

1. DESIGN LIFE LOADS: Snow=85psf, Floor=40psf, Wind 90mph (3 Second Gust), Seismic Zone B

2. RESPONSIBILITY: The contractor is responsible for cross referencing all plans and inspecting work placement at the site to ensure that no omissions or discrepancies exist that might adversely affect construction or the integrity of the finished product. Job site and construction safety are not addressed in these plans and are the responsibility of the contractor. These responsibilities are industry standard.

3. COMPLIANCE: All construction is in accordance with 2018 IRC and IRC codes. All construction to be in conformance with these codes.

1. Foundation designed in accordance with NWCOT Site Specific Soils Report with a Maximum allowable soil bearing pressure = 3000 psf.
2. Proper authorization for use of the report or its recommendations are the responsibility of the owner.
3. Where we recommend the soils engineer verify during excavation (and before construction of any part of the foundation) that the soils type and/or the soil moisture content, depth, minimum pit log(s) of the above mentioned soils report.
3. Remove topsoils, organic material, and any questionable material below pads and footers. All pads and footings exposed to soil must be placed on compacted fill to a depth of 12". Minimum pad thickness = 12". The footing elevations of this design are indicated in economical reference to architectural elements.
4. Proper soil bearing and/or the soil report may require lower footings.
5. Foundation and grading details to divert surface drainage at least 10' away from the structure. Do not backfill against any foundation or retaining wall until all supporting floor and slab systems are in place and securely anchored, or other adequate means.
5. Where exterior backfill rises above any adjacent floor, use granular free draining backfill from drain tie up. Exterior backfill may be native inorganic material where final grade is above foundation level. Where final grade is below final grade, we recommend capping backfill with a Miraf fabric under 12"-24" of water impermeable material (e.g., clay).
6. Provide 4" diameter perforated PVC drainline in a 12" by 12" gravel envelope at lowest levels of perimeter of excavation and/or below foundation level. Provide 1/2" diameter daylighting drain. Provide cleanouts and screen end. Miraf or other filter barriers will help prevent drain clogging. Test drainline before and after backfilling.
7. All concrete and materials to conform with ACI 318.
8. Reinforcing bar to be deformed 60 ksi steel (per ASTM A-615). Lap all rebar splices and corners 38 bar diameters minimum.
9. Concrete supplier to provide mixes that replace 20% of the sand with recycled fly ash from local coal burning power plants.
10. Minimum concrete 28 day compressive strength = 3500psi for walls, footers, and pads, and 4000psi for slabs.
11. Concrete to be placed and cured without prevent cold joints exposed to earth; footing, pad = 3". Concrete exposed to earth or weather: walls, slabs = 3".
12. Consolidate concrete per ACI 308. Cast in place concrete to be consolidated by vibration. Prevent cold joints.
13. Provide 1/2" diameter by 10" min anchor bolts at 24" on center with an embedment of 7" to connect framing to foundation (UNO). Anchor bolts to be located not more than 12" from foundation corner (TYP). Use galvanized anchor bolts with pressure treated plates. Finish all concrete wall tops to within 1/2" of finish grade.
14. Foundation insulation and waterproofing to be specified and installed in accordance with the above mentioned soils report, IRC, local codes, and accepted construction practice.
15. Do not use foam form systems without approval of Engineer.
16. Provide slab shrinkage reinforcement of 6x6xW1.4 welded wire mesh with 2' laps, or a poly fiber mesh per manufacturer's instructions.
17. Slab surfaces to be left free from trowel marks, uniform in appearance, and with a surface plane tolerance not exceeding 1/8" in 10'0", when tested with a 10' straightedge.
18. Provide 1/2" x 12" (or cut) control joints at approximately 10' on center.
19. Provide 1/2" expansion joint material at all slab to wall, footing, or column interfaces. Provide a 6 mil poly barrier under all interior slabs for moisture protection and as a bond breaker between approved horizontal and sealer to the surface of all slabs.
20. If foundation is to sit through winter without complete framing, we recommend the building achieve enough backfill, and/or use a temporary foundation bearing soils free from moisture accumulation and frost heave.

Additional framing plans show structural requirements only. Additional members may be required for blocking, nailers and code requirements.

1. Joists: Simpson Lir or Hem Fir "stud grade" (SAS) 2x4/2x6 at 16" o.c. for all wall studs(UNO). Use DF#2 (S4S) or better for all multi-span studs, joists, rafters, headers, posts, beams and platings. Sill plates and any other lumber in direct contact with ground must be treated with a preservative. Redwood or Species Group B Pressure Treated Lumber. Use galvanized anchor bolts with pressure treated platings.

2. Gulgums (GL) 24x6-V6 manufactured in accordance with NFPA 110 and 1400. Use to use 24x6-V6. Single span applications must be sealed and protected from moisture with an appropriate preservative.

3. Lumber: LVL manufactured in accordance with AIA criteria, fb=2600psi, (X-Beam Equiv.)

5. Timbers- Douglas Fir (DF) Grade specified on plan- #1 Fb>130psi, 2' Fb>85psi.

6. Exterior Wall Ply- 7/16" OSB APA rated 24/16 min. (11' max. span) 100% all floor. Manufacture to meet code conformance with APA PS 1-83. Floor Ply- 3/4" 1&6 OSB APA rated 24/0 minimum, 8d's @6" o.c. use 10' tie. Glue to joists. Roof Ply - 5/8" OSB APA rated 40/20 minimum, 8d's @6" o.c. glue, 12" tie. OK to use 1 1/2" Zip wall system. 12' max. span. 100% all floor. 100% all roof. Nailing: 16d sinkers (0.131" dia.) 3" o.c. Edge and 12" o.c. field.

7. Roof Trusses- 85 psf snow load, 24" o.c. Truss design and fabrication by others. No drop top glue truss adjacent to scissor truss without approval of Engineer.

