IHD DESIGN BUILD

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ISSUED FOR REVIEW (NOT FOR CONSTRUCTION)

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SECTION 1 - DIRECTIVES

1.1 RESPONSIBILITIES OF **IHD Design-Build** ARE FOR DRAWINGS ONLY. SITE SUPERVISION AND MUNICIPAL LIAISON ARE EXTRA TO CONTRACT.

1.2 THESE DRAWINGS ARE PROPERTY OF **IHD Design-Build**, AND MAY NOT BE USED, COPIED OR REPRODUCED WITHOUT CONSENT.

1.3 THESE DRAWINGS SHALL BE RETURNED UPON REQUEST.

1.4 THESE DRAWINGS MUST NOT BE USED IN ANY OTHER LOCATION WITHOUT THE WRITTEN APPROVAL OF THE DESIGNER.

1.5 THESE DRAWINGS SHALL BE USED IN CONTEXT WITH, AND AS A SUPPLEMENT TO DRAWINGS, AND OTHER INCLUDED STANDARD DETAIL PAGES. THESE SPECIFICATIONS AND DIMENSIONS SHALL APPLY UNLESS NOTED OTHERWISE. THE SCOPE AND INTENT OF THESE DRAWINGS ARE TO PROVIDE FOR THE COMPLETE BUILDING AND ASSOCIATED WORKS PER CONTRACT.

1.6 USE ONLY THE LATEST REVISED DRAWING, OR THOSE THAT ARE MARKED "FOR CONSTRUCTION"

1.7 DO NOT SCALE THE DRAWINGS.

1.8 THE CONSTRUCTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AT THE SITE, AND REPORT ALL DISCOVERIES OF ERRORS, OMISSIONS OR DISCREPANCIES TO THE DESIGNER BEFORE PROCEEDING WITH ANY CONSTRUCTION.

1.9 ANY CHANGES TO THE DRAWINGS AND RELATED SPECIFICATIONS, OR ANY PART THEREOF, ARE RESERVED FOR THE DESIGNER.

1.10 ALL CONSTRUCTION SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE (O.REG 322/12 VOLUMES 1&2) INCLUDING ALL LATEST AMENDMENTS & ALL OTHER APPLICABLE CODES & BYLAWS IN EFFECT AT THE PROJECT LOCATION.

1.11 ALL WORK SHALL BE COMPLETED IN A NEAT, SAFE AND PROFESSIONAL MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION STANDARDS & PRACTICES, AND MATERIAL, EQUIPMENT, MANUFACTURER'S, SUPPLIERS' SPECIFICATIONS, RECOMMENDATIONS, AND INSTRUCTIONS.

1.12 THE CONSTRUCTOR SHALL REPAIR, RESTORE AND MAKE GOOD ALL EXISTING ITEMS DISTURBED DURING CONSTRUCTION.

1.13 THE CONSTRUCTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOUR, ETC. NECESSARY TO COMPLETE THE PROJECT IN ALL RESPECTS (READY FOR OCCUPANCY) EVEN THOUGH THERE MAY BE OMISSIONS ON THESE DRAWINGS.

1.14 WHERE MATERIALS, EQUIPMENT, FINISHES, FIXTURES, ETC., ARE INDICATED WITHOUT SPECIFIC INFORMATION RELATING TO QUALITY , GRADE, COLOUR, TYPE, OR MANUFACTURER, THE CONSTRUCTOR SHALL OBTAIN THE BUILDING OWNER'S APPROVAL FOR THE PROPOSED MATERIAL, EQUIPMENT, FINISH, OR FIXTURE PRIOR TO THE INSTALLATION THEREOF.

1.15 UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO FRAMING.

1.16 IF A DESIGNER'S INSPECTION IS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, OUR OFFICE MUST BE CONTACTED A MINIMUM OF 2 DAYS IN ADVANCE.

SECTION 2 - SITE WORKS & EXCAVATION

2.1 SITEWORK AND EXCAVATION SHALL CONFORM TO O.B.C. SECTION 9.12.

2.2 THE CONSTRUCTOR SHALL LOCATE, IDENTIFY, MARK AND PROTECT ALL INGROUND & OVERHEAD SERVICES AND CONNECTIONS ON SITE OR WITHIN EASEMENTS, ROAD ALLOWANCES, ETC. PRIOR TO COMMENCING CONSTRUCTION.

2.3 ALL EXCAVATIONS & SITE WORKS SHALL BE COMPLETED IN A MANNER TO PREVENT DAMAGE TO ADJACENT PROPERTIES, EXISTING STRUCTURES, UTILITIES, ROADS, AND SIDEWALKS AT ALL STAGES OF CONSTRUCTION.

2.4 THE CONSTRUCTOR SHALL REPAIR ALL OF HIS OR HER DAMAGE TO EXISTING CONSTRUCTED OR LANDSCAPED ITEMS AT HIS OR HER EXPENSE. ALL BUILDING MATERIALS SHALL BE STORED IN A NEAT AND SAFE MANNER WHICH IS PROTECTED FROM WEATHER.

2.5 SOIL CONDITIONS UNDER FOOTINGS, SLABS ON GRADE, AND/OR PADS ARE CRUCIAL AND SHALL CONSIST OF A COMPACTED GRANULAR MATERIAL AS PER THE FOUNDATION SPECIFICATIONS WITHIN THIS PLAN, OR ON UNDISTURBED SOIL THAT ALLOWS WATER TO DRAIN TO A DEPTH BELOW THE EXPECTED FROST LINE AND HAS A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 75kPa.

2.6 ALL ORGANIC MATERIALS MUST BE REMOVED FROM THE FOUNDATION EXCAVATION TO CONSTRUCTION AND/OR FOUNDATION BACKFILLING.

2.7 THE EXCAVATION SHALL BE COMPLETELY VOID OF WATER BEFORE & DURING CONCRETE PLACEMENT. IF A DRY EXCAVATION CANNOT BE ACHIEVED, A PROFESSIONAL ENGINEER MUST BE CONTACTED.

2.8 THE CONSTRUCTOR SHALL VERIFY SOIL CONDITIONS AND REPORT TO THE DESIGNER PRIOR TO COMMENCING CONSTRUCTION.

2.9 WHEN BACKFILLING, SPECIAL CARE SHALL BE TAKEN NOT TO DAMAGE FOUNDATION WALLS, EXTERNAL INSULATION AND DAMPROOFING/ WATERPROOFING MEMBRANES.

2.10 BACKFILLING SHALL NOT COMMENCE UNTIL ALL REQUIRED LATERAL SUPPORT IS PROVIDED.

2.11 BACKFILL SHALL BE GRADED TO PREVENT DRAINAGE TOWARDS THE FOUNDATION AFTER SETTLING.

2.12 "UNDERSIDE OF FOOTINGS" AS NOTED ON SITE PLANS IS DERIVED FROM ARCHITECTURAL DRAWINGS, AND DOES NOT REFLECT SOFT GROUND, TRENCHED FOOTINGS, GARAGE OR DECK/PORCH FOUNDATIONS, OR BASES AT WALKOUT CONDITIONS.

2.13 BACKFILLING OF FOUNDATION WALLS (OTHER THAN THOSE ENCLOSING A BASEMENT) SHALL BE CARRIED OUT (INCLUDING COMPACTION) IN 24" MAXIMUM LIFTS ALTERNATING FROM INTERIOR TO EXTERIOR UNTIL REACHING FINAL GRADE.

2.14 BACKFILL MATERIAL SHALL BE CLEAN SAND OR GRANULAR MATERIAL FREE OF FROST AND ORGANIC MATTER (WOOD, ETC.).

2.15 ALL EXTERIOR FOUNDATION WALLS A SHALL BE DRAINED BY MIN. 4" WEEPING TILES LAID AROUND THE EXTERIOR OF ANY FOUNDATION WALL RETAINING AN UNEXCAVATED AREA. THE OBVERT OF ALL WEEPING TILES SHALL BE COVERED WITH 12" CRUSHED STONE.

2.16 BUILDINGS SHALL BE LOCATED AND THE SITE GRADED SO THAT WATER SHALL NOT ACCUMULATE AT OR NEAR BUILDINGS, AND WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES.

SECTION 3 - CONCRETE

3.1 ALL CONCRETE WORK SHALL COMPLY WITH CSA-A23.1-14 / CSA-A23.2-14 / CSA-A23.3-14 / CSA-A23.4-14. O.B.C. 9.3.1

3.2 PROTECT ALL CONCRETE FROM RAIN AND FREEZING DURING THE CURING PROCESS.

3.3 THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AFTER 28 DAYS AGE SHALL NOT BE LESS THAN:

FOOTINGS
20MPa (2,900 PSI) WITH 3" SLUMP +/- 1

FOUNDATION WALLS
20MPa (2,900 PSI) WITH 3" SLUMP +/- 1

GARAGE & CARPORT FLOORS, ALL EXTERIOR FLATWORK, AND STEPS
32 MPa (4,650 PSI) WITH 3" SLUMP +/- 1
PROVIDE 5-8% AIR-ENTRAINMENT +/-1

BASEMENT FLOORS
25 MPa (3,625 PSI) WITH 3" SLUMP +/-1

3.4 REINFORCEMENT BARS TO BE HI-BOND AND HAVE A MINIMUM YIELD STRENGTH OF 400MPa. BARS MUST BE HELD SECURELY FOR THE PLACEMENT OF CONCRETE, AND ADDITIONAL SUPPORT BARS OR STIRRUPS ARE TO BE USED AS REQUIRED.

3.5 CONTINUOUS REINFORCING BARS SHALL BE LAPPED / SPLICED AT CORNERS IN CONFORMANCE WITH THE REQUIREMENTS OF THE RELEVANT CSA STANDRADS AND THE TYPICAL DETAILS OF THIS DESIGN UNLESS OTHERWISE NOTED (MINIMUM 40X BAR DIAMETER).

3.6 MINIMUM COVER FOR REINFORCING BARS SHALL BE 25 BAR DIAMETERS IN SLABS, 40 IN BEAMS, 25 IN WALLS, AND 50 IN COLUMNS, UNLESS OTHERWISE NOTED.

3.7 ALL DOWELS EXCEPT COLUMN DOWELS SHALL HAVE A MINIMUM EMBEDMENT OF 24 BAR DIAMETERS OR 12" -WHICHEVER IS GREATER, EXCEPT THAT DOWELS FROM WALLS TO SLABS SHALL HAVE A MINIMUM EMBEDMENT AS NOTED IN THE SPLICE NOTES.

3.8 PROVIDE DOWELS TO WALLS, COLUMNS AND PIERS SIMILAR IN SIZE AND SPACING TO THE VERTICAL STEEL IN THE WALLS OR COLUMNS UNLESS OTHERWISE NOTED.

