PLUMBNG LEGEND SDIL (S.) OR WASTE (W.) UNDER FLOOR SLAB. SDIL (S.) OR WASTE (W.) ABOVE FLOOR. GREASE WASTE (GW) UNDER FLOOR SLAB. RD RD ROOF DRAIN (STORM) UNDER FLOOR SLAB. ---- VENT (V.) ABOVE FLOOR. ======= VENT (V.) BELOW FLOOR. ====GW==== GREASE VENT (GV.) BELOW FLOOR. ----GW---- GREASE VENT (GV.) ABOVE FLOOR. ------ COLD WATER (C.W.) PIPING —————— HOT WATER (H.W.) PIPING. → → → → GAS (G.) PIPING IN BUILDING. — ✓ — ✓ — WATER SERVICE PIPING UNDERGROUND, INTO BUILDING. --- SHUT-OFF VALVE. - GAS COCK PER CODE. BACKFLOW PREVENTER. ROOF DRAIN. FLOOR DRAIN. CLEANDUT; F.CO., FLOOR CLEANDUT; VTR, VENT STACK THROUGH ROOF; EWH, ELECTRIC WATER HEATER; H.WC, ADA WATER CLOSET; H.LAV, ADA LAVATORY; WHA, WATER HAMMER ARRESTER; FD, FLOOR DRAIN; I.E., INVERT ELEVATION; ELEV., ELEVATION; BWV, BACK WATER VALVE; BFP, BACKFLOW PREVENTOR; RD, ROOF DRAIN

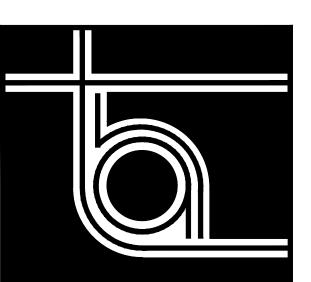
PLUBMING SPECIFICATIONS

- 1. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING EQUIPMENT SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. EQUIPMENT ITEMS NOT SHOWN OR CALLED FOR SUCH AS FITTINGS, VALVES, VACUUM BREAKERS, HAMMER ARRESTERS, RELIEF VALVES, ETC. SHALL ALSO BE INSTALLED TO MAKE A COMPLETE AND WORKABLE PLUMBING SYSTEM.
- 2. THE WORK SHALL INCLUDE, BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:
- A. SANITARY DRAINAGE SYSTEM.
- B. HOT AND COLD WATER PIPING.
- C. ROOF DRAINAGE SYSTEM.D. GAS PIPING SYSTEM.
- E. PIPE INSULATION.
- F. PLUMBING FIXTURES AND PLUMBING EQUIPMENT.
- G. WATER HAMMER ARRESTERS.
 H. WATER METER AND BACKFLOW PREVENTER.
- I. HOT WATER HEATER.J. FLOOR DRAINS.
- K. FLOOR CLEANOUTS.
- L. VENT PIPING.
- M. VALVES AND SILLCOCKS.
 N. SHOP DRAWINGS.
- O. NAME TAGS.
- THE FOLLOWING WORK IS TO BE DONE BY OTHER TRADES:
- A. EXCAVATION AND BACKFILL.
- B. CONCRETE WORK.
- C. PAINTING.D. ACCESS PANELS
- E. CUTTING AND PATCHING.
- F. ELECTRICAL WIRING.
- G. BATHROOM ACCESSORIES.
- 4. OBTAIN AND PAY FOR ALL REQUIRED TEST, PERMITS, INSPECTIONS AND BACK CHARGES.
- 5. ALL WORK SHOWN ON THE PLANS IS INTENDED TO BE APPROXIMATELY CORRECT TO SCALE, BUT FIGURED DIMENSIONS AND DETAILED DRAWINGS ARE TO BE FOLLOWED IN EVERY CASE. THE DRAWINGS SHALL BE TAKEN IN A SENSE AS DIAGRAMMATIC. METHODS OF RUNNING PIPES ARE SHOWN BUT IT IS NOT INTENDED TO SHOW OFFSETS AND FITTINGS, OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED.
- 6. MATERIAL, INSTALLATIONS AND WORKMANSHIP SHALL BE IN FULL ACCORD WITH THE MOST MODERN PLUMBING CONSTRUCTION REQUIREMENTS. ALL MATERIALS SHALL BE NEW. THIS CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, BOCA AND NATIONAL CODES.
- 7. THIS CONTRACTOR SHALL INSPECT THE SITE AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH HIS WORK WILL BE PERFORMED. HE SHALL COORDINATE HIS WORK SO THAT IT DOES NOT INTERFERE WITH THE WORK OF OTHER TRADES AND THE GENERAL CONTRACTORS BUILDING SCHEDULE.
- 8. INSULATE ALL HOT AND COLD WATER PIPING WITH OWENS_ CORNING OR EQUAL FIBERGLASS SECTIONAL PIPE INSULATION TYPE ASJ/SSLII OR EQUAL. INSTALL 1/2 INCH THICK INSULATION ON COLD WATER AND 1 INCH THICK INSULATION ON HOT WATER PIPING. FITTINGS TO BE INSULATED WITH "ZESTON" PRE-MOLDED FIBERGLASS FITTING INSULATION.
- 9. THE CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. IF ANY DEFECTS IN MATERIALS OR WORKMANSHIP OCCUR WITHIN THIS PERIOD, THEY SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER. MOTORS AND PUMPS SHALL INCLUDE A FIVE YEAR WARRANTY BY THE MANUFACTURER.
- 10. BEFORE PURCHASING THE FOLLOWING EQUIPMENT, SUBMIT FIVE (5) COMPLETE COPIES OF DESCRIPTIVE EQUIPMENT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER THROUGH THE GENERAL CONTRACTOR.
- A. PLUMBING FIXTURES AND TRIM.
- B. FLOOR CLEANOUTS.C. FLOOR DRAINS.
- D. VALVES AND SILL COCKS.
- E. WATER HEATER.F. PIPE INSULATION.
- G. BACKFLOW PREVENTER AND PRESSURE REDUCING VALVE.

