DESIGN TEAM

DESIGNER:

Barn Pros, Inc.
14567 169th Dr SE
Monroe, WA 98272
Phone: 866-844-2276

STRUCTURAL ENGINEER:

Eclipse Engineering
113 West Main Street, Suite B
Missoula, MT 59802
Phone: 406-721-5733

STRUCTURAL NOTES

Building Code:	2019 CBC
Jurisdiction:	City of San Jose
Occupancy:	
Ground Level	U
Construction Type:	V-B
Min. Frost Depth:	12"

DESIGN LOADS:

Risk Category:	II
Ground Snow:	0 PSF
Roof Live Load:	20 PSF
Wind Speed:	92 MPH, V_{ult}
Wind Exposure:	C
Seismic Design	E
Soil Bearing Pressure	1500 PSF
Loft Live Load	N/A

WOOD FRAMING:

6x PT Posts	Hem-Fir #2
4x6 PT Posts	Hem-Fir #2
Purlins & Framing	SPF #2

TREATED LUMBER:

Sills and plates in contact with concrete, and all lumber within 6" of grade shall be pressure-treated. Any end-cut on pressure-treated posts shall be treated/

Posts: 0.60 PCF Retention
Skirtboards: 0.40 PCF Retention

CONCRETE:

Compressive strength (f'c)= 3000 PSI @ 28 days
Calculations based on (f'c)=2500PSI @ 28 days

All footings shall bear on undisturbed native firm soil with minimum bearing capacity of 1500 PSF and lateral bearing capacity of 150 PCF. Builder to verify soil condition prior to construction.

Anchor Rods: ASTM F1554, Grade 36, threaded with nut, unless otherwise noted, and hooked for anchoring wood sole plates.

All fasteners in contact with pressure treated lumber shall be hot-dipped galvanized. Stainless steel fasteners shall be used in exterior applications or when exposed to weather.

WALLS:

Use CS16 strap at every 6' on 2x6 T&G siding. Bottom 2 boards pressure treated on exterior walls, 1 pressure treated board on interior walls. This applies to walls with no intermediate supports only.

SPECIAL INSPECTIONS:

Required special inspections, listed below, are to be performed by a competent third party under direct contract of the owner.
a) None required

GENERAL NOTES

The contractor shall be solely responsible for providing a safe place to work and for meeting the requirements of all applicable jurisdictions, including OSHA. The contractor shall execute their work to ensure the safety of persons and adjacent property against damage from falling debris and other hazards associated with the work.

The contractor shall verify all dimensions and job site conditions before commencing work and shall report any discrepancies to the engineer.

The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc is the sole responsibility of the contractor . The contractor is responsible for the stability of the structure prior to the erection of the framing and of the lateral-load-resisting system is complete.

Prior to beginning any work, the contractor shall verify that all required permits/ approvals have been obtained. No construction or fabrication of any item shall begin until the contractor has received approval of all plans and other documentation from all permitting/regulatory agencies. Failure to follow this procedure shall cause the contractor to assume full responsibility for any subsequent modification of work as mandated by such regulatory authority.

Where it is obvious that a drawing illustrates only a part of a given work of a number of items, the remainder shall be deemed repetitive and so constructed.

Barn Pros is not responsible for providing (including but not limited to) venting, flashing, insulation, drywall or any other items that are not explicitly included in your contract.

Barn Pros is not responsible for designing (including but not limited to) electrical, plumbing, or HVAC systems or plans.

All materials, workmanship, and construction shall conform to the requirements of the applicable Building Code(s).

The contractor shall follow construction documents. DO NOT SCALE DRAWINGS. Use written dimensions. Where no dimension is provided consult Barn Pros for clarification before proceeding with work.

General Notes shall not substitute for specifications. Conflicts between the two shall be brought to Barn Pros attention or the stricter criteria should be used.

Barn Pros Inc. and Eclipse Engineering hold no liability for unauthorized changes made to the construction documents made by the owner, contractor, building official, or other involved party. Unauthorized changes are to include construction at a location other than listed.