3.9 FOR CONCRETE EXPOSED TO WEATHER OR EARTH FILL, MINIMUM COVER SHALL BE 50 BAR DIAMETERS (40 FOR STIRRUPS) WHERE FORMS ARE USED. MINIMUM COVER SHALL BE 75 BAR DIAMETERS FOR CONCRETE CAST AGAINST EARTH, UNLESS OTHERWISE NOTED.

3.10 PROVIDE SLEEVES FOR ALL PIPES PENETRATING SLABS, BEAMS, FOOTINGS, WALLS ETC. ALL SLEEVES LARGER THAN 6" REQUIRE THE APPROVAL OF THE STRUCTURAL ENGINEER.

SECTION 4 - FOOTINGS

4.1 FOOTINGS SHALL CONFORM TO O.B.C. SECTION 9.12.

4.2 CONCRETE USED IN FOOTINGS SHALL CONFORM TO O.B.C. 9.3.1

4.3 ALL FOOTINGS SHALL REST ON UNDISTURBED SOIL, BEDROCK, OR APPROVED COMPACTED ENGINEERED FILL WITH A MINNIMUM SOIL BEARING CAPACITY OF 75kPa.

4.4 BOTTOM OF ALL FOOTINGS SHALL BE A MINIMUM OF 4'-0" BELOW FINISHED GRADE, OR BELOW THE LEVEL OF FROST PENETRATION. IF THIS IS NOT ACHIEVABLE, A SHALLOW FOOTING DETAIL IS REQUIRED BEARING A PROFESSIONAL ENGINEER'S SEAL.

4.5 ALL FOOTINGS SHALL BE MINIMUM 6" THICK AND HAVE A MINIMUM PROJECTION OF 4" FROM FOUNDATION WALLS.

4.6 MINIMUM STRIP FOOTING WIDTHS FOR INTERIOR LOADBEARING MASONRY WALLS SHALL BE INCREASED BY 4" FOR EACH STOREY OF MASONRY CONSTRUCTION THE FOOTING SUPPORTS.

4.7 THE PROJECTION OF UNREINFORCED FOOTINGS BEYONND THE SUPPORTED WALL SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.

4.8 STEPPED FOOTINGS SHALL HAVE 2-0" MINIMUM. RUN & MAXIMUM 2-0" RISE FOR FIRM SOIL (15" MINIMUM RUN & MAXIMUM 15" RISE FOR SAND OR GRAVEL). A MAXIMUM UNDERSLOPE OF 2 VERTICAL TO 3 HORIZONTAL.

4.9 NO FOOTING SHALL BE PLACED UNTIL THE SUPPORTING SOILS HAVE BEEN INSPECTED AND DEEMED ACCEPTABLE BY THE APPLICABLE MUNICIPAL BUILDING DEPARTMENT.

SECTION 5 - CONCRETE FLOOR SLABS

5.1 CONCRETE FLOOR SLABS TO CONFORM TO O.B.C. 9.16.

5.2 REINFORCED FLOOR SLABS AND SUSPENDED SLABS OVER COLD ROOMS SHALL CONFORM TO O.B.C. 9.39.

5.3 ALL CONCRETE SLABS SHALL HAVE POSITIVE SLOPE TO FLOOR DRAINS. GARAGE SLABS SHALL HAVE 2% SLOPE TO OVERHEAD DOORS.

5.4 NON STRUCTURAL CONCRETE SLABS SHALL NOT BE LESS THAN 4" THICK FOR BOTH INTERIOR AND EXTERIOR.

5.5 EXCEPT AS SHOWN ELSEWHERE, ALL STRUCTURAL CONCRETE SLABS ON GRADE SHALL BE MINIMUM 5" THICK.

5.6 DRY CEMENT SHALL NOT BE ADDED TO THE FLOOR SURFACES TO ABSORB EXCESS WATER.

5.7 CONCRETE SLABS ON GRADE SHALL BE REINFORCED USING 6x6 W2.0xW2.0 WWR EMBEDDED INTO SLAB

5.8 BOND BREAKING MATERIAL SHALL BE PLACED BETWEEN ANY SLAB AND FOOTINGS OR ROCKS.

5.9 SLABS UNDER FINNISHED AREAS SHALL BE DAMP PROOFED.

5.10 ALL JOINTS BETWEEN SLABS ON GRADE AND FOUNDATION WALLS SHALL BE PROVIDED WITH A PREMOULDED EXPANSION JOINT. SAW CUT CONTROL JOINTS SHALL BE PROVIDED AS SHOWN ON PLANS.

5.11 ALL INTERIOR SLABS SHALL BE SMOOTH TROWELLED TO A SMOOTH FINISH SUITABLE FOR THE APPLICATION OF V.C.T ETC.

SECTION 6 - SOIL GAS CONTROL (RADON)

6.1 SOIL GAS CONTROL TO CONFORM TO O.B.C. 9.13.4 & SB-9

6.2 CONSTRUCTOR TO SELECT THE MOST APROPRIATE SOIL GAS CONTROL SYSTEM INCLUDING:

SOIL GAS PIPE SYSTEM & MANDATORY RADON TESTING
SOIL GAS BARRIER SYSTEM & VOLUNTARY RADON TESTING
SUBFLOOR DEPRESSURIZATION SYSTEM & MAKEUP AIR SYSTEM CONFORMING TO O.B.C. 9.32.3.8.

SECTION 7 - FOUNDATION WALLS

7.1 ALL FOUNDATION WALLS TO CONFROM TO O.B.C. 9.15.

7.2 CONCRETE USED IN FOUNDATION WALLS TO CONFORM TO THE APPROPRIATE REQUIREMENTS IN O.B.C. 9.3.1.

7.3 FOUNDATION WALLS SHALL EXTEND MINIMUM 6" ABOVE FINISHED GRADE FOR MASONRY FINISH ABOVE, 8" FOR WOOD SIDING OR EIFS FINISH.

7.4 THE THICKNESS OF CONCRETE IN FLAT INSULATING CONCRERTE FORM FOUNDATION WALLS SHALL BE NOT LESS THAN THE GREATER OF 5 1/2", OR THE THICKNESS OF THE CONCRETE FORM UNITS SHALL BE LATERALLY SUPPORTED AT THE TOP AND THE BOTTOM.

7.5 APPLICATION OF FOUNDATION DAMPPROOFING OR WATERPROOFING SHALL CONFORM TO O.B.C. 9.13.

7.6 FOUNDATION WALLS SHALL BE CONSIDERED LATERALLY SUPPORTED AT THE TOP IF THE FLOOR JOISTS ARE EMBEDDED IN THE TOP OF THE FOUNNDATION WALLS OR THE FLOOR SYSTEM IS ANCHORERD TO THE TOP OF THE FOUNDATION WALLS WITH ANCHOR BOLTS, IN WHICH CASE THE JOISTS MAY RUN EITHER PARALLEL OR PERPENDICULAR TO THE FOUNDATION WALLS.

SECTION 8 - MASONRY

8.1 MASONRY CONSTRUCTION SHALL CONFORM TO CAN/CSA - LATEST EDITION

8.2 UNIT MASONRY FOUNDATION WALLS SHALL CONFORM TO O.B.C. 9.15.4.

8.3 HOLLOW MASONRY UNITS SHALL HAVE min. 1100 p.s.i BEARING CAPACITY. SOLID MASONRY UNITS SHALL HAVE min. 1800 p.s.i. BEARING CAPACITY. ALL MASONRY SHALL BE SUPPORTED ON CONCRETE FOUNDATION WALLS OR STEEL.

8.4 THE CONSTRUCTOR SHALL TAKE SPECIAL CARE TO ENSURE THAT SPECIFIED CAVITIES AND AIR SPACES IN WALL ARE KEPT FREE OF MORTAR DROPPINGS. EXPOSED MASONRY SHALL HAVE TOOLED JOINTS UNLESS NOTED.

8.5 PROVIDE WALL TIES AT 16" HORIZONTALLY AND 32"" VERTICALLY UNLESS NOTED OTHERWISE.

8.6 WALL TIES SHALL BE HEAVY DUTY GALVANIZED STEEL. REFER TO DRAWINGS FOR BONDING AND TYING OF MASONRY VENEERS & FACINGS.

8.7 VINYL BRICK VENTS SHALL OR 3/8" WEEP HOLES SHALL BE PROVIDED AT EVERY THIRD BRICK JOINT OR 24" O.C. AT THE BASE COURSE OF ALL WALL CAVITIES, AND OVER ALL DOORS, WINDOWS AND OTHER WALL OPENINGS.

8.8 A MINIMUM 1" AIRSPACE IS REQUIRED BETWEEN MASONRY VENEER AND WALL SHEATHING.

8.9 MAXIMUM HEIGHT OF MASONRY VENEER NOT TO EXCEED 36'-1".

8.10 MASONRY VENEER OVER ALL OPENINGS SHALL BE SUPPORTED BY A STEEL ANGLE LINTEL WITH THE LONG LEG VERTICAL (LLV) AS FOLLOWS PER O.B.C. 9.20.5.2:

ANGLE SIZE	SIZE
3 1/2"x 3 1/2" x 1/4"	7'-7" AND UNDER
4" x 3 1/2" x 1/4" (LLV)	8'-2"
5" x 3 1/2" x 5/16" (LLV)	10'-1"
5" x 3 1/2" x 3/8" (LLV)	10'-8"

PROVIDE 6" OF BEARING LENGTH AT EACH END SUPPORT

8.11 ALL MORTAR SHALL BE TYPE "S". ALL MASONRY SHALL BE LAID IN A FULL BED OF MORTAR FREE OF ANY FOREIGN OBJECTS.

SECTION 9 - STEEL

9.1 ALL STEEL SHALL CONFORM TO C.S.A. SPEC. CAN3-S16.1-M89. AND CAN/CSA G40.21-M81 (LATEST EDITION) GRADE 300W EXCEPT FOR H.S.S. SECTIONS SHALL BE GRADE 350W CLASS H UNLESS OTHERWISE NOTED.

9.2 ALL FRAMING CONNECTIONS SHALL BE DESIGNED FOR LOADS. SHEARS, AND MOMENTS NOTED ON FRAMING PLANS. WHERE NO LOADS ARE PROVIDED THE CONNECTION SHALL BE DESIGNED BY THE PROFESSIONAL ENGINEER FOR FULL SHEAR CAPACITY OF THE MEMBER.

9.3 NO FABRICATION SHALL COMMENCE WITHOUT SHOP DRAWINGS WHICH HAVE BEEN APPROVED BY ALL AFFECTED TRADES AND DESIGN CONSULTANTS. REQUIRED COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED BY CONSTRUCTOR TO AUTHORITIES HAVING JURISDICTION -TO BE INCLUDED AS, AND USED AS PART OF THESE DRAWINGS AND SPECIFICATIONS. THE STEEL FABRICATION SHALL SUPPLY SHOP DRAWINGS SHOWING LOCATION OF ALL ANCHOR BOLTS, WALL PLATES, BEAMS, STEEL ANCHORS ETC.

