

General Notes and Requirements

CONSTRUCTION DOCUMENTS:

- Adapt Building Development LLC retains the Title 17 USC Rights and Ownership of these Construction Documents and all subsequent copies, regardless of the form of the original or other copies. This is not sale of original documents whatsoever.
- Adapt Building Development LLC grants you as a client , rights of use this construction documents for the purpose of constructing one structure.
- Drawings and other accompanying construction documents are Copyrighted. Unauthorized copying of these documents without written permission from Tectonics Building Design is strictly prohibited.
- These documents may not be transferred to any one else without written consent of Tectonics Building Design.
- All changes to these plans must be executed in accordance with Federal and Local codes and regulations.
- Prior to construction, these documents shall be approved by local building department. One set of the construction plans shall be retained by the building official, the other set shall be kept at the site and use as a main construction document.
- While every attempt has been made to assure the accuracy of these drawings, ALL INFORMATION must be verified prior to ordering any raw materials or fabricated components. Any structural components specified are for reference only and must be verified with the ENGINEERING "S-Sheets" and/or attached documents.

GENERAL NOTES:

- Approved site address shall be provided for all new constructions in such position as to be plainly visible from the street fronting the structure.
- Walls and floors separating dwelling units in the same building shall not be less than 1-hr fire resistive construction.
- Garage shall be separated from the residence and its attic area by not less than 1/2" gypsum board applied to the garage side. Garages with habitable rooms shall be separated from all habitable rooms above by not less than 5/8" Type "X" gypsum board.
- R-3 Single-Family residence, duplexes or townhouses shall not exceed 40' in height. (IRC Section 503 Table 503) Zoning regulations or Deed restrictions may limit the height of structure more stringently.
- Dwelling units shall have at least one room with not less than 120 sq.ft. of floor area. Other habitable rooms, except kitchen, shall have an area of not less than 70 sq.ft., and be not less than 7' in any dimension.
- All wood in contact with the ground or embedded in concrete shall be approved pressure-treated wood.
- End of wood girders or masonry walls shall be provided with a 1/2" air space on tops, sides, and ends unless naturally durable or pressure-treated wood used.
- Whether resistive sheathing paper as asphalt -saturated felt must be free from holes and breaks, weighing no less than 14 pound per sq.ft. Such felt shall be applied horizontally with the upper layer lapped over the lower layer not less than 2" and where joints occur, felt shall be lapped not less than 6".
- Provide caulking, sealing, weather stripping to prevent air leakage around:
 - all windows and exterior doors,
 - opening between walls and foundation,
 - opening between walls and roof,
 - opening at all penetrations of the building envelope for utility services.
- All access doors from conditioned to unconditioned spaces (attics, crawl spaces, etc.) shall be weather stripped and insulated to the level equivalent to the insulation on the surrounding surfaces.

FOOTING AND FOUNDATION:

- All footing shall be supported on undisturbed natural soil or engineered fill.
- Footing for masonry fireplaces and chimneys shall be constructed of concrete or solid masonry at least 12" thick and shall extend at least 6" beyond the face of the foundation wall.
- Concrete foundation walls shall extend above finished grade adjacent to the foundation at all points a min. of 4" where masonry used and a min. of 6" elsewhere.
- All exterior footings shall be placed at least 18" below undisturbed ground surface.
- A ground cover of 6 mil. black polyethylene shall be laid over the ground within crawl spaces. The ground cover shall be overlapped 12" and shall extend to the foundation wall. The ground cover may be omitted if crawl space has concrete slab of min. 3 1/2" in thickness.

DRAINAGE NOTES:

- Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded to drain surface water away from foundation walls.

FRAMING NOTES:

- Access to all under floor spaces shall be provided with a min. opening of 18" x 24".
- Under floor clearance shall be a min. of 18" to the floor joist and 12" min. to the wood girders.
- Attic with a minimum vertical height of 30" must be provided with a minimum access opening of not less than 22" x 30".

DOORS AND WINDOWS:

- At least one exit door shall be provided for each dwelling unit. The required exit door shall be a side-hinged door not less than 36" in width and 80" in height.
- Openings from a garage directly into room used for sleeping purposes shall not be permitted. Other opening between garage and residence shall be 20-minute fire-rated doors.
- All sleeping rooms and basement are required to have egress windows. The window shall have a min. net clear openable area of 5.7 sq.ft. The min. net clear openable height shall be 24" and min. openable width shall be not less than 20". The window shall have a finished sill height not more than 44" above the floor. Window wells shall be provided when egress windows have a finished sill height below adjacent ground elevation. The well shall allow the window to be fully opened and provide a min. accessible net clear opening of 9 sq.ft. with a min. dimension of 36". Window wells with a vertical depth of more than 44" shall be provided with a permanent ladder.
- Any change in windows must be approved by the Building Department prior to installation. NFRC compliance sticker shall remain on the windows until the framing inspection has been approved by the Building Department.

VENTILATION NOTES:

- All habitable rooms must be provided with natural light (glazing area min. 8 percent of the floor area of such room) and ventilation, and have a min. openable area to the outdoor of 4 percent of the floor area being ventilated.
- For the purpose of air flow, all interior doors shall be undercut to a min. of 1/2" above the surface of the finished floor covering.

EXHAUST FANS:

- IRC R303.4, Section M1501, M1507. Exhaust fans are required in each kitchen, bathroom, water closet room, laundry facility, indoor swimming pool, spa and other rooms where excess water vapor or cooking odor is produced. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a nuisance and not less than the distances specified in IMC Section 501.2.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Dryer exhaust ducts shall not be exhausted into an attic or crawl space. The termination point shall be located at least 3-feet from property lines, 3-feet in any direction from openings into the buildings and 10-feet from mechanical air intakes.

SEALS AND WEATHERSTRIPPING:

- Apply DuPont FlexWrap self adhesive material into the windows rough opening prior to windows installation, per manufacturer's recommendation.
- Exterior doors and windows shall be designed to limit air leakage into or from the building envelope.
- Exterior joints around windows and door frames, opening between walls and foundation, between walls and roof and wall panels; opening at penetrations of utility services through walls, floors and roofs; and all other openings in the building envelope and between units shall be sealed, caulked, gasketed or weatherstripped to limit air leakage.
- All exterior doors or doors serving as access to an enclosed unheated area shall be weatherstripped to limit leakage around their perimeter when in a closed position.
- Site built windows shall be made tightgitting. Fixed lites shall have glass retained by stops with sealant or caulking all around. Operating sash shall have weatherstripping working against overlapping trim and a closer/latch which will hold the sash closed. The window frame to framing crack shall be made tight with caulking, overlapping membrane or other approved technique.

INSULATION NOTES:

- Wall insulation, attic, vaulted ceiling and under-floor insulation shall be in accordance with a local energy code. Insulate behind tubs and showers. Insulation baffles to maintain min. 1" air space above insulation. Extend baffle 6" above batt insulation. Extend baffle 12" above blown insulation.
- All ductwork shall be insulated without impingement from building surface.
- In deep frost line areas, or as required by local code, water pipes outside of the conditioned space shall be insulated to a min. of R-3.
- All electric hot water heaters must be insulated to a R-10 when located in an unheated space or on a concrete floor.

ROOF NOTES:

- Roof slopes from 2 units vertical by 12 units horizontal up to 4 units vert. and 12 units horizontal, underlayment shall be 2 layers overlapping 19 inches. For slopes of 4 units vert. by 12 units horz. or greater, underlayment shall be 1 layer overlapping 2 inches.

MASONRY:

- Stone and masonry veneers installed over a backing of wood or cold-formed steel shall be limited to the first story above grade and shall not exceed 5" in thickness.

STAIRS AND RAILING NOTES:

- Handrails height measured vertically from the sloped plane adjoining the tread nosing or finished surface of ramped slope, shall be no less than 34"not greater than 38". Spacing between the wall and handrail shall be not less than 1 1/2". All required handrails shall provide adequate graspability.
- All stairways shall have a min. of 6' 8" headroom clearance, measured vertically from the sloped plane. Stairways shall be not less than 36" in clear width at all points. Usable space under stairs shall be protected with 1/2" gypsum board from the enclosed side.
- The max. riser height shall be 7 3/4". The riser shall be measured vertically between leading edges of the adjacent treads. The minimum tread depth shall be 11". The largest tread rise or run may not exceed the smallest by more than 3/8". Winder treads shall have a min. tread depth of 6" at any point.
- There shall be a floor or landing at the top and bottom of each stairway. A flight of stairs shall not have a vertical rise greater than 12.0' between floor levels or landings. The width of each landing shall not be less than the stairway served. Every landing shall have a min. of 36" measured in the direction traveled. Exception: A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs. All interior and exterior stairways shall be provided with a means to illuminate the stairs and landing. The floor or landing at the exit door shall not be more than 1.5" lower than the top of the threshold. There shall be a wall switch at each floor level to control the lighting, where the stairway has six or more risers. The illumination of exterior stairways shall be controlled from inside the dwelling unit.
- Spiral stairways are permitted, provided the min. width of 26" with each tread of min. of 7 1/2" at 12" from the narrower edge. All treads shall be identical and with a max. rise of 9 1/2". A minimum headroom shall be 6' 6". (IRC R311.8.1)
- Porches, balcony, ramps or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36" in height. Open sides of stairs with total rise of more than 30" shall have guards not less than 34" in height measured vertically from the nosing of the treads. Opening in guards must be such that a 4" sphere can not pass through.

SAFETY GLAZING REQUIRED:

- R308.1 Each pane of glass installed in a hazardous location shall be provided with a manufacturer's designation specifying who applied the glazing, designating the type of glass and the safety glazing standard. The designation shall be visible in the final installation and shall be acid etched, sand-blasted, ceramic fired, laser etched, embossed or on that cannot be removed without being destroyed.
- R308.4 Hazardous locations. The following shall be considered specific hazardous locations for the purposes of glazing:
- Glazing in all fixed and operable panels of swinging, sliding and bifold doors. Exceptions:
 - Glazed openings of a size through which a 3-inch diameter (76 mm) sphere is unable to pass.
 - Decorative glazing.

- R308.4.2. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24-inch (610 mm) arc of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface.

- Exceptions:
- Decorative glazing.
 - When there is an intervening wall or other permanent barrier between the door and the glazing.
 - Glazing in walls on the latch side of and perpendicular to the plane of the door in a closed position.
 - Glazing where access through the door is to a closet or storage area 3-ft or less in depth.
 - Glazing that is adjacent to the fixed panel of patio doors.

- R308.4.3. Glazing in an individual fixed or operable panel that meets all of the following conditions:

- The exposed area of an individual pane is larger than 9 square feet.
- The bottom edge of the glazing is less than 18 inches above the floor; and
- The top edge of the glazing is more than 36 inches above the floor; and
- One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing. Exceptions:
 - Decorative glazing.
 - When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot without contacting the glass and be a minimum of 1 1/2 inches (38 mm)in cross sectional height.
 - Outdoor panes in insulating glass units and other multiple glazed panels when the bottom edge of the glass is 25 feet or more above grade, a roof, walking surfaces or other horizontal [within 45 degrees of horizontal] surface adjacent to the glass exterior.

- R308.4.4. All glazing in guards and railings regardless of area or height above a walking surface, including structural baluster panels and nonstructural infill panels. Glass used as a handrail assembly or a guard section shall be firmly supported on all edges. As an option glazing not supported on alledges shall be approved subject to detailed construction documents, detailed shop drawings, and analysis or test data assuring safe performance for the specific installation prepared by a registered design professional shall be required. (ref IBC2403)

- R308.4.5. Glazing and wet surfaces including enclosures or walls facing hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom-exposed edge of the glazing is less than 60 inches measured vertically above any standing or walking surface and less than 60-inches measured horizontally in a straight line from the water's edge of a bathtub, hot spa, or whirlpool, or swimming pool.

- Glazing in walls and fences adjacent to indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches above a walking surface and within 60 inches, measured horizontally and in a straight line, of the water's edge. This shall apply to single glazing and all panes in multiple glazing.

- R308.4.6. Glazing adjacent to stairways, landings and ramps less than 36 inches above the plane of the walking surface.

- Exceptions:
- When a rail is installed on the accessible side(s) of the glazing 34 to 38 inches above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot without contacting the glass and be a minimum of 1 1/2 inches in cross sectional height.
 - Glazing 36-inches or more measured horizontally from the walking surface.

- R308.4.7. Glazing adjacent to the stair landing at the bottom of a stairway where the glazing is less than 36-inches above the landing and within 60 inches horizontally of the bottom tread.

- Exceptions:
- The side of the stairway has a guardrail or handrail, including balusters or in-fill panels, complying with Sections R311.7.6 and R312 and the plane of the glass is more than 18 inches from the guard.

BATH AND SHOWERS:

- All walls and ceilings of bathtub and shower enclosures areas shall be covered with approved waterproof material.
- Shower walls and floors, and walls above the bathtubs with installed shower heads shall be finished with a nonabsorbent material. Such wall surface shall extend to a height of not less than 6'-8" above finished floor.
- Water resistant gypsum board shall not be installed over a vapor retarder in a shower or tub compartments.
- All surfaces immediately adjacent to washer, dryer and laundry tubs shall be surfaced with approved waterproof material.
- All bathroom and utility room floor shall be finished with approved nonabsorptive material.
- Kitchen floor shall be finished with approved nonabsorptive material.
- Shower shall have a min. finished interior floor area of 1024 sq.in. and shall also be capable of encompassing a 30' circle.
- Water closet shall be located in a clear space not less than 30 inches in width. The clear space in front shall be min. of 21 inches.

SKYLIGHTS:

- All skylights must be laminated glass under tempered glass, unless provided with screens. Exs.: Laminated glass need not be provided within individual dwelling units when fully tempered glass is used as single glazing or in both panes of an insulating glass unit when all the following conditions are met:
 - a. The area of each pane or unit shall not exceed 16 sq.ft.
 - b. The highest point of the glass shall not be higher than 12 feet above the walking surface or other accessible area.
 - c. The nominal thickness of each pain shall not exceed 3/16".

FIREBLOCKING:

- Fireblocking shall be provided to cut off all concealed draft openings(vertical and horizontal) and to form an effective fire barrier between stories and the roof spaces. Fireblocking shall be provided in wood framed construction in the following locations:
 - At opening around vents, pipes, and dust at ceiling and floor levels.
 - At all drop ceilings, soffits and cove ceilings.
 - Vertically at the ceiling and floor levels.
 - Horizontally at intervals not exceeding 10 ft.
 - Between stair stringers at the top and bottom of the run.
 - Fireblocking of cornices of a two story dwelling is required at the line of the dwelling unit separation.

