A. DESIGN CRITERIA Design Codes: a. International Building Code: IBC 2021 b. Minimum Design Loads for Buildings and Other Structures: ASCE 7-16 2. Design Loads: a. Dead Loads = 25 psf Floors (Units) Interior Partitions = 15 psf= 30 psf Floors (Breezeway) = 22 psf b. Live Loads (reducible per code UNO) Residential = 40 psfCorridors/Exits = 100 psfMechanical/Storage = 125 psf (non-reducible) Typical Roof = 20 psfc. Roof Snow Load Ground Snow Load (p_q) = 30 psf (Per City Bulletin #2) = 30 psf (Per City Bulletin #2) Flat Roof Snow Load (p_f) Snow Exposure Factor (C_e) Snow Load Importance (I_s) = 1.0 Thermal Factor (C_t) = 1.0 Slope Factor (C_s) = 1.0 Unbalanced Loads for Hip & Gable Roofs Windward Snow Load Leeward Snow load from ridge to 7.61' = 40.2 psf Leeward Snow load from 7.61' to eave d. Wind Load Basic Design Wind Speed, V = 115 mph (3 sec. Gust) (Per City Bulletin #2) ASD Wind Speed, Vasd $= 89.1 \, \text{mph}$ Risk Category Wind Exposure Internal pressure Coefficient (GC_{pi}) = ±0.18 Components and Cladding (psf): Zone A=10ft² A=50 ft² A=100 ft² +26/-47 +18/-35 +16/-29 +26/-65 +18/-49 +16/-42 +26/-65 +18/-49 +16/-42 +35/-38 +32/-35 +30/-33 5 | +35/-47 +32/-40 +30/-37 1. A is the Effective Wind Area as defined in ASCE 7 Ch. 26. Linear interpolation between tabulated values is permitted. 3. Elements with Tributary Area (At) > 700 ft² shall be permitted to be designed using provisions for MWFRS. e. Earthquake Load Risk Category Seismic Importance Factor (I_e) = 1.0 $S_S = 0.252g$ $S_1 = 0.063g$ Soil Site Class: D (Per Geotechnical Report) $S_{DS} = 0.268$ $S_{D1} = 0.101$ Seismic Design Category Basic Seismic Force Resisting System(s) Light-Frame Walls with shear panels – all other materials (ASCE 7 Table 12.2-1 Line A.17) R = 2.0 $C_s = 0.134$ (Controls Design) Light-Frame Wood Walls with structural wood shear panels (ASCE 7 Table 12.2-1 Line A.15) R = 6.5 $C_s = 0.041$ Design Base Shear, $V = C_s \times W = 314 \text{ kips}$ Analysis Procedure = Equivalent Lateral Force Procedure (ASCE 7-16 Chapter 12.8) f. Rain Load Rain Intensity (i) = 1.8 in/hr (Per City Bulletin #2) 3. Allowable Deflections: Total Load Live/Snow/Wind Load Absolute Maximum Floor Joists/Trusses L/360 L/480 L/360 1.5" Roof Joists/Trusses L/240 Wall Framing (flexible finish) L/240 0.75" Wall Framing (brittle/brick finish) L/360 Cantilever deflection limits are the more restrictive of 2 x the appropriate L/--- limit (e.g. 2L/360 = L/180) or absolute maximum value listed above, measured at the tip of the cantilever U.N.O. Soil Properties: a. Soil properties are based on the project geotechnical report entitled Grand View Property Geotechnical Engineering Report, prepared by Terracon on June 10, 2024 (herein known as "Geotechnical Report"). Allowable Soil Bearing Pressure = 2500 psf (Strip Footing) = 4000 psf (Square Footings)

B. STRUCTURAL ENGINEERING DESIGN NARRATIVE

- 1. McClure Engineering Company (McClure, MEC) is the Structural Engineer of Record (EOR) responsible for the documentation of structural design criteria, strength and stability of the primary vertical and lateral load-carrying systems in their completed form, and conformance of the structural design to the applicable building codes. These drawings produced by McClure convey the structural engineering design for the
- project, which includes the following components and systems:
- a. Foundations consisting of strip footings and isolated column footings. b. Slabs on grade.
- c. Residential tower framing above the slab on grade consisting of: Load-bearing wood wall and opening framing.
- Gypcrete over wood T&G Sheathing over wood joists, floor and roof trusses.
- d. The lateral force resisting system of the structure consisting of sheathed gypsum and wood shear walls and wood sheathed
- 2. The following items are Deferred Submittals. Framing intent and additional requirements for these structural components are provided within
- these drawings*: a. Structural steel stair framing and connections – see general notes section "Structural Steel" | see S001 for applicable design criteria
- b. Wood Floor & Roof Trusses* see general notes section "Wood Framing and Fastening" | see S001 for applicable design criteria.
- drawings and the Project Specifications.
- a. Requirements for fire rating of assemblies or fire protection of structural members
- d. Interior non-load-bearing wood wall or ceiling framing
- c. Connections of Wood Trusses to the supporting structure*
- * Reference section "D. Submittal Requirements." Coordinate requirements of these drawings with those of other design consultant
- 3. The following items are specifically excluded from McClure's design scope as represented on these drawings:
- b. Global stability of soil mass c. Any exterior slabs, bollards, curbs, and any enclosures not shown on these drawings
- e. Shoring design, formwork design, temporary bracing, and other means and methods items

C. GENERAL NOTES

- 1. All construction shall conform to the Design Codes in Section "A. Design Criteria," including all applicable standards and documents
- 2. Plan and detail notes provided on specific sheets within these drawings supplement information in these General Notes. Always coordinate
- the requirements of these notes with what is shown within the drawings. 3. Unless noted specifically on a plan, all floor plans show framing for the floor indicated and vertical framing (walls, openings, posts, columns) above that floor.
- 4. Contract Document Coordination: a. The drawings contained herein are intended to be utilized in conjunction with other design consultant's drawings (architectural, civil,
- mechanical, etc.). It is the responsibility of the Contractor to coordinate the requirements of the drawings into their shop drawings and
- b. Refer to the architectural, mechanical, electrical, and civil drawings for location and size of block outs, inserts, openings, curbs, bases &
- pads, and dimensions not shown on these drawings. Refer to the architectural drawings for size and location of doors and window openings, exterior wall assemblies, and floor, wall, and roof finishes. Refer to the mechanical and electrical drawings for additional information including locations of mechanical units,
- d. Omissions or conflicts between various elements of the drawings, notes and details shall be brought to the attention of the engineer and resolved before proceeding with the work.
- 5. Use of Drawings in Construction: a. The Contractor shall verify all dimensions and conditions at the job site before commencing work and shall report any discrepancies to
- the engineer responsible for the design of that work. b. Do not use scaled dimensions; use written dimensions or, where no dimension is provided, consult the engineer for clarification before
- proceeding with the work c. Details and keynotes shown shall be incorporated into the project at all appropriate locations, whether or not they are specifically
- referenced on the drawings. d. McClure may provide the contractor with electronic files for their convenience and use in the preparation of shop drawings. These electronic files are not construction documents; the contractor is not relieved of his/her duty to fully comply with the contract documents, including the need to confirm and coordinate all dimensions and details, take field measurements, verify field conditions, and coordinate the contractor's work with that of other contractors for the project.
- Changes During Construction: a. Openings shall not be cut or otherwise made in any structural member unless that opening is specifically shown on these drawings. The
- Contractor shall seek approval in writing from the engineer for any design incorporating additional openings. b. Support details shown for Architectural, Mechanical, Electrical, and Plumbing equipment as well as elevators is based upon available information from the manufacturer (if any). The Contractor shall coordinate requirements of actual equipment supplied with details and
- shall provide any additional framing required. c. The Contractor has the responsibility to notify the engineer of any architectural, mechanical, electrical, or plumbing load imposed on the structure that is not documented on the Contract Documents or differs from what is originally shown. Provide documentation of location,
- load, size, and anchorage of all undocumented loads in excess of 250 lbs. 7. Construction Sequence and Methods: a. These drawings and the related Specifications represent the finished structure and, except where specifically shown, do not indicate the
- method or means of construction. Loads on the structure during construction shall not exceed the design loads indicated in Section "A. Design Criteria" as a maximum. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence.
- b. The Contractor is responsible for compliance with all applicable job-related safety standards proceeding from governing organizations
- c. It is the responsibility of the Contractor to ensure the stability of the structural elements during construction as a result of means and sequence by providing shoring, bracing, etc. as required. i. Stability considerations should include all applicable temporary construction and environmental loads per ASCE 37 which may
- include wind and seismic forces. ii. Temporary bracing shall remain in place until positive connection is made between the braced element and the floor/roof
- diaphragm or foundation above and below, and those diaphragms in turn are structurally complete and connected to the vertical elements of the lateral force resisting system. This is a means and methods item. The Contractor may at their discretion employ a Specialty Structural Engineer, licensed in the state where the project is located, for the design of any temporary bracing, lifting, rigging, and shoring. Any sealed drawings, calculations, reports, etc. prepared for
- construction stability shall be submitted to the engineer for review. d. The Contractor shall consider the effects of thermal movements due to hot or cold weather construction and the potential for extreme
- temperature variations before the structure is complete. e. The Contractor is responsible for the protection and repair of any adjacent existing structures, surfaces, and areas which may be damaged as a result of the work.

D. SUBMITTAL REQUIREMENTS

- a. The Contractor shall provide all submittals in PDF format unless otherwise requested or indicated in the Project Specifications. b. All submittals must be reviewed by the Contractor prior to McClure's review. The Contractor is responsible for reviewing each submittal for basic coordination with these drawings and to verify that all the required components of the submittal are incorporated. The
- submittal must bear the electronic review stamp of the Contractor before McClure will proceed with the review. c. Incomplete submittals or submittals not meeting the requirements of this section will not be reviewed. McClure will notify the contractor that the submittal is incomplete or unacceptable and that resubmission is required
- i. Submittals requiring engineering calculations for all or a portion of the work are considered incomplete without the sealed
- calculations and will not be reviewed. ii. Shop Drawings shall be original drawings. Submissions incorporating any portion or reproduction of the contract documents will not
- be reviewed. Deferred Submittals not meeting the seal requirements of section D.2.b are considered incomplete and will not be reviewed.
- iv. Resubmittals with comments from a previous review left unaddressed or without any response will not be reviewed. d. Allow two weeks for review of all submittals unless an agreement for expedited review is made in writing by McClure.
- e. McClure's submittal review scope of work includes a single submittal review and one review of the revised submittal if required (two reviews total of the same submittal). Time required for more than two reviews of a submittal is considered an additional service and will be billed hourly. McClure reserves the right to withhold review of a submittal surpassing this allowance until proper billing to the
- responsible party can be established f. Submittals must be returned to the Contractor by McCure bearing a stamp marked "Reviewed No Exception Taken" or "Reviewed With Comments/Exceptions" prior to proceeding with the work. Submittals marked "Reject/Resubmit" must be revised according to the
- comments provided prior to commencing with the respective scope of work. Deferred Submittals:
- See Section "B. Structural Engineering Design Narrative" for the list of items considered Deferred Submittals. b. Deferred Submittals shall bear the seal of a professional engineer licensed in the state where the project is located. If the project requires a licensed Structural Engineer (S.E.) as the Engineer of Record according to state laws, the same qualification level applies to the engineer sealing the Deferred Submittals.
- c. Deferred Submittal items shall not be installed until the Deferred Submittal documents have been approved by the Building Official.
- a. Submittals (product data, test records, shop drawings, and/or calculations) are required for the following:

Submittal Name			Items F	Required:	
	Product Data	Shop Drawings	Test Records	Engineering Drawings	Engineering Calculations
Concrete Mix Designs	X		X		
2. Concrete Break Reports			X		
Concrete Reinforcing Layout		X			
Concrete Anchor Bolts & Embedded Plates	Х	Х			
5. Concrete Anchors (Post-Installed)	Х				
6. Post-Installed Anchor Substitutions	Х				X
7. Post-Installed Connection Geometry Alteration	Х			X	X
8. Concrete Shoring & Reshoring	X			X	X
9. Brick & Stone Veneer	Х				
10. Steel Stair Framing incl. Connections to Supports				X	X
11. Wood Framing Materials	X				
12. Wood Floor & Roof Trusses incl. Reactions				X	
13. Wood Truss Connections to Supporting Structure				X	X
14. Specialty Wood Fasteners	X				
 Manufactured Wood Shear Panels 	X				
All Cladding Systems & Attachments as Identified in the Architectural Drawings	Х			Х	Х

- b. "Product Data" may indicate mill certifications, material data sheets, Evaluation Service Reports (ESRs), etc. See requirements of each material section of the general notes for further information.
- c. Where "Engineering Drawings" and/or "Engineering Calculations" are indicated, the submittal must comply with the requirements of item "2. Deferred Submittals" above.
- Submittals For Record: a. The following items impact the structural design and therefore must be submitted to the engineer; however, they do not require review.
 - They will be returned stamped as "Received For Record". i. Mechanical Equipment Shop Drawings with Weight

E. CONCRETE

- 1. Reinforced concrete shall have the following minimum 28 day compressive strengths:
- a. Slab on grade, unless noted otherwise 4000 psi normal weight
- b. Foundations 5000 psi normal weight 2. All concrete exposed to weather shall have 6% (+- 1%) air entrainment.
- 3. Submit mix designs for all concrete mixes prior to placement. All submittals shall include the following:
 - a. Batch quantities including admixture dosage rates.
- Strength test results for trial mixes. . Aggregate source(s) and gradation(s).
- Product data for cement, fly ash and other cementitious materials. e. Product data for all admixtures.
- 4. Provide protection for reinforcing bars as follows: a. Concrete cast against and permanently exposed to earth
- b. Concrete exposed to earth and weather (formed) #5 and smaller
- #6 and larger
- c. Concrete not exposed to weather and not in contact with ground: Slabs and walls Beams and columns 1-1/2"
- 5. Provide construction or control joints in slab on grade as shown on plans. If joint pattern is not shown, provide joints at 10'-0" x 10'-0" and at locations to conform to bay spacing wherever possible (at column centerlines, half bays, third bays, etc.).
- 6. Interface of all slab and foundation construction joints shall be roughened with 1/4" amplitude. Surface of construction joints shall be clean
- and free of laitance. Immediately before new concrete is placed, construction joints shall be wetted and standing water removed. Construction joints in walls shall be keyed and placed at locations approved by the Architect and Structural Engineer.
- Provide PVC waterstops in all below grade construction joints and at other locations as shown.
- 9. Provide compressible filler and sealant in all slab-on-grade and wall and column interfaces that are not doweled together. 10. All column pockets shall be filled with concrete after column is erected.
- 11. Sleeves and openings in slabs not shown on structural drawings or outside the parameters of typical sleeve details are not permitted, unless approved by the Structural Engineer.
- 12. Conduit and pipes embedded in slabs, walls, or grade beams shall be no larger in outside dimension than 1/3 the overall member thickness and shall be placed no closer than 3 diameters or widths on center.
- 13. Conduits and pipes shall not be permitted in concrete pilasters or columns.
- 14. Provide concrete housekeeping pads under all mechanical, plumbing, fire protection, and electrical equipment per plans. Pads shall extend beyond equipment a nominal 6" on all sides. Apply a bonding agent to existing concrete slab prior to pouring of housekeeping pad. Provide
- 15. At floor drains, locally slope floor towards drain. See architectural and plumbing drawings for drain locations. 16. Foundation walls shall be temporarily braced until positive attachment is made to floor framing per details. This is a means and methods