9.4 NO SPLICING OF ANY MEMBER SHALL BE PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

9.5 THE CONSTRUCTOR SHALL PROVIDE ALL REQUIRED BRIDGING, ANCHORS, BRACING, CONNECTIONS, AND BEARING PLATES, FOR THE ERECTION OF ALL STEEL WHICH MAY NOT BE PROVIDED BY FABRICATOR.

9.6 ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED WITH ANTI-CORROSIVE PAINT, WITH THE EXCEPTION OF UNDER CONTACT AREAS FOR CONNECTIONS. TOUCH UPS IN THE FIELD MAY BE REQUIRED.

9.7 ALL WELDS (SHOP, ON IN SITU) SHALL CONFORM TO CSA W59, AND BE PERFORMED BY A WELDING COMPANY OR WELDER APPROVED BY THE CWB TO THE STANDARDS OF CSA W47.1.

9.8 ALL STRUCTURAL STEEL SHALL BEAR ON SOLID MASONRY, CONCRETE, OR STEEL UNLESS NOTED.

9.9 LOOSE STEEL LINTELS OVER 6'-0" IN LENGTH SHALL BE BOLTED TOGETHER.

9.10 STEEL LINTELS BEARING ON MASONRY OR CONCRETE SHALL HAVE MINIMUM 4" BEARING EACH END (EXCEPT AS SHOWN ON DRAWINGS). ONE END SHALL BE WRAPPED IN CONSTRUCTION PAPER FOR EXPANSION.

9.11 ALL BOLTS SHALL BE ASTM A325 HIGH STRENTH UNLESS OTHERWISE NOTED.

SECTION 10 - WOOD

10.1 ALL LUMBER USED SHALL CONFORM TO THE REQUIREMENTS OF O.B.C. 9.3.2.

10.2 ALL MEMBERS SHALL BE SIZED, FRAMED, BRACED, BLOCKED, TIED AND ANCHORED TO PROVIDE NECESSARY STRENGTH AND RIGIDITY ACCORDING TO THE ONTARIO BUILDING CODE (LATEST EDITION)..

10.3 ALL FRAMING LUMBER TO BE NO. 1 AND NO. 2 SPF UNLESS OTHERWISE NOTED.

10.4 ALL WOOD LINTELS TO BE MIN. 2- 2X10 SPF UNLESS OTHERWISE NOTED.

10.5 ALL EXTERIOR EXPOSED STRUCTURAL WOOD AND DECK PLANKING SHALL BE No2 PRESSURE TREATED (WOLMANIZED OR EQUIV.) UNLESS OTHERWISE NOTED.

10.6 ALL WOOD SHALL BE ISOLATED FROM POURED CONCRETE OR UNIT MASONRY WITH SILL GASKET, (6)mil POLY, TREATED TO PREVENT DECAY, OR WHERE APPROPRIATE A 1/2" AIR SPACE AT THE ENDS AND SIDES.

10.7 SILL PLATES FOR BEARING PARTITIONS IN BASEMENT AREAS SHALL BEAR ON ONE (1) COURSE OF CONCRETE ASHLAR BLOCK.

10.8 ALL SILLS LOCATED LOWER THAN 6" ABOVE FINISHED GRADE SHALL BE PRESSURE TREATED, AND PROTECTED WITH 6mil POLY.

10.9 HOLES DRILLED IN ROOF, FLOOR OR CEILING FRAMING MEMBERS SHALL NOT BE GREATER THAN 1/4 THE DEPTH OF THE MEMBER AND SHALL BE LOCATED NOT LESS THAN 2" FROM THE EDGES, UNLESS THE DEPTH OF THE MEMBER IS INCREASED BY THE SIZE OF THE HOLE.

10.10 NON ENGINEERED FLOOR, ROOF, AND CEILING FRAMING ARE PERMITTED TO BE NOTCHED PROVIDED THE NOTCH IS LOCATED ON THE TOP OF THE MEMBER WITHIN HALF THE JOIST DEPTH FROM THE EDGE OF BEARING AND IS NOT DEEPER THEN 1/3 THE JOIST DEPTH, UNLESS THE DEPTH OF THE MEMBER IS INCREASED BY THE SIZE OF THE NOTCH.

10.11 ROOF TRUSS MEMBERS, AND OTHER ENGINEERED FRAMING PRODUCTS, SHALL NOT BE NOTCHED, DRILLED, OR OTHERWISE WEAKENED UNLESS SUCH NOTCHING OR DRILLING IS ALLOWED FOR IN THE DESIGN OF THE MEMBER.

10.12 WHERE PRE-ENGINEERED ROOF TRUSSES, FLOOR TRUSSES, WOOD "I" JOISTS, LAMINATED COLUMNS, PSL & LVL BEAMS, SIMILAR ENGINEERED WOOD PRODUCTS ARE SPECIFIED ON DRAWINGS, THE MANUFACTURER SHALL SUPPLY CALCULATIONS AND SHOP DRAWINGS STAMPED AND APPROVED BY A OUR OFFICE (WHICH SHALL INCLUDE ALL LOADS AND REACTIONS) PRIOR TO CONSTRUCTION.

10.13 TOP PLATES IN WALLS SHALL NOT BE NOTCHED, DRILLED, OR OTHERWISE WEAKENED TO REDUCE THE UNDAMAGED WIDTH TO LESS THAN 2" UNLESS THE WEAKENED PLATES ARE SUITABLY REINFORCED.

10.14 WHERE AS SILL PLATE PROVIDES END BEARING FOR THE FLOOR SYSTEM, THEY SHALL NOT BE LESS THAN 2x4.

10.15 SILL PLATES SHALL BE LEVELLED BY SETTING THEM ON A FULL BED OF MORTAT, OR LAID DIRECTLY ON THE FOUNDATION (PROTECTED BY A GASKET) WHERE THE TOP OF THE FOUNDATION IS LEVEL.

10.16 ANCHORAGE OF BUILDING FRAMES TO THE FOUNDATION SHALL CONSIST OF ANCHOR BOLTS THAT ARE A MINIMUM DIAMETER OF 1/2", SPACED NOT GREATER THAN 7'-10", IN ACCORDANCE WITH O.B.C. 9.23.6.

10.17 UNLESS OTHERWISE NOTED, ALL BEAMS SHALL HAVE MIN. 3" END BEARING. FLOOR, CEILING, AND ROOF JOISTS TO HAVE MIN. 1-1/2" END BEARING.

10.18 WHERE A BEAM IS MADE UP OF INDIVIDUAL PIECES OF LUMBER THAT ARE NAILED TOGETHER, THE INDIVIDUAL MEMBERS SHALL BE 1-1/2" OR GREATER IN THICKNESS AND INSTALLED ON EDGE.

10.19 FLOOR JOISTS MAY BE TOP MOUNTED OR FLUSH MOUNTED TO BEAMS.

10.20 ALL EXTERIOR WOOD COLUMNS SHALL BE 6x6" UNLESS NOTED.

10.21 ALL STUDS IN LOAD BEARING PARTITIONS SHALL BE CONTINUOUS, ONE PIECE, FROM PLATE TO PLATE, AND RESTRAINED AT MID HEIGHT WITH SOLID BLOCKING (GIRTS).

10.22 ALL EXTERIOR LOAD BEARING STUDS NOT RECEIVING 1/2" SHEATHING SHALL HAVE DIAGONAL BRACING AT CORNERS.

10.23 PROVIDE DOUBLE STUDS AT OPENINGS, TRIPLE STUDS AT CORNERS, AND DOUBLE PLATES AT ON TOP OF ALL LOAD BEARING WALLS AND PARTITIONS. PROVIDE DOUBLE JACK STUDS FOR LINTELS w/ SPANS GREATER THAN 10'-0".

10.24 BLOCKING FOR THE SUPPORT OF NON LOADBEARING WALLS SHALL BE PROVIDED.

10.25 JOISTS UNDER ALL PARTITIONS SHOULD BE BLOCKED OR BRIDGED.

10.26 HEADER AND TRIMMER JOISTS SHALL BE DOUBLED.

10.27 NON LOADBEARING WALLS PARALLEL TO THE FLOOR JOIST SHALL BE SUPPORTED BY A JOIST OR SOLID BLOCKING BETWEEN JOISTS.

10.28 NON LOADBEARING INTERIOR WALLS PERPENDICULAR TO THE FLOOR JOIST HAVE NO LOCATION RESTRICTIONS.

10.29 LOAD BEARING INTERIOR WALLS PARALLEL TO FLOOR JOIST SHALL BE SUPPORTED BY BEAMS OR WALLS OF SUFFICIENT STRENGTH TO TRANSFER SAFELY THE DESIGN LOADS TO VERTICAL SUPPORTS.

10.30 LOADBEARING INTERIOR WALLS PERPENDICULAR TO FLOOR JOIST SHALL BE LOCATED NOT MORE THAN 2'-11" FROM THE JOIST SUPPORTWHEN THE WALL DOES NOT SUPPORT A FLOOR AND NOT MORE THAN 2'-0" FROM THE JOIST SUPPORT WHEN THE WALL SUPPORTS ONE OR MORE FLOORS, UNLESS THE JOISTS SIZE IS DESIGNED TO SUPPORT SUCH LOADS.

10.31 A BOTTOM WALL PLATE SHALL BE PROVIDED IN ALL CASES. THE BOTTOM PLATE IN EXTERIOR WALLS SHALL NOT PROJECT MORE THAN 1/3 OF THE PLATE'S WIDTH OVER THE SUPPORT.

10.32 ALL PARTITION WALLS SHALL BE MINIMUM 2x4 STUDS FRAMED AT 16" CENTERS, UNLESS OTHERWISE NOTED.

10.33 ALL BEARING WALLS SHALL BE MINIMUM 2x6 STUDS FRAMED AT 16" CENTERS, UNLESS OTHERWISE NOTED.

10.34 SUBFLOORING SHALL BE 5/8" T&G SPRUCE PLYWOOD GLUED TO SUPPORTING JOISTS. WALL AND ROOF SHEATHING SHALL BE 1/2" SPRUCE PLYWOOD, EDGE NAILED. INSTALL ALL PLYWOOD WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE SUPPORTS, STAGGER ALL JOINTS.

10.35 FLOOR JOISTS PARALLEL TO FOUNDATION WALLS SHALL RECEIVE SAME FLOOR JOISTS OR SOLID PANEL BLOCKING @ 2'-0" OC.

10.36 ALL JOISTS SHALL BE BRIDGED WITH 1-1/2"X1-1/2" CROSS BRIDGING OR 1-1/2" THICK SOLID BLOCKING AT 6'-11" MAX. STRAPPING SHALL BE 1x3 SPACED AT 6'-11" WHERE REQUIRED BY CODE.

10.37 MAINTAIN 2" CLEARANCE BETWEEN WOOD AND CHIMNEYS. MAINTAIN 18" CLEARANCE BETWEEN WOOD AND ANY EXPOSED FLUE SMOKE PIPE OR VENT.