EXCAVATION:

If any of the following conditions are discovered during construction at the building site, a Geotechnical investigation shall be commissioned in accordance with Chapter 18 of the IBC:

A. Questionable soil
B. Expansive soil
C. Ground-water table is above or within 5 feet below the elevation of the floor level or finished ground level adjacent to the foundation
D. Rock strata of variable or doubtful characteristics
E. Excavations that will remove lateral support of an adjacent, existing foundation
F. Use of compacted fill material below shallow foundations in excess of 12 inches in depth
G. Use of controlled low-strength material

The bottom of all exterior footings and footings susceptible to frost heave shall extend a minimum depth below lowest adjacent finished grade as noted in Design Criteria.

No water shall be allowed to accumulate in excavations. Remove any water to prevent softening of foundation bottoms, undercutting footings, and/or soil changes detrimental to the stability of subgrades and foundations.

BACKFILL:

Foundations shall be built on undisturbed soil or compacted fill material 12 inches or less in depth. If provided, compacted fill material shall have an in-place dry density of not less than 90 percent of the maximum dry density at optimum moisture content determined in accordance with ASTM D1557. If compacted fill material exceeds 12 inches in depth or CLSM is used, placement shall comply with the provisions of an approved geotechnical investigation and report.

The subgrades of slabs on grade shall be stripped, tilled, and re-compacted to produce a uniform surface. The subgrade shall be overlain with 6 inches, minimum, of clean, densely graded, crusher-run base material with a balanced fine content that satisfies the requirements of ASTM D1241, type 1 mixture, gradation C. The base material shall be compacted to a dry density not less than 90 percent of the maximum dry density at optimum moisture content determined in accordance with ASTM D1557. The surface of the base material shall be choked off with sand or fine gravel and compacted to provide a smooth, planar surface for the concrete on grade.

The excavation outside the foundation shall be backfilled with soil that is free of organic material, construction debris, cobbles and boulders, or with CLSM. The backfill shall be placed in lifts and compacted in a manner that does not damage the foundation or the waterproofing or damp proofing material, if present. CLSM need not be compacted.

Do not complete backfill against foundation until framing is in place.

Backfill should not contain rocks or debris larger than 2" in diameter.

BACKFILL CONTINUED:

All site fill and backfill shall be placed in 8" layers and compacted to 90% density after each layer.

FOUNDATION:

Concrete construction shall be in accordance with ACI 301, unless otherwise noted.

Roughen concrete surfaces on construction joints and at locations where concrete is cast against existing concrete to 1/4" amplitude and clean of laitance, foreign matter, and loose particles.

Typical reinforcing: ASTM A615 grade 40 for #3 bars, ASTM A615 grade 60 for #4 bars to #7 bars

i. cast against and permanently exposed to earth: 3 inches
ii. formed surfaces exposed to earth or weather, #5 bars and smaller: 1-1/2 inches
iii. interior slabs: 3/4 inches
iv. beams and columns: 1-1/2 inches to transverse reinforcing

All rebar shall be continuous in all footings, foundation walls, and at all corners with all rebar lapped a minimum of 50 bar-diameters.

CARPENTRY & WOOD:

All exterior wood shall be pressure treated, painted or stained. Maintenance shall be the responsibility of the owner. Follow the manufacturers recommendations for exterior applications.

All sawn lumber shall be stamped with grade work of a certain lumber grading agency. All lumber shall be kiln dried with a moisture content less than 19%.

Sheathing: Minimums where required
Walls - 7/16" OSB, 24/0 span rating, 8d @ 6" OC at edges, 12" in field
Roof - 7/16" OSB, 40/20 span rating, 8d @ 6" OC at edges, 12" in field

Wood structural panels shall conform to voluntary product standards PS 1 and PS 2 and APA PRP-108 performance standards. All sheathing shall bear the APA trademark and grade stamp. All end joints shall be staggered and shall butt along the center lines of framing members. The long dimension of panels shall be installed perpendicular to supports with panel continuous over two or more spans. Panels shall not be less than 4'x8', except at boundaries and changes in framing. The minimum panel dimension for floor sheathing at boundaries shall be 24" unless all edges of the undersized panels are supported by and fastened to framing members or blocking. Nails shall be common wire nails (not box or sinker nails) and be placed 3/8" minimum from the edge of the panels. The minimum nail penetration into framing members shall be 1-1/2" for 8d nails and 1-5/8" for 10d nails.