TO THE APPLICABLE TRADES INVOLVED.

- 11. ALL SHOP DRAWINGS SHALL BE SUBMITTED AT ONE TIME. ANY EQUIPMENT SUBSTITUTED THAT REQUIRES EXTRA WORK OR COST BY OTHER TRADES SHALL BE COMPENSATED BY THIS CONTRACTOR
- 12. SOIL, STORM, WASTE, VENT PIPING AND FITTINGS ABOVE GROUND SHALL BE HUBLESS CAST IRON SOIL PIPE AND FITTINGS
- 13. SOIL, STORM, WASTE, VENT PIPING AND FITTINGS UNDERGROUND CAN GROUND SHALL BE PVC SCHEDULE 40 SOIL PIPE AND FITTINGS.
- 14. WATER PIPING ABOVE GROUND WITHIN BUILDING SHALL BE TYPE "L" HARD SEAMLESS COPPER TUBING WITH CAST BRONZE SOLDER TYPE FITTINGS. EXPOSED PIPING AT FIXTURES SHALL BE CHROME PLATED BRASS. MINIMUM SIZE 1/2" EXCEPT 3/8" AT FIXTURES.
- 15. FURNISH AND INSTALL PATENTED TYPE DIELECTRIC FITTINGS OR COUPLINGS, EPCO, VALLETT, MAY OR APPROVED EQUAL, IN PIPE SYSTEMS WHEREVER DISSIMILAR METALS ARE JOINTED.
- 16. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH THREADED MALLEABLE IRON FITTINGS. ALL GAS PIPING SHALL BE PAINTED YELLOW.
- 17. GAS COCK SHALL BE WATTS REGULATOR SERIES GBV APPROVED GAS BALL VALVE.

- 18. EACH ABOVE GROUND PORTION OF THE GAS PIPING SYSTEM UPSTREAM FROM EACH EQUIPMENT SHUTOFF VALVE SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO ANY GROUNDING
- 19. SHUT_ OFF VALVES SHALL BE WATTS REGULATOR NO. B_ 6001 OR EQUAL BRONZE BALL VALVE WITH
- 20. FURNISH TO THE GARAGE CONTRACTOR, FLASHING COLLAR WITH CAULKING RING FOR ALL PIPES PASSING THROUGH DECKS.
- 21. FURNISH AND INSTALL ALL REQUIRED HANGERS, STRUCTURAL SUPPORTS, RIGGING, SLEEVES, LADDERS, HOIST AND OTHER REQUIREMENTS FOR THE INSTALLATION OF ALL PLUMBING EQUIPMENT.
- 22. FURNISH AND INSTALL WATER HAMMER ARRESTERS AT ALL LOCATIONS HAVING QUICK CLOSING
- 23. THIS CONTRACTOR SHALL INSTRUCT THE OWNERS REPRESENTATIVE ON THE PROPER OPERATION OF ALL EQUIPMENT AND GIVE ANY LITERATURE FURNISHED BY THE MANUFACTURER, REGARDING PROPER OPERATING AND MAINTENANCE PROCEDURE, TO THE OWNER.
- 24. WALL HYDRANT (WH) SHALL BE ZURN MODEL Z-1310 OR EQUAL CAST BRONZE, NON_ FREEZE WALL HYDRANT WITH 3/4" H.P.T. OUTLET, BACKFLOW PREVENTER AND INTEGRAL VACUUM BREAKER.
- 25. FLOOR CLEANOUTS SHALL BE ZURN 2_ 1400 OR EQUAL CAST IRON BODY FLOOR CLEANOUT WITH NICKEL BRONZE TOP.
- 26. PARKING GARAGE FLOOR AND ROOF DRAINS SHALL BE ZURN Z_535_ NB OR EQUAL CAST IRON BODY FLOOR DRAIN WITH NICKEL_BRONZE STRAINER_TRAP PRIMER CONNECTION.
- 27. PARKING GARAGE ENTRANCE TRENCH DRAIN SHALL BE ZURN Z-886 OR EQUAL WITH DUCTILE IRON SLOTTED GRATES.
- 28. WATER ROOM FLOOR DRAIN SHALL BE ZURN Z-FD2350 OR EQUAL.
- 29. TRAP PRIMER SHALL BE ZURN Z_ 1022 OR EQUAL SANI_ GARD AUTOMATIC TRAP PRIMER.
- 30. WALL MOUNTED LAVATORY SHALL BE KOHLER #K-2005 OR EQUAL WITH #K-15199-F OR EQUAL FAUCET.
- 31. WATER CLOSETS SHALL BE KOHLER #K-3999-0 OR EQUAL, TWO PIECE, ELONGATED BOWL, ADA.
- 32. MOP RECEPTOR FOR BIKE SHOP SHALL BE FIAT MSB2424 OR EQUAL WITH #830AA OR EQUAL SERVICE FAUCET WITH WALL BRACE. VACUUM BREAKER AND PAIL HOOK NO. 889-CC MOP HANGER NO. 832-AA HOSE AND HOSE BRACKET.
- 33. POINT OF USE WATER HEATER SHALL BE BOSCH MODEL US6 OR EQUAL 6000W 277 VOLT (GARAGE OFFICE)
- 34. TANKLESS WATER HEATER FOR BIKE SHOP SHALL BE HUBBLE MODEL TX24-3T4 OR EQUAL, 24 KW, 480 VOLT, 3 PHASE 90 DEGREE RISE AT 1.5 GPM



