

GENERAL NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY IBC 2018 EDITION AND SHALL CONFORM TO ALL OTHER APPLICABLE MUNICIPAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE ILLINOIS ACCESSIBILITY CODE (2018) AND THE AMERICANS WITH DISABILITIES ACT.

A. GENERAL NOTES

- 1. ALL CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND BE KNOWLEDGEABLE REGARDING EXISTING CONDITIONS AND THEIR EFFECT ON THE PROPOSED WORK. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE PROJECT.
2. NOTIFY THE OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO THE INTERRUPTION OF ANY UTILITY.
3. PROTECT AND KEEP IN SERVICE ACTIVE UNDERGROUND UTILITIES, PIPES, OR CONDUITS, WHETHER INDICATED ON THE DRAWINGS OR NOT, UNLESS SPECIFICALLY CALLED FOR TO BE REMOVED, RELOCATED, OR DISCONNECTED AND ABANDONED.
4. CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH THAT OF OTHER TRADES.
5. NO WORK WILL BE PERMITTED TO BE INSTALLED WITHOUT RECEIPT AND SUBSEQUENT REVIEW OF FULL AND COMPLETE SUBMITTALS BY THE ARCHITECT/ENGINEER.
6. DO NOT SCALE DRAWINGS, DIMENSIONS INDICATED TAKE PRECEDENCE OVER SCALE.
7. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. WHERE DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS OR ELEVATIONS SHOWN AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT/ENGINEER.
8. WHERE CONFLICTS MAY EXIST BETWEEN THE REQUIREMENTS OF PORTIONS OF THE CONTRACT DOCUMENTS, THE GREATER QUANTITY, HIGHER QUALITY OR MORE STRINGENT REQUIREMENT SHALL GOVERN. THEREFORE, BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT, IF IT RAISED NO QUESTIONS REGARDING SUCH CONFLICTS DURING THE BIDDING PROCESS, AND IN THE ABSENCE OF A CLARIFYING ADDENDUM ISSUED DURING THE BIDDING PROCESS, IT HAS VOLUNTEERED TO COMPLY WITH THE MORE EXPENSIVE REQUIREMENT AS PART OF ITS BASE BID AND IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION TO RESOLVE THE CONFLICT.
9. THE CONTRACT DOCUMENTS REQUIRE THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PRODUCTS, SYSTEMS AND SERVICES. BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT THE DRAWINGS SET FORTH THE DESIGN INTENT AND, THEREFORE, MAY NOT EXPRESSLY DEPICT EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE. THE CONTRACTOR FURTHER AGREES THAT, AS PART OF ITS BID, IT MUST FURNISH AND INSTALL EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE AND, CONSEQUENTLY, THE CONTRACTOR IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION FOR ANY LENGTH, SEGMENT, PIECE, PART COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE BECAUSE IT IS NOT EXPRESSLY DEPICTED HEREIN.

B. MISCELLANEOUS AND DEMOLITION NOTES

- 1. COORDINATE PENETRATIONS AND/OR SLEEVES REQUIRED IN WALLS, FLOORS, CEILING OR ROOFS FOR MECHANICAL AND ELECTRICAL WORK REQUIRED BY ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
2. SEAL WITH UL APPROVED MATERIALS PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH FIRE-RATED ASSEMBLIES. TO MAINTAIN THE RATING INTEGRITY OF THOSE ASSEMBLIES, PROVIDE FIRE DAMPERS AS INDICATED ON THE DRAWINGS.
3. SEAL WITH ACOUSTICAL SEALANT PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH NON-RATED FLOORS, FULL-HEIGHT WALLS/PARTITIONS, ACOUSTICALLY INSULATED WALLS/PARTITIONS, AND SOUND-RATED WALLS/PARTITIONS, TO MAINTAIN THE ACOUSTICAL INTEGRITY OF THOSE ASSEMBLIES.
4. APPLY APPROPRIATE & COMPATIBLE SEALANT MATERIALS AS REQUIRED TO SEPARATE DISSIMILAR METALS, FILL GAPS IN EXISTING ASSEMBLIES OR WHERE NEW AND EXISTING ASSEMBLIES MEET OR WHERE OTHERWISE REQUIRED BY THE SPECIFICATIONS.
5. BRING ANY UNFORESEEN OR CONFLICTING CONDITIONS TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. REPAIR, PATCH, OR REPLACE FINISH MATERIALS OR VISIBLE ASSEMBLIES THAT ARE SOILED, CUT OR DAMAGED IN ANY FASHION DURING THE COURSE OF THE WORK. PERFORM PATCHING SUCH THAT EDGES BLEND INTO CONTIGUOUS SURFACES SMOOTHLY, MATCHING TEXTURE AND COLOR OF ADJACENT SURFACES.

B. BIDDING NOTES

- 1. CONTRACTOR TO PROVIDE A \$5,000 ALLOWANCE IN HIS/HER BID FOR UNFORSEEN/MISCELLANEOUS CONDITIONS. WHEN FIGURING THE ALLOWANCE IN THE BID, CONTRACTOR IS TO INCLUDE ALL NECESSARY OVERHEAD AND PROFIT. THIS ALLOWANCE IS NOT FOR THE CONTRACTOR'S BENEFIT, AND IS ONLY AUTHORIZED TO CHARGE AGAINST THE ALLOWANCE WHEN DIRECTED AND APPROVED BY JOLIET JUNIOR COLLEGE. THE CONTRACTOR WILL BE ALLOWED TO INVOICE FOR MATERIAL AND RAW LABOR COST ONLY.

STANDARD ABBREVIATIONS

Table with 4 columns of abbreviations and their corresponding full names. Includes terms like AT ANCHOR BOLT, EWH ELECTRIC WATER HEATER, PTN PARTITION, etc.

DRAFTING SYMBOLS AND MATERIALS LEGEND. Table showing symbols for details, columns, reference lines, locations, rooms, doors, thicknesses, keynotes, window types, toilet accessories, spot elevations, and various materials like concrete, brick, stone, steel, etc.

