



**WALL SCHEDULE**

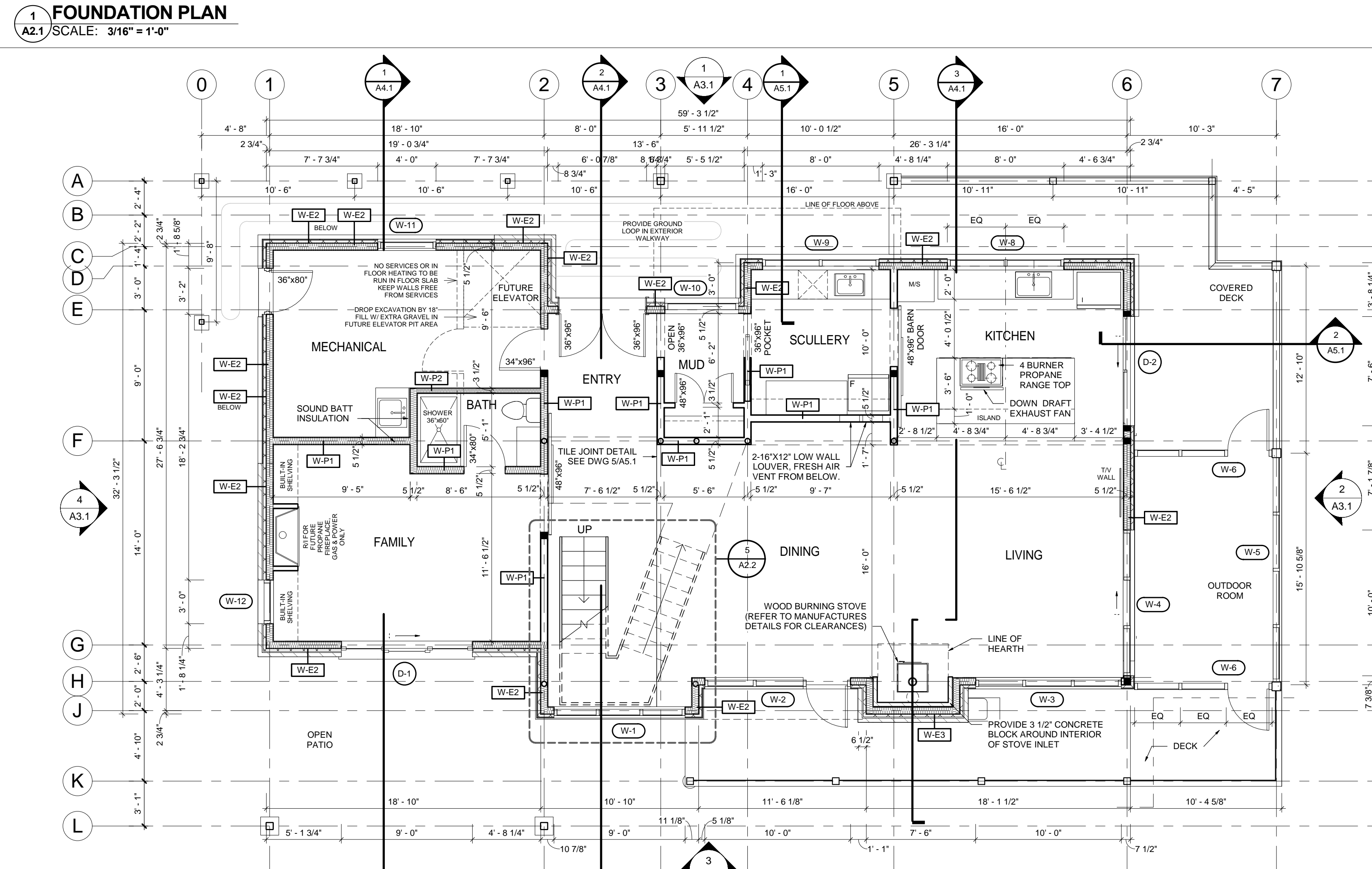
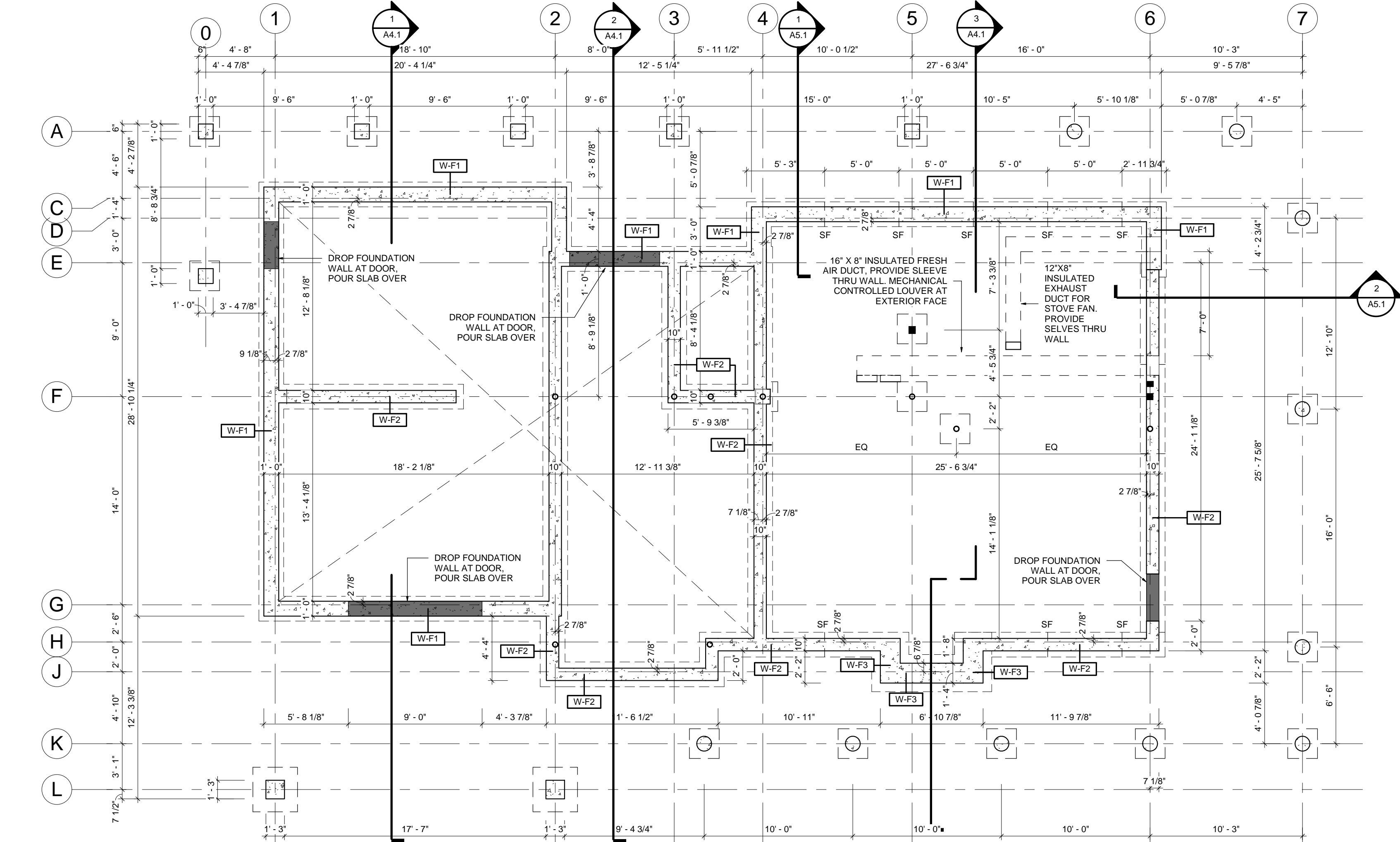
- W-F1 FOUNDATION WALL #1**  
- 12" 20MPa CONCRETE FOUNDATION WALL
  - W-F2 FOUNDATION WALL #2**  
- 10" 20MPa CONCRETE FOUNDATION WALL
  - W-F3 FOUNDATION WALL #3**  
- 16" 20MPa CONCRETE FABRIC-FACED FOUNDATION WALL
- \*PROVIDE DRAINAGE MAT DAMP PROOFING ON ALL EXTERIOR FOUNDATION WALLS BELOW GRADE
- W-E1 EXTERIOR WALL #1**  
- 3 3/4" CARBOCLAVE SOLID CONCRETE BLOCK WALL (38" HIGH)  
- 4" HIGH BLOCK, STACK BOND  
- 1" AIR SPACE  
- 2" RIGID INSULATION BOARD  
- WATERPROOFING MEMBRANE SELF-ADHERING & SELF SEALING  
- 7/16" OSB SHEATHING  
- 2X6 WOOD STUDS @ 16" O.C.  
- 5 1/2" (R20) BATT INSULATION  
- VAPOUR BARRIER (SEALED SEAMS)  
- GYPSUM WALL BOARD  
- PAINTED FINISH
  - W-E2 EXTERIOR WALL #2**  
- FIBRE CEMENT BOARD PANELS @ CORRELATED METAL SIDING  
- 1"X3" STRAPPING AT JOINT LOCATIONS  
- 2" (R10) RIGID INSULATION BOARD  
- WATERPROOFING MEMBRANE SELF-ADHERING & SELF SEALING  
- 7/16" OSB SHEATHING  
- 2X6 WOOD STUDS @ 16" O.C.  
- 5 1/2" (R20) BATT INSULATION  
- VAPOUR BARRIER (SEALED SEAMS)  
- GYPSUM WALL BOARD  
- PAINTED FINISH
- \*REFER TO EXTERIOR ELEVATIONS FOR MATERIAL LOCATIONS AND CHANGES
- W-E3 EXTERIOR WALL #3**  
- 3 3/4" CARBOCLAVE SOLID CONCRETE BLOCK WALL (38" HIGH)  
- 4" HIGH BLOCK, STACK BOND  
- 1/2" AIR SPACE  
- 2" (R10) RIGID INSULATION BOARD  
- AIR BARRIER (TAPED SEAMS)  
- 7/16" OSB SHEATHING  
- 2X6 WOOD STUDS @ 16" O.C.  
- 5 1/2" (R20) BATT INSULATION  
- VAPOUR BARRIER (SEALED SEAMS)  
- 3 3/4" CARBOCLAVE SOLID CONCRETE BLOCK WALL (38" HIGH)  
- 4" HIGH BLOCK, STACK BOND
  - W-P1 INTERIOR PARTITION WALL #1**  
- 1/2" GYPSUM BOARD  
- 5 1/2" WOOD STUDS @ 16" O.C.  
- 1/2" GYPSUM BOARD  
- ACOUSTIC SOUND BATT AS PER PLANS
  - W-P2 INTERIOR PARTITION WALL #2**  
- 1/2" GYPSUM BOARD  
- 3 1/2" WOOD STUDS @ 16" O.C.  
- 1/2" GYPSUM BOARD  
- ACOUSTIC SOUND BATT AS PER PLANS
  - W-P3 INTERIOR PARTITION WALL #3**  
- 1/2" TILE BACKER @ CEMENT BOARD (WASHROOM SIDE)  
- 3 1/2" or 5 1/2" WOOD STUDS @ 16" O.C. (as noted on plans)  
- 1/2" GYPSUM BOARD  
- ACOUSTIC SOUND BATT AS PER PLANS

**FLOOR SCHEDULE**

- F-1 FOUNDATION SLAB #1 (GROUND FLOOR)**  
- FLOOR FINISH  
- 5" CONCRETE FLOOR  
- RADIANT HEAT PIPING SECURED TO W.W.MESH IN SLAB  
- 3" CLOSED CELL RIGID INSULATION  
- VAPOUR BARRIER (TAPED SEAMS)  
- 12" COMPACTED GRANULAR FILL @ BEDROCK
- F-2 FOUNDATION SLAB #2 (BASEMENT)**  
- 4" CONCRETE FLOOR  
- 2" CLOSED CELL RIGID INSULATION  
- VAPOUR BARRIER (TAPED SEAMS)  
- 12" COMPACTED GRANULAR FILL @ BEDROCK
- F-3 INTERIOR WOOD FLOOR**  
- 1 1/2" CONCRETE FLOOR TOPPING  
- RADIANT HEAT PIPING SECURED TO SUBFLOOR  
- 5/8" T&G PLYWOOD SHEATHING  
- 11 7/8" T&G FLOOR JOISTS @ 12" @ 16" O.C.  
- REFER TO FRAMING PLAN  
- 5 1/2" (R22) ROXUL COMFORT BATT INSULATION  
- 1/2" GYPSUM BOARD CEILING  
- PAINTED FINISH
- F-4 INTERIOR WOOD FLOOR @ 2ND FLOOR**  
- ENGINEERED HARDWOOD FLOORING  
- 5/8" T&G PLYWOOD SHEATHING  
- RADIANT HEAT PIPING BETWEEN JOISTS  
- 2" X 10" FLOOR JOISTS @ 16" O.C.  
- SOUND BATT INSULATION WHERE NOTED  
- 1/2" GYPSUM BOARD CEILING  
- PAINTED FINISH
- F-5 INTERIOR WOOD FLOOR @ 2ND FLOOR SHOWER**  
- TILE FLOORING  
- CONCRETE FLOOR TOPPING SLOPED TO DRAIN  
- WATERPROOF MEMBRANE  
- 5/8" T&G PLYWOOD SHEATHING  
- 2" X 10" FLOOR JOISTS @ 16" O.C.  
- SOUND BATT INSULATION WHERE NOTED  
- 1/2" GYPSUM BOARD CEILING  
- PAINTED FINISH

**ROOF SCHEDULE**

- R-1 TRUSS ROOF #1**  
- METAL ROOFING (AGWAY-CENTURY RIB)  
- WATERPROOFING MEMBRANE  
- SELF-ADHERING & SELF SEALING  
- 5/8" T&G PLYWOOD SHEATHING c/w H-CLIPS  
- PRE-ENGINEER SCISSOR TRUSSES @ 24" O.C.  
- R50 BLOWN IN INSULATION  
- VAPOUR BARRIER (TAPED SEAMS)  
- 1/2" GYPSUM BOARD  
- PAINTED FINISH
- R-2 WOOD FRAMED ROOF #2**  
- METAL ROOFING (AGWAY-CENTURY RIB)  
- WATERPROOFING MEMBRANE  
- SELF-ADHERING & SELF SEALING  
- 5/8" T&G PLYWOOD SHEATHING  
- 2" X 12" WOOD RAFTERS @ 24" O.C.  
- (INTERIOR - SPRAY FOAM INSULATION TO FILL CAVITY)  
- 1/2" GYPSUM BOARD  
- PAINTED FINISH
- R-3 WOOD FRAMED ROOF #3**  
- METAL ROOFING (AGWAY-CENTURY RIB)  
- WATERPROOFING MEMBRANE  
- SELF-ADHERING & SELF SEALING  
- 5/8" T&G PLYWOOD SHEATHING  
- 2" X 8" WOOD RAFTERS @ 24" O.C.  
- (INTERIOR - SPRAY FOAM INSULATION TO FILL CAVITY)  
- 1/2" GYPSUM BOARD  
- PAINTED FINISH
- R-4 WOOD FRAMED ROOF #4**  
- METAL ROOFING (AGWAY-CENTURY RIB)  
- WATERPROOFING MEMBRANE  
- SELF-ADHERING & SELF SEALING  
- 5/8" T&G PLYWOOD SHEATHING  
- 2" X 8" WOOD RAFTERS @ 24" O.C.  
- 1" X 3" STRAPPING @ 24" O.C.  
- PRE-FINISHES ALUMINUM VENTED SOFFIT



THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND DISCREPANCIES TO THE CONSULTANT.

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REVISIONS:

NO.	DATE	ISSUED:
1	2017.01.12	SVCA REVIEW
2	2017.02.08	BUILDING PERMIT
3	2017.06.16	FOUNDATION LAYOUT
4	2017.07.14	ISSUED FOR CONSTRUCTION

**CONCRETE**

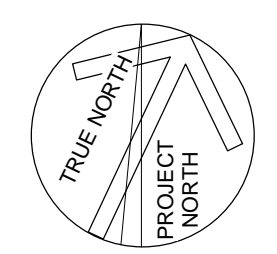
- COORDINATE AND COOPERATE WITH WORK OF OTHERS
- COMPLY WITH CSA A23
- CONCRETE 28 DAY COMPRESSIVE STRENGTH 20 MPa FOR WALLS AND FOOTINGS, GARAGE FLOOR TO BE 32MPa, 3" MAXIMUM SLUMP EXPOSURE TABLE 7 CAN 3 A23.1 M1977
- REBAR DEFORMED CSA G30.1 NEW BILLET STEEL GRADE 400, FY 60,000 PSI
- MIN COVER FOOTINGS 3" WALLS 2"
- WELDED WIRE MESH - WIRE ALL LAPS, ENDS 1 FULL MESH PLUS 2' EDGES LONG SELVAGE WIRES 6X6 6X6 WWM
- JOINT FILLER 1/2" UNPREMOLDED BITUMINOUS IMPREGNATED FIBERBOARD AROUND PERIMETER OF ALL SLABS ON GRADE
- SCREED TO LEVEL, SLOPE TO DRAINS, STEEL TROWEL FINISH, APPLY CURING SEALING COMPOUND CHLORINATED RUBBER BASED ASTM C-309-74 TYPE 1
- REINFORCING STEEL DETAILED AND PLACED IN ACCORDANCE WITH CURRENT MANUAL OF STANDARD PRACTICE OF REINFORCING STEEL INSTITUTE OF ONTARIO
- EXTERIOR EXPOSED CONCRETE, WALLS, ETC. USE 20 MPA MTC FORM 13-50 MIX WITH AIR ENTRAINMENT ADMIXTURE 6%, BROOM FINISH, JOINT FILLER AT 20'-0" O.C., CONTROL JOINTS AT 5'-0" O.C. MAX.

**REINFORCING STEEL (REFER TO STRUCTURAL SPECIFICATIONS)**

- DESIGN AS PER CAN/CSA-A23.3-04
- REINFORCEMENT STEEL AS PER CSA-A23.1-09 AND CAN/CAS-G30.18
- REBAR STRENGTH 1 (10M, 15M AND 20M): 400MPa (60,000PSI)
- FOR BELOW GRADE WALLS COVER OF 1" FROM THE INSIDE FACE OF THE CONCRETE; FOR ABOVE GRADE WALLS VERTICAL REINFORCEMENT SHALL BE PLACED IN THE MIDDLE THIRD OF THE WALL
- FOR BELOW GRADE WALLS HORIZONTAL REINFORCEMENT SHALL BE LOCATED IN THE INSIDE HALF OF THE WALL SECTION WITH A MIN. COVERAGE OF 1" FROM THE INSIDE FACE OF THE CONCRETE; FOR ABOVE GRADE WALLS HORIZONTAL REINFORCEMENT SHALL BE PLACED IN THE MIDDLE THIRD OF THE WALL
- DISTANCE FROM THE EDGE OF THE WALL TO THE PRIMARY REINFORCEMENT FOR EXTERIOR WALLS IS 2" FOR REINFORCEMENT STEEL 20M OR GREATER, AND 1 1/2" FOR REINFORCEMENT STEEL 15M OR SMALLER
- CORNER BARS ARE TO BE PROVIDED FOR ALL WALL INTERSECTIONS
- ALL HORIZONTAL AND VERTICAL BAR LENGTHS AS PER NBC 2005 & 2010, CLAUSE 9.3.1.1.(4)(b)(iii) LAPPED A MIN OF 18" FOR 10M BARS AND 28" FOR 15M BARS

**GENERAL NOTES**

- DIMENSIONS ARE TO EXTERIOR FACE OF STUD UNLESS NOTED OTHERWISE
- OPENING SIZES ARE ACTUAL WINDOW AND DOOR SIZES. CONTRACTOR TO COORDINATE ROUGH OPENING ACCORDING TO MANUFACTURER



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PROJECT:

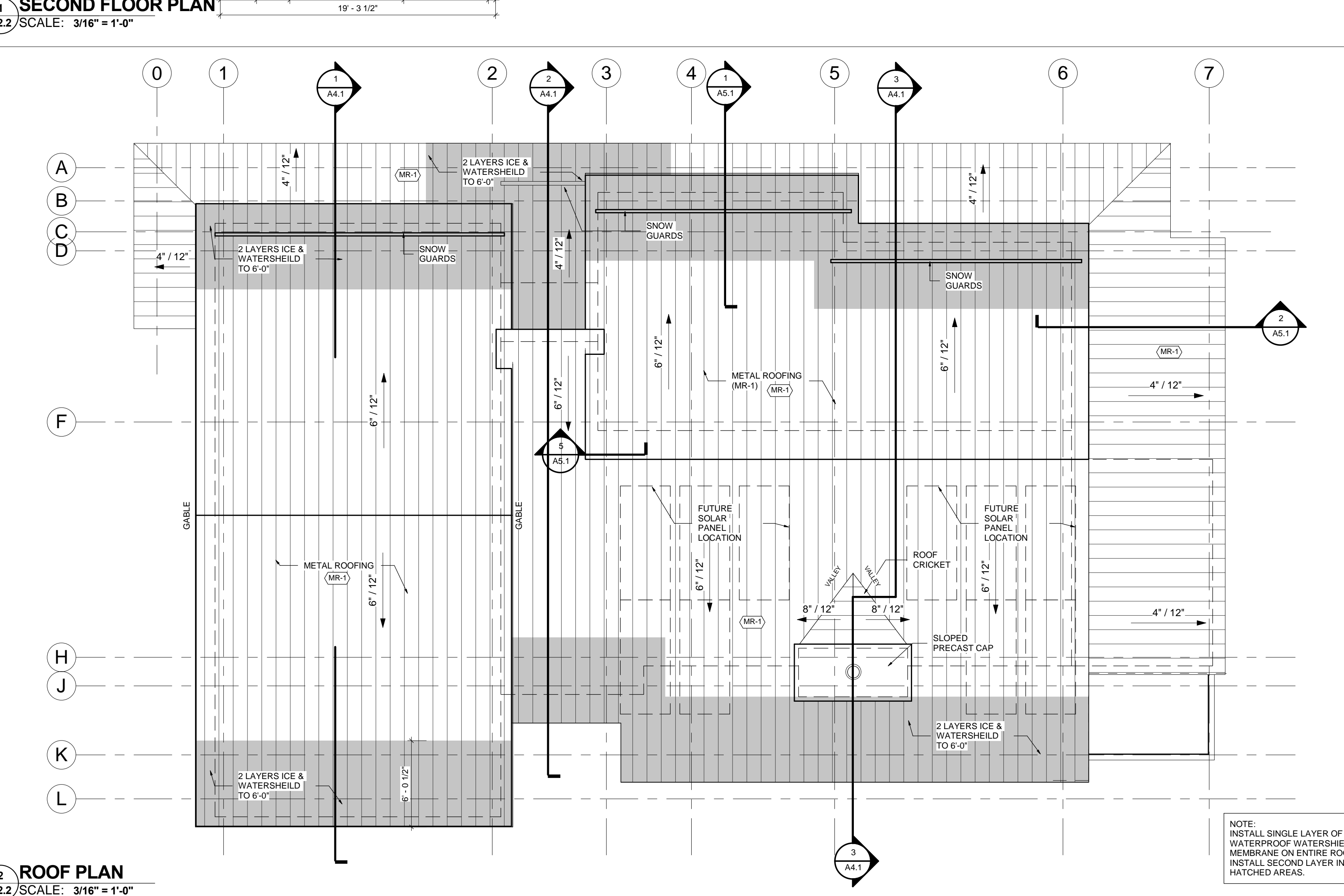
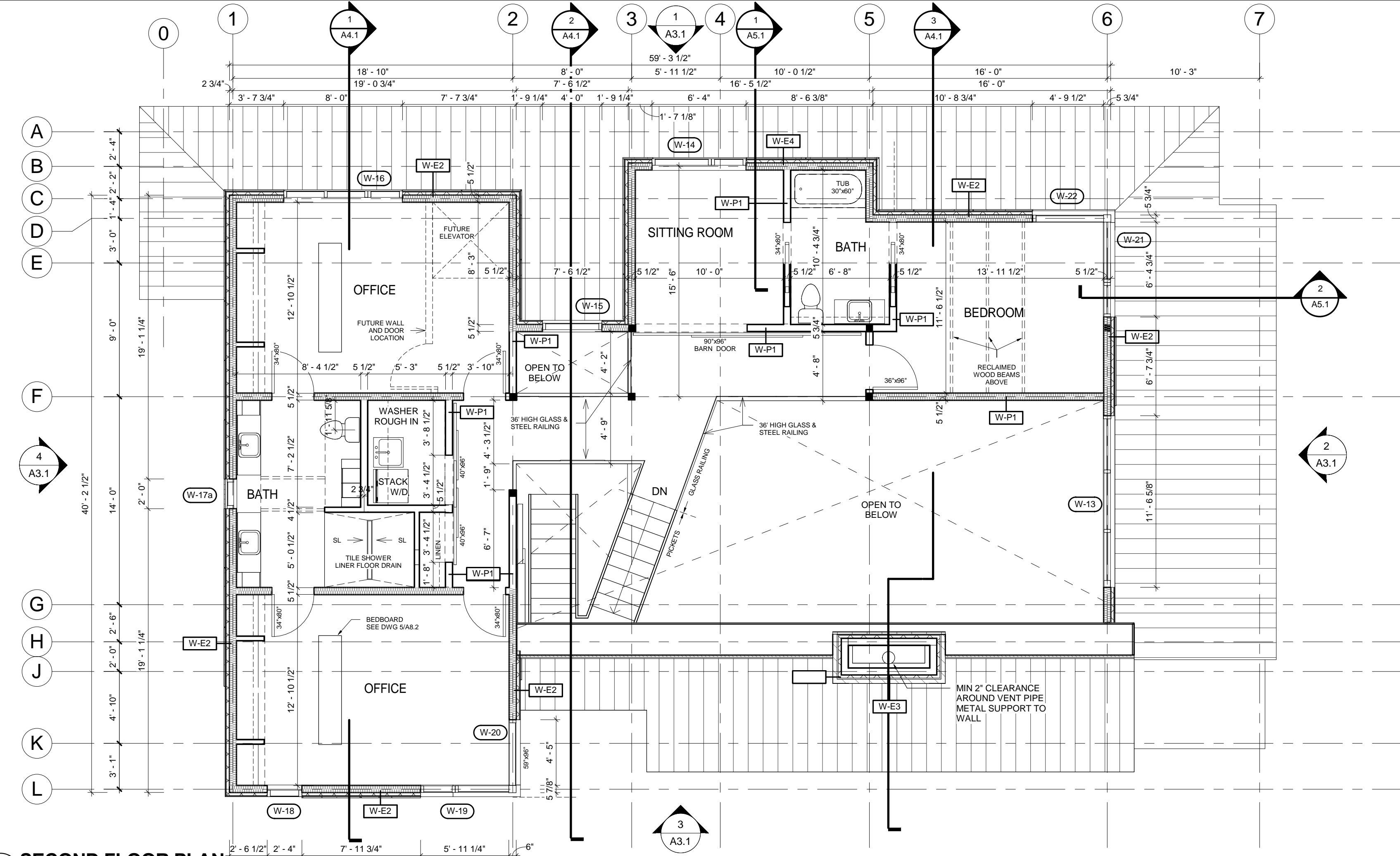
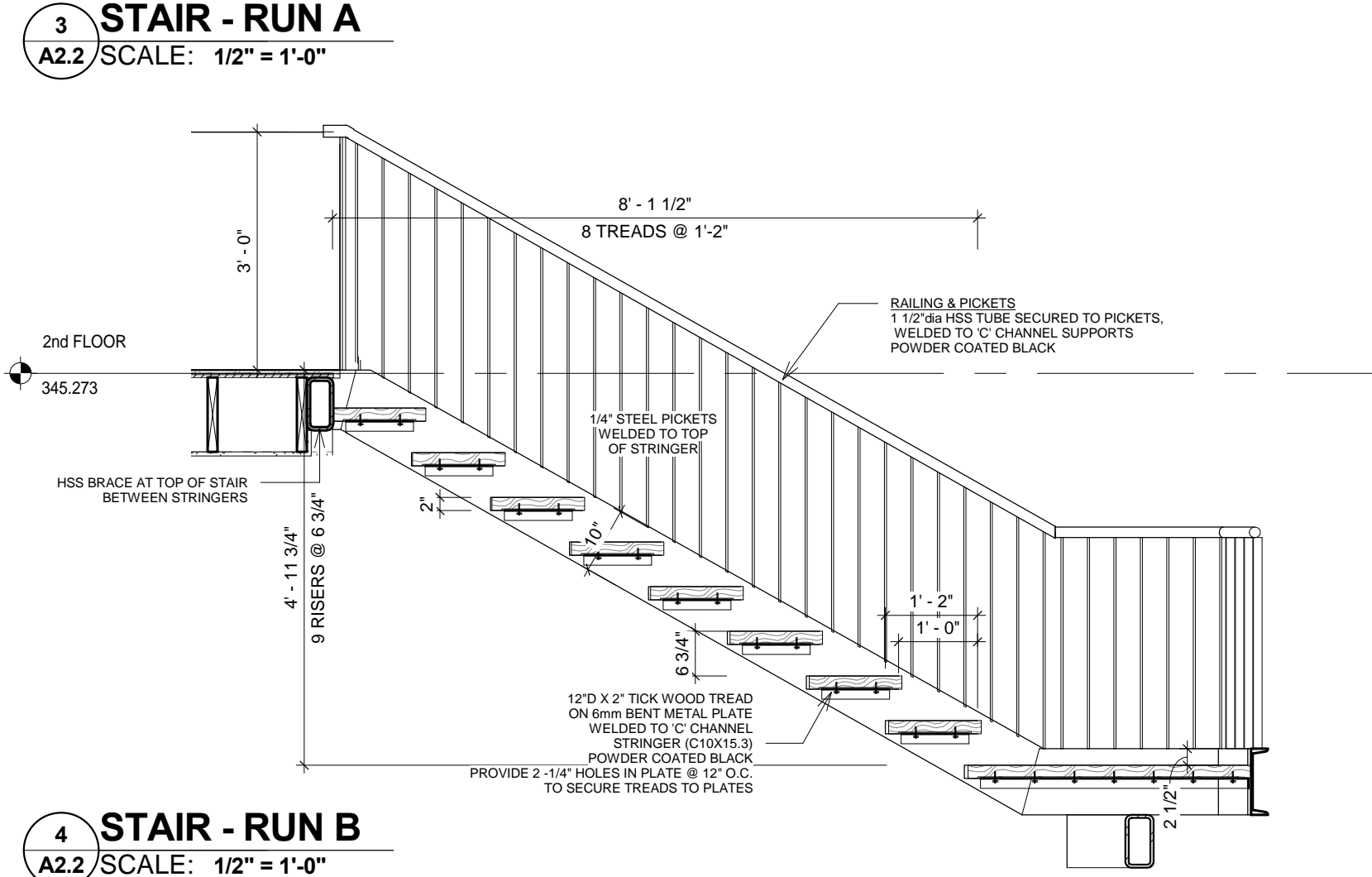
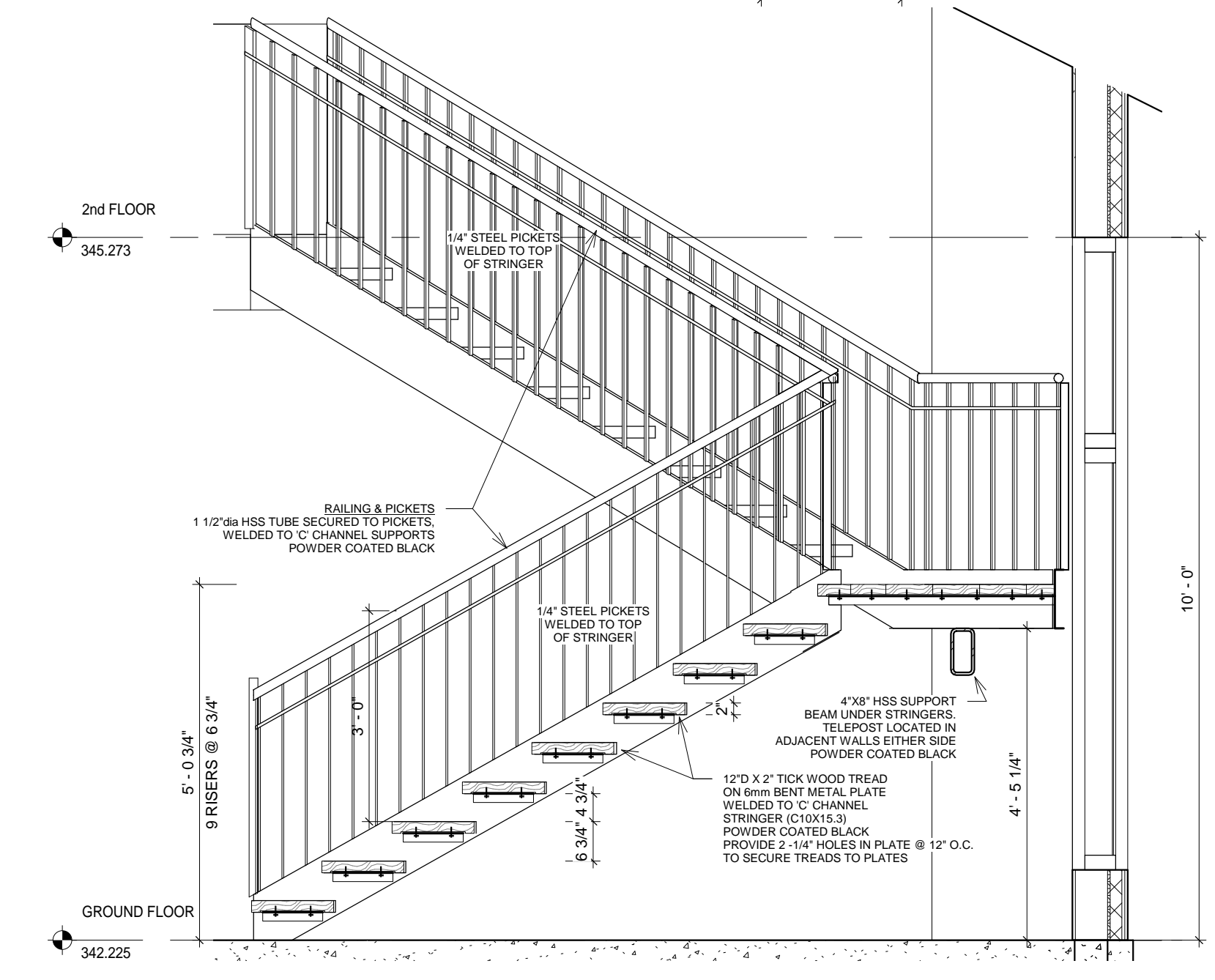
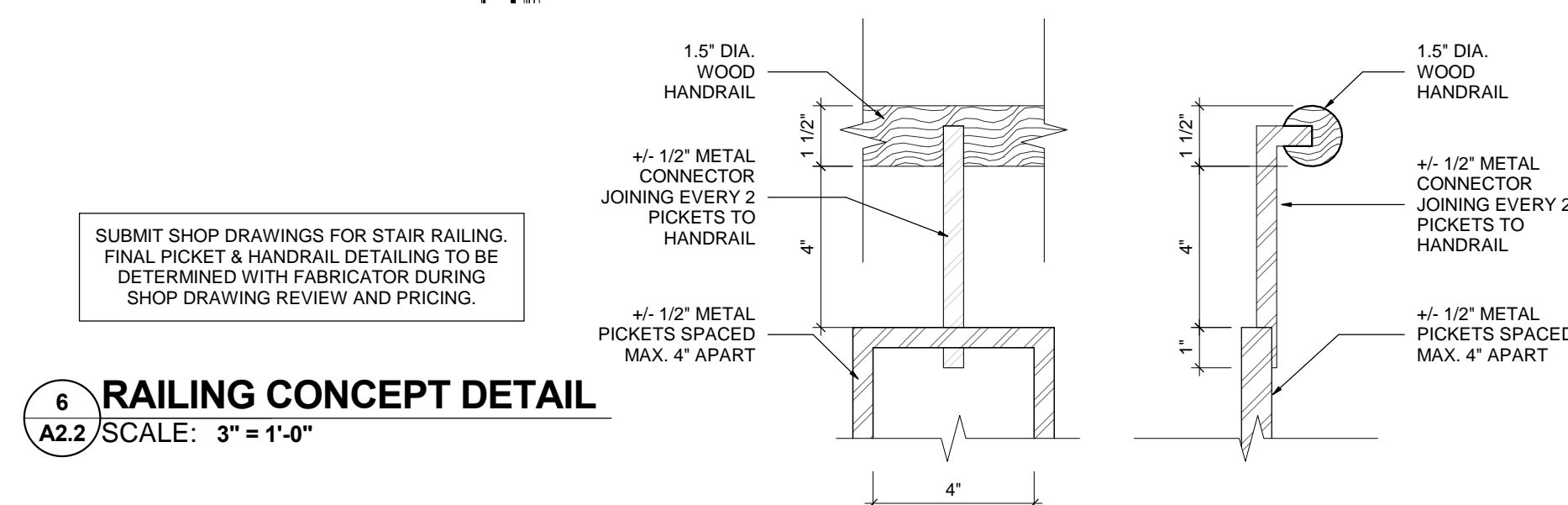
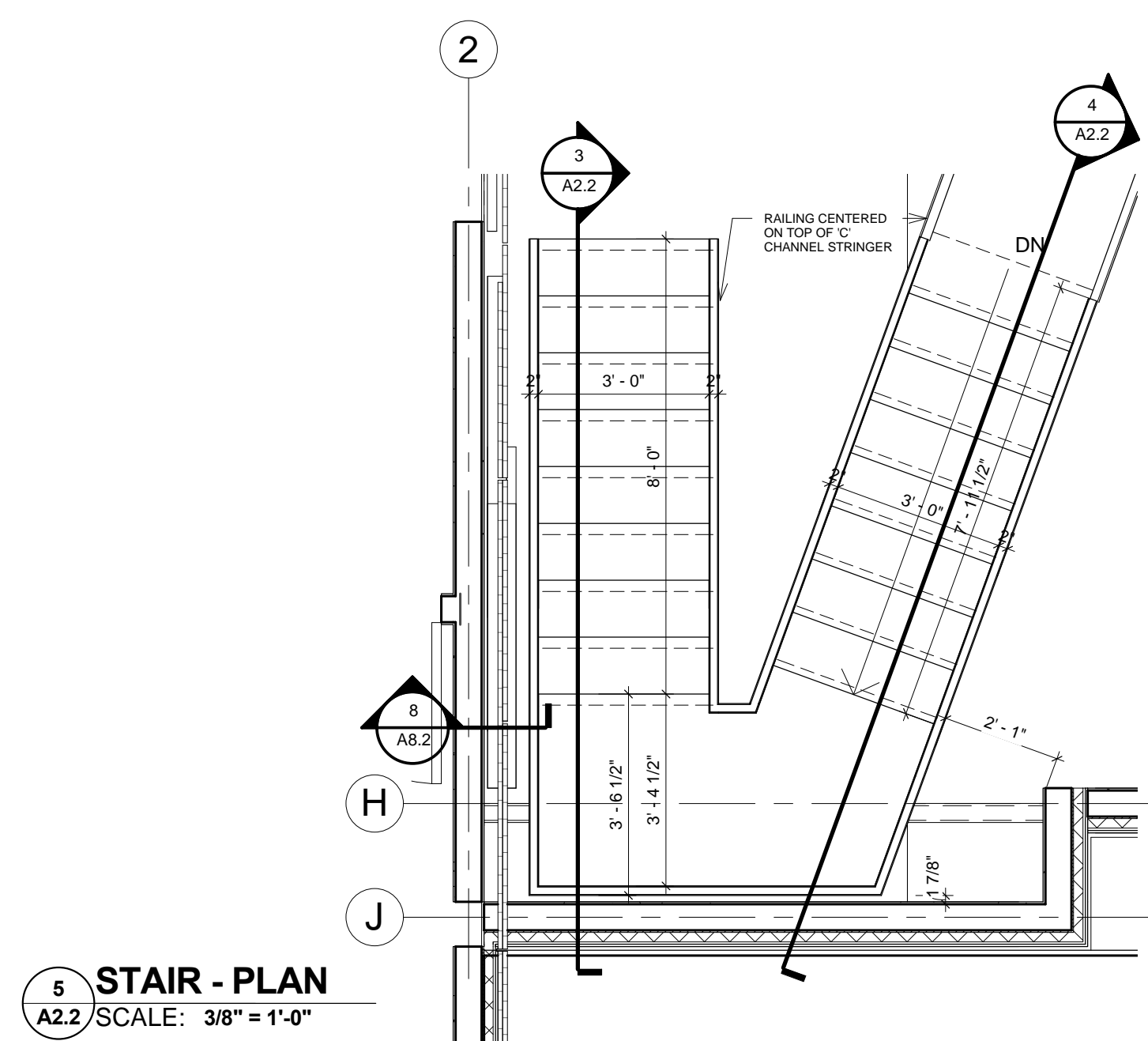
**TREVOR & MARTHA GROVE**

44320 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE:

**FOUNDATION & MAIN FLOOR PLANS**

DATE: 10/03/12	DRAWING NO.:
SCALE: As indicated	<b>A2.1</b>
DRAWN: Author	
STATUS: CONSTRUCTION	
JOB NO.: 1511	



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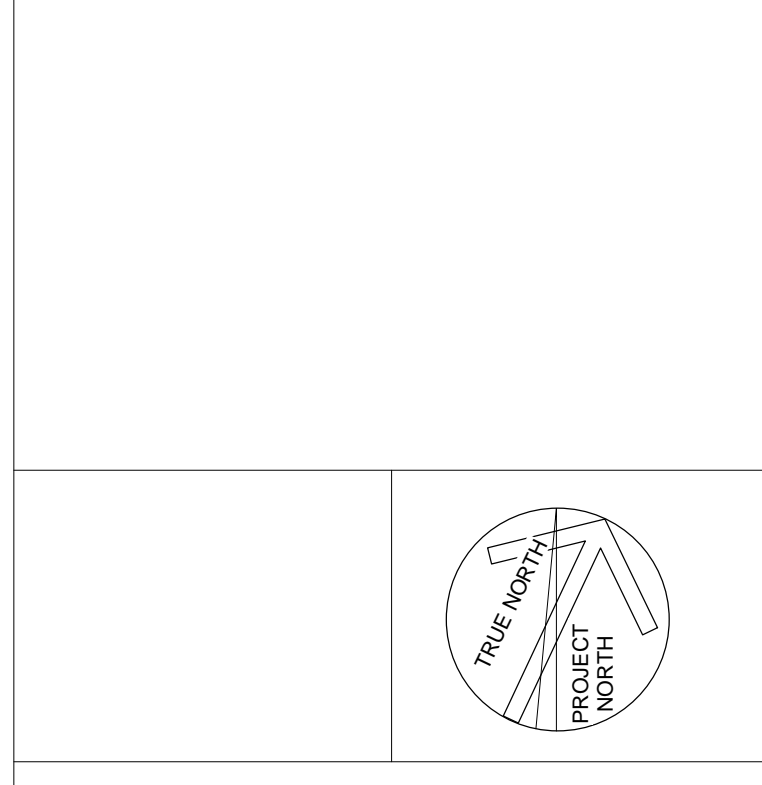
NO.	DATE	ISSUED:
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**ENERGY EFFICIENCY REQUIREMENTS AS PER ONTARIO BUILDING CODE**

- S2-12 PRESCRIPTIVE METHOD PACKAGE E TO BE USED
- ROOF INSULATION TO BE: ATTIC MIN. R50, NO-ATTIC=R31
- WALL INSULATION TO BE MIN. R22
- BASEMENT WALL INSULATION TO BE MIN. R20
- FORCED AIR FURNACE TO HAVE MIN. EFFICIENCY AFUE RATING OF 78%, PROVIDE COPY OF SPECIFICATIONS TO THE DESIGNER
- HRV or ERV UNIT TO BE MIN 70% EFFICIENT
- DOMESTIC WATER HEATER TO HAVE MIN. EFFICIENCY EF RATING OF 0.67, PROVIDE COPY OF SPECIFICATIONS TO THE ARCHITECT
- WINDOWS AND GLASS DOORS TO HAVE MIN. U-VALUE OF 0.29 (1.6 U-VALUE), PROVIDE COPY OF SPECIFICATIONS TO THE ARCHITECT
- ARCHITECTURAL WOOD MEMBERS, ASSEMBLIES AND FASTENERS ARE DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH CSA STANDARD CAN/CSA-086.1-M89 AND COMPLY IN ALL RESPECTS TO THE LATEST EDITIONS OF THE NBC & OBC
- STRUCTURAL LUMBER TO BE GRADE MARKED TO CONFORM TO CSA STANDARD O141 - ALL TIMBER TRUSSES, STUDS, JOISTS AND BRIDGING SHALL BE SPF #2 MINIMUM UNLESS OTHERWISE NOTED
- LUMBER SHALL BE GRADE STAMPED ACCORDING TO NLGA STANDARD GRADING % OR LESS RULES AND BE KILN DRIED TO 19
- ROOF SHEATHING: SPRUCE CSA 0153-1978 CDN SOFTWOOD PLYWOOD EDGES SUPPORTED W METAL H CLIPS
- WALL SHEATHING: 7/16" WAFER BOARD CAN-01332.2 - FLOOR SHEATHING: 5/8" DOUGLAS FIR VENEER CORE CSA 0121-1973, TONGUE AND GROOVED, GLUE AND SCREWNAIL AT 8" O.C.
- PROVIDE FIRE RATED PLYWOOD BACKER BOARDS FOR ELECTRICAL PANELS
- WOOD ROOF TRUSSES: CAN/CSA-086.1-M89, OBC NBC, CSA S307-M180 LOAD TEST PROCEDURE, IDENTIFY LUMBER BY GRADE STAMP, SUBMIT SHOP DRAWING BEARING STAMP OF P. ENG. TO DESIGNER FOR REVIEW BEFORE FABRICATION, DO NOT CUT OR ALTER ON SITE, INDICATE FIELD ANCHORAGE.
- THE TRUSS SUPPLIER AND MANUFACTURER MUST BE AN ACCREDITED MEMBER OF THE ONTARIO WOOD TRUSS MANUFACTURERS ASSOCIATION (OWTA), DEMONSTRATING QUALITY CONTROL, IN MANUFACTURING, HANDLING & DELIVERY
- CSA A82.2-M1977, INSTALLATION CSA A82.3-M1977
- 1/2" GYPSUM BOARD TO BE USED IN ALL AREAS
- 1/2" CEMENT BOARD TO BE USED AT SHOWER AND TUB LOCATIONS

**INSULATION**

- PERIMETER FOUNDATION: EXTRUDED EXPANDED POLYSTYRENE CAN/SCS8-51-20-M
- WALL: PREFORMED INSULATION OF ROCK OR SLAG, TO CSA A101, ROCKWOOL MINERAL WOOL INSULATION OR SAFB BATT INSULATION FROM FIBREX INSULATION INC.
- CEILING: MINERAL WOOL R50, PROVIDE SOFFIT VENTS AT EAVES AND AS SHOWN MORVAL-DUROFOAM MORVENTS 1 PER TRUSS
- AIR VAPOUR RETARDER: CAN2-51-33-M TYPE 1, 6 MIL SUPER POLYETHYLENE FILM
- CUT AROUND OBSTRUCTIONS, PROVIDE CONTINUOUS COMPLETE AIR VAPOUR BARRIER AND THERMAL BARRIER, TAPE OR SEAL LAP AIR VAPOUR RETARDER JOINTS
- FILL ALL VOIDS AROUND WINDOWS WITH FOAM URETHANE INSULATION
- EXTERIOR AIR BARRIER ON WOOD FRAMED WALLS TO BE "TYVEK", INSTALLED AS PER MANUFACTURERS SPECIFICATIONS.