Slab on Grade

- Slab shall be constructed as shown on plans.
- Slab-on-grade shall be founded on 6" deep 3/4" clean aggregate base.
- The existing fill shall be removed and the upper 24" of subgrade extending 5' beyond the footprint of the building shall consist of low volume change material such as rollstone or wastelime. Granular fill shall be compacted to a minimum of 98% of the ASTM D698 maximum dry
- Standard Proctor density. The 6" aggregate base shall be included in the 24" depth required for the low volume change layer. 4. Provide joints at 30 x slab thickness (+-) in both directions and located to conform to bay spacing wherever possible (at column centerlines,
- half bays, third bays, etc.). Submit control joint layout to Architect for any exposed concrete surface.
- 5. Saw cut control joints shall be done late enough to prevent raveling of the cut edges and early enough to prevent cracking of the slab ahead of the saw blade.
- 6. Concrete slab to be cured according to ACI Standards. Concrete slab cure to be compatible with any sealer, grout, or adhesive that may be
- 7. At floor drains, locally slope floor towards drain. See architectural and plumbing drawings for drain locations

Subsurface Requirements

1. Foundation design is based on geotechnical report by Terracon, dated June 10, 2024.

F. REINFORCING FOR CONCRETE

- a. All reinforcing steel to be ASTM A615, Grade 60, deformed bars, unless noted otherwise.
- Any reinforcing to be welded shall be ASTM A706 and welded with E80 electrodes. Alternatively, ASTM A615 reinforcing may be welded with E90 electrodes and proper preheat according to AWS D1.4.
- iii. E70 electrodes are not permitted for welding rebar. b. Welded wire fabric shall be plain wire conforming to ASTM A1064. Welded wire fabric shall be in flat sheets.
- c. All reinforcing bars to be detailed and placed in accordance with the ACI "Manual of Standard Practice for Detailing Reinforced Concrete
- d. All reinforcing, including dowels, shall be securely tied and cast with the lower member. Placing reinforcing after concrete has been
- e. Field bending of reinforcing partially embedded in concrete will not be allowed unless specifically noted on the drawings or approved by the Structural Engineer.
- f. All reinforcing bars shall be contact lap spliced or doweled as follows, unless noted otherwise:

Tension Development and Splice Lengths for f' _c = 4,000psi								
	Develo	opment	Class "	B" Splice	Stand	ı. Hook		
Bar Size	Top Bar	Other Bar	Top Bar	Other Bar	Embed	Leg Length	Bend Dia.	
#3	19	15	24	19	6	6	2-1/4	
#4	25	19	32	25	7	8	3	
#5	31	24	40	31	9	10	3-3/4	
#6	37	29	48	37	10	12	4-1/2	
#7	54	42	70	54	12	14	5-1/4	
#8	62	48	80	62	14	16	6	
#9	70	54	91	70	15	19	9-1/2	
#10	79	61	102	79	17	22	10-3/4	

- 1. Straight development and Class "B" splice lengths shown in above tables are based on uncoated bars assuming center-to-center bar spacing ≥ 3*d_b without ties or stirrups or ≥ 2*d_b with ties or stirrups, and bar clear cover ≥ 1.0*d_b Normal weight concrete as well as no transverse reinforcing are both assumed.
- Standard 90 deg. hook embedment lengths are based on bar side cover ≥ 2.5" and

All tension splices shall be Class "B" splices unless noted otherwise on plans.

bar end cover ≥ 2" without ties around hook. For special seismic considerations, refer to ACI 318 Code Chapter 21.

	Tension	Developm	ent and S	plice Lengt	hs for $f_c =$	5,000psi	
	Develo	opment	Class "	B" Splice	Stand	ard 90 deg	. Hook
Bar	Тор	Other	Тор	Other	Embed	Leg	Bend
Size	Bar	Bar	Bar	Bar		Length	Dia.
#3	17	13	22	17	6	6	2-1/4
#4	22	17	29	22	6	8	3
#5	28	22	36	28	8	10	3-3/4
#6	33	26	43	33	9	12	4-1/2
#7	49	37	63	49	11	14	5-1/4
#8	55	43	72	55	12	16	6
#9	63	48	81	63	14	19	9-1/2
#10	70	54	91	70	15	22	10-3/4
1 Strain	ı ıht develoni	ment and Cl	ı acc "R" enli	ce lenaths st	own in abo	ve tables ar	a hasad on

- Straight development and Class "B" splice lengths shown in above tables are based or uncoated bars assuming center-to-center bar spacing ≥ 3*d_b without ties or stirrups or ≥ 2*d_b with ties or stirrups, and bar clear cover ≥ 1.0*d_b Normal weight concrete as well as no transverse reinforcing are both assumed.
- Standard 90 deg. hook embedment lengths are based on bar side cover ≥ 2.5" and bar end cover ≥ 2" without ties around hook For special seismic considerations, refer to ACI 318 Code Chapter 21.
 All tension splices shall be Class "B" splices unless noted otherwise on plans.
- g. All welded wire fabric shall be lapped 12" or 48 wire diameters, whichever is greater.
- Provide (2) #5 x 6'-0" diagonals at all corners of openings and re-entrant corners, unless noted otherwise. Dowels between foundation and walls shall be installed and shall be the same grade, size, and spacing as the vertical wall reinforcing,
- Provide corner bars to match longitudinal reinforcing in all footings. Provide (2) corner bars at tee intersections. Provide 200 pounds of miscellaneous straight bar reinforcing (#4 & #5) to be used in field for special conditions. Labor for placing same to be included.
- 2. Slabs and Slabs-on-Grade a. All slabs on grade to be reinforced with 6x6 - W2.9xW2.9 welded wire fabric, unless noted otherwise



NOTICE: McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors guidance with respect to any alleged errors, omissions, inconsistencies,

ambiguities, or conflicts contained within

the Plans or Specifications. WYOMING CERTIFICATE OF AUTHORITY NO. E-1790 EXPIRES: DECEMBER 31, 2025



MARCUS HIMMELBERG 12/31/2024

I HEREBY CERTIFY THAT THIS **ENGINEERING DOCUMENT WAS** PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY

LICENSED PROFESSIONAL ENGINEER

UNDER THE LAWS OF THE STATE OF

WYOMING

No.	Description	Date
NO.	Description	Date

PROJECT NUMBER

2024000185 ENGINEER DRAWN BY CHECKED BY MDH CEL

SET ISSUE DATE

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AM

DRAWING NO. S00°

A

G. WOOD FRAMING AND CONNECTIONS

 Install rough carpentry according to the American Institute of Timber Construction Manual. Material: a. Sawn lumber Sawn lumber shall be grade stamped and visually graded with maximum 19% moisture content All members shall meet strength requirements in NDS "National Design Specification for Wood Construction" Joists. rafters. and nailers with nominal depth 8" or less shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 2 or better. Joists, rafters, and nailers with nominal depth greater than 8" shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 1 or All exterior posts shall be Western Red Cedar No. 2 or better. Bearing and shear wall studs, and wall plates, shall be Douglas Fir-Larch (DFL), No. 2 or better. b. Structural Composite Lumber SCL shall meet material specifications in ASTM D5456 SCL shall include laminated veneer lumber (LVL), laminated strand lumber (LSL), oriented strand lumber (OSL) and parallel strand All LVL shall be stress class 2.0E-2600F. Other SCL materials shall be graded as indicated on the plans. c. Glued-laminated timber (GluLam) shall be manufactured and identified as required in ANSI/AITC A-190.1 and ASTM D3737. GluLam shall be graded as indicated on the plans. d. Structural Panels All plywood or oriented strand board (OSB) panels shall meet the strength requirements in Department of Commerce (DOC) PS 1 and PS 2 or ANSI/APA PRP 210. All structural panels (walls, floor and roof) shall meet the Structural 1 grading standard e. Connectors and Fasteners Metal connectors and associated fasteners used for the applications indicated shall meet the following minimum standards: Untreated Lumber a. Connectors ..ASTM A653 G90 b. Bolts and Anchor RodsASTM F1554 Gr36ASTM F1667 Nails and Staples Sodium Borate (SBX) Pressure Treated Lumber a. Connectors ...ASTM A653 G90 b. Bolts ...ASTM A307 c. Anchor Rods ...ASTM F1554 Gr 55ASTM F1667 with A153 Hot Dipped Galvanized d. Nails and Staples 3. All Other Pressure Treated Lumber (e.g. ACQ-C, ACQ-D, CA-B, CBA-A, ACZA) a. Connectors ...AISI SS Type 304 or 316 ..ASTM A193, GrB7 b. Bolts c. Anchor Rods ..ASTM A193, GrB7 d. Nails and Staples ...ASTM F1667 using AISI Type 304 or 316 Stainless Steel Fasteners utilizing dissimilar materials are prohibited. Power driven fasteners shall comply with NES NER-272.

Aluminum fasteners and flashing shall not be in contact with pressure treated lumber. General:

support framing damaged by overdriven fasteners shall be removed and replaced.

a. All light framed wood construction shall be fastened as indicated on the plans. Connections not detailed shall be fastened in

b. All framing in direct contact with water, soil, concrete, masonry, or permanently exposed to weather shall be preservative treated

lumber in accordance with the AWPA Standard U1 and M4

Fastener installation whether power driven or otherwise shall be in accordance with the Building Code and the manufacturer's

recommendations. In general fastener heads shall be installed nominally flush with the outer ply of the connection. Sheathing and

c. All framing indicated to be fire-retardant treated or fire resistive on the drawings (Architectural or Structural) shall comply with AWPA U1

UCFA, Type A or ICC-ES ESR 2645 and shall have UL FR-S surface burning characteristics. d. All wood shall be stored on site and protected from the elements to prevent warping, cupping, bowing, crooking and twisting. Use only

material that is straight. All stored wood shall be held off the ground with sacrificial dunnage blocks. e. Wood connectors shall be installed to prevent wood from splitting or otherwise damaging either member.

Use 4x4, 4x6 and 6x6 columns as shown on plans. Built-up sections of 2x studs shall not be substituted for timber posts. g. All multi-ply beams, joists and headers shall be fastened together.

Fasten sawn lumber members per schedule below. Fasten structural composite lumber per manufacturer's literature.

h. Standard cut washers shall be used under bolt heads and nuts bearing against wood, unless noted otherwise per shear wall anchorage Wall studs are designed based on being fully braced by sheathing. Design of temporary or permanent blocking or bridging for support

of construction loads by unsheathed walls is the responsibility of the contractor. Wood joists shall bear on the full width of supporting members (stud walls, beams, nailers, etc.) unless noted otherwise.

Subject to compliance with the project requirements, wood connectors, joist hangers, post caps and bases, holdowns, and related hardware shall be manufactured by Simpson Strong-Tie Company, Inc. San Leandro, CA.

Contractor shall follow the manufacturer's latest recommendations for installation of connectors.

Other manufacturers may be acceptable. Submit substitution request demonstrating that the proposed hardware has the same or greater capacity for each connection. Allow two weeks for review.

I. All beams and joists not bearing on supporting members shall be framed with Simpson joist hangers. Use LU (or equal) for single joists and type LUS for double joists, unless noted otherwise. The joist hangers shall be installed using nails or screws supplied by the hanger

manufacturer as required for the hanger type. m. Bottom plates of all bearing walls on concrete shall be anchored with 5/8" diameter x 6" screw anchors spaced not more than 4'-0" o.c., unless noted otherwise. Sill plate anchors shall be located a maximum of 1'-0" from corners, ends of walls and sill plate splices. Provide (2) anchors minimum in each sill plate segment Refer to plans and details for shear wall anchorage requirements.

n. Nailers shall be anchored to steel beams and columns with 1/2" diameter A307 bolts with required washers at a maximum spacing of

o. Wall studs, jamb studs, and beam support studs shall have adequate vertical blocking installed to transfer all vertical loads to the

4. Wood Floor and Roof Trusses:

a. Provide wood trusses capable of withstanding the design loads within the limits and under the conditions indicated. Truss design shall be in accordance with the Building Code and TPI-1 Nation Design Standard for Metal Plate Connected Wood Truss Construction.

b. Wood trusses shall be of sawn lumber with 2x nominal thickness. c. In addition to the loads indicated, wood trusses shall be designed for all applicable wind, seismic, and snow (including drift) loads

required by Building Code and noted in plan. Truss design and shop drawing preparation shall be supervised by a registered professional engineer licensed in the state where the project is located.

d. Submittals shall be signed and sealed and include comprehensive truss layout plans, design calculations that indicate species and

grades of lumber, design stresses, size and type of connector plates used. e. Fabricator shall determine truss diagonal locations. Truss configurations shown on drawings are diagrammatic only. Bearing points shall coincide with intersections of diagonals and chords.

Truss member design shall consider unbalanced snow load with full dead load, as well as full dead and snow load. g. Roof trusses shall be designed for the following:

Dead load = 15 psf

Live load = 20 psf, on the top chord horizontal projection = 10 psf on the bottom chord. Dead load

Wind uplift = 15 psf. End / Gable Wind Load = ±13 psf

h. Floor trusses shall be designed for the following loads:

Dead Load = 25 psf + 15 psf partition dead load

Live Load = 40 psf: Private Rooms, offices and corridors serving them = 100 psf: Common and public areas, including stairs and landings

= 125 psf: Mechanical and communication rooms i. The maximum allowable deflection shall be:

Roof Trusses: Total Load: L/240, Roof Live or Snow Load: L/360 Floor Trusses: Total Load: L/360, Live Load: L/480

The manufacturer shall provide all open web trusses and accessories as shown on the structural and architectural drawings and as required for a complete project.

k. All truss to truss connections and truss to supporting member connections shall be designed and detailed by the truss supplier and the size and type of connectors included in the shop drawing submittal. Coordinate size, species and grade of supporting chord and web members with the truss hanger selected.

I. All temporary and permanent bracing shall be in accordance with the TPI standards for bracing. The bracing shall be furnished and installed by the Contractor. Do not use ceilings as uplift bracing at truss bottom chord.

m. Girder trusses shown on drawings shall be designed to carry concentrated reactions from supported members.

n. Wood trusses shall be handled and erected in accordance with TPI HIB-91. Trusses shall be unloaded and stored in bundles in an upright position out of contact with the ground until ready for installation.

o. Any damage to the trusses shall be brought to the immediate attention of the Structural Engineer and truss supplier. Field repair and modification of trusses shall not be made with prior written approval from the supplier, except for nominal trimming to correct length where such trimming will not impair the load carrying capacity of the truss.

