

Earthwork Specifications

EARTHWORK

Definition: "excavation" consists of removal of material encountered to subgrade elevations and subsequent disposal of materials removed.

JOB CONDITIONS

Site Information: Data on indicated subsurface conditions are not intended as representative or warranties of accuracy. It is expressly understood that architect will not be responsible for interpretations or conclusions drawn there by owner or the builder.

Existing Utilities: Locate existing underground utilities in area of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.

Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.

Demolish and remove completely from site existing underground utilities required to be removed. Coordinate with utility companies for shut-off of services if lines are active. Protection of Persons and Property: Barricade open excavations occurring as part of this work and post warning lights.

Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

Perform excavation within drip-line of large trees to remain by hand, and protect the root system from damage or dry-out to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with burlap. Paint root cuts of 1" diameter and larger with emulsified asphalt tree paint.

SOIL MATERIALS

Satisfactory soil materials are defined as those complying with "ASTM D 2487" soil classification groups GW, GP, GM, SM, SW and SP.

Unsatisfactory soil materials are defined as those complying with "ASTM D 2487" soil classification groups GC, SC, ML, MH, CL, CH, OL and PT.

Sub-base Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, crushed slag, material, or crushed sand.

Drainage Fill: washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, with 100% passing a 1-1/2" sieve and not more than 5% passing a No. 4 sieve.

Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2" in any dimension, debris, waste, frozen materials, vegetable and other deleterious matter.

EXCAVATION

Excavation is unclassified, and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.

Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions, unauthorized excavation, as well as remedial work shall be at Contractor's expense.

Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position.

Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classification.

Additional Excavations: When excavation has reached required subgrade elevations, notify Architect/Engineer who will make an observation of conditions.

If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper and replace excavated materials with compacted stone or slag.

Stability of Excavation: Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace when sloping in not possible because of space restrictions or stability of material excavated.

Maintain sides and slopes of excavations in safe condition until completion of backfilling.

Dewatering: Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area.

Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water removed from excavations to collecting or run-off areas. Do not use trench excavations as temporary drainage ditches.

Material Storage: Stockpile satisfactory excavated materials, until required for backfill of fill. Place, grade and shape stockpiles for proper drainage.

Locate and retain soil materials away from edge of excavations. Do not store with drip-line of trees.

Dispose of excess soil material and waste materials.

Excavation for Structures: conform to elevations and dimensions shown with a tolerance of plus or minus 0.10' and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, other construction, and for inspection.

In excavating for footings and foundations, take care not to disturb bottom of excavation. Trim bottoms to required lines and grades to leave soil base to receive other work.

Excavation for Trenches: Dig trenches to the uniform width required for particular items to be installed, sufficiently wide to provide ample working room. Provide 6' to 9' clearance on both sides of pipe or conduit.

Excavate trenches to depth required, carry depth of trenches for piping to establish indicated flow lines and invert elevations. Beyond building perimeter, keep bottoms of trenches sufficiently below finish grade to avoid freeze-ups.

Except as otherwise indicated, excavate for exterior water bearing piping (water, steam, condensate, drainage) so top of piping is not less than 3'-6" below finished grade.

Backfill trenches with concrete where trench excavations pass within 18" of columns or wall footings and which are carried below bottom of such footings, or which pass under wall footings. Place concrete to level of bottom of adjacent footing.

Do not backfill trenches until tests and inspections have been made and backfilling authorized. Use care in backfilling to avoid damage or displacement of pipe systems.

For piping or conduit less than 2'-6" below surface of roadways, provide 4" thick concrete base slab support. After installation and testing of piping or conduit, provide minimum 4" thick encasement (sides and top) of concrete prior to backfilling or placement of roadway sub-base.

Cold Water Protection: Protect excavation bottoms against freezing when atmospheric temperature is less than 35°F (1°C).

COMPACTION

General: Control soil compaction during construction providing minimum percentage of density specified for each area classification indicated below.

Percentage of maximum Density Requirements: Compact soil to not less than the following percentages of maximum density for soils which exhibit a well-defined moisture density relationship (cohesive soils) determined in accordance with ASTM D 1557= and not less than the following percentages of relative density determined in accordance with ASTM D 2049, for soils which will not exhibit a well-defined moisture-density relationship (cohesionless soils).

Structures, Building Slabs and Steps, Pavements: Compact top 12" of subgrade and each layer of backfill or fill material at 90% maximum density for cohesive material or 95% relative density for cohesionless material.

Lawn or Unpaved Areas: Compact top 6" of subgrade and each layer of backfill or fill material at 85% maximum density for cohesive materials and 90% relative density for cohesionless soils.

Walkways: Compact top 6" of subgrade and each layer of backfill or fill material at 90% maximum density for cohesive material or 95% relative density for cohesionless material.

Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material. Apply water in manner to prevent free water appearing on surface during or subsequent to compaction operations.

Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.

BACKFILL AND FILL

General: Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below.

In excavations, use satisfactory excavated or borrow material.

Under walkways and pavements, use subbase material or use satisfactory excavated or borrow material, or combination of both.

Under steps, use subbase material.

Under building slabs, use drainage fill material.

Under piping and conduit, use subbase material where subbase is indicated under piping or conduit ± shape to fit bottom 90° of cylinder.

Backfill excavations as promptly as work permits, but not until completion of the following:

Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.

Inspection, testing, approval, and recording locations of underground utilities. Removal of concrete formwork.

Removal of shoring and bracing, and backfilling of voids with satisfactory materials. Cut off temporary steel piling driven below bottom of structure and remove in manner to prevent settlement of the structure or utilities, or leave in place if required.

Removal of trash and debris.

Permanent or temporary horizontal bracing is in place on horizontally supported walls.

Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.

When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density.

Placement and Compaction: Place backfill and fill materials in layers not more than 8" in loose depth for material compacted by heavy compaction equipment, and not more than 4" in loose depth for material compacted by hand-operated tampers.

Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

Place backfill and fill materials evenly adjacent to structures, piping or conduit to required elevations. Take care to prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping or conduit to approximately same elevation in each lift.

GRADING

General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades.

Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding.

Finish surfaces free from irregular surface changes, and as follows:

Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10' above or below subgrade elevation.

Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 0.10' above or below required subgrade elevation.

Pavements: Shape surface of areas under pavements to line, grade and cross-section, with finish surface not more than 1/2" above or below required subgrade elevation.

Grading Surfaces of Fill Under Building Slabs: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2" when tested with a 10' straightedge.

Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.

MAINTENANCE

Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.

Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.

Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

Settling: Where settling is measurable or observable at excavated areas during general project warranty period, remove surface (pavement, lawn or other finish), add backfill material, compact, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

DISPOSAL OF EXCESS AND WASTE MATERIALS

Removal from Owner's Property: Remove waste materials, including unacceptable excavated material, trash and debris, and dispose of off Owner's property.

General Earthwork Notes

- IT IS ASSUMED THAT THE SOIL BEARING LEVEL HAS A RESISTIVE CAPACITY ACCEPTABLE FOR RESIDENTIAL STRUCTURE LOADING PER TABLE SR401.4.1 WITH 1,500 PSF LOAD BEARING PRESSURE. THE LOWEST ALLOWED IN-LIEU OF FULL GEOTECHNICAL REPORT, IF ADVERSE CONDITIONS ARE ENCOUNTERED AT THE TIME OF EXCAVATION, A GEOTECHNICAL ENGINEER MUST PERFORM SOIL TESTING AS REQUIRED TO VERIFY THE ACTUAL SOIL BEARING CAPACITY IT IS THE OWNER'S RESPONSIBILITY TO PROVIDE COMPENSATION AS AGREED UPON FOR ANY REQUIRED TESTS.
- THE ARCHITECT RECOMMENDS THE OWNER HAVE A GEOTECHNICAL SURVEY DONE TO ASSURE HER / HIMSELF THAT THE SITE IS SUITABLE FOR CONSTRUCTION OF THE PROPOSED BUILDING.

General Nailing Schedule

GENERAL NOTE:
NAILING REQUIREMENTS PER 2020 RCNYS TABLE 602.3(1) FASTENING SCHEDULE - ACCEPTABLE ALTERNATIVES PER TABLE NOT LISTED BELOW MAY BE USED.

TABLE NO. / CONNECTION	NAILING ¹	NOTE
1. BLOCKING BETWEEN CEILING JOIST OR RAFTERS TO TOP PLATE	3-8d TOE NAIL	
2. CEILING JOISTS TO TOP PLATE	3-8d PER JOIST, TOE NAIL	
3. CEILING JOISTS, LAPS OVER PARTITIONS	3-16d FACE NAIL	
4. CEILING JOISTS ATTACHED TO PARALLEL RAFTERS (HEEL JOINT)	SEE IRC TABLE R802.5.1(9)	
5. COLLAR TIE TO RAFTER	3-10d FACE NAIL EA. RAFTER	
6. RAFTER OR ROOF TRUSS TO PLATE	3-10d	2
7. ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS	3-10d TOE NAIL 2-16d END NAIL	
8. STUD TO STUD (NOT AT BRACED WALL PANELS)	16d @ 24"o.c. FACE NAIL	
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d @ 16"o.c. FACE NAIL	
10. BUILT-UP HEADER (2" TO 2" HEADER W/ 1/2" SPACER)	16d @ 16"o.c. EACH EDGE FACE NAIL	
11. CONTINUOUS HEADER TO STUD	4-8d - TOE NAIL	
12. TOP PLATE TO TOP PLATE	16d @ 16"o.c. FACE NAIL	
13. DOUBLE TOP PLATE SPLICE	8-16d FACE NAIL	3
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d @ 16"o.c. FACE NAIL	
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANELS)	2-16d - 2 EACH @ 16"o.c. FACE NAIL	
16. TOP OR BOTTOM PLATE TO STUD	4-8d TOE NAIL 2-16d END NAIL	
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d FACE NAIL	
18. 1" BRACE TO EACH STUD AND PLATE	2-8d FACE NAIL	
19. 1" x 6" SHEATHING TO EACH BEARING	2-8d FACE NAIL	
20. 1" x 8" AND WIDER SHEATHING TO EACH BEARING	3-8d FACE NAIL	
21. JOIST TO SILL, TOP PLATE OR GIRDER	3-8d TOE NAIL	
22. RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE	8d @ 6" O.C. TOE NAIL	
23. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2-8d FACE NAIL	
24. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d BLIND & FACE NAIL	
25. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d AT EACH BEARING FACE NAIL	
26. BAND OR RIM JOIST TO JOIST	3-16d END NAIL	
27. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d	4
28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16d FACE NAIL	
29. BRIDGING TO JOIST	2-10d EA. END, TOE NAIL	
WOOD STRUCTURAL PANELS, PLYWOOD AND PARTICLEBOARD		
30. 3/8" - 1/2" SUBFLOOR AND WALL	6d	5
31. 1/2" - 1" ROOF	8d	
32. 1 1/8" - 1 1/4"	10d	
STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING		
33. 1/2"	ROOFING NAIL	6
34. 5/8"		

- NOTES:
- COMMON NAILS TO BE USED EXCEPT WHERE OTHERWISE NOTED.
 - TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS.
 - FACE NAIL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT).
 - NAIL EACH LAYER AS FOLLOWS: 32"o.c. AT TOP AND BOTTOM AND STAGGERED AND FACE NAIL AT ENDS AND AT EACH SPLICE.
 - 6"o.c. SPACING AT EDGES AND 12"o.c. SPACING AT INTERMEDIATE SUPPORTS. SEE IRC TABLE R602.3(3) FOR WOOD STRUCTURAL PANEL EXTERIOR WALL SHEATHING TO WALL FRAMING).
 - CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1-1/2" LENGTH FOR 1/2" SHEATHING AND 1-3/4" LENGTH FOR 25/32" SHEATHING.

Structural Design Criteria

	ROOMS OTHER THAN SLEEPING ROOMS	40 PSF
	SLEEPING ROOMS	30 PSF
LIVE LOADS	STAIRS	40 PSF
	BALCONIES AND DECKS	40 PSF
	UNINHABITED ATTIC SPACE	30 PSF
	GROUND SNOW LOAD	PG = 50 PSF
SNOW LOAD	FLAT ROOF SNOW LOAD	PF = 50 PSF
	SNOW EXPOSURE FACTOR	CE = 1.0
	SNOW IMPORTANCE FACTOR	IS = 1.0
	THERMAL FACTOR	CT = 1.0
	BASIC WIND SPEED	V = 115 MPH
WIND DESIGN	WIND IMPORTANCE FACTOR	IW = 1.0
	OCCUPANCY CATEGORY	II
	EXPOSURE CATEGORY	B
	INTERNAL PRESSURE COEFFICIENT	GCPI = 0.18
	COMPONENT AND CLADDING DESIGN PRESSURE	12.22 PSF (14.86 END ZONES)
SEISMIC DESIGN	SEISMIC IMPORTANCE FACTOR	IE = 1.0
	OCCUPANCY CATEGORY	II
	SITE CLASS	D
	SEISMIC DESIGN CATEGORY	B
	BASIC SEISMIC FORCE RESISTING SYSTEM	BEARING WALL SYSTEMS LIGHT FRAMED WALLS WITH WOOD STRUCTURAL PANELS RATED FOR
	SHEAR RESISTANCE	CS = 0.116
	DESIGN BASE SHEAR	V = 5.65 (E/W)
(WIND AND SEISMIC GOVERNED)	V = 7.875 (N/S)	
ANALYSIS PROCEDURE	EQUIVALENT	
LATERAL FORCE PROCEDURE	PER ASCE 7 SEC. 12.8	

Fireblocking Requirements

PER THE REQUIREMENTS OF THE 2020 RESIDENTIAL CODE OF NEW YORK STATE, SECTION R302.11, THE CONTRACTOR IS RESPONSIBLE TO ENSURE FIREBLOCKING IS PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS, BOTH VERTICAL AND HORIZONTAL, AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING WILL BE PROVIDED IN ALL LOCATIONS REQUIRED BY CODE.

Header Schedule

GENERAL NOTE:
HEADER REQUIREMENTS PER 2020 RCNYS TABLE 602.7(1) & TABLE 602.7(2)

HEADERS SUPPORTING	WALL TYPE/ THICKNESS	MAX. SPAN PER BUILDING WIDTH			HEADER SIZE	NO. OF JACK STUDS
		20'	28'	36'		
ROOF AND CEILING	EXTERIOR/ 3 1/2"	4'-8" 5'-11" 7'-3" 8'-5"	4'-1" 5'-2" 6'-3" 7'-3"	3'-8" 4'-7" 5'-7" 6'-6"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	1/2@36' 2 2 2
	EXTERIOR/ 5 1/2"	7'-5" 9'-1" 10'-7"	6'-5" 7'-10" 9'-2"	5'-9" 7'-0" 8'-2"	(3) 2x8 (3) 2x10 (3) 2x12	1@20'/2 2 2
ROOF, CEILING & ONE CENTER-BEARING FLOOR	EXTERIOR/ 3 1/2"	4'-1" 5'-2" 6'-4" 7'-4"	3'-7" 4'-6" 5'-6" 6'-5"	3'-3" 4'-1" 5'-0" 5'-9"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	1@20'/2 2 2 2/3@36'
	EXTERIOR/ 5 1/2"	6'-5" 7'-11" 9'-2"	5'-8" 6'-11" 8'-0"	5'-1" 6'-3" 7'-3"	(3) 2x8 (3) 2x10 (3) 2x12	2 2 2
ROOF, CEILING & ONE CLEAR-SPAN FLOOR	EXTERIOR/ 3 1/2"	3'-10" 4'-10" 5'-11" 6'-10"	3'-4" 4'-2" 5'-1" 5'-11"	3'-0" 3'-9" 4'-7" 5'-4"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	2 2 2@20'/3 2
	EXTERIOR/ 5 1/2"	6'-5" 7'-11" 9'-2"	5'-8" 6'-11" 8'-0"	5'-1" 6'-3" 7'-3"	(3) 2x8 (3) 2x10 (3) 2x12	2 2 2
ROOF, CEILING & TWO CENTER-BEARING FLOORS	EXTERIOR/ 3 1/2"	3'-8" 4'-7" 5'-8" 6'-6"	3'-2" 4'-0" 4'-11" 5'-9"	2'-10" 3'-8" 4'-5" 5'-2"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	2 2 2/3@36' 2@20'/3
	EXTERIOR/ 5 1/2"	5'-9" 7'-1" 8'-2"	5'-1" 6'-2" 7'-2"	4'-7" 5'-7" 6'-5"	(3) 2x8 (3) 2x10 (3) 2x12	2 2 2/3@36'
ROOF, CEILING & TWO CLEAR-SPAN FLOORS	EXTERIOR/ 3 1/2"	3'-0" 3'-10" 4'-8" 5'-5"	2'-7" 3'-4" 4'-0" 4'-8"	2'-3" 2'-11" 3'-7" 4'-2"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	2 2/3@36' 2@20'/3 3
	EXTERIOR/ 5 1/2"	4'-9" 5'-10" 6'-9"	4'-1" 5'-0" 5'-10"	3'-8" 4'-6" 5'-3"	(3) 2x8 (3) 2x10 (3) 2x12	2 2/3@36' 2@20'/3
ONE FLOOR ONLY	INTERIOR/ 3 1/2"	4'-6" 5'-9" 7'-0" 8'-1"	3'-11" 5'-0" 6'-1" 7'-0"	3'-6" 4'-5" 5'-5" 6'-3"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	1 1@20'/2 2 2
	INTERIOR/ 5 1/2"	7'-2" 10'-2" 10'-2"	6'-3" 8'-10" 8'-10"	5'-7" 6'-9" 7'-10"	(3) 2x8 (3) 2x10 (3) 2x12	1/2@36' 1@20'/2 2
TWO FLOORS	INTERIOR/ 3 1/2"	4'-1" 4'-11" 5'-9"	3'-6" 4'-3" 5'-0"	3'-2" 3'-10" 4'-5"	(2) 2x6 (2) 2x8 (2) 2x10 (2) 2x12	2 2 2/3@36' 2@20'/3
	INTERIOR/ 5 1/2"	5'-1" 6'-2" 7'-2"	4'-5" 5'-4" 6'-3"	3'-11" 4'-10" 5'-7"	(3) 2x8 (3) 2x10 (3) 2x12	2 2 2/3@36'

- NOTES:
- FOR CONDITIONS NOT SHOWN CONTACT ARCHITECT.
 - NO. 1 OR BETTER GRADE LUMBER SHALL BE USED FOR SOUTHERN PINE. OTHER TABULATED VALUES ASSUME #2 GRADE LUMBER.
 - BUILDING WIDTH IS MEASURED PERPENDICULAR TO THE RIDGE. FOR WIDTHS BETWEEN THOSE SHOWN, SPANS ARE PERMITTED TO BE INTERPOLATED.
 - WHERE THE NUMBER OF JACK STUDS EQUALS (1), THE HEADER IS PERMITTED TO BE SUPPORTED BY AN APPROVED FRAMING ANCHOR ATTACHED TO THE FULL HEIGHT WALL STUD AND TO THE HEADER.
 - REFER TO KING STUDS AT HEADERS SCHEDULE FOR FULL HEIGHT STUDS AT EXTERIOR WALLS INFORMATION.

Header Support Schedule

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALL REQUIREMENTS PER 2020 RCNYS TABLE 602.7.5	
	MAXIMUM STUD SPACING (INCHES)	
≤ 3'	16 O.C	

Foundation Specifications

CONCRETE WORK

Material Certification: Provide materials certification in lieu of materials laboratory test reports. Material certificates shall be signed by manufacturer and contractor, certifying that each material item complies with, or exceeds, specified requirements. Provide certification from admixture manufacturers that chloride content complies with specification requirements.

QUALITY ASSURANCE

Codes and Standards: Comply with provisions of the following codes, specifications, and standards, except where more stringent requirements are shown or specified:

ACI 318 "Building Code Requirements for Reinforced Concrete".

Concrete Reinforcing Steel Institute (CRSI), "Manual of Standard Practice".

PROJECTS CONDITIONS

Protection of Footings Against Freezing: Cover completed work at footing level with sufficient temporary permanent cover as required to protect footings and adjacent subgrade against possibility of freezing± maintain cover for time period as necessary.

Protect adjacent finish materials against spatter during concrete placement.

PRODUCTS

REINFORCING MATERIALS

Reinforcing Bars: ASTM A 615, Grade 60, deformed.

Welded Wire Fabric: ASTM A 185, welded steel wire fabric.

Supports for Reinforcement: Bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place. Use wire bare type supports complying with CRSI specifications.

CONCRETE MATERIALS:

Portland Cement: ASTM C 150, Type 1.

