Legend: OmniClass#   OmniClassTitle...
Project notes. (references) {IBC / IRC reference}.

22-01   General Requirements...
All work must meet the requirements all locally adopted codes and ordinances including the Building Code (22-01 00 10) and the Accessibility Code (22-01 00 20), as well as all requirements, drawings, details, specifications and references in these construction documents.
22-01 00 10   Building Code...
All work must meet the requirements of the 2018 edition of the International Residential Code with all associated International Code Family.
22-01 00 20   Accessibility Code...
All work must meet the requirements of the latest edition of ANSI 119.1
22-01 31 00   Project Management and Coordination...
The Contractor is fully responsible for the construction and its conformance with all General Requirements (22-01 00 00) in order to be eligible for payment by the Owner. The Owner, under separate contract, may enlist the services of the Architect as a consultant to assess and confirm in writing the compliance of the work with the General Requirements (22-01 00 00). Otherwise, the Architect's liability is waived except for non-conformance of the design with applicable codes and ordinances. The presence of a representative of the Architect or Owner on the job site does not constitute approval of the work.
22-01 31 13   Project Coordination...
Contact Sustainable Architecture, PLLC, wbswain@SustainableArch.com, 662/801-2701, with any questions regarding these documents or discrepancies between the design and actual conditions.
22-01 31 13 10   Dimensioning...
The data given in the design documents is for design purposes only and not guaranteed to a level of accuracy suitable for construction; the Contractor shall obtain exact locations, measurements, levels, etc. at the site, and shall adapt his work to the actual site conditions –and shall preserve the integrity of the design. Do not scale drawings. All notes and noted dimensions take precedence over scaled values, visual representations, or assumed information shown. Dimensioning guidelines are as follows: -vertical dimensions are measured from finished floor elevation "FFE" – i.e. top of slab or subfloor prior to installation of the finished floor – unless noted otherwise, -door frames not dimensioned are to be placed as shown: 5" from the face of stud at adjacent corners, centered along the wall length, or to match existing conditions, -windows not elevated shall be placed vertically to have same head height as doors exterior doors taking precedence – coordinate with the Exterior Window & Door Schedule, -stairs are dimensioned to face of nosing for riser, tread and handrail elevation dimensions, with handrails at 91cm[36"]h. and guardrails at 107cm[42"]h.
22-01 31 19 13   Pre-Construction Meetings...
The Owner, Architect and Contractor shall have an on-site pre-construction meeting to review the contract documents and to confirm Owner, Architect and Contractor responsibilities, and schedule and fee requirements. The Owner fails to have the meeting at Owner's risk.
22-01 31 19 23   Progress Meetings...
The Contractor shall adhere to the construction progress schedule (22-01 32 16), and shall notify the Architect or Owner at each construction milestone (22-01 32 16) so progress meetings can occur to inspect the work, authorize payment and approve construction to proceed. Architect's assessments are only recommendations; the Architect is not a Mediator.
22-01 32 16   Construction Progress Schedule...
The construction progress schedule shall be negotiated between the Owner, Architect and Contractor, during the pre-construction meeting. It shall be coordinated with any draw schedule in place. The construction milestones are as follows: 1) just prior to each concrete pour, 2) at completion of exterior wall and roof framing, 3) at completion of fenestration and Weather-Resistive Barrier (36-11 21 00 07) but before finishes, 3) at completion of interior framing, 5) at completion of plumbing, mechanical, electrical and fire protection but before finishes, 6) at completion of millwork and casework installation, 7) at completion of finishes and plumbing, mechanical, electrical top-out, 8) at preliminary closeout review (22-01 77 13), and 9) at Final Closeout Review (22-01 77 16).
22-01 71 16   Acceptance of Conditions, Substitution...
Substitutions are permitted but must be reviewed by the Architect. The Architect shall review any proposed changes for violations of the general requirements. If the Contractor, Owner or their Agents explicitly alter the work so that it does not conform with these Documents without the Architect's written approval, (e.g. alter the design, substitute a material or system, revise a construction detail or method of attachment from what is shown) such action will relieve the Architect of any liability regarding possible subsequent failure, property damage or personal liability.
22-01 77 13   Preliminary Closeout Review...
Within 1 week after the preliminary closeout review progress meeting, the Architect will issue a Completion and Correction List (22-01 78 13), and establish a date for the Final Closeout Review (22-01 77 16).
22-01 77 16   Final Closeout Review...
At the final closeout review, the Architect will inspect against the Completion and Correction List (22-01 78 13), and if all items are handled satisfactorily a substantial-completion certificate will be issued. Closeout preparation items include but are not limited to the following procedures: 1) Remove all construction debris, scraps, material, and equipment from site. 2) 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. 4) All ductwork shall be power brush cleaned, vacuumed, and sanitized before owner takes possession. 5) All hard and soft floor surfaces are to be cleaned per manufacturer's specifications. 6) 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. Any items not required in the construction documents will be handled under separate contract between the Owner and Contractor, and the Owner-Architect contract will be considered closed.
22-01 78 13   Completion and Correction List...
A completion and correction list ("punch list") will list all notable items that are officially deemed a discrepancy between the project requirements and the work. All items must be resolved for the final closeout review to commence.
22-01 78 23   Operation and Maintenance Data...
At the final closeout review (22-01 77 13), the Contractor shall provide a file to the Owner containing manufacturer specifications, operation and maintenance instructions, and warranties for all products and systems installed by the Contractor.

1 22-01 General Requirements

All documents below are hereby incorporated into the Construction Documents.
36-11 21 00   Product Literature
36-11 21 00 01   Specificator's Guide for Trus Joist Beams, Headers and Columns...
Weyerhaeuser (www.woodbywy.com/library/ >Design & Specification >tj-9000)
36-11 21 00 02   USP Connector Guide for Trus Joist Products...
Weyerhaeuser requirements (http://www.woodbywy.com/library/ >Design & Specification >5036)
36-11 21 00 03   Technical Guide...
TrimJoist (https://static1.squarespace.com/static/5ac4e90a9772aef7664e78ac/t/5acfc1c0f950b750de764824/1523565010081/Technical+Guide+FINAL+VERSION+Rev+2.pdf)
36-11 21 00 04   Installation Instructions (online)...
Marvin "Elevate" (wood-Ultrex) windows (https://www3.marvin.com/tools-and-documents-product?id=50&document=334&drawing=0)
36-11 21 00 05   Installation Instructions (online)...
Masonite exterior patio doors (https://images.homedepot-static.com/catalog/pdfImages/13/13e632f3-7ce8-4233-8dcc-e9712d35b49f.pdf)
36-11 21 00 06   Installation Instructions (online)...
FP Ultra Lite Foundation Insulation Panels, Styro Industries Inc. (https://styro.net/PDF/Flyers/Install/InstallFPUltraLite.pdf)
36-11 21 00 07   Installation Instructions (online)...
HardiePanel exterior fiber-cement siding (https://www.jameshardiepros.com/getattachment/2510b556-ee39-416d-8ef7-198c698f4cc7/hardiepanel-single-family-hz10-us-en.pdf)
36-11 21 00 08   Installation Instructions (online)…
Hardie Trim fiber-cement trim (https://www.jameshardiepros.com/getattachment/09272f30-ce31-43a8-af18-081c0e017104/5107-fd80876a694756a).
36-11 21 00 09   Installation Instructions (online)…
Semco Sem-Lok Metal Roofing system (https://semetals.com/wp-content/uploads/2019/04/Sem-Lok_detail.pdf)
36-11 21 00 10   Product Information (online)…
Aluminum Sunshades, H&H Metals (https://h-hmetals.com/products_and_services-item/aluminum-sunshades/)
36-11 21 00 11   Installation Instructions (online)…
Hardie Soffit fiber-cement panels (https://www.jameshardiepros.com/getattachment/20ef4097-c830-4dee-81bc-eb24d9eba666/HardieSoffit-HZ5-Installation-Instructions-English-US.pdf).
36-11 29 13   Professional Practice Guides and Standards
36-11 29 13 01   Details for Conventional Wood Construction...
American Forest & Paper Association (https://www.cochise.az.gov/sites/default/files/community_development/BSDRef%20AFPA%20-%20Conventional%20Wood%20Frame%20Construction%20Details.pdf)
36-11 29 13 02   PS 2-10 Performance Standard for Wood-Based Structural-Use Panels...
APA Engineered Wood Association (http://shop.iccsafe.org/ps-2-10-performance-standard-for-wood-based-structural-use-panels-download-2.html)
36-11 29 13 03   E30S Engineered Wood Construction Guide...
APA Engineered Wood Association (http://shop.iccsafe.org/apa-e30-engineered-wood-construction-guide-download.html)
36-11 29 13 04   Moisture Resistant Homes…
U.S. Department of Housing and Urban Development (https://www.huduser.gov/Publications/pdf/moisturehomes.pdf)
36-11 29 13 05   National Gypsum Construction Guide...
National Gypsum Company (http://www.nationalgypsum.com/RESOURCES/construction-guide/NGCConstGuide.pdf)
36-11 29 13 06   Architectural Woodwork Standards...
Architectural Woodworking Institute (http://eggersindustries.com/wp-content/uploads/pdf/AWS-Edition-2.pdf)

2 36-11 General References

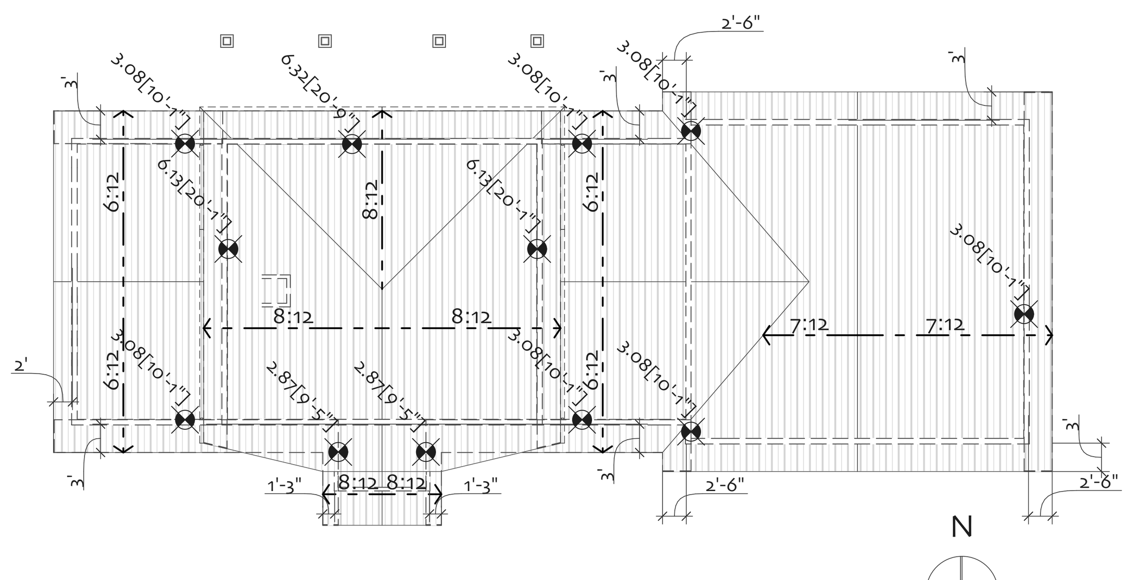
Site Plan
SCALE: 1" = 50' 0 20' 50' 100'

