- A. Contact Sustainable Architecture, PLLC with any questions regarding these documents. The Contractor must notify the Architect of any contradictions or inconsistencies in the drawings before construction is begun in the area pertinent to the
- contradiction or inconsistency B. NOTE: do not scale the drawings. All notes and noted dimensions take precedence over scaled values, visual representations, or assumed information shown.
- Walls are dimensioned from face of framing or concrete unless noted otherwise.
- 2. Door frames not dimensioned are to be placed 5" from adjacent/perpendicular walls, or centered along the wall length vi. WOOD AND PLASTICS or to match existing conditions.
- 3. All vertical dimensions are measured from top of slab or top of subfloor unless noted otherwise. 4. All windows & doors to have same head height unless noted otherwise. Coordinate head heights with elevations and Window & Door Schedule
- 5. Lines on plan views of stairs depict the face of the riser, and dimensions are to face of riser unless noted otherwise. C. The Contractor and all Subcontractors shall review these specifications and drawing and be well versed in these documents and coordinate the work across all trades prior to commencement of the work.
- D. Contractor and Subcontractors shall field verify all existing site conditions and shall be responsible for reporting to the Architect any discrepancies in the assumed conditions before commencing work. No additional allowances will be made for lack of knowledge of such conditions.
- E. All trades shall perform their work in strict accordance with highest professional standards adopted by their industry. Work shall conform to all existing codes of record.
- F. The presence of a representative of the Architect or Owner on the job site does not constitute approval of the work. G. Architect-prepared structural drawings and analyses (foundation, framing, beam loading, etc.) do not constitute engineering. Prescriptive IRC requirements and industry standard structural manufacturer's requirements & specifications are assumed. Construction Documents seek to provide helpful information toward meeting those requirements. However, the construction documents do not exempt the contractor and structural subcontractors from the conditions of the Code or manufacturer's specifications and recommendations.
- H. "Or equal" indicates the need for Architect's approval. The Contractor shall submit requests for "or equal" status with substitute samples, including specifications and cost information, for evaluation by the Architect. Substitutions must be approved in writing before use.
- J. All addenda issued between the time of issuance of the Contract Documents and the signing of the Agreement between the Owner and Contractor shall be acknowledged in writing by the Contractor and shall become part of the Agreement. K. If the Contractor, the Owner, or their Agents substitute a material, revise a construction detail, a method of attachment, or in any way alter the work so that it does not conform with these Documents, and do so without the Architect's written
- approval, such action will relieve the Architect of any responsibilities of liability regarding possible subsequent failure, property damage or personal liability. L. The Contractor shall be responsible for obtaining all required construction related permits.
- M. The General Contractor and his Subcontractors shall observe and adhere to the following guidelines as they prepare to turn the project over to the Owner:
- 1. Remove all construction debris, scraps, material, and equipment from site.
- All glass shall be free of all manufacturer's tags, shall be cleaned on both sides, and shall be scratch free. 3. All millwork, doors, wall materials, painted surfaces, fixtures & fittings, mechanical grilles, ductwork, etc. are to be wiped down and free of dirt or other foreign matter. All ductwork shall be power brush cleaned, vacuumed, and sanitized before owner takes possession.
- 4. All hard and soft floor surfaces are to be cleaned per manufacturer's specifications. 5. All areas used for storage, and all travel routes to and from the Project are to be returned to their original condition at the completion of Work.
- 6. The final and installation of all specified items shall be completed prior to final acceptance of the Project. The Contractor shall furnish the Owner with all warranties, guarantees and manuals required at the conclusion of the work,
- organized and prepackaged. N. All manufacturer's or fabricator's printed warnings, installation instructions, and operating manuals shall be strictly
- observed, and shall take precedence over construction drawings unless an exception is noted. P. The data given herein and on the drawings are as exact as could be secured. Their absolute accuracy is not guaranteed, and the Contractor shall obtain exact locations, measurements, levels, etc., at the site, and shall satisfactorily adapt his
- Q. No extra work shall be done either by the Contractor or his Subcontractors unless such extra work and costs thereof have been previously approved in writing by the Owner. No claims for extras will be acknowledged unless accompanied by such written approvals (i.e. Change Orders).
- R. The owner reserves all rights to any salvage of his property. S. GENERAL PROJECT SPECIFICATIONS
- 1. Per wall types legend, frame new exterior walls with 2x4 studs at 16" o.c., insulated to R19 minimum unless noted otherwise. Attach 7/16" A.P.A. span-rated O.S.B. sheathing with Tyvek Home Wrap or equivalent at all exterior wall surfaces. Follow window manufacturer's instructions for building wrap at all openings. Frame new interior walls with 2X4 studs, at 16"o.c.
- 3. Frame roof-ceiling structure at cathedral ceilings with 2X8 rafters at 16"o.c.. Support all roof loads on load-bearing VII. THERMAL & MOISTURE PROTECTION wall or beam structures and use Simpson A35 framing anchors or equivalent at each rafter bearing location. Attach 5/8" A.P.A. span-rated plywood or O.S.B. roof decking to top of rafters and cover all decking with 15 lb. minimum roofing felt. Use 30 lb. felt and/or additional roof protection to meet code at all horizontal eaves.
- 4. Insulation: At exterior 2x4 framed walls, install R-15 foil faced fiberglass batts; between all rafters at sloped ceiling, install R-11 foil-faced fiberglass batts over 1" polyisocyanurate insulation board. Maintain 1" minimum clear airspace above all roof insulation for roof venting. Fill all open joints in exterior framing with low pressure expanding foam sealant, and tape seal all joints in foil face of batt insulation for vapor retarder at warm-winter side of
- II. SITE WORK
- A. Soils Report: A soils report is recommended. The Architect reserves the right, at the Owner's expense, to require a soils report prior to construction in the event of site conditions of concern, and a waiver of liability to cover recommendations not followed. If owner does not contract with a licensed soils engineer for a comprehensive soils report with recommendations, the foundation shall be designed to the standards set forth in the latest edition of the International Residential Code.
- B. Site Clearing: Clear only those areas absolutely necessary for the construction of the project. Protect all other areas,
- including landscaping and trees. C. Excavation and backfill: Strip topsoil as required and store on site for future redistribution at the conclusion of the construction process. Replace prior to any reseeding and/or replanting. Excavate as required for the footings, foundations, and slabs at the lowest elevation documented in the drawings. Backfill with moistened soil and compact in 1'-0" lifts to prevent settlement. Do not puddle. Compact any soils disturbed under or next to footings to achieve soils loading capacity necessary as prescribed in the Code or Soils Report. Compact all soil disturbed under slabs with mechanical tamping devices to achieve necessary loading capacity. Bring finished grades around building to elevations indicated. All fill within the building site shall be compacted to 95% of maximum Proctor density. The Architect reserves the right to contract, at the Contractor's expense, with a Soils Engineer for inspection prior to the concrete work proceeding in the
- event of perceived lack of due diligence with foundation preparation. D. Paving: The contractor is advised to document existing site conditions prior to commencing work and provide that documentation to the Owner and Architect. All existing site concrete, asphalt and all other site areas shall be protected from damage by construction equipment by the contractor. Any damage shall be repaired to prior condition at the expense of the contractor.

### III. CONCRETE Reference standards:

- 1. American Concrete Institute publications; ACI 306 Recommended Practice for Cold Weather and Concreting; ACI 318 Building Codes Requirements For Reinforced Concrete; ACI 305 Recommended Practice for Hot Weather Concreting; ACI 315 Manual of Standard Practice for Detailing Reinforced Concrete Structures.
- 2. Concrete Reinforcing Institute: Manual of Standard Practice
- General standards: 1. Concrete mix to meet ACI 318-95, ASTM C33
- 2. Reinforcing Steel: Bars-ASTM A615 Grade 60, Welded wire-ASTM A185, protective cover for reinforcing steel shall be: Footings-3"; Beams or columns-2"; Slab-1"; Walls-1 1/2" @ interior face, 3" @ exterior face.
- 3. The Contractor shall notify the Building Inspector 48 hours prior to each concrete pour. All reinforcing must be in place and inspected by the Building Inspector prior to any concrete pour. 4. Protect concrete from premature drying and excessive cold or hot temperatures. Maintain at proper temperature and
- humidity necessary for hydration and proper hardening. Provide moist curing or moisture retaining cover curing for all concrete work. 5. Cold weather placement: Protect concrete work from physical damage or reduced strength caused by frost, freezing actions, or low temperatures. When air temperature has fallen or is expected to fall below 40 degrees F., uniformly heat all water and aggregate before mixing to obtain 50 degrees F. to 80 degrees F. temperature at point of placement.
- Do not use frozen materials in the mix or place concrete on frozen subgrade. Do not use antifreeze agents or admixtures without approval of the Architect. 6. An industry standard concrete masonry (CMU) or Insulated Concrete Form (ICF) system may be substituted for a concrete foundation wall system upon approval by the Owner and Architect. Documentation of the proposed system specifications, with solutions for waterproofing, drainage, structural connection, interior and exterior finishes, shall be submitted to the Architect for approval prior to construction. Exemptions for foundation insulation will be
- A. Footings and Foundation Walls: See foundation drawings and specifications.
- Slabs: See structural for size and details. Float top surface of slab with a smooth trowel finish.