THA ARCHITECTS, LLC

ARCHITECTURE ■ DESIGN ■ PLANNING ■ INTERIOR DESIGN

105 WILLOW BROOK AVENUE STRATHAM, NEW HAMPSHIRE 03885

Tel: (603) 770-2491 Fax: (603) 773-0238

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midtown Portland

Somerset Street Elm Street Portland, ME

Building 2 Plumbing Specifiactions and Legend

Structural Engineer
Becker Engineering
MEP ENGINEER
McCabe Associates
FP Engineer

McCabe Associates

SCALE: NONE

ISSUED / DRAWN BY

2/8/16

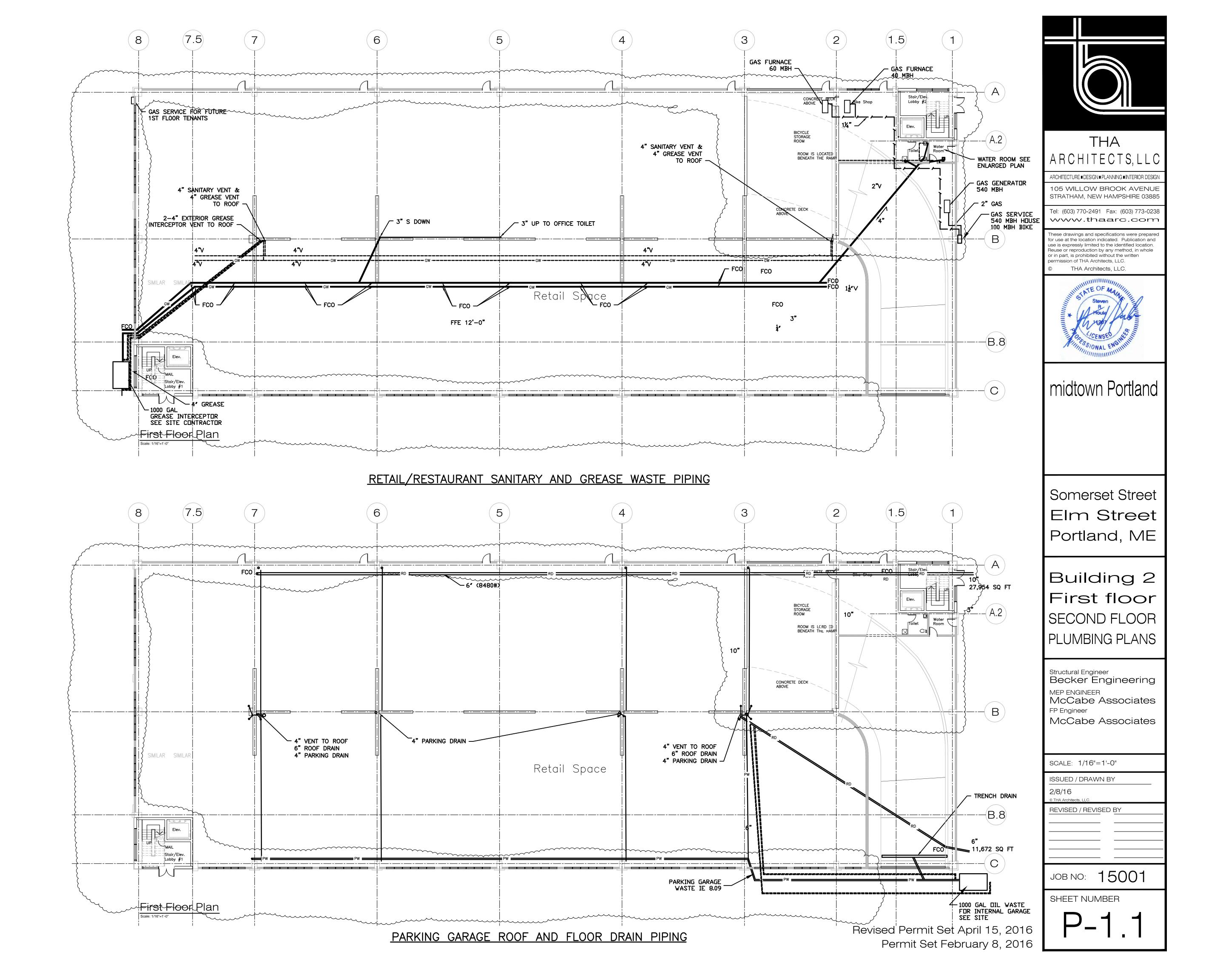
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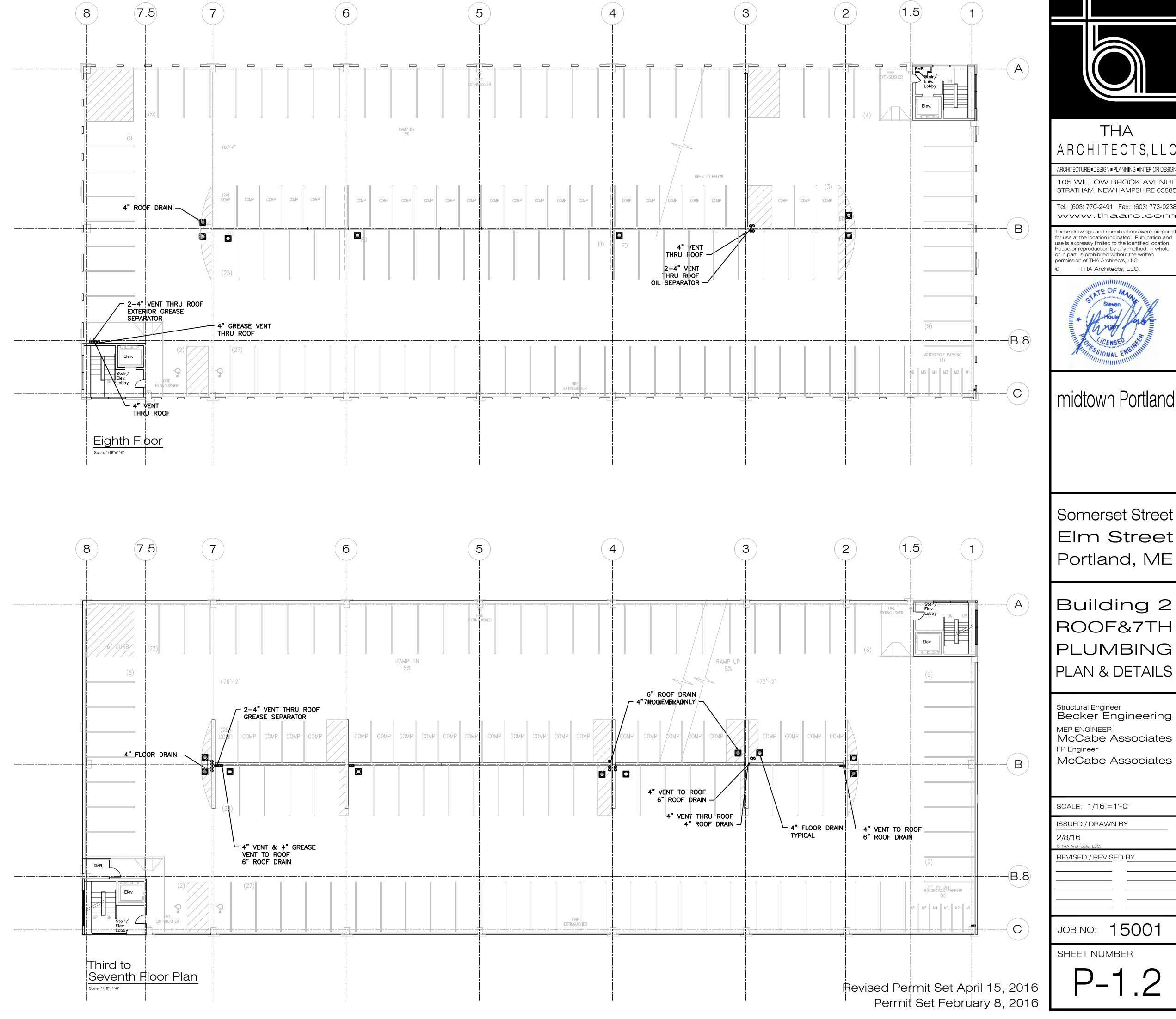
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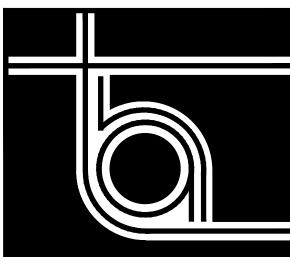
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P-0.1