Fly-Ash: ASTM C 618, Type C or Type F.

Normal Weight Aggregates: ASTM C 33, and as herein specified. Provide aggregates from a single source for exposed concrete.

For exterior exposed surfaces, do not use fine or coarse aggregates containing spalling-causing deleterious substances.

Local aggregates not complying with ASTM C 33 but which have shown by special test or actual service to produce concrete of adequate strength and durability may be used when acceptable to Authority having jurisdiction.

Water: Drinkable.

Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required admixtures.

Water-Reducing Admixture: ASTM C 494, Type A, and containing not more than 0.1 percent chloride ions.

Prohibited Admixtures: Calcium chloride thyoanate or admixtures containing more than 0.1 percent chloride ions are not permitted.

RELATED MATERIALS

Waterstops: Provide flat, dumbbell type or center bulb type waterstops at construction joints and other joints as indicated size to suit joints.

Rubber Waterstops: Corps of Engineers CRD-C 513.

Polyvinyl Chloride Waterstops: Corps of Engineers CRD-C 572.

Granular Base: Evenly graded mixture of fine and coarse aggregates to provide, when compacted, a smooth and even surface below slabs on grade.

Vapor Retarder: Provide vapor retarder cover over prepared base material where indicated below slabs on grade. Use only materials which are resistant to decay when tested in accordance with ASTM E 154, as follows:

Polyethylene sheet not less than 8 mils thick.

Non-Shrink Grout: CRD-C 621, factory pre-mixed grout.

Absorptive Cover: Burlap cloth made from jute or kenaf, weighing approximately 9oz. per square yard, complying with AASHTO M 182, Class 2.

Moisture-Retaining Cover: One of the following, complying with ASTM C 171.

Waterproof paper.

Polyethylene film.

Polyethylene-coated burlap.

Compound: Polyvinyl acetate or acrylic base.

Epoxy Adhesive: ASTM C 881, two component material suitable for use on dry or damp surfaces. Provide material 'Type', 'Grade', and 'Class' to suit project requirements.

PROPORTIONING AND DESIGN OF MIXES

Prepare design mixes for each type and strength of concrete by either laboratory trial batch or field experience methods as specified in ACI 301. If trial batch method used, use an independent testing facility acceptable to Architect for preparing and reporting proposed mix designs. The testing facility shall not be the same as used for field quality control testing.

Limit use of fly ash to not exceed 25 percent of cement content by weight.

Design mixes to provide normal weight concrete with the following properties, as indicated on drawings and schedules:

4000psi 28-day compressive strength W/C ratio, 0.44 maximum (non air-entrained), 0.35 maximum (air-entrained).

3000psi 28-day compressive strength W/C ratio, 0.58 maximum (non air-entrained), 0.46 maximum (air-entrained).

2500psi 28-day compressive strength W/C ratio, 0.61 maximum (non air-entrained), 0.54 maximum (air-entrained).

Adjustment to Concrete Mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant at no additional cost to Owner and as accepted by Architect. Laboratory test data for revised mix design and strength results must be submitted to and accepted by Architect before using in work.

Admixtures:

Use water-reducing admixture or high range water-reducing admixture (super plasticizer) in concrete as required for placement and workability.

Use non-chloride accelerating admixture in concrete slabs placed at ambient temperatures below 50 deg F (10 deg C).

Use admixtures for water-reducing and set-control in strict compliance with manufacturer's directions.

Slump Limits: Proportion and design mixes to result in concrete slump at point of placement as follows:

Reinforced foundation system: Not less than 1" and not more than 3".

EXECUTION

FORMS

Design, erect, support, brace and maintain formwork to support vertical and lateral, static, and dynamic loads that might be applied until such loads can be supported by concrete structure. Construct formwork so concrete members and structures are correct size, shape, alignment, elevation and position. Maintain formwork construction tolerances complying with ACI 347.

Construct forms to size, shapes, lines and dimensions shown, and to obtain accurate alignment, location, grades, level and plumb work in finished structures. Provide for openings, offsets, sinkings, keyways, recesses, blocking, screeds, bulkheads, anchorages and inserts, and other features required in work. Use selected materials to obtain required finishes. Solidly but joints and provide back-up at joints to prevent leakage of cement paste.

Provisions for Other Trades: Provide openings in concrete formwork to accommodate work of other trades. Determine size and location of openings, recesses and chases from trades providing such items. Accurately place and securely support items built in forms.

Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt or other debris just before concrete is placed. Retightening forms and bracing after concrete placement is required to eliminate mortar leaks and maintain proper alignment.

VAPOR RETARDER INSTALLATION

Following leveling and tamping of granular base for slabs on grade, place vapor retarding sheeting with longest dimension parallel with direction of pour.

Lap joints 6' and seal with appropriate tape. B

After placement of moisture barrier, cover with granular material and compact to depth shown on drawings.

PLACING REINFORCEMENT

Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports.

Clean reinforcements of loose rust and mill scale, earth, ice, and other materials which reduce or destroy bond with concrete.

Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers. As required.

Place reinforcement to obtain at least minimum coverage for concrete protection. Arrange, space and securely tie bars and bars supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.

Install welded wire fabric as long lengths as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

Waterstops: Fabricate field joints in waterstops in accordance with manufacturer's printed instructions.

Contraction (Control) Joints in Slab-on-Ground: Construct contraction joints in slab-on-ground to form panels of patterns as shown. Use saw cuts 1/8"x1/4 slab depth of inserts 1/4" wide x 1/4 of slab depth, unless otherwise indicated.

INSTALLATION OF EMBEDDED ITEMS

General: Set and build into work anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of items to be attached thereto.

CONCRETE PLACEMENT

Pre-placement Inspection: Before placing concrete, inspect and complete formwork installation, reinforcing steel, and items to be embedded or cast-in. Notify other crafts to permit installation of their work; cooperate with other trades in setting such work. Moisten wood forms immediately before placing concrete where form coatings are not used.

General: Comply with ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as herein specified.

Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as herein specified. Deposit concrete as nearly as practicable to its final location to avoid segregation.

Placing Concrete in Forms: Deposit concrete in forms in horizontal layers not deeper than 24" and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints.

Consolidate placed concrete by mechanical vibrating equipment supplemented by hand-spooling, rodding or tamping. Use equipment and procedures for consolidation of concrete in accordance with ACI recommended practices.

Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations not further than visible effectiveness of machine. Place vibrators to rapidly penetrate placed layers and at least 6" into preceding layer. Do not insert vibrators into lower layers on concrete that have begun to set. At each insertion limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items with out causing segregation of mix.

Placing Concrete Slabs: Deposit and construct concrete slabs in a continuous operation, within limits of construction joints, until the placing of a panel or section is completed.

Consolidate concrete during placing operations so that concrete is thoroughly worked around reinforcement and other embedded items and into corners.

Bring slab surfaces to correct level with straightedge and strikeoff. Use bull floats or darbies to smooth surface, free of humps or hollows. Do not disturb slab surfaces prior to beginning finishing operations.

Maintain reinforcing in proper position during concrete placement operations.

COLD WEATHER PLACING

Cold Weather Placing: protect concrete work form physical damage or reduced strength which could be caused by frost, freezing actions, or low temperatures, in compliance with ACI 306 and as herein specified.

When air temperature has fallen to or is expected to fall below 40 deg F (4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C), and not more than 80 deg F (27 deg C) at point of placement.

Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

Do not use calcium chloride, salt and other materials containing antifreeze agents or chemical accelerators, unless otherwise accepted in mix designs.

Hot Weather Placing: When hot weather conditions exist that would seriously impair quality and strength of concrete, place concrete in compliance with ACI 305 and as herein specified.

Cool ingredients before mixing to maintain concrete temperature at time of placement below 90 deg F (32 deg C). Mixing water may be chilled, or chopped ice may be used to control temperature provided water equivalent of ice is calculated in total amount of mixing water. Use of liquid nitrogen to cool concrete is Contractor's option.

Use water-reducing retarding admixtures (Type D) when required by high temperatures, low humidity or other adverse placing conditions.

FINISH OF FORMED SURFACES

Flat Finish: Apply float finish to monolithic slab surfaces to reduce trowel finish and other finishes as hereafter specified, and slab surfaces which are to be covered with membrane or elastic waterproofing, membrane or elastic roofing, or sand-bed terrazzo, and as otherwise indicated.

After screeding, consolidating, and leveling concrete slabs, do not work surface until ready for floating. Begin floating when surface water has disappeared or when concrete has stiffened sufficiently to permit operation of power-driven floats, or both. Consolidate surface with power-driven floats, or by hand-floating if area is small or inaccessible to power units. Check and level surface plans to tolerances of FF18 - FL15. Cut down high spots and fill low spots. Uniform slope surfaces to drains. Immediately after leveling, refloat surface to a uniform, smooth, granular texture.

Non-Slip Broom Finish: Apply non-slip broom finish to exterior concrete platforms, steps and ramp and elsewhere as indicated.

Immediately after float finishing, slightly roughen concrete surface by brooming with fiber bristle broom perpendicular to main traffic route. Coordinate required final finish with Architect before application.

CONCRETE CURING AND PROTECTION

General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than four (4) days.

Begin final curing procedures immediately following initial curing and before concrete has dried. Continue final curing for at least four (4) days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

Curing Methods: Perform curing of concrete by curing and sealing compound, by moist curing, by moisture-retaining cover curing, and by combinations thereof, as herein specified.

Keep concrete surface continuously wet by covering with water.

Continuous water-fog spray.

Covering concrete surface with specified absorptive cover, thoroughly saturating cover with water and keeping continuously wet. Place absorptive cover to provide coverage of concrete surfaces and edges, with 4" lap over adjacent absorptive covers.

Provide moisture-cure curing as follows:

Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width with sides and ends lapped at least 3" and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

Provide curing and sealing compound to exposed interior slabs and to exterior slabs, walks, and curbs, as follows:

Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours). Apply uniformly in continuous operation by power-spray or roller in accordance with manufacturer's directions. Re-coat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period.

Do not use membrane curing compounds on surfaces which are to be covered with coating material applied directly to concrete, liquid floor hardener, waterproofing, damp-proofing, membrane roofing, flooring (such as ceramic or quarry tile, glue-down carpet), painting, and other coatings and finish materials, unless otherwise indicated to Architect.

Curing Unformed Surfaces: Cure unformed surfaces, such as slabs, floor topping, and other flat surfaces by application of appropriate curing method.

MISCELLANEOUS CONCRETE ITEMS

Filling-In: Fill-in holes and openings left in concrete structures for passage of work by other trades, unless otherwise shown or directed, other work of other trades is in place. Mix, place and cure concrete as herein specified to blend with in-place construction. Provide other miscellaneous concrete filling shown or required to complete work.

CONCRETE SURFACE REPAIRS

Patching Defective Areas: Repair and patch defective areas with cement mortar immediately after removal of forms.

Cut out honeycomb, rock pockets, voids over 1/4" in any dimension, and holes left by tie rods and bolts, down to solid concrete but, in no case to a depth of less than 1". Make edges of cuts perpendicular to concrete surface. Thoroughly clean, dampen with water, and brush-coat the area to be patched with specified bonding agent. Place patching mortar after bonding compound has dried.

For exposed-to-view surfaces, blend white Portland cement and standard Portland cement so that, when dry, patching mortar will match color surrounding. Provide test areas at inconspicuous location to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.

General Concrete Notes

- FOOTINGS SHALL BEAR ON UNDISTURBED SOIL HAVING AN ASSUMED ALLOWABLE BEARING CAPACITY OF 14,500 POUNDS PER SQ. FT. IF BEARING MATERIALS WITH A LOWER BEARING CAPACITY THAN 14,500 POUNDS PER SQ. FT. ARE ENCOUNTERED, THE UNDERLYING UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIALS APPROVED BY A GEOTECHNICAL ENGINEER TO BE HIRED BY THE OWNER. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE ADEQUACY OF THE SUBSURFACE CONDITIONS.
- ANY OBSTRUCTIONS ENCOUNTERED DURING EXCAVATION WHICH MAY INTERFERE WITH THE CONSTRUCTION OF ANY OF THE FOUNDATIONS OR WALLS MUST BE REMOVED AND REPLACED IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- GENERAL CONTRACTOR SHALL INSURE COMPLIANCE WITH ALL APPLICABLE STATE, COUNTY, AND LOCAL BUILDING ORDINANCES. ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-LATEST EDITION) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301, LATEST EDITION). NO CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN GROUND. ALL CONCRETE AND FOUNDATIONS SHALL BE PROTECTED AGAINST FROST UNTIL PROJECT IS COMPLETED.
- BACKFILL UNDER ANY PORTION OF THE BUILDING OR FOUNDATION SHALL BE COMPACTED IN 6' LIFTS OF 95% COMPACTED FILL AS APPROVED BY THE GEOTECHNICAL ENGINEER.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI. AT 28 DAYS. CONCRETE SHALL HAVE A SLUMP OF NO MORE THAN 5" AND AIR ENTRAINMENT OF 4-6%. THE USE OF CALCIUM CHLORIDE IS NOT PERMITTED. PROVIDE PROPER CONCRETE PROTECTION IN COLD WEATHER AND MAINTAIN PROPER CURING PROCEDURES IN ACCORDANCE WITH ALL A.C.I. REQUIREMENTS. CONCRETE FOR FLOOR SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, A SLUMP OF NO MORE THAN 3" AND A MAXIMUM AIR ENTRAINMENT OF 3%.
- STEEL REINFORCEMENT SHALL CONFORM TO A.S.T.M. A 615, GRADE 60. ALL REINFORCING BARS SHALL BE COLD BENT IN ACCORDANCE WITH THE PROPER RADI ESTABLISHED BY THE A.C.I. UNLESS OTHER CIRCUMSTANCES SHALL HEAT BE APPLIED TO THE BARS TO OBTAIN BENDS. ALL CONCRETE SLABS PLACED ON GROUND SHALL BE REINFORCED WITH FIBERMESH OR WELDED WIRE MESS REINFORCINGS. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE 40 BAR DIAMETERS, UNLESS OTHERWISE SHOWN.
- ALL FOUNDATIONS WALLS SHALL BE BRACED DURING BACKFILLING AND TAMPING OPERATIONS. BACKFILL NO EXTERIOR WALLS UNTIL PERMANENT STRUCTURAL SUPPORTS (FRAMED FLOORS AND SLABS) ARE IN PLACE. THE USE OF CONTROL JOINTS IN THE SLAB IS RECOMMENDED TO CONTROL CRACKING, SAW CUT TO A DEPTH OF 1/5 OF THE DEPTH OF SLAB.
- CONCRETE SHALL REACH 75% OF SPECIFIED STRENGTH BEFORE CONSTRUCTION LOADS ARE APPLIED, UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT-OF-RECORD. CONCRETE SHALL BE VERIFIED WITH 7-DAY CYLINDER BREAKS.
- CONCRETE PROTECTION FROM REINFORCING BARS: FOUNDATION & BASEMENT WALLS: 2" CLEAR BOTTOM OF FOOTINGS & GRADE BEAMS: 3" CLEAR BEAMS, COLUMNS & STRUCTURAL SLABS: 1-1/2" CLEAR.
- THE FOUNDATION PLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A GRADING PLAN. THE OWNER MUST COORDINATE THE BOTTOM OF FOOTING ELEVATIONS AND THE LOCATIONS OF FOOTING STEPS WITH THE GENERAL CONTRACTOR TO ENSURE A MINIMUM OF 4'-0" FROST COVER OVER ALL EXTERIOR FOOTINGS. BOTTOM OF FOOTING ELEVATIONS CAN BE NOTED ON THE DRAWINGS ONLY AFTER A GRADING PLAN HAS BEEN PROVIDED. COORDINATE FINAL EXTERIOR GRADES WITH LATEST CIVIL GRADING PLAN AVAILABLE OR FIELD CONDITIONS TO ENSURE MINIMUM 4'-0" COVER OVER FOOTINGS. TOP OF SLAB ELEVATION 0'-0" IS A REFERENCE ELEVATION ONLY.
- CONTRACTOR IS TO VERIFY ALL COLUMN LOCATIONS WITH ARCHITECTURAL DRAWINGS. CONTRACTOR IS TO VERIFY LOCATIONS AND SIZES OF ALL EXTERIOR DOORS WITH ARCHITECTURAL DRAWINGS. ALL DIMENSIONS ARE TO BE VERIFIED WITH ARCHITECTURAL DRAWINGS. TYPICAL MASONRY AND CONCRETE DETAILS ARE APPLICABLE WHERE APPROPRIATE.

Framing Specifications

ROUGH CARPENTRY

PRODUCT HANDLING

Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels± provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.

Coordination: Fit carpentry work to other work: scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow attachment of other work.

PRODUCTS

Lumber Standards: Manufacture lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.

Grade Stamps: Factory-mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing and mill.

Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS 20, for moisture content specified for each use.

Provide seasoned lumber with 19 percent maximum moisture content at time of dressing and shipment for sizes 2" or less in nominal thickness, unless otherwise indicated.

DIMENSION LUMBER:

For light framing provide "Stud" or "Standard" grade lumber for stud framing (2" to 4" thick, 2" to 6" wide, 1' and shorter) and "Standard" grade for other light framing (2" to 4" thick, 2" to 4" wide), any species.

For structural framing (2" to 4" thick, 5" and wider), provide the following grade and species: Any species and grade which meets or exceeds the following values: Fb (minimum extreme fiber stress in bending) ± 1250 psi. E (minimum modulus of elasticity) ± 1,500,000 psi.

CONSTRUCTION PANELS:

Construction Panel Standards: Comply with PS 1 "US Product Standard for Construction and Industrial Plywood" for plywood panels and, for products not manufactured under PS 1 provisions, with American Plywood Associates (APA) "Performance Standard and Policies for Structural-Use Panels", Form No. E445.

Trademark: Factory-mark each construction panel with APA trademark evidencing compliance with grade requirements.

Canceled APA Performance-Rated Panels: Where construction panels will be used for the following canceled types of applications, provide APA Performance-Rated Panels complying with requirements indicated for grade designation, span rating, exposure durability classification, edge detail (where applicable) and thickness.

Combination Subfloor-Underlayment: APA RATED STUD-I-FLOOR Exposure Durability Classification: EXTERIOR Span Rating: As required to suit joint spacing indicated. Edge Detail: Tongue and groove.

Wall Sheathing: APA RATED SHEATHING Exposure Durability Classification: EXTERIOR Span Rating: As required to suit rafter spacing indicated.

Roof Sheathing: APA RATED SHEATHING Exposure Durability Classification: EXTERIOR Span Rating: As required to suit rafter spacing indicated.

Plywood Underlayment for Resilient Flooring: For underlayment under 19/32" in indicated thickness, provide plywood panels with fully sanded face complying with the following requirements: Grade Designation: APA UNDERLAYMENT INT with exterior glue.

MISCELLANEOUS MATERIALS:

Fasteners and Anchorages: Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including recommended nails.

Where rough carpentry work is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners and anchorages with hot-dip zinc coating (ASTM A 153).

Building Paper: ASTM D 226, Type1± asphalt saturated felt, non-perforated, 15-lb. type.

Sill Sealer Gaskets: Glass fiber resilient insulation fabricated in strip form for use as a sill sealer ± 1" nominal thickness compressible to 1/32" ± selected from manufacturer's standard widths to suit width of sill members indicated ± in rolls of 50' or 100' in length.

WOOD TREATMENT BY PRESSURE PROCESS:

Preservative Treatment: Where lumber or plywood is indicated as "P.T." or "Treated," or is specified otherwise to be treated, comply with applicable requirements of AWPB Standards C2 (Lumber) and C9 (Plywood) and of AWPB Standards listed below. Mark each treated item with the AWPB Quality Mark Requirements.

Pressure-treat above-ground items with water-borne preservatives to comply with AWPB LP-2. After treatment, kiln-dry lumber and plywood to a maximum moisture content, respectively, of 19 percent and 15 percent. Treat indicated items and the following: Wood cants, nails, curbs, equipment support bases, blocking, striping, and similar members in connection with roofing, flashing, vapor barriers and waterproofing. Wood silos, sleepers, blocking, furring, stripping and similar concealed members in contact with masonry or concrete. Wood framing members less than 8" above grade. Wood floor plates installed over concrete slabs directly in contact with earth.

Pressure-treat the following with water-borne preservatives for ground contact use complying with AWPB LP-22: Wood members in contact with ground.

Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of same chemical used for treatment and to comply with AWPB 144. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

WOOD FRAMING GENERAL:

Provide framing members of sizes and on spacings shown, and frame openings as shown, or if not shown, comply with recommendations of "Manual for House Framing" of National Forest Products Association (NFPA). Do not splice structural members between supports.