Joists and rafters shall have a 1-1/2" minimum bearing or shall be seated in metal hangers.

Blocking shall be solid 2x material with the same depth as the joist or rafter and shall be tightly fitted between joists or rafters.

Fasten beams, columns, trimmer studs, and kings studs composed of multiple 2x members with two rows of 10d nails 12" on center through length or height, staggered to prevent splitting, between each ply.

Fasten multi-ply LVL beams or joists together with two rows of 10d nails @ 12" on center through length, staggered to prevent splitting, between each ply. Provide (8) additional 10d nails between each ply distributed closely to the vicinity of concentrated loads on members from flush-supported beams or joists.

Framing Anchors/Hangers: Simpson or approved equal install as per manufacturer's recommendations.

For connections for wood members not shown on these drawings or in these notes, use the IBC fastening schedule, Table 2304.10.1. Structural members shall not be cut for pipes, ducts, etc., unless specifically noted, detailed or approved in writing by the engineer.

Wood stud walls shall be 2x6 @ 16" O.C. unless otherwise noted on plans. Provide double 2x6 top plate with minimum 48" lap splice with (16) 16d common nails minimum, staggered, unless otherwise noted. Plate anchor bolts shall be 5/8" diameter placed not to exceed 4' O.C. unless otherwise noted. Anchor bolts shall be placed at all jambs, corners, intersections, and wall ends. All bottom plates shall have a minimum of 2 anchor bolts. All bottom plates or sills on concrete slabs, and on concrete shall be pressure treated and stamped by an approved agency.

Where shear wall construction is indicated, provide sheathing to the grade and thickness indicated on drawings.

If trusses used, the roof truss supplier is responsible for structural design and detail of the trusses to fit the building dimensions and details as shown in the drawings.

MISCELLANEOUS:

Barn Pros reserves first right of replacement on any warped, twisted, generally defective or missing structural materials. For defective framing members photos must be provided before replacement material will be sent. Inventory of the materials is expected to be completed within 3 business days of initial delivery. Any shortages from the master shipping list are expected to be brought to our attention at that time. Material request beyond 2 weeks will be evaluated on an individual basis and material supplied at Barn Pros discretion.

Guard rails shall be at least 40" high. Guard rails and hand rails shall have intermediate rails such that a 4" DIA object cannot pass through.

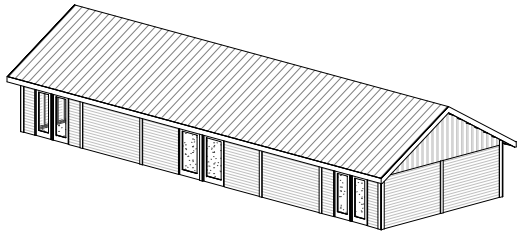
Simpson hardware is to be installed using standard attachment. Some Simpson hardware includes fasteners, for all that don't, it is the contractors responsibility to ensure that they are property attached and to provide the manufacturer specified fasteners. For more information on Simpson Strong Tie hardware please refer to their website at www.strongtie.com.

Owner to supply all material for WUI compliance. If disclosed at time of sale Barn Pros may substitute tempered glazed windows for our standard offering.

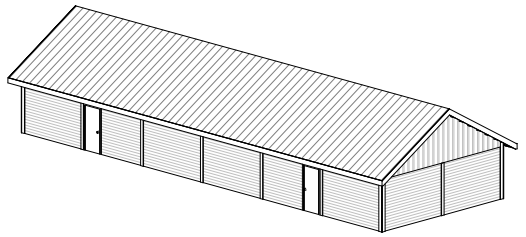
INFORMATION AND NOTES	
Sheet Name	Sheet Number
COVER & GENERAL NOTES	0

ARCHITECTURAL DRAWINGS	
Sheet Name	Sheet Number
EXTERIOR ELEVATIONS	A1.0
EXTERIOR ELEVATIONS	A1.1
FLOOR PLAN	A2.0

STRUCTURAL DRAWINGS	
Sheet Name	Sheet Number
FOUNDATION PLAN	S1.0
ROOF FRAMING PLAN	S1.1
SECTION & ISOMETRIC VIEWS	S2.0
STRUCTURAL DETAILS	S3.0
STRUCTURAL DETIALS	S3.1



