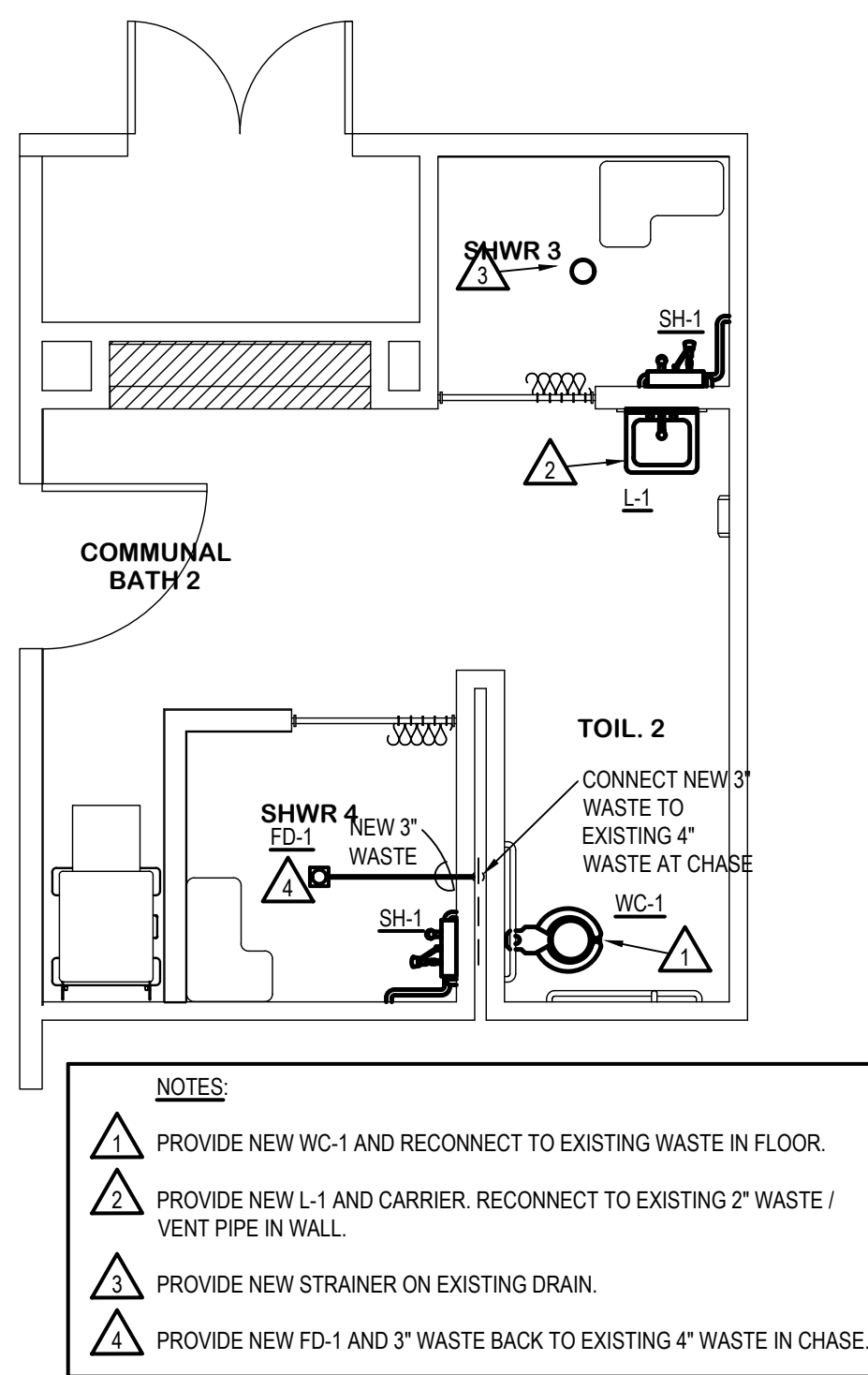
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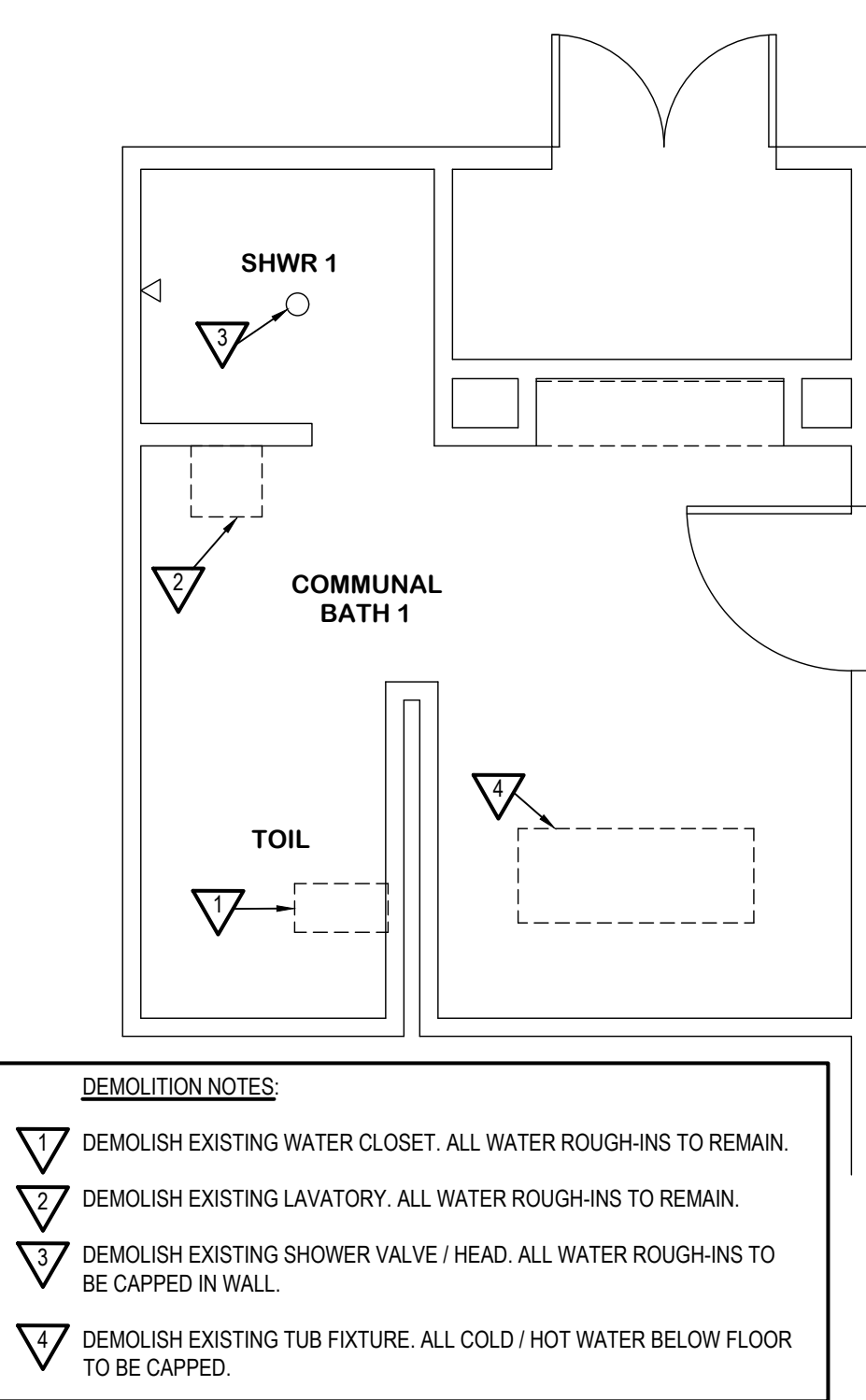
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NON PRESSURE**
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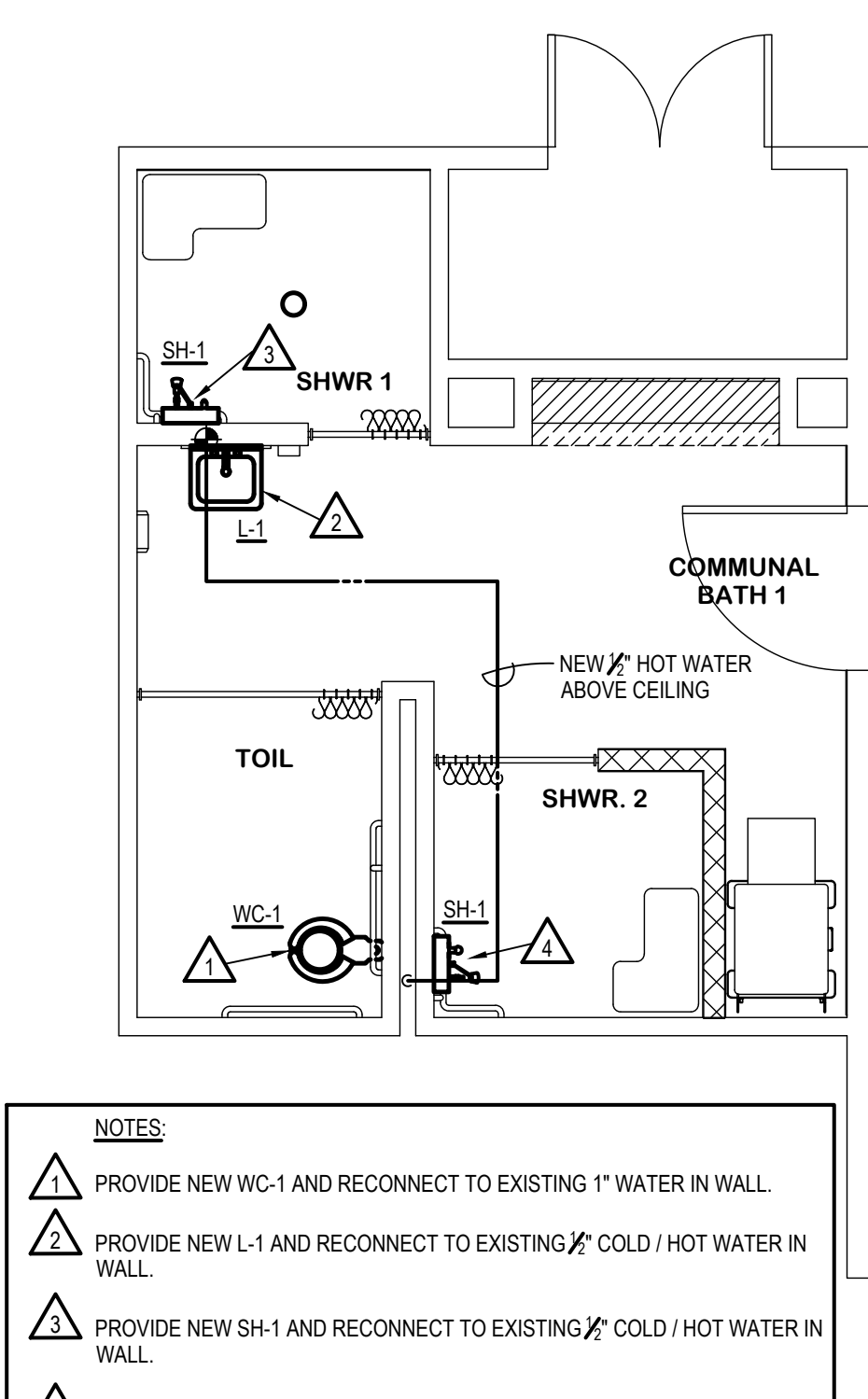