# IV. MASONRY

- Masonry and grouting shall be in accordance w/ specified ASTM C270 requirements, Masonry units shall not be laid if wet or frozen.
- 3. Lay masonry in common bond with 6th course headers, with 3/8" nominal mortar joints. Lay masonry units level, plumb, and true. Protect masonry against freezing with heaters and temporary insulating covers as required.
- 4. Provide concealed flashing in masonry as shown. Place through wall flashing on a bed or mortar and cover with
- mortar. Provide weep holes at 48" o.c. in the head joints of the first course of masonry above concealed flashings 5. Clean all masonry after mortar is set and cured in accordance with the technical notes for cleaning clay masonry by
- SCPI. Replace, repair, and repoint all loose and damaged units. Protect the work of other trades throughout masonry construction.
- A. <u>Concrete Masonry Units:</u> not used.
- B. Brick Veneer: Install according to specifications set forth by the ASTM C216, Type FOBS Grade SW, compressive strength of min. 3000 psi. brick ties shall be securely anchored to masonry structural wall or wood structural wall @ 2'o.c. both vertically and horizontally. Brick water table to be manufactured by Glen Gery. Exact brick to be approved by Owner before purchase. Brick size is modular 3 5/8" x 7 5/8" x 2 1/4" or to match existing. The architectural design assumes modular brick dimensions, and in-field adjustments to align new work with existing are the responsibility of the Contractor. Install solid brick units in locations where holes in standard brick would be visible.

### V. METALS

- All structural steel shall have at least one coat of antirust shop primer. Structural steel: See structural drawings. Shall conform to ASTM A-36, Provide shop drawings for any special
- connections, conditions, or details needed. Provide steel base plate for all structural steel beams bearing on masonry or XI. B. Lintels: End bearing shall be a minimum of 1" per 1'-0" of clear span with a minimum bearing of 4". Lintels shall be
- coated with one coat rust prohibitory steel primer and one coat rust prohibitory enamel before finish coat.
- Reference standards: 1. American Institute of Timber Construction; National Forest Products Assoc.-National Design Specifications for Wood
- Construction; 2. Truss Plate Institute TIP-74;
- American Plywood Association- Guide to Plywood For Floors, Plywood Sheathing for walls and Roofs;
- 4. American Wood Preservers Assoc.-Standards. National Design Specifications for Stress Grade Lumber and its Fastening, latest edition.
- 1. Maximum moisture content: Framing Lumber-10%; Exterior Finish Lumber 8%; Interior Finish Lumber 7% XV. 2. Set wood framing accurately to required lines and levels.
- Firestop concealed spaces with nominal 2" wood blocking unless blocked with other framing. A. Pressure treated: Includes all framing lumber in direct contact with masonry or concrete (i.e. sill plates) or within 1 foot of
- B. Framing Lumber: Material shall be no. 2 grade Douglas Fir or similar with the following values: Extreme fiber stress: Fb = 1250 psi.
  - Horizontal shear: Fv = 95 psi. Compression perpendicular to grain: Fc = 625 psi.
- Modulus of elasticity: E = 1,7e6 psi. <u>Wood Moulding:</u> See drawings.
- Roof Sheathing: 5/8" CDX exposure1 plywood (or equivalent). Ref. Structural Coordination Drawings.
- Wood Fasteners: Use metal framing connectors -- USP, Simpson Strong-Tie, or equivalent -- at all wood or wood-product beam bearing connections
- Brace all beams to provide lateral stability and to prevent rotation.Ref. Structural Coordination Drawings.
- Provide all necessary nails, bolts, hangers, anchors, and ties as shown or required. 4. Standard joist hangers and connectors as noted by "USP," "Simpson" or "Teco." All fasteners exposed to weather XVI. ELECTRICAL must be galvanized, or triple-zinc-coated if available, or otherwise non-rusting. All fasteners used with cedar,
- redwood, or treated trim lumber shall be stainless steel. 9. Per wall types legend, frame new exterior walls with 2x4 studs at 16" o.c., insulated to R19 minimum – unless noted otherwise. Attach 7/16" A.P.A. span-rated O.S.B. sheathing with Tyvek Home Wrap or equivalent at all exterior wall
- surfaces. Follow window manufacturer's instructions for building wrap at all openings. 10. Frame new interior walls with 2X4 studs, at 16"o.c..
- 11. Frame roof-ceiling structure at cathedral ceilings with 2X8 rafters at 16"o.c.. Support all roof loads on load-bearing wall or beam structures and use Simpson A35 framing anchors or equivalent at each rafter bearing location. Attach 5/8" A.P.A. span-rated plywood or O.S.B. roof decking to top of rafters and cover all decking with 15 lb. minimum roofing felt. Use 30 lb. felt and/or additional roof protection to meet code at all horizontal eaves.
- 12. Insulation: At exterior 2x4 framed walls, install R-15 foil faced fiberglass batts; between all rafters at sloped ceiling, install R-11 foil-faced fiberglass batts over 1" polyisocyanurate insulation board. Maintain 1" minimum clear airspace above all roof insulation for roof venting. Fill all open joints in exterior framing with low pressure expanding foam sealant, and tape seal all joints in foil face of batt insulation for vapor retarder at warm-winter side of
- 13. Duct combustion air supply from outside to wood-burning stove and any other fuel-burning mechanical equipment per code.
- G. <u>Interior and Exterior trim and details</u>: See drawings details for sizes and locations. Coordinate with contractor and
- developer. All trim attached directly to masonry walls shall be glued with PL400 construction adhesive. H. Finish carpentry: See notes on drawings. Prime all sides and edges of trim to be painted before installing. Countersink all nails, and fill holes with lightweight spackling compound on interior surfaces to be painted. Fill all stained wood holes with wood putty to match wood color. Fill all exterior painted trim holes with exterior grade paintable hole filler. Sand
- I. <u>Cabinets and Bath Vanities:</u> Per owner selection. Verify all dimensions on the drawings by taking field measurements. Proper fit and attachment of all parts and coordination with other trades is required. Install cabinets in a manner consistent with the specified quality by AWI standards. Cabinets shall be installed plumb, level, and straight, with no distortions. Secure to grounds, stripping and blocking with concealed fasteners. Scribe and cut for accurate fit to other finish work. Repair damaged or defective work as directed by the Architect. Adjust and lubricate hardware for proper operation and