CHIMNEY TERMINATION:

- Chimneys for residential-type or low heat appliances shall extend at least 3 feet above the highest point where they pass through a roof of a building and at least of 2 feet higher than any portion of building within horizontal distance of 10 feet.

FIREPLACE HEIGHTS:

- Hearth extensions shall extend at least 16" in front of and at least 8" beyond each side of the fireplace opening. Where the fireplace opening is 6 sq.ft. or larger, the hearth extension shall extend at least 20" beyond each side of the fireplace opening.

WOOD AND LUMBER:

- All wood in contact with concrete or masonry slab that is in direct contact with the earth shall be naturally durable or preservative-treated wood.
- Wood, siding, sheathing and wall framing on the exterior of a building must have a clearance of 6 inches from the ground, except where material used is naturally durable or preservative-treated wood.
- The post and columns shall be restrained to prevent lateral displacement at the bottom end. Wood columns shall be not less than 4" x 4" and steel columns shall be not less than 3 inches dia. standard pipe or equivalent.
- Plywood sub flooring shall be 3/4" T.&G. CDX or 11/16" OSB (glued and nailed).
- Wall and roof sheathing shall be 1/2" CDX or 7/16" OSB nailed per shear wall schedule.
- Wood trusses shall be designed with approved engineering practice. Trusses shall be braced to prevent rotation and provide lateral stability. Roof truss design and a shop drawings shall be provided to the building official at the time of permit application and shall be on site prior to erection. FIELD MEASUREMENTS of building framing must be done (to verify drawing/field accuracy) prior to ordering of Trusses.
- The end of each joist , beam or girder shall have min. of 1 1/2" bearing on wood or metal and min. of 3" on masonry or concrete. Joists framing from opposite sides over a bearing support shall lap a min. of 3" and shall be nailed together with a min. of three 10d face nails.
- Ridge board shall be at least of 1" thickness and not less in depth than the cut end of the rafter. Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. At all valley and hips there shall be a valley or hip rafter min. of 2" thickness and not less in depth than the cut end of the rafters.
- Ceiling joists shall be continuous or securely joined where they meet over interior partitions and nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to the rafters.

MECHANICAL:

- All appliances must be installed per manufacturer specifications.
- Every dwelling unit shall be provided with heating facilities capable of maintaining a min. room temperatures of 68 deg. F in all habitable rooms. Each heating-cooling system shall be provided with at least one temperature control device.
- All warm air furnaces shall be listed and labeled by an approved agency and installed per manufacturer specifications.
- Appliances shall be accessible for inspection, service and replacement without removing permanent construction.
- Appliances having an ignition source shall be elevated such that the source ignition is not less than 18 inches above the floor of garage, and shall be protected from impact by automobiles.
- Appliances designed to be fixed in position shall be fastened or anchored in an approved manor. Temperature and pressure relief valves shall be drained to outside. Drain may not be trapped and must terminate from 2" - 6" from the ground. Where required, an approved expansion tank shall be provided.
- Where applicable, provide water hammer arrestors at all quick-acting valves at plumbing supply.
- Clothes dryer exhaust ducts shall terminate outside the building, and be equipped with a backdraft damper. The max. length of a clothes dryer exhaust shall be not more than 25 ft. from the dryer location to the wall or roof termination. Duct length must be reduced by 2.5 ft. for 45 deg. bend and 5 ft. for 90 deg. bend.
- All showers and tubs shall have pressure balancer or thermostatic controlled mixer valves.
- All heating duct within unconditioned spaces shall be insulated.
- Installer shall leave the manufacturer's installation and operating instructions attached to the appliance.

- VAPOR RETARDER/MOISTURE CONTROL: IRC R702.7 Class I, II, or III, vapor retarders shall be installed on the interior side of the framed walls. Sheet polyethylene, imperforated aluminum foil, kraft-faced fiberglass batts, latex or enamel paints in stalled in accordance with manufacturer specifications are deemed to meet class I, II, or III. Kraft-faced batts shall be face stapled over studs.

- AIR LEAKAGE INCLUDING RECESSED LIGHTING FIXTURES: IECC/WSEC R401.3, R402.4. The building or dwelling shall be tested and verified as having an air leakage rate not exceeding 5 air changes per hour. Testing shall be conducted with a blower door in accordance with IECC/WSEC R402.4.1.2. A written report of the results of the test shall be signed by the party conducting the test and provided to the building inspector during the final inspection. Provisions to limit air leakage shall be provided to those locations separating outdoor ambient conditions from interior spaces that are heated or mechanically cold. Seals & Weather-stripping: a) Exterior joints around windows and door frames, openings between walls and foundation, between walls and roof and wall panels; openings at penetrations of utility services through walls, floors, and roofs; and at all other openings in the building envelope, and between dwelling units shall be sealed, caulked, gasketed or weather-stripped to limit air leakage. Other exterior joints and seams and seams shall be similarly treated or taped, or covered with moisture vapor permeable house wrap. b) All exterior doors or doors serving as access to an enclosed unheated area shall be weather-stripped to limit air leakage around the perimeter when in a closed position. c) Site built windows are exempt from testing but shall be made tight fitting. Fixed lites shall have glass retained by stops with sealant or caulking all around.

- RECESSED LIGHTING FIXTURES shall be type IC rated, and ins and certified under ASTM283 to have no more than 2.0 cfm air movement from the conditioned space to the ceiling cavity. The lighting fixture shall be tested at 75 Pascal's or 1.57-lbs/sq. ft. pressure difference and have a label attached, showing with this test method. Recessed lighting fixtures shall be installed with a gasket or caulk between the fixture and ceiling to prevent air leakage.

ELECTRICAL NOTES:

- Separate permit may be required for electrical, mechanical and plumbing inspections. All electrical wiring and installations shall be as required by state and local electrical codes.
- Provide GFI for all bath receptacles and waterproof outlets with 6'-0" of all sinks and lavs.
- Smoke detectors shall be installed in each sleeping area, outside of each sleeping area in the immediate vicinity of the bedrooms and on each additional story of the dwelling including basement but not crawl space or uninhabitable attics. Smoke detectors shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms. In new construction, the required smoke alarm shall receive their power from the building wiring when such wiring is served, and when primary power is interrupted,shall receive power from a battery. Smoke detectors shall be a min. of 3'-0" from drop opening.
- All receptacles shall be grounded type. Receptacles located in kitchen and bathrooms shall be installed above the work top.
- Outlets in garage, mechanical rooms and unconditioned storage shall be mounted 18" off floor, and shall be GFI circuit.
- All recessed lighting to be thermally protected.
- All ceiling boxes used for support of fans, shall be approved type, and securely fastened to building frame.
- Exterior stairways shall be provided with a light source located in the immediate vicinity of each landing of the stairway.
- All exterior building and landscaping lighting connected to the common house meter must meet high efficiency requirements and controlled by photocell that prevent operation during daylight hours.
- Exterior stairways shall be provided with a light source located in the immediate vicinity of the top of the landing of the stairway. The illumination of exterior stairways shall be controlled from inside the dwelling unit.

- LIGHTING: IECC/WSEC R404 & Chapter 2. A minimum of 75% of permanently installed lamps in lighting fixtures shall be high-efficacy lamps. Fuel gas lighting systems shall not have continuously burning pilot lights. High efficiency lamps are defined in Chapter 2, they include compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps or lamps with an efficacy 1) 60 lumens per watt for lamps over 40 watts; 2) 50 lumens per watt for lamps over 15 watts to 40 watts; 3) 40 lumens per watt for lamps 15 watts or less.

AREA TO BE VENT.		VENTILATION RATES
Kitchen		100 cfm intermittent or 25 cfm continuous
Bathroom/Toilet Room		50 cfm intermittent or 20 cfm continuous
TABLE M1508.6.2 PRESCRIPTIVE SUPPLY FAN DUCT SIZING		
Supply Fan Tested CFM at 0.40" WG		
Specified Volume from Table 408.1	Minimum Smooth Duct Diameter	Minimum flexible Duct Diameter
50 - 90 CFM	4 INCH	5 INCH
90 - 150 CFM	5 INCH	6 INCH
150 - 250 CFM	6 INCH	7 INCH
250 - 400 CFM	7 INCH	8 INCH

Please revise the plans and all notes to conform to the 2018 IBC and WSEC [1570 PLANS, sheet A1.0].

NOTES PER 2015 IBC & WSEC

TABLE R402.1.1

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENTa

CLIMATE ZONE	5 AND MARINE 4	6
FENESTRATION U-FACTORb	0.30	0.30
SKYLIGHT U-FACTOR	0.50	0.50
GLAZED FENESTRATION SHGCc, e	NR	NR
CEILING R-VALUEj	49	49
WOOD FRAME WALL R-VALUE	21 int	21+5di
Mass Wall R-Valuei	21/21h	21+5h
FLOOR R-VALUE	30g	30g
BELOW-GRADEc,k WALL R-VALUE	10/15/21 int + TB	10/15/21 int + TB
SLABd R-VALUE & DEPTH	10, 2ft	10 , 4ft

The notes on this sheet are for residential structures, and most are sections from the International Residential Code. Please remove all residential notes and include relevant commercial notes that apply to this specific project [1570 PLANS, sheet A1.0].

Please include the following Code Summary information:
Proposed Use, Construction Type, Occupancy Group Classification, Allowable Area, and Actual Area. [1570 PLANS, sheet A1.0].

- 1 foot = 304.8 mm, ci = continuous insulation, int = intermediate framing.
- a R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.
- b The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones1 through 3 where the SHGC for such skylights does not exceed 0.30.
- c "10/15/21.+TB" means R-10 continuous insulation on the exterior of the wall, or R-15 on the continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21.+TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall. "TB" means thermal break between floor slab and basement wall.
- d R-10 continuous insulation is required under heated slab on grade floors. See R402.2.9.1.
- e There are no SHGC requirements in the Marine Zone.
- f Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and table R301.1.
- g Reserved.
- h First value is cavity insulation, second is continuous insulation or insulated siding, so "13.+5" means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40 percent or less of the exterior, continuous insulation R-value shall be permitted to be reduced by no more than R-3 in the locations where structural sheathing is used to maintain a consistent total sheathing thickness.
- i The second R-value applies when more than half the insulation is on the interior of the mass wall.
- j For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38.
- k Int. (intermediate framing) denotes standard framing 16 inches on center with headers insulated with a minimum of R-10 insulation.
- l Log and solid timber walls with a minimum average thickness of 3.5 inches are exempt from this insulation requirement.

Ventilation requirements are met through the prescriptive method with fresh air provided through an integrated forced air system supplying fresh air through the forced air system and exhaust through the whole house fan.

INTERMITTENT WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED-AIR SYSTEM. (Make-up air through the furnace). IRC M1507.5. Integrated ventilation systems shall provide outdoor air at the rate calculated using Table M1507.3.3. The ventilation system shall distribute outdoor air to each habitable room through the forced-air system ducts. The outside air inlet duct shall terminate outside of the building and be connected to the return air plenum of the forced air system at a point within 4-ft upstream of the air handler. The outdoor inlet shall be connected upstream of the forced air system blower and shall not be connected directly into the furnace cabinet. The system shall be provided with a motorized damper connected to the automatic ventilation control as specified in M1507.3.2. The required flow rate shall be verified by field-testing with a flow hood or a flow measuring station. A copy of the testing report shall be provided to the inspector during inspection. The system shall be controlled by a 24-hour clock timer with the capability of continuous operation, manual and automatic. This control will control the forced air system blower and the automatic damper. The 24-hour Timer shall be readily accessible and capable of operating the whole house ventilation system without energizing other energy-consuming appliances. At the time of inspection the automatic control timer shall be set to operate at least 8-hours a day. A label shall be affixed to the control that reads, "Whole House Ventilation (see operating instructions)".

TABLE 403.8.4.2
PRESCRIPTIVE EXHAUST DUCT SIZING

Fan Tested CFM @ .25" W.G.	Minimum Flex Diameter	Max. Length Feet	Minimum Smooth Diameter	Max. Length Feet	Maximum Elbows*
50	4 inch	25	4 inch	70	3
50	5 inch	90	5 inch	100	3
50	6 inch	No Limit	6 inch	No Limit	3
80	4 inch**	N/A	4 inch	20	3
80	5 inch	15	5 inch	100	3
80	6 inch	90	6 inch	No Limit	3
100	5 inch**	N/A	5 inch	50	3
100	6 inch	45	6 inch	Mo Limit	3
125	6 inch	15	6 inch	No Limit	3
125	7 inch	70	7 inch	No Limit	3
* For each additional elbow subtract 10 feet from length. ** Flex ducts of this diameter are not permitted with fans of this size.					