21-07   Sitework...
21-07 10 10 50   Earth Stripping and Stockpiling...
Minimize the area of earth stripping to within and around the building pad perimeter and minimal area necessary for access.
21-07 10 70 10   Grading...
Grade the site as indicated in the civil plan to accommodate the storm drainage system (21-07 30 30).
21-07 10 70 20   Excavation and Fill (building pad)…
The building pad consists of 1m[3'] of engineered fill as specified over virgin earth after all organic material is removed, moistened and compacted to 95% of maximum Proctor density to achieve a minimum load bearing value of 1500psi for residential loading. If such values are not achieved, a soils report is required. In the absence of a soils report, all Architect liability for foundation issues or failures is waived. Excavate the minimum area necessary to establish the building pad. The building pad shall be 30cm[1'] above existing grade at the high side, feathered with a 1:4 slope all around. The finish-floor elevation (FFE) will be set at 15cm[6"] above top of building pad. Adjacent concrete patios, driveways, walks will meet the slab at 10cm[4"] below finished floor elevation and slope away at 1:50. Provide Owner-selected gravel inside the eave drip line ensuring a minimum of 15cm[6"] clearance to finish floor elevation, maintaining positive slope away from the building.
21-07 10 70 35   Erosion and Sedimentation Controls...
Provide silt fencing and ground cover throughout construction as needed to keep inlets to off-site drainage clear.
21-07 20 80   Landscaping...
Prior to landscaping, all construction debris shall be disposed of off-site. Excavation soil shall be retained and redistributed neatly prior to landscaping. Bait-based termite prevention systems shall be provided in the gravel zone (21-07 10 70 20). Outside that zone, landscaping must be coordinated with the owner to provide complete ground-cover and associated irrigation (21-07 10 30 10 50).
21-07 30   Liquid and Gas Site Utilities...
The Contractor is responsible for any natural gas connection.
21-07 30 10   Water Utilities...
The Contractor is responsible for the domestic water connection.
21-07 30 10 50   Site Irrigation Water Distribution...
The site irrigation is system to be designed under separate contract upon request by the Owner. Rainwater harvesting is recommended. Upon approval of the Code Official, Rainwater harvesting in encouraged as a source for lawn irrigation, and Xeriscaping (36-11 43 00 01) is recommended as an alternative to an irrigation system.
21-07 30 20 20   Sanitary Sewerage Piping...
The Contractor is responsible for the sanitary sewerage piping and all site connections (21-04 20 20).
21-07 30 30   Storm Drainage System...
Use gutters and downspouts at all eaves sized per section 2.2.5 of Moisture Resistant Homes (36-11 29 13 04). Provide schedule-40 transition to underground and route via schedule-40 PVC piping into existing off-site stormwater drainage system or to pop-up overflow heads downhill from the structure. Ensure positive slope away from the building in all directions, and provide culverts, swales, and French Drains (21-07 30 30 30).
21-07 30 30 30   Culverts . Swales, French Drains...
Provide swales and French drains as required to ensure positive drainage from all areas to off-site stormwater systems.

3 21-07 Sitework

	Sheet Name	Name
C1.01	Site & General Information	22-01 General Requirements
C1.01	Site & General Information	36-11 General References
C1.01	Site & General Information	21-07 Sitework
C1.01	Site & General Information	Site Plan
C1.01	Site & General Information	Drawing Index
C1.01	Site & General Information	Roof Plan
C1.01	Site & General Information	Southeast Perspective
A1.01	First Floor Plan	Assembly Types
A1.01	First Floor Plan	First Floor Plan
A1.02	Second Floor Plan	Second Floor Plan
A1.02	Second Floor Plan	Support Bracket Detail
A2.01	Exterior	North Elevation
A2.01	Exterior	West Elevation
A2.01	Exterior	South Elevation
A2.01	Exterior	East Elevation
A2.01	Exterior	Exterior Door and Window Legend
A2.01	Exterior	21-02 Shell
A2.01	Exterior	21-02 20 Exterior Vertical enclosures
A2.01	Exterior	21-02 30 Exterior Horizontal Enclosures
A3.01	Construction	Section 01
A3.01	Construction	Section 02
A3.01	Construction	Section 03
A4.01	Interiors	21-03 Interiors
A4.01	Interiors	Kitchen E
A4.01	Interiors	Kitchen N
A4.01	Interiors	Kitchen S
A4.01	Interiors	Kitchen SW
A4.01	Interiors	Kitchen W
A4.01	Interiors	Living Room View
S1.01	Substructure (Foundation)	Foundation Plan
S1.01	Substructure (Foundation)	Typical Turned Down Slab Edge
S1.01	Substructure (Foundation)	Spread Footing at Porch
S1.01	Substructure (Foundation)	Turned-Down Slab Edge at Porch
S1.01	Substructure (Foundation)	Thickened Slab at Two-Story Wall
S1.01	Substructure (Foundation)	Thickened Slab
S1.01	Substructure (Foundation)	Slab Step-Down
S1.01	Substructure (Foundation)	Slab Edge at Garage
S1.01	Substructure (Foundation)	Strip Footing at Garage Door
S1.01	Substructure (Foundation)	Point-Load Footing at Porch
S1.01	Substructure (Foundation)	Spread Footing at Interior
S1.01	Substructure (Foundation)	21-01 Substructure
S1.01	Substructure (Foundation)	Porch Turned-Down Slab Edge
S2.01	Superstructure (Framing)	Second Floor Framing Plan
S2.01	Superstructure (Framing)	21-02 10 Superstructure
S2.01	Superstructure (Framing)	Roof Framing Plan
S2.01	Superstructure (Framing)	Framing Axonometric
S2.01	Superstructure (Framing)	CS_PF F.R602.10.6.4 Continuously Sheathed Portal Frame at Garage
S2.01	Superstructure (Framing)	PFH F.R602.10.6.2 Portal Frame with Hold-Downs
E1.01	Electrical and Services	21-04 Services
E1.01	Electrical and Services	First Floor Electrical and Servces Plan
E1.01	Electrical and Services	Electrical and Services Legend
E1.01	Electrical and Services	Second Floor Electrical and Services Plan

4 Southeast Perspective



Roof Plan
SCALE: 1/16" = 1'-0" 0 8' 16' 32'

project number: 3782001

Construction Documents

issue: 4/16/2021
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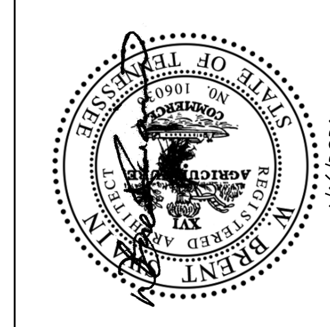
Addenda:

Issue	Issue Date	Issue Name
1	4/13/21	Final CD Revisions



4/16/2021

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Carter Residence
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New Market, TN 37820

Site & General Information

C1.01

W01: above grade exterior wall
backup: WRB (36-11 29 13 04) over 7/16 OSB or 17/32 plywood sheathing on wood framing with 2x6 studs @41cm[16"]oc
insulation: 5cm[2"] closed-cell spray foam + 9cm[3.5"] fiberglass (22-04 21)
exterior finish: cementitious siding (HardiePanel or equal) installed with vertical battens every 61cm[2"]
interior finish: 13mm[1/2"] drywall

W02: above grade exterior braced wall– see Roof Framing Plan
same as W01,
backup: WRB over 14mm[9/16"] plywood sheathing on 2x6 studs @30cm[12"]oc. Sheathing fastened with 8d common nails spaced 15cm[6"]oc both ways at perimeter of sheathing, 30cm[12"]oc both ways at intermediate studs

W03: interior load-bearing or braced wall– see Roof Framing Plan
backup: 2X4 no.1 studs @41cm[16"]oc, blocking at 61cm[2"]oc vertical
finish: 13mm[1/2"] drywall applied to studs with 1 1/4" type W or S screws @18cm[7"]oc

P01: interior partition
back-up: 2X4 studs @61cm[24"]oc
insulation: none
finish: 13mm[1/2"] drywall

P02: sound insulated partition
same as P01. R11 fiberglass batts

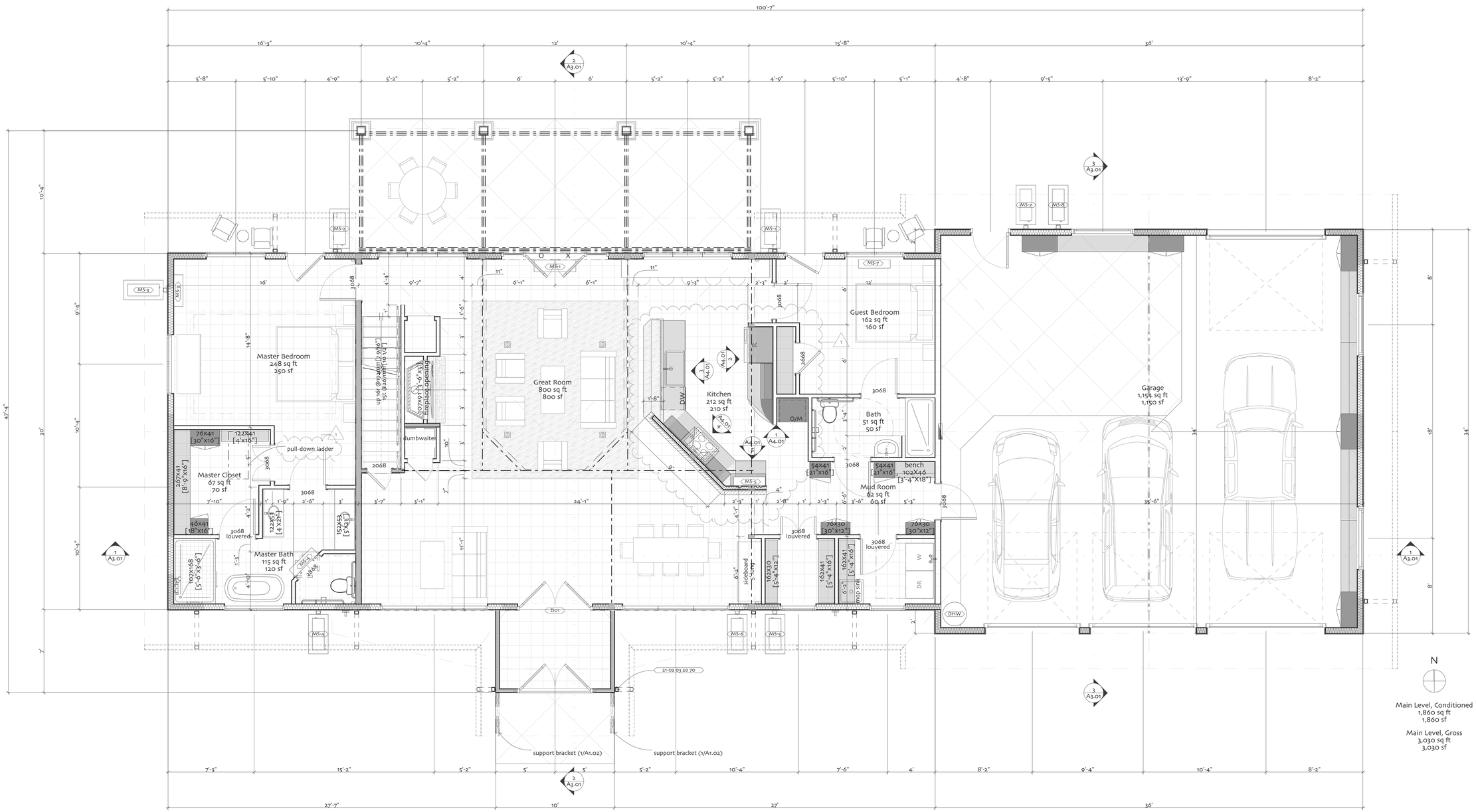
C01: chase type 1
same as P01, drywall on exposed side only

RC1: primary roof-ceiling
backup: 20mm[13/16"] plywood decking on 2X10 rafters
insulation: 15cm[6"] closed-cell spray foam + 9cm[3.5"] fiberglass (22-04 21)
roofing: 29ga standing-seam metal roofing, manufacturer-recommended underlayment
ceiling finish: 13mm[1/2"] drywall applied to underside of ceiling joists. Fiber-cement soffits.