- Foundation Dampproofing: as specified in A1010.320 Foundation Dampproofing on Foundation Plan. <u>Perimeter Drain:</u> Perforated drain pipe with "sock". See soils report for system.
- Foundation Insulation: none on exterior. Fiberglas batts on the inside.
- Foundation Sills: Install fiberglass sill sealer continuous under plate and seal all other cracks with foam sealer. Floors: Coordinate with owner and developer.
- Walls: Insulate 2x4 stud wall with Kraftfaced fiberglass batts, R-15, 3-1/2", stapled to studs. Staple 6 mil polyethylene plastic sheet vapor barrier to studs on warm side of wall.
- Roof: R38 batts with 6 mil polyethylene vapor barrier warm side of roof. Always leave 1" airspace between insulation and sheathing for ventilation. Vent soffits and roof (on ridge) with continuous vent with bug screen
- Roofing: Install "Grace Ice and Water Shield" directly to sheathing on all eaves, valleys, ridges and up sides of chimney next to roof and on top of chimney under metal cap. Install 30# roofing felt over entire roof before shingling. Install 235# min. composite shingles per owner selection on sloped roofs per manufacturer's specifications. Coordinate installation with manufacturer's recommendations and local codes. Install "Tremco" 350/351 roofing (color: gray) on all flat roofs per
- manufacturer's specifications including the plywood substrate. Contact: www.tremcoroofing.com or 800-562-2728. Flashing: Install 26 ga galvanized steel flashing where indicated. Provide continuous flashing w/ 1/2" drip edge at all window head locations. Flash all pipes, vents, and flues passing through the roof per manufacturer's
- Gutters & Downspouts: 5" seamless gutters or per roofing contractor. Downspouts to be of galvanized steel or aluminum and painted to match trim. <u>Caulking and sealants</u>: Fill cracks in rough framing or exterior envelope (at door and window perimeters, etc.) with elastomeric foam sealant, butyl at hard to replace direct weather-exposed areas (i.e. foundation sills),

paintable 30-year latex around exterior trim to match surrounding materials. Color to be coordinated with

### VIII. DOORS & WINDOWS Reference Standards:

- Underwriter's Laboratories, Inc., Building Materials Directory; National Fire Protection Assoc. Pamphlet no. 80, Standard for Fire Doors and Windows; National Woodwork Manufacturers Assoc. - I. S. 1-78 Exterior doors: Per owner selection. Install Z-flashing over the entire length of the head trim of all exterior doors. Install flashing and butyl caulk between the threshold and the subfloor and extend flashing down and over exterior material. Weatherstrip all doors per manufacturer's recommendations. Prime all surfaces of painted doors
- before any (even temporary) installation. <u>Interior doors</u>: Per owner selection.
- Windows: Marvin. All windows must meet or exceed the 80 MPH wind load as specified in the local Code (latest edition). Install "Z" flashing over the heads of all window trim. Tempered Glass: Glazing in locations which are subject to human impact (i.e. frameless glass doors, sliding
- glass doors, storm doors, fixed glass panels located within 12" of doorways, windows with glazing within 18" of the floor) shall be tempered glass per adapted code. <u>Door Stops:</u> per owner

### **FINISHES** <u>Floors</u>: See plans and sections.

- Walls: 1/2" tapered edge fire rated gypsum board throughout. Provide green board or Durock at all wet locations per local Code. Tape, float, and texture to match existing residence all surfaces ready to receive paint.
- Preparation of surfaces: No painting shall begin until surfaces are in proper condition to receive paint. The subcontractor shall notify the General Contractor of any surfaces not suitable for proper application and shall not apply any materials until such surfaces are properly prepared, clean, and free from grease and oil. All necessary puttying and caulking of nail holes, cracks, etc. shall be done after prime coat has cured. On stain work holes shall be puttied to match finish color. Protect hardware from paint. Exact finish to be approved by Owner prior to application.
- Colors: All colors shall be selected by Owner. The subcontractor shall furnish color samples requested two weeks before starting work.
- Manufacturer: First grade paint lines of Benjamin Moore, Pittsburgh, Pratt and Lambert or approved equal. First grade transparent stain lines of Olympic, Cabots, Rez, or approved equal.
- Schedule: NOTE: COORDINATE SPECIFICATIONS AND GET OWNER'S APPROVAL BEFORE ANY WORK. Exterior Woodwork: (1) coat primer, (2) coats latex semi-gloss house paint or as specified by
- Exterior Metal (flashing, flues, gutters and downspouts, trim): (1) coat galvanized primer, (2)
- coats alkyd enamel where designated. Interior Hardwood Trim: (1) coat semi-transparent stain and wipe, (2) coats satin urethane
- Gypsum Board: (1) coat tinted primer, sealer, (2) coats eggshell latex. Interior Unprimed Metal: (1) coat galvanized primer, (2) coats alkyd enamel, match adjacent
- Paint Coverage: The number of coats listed is a minimum. The number of coats necessary to achieve coverage equal to the best work of the trade shall be applied. "Painting" includes protecting work of other trades, surface preparation, and cleaning; coordination of prime and finish coats and proper
- preparation and application of materials. Floor Tile: Selection by Owner. Installation by contractor. Shower Tile: Selection by Owner. Installation by contractor.
- Interior Trim: Selection by Owner. Installation by contractor. Exterior Trim: Selection by Owner. Installation by contractor.

## **SPECIALTIES**

- Toilet and bath accessories: Coordinate exact locations with Owner. Contractor to install 2X blocking behind all
- accessories and grabbar locations. Columns: manufactured by Chadsworth.

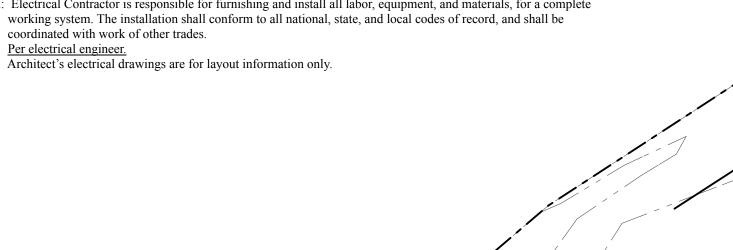
- A. Residential Appliances:
- Refrigerator: By Owner. <u>Fireplace:</u> Lennox per plans. Install with all accessories per manufacturer and to meet local Codes.

### **FURNISHINGS**

- SPECIAL
- CONSTRUCTION
- CONVEYING SYSTEMS None
- MECHANICAL General: Mechanical Contractor is responsible for furnishing and installing all labor, equipment, and materials, for a complete working system. The installation shall conform to all national, state, and local codes of record, and
- shall be coordinated with work of other trades. A. <u>Plumbing</u>:
- Per plumbing contractor.
- B. Heating, Ventilating and Cooling: Re: Mechanical contractor and owner. Duct combustion air supply from outside to wood-burning stove and any other fuel-burning mechanical
- equipment per code. C. <u>Plumbing</u> <u>Fixtures:</u>
- 1. Per owner.

### Plumbing Fittings: Per owner

- General: Electrical Contractor is responsible for furnishing and install all labor, equipment, and materials, for a complete working system. The installation shall conform to all national, state, and local codes of record, and shall be
- Per electrical engineer.

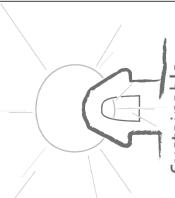


Grading & Drainage Plan Notes

- This is not a survey. Proposed grading is conceptual and based on assumed topography. Slope all grade to drain away from the building. Provide swales to direct water to existing city storm
- drainage system. Provide scuppers, gutters & downspouts as indicated in the roof
- areas of gentle slope within swales. Provide site-concrete or lumber porch from addition slab down to gently-
- sloped grade as indicated in the foundation plan.