Anchor and nails as shown, and to comply with "Recommended Nailing Schedule" of "Manual for House Framing" and "National Design Specifications for Wood Construction" published by NFPA.

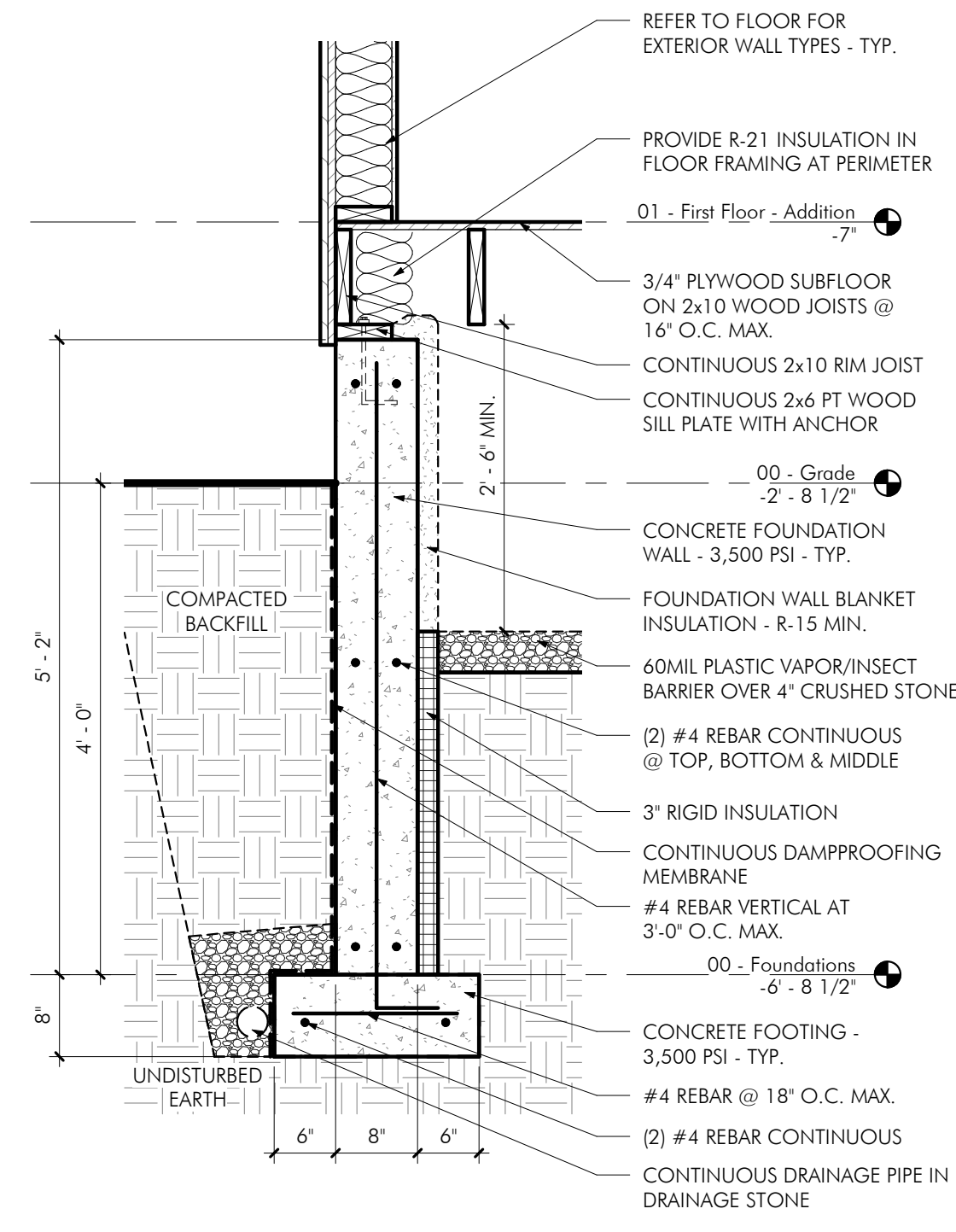
Firestop concealed spaces of wood framed walls and partitions at each floor level and at the ceiling line of the top story. Where firestops are not automatically provided by the framing system used, use closely-fitted wood blocks of nominal 2" thick lumber of the same width as framing members, or other non-combustible material acceptable to the authority having jurisdiction.

STUD FRAMING:

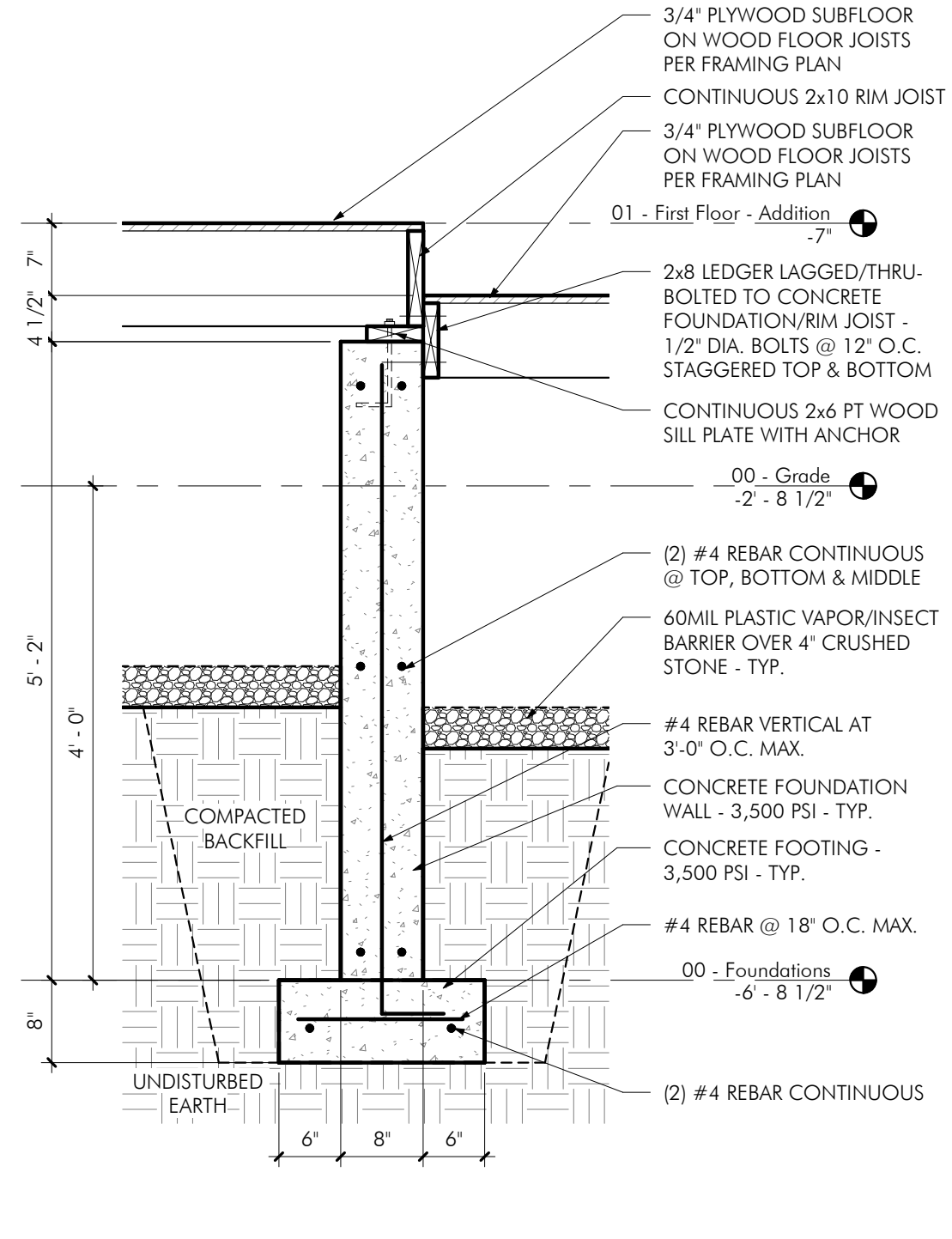
General: Provide stud framing of size and spacing indicated or, if not otherwise indicated, of the following sizes and spacings. Arrange studs so that wide face of stud is perpendicular to direction of wall or partition and narrow face is parallel. Provide single bottom plate and double top plates using 2" thick members with widths equaling that of studs± except single top plate may be used for non-load-bearing partitions. Nail or anchor partitions to supporting construction.

Construct corners and intersections with not less than 3 studs. Provide miscellaneous blocking and framing as required for support of lacing materials, fixtures, specialty items and trim.

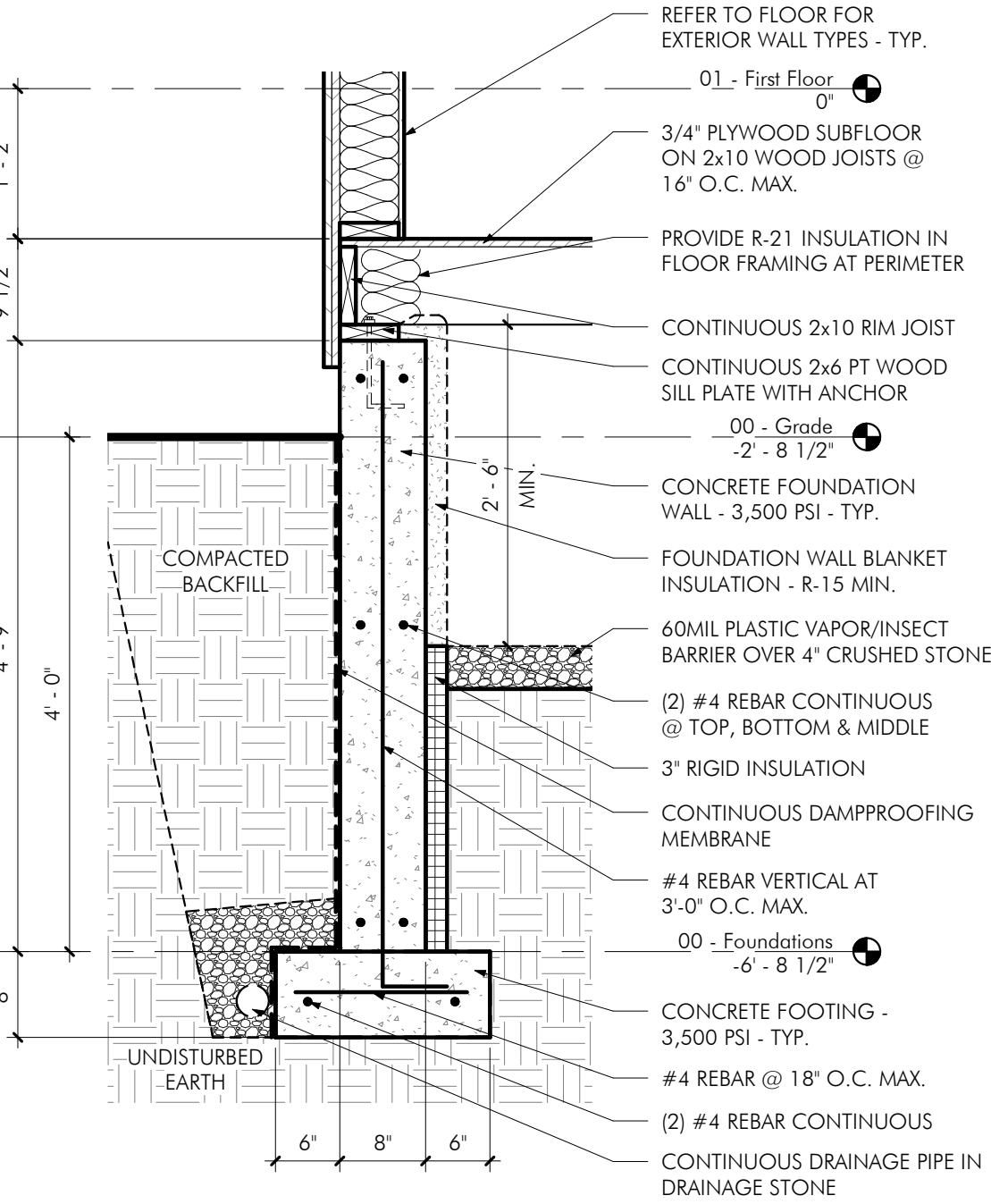
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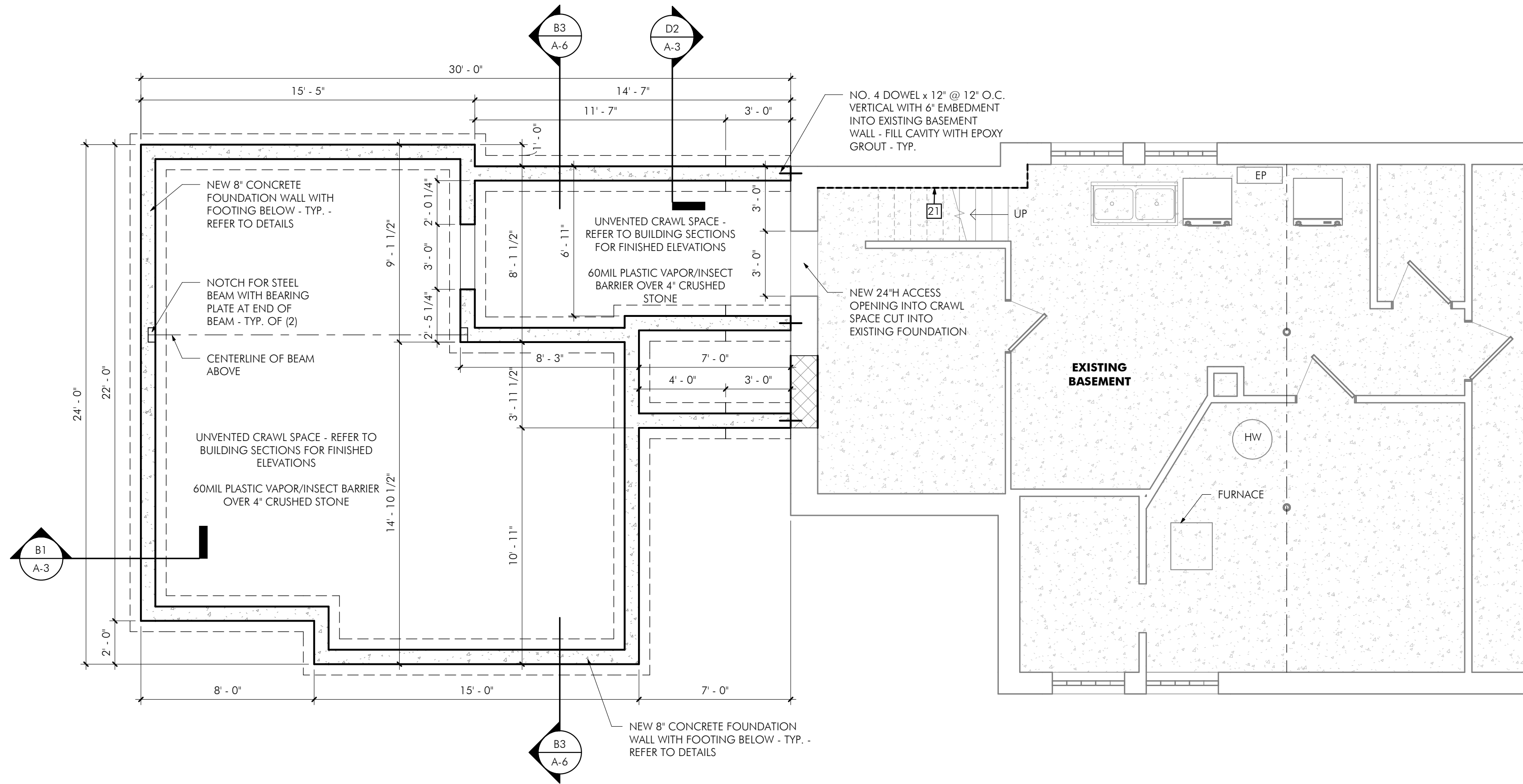
B1 Foundation Detail
 3/4" = 1'-0" B3 A-3



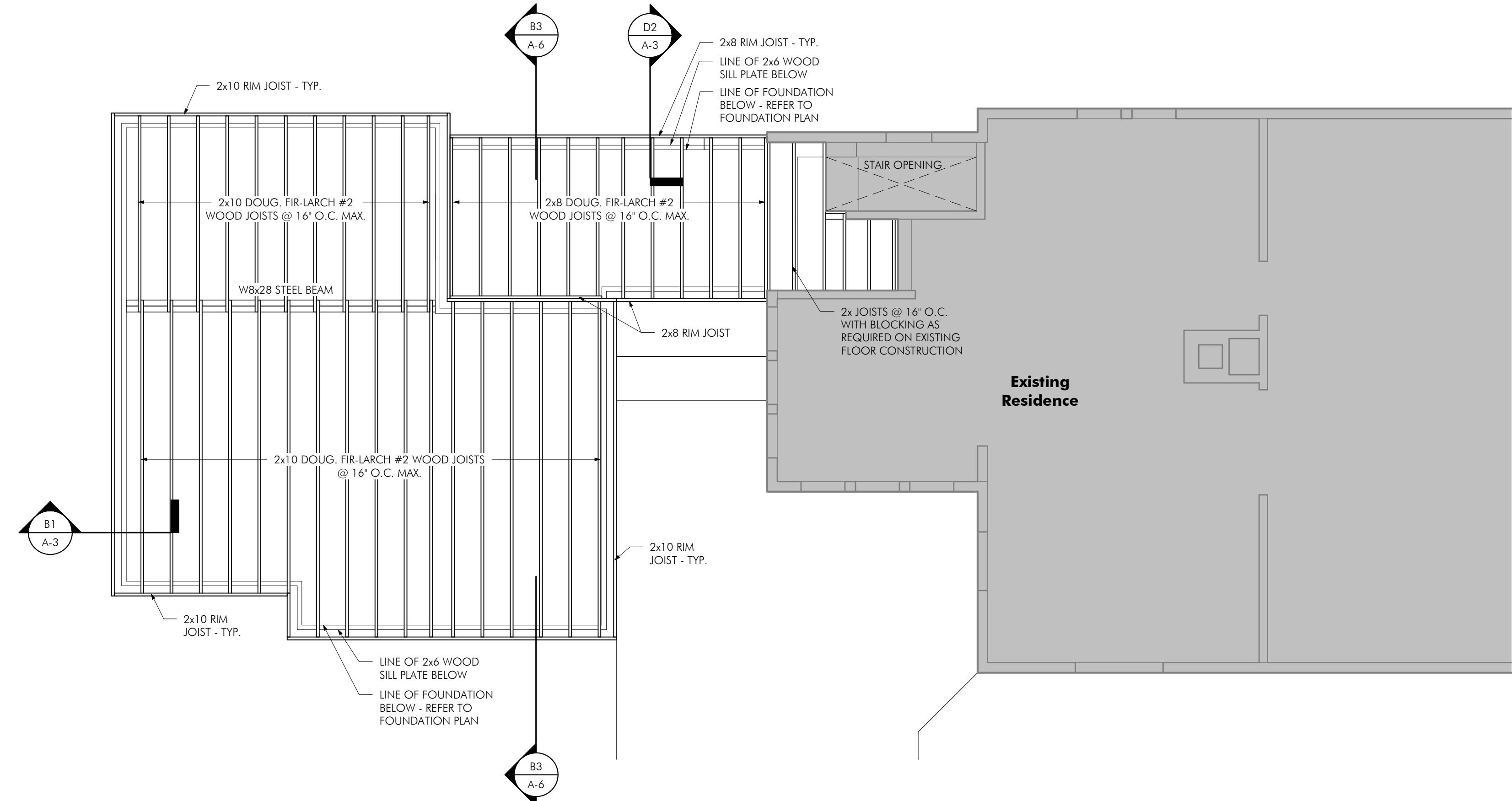
B2 Foundation Detail
 3/4" = 1'-0" B3 A-6