10.38 ALL MILLWORK SHALL BE "MADE TO FIT" WITHIN PRESCRIBED AREAS. SUPPLIER SHALL FIELD MEASURE BEFORE COMMENCING FABRICATION.

10.39 ALL FINISHES SPECIFIED TO BE "UNFINISHED BY MANUFACTURER" SHALL BE FINISHED BY PAINTERS.

SECTION 11 - ROOF

11.1 ROOF RAFTERS, ROOF JOISTS, AND CEILING JOISTS SHALL BE CONTINUOUS MEMBERS, OR SHALL BE SPLICED OVER VERTICAL SUPPORTS THAT EXTEND TO SUITABLE BEARING.

11.2 ROOF AND CEILING MEMBERS SHALL BE DOUBLED ON EITHER SIDE OF OPENINGS GREATER THAN 2 RAFTER OR JOIST SPACES WIDE.

11.3 RAFTERS SHALL BE PLACED DIRECTLY OPPOSITE EACH OTHER AND TIED TOGETHER AT THE PEAK, OR MAY BE OFFSET BY THEIR OWN THICKNESS IF NAILED TO A RDGE BOARD NO LESS THAN 3/4" THICK.

11.4 RAFTERS SHALL BE SHAPED AT SUPPORTS TO PROVIDE EVEN BEARING SURFACES AND SUPPORTED DIRECTLY ABOVE THE EXTERIOR WALLS.

11.5 ALL HIP AND VALLEY RAFTERS AND ROOF RIDGE BOARDS SHALL BE 2" DEEPER THAN SPECIFIED RAFTERS, AND NO LESS THAN 1-1/2" ACTUAL THICKNESS.

11.6 ALL RAFTERS SHALL HAVE A MIN 2x4" CONTINUOUS END RESTRAINT (PLATE TO PLATE TIES) OR BE TIED TO CEILING JOISTS.

11.7 WHERE REQUIRED BY O.B.C. 9.19.2. PROVIDE A COMPLIANT ATTICH HATCH WITH A MINIMUM OF R-20 INSULATED DOOR WITH WEATHER STRIPPING.

11.8 DESIGN WOOD TRUSSES AND ENGINEERED FLOOR SYSTEMS, RELATED CONNECTION HARDWARE, AND BRACING FOR A COMPLETE INSTALLATION, SUBMIT P.ENG SEALED SHOP DRAWINGS FOR ALL TRUSSES, RELATED BEAMS, LINTELS AND JOISTS.

11.9 EAVE PROTECTION TO EXTEND A MINIMUM OF 1'-0" BEYOND INNER WALL, PER O.B.C. 9.19.

11.10 ROOF VENTING TO COMPLY WITH O.B.C. 9.19.1. FOR ROOFS LESS THAN 1:6, PROVIDE 1 FT^2 VENTILATION FOR EVERY 150 FT^2 OF ROOF SPACE. FOR ROOFS ABOVE 1:6, PROVIDE 1 FT2 OF VENTILATION FOR EVERY 300 FT2 OF ROOF SPACE. TOTAL VENTILATION TO BE DIVIDED 50% AT SOFFIT AND 50% AT REIDGE.

11.11 FASTENERS FOR ROOFING TO BE CORROSION RESISTANT.

11.12 ROOFING NAILS MUST PENETRATE THROUGH ROOFING SHEATHING.

11.13 ASPHALT SHINGLES TO BE FASTENED WITH A MINIMUM OF 4 NAILS.

11.14 PRE-FINISHED STEEL ROOFING SHALL BE INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTIONS BY QUALIFIED INSTALLERS.

11.15 ROOFING ON ALL SLOPED ROOFS SHALL EXTEND 1" PAST ROOF EDGE TO FORM A DRIP CLEAR OF WALLS, FASCIA BOARDS ETC.

11.16 APPROPRIATE LOW SLOPE ROOFING SHALL BE USED FOR SLOPED ROOFS LOWER THAN 4 IN 12.

11.17 ROOF TRUSS MEMBERS, AND OTHER ENGINEERED FRAMING PRODUCTS, SHALL NOT BE NOTCHED, DRILLED, OR OTHERWISE WEAKENED UNLESS SUCH NOTCHING OR DRILLING IS ALLOWED FOR IN THE DESIGN OF THE MEMBER.

11.18 ALL CONVENTIONAL FRAMING TO CONFORM WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE.

11.19 CHIMNEYS AND FLUES TO BE BUILT A MINIMUM OF 2'-0" ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF SURFACE WITHIN A HORIZONTAL DISTANCE OF 10'-0" FROM THE CHIMNEY.

11.20 CHIMNEYS AND FLUES TO BE BUILT A MINIMUM OF 3'-0" ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF.

11.21 ALL ROOFING MATERIAL TO CONFORM WITH O.B.C. 9.26.

SECTION 12 - THERMAL & MOISTURE PROTECTION

12.1 ENERGY EFFICIENCY COMPLIANCE SHALL CONFORM TO TEH LATEST VERSION OF O.B.C. VOLUME 2, SUPPLEMENTARY STANDARD SB-12.

12.2 INSULATION SHALL BE SIZED ACORDING TO THE O.B.C. SB-12 PRESCRIPTIVE COMPLIANCE PACKAGE SELECTED.

12.3 WHERE A BUILDING COMPONENT OR ASSEMBLY WILL BE SUBJECTEDD TO AN INTENDED TEMPERATURE DIFFERENTIAL, THE COMPONENT OR ASSEMBLY SHALL INCLUDE MATERIALS TO RESIST HEAT TRANSFER OR MEANS TO DISSIPATE TRANSFERRED HEAT.

12.4 INSULATION SHALL BE PROTECTED WITH GYPSUM WALL BOARD OR AN EQUIVALENT INTERIOR VINISH, WITH THE EXCEPTION OF AND UNFINISHED BASEMENT, UNLESS OTHERWISE NOTED.

12.5 AN AIR BARRIER SYSTEM SHALL BE INSTALLED TO PROVIDE PRINCIPAL RESISTANCE TO AIR LEAKAGE.

12.6 THE AIR BARRIER SYSTEM SHALL BE CONTINUOUS ACROSS CONSTRUCTION, CONTROL AND EXPANSION JOINTS, AS WELL AS ACROSS JUNCTIONSBETWEEN DIFFERENT BUILDING ASSEMBLIES AND AROUND ALL PENETRATIONS THROUGH THE BUILDING ASSEMBLY.

12.7 A VAPOUR BARRIER SHALL BE INSTALLED TO PROVIDE THE PRINCIPAL RESISTANCE TO WATER VAPOUR DIFFUSION. THE 6 MIL. VAPOUR BARRIER SHALL BE APPLIED, LAPPED AND SEALED ON THE WARM SIDE OF ALL ASSEMBLIES.

12.8 THE VAPOUR BARRIER SHALL BE CONTINUOUS AND ALL JOINTS ARE TO BE OVERLAPPED BY A MINIMUM OF 4", AND SEALED WITH AN ACOUSTICAL SEALANT.

12.9 THE VAPOUR BARRIER SHALL BE PROPERLY SEALED AT ALL ELECTRICAL BOXES, ELECTRICAL WIRING, PLUMBING INSTALLATIONS, VENT DUCTS, AND WALL INTERSECTIONS.

12.10 CARPENTERS OR FRAMERS SHALL SUPPLY AND INSTALL VAPOR BARRIER AT THE INTERSECTION OF INTERIOR PARTITIONS AND EXTERIOR WALLS, CEILING STRUCTURE AND FLOOR STRUCTURE.

12.11 ALL FLASHINGS SHALL BE ADEQUATE TO PREVENT LEAKAGE UNDER ALL CONDITIONS.

12.12 SHOWER AND BATHTUB SURROUNDS SHALL BE LINED WITH A WATERPROOF SHEATHING SUCH AS WATERPROOF GYPSUM WALL BOARD, CEMENT BOARD, OR OTHER PREMIUM WALL BOARD MATERIAL.

12.13 2" RIGID INSULATION AND A VAPOUR BARRIER SHALL BE INSTALLED UNDER SLABS ON GROUND IN HABITABLE SPACES.

12.14 PROVIDE A PREMANUFACTURED STORM COLLAR, CAULKED TO ALL PLUMBING VENTS AND THE ROOF.

12.15 ALL FOUNDATION WALLS ENCLOSING EXCAVATED BASEMENT OR CRAWL SPACES AREAS SHALL RECEIVE AN APPROVED DAMPPROOFING, OR WATERPROOFING, FROM TOP OF FOOTING TO FINISHED GRADE, WHERE EITHER CONDITION IS REQUIRED.

12.16 ALL BELOW GRADE EXTERIOR SURFACE OF FOUNDATION WALLS SHALL HAVE A DRAINAGE LAYER, FROM TOP OF FOOTING TO FINISHED GRADE.

12.17 ALL EXPOSED FLASHINGS SHALL BE PRE-FINISHED METAL. ALL FLASHINGS USED AS DRIPS SHALL HAVE 1" DRIPS. ALL VALLEYS SHALL BE METAL FLASHED WITH PRE-FINISHED FLASHINGS (COLOUR SHALL MATCH SHINGLES) AND HAVE CONTIGUOUS ROOFING TRIMMED TO FORM A TAPER WHICH WILL VOID ITSELF OF ANY DEBRIS OR DETAILS.

12.18 ALL SKYLIGHTS SHALL BE MOUNTED ON CURBS AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND DETAILS.

SECTION 13 - VENTILATION

13.1 EVERY DWELLING SHALL BE PROVIDED BY A MECHANICAL VENTILATION SYSTEM HAVING THE CAPACITY TO EXHAUST INSIDE AIRE OR TO INTRODUCE OUTSIDE AIR AT THE RATE OF MINIMUM 0.3 AIR EXCHANGES PER HOUR (ACH) OVER A 24 HOUR PERIOD.

13.2 RANGE AND DRYER SHALL BE VENTED DIRECTLY TO THE EXTERIOR THROUGH THE WALL.

13.3 WASHROOMS TO BE MECHANICALLY VENTED TO PROVIDE A MINIMUM OF 1.0 ACH.

13.4 INSULATION SHALL BE INSTALLED AND OTHER CONSTRUCTION WORK UNDERTAKEN IN A MANNER WHICH WILL NOT REDUCE THE FLOW OF AIR THROUGH VENTS OR THROUGH ANY OTHER PORTION OF THE ROOF SPACE OR ATTIC WHERE NECESSARY TO ENSURE EFFECTIVE AIR CIRCULATION.

13.5 ASBESTOS SHALL NOT BE USED IN AIR DISTRIBUTION SYSTEMS OR EQUIPMENT IN A FORM OR LOCATION WHERE ASBESTOS FIBERS COULD ENTER THE AIR SUPPLY OR RETURN SYSTEMS.