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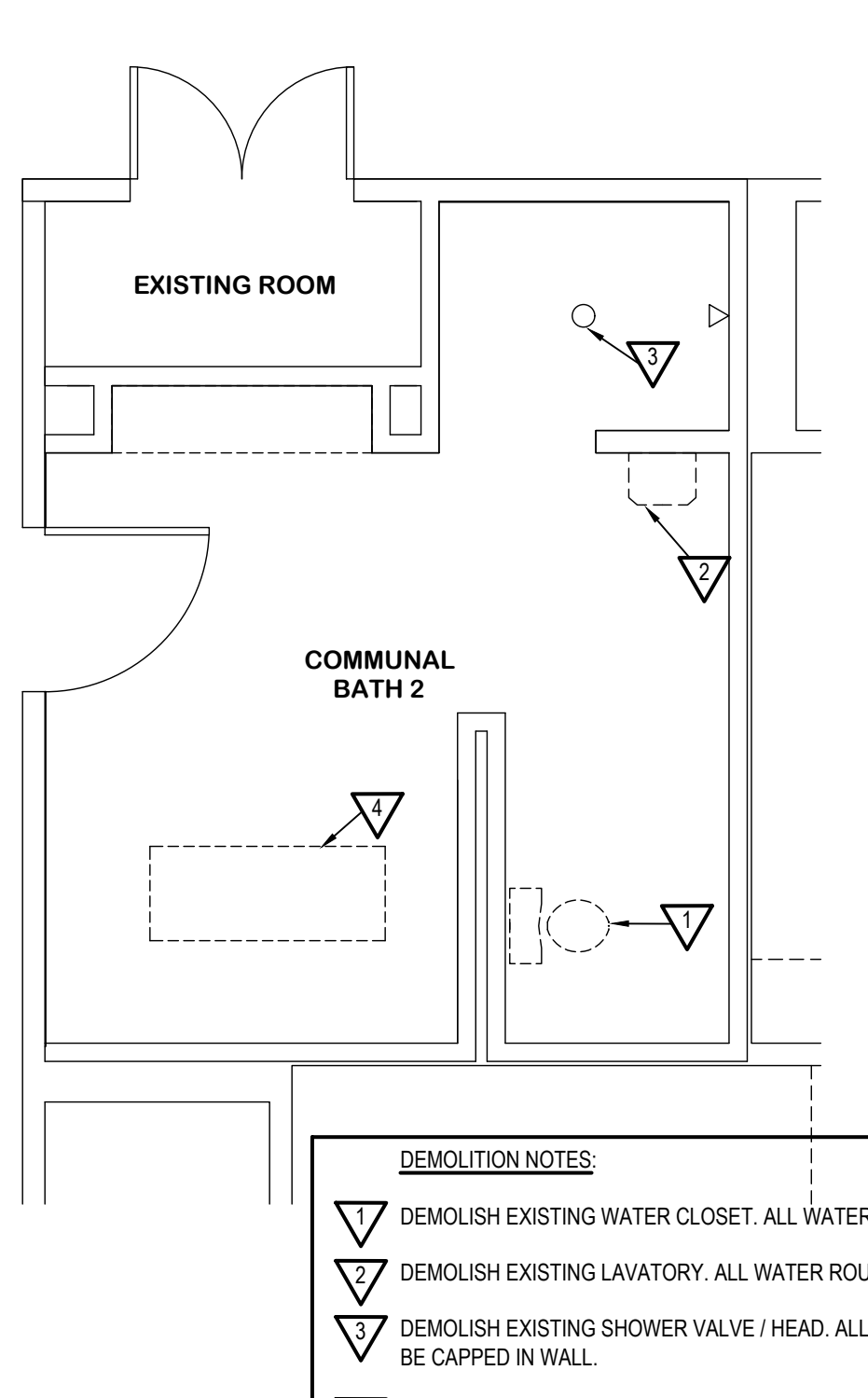
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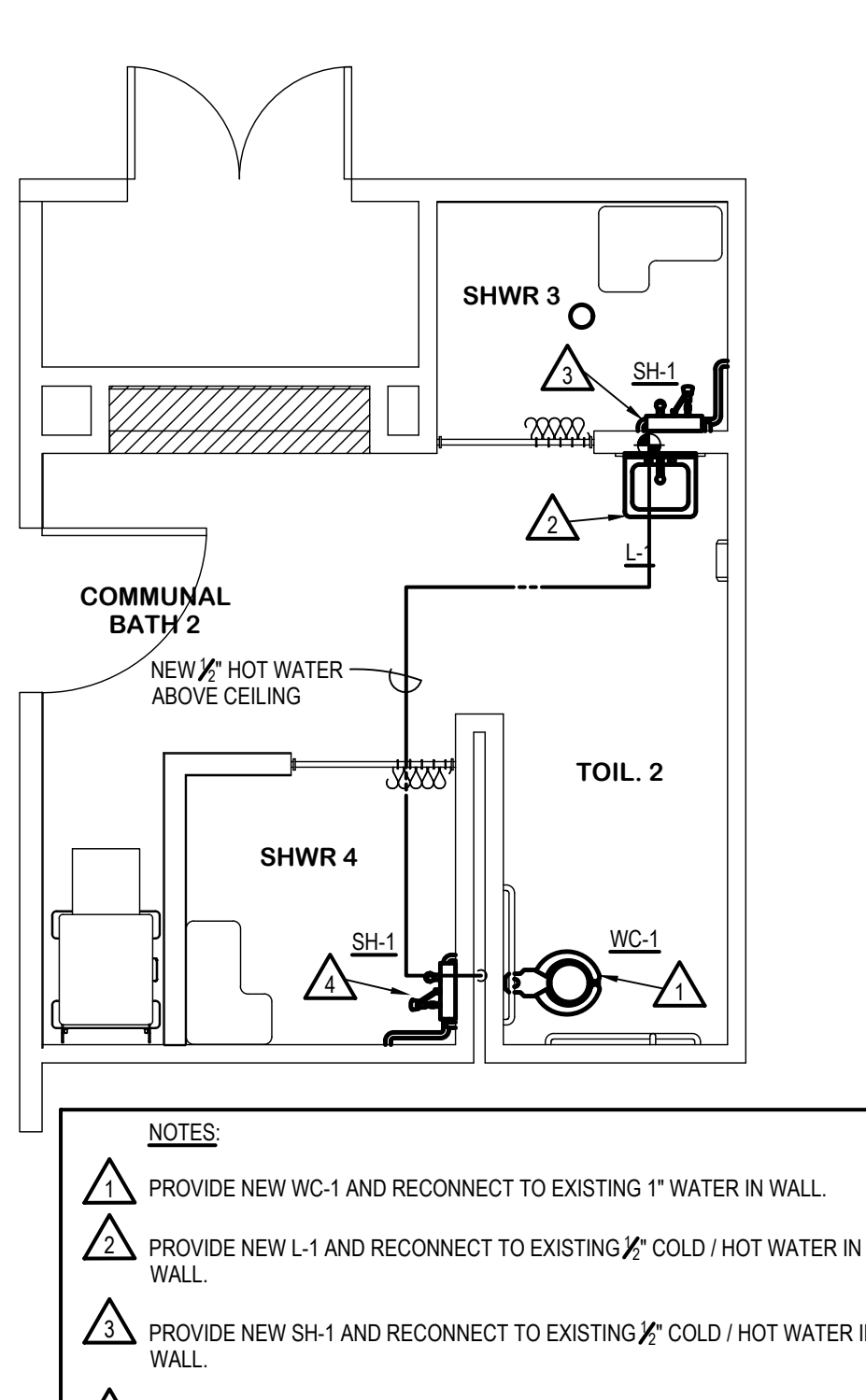
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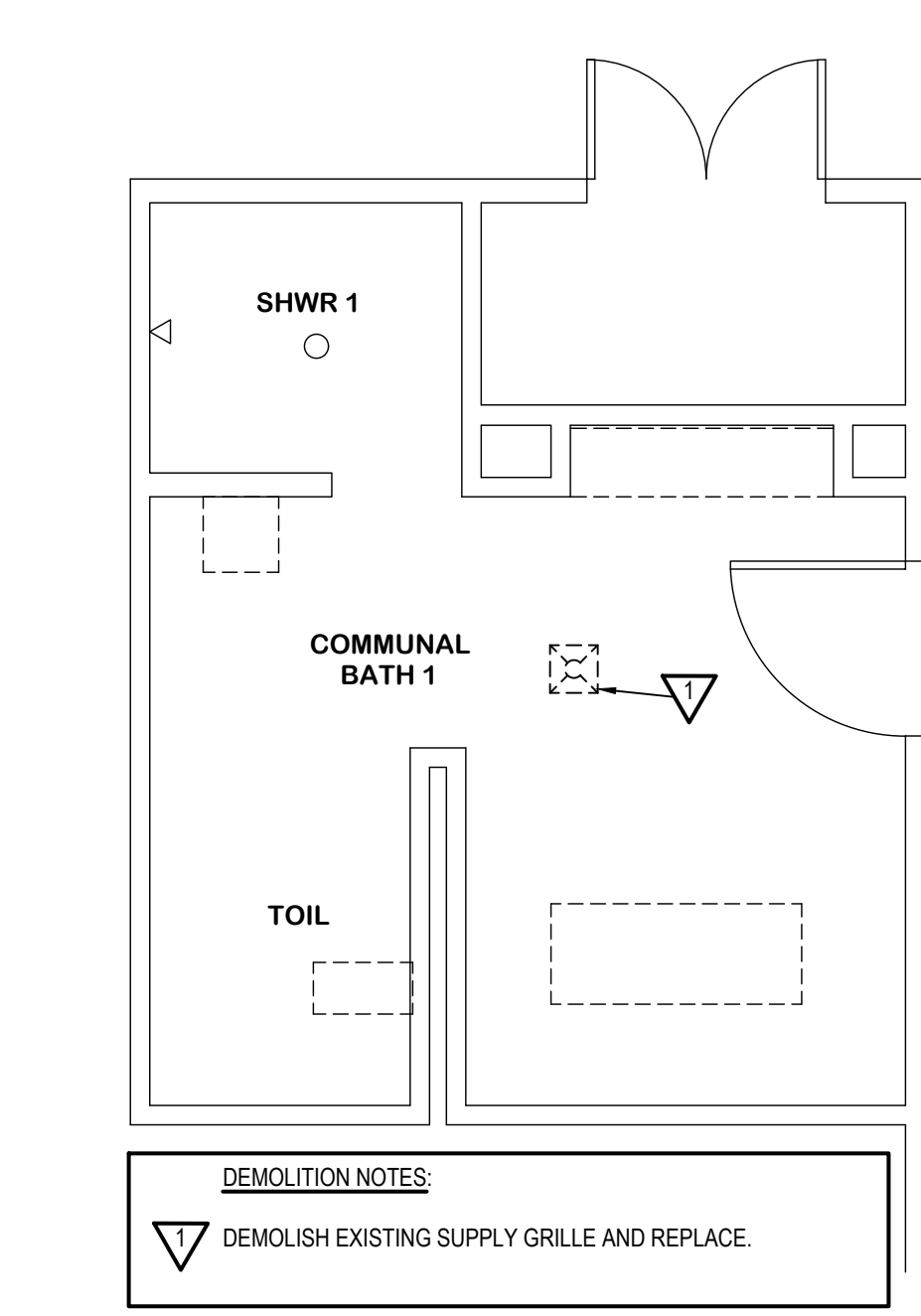
**COMMUNAL BATH 1
PRESSURE**