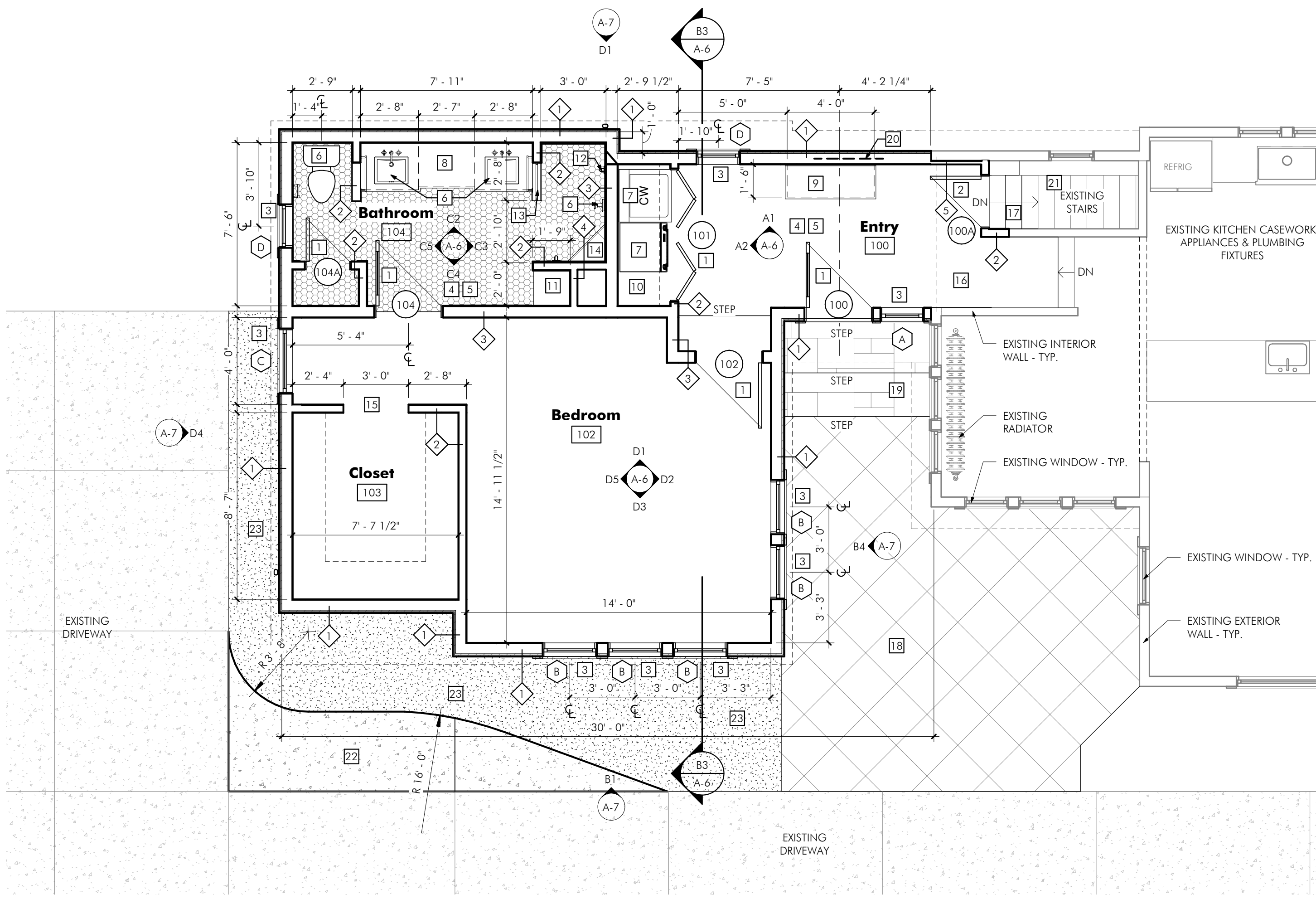
D2 Foundation Detail
 3/4" = 1'-0" B3 A-3



B3 Foundation Plan
 1/4" = 1'-0" B1 A-7



D3 First Floor Framing Plan
 1/4" = 1'-0" D2 A-3



B1 First Floor Plan
 1/4" = 1'-0" D2, A-3

Construction Notes

- NEW DOOR - REFER TO DOOR SCHEDULE - REFER TO HEADER SCHEDULE FOR SIZE AND NUMBER OF STRUCTURAL MEMBERS ABOVE.
- NEW OPENING WITH EXISTING DOOR SLAB PROVIDED BY OWNER - REFER TO DOOR SCHEDULE - REFER TO HEADER SCHEDULE FOR SIZE AND NUMBER OF STRUCTURAL MEMBERS ABOVE.
- NEW WINDOW - REFER TO WINDOW SCHEDULE - REFER TO HEADER SCHEDULE FOR SIZE AND NUMBER OF STRUCTURAL MEMBERS ABOVE.
- NEW WOOD FRAMED FLOOR SYSTEM - 3/4" PLYWOOD SHEATHING ON WOOD FLOOR JOISTS PER FRAMING PLAN.
- NEW FLOOR, WALL & CEILING FINISHES - REFER TO FINISH NOTES.
- NEW PLUMBING FIXTURE - REFER TO MEP COORDINATION PLAN & PLUMBING NOTES.
- NEW APPLIANCE - REFER TO MEP COORDINATION PLAN & APPLIANCE NOTES.
- NEW BATHROOM COUNTERTOP & CASEWORK - PROVIDE IN WALL BLOCKING AS REQUIRED FOR CASEWORK - REFER TO INTERIOR ELEVATIONS & FINISH NOTES.
- NEW ENTRY BUILT-IN CASEWORK - PROVIDE IN WALL BLOCKING AS REQUIRED FOR CASEWORK - REFER TO INTERIOR ELEVATIONS & FINISH NOTES.
- NEW BUILT-IN LAUNDRY CASEWORK - PROVIDE IN WALL BLOCKING AS REQUIRED FOR CASEWORK - REFER TO INTERIOR ELEVATIONS & FINISH NOTES.
- NEW SHOWER GRAB BARS - PROVIDE IN WALL BLOCKING AS REQUIRED - TYP. FOR (2) LOCATIONS.
- PROVIDE SOLID WOOD IN-WALL BLOCKING FOR SHOWER GLASS.
- NEW SHOWER SEAT - PROVIDE SOLID WOOD BLOCKING IN WALL AS REQUIRED.
- NEW 36"Wx84"H OPENING - DRYWALL RETURNS WITH NO CASINGS.
- PATCH/REPAIR EXISTING WALL, FLOOR, & CEILING FINISHES AS REQUIRED DUE TO REMOVALS TO MATCH EXISTING ADJACENT.
- NEW WOOD FRAMED STAIRS TO EXTEND EXISTING STAIR TO NEW FLOOR LEVEL.
- REINSTALLED PATIO PAVERS WITH NEW COMPACTED SAND BASE - NOTIFY OWNER & ARCHITECT IF QUANTITIES OF EXISTING PAVERS ARE NOT ENOUGH.
- NEW STONE PAVEMENT STAIRS FROM ENTRY TO PATIO.
- PROVIDE SOLID WOOD IN-WALL BLOCKING AS REQUIRED FOR OUTDOOR A/C CONDENSER MOUNTING BRACKET.
- OVER ENTIRE AREA OF EXISTING FOUNDATION WALL AT EXISTING STAIR - PATCH, REPAIR AND PREP EXISTING BLOCK FOUNDATION WALL AS REQUIRED FOR NEW WATERPROOFING - PROVIDE PENETRATING MASONRY SEALER WATERPROOFING - BASIS OF DESIGN IS RADONSEAL STANDARD CONCRETE SEALER OR EQUIVALENT - RECONSTRUCT WOOD TRIM WALL ENCLOSURE ONCE WATERPROOFING APPLICATION IS COMPLETE.
- NEW 4" CONCRETE DRIVEWAY WITH 4" COMPACTED STONE BASE - MATCH ELEVATION & FINISH OF EXISTING ADJACENT DRIVEWAY TO REMAIN.

Door Schedule & Notes

- BASIS OF DESIGN FOR EXTERIOR DOORS TO BE PELLA INSULATED CORE FIBERGLASS EXTERIOR DOORS. FINISH COLOR PER FINISH SCHEDULE. ALL GLAZING IN EXTERIOR DOORS TO BE MANUFACTURER'S DUAL PANE, INSULATED, LOW-E, ARGON FILLED.
- BASIS OF DESIGN FOR SCREEN DOORS TO BE PELLA SELECT STORM DOORS. GLASS DESIGN AND FINISH COLOR PER FINISH SCHEDULE. SEASONAL SCREEN TO BE PROVIDED.
- ALL INTERIOR SWING DOORS ARE TO BE SOLID CORE WOOD UNLESS OTHERWISE NOTED. PAINTED FINISH COLOR PER FINISH SCHEDULE.
- DOORS AND CASINGS SHALL BE APPROVED BY OWNER PRIOR TO ORDERING.
- LOCKSET MANUFACTURE AND FUNCTIONS SHALL BE DETERMINED BY OWNER/ CONTRACTOR AGREEMENT. PROVIDE ALL STANDARD HINGES, FLOOR OR WALL STOPS AT ALL DOORS, AND APPROVED DOOR HANDLE FOR OPENING FUNCTION. AT EXTERIOR DOORS ALSO PROVIDE GASKETS & SWEEPS. ALL DOORS SHALL INCLUDE HARDWARE APPROPRIATE TO LOCATION AND USE.
- NO HARDWARE WILL BE ORDERED UNTIL FINAL APPROVAL FROM OWNER IS PROVIDED. BASIS OF DESIGN IS BALDWIN RESERVE TUBE SATIN NICKEL LEVER WITH CONTEMPORARY ROUND ROSE.

DOOR	TYPE	SIZE (WxH)	REMARKS
100	EXTERIOR HALF-GLASS INSULATED FIBERGLASS DOOR	36"x84"	PROVIDE COORDINATED SCREEN DOOR
100A	INTERIOR FLUSH WOOD DOOR	28"x80"	EXISTING DOOR SLAB
101	INTERIOR DOUBLE BI-FOLD LOUVER DOORS	72"x84"	
102	INTERIOR FLUSH WOOD DOOR	36"x84"	
104	INTERIOR FULL GLASS WOOD FRAME DOOR	36"x84"	
104A	INTERIOR FLUSH WOOD DOOR	24"x84"	

Window Schedule & Notes

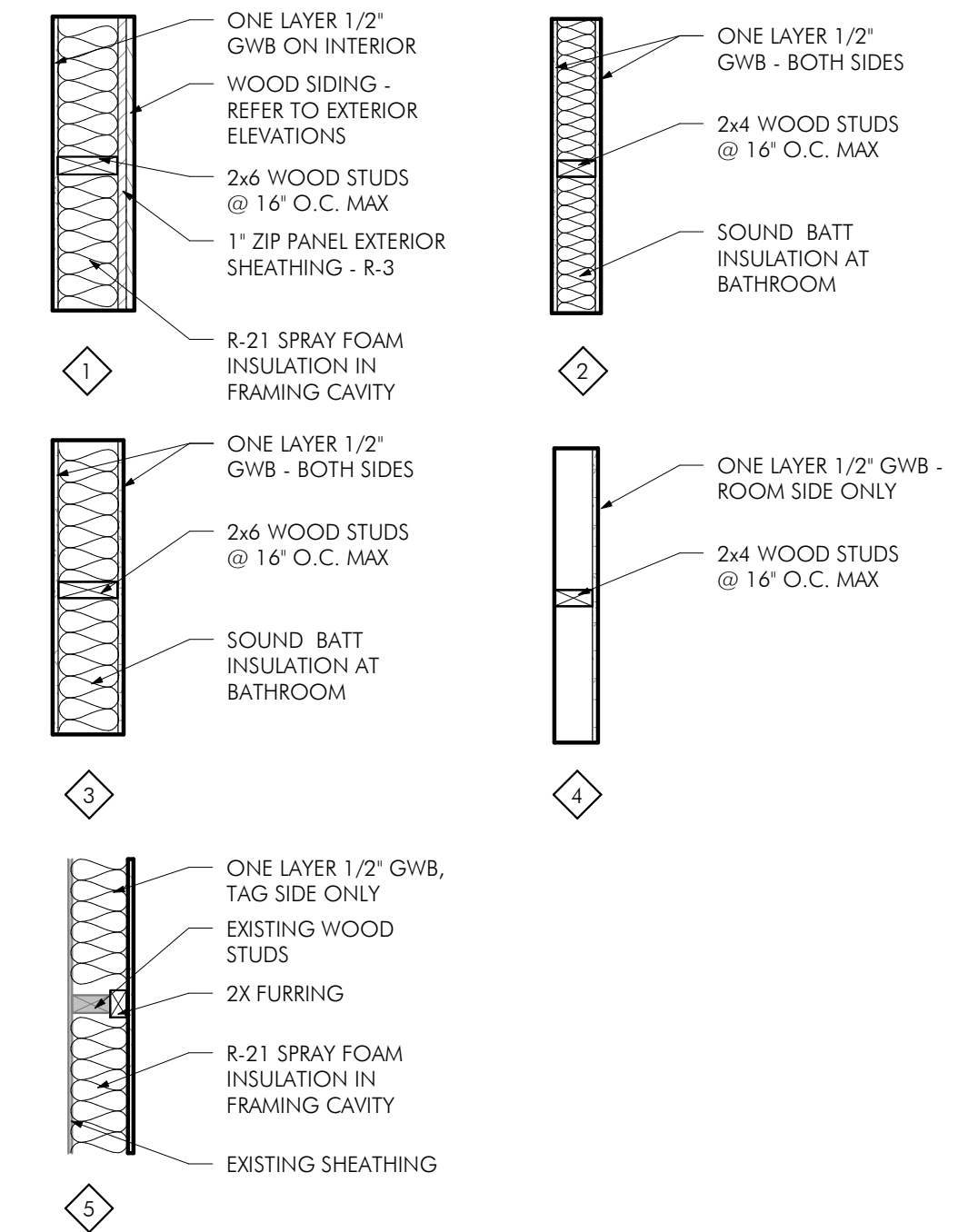
- FINAL APPROVAL OF WINDOWS SHALL BE BY OWNER. WINDOW DESIGNS BASED ON PELLA LIFESTYLE SERIES WINDOWS. DIMENSIONS ARE FOR UNIT, CONTRACTOR TO COORDINATE REQUIRED MINIMUM ROUGH OPENING SIZE.
- GLAZING SHALL BE WINDOW MANUFACTURER'S DUAL PANE, INSULATED, LOW-E, ARGON FILLED. EXTERIOR WINDOW INSULATED GLASS - UNLESS OTHERWISE NOTED U-FACTOR 0.27
- ALL NEW CASINGS:
 INTERIOR PER ROOM FINISH SCHEDULE
 EXTERIOR SHALL BE WOOD
- WINDOW UNITS TO BE NEW CONSTRUCTION TYPE COMPLETE WITH INTEGRAL EXTERIOR WEATHER SEAL TRIM.
- HEAD HEIGHT 7'-0" AFF UNLESS OTHERWISE NOTED.
- BEDROOM & BATHROOM WINDOWS TO RECEIVE PLANTATION SHUTTERS. BASIS OF NORMAN SHUTTER WOOD/ORE PLUS - FINISH TO BE WHITE.
- EGRESS WINDOWS TO MEET MINIMUM CLEAR OPENING OF 24"(H), 20"(W) & 5.7SF TOTAL. BATHROOM WINDOW SHALL HAVE A MINIMUM GLAZING AREA OF 3SF, OF WHICH ONE-HALF MUST BE OPERABLE.

WINDOW	TYPE	SIZE (WxH)	REMARKS
A	FIXED	24"x60"	
B	DOUBLEHUNG	30"x64"	7'-8" HEAD HEIGHT
C	AWNING	36"x24"	
D	DOUBLEHUNG	24"x44"	

General Construction Notes

- ALL WORK SHALL MEET THE REQUIREMENTS OF THE 2020 RESIDENTIAL CODE OF NEW YORK STATE, INCLUDING ALL REFERENCE DOCUMENTS, THE 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE, AND ALL APPLICABLE MUNICIPAL REQUIREMENTS. THESE PLANS HAVE BEEN DESIGNED IN COMPLIANCE WITH THE LATEST VERSION OF RESCHECK COMPLIANCE PROGRAM.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE MECHANICAL, ELECTRICAL AND PLUMBING DESIGNS BY THE INDIVIDUAL TRADES. REMOVE AND/OR REROUTE ANY MECHANICAL, ELECTRICAL OR PLUMBING FOUND IN WALLS TO BE REMOVED. COORDINATE ALL RE-ROUTING / TERMINATIONS WITH OWNER & ARCHITECT. ALL MECHANICAL, ELECTRICAL AND PLUMBING TRADE WORK SHALL MEET ALL REQUIREMENTS OF THE BUILDING CODES OF NEW YORK STATE AND ALL APPLICABLE MUNICIPAL REQUIREMENTS.
- ALL CONTRACTORS WORKING ON THE PROJECT SHALL BE LICENSED IN THE CITY / TOWN / VILLAGE AND IN GOOD STANDING WITH ALL APPLICABLE PERMITTING DEPARTMENTS, OFFICES, OR GOVERNING BODY. THE CONTRACTOR SHALL COORDINATE ALL WORK PROCEDURES WITH THE REQUIREMENTS OF LOCAL AUTHORITIES. THE PROJECT MAY INVOLVE PHASING OF CONSTRUCTION WORK SO AS NOT TO DISRUPT ACTIVITIES AROUND THE CONSTRUCTION SITE. THE CONTRACTOR IS TO FAMILIARIZE HERSELF WITH THESE REQUIREMENTS AND THOSE FOR OPERATING AROUND THE PREMISES OF THE BUILDING IF ANY.
- THE CONTRACTOR SHALL PERFORM ALL CUTTING, PATCHING, REPAIRING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS. WHERE MATERIALS, ALL MASONRY AND CMU PATCHING IS TO BE TOOTHED IN AND NOT ABUTTED USING BRICKS SALVAGED FROM EXISTING MATERIALS AS REQUIRED FOR PATCHING AND NEW CONSTRUCTION. IF SALVAGED QUANTITIES ARE NOT SUFFICIENT FOR PROPOSED NEW CONSTRUCTION, THEN NEW MATERIALS ARE TO MATCH EXISTING MATERIALS IN COLOR AND TEXTURE.
- NEW WORK SHALL ALIGN WITH AND MATCH EXISTING CONSTRUCTION ADJACENT EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED. PATCH ALL FLOOR, WALL AND CEILING AREAS, ETC. AFFECTED BY NEW CONSTRUCTION. THE CONTRACTOR IS NOT TO SCALE DRAWINGS OR DETAILS. ALL DIMENSIONS ARE TO THE FINISHED FACE OF SURFACES UNLESS OTHERWISE NOTED. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR STRUCTURAL OR REMOVAL TASKS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY OF ANY ENCOUNTER WITH SUSPECTED HAZARDOUS MATERIALS. DO NOT REMOVE EXISTING HAZARDOUS MATERIAL.
- PAINT ALL AREAS OF CONSTRUCTION. ALL COLORS OF EXPOSED FINISH MATERIALS ARE TO BE APPROVED BY THE ARCHITECT AND OWNER PRIOR TO ORDERING MATERIALS. ALL MILLWORK AND/OR SHELVING SHALL BE SCRIBED TO FIT NEW AND ADJACENT SURFACES. ALL DETAILS, SECTIONS, MATERIALS, METHODS, ETC SHOWN AND/OR NOTED ON THE DRAWINGS SHALL APPLY TO ALL OTHER SIMILAR LOCATION UNLESS NOTED OTHERWISE.
- OWNER IS RESPONSIBLE FOR ANY ZONING ISSUES.

Wall Types



BASIS OF DESIGN FOR - PROVIDE THE FOLLOWING OR APPROVED EQUAL:

ABOVE GRADE IN-WALL INSULATION:
 CLOSED CELL SPRAY FOAM - R-VALUE PER NOTED ON INDIVIDUAL WALL TYPE.

