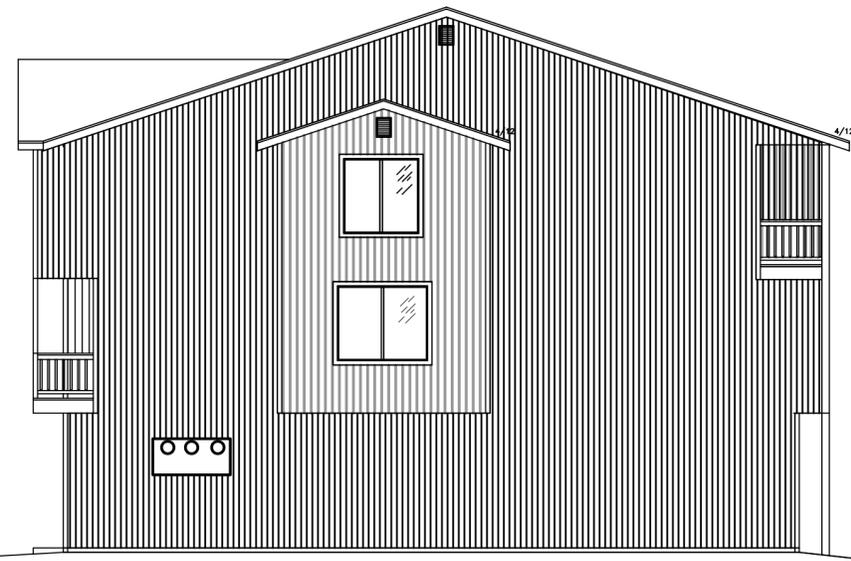


LEFT SIDE ELEVATION

SCALE: 1"=8 FT



RIGHT SIDE ELEVATION

SCALE: 1"=8 FT

DEFERRED SUBMITTALS: The following systems are required and applications are deferred. No work on these systems may begin until a permit has been issued by the AHJ:

1. An NFPA 13D Automatic Fire Sprinkler System is required to be installed. (separate system protecting each individual dwelling unit.)

Once sprinkler system is roughed in, contact Scott Barr for a water quality inspection Sbarr@monroewa.gov.

Table 505.1 Address Numbering Size Table

DISTANCE FROM STREET OR ROAD	MINIMUM SIZE
0 – 50 feet	6" H x 3/4" Stroke Width
51 – 150 feet	8" H x 1" Stroke Width
151 – 200 feet	10" H x 1 1/4" Stroke Width
201 feet and farther	12" H x 1 1/2" Stroke Width

THE BUILDING ADDRESS MUST BE PLAINLY VISIBLE FROM THE ROAD FRONTING THE PROPERTY ON A CONTRASTING BACKGROUND IN ACCORDANCE WITH THIS TABLE.

EACH UNIT WILL HAVE THE NFPA-3D FIRE SPRINKLER SYSTEM

FRONT ELEVATION



General Drawing Notes: New Construction Specifications

DESIGN CRITERIA:

WIND LOAD: Per IBC: Ultimate Wind Speed=110 mph, exposure B  
 SEISMIC: Per IBC, I=1.0, SEISMIC DESIGN CATEGORY D, SITE CLASS D  
 ROOF LOAD: DL=15 PSF, LL=25 PSF  
 FLOOR/DECK LOAD: DL=10 PSF, LL=40 PSF  
 SOILS: Assumed 2000 PSF Allowable Soil Bearing  
 CONCRETE: 2500 PSI @ 28 days, Grade 40 reinforcement- covered 3" min.

The following basics from the CURRENT International Residential Code (IRC) shall be adhered to in this plan-set: (not all items may apply)

1. Material: a) HF#2 min framing lumber b) Use HF#2 min PT plates c) 3/8" min APA rated plywood d) 2000 psi min concrete strength e) 24F-V4 min glu-lam timbers per 106.3.3
2. Section R302.6. House to garage separation shall be of materials approved for 1-hour fire resistive construction (i.e., 1/2" type "X" G.W.B.). Doors in these areas shall be 1-3/8" minimum thickness, solid core, with self-closer hardware.
3. Section P2708. All shower areas to be finished with a smooth, non-absorbent material to a height of 70" above drain.
4. Section R307. A toilet compartment shall not be less than 30" wide, and have a front clearance of 24".
5. Section R606. Masonry shall not be supported by any wood member.
6. Section R408. Crawl space under floor joists shall be at least 18" & a minimum of 12" to bottom of girders. Underfloor area to be provided with a minimum 18"x24" size access, located within 20' of main plumbing clean-out.
7. Section R317. All wood in contact with concrete or masonry shall be pressure treated.
8. Section R317. Wood girders entering concrete or masonry shall be provided with 1/2" air space on sides, top & end.
9. Section R408.1. Minimum foundation ventilation: 1 square foot for every 150 square feet of under-floor area. Covered with 1/4" or less wire mesh (restricts opening area 25%).
10. Section R302. Firestops shall be provided to cut-off concealed draft openings between stories and roof space.
11. Section R807. A 22"x30" attic access opening shall be provided in an area that has 30" minimum of headroom.
12. Section R806.2. Cross-attic ventilation required at 1/150 of the attic area or enclosed rafter space. Continuous vent each enclosed rafter space. If rafters are enclosed & roofs are of solid sheathing, a continuous ridge vent is required. cover vents with 1/4" max. opening mesh.
13. Section R311.7.4. Maximum stairway rise is 7-3/4", minimum run is 10", minimum headroom is 6'-8". Enclosed usable space under stairways shall be of 1/2" Gypsum Wall Board (GWB).
14. Safety glazing shall be used in 1) doors other than wardrobe, 2) bathtub & shower enclosures, 3) glazing less than 60" from floor & adjacent to a door within 12" & 4) glazing in excess of 9 sq. ft & less than 18" from floor. R308.4 Hazardous locations.
15. Chimneys shall extend over 36" above roof where it passes through, & 24" above any structure within 10".
16. Combustible materials shall not come within 1" of fireplace, smoke chamber or chimney walls. 1001.6 Termination.
17. One 110 volt, battery back-up, interconnected smoke detector in each bedroom and hallway leading to a bedroom.
18. Eaves have 1" thick fascia boards, with 5" prefinished continuous metal gutters. Matching 2"x3" downspouts with concrete splashblocks.
20. Slope finish grade away from foundation wall, 1/4"/ft min. for 5' from foundation.
21. Minimum ceiling height in structure is 7'-6", with exceptions for halls, kitchen & bathrooms to be 7'-0" min. height.
22. Trusses shall be designed by a licensed Washington State Structural Engineer. Snow load will be determined by the Building Official. Truss manufacturer will supply engineered shop drawings for building department approval, and all trusses supplied will be marked accordingly.
23. Provide mechanical ventilation capable of providing 5 air changes per hour in bathrooms, water closet compartments, laundry and similar rooms.
24. Exterior joints shall be sealed, caulked, gasketed or weatherstripped to limit air leakage at the following openings  
 a) Windows & door frames b) openings between walls & foundations c) between walls & roof d) openings at penetration of utility services d) all other openings in the building envelope.
25. All exhaust ducts to be 26 GA minimum (UMC Sec 601.7)
26. All fasteners in contact with PT matl hot-dip galv or stainless

"Fire Sprinkler System (separate system protecting each individual dwelling) NFPA 13-D" will be used.

Refer to structural pages only for structural components.

DEFERRED SUBMITTALS: The following systems are required and applications are deferred. No work on these systems may begin until a permit has been issued by the AHJ:

1. An NFPA 13D Automatic Fire Sprinkler System is required to be installed. (separate system protecting each individual dwelling unit.)

Mini-split compressor location. Leave the 3 windows.

Can be placed at lower height, because there is no roadway here.



REAR ELEVATION

TSARUK 21

plans2build.com  
 plans2build@live.com 360-629-6068  
 web:plans2build.com Camano Island, WA

ELEVATIONS  
 Rob 3/16/2022 7:44 AM TSARUK21-MASTER.dwg

SCALE  
 1/4"=1 FT  
 SHEET  
 2

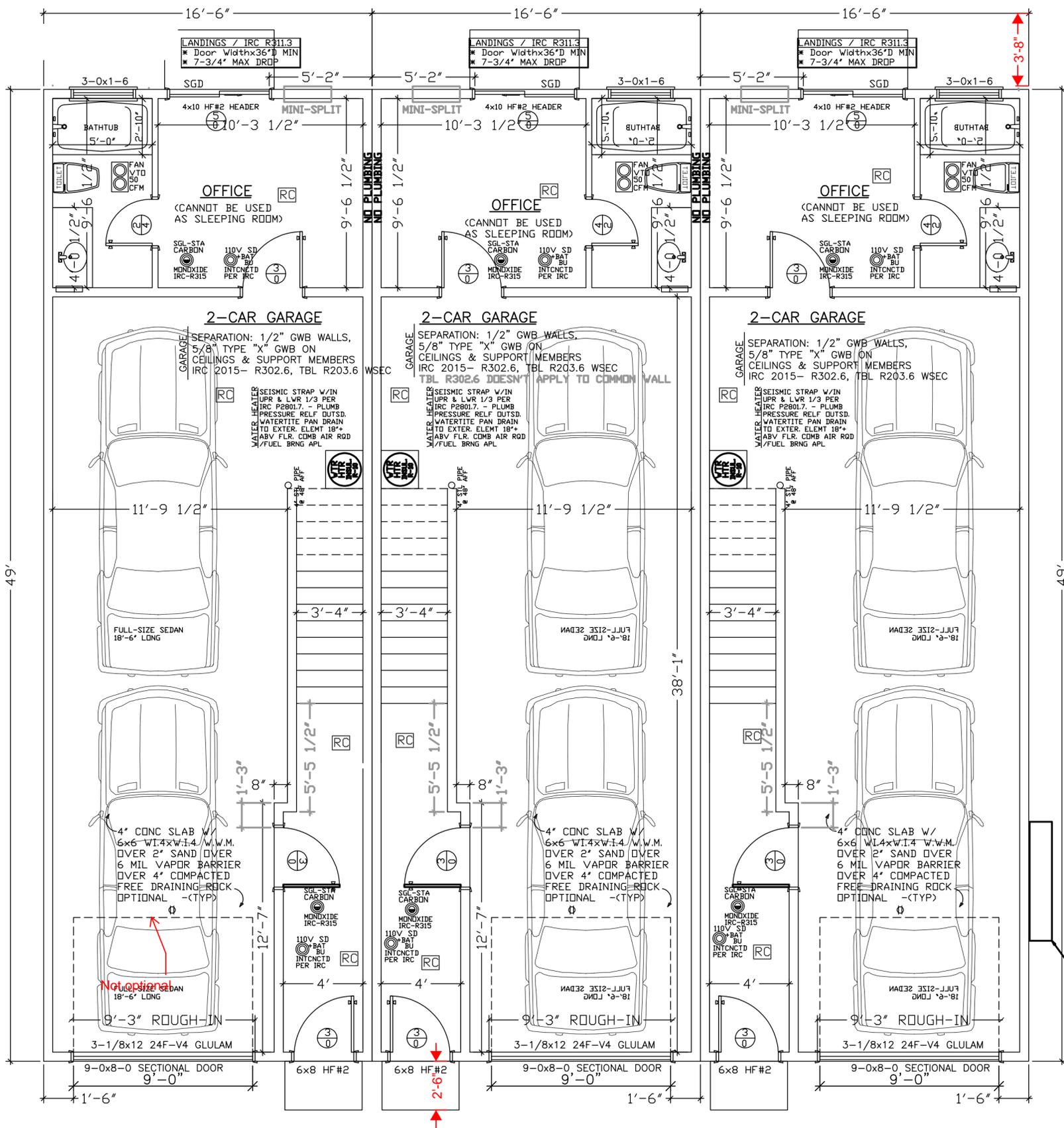
NOTE: ALL DIMENSIONS ON THIS PAGE ARE ROUGH FRAMING DIMENSIONS (NO DRYWALL)

170 SQ FT Heated This Level

170 SQ FT Heated This Level

170 SQ FT Heated This Level

each bed roomS will have a mini-split, one in the living room, and one in garage and upstairs office



**CODE REFERENCES**

INTERNATIONAL RESIDENTIAL CODE 2018  
 INTERNATIONAL MECHANICAL CODE 2018  
 INTERNATIONAL FIRE CODE 2018  
 UNIFORMED PLUMBING CODE 2018  
 WASHINGTON STATE ENERGY CODE 2018

**EGRESS/ IRC -R310**

BEDROOM SILLS 44" MAX HT TO FINISHED OPENING  
 MIN 20" Wx24" HI OPENING  
 5.7 SQ FT MIN - R310.1

NOTE: ALL HEADERS 4x8 HF#2 U.N.D.

ALL HOLDDOWNS, FRAMING ANCHORS & SHEARWALLS MUST BE INSPECTED BEFORE COVERING.

UNDERFLOOR INSPECTION REQUIRED PRIOR TO INSTALLATION OF ANY FLOOR SHEATHING OR DECKING.

PROVISION SHALL BE MADE TO PREVENT WATER FROM COLLECTING IN CRAWLSPACE & FROM LEAKING INTO BASEMENT FLOORS.

WALL BRACING PER CURRENT IRC Table R602.10.1 Wall bracing in D1 seismic zone to meet the following: brace wall panels in the corners and every 25' O.C. Offsets 4' max. R602.10.11 Structures in seismic categories D1 & D2 shall be provided with exterior & interior braced wall lines. Spacing between braced wall lines in each story shall not exceed 25' O.C. in both longitudinal and transverse directions.