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PROJECT:  
**TREVOR & MARTHA GROVE**  
443202 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE:  
**SECOND FLOOR & ROOF PLANS**

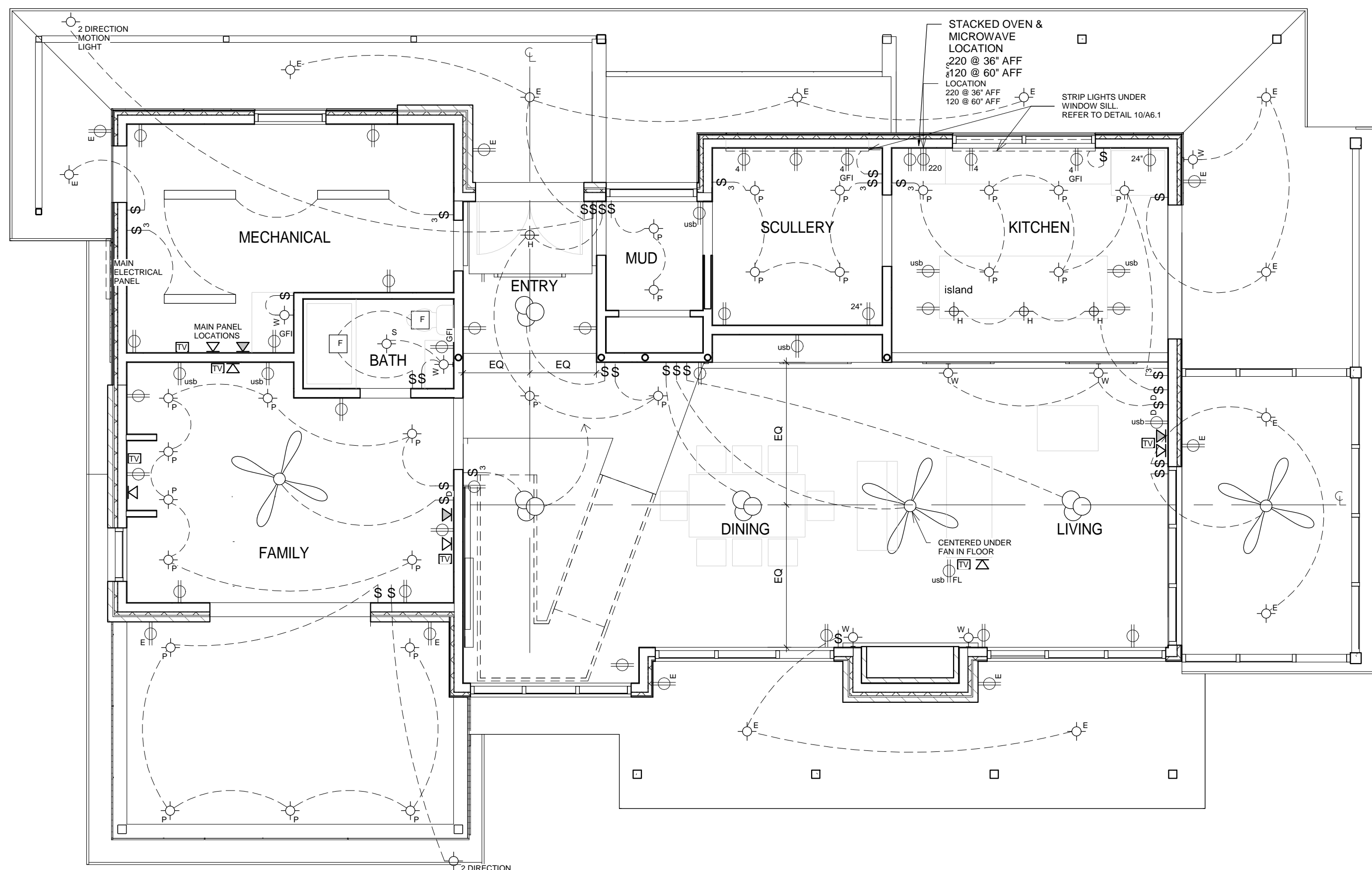
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SCALE: As indicated  
DRAWN: Author  
STATUS: CONSTRUCTION  
JOB NO.: 1511

**A2.2**

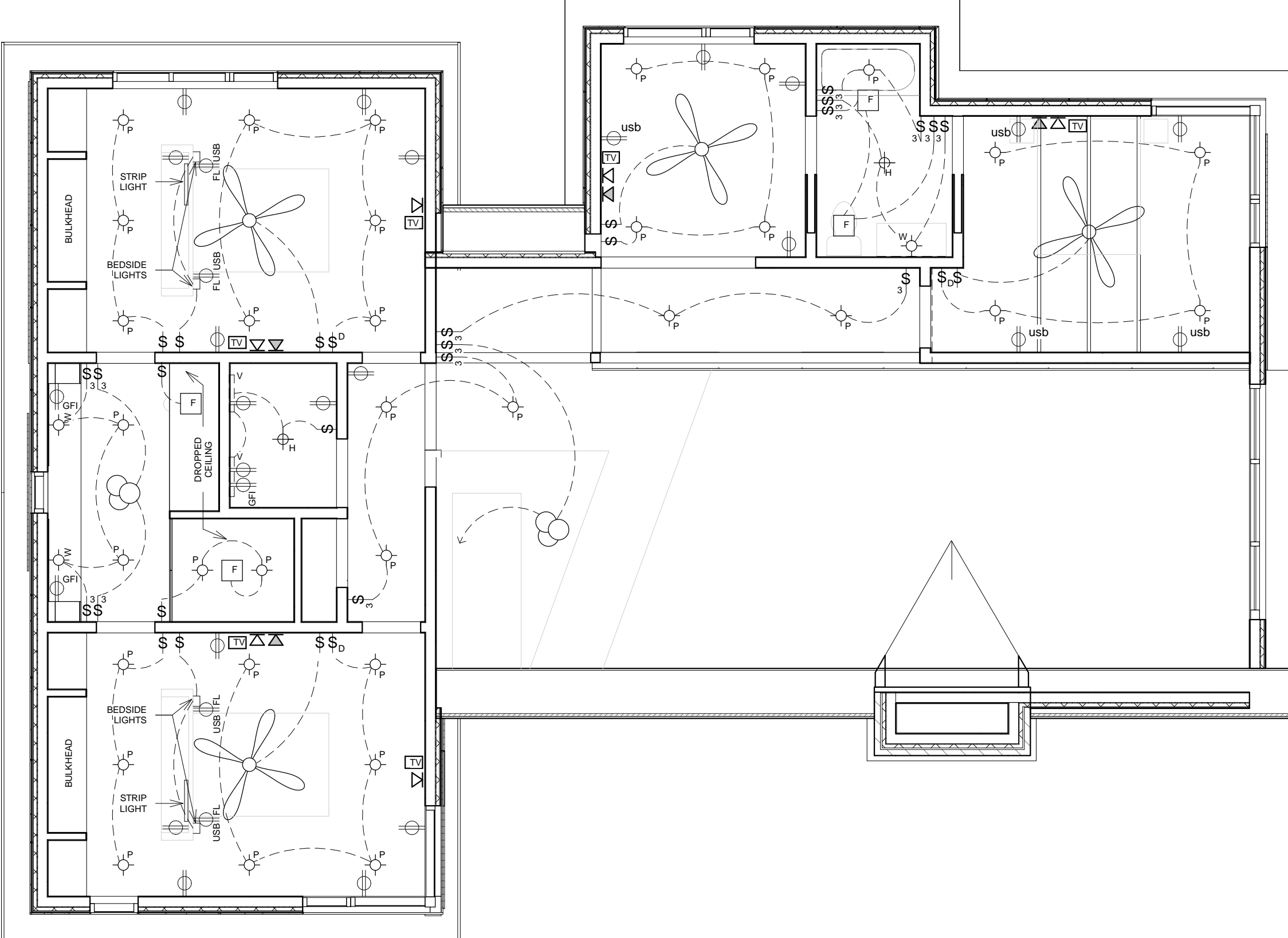
NOTE:  
INSTALL SINGLE LAYER OF WATERPROOF WATERSHIELD MEMBRANE ON ENTIRE ROOF. INSTALL SECOND LAYER IN HATCHED AREAS.

**Electrical Specifications**

1.1	<b>General</b> Supply and install all wiring, equipment, etc., shown or required unless otherwise specified. Any item or system which is shown, mentioned or reasonably implied on either the drawings or in the specifications shall be considered to be properly and sufficiently specified and shown, and must be provided. Include all labour, equipment, tools, etc., required to complete all installations as intended. Conform to requirements of bidding documents and division 1.	8.16	Provide (2) weeks advance notice to the owner or engineer regarding any planned power outage.
2.1	<b>Scope of work</b> Determine the full scope of the work by referring to all drawings and specifications. Any questions are to be directed to the engineer prior to bidding the work.	8.17	Obtain an ESA certificate of inspection upon completion of the project and provide copies to the owner and the engineer.
2.2	Any errors or omissions in the drawing or specifications must be reported to the engineer prior to bid closing. Failure to do so will relieve the contractor from completing the job as intended or meeting the intent of paragraph 3.1.	8.18	All equipment and installation methods shall be suitable for the area classification. If in doubt, the engineer must be notified for direction prior to work proceeding.
2.3	Deviations for any reason must be approved by the engineer in writing. Any non-approved deviations shall be the responsibility of the contractor.	9.1	<b>Lighting</b> All Lighting will be CSA approved residential grade lighting purchased by owner and turned over to contractor for installation. Verify all locations / mounting heights / mounting styles prior to rough-in.
2.4	Perform all work in such a manner so as to cause as little disturbance or inconvenience as possible to the existing operations of the owner. Provide temporary measures as appropriate to the situation or as required from time to time by the owner or the engineer.	9.2	Electrical contractor to provide all pot lights. Pot lights to be 3" LED residential dimmable pot lights, minimum 80V. Ensure that all provided dimmers are listed as compatible by manufacturer.
2.5	All work must be coordinated with work of all trades to ensure proper and complete installations. Where integration of work is required with other trades, notify all trades with requirements for openings, sleeves, inserts and other hardware necessary for a complete installation. All work is to be carefully coordinated. Any modifications, repairs, or extra work due to lack of coordination is the responsibility of the contractor. Properly plan all routing and locations of services with other trades. All routing and locations on drawings is general and will require field investigation to establish exact routes. If in doubt, contact the engineer prior to performing the work.	9.3	The contractor shall ensure that both recessed and surface mounted lighting fixtures mounted as part of a suspended ceiling system are adequately supported. Fixtures must be suspended from the building structure and not from the ceiling deck unless otherwise specified by the engineer. Fixture safety chains if required shall be installed in an approved manner.
2.6	Co-ordinate noisy work with other trades to minimize noise disturbances.	9.4	Contractor shall coordinate installation of light fixtures with mechanical equipment, sprinkler heads, and other devices. Any significant conflicts must be reported to the engineer for direction.
2.7	Schedule work at times approved by owner.	9.5	Switching arrangements have been depicted on the drawings showing the desired functionality. In moving switches and fixtures to meet this, the contractor shall not compromise the operation of existing lighting and switching functions.
2.8	Protect and properly store all equipment and materials on site from damage. Safe storage is the responsibility of division 16 contractor. Contractor shall repair or replace damaged equipment etc. at the discretion of owner.	9.6	Neutrals on lighting circuits shall not be shared between circuits. The contractor shall ensure that the maximum number of fixtures or wattage per circuit complies with the OESC.
2.9	Engineer shall have access to work at all times and shall be notified at appropriate stages of the work. Where work does not comply with standards or work specified or implied, the deficiency shall be corrected as directed by engineer. All subsequent testing to verify operation or performance shall be at contractor's expense.	10.1	<b>Service and distribution</b> Provide all labour and materials to relocate, alter, extend the electrical service and distribution system if so required, and as shown on the drawings to meet the requirements of the project. Co-ordinate with all utility supply authorities and electrical inspection authorities to ensure that the new service meets all utility and electrical code requirements.
3.1	Provide all work and materials in accordance with the latest editions of the Ontario electrical safety code, the Ontario building code, and all applicable municipal and provincial codes and regulations. Any materials, equipment or installations not meeting all requirements of the appropriate regulatory agencies will not be accepted. It is the contractor's responsibility to ensure these requirements are met and provide evidence of such.	10.2	Update any panel or breaker schedules to reflect changes and additions. Panel directories shall be prepared on a computer in Microsoft Word format, font shall be sans-serif, 12pt, listing each breaker designation, breaker size, and item the breaker feeds. Provide 1 printed and laminated copy to be permanently fixed to the panel, a plastic sleeve permanently fixed to the panel containing 2 additional printed copies.
3.2	Obtain and pay for all permits for the execution and inspection of the electrical work. All work shall be performed by qualified journeyman electricians or apprentices holding valid Ontario certificates of qualification and be supervised by a competent foreman. The contractor shall also be a registered master electrician if such is required in the particular municipality where the work is being performed. ESA certificates verifying that the installation and equipment meets all applicable inspections shall be presented to the engineer.	10.3	All panels shall be of a type to accommodate current and voltage as indicated on the drawings and sized to accommodate branch circuit breakers and spaces as shown on the panel schedules. Provide locking doors for all panels.
3.3	The contractor must carry proper and adequate liability insurance to protect both himself, the engineer, and the owner from all claims related to his work for this project.	10.4	All moulded case breakers shall be of a bolt-on type rated a minimum of 10ka-sym interrupting capacity at 240 volts, unless otherwise specified on the drawings. The exact short circuit requirements must meet electrical safety authority requirements and may exceed the previously mentioned values. Verify requirements with hydro one and Generator manufacture prior to ordering.
4.1	Products listed and/or specified on contract documents are selected to establish design standards. Acceptable equal manufacturers are listed in most cases. Ensure products supplied are equivalent to specified products. The use of Alternate products may be proposed to engineer for acceptance prior to closing of bids with complete listing of credits. Any proposed changes initiated by contractor after award of contract may be considered by the engineer at the engineer's discretion. Costs for such changes if approved by engineer and costs associated with review by	10.5	Any branch circuit breakers used to switch lighting load shall be rated as switching duty breakers.
4.2	Provide a written guarantee which covers all materials and installation of this division for this project. The guarantee shall extend for a period of at least one year from the date of final acceptance of the work by the engineer. Where defects occur contractor shall be responsible for all costs incurred in making defective work good including repair or replacement of building finishes, other materials, or damage to other equipment caused by such defects, or by subsequent replacement or	10.6	Connect all single phase loads such that there is the least amount of phase imbalance.
4.3	Carefully examine the site and contract documents for the work prior to bidding. Visit the existing building or site and become familiar with the scope of work to be performed. Anything that is unclear or appears to be deficient must be brought to the attention of the engineer during bid period. No extras will be allowed for anything which would have been discovered in the course of such an examination.	10.7	The contractor shall supply all fuses and other protective devices required to deliver a working system. The contractor shall set any adjustable protective devices to meet the requirements of the electrical safety authority.
4.4	Contractor shall declare in his bid submission any instance where he has not fully complied with the drawings and specifications. If no declaration is made, it will be assumed that the contractor agrees with and will fully comply with the drawings and specifications.	10.8	Prime and paint all exposed raceway and boxes, etc. to match existing the colour scheme or as specified by the architect.
4.5	Alternative methods to improve the quality of the job or provide cost savings are encouraged but must be listed in the bid submission as options with a separate price adjustment.	10.9	Run all concealed and surface mounted raceway in a neat manner at right angles to building lines so as to clear all obstructions.
5.1	<b>Equipment, materials and methods</b> All items installed must be CSA and/or ULC and/or electrical safety authority approved for the particular application. All work and installation must be acceptable to the equipment manufacturer or system supplier and be approved by the electrical safety authority. All materials specified with the manufacturer's name, type, etc., are to establish type and quality of materials. Other manufacturers may be used, but only after obtaining written approval from the engineer. Unless otherwise specified, used or re-furnished equipment and material shall not be used.	11.1	<b>Wiring for other trades</b> Provide all power and control wiring as well as disconnect switches and associated equipment required by the other trades in the execution of the project. The contractor shall refer to the drawings and specifications of this division as well as all other divisions of the specifications to determine the actual requirements of all other trades. Any questions or areas of concern should be addressed to the engineer prior to bid closing. Any question after that time shall be answered by the engineer but any additional costs shall be the responsibility of the contractor.
6.1	Mount equipment as close to practical to the location shown on the drawings taking into account site conditions. The engineer reserves the right to relocate any fixture, outlet, equipment, etc., up to 10 feet prior to installation without incurring any extra cost. If in doubt notify the owner prior to proceeding.	11.2	Provide connections c/w breakers / wiring for the following mechanical equipment. VERIFY ALL BREAKERS SIZES / WIRING REQUIREMENTS with Plumbing / HVAC installers / owner prior to rough-in. Provide disconnect at all equipment.
6.2	Ensure all outlet boxes installed in the vicinity of a building vapour barrier are installed with vapour barrier protection integral with the specific wall or ceiling construction. For each applicable outlet box, provide an appropriately sized Hubble or equal vapour barrier box surrounding the outlet box to seal all air leaks and maintain vapour barrier continuity.	11.3	HRV1 (120V, 15A)
6.3	Use only approved conduit and raceways of adequate size to suit types and number of conductors being carried. Every section of conduit or armored cable shall be adequately secured per the OESC using approved supports, clamps and fasteners. Conduit or armored cable run in finished areas shall be concealed in walls, ceilings or furring unless otherwise approved by the engineer.	11.4	HRV2 (120V, 15A)
6.4	Use type T90 or RW90 building wire rated at the service voltage and approved for the particular installation for all wiring in conduit or raceways unless otherwise specified. Use only copper conductors. Each lighting fixture shall be individually connected to the circuit junction boxes. Direct connection between fixtures is not allowed. Join all conductors using approved solderless wing nut pressure connectors. All circuits to be supplied with individual neutral wires sized accordingly. "Romex" is acceptable from main panel to devices in residence with wood construction.	11.5	Water Heater (120V, 15A)
6.5	Generally receptacles / switches / devices in Residential areas to be "Decora" style white c/w white unless otherwise specified.	11.6	Water Softener (120V, 15A)
6.6	Switches / manual disconnects for motors / equipment to be standard white (not Decora) c/w steel cover plates to match utility boxes. Receptacles in garage to be white c/w steel utility cover plates to match boxes / utility boxes.	11.7	Motorized Damper
6.7	Provide 50 Leviton USB receptacles c/w 2 USB ports capable for providing 2A on each.	11.8	Four (4) Power Operated Windows + Associated Controls
6.8	Coordinate location of USB Receptacles on site.	11.9	Geothermal Heat Pump (240V, 50A)
6.9	Label all junction boxes with black marker identifying circuits, panels and systems.	11.10	Four (4) Geothermal Circ Pumps (120V, 15A)
6.10	Provide all necessary grounding as required by the OESC, the electrical safety authority and the local supply authority regardless of whether it is shown on the drawings. All conduits must carry an insulated green ground conductor sized per the OESC.	11.11	Four (4) Infloor heating manifolds (120V, 15A)
6.11	In general, all necessary cutting and patching for the electrical work will be provided by the appropriate sub-trade at the expense of the electrical contractor. Holes through exterior walls and roof are to be flashed and made weatherproof. Repair any damage caused by the electrical trade to existing buildings or equipment, etc. to the engineer's satisfaction. Upon completion of the work, clean all equipment and remove from the site all debris associated with the electrical trade.	11.12	Well Pump (240V, 20A)
6.12	Provide legible signs and barriers on or around all live panels and outlets during construction to prevent injury or shock. Contractor shall comply with P.S.A. 7462, Provide all sleeves, inserts, and hangers required for the electrical work. All sleeves or holes piercing noted acoustical separations, private office walls, meeting room walls, etc for to be packed with acoustical insulation and sealed at both ends with acoustical caulking. Patch all openings around installations of this division	11.13	Provide relay to allow remote operation of Power Operated windows, interlocked with motorized damper. See wiring diagram on drawings.
6.13	Label all new distribution equipment, including but not limited to panels, cabinets, starters, contactors, disconnect switches, etc., with industrial grade weatherproof printed self-adhesive vinyl labels. Label to be black text with white background, text height to be 1/2" (-36 point), sans-serif font. Re-label any existing equipment feeding new equipment where label has faded or been damaged. Label to list equipment designation, voltage, max fuse size (if applicable), and source.	12.1	<b>Communication Wiring (Coax / CAT6)</b> Electrical contractor to provide RG6 coaxial cable / and CAT6 Network c/w face plates and terminations at each location through-out house. Cables to be brought to electrical room communication back board and terminated in 48 position patch panel provided by contractor. All runs to be labeled. Cable to be run in walls. Group connecting into single communication box where possible. Coordinate exact location of all connections on site prior to rough-in.
6.14	Mark all new outlets indicating panel & circuit number, with industrial grade printed self-adhesive vinyl labels. Label to be black text with white background, text height to be 1/4" (18 pt), sans-serif font.	12.2	Provide 2 runs to room area for satellite connection. Provide 2" conduit from attic space to roof, c/w gosseneck weather cap. See drawing for approximate location and Coordinate exact location on site with owner.
		12.3	Provide 48"x48"x3/4" plywood backboard in Mechanical room to mount all patch panels and for owner communication Equipment.
		12.4	Provide recessed Outlet / Communication boxes at wall mounted TV locations. Coordinate exact location on site with owner. Typical of two locations.
		13.1	<b>Branch circuit Panelboards</b> Schneider electric "square d npod type" panelboard sized as indicated on the drawings. Panels are to be recessed vertical wall-mounted.
		13.2	Enclosure to be EEMAC 1, ansi-60 light gray colour, galvanized steel. Trim to be code-gauge steel, ansi-61 light gray finish applied by baked on polyester powder coating. Door to have rounded corners, concealed hinges and 130-degree swing, lockable, and be supplied with a type-written directory.
		13.3	Neutral bus to be included.
		13.4	Panelboards are to have a copper bus, as scheduled on the drawings. Ground bus to be copper.
		13.5	Provide full documentation and service manual and manufacturer's standard warranty.
		13.6	Generally acceptable Manufacture: Schneider, Cutler-Hammer, Seimens.
		14.1	<b>Electric heaters</b> Baseboard Heaters to be supplied and installed by electrical contractor. Manufacture, Wattage and Voltage as per drawings. Colour to be white unless otherwise noted. c/w external thermostat, group with wall switch unless otherwise noted. Where no switch is present, locate thermostat on wall beside door, opposite to hinges.
		14.2	Fan Forced Heaters to be supplied and installed by electrical contractor. Manufacture, Wattage and Voltage as per drawings. Colour to be white unless otherwise noted. c/w external thermostat, group with wall switch unless otherwise noted. Where no switch is present, locate thermostat on wall beside door, opposite to hinges.
		14.3	Acceptable manufacturers include Ouellet, Steipro & Chromalox.