H. WOOD SHRINKAGE

1. IBC 2304.3.3 requires that architectural, mechanical, electrical, and plumbing systems be designed to accommodate movement due to shrinkage. McClure Engineering Co. takes no responsibility for the naturally occurring shrinking that will occur.

2. Estimated values are based upon the following moisture content:

a. At installation (MC) = 19%

b. At equilibrium (EMC) = 8%

3. The following recommendations are intended to minimize the potential issues associated to wood shrinkage. Implementation and liability are ultimately up to the contractor or design professional responsible for the impacted trade.

a. Mechanical, Electrical, Plumbing i. Allow construction gaps in the wood framing to close by delaying installation of MEP as long as possible to allow for additional

dead load to be installed. ii. Provide oversized or long slotted holes at pipe penetrations. Holes must be within conformance of typical penetration details.

iii. Rigid connections shall be adjusted before completion of construction of closing of wall and ceiling assemblies. iv. All vertical sheet metal down spouts shall have intermediate slip joints.

v. Roof Drains shall utilize adjustable fittings. Fittings must be adjusted at the completion of construction and then as required to maintain proper drainage.

b. Architectural Considerations Stucco, EIFS and brittle finishes shall have horizontal expansion joints, slip joints with appropriate waterproofing.

ii. Brick and stone finishes shall have ties that accommodate differential movement. iii. Provide adjustable thresholds or transitions at rigid transitions such as CMU or concrete stair and elevator shafts.

c. Construction tolerance

i. Limit shortening due to nesting by cutting all studs level square and tight against plates. Structural wood panels shall have ½" relief gaps at each floor to limit bulging.

iii. Floor sheathing shall have 1/8" gaps on all sides during installation to accommodate movement.

iv. Shear wall hold downs shall be check and retightened immediately prior to sheathing walls. v. Delay gyp topping around concrete and CMU stair or elevator shafts until competition of construction.

i. Stored materials shall be covered and elevation from the elements. ii. Do not allow water to pond on floor sheathing. Provide drain holes if required to allow water to quickly drain if water does temporar-

e. Post occupancy i. McClure recommends a review of roof drains every 3 months for the first 24 months of occupancy and then annually. Adjust drains

as required to maintain watertight integrity. McClure recommends review of joints at exterior doors, windows and finish transitions. Waterproof as needed where original joints

fail per the architect's recommendations. Remedial self-leveling work may be required around concrete or CMU stair and elevator towers to accommodate shrinkage.

I. POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY

1. Post installed anchors shall be expansion, adhesive, or screw anchors as indicated in the details, unless noted otherwise. Only use the anchor type indicated. All anchors on the project of each type must be by the same manufacturer, see below for substitution requirements. a. Expansion anchors:

i. Concrete: Hilti Kwik Bolt TZ (ICC-ES ESR1917).

Simpson Strong-Bolt 2 (ICC-ES ESR3037). Powers Power-Stud+ SD2 (ICC-ES ESR2502).

Holes shall be drilled per the manufacturer's written instructions as outlined in the ESR.

b. Adhesive anchors (threaded rods shall be ASTM A193 B7 for all anchors):

i. Concrete: Hilti HIT RE 500-SD (ICC-ES ESR2322) or Hilti HIT-HY 200 (ICC-ES ESR3187). Simpson AT-XP (UES ER263), SET-XP (ICC-ES ESR2508) or ET-HP (ICC-ES ESR3372)

Powers Pure 110+ (ICC-ES ESR3298), PE1000+ (ICC-ES ESR2583), Pure 50+ (ICC-ES ESR3576), AC 200+ (ICC-ES ESR4027), or AC100+ Gold (ICC-ES ESR2582)

c. Screw anchors:

Hilti Kwik HUS EZ (ICC-ES ESR3027) Simpson Titen HD (ICC-ES ESR2713)

Powers Wedge-Bolt+ (ICC-ES ESR2526)

2. Post-installed anchors shall only be used where specified in the drawings. The Contractor shall obtain approval from the engineer prior to using post-installed anchors for missing or misplaced cast-in-place anchors.

3. All personnel installing anchors shall be trained and certified by the anchoring system manufacturer or by ACI. Contractor shall submit current certifications for all personnel. ACI certification required for all personnel installing adhesive anchors in a horizontal or overhead

conditions. If a failure occurs at any time during testing or construction, personnel shall be retrained and recertified. 4. Installation:

 a. Do not cut existing reinforcing. b. The hole through the supported steel member shall be 1/16" larger in diameter (1/8" for screw anchors) than the anchor unless noted otherwise. Use plate washers with a standard size hole welded to steel members where oversized holes must be used.

d. Where applicable, installation shall follow cleaning procedure indicated in the ESR. Holes shall be made with a hammer drill. Use of a core drill is not allowed.

5. Special inspection shall be provided for all post installed anchors as required by the building code and/or ICC-ES report. Written special inspection reports shall be submitted to the registered design professional in responsible charge by the special inspector. The reports shall record and report the following as a minimum:

a. One of every ten anchors installed by each technician in locations listed below shall be randomly tested in direct tension. At least one anchor shall be tested on each day that anchors are installed. i. Test anchors in the following locations:

Shear wall hold down anchors. Shear wall sill plate anchors. Braced frame base plate anchors

Anchors supporting dead or live loads in tension. ii. Test anchor to twice the allowable tension load as provided in the ESR. Test load shall not exceed 80 percent of the yield strength

of the anchor $(0.8 \times A_{se} \times f_{va})$. Post-installed anchors shall not be tested using a torque wrench.

If any anchor fails quality control testing, all anchors of the same type shall be randomly tested until (10) consecutive anchors pass. Resume normal frequency after this with approval of the engineer. The failed anchor(s) shall be removed and the affected area patched per engineer's direction. Consult the engineer for anchor replacement instructions. The cost for additional work and testing

required due to anchor failure is the responsibility of the installing contractor. b. Prior to and during installation of anchors, inspection and report shall include: Installer shall have reviewed manufacturer's ESR report and written installation procedures and has been certified by the manufacturer or ACI.

General concrete or CMU block conditions (cracked or un-cracked, wet or dry, grouted or hollow, etc). Whether manufacture's written procedures for preparation of hole were followed. Indicate if hole is wet or dry.

Whether hole was made with a hammer drill Whether manufacture's written procedures for anchor installation were followed.

Embedment depth and concrete or block thickness. vii. Anchor diameter, length and type.

c. After installing anchors, inspection and report shall include: All test locations.

Anchor size and/or type.

Applied load, loading procedure, load increments and rate of loading. Mode of failure.

v. Photographs of test equipment and typical failures.

ES code reports shall be included with the submittal package.

6. Substitution requests for products other than those listed above shall be submitted to the engineer with calculations that are prepared and sealed by a registered structural engineer at least two weeks prior to scheduled installations. Calculations shall demonstrate that the substituted product will achieve an equivalent capacity using the appropriate design procedure required by the building code. Product ICC-

J. STRUCTURAL STEEL

 Materials: a. Materials shall conform to the following, unless noted otherwise. Rolled WF shapes ASTM A572 Grade 50 Plates and Angles Channels ASTM A36 ASTM A500, Grade C HSS: Rectangular ASTM A500, Grade C HSS: Round ASTM F3125 All bolts shall be Grade A325 or F1852, UNO Bolts designed as "A490" shall be Grade A490 or F2280 ASTM A563 DH or A194 ASTM F436 Washers ASTM F1554 Grade 36, UNO Anchor Bolts Threaded Rod ASTM A36 ASTM A108, Type B Nelson headed shear stud connectors or equal. Studs Matching weld metal, 70 ksi minimum strength. xii. Electrodes b. Finishes Prepare all surfaces that will be exposed in accordance with SSPC SP3 "Power Tool Cleaning". Do not prime surfaces to be fireproofed, field welded, in contact with concrete, or high-strength bolted. All exterior steel components exposed to view or weather shall be galvanized in accordance with ASTM A123 for framing members and ASTM A153 for bolts and threaded fasteners. All exterior welded connections shall be cold galvanized in accordance with ASTM A780. 2. Fabricator: a. Steel Fabricator shall be AISC Certified. b. Structural members shall be detailed, fabricated, and erected in accordance with the latest edition AISC 303 "Code of Standard Practice for Steel Buildings and Bridges.

Structural steel fabrication drawings must be submitted to the engineer for review prior to fabrication.

Connections: a. The contractor has the option to use bolted or welded connections. Any connections not specifically detailed on the drawings shall be designed by a professional structural engineer licensed in the project state and retained by the fabricator. In general, any connections shown on the drawings are schematic and are intended to show only the relative relationship of the connected members. b. Structural design calculations for all beam and bracing connections shall be submitted to the engineer prior to fabrication and should

d. The Fabricator shall engage a professional engineer registered in the state where the project is located for the design and detailing of:

include the following (as a minimum): All plate dimensions and grades (minimum plate thickness shall be 3/8").

Number and type of bolts. c. Bolted Connections:

Steel Stairs.

Temporary bracing.

Minimum bolt diameter shall be 3/4".

All weld sizes, lengths, pitches and returns.

Slip critical connections shall be used for bracing members, moment-resisting connections, cantilevers, and as indicated on the drawings. Standard oversized and long-slotted holes are permitted for friction-type connections.

All non-slip-critical connections shall be typical bearing type. Oversized or slotted holes are not permitted unless indicated on the The fabricator is responsible for verifying the tensile capacity of axially loaded members with the presence of bolt holes. Increase

member size; add plates (etc) as required. d. Welded Connections: All fillet welds shall be sized according to AISC minimums, but never less than 3/16" (UNO).

All welds shall be performed in accordance with the latest edition of the AWS Structural Welding Code. 4. Erection:

a. All structural steel to be fabricated and erected in accordance with latest AISC specifications. It is the responsibility of the contractor to ensure that structure is maintained in a safe, stable configuration at all times. Any shoring required shall be submitted with engineering calculations for approval.

b. Splicing of steel members not specifically shown on the drawings is prohibited without prior approval from the engineer. All beams shall be installed with the mill camber up. Steel Lintels:

a. Loose lintels for masonry at all openings shall be the following, one angle per 4" wythe of masonry: L 3-1/2 x 3-1/2 x 5/16 for spans less than 5'-9"

ii. L 5 x 3-1/2 x 5/16 for spans between 5'-9" and 7'-11" iii. L 6 x 3-1/2 x 5/16 for spans between 8'-0" and 9'-7"

iv. L 7 x 4 x 3/8 for spans between 9'-8" and 11'-10" b. Lintel sizes are based on 36 psf brick weight with 8'-0" max height of brick above the lintel. Lintels shall bear 8" minimum each end.

d. Lintels carrying brick shall be galvanized

e. All double angle lintels back-to-back shall be bolted at 32" o.c. maximum spacing, with 5/8" diameter A307 bolts, a minimum of two bolts per span.

f. See architectural and mechanical drawings for opening sizes and locations. Steel Stairs: a. Design of steel stairs shown on drawings is the responsibility of the fabricator.

Unless noted otherwise, treads and landings shall be filled with 2 in. of concrete (4,000 psi). Submit complete, sealed, shop drawings including engineering calculations for each stair. Drawings shall include all members and connections, including connections to supporting structure.

d. Unless noted, all connections to steel structure shall be welded and all connections to wood shall be post-installed anchors (screw or

e. Supporting members have been designed for all loads imposed by stair system. i. Check supporting members for local effects at connections and provide stiffeners, doublers, etc. as necessary. f. Design stairs for the following loads:

Live Load = 100 psf or 300 lb. point load on 4" square area. ii. Dead Load = Self weight plus 10 psf superimposed dead load. g. Design stairs for the following deflection criteria:

Live Load = L/480 Total Load = L/360

on the drawings.

	ule of m										
							onnectio	n			
Connection ^{2, 3}				m, nomi e minim			ches. meters,	in inche	S.		
	3 ½ x	3 x	3 1/4 X	3 x	2 ½ x	3 1/4 X	3 x	2 3/8 X	2 x	2 1/4 X	2 1/4 X
	0.162	0.148	0.131	0.131	0.131	0.120	0.120	0.113	0.113	0.105	0.099
Equiv. Common Nail	16d	10d			8d				6d		
			loor Fra	mina							
Joist to band joist	3	5	5	5	N/A	6	6	N/A	N/A	N/A	N/A
Ledger strip	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
Joist to sill or girder	3	3	3	3	3	4	4	N/A	N/A	N/A	N/A
Blocking between joist or rafter to top plate	3	3	3	4	3	4	4	N/A	N/A	N/A	N/A
Bridging to joist	N/A	N/A	N/A	N/A	2	3	3	3	4	3	4
Rim joist to top plate	8" o.c.	6" o.c.	6" o.c.	6" o.c.	6" o.c.	6" o.c.	4" o.c.	6" o.c.	3" o.c.	3" o.c.	3" o.c.
Built-up Girders & Beams				24" o.c.							
- Spacing along edges,								N/A	N/A	N/A	N/A
- # at ends & splices	3	3	3	3	4	3	3				
		Ceiling	and Ro	of Fran	ning						
Ceiling joists to plate	3	4	5	5	5	5	5	6	N/A	N/A	N/A
Ceiling joists, laps over partitions	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
Ceiling joist to parallel rafter	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
Collar tie to rafter	3	3	4	4	5	4	4	N/A	N/A	N/A	N/A
Jack rafter to hip, toe-nailed	3	3	4	4	5	4	4	N/A	N/A	N/A	N/A
Jack rafter to hip, face nailed	2	3	3	3	3	4	4	N/A	N/A	N/A	N/A
Roof rafter to plate	3	3	3	3	3	4	4	5	5	5	6
Roof rafter to 2-by ridge beam (driven through beam into end of ridge)	2	3	3	3		4	4	N/A	N/A	N/A	N/A
Roof rafter to 2-by ridge beam (toe-nail rafter to beam)	2	3	3	3	3	4	4	N/A	N/A	N/A	N/A
(too man ratio to boarn)	l	1	Nall Fra	mina		l					l
Top or sole plate to stud (End nailed)	2	3	3	3	5	4	4	N/A	N/A	N/A	N/A
Stud to top or sole plate (toe-nailed)	2	3	3	3	5	4	4	5	5	5	5
Cap/top plate laps and intersections (each						-					
side of lap)	2	3	3	3	4	3	3	N/A	N/A	N/A	N/A
Diagonal bracing	2	2	2	2	2	3	3	3	4	4	4
Sole plate to joist or blocking @ braced panels (number per 16" joist space)	2	3	3	4		4	4	N/A	N/A	N/A	N/A
Sole plate to joist or blocking	16" o.c.	8" o.c.	8" o.c.	8" o.c.	6" o.c.	8" o.c.	8" o.c.	N/A	N/A	N/A	N/A
Double top plate				12" o.c.				N/A	N/A	N/A	N/A
Double studs				8" o.c.				N/A	N/A	N/A	N/A
				16" o.c.				N/A	N/A	N/A	N/A

¹This fastening schedule applies to framing members having an actual thickness of 1 ½"(Nominal "2-by" lumber) ²Fastenings listed above may also be used for other connections that are not listed but that have the same configuration and the same code requirement for fastener quantity/spacing and fastener size (pennyweight and style, e.g., 8d common, "8-penny common nail"). ³Fastening schedule only applies to buildings of conventional wood frame construction. Connections of shear walls and floor and roof diaphragms shall be as shown



NOTICE: McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively 'Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans or Specifications.