**WHOLE HOUSE FAN VENTILATION RATE PER CURRENT IRC TABLE M1507.3.3 (1) CONTINUOUS OPERATING SYSTEM**

FLOOR AREA SQ. FT.	0-1	2-3	4-5	6-7	>7
< 1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135

RATES ABOVE ARE MIN OUTDOOR AIRFLOW IN CFM

**CURRENT IRC TABLE M1507.3.3 (2) INTERMITTENT >25% IN 4 HR M1507.3.3(2)**

RUN TIME%	25%	33%	50%	66%	75%	100%
FACTOR	4	3	2	1.5	1.3	1

SCALE

NOTICE OF LIABILITY: Written dimensions on these drawings shall have preference over scaled dimensions. Homeowner/ Contractor shall check & verify all dimensions and conditions pertaining to the project prior to proceeding to the construction phase. Beam sizes are estimated but not Engineering certified. Any discrepancy shall be resolved with P2B prior to proceeding with the work, or Contractor shall accept full responsibility for rectifying same in event that liability is imposed on p2b, our liability to you or any third party shall not exceed the price paid for p2B's product.

SUBJECT TO FIELD INSPECTIONS, CORRECTIONS & PROVISIONS OF PLAN CHECK

LANDINGS / IRC R311.3  
 Door Widthx36"D MIN  
 7-3/4" MAX DROP

TRUSS ENGINEERING & DESIGN ARE TO BE BY THE TRUSS MANUFACTURER

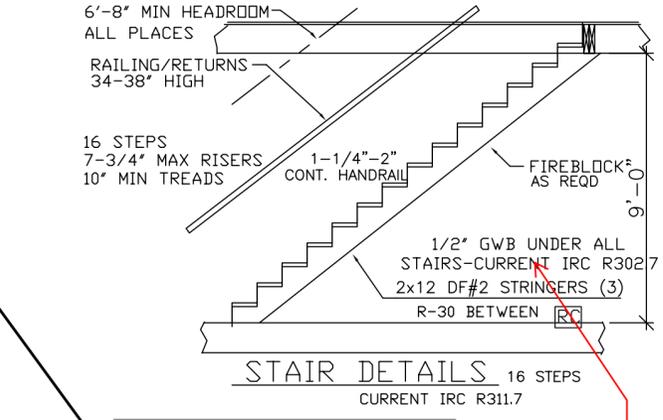
**LIGHTING NOTES:**  
 ALL EXTERIOR LIGHTING FIXTURES WILL BE HIGH EFFICACY LUMINAIRES. A MIN. OF 90% OF ALL INTERNAL UNITS SHALL BE HIGH EFFICACY UNITS.

Indicate actual WHF CFM proposed with consideration for the adjustment factors from table R1505.4.3(2)

**DEFERRED SUBMITTALS:** The following systems are required and applications are deferred. No work on these systems may begin until a permit has been issued by the AHJ:  
 1. An NFPA 13D Automatic Fire Sprinkler System is required to be installed. (separate system protecting each individual dwelling unit.)

**M1504.3 Exhaust openings.**  
 Air exhaust openings shall terminate as follows:  
 1. Not less than 3 feet (914 mm) from property lines.  
 2. Not less than 3 feet (914 mm) from gravity air intake openings, operable windows and doors.  
 3. Not less than 10 feet (3048 mm) from mechanical air intake openings except where either of the following apply:  
 3.1. The exhaust opening is located not less than 3 feet (914 mm) above the air intake opening.  
 3.2. The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the manufacturer's instructions, and the exhaust air is drawn from a living space.  
 4. Openings shall comply with Sections R303.5.2 and R303.6.

MAX RISE= 7-3/4"; MAX RUN=10"  
 MAX OPEN SPACE RISERS=4"; WIDTH=36" MIN  
 HANDRAIL HT; 34-38" OFF TREAD NOSE  
 HANDRAILS END @ NEWEL POST / SAFETY TERM OR RETURN  
 HANDRAILS= GRIPPABLE SHAPE/SIZE  
 BALUSTER SPACING= 4-3/8" MAX  
 TRIANG OPNGS @ TREAD SIDES < 6" SPHERE  
 36" DEEP MIN LANDING @ BOTTOM OF STAIRS



ELECTRIC, PHONE, CABLE AND GAS METERS ALL UNITS

5/8" Type-X when open to the garage

TSARUK 21

plans2build.com  
 plans2build@live.com 360-629-6068  
 web:plans2build.com Camano Island, WA

Lower Plan View  
 TSARUK21-MASTER.dwg  
 Rob 3/16/2022 7:44 AM

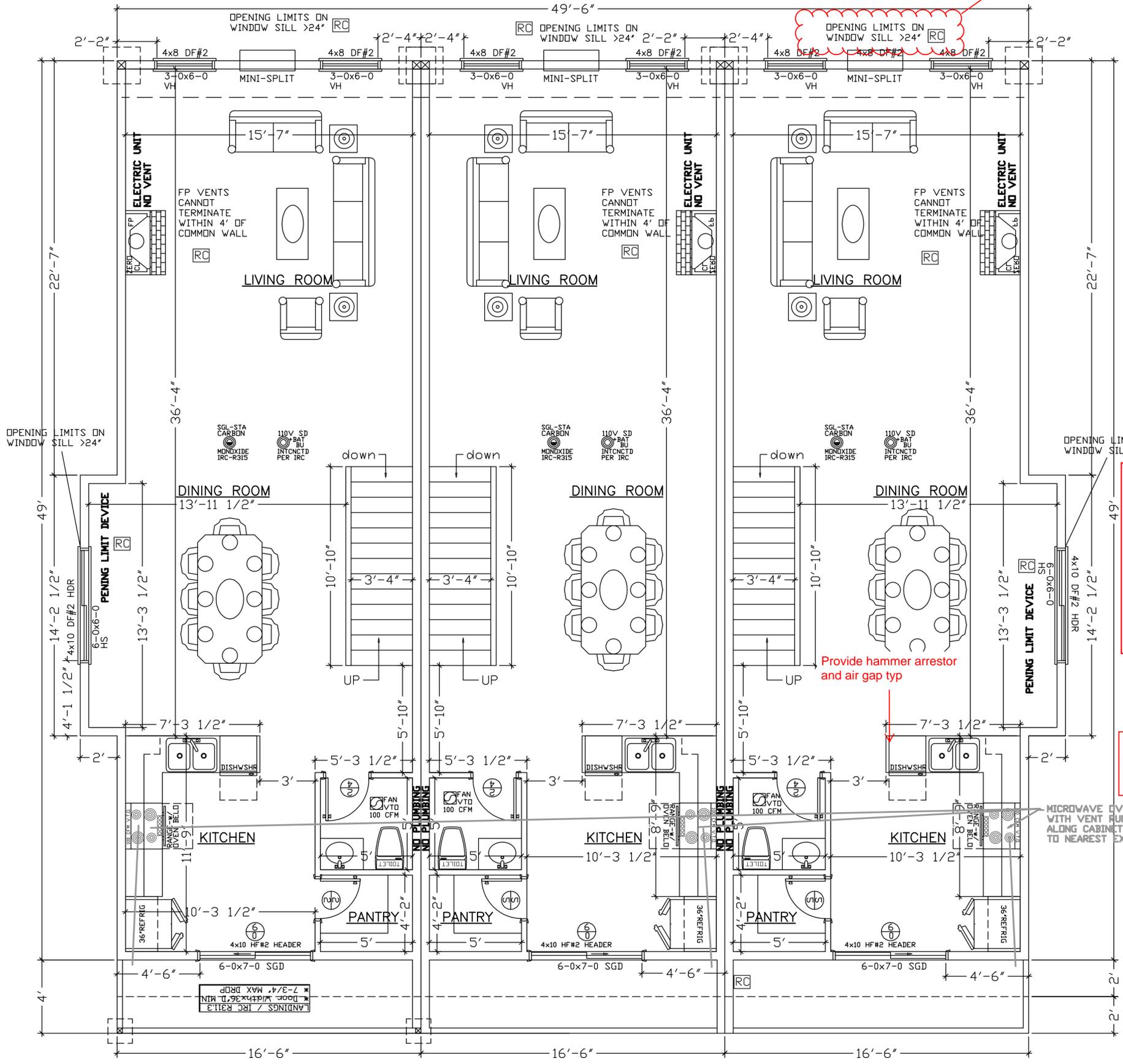
SCALE 1/4"=1 FT  
 SHEET

837 SQ FT Heated This Level

805 SQ FT Heated This Level

837 SQ FT Heated This Level

See R32.2.1 for requirement for opening limiters where window sill >24" from walking surface.



DEFERRED SUBMITTALS: The following systems are required and applications are deferred. No work on these systems may begin until a permit has been issued by the AHJ:

- 1. An NFPA 13D Automatic Fire Sprinkler System is required to be installed. (separate system protecting each individual dwelling unit.)

M1504.3 Exhaust openings.  
Air exhaust openings shall terminate as follows:

1. Not less than 3 feet (914 mm) from property lines.
2. Not less than 3 feet (914 mm) from gravity air intake openings, operable windows and doors.
3. Not less than 10 feet (3048 mm) from mechanical air intake openings except where either of the following apply:
  - 3.1. The exhaust opening is located not less than 3 feet (914 mm) above the air intake opening.
  - 3.2. The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the manufacturer's instructions, and the exhaust air is drawn from a living space.
4. Openings shall comply with Sections R303.5.2 and R303.6.

Plumbing and mechanical is not permitted in the party walls per R302.2.2, this includes ductwork for the range hoods.

Air admittance valves not permitted as a means of venting for plumbing systems.

Provide hammer arrestor and air gap typ

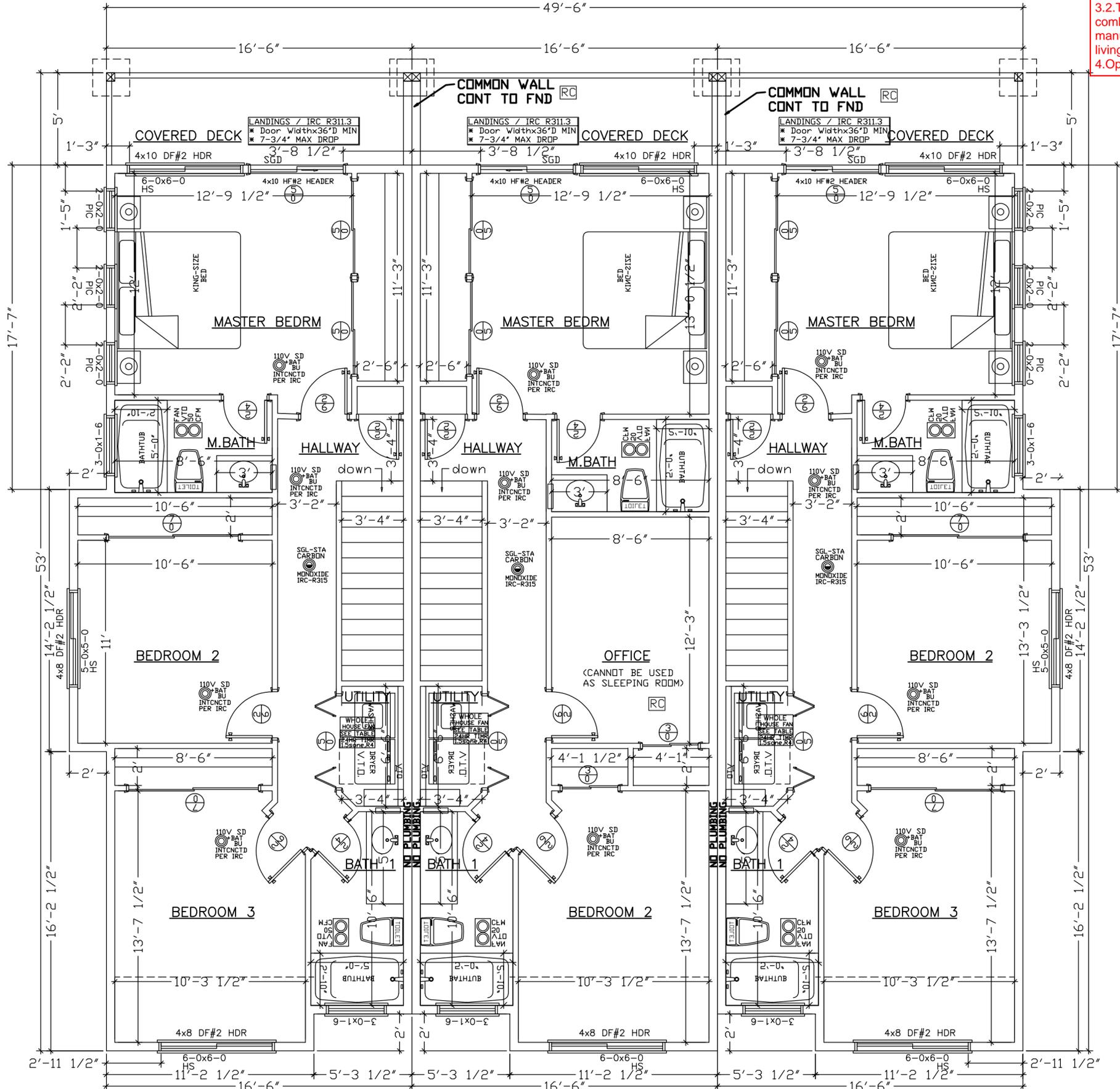
MICROWAVE OVER RANGE WITH VENT RUNNING OUT ALONG CABINET TOPS TO NEAREST EXTERIOR WALL

there will be mini split in each room on the 3rd floor layout

780 SQ FT Heated This Level

762 SQ FT Heated This Level

780 SQ FT Heated This Level



M1504.3 Exhaust openings.  
 Air exhaust openings shall terminate as follows:  
 1. Not less than 3 feet (914 mm) from property lines.  
 2. Not less than 3 feet (914 mm) from gravity air intake openings, operable windows and doors.  
 3. Not less than 10 feet (3048 mm) from mechanical air intake openings except where either of the following apply:  
 3.1. The exhaust opening is located not less than 3 feet (914 mm) above the air intake opening.  
 3.2. The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the manufacturer's instructions, and the exhaust air is drawn from a living space.  
 4. Openings shall comply with Sections R303.5.2 and R303.6.