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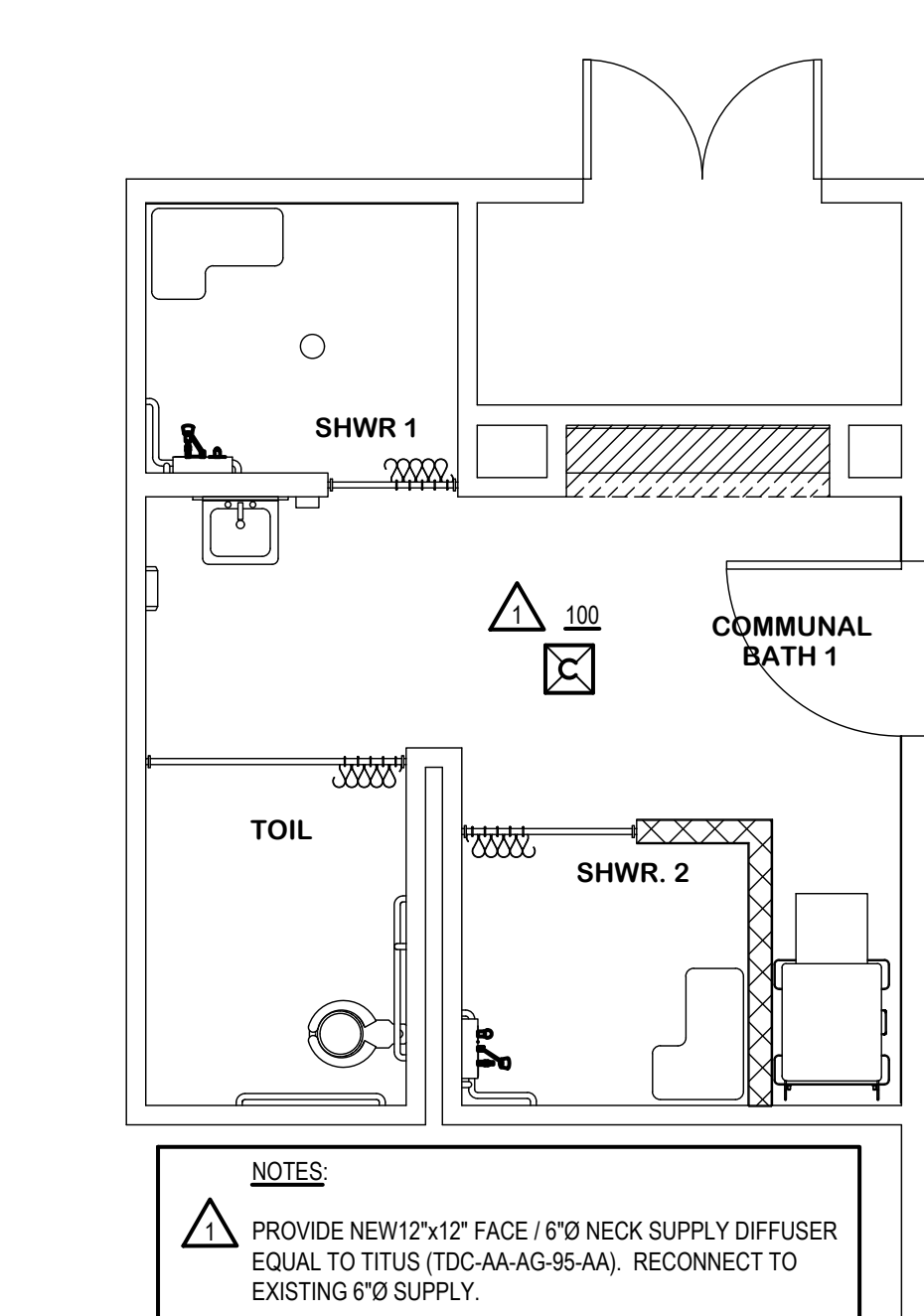
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DEMOLITION - PRESSURE**
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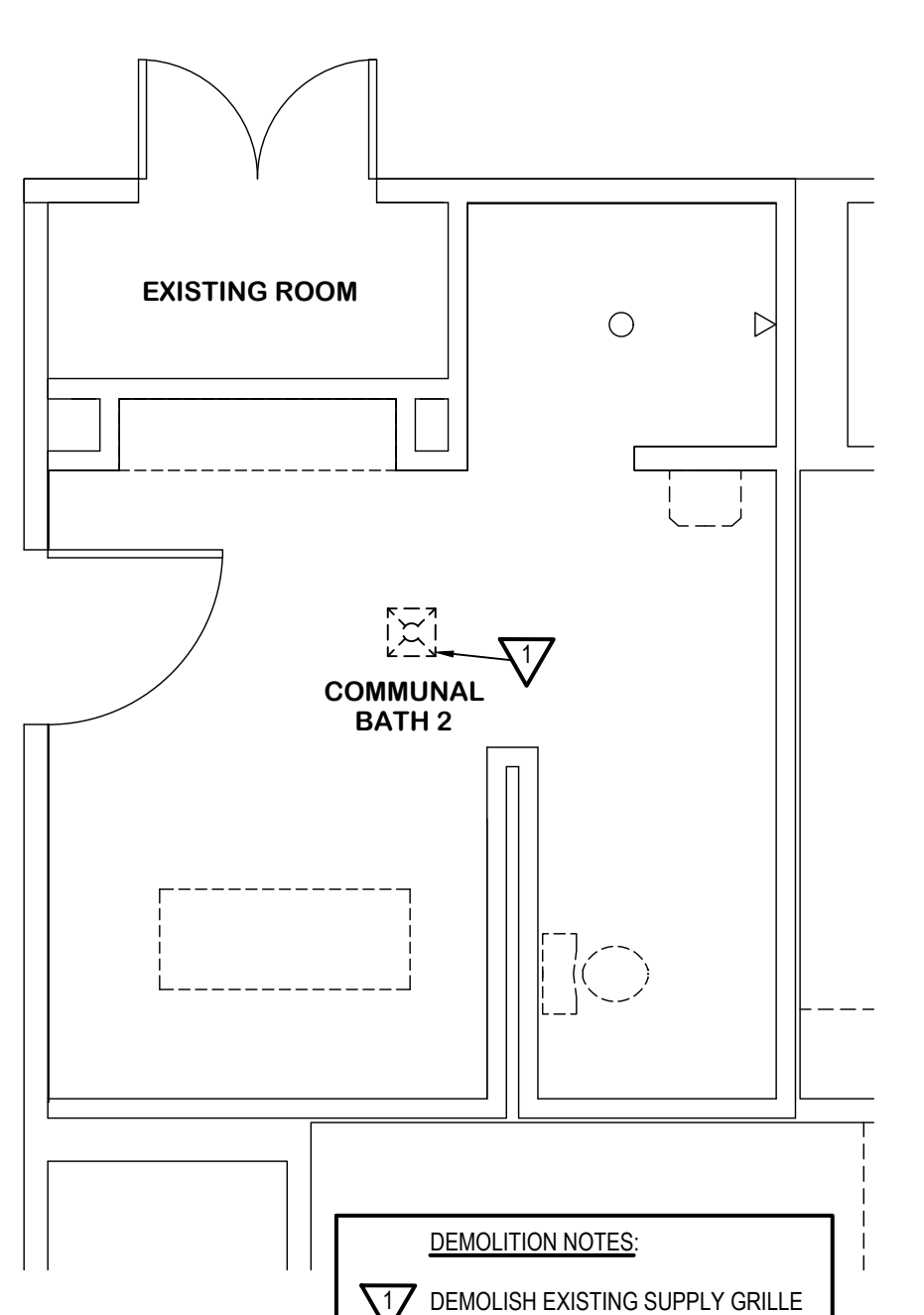
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PRESSURE**
SCALE: 1/4" = 1'-0"