R02 Garage Roof
same as RC1, omit spray-foam insulation, R19 fiberglass insulation at ceiling, provide continuous vents at soffit, gable vents

R02 roof over exterior porches
same as RC1, omit insulation

1 Assembly Types
SCALE: 3/16" = 1'-0"



First Floor Plan
SCALE: 1/4" = 1'-0"

project number: 3782001

Construction Documents

issue: 4/16/2021
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Addenda:

Issue	Issue Date	Issue Name
1	4/13/21	Final CD Revisions

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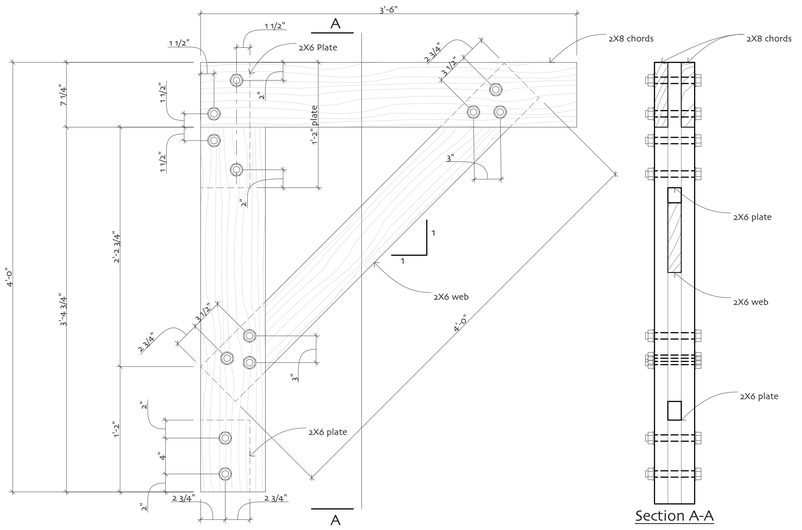
First Floor Plan

A1.01

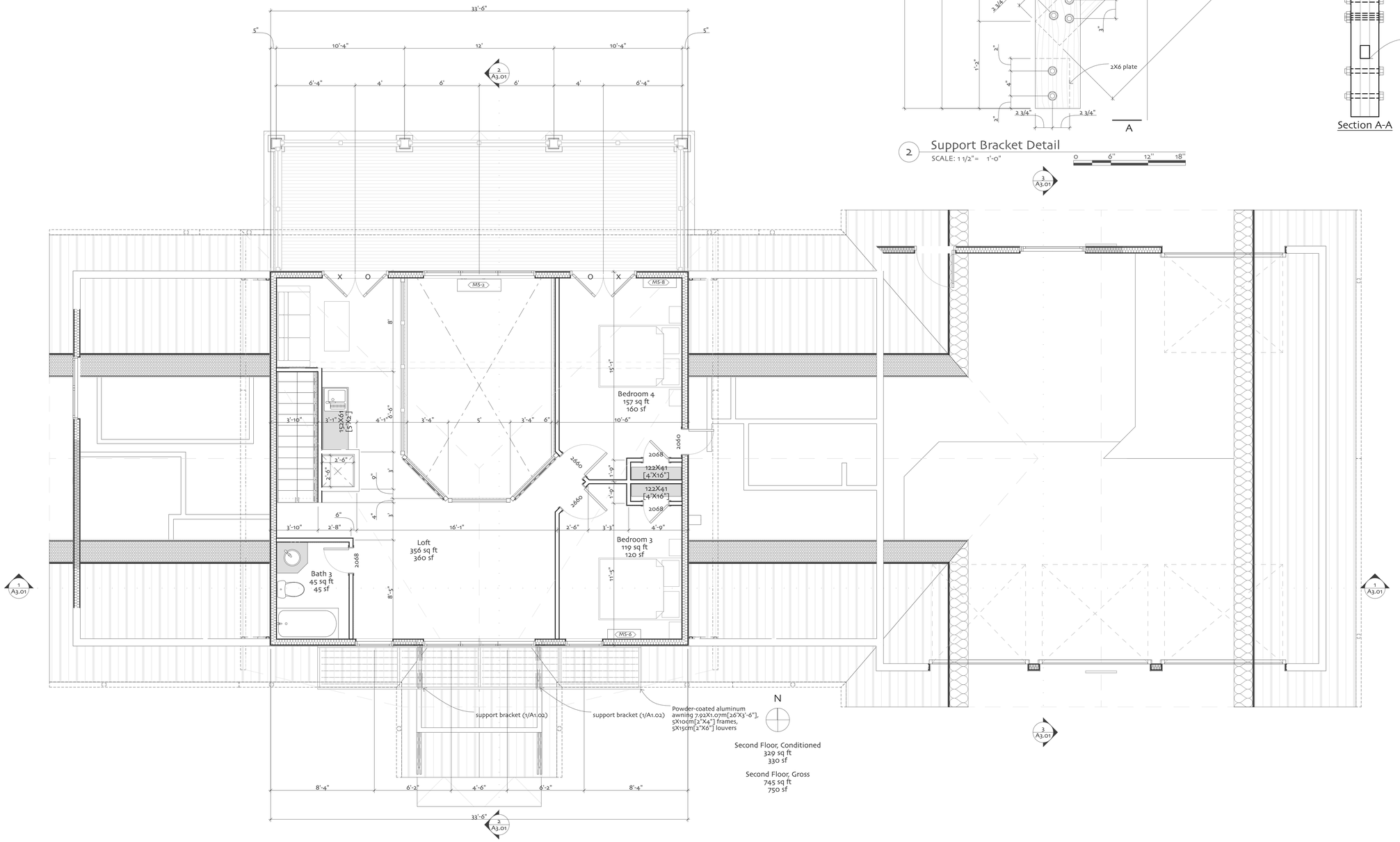


2 Support Bracket Detail

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

0 6" 12" 18"

3 A3.01



1 Second Floor Plan

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

0 2' 4' 8'

project number: 378a001

Construction Documents

issue: 4/16/2021
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Addenda:

Issue	Issue Date	Issue Name
1	4/13/21	Final CO Revisions

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Second Floor Plan

A1.02

21-02 30 Exterior Horizontal Enclosures...
21-02 30 20 70 Rainwater Management...
As shown on the elevations, provide gutters and downspouts, sized per Table 6 of "Moisture Resistant Homes (36-11 29 13 04) at all eave conditions. Route underground to off-site drainage.
21-02 30 80 10 Ceilings...
Interior roof-ceiling skin consists of painted 13cm(5/2") drywall. Use type S or W drywall screws 32mm(1 1/4") long minimum at 16"oc. If drywall nails are preferred, adhesive is required and nails shall be annular ringed 0.098dia 34mm(1 3/8") long. {T.R702.3.5}
21-02 30 80 20 Exterior Soffits...
Exterior soffits are to be HardieSoffit or equal (36-11 21 00 11) fiber-cement board, smooth finish, non-ventilated adjacent to conditioned areas, ventilated at garage.

4 21-02 30 Exterior Horizontal Enclosures

21-02 20 Exterior Vertical Enclosures...
21-02 20 10 20 Exterior Wall Construction...
Exterior Wall Construction consists of light frame wood construction, and must meet all Lumber Framing requirements (36-11 29 13 01). Provide Braced Wall Panel construction per IRC requirements (R602.10) as shown in the Framing Plan. Exterior finish consists of Fiber-Cement Siding, HardiePanel or equal with stucco finish (36-11 21 00 07), with vertical battens every 61cm[2'] to cover nails and seams. Exterior trim shall be fiber-cement, HardieTrim or equal (36-11 21 00 08).
21-02 20 10 30 Exterior Wall Interior Skin...
Exterior wall interior skin consists of painted 13mm[1/2"] gypsum board (22-09 29). Where wall tile is scheduled, concrete backer board (Wonderboard or equal) is required. Use water-resistant gypsum at all locations within 3'[91cm] of plumbing fixtures (T.R702.3.5). Fasteners shall be as specified in {T.R702.3.5}: drywall nails at 8"oc, or as specified in {R702.3.6}: screws at 16"oc.
21-02 20 20 Exterior Windows and Doors...
Exterior windows are Marvin "Elevate" wood-Ultrex fiberglass windows (36-11 21 00 04) or equal, double-pane. Glass types for windows and glazed doors are to be double-pane low-e(<=0.3) high-SHGC(0.4=>) at south-facing and Garage windows, and low-e(<=0.29), low-SHGC(<=0.25) at all other locations. Interior finish shall be drywall return at all jambs and heads, with interior wood stools, or jamb extensions and wood trim at Owner's approval. Exterior Doors are fiberglass in-swing entrance and French doors "Masonite" (36-11 21 00 05) or equal installed per manufacturer's instructions.