13.6 THE RETURN AIR SYSTEM SHALL BE DESIGNED TO HANDLE THE ENTIRE AIR SUPPLY.

13.7 FLAT ROOFS, ROOF SPACES OR ATTIC SPACES SHALL BE VENTED IN ACCORDANCE WITH O.B.C. 9.19.

13.8 OPENINGS FOR VENTILATION SHALL BE PROTECTED FROM THE WEATHER AND INSECTS.

13.9 VENTILATION SHALL CONFORM TO O.B.C. 9.32.

SECTION 14 - MECHANICAL EQUIPMENT

13.1 BUILDINGS CLASSIFIED AS GROUP B, DIVISION 2 OR 3 OCCUPANCIES, OR GROUP C RESIDENTIAL OCCUPANCY THAT ARE INTENDED FOR USE IN THE WINTER MONTHS ON A CONTINUING BASIS SHALL BE INSULATED AND EQUIPPED WITH HEATING FACILITIES THAT ARE CAPABLE OF MAINTAINING AN INDOOR AIR TEMPERATURE OF 22 DEGREES CELCIUS AT THE OUTSIDE WINTER DESIGN TEMPERATURE.

13.2 MECHANICAL SYSTEMS AND EQUIPMENT ARE TO BE DESIGNED AND INSTALLED TO ACCOMODATE THE MAXIMUM RELATIVE STRUCTURAL MOVEMENT PROVIDED FOR IN THE CONSTRUCTION OF THE BUILDING.

13.3 THE OUTSIDE CONDITIONS TO BE USED IN DESIGNING HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS SHALL BE DETERMINED IN CONFROMANCE WITH THE ONTARIO BUILDING CODE, VOLUME 2 SUPPLEMENTARY STANDARD SB-1.

13.4 EQUIPMENT REQUIRING PERIODIC MAINTENANCE SHLL BE GIVEN PROVISION FOR ACCESS, INSPECTION, MAINTENANCE, REPAIR, AND CLEANING.

13.5 HVAC SYSTEMS SHALL BE PROTECTED FROM FREEZING, IF THEY MAY BE ADVERSELEY AFFECTED BY FREEZING TEMPERATURES.

13.6 ALL DUCTS, CONNECTORS, AND ASSOCIATED FITTINGS, PLENUMS IN AIR DUCT SYSTEMS SHALL BE CONSTRUCTED OF STEE, ALUMINUM ALLOY, COPPER, CLAY, OR SIMILAR NONCOMBUSTIBLE MATERIAL.

13.7 ALL DUCT MARERIALS AND FITTINGS SHALL BE SUITABLE FOR EXPOSURE TO THE TEMPERATURE AND HUMIDITY OF THE AIR BAING CONVEYED IN THE DUCTS.

13.8 AIR DUCT SYSTEMS SHALL HAVE TIGHT FITTING CONNECTIONS THROUGHOUT AND NO OPENINGS OTHER THAN THOSE REQUIRED FOR PROPER OPERATION, INSPECTION, AND MAINTENANCE OF THE SYSTEM.

13.9 ACCESS OPENINGS SHALL BE PROVIDED IN DUCT SYSTEMS TO ALLOW THE REMOVAL OF MATERIAL THAT MAY ACCUMULATE IN PLENUMS AND DUCTS.

13.10 HEATING DUCTS AND RETURN AIR PLENUMS HAVE BEEN LOCATED AS A SUGGESTED GUIDE ONLY. INSTALLATION TO SUIT BUILDING CONDITIONS AND LOCAL BYLAWS. SUBMIT HEATING LAYOUTS BEFORE COMMENCEMENT OF CONSTRUCTIONS.

13.11 AIR DUCTS IN EXTERIOR WALLS TO HAVE A MINIMUM OF R-4 THERMAL INSULATION AND R-12 IN UNHEATED SPACE. SPACE BETWEEN DUCTS TO BE SEALEDWITH NON COMBUSTIBLE MATERIAL.

13.12 ALL PIPES INSTALLED IN HVAC SYSTEMS SHALL BE INSTALLED TO ALLOW FOR EXPANSION AND CONTRACTION DUE TO TEMPERATURE CHANGES, PIPING SHALL BE MADE FROM MATERIALS DESIGNED TO WITHSTAND THE EFFECTS OF TEMPERATURES AND PRESSURES THAT MAY OCCUR IN THE SYSTEM.

13.13 INSULATION AND COVERINGS ON PIPES SHALL BE COMPMOSED OF MATERIAL SUITABLE FOR THE OPERATING TEMPERATURE OF THE SYSTEM TO WITHSTAND DETERIORATION FROM SOFTENING, MELTING, MILDEW, AND MOULD.

13.14 FIREPLACES SHALL BE INSTALED OR COSTRUCTIED IN ACCORDANCE WITH O.B.C. 9.22.

13.15 HEATING SYSTEMS, COOLING SYSTEMS, AND DUCT WORK TO CONFORM WITH O.B.C. 9.32 & 9.33., AND O.B.C. DIVISION B, PART 6.

13.16 MECHANICAL AND ELECTRICAL DESIGN FOR EQUIPMENT, DUCT SIZING, ASSORTED AND OTHER ELECTRICAL CIRCUITRY, HEAT LOSS CALCULATIONS, ETC. SHALL BE PROVIDED BY HEATING / MECHANICAL / ELECTRICAL CONTRACTOR. LAYOUT, DESIGN, AND SHOP DRAWINGS ARE REQUIRED.

13.17 REFER TO MECHANICAL DRAWINGS WHERE APPLICABLE. ALL ITEMS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

SECTION 14 - EXTERIOR FINISHES

14.1 STUCCO TO COMPLY WITH O.B.C. 9.28
14.2 EIFS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS USING THE CORRECT SYSTEM COMPONENTS. SYSTEMS MUST HAVE CURRENT CCMC APPROVAL.
14.3 EXTERIOR CALDDING TO COMPLY WITH O.B.C. 9.27.

14.4 REFER TO DRAWINGS FOR TYPE OF EXTERIOR FINISHES.

14.5 ALL EXTERIOR SURFACES TO BE PAINTED SHALL BE COVERED WITH ONE (1) COAT OF PRIMER AND TW0 (2) FINISH COATS OF PAINT APPROVED FOR THE SPECIFIC APPLICATION..

14.6 BASEMENT CMU WALLS EXPOSED ABOVE GRADE SHALL BE PARGED.

SECTION 15 - STAIRS, GUARDS, LANDINGS

15.1 STAIRS, RAMPS, HANDRAILS & GUARDS SHALL BE CONSTRUCTED IN ACCORDANCE WITH O.B.C. 9.8.

15.2 REQUIRED EXIT STAIRS SHALL HAVE A WIDTH, MEASURED BETWEEN WALL FACES OR GUARDS, OF NOT LESS THAN 2'-11".

15.3 MAXIMUM STAIR HEIGHT OR MAXIMUM VERTICAL HEIGHT BETWEEN LANDINGS SHALL BE 12'-2". CLEAR HEIGHT OVER LANDINGS AND STAIRS, MEASURED VERTICALLY FROM ALINE DRAWN THROUGH THE LEADING EDGES OF THE TREADS, SHALL BE NOT LESS THAN 6'-5" IN DWELLINGS AND 6'-9" ELSEWHERE.

15.4 EXCEPT FOR STAIRS WITHIN A DWELLING UNIT, AT LEAST 3 RISERS SHALL BE PROVIDED IN INTERIOR FLIGHTS.

15.5 RISERS SHALL HAVE UNIFORM HEIGHT IN ANY ONE FLIGHT WITH A MAXIMUM TOLERANCE OF 1/4" BETWEEN ADJASCENT TREADS OR LANDINGS, AND 1/4" BETWEEN THE TALLEST AND SHORTEST RISERS IN A FLIGHT.

15.6 TREADS SHALL HAVE UNIFORM RUN AND TREAD DEPTH, WITH A MAXIMUM TOLERANCE OF 1/4" BETWEEN ADJASCENT TREADS, AND 1/4" BETWEEN THE DEEPEST AND SHALLOWEST RUNS AND TREADS IN A FLIGHT.

15.7 INTERIOR STAIRS WITHIN DWELLINGS SHALL HAVE:

MAX RISE	7 7/8"
MIN. RISE	4 7/8"
MIN RUN	8 1/4"
MIN TREAD WIDTH	9 1/4" (INCLUDES 1" NOSING)
MIN STAIR WIDTH.	2'-11"
MIN HEAD ROOM	6'-9"

15.8 WHERE ANGLED TREAD OR WINDERS ARE INCORPORATED INTO A STAIR, THE TREADS IN ALL SETS OF ANGLED TREADS OR WINDERS WITHIN A FLIGHT SHALL TURN IN THE SAME DIRECTION.

15.9 STAIRS WITHIN DWELLING UNITS ARE PERMITTED TO CONTAIN WINDERS THAT CONVERGE TO A CENTER POINT PROVIDED THE WINDERS TURN THROUGH AN ANGLE OF NOT MORE THAN 90 DEGREES.

15.10 LEADING EDGES OF TREADS THAT ARE BEVELLED OR ROUNDED SHALL NOT REDUCE THE REQUIRED TREAD DEPTH BY MORE THAN 5/8" AND NOT, IN ANY CASE, EXCEED 1" HORIZONTALLY.

15.11 A LANDING SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH FLIGHT OF INTERIOR AND EXTERIOR STAIRS, INCLUDING STAIRS IN GARAGES, AND WHERE A DOORWAY OPENS ONTO A STAIR OR RAMP.

15.12 WHERE A DOOR AT THE TOP OF A STAIR IN A DWELLING UNIT SWINGS AWAY FROM THE STAIRS, NO LANDING IS REQUIRED BETWEEN THE DOORWAY AND THE STAIR.

15.13 INTERIOR RAMPS WITHIN DWELLING UNITS SHALL HAVE MAX 1 TO 10 SLOPE AND EXTERIOR RAMPS SHALL HAVE MAX. 1 TO 10 SLOPE.

15.14 PROVIDE HANDRAILS AND GUARDS FOR STAIRS AND RAMPS AND LANDINGS SHALL BE 2'-7" MIN. TO 3'-2" MAX ABOVE NOSING OR RAMP. HAND RAILS SHALL BE CONTINUOUS AND UNOBSTRUCTED EXCEPT FOR NEWEL POSTS, DOORS, AT CHANGES OF DIRECTION.

15.15 A CLEARANCE OF NOT LESS THAN 2" SHALL BE PROVIDED BETWEEN A HANDRAIL AND ANY SURFACE BEHIND IT.

15.16 HANDRAILS SHALL BE TERMINATED IN A MANNER THAT WILL NOT OBSTRUCT PEDESTRIAN TRAVEL OR CREATE A HAZARD.

15.17 INTERIOR GUARDRAIL HEIGHT WITHIN A DWELLING SHALL BE A MINIMUM OF 3'-0" HIGH

15.18 EXTERIOR GUARDRAIL HEIGHT WITHIN A DWELLING SHALL BE A MINIMUM OF 2'-11" IF LESS THAN 5'-11" ABOVE FIN GRADE, OR 3'-6" IF MORE THAN 5'-11" ABOVE FIN GRADE

SECTION 16 - DOORS & WINDOWS

16.1 ALL WINDOWS, ALL DOORS TO CONFORM WITH O.B.C. 9.7.

16.2 WINDOWS LOCATED 6'-7" OR LESS FROM GROUND LEVEL SHALL CONFORM TO O.B.C. 9.7.5.3., RESISTANCE TO FORCED ENTRY FOR WINDOWS.