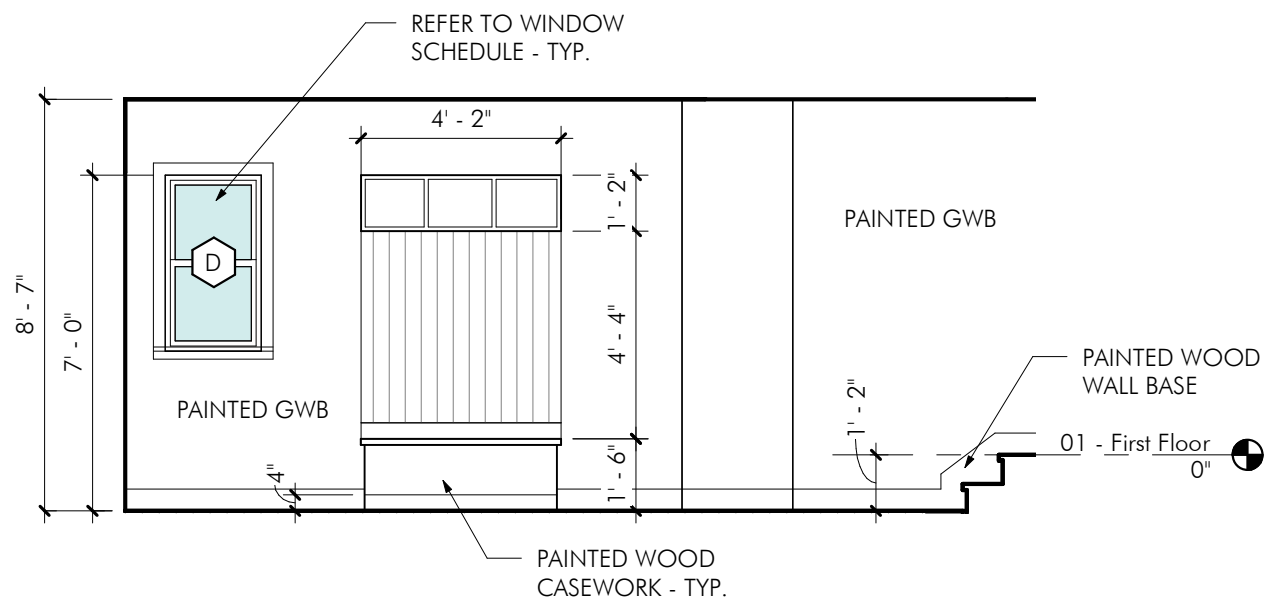
EXTERIOR SHEATHING/ WEATHER BARRIER:
 ZIP SYSTEMS 1" INSULATED PANEL - R-3.
 ALL SEAMS, EDGES, OPENINGS & PENETRATIONS SEALED WITH ZIP SYSTEMS FLASHING TAPE.

BELOW GRADE INSULATION:
 OWENS CORNING FOAMULAR 250 EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION - 3" (R-15).

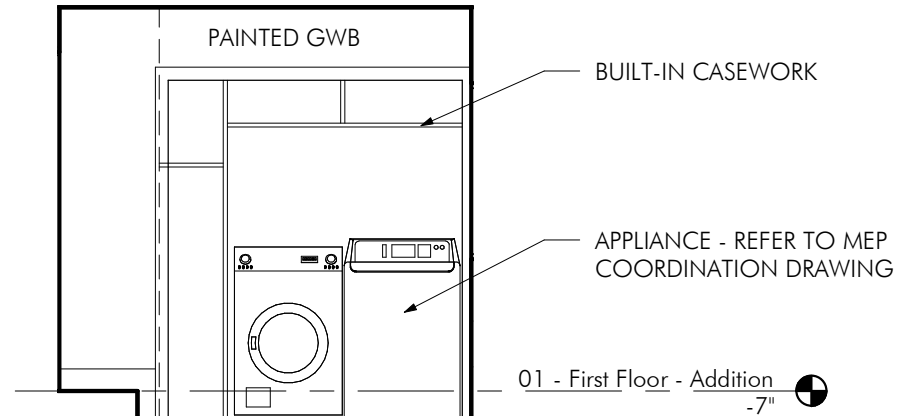
General Finish Notes

- ALL FINAL FINISH SELECTIONS SHALL BE COORDINATED WITH THE WISHES OF THE OWNER. PAINTED WOOD TRIM TO BE POPLAR - EITHER PURCHASED PRE-PRIMED OR PRIMED BEFORE INSTALLATION - FINISH COLOR TO BE APPLIED IN FIELD. STAINED WOOD TRIM IS TO BE A SPECIES TO MATCH EXISTING. ALL MANUFACTURER'S INSTALLATION GUIDELINES WILL BE FOLLOWED FOR ALL FINISH MATERIALS.
- PROVIDE SCHLUTER KERDI WATER-PROOFING MEMBRANE SYSTEM BEHIND/BELOW ALL TILE FLOOR AND BASE FINISHES AND 6" UP WALL AT WALL TILE.

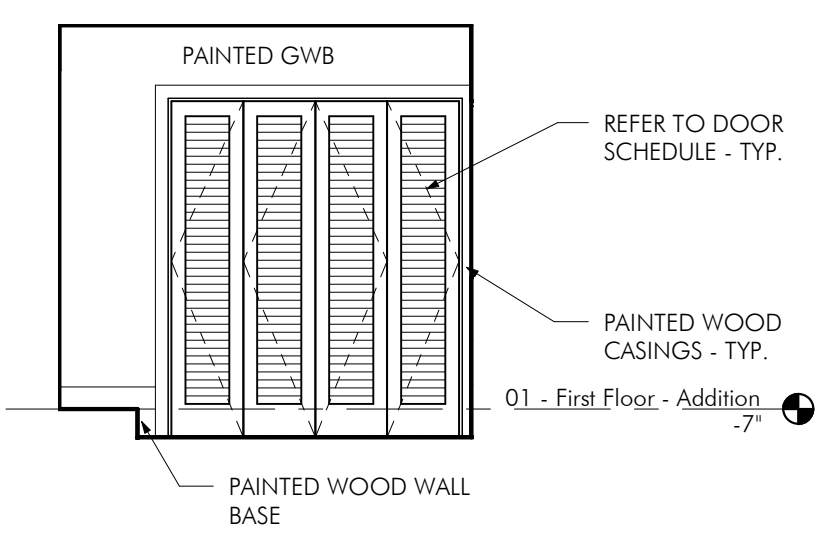
12/17/2020 5:29:32 P:\P20073 238 Summit Ave - Residential Addition\RV\P20073 238 Summit Ave - Residential Addition.rvt
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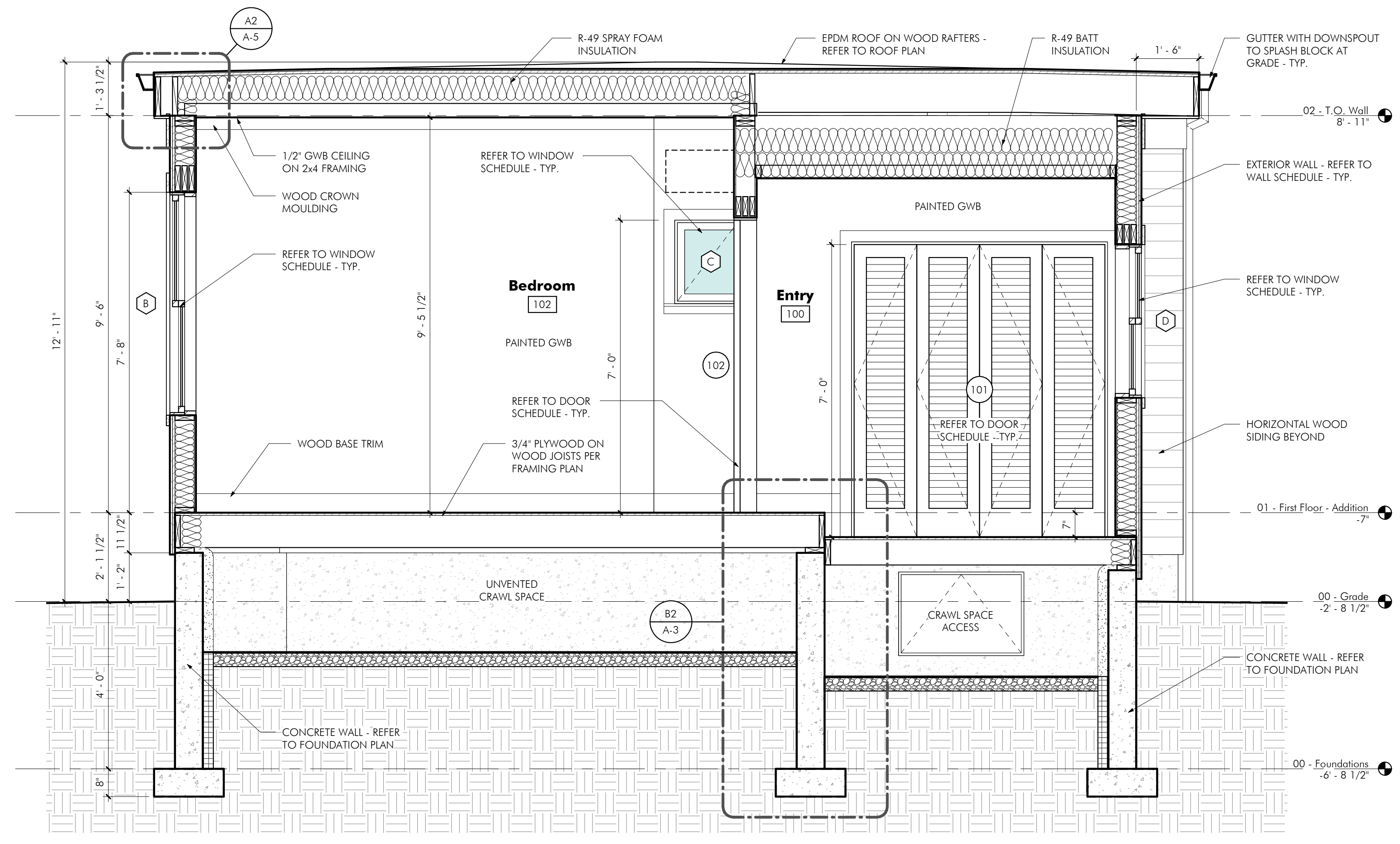
A1 Entry - N
 1/4" = 1'-0" B1 A-4



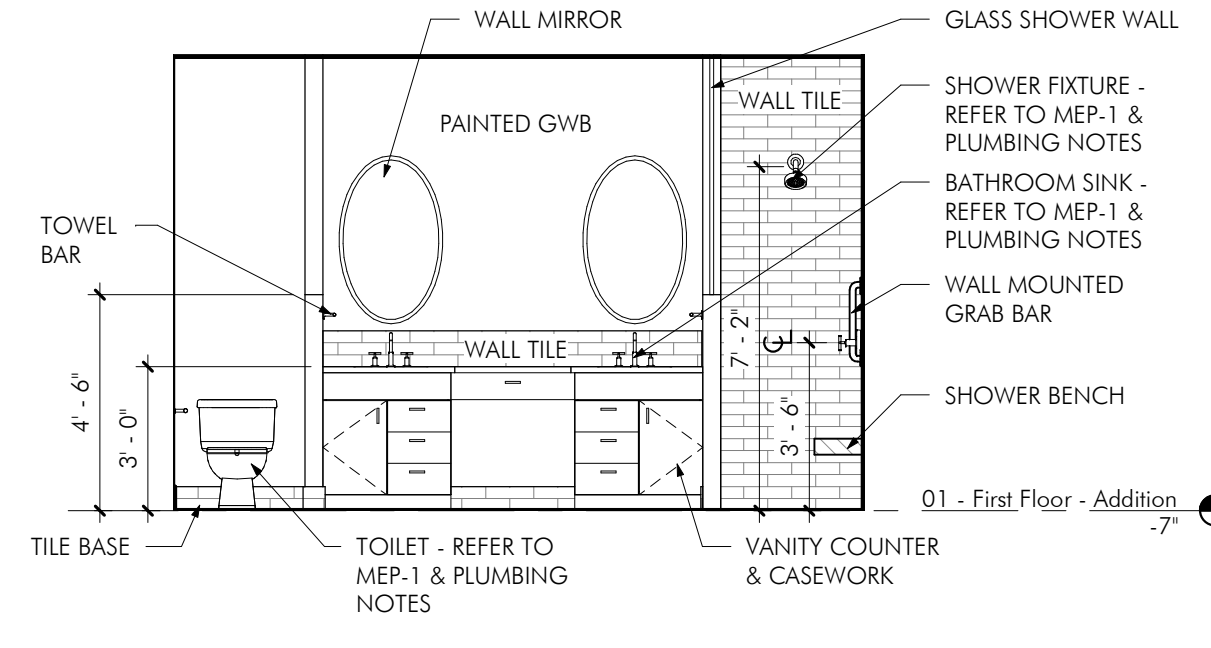
A2 Entry - W - Laundry
 1/4" = 1'-0" B1 A-4



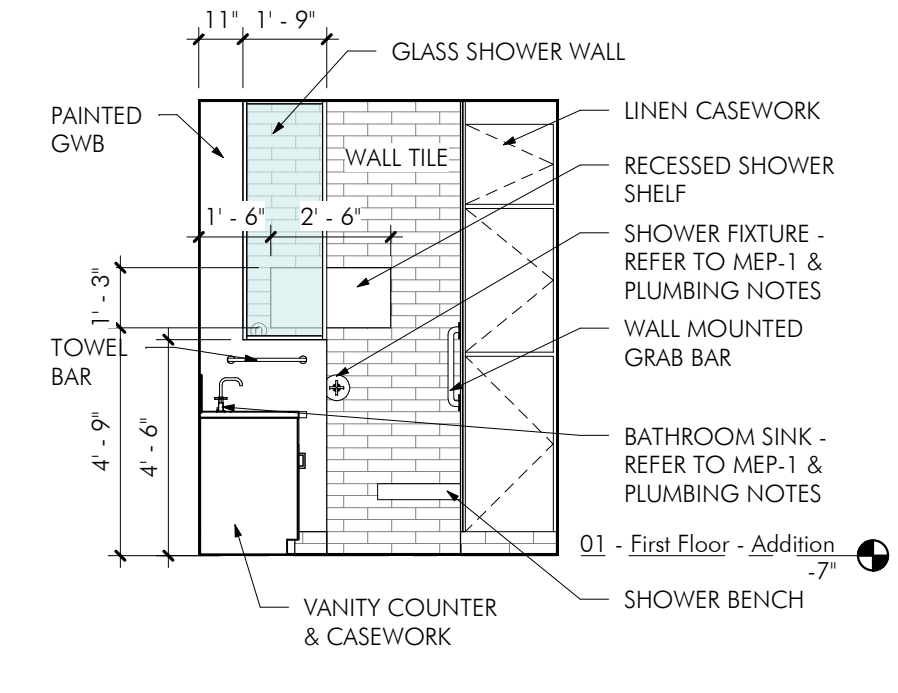
B2 Entry - W
 1/4" = 1'-0"



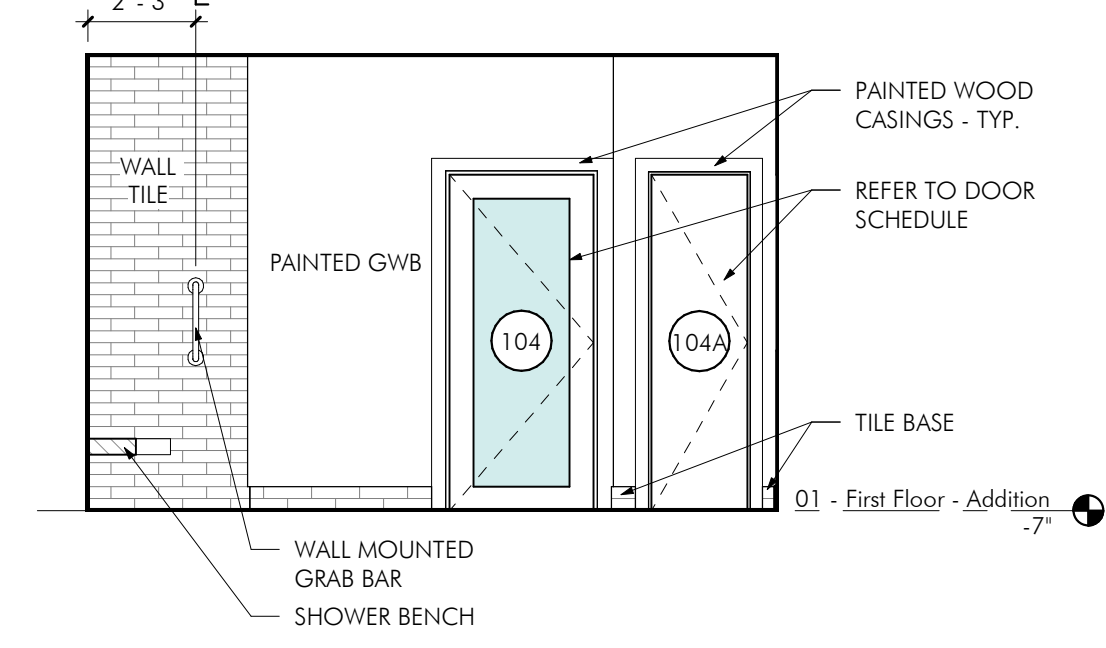
B3 Building Section
 1/2" = 1'-0" B3 A-3