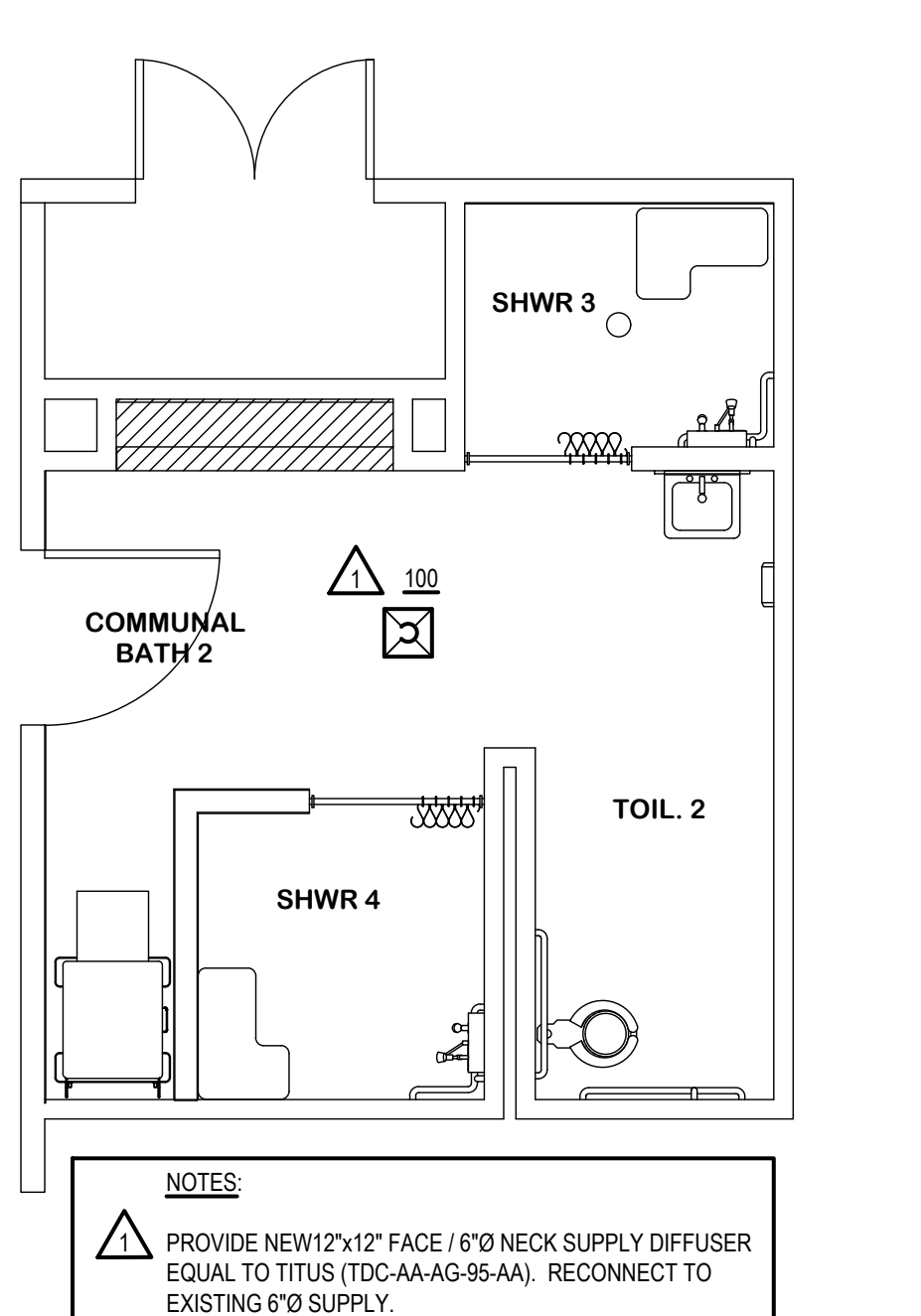
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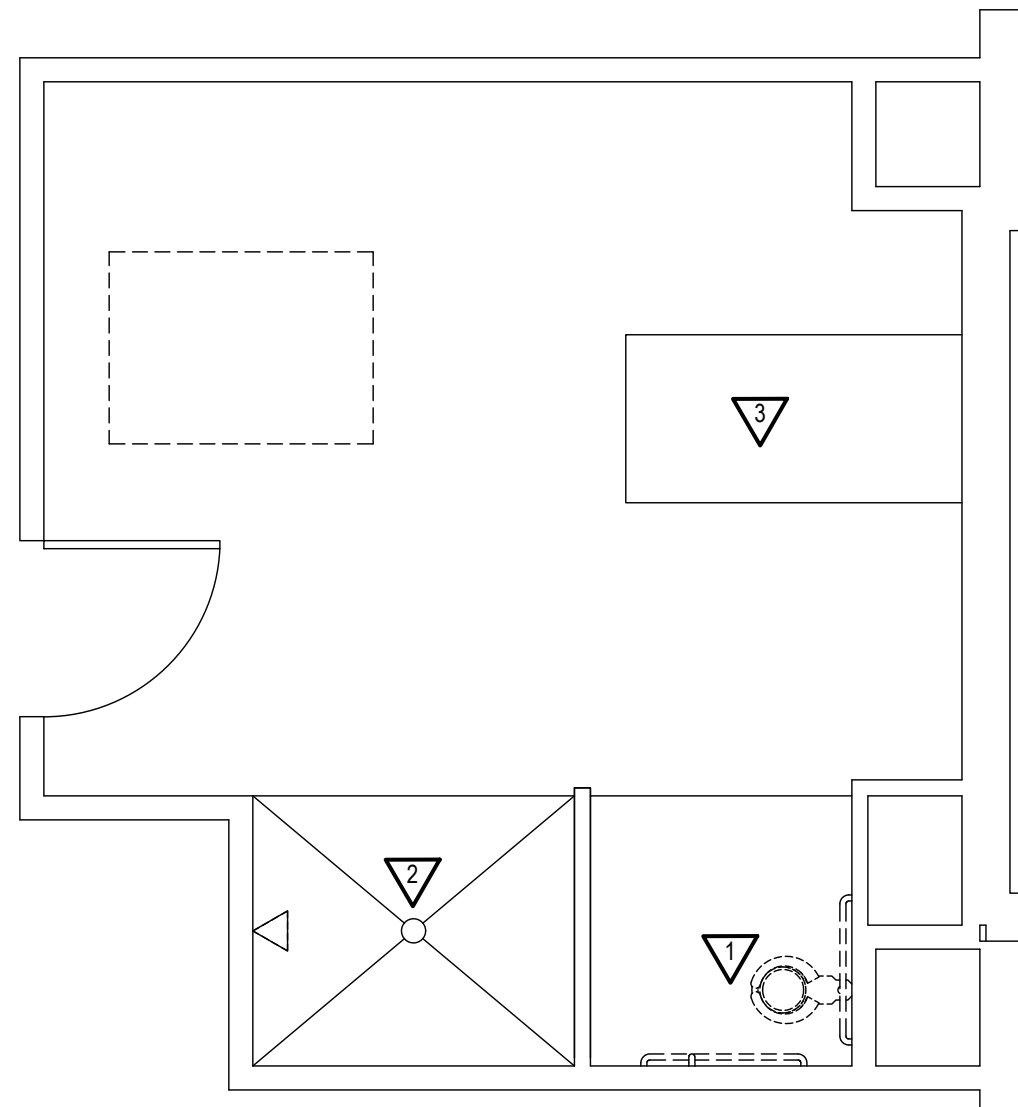
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H.V.A.C.**
SCALE: 1/4" = 1'-0"