Revised Permit Set April 15, 2016 Permit Set February 8, 2016







ARCHITECTS, LLC

Tel: (603) 770-2491 Fax: (603) 773-0238

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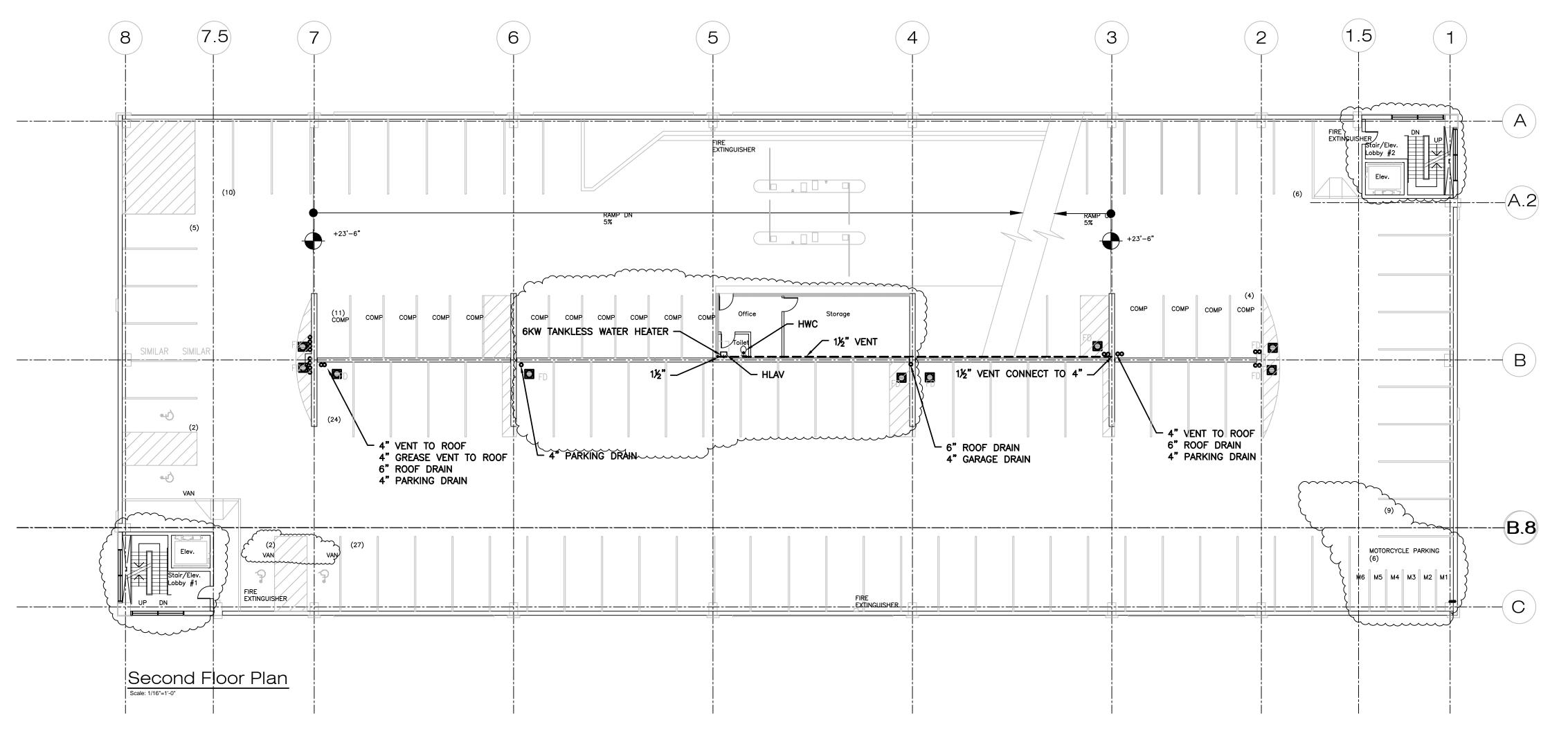