16.3 ENTRY DOORS SHALL CONFORM TO O.B.C. 9.7.5.2., RESISTANCE TO FORCED ENTRY FOR DOORS.

16.4 WEATHER STRIPPING SHALL BE PROVIDED AROUND ALL EXTERIOR DOORS.

16.5 EXTERIOR OUTSWING DOORS, OTHER THAN STORM DOORS OR SCREEN DOORS, SHALL BE PROVIDED WITH HINGES OR PINS SO THAT THE DOOR CANNOT BE REMOVED WHEN IN THE CLOSED POSITION.

16.6 THE PRIMARY ENTRY DOOR TO A DWELLING UNIT SHALL BE PROVIDED WITH A VIEWER OR TRANSPARENT GLAZING IN THE DOOR OR SIDELIGHT.

16.7 GLASS OTHER THAN SEFETY GLASS SHALL NOT BE USED FOR A SHOWER OR BATHTUB ENCLOSURE.

16.8 EXCEPT WHERE A DOOR ON THE SAME LEVEL AS THE BEDROOM PROVIDES DIRECT ACCESS TO THE EXTERIOR, EVERY FLOOR LEVEL SHALL HAVE MINIMUM (1) EGRESSABLE WINDOW WHICH SHALL OPEN BY HAND TO EXTERIOR SPACE, AND WHICH SHALL HAVE MIN. 3.8 SQ.FT. UNOBSTRUCTED AREA, WITH ONE DIMENSION MIN. 15" AND MAXIMUM SILL HEIGHT 3'-3" ABOVE FLOOR. WHERE WINDOW WELLS ARE PRESENT THERE SHALL BE MIN 22" CLEARANCE.

16.9 WITH THE EXCEPTION OF BASEMENT AREAS, BEDROOM WINDOWS SHALL HAVE A MAXIMUM SILL HEIGHT OF 3'-3" ABOVE THE FINISHED FLOOR.

16.10 REFER TO DOOR AND WINDOW SCHEDULE WHERE PROVIDED. UNLESS NOTED, DOOR AND WINDOW SIZES ARE GIVEN AS A GUIDE ONLY. ACTUAL SIZES AND ROUGH STUD OPENINGS MUST BE SELECTED FROM MANUFACTURER'S SPECIFICATIONS.

16.11 SDL SIZE, TYPE AND SPACING TO BE REVIEWED BY THE DESIGNER PRIOR TO ORDER AND INSTALLATION.

16.12 ALL DOORS AND WINDOWS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATION AND DETAILS. INSTALLERS SHALL MAINTAIN AIR AND VAPOR BARRIER INTEGRITY, AND SHALL SUPPLY AND INSTALL ALL BARRIERS, CAULKING, SEALANTS, SILLS, FASTENERS, ETC. AS REQUIRED TO PROPERLY FINISH INSTALLATION. MASONRY SILLS AND INTERIOR MILLWORK ARE BY OTHERS.

16.13 ALL WINDOWS SHALL BE MINIMUM DOUBLE GLAZED WITH THERMALLY BROKEN FRAMES

16.14 DOORS BETWEEN A GARAGE AND A DWELLING UNIT SHALL BE EXTERIOR TYPE, INSULATED, WEATHER STRIPPED TO PROVIDE GASPROOFING, WITH SELF CLOSERS, LOCKS AND DEAD BOLT.

SECTION 17 - INTERIOR FINISHES

17.1 REFER TO THE ONTARIO BUILDING CODE FOR MINIMUM FLAME SPREAD RATINGS FOR INTERIOR FINISHES. FINISHED MATERIALS SHALL CONFORM TO APPROPRIATE SECTIONS OF THE ONTARIO BUILDING CODE GOVERNING FLAME SPREAD RATINGS WHERE APPLICABLE.

17.2 PROVIDE WATER RESISTANT FLOORING IN ALL WASHROOMS, KITCHEN, AND LAUNDRY ROOMS.

17.3 PROVIDE NON-SLIP TREADS ON ALL STAIR TREADS.

17.4 CERAMIC FLOOR TILE OR STONE FLOORING SHALL BE BEDDED ON APPROVED DECOUPLING LAYER FOLLOWING MANUFACTURER'S GUIDELINES

17.5 ALL INTERIOR SURFACES SPECIALLY NOTED TO BE PAINTED SHALL BE PRIMED AND SHALL RECEIVE (2) COATS OF QUALITY PAINT.

SECTION 18 - SPECIALTIES

18.1 ALL LOUVERS AND VENTS SHALL BE PEST/VERMIN SCREEN.

18.2 REFER TO ' FIREPLACE DETAILS PAGE ' WHERE APPLICABLE.

18.3 ALL MANUFACTURER'S CHIMNEYS, VENTS, AND OTHER FUEL FIRED APPLIANCES, SHALL BE U.L.C. LABELED AND INSTALLED IN STRICT COMPLIANCE TO MANUFACTURER'S INSTRUCTIONS. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED IN PROXIMITY TO ALL FUEL FIRED ITEMS.

SECTION 19 - SMOKE DETECTION

19.1 SMOKE ALARMS SHALL HAVE A VISUAL SIGNALING COMPONENT CONFORMING TO THE REQUIREMENTS IN 18.5.3. (LIGHT, COLOR AND PULSE CHARACTERISTICS) OF NFPA 72, “NATIONAL FIRE ALARM AND SIGNALING CODE”.

19.2 INTERCONNECTED SMOKE ALARMS/CO DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.10.19.3:

THERE IS AT LEAST ONE SMOKE ALARM INSTALLED ON EACH STOREY, INCLUDING BASEMENTS, AND

ON ANY STOREY OF A DWELLING UNIT CONTAINING SLEEPING ROOMS, A SMOKE ALARM IS INSTALLED,

IN EACH SLEEPING ROOM, AND

IN A LOCATION BETWEEN THE SLEEPING ROOMS AND THE REMAINDER OF THE STOREY, AND IF THE SLEEPING ROOMS ARE SERVED BY A HALLWAY, THE SMOKE ALARM SHALL BE LOCATED IN THE HALLWAY.

SECTION 20 - FURNISHINGS

20.1 UN-DETAILED CABINETRY SHALL BE ACCORDING TO OWNER'S SPECIFICATIONS AND SHALL BE DETAILED BY SUPPLIER -SHOP DRAWINGS REQUIRED.