WYOMING CERTIFICATE OF AUTHORITY NO. E-1790 EXPIRES: DECEMBER 31, 2025



12/31/2024

I HEREBY CERTIFY THAT THIS **ENGINEERING DOCUMENT WAS** PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER

UNDER THE LAWS OF THE STATE OF

WYOMING.

DRAWN BY

CEL

SET ISSUE DATE

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PROJECT NUMBER

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STATEMENT OF SPECIAL INSPECTIONS

Project Name: Grand View Heights, The Reserves Address: New Apt. Complex, Laramie, WY 82070

1. This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspector to be retained for conducting these inspections and tests. This Statement of Special Inspections encompasses the following disciplines:

o Architectural x Structural

o Mechanical/Electrical/Plumbing o Other:

2. The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

3. Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge.

4. A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

5. Job site safety and means and methods of construction are solely the responsibility of the Contractor. This Statement of Special Inspections includes the following building systems:

x Fabricators

o Driven Deep Foundation Elements x Cast-In-Place Foundations Elements o Helical Pile Foundations o Cast-In-Place Deep Foundation Elements

x Concrete Construction o Masonry Construction - Level 2 o Masonry Construction - Level 3 x Structural Steel Construction

o Cold-Formed Steel Construction o Metal Building Systems

o Spray Fire-Resistant Materials x Wood Construction o Exterior Insulation and Finish System (EIFS) o Mastic and Intumescent Fire-Resistant Coatings

o Smoke Control o Fire-Resistant Penetrations and Joints

x Seismic Resistance x Wind Resistance

6. The following components are wind-resisting components or part of the main wind-force resisting system and are subject to special inspections in accordance with the Special Inspection Schedule - Wind Resistance:

Wood framed shear walls with wood sheathing and sheathing of other materials, wood sheathed floor and roof diaphragms.

7. The following components are designated seismic systems or part of the seismic-force resisting system that are subject to

special inspections in accordance with the Special Inspection Schedule - Seismic Resistance:

Wood framed shear walls with wood sheathing and sheathing of other materials, wood sheathed floor and roof diaphragms.

Special Inspection Sched	ule: Fabricators		
Verification And	Applicable To	Freque	ncy
Inspection Task	This Project?	Continuous	Periodic
Verify fabrication and implementation procedures:			•
a. Steel Construction	X	-	X
b. Concrete Construction (including rebar fabrication)	X	-	X
c. Masonry Construction	-	-	X
d. Wood Construction	X	-	X
e. Cold Formed Metal Construction	-	-	X
f. Other Construction	-	-	Х

Special Inspection Schedule: Soil	ls			
Verification And	Applicable To	Frequency		
Inspection Task	This Project?	Continuous	Periodic	
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Х	-	Х	
2. Verify excavations are extended to proper depth and have reached proper material.	Х	-	Х	
3. Perform classification and testing of compacted fill materials.	Х	-	X	
4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill.	Х	Х	-	
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Х	-	Х	

Special Inspection Schedule: Cast-In-Place Fou	undation Elements		
Verification And	Applicable To		ncy
Inspection Task	This Project?	Continuous	Periodic
1. Special Inspections and verifications for concrete foundation construction in accordance with the Special Inspection Schedule: Cast-In-Place Concrete for the following foundation elements:			
a. Isolated spread concrete footings.	X	-	Χ
b. Continuous concrete footings supporting walls.	X	-	Χ
c. Concrete foundation walls.	-	X	-

Special Inspection Schedule: Concrete Co	onstruction		
Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodic
Inspect reinforcing steel, including prestressing tendons and placement.	X	-	Х
2. Inspection of welding, reinforcing steel:			
a. Verification of weldability of reinforcing steel other than ASTM A706.	X	-	Х
b. Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames and boundary elements of special structural walls of concrete and shear reinforcement.	-	Х	-
c. Shear reinforcement.	-	X	-
d. Other reinforcing steel.	-	-	Х
3. Inspect anchors cast in concrete where allowable loads have been increased or where strength design is used.	Х	-	Х
4. Inspect anchors post-installed in hardened concrete members.	X	-	Х
5. Verify use of required design mix.	X	-	Х
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and record the temperature of the concrete.	Х	Х	-
7. Inspect concrete and shotcrete placement for proper application techniques.	Х	Х	-
8. Inspect for maintenance of specified curing temperature and techniques.	Χ	-	Х
9. Inspection of Prestressed Concrete:			
a. Observe application of prestressing forces.	-	X	-
b. Observe grouting of bonded prestressing tendons in the seismic force resisting system.	-	Х	-
10. Inspect erection of precast concrete members.	-	-	Х
11. Verify in-situ concrete strength prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	-	-	Х
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.	Х	-	X

Verification And	Applicable To	Freque	ncy
Inspection Task	This Project?	Continuous	Periodic
Material verification of high-strength bolts, nuts and washers:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Х	-	Х
b. Manufacturer's certificate of compliance required.	X	-	Х
2. Inspection of high-strength bolting:			
a. Snug-tight joints.	Χ	-	Х
b. Pretensioned and slip-critical joints using turn-of-nut with match marking, twist-off bolt, or direct tension indicator methods of installation.	-	-	Х
c. Pretensioned and slip-critical joints using turn-of-nut without match marking or calibrated wrench methods of installation.	-	Х	-
Material verification of structural steel:			
a. Identification markings to conform to ASTM standards specified in the approved Construction Documents and AISC 360.	Х	-	Х
b. Manufacturer's certified test reports.	Χ	-	X
4. Material verification of weld filler materials:			
a. Identification markings to conform to AWS specification in the approved Construction Documents.	Х	-	X
b. Manufacturer's certificate of compliance required.	X	-	X
5. Inspection of welding, structural steel:			
a. Complete and partial penetration groove welds.	-	X	-
b. Multi-pass fillet welds.	Х	X	-
c. Single-pass fillet welds > 5/16".	Х	X	-
d. Single-pass fillet welds < 5/16".	Х	-	X
6. Inspection of steel frame joint details for compliance with approved Construction Documents:			•
a. Details such as bracing and stiffening.	Х	-	х
b. Member locations.	X	-	X
c. Application of joint details at each connection.	X	-	X

Verification And	Applicable To	ble To Frequency	
Inspection Task	This Project?	Continuous	Periodic
1. Inspection of high-load diaphragms:			1
a. Verify wood structural panel sheathing is of the grade and thickness shown on the Construction Documents.	Х	-	Х
b. Verify nominal size of framing members at adjoining panel edges agrees with the Construction Documents.	Х	-	Х
c. Verify fastener diameter and length, number of fastener lines, the spacing of the fasteners, and the edge margins agree with the Construction Documents.	Х	-	Х
2. Inspection of metal-plate-connected wood trusses spanning 60 feet or greater:			
a. Verify temporary installation restraint/bracing are installed in accordance with approved truss submittal package.	-	-	Х
b. Verify permanent individual truss member restraint/bracing are installed in accordance with approved truss submittal package.	-	-	Х

Verification And	Applicable To	Frequency	
Inspection Task	This Project?	Continuous	Periodic
Roof cladding and roof framing connections.	Х	-	-
Wall connections to roof and floor diaphragms and framing.	X	-	Х
Roof and floor diaphragm systems including collectors, drag struts, and boundary elements.	Х	-	Х
4. Vertical wind force resisting systems including braced frames, moment frames, and shear walls.	Х	-	Х
5. Wind force resisting system connections to the foundation.	X	-	Х
6. Fabrication and installation of systems or components required to meet impact-resistant requirements.	-	-	Х
7. Inspection of structural wood:			
a. Inspect field gluing operations of elements of the main wind force resisting system.	-	Х	-
b. Inspect nailing, bolting, anchoring, and other fastening of components within the main wind force resisting system including wood shear walls, wood diaphragms, drag struts, braces, and hold downs.	Х	-	Х
8. Inspection of cold-formed steel light frame construction:		1	1
a. Inspection of welding operations of elements of the main wind force resisting system.	-	-	-
b. Inspection of screw attachment, bolting, anchoring, and other fastening of other components within the main wind force resisting system including shear walls, braces, diaphragms, collectors (drag struts), and hold downs.	-	-	-
9. Wind resistant systems and components:			
a. Roof cladding	Χ	-	-
b. Wall cladding	Χ	_	_

Special Inspection Schedule: Seismic F Verification And	Applicable To	Freque	ncv/
Inspection Task	This Project?	Continuous	Periodic
·	This Project?	Continuous	renoun
1. Inspection of pier foundations:		1	
a. Inspect placement of reinforcement.	-	-	X
b. Inspect placement of concrete.	-	-	X
2. Inspection of concrete reinforcement:			
a. Verify certified mill test reports comply with ACI 318 Chapter 21 requirements.	X	-	X
b. Where reinforcing complying with ASTM A615 is to be welded, chemical tests shall be performed to determine weldability.	X	-	X
3. Inspection of structural steel.			
a. Inspections shall be in accordance with the quality assurance plan requirements of AISC 341.	-	-	Х
4. Inspection of cold-formed steel framing:			
a. Inspect welding operations of elements of the seismic force resisting system.	-	-	Х
b. Inspect screw attachment, bolting, anchoring, and other fastening of components within the seismic force resisting system including shear walls, braces, diaphragms, collectors (drag struts), and hold downs.	Х	-	х
5. Inspection of structural wood:			
a. Inspect field gluing operations of elements of the seismic force resisting system.	-	Х	
b. Inspect nailing, bolting, anchoring, and other fastening of components within the seismic force resisting system including wood shear walls, wood diaphragms, drag struts, braces, shear panels, and hold downs.	Х	-	х
6. Inspection of storage racks:			
a. Inspect anchorage of storage racks 8 feet or greater in height.	-	-	X
7. Inspection of architectural components:			
a. Inspect erection and fastening of exterior cladding.	X	-	Х
b. Inspect erection and fastening of interior and exterior nonbearing walls.	Х	-	Х
c. Inspect erection and fastening of interior and exterior veneer.	X	-	X
d. Inspect anchorage of access floors.	-	-	X
9. Inspection of designated seismic systems:			1
a. Verify label, anchorage, or mounting conforms to the certificate of compliance.	-	-	Х
10. Inspection of seismic isolation systems:		I	
a. Inspect the fabrication and installation of isolator units and energy dissipation devices that are part of the seismic isolation system.	-	-	X



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ambiguities, or conflicts contained within

MARCUS HIMMELBERG 17369 12/31/2024

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UNDER THE LAWS OF THE STATE OF

WYOMING. PROJECT NUMBER

2024000185

VIEW HEIGHT GRAND INSPECTIONS RENZ

SPECIAL

	,	WOOD WALL SCHEDULE		
Wood Wall Location	Stud Spacing	Level 1	Level 2	Level 3
Exterior & Breezeway Walls	24" o.c.	(1) 2x6	(1) 2x6	(1) 2x6
Interior Unit Walls (indicated)	16" o.c.	(2) 2x4*	(1) 2x4*	(1) 2x4
Unit Separation Walls	16" o.c.	(1) 2x4	(1) 2x4	(1) 2x4

- 1. Wall stud spacing is to be per schedule unless noted otherwise.
- 2. Bottom sill plates at foundation to be fastened w/ 3/8"Ø x 3-1/2" Hilti Kwik HUS EZ Bolts @ 48" o.c. U.N.O.
- 3. Bottom sill plate connections shall have a 3"x3" steel plate washer at each anchor bolt on shear walls only.
- 4. Sill and top plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O.
- 5. Shear walls shall be sheathed per shear wall schedule
- 6. Non-load bearing walls not shown, refer to architectural drawings.
- 7. All top plates are to be continuous. Splice per 4/S500
- 8. U.N.O. bottom sill plates shall be (1) 2x member matching wall thickness, and top plates shall be (2) 2x members.
- 9. * Indicates studs are spaced at 12" o.c.

TYPICAL WALL HEADER SCHEDULE (STACKED OPENINGS)												
Ononina	May Coan	Header				Kings & Jacks				Sills*		
	Max. Span (ft-in)	Lovel 1 Lovel 2 Lovel 2			Header Plates (All	Lev	el 1	Lev	el 2	Lev	el 3	All Levels
Mark	(11-111)	Level 1	Level 2	Level 3	Levels)	Kings	Jacks	Kings	Jacks	Kings	Jacks	(if applicable)
H1	4'-2"	(2) 2x10**	(2) 2x10**	(2) 2x8**	(1) 2x4 T&B	(3) 2x4	(1) 2x4	(2) 2x4	(1) 2x4	(1) 2x4	(1) 2x4	(1) 2x4
H2	3'-4"	(2) 2x8**	(2) 2x8**	(2) 2x8**	(1) 2x6 T&B	(2) 2x6	(1) 2x6	(2) 2x6	(1) 2x6	(2) 2x6	(1) 2x6	(1) 2x6
Н3	6'-4"	(2) LVL 1-3/4 x 11-7/8	(2) LVL 1-3/4 x 11-7/8	(3) 2x8	(1) 2x6 T&B	(2) 2x6	(1) 2x6	(2) 2x6	(1) 2x6	(2) 2x6	(1) 2x6	(1) 2x6

H = An opening which requires a header

- 1. See S500 for typical opening framing.
- 2. All openings should stack according to the plans. 3. Coordinate all dimensions and elevations with architectural drawings.
- 4. Cripple studs should match the adjacent wall framing.
- 5. * Header top and bottom plates and sills should match the adjacent wall studs.
- 6. ** Indicates headers that do not require top and bottom plates.
- 7. All LVL shall be stress class 2.0E-2500F

WOOD POST SCHEDULE					
Mark Level 1 Level 2 Level 3					
C1	(3) 2x6	(3) 2x6	(3) 2x6		
C2	(4) 2x4	(3) 2x4	(3) 2x4		

1. All exterior columns are to be pressure treated

JOIST & HANGER SCHEDULE				
Joist Size	Hanger			
2x12	LUS28			
Notes:				

- 1. Hangers to be installed with typical fasteners per manufacturer product
- 2. All exterior members are to be
- pressure treated

		WOOD BEAM SCHEDULE	
Mark	Max. Span (ft-in)	Beam Size	Hanger
B1	8'-6"	(2) 2x12	Simpson U210-2
B2	16'-3"	(3) 2x12 (SS)	Simpson HU212-3
В3	8'-6"	(2) 1 3/4"x11 1/2" LVL	Simpson HGUS410
B4	4'-2"	(2) 2x10	Simpson HUCQ210-2-SDS
B5	4'-2"	(2) 2x8	Simpson HU28-2

- 1. All exterior beams are to be pressure treated.
- 2. All LVL shall be stress class 2.0E-2500F
- 3. Hangers to be installed with typical fasteners per manufacturer product data

	FLOO	R AND ROOF SCHEDU	JLE	
Туре	Membrane/Sheathing	Fastening	Concrete/Topping	Reinforcing
Slab on Grade	10mil Vapor Retarder	Taped Edges	4" NW Concrete U.N.O.	see General Notes
Breezeway Floor	3/4" Plywood	10d @ 6/12	1 1/2" Gypcrete Toping	see General Notes
Interior Floors	3/4" Plywood	10d @ 6/12	3/4" Gypcrete Topping	
Roof	15/32" Plywood	10d @ 6/12 UNO		

- 1. Vapor barrier to be placed over compacted fill per general notes.
- 2. Plywood sheathing to be fastened per detail 2/S500
- 3. Floor/Roof diaphragm assumed unblocked unless noted otherwise on plan.
- 4. Plywood to be Grade 1 Material
- 5. See architectural drawings for full floor and roof assemblies including nonstructural elements.