**DEFERRED SUBMITTALS:** The following systems are required and applications are deferred. No work on these systems may begin until a permit has been issued by the AHJ:

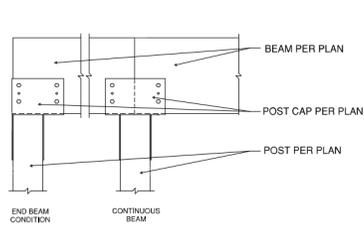
1. An NFPA 13D Automatic Fire Sprinkler System is required to be installed. (separate system protecting each individual dwelling unit.)

TSARUK 21

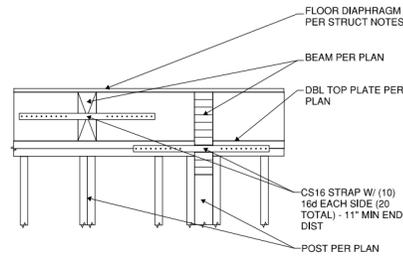
plans2build .COM  
 plans2build@live.com 360-629-6068  
 web:plans2build.com Camano Island, WA

Upper Plan View  
 Rob 3/16/2022 7:44 AM TSARUK21-MASTER.dwg  
 SCALE 1/4"=1 FT  
 SHEET

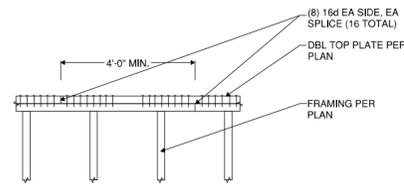
RC



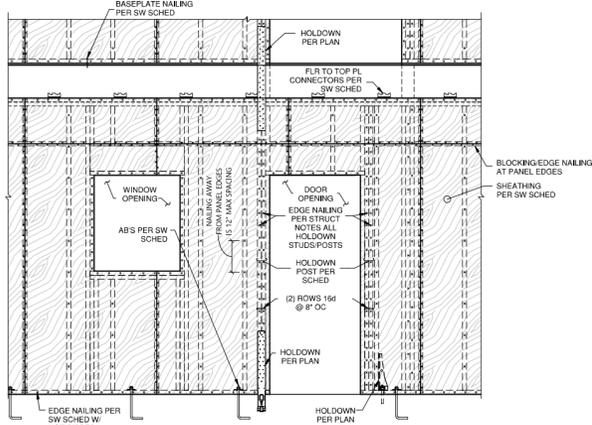
1 TYPICAL POST & BEAM @ ISOLATED POST NTS



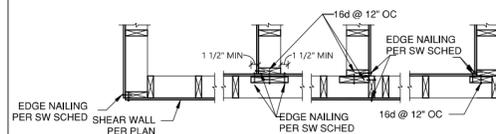
2 TYPICAL POST & BEAM @ WALL NTS



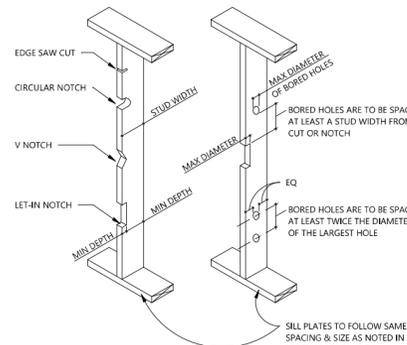
3 TYPICAL TOP PLATE SPLICE NTS



4 TYPICAL SHEAR WALL CONSTRUCTION NTS



5 TYPICAL SHEAR WALL CORNER CONFIGURATIONS NTS



6 TYPICAL STUD PENETRATIONS NTS

**EXTERIOR/BEARING/SHEAR WALL STUDS**

Stud Size	Max Depth of Edge Cut or Notch	Min Stud Depth Remaining
2x4	7/8"	2 5/8"
2x6	1 3/8"	4 1/8"

- Notes:
- No cutting or notching is allowed in shear wall compression studs.
  - No cutting or notching is allowed in shear wall plates without prior approval.

**EXTERIOR/BEARING/SHEAR WALL STUDS**

Stud Size	Max Diameter of Hole	Min Depth Remaining After Boring
2x4	1 3/8"	5/8" EA SIDE OF HOLE
2x6	2 1/8"	5/8" EA SIDE OF HOLE

- Notes:
- Borings shall not be made at the same section where cut or notch has been made.
  - No holes are allowed in shear wall compression studs.
  - No holes are allowed in shear wall plates without prior approval.

**NON-BEARING WALL STUDS**

Stud Size	Max Depth of Edge Cut or Notch	Min Stud Depth Remaining
2x4	1 3/8"	2 1/8"
2x6	2 1/8"	3 3/8"

SILL PLATES TO FOLLOW SAME SPACING & SIZE AS NOTED IN VERTICAL STUDS, TYP

**NON-BEARING WALL STUDS**

Stud Size	Max Diameter of Hole	Min Depth Remaining After Boring
2x4	2"	5/8" EA SIDE OF HOLE
2x6	3 1/4"	5/8" EA SIDE OF HOLE

- Notes:
- Borings shall not be made at the same section where cut or notch has been made.

NOTE: DETAILS ON THIS SHEET MAY NOT BE REFERENCED WITHIN THE PLAN SET BUT SHOULD BE UTILIZED WHERE APPLICABLE.

**GENERAL STRUCTURAL NOTES**

**GENERAL** ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, OR OTHER GOVERNING CODE, AS REQUIRED BY LOCAL JURISDICTION.

**DESIGN PARAMETERS**

**WIND:**  
 NOMINAL WIND SPEED - 85 MPH RISK CATEGORY II  
 ULTIMATE WIND SPEED - 110 MPH IMPORTANCE, I = 1.0  
 WIND EXPOSURE, B K<sub>zt</sub> = 1.00

**SEISMIC:**

EQUIVALENT LATERAL FORCE PROCEDURE  
 IMPORTANCE, I<sub>e</sub> = 1.0 S<sub>s</sub> = 1.170  
 SITE CLASS, D S<sub>1</sub> = 0.400  
 SEISMIC DESIGN CAT., D S<sub>DS</sub> = 1.17  
 SEIS. FORCE RES. SYS, A.15. S<sub>01</sub> = NA  
 DESIGN BASE SHEAR = 23834 lbs C<sub>s</sub> = 0.18  
 RISK CATEGORY II R = 6.5

**LIVE LOADS:**

ROOF 25 (SNOW)  
 FLOOR 40 PSF  
 DECKS 60 PSF

**INSPECTIONS** NO SPECIAL INSPECTIONS ARE REQUIRED. VERIFY INSPECTIONS REQUIRED WITH AUTHORITY HAVING JURISDICTION.

**SOILS** REPORT NOT PROVIDED.

**FOUNDATIONS** EXTEND FOOTING TO UNDISTURBED SOIL OF 2000 PSF BEARING CAPACITY. BOTTOM OF EXTERIOR FOOTING SHALL BE 1'-6" MINIMUM BELOW OUTSIDE FINISHED GRADE.

**COMPACTED FILL** SHOULD CONSIST OF PREDOMINATELY WELL-GRADED, GRANULAR SOIL, FREE OF ORGANIC MATERIAL AND DEBRIS. FILL SHOULD BE PLACED IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED BY ASTM D-1557 TEST PROCEDURES.

**CONCRETE** f'<sub>c</sub> = 2500 PSI MINIMUM 5 1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND A MAXIMUM OF 6.0 GALLONS OF WATER PER 94 LB SACK OF CEMENT. MAXIMUM SLUMP IS 4". SEGREGATION OF MATERIALS TO BE PREVENTED.

**REINFORCING STEEL** #5 BARS AND LARGER SHALL BE GRADE 60 DEFORMED BARS, AND #3 AND #4 BARS SHALL BE GRADE 40, IN ACCORDANCE WITH ASTM A-615. LAP SPLICES 32 BAR DIAMETERS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND SHALL BE 6X6 - W1.4 X W1.4. LAP ONE FULL MESH AT SPLICES.

**TIMBER FRAMING** SHALL MEET THE FOLLOWING MINIMUM STANDARDS:

BEAMS AND POSTS	(4x AND GREATER):DF-L#2
JOISTS / STUDS (2x)	HF#2 / STUD
GLUE LAMINATED BEAMS (GLB)	24F-V4 (24F-V8 AT CANTILEVERS)
PARALLAM BEAMS (PSL)	2.0E UNO

2x TIMBER SHALL BE KILN DRIED. GRADES SHALL CONFORM TO "WWPA GRADING RULES FOR WESTERN LUMBER", LATEST EDITION. ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE T.P.I. AND THE IBC. ALL CONNECTIONS PER IBC TABLE 2304.10.1 (SEE BELOW).

**NOTE ALL BEAMS/HEADERS TO BE SUPPORTED BY MINIMUM DBL 2x POSTS AT EACH END, UNO**

**ROOF DIAPHRAGM** INSTALL MINIMUM 1/2" CDX PLYWOOD (32/16) OR 7/16" OSB SHEATHING. NAIL ALL SUPPORTED EDGES AND BOUNDARIES WITH 8d AT 6" O.C. AND INTERIOR SUPPORTS WITH 8d AT 12" O.C.; BLOCKING NOT REQUIRED.

**FLOOR DIAPHRAGM** INSTALL MINIMUM 23/32" T&G STURD-I-FLOOR (240c) SHEATHING. GLUE AND NAIL ALL SUPPORTED EDGES AND BOUNDARIES WITH 10d AT 6" O.C.; AND INTERIOR SUPPORTS WITH 10d AT 12" O.C.; BLOCKING NOT REQUIRED.

**MISCELLANEOUS** THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT JOB SITE. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT CONNECTIONS AND STIFFENINGS HAVE BEEN INSTALLED. DO NOT SCALE DRAWINGS. PRE-FABRICATED ELEMENTS TO BE HANDLED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

**MINIMUM FASTENING SCHEDULE (UNO) (PER 2018 IBC TABLE 2304.10.1)**

NO.	CONNECTION	NAILING, LOCATION (UNO)
1	BLOCKING BETWEEN JOIST/RAFTER OR TRUSSES TO TOP PLATE OR OTHER FRAMING ABOVE	(3) 8d, TOENAIL EACH END
2	BLOCKING BETWEEN JOIST/RAFTER OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	(2) 8d, TOENAIL EACH END
3	FLAT BLOCKING TO TRUSS AND WEB FILLER	16d FACE NAIL
4	JOISTS TO TOP PLATE OR GIRDER	(3) 8d, TOENAIL
5	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	(3) 16d
6	COLLAR TIE TO JOIST/RAFTER	(3) 10d
7	ROOF TRUSS TO TOP PLATE	(3) 10d, TOENAIL
8	ROOF JOIST/RAFTER TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2" RIDGE BEAM	(2) 16d, END NAIL
9	STUD TO STUD (NOT AT SHEAR WALLS)	16d @ 24" O.C., FACE NAIL
10	CONTINUOUS HEADER TO STUD	(4) 8d, TOENAIL
11	TOP PLATE TO TOP PLATE, AT END JOINTS	(8) 16d, EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
12	SILL PLATE TO JOIST, RIM JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d @ 16" O.C., FACE NAIL
13	SILL PLATE TO JOIST, RIM JOIST OR BLOCKING AT BRACED WALL PANELS	(3) 16d @ 16" O.C., FACE NAIL
14	STUD TO SILL PLATE	(4) 8d, TOENAIL OR (2) 16d, END NAIL*
15	TOP PLATE TO STUD	(2) 16d, END NAIL
16	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(2) 16d, FACE NAIL
17	1" BRACE TO EACH STUD AND PLATE	(2) 8d, FACE NAIL
18	1" x 6" SHEATHING OR LESS TO EACH BEARING	(2) 8d, FACE NAIL
19	1" x 8" AND WIDER SHEATHING TO EACH BEARING	(3) 8d, FACE NAIL
20	JOIST TO SILL, TOP PLATE OR GIRDER	(3) 8d, TOENAIL
21	RIM JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d @ 6" O.C., TOENAIL
22	1" x 6" SUBFLOOR OR LESS TO EACH JOIST	(2) 8d, FACE NAIL
23	2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d, BLIND AND FACE NAIL
24	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	(2) 16d, EACH BEARING, FACE NAIL
25	BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d @ 32" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES AND (2) 20d AT ENDS OF EACH SPLICE
26	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	(3) 16d, EACH JOIST OR RAFTER, FACE NAIL
27	JOIST TO RIM JOIST	(3) 16d, END NAIL
28	BRIDGING OR BLOCKING TO JOIST	(2) 8d, EACH END, TOENAIL

\*USE (4) 16d END NAIL STUDS TO TOP AND SILL PLATES AT 2x10 STUDS



STRUCTURAL DESIGN  
 TYPICAL DETAILS  
 MINIMUM CONNECTIONS  
 STRUCTURAL NOTES

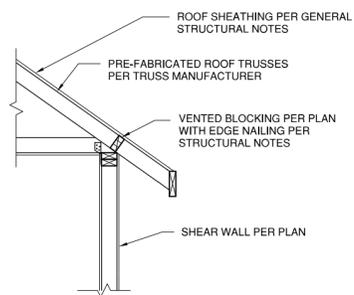
TSARUK 21  
 (3) UNIT TOWNHOMES  
 15025 179TH AVE SE  
 MONROE, WA 98272

UPSTATE JOB#	DRAWN BY	CHECKED BY
1556	JBG	amg

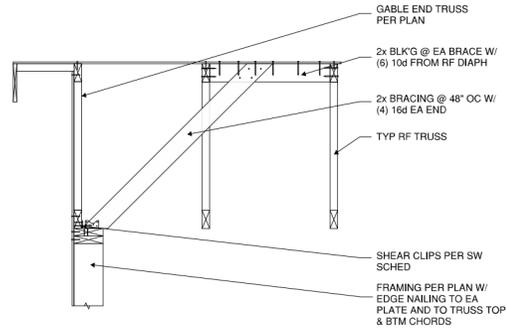
REVISION DATE	DESCRIPTION
5/25/2022	VER 1