8. Rafter Trusses- 85 psf snow load, 24" o.c. Truss design and fabrication by others. No drop top glue truss adjacent to scissor truss without approval of Engineer.

9. Maintain 6" clearance between untreated wood or siding and soils at finish grade.

10. 1/2" tie, through 100% all exterior frame. Ply to lap floor joists, top plate and 100% all exterior frame.

11. All floor and roof plywood plate with 8" dimension perpendicular to framing with end joints staggered.

12. Typical headers unless noted otherwise on plans: All load bearing headers in 2x6 wall (2x12); in 2x4 wall (2x12), (UNO).

13. Provide 2 stud under each end of all load bearing beams or headers >38"(UNO). (1)King stud min.(UNO)

14. Multiple stud posts adjacent 2 min wall sections preventing buckling. Verify new anticipate openings with engineer.

15. Studs removed for doors and windows shall be placed equally at the end of headers, up to 2'(king full height)

16. Posts to stack over equal below (UNO). Trusses spanning >18' to stack over studs below (UNO). Provide end joint where studs above do not stack over studs below.

17. Block all load bearing walls and posts for continuity to foundation.

18. Block all trusses, outsocks, rafters and joists at all bearing points.

19. Block full height foundation wall parallel to joists, blocking 1st joist space @24" o.c.

20. Wall studs to be continuous from floor to floor, or floor to roof. Ballroom frame all gable walls. Provide freestop blocking at 10' max intervals in any wall with studs over 10' height.

21. Connect joists to blocking with a minimum of (2) 10d nails and connect joists to plate or beam below with a minimum of (2) 10d toenails. Connect rim to plate below with 10d toenails @6" o.c.

22. Nail exterior wall sole plate to joists below with (3) 10d and to blocking, rim or end joist with 10d's @4" o.c.

23. Connect all TJI rafters to blocking with (3) 10d nails, and to plate or beam below with (4) 10d nails. Provide blocking below exterior wall studs. Connect blocking cut at exterior bearing. Provide beveled web stiffeners at birdsmouth and regular web stiffeners at interior bearing. Strap TJI rafters across ridge with LSTA 18. Connect blocking to plate below (3) 10d nails @6" o.c. Connect blocking to TJI. Refer to TJI Specifications Guide roof details.

24. Connect all 2x rafters to blocking with (3) 10d nails, and to plate or beam below with (4) 10d nails. Provide freestop blocking at 10' max intervals in any wall with studs over 10' height.

25. Connect common trusses to all bearing points with Simpson H2.5 connectors (UNO). Scissor trusses connect one end with Simpson H2.5 Connect to blocking with (3) 16d nails

26. Ventilate roof framing per local codes.

27. Nailing, blocking, and all other construction details per 2018 IRC and IRC, such as Table R602.3(1). (UNO)

28. All connector details to be Simpson Strong-Tie or equal by Simpson Strong-Tie Company, Inc. install per manufacturer's instructions.

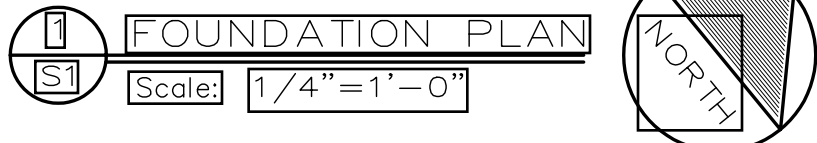
29. TJI and Microlam (ML) are products by Trus Joist MacMillan. Install per manufacturer's instructions.

30. Where Simpson Strong-Tie is not specified, and where not otherwise noted, provide 2x full width nailer on top with 1/2" Trus bolt at 24" staggered side to side of beam web. Where frame wall pocket prevents beam nailing, connect steel beam to post with 2x full width nailer, (2) 5/8" x 12" lag bolts. Otherwise connect beam to bearing via welded steel angle. Flanges similar to Simpson CC. Provide 1/4" fitted web stiffeners at steel beam point loads and bearing points (UNO).

31. If slab on grade is placed on expansive soils (i.e. minimum soil bearing required, see foundation note 1 above) portion walls framed on slab to be slip jointed per note 1 above.

1. All structural steel shall conform to ASTM specifications A36 except pipe columns which shall conform to ASTM A53 Grade B, and steel tube columns which shall conform to ASTM A500 Grade B. Steel to steel member connection bolts shall be A325 steel and miscellaneous wood embedded items shall be A36 steel.
2. Steel column base plates shall bear evenly to concrete below via 4000 psi non shrink grout.
3. Minimum welds to be per AWS and/or AWSB, but not less than 3/16" continuous fillet unless otherwise noted. Welding quality control shall be per AWS. All welders shall have evidence of passing the American Welding Society Standard Qualifications Test as detailed in AWS D1.1.

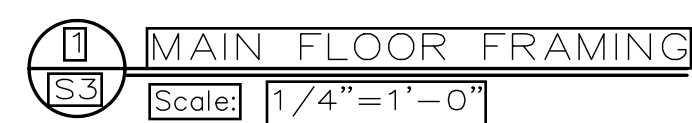
BOBG = bottom of grade beam
BRG = bearing
CL = center line
E.E. = each end
E.M. = each member
E.S. = each side
E.W. = each way
GL = Glulam
HDR = header
LVL = Laminated veneer lumber
OC = on center
OF = overframe
OH = overhang
OPP SIM = opposite similar
PL = plate
PT = pressure treated
PSL = parallel
R.O. = Rough opening
SGB = slab on grade
STD = Structure
TOBL = top of brick ledge
TOF = top of footing
TOGB = top of grade beam
TOSB = top of slab
TOSSB = top of steel beam
TOW = top of wall
TYP = typical
UNC = Unless noted otherwise
WS = steel web stiffeners