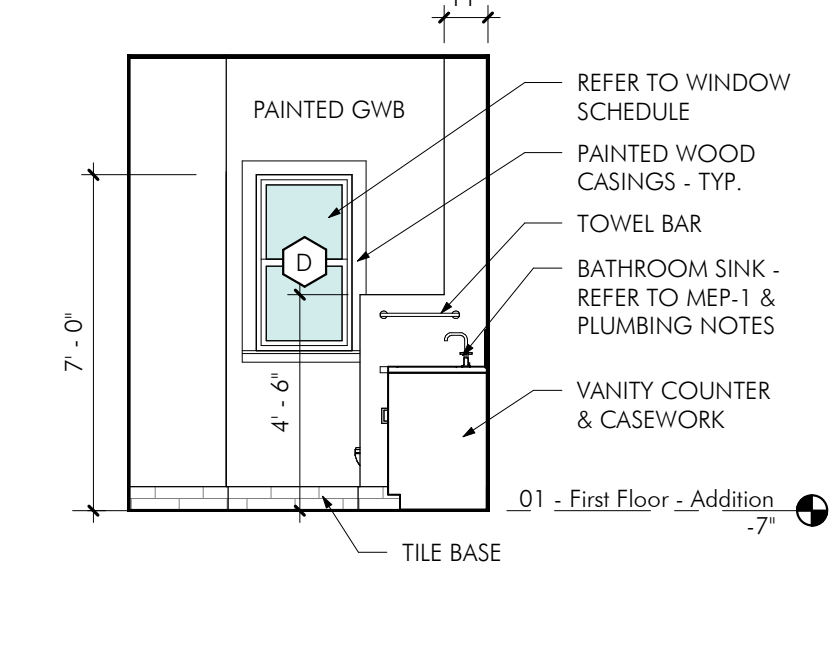
C2 Bathroom - N
 1/4" = 1'-0" B1 A-4



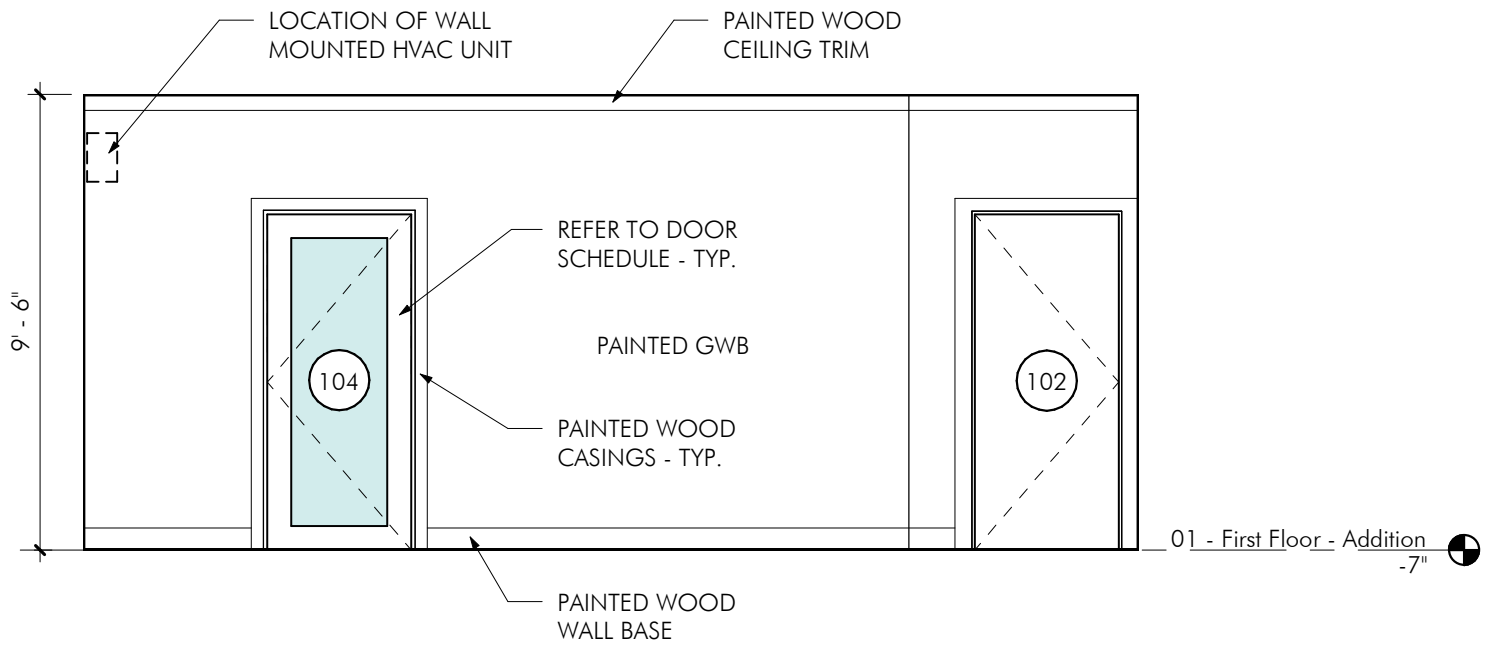
C3 Bathroom - E
 1/4" = 1'-0" B1 A-4



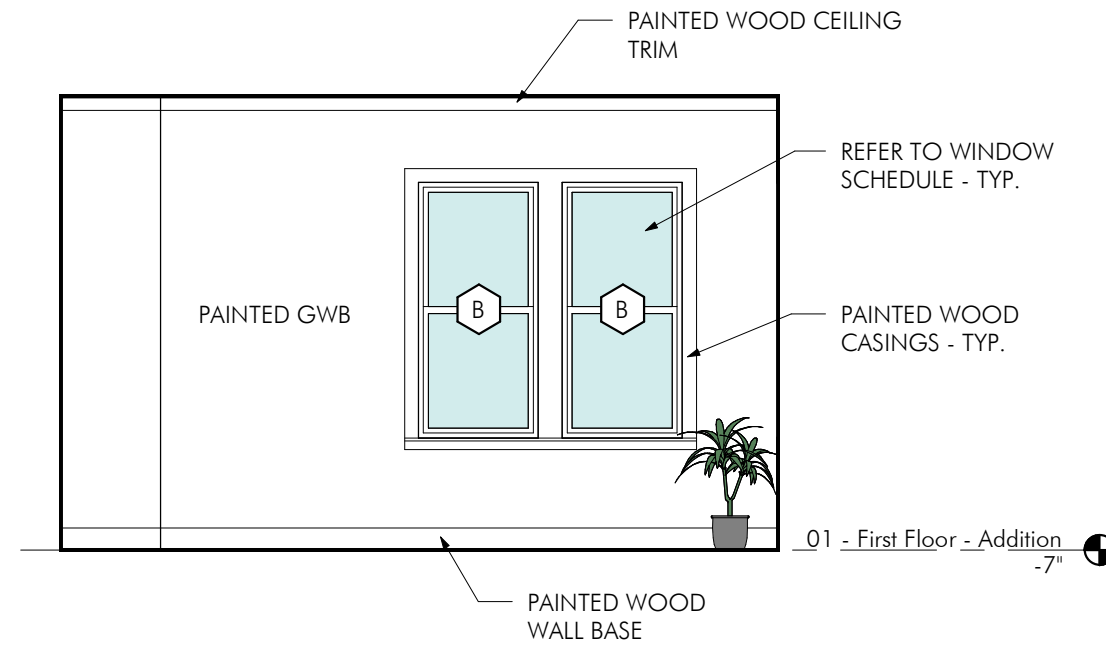
C4 Bathroom - S
 1/4" = 1'-0" B1 A-4



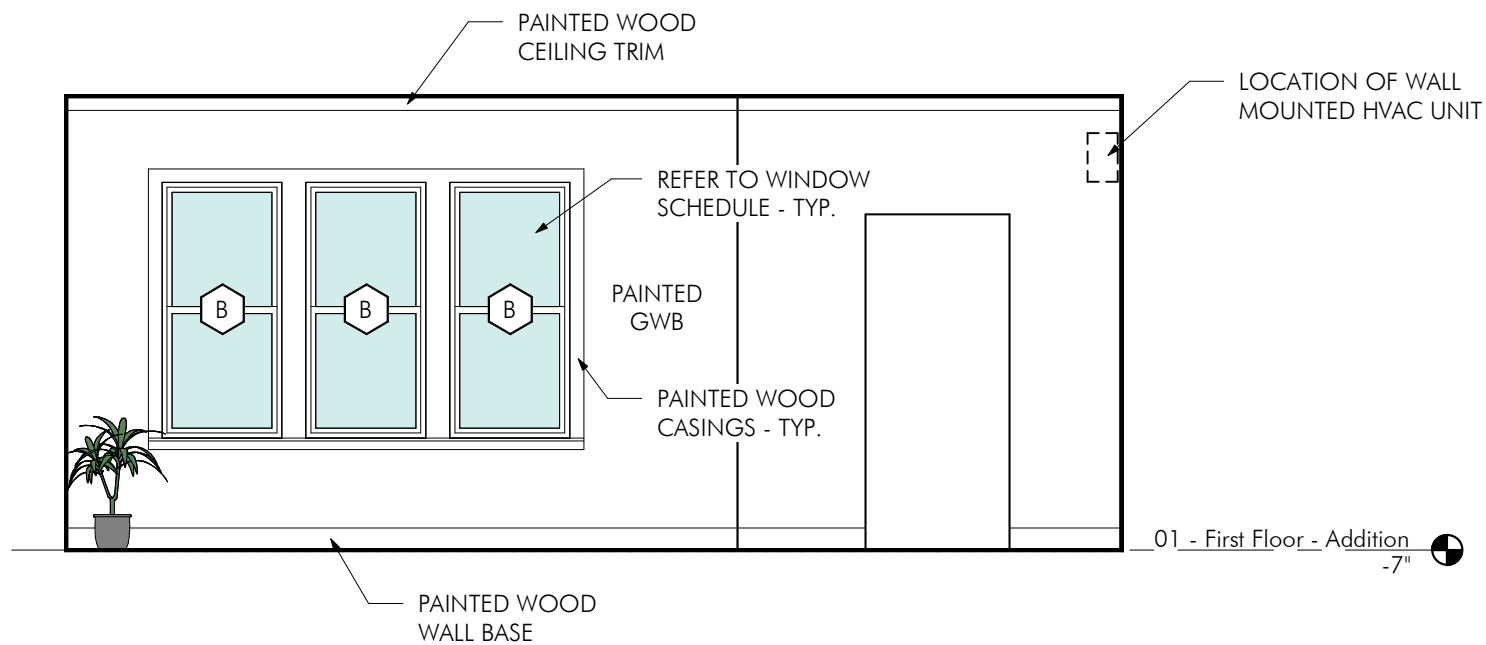
C5 Bathroom - W
 1/4" = 1'-0" B1 A-4



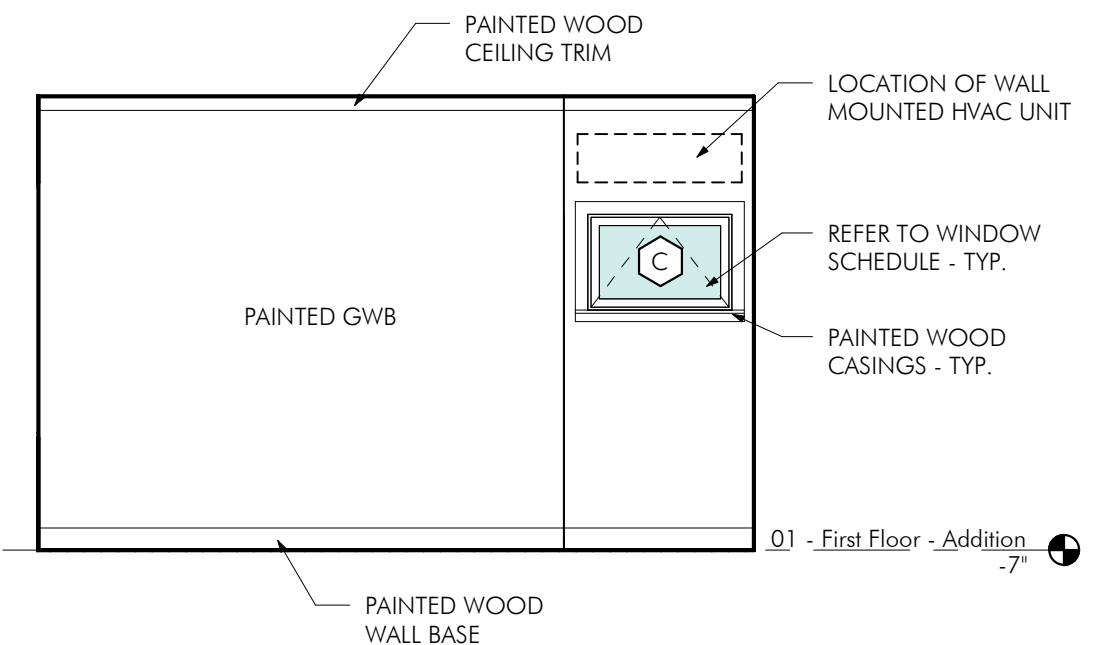
D1 Bedroom - N
 1/4" = 1'-0" B1 A-4



D2 Bedroom - E
 1/4" = 1'-0" B1 A-4

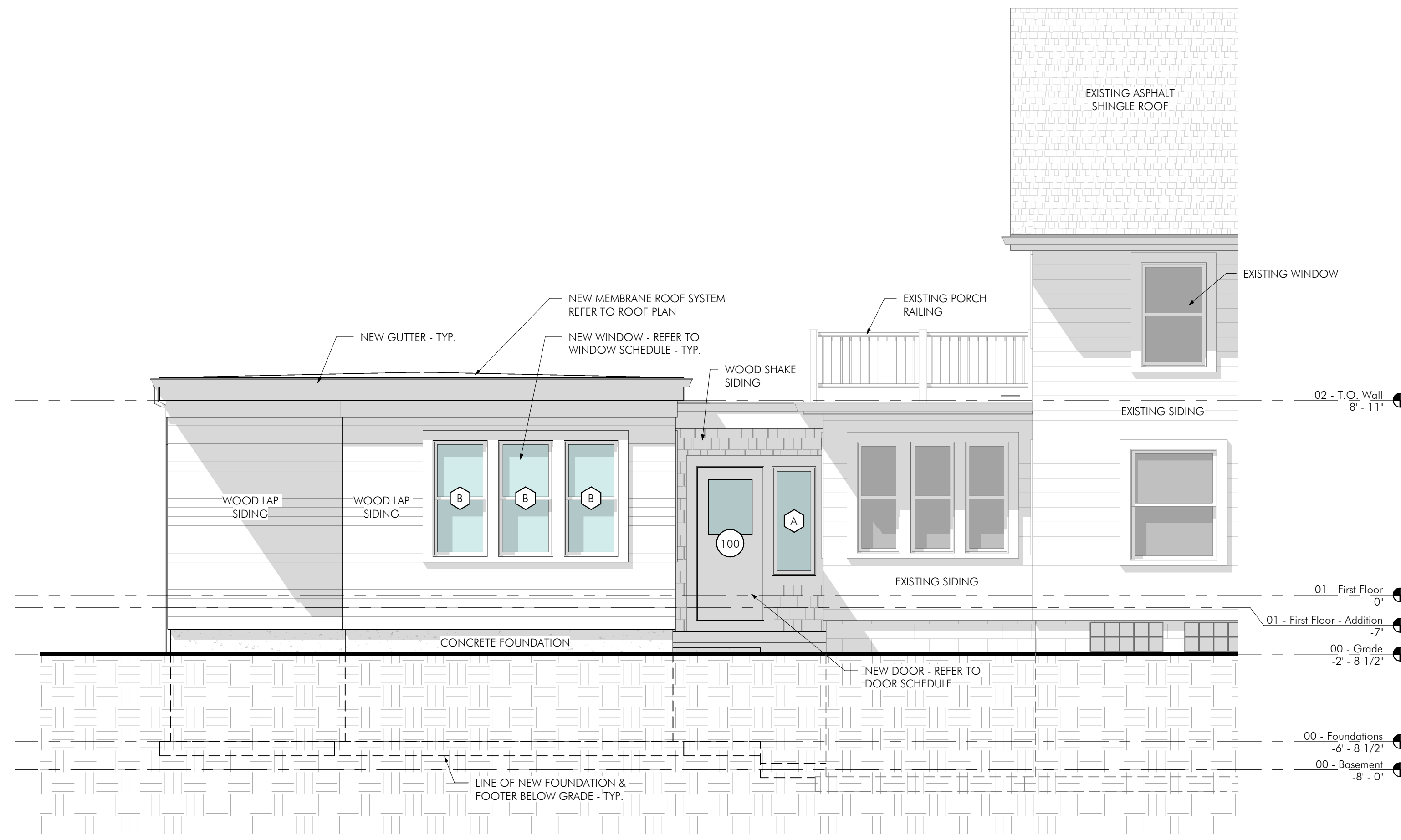


D3 Bedroom - S
 1/4" = 1'-0" B1 A-4

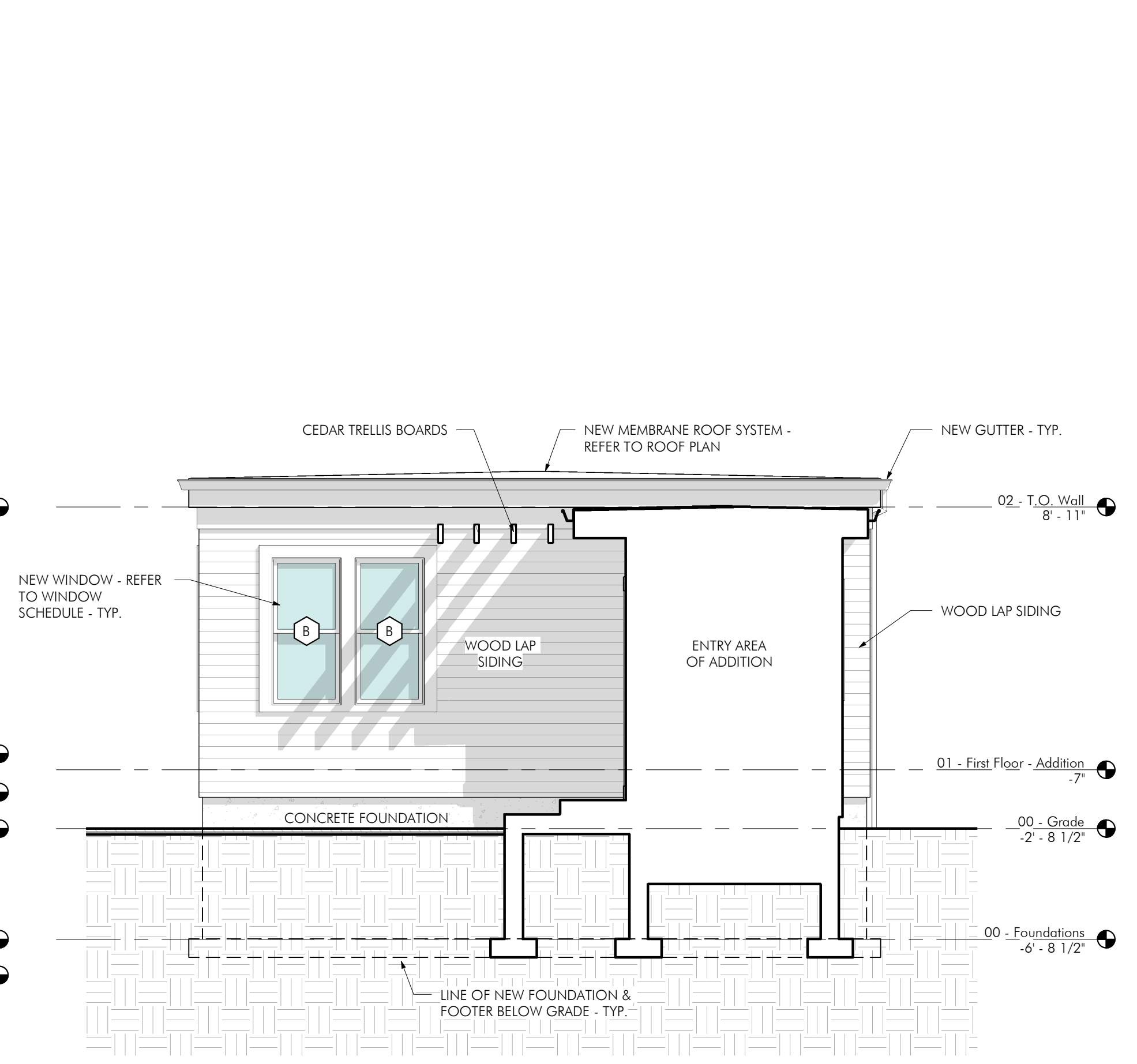


D5 Bedroom - W
 1/4" = 1'-0" B1 A-4

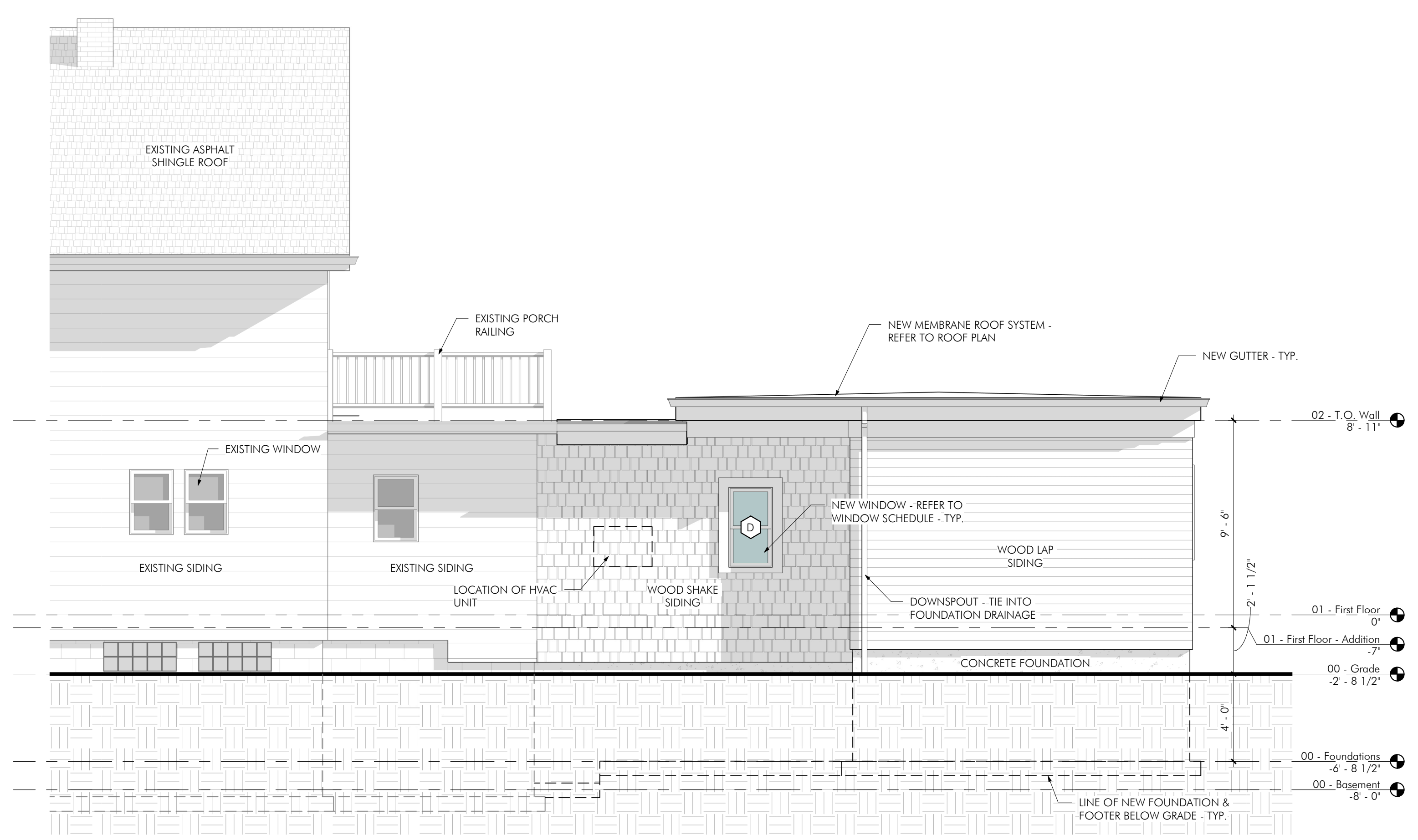
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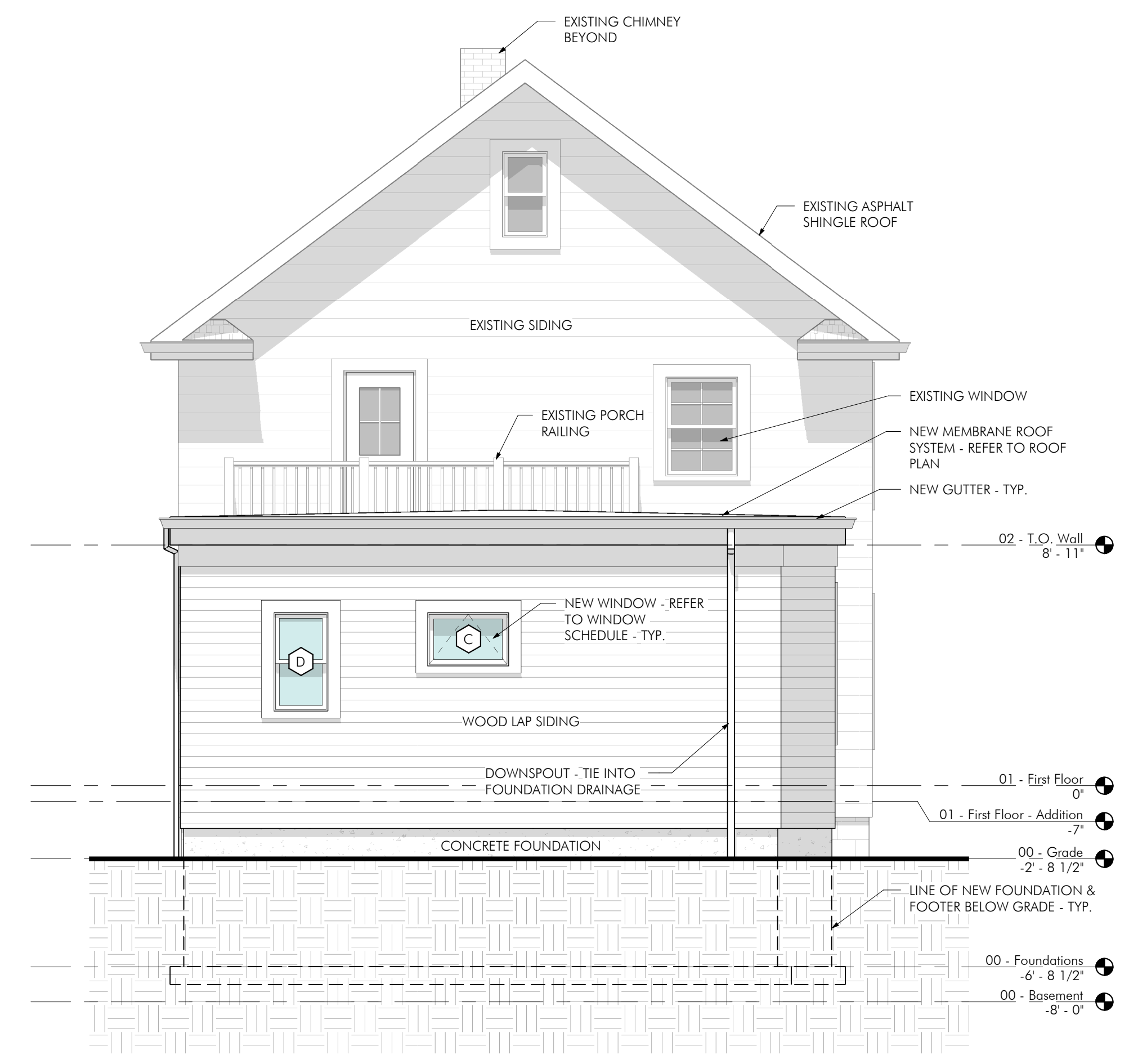
B1 South Elevation
 1/4" = 1'-0" B1 A-4



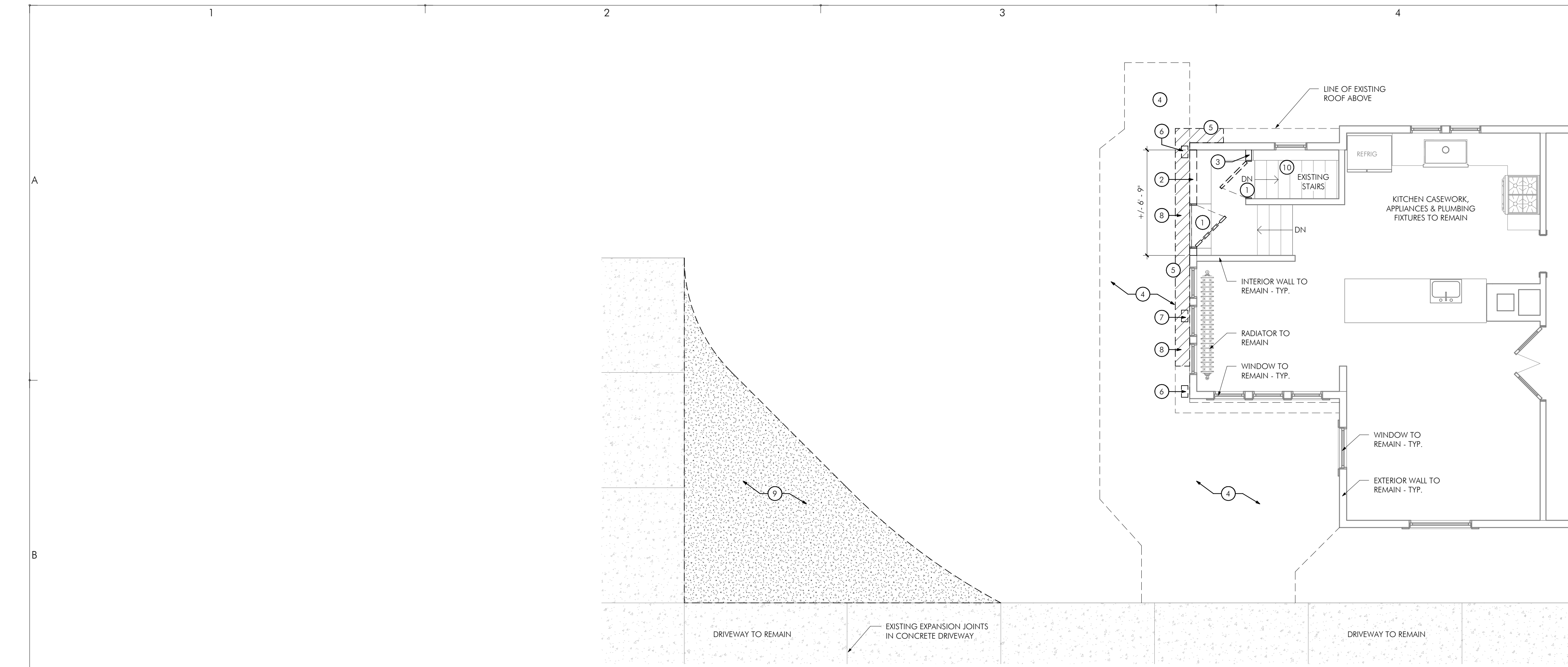
B4 East Elevation
 1/4" = 1'-0" B1 A-4



D1 North Elevation
 1/4" = 1'-0" B1 A-4



D4 West Elevation
 1/4" = 1'-0" B1 A-4



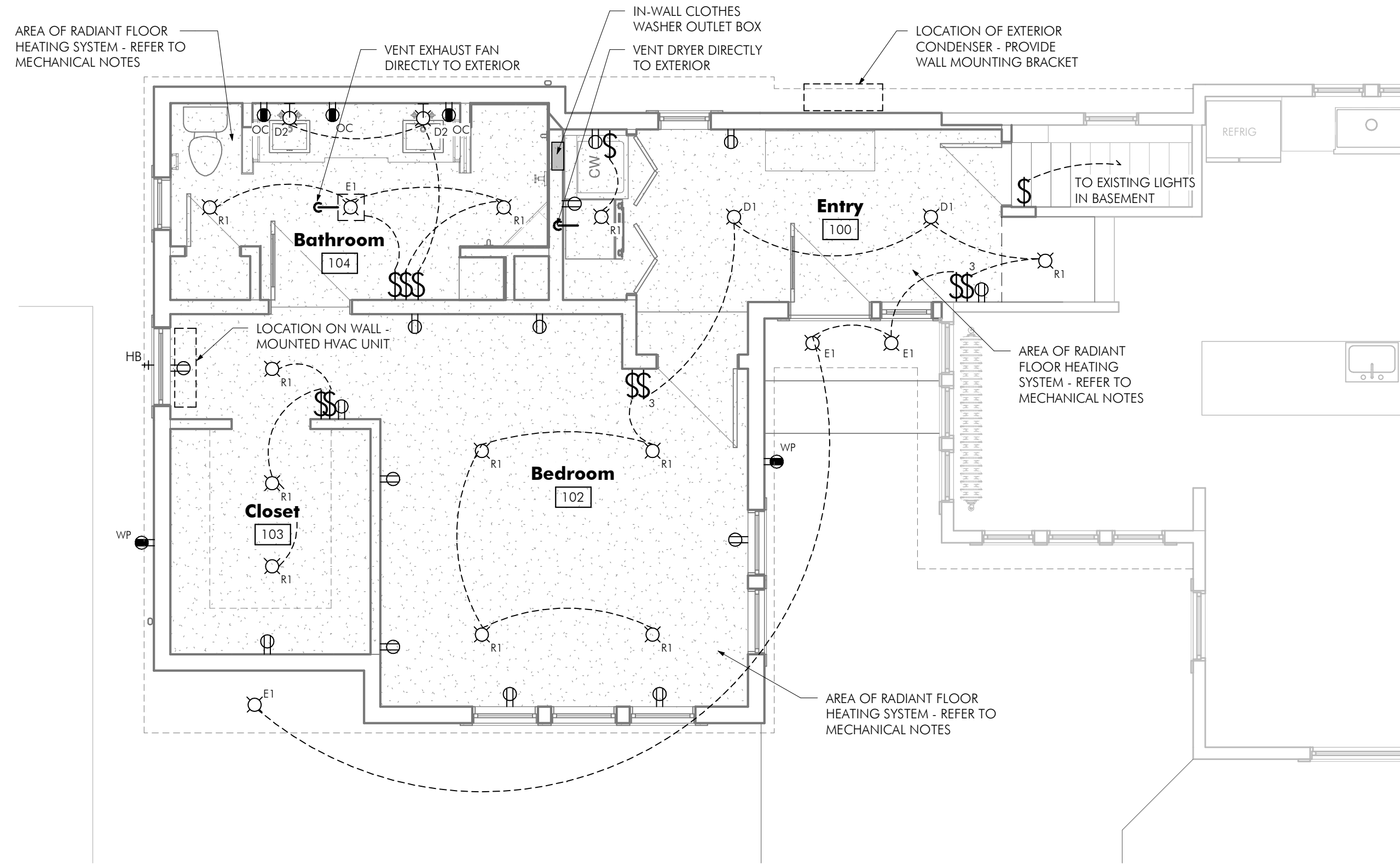
B2 First Floor Demolition Plan
1/4" = 1'-0" D2 A-3

General Demolition Notes

- A. ALL WORK SHALL BE IN COMPLIANCE WITH THE ADMINISTRATIVE PROVISIONS AND THE NEW YORK BUILDING CODE. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK TO BE PERFORMED BY CONTRACTOR, SUBCONTRACTORS AND ALL PARTIES PERFORMING WORK UNDER OTHER CONTRACTS ASSOCIATED WITH THE RENOVATION AND NEW CONSTRUCTION. CONTRACTOR IS NOT RESPONSIBLE FOR COORDINATING SITE WORK NOT INCLUDED IN THESE DOCUMENTS. CONTRACTOR TO CUT WALLS FOR DUCTWORK OPENINGS & PROVIDE LINTEL WHERE REQUIRED. REFER TO LINTEL SCHEDULE FOR LINTEL SIZING.
- B. DRAWINGS DO NOT INDICATE ALL DEMOLITION / REMOVALS. CONTRACTOR IS TO REFER TO DRAWINGS, SPECIFICATIONS AND VERIFY FIELD CONDITIONS TO DETERMINE FULL SCOPE AND PARTICULARS OF REMOVAL REQUIREMENTS. CONFER WITH OWNER WHICH ITEMS ARE TO BE SAVED FOR OWNERS USE OR REINSTALLATION BY CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ITEMS TO BE SALVAGED AND RELOCATED, THROUGHOUT THE CONSTRUCTION PERIOD, INCLUDING SAFE STORAGE OF SAME. UPON DEMOLITION, THE OWNER SHALL RETAIN THOSE ITEMS DEEMED SALVAGEABLE. ITEMS NOT RETAINED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, WHO SHALL LEGALLY DISPOSE OF SAME.
- C. IF DEEMED REQUIRED, PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR RENOVATION, A SURVEY SHALL BE PERFORMED FOR THE PRESENCE OF REGULATED ASBESTOS-CONTAINING MATERIALS. THE CONTRACTOR MUST DEMONSTRATE COMPLIANCE WITH OR EXEMPTION FROM NOTIFICATION REQUIREMENTS.