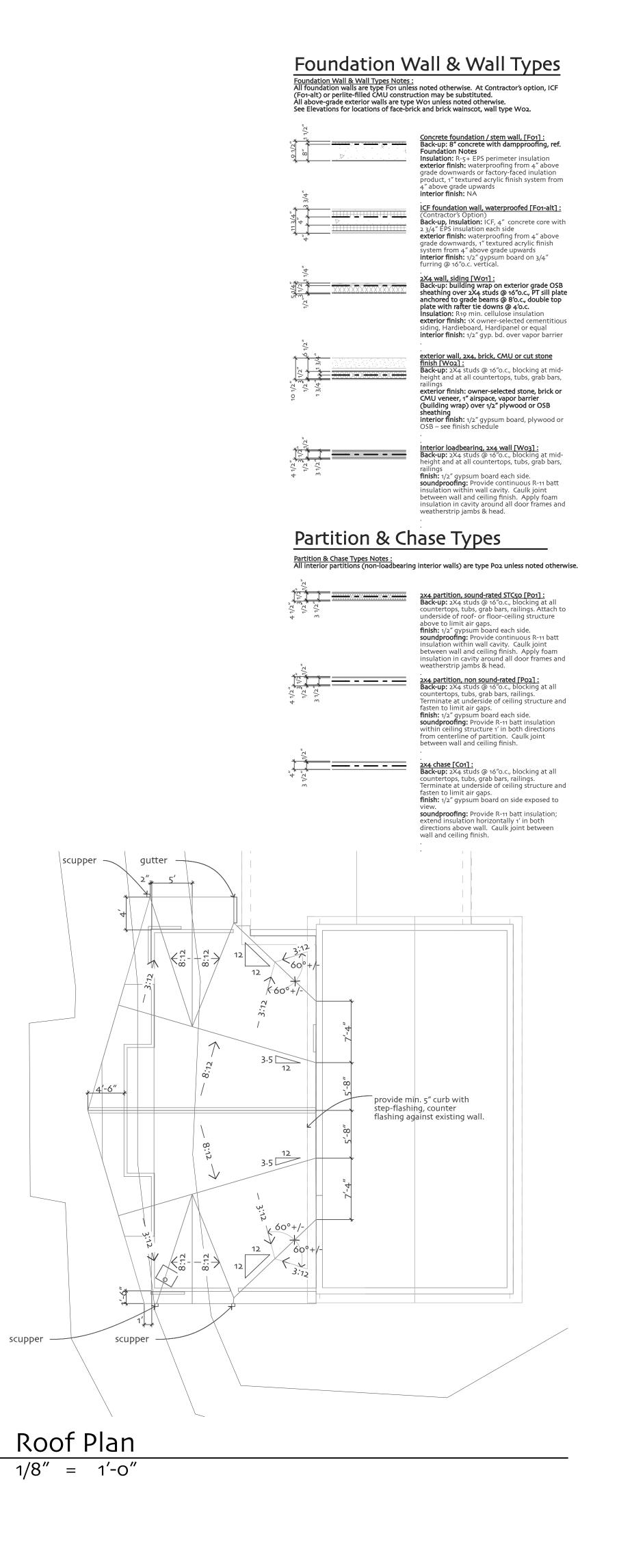
plan. Route drainage underground to

Grading & Drainage Plan

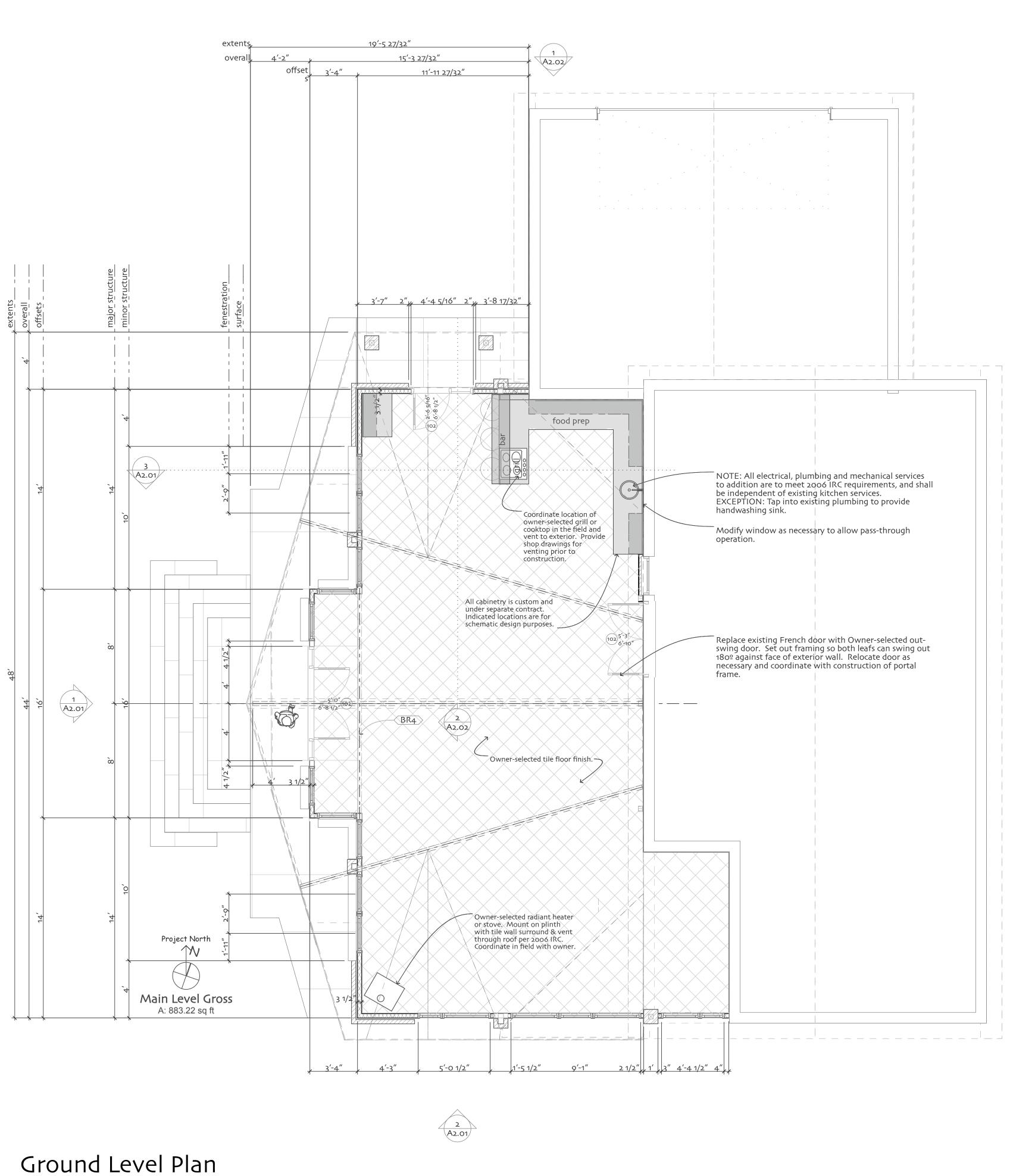


D

General Info, Site rading & Drainag 0



1/4" = 1'-0"



Nev Vid

Status:





South Elevation

1/4" = 1'-0"

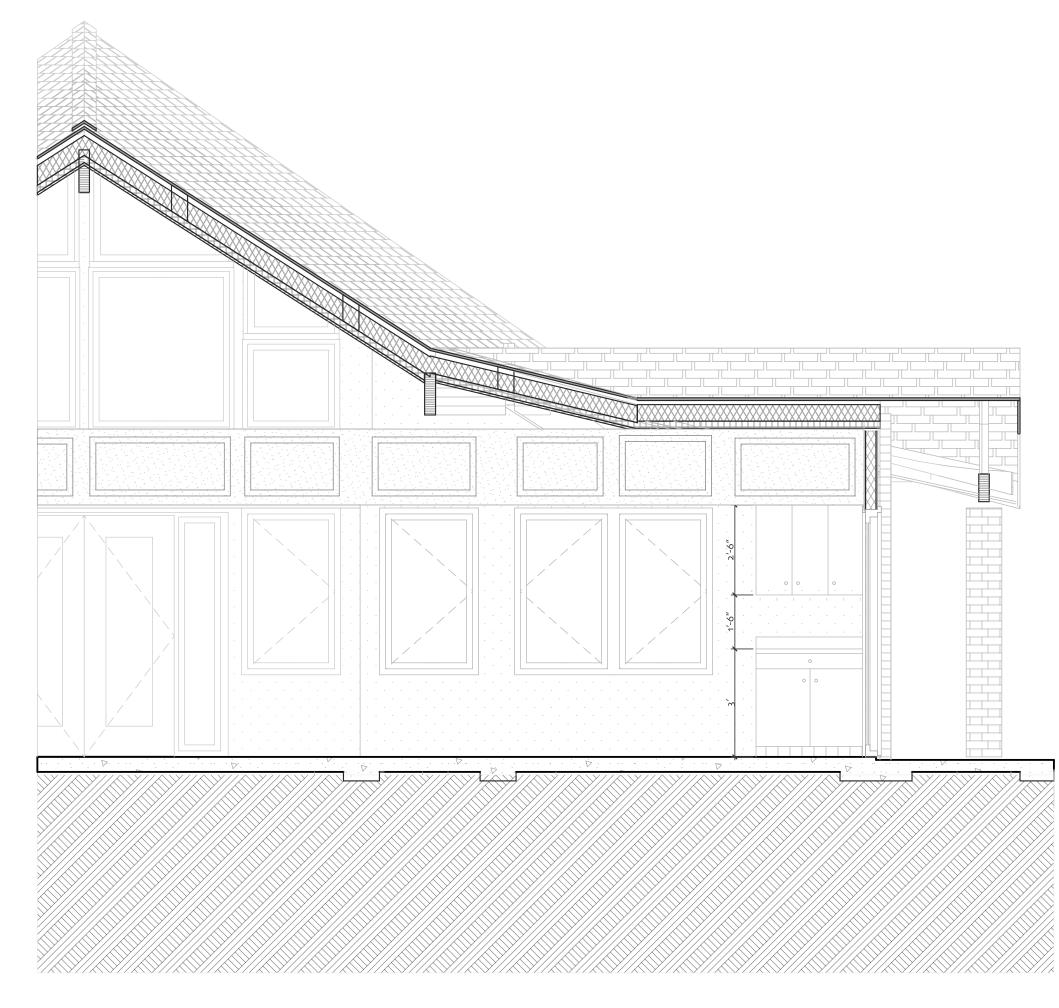
WINDOW SCHEDULE I.D. Type
Fo1 W1 Casement 12 W H Ext. Mat'l. Glass Type Glass t Notes 2.63′ 4.57′ Mtl-Alum Glass - low e, low SHGC o'-o 1/4" shoulder height: 1'-2" Fo4 W Trapezoid Fix 12 2.63′ 2.99′ Mtl-Alum Glass - low e, low SHGC o'-o 1/4" shoulder height: 1'-2 ... Glass - low e, low SHGC o'-o 1/4" Glass - low e, low SHGC o'-o 1/4" 2.29' 4.57' Mtl-Alum Glass - low e, low SHGC o'-o 1/4"