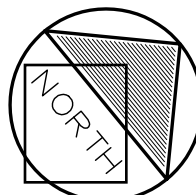


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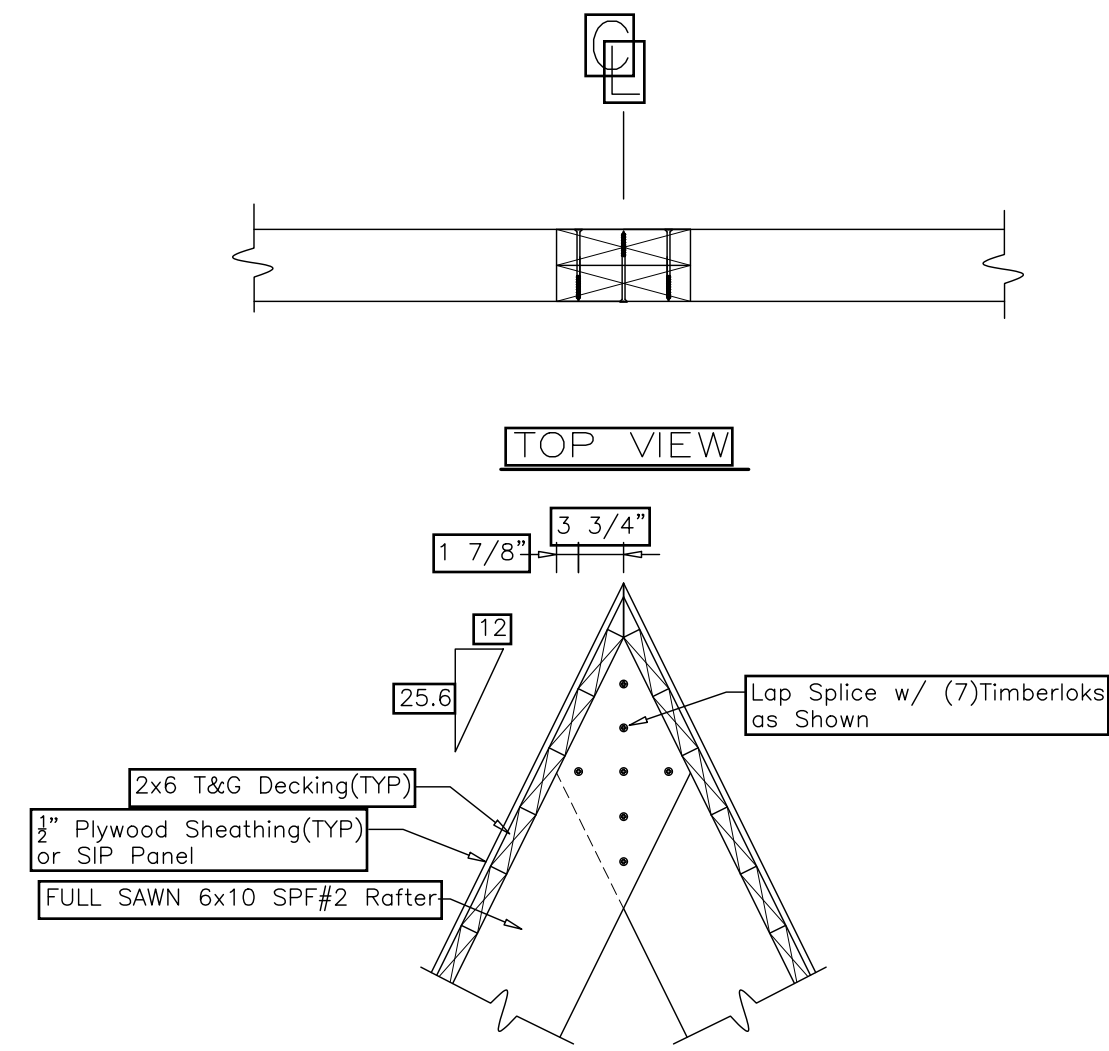