APPROVALS

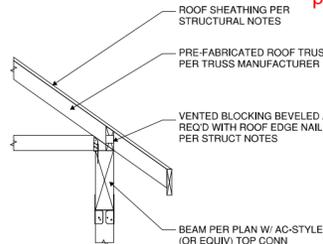
SO



1 TYPICAL SHEAR FLOW TRUSS PERP TO SW NTS

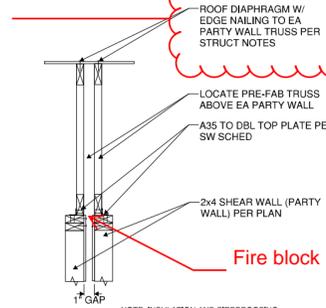


2 TYPICAL SHEAR FLOW GABLE TO SW NTS

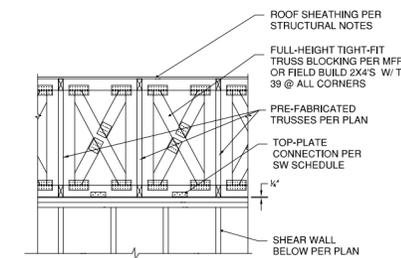


3 TYPICAL CONNECTION RF TO BEAM NTS

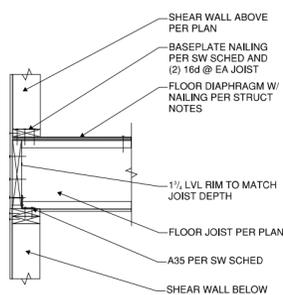
Fire-treated plywood when within 4' of party wall



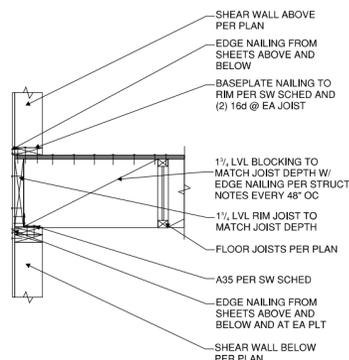
4 TYPICAL SHEAR FLOW RF PRLL TO PARTY WALL NTS



5 TYPICAL SHEAR FLOW RF PERP TO SW NTS

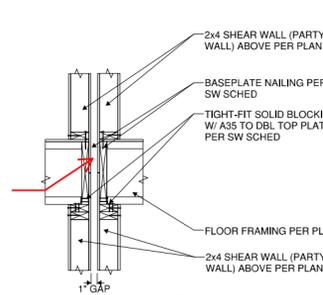


6 TYPICAL SHEAR FLOW FLR PERP TO SW NTS

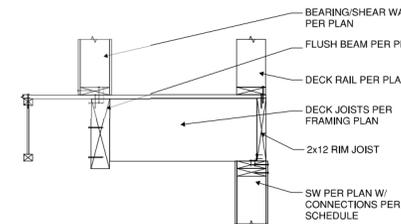


7 TYPICAL SHEAR FLOW FLR PRLL TO SW NTS

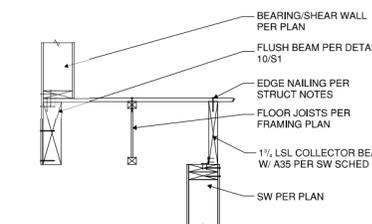
Fire blocking at each floor



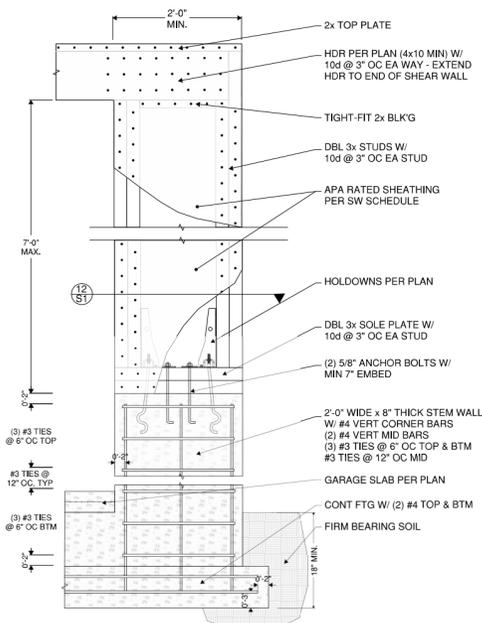
8 TYPICAL SHEAR FLOW FLR PERP TO PARTY WALL NTS



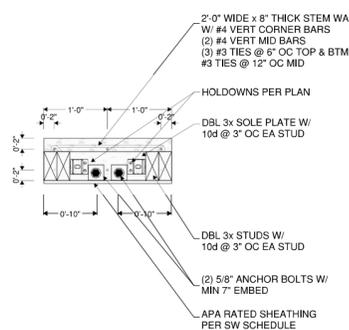
9 SHEAR FLOW FLR FRMG DIRECTION CHANGE NTS



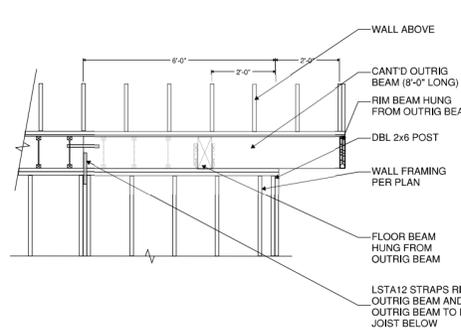
10 SHEAR FLOW OFFSET SW NTS



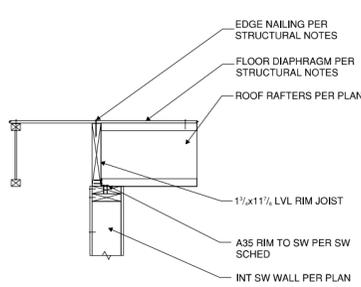
11 RAISED SHEAR WALL (RSW) ELEVATION VIEW NTS



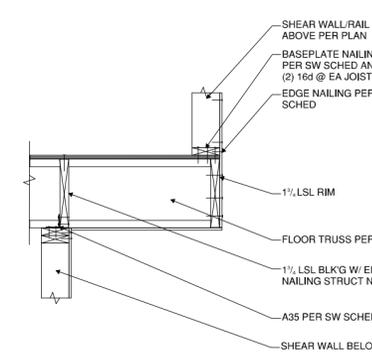
12 RAISED SHEAR WALL (RSW) SECTION VIEW NTS



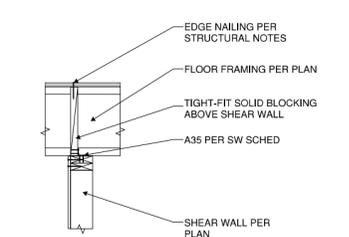
13 OUTRIGGER BEAM NTS



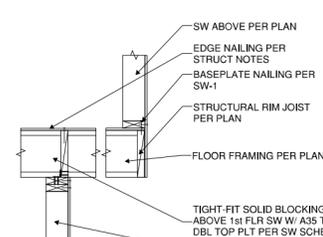
14 SHEAR FLOW FLR TO INT SW NTS



15 SHEAR FLOW CANT'D FLR JOISTS NTS



16 SHEAR FLOW FLR TO INT SW NTS



17 SHEAR FLOW OFFSET SW NTS



STRUCTURAL DESIGN  
FRAMING DETAILS

TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB#	DRAWN BY:	CHECKED BY:
1556	JBG	amg
REVISION DATE:	DESCRIPTION:	
5/25/2022	VER 1	

APPROVALS

S1



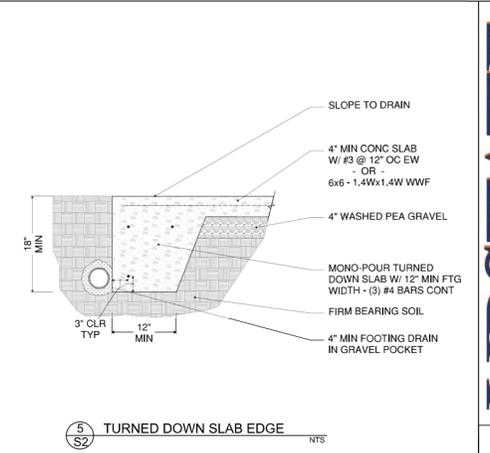
STRUCTURAL DESIGN  
FOUNDATION DETAILS  
CONCRETE NOTES

TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB#	DRAWN BY	CHECKED BY:
1556	JBG	amg
REVISION DATE:	DESCRIPTION:	
5/25/2022	VER 1	

APPROVALS

S2



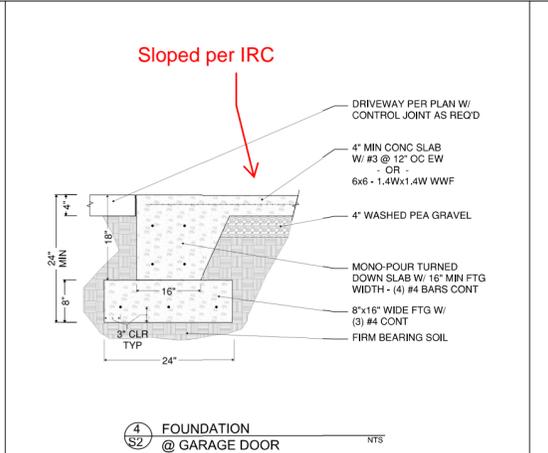
5 TURNED DOWN SLAB EDGE NTS

**CONCRETE COVER FOR REINFORCING STEEL**

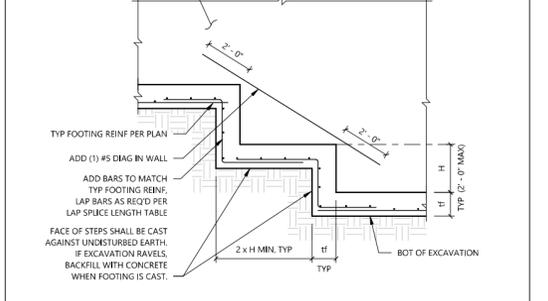
Reinforcing Bar Location	Min Concrete Cover
UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS AND LARGER)	2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS AND SMALLER)	1 1/2"
1 1/2" COLUMNS AND BEAMS w/ BARS ENCLOSED IN STIRRUPS, TIES OR SPIRAL REINF (TO REINFORCING)	1 1/2"
SLABS, JOISTS AND INTERIOR FACES OF WALLS (#6 BARS AND LARGER)	db + 5/8"
SLABS, JOISTS AND INTERIOR FACES OF WALLS (#5 BARS AND SMALLER)	3/4"
2-HOUR AND 3-HOUR SLABS	(REFER TO PLAN NOTES)
CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER (BARS ENCLOSED IN STIRRUPS/TIES)	1"
CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER (NO STIRRUPS/TIES)	2db
CLEAR SPACING BETWEEN (2) OR MORE PARALLEL LAYERS	1"

NOTES:  
1. WHERE A THICKNESS OF COVER REQUIRED FOR FIRE PROTECTION IS GREATER THAN THAT SPECIFIED IN THIS TABLE, THE GREATER THICKNESS SHALL BE USED.