DRAFTING SYMBOLS AND MATERIALS LEGEND



PROJECT

GREENHOUSE WATER HEATER REPLACEMENT
JOLIET JUNIOR COLLEGE
1215 HOUBOLT ROAD
JOLIET, IL 60431

OWNER

JOLIET JUNIOR COLLEGE
1215 HOUBOLT ROAD
JOLIET, IL 60431

ARCHITECT/ENGINEER

KLUBER ARCHITECTS + ENGINEERS
41 W BENTON STREET
AURORA, ILLINOIS 60506
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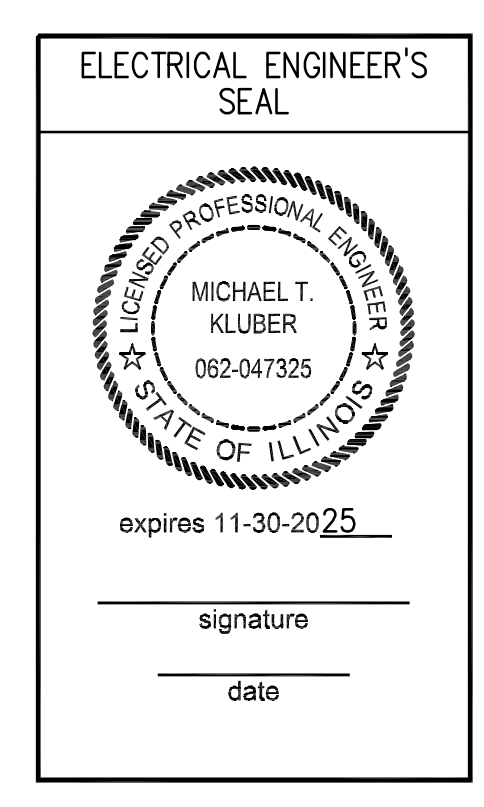
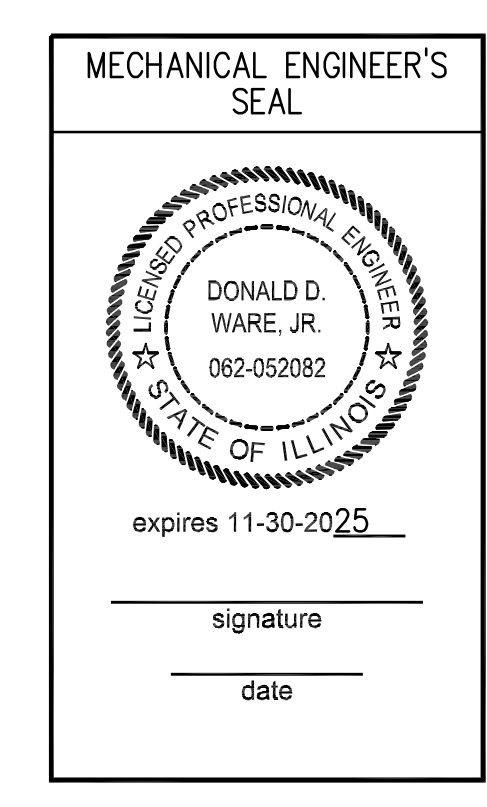
INDEX OF DRAWINGS

Table listing drawing numbers and titles: G100 COVER SHEET, GENERAL NOTES, SYMBOLS, & DRAWING INDEX; PE310 PLUMBING & ELECTRICAL PARTIAL FLOOR PLANS AND DETAILS.

APPLICABLE CODES

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL FUEL AND GAS CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2020 NATIONAL ELECTRICAL CODE
LOCAL AMENDMENTS TO THE ABOVE CODES
2014 ILLINOIS PLUMBING CODE
2018 ILLINOIS ENERGY CONSERVATION CODE (2018 INTERNATIONAL ENERGY CONSERVATION CODE W/STATE AMENDMENTS)
2018 ILLINOIS ACCESSIBILITY CODE

SEALS & CERTIFICATIONS



I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH IBC 2018 EDITION, THE ENVIRONMENTAL BARRIERS ACT AND THE ILLINOIS ACCESSIBILITY CODE.

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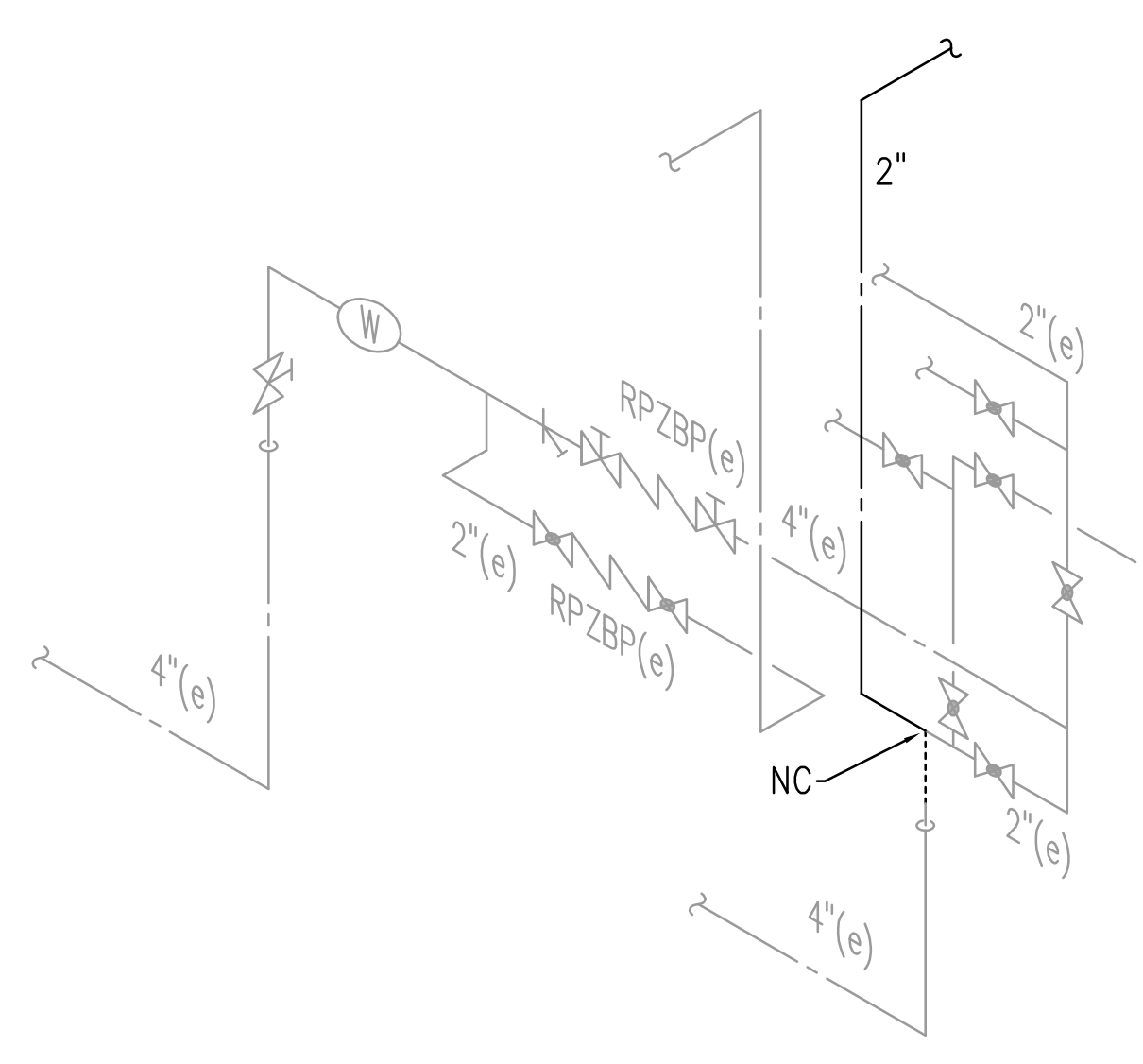
GREENHOUSE WATER HEATER REPLACEMENT
JOLIET JUNIOR COLLEGE
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