20.2 ALL CLOSETS SHALL HAVE A ROD AND SHELF

20.3 ALL LINEN CLOSETS SHALL HAVE A MINIMUM OF 4 SHELVES.

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PENETANGUISHENE

GBCSC

Project No. 7435

D. W. LALONDE
2024/11/15

Revisions

1.	2024.11.13	FOR BUILDING PERMIT

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Scale

GENERAL NOTES

A0.2

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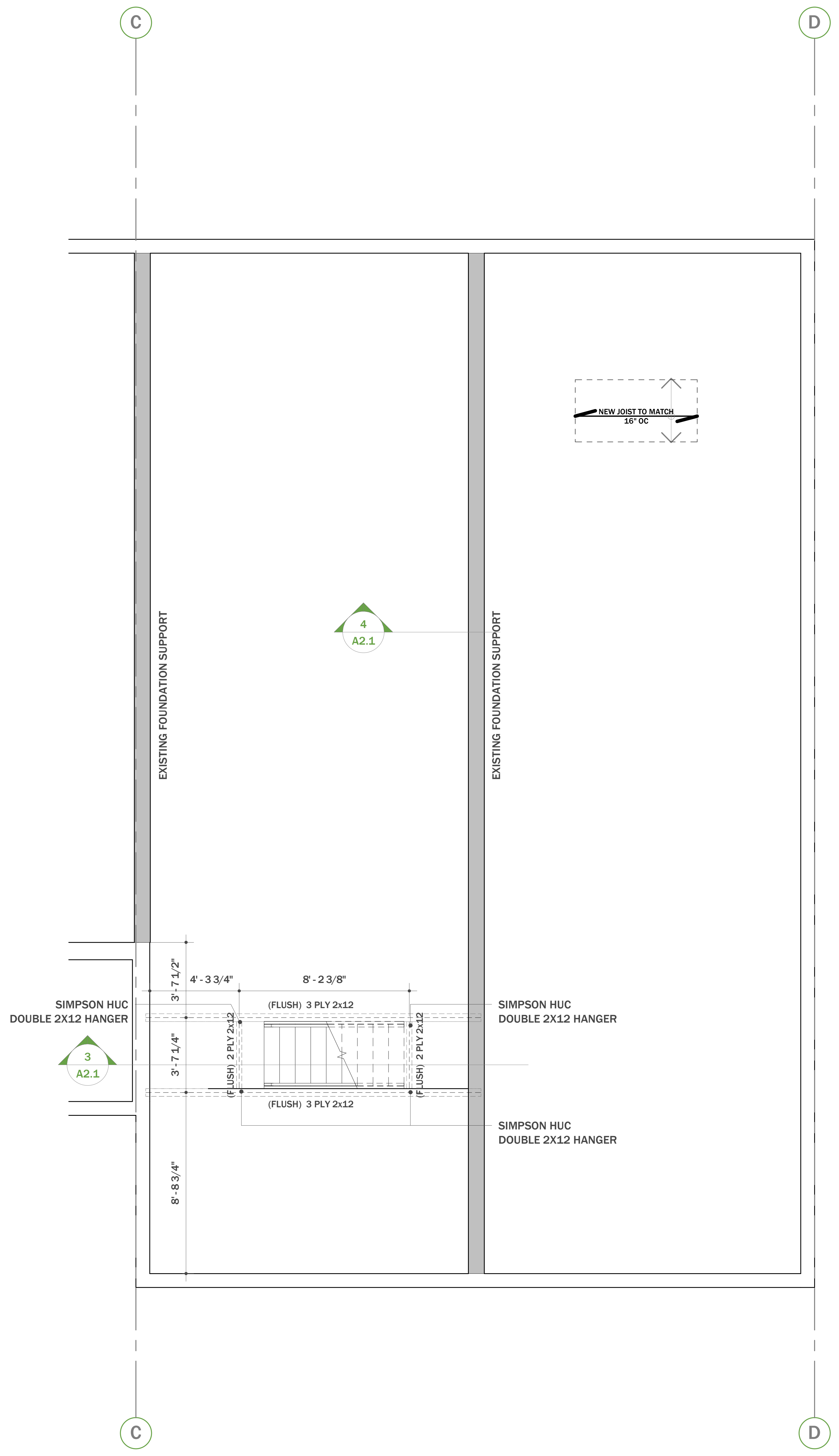
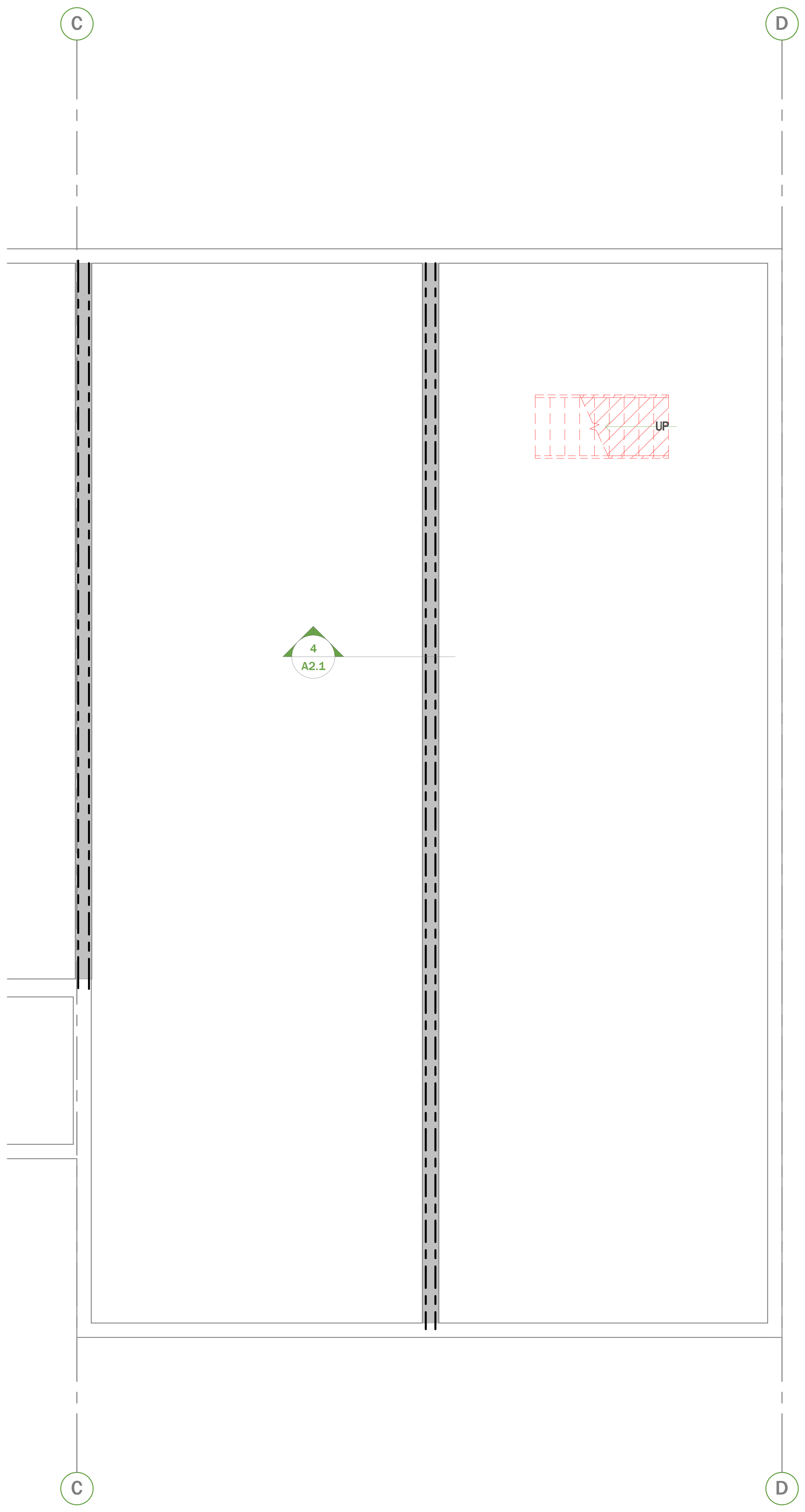


2 BASEMENT - PROPOSED

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



1 BASEMENT - EXISTING

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

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CRAWLSPACE PLAN

A1.1

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2

MAIN - PROPOSED

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

WINDOW SCHEDULE

NO	TYPE	DIMENSIONS		DESCRIPTION
		WIDTH	HEIGHT	
1.01	cw	2' - 8"	4' - 0"	
1.02	cw	2' - 8"	4' - 0"	
1.03	cw	2' - 8"	4' - 0"	
1.04	cw	2' - 8"	4' - 0"	

DOOR SCHEDULE

NO	PANEL SIZE		DESCRIPTION
	WIDTH	HEIGHT	
101	3' - 0"	6' - 8"	
102	3' - 0"	6' - 8"	
103	3' - 0"	6' - 8"	
104	3' - 0"	6' - 8"	
105	3' - 0"	6' - 8"	
106	3' - 0"	6' - 8"	
107	3' - 0"	6' - 8"	
108	4' - 6"	6' - 8"	
109	8' - 0"	6' - 8"	

EXTERIOR WALL SCHEDULE

W

WOOD SIDING

HORIZONTAL SIDING TO MATCH EXISTING

1x3 VERTICAL STRAPPING AT 16" O/C
TYVEK AIR BARRIER OR EQUIVALENT
1" RIGID INSULATION - R5
1/2" SPRUCEPLY SHEATING
2x6 FRAMING AT 16" O/C WITH R22 INSULATION
6 MIL POLY VB OR EQUIVALENT
5/8" GYPSUM WALL BOARD

INTERIOR WALL SCHEDULE

4

2x4
PARTITION

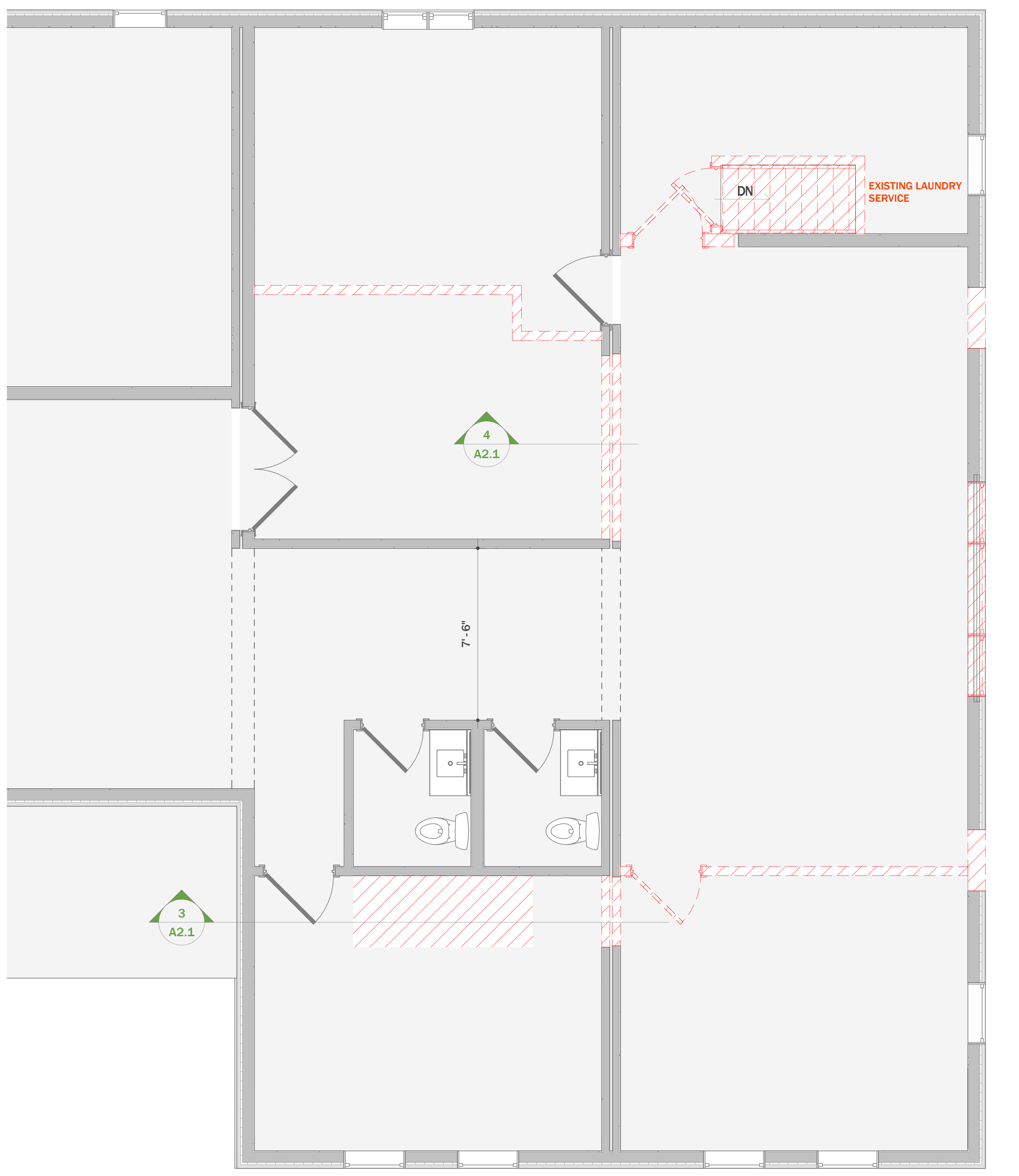
5/8" GYPSUM WALL BOARD
2x4 FRAMING AT 16" O/C
5/8" GYPSUM WALL BOARD

FLOOR SCHEDULE

F1

JOISTS

FINISHED FLOOR TO MATCH EXISTING
5/8" T&G PLYWOOD SUBFLOOR
SPF JOISTS TO MATCH EXISTING



1

MAIN - EXISTING

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

DESIGN
BUILD

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D. W. LALONDE
2024/11/15
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PLANS