3 21-02 20 Exterior Vertical enclosures

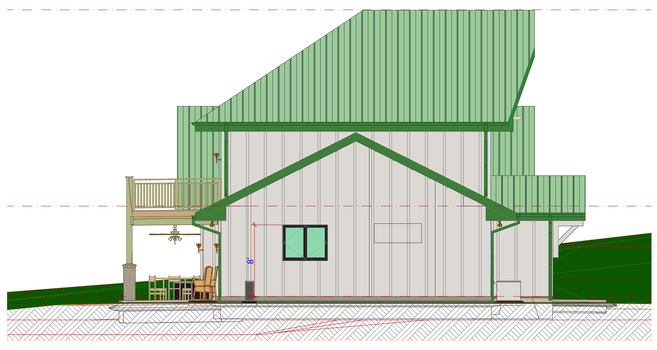
21-02 Shell...
Shell consists of Superstructure (21-02 10, 1/S2.01) Exterior Vertical Enclosures (21-02 20, 3/A2.01) and Exterior Horizontal Enclosures (21-02 30, 4/A2.01), with global requirements listed below for Decay Prevention (22-06 05 33 73), Termite Protection (22-31 31 16 16), Fastening (22-05 05 23), Firestopping (22-07 84 00) and Thermal Insulation (22-04 21 00) and Weather-Resistive Barrier WRB (22-07 25 00).
22-06 05 33 73 Decay Prevention...
Field-cut ends, notches and drilled holes of preservative treated wood shall be treated in the field in accordance with AWPA standards (36-11 29 13 02). All wood in contact with ground or concrete exposed to the weather shall be preservative-treated. All wood columns and posts supported by concrete piers or footings shall be anchored by hot-dipped zinc-coated galvanized- or stainless steel, silicon bronze or copper 1" stand-off bases, and the concrete pier or footing shall extend 6" above the adjacent finish grade with a termite shield cap over an impervious moisture barrier surrounding the pier or footing for minimum 2' out in all directions. (exception: Termite shield and moisture barrier are not required around deck posts.) {R319}
22-31 31 16 16 Termite Protection...
The site is located in an area designated "very heavy" probability of termite infestation {F.R301.2(6)}. A termite bait system shall be installed and maintained in accordance with the manufacturer's instructions.
22-05 05 23 Fastening Requirements...
All construction, including Braced Wall Panels (21-02 20 10 20 10, 2/A2.01) shall be fastened according to IRC table {R602.10(1)}. Where the engineered wood manufacturer has more stringent hardware recommendations those requirements prevail. Where IRC requirements are more stringent for wind or seismic design, those requirements prevail. Structural Engineer requirements trump all other requirements.
22-07 84 Firestopping...
Firestopping to prohibit draft openings between horizontal and vertical assemblies shall be provided at all concealed spaces of stud walls and partitions and furred spaces. The fireblocking shall occur at the ceiling and floor levels, every 10 feet horizontally, at all interconnections between vertical and horizontal spaces (e.g. soffits), concealed spaces, at openings around penetrations (ducts, pipes, etc.), and at chimneys and fireplaces per (R1003.19). Fireblocking may consist of 2X construction or double-1X construction with offset lap joints, 18mm[23/32"] wood structural panels installed with battens of the same, 19mm[3/4"] particleboard with battens of the same, 13mm[1/2"] gypsum board, or 6mm[1/4"] cement-based millboard. {R602.8}
22-04 21 Thermal Insulation...
Thermal Insulation in the exterior walls of conditioned spaces shall be 5cm[2"] closed-cell spray foam (R11 minimum) against the inside face of the wall sheathing, plus 9cm[3 1/2"] fiberglass (R10.9 minimum) to fill the remaining stud cavities, Total R-value for the walls (when considering the outside air film (R=0.17), siding (0.5), sheathing (1.3), gypsum board (0.56), and inside air film (0.68)) shall equal R=22.2 minimum (IP units). Omit fiberglass insulation at front porch roof. Provide closed-cell foam thickness of 10cm[4"] at perimeter of second floor and around roof edges to ensure air-tight building envelope. Roof-ceiling insulation shall be 15cm[6"] of closed-cell spray foam (R33 minimum) applied to the underside of the roof deck, plus 8cm[3 1/4"] fiberglass insulation to fill the remaining joist cavity. Total roof-ceiling R-value (when considering the outside air film (R=0.17), roofing (0.61), decking (1.3), gypsum board (0.56), and inside air film (0.87)) shall equal R=42.9 minimum (IP units). Insulate the garage walls, the partition wall between the conditioned space and the garage, and the garage ceiling with R19 fiberglass batts, and provide continuous soffit vents and gable vents to garage attic. Use expanding foam insulation to seal gaps and cracks, fire-rated for window and door perimeter sealing. Follow all manufacturer's instructions for all insulation types.
22-07 25 Weather-Resistive Barrier (WRB)...
Weather resistive barrier shall follow all recommendations of HUD "Moisture Resistant Homes" Practice Guide (36-11 29 13 04) {R703.2, R703.6.3}.

2 21-02 Shell

ID	D01	D02	D03	OD1	OD2	OD3	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11	W12
2D Symbol																		
Elevation																		
Nominal W x H Size	6'×8'	5'×6'-8"	3'×6'-8"	10'×8'	9'×8'	8'×8'	9'×6'	5'×5'	3'×5'	9'×5'	3'×6'	4'-6"×8'	5'×4'-8"	5'×2'	7'-6"×4'	5'×4'	9'×4'	7'×3'
Notes		61cm[2'] sidelites										1524mm[60"] heel height	4064mm[16"] heel height					203mm[8"] heel height

1 Exterior Door and Window Legend

North Elevation
SCALE: 1/8" = 1'-0"
0 4' 8' 16'



West Elevation
SCALE: 1/8" = 1'-0"
0 4' 8' 16'

East Elevation
SCALE: 1/8" = 1'-0"
0 4' 8' 16'

South Elevation
SCALE: 1/8" = 1'-0"
0 4' 8' 16'

project number: 3782001

Construction Documents

issue: 4/16/2021
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Addenda:

Issue	Issue Date	Issue Name
1	4/3/21	Final CO Revisions

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Sustainable Architecture PLLC

Carter Residence
Lot 14R, Holston View Rd.
New Market, TN 37820

Exterior

A2.01

3 Section 03
SCALE: 1/4" = 1'-0"

2 Section 02
SCALE: 1/4" = 1'-0"

1 Section 01
SCALE: 1/4" = 1'-0"

project number: 3782001

Construction Documents

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Addenda:

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1	4/13/21	Final CO Revisions

4/16/2021

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Construction

A3.01

21-03 Interiors...

Interiors consist of Interior Partitions (21-03 10 10), Interior Doors (21-03 10 30), Tile Flooring (21-03 20 30 20), Painting (22-09 91), Interior finish carpentry (22-06 20 23), Millwork (22-06 22), and Toilet Accessories (22-10 28 13).

21-03 10 10 Interior Partitions...

Interior Partitions shall meet all requirements of Gypsum Board Assemblies (22-09 29) and Rough Carpentry (22-06 10). See Assembly Types, 1/A1.01 for lumber grade.

21-03 10 30 Interior Doors...

Install interior doors with maximum 3mm[1/8"] clearance at top and sides, and 6mm[1/4"] clearance at bottom. Doors shall have an allowable warp tolerance of 6mm[1/4"]. All four corners are to be square and the hypotenuse measurements must be within 3mm[1/8"] of each other. Shim to ensure frames are plum and level.

21-03 20 30 20 Tilework...

Size, color and texture of all tile is to be as selected by Owner. Static coefficient of friction for all tile shall be minimum 0.6 and 0.8 for sloped surfaces wet. Ceramic tile areas to receive painted wood base; porcelain tile to receive porcelain tile cove base. Concrete beneath subfloor is to be clean and dust free, cured, flat and level. Verify plumbing and other services are located properly before performing work. Use organic adhesive Type I in all areas exposed to prolonged moisture. Use tile manufacturer-recommended mortar bed materials, mortar bond coat materials, grout, sealant, cleavage membrane, waterproofing membranes and backer board as required. Install tile to manufacturer recommended tolerances. For floors, install per TCA Handbook method F111 with cleavage membrane lapped 5cm[2"] in all directions; mortar bed thickness is 3cm to 5 cm[1 1/4" to 2"]; standard grout. At tiled shower stall receptors install per method B415, mortar bed floor; and W244, thin set over cementitious backer unit walls. At bathtub surrounds install per method B412, over cementitious backer units with waterproofing membrane. Thoroughly clean all surfaces after installation; remove wayward grout. Provide an additional 2% of each product type to Owner.

22-09 91 Painting...

Interior paint shall be latex based, zero VOC paint. A primer and one finished coat is required (unless pre-primed). Luon doors require two primer coats. Finish shall be semi-gloss for all walls; gloss for all paint grade trim, posts and post wraps, exposed beams or beam wraps, millwork and doors; flat for ceilings. Stain grade posts or beams, 6-panel doors and millwork shall receive 2 coats of semi-transparent stain, alkyd or oil resin base. Submit 2 extra gallons of each paint and color.

22-09 29 Gypsum Board Assemblies...

Gypsum Board shall be regular 13mm[1/2"], except board shall be moisture resistant extending 61cm[2'] in all directions from all wet areas, and type-X beneath habitable rooms and in the garage ceiling. Ceiling gypsum board shall be hung perpendicular to the underside of the floor framing, which is spaced a maximum of 61cm[2']oc. Fastener spacing for ceilings shall be 17cm[7"oc] for nails or 30cm[12"]oc for screws, and for walls shall be 20cm[8"]oc for nails or 61cm[24"]oc for screws. Material Standard for Gypsum Board Finish is ASTM C1396. Fasteners shall be 1398 34mm[1 3/8"] nails with a 7.5mm[19/64"] head, or 31mm[1 1/4"] X 3mm[0.098"] diameter annular-ringed nails, or 5d 41mm[1 5/8"] X 2mm[0.086"] diameter cooler nail with a 6mm[15/64"] head, or 41mm[1 5/8"] X 2mm[0.086] diameter gypsum board nails with a 7mm[9/32"] head. Finish standard is C840 and GA16 Level 4. Joint treatment shall be 3 coat system with paper or fiberglass tape complying with ASTM C474 and C840. There shall be not more than 2mm[1/16"] difference in true plane at joints between adjacent boards before finishing and not more than 3mm per 2.5m[1/8"-10'] deviation from true plane, plumb, level and proper relation to adjacent surfaces in finished work. After finishing, joints shall not be visible. Install boards vertically. Do not allow butt-to-butt joints or joints that do not fall over framing members. Repair surface defects (36-11 29 13 05, pages 101 through 105).

22-06 10 Rough Carpentry...

Interior ceilings are to be constructed according to Gypsum Board Assemblies (22-09 29). Lumber is to be stamped with American Softwood Lumber Standard and inspection agency stamps DOC PS 20. Product standard for plywood: DOC PS 1, APA PRP-108. All carpentry to be level and plumb, all door and window installations shimmed to level and plumb. Lumber should be FSC certified. Fastening requirements are per (IRC T.R602.10(1)). Provide blocking for Toilet Accessories (22-10 28 13) and Millwork (22-06 22).

22-06 20 23 Interior Finish Carpentry...

Interior finish carpentry including wood base, door casing, window stool and aprons, crown moulding at the top of millwork, and crown moulding at the top of all wall partitions where there is no ceiling is to meet AWI standards, custom grade (36-11 29 13 06). After drywall is hung but prior to trim carpentry work, discuss finish carpentry options (e.g. crown moulding, chair rail, custom sills, window seats, etc.) with Owner; an allowance in the original project budget is recommended.

22-06 22 Millwork...

Millwork consists of site-fabricated, site-built Owner-selected fixed furnishings. Millwork is to be AWI custom grade (36-11 29 13 06). Universal design standards are recommended.

21-05 10 20 30 Casework...

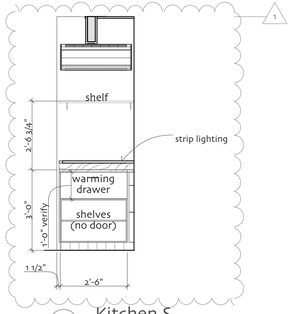
Casework consists of fully finished shop-built fixed furnishings installed and trimmed out by the Contractor. Unless approved by Owner, all fixed furnishings, "built-ins," including kitchen cabinetry and bath vanities are to be Millwork (22-06 22). Casework is to be AWI custom grade (36-11 29 13 06). Universal design standards are recommended.