ADAPT

Building Development

Legend Auto Addition

1632 River Road
Puyallup, WA 98371

NOTES

Project number2201

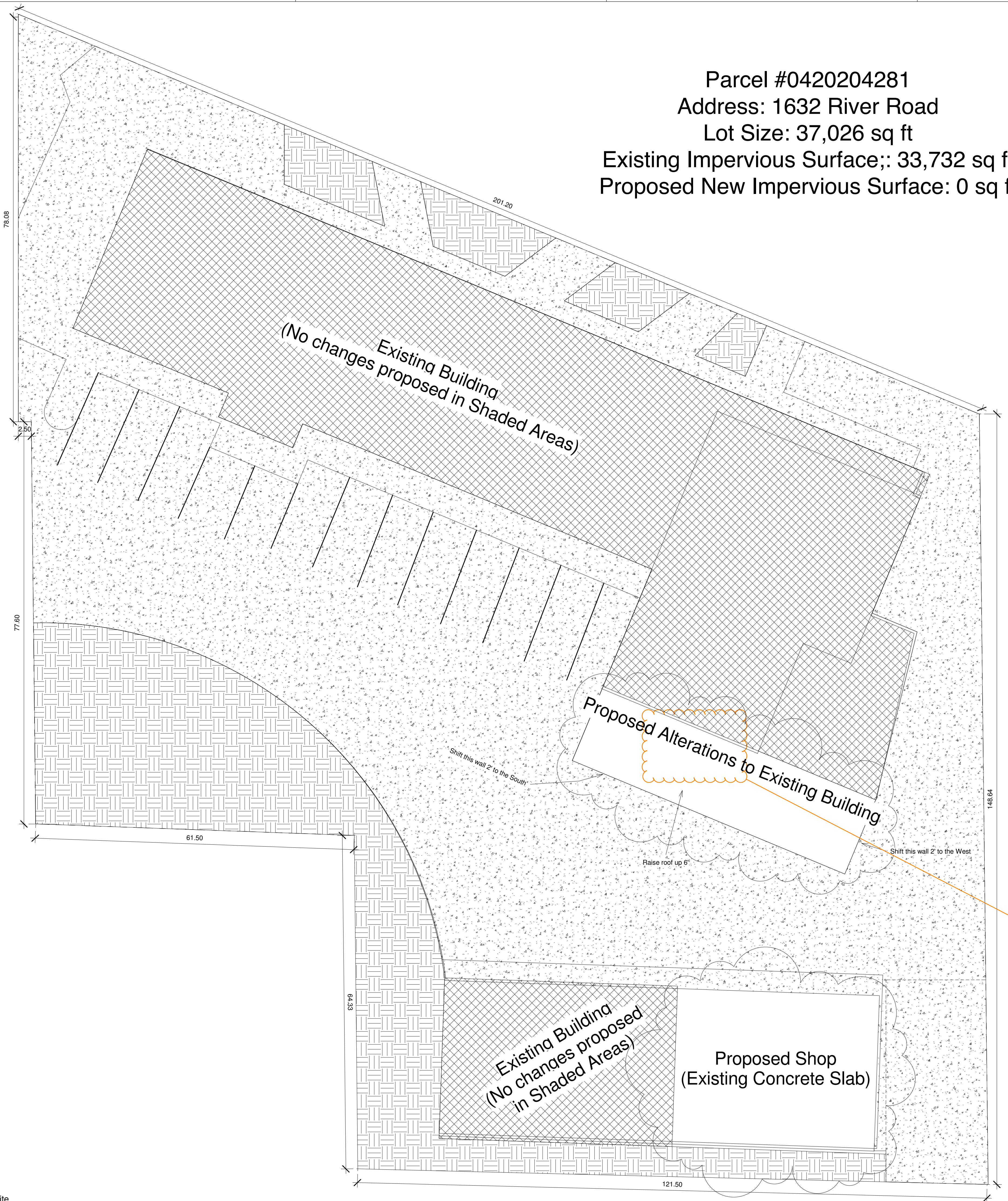
Date02/04/22

Drawn byFK.

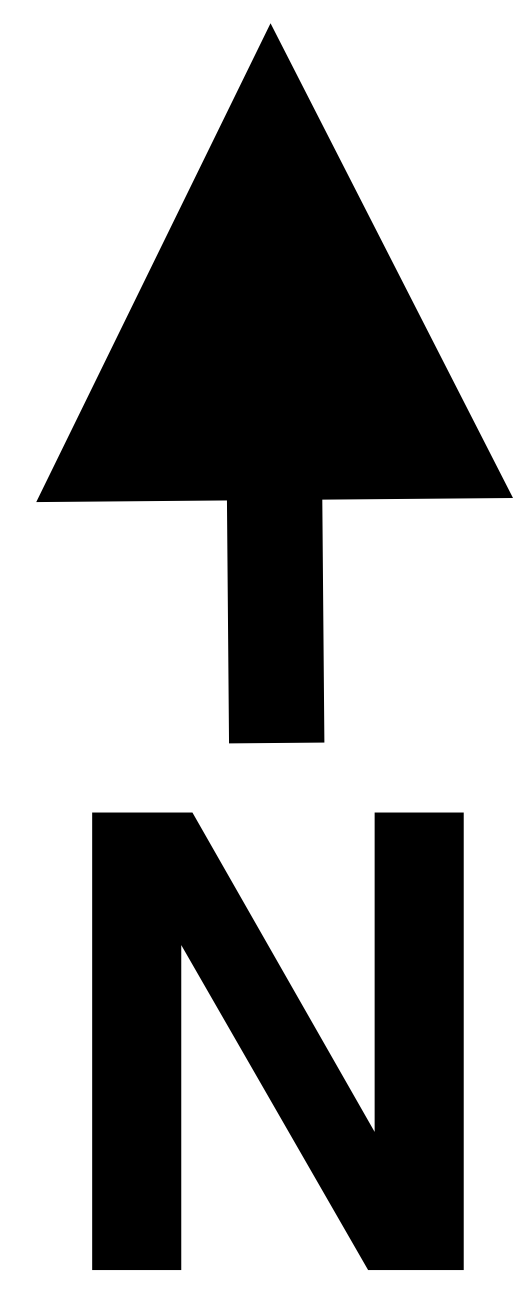
Phone253-722-4864

A1.0

Scale



Parcel #0420204281
Address: 1632 River Road
Lot Size: 37,026 sq ft
Existing Impervious Surface;: 33,732 sq ft
Proposed New Impervious Surface: 0 sq ft



Legend Auto Addition

Attached in CityView you will find a document titled All Methods of Downspout Control. Methods described in this document must be implemented for the control of roof downspouts. Provide the

Attached in CityView you will find a document titled All Methods of Downspout Control. Methods described in this document must be implemented for the control of roof downspouts. Provide the City detailed information on methods that will be used. [1570 PLANS* Site Plan Sheet A2.0]

DETAIL. Methods described in this document must be implemented for sediment and erosion control during construction. Provide the City detailed information on the methods that will be used. [1570 PLANS* Site Plan Sheet A2.0]

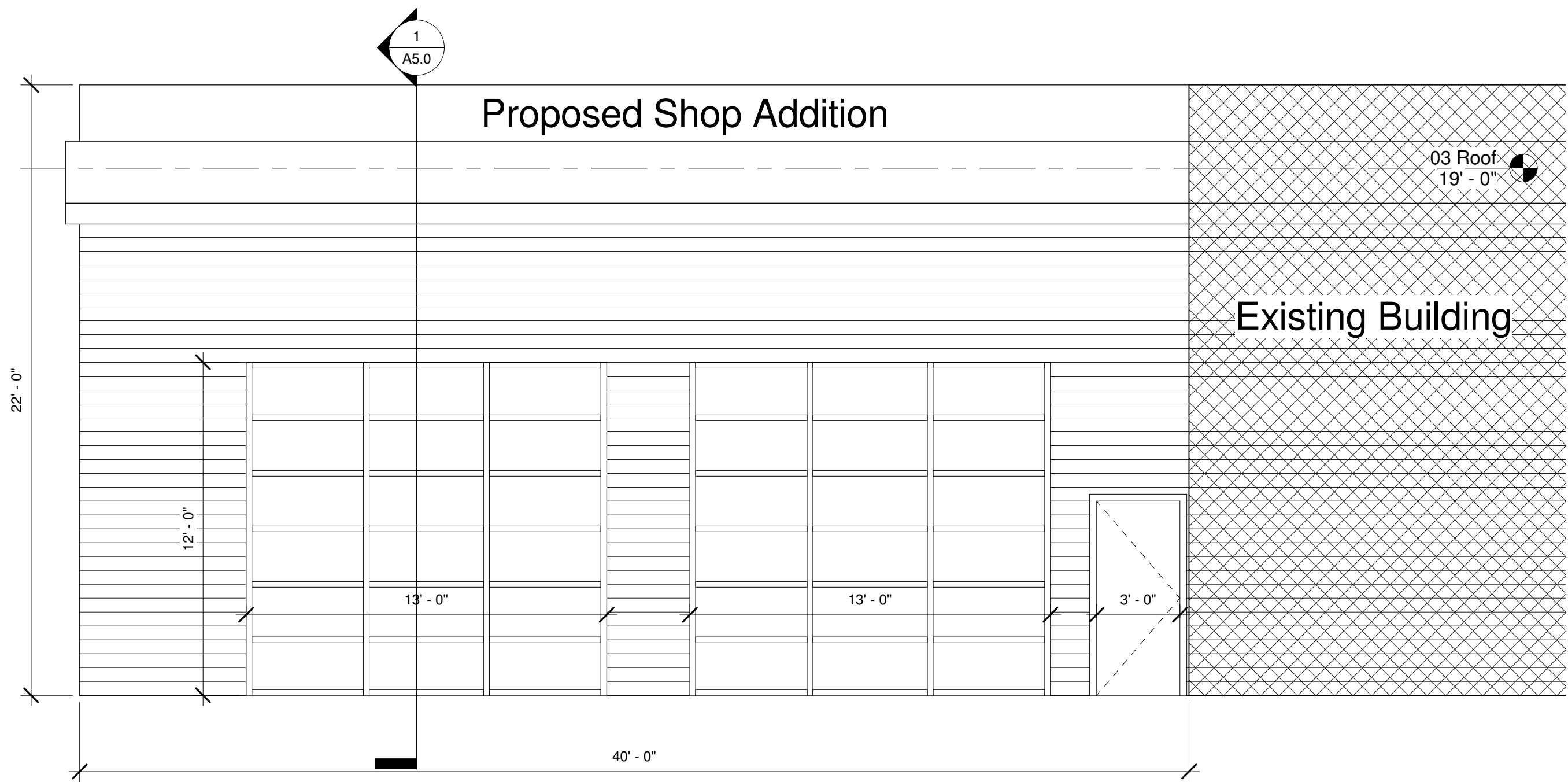
Please provide the following dimensions on the site plan:
Length and Width of each proposed structure
Distance from each proposed structure to the property lines
[1570 PLANS, sheet A2.0].

The scope of work at this area would categorize this as an addition as everything, including the foundation, is new
[1570 PLANS, sheet A2.0].

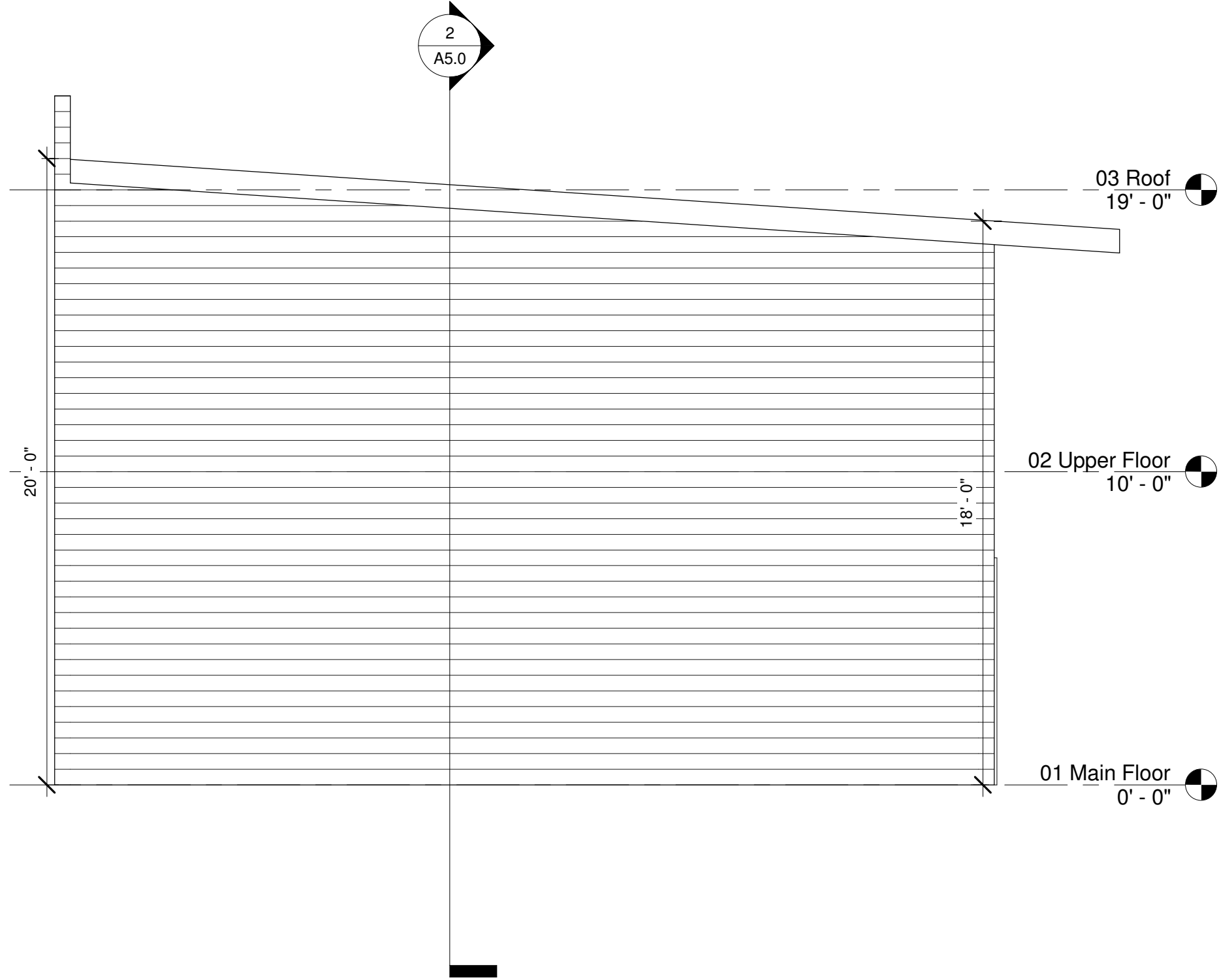
Site Plan
1632 River Road
Puyallup, WA 98371

Project number	2307
Date	06-16-2023
Drawn by	FK.
Phone	253-722-4864
A2.0	
Scale	1" = 10'-0"