**GROUND FLOOR RCP & ELECTRICAL PLAN**  
SCALE: 3/16" = 1'-0"



**SECOND FLOOR RCP & ELECTRICAL PLAN**  
SCALE: 3/16" = 1'-0"

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**ELECTRICAL LEGEND**

- ⊕ EXTERIOR GRADE LIGHT
- ⊕ POT LIGHT
- ⊕ HANGING PENDANT LIGHT
- ⊕ WALL LIGHT
- ⊕ UNDER CABINET VALANCE LIGHT
- ⊕ CHANDELIER
- ⊕ CEILING FANS
- ⊕ Variable Speed Fans with remote control
- ⊕ SINGLE SWITCH
- ⊕ SINGLE DIMMER SWITCH
- ⊕ 3 WAY SWITCH
- ⊕ DUPLEX OUTLET
- ⊕ DUPLEX OUTLET WITH USB PORT
- ⊕ WEATHERPROOF
- ⊕ GROUND FAULT FLOOR DUPLEX OUTLET
- ⊕ CEILING FAN
- ⊕ TV OUTLET (DOUBLE)
- ⊕ DOUBLE LINE TO EACH LOCATION
- ⊕ DATA OUTLET (DOUBLE)
- ⊕ DOUBLE LINE TO EACH LOCATION
- ⊕ PHONE OUTLET
- ⊕ CAT-5 Cabling

1	2012.07.xx	
NO.:	DATE:	ISSUED:

**MASRI O Inc. ARCHITECTS**  
101-609 KUMPF DRIVE  
WATERLOO, ON, N2V 1K8  
PH. 519.579.0072  
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PROJECT: NEW RESIDENCE

**TREVOR & MARTHA GROVE**

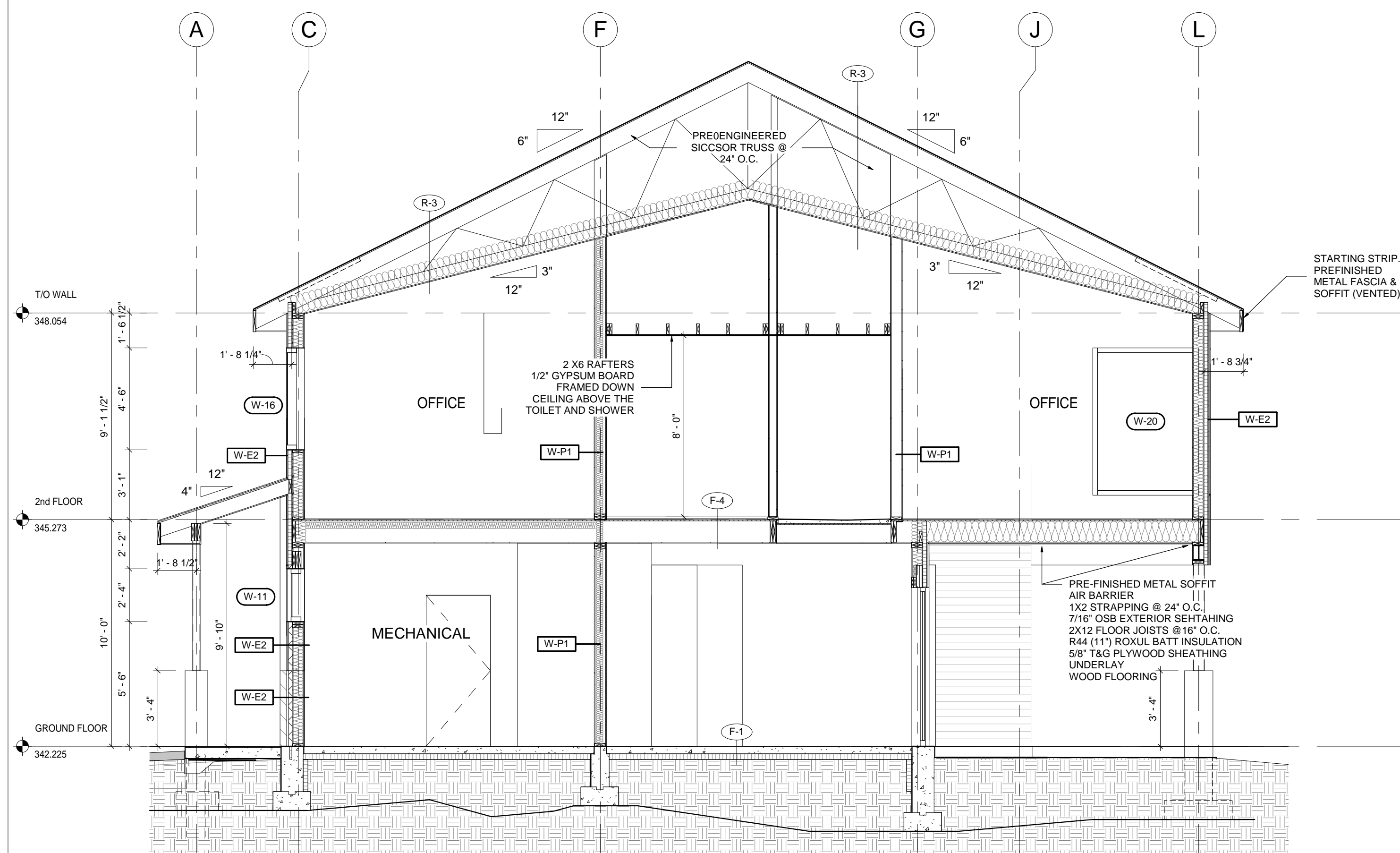
443202 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE: **CEILING & ELECTRICAL PLANS**

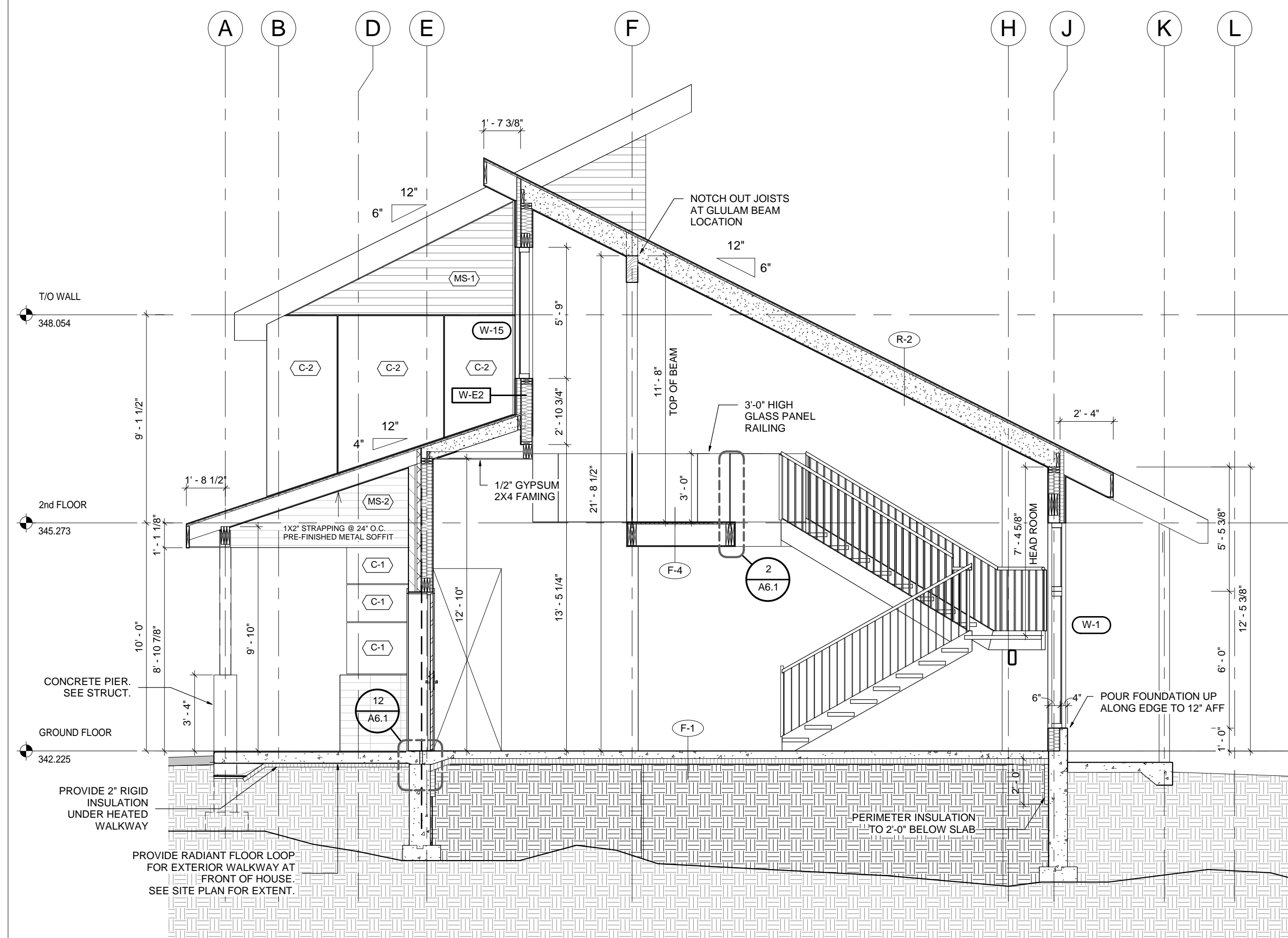
DATE:	10/03/16	DRAWING NO.:	
SCALE:	Approver		
DRAWN:	Author		
STATUS:	REVIEW		
JOB NO.:	1511		

A2.3

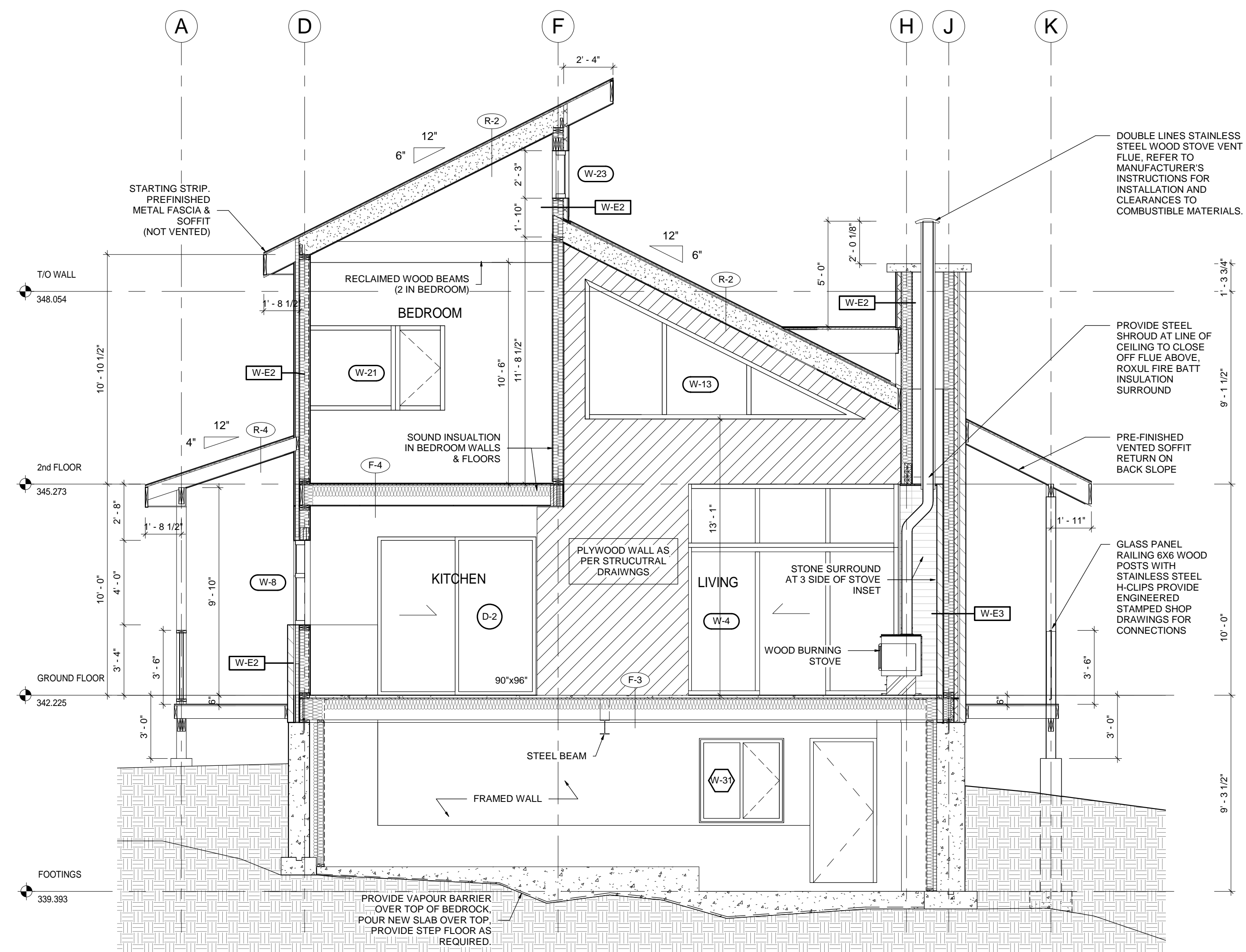




**1 BUILDING SECTION 1**  
 A4.1 SCALE: 1/4" = 1'-0"



**2 BUILDING SECTION 3**  
 A4.1 SCALE: 1/4" = 1'-0"



**3 BUILDING SECTION 2**  
 A4.1 SCALE: 1/4" = 1'-0"

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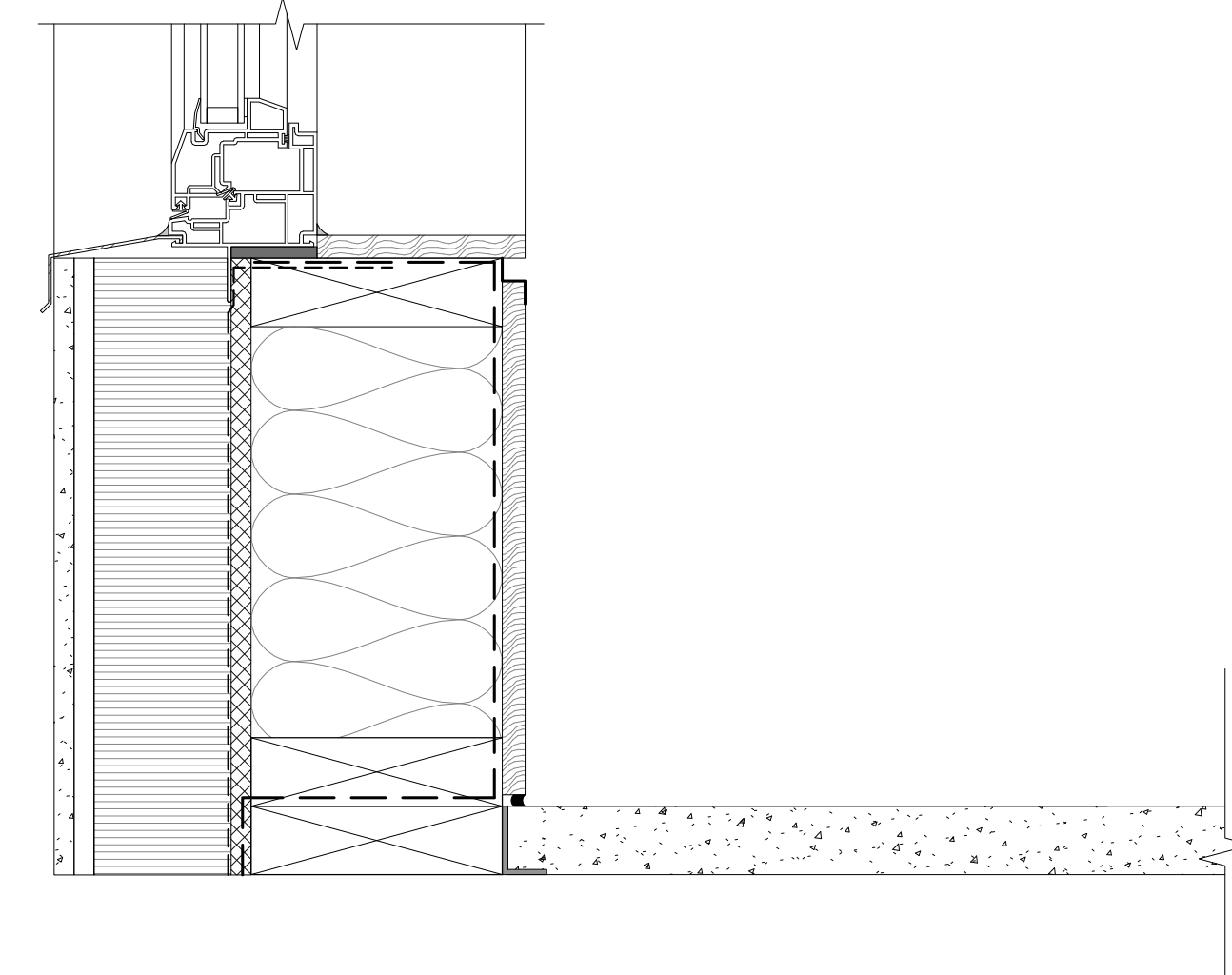
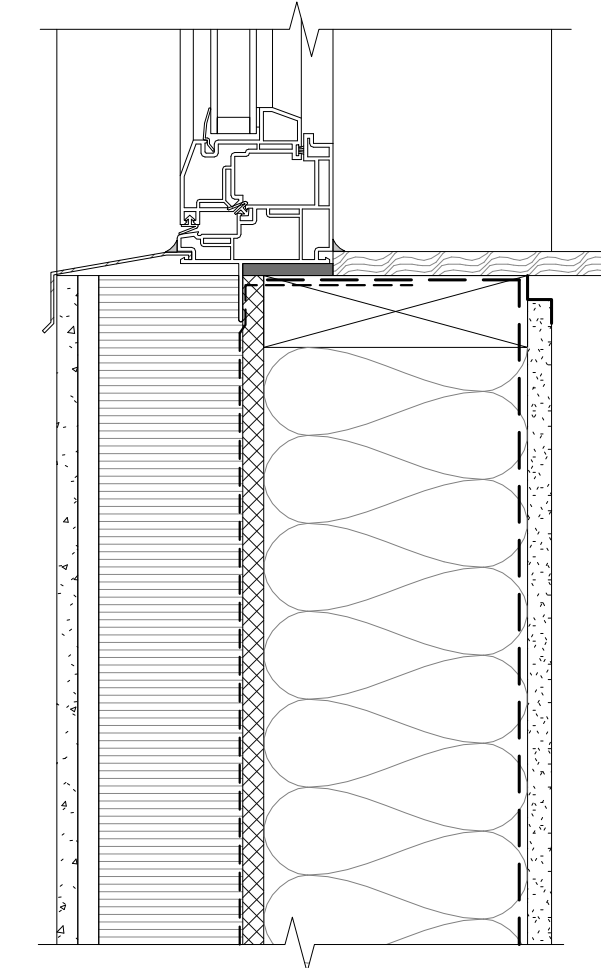
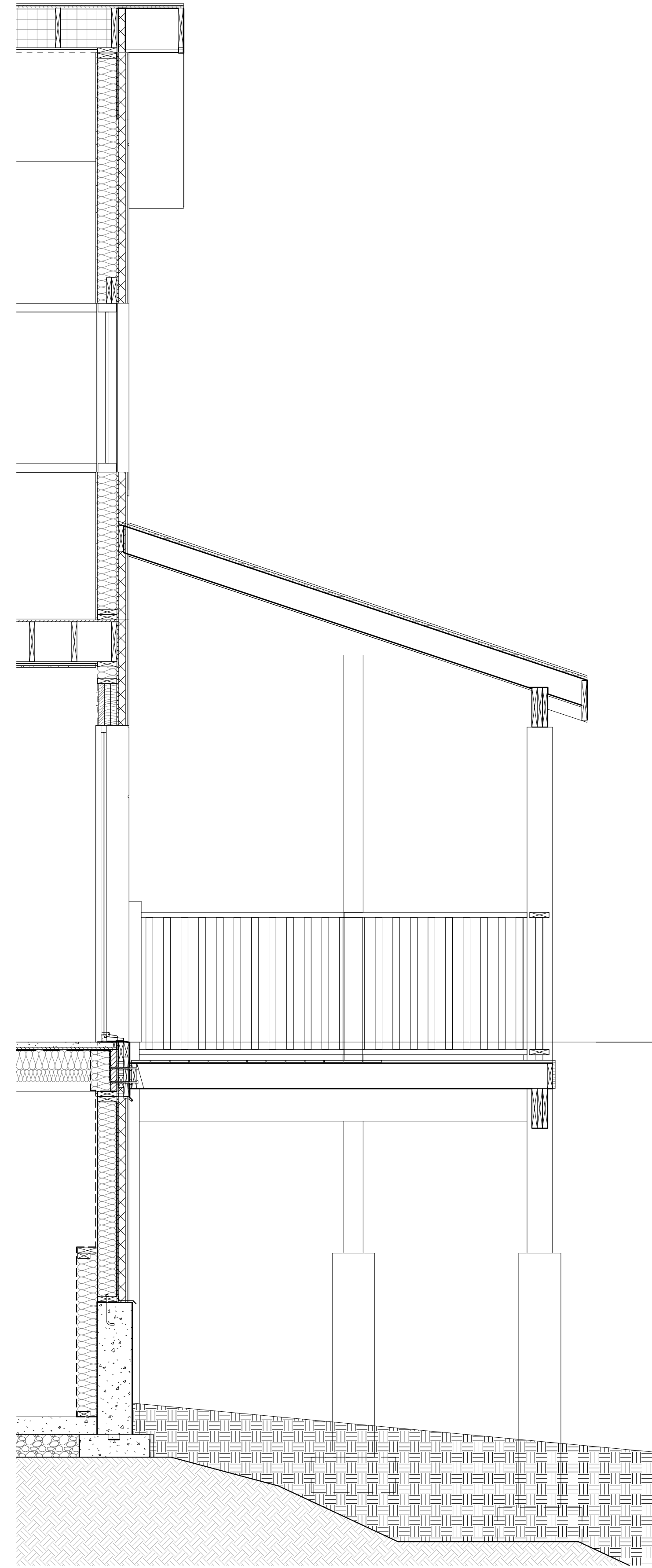
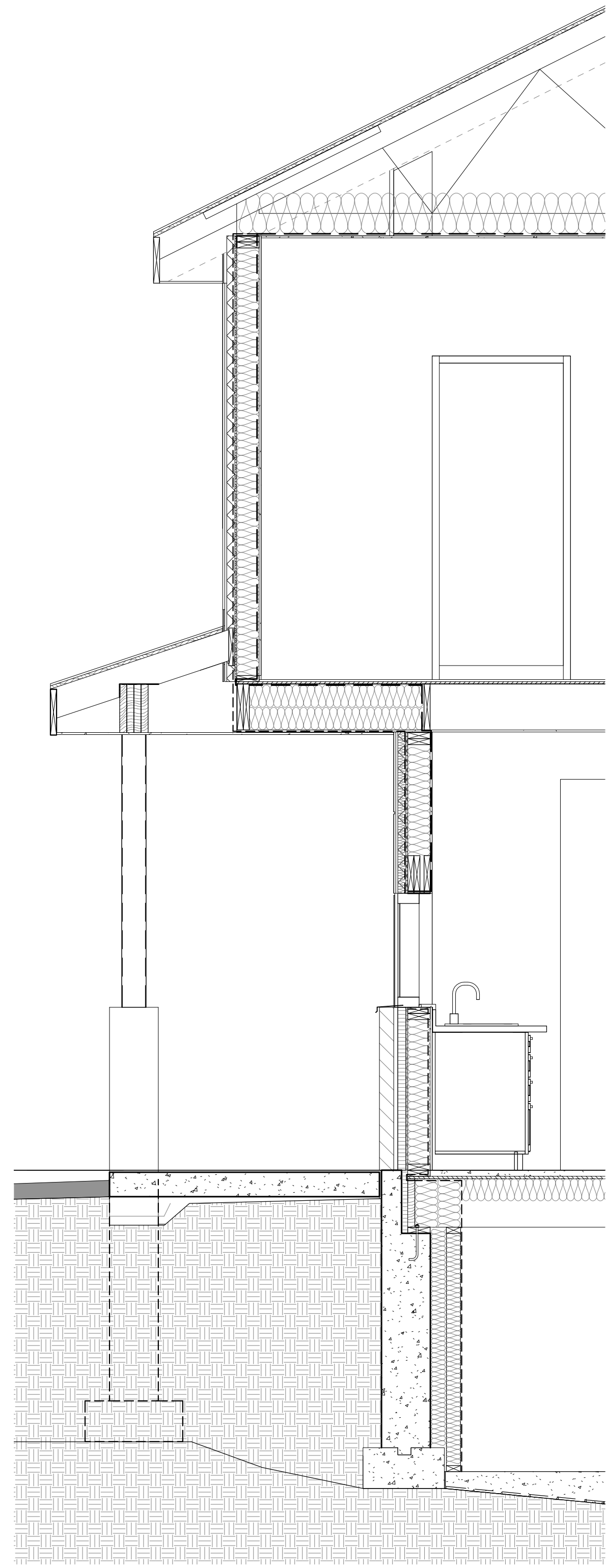
NO.	DATE	ISSUED:
1	2017.01.12	SVCA REVIEW
2	2017.02.08	BUILDING PERMIT
3	2017.06.16	FOUNDATION LAYOUT
4	2017.07.14	ISSUED FOR CONSTRUCTION