22-10 28 13 Toilet Accessories...

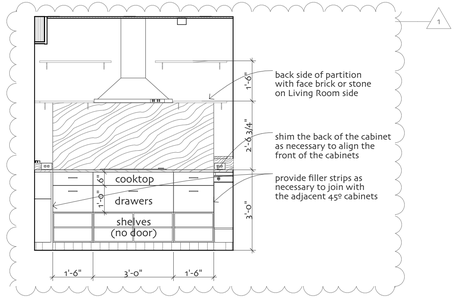
Toilet Accessories including at a minimum towel bars and hooks, toilet paper dispensers, bathroom mirrors, and optional wall-mounted soap dispensers and soap dishes are as selected by the Owner and installed by the Contractor. Provide grab bars at shower and toilet in Master Bathroom and Guest Bath as shown on the floor plans; provide blocking for future grab bars elsewhere. Universal design standards are recommended.

6 21-03 Interiors

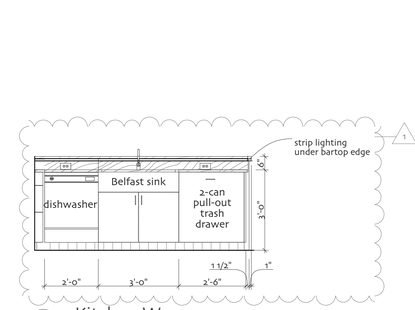
7 Living Room View



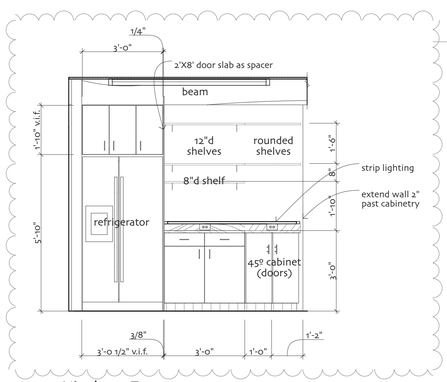
5 Kitchen S
SCALE: 3/8" = 1'-0"



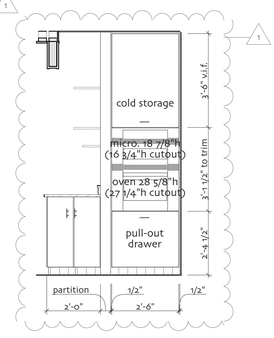
4 Kitchen SW
SCALE: 3/8" = 1'-0"



3 Kitchen W
SCALE: 3/8" = 1'-0"



2 Kitchen E
SCALE: 3/8" = 1'-0"



1 Kitchen N
SCALE: 3/8" = 1'-0"

project number: 3782001

Construction Documents

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Addenda:

Issue	Issue Date	Issue Name
WIP	Work in Progress	Not in Issue
1	4/13/21	Final CO Revisions

4/16/2021

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Interiors

A4.01

21-01 10 Foundations...
This drawing is not engineered; foundation engineering is required– engineered requirements hold precedence over these minimum design recommendations.Assumed soil capacity is 1500psf. Minimum rebar cover from earth is 76mm[3"], and 38mm[1 1/2"] side and top cover. Sidewalks, driveway and other site concrete are not included in this drawing and are to be coordinated in the field; they are be set at elevation -10cm[99'-8"] adjacent to the building, and are to slope to drain away from building in all directions.

21-01 10 10 10 20 Strip Footings...
The bottom of all strip footings, including turned-down slab edges and thickened slabs, shall be a minimum of 61cm[12"] below undisturbed ground unless detailed otherwise. The tops of the footings must be level, and the bottom cannot exceed a 10-percent slope; footings shall be stepped when this is unavoidable. {R403.1.3.2}

21-01 10 10 10 40 turned down slab edge...
Pour turned down slab edges along with the slab so the top of footing is level with the top of slab. Tie top steel to slab steel. The footing depth is measured from top of adjacent grade, which is to be 15cm[6"] below top of slab edge. For footers adjacent to porch slabs (2/S1.01) the footing depth is measured from FFE. Step bottom of footers up to top of spread footer elevation where applicable and continue horizontal steel through piers (see 3/S1.01).

21-01 10 10 10 41 porch turned-down slab edge (4/S1.01)...
30cmW X 61cmD [12"x 24"] with (1)#4 bar top and (2)#5 bars bottom.

21-01 10 10 10 44 typical turned-down slab edge (1/S1.01)...
46cmW X 61cmD [18"x 24"] with (1)#4 bar top and (2)#5 bars bottom.

21-01 10 10 10 60 thickened slab...
Thickened slabs are 61cmW x 61cmD [2' X 2'] with (3)#5 bars at bottom for 2-story construction (6/S1.01), and 61cmW X 46cmD [2' X 1'] with (2)#5 bars at bottom for 1-story construction (7/S1.01). Pour thickened slab along with the slab so the top of footing is level with the top of slab.

21-01 10 10 30 Piers (3/S1.01)...
Piers at point loads are centered on the column as measured along the edge of slab, with the outside face of pier flush with the outside face of the slab edge– see plan dimensions. Top of pier to be at FFE and bottom of pier at top of footing(21-01 10 10 40 10, 3/S1.01). Turned-down slab edge steel runs continuous through pier.

21-01 10 10 40 10 Spread Footings (3/S1.01)...
Spread Footings are 31cm[12"] thick with (3)#5 bars each way at bottom 1/3 depth, with top of footing at -457mm[98'-6"] poured prior to slab pour. Footings are to be centered on pier in both directions– see Plan dimensions.

21-01 10 10 40 20 Spread Footings, thickened slab (6/S1.01) ...
Spread Footings are 31cm[12"] thick with (3)#5 bars each way at bottom 1/3 depth. Where footing is integral with a slab, the top of footing is the top of slab; tie top steel to slab steel. Set column zinc-coated post base using epoxy-set anchor bolts or drilled 'red heads'.

21-01 20 30 Sill Anchorage...
The project is in seismic zone D2 and thus shall have treated 2X sill plates anchored to the slab with 13mm[1/2"] diameter anchor bolts extending 18cm[7"] into the concrete at 182cm[6'] on center minimum and located between 9cm[3 1/2"] and 30cm[12"] from the end of each plate. Plate washers shall be installed between the sill plate and the nut, and are to be 6mm X 76mm[0.229" X 3"] with maximum 17mm[11/16"] hole diameter; a slotted hole is permitted up to 45mm[1 3/4"] in length. Approved anchor straps may be used in lieu of plate washers.

21-01 40 Slab On Grade...
Slab On Grade shall be minimum 10cm[4"] thick with a compressive strength of 3000f`c over Vapor Retarder (21-01 40 90 20) and 10cm[4"] granular mat. Provide sawcut joints every 3m[10'] on center; reduce dimension to every 1.5m[5'] and run joints on a 45º angle for stained concrete . Exterior slabs and slab under parking area in Garage as shown are to step down 10cm[4"] and slope down at 1:100[1/8":1'].

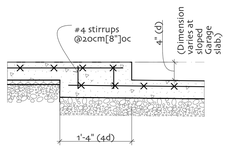
21-01 40 90 10 Perimeter and Slab Insulation...
Provide R5 FP Ultra Lite insulation(36-11 21 00 06) adjacent to grade; omit insulation at interior and exterior porch footers. Provide R5 under-slab XPS insulation under all conditioned spaces.

21-01 40 90 20 Vapor Retarder...
Vapor Retarder shall be a 6-mil polyethylene with joints lapped minimum 15cm[6"] above all grade conditions beneath all construction.

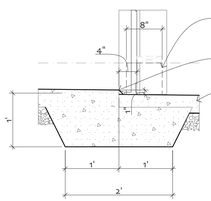
21-01 40 90 30 Termite Shield...
Provide through-wall metal flashing below sill plate to form a termite shield and extend out past bottom of siding to form a drip edge.

21-01 60 20 10 Radon Mitigation...
Consult the home insurance provider prior to construction and notify the Architect of any additional requirements.

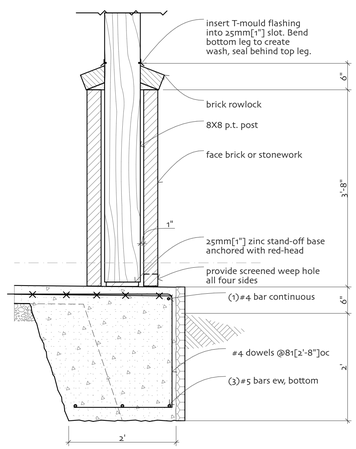
12 21-01 Substructure



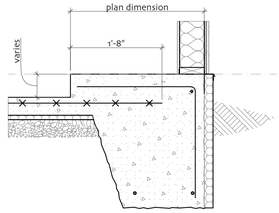
9 Slab Step-Down
SCALE: 3/4" = 1'-0"



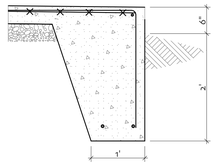
10 Strip Footing at Garage Door
SCALE: 3/4" = 1'-0"



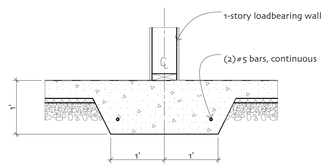
11 Point-Load Footing at Porch
SCALE: 3/4" = 1'-0"



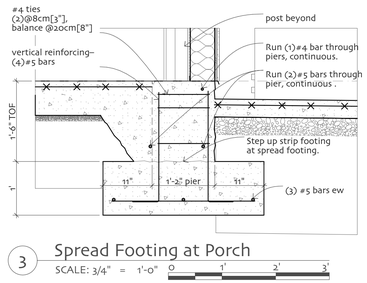
8 Slab Edge at Garage
SCALE: 3/4" = 1'-0"



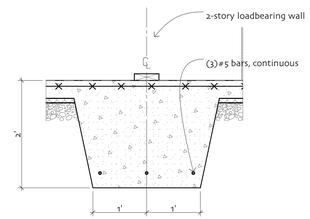
4 Porch Turned-Down Slab Edge
SCALE: 3/4" = 1'-0"



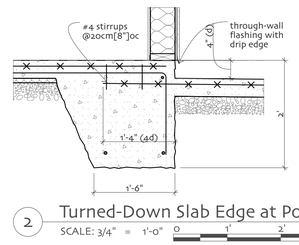
7 Thickened Slab
SCALE: 3/4" = 1'-0"



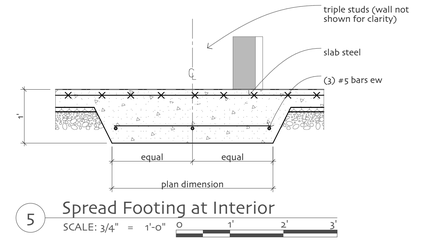
3 Spread Footing at Porch
SCALE: 3/4" = 1'-0"