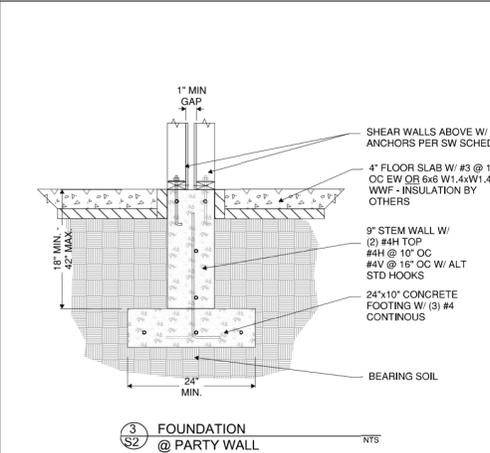
10 GENERAL REINFORCEMENT SCHEDULE NTS



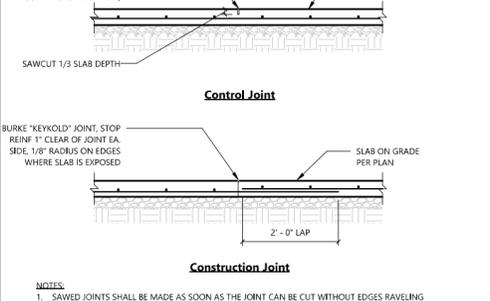
4 FOUNDATION @ GARAGE DOOR NTS



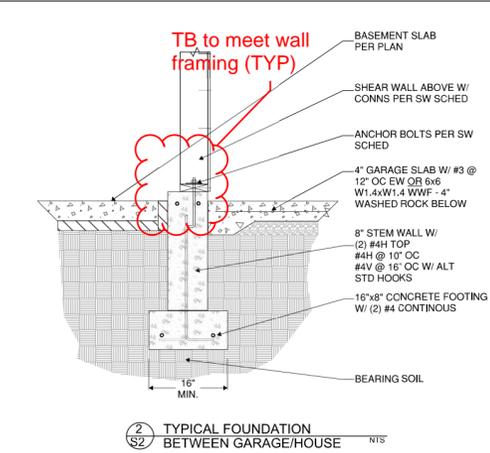
9 TYPICAL FOUNDATION STEP NTS



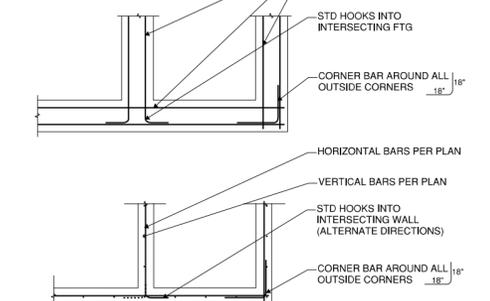
3 FOUNDATION @ PARTY WALL NTS



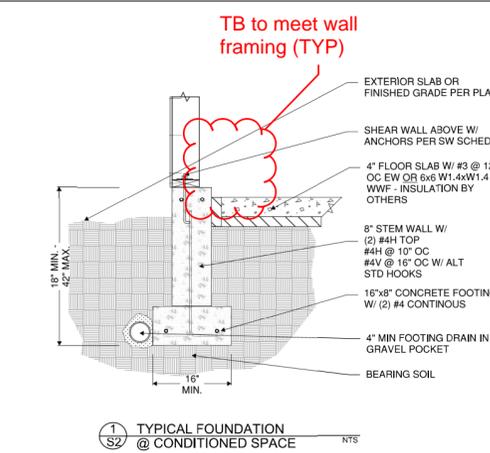
8 TYP SLAB CONSTRUCTION NTS



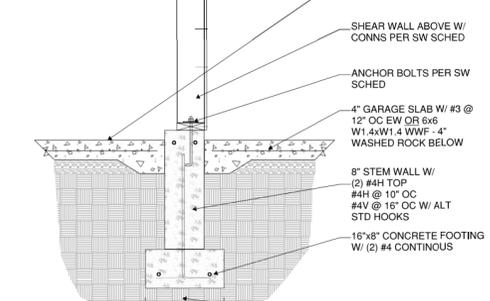
2 TYPICAL FOUNDATION BETWEEN GARAGE/HOUSE NTS



7 TYP CORNER REINFORCEMENT NTS



1 TYPICAL FOUNDATION @ CONDITIONED SPACE NTS



6 INTERIOR FOUNDATION NTS

**REINFORCING BAR LAP SPICE & DEVELOPMENT LENGTH DIAGRAMS**  
The following conditions must be met in order to use the Reinforcing Bar Lap Splice & Development Length Tables

	Lap Splices	Straight Bar Development	Hooked Bar Development
<b>CLASS 1:</b> Bars enclosed by column ties or beam stirrups	db CLR (MIN) EDGE OF CONC COL TIES OR BM STIRRUPS	db CLR (MIN) EDGE OF CONC COL TIES OR BM STIRRUPS	2 1/2 CLR (MIN) EDGE OF CONC
<b>CLASS 2:</b> No enclosure	2db CLR (MIN) EDGE OF CONC	2db CLR (MIN) EDGE OF CONC	4db CLR (MIN) EDGE OF CONC
Where conditions for Classes 1 & 2 are not met	MULTIPLY LENGTHS SHOWN IN SCHEDULE BY 1.5	MULTIPLY LENGTHS SHOWN IN SCHEDULE BY 1.5	

- NOTES:  
1. ALL BARS SHALL BE DEVELOPED & ALL SPICES LAPPED PER ACE 318 FOR TENSION UNDO TABLE MAY BE USED WHERE CONDITIONS MEET CRITERIA NOTED IN DIAGRAMS.  
2. TABLES ARE APPLICABLE FOR NORMAL WEIGHT CONCRETE, ONLY.  
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM (WALL HORIZONTAL REINFORCEMENT IS EXEMPT).  
4. WHERE BARS OF DIFFERENT SIZE ARE LAP SPICED, SPICE LENGTH SHALL BE THE LARGER OF:  
- DEVELOPED LENGTH OF LARGER BAR  
- SPICE LENGTH OF SMALLER BAR  
5. WHERE MINIMUM STRAIGHT BAR DEVELOPMENT LENGTH CANNOT BE ACHIEVED, USE WITH STANDARD HOOK.  
6. REFER TO CONCRETE COVER TABLE FOR MINIMUM CONCRETE COVER REQUIREMENTS.

**REINFORCING BAR LAP SPICE & DEVELOPMENT LENGTH TABLE**  
f'c = 3,000 psi  
Grade 60 Reinforcing

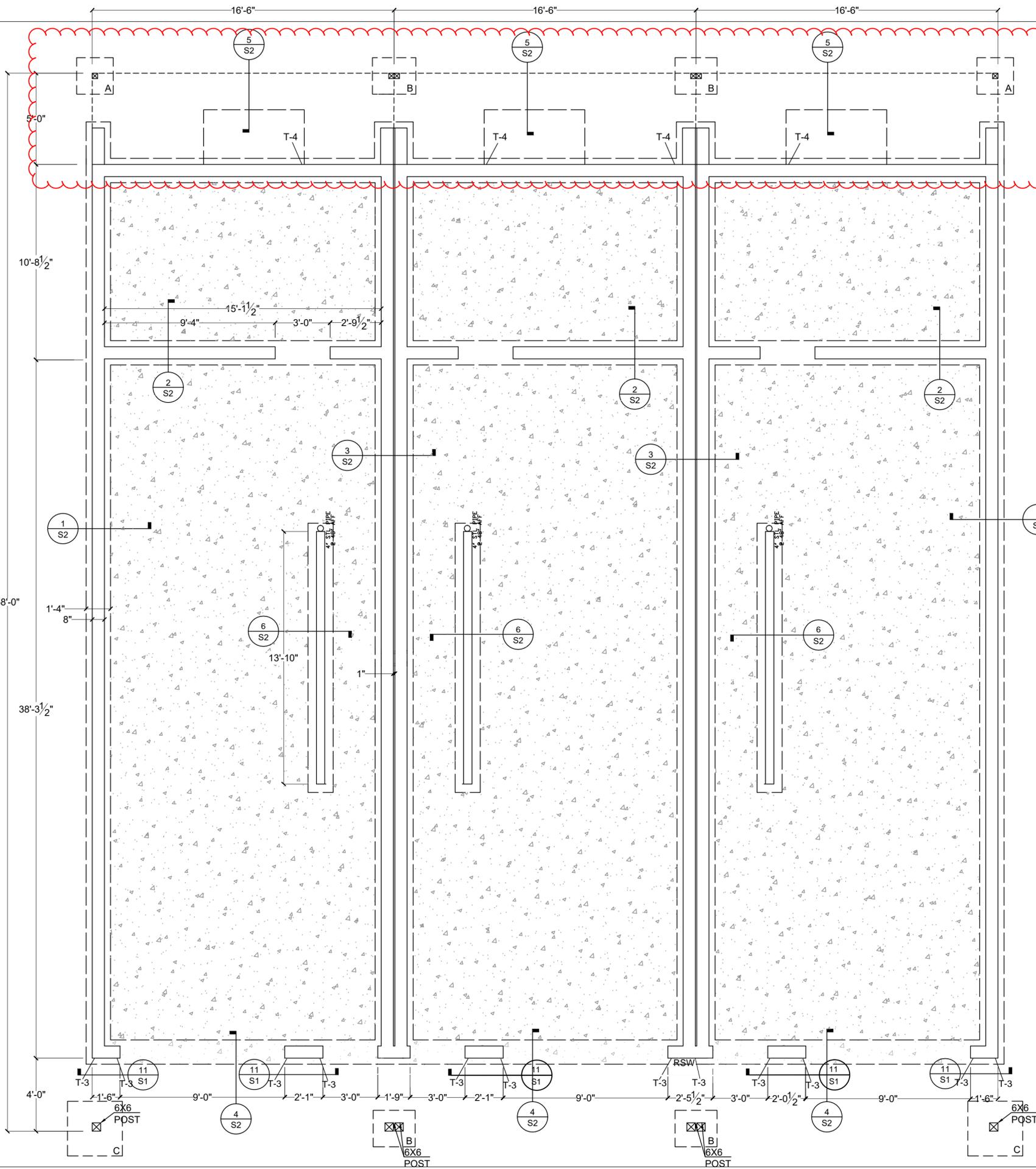
Bar Size	Min Lap Splice Lengths (Ls)		Min Straight Bar Development Lengths (Ld)		Min Hooked Bar Embedment Lengths (Ldb)
	Top Bars	Other Bars	Top Bars	Other Bars	
#3	28"	22"	22"	17"	9"
#4	37"	29"	29"	22"	11"
#5	47"	36"	36"	28"	14"
#6	56"	43"	43"	33"	17"
#7	81"	63"	63"	48"	20"
#8	93"	72"	72"	55"	22"
#9	105"	81"	81"	62"	25"
#10	118"	91"	91"	70"	28"
#11	131"	101"	101"	78"	31"

**REINFORCING BAR LAP SPICE & DEVELOPMENT LENGTH TABLE**  
f'c = 4,500 psi  
Grade 60 Reinforcing

Bar Size	Min Lap Splice Lengths (Ls)		Min Straight Bar Development Lengths (Ld)		Min Hooked Bar Embedment Lengths (Ldb)
	Top Bars	Other Bars	Top Bars	Other Bars	
#3	23"	17"	17"	13"	7"
#4	30"	23"	23"	18"	9"
#5	38"	29"	29"	22"	11"
#6	45"	35"	35"	27"	13"
#7	66"	51"	51"	39"	16"
#8	76"	58"	58"	45"	18"
#9	85"	66"	66"	50"	20"
#10	96"	74"	74"	57"	23"
#11	107"	82"	82"	63"	25"

11 REINFORCEMENT DEVELOPMENT SCHEDULES NTS

NOTE DETAILS 7 THROUGH 11 MAY NOT BE REFERENCED WITHIN THE PLAN SET BUT SHOULD BE EMPLOYED WHEREVER APPLICABLE UNLESS NOTED OTHERWISE



Per note on page 5, common walls to extend to foundation. foundation does not extend out to the projection of the walls above.

**FOUNDATION NOTES**

- LUMBER IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER TO BE PRESSURE - TREATED
- HARDWARE AND FASTENERS IN CONTACT WITH CONCRETE, IN USE WITH PRESSURE-TREATED LUMBER, AND/OR EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED OR OTHER APPROVED MATERIAL
- SEE TYPICAL FOUNDATION DETAILS ON SHEET S2
- ADDITIONAL DIMENSIONS TO BE DETERMINED FROM ARCHITECTURAL PLANS
- EMBEDDED HOLD DOWNS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS

**HOLDOWN SCHEDULE**

MARK	HOLDOWN / STRAP * (1)	FASTENERS TO STUDS MIN. U.N.O.	FOUNDATION ANCHOR * (1) X (4)	COMMENTS
T-1	MSTC40	(6) - 16d sinkers to each connected element	N/A	
T-2	MSTC52	(24) - 16d sinkers to each connected element	N/A	
T-3	HDU5-SDS2.5	(14) - SDS 0.25x2.5 WOOD SCREWS	SSTB24	
T-4	HDU8-SDS2.5	(20) - SDS 0.25x2.5 WOOD SCREWS	SSTB28	MIN. DF#2 4X POST

Lot compaction report showing conformance with an approved geotech report to be given to inspector at footing inspection.

**FOOTING SCHEDULE**

- FOOTING A:**  
2'-0"X2'-0"X10" THICK CONC FTG W/ (3) #4 CONT
- FOOTING B:**  
2'-0"X2'-4"X10" THICK CONC FTG W/ (3) #4 CONT
- FOOTING C:**  
3'-0"X3'-0"X12" THICK CONC FTG W/ (3) #4 CONT