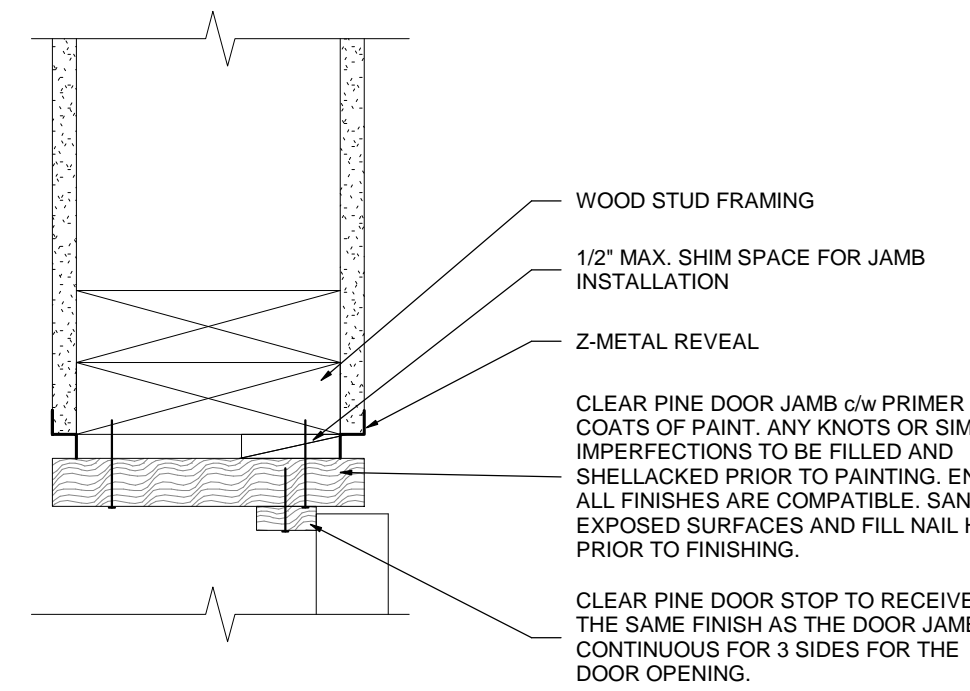


PROJECT:  
**TREVOR & MARTHA GROVE**  
 443202 McCORMICK'S SIDE ROAD  
 DURHAM, GREY COUNTY, ONTARIO

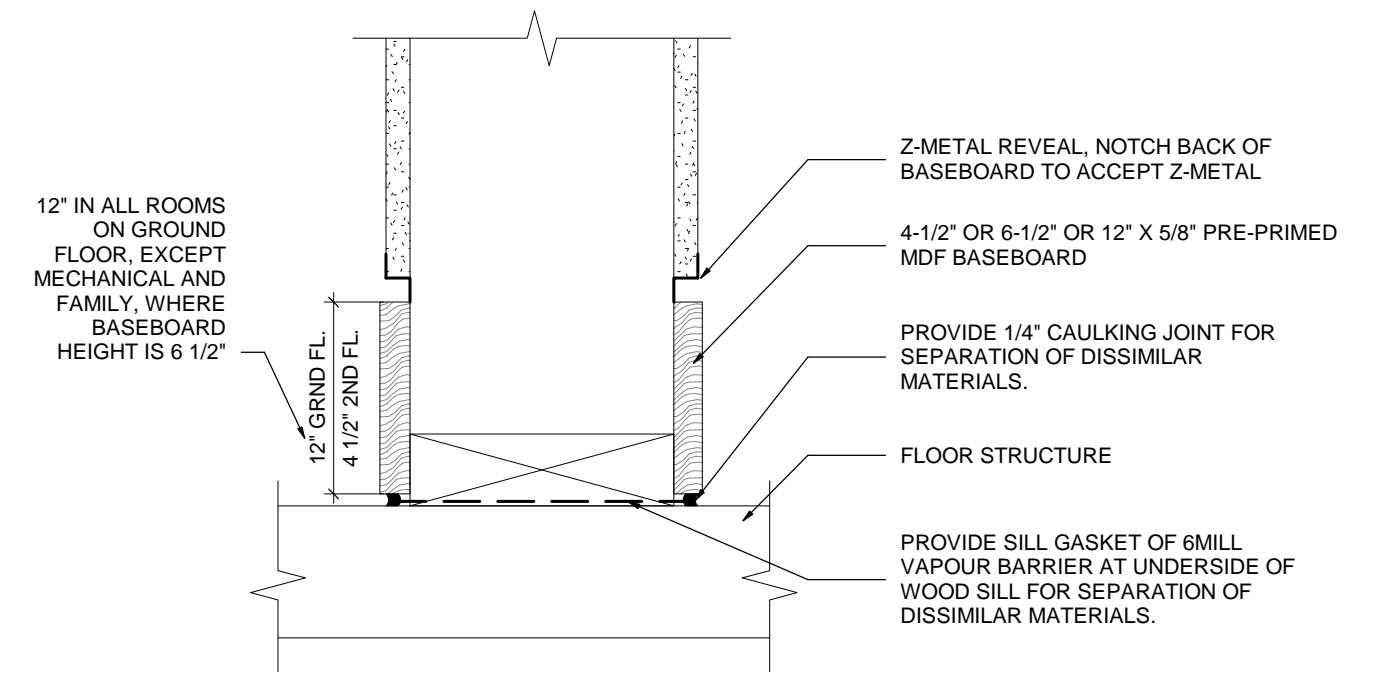
DRAWING TITLE:  
**BUILDING SECTIONS**

DATE: 08/09/11	DRAWING NO.:
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DRAWN: Author	
STATUS: CONSTRUCTION	
JOB NO.: 1511	

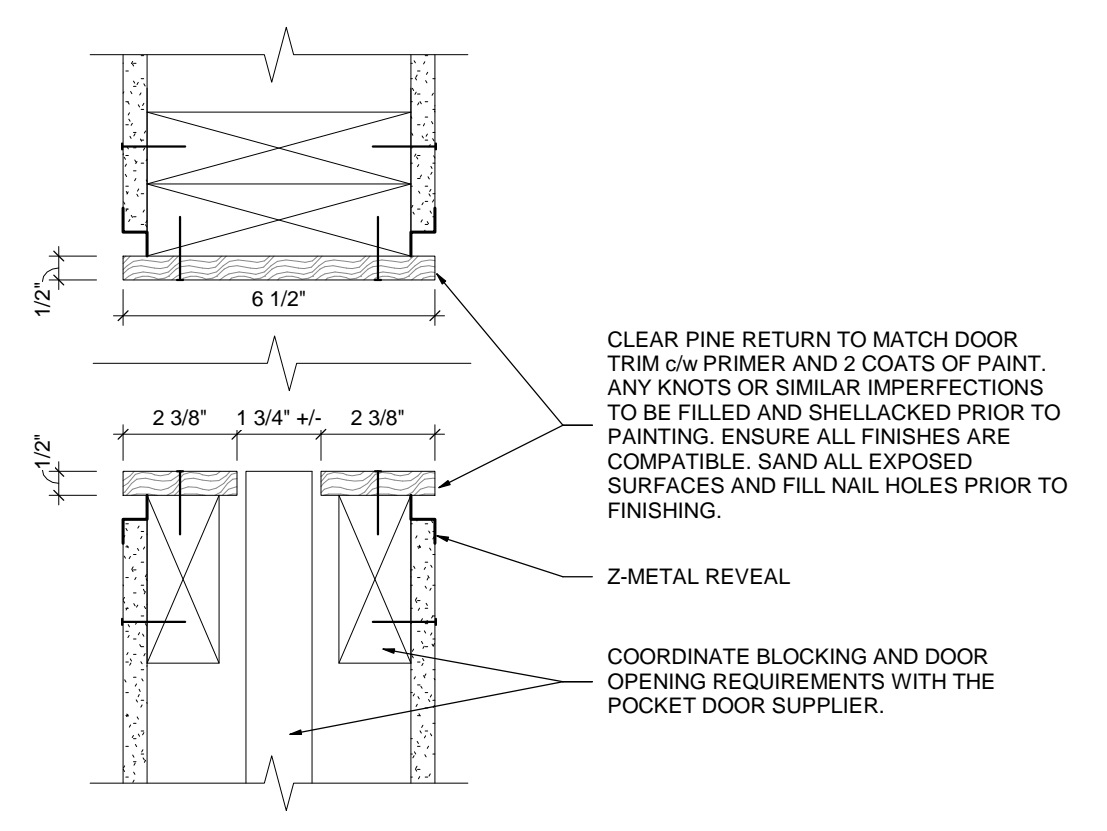




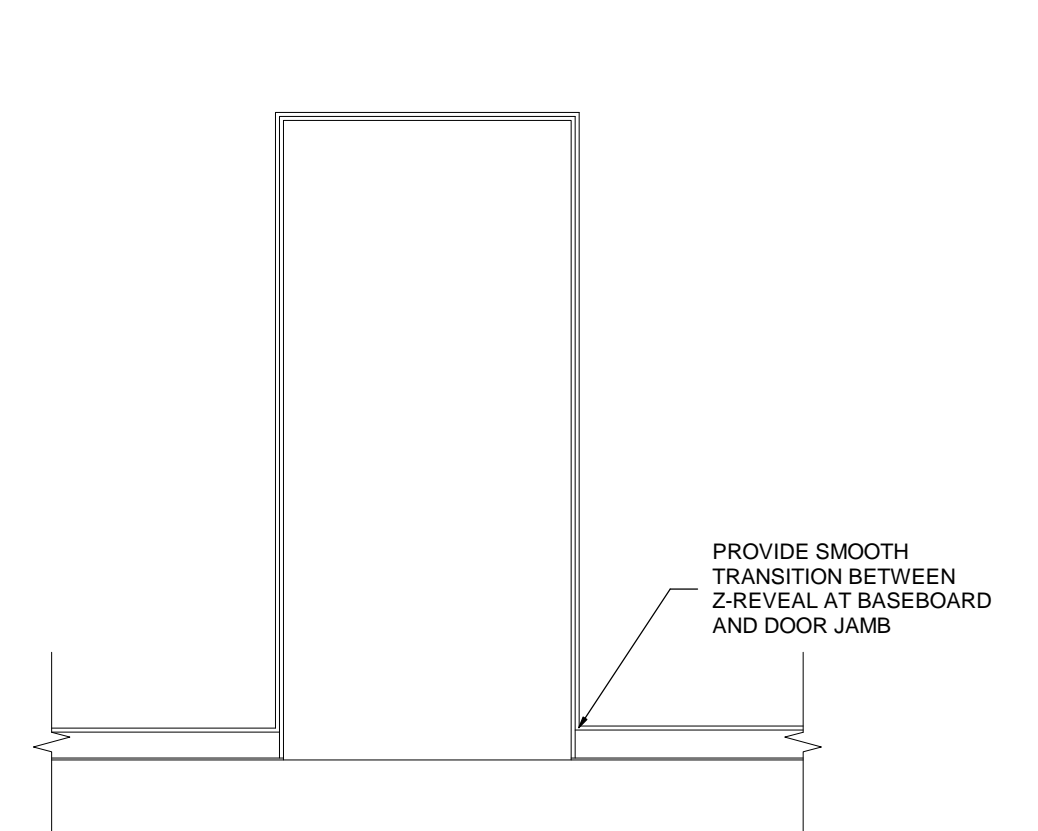
**6 FLUSH DOOR JAMB / HEAD DETAIL**  
A6.1 SCALE: 3" = 1'-0"



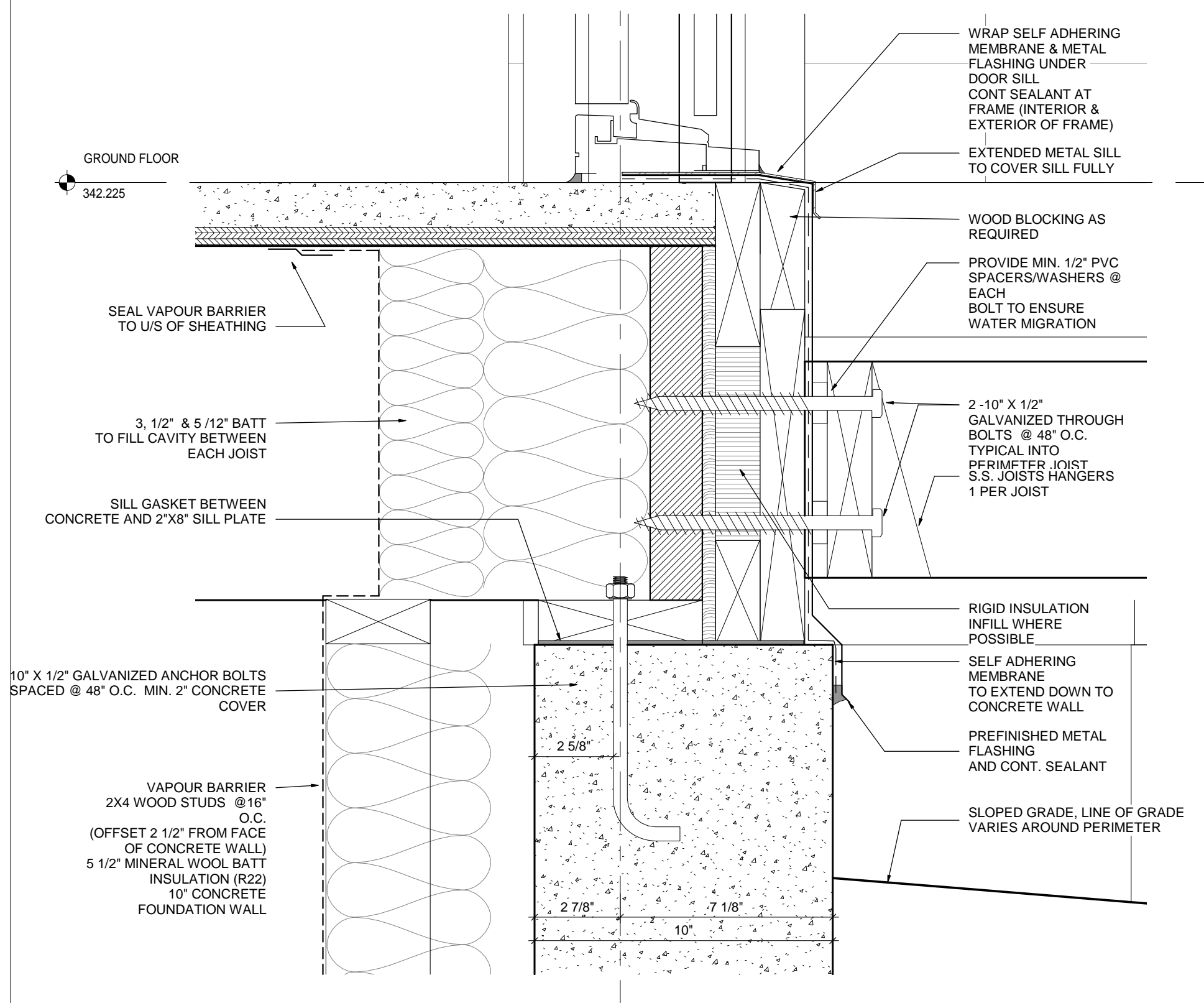
**1 FLUSH BASEBOARD DETAIL**  
A6.1 SCALE: 3" = 1'-0"



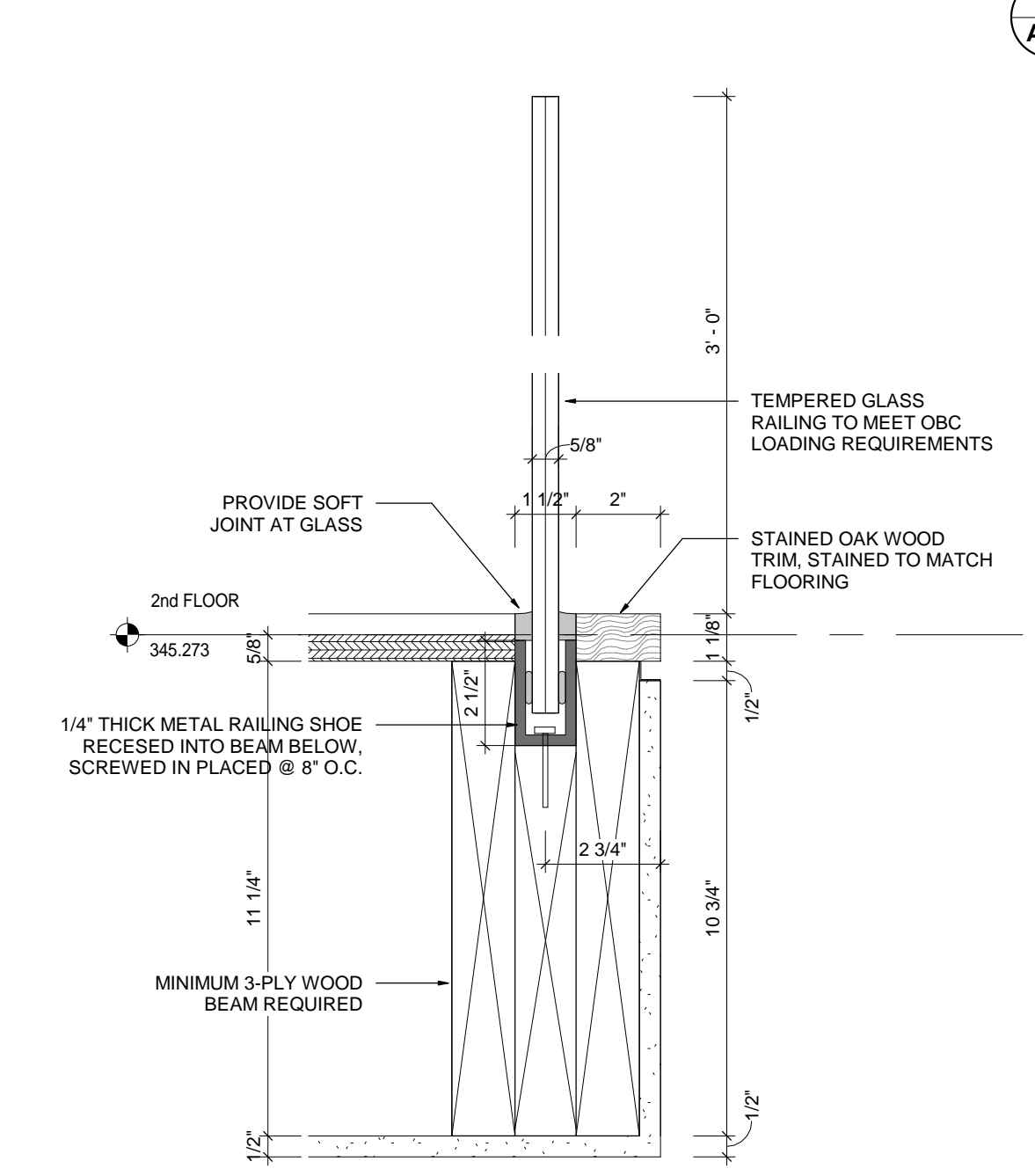
**9 FLUSH POCKET DOOR JAMB**  
A6.1 SCALE: 3" = 1'-0"



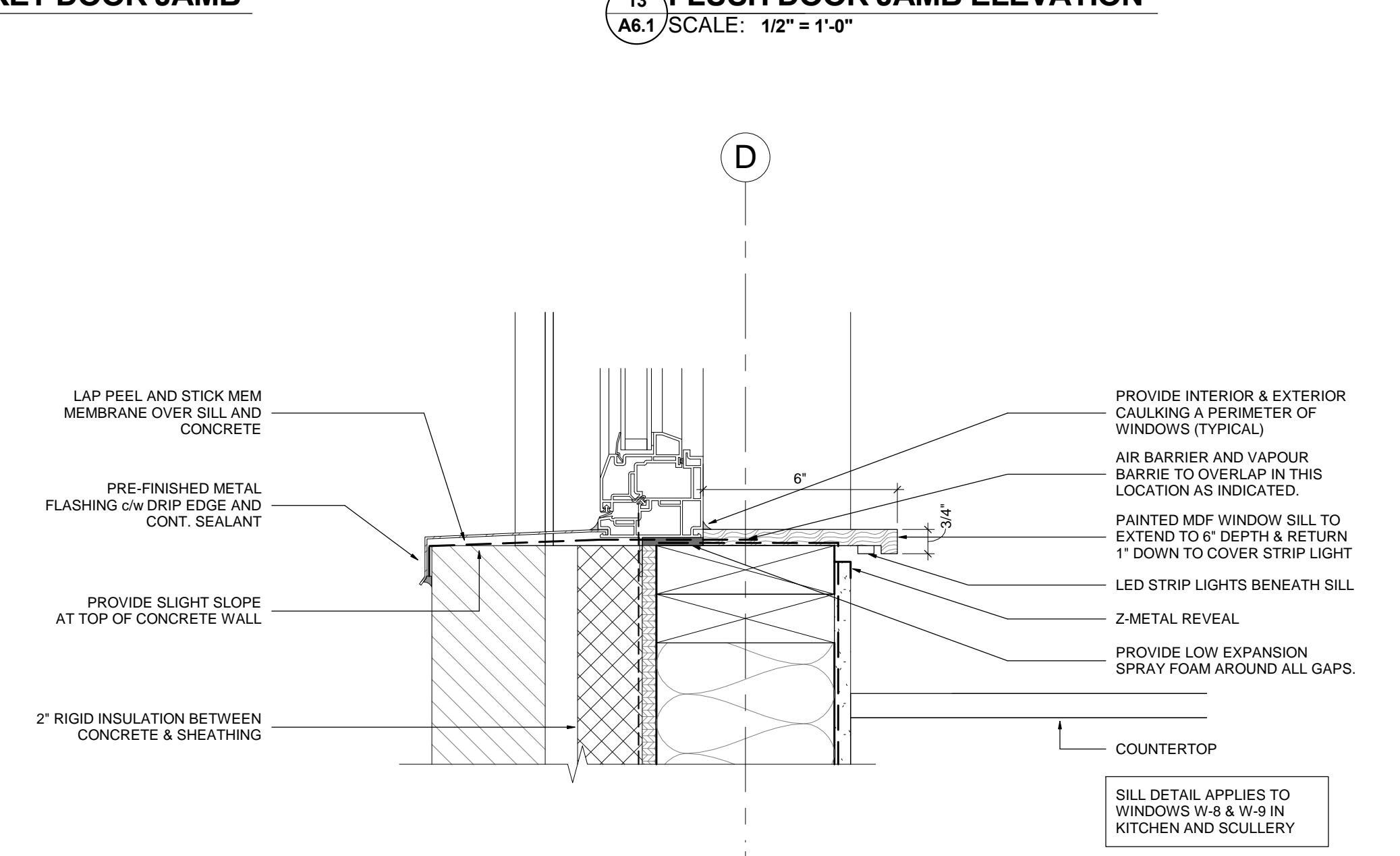
**13 FLUSH DOOR JAMB ELEVATION**  
A6.1 SCALE: 1/2" = 1'-0"