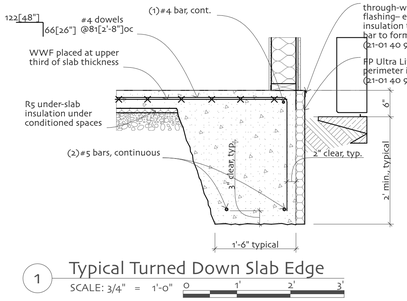
6 Thickened Slab at Two-Story Wall
SCALE: 3/4" = 1'-0"



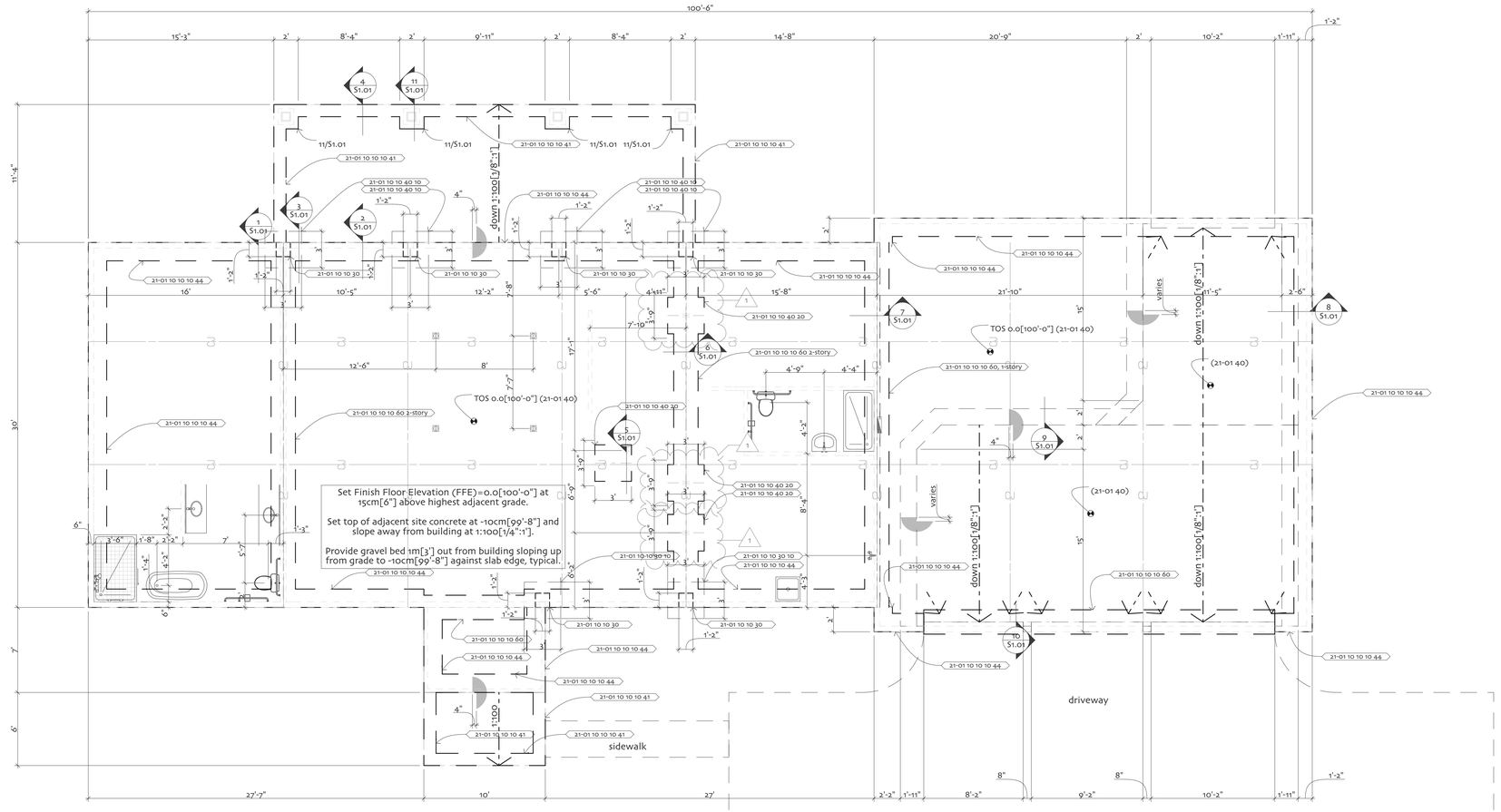
2 Turned-Down Slab Edge at Porch
SCALE: 3/4" = 1'-0"



5 Spread Footing at Interior
SCALE: 3/4" = 1'-0"



1 Typical Turned Down Slab Edge
SCALE: 3/4" = 1'-0"



Foundation Plan
SCALE: 3/16" = 1'-0"

N

project number: 378a001

Construction Documents

issue: 4/16/2021
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Addenda:

Issue	Issue Date	Issue Name
1	4/3/21	Final CO. Revisions

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Substructure (Foundation)

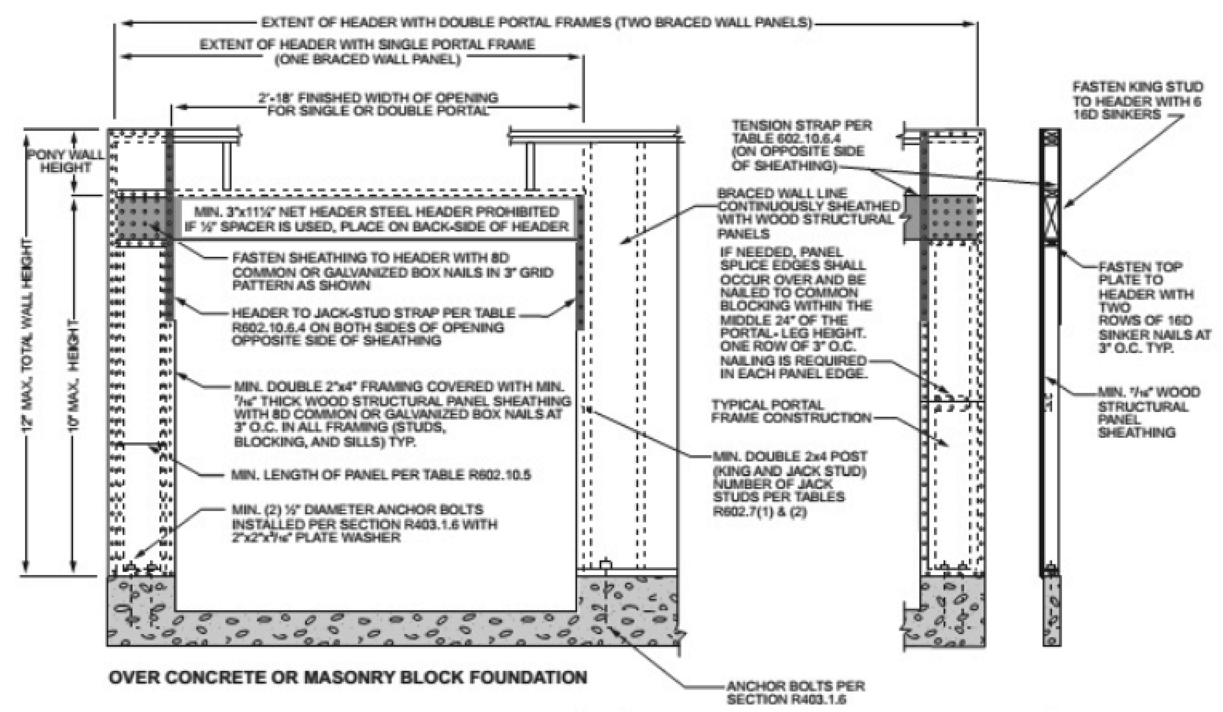
S1.01

21-02 10 Superstructure...
Superstructure consists of Roof Structural Frame (21-02 10 10) and Roof Decks, Slabs and Sheathing (20-02 10 20).
21-02 10 10 Roof Structural Frame...
Roof Structural Frame shall be as designed by Component Builders Inc., 679 Rd 1409, Mooreville, MS 38857, (662) 842-7948. Alternate Engineers are acceptable.
21-02 10 10 60 Wall Bracing...
Provide wall bracing to withstand D2 seismic loads according to the requirements of {R602.10} as indicated on the Second Floor and Roof Framing plans (S1.01). Align trusses and to bear directly over studs below wherever possible, or within 13cm[5"]. Connect studs where they abut at corners with 16d 89mmX3mm[3 1/2"X0.135"] box nails or 76mmX3mm[3"X0.131"] nails face nailed at 30cm[12"]oc, or 16d 89mmX4mm[3 1/2"X0.162"] common nails face nailed at 41cm[16"]oc. Connect single top plate splices with 76mmX41cmX1mm[3"X16"X0.036"] galvanized steel plate with (18)8d 64mmX3mm[2 1/2"X0.113"] box nails, and at corners with 76mmX41cmX1mm[3"X8"X0.036"] galvanized steel plate with (9)8d 64mmX3mm[2 1/2"X0.113"] box nails. Interior load-bearing walls shall be constructed, framed and fire blocked as specified for exterior walls. Drilling and notching are per {R602.6}. Girders and headers are per {R602.7}. Braced wall connections to adjacent framing are per {R602.10.8}. Wall bracing methods are per {T.R602.10.4} as follows:
21-02 10 10 60 10 Wall Bracing, Wood Structural Panels (WSP)...
Per R602.10.5, because the brick veneer is limited to the first story, wall bracing with Wood Structural Panels is per R602.10.3. The veneer shall be installed in accordance with {R703.8}. Walls braced with wood structural panels shall be sheathed with 51mm[1/2"] nominal plywood or OSB sheathing with a minimum span rating of 24/16, fastened to a minimum penetration of 45mm[1 3/4"] with 8d[64mmX3mm] common nails, or 38mm[1 1/2"] 2.5mm diameter[12 1/2ga.] ring or screw shank nails, spaced at 15cm[6"]oc at the perimeter and 30cm[12"]oc in the field of the panel. Alternate attachments are per {T.R602.3(2)}
21-02 10 10 60 20 Wall Bracing, Gypsum Board (GB)...
Interior walls braced with gypsum board shall be sheathed on both sides. If nails are used, they shall be 35mm[1 3/8"] 13ga. 35mm[0.098"] diameter nails with a 7.5mm[19/64"] head, or 32mm[1 1/4"] annular ringed nails, or 41mm[1 5/8"] 2.2mm[0.086"] diameter 5d cooler nail with 6mm[15/64"] head, or 41mm[1 5/8"] 2.2mm[0.086"] diameter gypsum board nail with 7mm[9/32"] head, spaced at 20cm[8"] at the perimeter and 30cm[12"]oc in the field.
21-02 10 10 60 30 Wall Bracing, Portal Frame with Hold-Downs (PFH) (1/S2.01)...
Where a window or door opening does not allow adequate space for the required minimum width of braced wall panel on a braced wall panel line, wall bracing shall be by the portal frame with hold-downs method excerpted from {R602.10.6.2} as shown in 1/S2.01. Framing shall be 2X6 stud grade. Tension strap capacity shall be 1,000# to withstand uplift by 115mph winds.
21-02 10 10 60 40 Wall Bracing, Continuous Sheathed Portal Frame (CS-PF) (2/S2.01)...
The wall containing the garage door openings shall be braced by the continuous sheathed portal frame method excerpted from {R602.10.6.4} as shown in 2/S2.01.
22-06 10 63 Exterior Posts...
Install posts anchored to concrete pier or slab with a 25mm[1"] zinc coated stand-off base. Wrap with Mirtec or equal; terminate 6mm[1/4"] above concrete at bottom and 3mm[1/8"] with a painted sheet metal cap and sealant joint to soffit or beam wrap at the top.
22-06 18 13 Glued-Laminated Beams...
Glued-Laminated Beams shall meet all recommendations and requirements of the Specificator's Guide for Trus Joist Beams, Headers and Columns (36-11 21 00 05) and connections per Weyerhaeuser requirements (36-11 21 00 07). Weyerhaeuser "parallam PSL" or "timberstrand TSL" beams are to be stained and sealed. "Laminated LVL" beams are to be trimmed and painted with sealed fiberboard Mirtec or equal on the exterior, or finish wood on the interior. Attach rafters at birds mouth condition with hurricane clips per Weyerhaeuser requirements (36-11 21 00 07).
21-02 10 20 Roof Decks, Slabs and Sheathing...
Roof Decks, Slabs and Sheathing shall meet all requirements of American Forest & Paper Association "Details for Conventional Wood Construction (36-11 29 13 01)

3 21-02 10 Superstructure

R602.10.6.4 Method CS-PF: Continuously sheathed portal frame.