1 JOURNEYMAN 72 - FRONT



2 JOURNEYMAN 72 - REAR

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CIVIL ENGINEER
STATE OF CALIFORNIA

Digitally signed by Rolf Armstrong
DN: CN=Rolf Armstrong, O=Rolf Armstrong, L=Bend, S=Oregon, C=US, SERIALNUMBER=49knr76rl7m06vy7lr7jg950s5qn
Location: 376 SW Bluff Dr, STE B, Bend, OR 97702
Contact Info: 541-389-9659
Date: 2020.03.25 17:05:02-07'00'

Journeyman 72
Nguyen, Tien
2054 Old Piedmont Rd
San Jose, CA 95132

#004356

SUBMITTALS

REVISIONS		
No.	Description	Date

COVER & GENERAL NOTES

Drawn by: DI
Approved by: OPERATIONS

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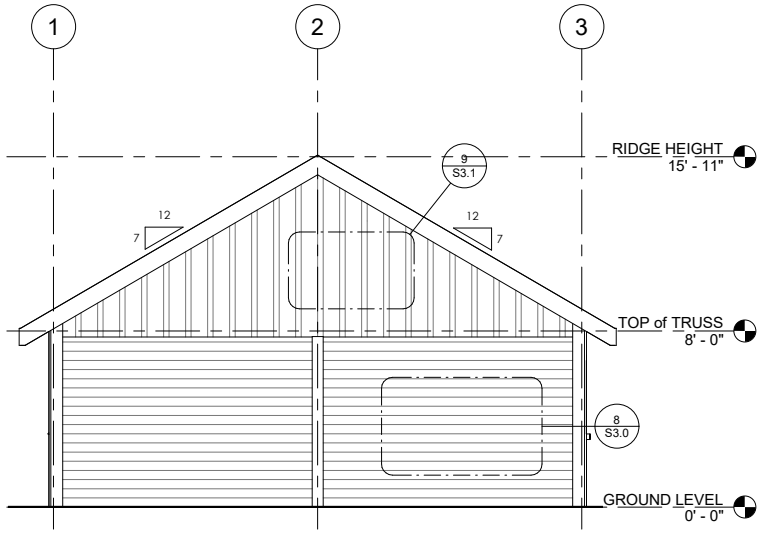


1 FRONT ELEVATION
1/4" = 1'-0"

1/2" CDX Roof Sheathing - Roofing Material by Owner

5/8" Rough Sawn with 1x3 Battens @ 16" O.C. - Flashing by Owner

2x6 Douglas Fir Tongue & Groove Siding w/ (3) 16d Nails Each End, Bottom (2) Boards PT

EXTERIOR FINISHES
1/4" = 1'-0"

1x4 Trim for Windows and Standard Entry Doors

1x6 Trim for Upper Corners of Dormers and Shed Dormers, Wall Trim, Dutch Doors, Hayloft Doors, and Track Backer on Breezeway Door, if necessary