Table with columns for ISSUED, 08/02/24, and BID DOCUMENTS.

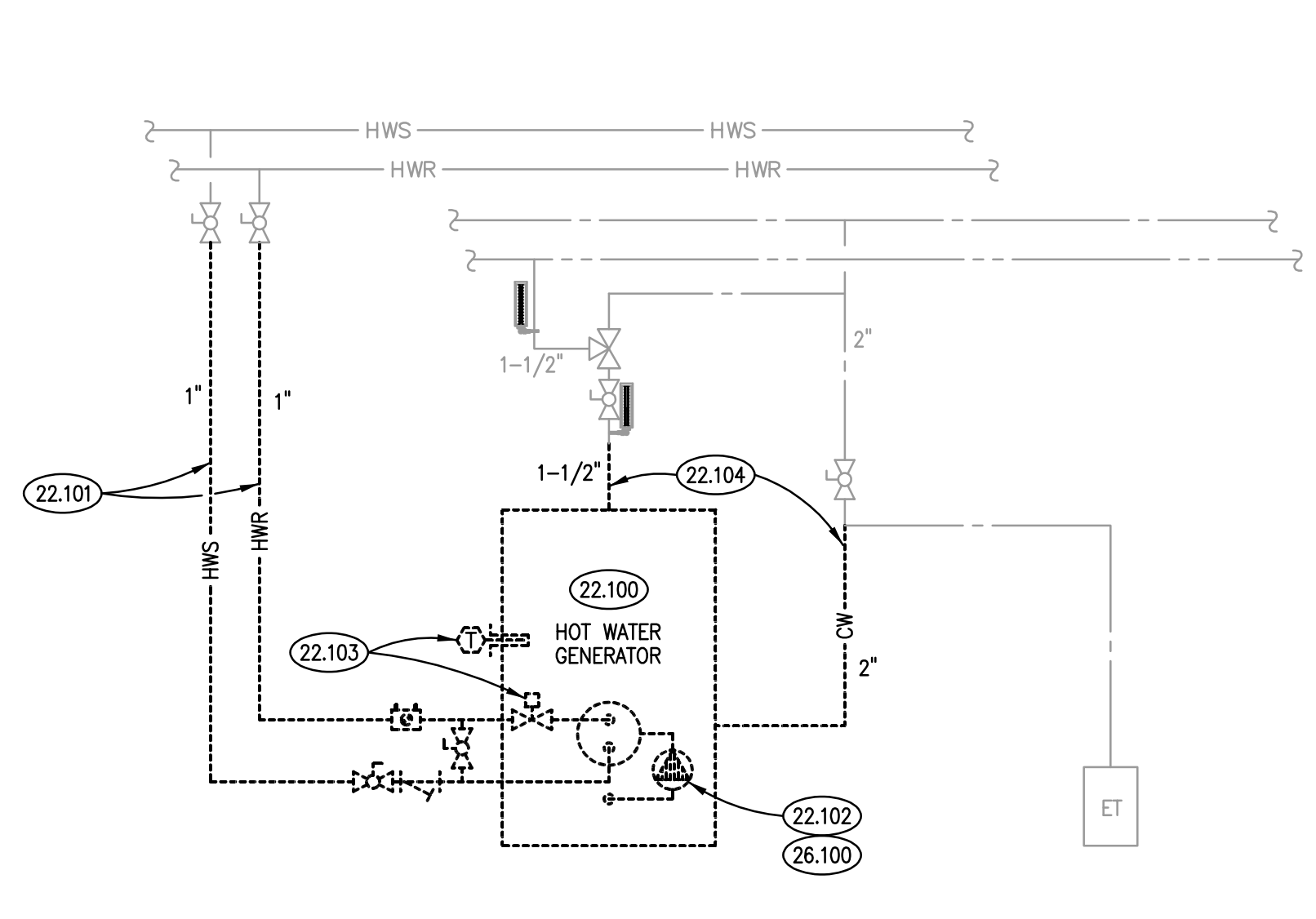
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CHECKED DDW
APPROVED DDW