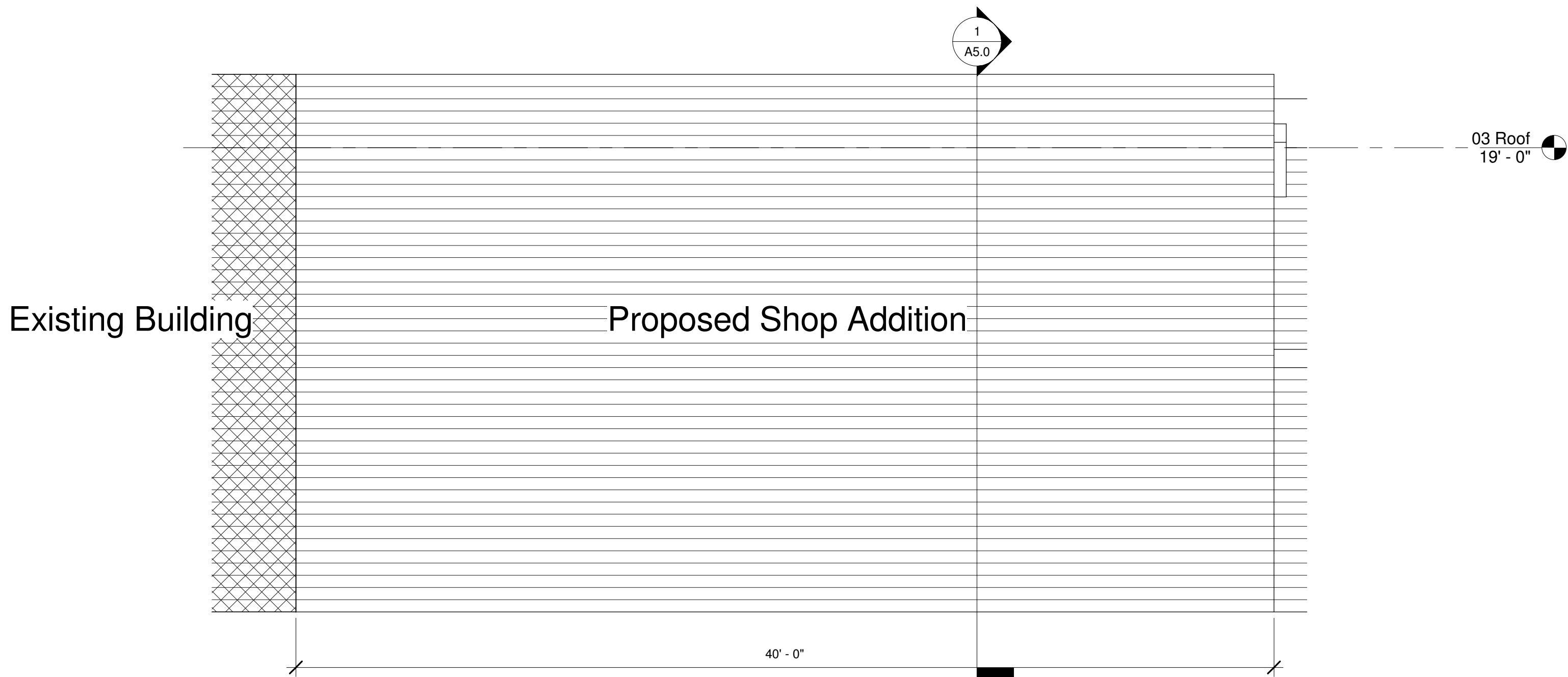




② Proposed Shop South Elevation
1/4" = 1'-0"



③ Proposed Shop West Elevation
1/4" = 1'-0"



① Proposed Shop North Elevation
1/4" = 1'-0"



Legend Auto Addition

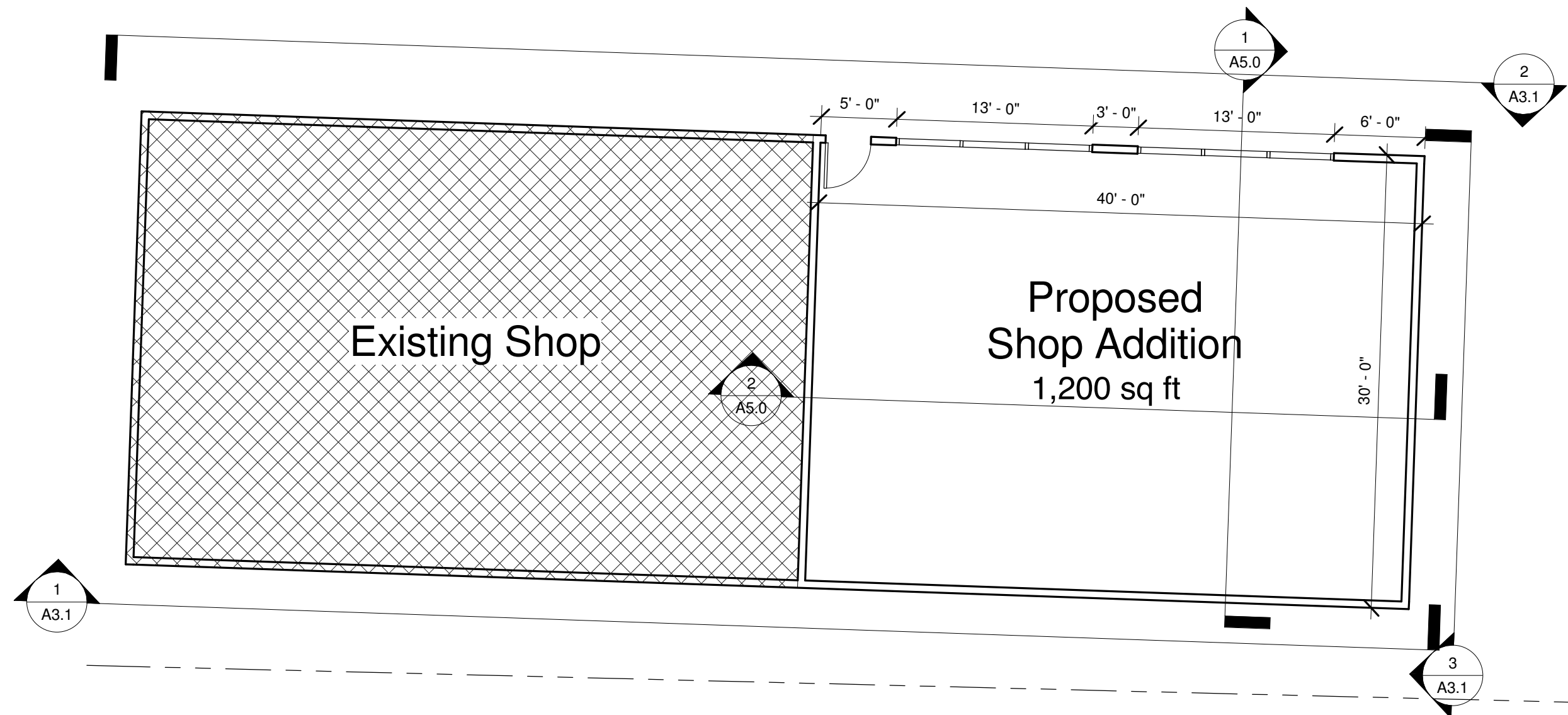
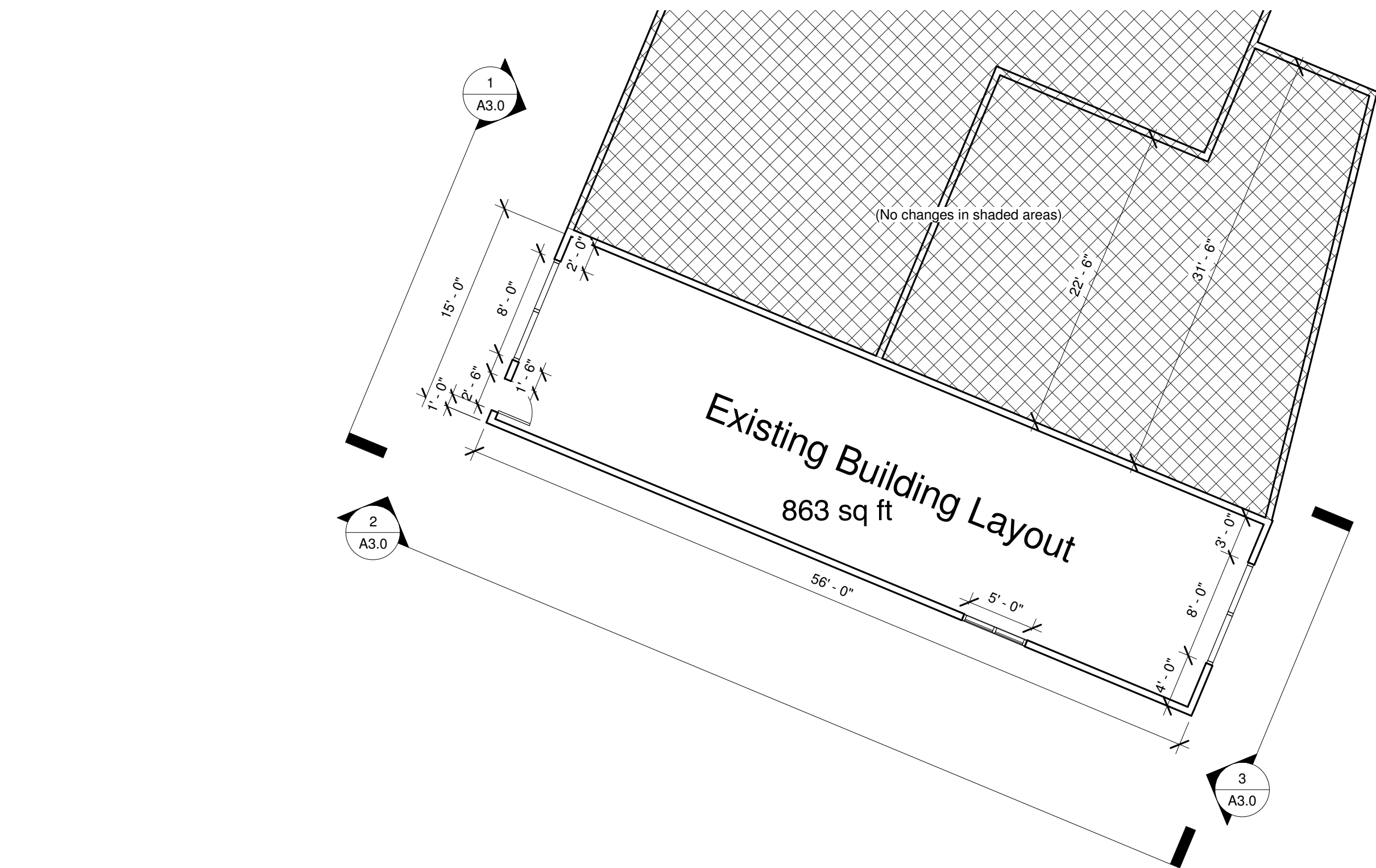
Shop Elevations

1632 River Road
Puyallup, WA 98371

Project number	2307
Date	06-16-2023
Drawn by	FK.
Phone	253-722-4864

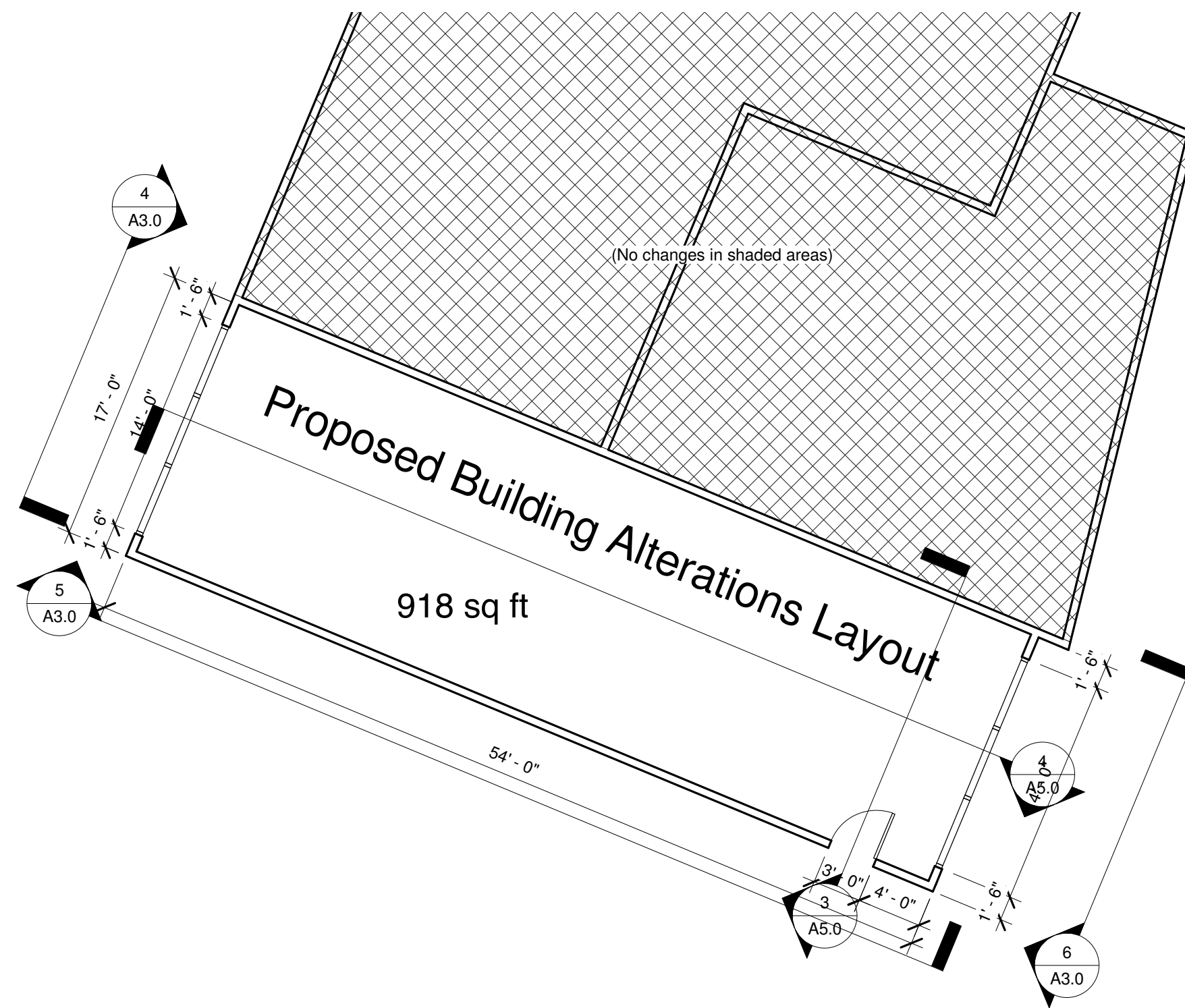
A3.1

Scale 1/4" = 1'-0"



1 01 Main Floor
1/8" = 1'-0"

The Energy Worksheets reference sheet A4.0 for all applicable Energy Code calculations, equipment information, etc.; however, no Energy Code information is provided on sheet A4.0 or anywhere else in the plan set. Please provide all necessary Mechanical, Lighting, and Electrical drawings [1570 PLANS, sheet A4.0].