**FOUNDATION PLAN**  
1/4" = 1'-0"



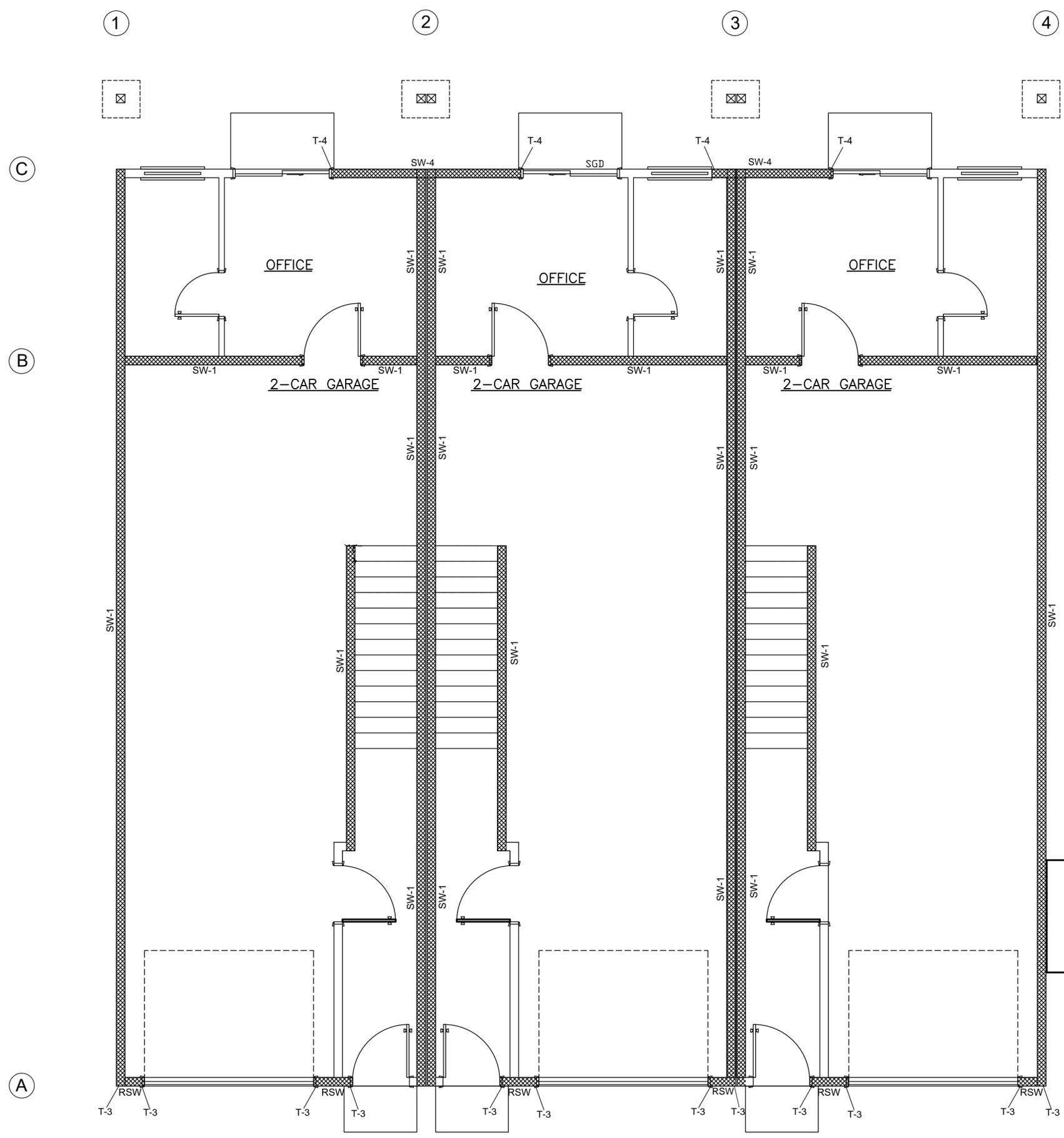
STRUCTURAL DESIGN  
FOUNDATION

TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY	JBG
CHECKED BY	AG
REVISION DATE	5/23/2022
DESCRIPTION	VERSION 1

APPROVALS

S3



**LATERAL NOTES**

- ▣ SHEAR WALLS
- CONSTRUCTION OF EACH DIAPHRAGM TO BE PER THE STRUCTURAL NOTES ON SHEET S1
- ALL SHEAR WALL CONNECTIONS TO BE PER THE SHEAR WALL SCHEDULE
- SEE ADDITIONAL SHEAR WALL NOTES ON SHEET S1
- PLEASE NOTIFY UPSTATE ENGINEERING OF ANY STRUCTURAL PLAN REVISIONS, INCLUDING WINDOW / DOOR LOCATIONS, PRIOR TO INSPECTION

HOLDOWN SCHEDULE					Date: 5/26/2022
MARK	HOLDOWN STRAP *(1)	FASTENERS TO (2)-STUDS MIN UNO.	FOUNDATION ANCHOR *(1)(4)	COMMENTS	Job #: 1556
T-1	MSTC40	(8) - 16d sinkers to each connected element	N/A		
T-2	MSTC52	(24) - 16d sinkers to each connected element	N/A		
T-3	HDU8-SDS2.5	(14) - SDS 0.25x2.5 WOOD SCREWS	SSTB24		
T-4	HDU8-SDS2.5	(20) - SDS 0.25x2.5 WOOD SCREWS	SSTB28	MIN. DF#2 4X POST	

SHEARWALL SCHEDULE					Date: 5/26/2022	
MARK *(2)	SHEATHING - APPLY TO 2x HF STUDS @ 16" o/c UNO BELOW *(9)	SHEATHING EDGE NAILS *(5) ALL EDGES BLOCKED (do not penetrate panel field)	BASE PLATE NAILS *(5)	ROOF TO TOP PLATE, FLOOR TO TOP PLATE & SILL PLATE *(6)	SILL PLATE ANCHORS w/ 3" x 3" x 1/4" WASHERS *(8)	Job #: 1556
SW-1	7/16" OSB	8d @ 6" o/c (12" o/c field)	16d @ 12" o/c	H1 @ 24" o/c or A35 @ 24" o/c	5/8"x10" AFB @ 60" o/c	
SW-2	7/16" OSB	8d @ 4" o/c (12" o/c field)	16d @ 6" o/c	A35 @ 20" o/c	5/8"x10" AFB @ 48" o/c	
SW-3	7/16" OSB *(7)	8d @ 3" o/c (12" o/c field)	16d @ 4" o/c	A35 @ 12" o/c	5/8"x10" AFB @ 36" o/c	
SW-4	7/16" OSB *(7)	8d @ 2" o/c staggered (12" o/c field)	16d @ 3" o/c	A35 @ 10" o/c	5/8"x10" AFB @ 24" o/c	
RSW	5/8" PLY *(7) DF#2 FRAMING	10d @ 3" o/c staggered (12" o/c field)				SEE DETAIL 11/S1

**SHEAR WALL AND HOLDOWN NOTES**

- (1) HOLDOWNS TO BE SIMPSON OR EQUIVALENT WHERE EQUIVALENT IS PERMITTED. LOCATE HOLDOWNS AT ENDS OF SHEARWALLS, UNO. INSTALL PER MANUFACTURER RECOMMENDATIONS FOR FOUNDATION MINIMUM END DISTANCE AND EMBEDMENT. EXTEND, THICKEN, DEEPEN, ETC. FOUNDATION TO MEET THE MANUFACTURER'S SPECIFICATIONS.
- (2) CONSTRUCT CRIPPLE WALLS AND PONY WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL ABOVE. CONSTRUCT GABLE END WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL BELOW. CONSTRUCT CLERESTORY WALLS PER SW-1, UNO. ALL EXTERIOR WALLS TO BE CONSTRUCTED PER SW-1, UNO.
- (3) 3X OR DBL 2X SILL PLATE REQUIRED.
- (4) USE THREADED ROD AND COUPLER AS REQUIRED.
- (5) COMMON NAILS, UNO:
  - 8d = 0.131" x 2 1/2"
  - 10d = 0.148" x 3"
  - 12d = 0.148" x 3 1/2"
  - 16d = 0.148" x 3 1/4"
- (6) INSTALL H1 CLIPS AT EACH TRUSS/RAFTER END. INSTALL A35 @ 24" OC AT EACH GABLE END AND RIM JOIST (OR SOLID BLOCKING) TO TOP PLATE AND MUDSILL CONNECTION, UNO. WHERE SPACING TIGHTER THAN 24" OC IS SPECIFIED, INSTALL A35 CLIPS FROM SOLID BLOCKING TO DBL TOP PLATE, AND INSTALL H1 OR H2.5 CLIPS TO EACH TRUSS/RAFTER END. LTP4, LTP5 OR LS50 CAN BE SUBSTITUTED FOR A35 CLIPS PER SIMPSON.
- (7) MINIMUM 3X OR DBL 2X STUDS REQUIRED AT ABUTTING PANEL EDGES. DBL STUDS TO BE LAMINATED W/ (2) 16d @ 6" OC.
- (8) ANCHOR BOLTS SHALL BE EMBEDDED 7" MINIMUM INTO CONCRETE. MIN (2) BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 2" OR LESS THAN (7) BOLT DIAMETERS FROM EACH END OF THE PIECE. MUD SILL TO BE 2X MINIMUM AND PRESSURE-TREATED.
- (9) ALL SHEATHING TO BE APA RATED. SEE GENERAL STRUCTURAL NOTES.

**LOWER FLOOR SHEAR WALLS**  
1/4" = 1'-0"



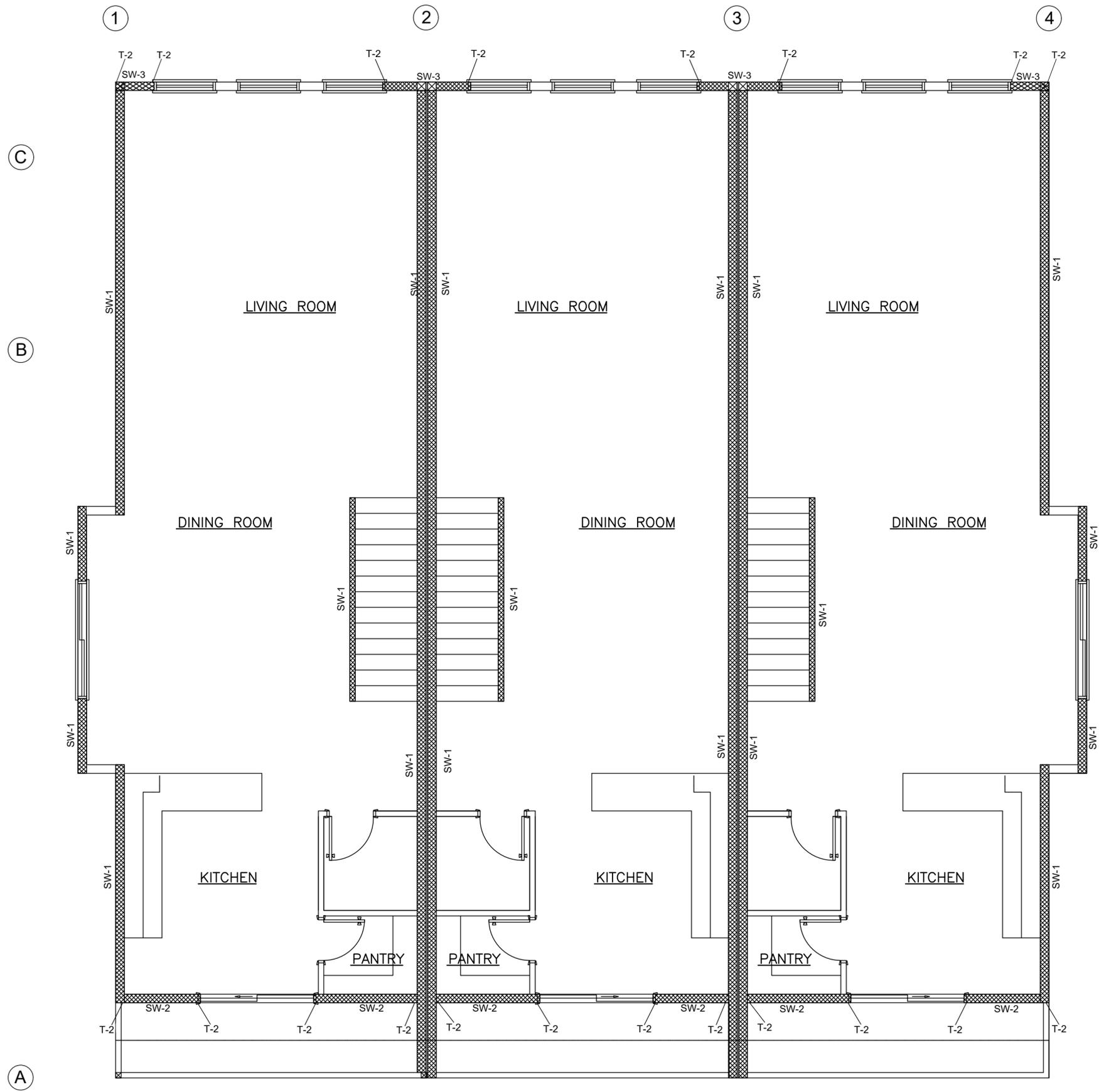
STRUCTURAL DESIGN  
LOWER FLOOR LATERAL

TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY	JBG
CHECKED BY	AG
REVISION DATE	5/23/2022
DESCRIPTION	VERSION 1

APPROVALS

S4



**LATERAL NOTES**

- ▨ SHEAR WALLS
- CONSTRUCTION OF EACH DIAPHRAGM TO BE PER THE STRUCTURAL NOTES ON SHEET S1
- ALL SHEAR WALL CONNECTIONS TO BE PER THE SHEAR WALL SCHEDULE
- SEE ADDITIONAL SHEAR WALL NOTES ON SHEET S1
- PLEASE NOTIFY UPSTATE ENGINEERING OF ANY STRUCTURAL PLAN REVISIONS, INCLUDING WINDOW / DOOR LOCATIONS, PRIOR TO INSPECTION

HOLDOWN SCHEDULE					Date: 5/26/2022
MARK	HOLDOWN STRAP *1	FASTENERS TO STUDS MIN U.N.O.	FOUNDATION ANCHOR *11K4		COMMENTS
T-1	MSTC40	(8) - 16d sinkers to each connected element	N/A		
T-2	MSTC52	(24) - 16d sinkers to each connected element	N/A		
T-3	HDUS-SDS2.5	(14) - SDS 0.25x2.5 WOOD SCREWS	SSTB24		
T-4	HDUS-SDS2.5	(20) - SDS 0.25x2.5 WOOD SCREWS	SSTB28	MIN. DF#2 4X POST	

SHEARWALL SCHEDULE					Date: 5/26/2022
MARK *2	SHEATHING - APPLY TO 2x HF STUDS @ 16" o/c U.N.O. BELOW *9	SHEATHING EDGE NAILS *8	BASE PLATE NAILS *5	ROOF TO TOP PLATE, FLOOR TO TOP PLATE & SILL PLATE *6	SILL PLATE ANCHORS w/ 3" x 3" x 1/4" WASHERS *8
SW-1	7/16" OSB	8d @ 6" o/c (12" o/c field)	16d @ 12" o/c	H1 @ 24" o/c or A35 @ 24" o/c	5/8"x10" AB's @ 60" o/c
SW-2	7/16" OSB	8d @ 4" o/c (12" o/c field)	16d @ 6" o/c	A35 @ 20" o/c	5/8"x10" AB's @ 48" o/c
SW-3	7/16" OSB *7	8d @ 3" o/c (12" o/c field)	16d @ 4" o/c	A35 @ 12" o/c	5/8"x10" AB's @ 36" o/c
SW-4	7/16" OSB *7	8d @ 2" o/c staggered (12" o/c field)	16d @ 3" o/c	A35 @ 10" o/c	5/8"x10" AB's @ 24" o/c
RSW	5/8" PLY *7	10d @ 3" o/c staggered (12" o/c field)			SEE DETAIL 11S1