West Elevation
1/4" = 1'-0"

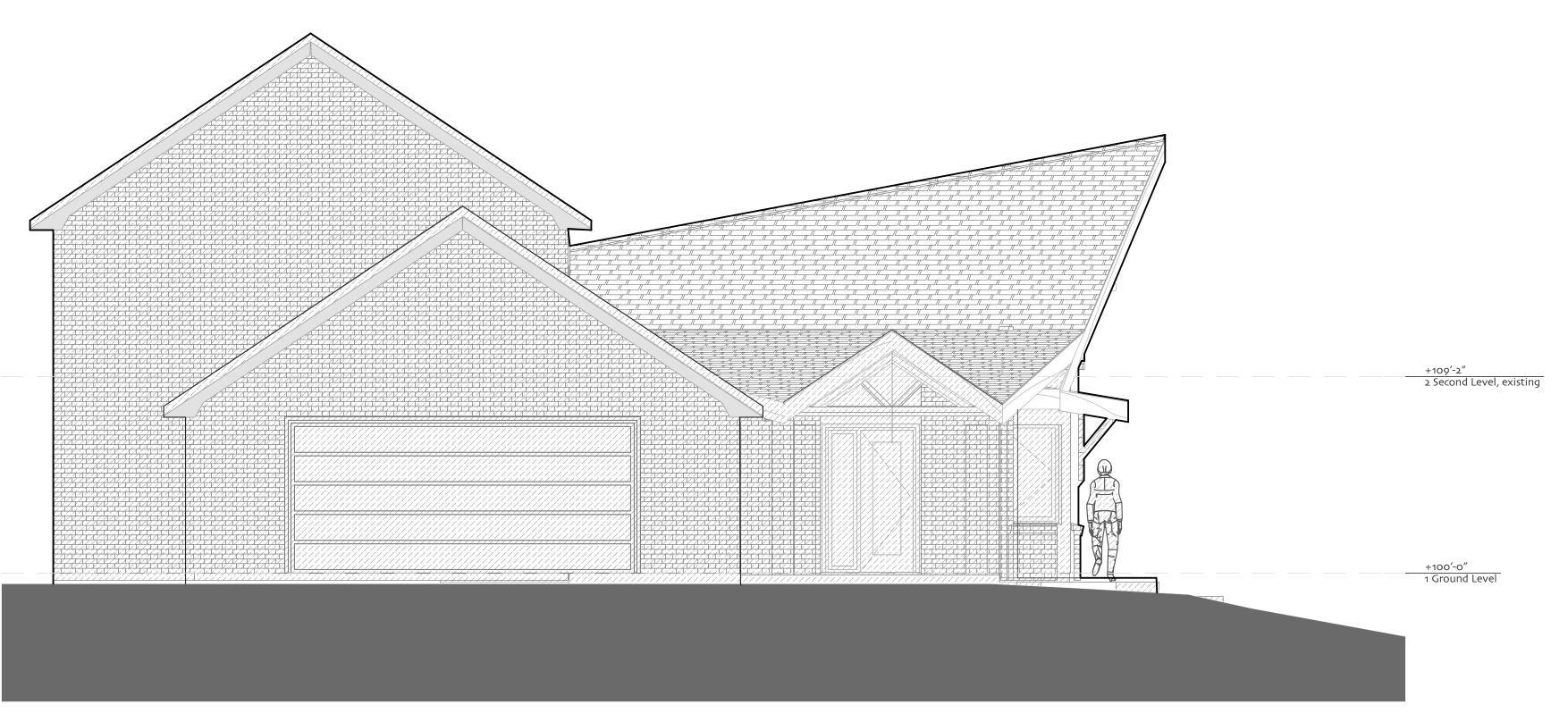
Status:

Elevations & Sections A2.01



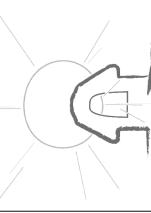
Section 2

3/8" = 1'-0"



North Elevation

1/4" = 1'-0"



Licenses: MS 4435, KS 5432
153 Lakes Drive South
Oxford, MS 38655
662/801-2701
www.SustainableArch.com
architecture, sustainable &
passive-solar BIM design,

avid & Carol Wedge

Addenda:

Status:
design-build, limited
liability
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Elevations & Sections
A2.02

# **A10** foundation

Foundation consists of standard foundations (A1010). See (A20) for basement construction.

**A20** basement construction Basement construction shall consist of basement excavation and basement walls. See (A10) for foundation.

# **A1010** standard foundations

Standard foundations consist of wall foundations (A1010.100), point- and area-load foundations (A1010.200), and slab on grade (A1030).

### A1010.100 wall foundations

Exterior wall foundations consist of turned down slab edge (A1010.120), turned down garage slab edge (A1010.120.2201), and basement walls (A2020). Interior wall foundations consist of thickened slab (A1010.140), and basement walls (A2020). R403

**A1010.110** strip footing, general All footings shall be a minimum of 12" below undisturbed ground. The tops of the footings must be level, and the bottom of the footings cannot exceed a 10-percent slope; footings shall be stepped when this is unavoidable. Provide

foundation underdrain (A1010.310) for all strip

footings at exterior bearing conditions. R403.1

**A1010.110.2100** strip footing, 1-story light frame Strip footing for 1 story conventional light frame construction, soil capacity 1500SF, 12" wide x 8" deep, unreinforced. R403.1.3.2

# **A1010.110.2501** strip footing, 2-story masonry

Strip footing for 2-story 4-inch brick veneer over light frame or 8-inch hollow concrete masonry, soil capacity 1500SF, 21" wide x 12" deep. Provide minimum (1) #4 bar top and bottom. R403.1.3.2

**A1010.120** turned-down slab edge, general All footings shall bear a minimum of 12" below undisturbed ground. The tops of the footings must be level, and the bottom of the footings cannot exceed a 10-percent slope; footings shall be stepped when this is unavoidable. Provide reinforcement per Section R403.1.3.2 of IRC 2006 - place bottom steel minimum 3" above bottom of footing. R403.1

### **A1010.120.2100** turned-down slab edge, 1-story light frame

Strip footing for 1 story conventional light frame construction, soil capacity 1500SF, 12" wide x 8" deep. Provide (1) #5 bar at mid-depth. R403.1.3.2

# **A1010.120.2101** turned-down slab edge, 1-story

masonry veneer Strip footing for 1 story 4-inch brick veneer over light frame or 8-inch hollow concrete masonry, soil capacity 1500SF, 12" wide x 8" deep. Provide (1) #5 bar at mid-depth. Provide 5 1/2" deep brick ledge to between 6" and 12" above finish grade with back face of ledge aligned with face of sheathing. Omit brick ledge at door threshold as indicated. R403.1.3.2

A1010.140.2100 thickened slab, 1-story light frame Thickened slab for 1 story light frame construction. soil capacity 1500SF. Thicken floor slab to 12" wide by 8" deep, unreinforced. Provide sill plate anchorage to the top of the footing per Sill Anchorage (A2020 170). Where thickened slab joins strip footing, extend thickened slab steel into strip footing and tie steel together. R403.1.4.2

# A1010.140.2501 thickened slab, 2-story masonry

Thickened slab for 2-story 4-inch brick veneer over light frame or 8-inch hollow concrete masonry, soil capacity 1500SF. Thicken slab to 21" wide x 12" deep. Provide minimum (1) #4 bar top and bottom. Provide sill plate anchorage to the top of the footing per Sill Anchorage (A2020 170). Where thickened slab joins strip footing, extend thickened slab steel into strip footing and tie steel together. R403.1.4.2

**A1010.200** point- and area-load foundations Point- and area-load foundations consist of spread footings (A1010.210), thickened slab at step down (A1010.220) and concrete pier (A1010.270).