Please note the uses for the new space and existing spaces (shop, office, retail, etc.). Note any separation requirements between the revised space and existing spaces per the 2018 International Building Code [1570 PLANS, sheet A4.0].



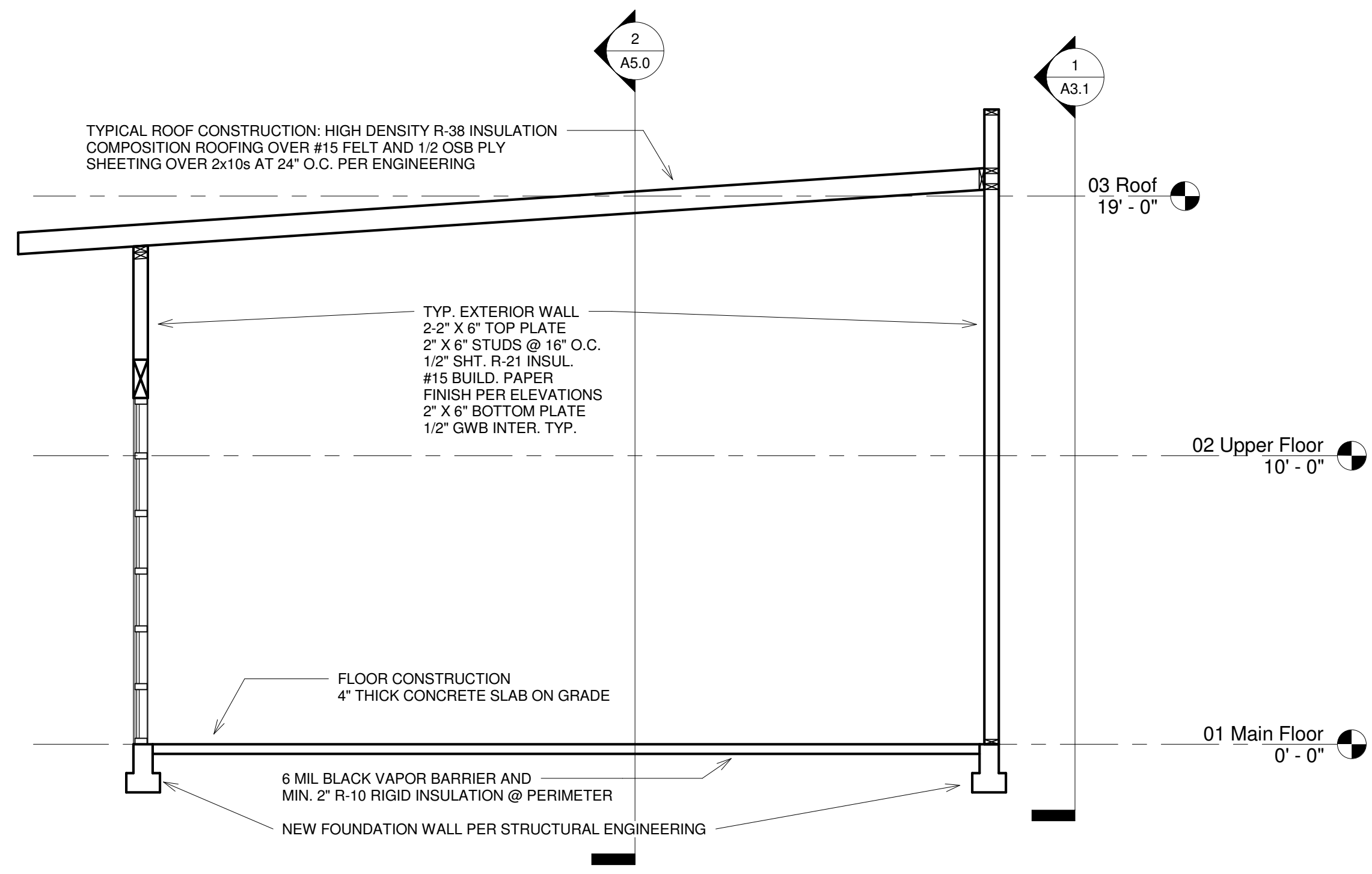
Legend Auto Addition

Floor Plans
1632 River Road
Puyallup, WA 98371

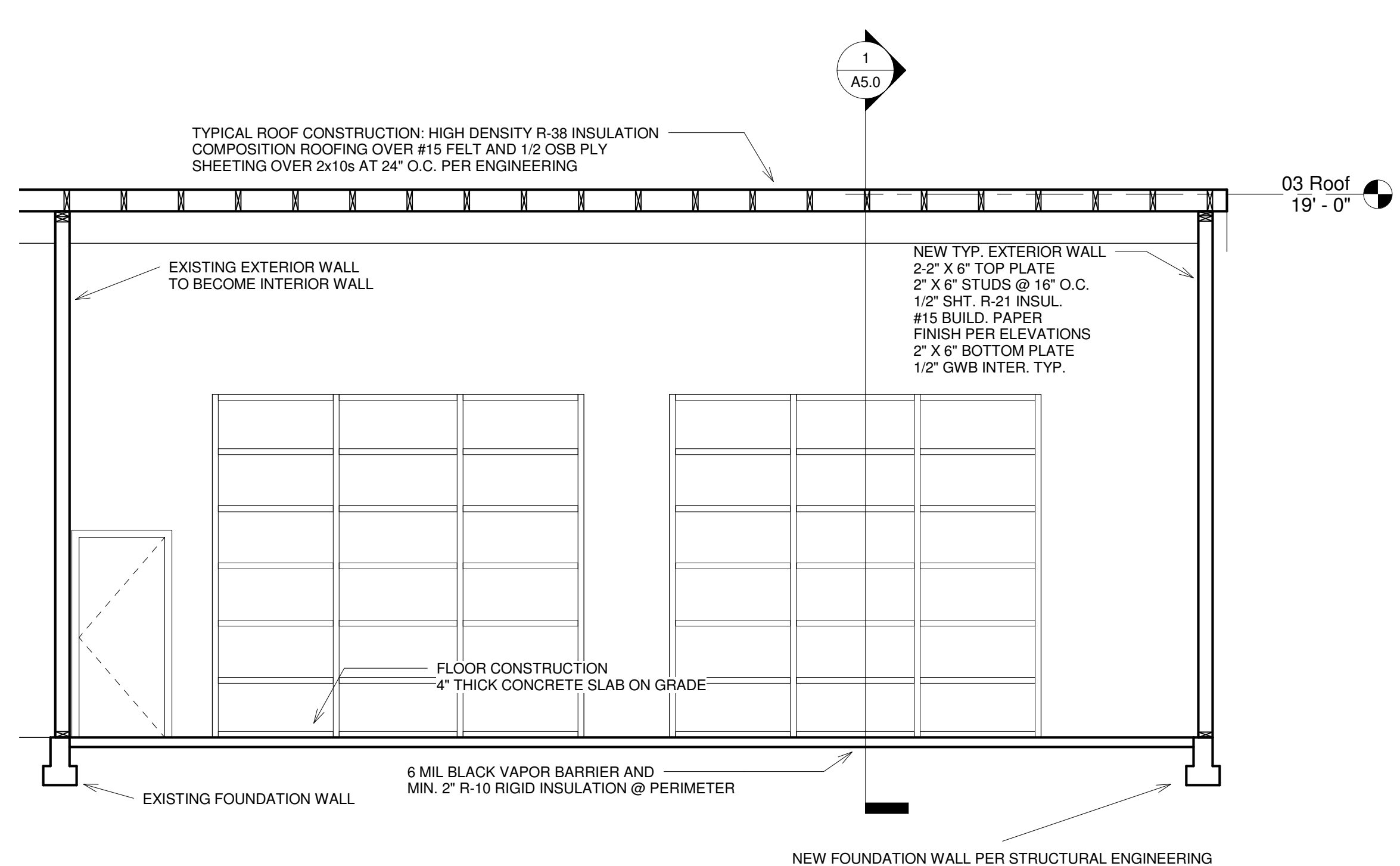
Project number 2307
Date 06-16-2023
Drawn by FK.
Phone 253-722-4864

A4.0

Scale 1/8" = 1'-0"

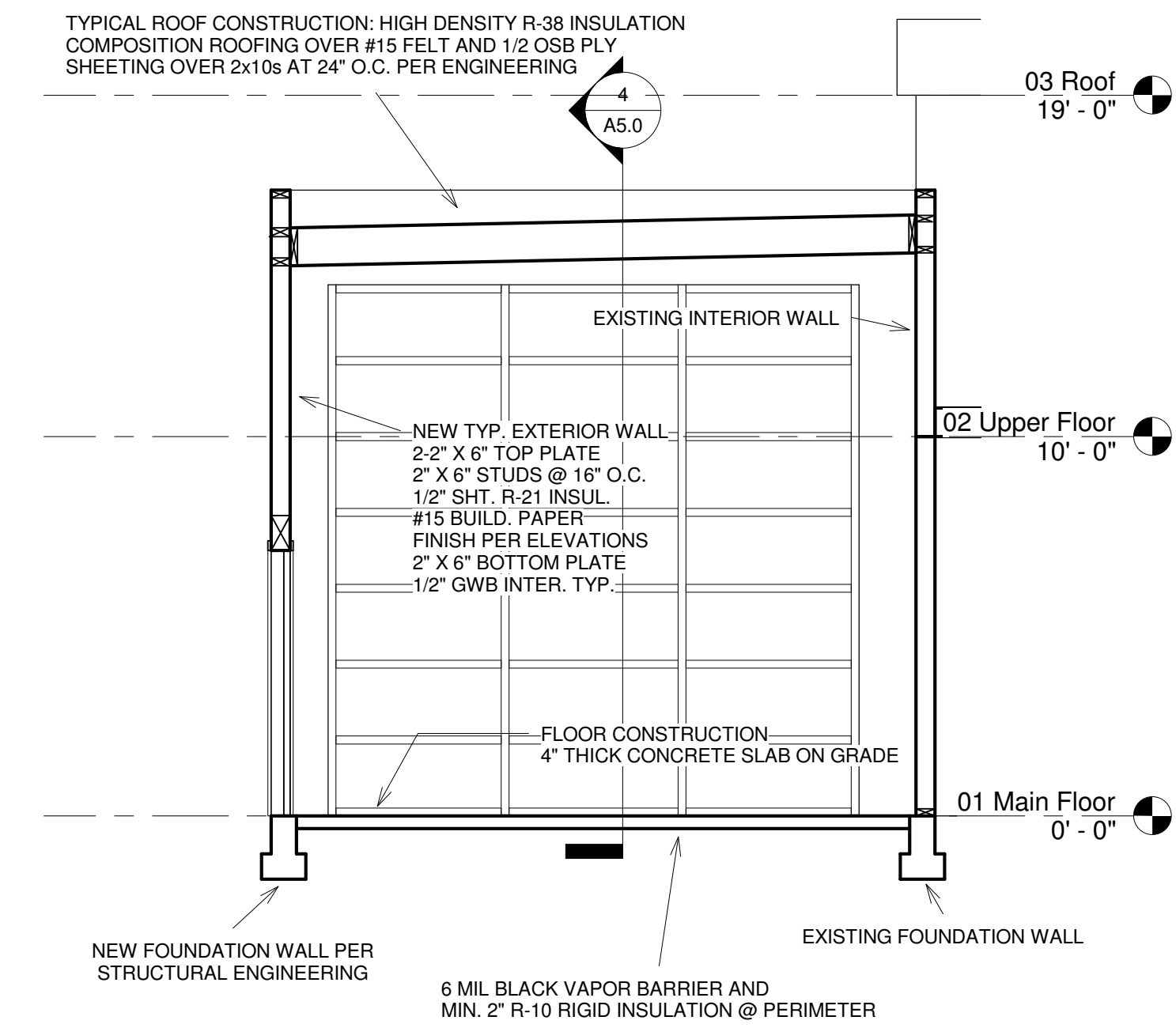


1 PROPOSED SHOP SECTION 1
1/4" = 1'-0"

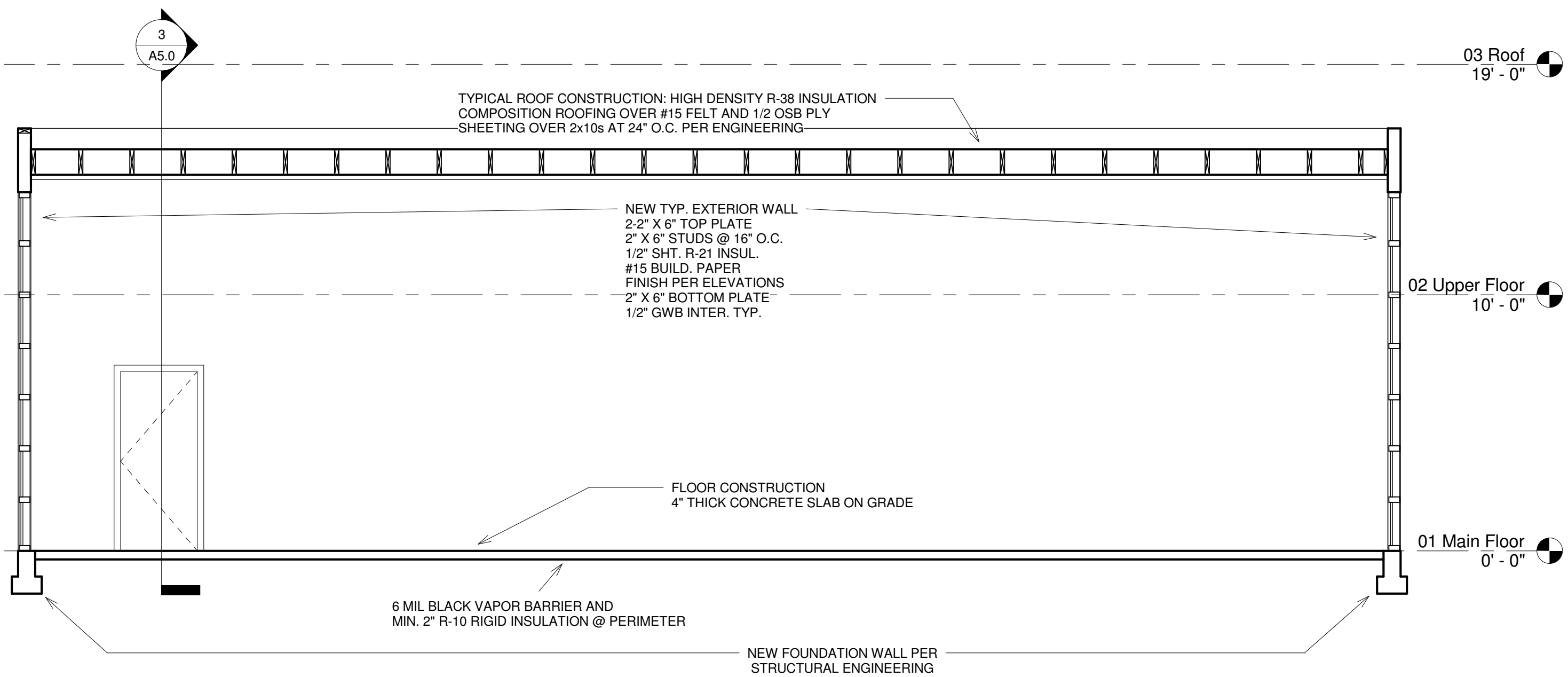


2 PROPOSED SHOP SECTION 2
1/4" = 1'-0"

Please detail how the proposed vehicle doors will operate (roll up, tilt up, etc.). Include relevant tracks, machinery, operable space, and all manufacturer's specifications and requirements. [1570 PLANS, sheet A5.0].