1x8 trim for Lower Corners

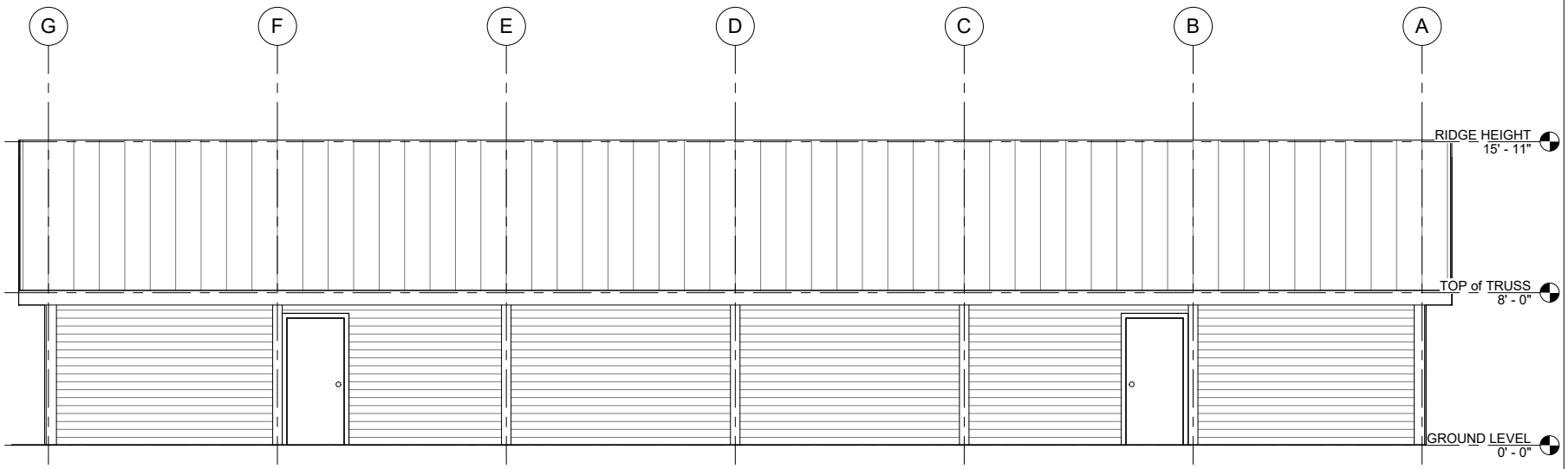
1x10 Fascia is standard but can be affected by purlin size. Final size not availiable until the conclusion of engineering

Bottom (2) boards of DF T&G to be Pressure Treated if there is ground contact
Bottom (1) board PT on interior walls

Roofing Material to be provided by owner. On most models Barn Pros provides sheathing but refer to your specific model for verification

EXTERIOR NOTES
1/4" = 1'-0"

Door Schedule					
Mark	Description	Count	Rough Width	Rough Height	Comments
A	3' wide door by owner	4	3' - 4"	7' - 4"	
B	4' wide door by owner	2	4' - 4"	7' - 4"	
C	3' x 6'-8" Steel Entry Door	2	3' - 2"	6' - 10 1/2"	



2 RIGHT ELEVATION
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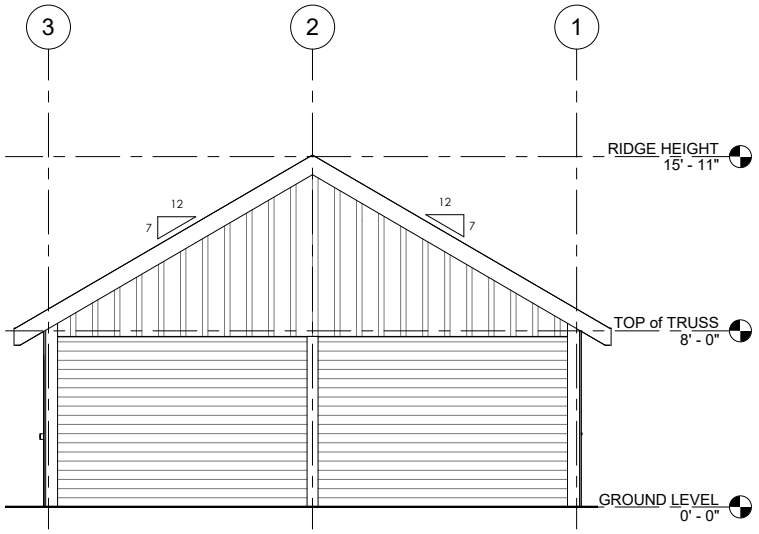
EXTERIOR ELEVATIONS

Drawn by: DI
Approved by: OPERATIONS

A1.0



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EXTERIOR NOTES
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Door Schedule