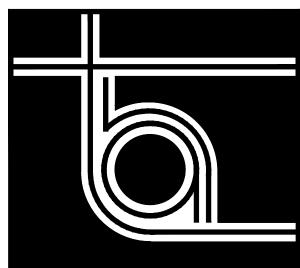
Somerset Street Elm Street Portland, ME

Building 2 ROOF&7TH PLUMBING PLAN & DETAILS

Structural Engineer Becker Engineering MEP ENGINEER

McCabe Associates





THA ARCHITECTS, LLC

ARCHITECTURE DESIGN PLANNING INTERIOR DESIGN

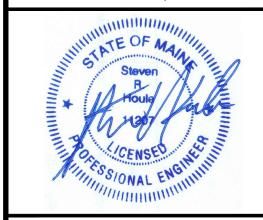
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www.thaarc.com

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midtown Portland

Somerset Street Elm Street Portland, ME

Building 2 Second Floor PLUMBING PLAN & DETAILS

Structural Engineer
Becker Engineering
MEP ENGINEER
McCabe Associates
FP Engineer
McCabe Associates

SCALE: 1/16"=1'-0"

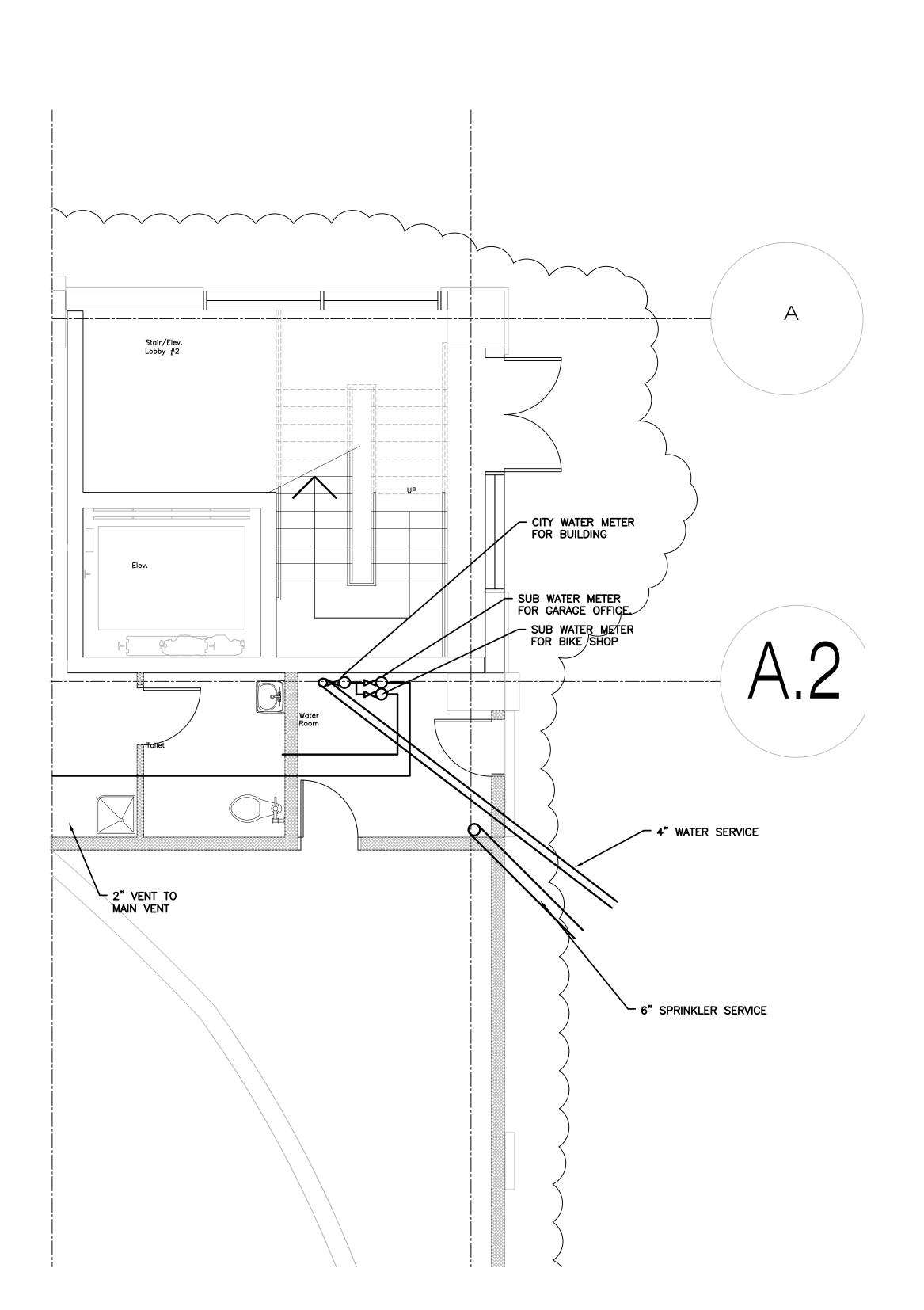
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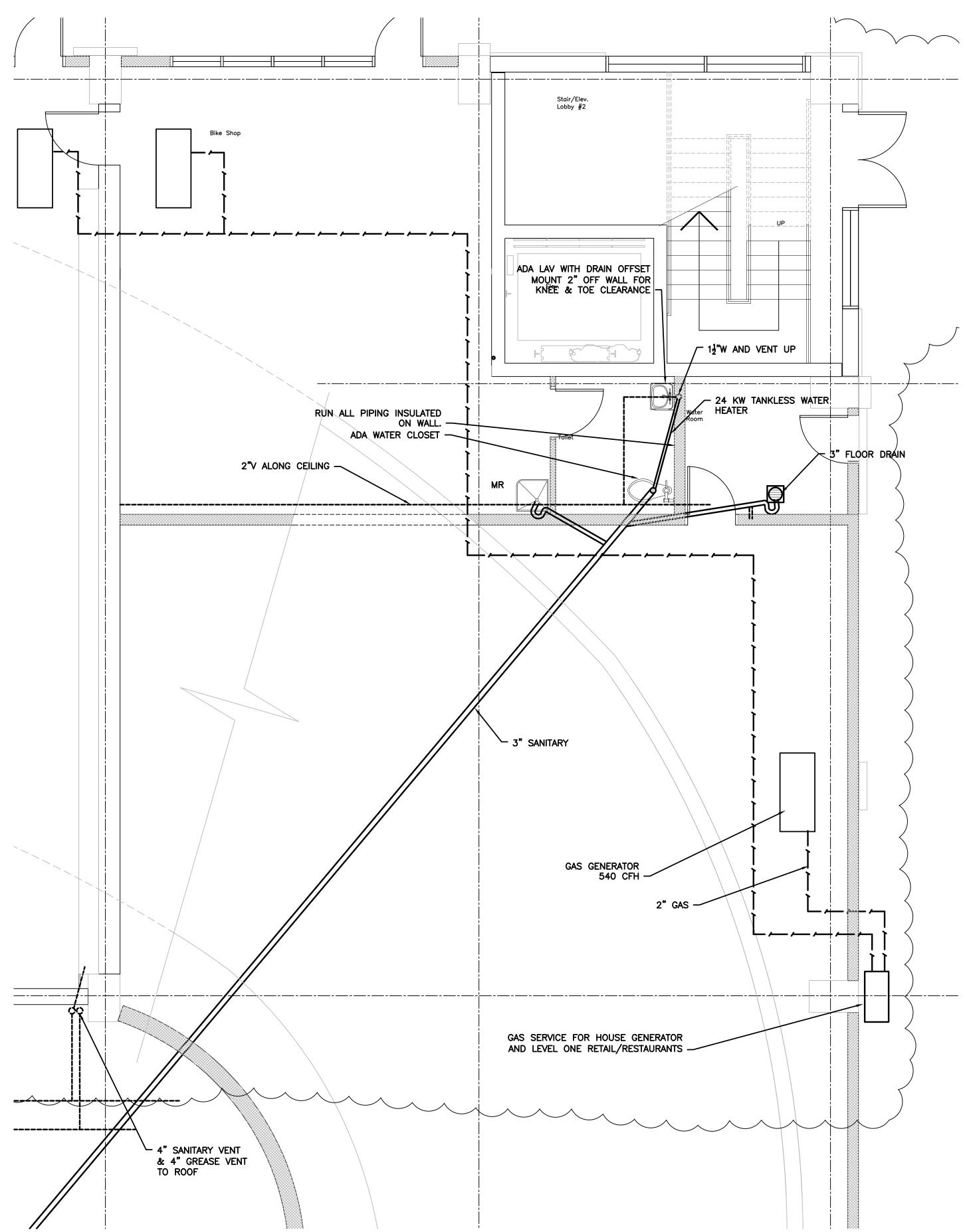
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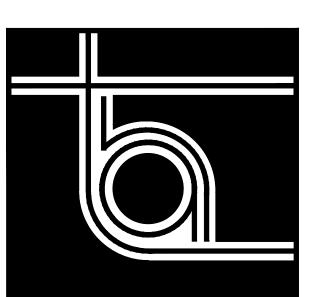
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SHEET NUMBER

P-1.3







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midtown Portland

Somerset Street
Elm Street
Portland, ME

Building 2 Large Scale Plumbing Plans

Structural Engineer
Becker Engineering

MEP ENGINEER
McCabe Associates
FP Engineer
McCabe Associates

SCALE: 1/4"=1'-0"