**COMMUNAL BATH 2
DEMOLITION - H.V.A.C.**
SCALE: 1/4" = 1'-0"

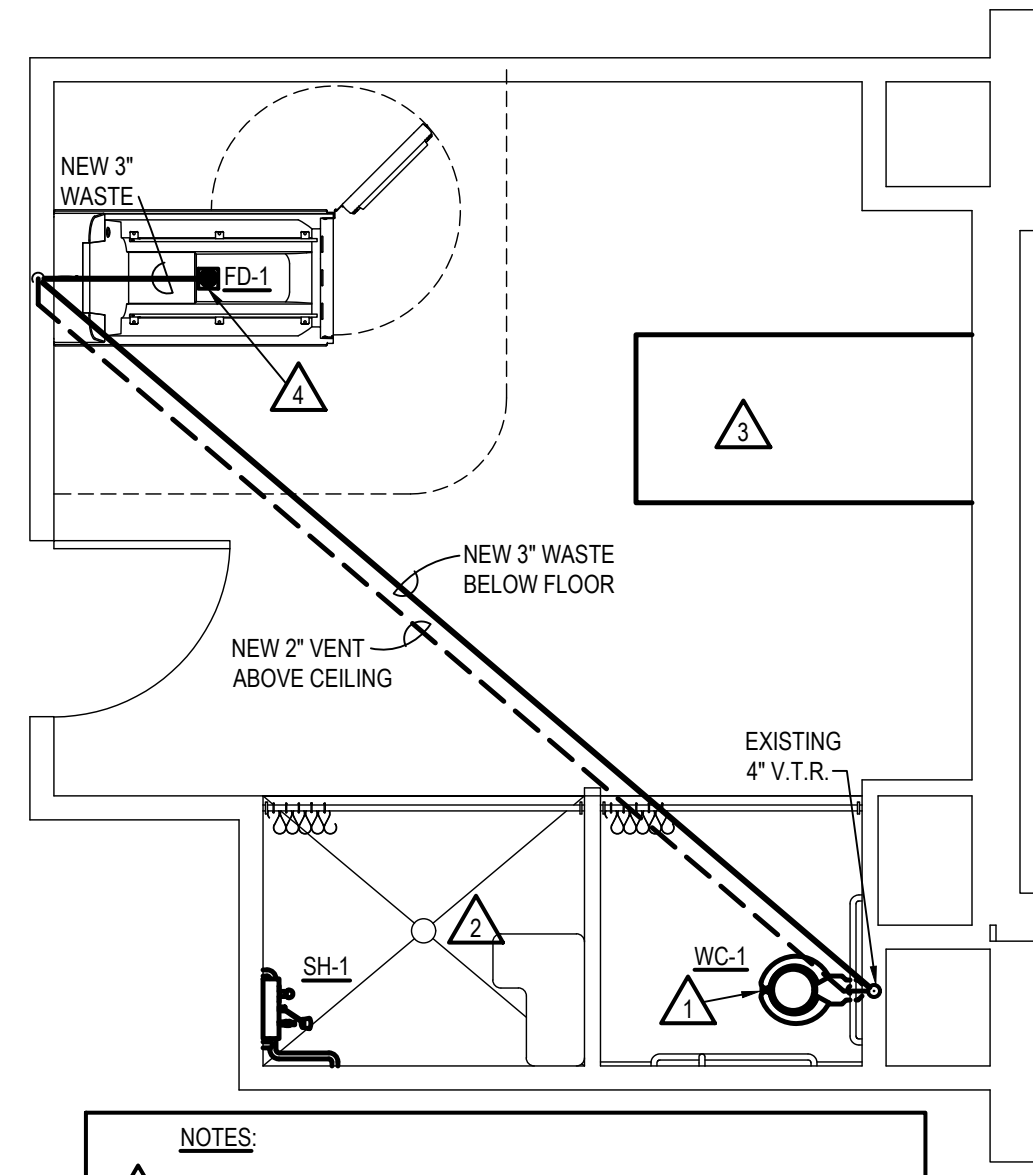


**COMMUNAL BATH 2
H.V.A.C.**
SCALE: 1/4" = 1'-0"



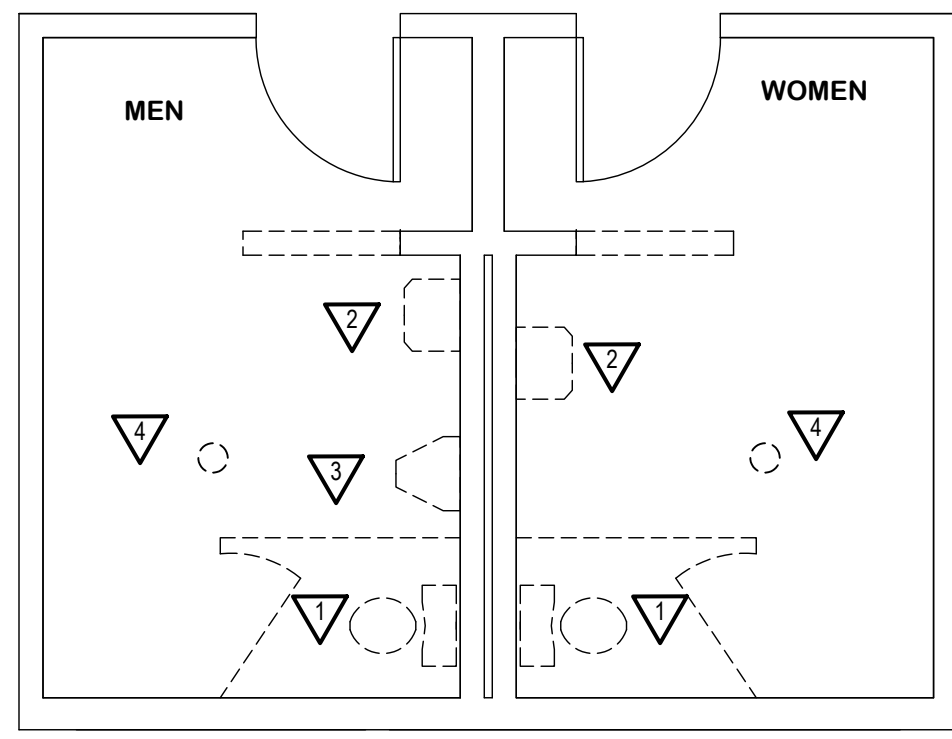
- DEMOLITION NOTES:
- DEMOLISH EXISTING WATER CLOSET. ALL WATER ROUGH-INS TO REMAIN.
 - DEMOLISH EXISTING FLOOR DRAIN GRATE.
 - REMOVE EXISTING TUB FIXTURE AND RE-INSTALL.

COMMUNAL BATH 3
DEMOLITION - NON PRESSURE
SCALE: 1/4" = 1'-0"



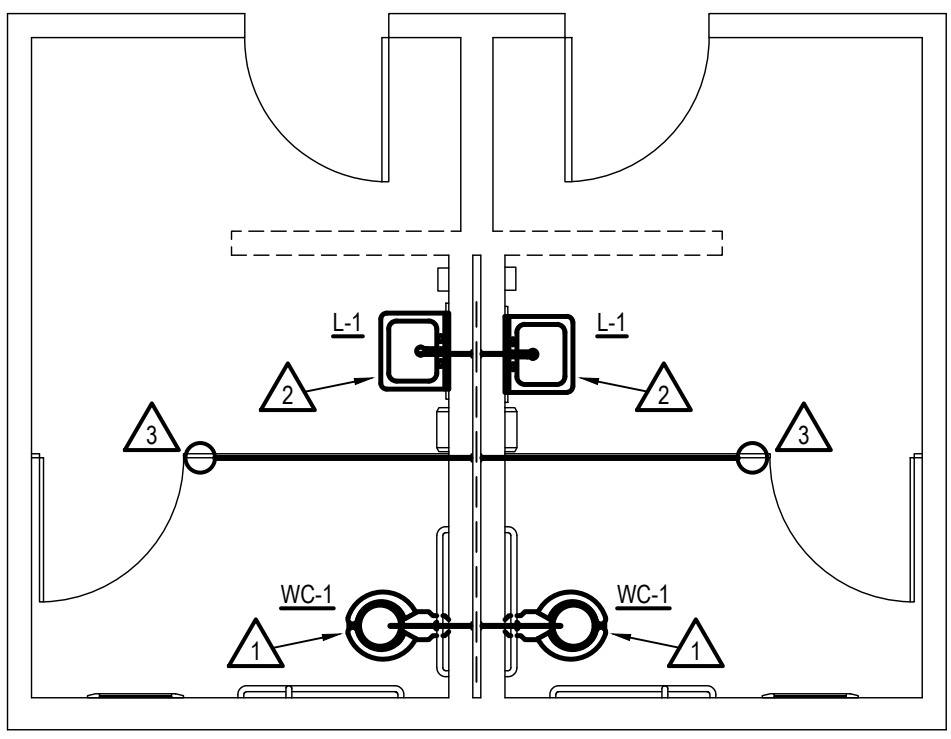
- NOTES:
- PROVIDE NEW WC-1 AND RECONNECT TO EXISTING WASTE IN FLOOR.
 - PROVIDE NEW STRAINER ON EXISTING DRAIN.
 - RE-INSTALL EXISTING TUB AND RECONNECT TO EXISTING WASTE.
 - PROVIDE NEW FD-1 AND 3" WASTE / 2" VENT BACK TO EXISTING WC-1.