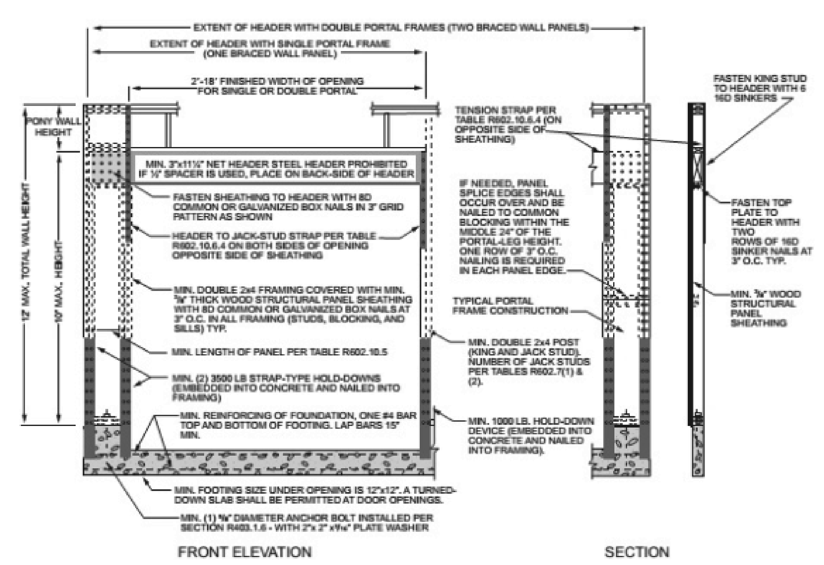
Continuously sheathed portal frame *braced wall panel*s shall be constructed in accordance with Figure R602.10.6.4 and Table R602.10.6.4. The number of continuously sheathed portal frame panels in a single *braced wall line* shall not exceed four.



2 CS_PF F.R602.10.6.4 Continuously Sheathed Portal Frame at Garage

R602.10.6.2 Method PFH: Portal frame with hold-downs.

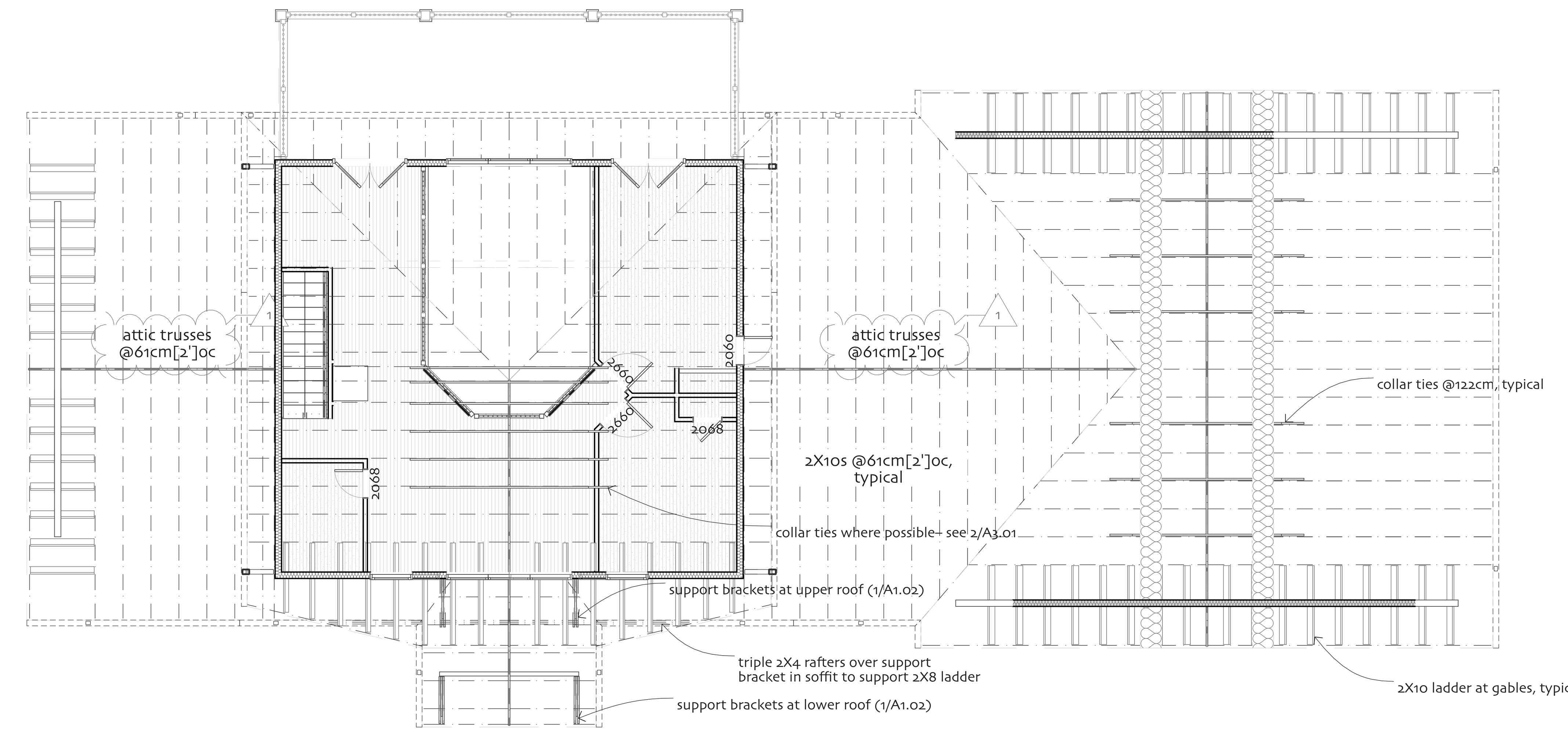
Method PFH *braced wall panel*s shall be constructed in accordance with Figure R602.10.6.2.



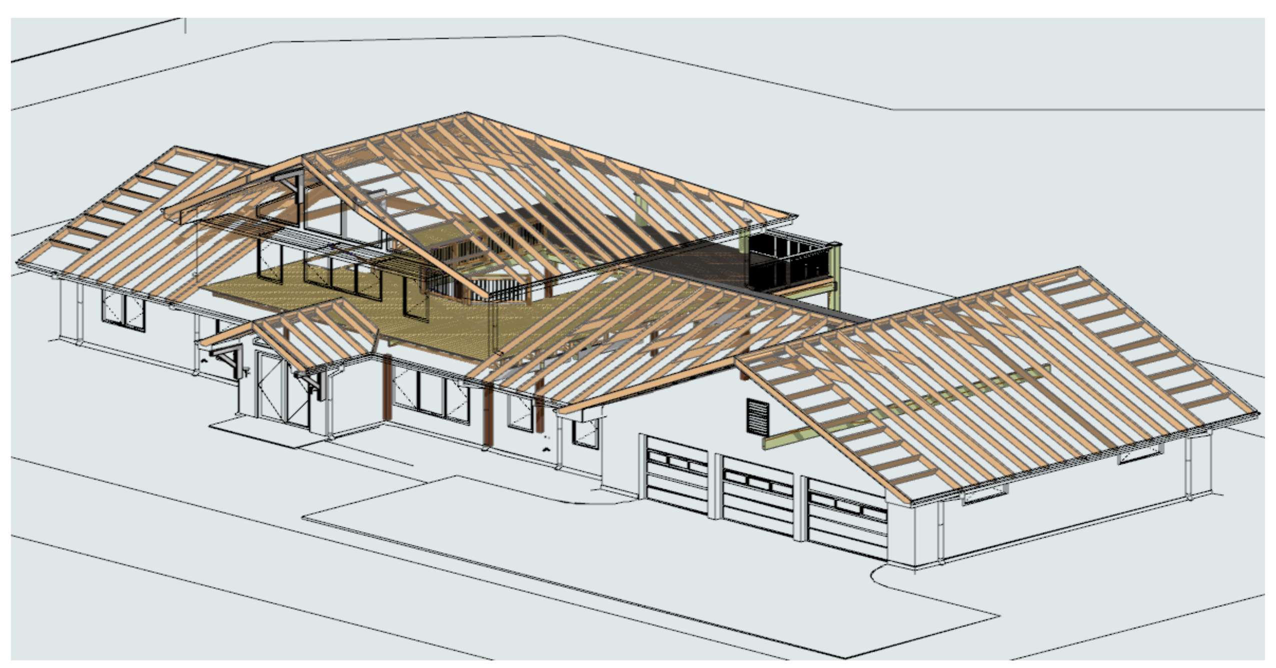
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