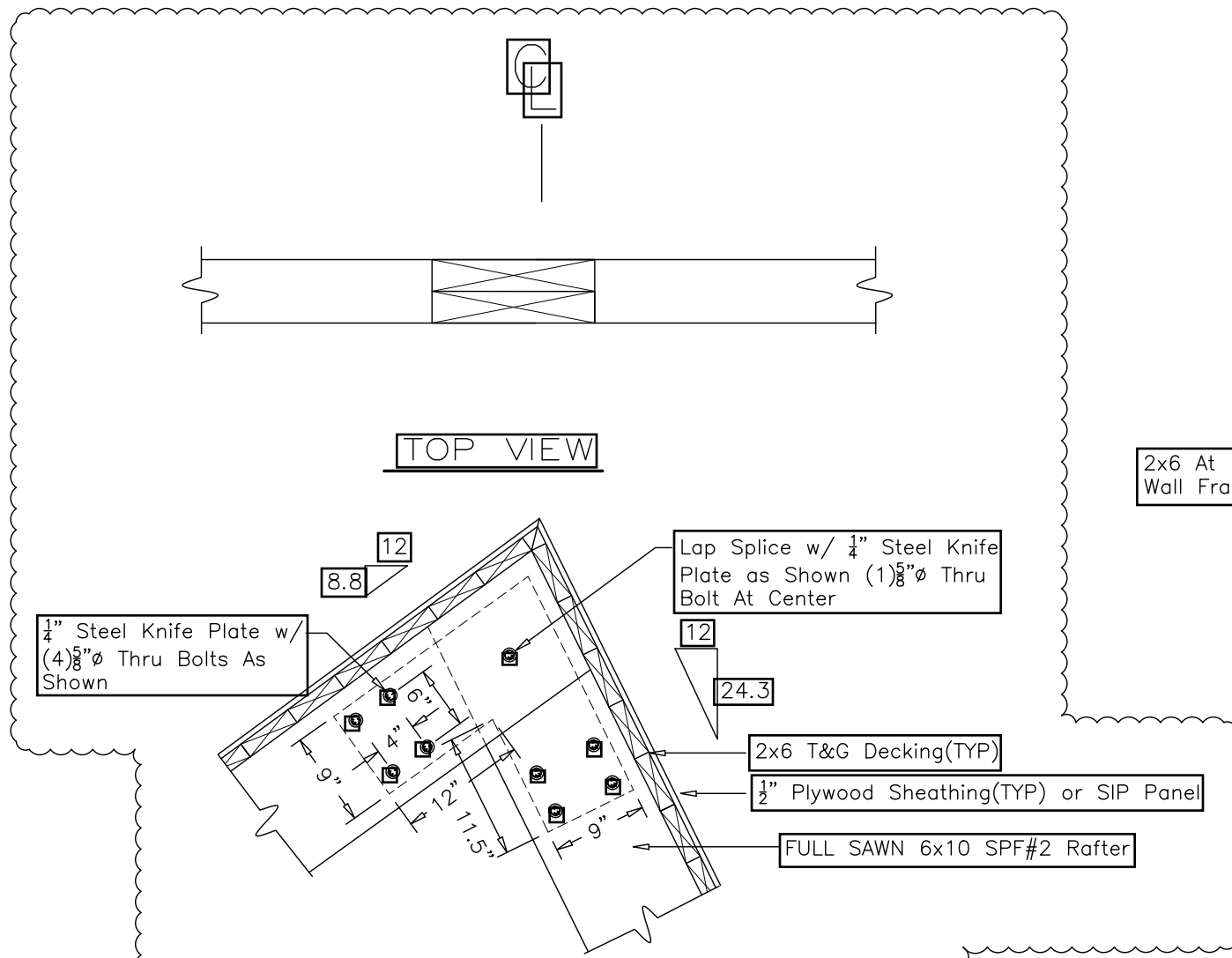
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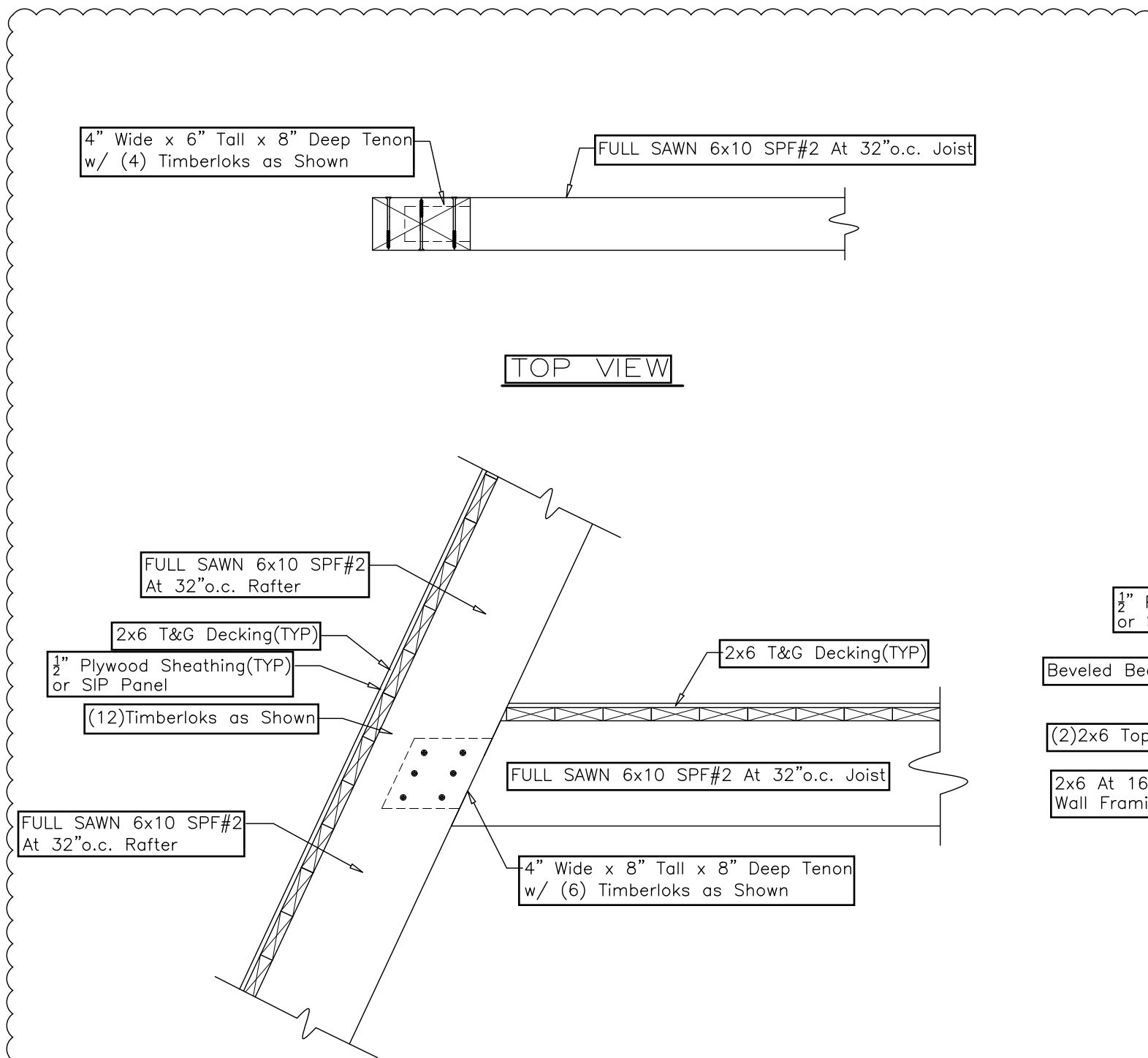