SHEET TITLE
COVER SHEET, GENERAL NOTES, SYMBOLS AND DRAWING INDEX

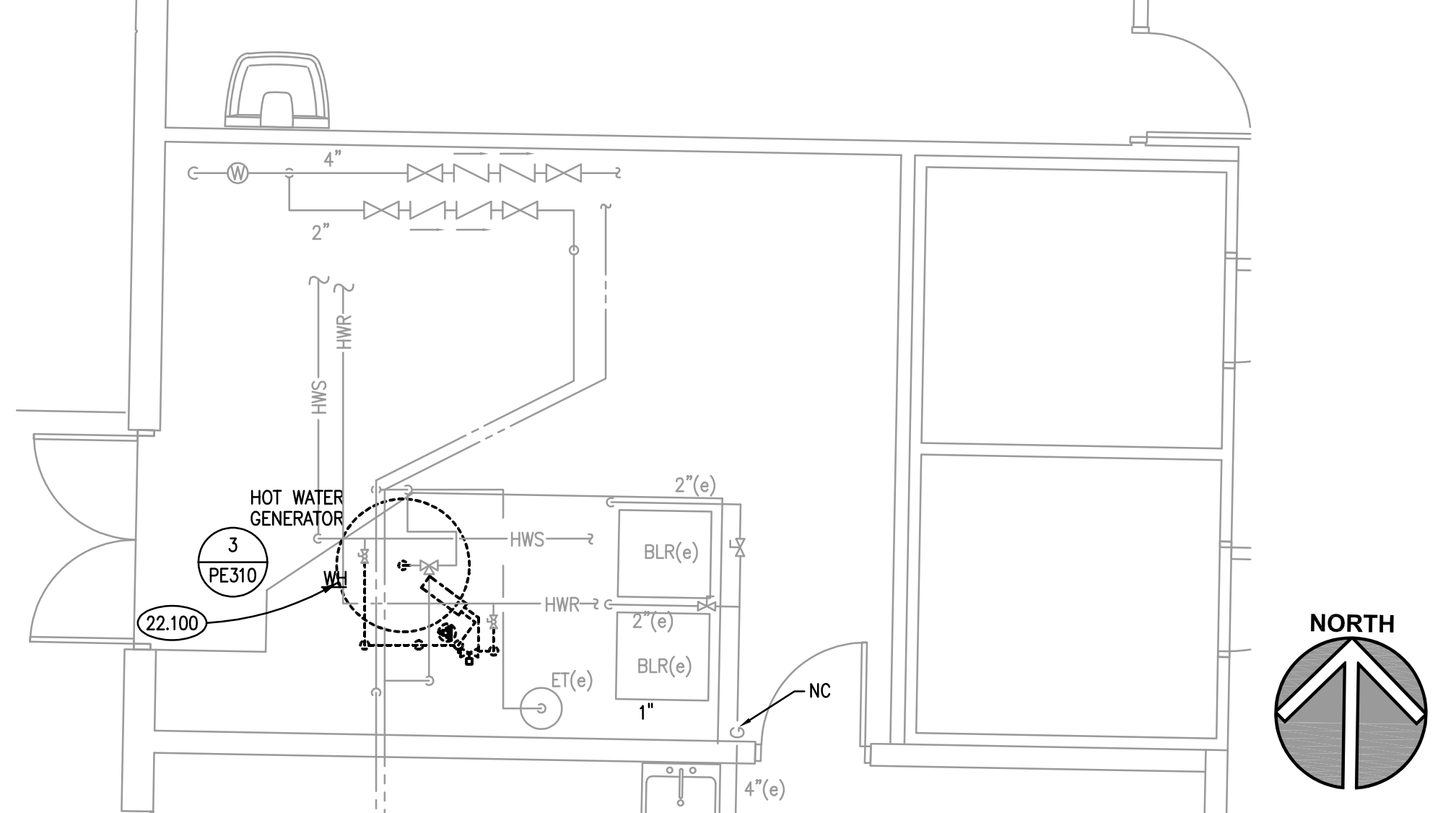
SHEET NUMBER
G100



WATER SERVICE PIPING SCHEMATIC
SCALE: NTS



WATER HEATER DEMOLITION DIAGRAM
SCALE: NTS