# A1010.210 spread footings

Spread footing, 12" thick with #4 bars @ 12"o.c.e.w. at bottom 1/3 depth and top 1/3 depth. Tie top steel to slab steel. Top of footing is level with top of slab. Where columns occur, Epoxy-set 5/8" dia. steel anchor bolt.

# A1010.300 perimeter insulation

Provide perimeter slab insulation of a minimum of R4.5 at the vertical faces of all slab edges and turned-down slab edges adjacent to conditioned space. Where the foundation is above the frost line, perimeter insulation shall meet the requirements of section R403.3 of the 2006 IRC. Concrete or masonry foundation walls shall be insulated as specified (A2020.300), and dampproofed or waterproofed (A1010.320).

## **A1010.310** foundation underdrain

foundation underdrain, PVC pipe 4" diam. S.D.R. 35 Pipe Bedding, graded gravel 3/4" to 1/2". Pipe bedding should extend minimum 12" beyond the outside edge and 6" above the top of the footing. The bedding should be covered by a mesh filter membrane. Protect the top of all open joints in drain tile with strips of building paper. Place drainage tiles or perforated pipe on a minimum of 2" of washed gravel or crushed rock at least one seive size larger than the tile joint opening or perforation. Cover tiles or pipe with minimum 6" of

the same material. R406 **A1010.320** foundation dampproofing, general Provide foundation dampproofing to all concrete or masonry foundation walls that enclose interior space below grade. See foundation dampproofing, ICF (A1010.320.1430) for dampproofing of ICF foundation walls. Wherever a high water table or other severe soil-water conditions exist, foundation waterproofing of all basement walls is required (A1010.330). Dampproofing shall extend from the top of the footing to finished grade. Masonry walls shall have minimum 3/8" parging applied to the exterior face unless the dampproofing product is approved for direct application over masonry. Dampproofing shall be selected from one of the foundation dampproofing options. R406

# **A1010.320.1401** foundation dampproofing, option

Bituminous asphalt coating **A1010.320.1402** foundation dampproofing, option

acrylic modified cement applied at 3# per square

A1010.320.1403 foundation dampproofing, option

surface-bonding cement complying with ASTM C 887, applied to minimum 1/8" thickness

**A1010.320.1404** foundation dampproofing, option

# foundation waterproofing (A1010.330)

A1010.320.1430 foundation dampproofing, ICF Waterproofing (A1010.330), e.g. rubberized asphalt "peel-n-stick" Royston HP or equal, shall be applied to all below grade ICF's per manufacturer's instructions.

**A1010.330** foundation waterproofing, general Wherever a high water table or other severe soilwater conditions exist, foundation waterproofing of A2020.110 walls, cast in place all basement walls is required, such as foundation waterproofing, option 8 (A1010.330.1408). Waterproofing shall extend from the top of the footing to 4" above finished grade. Masonry walls shall have minimum 3/8" parging applied to the exterior face unless the waterproofing product is approved for direct application over masonry Dampproofing shall be selected from one of the Foundation Dampproofing options. See foundation waterproofing, ICF (A1010.330.1430) for additional requirements for ICF foundation wall construction. All joints in membrane waterproofing shall be lapped and sealed with an adhesive compatible with the membrane. R406

**A1010.330.1401** foundation waterproofing, option 2-ply hot-mopped felts

**A1010.330.1402** foundation waterproofing, option 2 55# roll roofing

**A1010.330.1403** foundation waterproofing, option 3 6-mil polyvinyl chloride

A1010.330.1404 foundation waterproofing, option 4 6-mil polyethylene

**A1010.330.1405** foundation waterproofing, option 5 40-mil polymer-modified asphalt **A1010.330.1406** foundation waterproofing, option 6

60-mil flexible polymer cement **A1010.330.1407** foundation waterproofing, option 7 1/8" cement based, fiber-reinforced waterproof

**A1010.330.1408** foundation waterproofing, option 8 60-mil solvent-free liquid-applied synthetic rubber

**A1010.330.1430** foundation waterproofing, ICF Organic-solvent based products (e.g. hydrocarbons, chlorinated hydrocarbons, ketones, esters) shall not be used over polystyrene. Plastic roofing cements, acrylic coatings, latex coatings, mortars and pargings to seal ICF walls is permitted. Cold-setting asphalt or hot asphalt shall conform to type C of ASTM D 449. Hot asphalt shall be applied at a temperature of less than 200°F.

# **A1020** Special Foundations

A1030 slab on grade

Slab on Grade consists of interior slab on grade, hydronic radiant heated slab on grade, and garage slab on grade. Slab recesses occur where tile and wood floor are specified in the finish schedule, and for shower pan as indicated.

**A1030.150** slab recess Recess top of slab 1 1/2" for floor finish. For shower, recess as required to accommodate prefabricated shower pan, or slope top of floor slab down to shower drain at 1" minimum below Main Floor line.

# **A1030.500** under-slab drainage & insulation,

engineered subgrade Place a 6-mil polyethylene moisture retarder under the specified slab on grade over the specified compacted engineered fill with joints lapped not less than 6". R406

## A1030.501 under-slab drainage & insulation,

granular mat A 4" thick mat of granular material shall be placed on prepared engineered fill. This material shall be naturally-occurring earth material fairly well-graded with an upper particle size diameter of 1". A minimum of 30% should pass the No. 10 sieve and a maximum of 5% should pass the No. 200 sieve. This material shall be spread uniformly over the sub-grade, and tamped or rolled to provide a firm, true surface for placing concrete. A moisture barrier shall be placed over the granular material and lapped a 6" minimum. Provide 1" polystyrene insulation lapped 6". R406

**A2010** basement excavation Excavate 2' to 6' out from foundation wall and backfill with gravel. Provide foundation underdrain (A1010.310) for all strip footings.

A2020 basement walls, general Basement walls shall consist of basement wall construction conforming to Section 404 of IRC 2006 capable of carrying the loads specified in Section R301 and Section 404 of the IRC 2006. Anchorage to sill plates shall be as specified in Sections R403.1 and R602.11 (at braced wall panels) of the IRC 2006. R404

### **A2020.100** basement wall construction

Basement wall construction shall consist of walls, cast in place (A2020.110) bearing on strip footings (A1010.210) and standard slab on grade (A1030.120.2220). Provide "Waterstop-RX" or equal waterstop, located hoizontally at the centerline of the ICF core or concrete basement wall, at the joint between the strip footing or turned-down slab edge and the basement wall.

Wals, cast in place, shall consist of concrete or masonry wall (A2020.120) meeting all requirements of Section R404.1 of IRC 2006.

# A2020.120 concrete or masonry wall

Concrete or masonry foundation walls shall be minimum 7.5" thick with top and bottom elevations as indicated in the foundation plan, not to exceed 8' high. Per R404.1.4 (Seismic D0), reinforcement shall be as specified in Reinforcing Steel (A2020 160). Provide a 5 1/2" brick ledge at exterior walls maintained at 6" to 12" above finish grade. Omit brick ledge at exterior doors as indicated. Provide sill plate anchorage to the top of the wall per Sill Anchorage (A2020 170). Follow requirements for basement excavation (A2010.140).