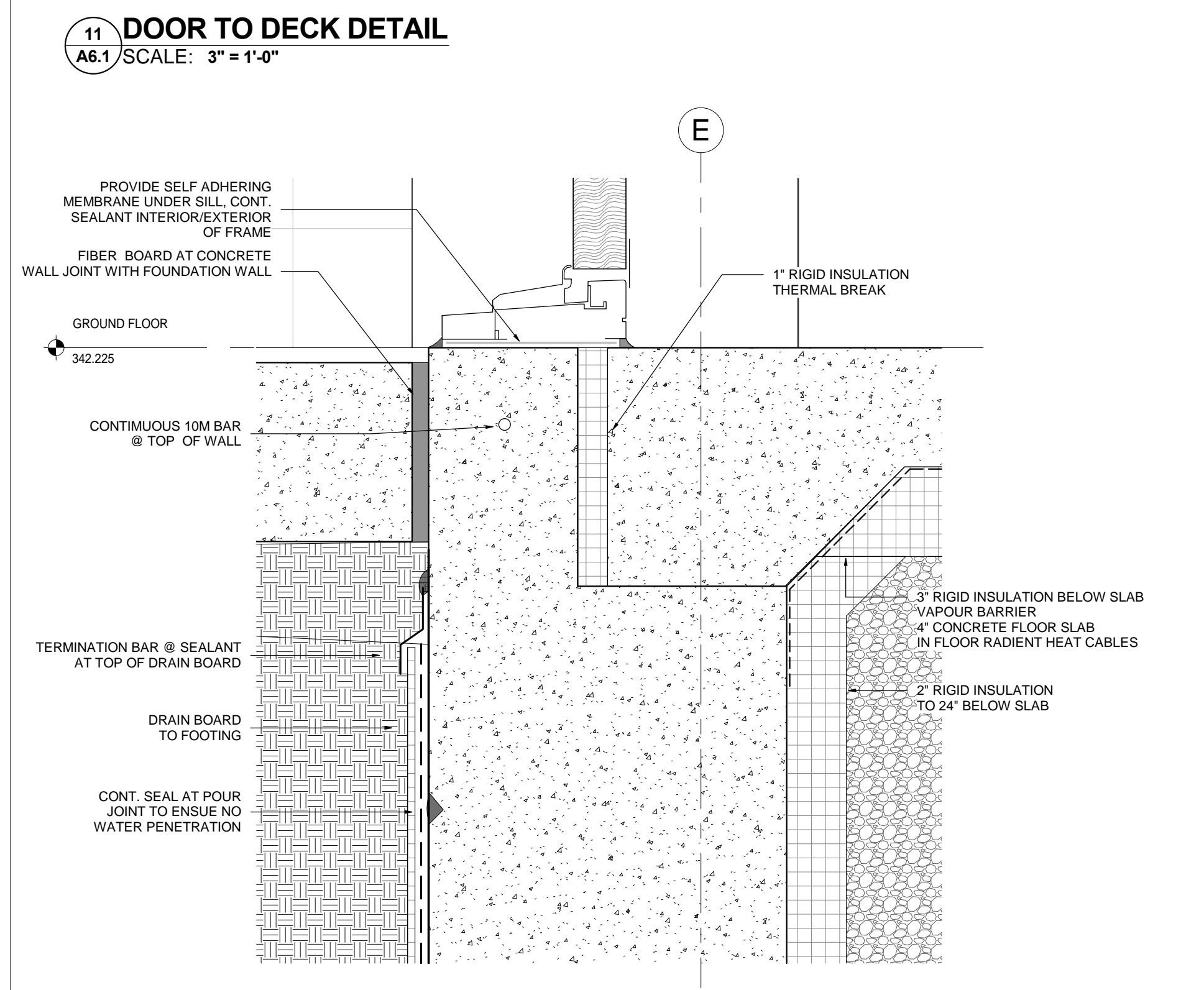
**11 DOOR TO DECK DETAIL**  
A6.1 SCALE: 3" = 1'-0"



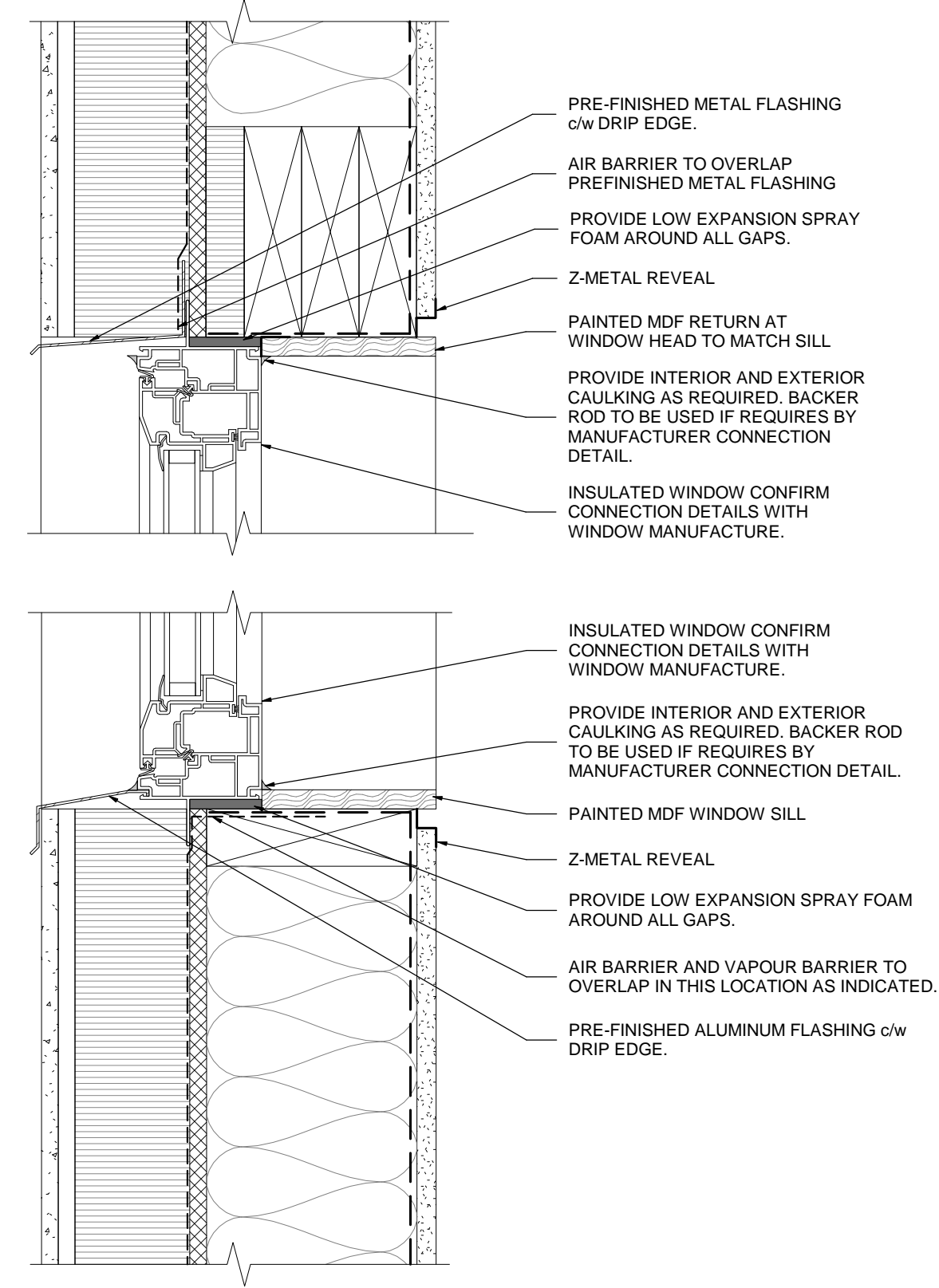
**2 GLASS RAILING @ INTERIOR**  
A6.1 SCALE: 3" = 1'-0"



**14 FLUSH WINDOW SILL & HEAD**  
A6.1 SCALE: 3" = 1'-0"



**12 DOOR TO CONC. WALKWAY DETAIL**  
A6.1 SCALE: 3" = 1'-0"



**10 WALL SECTION @ KITCHEN & SCULLERY**  
A6.1 SCALE: 3" = 1'-0"

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REVISIONS:

NO.	DATE	ISSUED:
1	2017.01.12	SVCA REVIEW
2	2017.02.08	BUILDING PERMIT
3	2017.06.16	FOUNDATION LAYOUT
4	2017.07.14	ISSUED FOR CONSTRUCTION



PROJECT:  
**TREVOR & MARTHA GROVE**  
44320 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE:  
**DETAILS**

DATE: 07/25/16	DRAWING NO.:
SCALE: As indicated	<b>A6.1</b>
DRAWN: Author	
STATUS: CONSTRUCTION	
JOB NO.: 1511	

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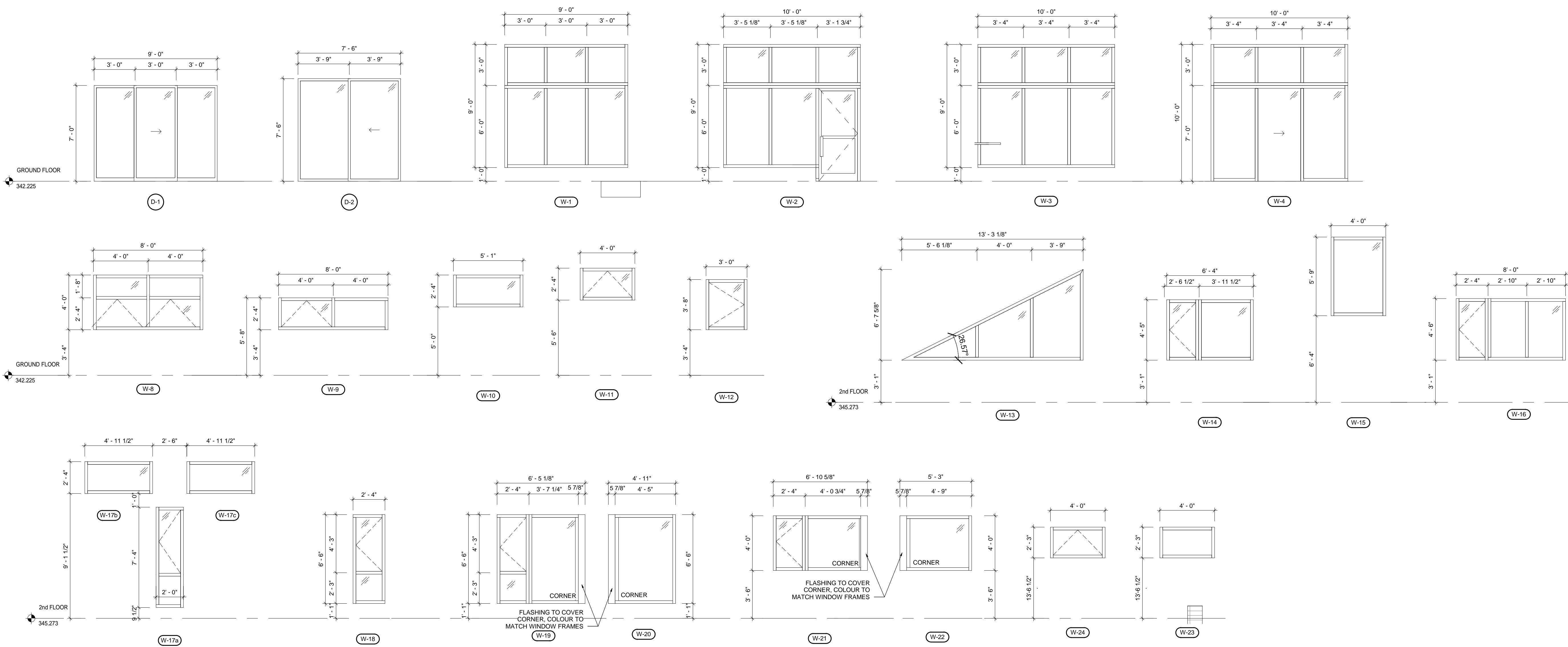
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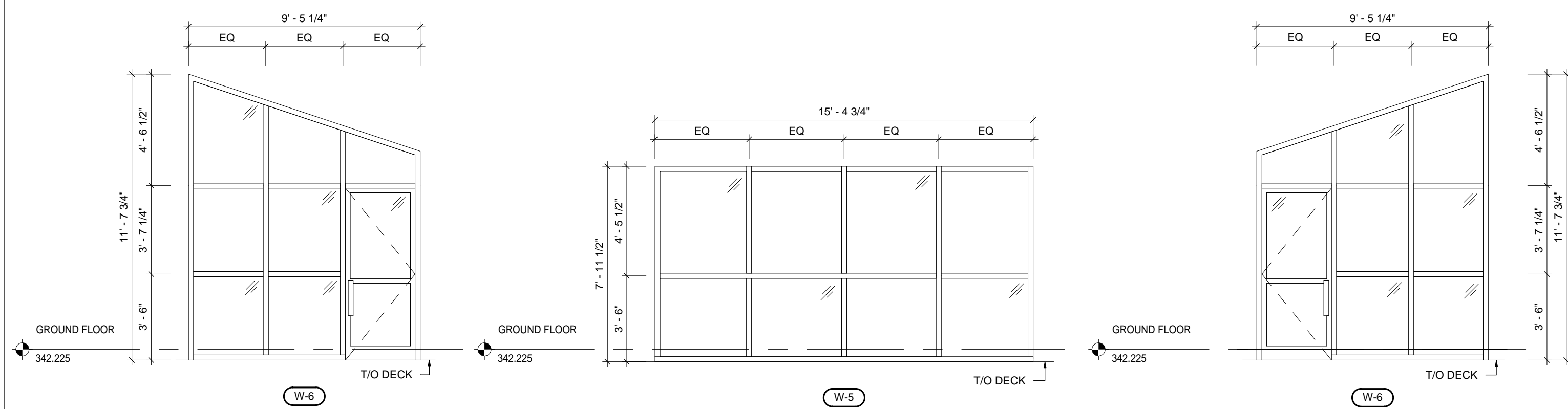
REVISIONS:

NO.	DATE	ISSUED:
1	2017.01.12	SVCA REVIEW
2	2017.02.08	BUILDING PERMIT
3	2017.06.16	FOUNDATION LAYOUT
4	2017.07.14	ISSUED FOR CONSTRUCTION



OUTDOOR ROOM SCREENING - BY OTHERS

THESE ARE GENERAL DIMENSIONS FOR THE ENCLOSED OUTDOOR ROOM LOCATED ON THE DECK AS PER THE FLOOR PLAN. SITE DIMENSIONS AND SHOP DRAWINGS ARE TO BE PREPARED FOR REVIEW BY WALL SUPPLIER, AND REVIEW BY THE ARCHITECT. SYSTEM TO BE STAMPED ENGINEER TO ENSURE THAT THE SYSTEMS COMPLES WITH REQUIREMENTS FOR GUARDS AS PER THE ONTARIO BUILDING CODE.

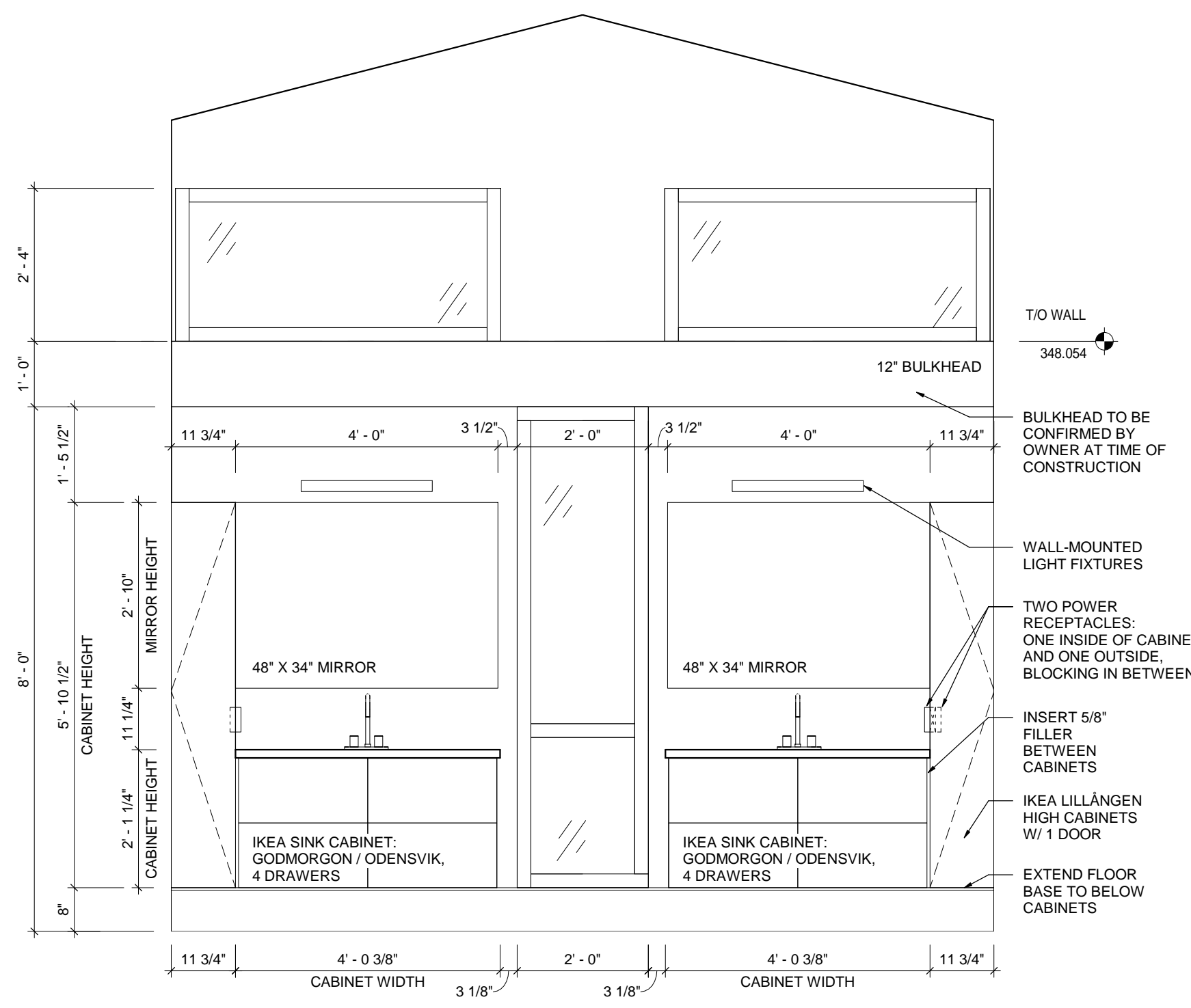


PROJECT:  
**TREVOR & MARTHA GROVE**  
443202 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