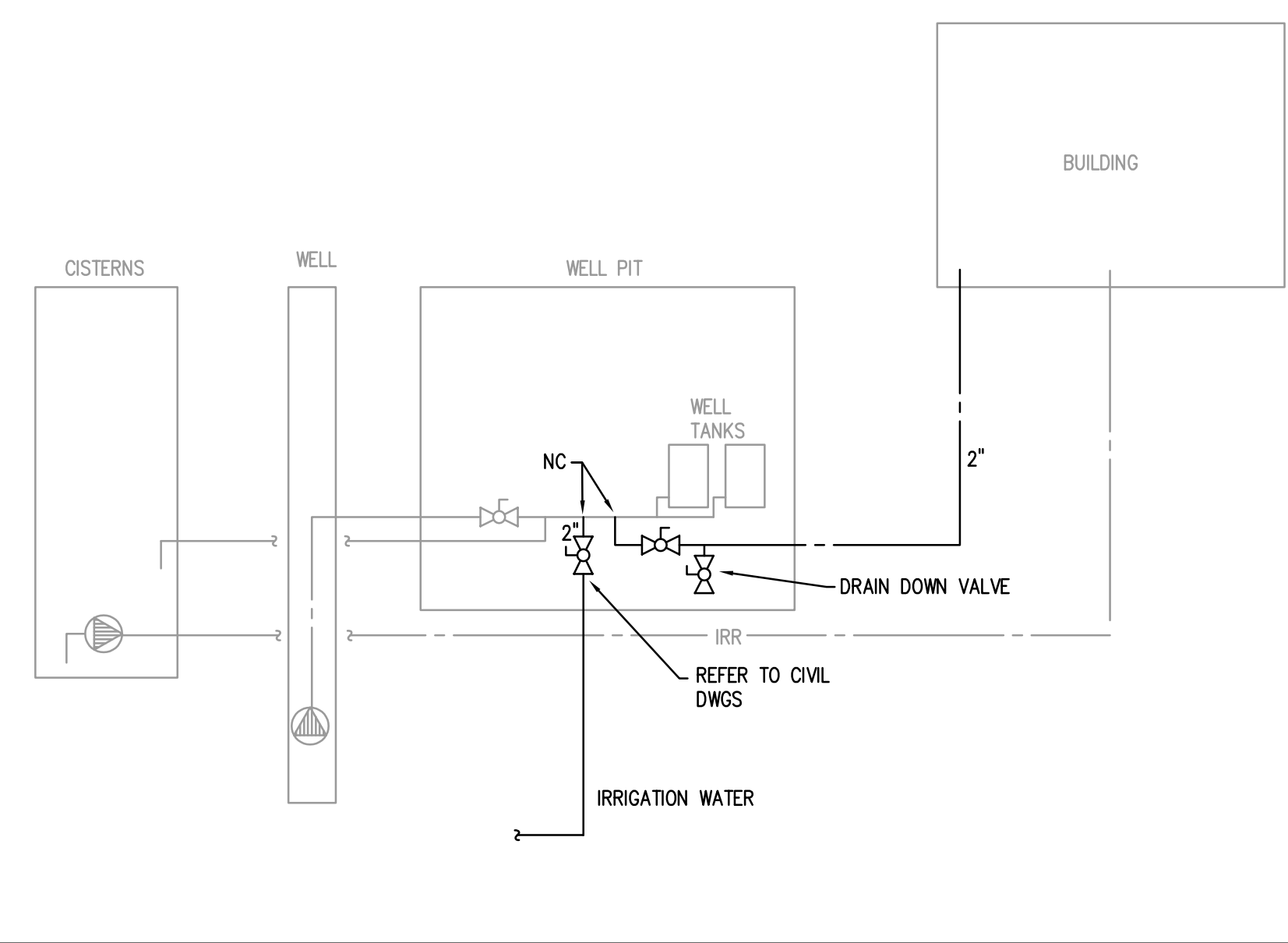


PARTIAL FIRST FLOOR DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

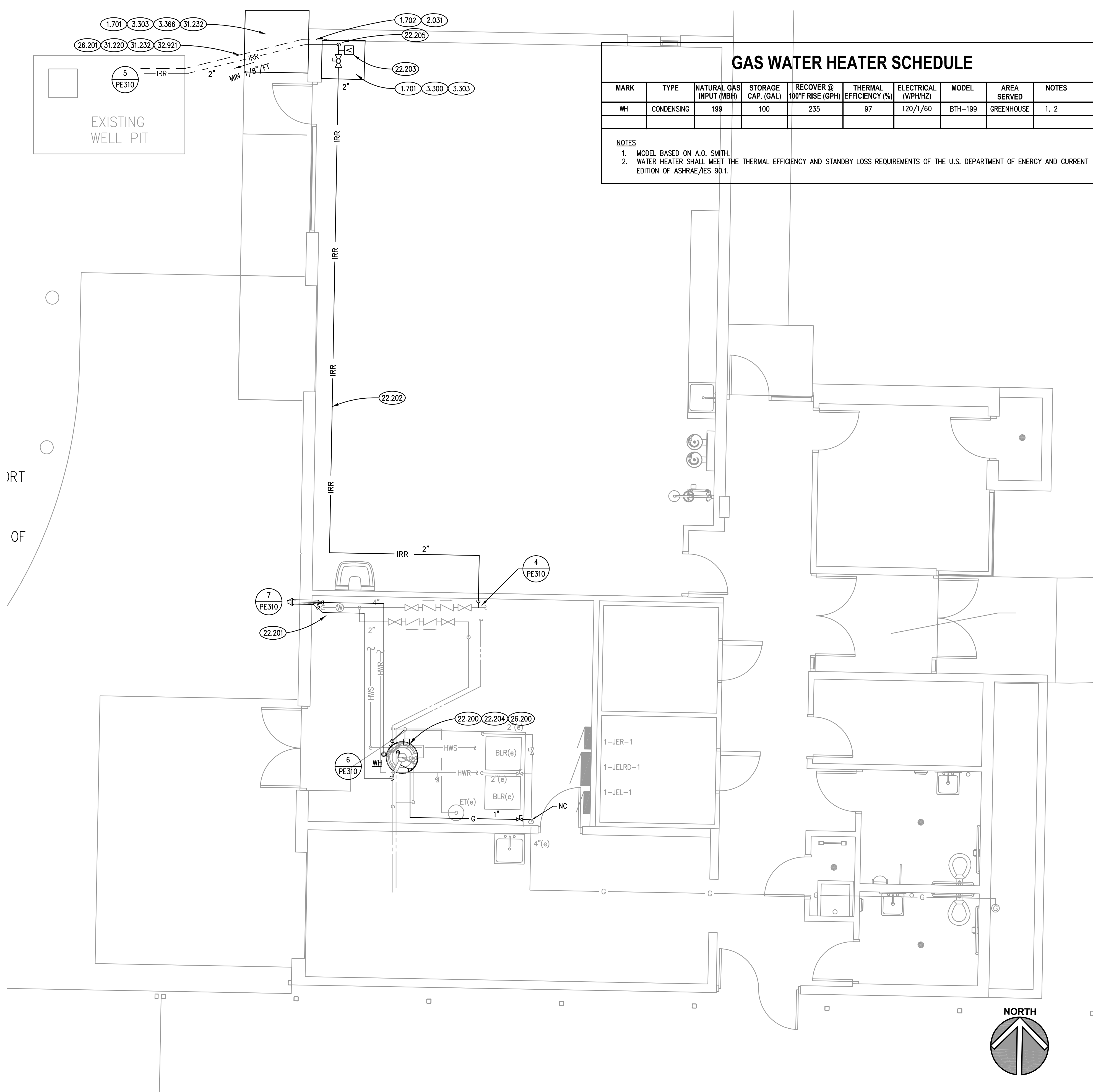
KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