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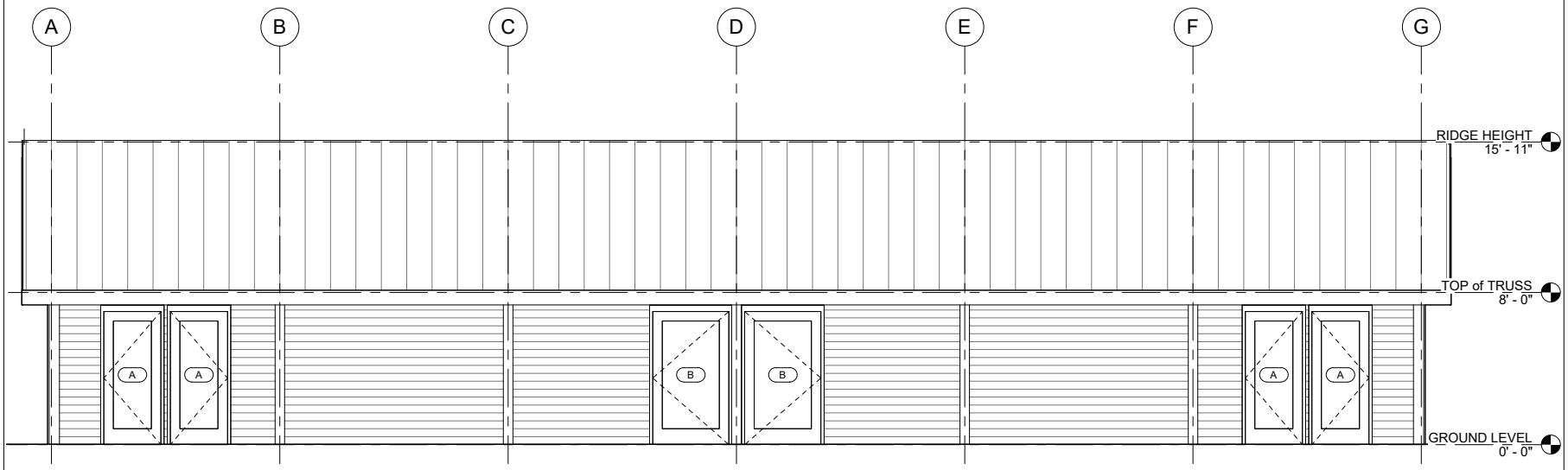

2 LEFT ELEVATION
1/4" = 1'-0"

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EXTERIOR ELEVATIONS

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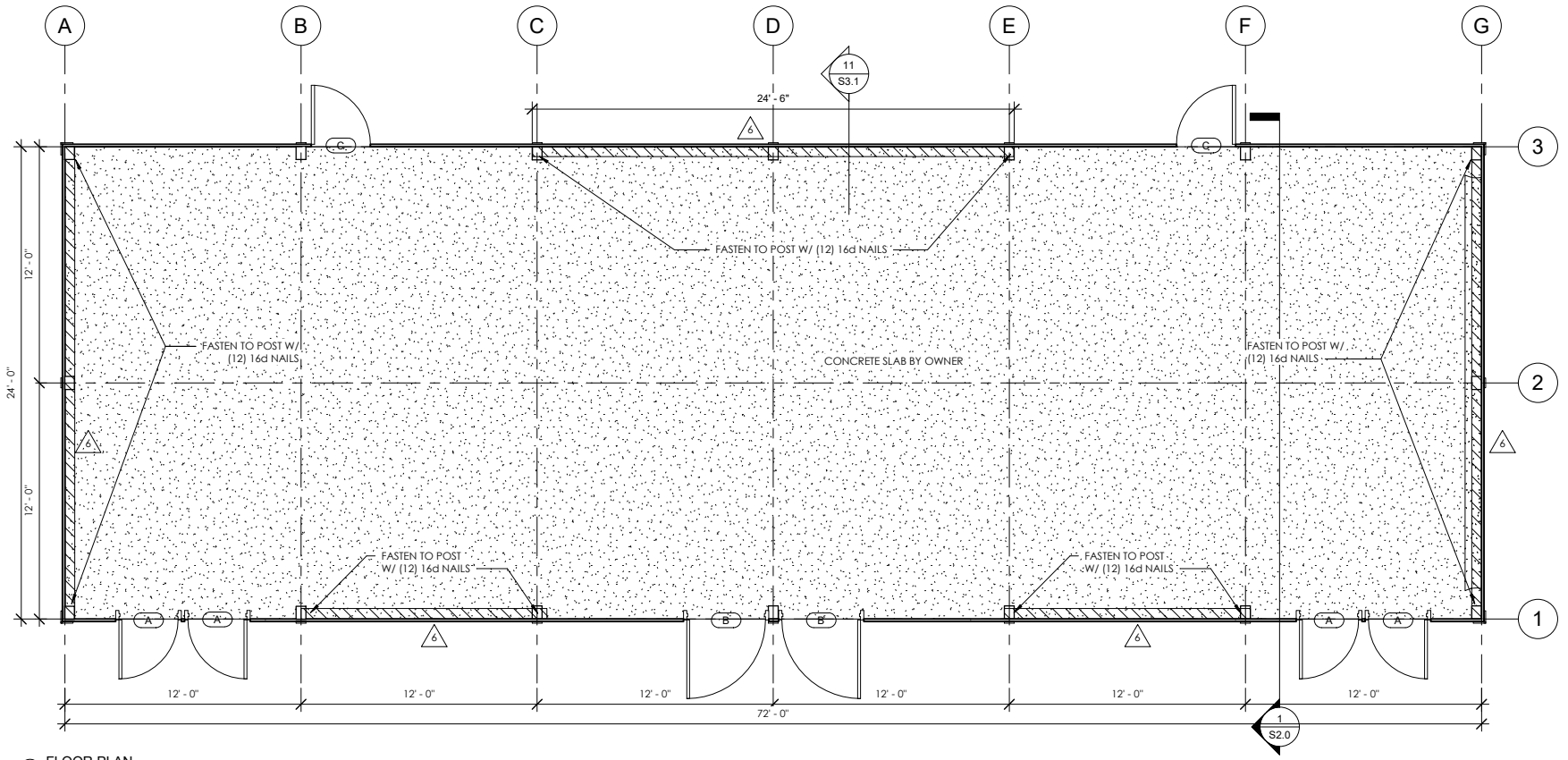
Approved by: OPERATIONS