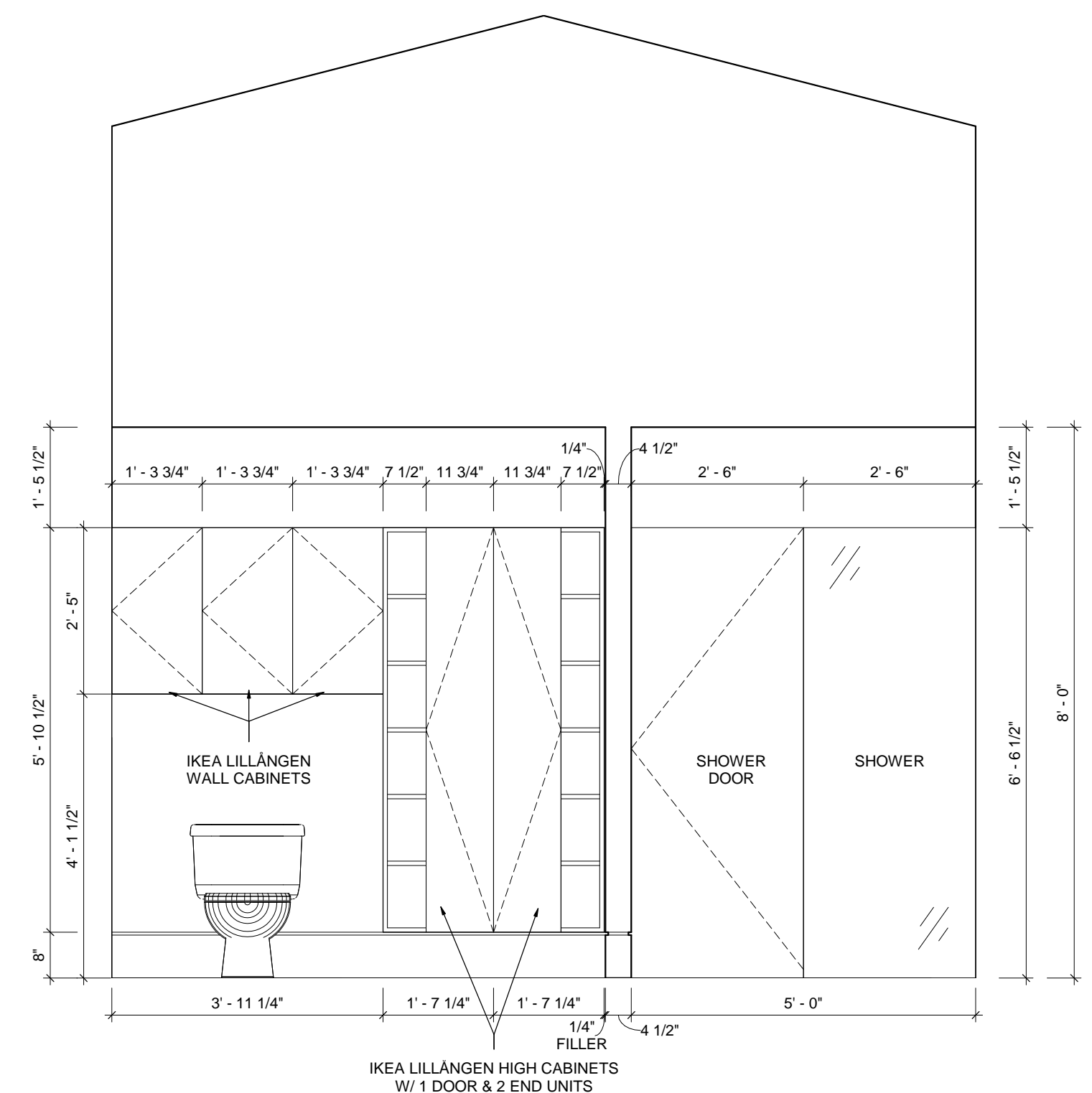
DRAWING TITLE:  
**WINDOW SCHEDULE**

DATE: 2017.06.19	DRAWING NO.:
SCALE: 1/4" = 1'-0"	<b>A7.1</b>
DRAWN: WL	
STATUS: CONSTRUCTION	
JOB NO.: 1511	

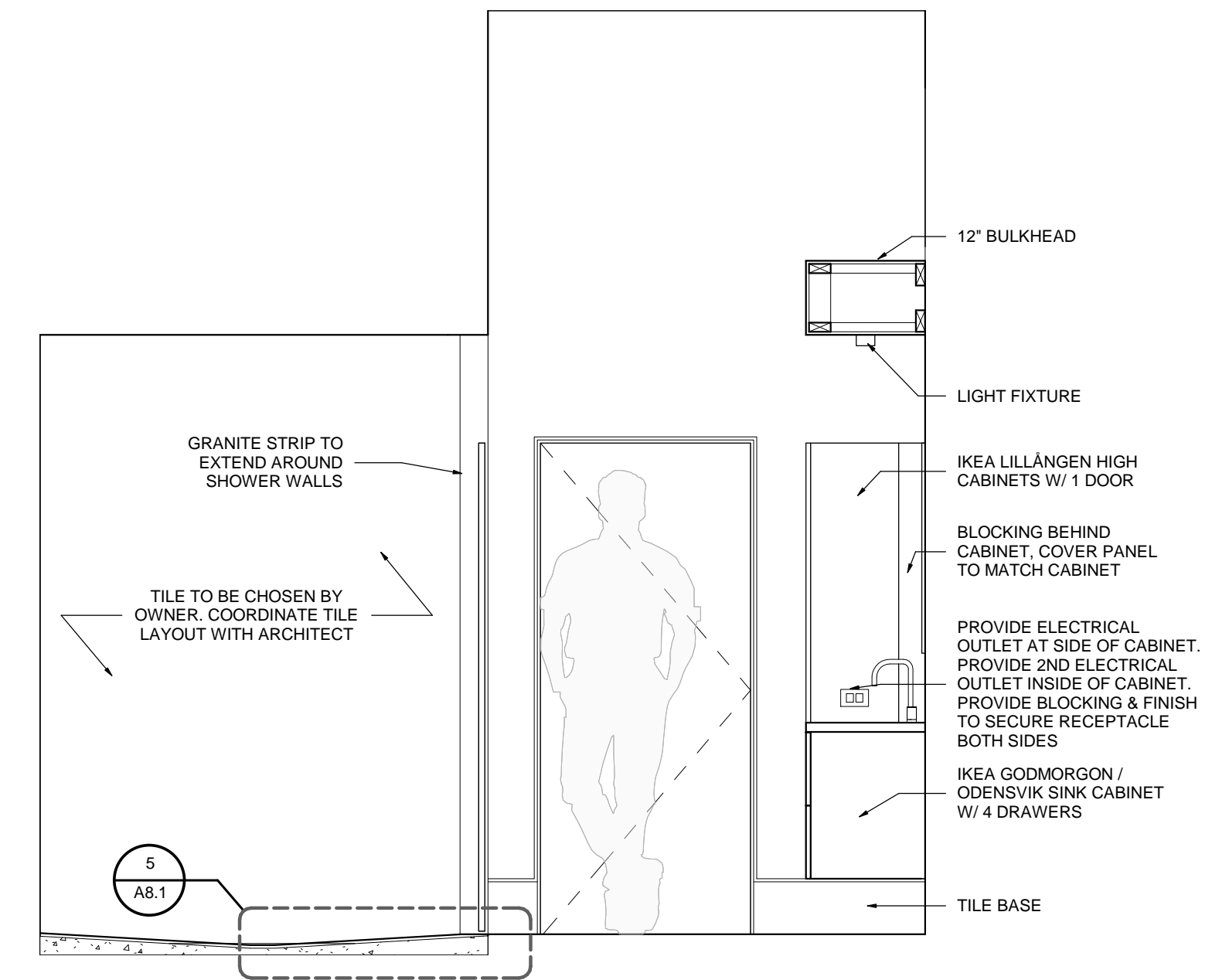
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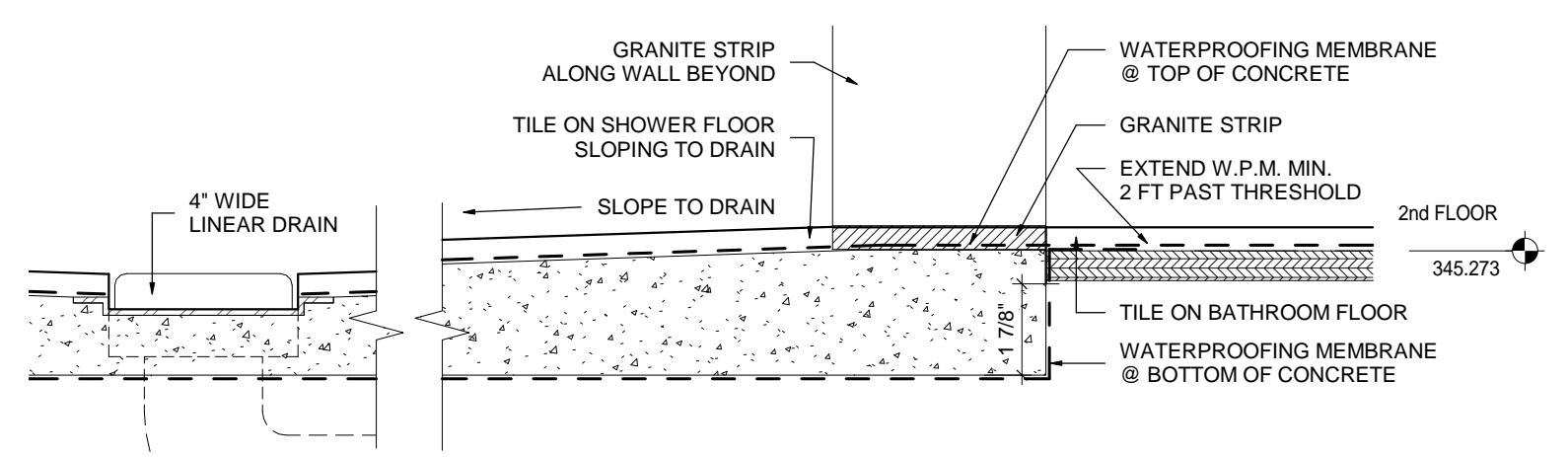
**1 MASTER BATH ELEVATION 1**  
 A8.1 / SCALE: 1/2" = 1'-0"



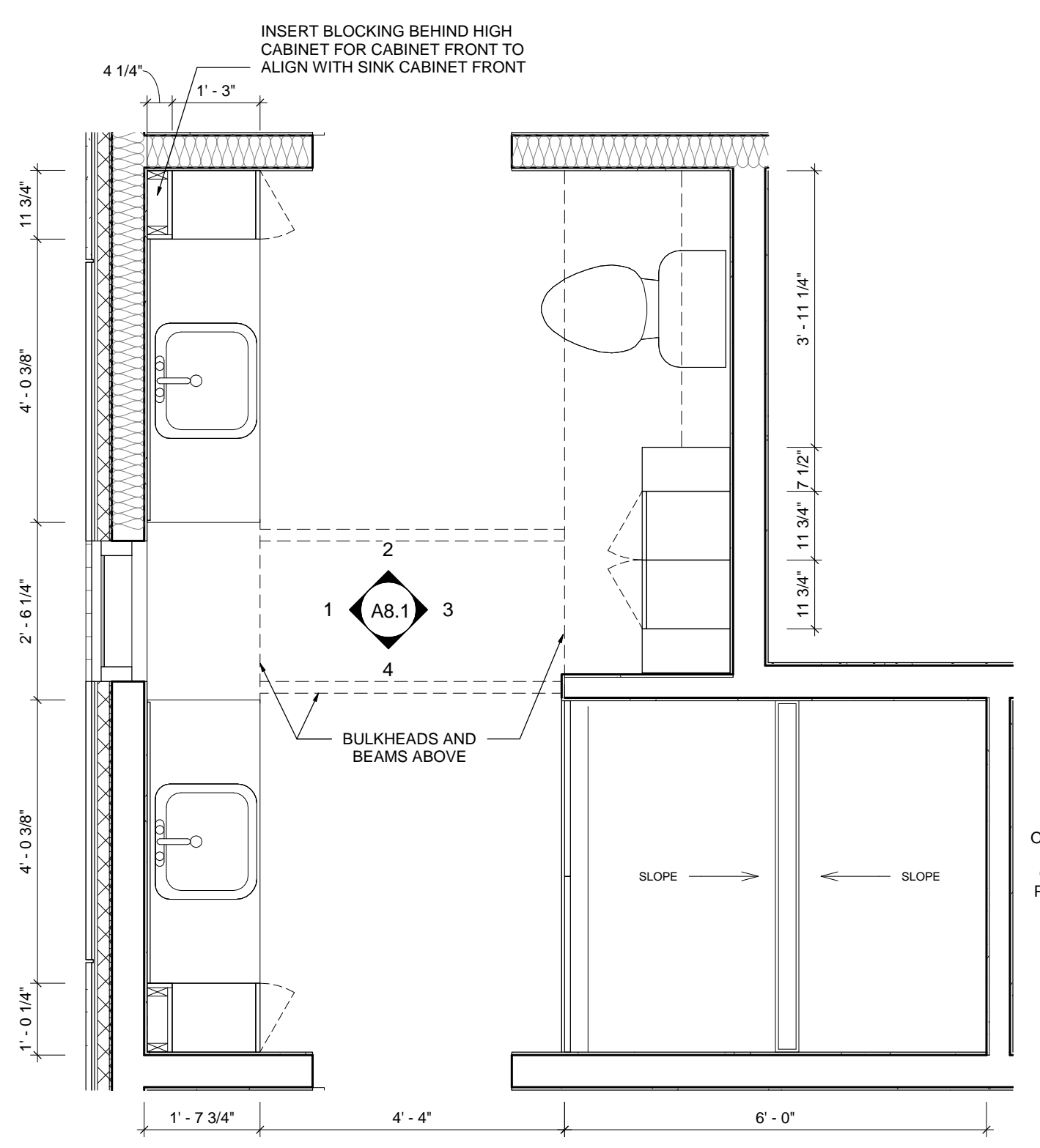
**3 MASTER BATH ELEVATION 3**  
 A8.1 / SCALE: 1/2" = 1'-0"



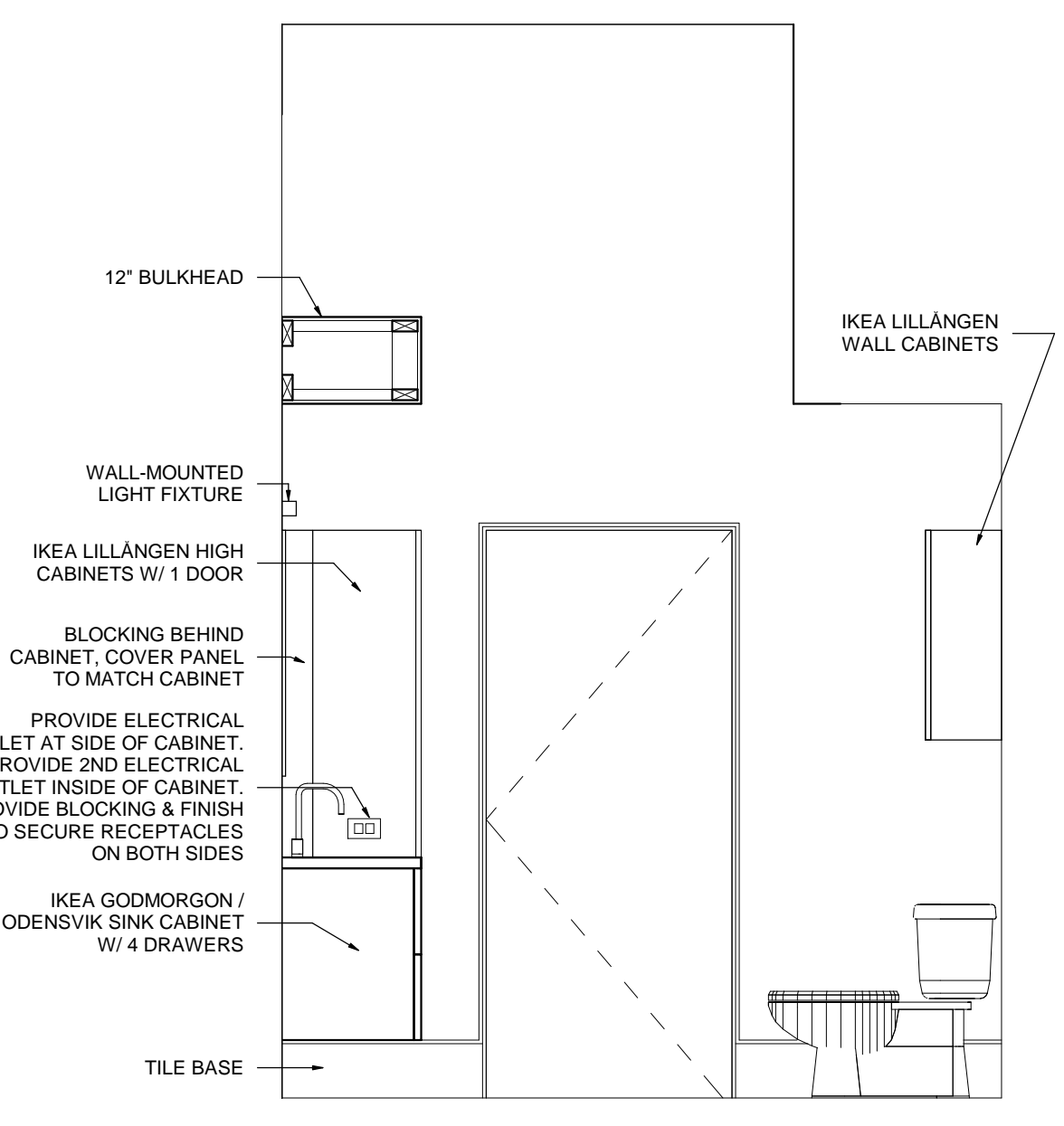
**4 MASTER BATH ELEVATION 4**  
 A8.1 / SCALE: 1/2" = 1'-0"



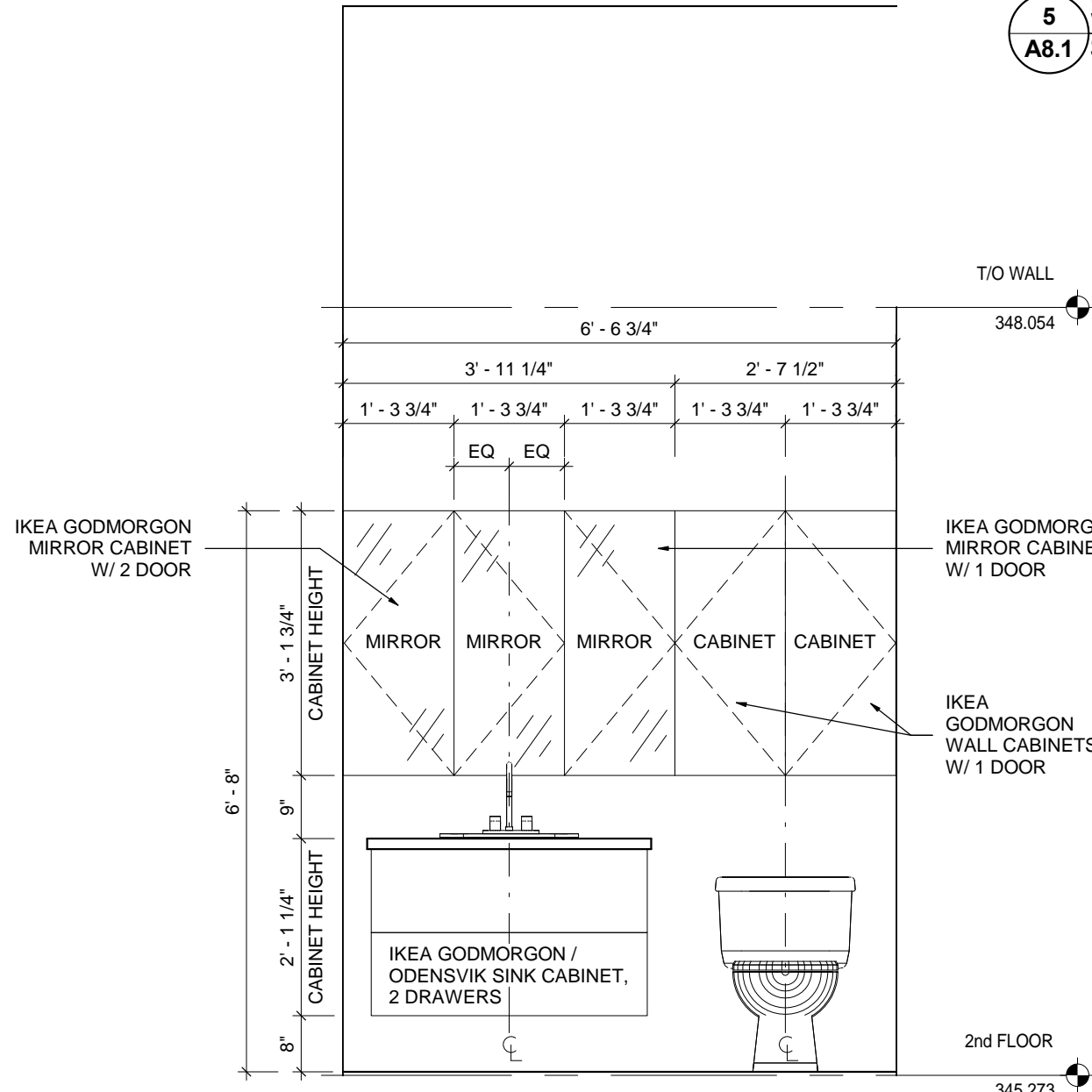
**5 SHOWER FLOOR DETAIL**  
 A8.1 / SCALE: 3" = 1'-0"



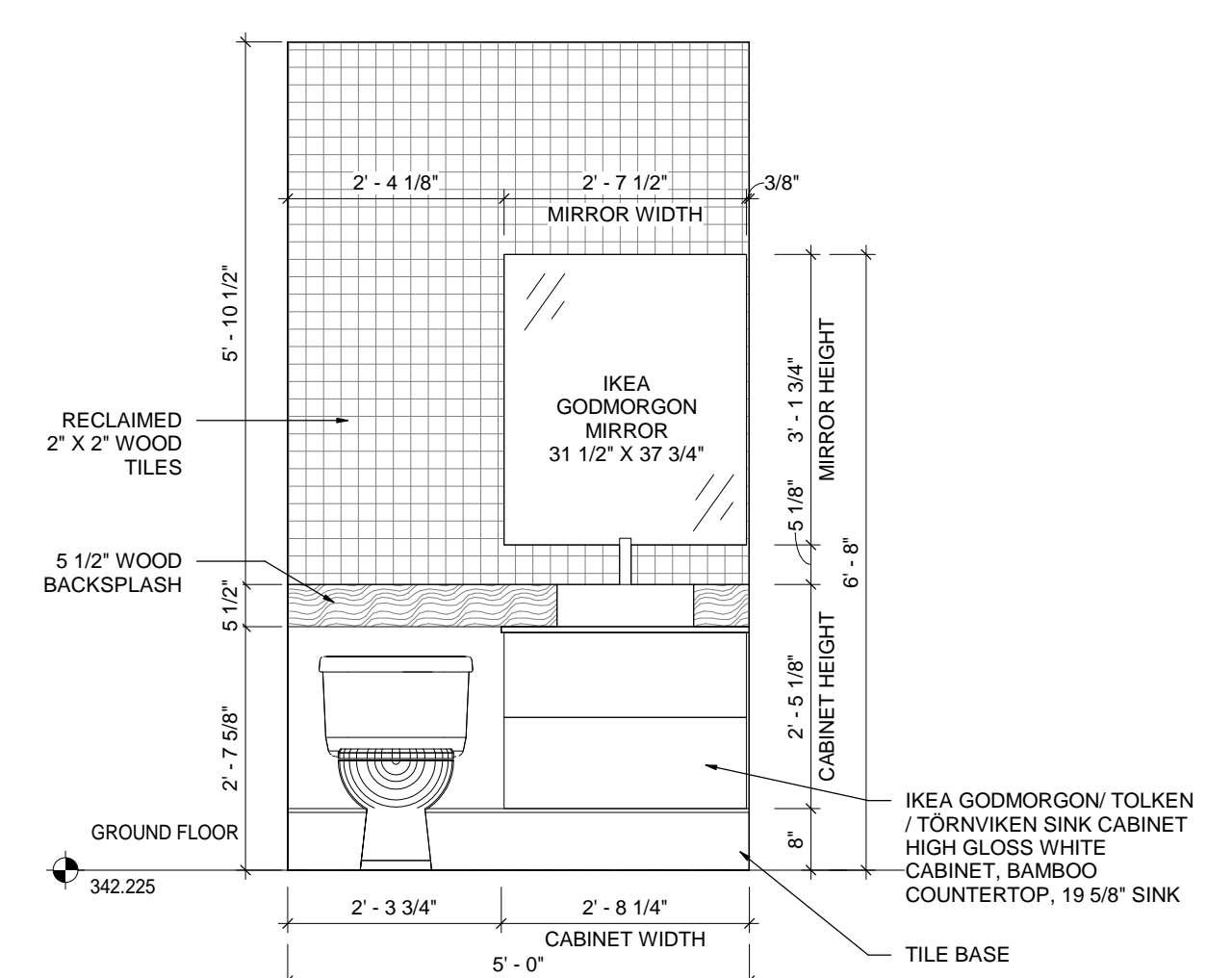
**6 MILLWORK PLAN - MASTER BATH**  
 A8.1 / SCALE: 1/2" = 1'-0"



**2 MASTER BATH ELEVATION 2**  
 A8.1 / SCALE: 1/2" = 1'-0"



**9 SECOND FLOOR BATH**  
 A8.1 / SCALE: 1/2" = 1'-0"



**7 GROUND FLOOR BATH**  
 A8.1 / SCALE: 1/2" = 1'-0"

1	2012.07.xx	
NO.	DATE	ISSUED

**MASRI O Inc. ARCHITECTS**  
 101-609 KUMPF DRIVE  
 WATERLOO, ON, N2V 1K8  
 PH. 519.579.0072  
 www.MasriO.ca

PROJECT: NEW RESIDENCE  
**TREVOR & MARTHA GROVE**  
 443202 McCORMICK'S SIDE ROAD  
 DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE: **INTERIOR ELEVATIONS**

DATE: 06/14/17	DRAWING NO.:
SCALE: Approver	<b>A8.1</b>
DRAWN: Author	
STATUS: REVIEW	
JOB NO.: 1511	



**GENERAL NOTES:**

- ALL WORK ON THIS PROJECT SHALL CONFORM TO THE 2012 ONTARIO BUILDING CODE (OBC 2012).
- CONTACT TACOMA ENGINEERS FOR CONSTRUCTION REVIEWS AS REQUIRED BY THE LOCAL BUILDING DEPARTMENT.
- SUBMIT SHOP DRAWINGS AS PER TABLE 1. SHOP DRAWINGS SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER WHERE REQUIRED AND REVIEWED BY THE CONTRACTOR FOR DIMENSIONAL CORRELATION WITH THE DRAWINGS AND FIELD CONDITIONS PRIOR TO SUBMITTING TO TACOMA ENGINEERS. FABRICATION OF ELEMENTS ON SHOP DRAWINGS MAY NOT PROCEED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY TACOMA ENGINEERS. UNFACTORED DESIGN LOADS:
- SNOW LOAD = 1.94 kPa (PART 9 DESIGN, Ss = 2.8 kPa in DURHAM)
- ROOF DEAD LOAD = 0.75 kPa
- SECOND FLOOR DEAD LOAD = 0.5 kPa
- MAIN FLOOR DEAD LOAD = 1.0 kPa
- OCCUPANCY LIVE LOAD = 1.9 kPa
- WIND PRESSURE = 1.50 @ 1500
- ASSUMED SOIL BEARING CAPACITY = 300 kPa
- GUARDS ARE TO BE BUILT ACCORDING TO OBC 2012 SB-7.