		WOOD SH	IEAR WALL S	CHEDULE		
Mark	Level	Sheathing/ Fastener Layout	Post	Hold-Down	Min. Sill/Top Plate	Base Connection
	Level 3	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	MSTA 49 w/ (26) 0.148X2-1/2" nails	(1) 2x6	(2) 16d nails @ 12" o.c.
SW1	Level 2	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 4" Edge fastening	(2) 2x6	MST48 w/ (34) 0.162x2-1/2" nails	(1) 2x6	(2) 16d nails @ 6" o.c.
	Level 1	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 3" Edge fastening	(2) 2x6	HTT4 w/ (18) SD #10x1-1/2 & 5/8"Ø Anchor Rod	(1) 2x6	(1) HILTI KH-EZ 1/4"Øx 4" @ 6" o.c.
	Level 3	(1) Sided, Gypsum Wallboard - 1/2" Thick, 5d Nail, 7" Edge Fastening, 16" O.C. Unblocked	(2) 2x4	LSTA9 w/ (8) 0.148"x2-1/2" nails	(1) 2x4	(2) 16d nails @ 16" o.c.
SW2	Level 2	(2) Sided, Gypsum Wallboard - 1/2" Thick, 5d Nail, 7" Edge Fastening, 16" O.C. Blocked	(2) 2x4	MSTA 49 w/ (26) 0.148X2-1/2" nails	(1) 2x4	(2) 16d nails @ 12" o.c.
	Level 1	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked	(3) 2x4	HTT4 w/ (18) SD #10x1-1/2 & 5/8"Ø Anchor Rod	(1) 2x4	(1) HILTI KH-EZ 1/4"Øx 4" @ 8" o.c.
	Level 3	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 6" Edge fastening	(2) 2x6	MSTA 49 w/ (26) 0.148X2-1/2" nails	(1) 2x6	(2) 16d nails @ 12" o.c.
SW3	Level 2	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 3" Edge fastening	(2) 2x6	MST60 w/ (46) 0.162x2-1/2" nails	(1) 2x6	(2) 16d nails @ 4" o.c.
	Level 1	(1) Sided, Wood Structural Panels - S1 - 15/32" Thick, 10d Nail, 2" Edge fastening	(2) 2x6	HDU8-SDS2.5 w/ (20) 1/4"Øx2-1/2"SDS Screws & 7/8"Ø Anchor Rod	(1) 2x6	(1) HILTI KH-EZ 1/4"Øx 4" @ 4" o.c.

- 1. See S530 for typical shear wall framing
- 2. All hold down anchors to be welded to embeds or beams as detailed.
- 3. All threaded rods shall be F1554 GR105
- 4. Floor to floor strap ties at top of wall shall match that of the floor above.
- 5. All hold downs and strap ties are Simpson Strong-Tie brand, U.N.O.
- 6. Bottom sill plate connections shall have a 3"x3"x1/4" steel plate washer at each anchor bolt on shear walls only.
- 7. All drag trusses shall be connected to shear walls per detail 4/S530.
- 8. Provide floor to floor strapping on the same side as the OSB sheathing.
- 9. Field fastening for all sheathing to be 12" O.C. U.N.O
- 10. All shear walls to be blocked at all pael joints unless noted "Unblocked."



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	WYOMING	i.	
	Description		Date
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	ROJECT NUMB	Description ROJECT NUMBER 024000185	Description ROJECT NUMBER SET IS 024000185

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HEIGHT(RENZ S AT G

> DRAWING NO. S004

JONES

SCHEDUL

FRAMING PLAN LEGEND:

(H?#) HEADER/OPENING PER OPENING SCHEDULE

(SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY

(F?) INDICATES FOOTING TYPE

C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

FOUNDATION PLAN NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS) T.O. SLABE-ON-GRADE: 100'-0"

PROVIDE CONTROL JOINTS IN SLAB ON GRADE PER DETAIL 5/S501 AND PER GENERAL NOTES.

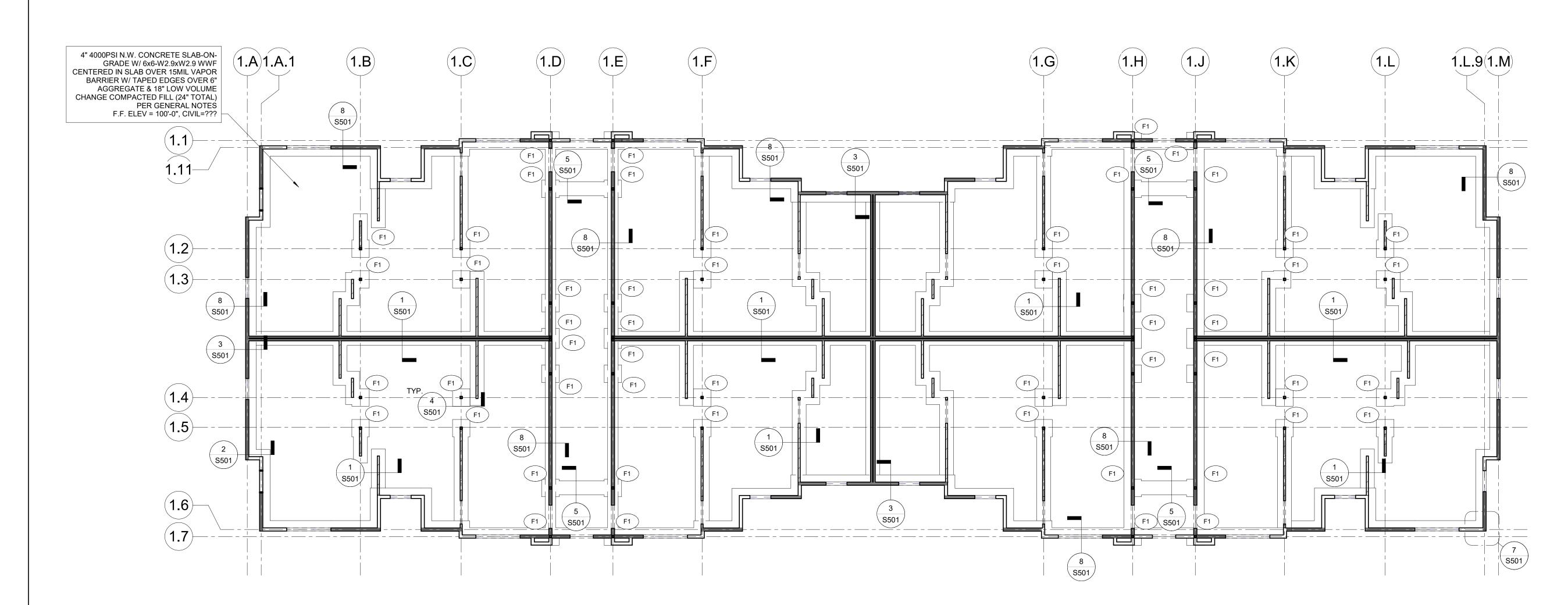
COORDINATE PLUMBING FIXTURES AND FLOOR DRAINS WITH ARCH. & MEP DRAWINGS. ALL EXTERIOR AND INTERIOR LOAD BARING WALLS ARE PER WALL

SCHEDULE ON SHEET S003. SEE ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER CONNECTIONS.

	FOUNDA	TION SCHEDULE
Mark	Size	Reinforcing
F1	2'-6"x2'-6"x1'-0"	(3) #4 BARS Top & Bottom (Each Way)

1. All footings must be centered on walls and columns U.N.O.

SEE SHEET S501 & S502 FOR DETAILS.



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CEL HEIGHTS

GRAND

JONES GILLAM RENZ THE RESERVES AT G

FOUNDATION

BUILDING

1 BLDG B - FOUNDATION 1/8" = 1'-0"



FRAMING PLAN LEGEND:

(H?#) HEADER/OPENING PER OPENING SCHEDULE

(SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY

(F?) INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

PLAN NOTES:

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS)

 T.O. SLAB-ON-GRAB: 100'-0" LEVEL 2 F.F.:

110'-5 7/8" LEVEL 3 F.F.: 120'-11 3/4" 130'-0 7/8" TRUSS BRG:

FLOOR SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. ROOF SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/

10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. COORDINATE PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS WITH ARCH. & MEP DRAWINGS. ALL EXTERIOR AND INTERIOR LOAD BARING WALLS ARE PER WALL SCHEDULE ON

AND WINDOW LOCATIONS. FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, HEADERS, POSTS, COLUMNS) SUPPORTING THAT FLOOR.

SHEET S003. SEE ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR,

SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES,

HOLD DOWNS & OTHER CONNECTIONS. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED. WOOD FLOOR TRUSSES TO BE DESIGNED BY MANUFACTURER AND ARE SHOWN

FOR THE INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. TRUSS MANUFACTURER TO DESIGN & PROVIDE GIRDER TRUSSES AT ALL FLOOR

OPENINGS & SPECIFY HANGERS FOR GIRDERS & SUPPORTED FRAMING. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

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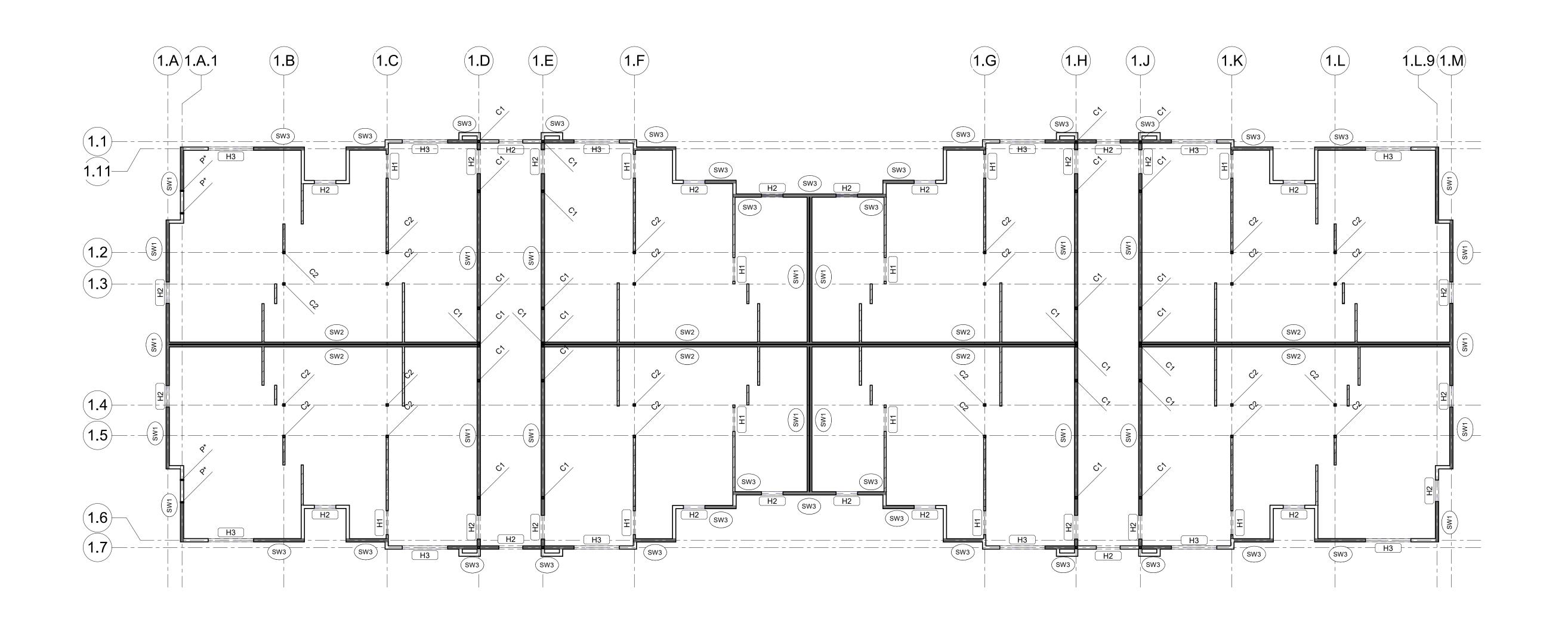
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No.	Description	1	Date
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HEIGHTS VIEW GRAND

BUILDING

JONES GILLAM RENZ THE RESERVES AT G



FRAMING PLAN LEGEND: (H?#) HEADER/OPENING PER OPENING SCHEDULE (SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY

(F?) INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

PLAN NOTES:

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS) T.O. SLAB-ON-GRAB: 100'-0"

LEVEL 2 F.F.: 110'-5 7/8" LEVEL 3 F.F.: 120'-11 3/4" TRUSS BRG:

130'-0 7/8" FLOOR SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. ROOF SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/

10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. COORDINATE PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS WITH ARCH. & MEP DRAWINGS. ALL EXTERIOR AND INTERIOR LOAD BARING WALLS ARE PER WALL SCHEDULE ON

AND WINDOW LOCATIONS. FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, HEADERS, POSTS, COLUMNS) SUPPORTING THAT FLOOR.