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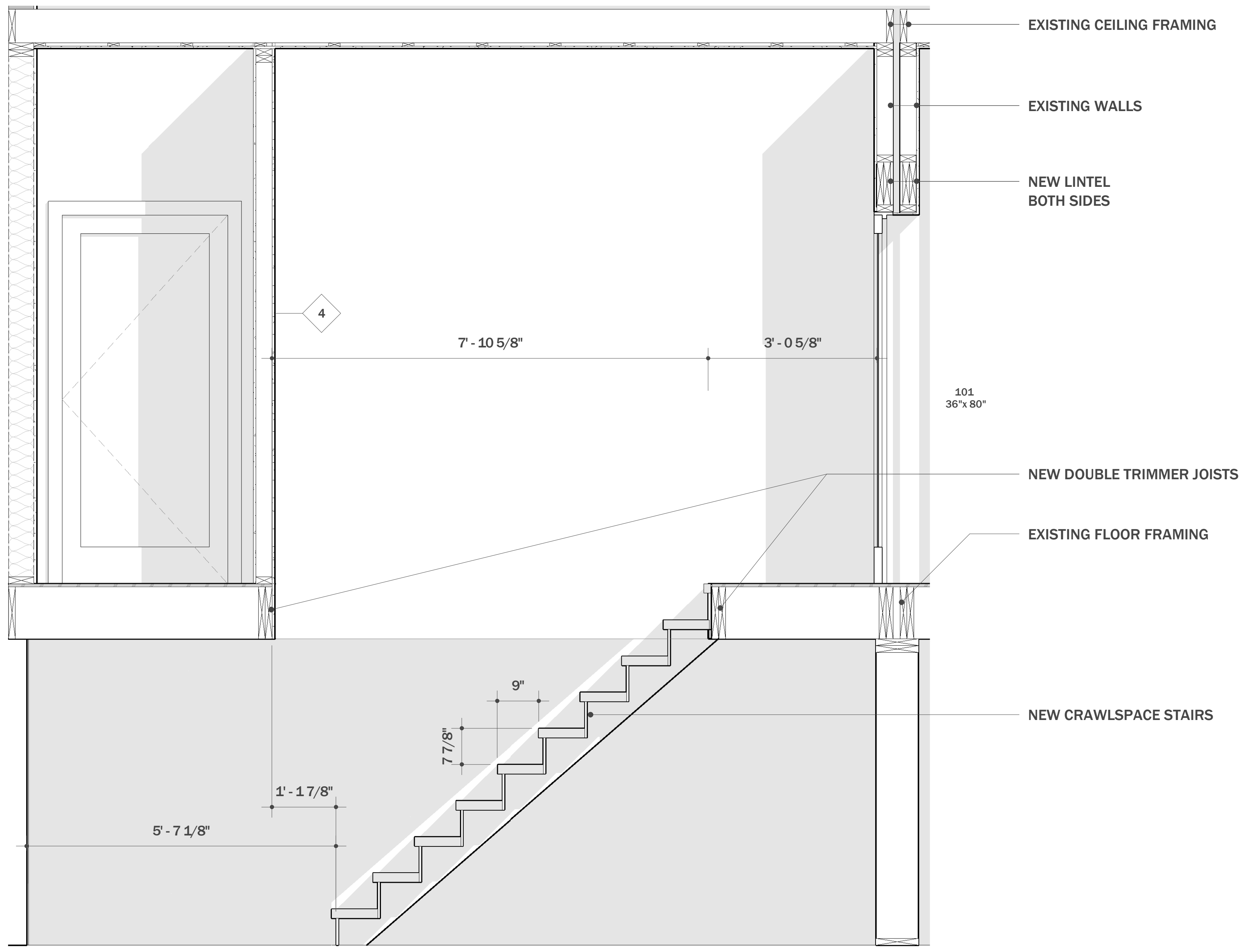
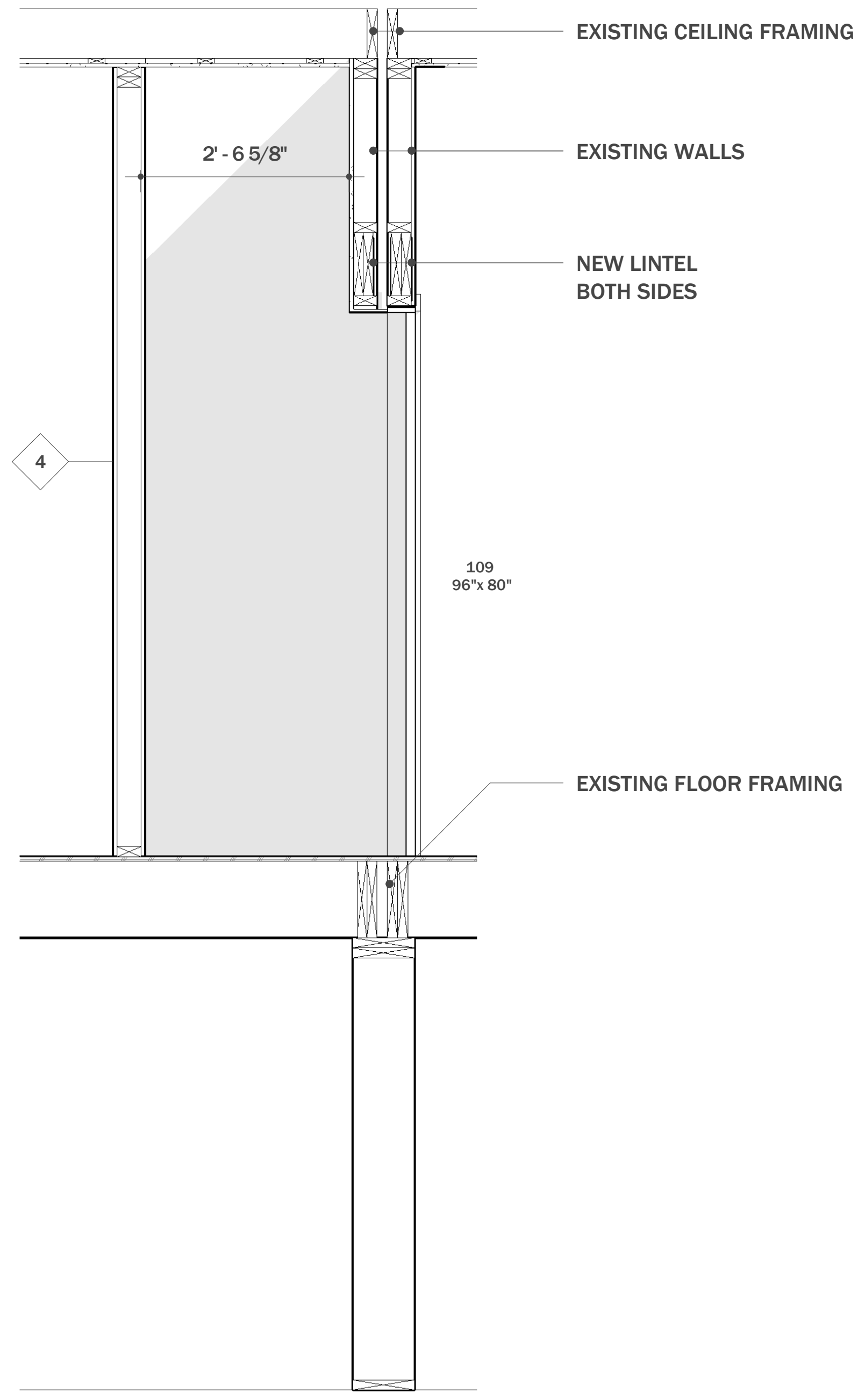


3

SECTION - NEW STAIRWELL

SCALE: 1/2" = 1'-0"



4

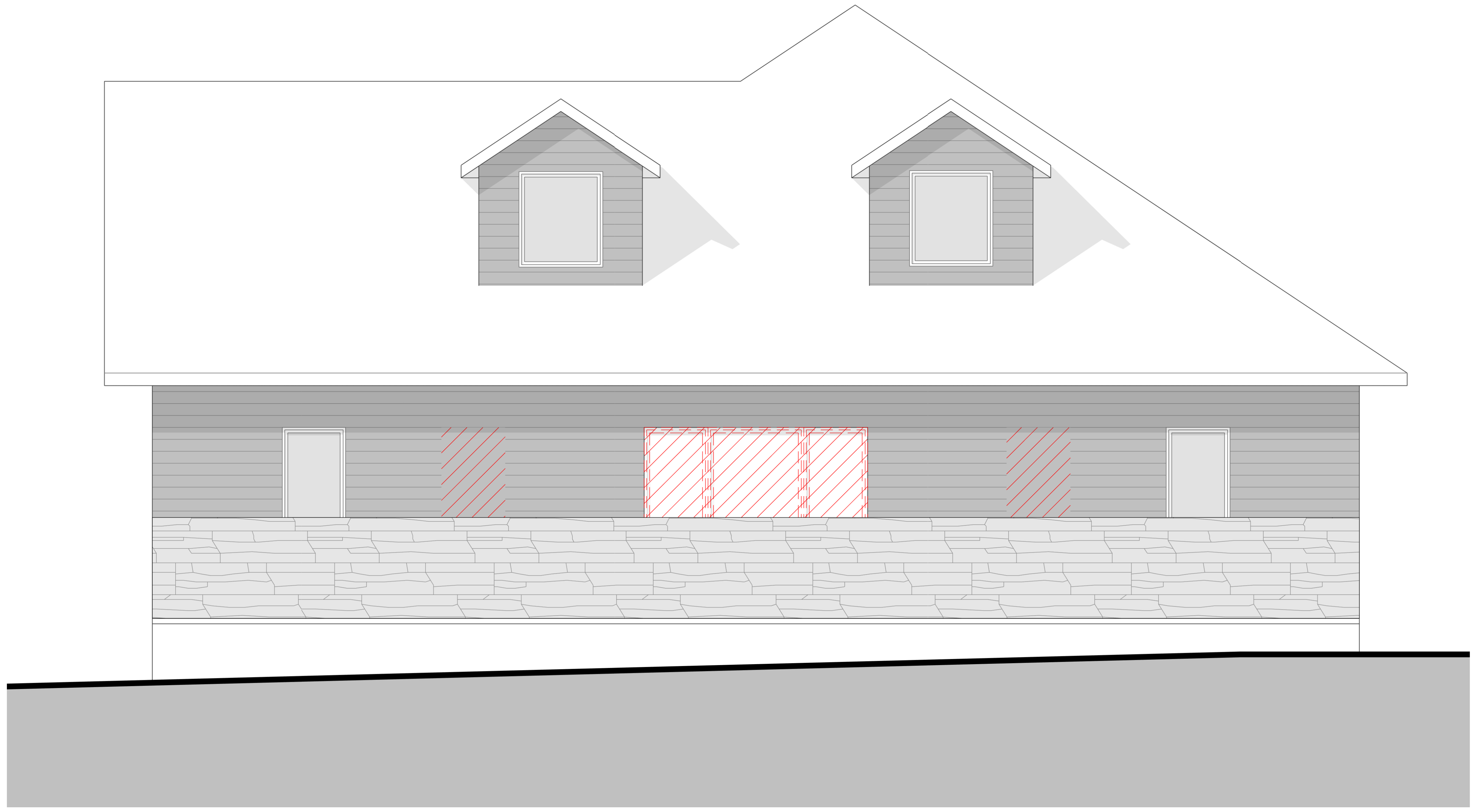
SECTION - PRINTER CLOSET

SCALE: 1/2" = 1'-0"

1

NORTH ELEVATION - PROPOSED

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



2

NORTH ELEVATION - EXISTING

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

DESIGN
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1. Do not scale drawings.
2. Drawings remain property of IHD

Project North

N

Scale As indicated

ELEVATIONS

A2.1

Sheet No.

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