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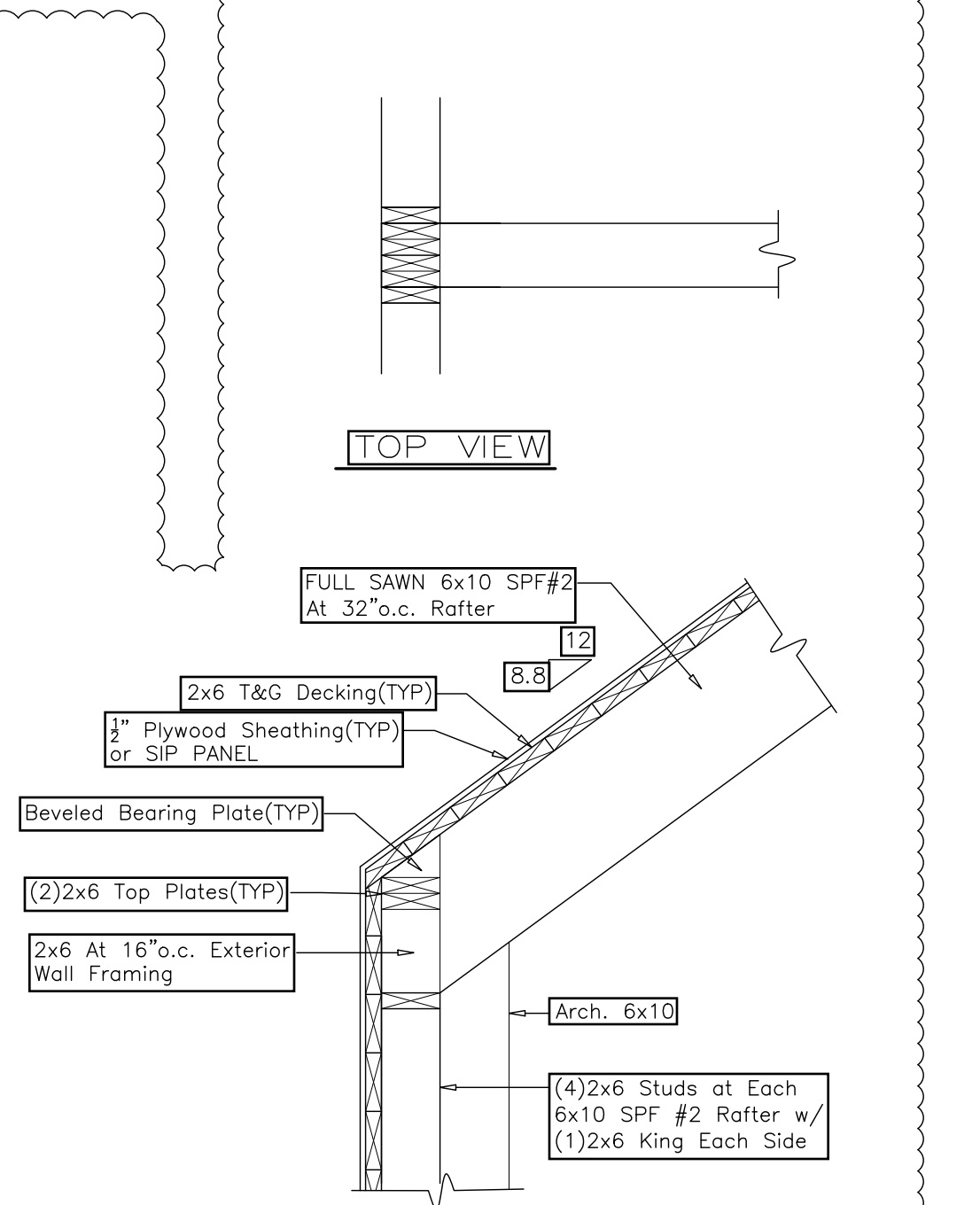
[A] RIDGE LAP DETAIL A
Scale: 3/4"=1'-0"