- 1.701 SAWCUT AND REMOVE PORTION OF EXISTING SLAB AS REQUIRED TO INSTALL NEW WORK.
- 1.702 CORE DRILL EXISTING FOUNDATION WALL AS REQUIRED.
- 2.031 EXISTING CONCRETE FOUNDATION WALL/FOOTING.
- 2.033 EXISTING CONCRETE SLAB.
- 3.255 CONCRETE REINFORCING: #4(EPOXY) DOWEL X 2'-6" @ 2'-0" O.C. U.N.O. ANCHOR INTO EXISTING SLAB/WALL/FOOTING USING INJECTION ADHESIVE/EPOXY SYSTEM PER PROJECT SPECIFICATIONS. EMBEDMENT TO BE 6" U.N.O.
- 3.300 CAST-IN-PLACE CONCRETE: INTERIOR SLAB-ON-GRADE. REFER TO PLAN, SCHEDULE AND SPECIFICATIONS FOR THICKNESS, REINFORCING, MIX (TYPE A) AND FINISH.
- 3.303 CAST-IN-PLACE CONCRETE: EXTERIOR SLAB-ON-GRADE. REFER TO SPECIFICATIONS FOR MIX (TYPE D) AND FINISH. REINFORCE WITH WWF-6x6 W2.1 x W2.1. MATCH EXISTING SLAB ELEVATIONS AND FINISH.
- 3.366 CAST-IN-PLACE CONCRETE JOINT DEVICE/FILLER: SLAB CONTRACTION JOINT. PROVIDE TOOLED JOINT WITH 1/2" RADIUS.
- 22.100 REMOVE DOMESTIC HOT WATER GENERATOR AND ALL ASSOCIATED PIPING AND SPECIALTIES.
- 22.101 REMOVE HOT WATER SUPPLY AND HOT WATER RETURN PIPE BACK TO VALVE LOCATED AT MAINS AND CAP.
- 22.102 REMOVE HOT WATER GENERATOR CIRCULATING PUMP AND ALL SPECIALTIES.
- 22.103 REMOVE CONTROL COMPONENTS AND ALL GRAPHICS AND POINTS FOR EQUIPMENT BEING REMOVED FROM BUILDING AUTOMATION SYSTEM. SUBCONTRACT WITH DELTA BUILDING TECHNOLOGIES, JAMES BREVORT, 708-990-1768.
- 22.104 REMOVE COLD WATER AND HOT WATER PIPES BACK TO APPROXIMATE POINT SHOWN AND PROVIDE TEMPORARY CAP FOR NEW CONNECTION. RECONFIGURE PIPING AS REQUIRED TO CONNECT TO NEW GAS FIRED WATER HEATER.
- 22.200 PROVIDE GAS-FIRE WATER HEATER AND ALL ASSOCIATED SPECIALTIES.
- 22.201 PROVIDE INTAKE AND EXHAUST PIPES AT LOCATION SHOWN AND TERMINATE WITH CONCENTRIC VENT THROUGH THE WALL. LOCATE VENT AS HIGH AS POSSIBLE ABOVE GRADE.
- 22.202 PROVIDE IRRIGATION WATER PIPE BETWEEN MECHANICAL ROOM AND WELL PIT
- 22.203 PROVIDE VACUUM BREAKER AT TOP OF PIPE TO ASSIST WITH DRAIN DOWN OF PIPE.
- 22.204 PROVIDE WATER HEATER STORED WATER TEMPERATURE ON BUILDING AUTOMATION SYSTEM. SUBCONTRACT WITH DELTA BUILDING TECHNOLOGIES, JAMES BREVORT, 708-990-1768.
- 22.205 PROVIDE IRRIGATION DOWN IN CORNER OF CLASSROOM TO DEPTH OF 36" BELOW GRADE AND ROUTE TO WELL PIT.
- 26.100 REMOVE ELECTRICAL CONNECTION TO PUMP TO BE REMOVED, INCLUDING BRANCH CIRCUITRY TO SOURCE. RE-LABEL EXISTING CIRCUIT BREAKER SERVING REMOVED PUMP AS 'SPARE'.
- 26.200 PROVIDE FLEXIBLE ELECTRICAL CONNECTION TO EQUIPMENT. PROVIDE 20 AMPERE, SINGLE POLE, NEMA 1 DISCONNECT SWITCH FOR WATER HEATER. HOMERUN 2#12, #20, 3/4" C TO EXISTING SPARE 20 AMPERE BREAKER IN PANELBOARD 1-JEL-1.
- 26.201 PROVIDE 3-1" PVC CONDUIT FROM MECHANICAL ROOM 1009 TO EXISTING WELL PIT. TRANSITION TO GALVANIZED RIGID STEEL CONDUIT ABOVE GROUND. STUB AND CAP. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- 31.220 GRADING: RESTORE GRADES AND PROVIDE 8" OF TOPSOIL FOR TURF AREAS DISTURBED BY REMOVAL OR CONSTRUCTION OPERATIONS.
- 31.232 EXCAVATION FILL: ENGINEERED GRANULAR FILL. ASSUME MINIMUM 36" DEPTH TO ACCOMMODATE TRENCHING DEPTH.
- 32.921 SEEDING: RESTORE TURF IN AREA DISTURBED BY REMOVAL OR CONSTRUCTION OPERATIONS.