A1.1



1 FLOOR PLAN
1/4" = 1'-0"

SHEARWALL SCHEDULE								
WALL TYPE	SILL ATTACHMENT		SHEATHING	EDGE NAILING	RIM	NOM. CAPACITY		NOTES
	WOOD	CONCRETE				SEISMIC	WIND	
6	16d @ 4" O.C.	5/8" @ 48" O.C.	1/2" CDX or 5/8" ROUGH SAWN	8d @ 6" O.C.	A35 @ 18" O.C.	260	365	
4[a,b,c]	SDS25500 @ 8" O.C.	5/8" @ 32" O.C.	1/2" CDX or 5/8" ROUGH SAWN	8d @ 4" O.C.	A35 @ 12" O.C.	380	533	
3a[a,b,c]	SDS25500 @ 6" O.C.	5/8" @ 24" O.C.	1/2" CDX or 5/8" ROUGH SAWN	8d @ 3" O.C.	A35 @ 8" O.C.	490	685	
3b[a,b,c]	SDS25500 @ 4" O.C.	5/8" @ 16" O.C.	1/2" CDX or 5/8" ROUGH SAWN	10d @ 3" O.C.	A35 @ 6" O.C.	665	930	
TYPICAL FIELD NAILING: 8d @ 12" O.C.								

SCHEDULE NOTES:
- Nail shall be common or galvanized box. Galvanizing shall be hot-dipped or tumbled.
- All shear panels are to be continuous between horizontal diaphragms (roof to floor, floor to floor, or floor to foundation).
- All framed shear walls shall be blocked at all panel edges.
- All shear walls shall terminate on at least (1) full height stud. Additional studs or solid posts shall be installed as required for holdowns where they occur.
- 8d common nail shank diameter = 0.131", 16d sinker nail shank diameter = 0.148"
- All anchor bolts shall have 7" minimum embedment.

a. Studs and/or blocking at adjoining panel edges shall be 3x minimum and nails shall be staggered. Sill plates shall be 3x minimum.
b. 3x members may be substituted with (2) 2x members nailed together with 10d nails @ 4" O.C.
c. Where panels are applied on both faces of a wall and nail spacing is 6" O.C. or less, panel joints shall be offset to fall on different framing members.
d. 1/4" SDS: 'Simpson' Strong-Drive wood screws into rim joist or member below. Provide minimum 2" embedment.

X DENOTES SHEAR WALL

2 SHEAR WALL SCHEDULE
1/2" = 1'-0"

Door Schedule					
Mark	Description	Count	Rough Width	Rough Height	Comments
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FLOOR PLAN

Drawn by: DI
Approved by: OPERATIONS

A2.0