**SHEAR WALL AND HOLDOWN NOTES**

- (1) HOLDOWNS TO BE SIMPSON OR EQUIVALENT WHERE EQUIVALENT IS PERMITTED. LOCATE HOLDOWNS AT ENDS OF SHEARWALLS, UNO. INSTALL PER MANUFACTURER RECOMMENDATIONS FOR FOUNDATION MINIMUM END DISTANCE AND EMBEDMENT. EXTEND, THICKEN, DEEPEN, ETC. FOUNDATION TO MEET THE MANUFACTURER'S SPECIFICATIONS.
- (2) CONSTRUCT CRIPPLE WALLS AND PONY WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL ABOVE. CONSTRUCT GABLE END WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL BELOW. CONSTRUCT CLERESTORY WALLS PER SW-1, UNO. ALL EXTERIOR WALLS TO BE CONSTRUCTED PER SW-1, UNO.
- (3) 3X OR DBL 2X SILL PLATE REQUIRED.
- (4) USE THREADED ROD AND COUPLER AS REQUIRED.
- (5) COMMON NAILS, UNO:
  - 8d = 0.131" x 2 1/2"
  - 10d = 0.148" x 3"
  - 12d = 0.148" x 3 1/2"
  - 16d = 0.148" x 3 1/4"
- (6) INSTALL H1 CLIPS AT EACH TRUSS/RAFTER END. INSTALL A35 @ 24" OC AT EACH GABLE END AND RIM JOIST (OR SOLID BLOCKING) TO TOP PLATE AND MUDSILL CONNECTION, UNO. WHERE SPACING TIGHTER THAN 24" OC IS SPECIFIED, INSTALL A35 CLIPS FROM SOLID BLOCKING TO DBL TOP PLATE, AND INSTALL H1 OR H2.5 CLIPS TO EACH TRUSS/RAFTER END. LTP4, LTP5 OR LSS0 CAN BE SUBSTITUTED FOR A35 CLIPS PER SIMPSON.
- (7) MINIMUM 3X OR DBL 2X STUDS REQUIRED AT ABUTTING PANEL EDGES. DBL STUDS TO BE LAMINATED W/ (2) 16d @ 6" OC.
- (8) ANCHOR BOLTS SHALL BE EMBEDDED 7" MINIMUM INTO CONCRETE. MIN (2) BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 2" OR LESS THAN (7) BOLT DIAMETERS FROM EACH END OF THE PIECE. MUD SILL TO BE 2X MINIMUM AND PRESSURE-TREATED.
- (9) ALL SHEATHING TO BE APA RATED. SEE GENERAL STRUCTURAL NOTES.

**MAIN FLOOR SHEAR WALLS**  
1/4" = 1'-0"



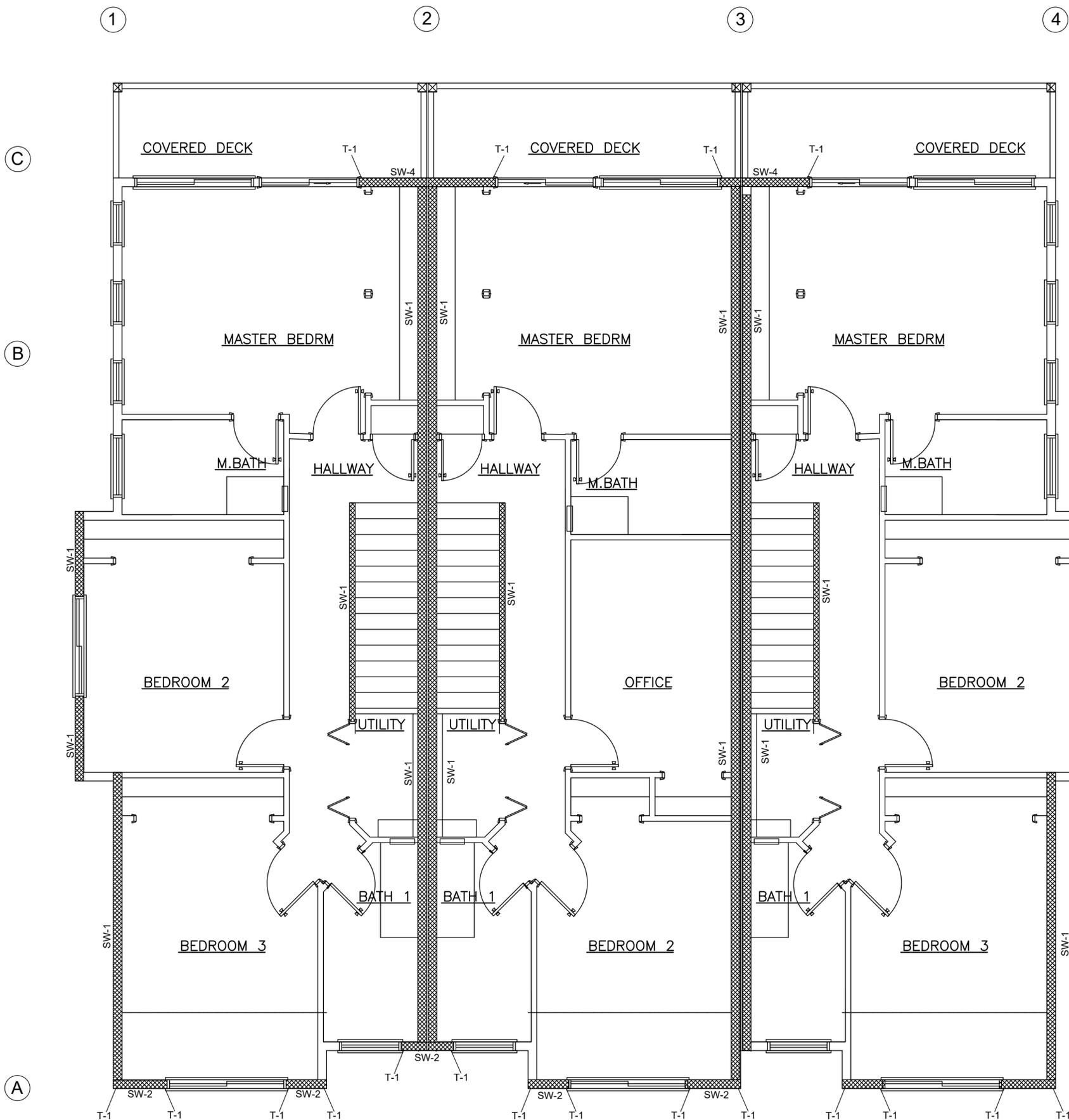
STRUCTURAL DESIGN  
MAIN FLOOR LATERAL

TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY	JBG
CHECKED BY	AG
REVISION DATE	5/23/2022
DESCRIPTION	VERSION 1

APPROVALS

S5



**LATERAL NOTES**

- ▨ SHEAR WALLS
- CONSTRUCTION OF EACH DIAPHRAGM TO BE PER THE STRUCTURAL NOTES ON SHEET S1
- ALL SHEAR WALL CONNECTIONS TO BE PER THE SHEAR WALL SCHEDULE
- SEE ADDITIONAL SHEAR WALL NOTES ON SHEET S1
- PLEASE NOTIFY UPSTATE ENGINEERING OF ANY STRUCTURAL PLAN REVISIONS, INCLUDING WINDOW / DOOR LOCATIONS, PRIOR TO INSPECTION

HOLDOWN SCHEDULE				Date:	5/26/2022
MARK	HOLDOWN / STRAP *1)	FASTENERS TO (2) STUDS MIN U.N.O.	FOUNDATION ANCHOR *1)K4	Job #:	1556
COMMENTS					
T-1	MSTC40	(8) - 16d sinkers to each connected element	N/A		
T-2	MSTC52	(24) - 16d sinkers to each connected element	N/A		
T-3	HDU5-SD82.5	(14) - SDS 0.25x2.5 WOOD SCREWS	SSTB24		
T-4	HDUR-SD82.5	(20) - SDS 0.25x2.5 WOOD SCREWS	SSTB28		MIN. DF#2 4X POST

SHEARWALL SCHEDULE						Date:	5/26/2022
MARK *1)	SHEATHING - APPLY TO 2x HF STUDS @ 16" o.c U.N.O. BELOW *6)	SHEATHING EDGE NAILS *5)	BASE PLATE NAILS *5)	ROOF TO TOP PLATE, FLOOR TO TOP PLATE & SILL PLATE *6)	SILL PLATE ANCHORS w/ 3" x 3" x 1/4" WASHERS *8)	Job #:	1556
COMMENTS							
SW-1	7/16" OSB	8d @ 6" o.c (12" o.c field)	16d @ 12" o.c	H1 @ 24" o.c or A35 @ 24" o.c	5/8" Dia 10" ABS @ 60" o.c		
SW-2	7/16" OSB	8d @ 4" o.c (12" o.c field)	16d @ 6" o.c	A35 @ 20" o.c	5/8" Dia 10" ABS @ 48" o.c		
SW-3	7/16" OSB *7)	8d @ 3" o.c (12" o.c field)	16d @ 4" o.c	A35 @ 12" o.c	5/8" Dia 10" ABS @ 36" o.c		
SW-4	7/16" OSB *7)	8d @ 2" o.c staggered (12" o.c field)	16d @ 3" o.c	A35 @ 10" o.c	5/8" Dia 10" ABS @ 24" o.c		
BSW	5/8" PLY *7)	10d @ 3" o.c staggered (12" o.c field)					SEE DETAIL 11.S1

**SHEAR WALL AND HOLDOWN NOTES**

- (1) HOLDOWNS TO BE SIMPSON OR EQUIVALENT WHERE EQUIVALENT IS PERMITTED. LOCATE HOLDOWNS AT ENDS OF SHEARWALLS. UNO. INSTALL PER MANUFACTURER RECOMMENDATIONS FOR FOUNDATION MINIMUM END DISTANCE AND EMBEDMENT. EXTEND, THICKEN, DEEPEN, ETC. FOUNDATION TO MEET THE MANUFACTURER'S SPECIFICATIONS.
- (2) CONSTRUCT CRIPPLE WALLS AND PONY WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL ABOVE. CONSTRUCT GABLE END WALLS TO MATCH SPECIFICATIONS OF THE SHEAR WALL BELOW. CONSTRUCT CLERESTORY WALLS PER SW-1, UNO. ALL EXTERIOR WALLS TO BE CONSTRUCTED PER SW-1, UNO.
- (3) 3X OR DBL 2X SILL PLATE REQUIRED.
- (4) USE THREADED ROD AND COUPLER AS REQUIRED.
- (5) COMMON NAILS, UNO:
  - 8d = 0.131" x 2 1/2"
  - 10d = 0.148" x 3"
  - 12d = 0.148" x 3 1/2"
  - 16d = 0.148" x 3 1/2"
- (6) INSTALL H1 CLIPS AT EACH TRUSS/RAFTER END. INSTALL A35 @ 24" OC AT EACH GABLE END AND RIM JOIST (OR SOLID BLOCKING) TO TOP PLATE AND MUDSILL CONNECTION, UNO. WHERE SPACING TIGHTER THAN 24" OC IS SPECIFIED, INSTALL A35 CLIPS FROM SOLID BLOCKING TO DBL TOP PLATE, AND INSTALL H1 OR H2.5 CLIPS TO EACH TRUSS/RAFTER END. LTP4, LTP5 OR LS50 CAN BE SUBSTITUTED FOR A35 CLIPS PER SIMPSON.
- (7) MINIMUM 3X OR DBL 2X STUDS REQUIRED AT ABUTTING PANEL EDGES. DBL STUDS TO BE LAMINATED W/ (2) 16d @ 6" OC.
- (8) ANCHOR BOLTS SHALL BE EMBEDDED 7" MINIMUM INTO CONCRETE. MIN (2) BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 2" OR LESS THAN (7) BOLT DIAMETERS FROM EACH END OF THE PIECE. MUD SILL TO BE 2X MINIMUM AND PRESSURE-TREATED.
- (9) ALL SHEATHING TO BE APA RATED. SEE GENERAL STRUCTURAL NOTES.