ISSUED / DRAWN BY

2/8/16

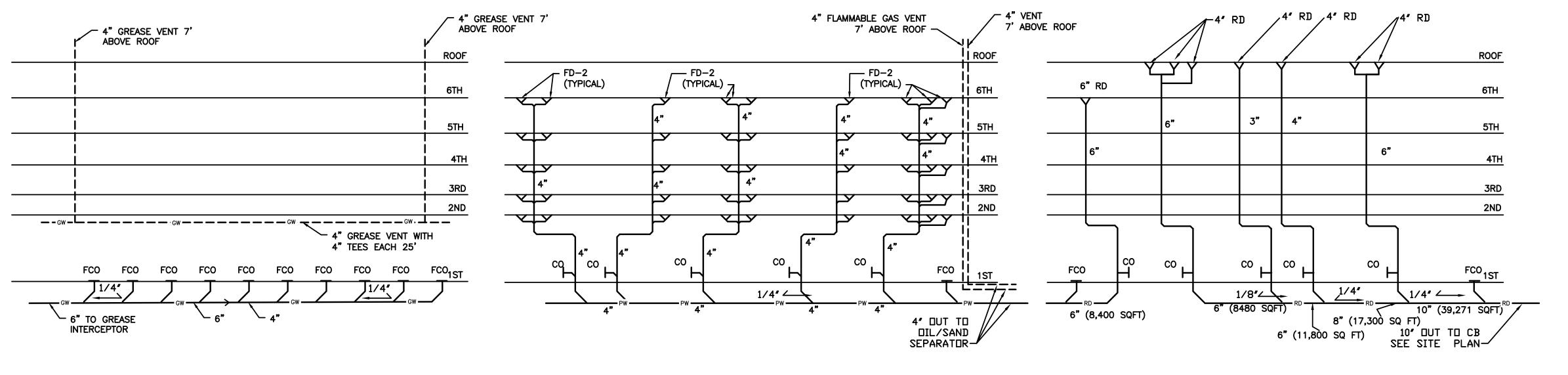
REVISED / REVISED BY

JOB NO: 15001

SHEET NUMBER

P-2.1

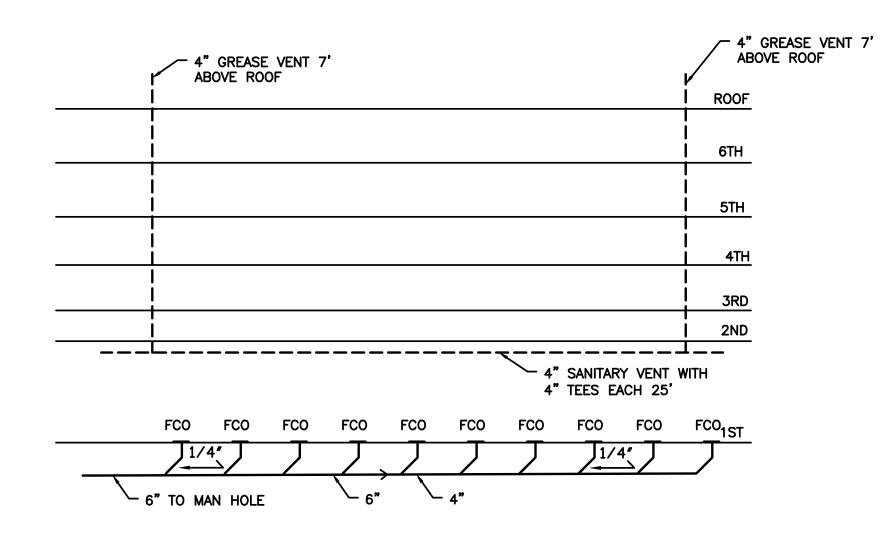
Revised Permit Set April 15, 2016 Permit Set February 8, 2016



BUILDING 2 1ST LEVEL GREASE WASTE RISER

BUILDING 2 INTERIOR GARAGE DRAIN RISER

BUILDING 2 ROOF DRAIN RISER



CITY WATER METER

WATER HEATER GARAGE OFFICE

CITY WATER METER

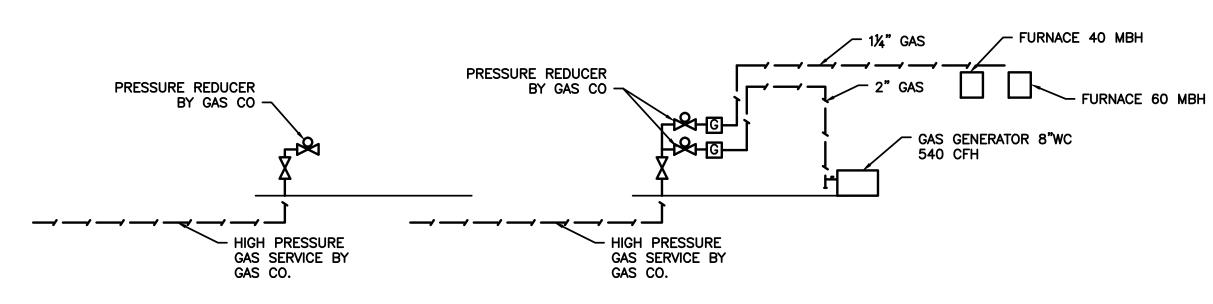
WATER HEATER GARAGE OFFICE

SUB WATER HEATER BIKE SHOP

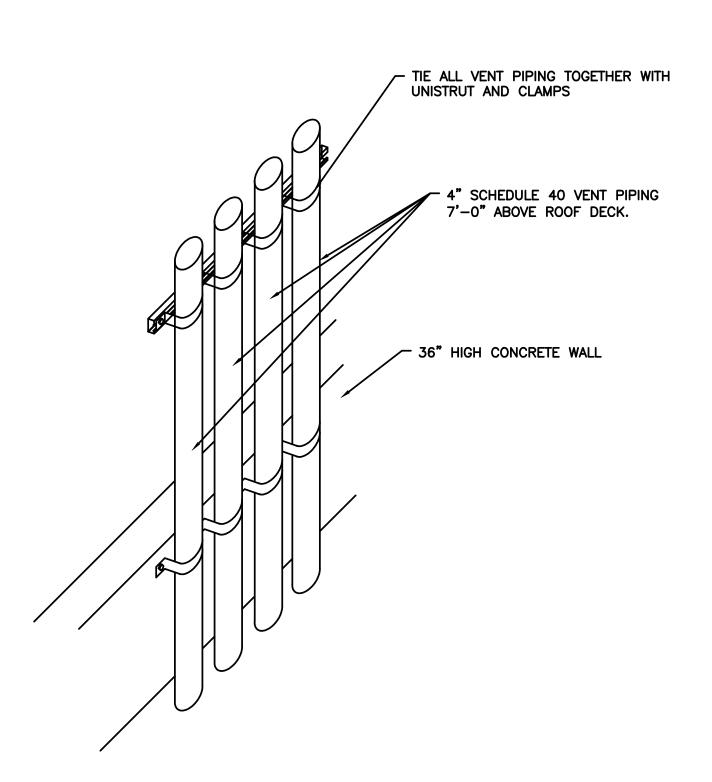
4" WATER SERVICE

BUILDING 2 WATER PIPING

BUILDING 2 1ST LEVEL SANITARY WASTE RISER

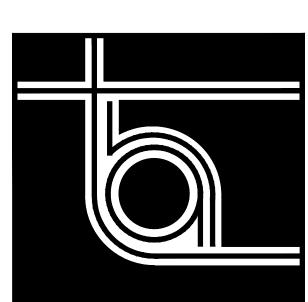


BUILDING 2 GAS PIPING
N.T.S.