3 PROPOSED ALTERATION SECTION 1
1/4" = 1'-0"



4 PROPOSED ALTERATION SECTION 2
1/4" = 1'-0"

Legend Auto Addition

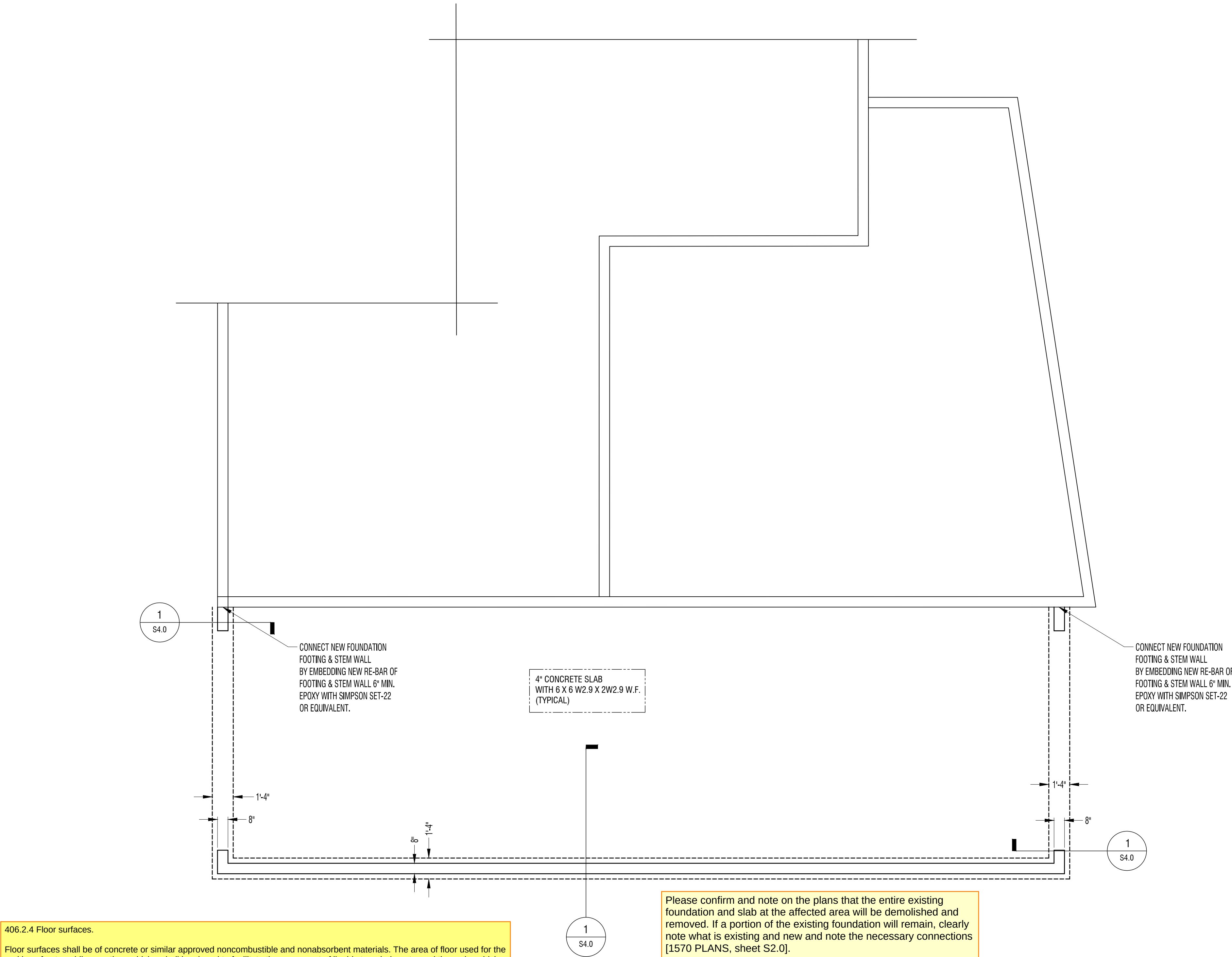
SECTIONS

1632 River Road
Puyallup, WA 98371

Project number 2307
Date 06-16-2023
Drawn by FK.
Phone 253-722-4864

A5.0

Scale 1/4" = 1'-0"



406.2.4 Floor surfaces.

Floor surfaces shall be of concrete or similar approved noncombustible and nonabsorbent materials. The area of floor used for the parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway. The surface of vehicle fueling pads in motor fuel-dispensing facilities shall be in accordance with Section 406.7.1.

Exceptions:

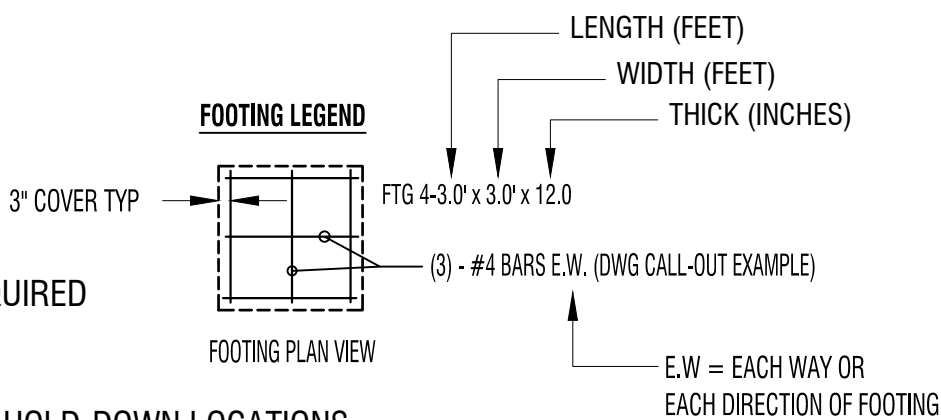
- 1.Asphalt parking surfaces shall be permitted at ground level for public parking garages and private carports.
- 2.Floors of Group S-2 parking garages shall not be required to have a sloped surface.
- 3.Slip-resistant, nonabsorbent, interior floor finishes having a critical radiant flux not more than 0.45 W/cm2, as determined by ASTM E648 or NFPA 253, shall be permitted in repair garages.

Please confirm and note on the plans that the entire existing foundation and slab at the affected area will be demolished and removed. If a portion of the existing foundation will remain, clearly note what is existing and new and note the necessary connections [1570 PLANS, sheet S2.0].

FOUNDATION PLAN

- 3 X 3 X 1/4" GALVANIZED PLATE WASHER IS REQUIRED
- EMBED ANCHOR BOLTS 7.5" MIN
- REFER TO SHEAR WALL PLANS FOR HOLD-DOWN LOCATIONS

● THE FOUNDATION PLAN SHOWN ON THIS SHEET PROVIDES THE FOOTING SIZES AND DIMENSIONS, ALONG WITH THE STRUCTURAL DETAILS. REFER TO THE ARCHITECTURAL DWGS FOR OVERALL DIMENSIONS (WHICH IS THE BASIS OF THE DESIGN).



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PROJECT NAME: LEGEND AUTO ADDITION

PROJECT ADDRESS:
1632 RIVER ROAD
PUYALLUP WA 98371

DWG TITLE
MAIN BLDG FOUNDATION PLAN

Date

10-30-2023

Revision

CURRENT VERSION

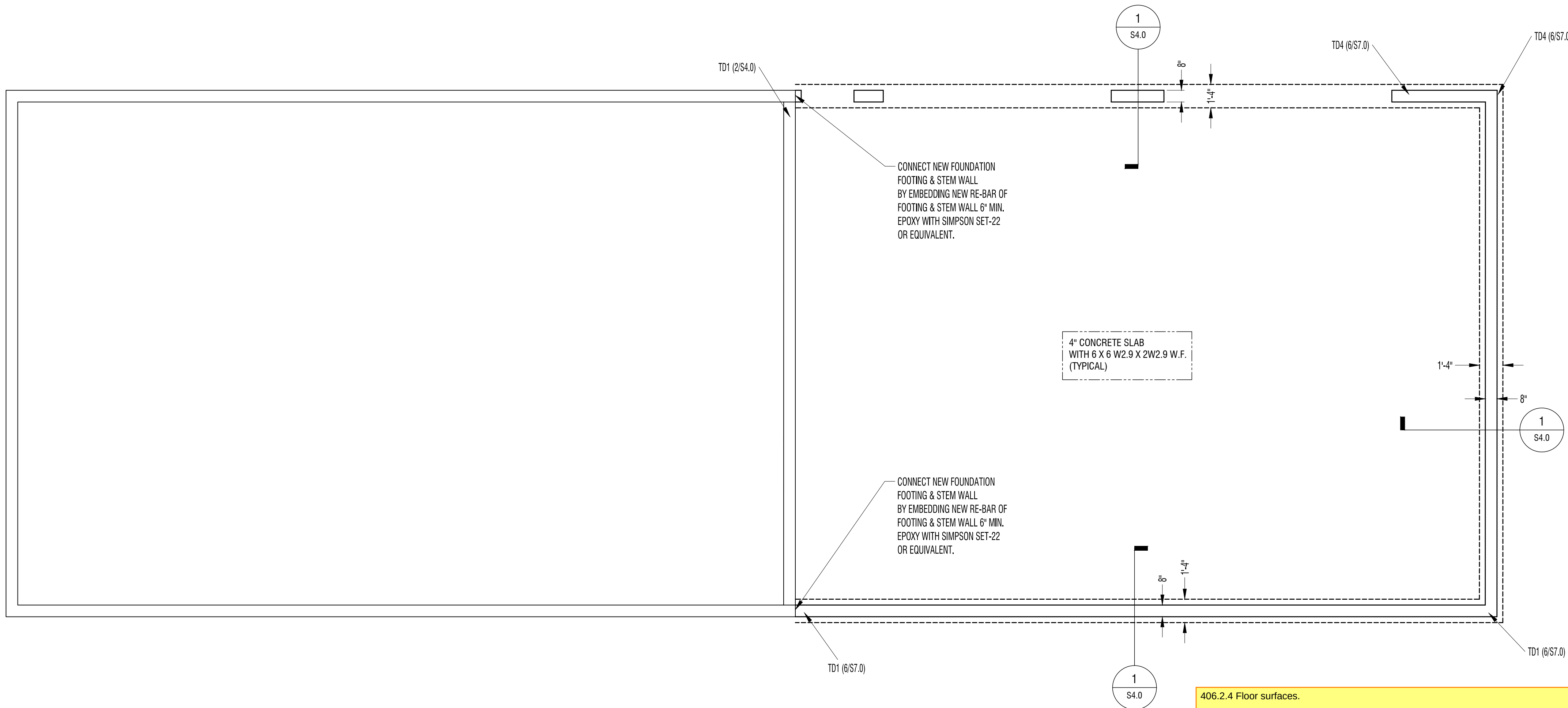


PROJECT #

Z9-3288

SHEET NO

S2.0



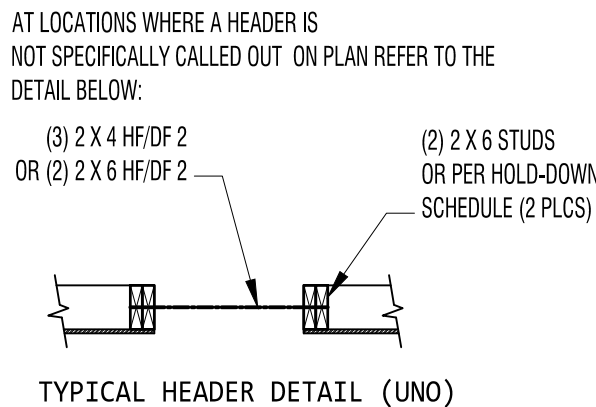
406.2.4 Floor surfaces.

Floor surfaces shall be of concrete or similar approved noncombustible and nonabsorbent materials. The area of floor used for the parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway. The surface of vehicle fueling pads in motor fuel-dispensing facilities shall be in accordance with Section 406.7.1.