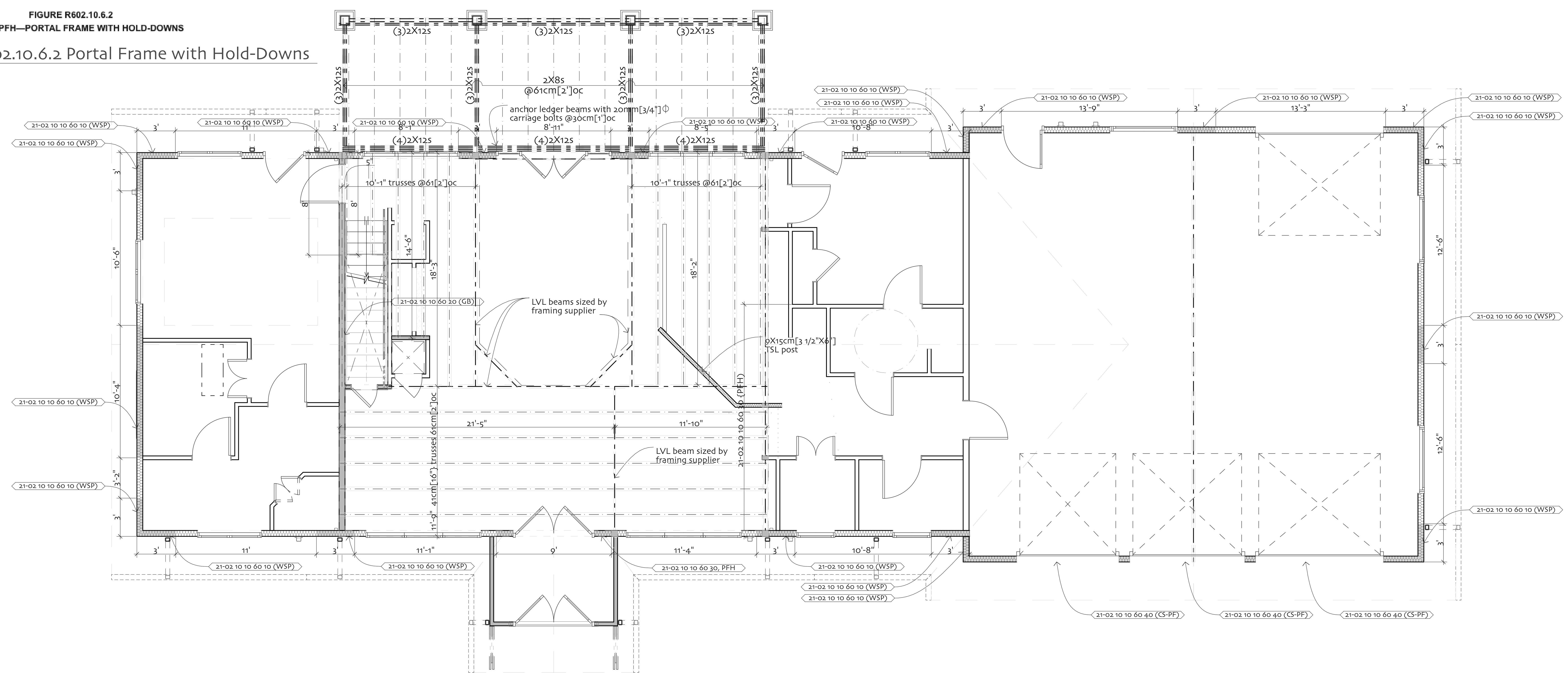
1 PFH F.R602.10.6.2 Portal Frame with Hold-Downs



Roof Framing Plan
SCALE: 1/8" = 1'-0"



4 Framing Axonometric
SCALE: 6" = 1'-0"



Second Floor Framing Plan
SCALE: 3/16" = 1'-0"

project number: 3782001

Construction Documents

issue: 4/16/2021
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Addenda:

Issue	Issue Date	Issue Name
1	4/13/21	Final CD Revisions

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Superstructure (Framing)

S2.01

21-04 Services...

Services consist of Electrical (21-04 05), Plumbing (21-04 20), HVAC (21-04 30), Fire Protection Specialties (21-04 40 30), and Facility Natural Gas Piping (22-23 11 23). Provide low-voltage service for security and alarm, and sound at Owner's request.

21-04 05 Electrical...

Electrical service consists of Electrical Service and Distribution (21-04 05 20). Provide electrical service to Fire Protection system (21-04 40 30) and air-conditioning system (22-23 81 26 13).

21-04 05 30 10 Branch Wiring System...

Provide branch wiring to meet all General Requirements (21-01). GFI receptacles in kitchen are to have a dedicated circuit for each receptacle.

21-04 20 Plumbing...

Plumbing service consists of consists of installation of plumbing fixtures and all necessary supply, soil and vent piping needed for water closets (22-22 41 13 13), showers and tubs (22-22 41 23), lavatories (22-22 41 16 13), and sinks (22-22 41 16 13).

22-22 41 13 13 Residential Water Closets...

Provide Owner-selected "water-sense" labeled water closets. Install ADA-compliant grab-bars, or, of at Owner request no fixed grab bars, provide grab-bar blocking for future grab bars.

22-22 41 23 Residential Showers and Tubs...

Provide Owner-selected showers and tubs and construct Owner-selected surrounds and tile shower per Tilework (21-03 30 30 20). Locate controls to be ADA compliant and install ADA-compliant grab-bars, or, at Owner request no fixed grab bars, provide grab-bar blocking for future grab bars.

22-22 41 16 13 Residential Lavatories...

Install owner-selected residential lavatory or mop sink in laundry rooms unless Owner deems them not necessary.

22-22 41 16 19 Residential Sinks...

Install Owner-selected lavatories and kitchen sinks.

21-04 30 Heating, Ventilating and Air-Conditioning...

33-41 76 02 HVAC Contracting...

Provide minimum 21-SEER mini-split heat pump systems. Follow all manufacturer's installation instructions. Enclose exterior condensate lines in downspouts to match stormwater drainage downspouts, paint downspouts to match siding color.

21-04 40 30 Fire Protection Specialties...

Provide fire alarms powered by the branch wiring system with back-up batteries installed in all sleeping rooms, near the entrance to sleeping rooms, and in the kitchen. Provide a wall-mounted ABC rated general use residential fire extinguisher in the kitchen.

22-22 33 30 Residential Electric Domestic Water Heater...

Install electric hybrid (heat-pump) DHW system with circulating pump to meet all manufacturer's instructions, (G2448). Drain condensate to exterior.

22-23 11 23 Facility Natural Gas Piping...

Provide propane or natural gas supply piping for future kitchen cook-top and double-ovens. Provide gas supply for future outdoor cooking area on the North porch.

2 21-04 Services

duplex receptacle

GFCI ground-fault circuit interrupt receptacle

230 receptacle on dedicated circuit

WP waterproof receptacle

single-pole switch– provide dimmers in bedroom, living and dining areas

3 3-way switch

exhaust fan, ducted to exterior

recessed LED light fixture

ceiling ventilator with LED light kit and remote controls for fan speed and direction

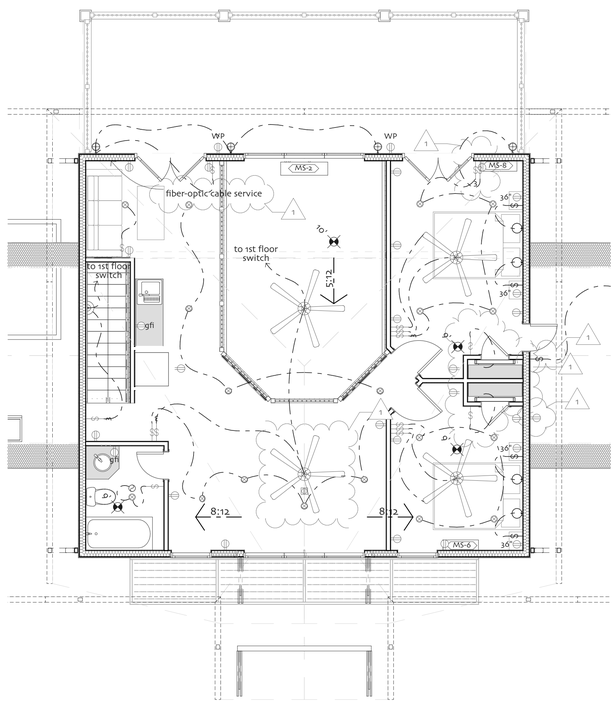
LED bath bar or under-counter lighting, closet lighting on interior above door

pendant LED light fixture

surface-mounted utility LED fixture

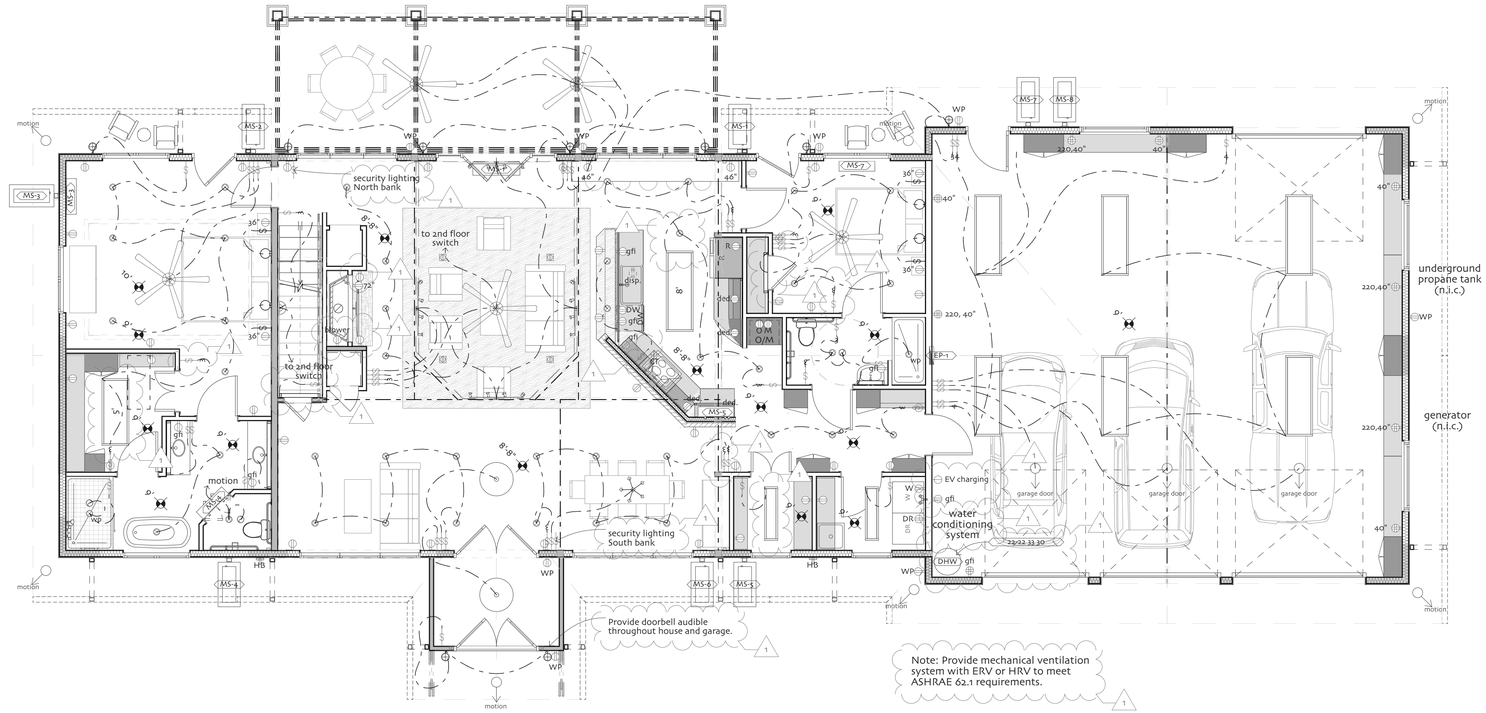
motion security lighting on motion sensors with reset to turn off lights manually and/or security cameras– provide allowance for security system

1 Electrical and Services Legend



Second Floor Electrical and Services Plan

SCALE: 3/16" = 1'-0" 0 4' 8' 12'



Note: Provide mechanical ventilation system with ERV or HRV to meet ASHRAE 62.1 requirements.

First Floor Electrical and Servces Plan

SCALE: 3/16" = 1'-0" 0 4' 8' 12'

project number: 3782001

Construction Documents

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Electrical and Services

E1.01