STRUCTURAL DESIGN  
UPPER FLOOR LATERAL

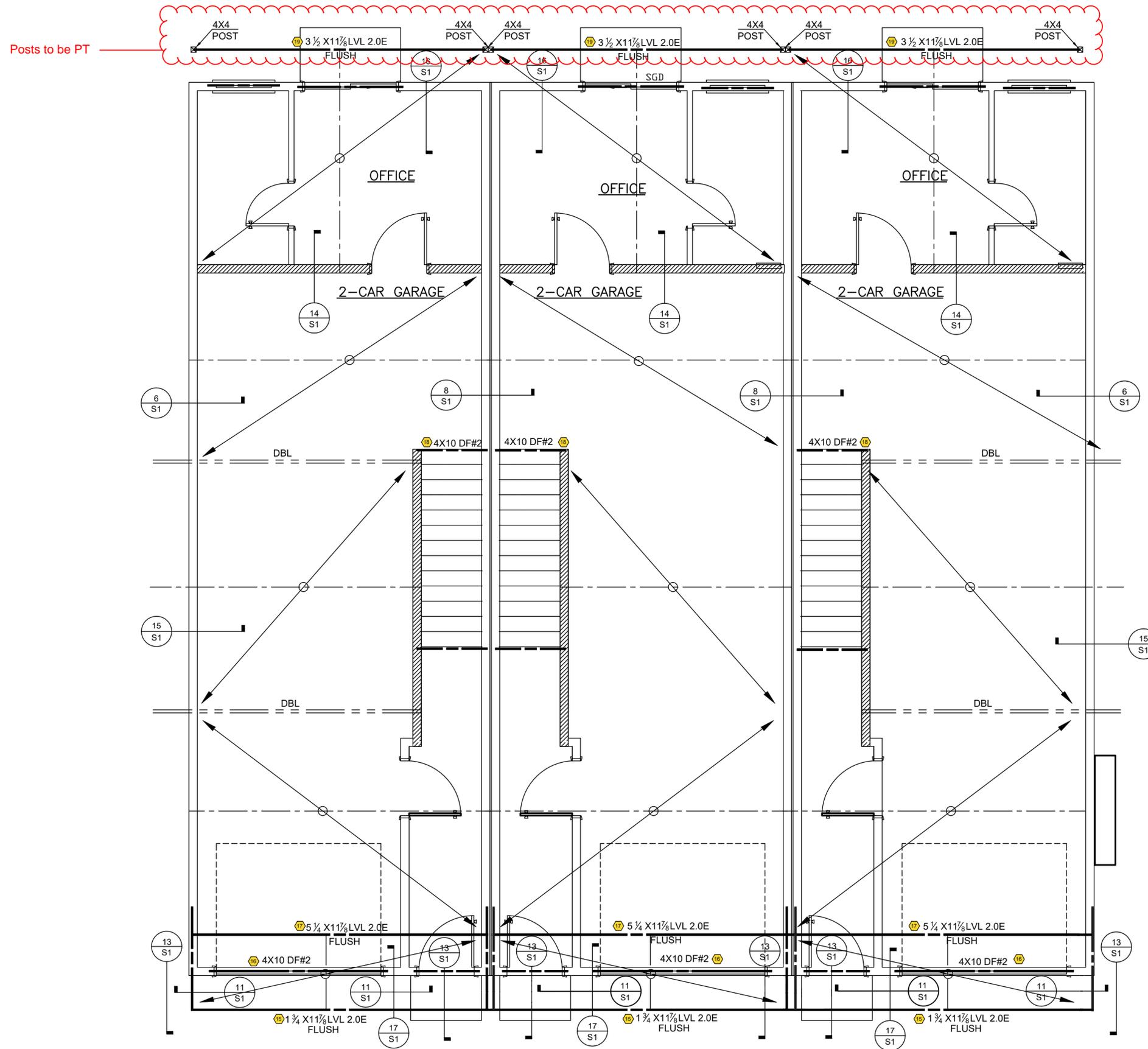
TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY	JBG
CHECKED BY	AG
REVISION DATE	5/23/2022
DESCRIPTION	VERSION 1

APPROVALS

**UPPER FLOOR SHEAR WALLS**  
1/4" = 1'-0"

S6



- MAIN FLOOR FRAMING NOTES**
- ▨ - INTERIOR BEARING WALL
  - ⊗ - BEAM NUMBER
  - ALL BEAMS/HEADERS TO BE 4X8 DF#2 MINIMUM, UNO
  - ALL BEAMS/HEADERS TO BE SUPPORTED WITH DBL 2X POST EA END, UNO
  - LUMBER IN CONTACT WITH OR EXPOSED TO WEATHER TO BE PRESSURE-TREATED
  - HARDWARE AND FASTENERS IN CONTACT WITH CONCRETE, IN USE WITH PRESSURE-TREATED LUMBER, AND/OR EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED OR OTHER APPROVED MATERIAL
  - ALL FLOOR JOISTS TO BE 11 7/8" TJI @ 16"OC, UNO

**UPSTATE**  
 engineering, inc.  
 22002 64TH AVE. W. - SUITE 200, MOUNTLAKE TERRACE WA 98043  
 TEL: (425)354-4105 SERVICES@UPSTATE.COM



STRUCTURAL DESIGN  
 MAIN FLOOR FRAMING

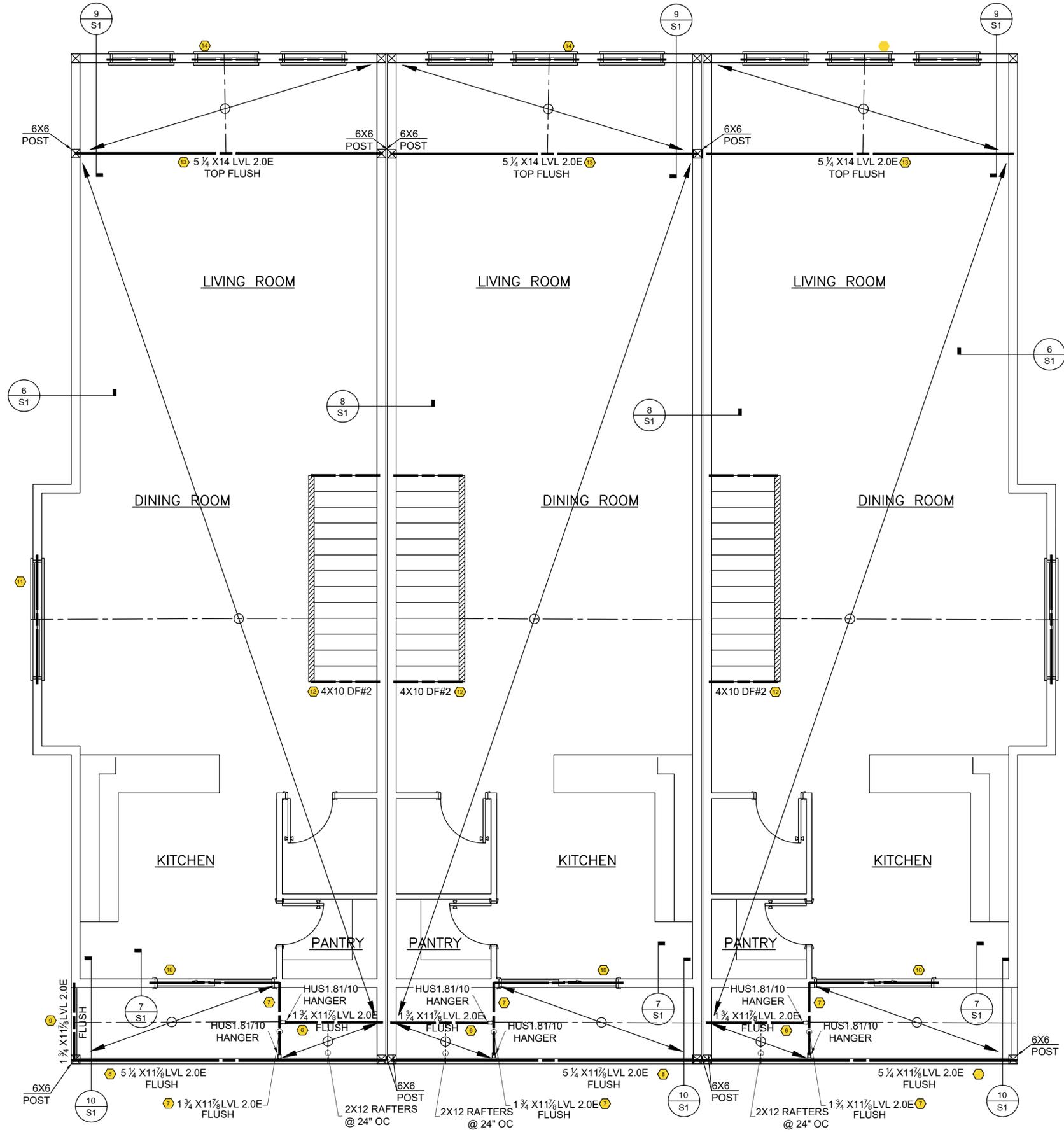
TSARUK 21  
 (3) UNIT TOWNHOMES  
 15025 179TH AVE SE  
 MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY:	JBG
CHECKED BY:	AG
REVISION DATE:	5/23/2022
DESCRIPTION:	VERSION 1

APPROVALS

**MAIN FLOOR FRAMING**  
 1/4" = 1'-0"

**S7**



**UPPER FLOOR FRAMING NOTES**

- ▨ - INTERIOR BEARING WALL
- ⊙ - BEAM NUMBER
- ALL BEAMS/HEADERS TO BE 4X8 DF#2 MINIMUM, UNO
- ALL BEAMS/HEADERS TO BE SUPPORTED WITH DBL 2X POST EA END, UNO
- LUMBER IN CONTACT WITH OR EXPOSED TO WEATHER TO BE PRESSURE-TREATED
- HARDWARE AND FASTENERS IN CONTACT WITH CONCRETE, IN USE WITH PRESSURE-TREATED LUMBER, AND/OR EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED OR OTHER APPROVED MATERIAL
- ALL FLOOR JOISTS TO BE 11 7/8" TJI @ 16" OC, UNO



STRUCTURAL DESIGN  
UPPER FLOOR FRAMING

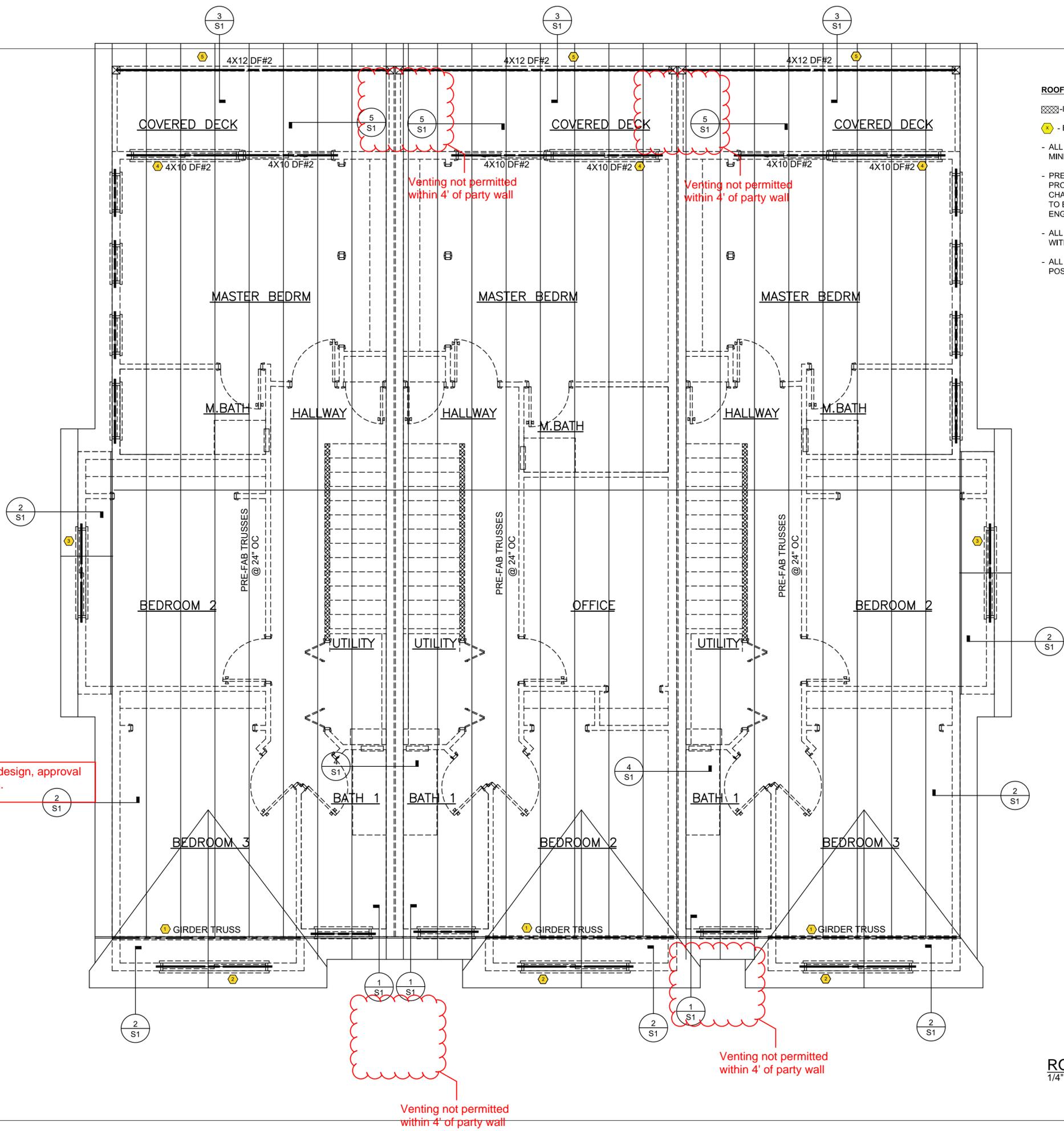
TSARUK 21  
(3) UNIT TOWNHOMES  
15025 179TH AVE SE  
MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY	JBG
CHECKED BY	AG
REVISION DATE	4/27/2022
DESCRIPTION	VERSION 1

APPROVALS

**UPPER FLOOR FRAMING**  
1/4" = 1'-0"

S8



- ROOF FRAMING NOTES**
- ▨ - INTERIOR SHEAR WALL
  - ⦿ - BEAM NUMBERS (SEE CALCULATIONS)
  - ALL BEAMS/HEADERS TO BE 4X8 DF#2 MINIMUM, UNO
  - PREFABRICATED TRUSS DESIGN TO BE PROVIDED BY MANUFACTURER. ANY CHANGES RESULTING FROM TRUSS DESIGN TO BE PROVIDED TO UPSTATE ENGINEERING, INC BEFORE PROCEEDING.
  - ALL BEAMS/HEADERS TO BE SUPPORTED WITH DBL 2X POST EA END, UNO
  - ALL POSTS TO BE SUPPORTED WITH LIKE POSTS TO FOUNDATION, UNO

**UPSTATE**  
 engineering, inc.  
 22002 64TH AVE. W. - SUITE 200, MOUNTLAKE TERRACE WA 98043  
 TEL: (425)354-4105 SERVICES@UPST8.COM



STRUCTURAL DESIGN  
 ROOF

TSARUK 21  
 (3) UNIT TOWNHOMES  
 15025 179TH AVE SE  
 MONROE, WA 98272

UPSTATE JOB #	1556
DRAWN BY:	CHECKED BY:
JBG	AG
REVISION DATE:	DESCRIPTION:
5/23/2022	VERSION 1

APPROVALS

**ROOF FRAMING**  
 1/4" = 1'-0"

S9