BUILDING 2 ROOF VENT PIPING DETAIL N.T.S.

Revised Permit Set April 15, 2016 Permit Set February 8, 2016



THA ARCHITECTS, LLC

ARCHITECTURE DESIGN PLANNING INTERIOR DESIGN

STRATHAM, NEW HAMPSHIRE 03885

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midtown Portland

Somerset Street Elm Street Portland, ME

Building 2 PLUMBING RISER DIAGARM & DETAILS

Structural Engineer
Becker Engineering
MEP ENGINEER
McCabe Associates
FP Engineer
McCabe Associates

SCALE: 1/16"=1'-0"

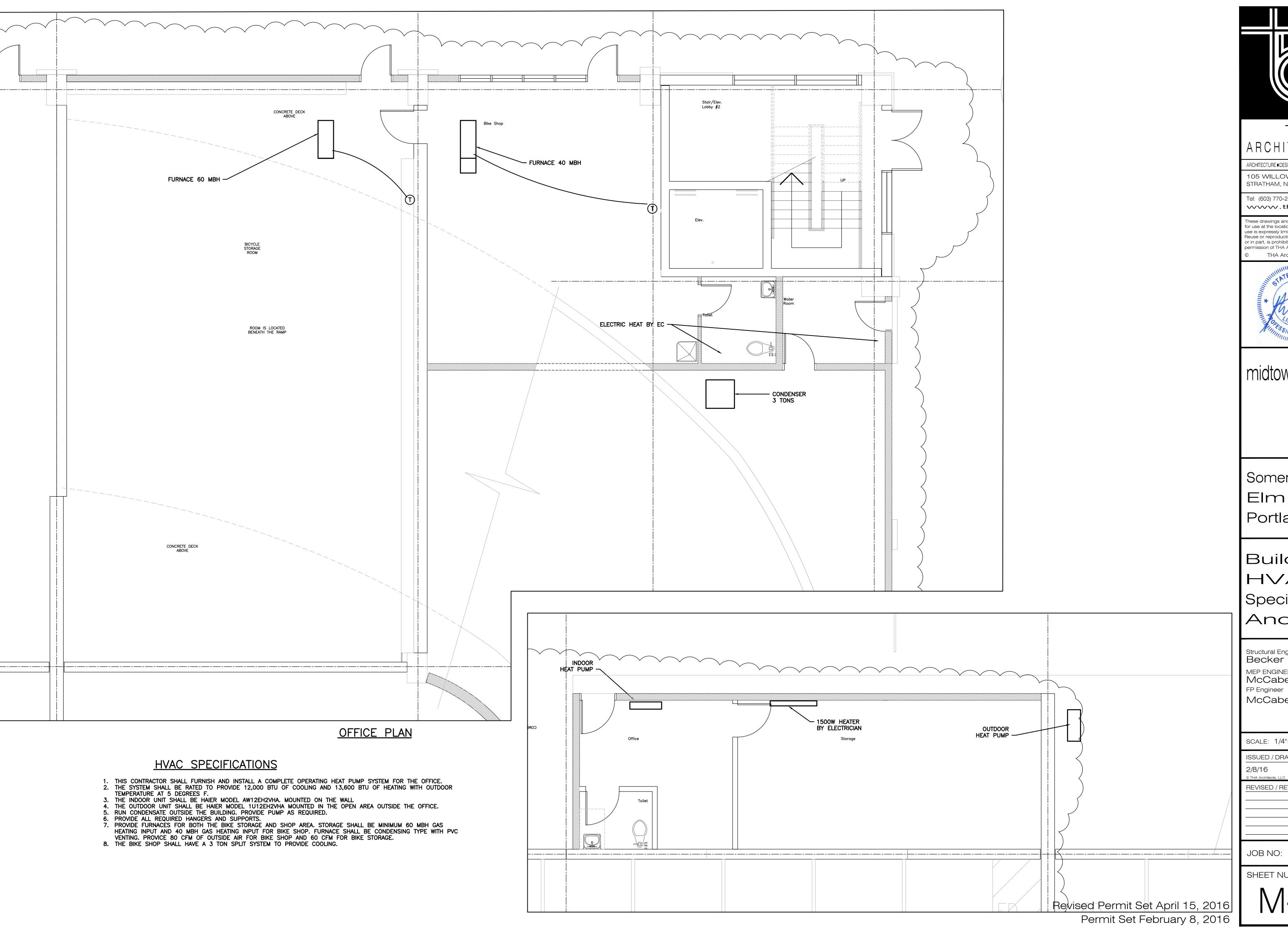
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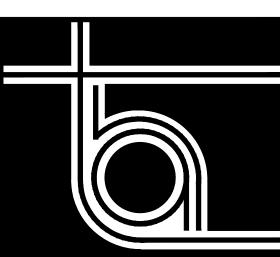
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JOB NO: 15001

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midtown Portland

Somerset Street Elm Street Portland, ME

Building 2 HVAC Specifications And Plan

Structural Engineer Becker Engineering MEP ENGINEER

McCabe Associates

McCabe Associates

SCALE: 1/4"=1'-0"

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JOB NO: 15001

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