WELL PIT PIPING SCHEMATIC
SCALE: NTS



GAS WATER HEATER SCHEDULE

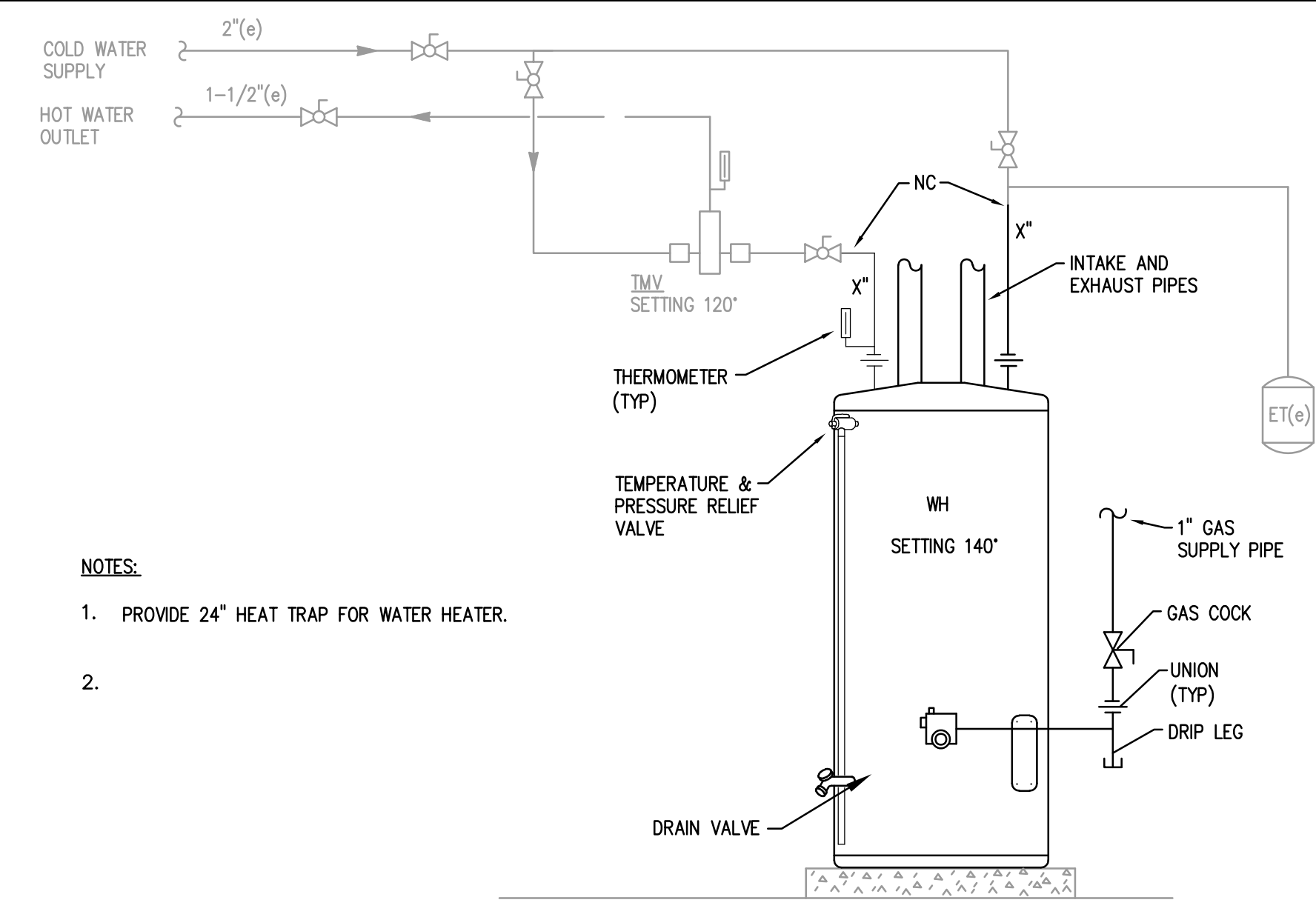
MARK	TYPE	NATURAL GAS INPUT (MBH)	STORAGE CAP. (GAL)	RECOVER @ 100°F RISE (GPH)	THERMAL EFFICIENCY (%)	ELECTRICAL (V/PH/Hz)	MODEL	AREA SERVED	NOTES
WH	CONDENSING	199	100	235	97	120/1/60	BTH-199	GREENHOUSE	1, 2

NOTES

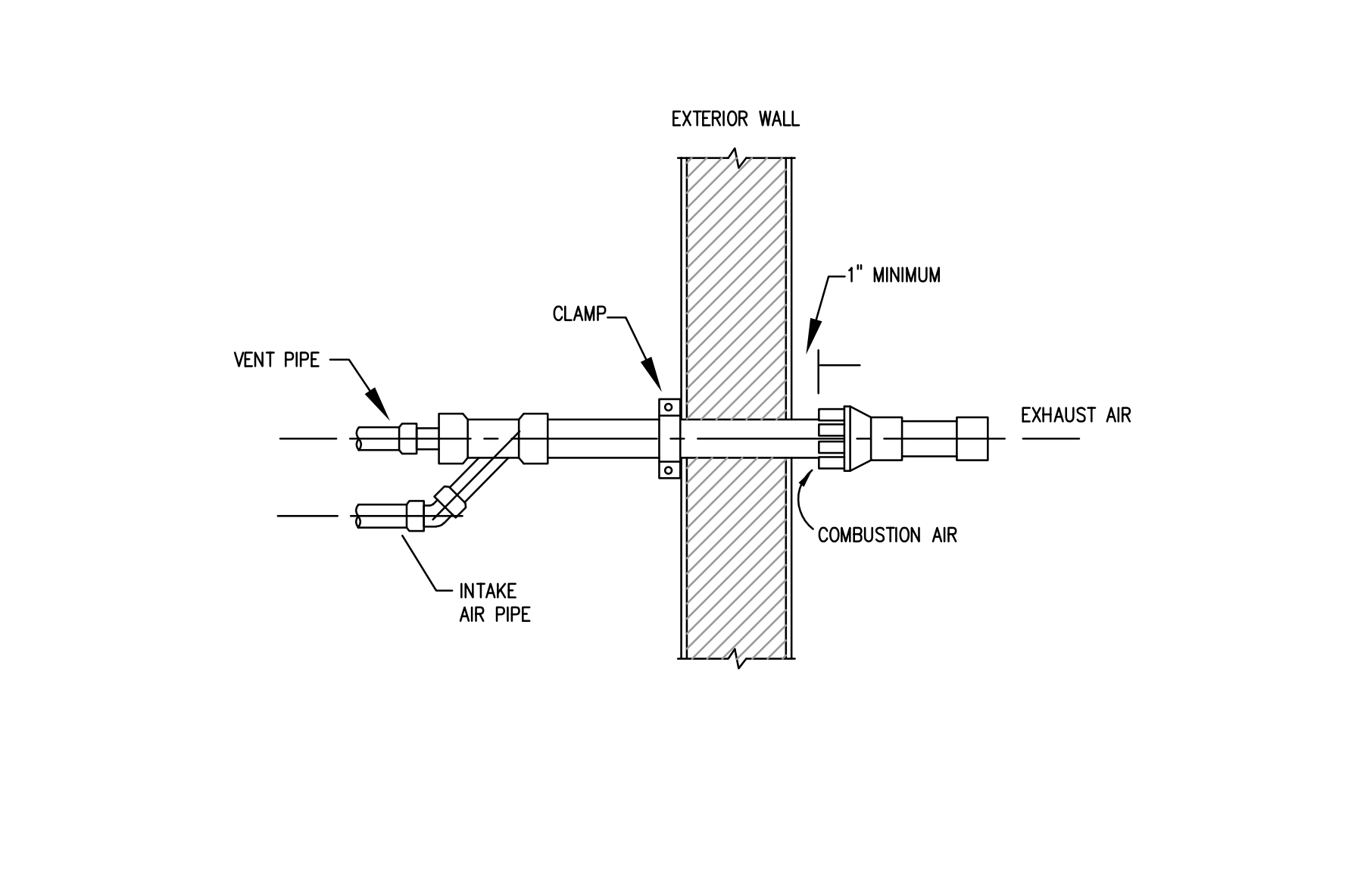
1. MODEL BASED ON A.O. SMITH.
2. WATER HEATER SHALL MEET THE THERMAL EFFICIENCY AND STANDBY LOSS REQUIREMENTS OF THE U.S. DEPARTMENT OF ENERGY AND CURRENT EDITION OF ASHRAE/IES 90.1.