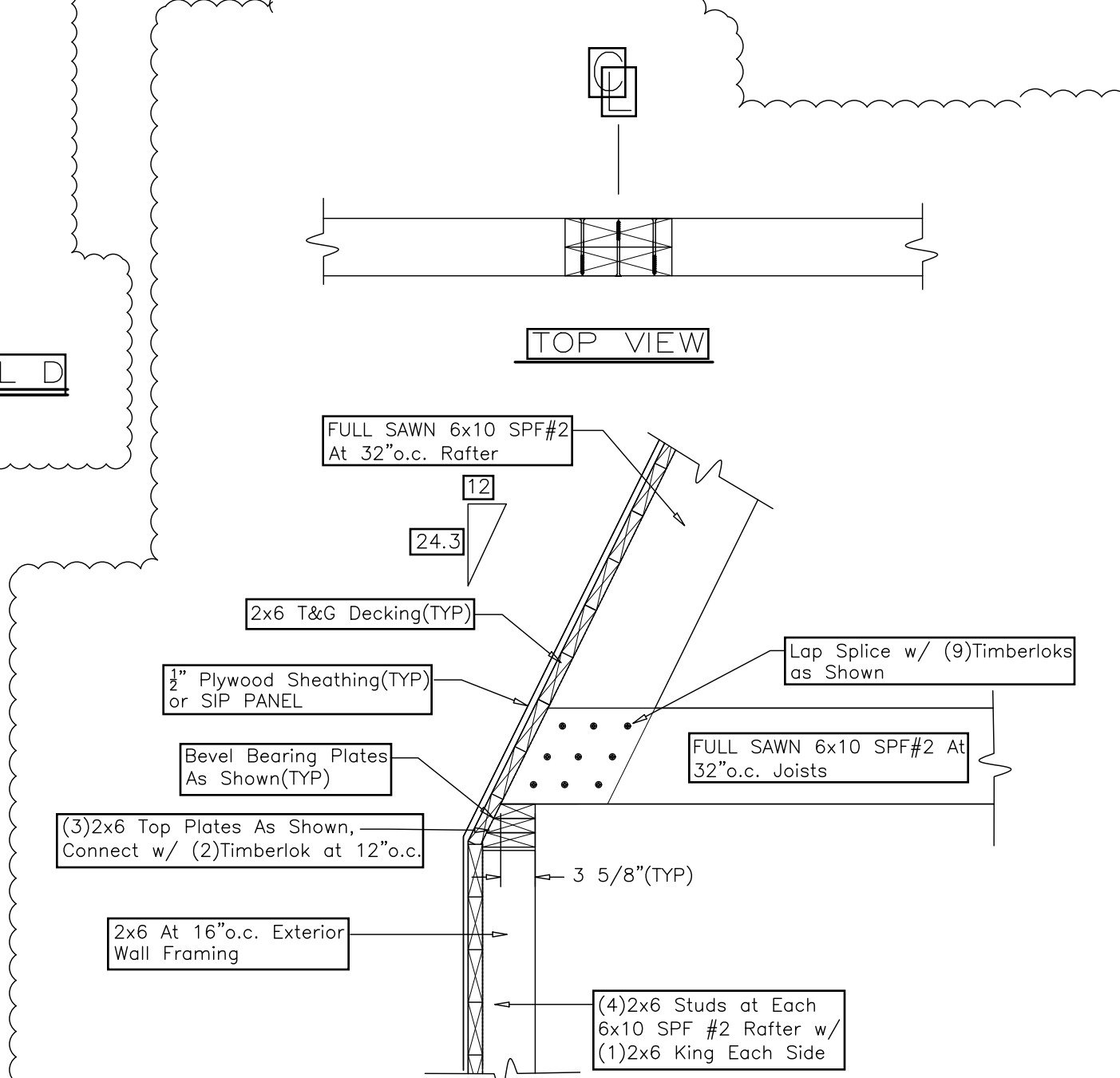
[C] RIDGE LAP DETAIL C
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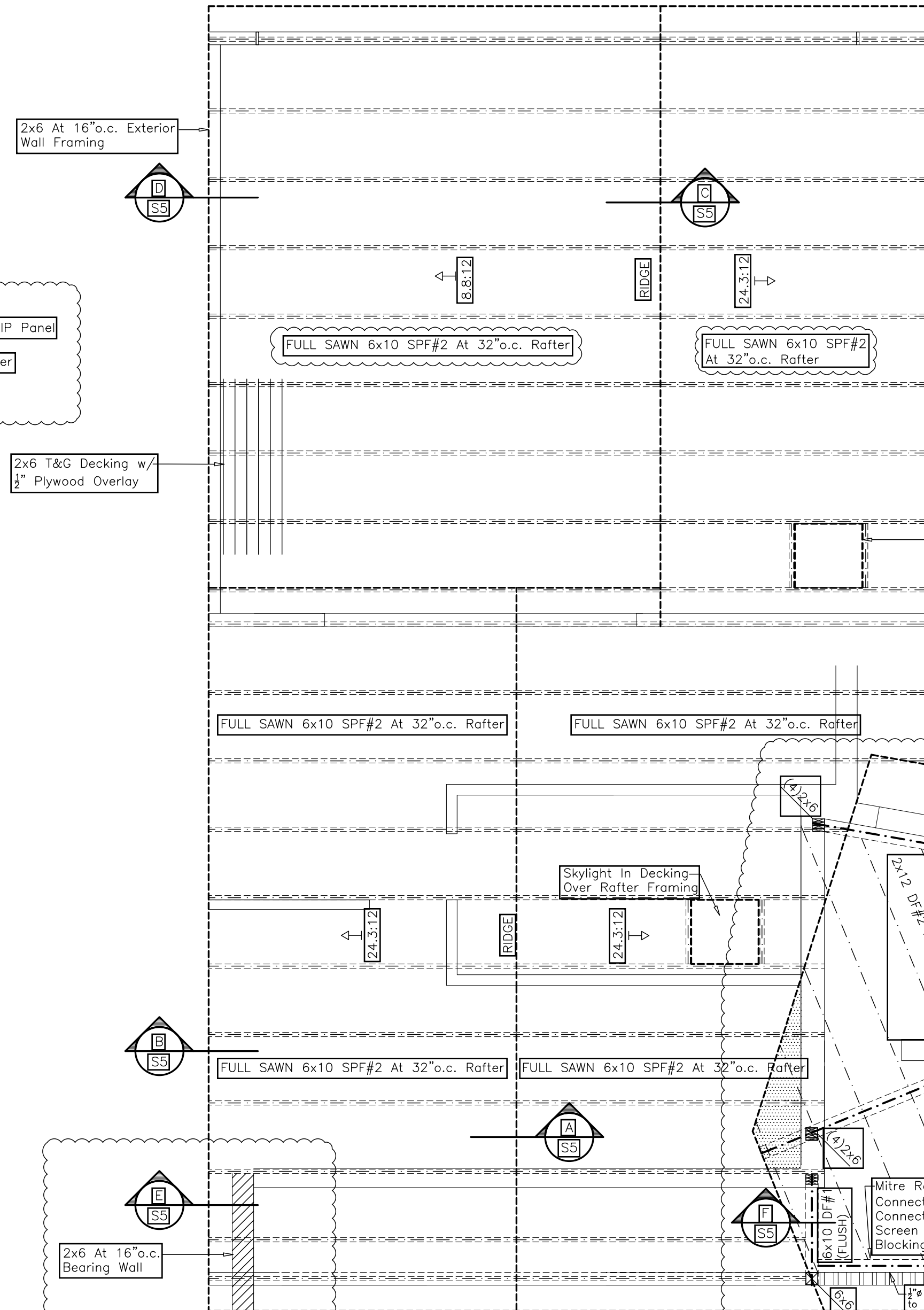
[B] RAFTER/LOFT JOIST LAP DETAIL B