COMMUNAL BATH 3
NON PRESSURE
SCALE: 1/4" = 1'-0"



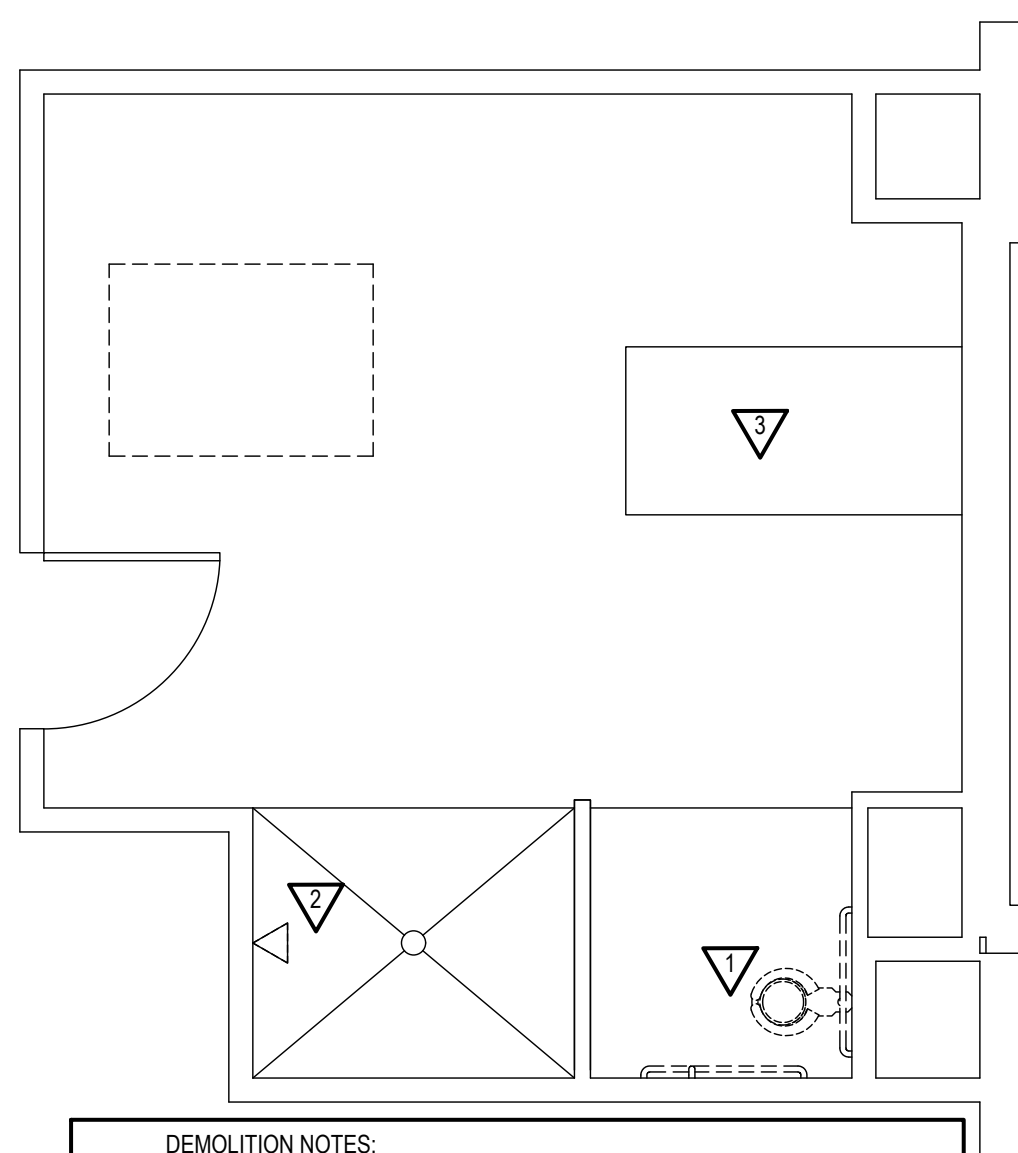
- DEMOLITION NOTES:
- DEMOLISH EXISTING WATER CLOSET. ALL WATER ROUGH-INS TO REMAIN.
 - DEMOLISH EXISTING LAVATORY. DEMOLISH WASTE / VENT PIPE IN WALL.
 - DEMOLISH EXISTING URINAL AND CARRIER. CAP SEWER PIPING IN WALL.
 - DEMOLISH EXISTING FLOOR DRAIN GRATE.

HALL BATH
DEMOLITION - NON PRESSURE
SCALE: 1/4" = 1'-0"



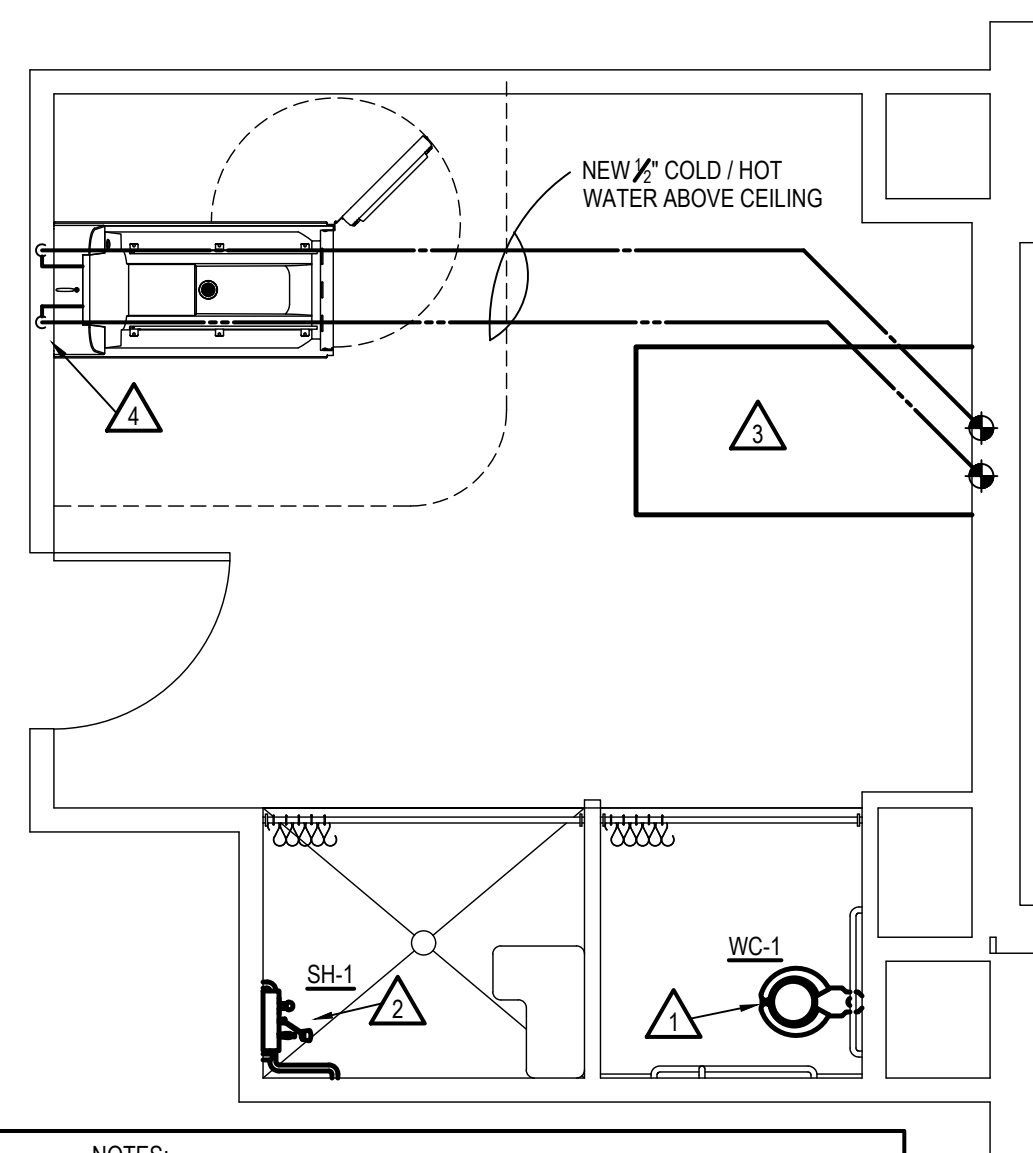
- NOTES:
- PROVIDE NEW WC-1 AND RECONNECT TO EXISTING WASTE IN FLOOR.
 - PROVIDE NEW L-1 AND CARRIER. PROVIDE NEW 2" WASTE / VENT PIPE TO EACH LAVATORY.
 - PROVIDE NEW STRAINER ON EXISTING DRAIN.