SHEET S003. SEE ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR,

SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES,

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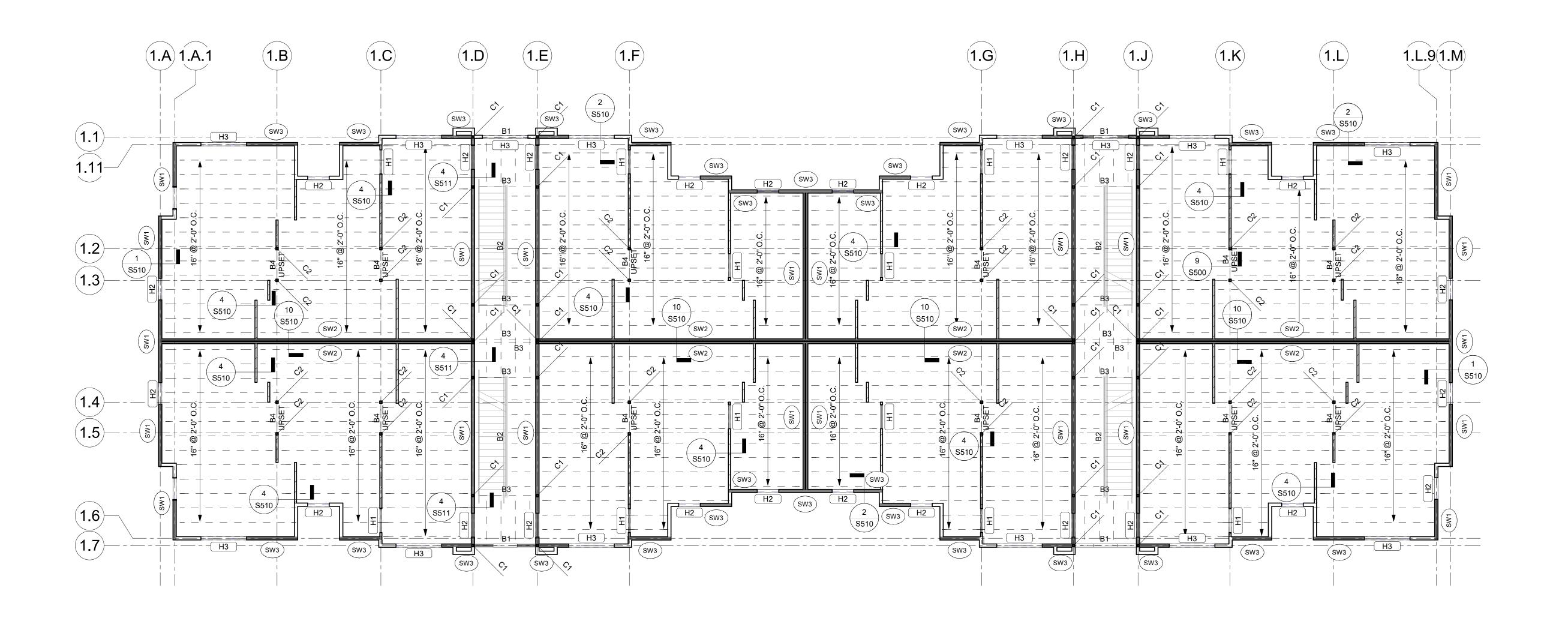
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VIEW HEIGHTS

GRAND

JONES GILLAM RENZ THE RESERVES AT G

BUILDING



FRAMING PLAN LEGEND: (H?#) HEADER/OPENING PER OPENING SCHEDULE (SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY (F?) INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE P* JAMB FROM OPENING ABOVE



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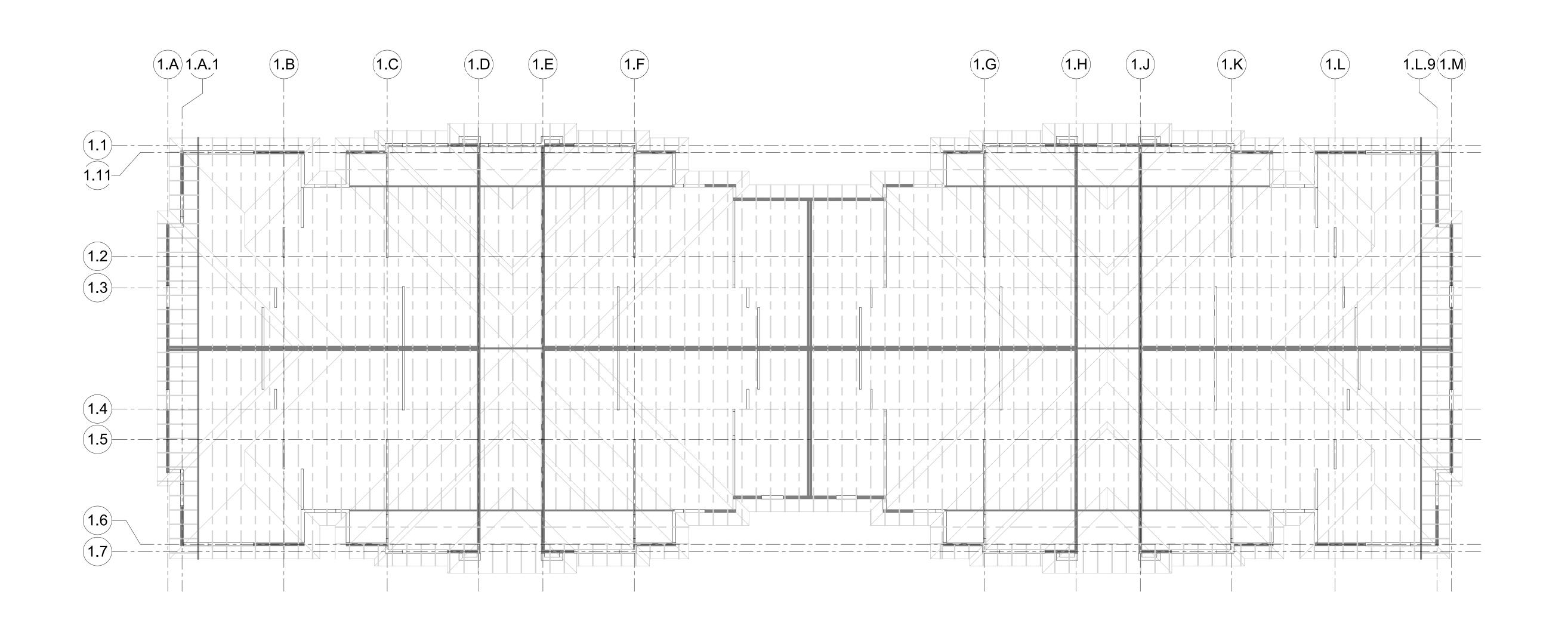
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VIEW HEIGHTS

ROOF

BUILDING

JONES GILLAM RENZ THE RESERVES AT GRAND DRAWING NO. S113



FRAMING PLAN LEGEND: (H?#) HEADER/OPENING PER OPENING SCHEDULE (SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY F? INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

Mark

FOUNDATION PLAN NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS)

 T.O. SLABE-ON-GRADE: 100'-0" PROVIDE CONTROL JOINTS IN SLAB ON GRADE PER DETAIL 5/S501 AND PER GENERAL NOTES. COORDINATE PLUMBING FIXTURES AND FLOOR DRAINS WITH ARCH. &

MEP DRAWINGS. ALL EXTERIOR AND INTERIOR LOAD BARING WALLS ARE PER WALL SCHEDULE ON SHEET S003. SEE ARCHITECTURAL FLOOR PLAN FOR

NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER CONNECTIONS. SEE SHEET S501 & S502 FOR DETAILS.

FOUNDATION SCHEDULE Reinforcing F1 2'-6"x2'-6"x1'-0" (3) #4 BARS Top & Bottom (Each Way)

1. All footings must be centered on walls and columns U.N.O.

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PROJECT NUMBER SET ISSUE DATE 2024000185		SUE DATE				

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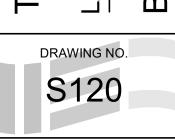
HEIGHTS VIEW

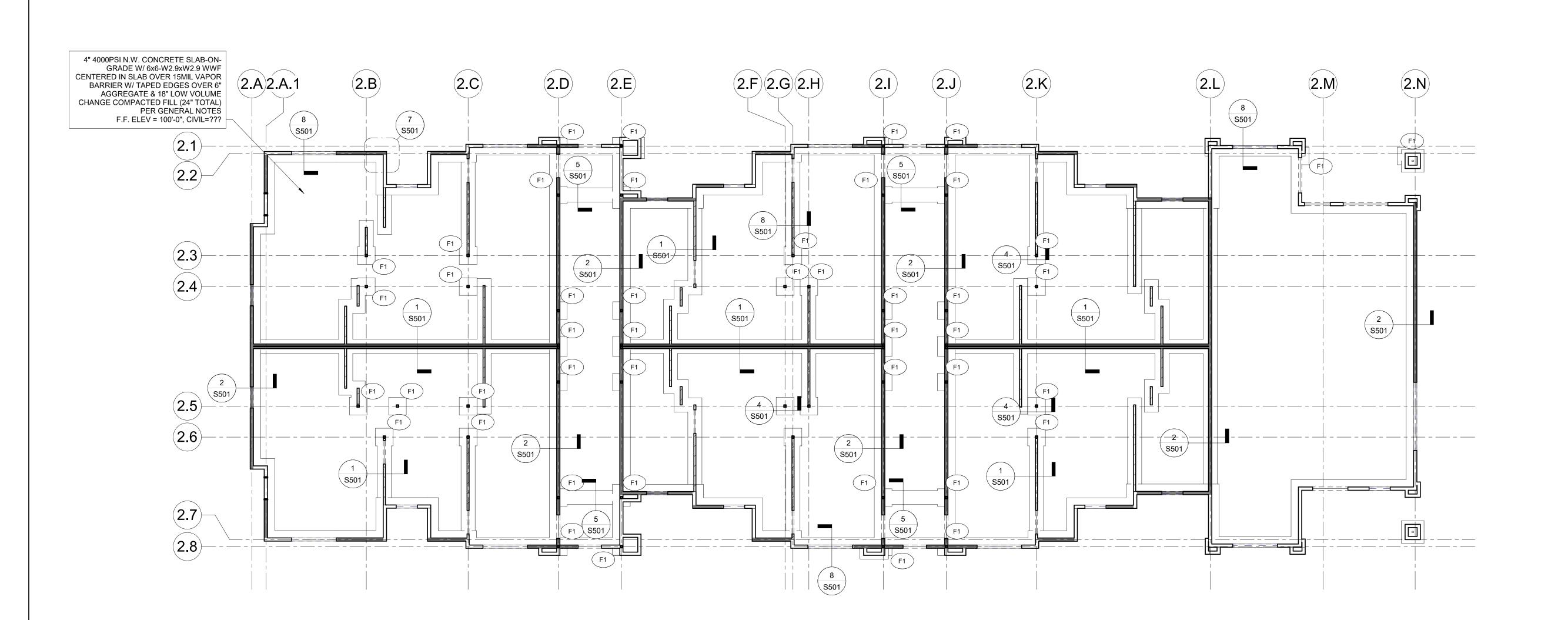
FOUNDATION

BUILDING

JONES GILLAM RENZ THE RESERVES AT G

GRAND





FRAMING PLAN LEGEND: (H?#) HEADER/OPENING PER OPENING SCHEDULE (SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY (F?) INDICATES FOOTING TYPE

C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS) T.O. SLAB-ON-GRAB: 100'-0" LEVEL 2 F.F.: 110'-5 7/8" LEVEL 3 F.F.: 120'-11 3/4"

PLAN NOTES:

TRUSS BRG:

10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. ROOF SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. COORDINATE PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS WITH ARCH. & MEP DRAWINGS.

130'-0 7/8"

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR

FLOOR SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/

ALL EXTERIOR AND INTERIOR LOAD BARING WALLS ARE PER WALL SCHEDULE ON

SHEET S003. SEE ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS. FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING

(WALLS, HEADERS, POSTS, COLUMNS) SUPPORTING THAT FLOOR. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN CRITERIA.

REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER CONNECTIONS. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED.

WOOD FLOOR TRUSSES TO BE DESIGNED BY MANUFACTURER AND ARE SHOWN FOR THE INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA.

TRUSS MANUFACTURER TO DESIGN & PROVIDE GIRDER TRUSSES AT ALL FLOOR OPENINGS & SPECIFY HANGERS FOR GIRDERS & SUPPORTED FRAMING.

REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

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ambiguities, or conflicts contained within the Plans or Specifications.

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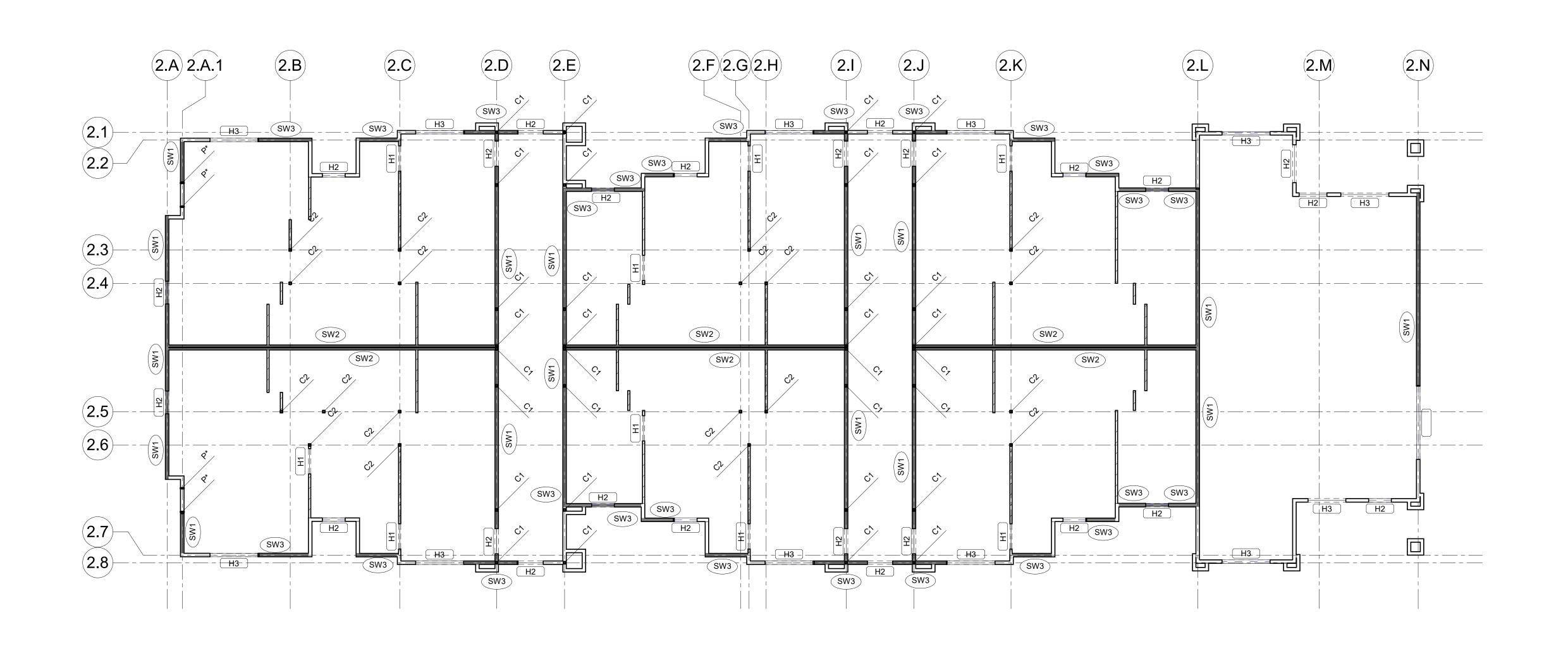
No.	Description	Date	
PROJECT 20240	NUMBER	SET ISS	SUE DATE

CEL

HEIGHTS VIEW GRAND

RENZ

JONES GILLAM F THE RESERVES BUILDING



FRAMING PLAN LEGEND:

(H?#) HEADER/OPENING PER OPENING SCHEDULE

(SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY

(F?) INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE

P* JAMB FROM OPENING ABOVE

PLAN NOTES:

SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATIONS, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS)

T.O. SLAB-ON-GRAB: 100'-0" LEVEL 2 F.F.:

110'-5 7/8" LEVEL 3 F.F.: 120'-11 3/4" 130'-0 7/8" TRUSS BRG:

HOLD DOWNS & OTHER CONNECTIONS.