**FOUNDATIONS:**

- ALL CONCRETE SHALL CONFORM TO OBC 9.3.1. AND ALL FOOTINGS AND FOUNDATIONS SHALL CONFORM TO OBC 9.15 U.N.O. ON THE DRAWINGS.
- SOFT AREAS UNCOVERED DURING EXCAVATION SHALL BE SUB-EXCAVATED TO SOUND MATERIAL AND FILLED WITH CLEAN, FREE DRAINED GRANULAR SOIL COMPACTED TO 100% STANDARD PROCTOR DRY DENSITY (SPDD).
- LOCATE ALL FOOTINGS AND PIERS CENTRALLY UNDER COLUMNS AND WALLS UNLESS NOTED OTHERWISE.
- PLACE FOOTINGS WHICH ARE EXPOSED TO FREEZING WEATHER A MINIMUM OF 1200mm (48") BELOW FINISHED GRADE UNLESS SPECIFIED OTHERWISE.
- FOUNDATION WALLS TO BE CONNECTED TO STRIP FOOTINGS WITH SHEAR KEY OR 15M DOWELS x 16" LONG @ 4'-0" O.C. WITH 4" EMBEDMENT INTO FOOTING.
- FOUNDATION WALLS HAVE BEEN DESIGNED TO SUPPORT DRAINED EARTH. ENSURE GROUNDWATER DRAINAGE CAN OCCUR.
- WHERE FOUNDATION WALL THICKNESS IS REDUCED AT TOP OF WALL TO ALLOW FOR STONE LEDGE, THE REDUCTION IN THICKNESS SHALL COMPLY WITH OBC 2012 9.15.4.7.
- REBAR TO BE DEFORMED BARS WITH A YIELD STRENGTH OF 400 MPa.
- LAP LENGTH FOR 15M BARS IS 24".
- ENSURE FOUNDATION WALL ARE LATERALLY SUPPORTED BEFORE BACKFILLING.
- CONCRETE FOUNDATION WALLS WHICH DO NOT EXTEND TO THE UNDERSIDE OF THE MAIN FLOOR JOISTS MAY BE BACKFILLED UP TO THE FOLLOWING HEIGHTS ABOVE THE BASEMENT FLOOR BASED ON OBC 2012 9.15.4.2.A:  
8" THICK FOUNDATION = 3'-11"  
10" THICK FOUNDATION = 3'-7"
- FOR FOUNDATION OPENINGS GREATER THAN 3'-11" WIDE, REINFORCE FOUNDATION WALL AROUND OPENING WITH 2-15M FULL HEIGHT VERTICAL BARS EACH SIDE OF WINDOW AND 2-15M HORIZONTAL BARS BELOW WINDOW SILL. EXTEND HORIZONTAL BARS 24" PAST WINDOW OPENINGS ON BOTH SIDES. TYPICAL FOR WINDOWS 48" TO 72" WIDE.

**STRUCTURAL FRAMING:**

- ALL WOOD-FRAME CONSTRUCTION SHALL CONFORM TO OBC 9.23 U.N.O. ON THE DRAWINGS.
- WOOD TRUSSES AND MANUFACTURED FRAMING MEMBERS ARE TO BE DESIGNED & CERTIFIED BY A PROFESSIONAL ENGINEER FOR THE LOADS AND CONDITIONS INDICATED ON THE DRAWINGS. REFER TO TRUSS MANUFACTURER'S DRAWINGS FOR UPLIFT CLIPS. PROVIDE ADEQUATE BEARING SURFACE FOR THE TRUSS BEARING LOADS.
- LUMBER SHALL BE SPF No. 1/2 OR BETTER UNLESS NOTED OTHERWISE. MOISTURE CONTENT SHALL BE 19% OR LESS. LUMBER SHALL NOT BE NOTCHED OR DRILLED IN THE FIELD WITHOUT PERMISSION OF TACOMA ENGINEERS.
- ENGINEERED LUMBER (TJI, LVL) MAY BE DRILLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND DETAILS.
- THICKNESS AND TYPE OF SUBFLOOR, ROOF SHEATHING AND WALL SHEATHING SHALL CONFORM TO 9.23.14, 9.23.15, AND 9.23.16 RESPECTIVELY.
- BOLTED CONNECTIONS SHALL BE MADE USING GRADE A307 BOLTS, UNLESS NOTED OTHERWISE.
- USE PRESSURE TREATED LUMBER (CW/PB APPROVED) OR APPLY SUITABLE WOOD PRESERVATIVE TO ALL WOOD IN CONTACT WITH SOIL.
- WOOD IS NOT PERMITTED TO BEAR DIRECTLY ON MASONRY OR CONCRETE WITHOUT PROTECTION. PROVIDE EITHER PRESSURE TREATED LUMBER, SUITABLE WOOD PRESERVATIVE OR 6 MIL (0.152mm) POLYETHYLENE SHEET.
- SOLID HORIZONTAL BRIDGING SHALL BE PROVIDED AT 1200mm (4'-0") O.C. IN THE FIRST TWO JOIST SPACES ADJACENT TO THE EXTERIOR WALLS. BRIDGING SHALL BE ATTACHED TO THE EXTERIOR WALL TO PROVIDE LATERAL STABILITY.
- PROVIDE 38mm x 38mm (2X2) DIAGONAL CROSS BRIDGING OR SOLID BLOCKING AT MAXIMUM 2.1m (82") O.C. FOR ALL SAVN JOIST LOCATIONS.
- PROVIDE SOLID WOOD HORIZONTAL BLOCKING AT MAXIMUM 3.0m (10'-0") O.C. FOR ALL FRAMED WALLS. INSTALL MORE FREQUENTLY WHEN SO NOTED ON THE ARCHITECTURAL OR STRUCTURAL WALL DRAWINGS (EG. FOR BLOCKING OF SHEAR WALLS, OR FOR LATERAL STUD SUPPORT).
- ALL NAILS USED SHALL CONFORM TO STEEL WIRE NAILS AND SPIKES AS DEFINED IN CSA STANDARD B111 "WIRE NAILS, SPIKES AND STAPLES" UNLESS NOTED OTHERWISE.
- LATERALLY SUPPORT ALL STEEL BEAMS BY PRE-DRILLING FLANGES FOR 13mm (1/2") BOLTED ATTACHMENTS OF WOOD NAILERS WITH 16mm (5/8") HOLES STAGGERED AT 600mm (24") O.C.
- STEEL BEAMS AND COLUMNS SHALL BE GRADE 350W.
- ALL WELDING SHALL BE COMPLETE BY CWB CERTIFIED WELDERS.
- EXTERIOR STRUCTURAL STEEL SHALL BE PROTECTED FROM CORROSION BY HOT DIP GALVANIZING.
- USE JOIST HANGERS WHERE FRAMING MEMBERS CONNECT INTO THE SIDES OF SUPPORTING MEMBERS.
- ALL STEEL CONNECTORS (UPLIFT CLIPS, BRACKETS, JOIST HANGERS etc.) SHALL BE SIMPSON STRONG TIE CONNECTORS UNLESS NOTED OTHERWISE.
- ALL NAILS AND FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD ARE TO BE HOT DIP GALVANIZED (TO CSA-G164) OR STAINLESS STEEL.
- FOR SOLID AND BUILT UP MEMBERS (TRUSSES, BEAMS, LINTELS) PROVIDE A BUILT UP POST WITH AN EQUAL OR GREATER THICKNESS UNLESS NOTED OTHERWISE. ALL BUILT UP POSTS TO BE CONTINUOUS (INCLUDING TRANSFER BLOCKING AT FLOORS) DOWN TO THE FOUNDATIONS.
- ALL BUILT UP MEMBERS TO BE FASTENED TOGETHER WITH TWO 75mm (3") SPIRAL NAILS AT 300mm (12") O.C. FOR EVERY PLY UNLESS NOTED OTHERWISE. MULTI-PLY ENGINEERED LUMBER BEAMS TO BE FASTENED AS PER THE MANUFACTURER'S SPECIFICATIONS.
- ALL PRE-ENGINEERED STEEL CONNECTORS (EG. SIMPSON STRONG TIE) ARE TO HAVE THE CORRECT NUMBER AND SIZE OF FASTENERS, AS PER THE MANUFACTURER'S PRODUCT CATALOGUE.
- PROVIDE SOLID BLOCKING OR MECHANICAL CONNECTIONS AT THE TOP AND BOTTOMS OF BEAMS AT BEARING POINTS TO PREVENT MOVEMENT OR ROTATION.
- ALL GUARDS SHALL CONFORM TO OBC 9.8.8. AND SUPPLEMENTARY STANDARD SB-7.
- LVL = WEYERHAEUSER 2.0E MICROLAM LVL WITH MINIMUM VALUES:  
E = 2.0 x 10<sup>6</sup> psi; I<sub>b</sub> = 4.805 psi; I<sub>v</sub> = 530 psi; G = 125,000 psi  
APPROVED EQUIVALENTS: WEST FRASER LVL 3100 FB 2.0E; LP SOLID START LVL 2000 FB 2.0E; INTERNATIONAL BEAMS LVL 2.0E; BOISE CASCADE VERSA-LAM 3100 2.0E; BOISE CASCADE GP-LVL 2.0E (FORMERLY GP LAM LVL 2.0E)

**FOUNDATIONS NOTE:**

- PROVIDE 1/2" DIA ANCHORS AT 4' O.C. U.N.O.

**TABLE 1: SHOP DRAWING SUBMITTALS**

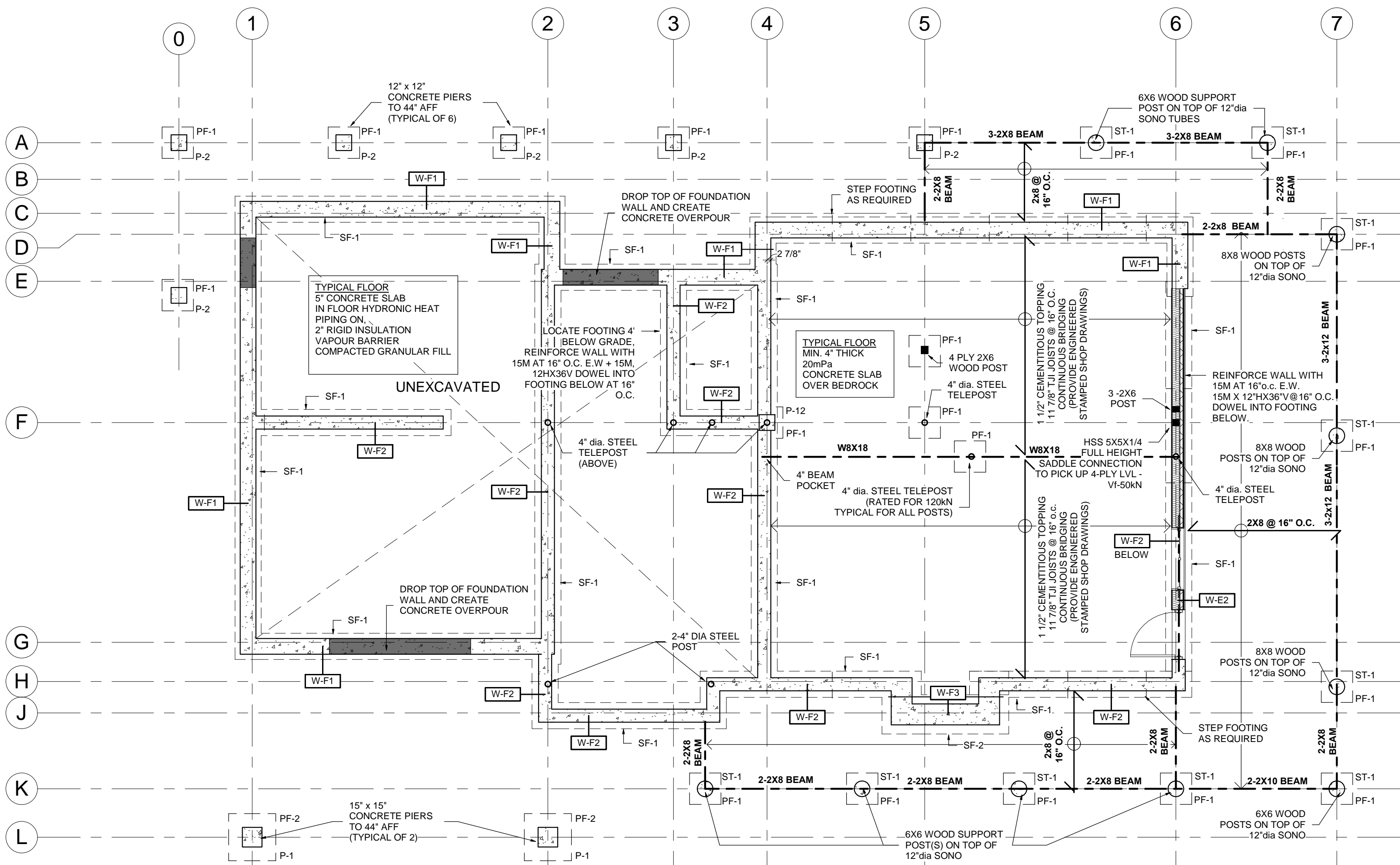
ITEM	REQUIRED SUBMITTAL?	REQUIRED STAMP REQ'D?	NOTES
STRUCTURAL STEEL ERECTION DRAWINGS	YES	YES	STAMP FOR CONNECTIONS ONLY
MISC. METAL (INCLUDING GUARDS & HANDRAILS)	YES	YES	
WOOD ROOF TRUSSES	YES	YES	
MANUFACTURED WOOD PRODUCTS	YES	YES	

- NOTE#1**  
PLYWOOD SHEAR WALL  
2x6 studs at 16" o.c.  
3/4" plywood on one side c/w 3 5" common spiral nails at 4" o.c. on panel edges and 6" o.c. in the field. block panel edges.  
-3 ply stud post at each side.  
-1du 8 - sds2.5 hold down on each side c/w 7/8" dia drilled and epoxied with 12" embedment
- PF-1** PAD FOOTING  
24" x 24" x 10"  
20MPa CONCRETE  
3-15M E.W. PIN TO BEDROCK WITH 2-12" LONG 15M DOWELS DRILL AND EPOXY WITH 4" EMBEDMENT(TYPICAL)
- PF-2** PAD FOOTING  
36" x 36" x 12"  
r.w. 3-15M E.W.  
15Mx12"horz X36"vert. INTO PIER ABOVE. 20MPa CONCRETE.  
PIN TO BEDROCK WITH 4-12" LONG 15M DOWELS DRILL (AT CORNERS) INTO BEDROCK WITH 4" EMBEDMENT(TYPICAL)
- SF-1** STRIP FOOTING #1  
20" x 10"  
20MPa CONCRETE  
PIN TO BEDROCK WITH 2-12" LONG 15M DOWELS @ 48" O.C. DRILL INTO BEDROCK WITH 4" EMBEDMENT(TYPICAL)
- SF-2** STRIP FOOTING #2  
20" x 10"  
20MPa CONCRETE  
PIN TO BEDROCK WITH 2-12" LONG 15M DOWELS @ 48" O.C. DRILL INTO BEDROCK WITH 4" EMBEDMENT(TYPICAL)
- P-1** CONCRETE PIER  
15" x 15"  
20MPa CONCRETE  
c/w 4-15M VERTICAL BARS 10M TIES AT 10" O.C.  
SEE FOOTING FOR DOWELS FROM BELOW
- P-2** CONCRETE PIER  
12" x 12"  
20MPa CONCRETE  
c/w 4-15M VERTICAL BARS WITH 4" EMBEDMENT INTO FOOTING
- ST-1** 12"dia. SONO TUBE  
20MPa CONCRETE  
c/w 4-15M VERTICAL BARS WITH 4" EMBEDMENT INTO FOOTING BELOW

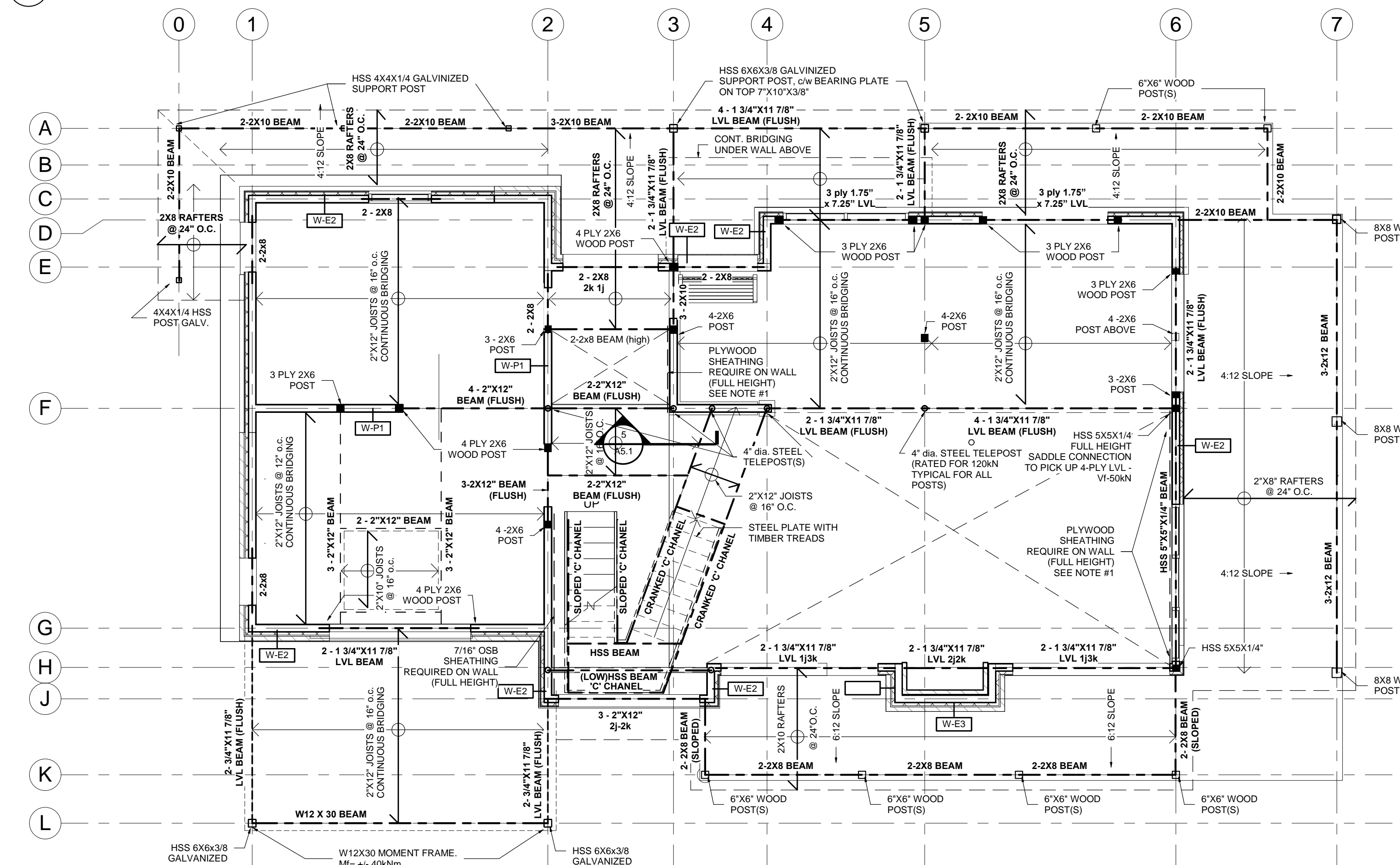
**WALL SCHEDULE**

- W-F1** FOUNDATION WALL #1  
-10' 20MPa CONCRETE FOUNDATION WALL
- W-F2** FOUNDATION WALL #2  
-10' 20MPa CONCRETE FOUNDATION WALL
- W-F3** FOUNDATION WALL #3  
-16' 20MPa CONCRETE FOUNDATION WALL

- \*PROVIDE DAMP PROOFING ON ALL EXTERIOR FOUNDATION WALLS BELOW GRADE.
- W-E1** EXTERIOR WALL #1  
-2x6 WOOD STUDS @ 16" O.C.
- W-E2** EXTERIOR WALL #2  
-2x6 WOOD STUDS @ 16" O.C.
- W-E3** EXTERIOR WALL #3  
-2x6 WOOD STUDS @ 16" O.C.
- W-E4** EXTERIOR WALL #4  
-2x6 WOOD STUDS @ 16" O.C.
- W-E5** EXTERIOR WALL #5  
-2x6 WOOD STUDS @ 16" O.C.
- W-P1** INTERIOR PARTITION WALL #1  
-1/2" GYPSUM BOARD (BOTH SIDES)  
-5 1/2" WOOD STUDS @ 16" o.c.
- W-P2** INTERIOR PARTITION WALL #2  
-1/2" GYPSUM BOARD (BOTH SIDES)  
-3 1/2" WOOD STUDS @ 16" o.c.



**FOUNDATION & BASEMENT FRAMING PLAN**  
SCALE: 3/16" = 1'-0"



**GROUND FLOOR FRAMING PLAN**  
SCALE: 3/16" = 1'-0"

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND DISCREPANCIES TO THE CONSULTANT.

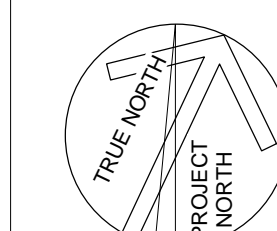
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**REVISIONS:**

NO.	DATE:	ISSUED:
1	2017.01.12	SVCA REVIEW
2	2017.03.03	BUILDING PERMIT
3	2017.06.09	CONSTRUCTION
4	2017.07.14	ISSUED FOR CONSTRUCTION



**MASRI O Inc. ARCHITECTS**  
101-609 KUMPF DRIVE  
WATERLOO, ON, N2V 1K8  
PH. 519.579.0072  
www.MasriO.ca

PROJECT:  
**TREVOR & MARTHA GROVE**  
44320 McCORMICK'S SIDE ROAD  
DURHAM, GREY COUNTY, ONTARIO

DRAWING TITLE:  
**FOUNDATION PLAN & 1ST FLOOR FRAMING**

DATE: JUNE 9 2017	DRAWING NO.:
SCALE: As indicated	<b>S.1</b>
DRAWN: AJ	
STATUS: CONSTRUCTION	
JOB NO.: 1511	