HALL BATH
NON PRESSURE
SCALE: 1/4" = 1'-0"



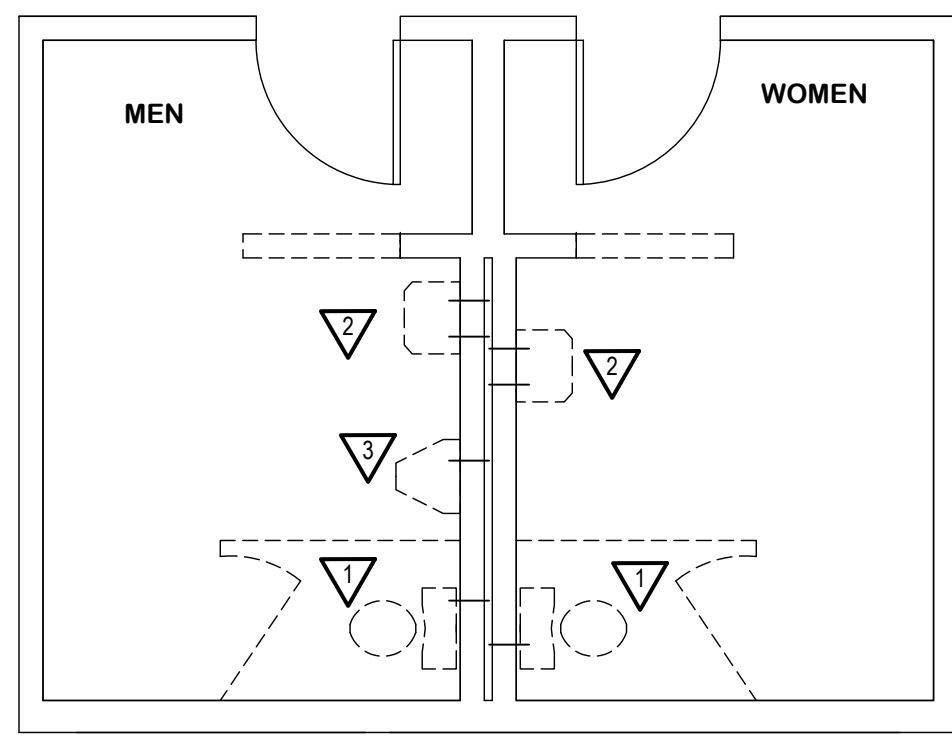
- DEMOLITION NOTES:
- DEMOLISH EXISTING WATER CLOSET. ALL WATER ROUGH-INS TO REMAIN.
 - DEMOLISH EXISTING SHOWER VALVE / HEAD. ALL WATER ROUGH-INS TO BE CAPPED IN WALL.
 - REMOVE EXISTING TUB FIXTURE AND RE-INSTALL.

COMMUNAL BATH 3
DEMOLITION - PRESSURE
SCALE: 1/4" = 1'-0"



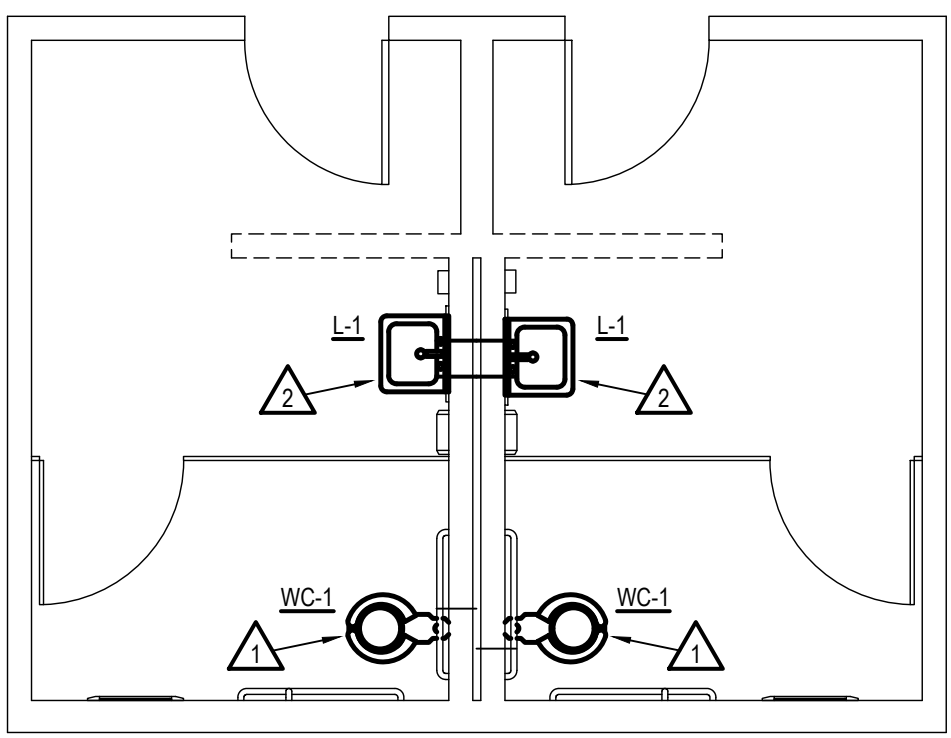
- NOTES:
- PROVIDE NEW WC-1 AND RECONNECT TO EXISTING 1" WATER IN WALL.
 - PROVIDE NEW SH-1 AND PROVIDE NEW 1/2" COLD / HOT WATER FROM IN WALL.
 - RE-INSTALL EXISTING TUB FIXTURE AND RECONNECT WATER PIPE.
 - PROVIDE NEW 1/2" COLD / HOT TO NEW WHIRLPOOL TUB.

COMMUNAL BATH 3
PRESSURE
SCALE: 1/4" = 1'-0"



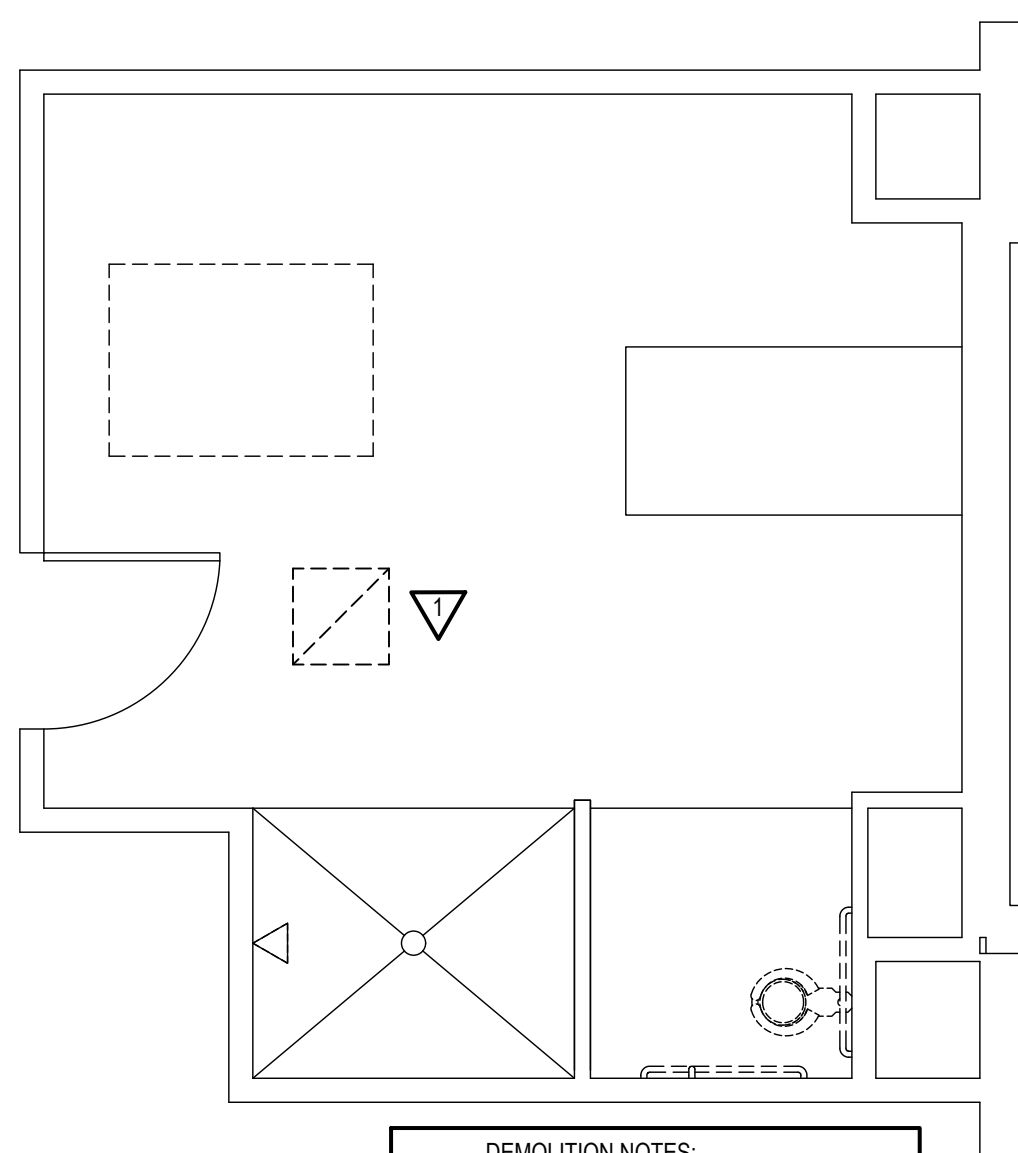
- DEMOLITION NOTES:
- DEMOLISH EXISTING WATER CLOSET AND RE-USE EXISTING 1" WATER FOR NEW FLUSH VALVE.
 - DEMOLISH EXISTING LAVATORY AND ALL COLD / HOT WATER TO FIXTURE. CAP PIPES IN WALL.
 - DEMOLISH EXISTING URINAL AND CAP 1/2" COLD WATER PIPING IN WALL.