- D. CUT AND CAP, EXTEND OR RELOCATE IMPACTED GAS, WATER SUPPLY & SANITARY LINES AS REQUIRED BY NEW CONSTRUCTION. EXISTING WATER SERVICE LINE, GAS METER, WATER METER AND SEWER LINE TO REMAIN WITH EXISTING STRUCTURE ONCE RELOCATED. CUT AND REMOVE MAIN SUPPLY AND SANITARY LINES AS REQUIRED FOR RELOCATION. RECONNECT ALL UTILITIES AT CONCLUSION OF RELOCATION OF STRUCTURE.
- E. COORDINATE ALL REMOVALS WITH STRUCTURAL IMPLICATIONS WITH FRAMING DRAWINGS AND NOTES. BRACE AND SHORE ALL WALLS AS REQUIRED TO MAINTAIN STRUCTURAL STABILITY OF REMAINING MATERIALS. SHOULD ANY QUESTIONS ARISE DURING DEMOLITION CONTACT ARCHITECT IMMEDIATELY FOR CLARIFICATION. WHERE ITEMS ARE REMOVED, PATCH SURFACES TO MATCH ADJACENT SURFACES OR TO RECEIVE NEW FINISHES WHERE SCHEDULED. PATCHING OF NEW OR EXISTING FINISHES SHALL EXTEND TO NEAREST NATURAL BREAK OR TERMINATION FOR A CLEAN, UNBLEMISHED APPEARANCE AT THE END OF CONSTRUCTION.
- F. CONTRACTOR IS RESPONSIBLE FOR THE PREP OF ALL EXISTING WALLS AND SURFACES TO REMAIN THAT ARE IMPACTED BY THE REMOVAL OF ADJACENT SURFACES. EXISTING ROOF FRAMING TO REMAIN UNLESS OTHERWISE NOTED. PROTECT ALL EXISTING CONSTRUCTION, HARDSCAPE, LANDSCAPE OR FINISHES TO REMAIN/SALVAGE/REUSE FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE WILL BE REPAIRED OR MATERIAL REPLACED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- G. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN A SAFE AND CLEAN JOB SITE AND REMOVE ALL DEBRIS GENERATED BY DEMOLITION AND CONSTRUCTION PROCESS IN A TIMELY MANNER. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE A DUMPSTER AS NEEDED.
- H. PROVIDE ALL REQUIRED TEMPORARY STRUCTURAL SUPPORT AND SHORING AS NEEDED FOR RELOCATION OF EXISTING TWO STORY STRUCTURE. AT THE CONCLUSION OF THE RELOCATION OF THE EXISTING STRUCTURE, REMOVE EXISTING FOUNDATION IN ENTIRETY.

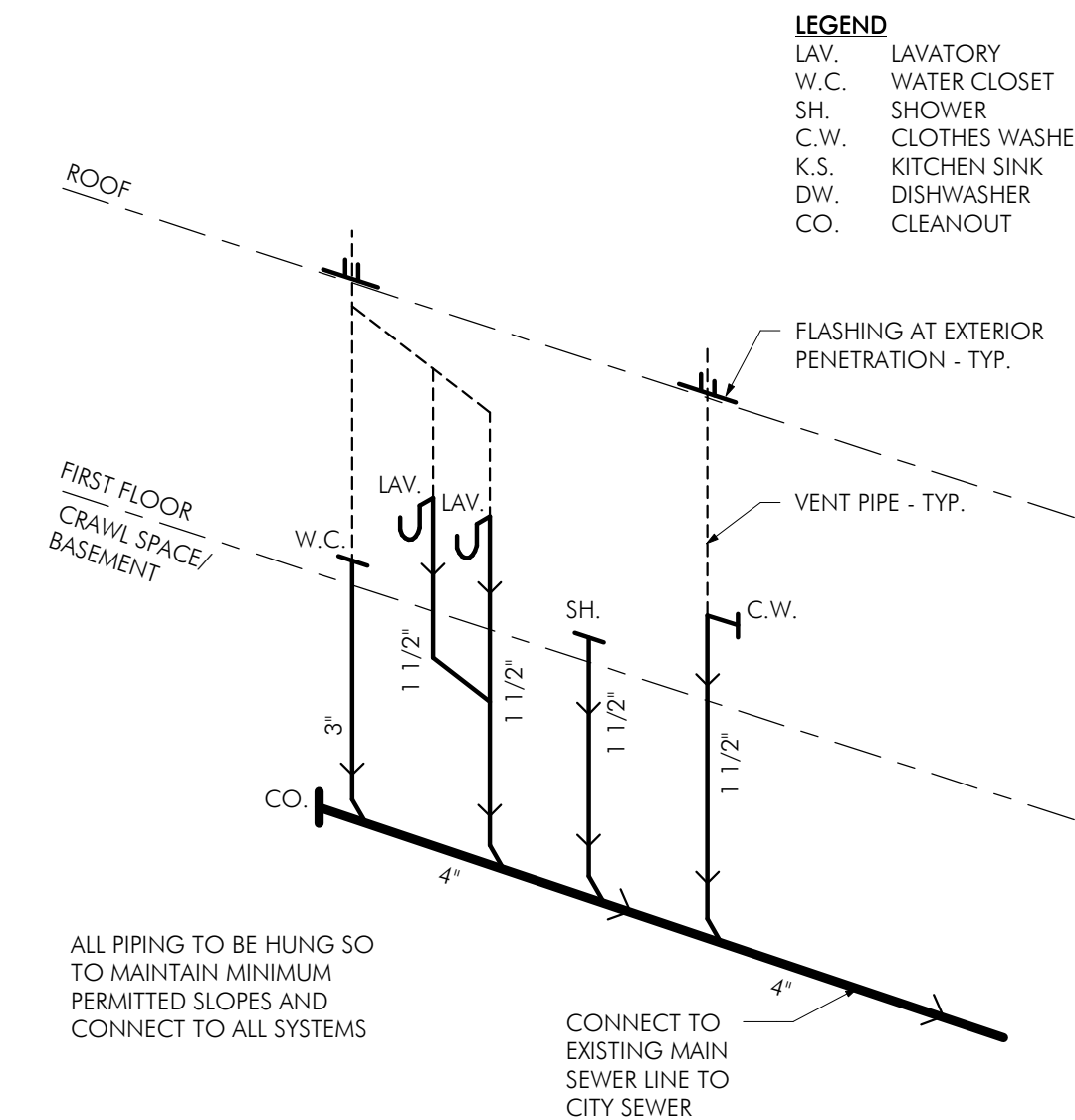
Demolition Notes

- ① REMOVE DOOR AND FRAME IN ENTIRETY.
- ② REMOVE EXTERIOR WALL TO EXTENT SHOWN - PROVIDE TEMPORARY SHORING AS REQUIRED.
- ③ REMOVE INTERIOR IN ENTIRETY - PROVIDE TEMPORARY SHORING AS REQUIRED.
- ④ REMOVE EXISTING PATIO PAVERS IN ENTIRETY - SAVE ALL CUT & UNCUT PAVERS FOR REINSTALLATION.
- ⑤ REMOVE EXTERIOR SIDING AND TRIMS TO EXTENT REQUIRED FOR NEW CONSTRUCTION - SAVE FOR POSSIBLE REUSE/REINSTALLATION.
- ⑥ REMOVE EXTERIOR WALL TO EXTENT SHOWN - PROVIDE TEMPORARY SHORING AS REQUIRED.
- ⑦ WALL MOUNTED UTILITY UNITS TO BE RELOCATED - CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.
- ⑧ HATCHED AREA: ROOF SOFFIT TO BE REMOVED TO EXTENT REQUIRED FOR NEW CONSTRUCTION.
- ⑨ REMOVE CONCRETE DRIVEWAY TO EXTENT CALLED FOR - CUT CONCRETE AT EXISTING EXPANSION JOINTS.
- ⑩ REMOVE WOOD FRAMED WALL ENCLOSURE AT EXISTING STAIR TO BASEMENT EXPOSING EXISTING MASONRY BLOCK FOUNDATION WALL TO EXTENT REQUIRED FOR APPLICATION OF WATERPROOFING MEMBRANE.