FLOOR SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. ROOF SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/

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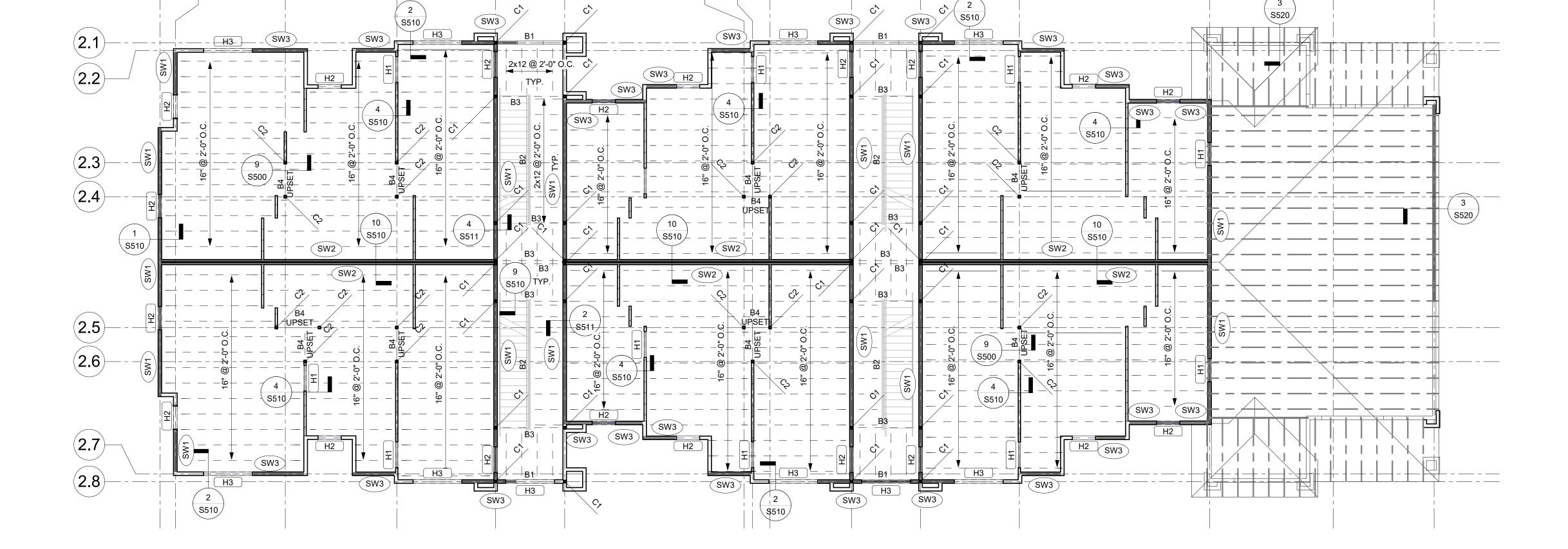
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VIEW HEIGHTS

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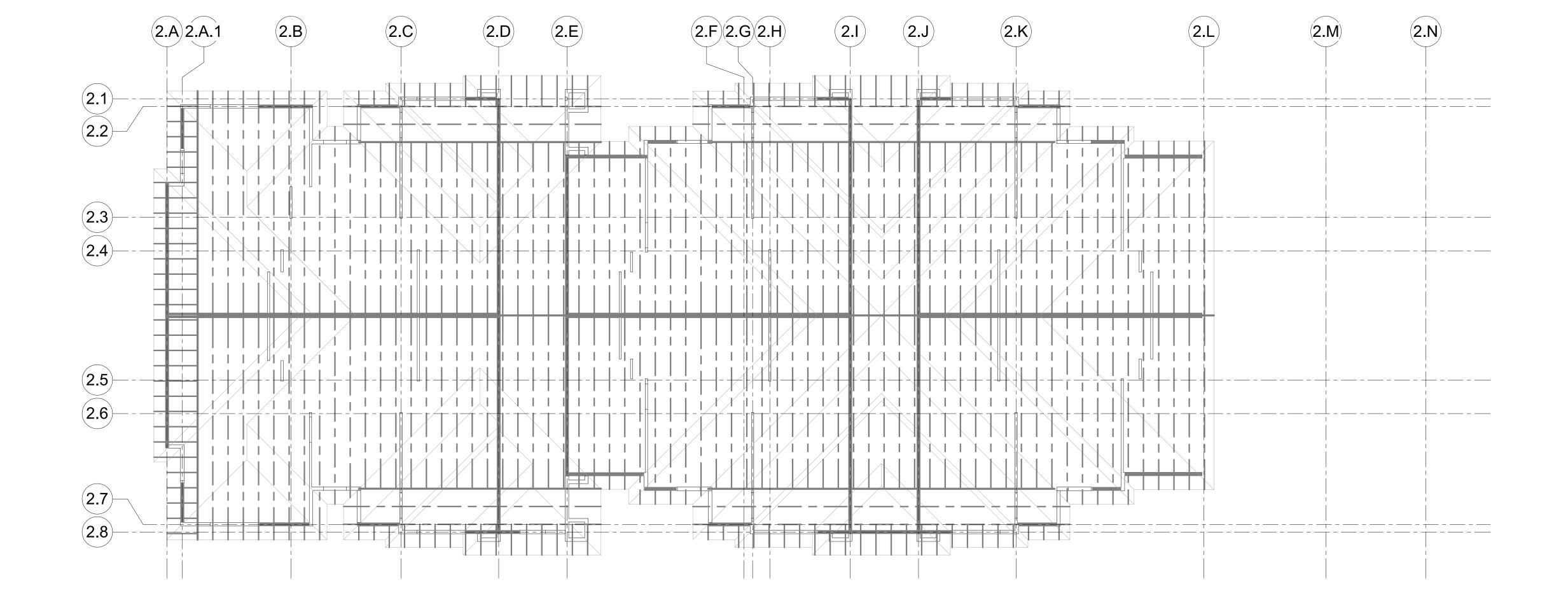
BUILDING

GRAND JONES GILLAM RENZ THE RESERVES AT G



(2.A) 2.A.1

FRAMING PLAN LEGEND: (H?#) HEADER/OPENING PER OPENING SCHEDULE (SW?) SHEAR WALL TYPE, SHEAR WALL INDICATED BY F? INDICATES FOOTING TYPE C# INDICATES COLUMN TYPE P* JAMB FROM OPENING ABOVE





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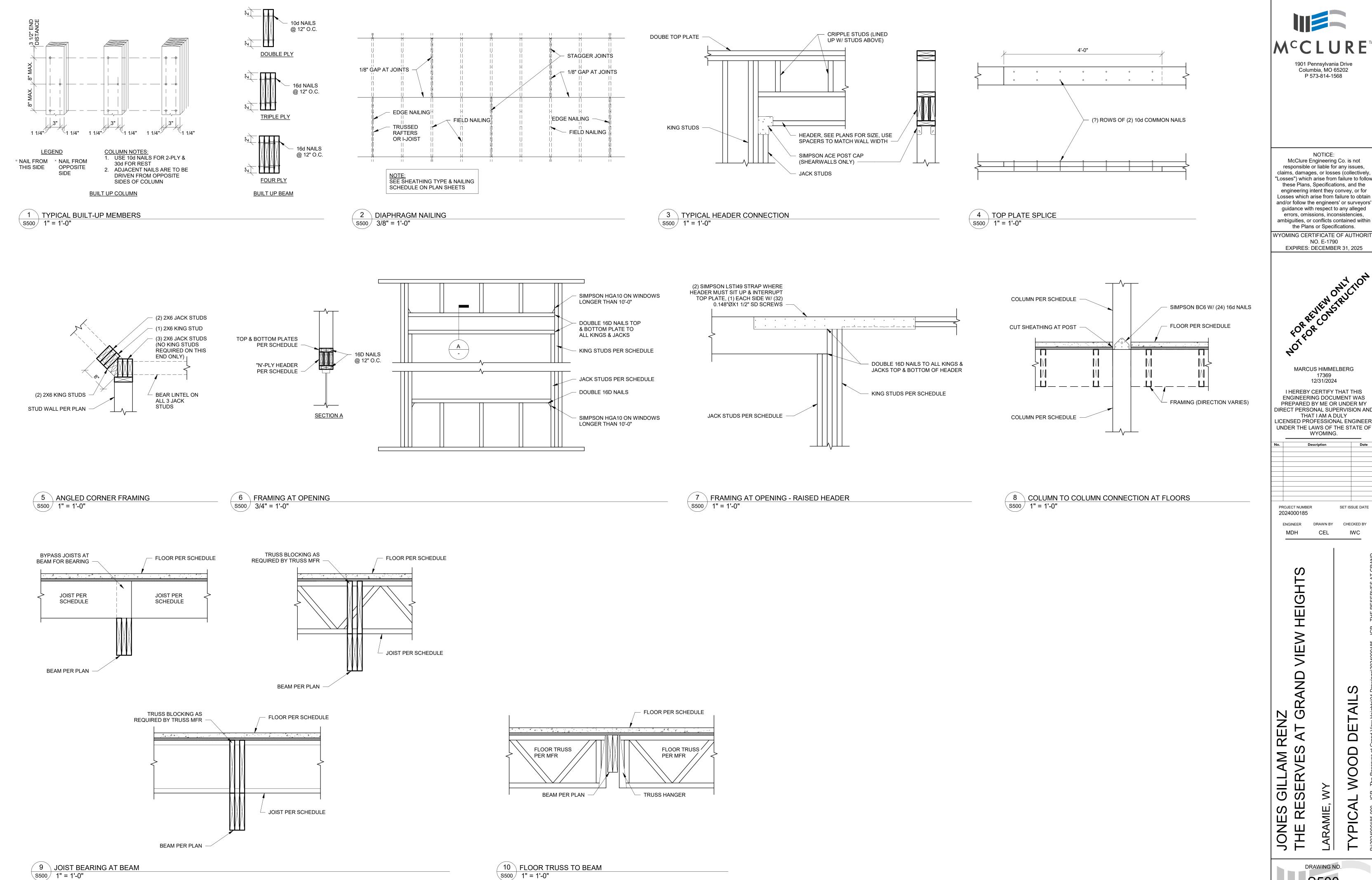
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	MDH	CEL	ı	WC	

VIEW HEIGHTS ROOF

JONES GILLAM RENZ THE RESERVES AT GRAND

BUILDING DRAWING NO. **S123**





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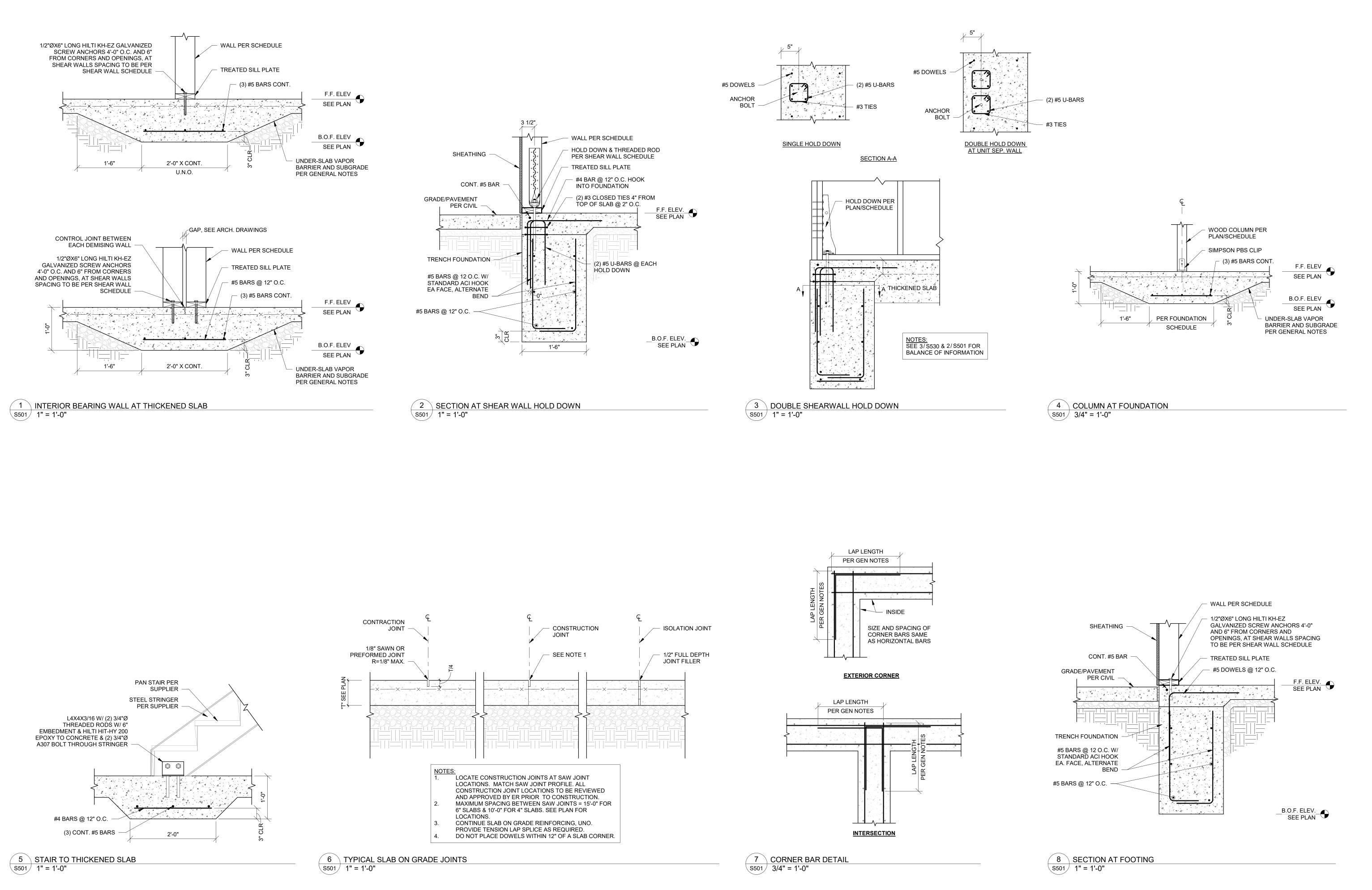
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CEL MDH IWC