HALL BATH
DEMOLITION - PRESSURE
SCALE: 1/4" = 1'-0"



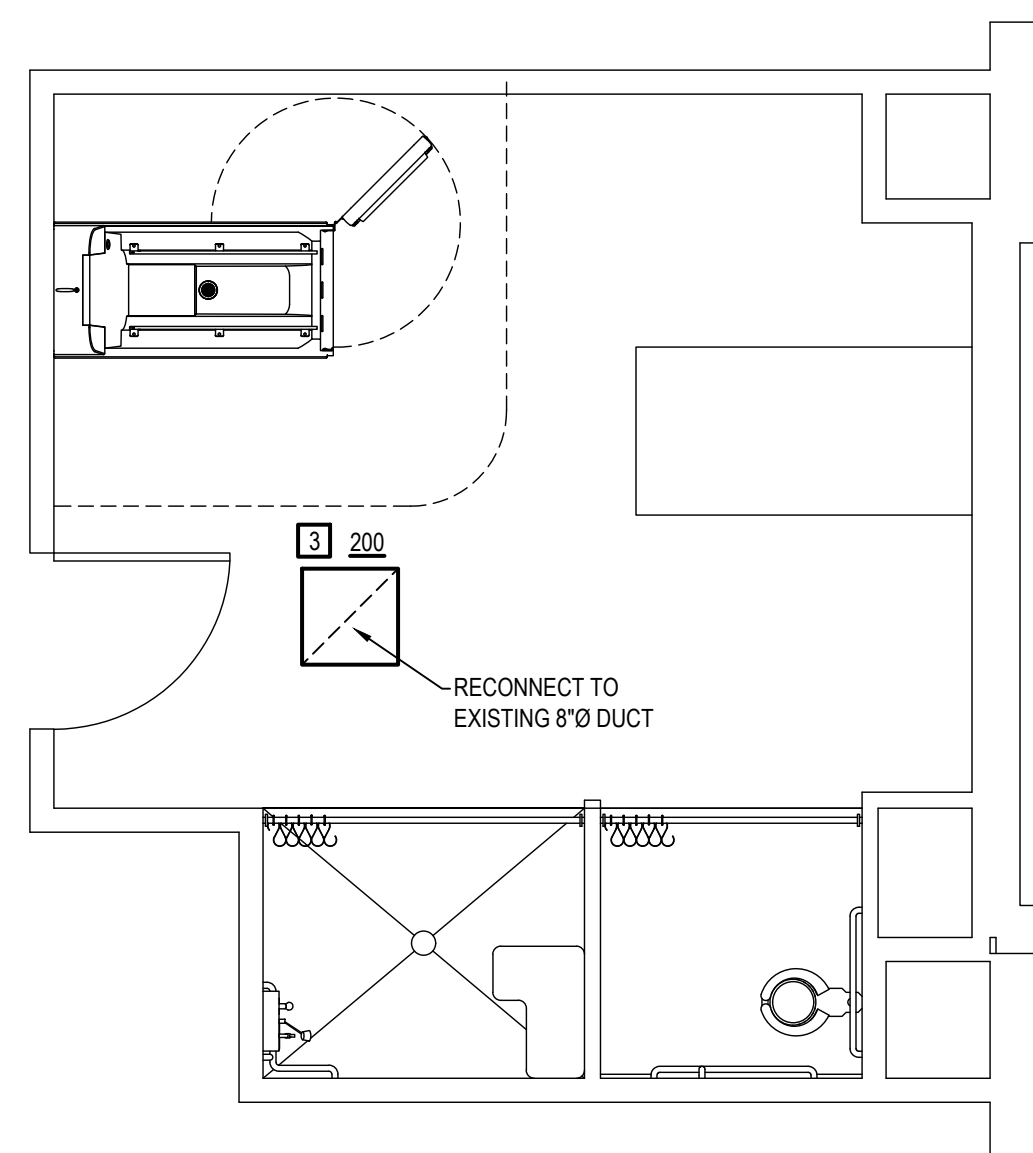
- NOTES:
- PROVIDE NEW WC-1 AND RECONNECT TO EXISTING 1" WATER AT WALL.
 - PROVIDE NEW L-1 AND CARRIER. PROVIDE NEW 1/2" COLD / HOT WATER, FROM IN CHASE, TO EACH LAVATORY.

HALL BATH
PRESSURE
SCALE: 1/4" = 1'-0"

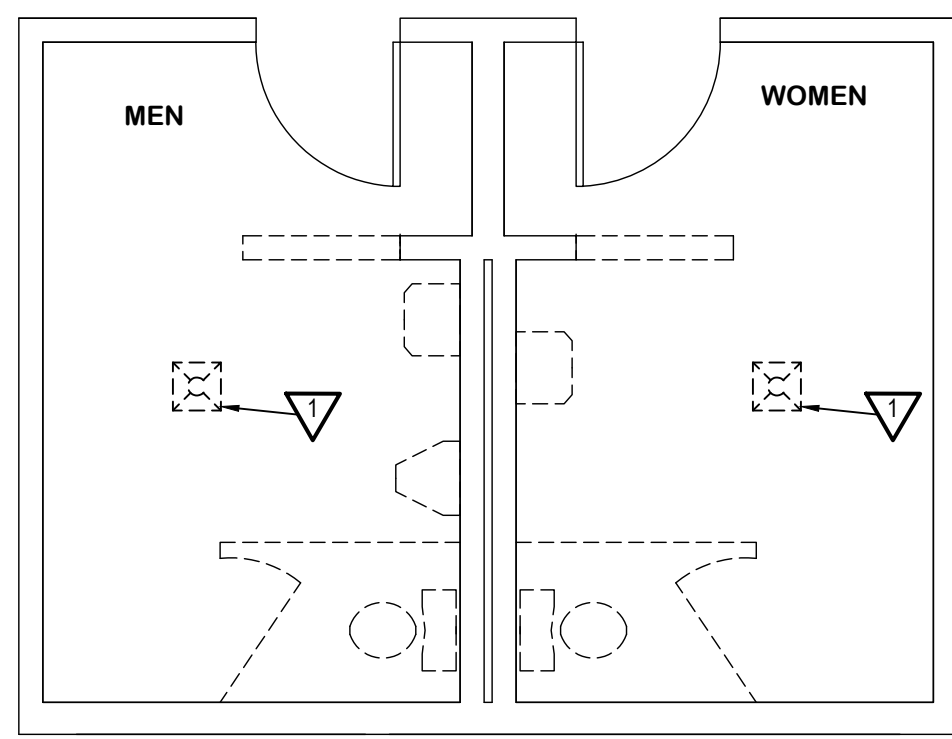


- DEMOLITION NOTES:
- DEMOLISH EXISTING EXHAUST GRILLE

COMMUNAL BATH 3
DEMOLITION - H.V.A.C.
SCALE: 1/4" = 1'-0"

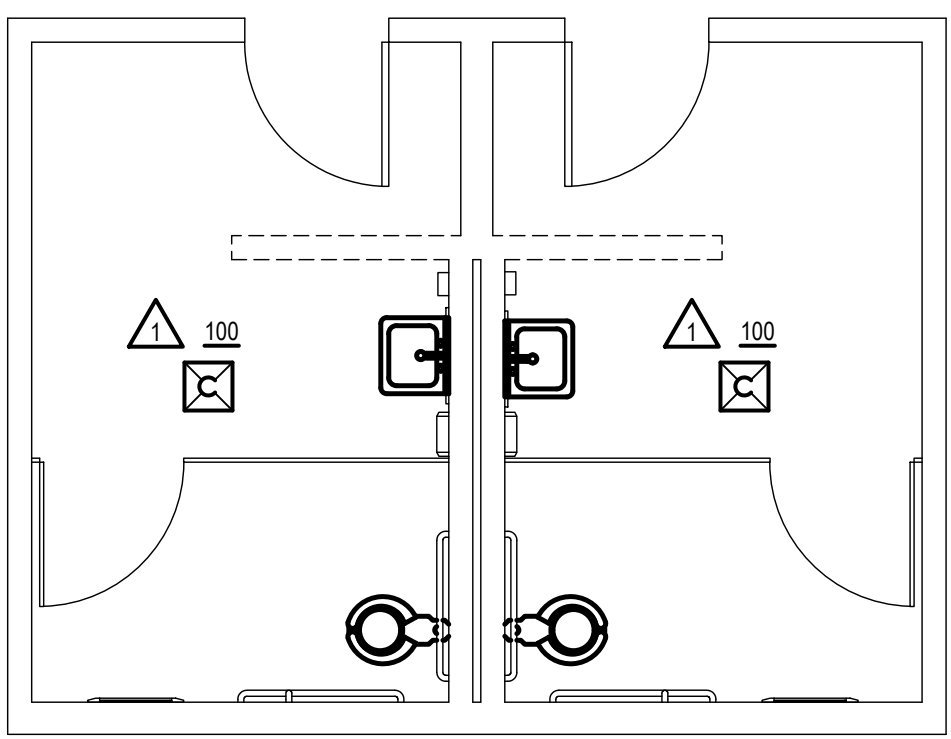


COMMUNAL BATH 3
H.V.A.C.
SCALE: 1/4" = 1'-0"



- DEMOLITION NOTES:
- DEMOLISH EXISTING SUPPLY GRILLE AND REPLACE.

HALL BATH
DEMOLITION - H.V.A.C.
SCALE: 1/4" = 1'-0"



- NOTES:
- PROVIDE NEW 12"x12" FACE / 6" Ø NECK SUPPLY DIFFUSER EQUAL TO TITUS (TDC-AA-AG-95-AA). RECONNECT TO EXISTING 8" Ø SUPPLY.

HALL BATH
H.V.A.C.
SCALE: 1/4" = 1'-0"