# A2020.130 ICF foundation wall

ICF Foundation Wall, 6 1/4" core unless noted otherwise. Horizontal reinforcement shall be a minimum of one continuous No.4 re-bar placed 36" on center with one bar located within 12" of the top of the wall. Vertical reinforcement shall be according to IRC Table R404.4. Concrete shall have a compressive strength of 2,500f`c. Maximum slump shall not be greater than 6 inches and maximum aggregate should be less than 3/4 inch. Foundation walls must extend above finished ground a minimum of 4" when masonry veneer is used and a minimum of 6" everywhere else. Provide dampproofing or waterproofing according to A1010.320.

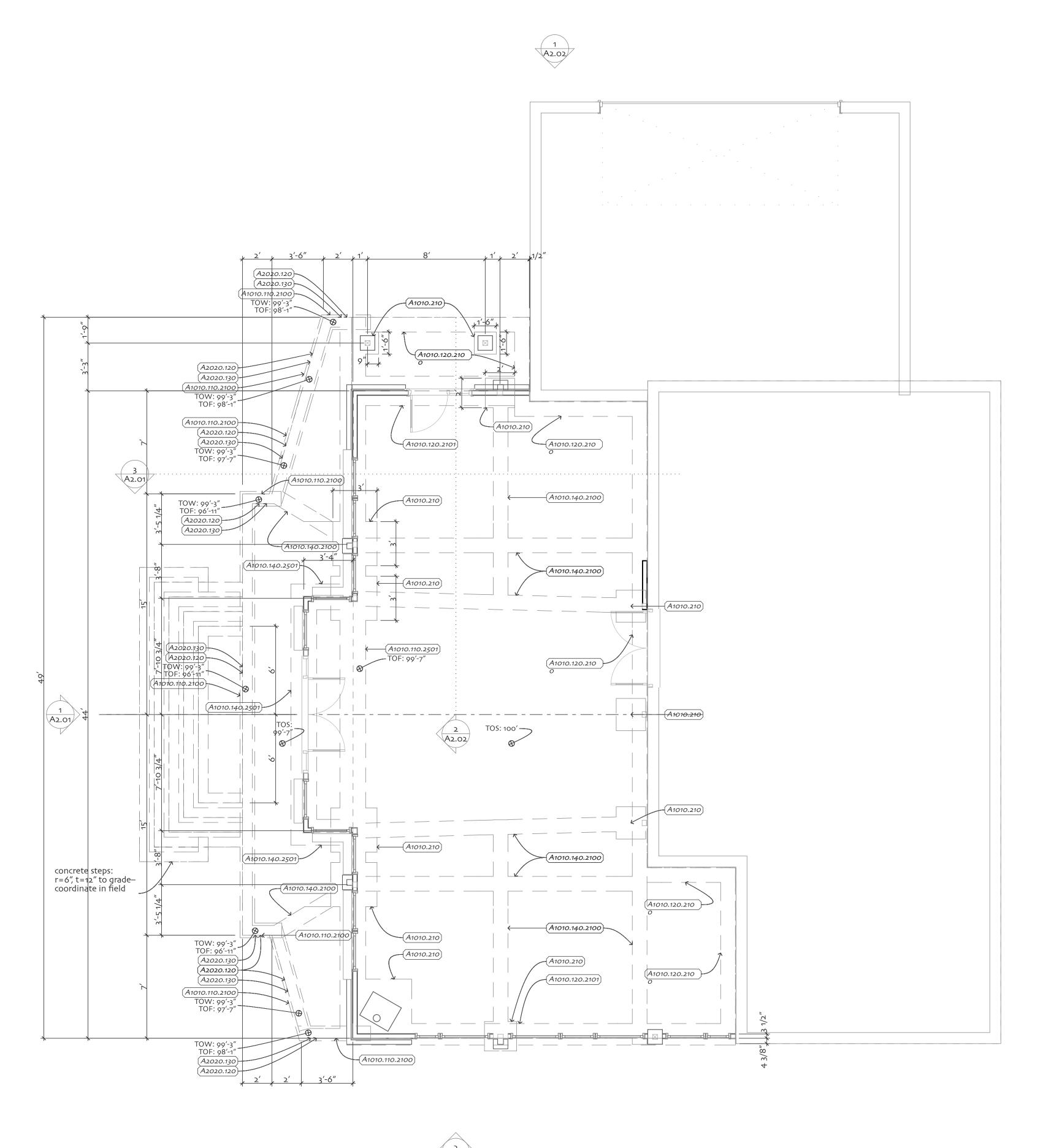
# **A2020.160** fdn. wall reinforcenent, seismic D0, D1,

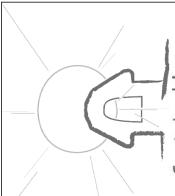
Per R404.1.4: A continuous horizontal #4 bar shall be located in the top 12" of the wall. Vertical reinforcement shall consist of one #3 bar at 4'o.c. maximum and tied to the horizontal reinforcement. In masonry, reinforcement shall be in grouted

# A2020.170 sill anchorage

Per R403.1.6, anchor bolts shall be minimum 1/2" dia. and shall extend 7" into the foundation wall. Sill plates shall be protected against decay from termites according to R319 and R320 of the 2006 IRC. Per R403.1.6.1 for seismic D0, treated 2X sill plates shall be anchored to the top of the concrete wall with a.b. @ 4'o.c. min.and located not more than 12" or 7 bolt dia. from each end. Plate washers are to be .229" X 3" X 3" and up to 3/16" larger than the bolt daimeter with a slotted hole permitted up to 1 3/4", installed between the sill plate and the nut.

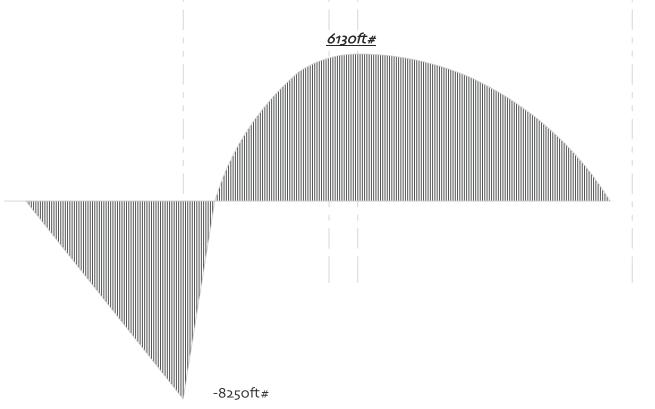
Foundation Plan





ф Addition Carol  $\infty$ 

Foundation Coordination



Roof Beam "RB1" analysis

1/4" = 1'-0"

# Framing Notes

B. Shell

# **B10** Superstructure

Superstructure shall consist of Floor & Wall Construction, and Roof Construction.

# **B1010** Floor & Wall Construction

paid by the Owner upon Archi

literature.

Use pressure treated exterior grade framing in all exterior exposed locations or wrap in weatherproof enclosure. Use pressure treated exterior grade lumber for any framing in contact with concrete.

### **B1010.210** Lumber / Wood Products, structural systems Lumber & engineered wood products structural systems must meet all prescriptive requirements of the latest issue of the IRC or must be custom-engineered (B1010.211). Residential loading conditions (B1010.210.1000) consist of single-story or two-story braced construction in which gravity loads rule, meeting all requirements of the latest issue of the IRC, including secondary load requirements. For structures where gravity loading rules, but with additional load requirements (e.g. snow, wind, earthquake), or with spans exceeding lumber and wood-products standards, or with (2) story unbraced conditions (e.g. unbraced exterior walls or posts in excess of 9' plate height), standard loading (B1010.210.2000) is assumed. For conditions and designs that exceed prescriptive code requirements and published manufacturer's specifications, a custom engineered structural system (B1010.211) is

**B1010.210.0100** Lumber / Wood Products structure, hardware requirements, general Hardware, including hold-downs, tie-downs, anchors, beam & joist hangars and column bases as specified in framing hardware supplier's

required, with the engineer acting as a sub-contractor to the Architect and

B1010.210.1000 Lumber / Wood Products structure, residential loading B1010.210.2041 A lumber structural system may be used for residential loading conditions. Structural spans for joists and rafters, beams and posts are as specified in lumber supplier's literature (e.g. Southern Pine). Framing Hardware requirements are for light or medium loads as specified in framing hardware supplier (e.g. USP) literature with exemptions granted by the Architect on a case-by-case basis.