HEIGHT VIEW RAND

DETAIL WOOD



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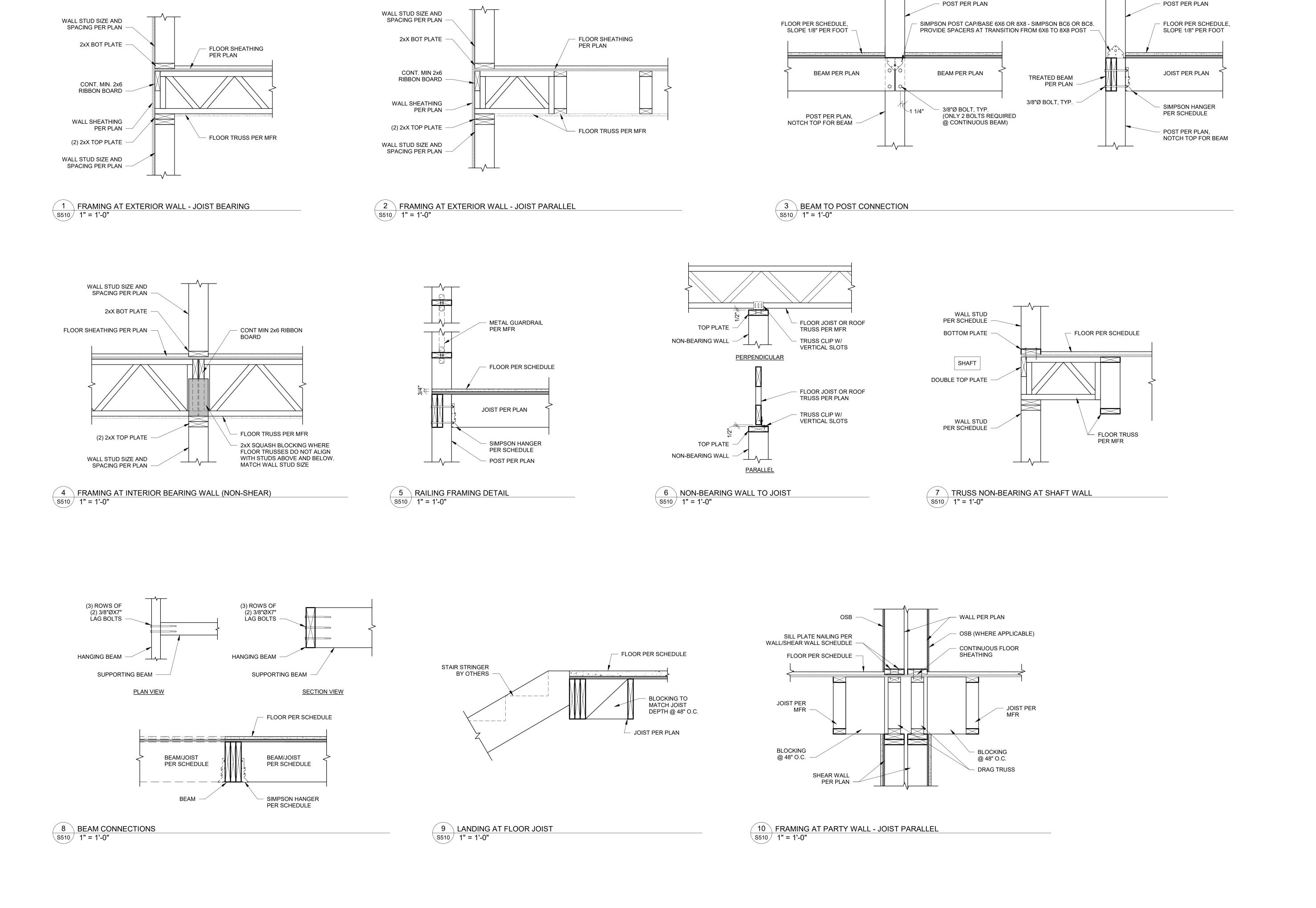
HEIGHT VIEW RAND RENZ

AL ATION

OUND,

DRAWING NO. S501

GILLAM



JONES GILLAM RENZ
THE RESERVES AT GRAND VIEW HEIGHT

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PROJECT NUMBER

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ENGINEER

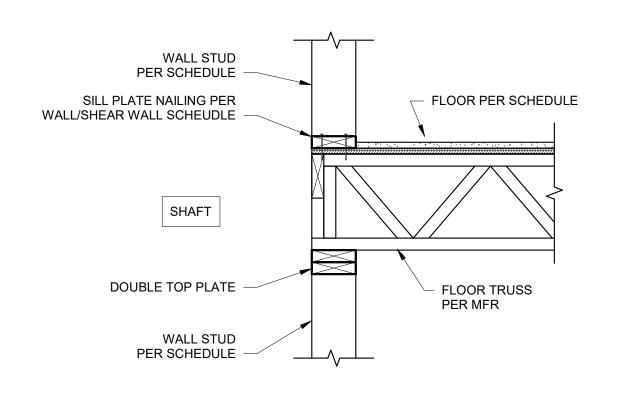
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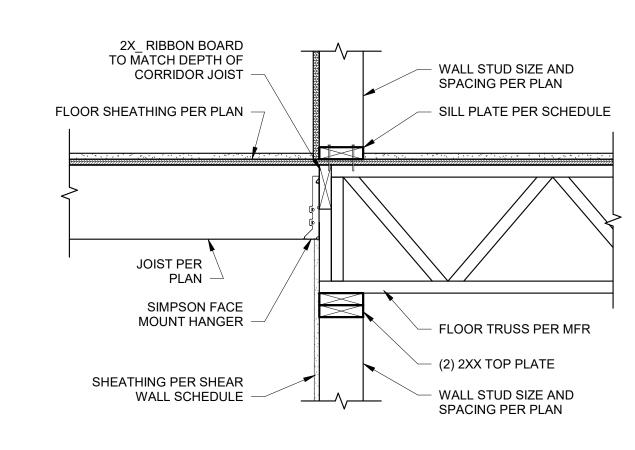
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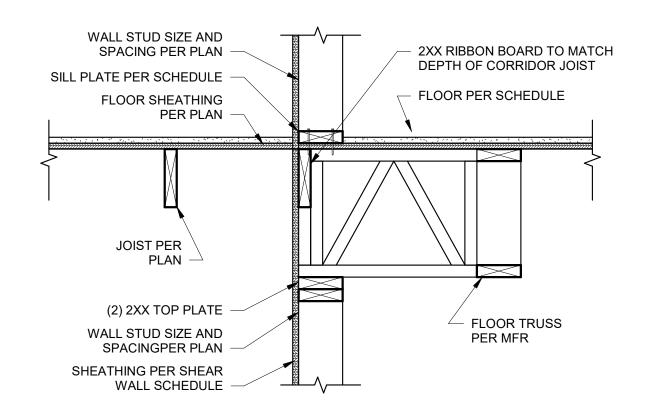
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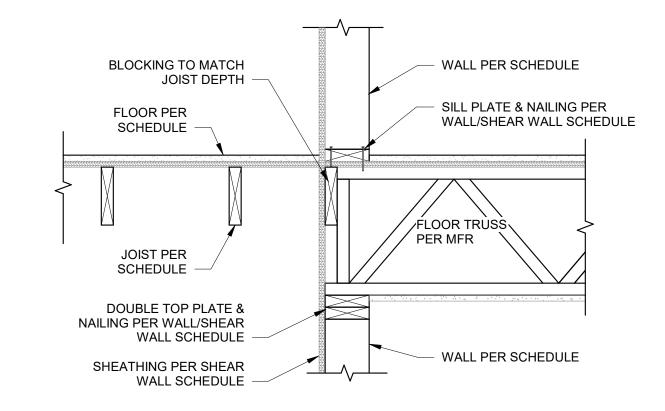
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1 TRUSS BEARING AT SHAFT WALL
S511 1" = 1'-0"

2 FRAMING AT CORRIDOR WALL
1" = 1'-0"

3 FRAMING AT INTERIOR WALL S511 1" = 1'-0"

4 FRAMING AT BREEZEWAY
S511 1" = 1'-0"



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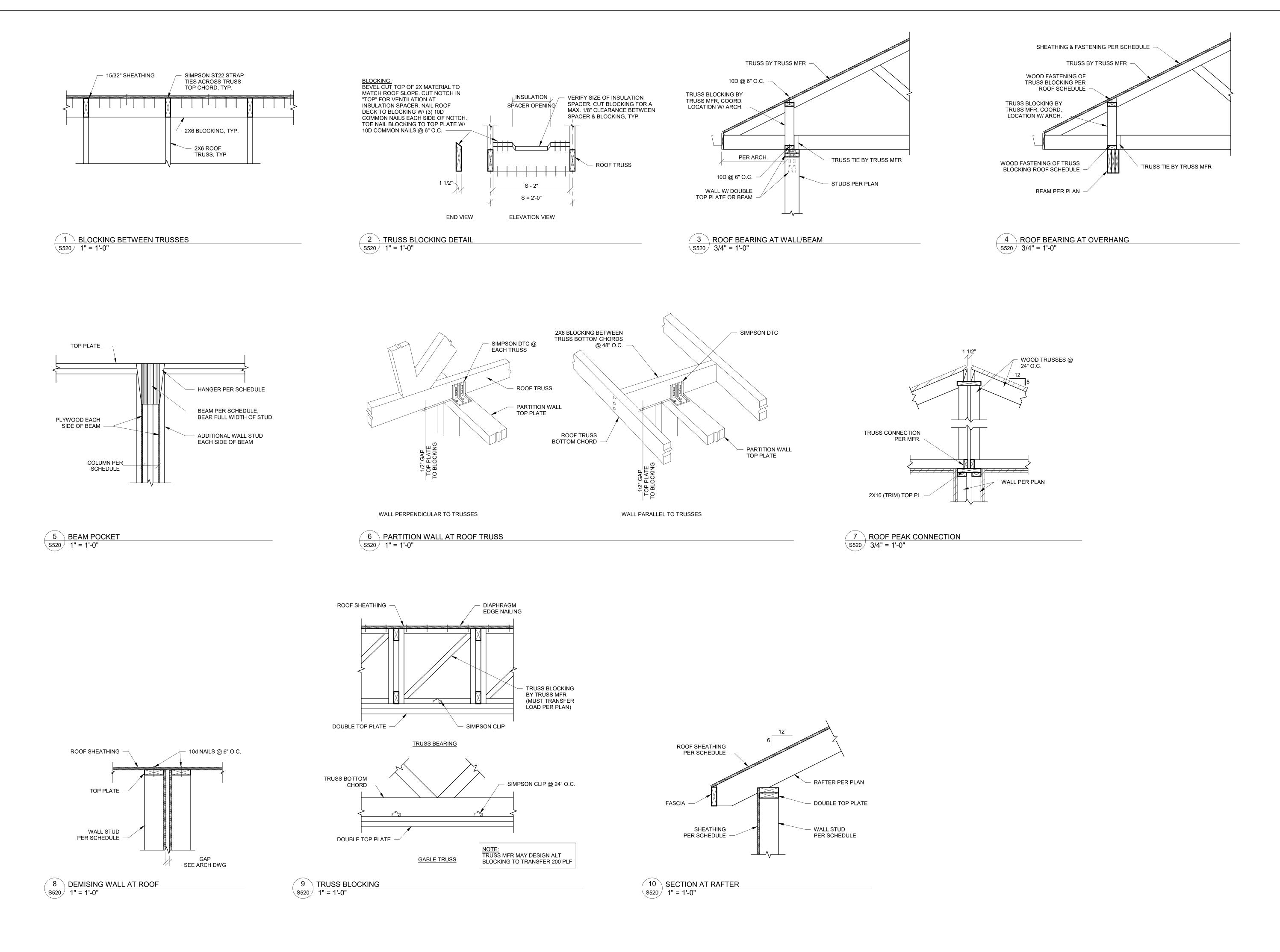
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VIEW HEIGHTS

JONES GILLAM RENZ THE RESERVES AT GRAND FRAMING DETAILS





DETAIL

ROOF

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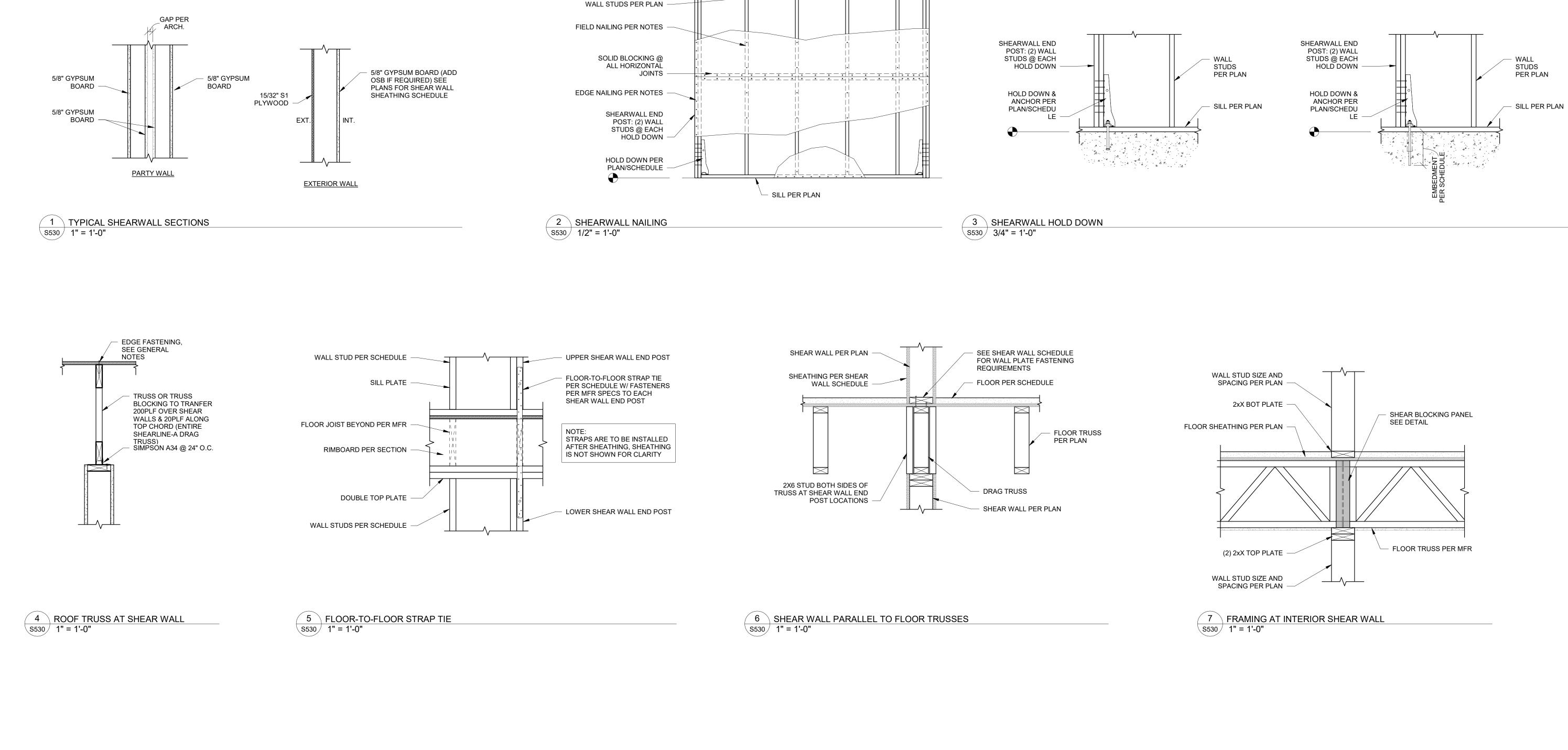
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DETAILS

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