B2 First Floor MEP Plan
 1/4" = 1'-0" D2 A-3

Plumbing Iso



ALL PIPING TO BE HUNG SO TO MAINTAIN MINIMUM PERMITTED SLOPES AND CONNECT TO ALL SYSTEMS

CONNECT TO EXISTING MAIN SEWER LINE TO CITY SEWER

- LEGEND**
- LAV. LAVATORY
 - W.C. WATER CLOSET
 - SH. SHOWER
 - C.W. CLOTHES WASHER
 - K.S. KITCHEN SINK
 - DW. DISHWASHER
 - CO. CLEANOUT

MEP Plan Legend

- § LIGHTING CONTROL SWITCH - LIGHTING WALL SWITCHES, LOCATED BY DOT. 1 POLE IF NO NOTATION:
 '3' 3-WAY SWITCH
 'D' DIMMER CONTROL
- ⊕ DUPLEX RECEPTACLE
- ⊖ GFI RECEPTACLE
- UC - UNDER-COUNTER
 OC - OVER-COUNTER
 WP - WATERPROOF
- ⊗ LIGHTING FIXTURE - REFER TO LIGHT SCHEDULE. ON BRANCH CIRCUITRY WHERE ONLY THE CIRCUIT NUMBER IS SHOWN, CIRCUIT LUMINARIES WITH THE SAME NUMBER FEED TO THE CIRCUIT INDICATED WITH A HOMERUN TO EACH NUMBERED GROUP - CONNECT TO A 20AMP - 1 PHASE CIRCUIT BREAKER
- R - RECESSED FIXTURE
 D - DECORATIVE FIXTURE
 E - EXTERIOR FIXTURE
- ⊙ SMOKE DETECTOR
- ⊕ CARBON MONOXIDE DETECTOR
- BOTH SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR ARE TO BE HARDWIRED, RECESSED BODY STYLE UNITS - FASCIA TO BE APPROVED BY ARCHITECT PRIOR TO ORDERING.
- ⊖ RECESSED CEILING MOUNTED EXHAUST FAN/LIGHT - REFER TO LIGHT SCHEDULE

Light Schedule

ALL LIGHTING FIXTURES AND ACCESSORIES TO BE APPROVED BY OWNER PRIOR TO ORDERING AND INSTALLATION BY CONTRACTOR.

ALL LIGHT FIXTURES TO BE ON A COMPATIBLE DIMMER SYSTEM EXCEPT FOR THE CEILING MOUNTED FIXTURE IN LAUNDRY CLOSET.

RECESSED CAN DOWNLIGHTS FIXED (R1):
 MANUFACTURER: LITHONIA LIGHTING
 MODEL: LKS 5" RECESSED LED FINISHING KIT
 TRIM COLOR: MATTE WHITE
 *PROVIDE WET LOCATION APPROVED TRIM AT SHOWER

DECORATIVE LIGHT FIXTURE (D1):
 MANUFACTURER: OLDE BRICK LIGHTING
 MODEL: LARGE WHITE/MILK GLASS SCHOOL HOUSE STYLE - FLUSH MOUNT
 TRIM COLOR: ANTIQUE BRASS

EXTERIOR LIGHT FIXTURE (E1):
 MANUFACTURER: aspectLED
 MODEL: 3.5" SINGLE ARRAY LED RECESSED LIGHT - SUITABLE FOR OUTDOORS
 TRIM COLOR: WHITE

EXHAUST FAN/LIGHT:
 MANUFACTURER: BROAN-NUTONE
 MODEL: INVENT SERIES 110 CFM WITH LIGHT - 791LEDNTM
 TRIM COLOR: WHITE

Electrical Notes

- A. ELECTRICAL WORK IS LIMITED TO THE AREA OF THE PROPOSED ADDITION FOR LIGHTING, OUTLETS & SAFETY DEVICES IN LOCATIONS REQUIRED BY CODE. THE REMAINDER OF THE EXISTING ELECTRICAL SYSTEM IS TO REMAIN. ALL ELECTRICAL WORK SHALL BE INSTALLED IN COMPLIANCE WITH N.E.C. (ANSI/NHATO) AND FIRE CODE OF NEW YORK STATE BY A LICENSED ELECTRICIAN AND IN STRICT ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES. LICENSED ELECTRICAL CONTRACTOR TO COORDINATE ALL ELECTRICAL OUTLETS AND LIGHTING FIXTURES TYPES AND LOCATIONS WITH OWNER.
- B. ONLY AIRTIGHT ELECTRICAL BOXES SHALL BE INSTALLED IN EXTERIOR WALLS AND INSULATED CEILINGS. RECESSED LIGHT FIXTURES OR JUNCTION BOXES IN INSULATED CEILINGS SHALL BE COVERED WITH INSULATION. RECESSED LIGHT FIXTURES INSTALLED IN DROP CEILINGS OR SOFFITS SHALL BE DRABT STOPPED. WHERE ELECTRICAL PANELS ARE INSTALLED ON EXTERIOR WALLS, AIR SEALING OF ALL PENETRATIONS ARE REQUIRED. CONDUIT/WIRES SHALL BE LOCATED ALONG PLATES OR AGAINST STUDS RATHER THAN THROUGH THE CENTER OF INSULATION CAVITIES.
- C. ELECTRICAL PENETRATIONS THROUGH RIM JOISTS SHALL BE SEALED WITH EXPANDABLE FOAM OR CAULK. CONDUIT/WIRES PENETRATING INTO THE ATTIC AND THROUGH TOP AND BOTTOM PLATES IN EXTERIOR WALLS SHALL BE SEALED WITH EXPANDABLE FOAM OR CAULK.
- D. ALL LIGHT FIXTURES ARE TO BE APPROVED BY THE OWNER PRIOR TO ORDERING. CONTRACTOR IS RESPONSIBLE FOR ALL WIRING TO DEVICES. IF OWNER REQUESTS ANY ADDITIONAL DECORATIVE/SPECIALTY LIGHT FIXTURES, THEY ARE TO BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE AGREED BETWEEN THE OWNER AND CONTRACTOR. ALL DECORATIVE/SPECIALTY LIGHT FIXTURES ARE TO BE ON A SEPARATE SWITCH FROM FIXTURES SHOWN ON ELECTRICAL PLAN, WITH AN INDIVIDUAL HOME RUN TO THE EXISTING ELECTRICAL PANEL. PROPERLY GROUND AND BOND ALL LIGHTING FIXTURES.
- E. ALL DEVICES WHERE APPLICABLE SHALL BE ENERGYSTAR RATED. THE ELECTRICAL SYSTEM SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH THE LATEST ISSUE OF THE N.E.C. INCLUDING BUT NOT LIMITED TO THE PANEL BOARDS, WIRING DEVICES, LIGHTING DEVICES, ETC.
- F. FEEDER AND BRANCH CIRCUIT WIRING SHALL BE INDIVIDUAL BUILDING WIRE. COPPER MINIMUM #12 AWG RATIO 600V OR TYPE NM (ROMEX). ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ENSURING CORRECT LOAD DISTRIBUTION FOR EACH HOME RUN RETURN TO MAIN PANEL. RECEPTACLES SHALL BE DUPLEX 125 VOLT AC, RATED 20 AMP, 3 WIRE GROUNDING TYPE - SIDE/BACK WIRED AND SHALL CONFORM TO NEMA CONFIGURATION AND OSHA REQUIREMENTS. LIGHTING SWITCHES SHALL BE DECORE HANDLE, SCREW TERMINALS, SILENT OPERATING TYPE, 20 AMP, 120-227 VAC OR OWNER APPROVED ALTERNATIVE.
- G. SMOKE ALARM SHALL BE INTERCONNECTED AND HARDWIRED ON A SEPARATE CIRCUIT. SYSTEM SHALL HAVE A BATTERY BACKUP FOR POWER WHEN PRIMARY COMMERCIAL POWER IS INTERRUPTED. SMOKE ALARM SHALL BE LISTED AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE BUILDING CODE OF NEW YORK STATE AND THE FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.

Appliance Notes

- A. LAUNDRY APPLIANCES WILL BE SUPPLIED BY THE OWNER FOR INSTALLATION BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL, GAS, WATER, MECHANICAL AND VENTILATION HOOK UPS TO APPLIANCES.
- B. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SURROUNDING CONSTRUCTION AND FINISHES TO ENSURE CORRECT MANUFACTURER RECOMMENDED FIT FOR APPLIANCES.
- C. RUN SUPPLY LINES TO LOCATIONS AS SPECIFIED BY MANUFACTURERS INSTALLATION GUIDELINES. OWNER WILL PROVIDE CONTRACTOR WITH APPLIANCE MAKE/MODEL INFORMATION ONCE DETERMINED.

Mechanical Notes

- A. NO CHANGES ARE ANTICIPATED TO THE EXISTING BOILER HEATING & MECHANICAL AIR CONDITION SYSTEM SERVICING THE EXISTING DWELLING. IT IS ANTICIPATED THAT THE EXISTING BOILER CAN HANDLE THE ADDITIONAL SQUARE FOOTAGE OF THE PROPOSED NEW CONSTRUCTION WITH THE ADDITION OF A NEW CONTROL VALVE.
- B. REFER TO SPECIFIC NOTES ABOUT THE RADIANT FLOOR HEATING SYSTEM. COOLING & ADDITIONAL HEAT FOR THE PROPOSED NEW CONSTRUCTION IS TO BE PROVIDED BY MITSUBISHI WALL MOUNTED SYSTEM TO BE INSTALLED BY OWNER PROVIDED VENDOR. CONTRACTOR IS RESPONSIBLE FOR MOUNTING EXTERIOR UNIT USING REQUIRED WALL BRACKETS, COORDINATING POWER & ROUTING OF PIPING BETWEEN INTERIOR AND EXTERIOR UNITS.
- C. IF ANY ADDITIONAL WORK IS REQUIRED THE CONTRACTOR SHALL VISIT THE JOB SITE AND EXAMINE ALL EXISTING CONDITIONS AFFECTING OR WALLS OR IN CONCRETE FLOOR SLABS. SPECIFICATIONS, EXISTING MECHANICAL HEATING AND COOLING SYSTEMS IS TO REMAIN TO THE EXTENT POSSIBLE, AND IS TO BE CLEANED AND FULLY SERVICED INCLUDING REPLACEMENT OF ALL FILTERS.
- D. ALL WORK SHALL BE COMPLETED IN COMPLIANCE WITH THE 2020 MECHANICAL CODE OF NEW YORK STATE (MCMNS) AND ANY OTHER APPLICABLE CODE AND/OR RECOMMENDATION. CONTRACTOR IS TO PROVIDE LINE DIAGRAM OF PROPOSED DUCTWORK LAYOUT PRIOR TO ORDERING ANY ITEMS FOR OWNER OR ARCHITECT APPROVAL. ALL DUCTWORK SHALL BE LOCATED WITHIN CONDITIONED SPACES AND ALLOW EASE OF ACCESS TO FACILITATE SERVICING, FILTER REPLACEMENT, DRAIN PAN CLEANING AND FUTURE SYSTEM UPGRADES.
- E. AS A DESIGN-BUILD PROJECT, THE MECHANICAL CONTRACTOR IS TO PROVIDE HIS OWN DRAWINGS FOR PERMIT REVIEW AND APPROVAL. THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO REVIEW OTHER TRADES DOCUMENTS TO DETERMINE MOUNTING HEIGHTS FOR MECHANICAL DEVICES OR EQUIPMENT AND FULL SCOPE OF WORK. CONTRACTOR PROVIDED DRAWINGS CAN BE DIAGRAMMATIC IN NATURE AND INDICATE THE SIZE AND GENERAL ARRANGEMENT OF PIPING, DUCTWORK, EQUIPMENT, ETC. EXACT LOCATIONS AND ROUTINGS SHALL BE DETERMINED IN THE FIELD BEFORE AND AS THE WORK PROGRESSES. CAREFULLY COORDINATE THE WORK OF THIS TRADE WITH ALL OTHER TRADES. CONTRACTOR IS TO PROVIDE LINE DIAGRAM OF ANY/ALL PROPOSED NEW DUCTWORK LAYOUT PRIOR TO ORDERING ANY ITEMS FOR OWNER OR ARCHITECT APPROVAL.
- F. DUCTWORK SHALL NOT BE LOCATED IN VENTED ATTICS, VENTED CRAWLSPACES OR GARAGES. DUCTWORK SHALL NOT BE LOCATED IN EXTERIOR WALLS OR IN CONCRETE FLOOR SLABS. DUCTWORK SHALL BE SEALED AGAINST AIR LEAKAGE. AIR SHALL ONLY BE ABLE TO EXIT THE HEATING/COOLING SYSTEM VIA THE SUPPLY REGISTERS. ENTIRE SUPPLY SYSTEM SHALL BE SEALED WITH MASTIC IN ORDER TO BE AIRTIGHT. ALL OPENINGS (EXCEPT SUPPLY REGISTERS), PENETRATIONS, HOLES AND CRACKS SHALL BE SEALED WITH MASTIC OR FIBERGLASS MESH AND MASTIC. RETURN SYSTEMS SHALL BE HARD DUCTED AND SEALED WITH MASTIC. BUILDING CAVITIES AND STUD BAYS SHALL NEVER BE USED AS RETURN DUCTS.
- G. UPON COMPLETION OF MECHANICAL SYSTEM INSTALLATION, SYSTEM IS TO BE BALANCED AND RUN TO DEMONSTRATE AT ALL HEATING AND VENTILATION SYSTEMS ARE FUNCTIONAL AS INTENDED.
- H. ALL EXHAUST VENTS FOR PRODUCT CONVEYING SYSTEMS SHALL BE LOCATED A MINIMUM OF 10' FROM OR 3' ABOVE ALL ROOF OR WALL OPENINGS PER 2020 MCMNS. TERMINATIONS OF ALL ENVIRONMENTAL AIR DUCTS SHALL BE A MINIMUM OF 3'-0" FROM ANY OPENING IN THE BUILDING. DIRECT DUCTED EXHAUST SHALL BE PROVIDED FROM THE TOILETS. EXHAUST DUCTWORK SHALL EXT DIRECTLY TO THE EXTERIOR. LOW SON FAN (LESS THAN 3 SONES) ARE RECOMMENDED IN TOILETS, INCLUDING THOSE WITH OPERABLE WINDOWS. EXTERIOR VENT COVERS TO BE MODEL SFZ BY SEIHO INTERNATIONAL INC. AND BE OF ALUMINUM OR ANODIZED FINISH OR AN APPROVED ALTERNATIVE.

Radiant Heating System Notes

- A. RADIANT HEATING SYSTEM TO BE PROVIDED VIA PLYWOOD PANELS MANUFACTURED TO ACCEPT POLYETHYLENE TUBING FOR A HYDRONIC HEATING SYSTEM. BASIS OF DESIGN FOR PLYWOOD PANELS TO BE **PRE-SCRIBED PLYWOOD PANELS BY HEATPLY INC.**
- B. RADIANT HEATING SYSTEM TO BE PROVIDED IN THE FOLLOWING ROOMS:
 - ENTRY 100
 - BEDROOM 102
 - CLOSET 103
 - BATHROOM 104

Plumbing Notes

- A. ALL PLUMBING WORK SHALL BE COMPLETED BY A LICENSED PLUMBER AND IN STRICT ACCORDANCE WITH NATIONAL AND LOCAL PLUMBING CODES.
- B. NO PLUMBING LINES SHALL BE INSTALLED IN EXTERIOR WALL CONSTRUCTION UNLESS SPECIFICALLY CALLED FOR. ALL HOT WATER LINES ARE TO BE INSULATED. PLUMBING PENETRATIONS THROUGH RIM JOIST SHALL BE SHEATHED WITH EXPANDABLE FOAM OR CAULK. VENT STACKS PENETRATING INTO THE ATTIC SHALL BE SEALED WITH FLEXIBLE SEALS TO HANDLE EXPANSION OF PIPES WITHIN REASONABLE EXPECTED TOLERANCES. PROVIDE PIPE SLEEVE AT ALL PIPE PENETRATIONS THROUGH FOUNDATIONS WALLS.
- C. ALL PLUMBING SUPPLY LINES SHALL BE RUN IN THE MOST ECONOMIC ROUTE TO ENSURE MINIMUM DISTANCE FROM WATER HEATER AND NO EXCESS USE OF PLUMBING MATERIALS. ALL SANITARY LINES MUST RUN IN THE MOST ECONOMIC AND SENSIBLE ROUTE TO MAIN HOME SANITARY LINE AND TIED INTO DISCHARGE TO SEPTIC TANK AND LEACHING FIELD.
- D. WASTE & DRAIN PIPES TO BE OF A MATERIAL AND SIZE PERMITTED BY CODE. PROVIDE 1/4" PER FOOT SLOPE FOR PROVIDE DRAINAGE. PROVIDE CLEANOUTS AS REQUIRED BY 2020 PLUMBING CODE OF NEW YORK STATE (PCNYS) IN LOCATIONS THAT ARE UNOBSTRUCTED AND ACCESSIBLE. VERIFY ALL WASTE LINES WITH ARCHITECT AND/OR OWNER PRIOR TO FRAMING. VENT PIPE TO BE 2" DIA. MIN. ABS-TYPE PIPE JOINED TOGETHER AT COMMON ROOF PENETRATIONS AS MANY AS POSSIBLE TO LIMIT NUMBER OF ROOF PENETRATIONS. EACH PLUMBING VENT SHALL EXTEND THROUGH ITS FLASHING AND SHALL TERMINATE VERTICALLY NO LESS THAN 6" ABOVE THE ROOF AND NO LESS THAN 1'-0" FROM ANY VERTICAL SURFACE PER PCNYS. PROVIDE NEOPRENE GASKETS AT ROOF PENETRATIONS AND LOCATE WHERE NOT VISIBLE FROM THE STREET WHENEVER POSSIBLE.
- E. LOW-FLOW FIXTURES (TOILETS & FAUCETS) SHALL BE INSTALLED TO MINIMIZE WATER CONSUMPTION. ALL FIXTURES SHALL BE APPROVED BY THE OWNER PRIOR TO ORDERING. REFER TO PLUMBING FIXTURE SCHEDULE.
- F. ALL SOIL PIPING SHALL BE PVC SCHEDULE 40 AND SLOPE AT 1/4" PER FOOT. ALL SOIL PIPING BELOW GRADE SHALL BE A MINIMUM OF 2" DIAMETER. IF REQUIRED PROVIDE BACKFLOW PREVENTER(S) ON MAIN SUPPLY LINE. DESIGN OF SEPTIC SYSTEM TO BE PROVIDED BY THE INSTALLER AND MEET THE REQUIREMENTS OF THE DESIGN AS PRESENTED.
- G. PROVIDE CLEAN OUTS ON SOIL PIPING AT ALL CHANGES OF DIRECTION SPACED AT 50' MAXIMUM. ALL VENT PIPING SHALL BE ABOVE FLOOD RIM LEVEL OF HIGHEST FIXTURE BEFORE CONNECTION TO COMMON VENTS
- H. CONTRACTOR TO COORDINATE WITH HOMEOWNER ALL TYPICAL BATHROOM ACCESSORIES INCLUDING TOILETPAPER HOLDER AND TOWEL BARS (HAND AND SHOWER) IN A STYLE AND FINISH APPROVED BY THE OWNER UNLESS OTHERWISE NOTIFIED.

PLUMBING FIXTURE BASIS OF DESIGN

- TOILET:
 MANUFACTURER: GERBER
 MODEL: AVALANCHE 2-PIECE ELONGATED - AV-21-818 - WHITE
 SEAT: WOOD
- LAVATORY FAUCET:
 MANUFACTURER: RESTORATION HARDWARE
 MODEL: DILLON LEVER-HANDLE 8" WIDESPREAD -
 FINISH: TBD
- SHOWERHEAD/VALVE TRIM/ADA HAND SHOWER:
 TO BE SELECTED BY OWNER THROUGH OWNER/CONTRACTOR AGREEMENT FOR INSTALLATION BY CONTRACTOR.