GENERAL NOTES

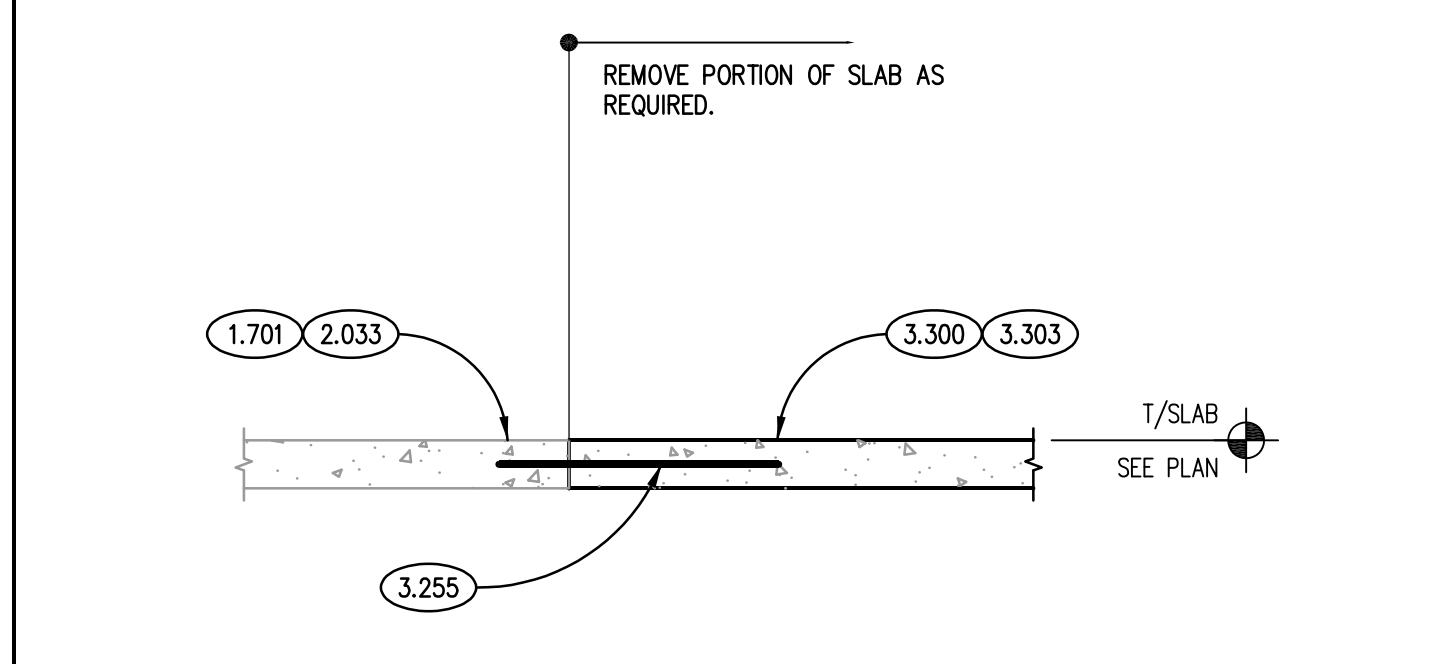
- 1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
- 2. ALL PIPING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM.
- 3. OBTAIN AND PAY ALL COSTS FOR PERMITS, LICENSES, CERTIFICATE FILING AND INSPECTIONS BY AUTHORITIES HAVING JURISDICTION.
- 4. EXISTING PIPING INDICATED ON THESE PLANS SHALL BE FIELD VERIFIED FOR EXACT LOCATIONS, QUANTITY AND PIPE SIZES.
- 5. DO NOT CUT THROUGH STRUCTURAL ELEMENTS WHEN INSTALLING OPENINGS REQUIRED FOR ALL PIPING, CONDUITS OR OTHER WORK. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE DISRUPTED ELEMENTS.
- 6. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER PLUMBING COMPONENTS HAVE BEEN MADE WITH RESPECT TO ALL EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURERS ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
- 7. ALL BACKFLOW PREVENTER ASSEMBLIES SHALL BE TESTED AND APPROVED BY A CROSS CONNECTION CONTROL DEVICE INSPECTOR (CCCDI) BEFORE INITIAL OPERATION, AND AT LEAST ANNUALLY THEREAFTER.



GAS FIRED WATER HEATER DETAIL
SCALE: NTS



CONCENTRIC VENT - SIDEWALL TERMINATION DETAIL
SCALE: NTS



TYP. NEW SLAB TO EXIST. SLAB DETAIL
SCALE: N.T.S.

ISSUED

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CHECKED DDW
APPROVED DDW

SHEET TITLE
PLUMBING & ELECTRICAL PARTIAL FLOOR PLANS AND DETAILS

SHEET NUMBER

PE310