**B1010.210.1030** Lumber Posts, residential loading, hardware All hardware listed is as manufactured by UPC for reference purposes; equal products from recognized manufacturers are approved. Use manufacturer-specified fasteners with all framing hardware. Hot-dip galvanized finish, or triple-zinc coating if available, is required for all framing hardware unless otherwise approved by Architect. Use post base series CBS, typical for interior locations. Omit post base for locations within the exterior wall framing and attach the base of the post or built-up studs to the sill plate using (4) S01 holddown framing anchorsl. Use WAS post base for all exterior (wet) locations.

B1010.210.1040 Composite Wood & Lumber Beams, residential loading, general

For reference purposes, beams are listed as iLevel; approved equal products from recognized manufacturers are acceptable. Beams are to be iLevel TimberStrand LSL except where capacity is exceeded or for wet locations, in which Parallam PSL is required.

Composite Wood & Lumber Beams, residential loading, bearing & hardware

W=9560#

240=327, L/360=218, end

bearing min.=3.6″, int. bearing min.=3.9"

> Beam connection hardware is listed USP for reference purposes; approved equal products by recognized manufacturers are acceptable. Use post cap series PCM for beam attachment, with custom-fabricated caps for rotated beams (angles other than 90- or 45-degrees). For sloped beams, provide shop drawings for birds-mouth conditions to Architect / engineering product supplier approval. Where beams bear on and pass through exterior walls, create a beam pocket in the wall with (2) layers of 2x framing and anchor the beam in the pocket with (2) SO1 anchors. In lieu of birds-mouth notch in beam, slope the base of the beam pocket.

BR3

BR4

B1010.210.2000 Lumber / Wood Products structure, standard loading For standard loading condtions, a composite lumber / engineered wood product structural system is required, which meets or exeeds all specifications of: 1) the lumber manufacturer (e.g. Southern Pine) for joists, studs, posts & plates, 2) the engineered wood products manufacturer (i.e. iLevel) for columns beams and connections, and 3) the framing / structural hardware manufacturer (e.g. USP, Simpson) for all structural & framing connections – with documentation provided to the Architect prior to construction. General hardware requirements are as specified in B1010.210.0100. Structural spans for joists and rafters are as specified in lumber supplier's literature. Hardware requirements, including hold-downs, tie-downs, anchors, hangers, bases and caps are as specified in B1010.210.2021 and framing hardware supplier's literature and wood products supplier literature. Column and beam design are as specified in B1010.210.2020, B1010.210.2040 and wood products supplier literature. Any

### B1010.210.2021 Wood Products, Columns, standard loading, hardware

All hardware listed is as manufactured by UPC for reference purposes; equal products from recognized manufacturers are approved. Use manufacturer-specified fasteners with all framing hardware. Triple-zinc coating is required for all framing hardware unless otherwise approved by Architect. Use post base series KCB, typical for interior locations. Omit post base for locations within the exterior wall framing and attach the base of the post or built-up studs to the sill plate using (4) S01 holddown framing anchorsl. Use WAS base for all exterior (wet) locations.

### Composite Wood & Lumber Beams, standard loading, bearing & hardware

Beam connection hardware is listed USP for reference purposes; approved equal products by recognized manufacturers are acceptable. Use column cap series KCCQ for beam attachment, with customfabricated caps for rotated beams (angles other than 90- or 45-degrees). For sloped beams, provide shop drawings for birds-mouth conditions to Architect / engineering product supplier approval. Where beams bear on and pass through exterior walls, create a beam pocket in the wall with (2) layers of 2x framing and anchor the beam in the pocket with (2) SO1 anchors. In lieu of birds-mouth notch in beam, slope the base of the beam pocket.

B1010.210.3000 Wood Products structure, engineered Engineered wood products structure is to be designed as a system by an engineer to withstand required gravity, snow, earthquake and lateral loads, including all connection, tie-down, hold-down and bracing details.

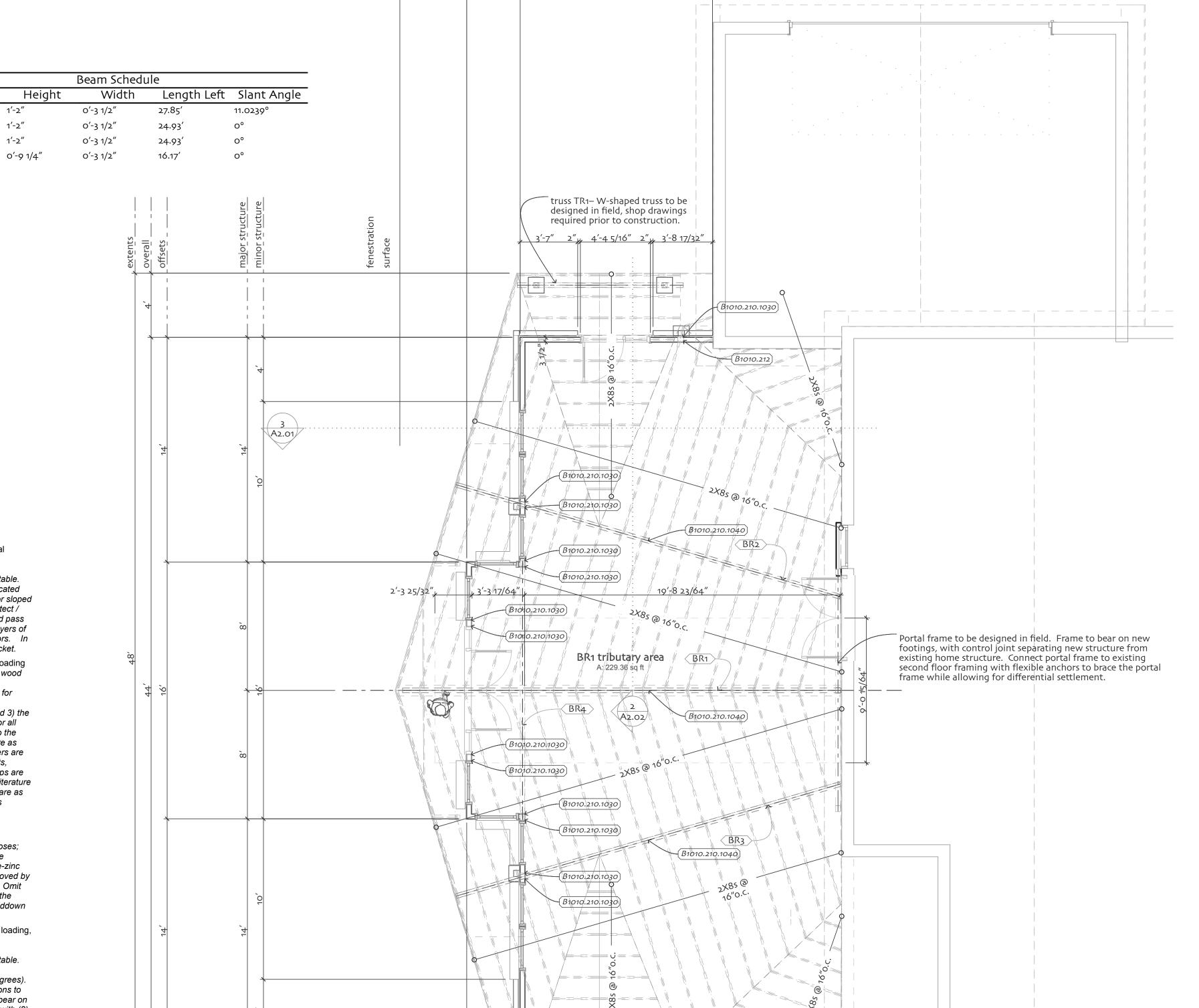
**B1010.211** Lumber / Wood Products structure, engineered

# **B1010.212** Built-Up Studs, general

Built-up studs can substitute for lumber posts in locations embedded in the wall framing. Attachment to sill plate is as indicated in lumber post hardware, residential loading (B1010.210.1021). Studs shall be nailed together using 8d nails at 12"o.c. in (1) vertical row for 2x4s, and (2) vertical rows for 2x6s.

Roof Framing Plan

1/4" = 1'-0"



B1010.210.1030

-(B1010.210.1030)

1'-5 1/2" 9'-1"

5′-0 1/2″

15'-3 27/32"

3'-4"

11′-11 27/32″

Status:

Roof Framing Coordination