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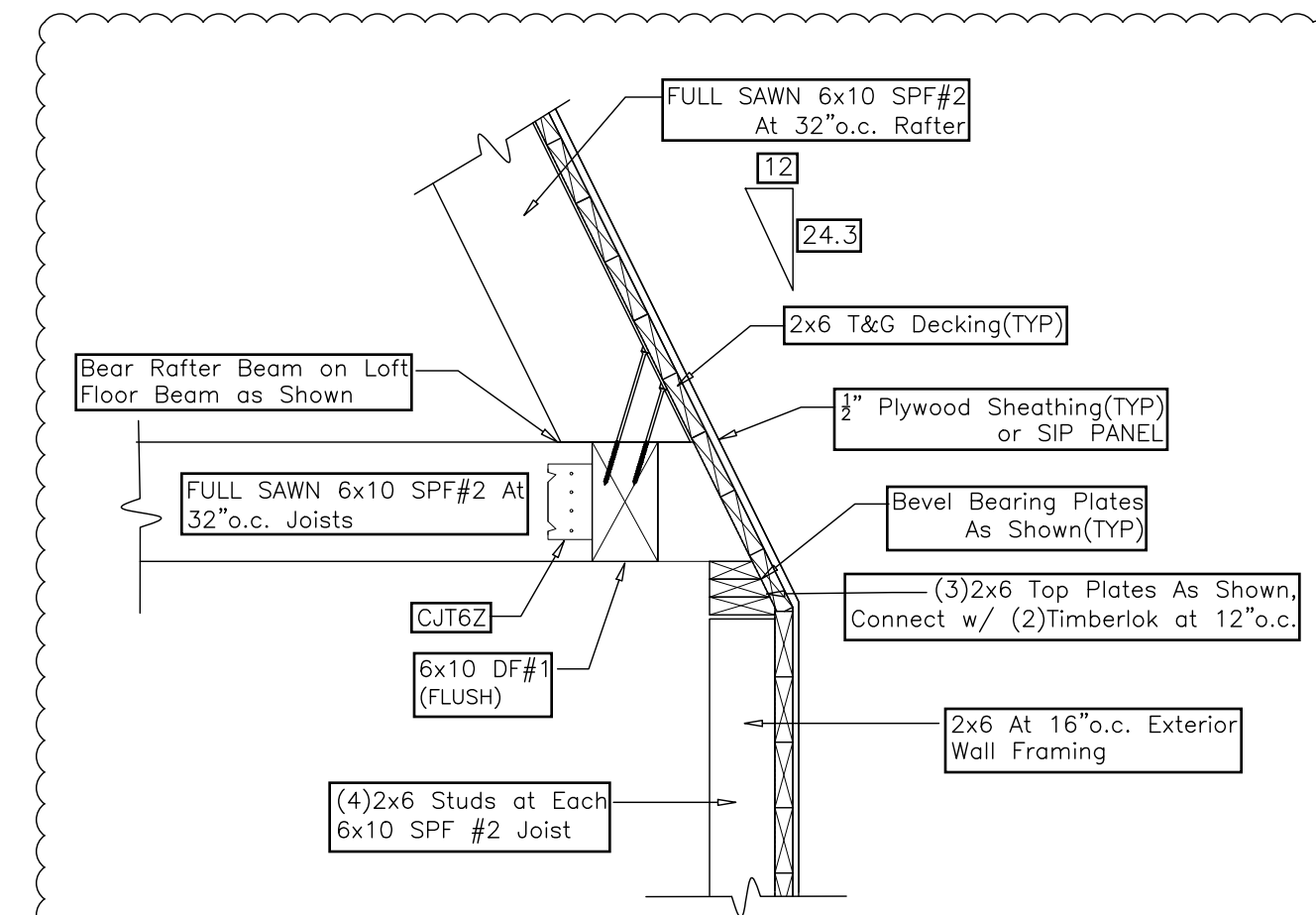
[D] RAFTER/POST LAP DETAIL D
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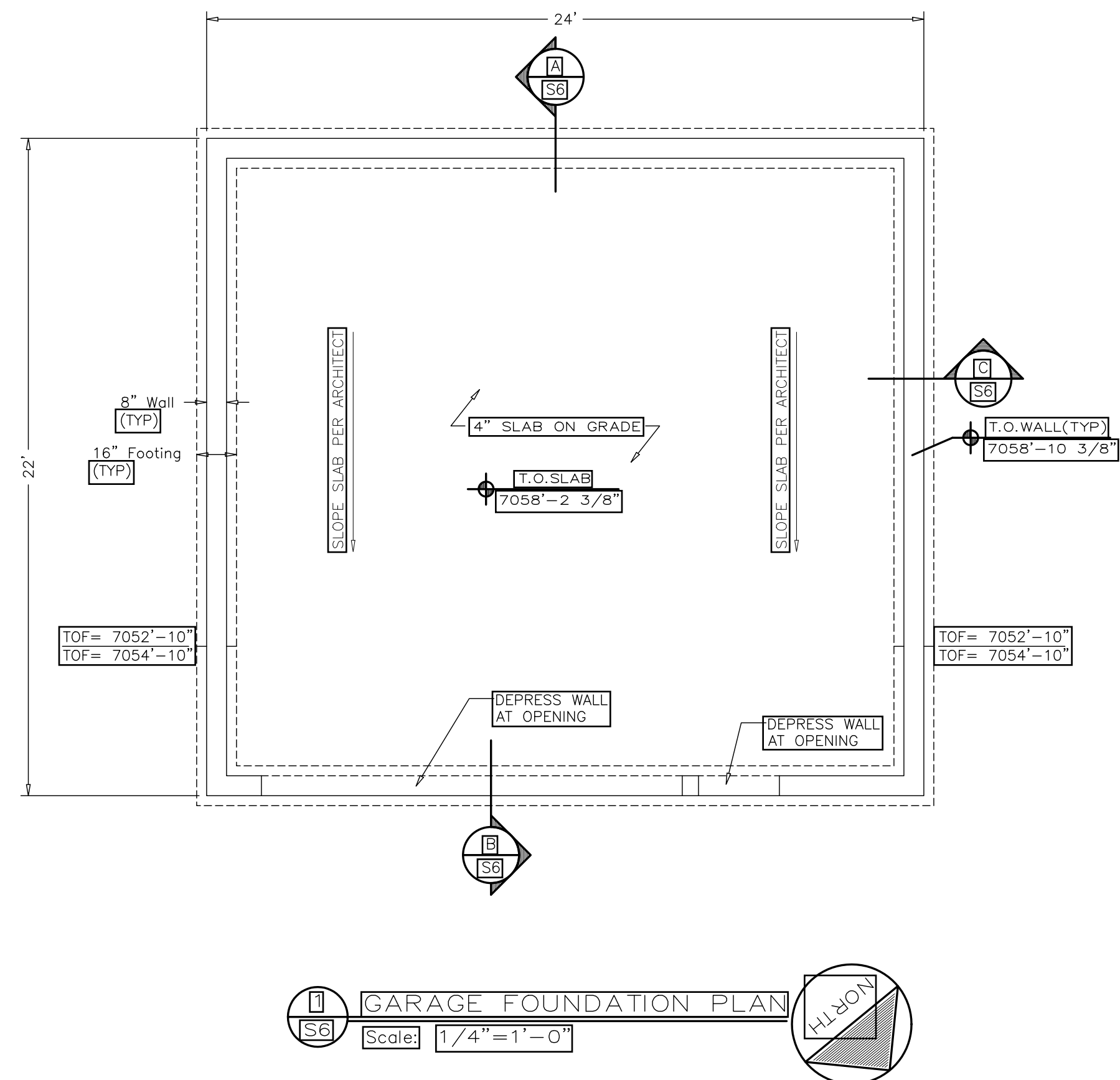
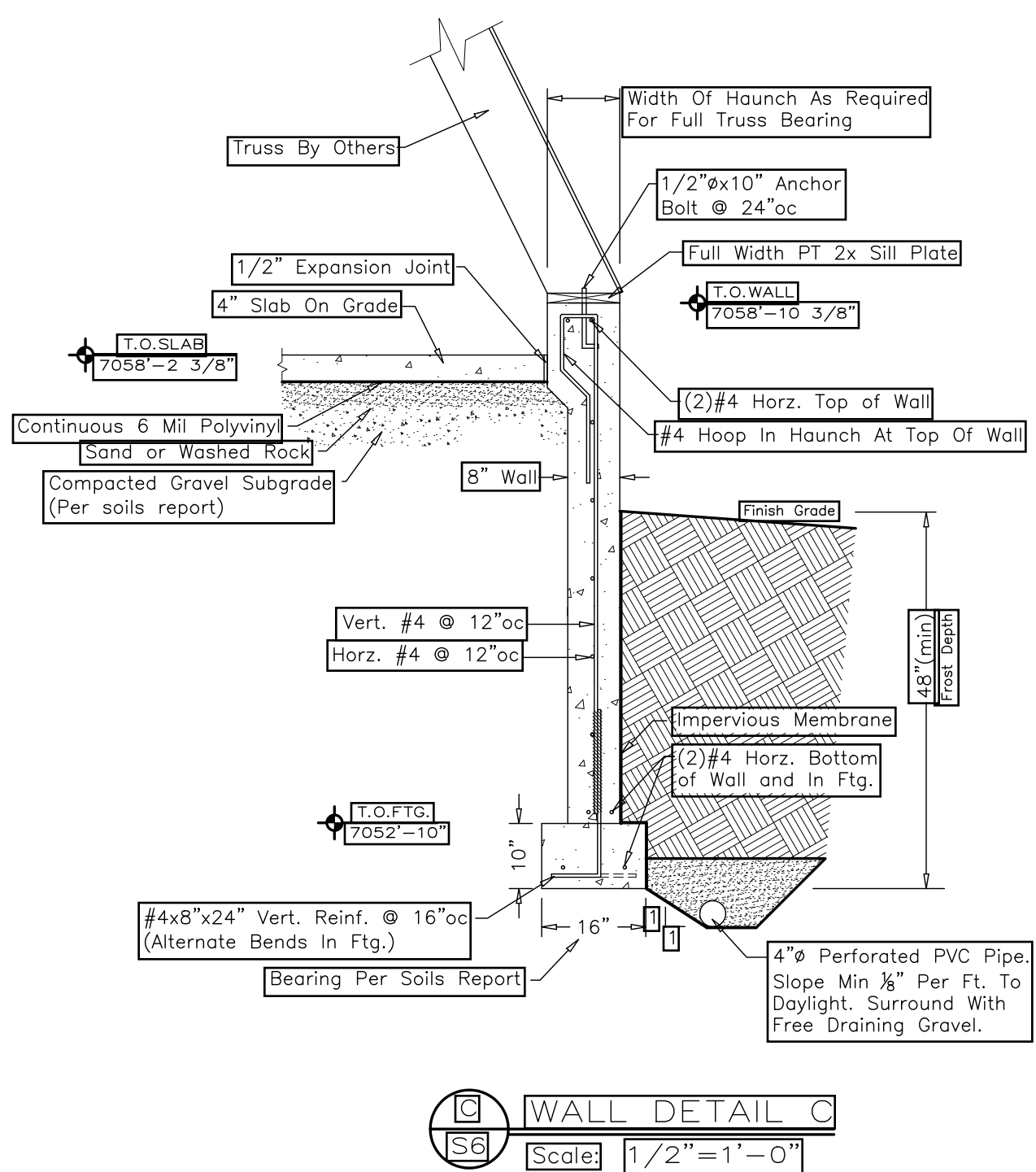
[E] RAFTER/WALL LAP DETAIL E
Scale: 3/4"=1'-0"



[1] ROOF FRAMING PLAN
Scale: 1/4"=1'-0"



[F] RAFTER/BAM LAP DETAIL F
Scale: 3/4"=1'-0"



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