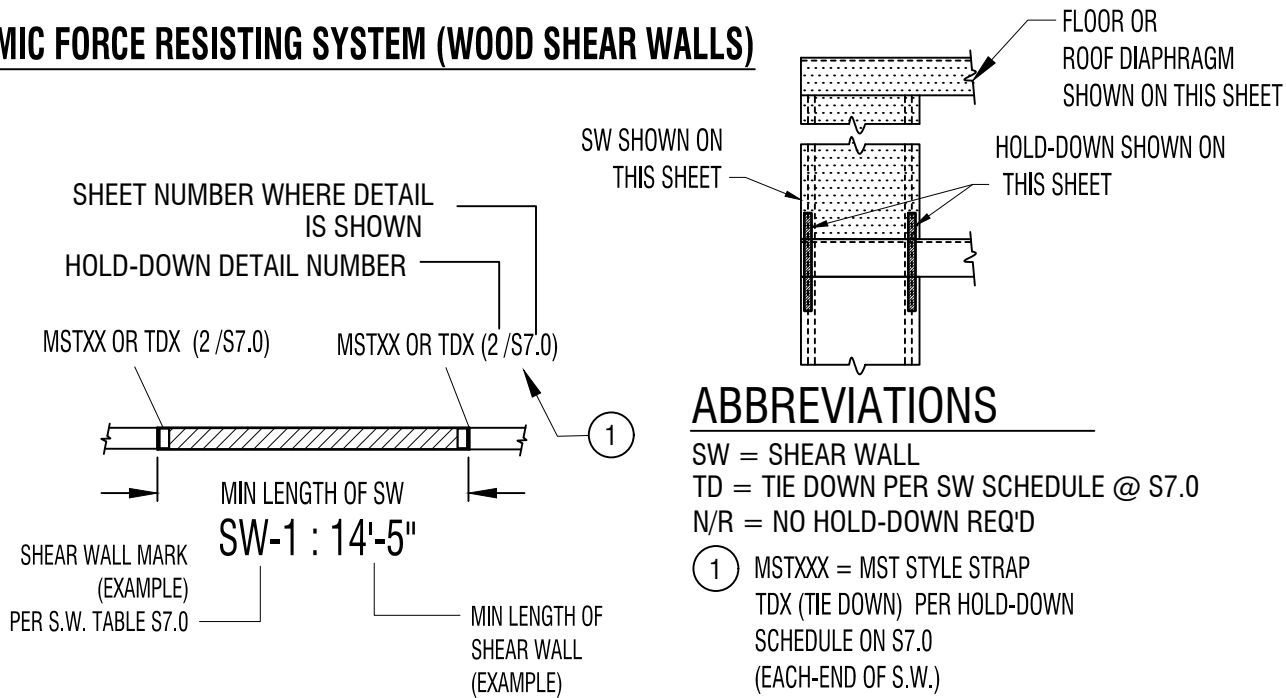
Exceptions:

1. Asphalt parking surfaces shall be permitted at ground level for public parking garages and private carports.
2. Floors of Group S-2 parking garages shall not be required to have a sloped surface.
3. Slip-resistant, nonabsorbent, interior floor finishes having a critical radiant flux not more than 0.45 W/cm2, as determined by ASTM E648 or NFPA 253, shall be permitted in repair garages.

HEADERS IN NON LOAD BEARING WALLS



SEISMIC FORCE RESISTING SYSTEM (WOOD SHEAR WALLS)

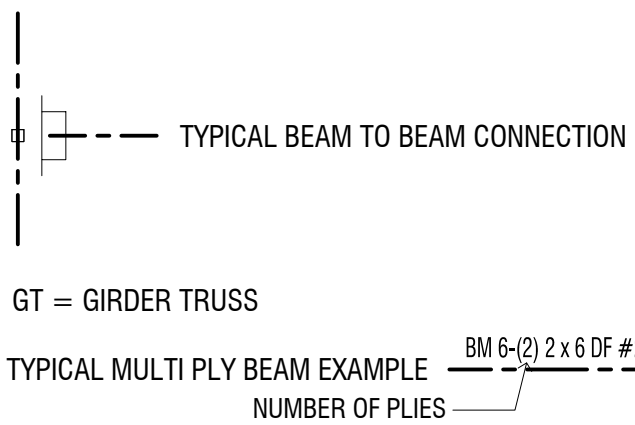


ABBREVIATIONS

SW = SHEAR WALL
TD = TIE DOWN PER SW SCHEDULE @ S7.0
N/R = NO HOLD-DOWN REQ'D
① MSTXXX = MST STYLE STRAP
TDX (TIE DOWN) PER HOLD-DOWN SCHEDULE ON S7.0 (EACH-END OF S.W.)

DRAWING SYMBOL LEGEND

- = POST/COLUMN SUPPORTED BY A BEAM. DOES NOT CONTINUE TO FLOOR BELOW.
- ⊠ = POST/COLUMN SUPPORTING A BEAM. (CONTINUES THRU THE FLOOR)
- ⊠ = MULTI-PLY (2 MAX) 2 X STUD COLUMN. USE 2 - 2 X 4 FOR 2 X 4 WALLS & 2 - 2 X 6 FOR 2 X 6 WALLS. TYPICAL (UNO)



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The existing building top plate and new addition top plate are not at the same elevation [1570 PLANS, sheet S2.2].

MST72 STRAP
EXISTING BLDG TOP PLATE
TO NEW ADDITION TOP PLATE

(2) 1.75 X 14 LSL
BLOCKING @ 48" O.C.

4
S3.0

6 x 6 HF 2
EPC6

BM 2-6 x 10 DF #2

6 x 6 HF 2
EPC6

N/R

11'6"5" J.110
24" O.C.

SW-1 : 48'-12"

3
S3.0

6 x 6 HF 2
EPC6

4
S3.0

(2) 1.75 X 14 LSL BLOCKING @ 48" O.C.

BM 1-(2) 2 x 6 DF #2

6 x 6 HF 2
EPC6

Please clarify how the shear and drag loads along this side of the building will be supported or transferred into the existing building [1570 PLANS, sheet S2.2].

The existing wall at this area will need to be retrofitted to match the new wall height. Please include framing requirements and specifications. [1570 PLANS, sheet S2.2].

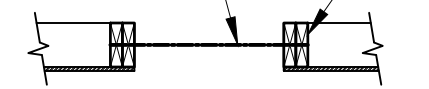
MAIN BLDG 1ST FLOOR SHEAR WALLS/ ROOF FRAMING

HEADERS IN NON LOAD BEARING WALLS

AT LOCATIONS WHERE A HEADER IS NOT SPECIFICALLY CALLED OUT ON PLAN REFER TO THE DETAIL BELOW:

(3) 2 X 4 HF/DF 2
OR PER HOLD-DOWN
SCHEDULE (2 PLCS)

(2) 2 X 6 STUDS
OR PER HOLD-DOWN
SCHEDULE (2 PLCS)



TYPICAL HEADER DETAIL (UNO)

SEISMIC FORCE RESISTING SYSTEM (WOOD SHEAR WALLS)

SHEET NUMBER WHERE DETAIL IS SHOWN

HOLD-DOWN DETAIL NUMBER

MSTXX OR TDX (2 /S7.0)

MSTXX OR TDX (2 /S7.0)

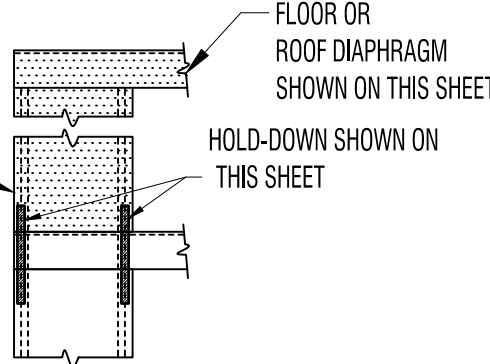
MIN LENGTH OF SW

SW-1 : 14'-5"

SHEAR WALL MARK (EXAMPLE)
PER S.W. TABLE S7.0

MIN LENGTH OF
SHEAR WALL
(EXAMPLE)

SW SHOWN ON
THIS SHEET



ABBREVIATIONS

SW = SHEAR WALL
TD = TIE DOWN PER SW SCHEDULE @ S7.0
N/R = NO HOLD-DOWN REQ'D

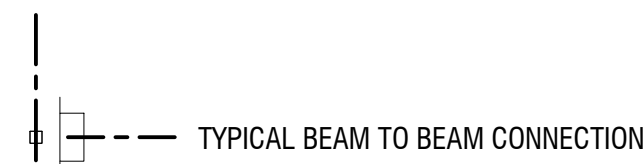
1 MSTXXX = MST STYLE STRAP
TDX (TIE DOWN) PER HOLD-DOWN
SCHEDULE ON S7.0
(EACH-END OF S.W.)

DRAWING SYMBOL LEGEND

□ = POST/COLUMN SUPPORTED BY A BEAM.
DOES NOT CONTINUE TO FLOOR BELOW.

▣ = POST/COLUMN SUPPORTING A BEAM.
(CONTINUES THRU THE FLOOR)

▤ = MULTI-PLY (2 MAX) 2 X STUD COLUMN.
USE 2 -2 X 4 FOR 2 X 4 WALLS &
2 - 2 X 6 FOR 2 X 6 WALLS.
TYPICAL (UNO)



GT = GIRDER TRUSS

TYPICAL MULTI PLY BEAM EXAMPLE
NUMBER OF PLYS

FRAMING PLAN NOTES

- ALL BEAMS SHALL BE FLUSH UNLESS NOTE OTHERWISE ON THE PLAN. WINDOWS & DOOR HEADERS SHALL BE DROPPED (SEE NOTE 9). FLUSH BEAMS HAVE FLOOR SHEATHING ATTACHED DIRECTLY. DROPPED BEAMS ARE INSTALLED BELOW FLOOR FRAMING.
- REFER TO THE TYPICAL HEADER DETAIL ON THIS SHEET FOR HEADERS NOT SPECIFICALLY CALLED OUT ON THIS PLAN. THIS DETAIL IS TYPICAL FOR NON-BEARING EXTERIOR WALLS.
- UNLESS NOTED OTHERWISE, USE (2) 2 X 4 OR (2) 2 X 6 UNDER ALL HEADERS, (3) 2 X 4 STUDS OR (2) 2 X 6 STUDS MAY BE SUBSTITUTED FOR 4 X 4 POSTS PER PLAN.
- GARAGE DOOR HEADERS (WHERE APPLICABLE) - UNLESS NOTED OTHERWISE ON THE PLAN. GARAGE DOOR HEADER BEAMS SHALL BE:
 - 4 X 10 DF/HF 2 FOR OPENINGS UP TO 9 FT;
 - 4 X 12 DF / HF 2 FOR OPENINGS UP TO 12 FT.
 - 4 X 4 DF / HF 2 SUPPORT POSTS AT EACH END OF HEADER BEAM.
- STRAPS SHOWN ON THIS LEVEL ATTACH TO WALLS ABOVE AND BELOW (CENTERED ABOUT THE JOIST RIM.
- SHEAR WALLS SHOWN ON THIS PLAN OCCUR BELOW THE FLOOR FRAMING.
- PROVIDE CONTINUOUS SOLID BEARING TO THE FOUNDATION AT GIRDER TRUSSES, HIP MASTERS, BEAMS AND HEADERS.
- IF MANUFACTURED FLOOR JOISTS ARE USED IN LIEU OF SOLID FRAMING (IF APPLICABLE), PROVIDE SHOP DRAWINGS FOR REVIEW.
- FLOOR SHEATHING & NAILING:
 - FLOOR SHEATHING SHALL BE $\frac{5}{8}$ " T & G.
 - NAIL WITH 10d @ 6" O.C. AT PERIMETER AND 10d @ 12" O.C. IN THE FIELD - UNLESS OTHERWISE NOTED ON PLAN.
- WALL TOP PLATE REQUIREMENTS - ALL TOP PLATES OF WALLS SHALL BE DOUBLE 2 X 6 (OR 2 X 4 IF ALLOWED), THE TOP PLATES MUST BE CONTINUOUS OVER HEADERS. DO NOT CUT DOUBLE TOP PLATES UNLESS ALLOWED PER THE FRAMING PLAN.

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CUSTOM DESIGN
&
ENGINEERING, INC
STRUCTURAL ANALYSIS & DESIGN

WWW.CDENGR.COM
MUKILTEO, WA
(425) 343-7517
email: mail@cdengr.com

PROJECT NAME:
LEGEND AUTO ADDITION

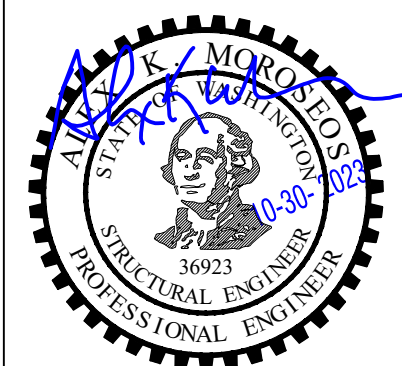
PROJECT ADDRESS:
1632 RIVER ROAD
PUYALLUP WA 98371

DWG TITLE
1ST FLOOR SHEAR WALLS
ROOF FRAMING

Date
10-30-2023

Revision
CURRENT VERSION

Number:

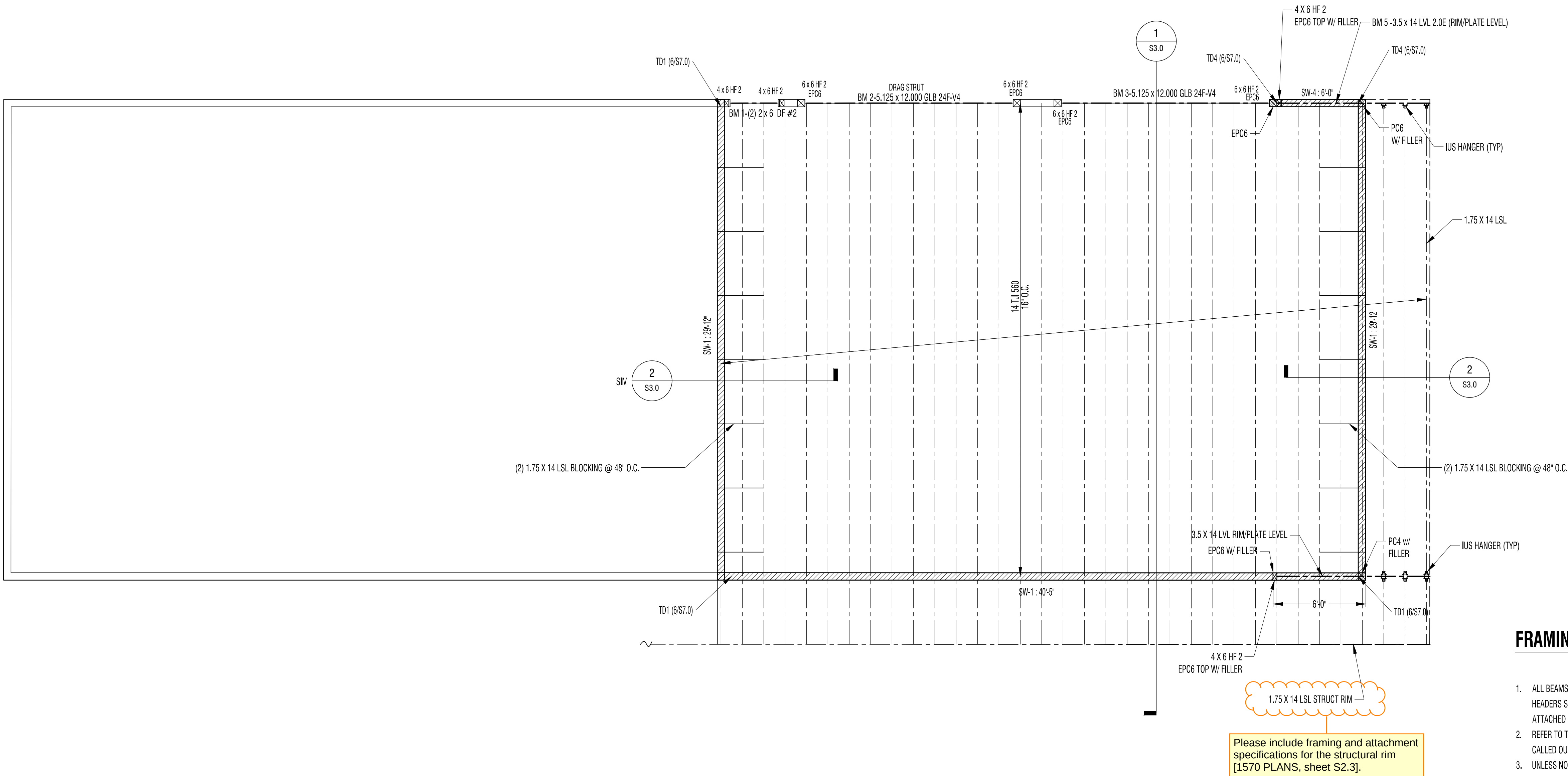


PROJECT #

Z9-3288

SHEET NO

S2.2

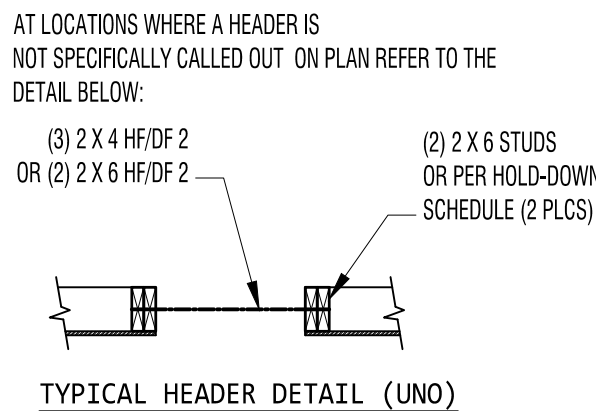


SHOP 1ST FLOOR SHEAR WALLS/ ROOF FRAMING

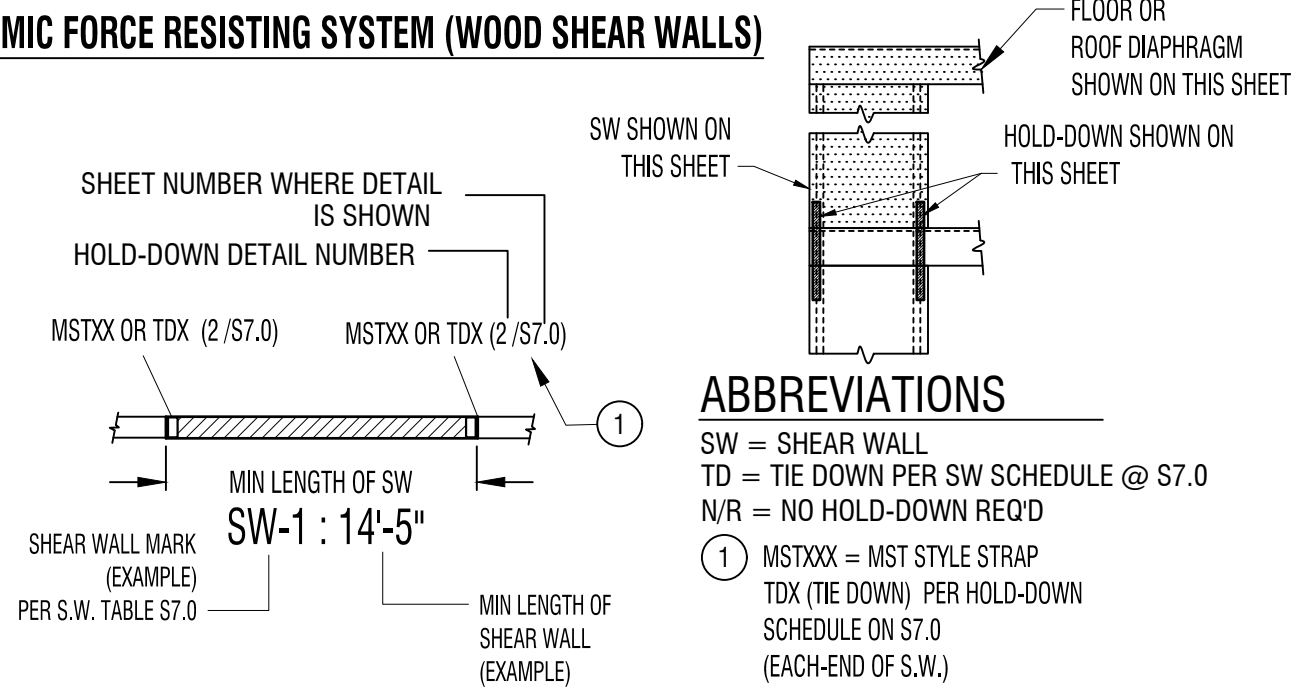
FRAMING PLAN NOTES

- ALL BEAMS SHALL BE FLUSH UNLESS NOTE OTHERWISE ON THE PLAN. WINDOWS & DOOR HEADERS SHALL BE DROPPED (SEE NOTE 9). FLUSH BEAMS HAVE FLOOR SHEATHING ATTACHED DIRECTLY. DROPPED BEAMS ARE INSTALLED BELOW FLOOR FRAMING.
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- IF MANUFACTURED FLOOR JOISTS ARE USED IN LIEU OF SOLID FRAMING (IF APPLICABLE), PROVIDE SHOP DRAWINGS FOR REVIEW.
- FLOOR SHEATHING & NAILING:
 - FLOOR SHEATHING SHALL BE $\frac{3}{4}$ " T & G.
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HEADERS IN NON LOAD BEARING WALLS

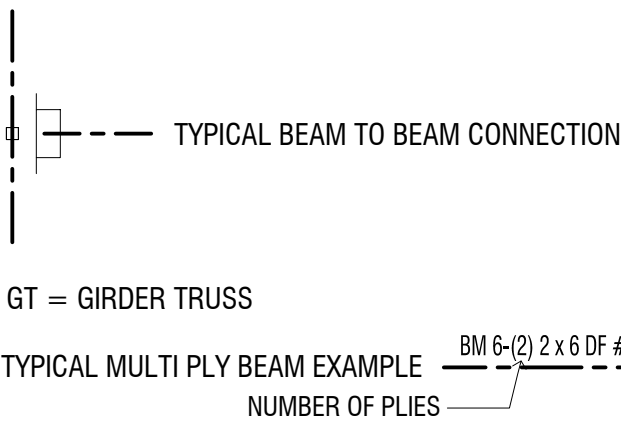


SEISMIC FORCE RESISTING SYSTEM (WOOD SHEAR WALLS)



DRAWING SYMBOL LEGEND

- [Symbol] = POST/COLUMN SUPPORTED BY A BEAM. DOES NOT CONTINUE TO FLOOR BELOW.
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PROJECT NAME: LEGEND AUTO ADDITION

1632 RIVER ROAD
PUYALLUP WA 98371

DWG TITLE 1ST FLOOR SHEAR WALLS
ROOF FRAMING

PROJECT ADDRESS:

Date 10-30-2023

Revision CURRENT VERSION

Number:

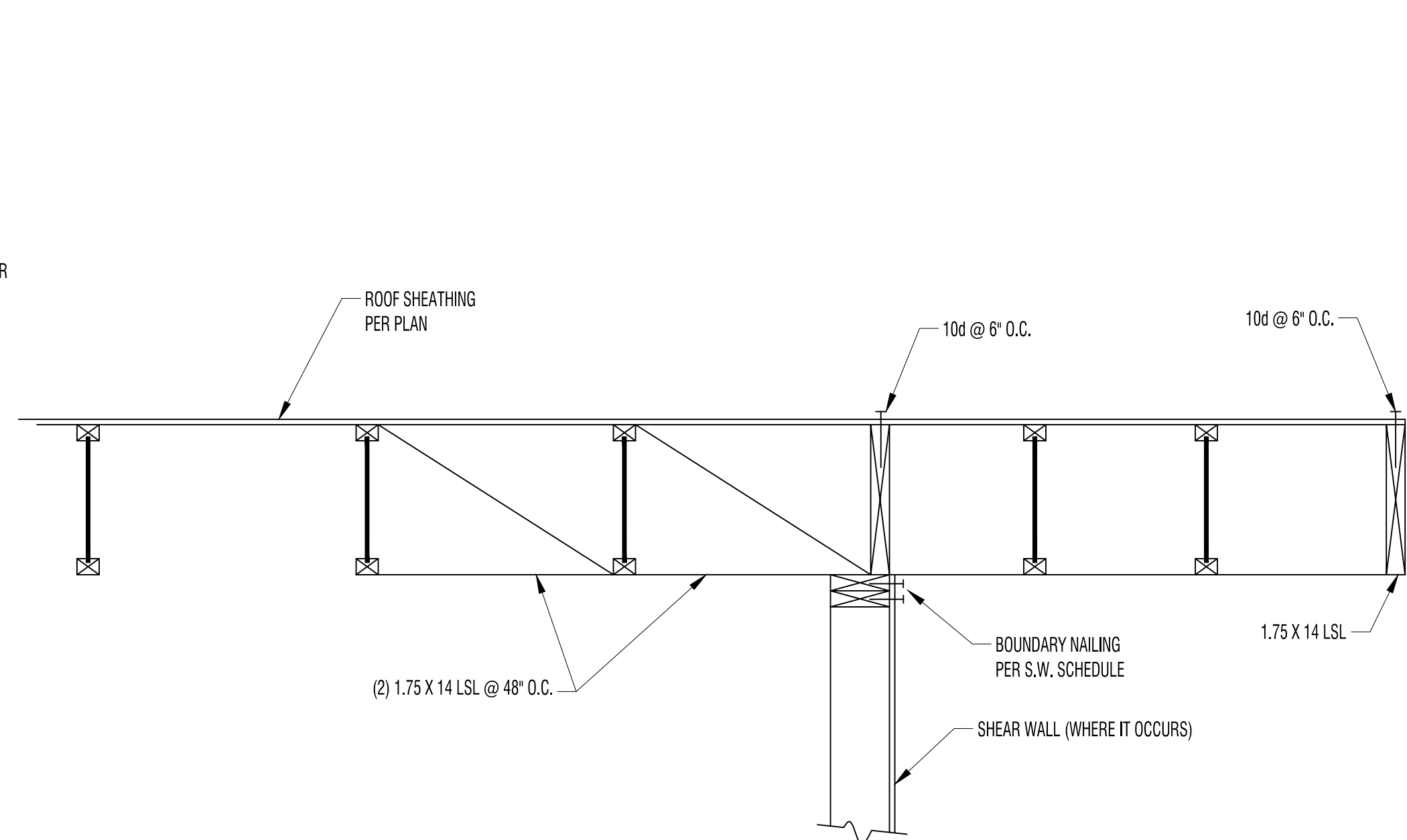
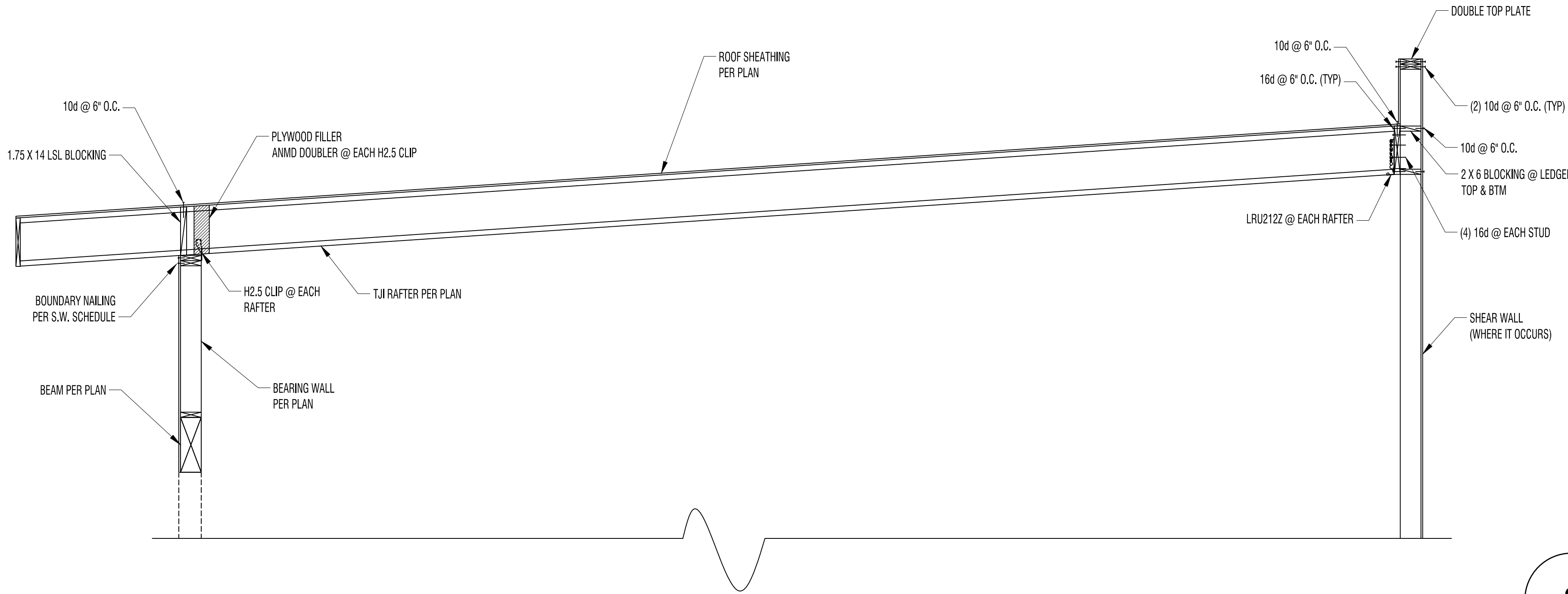


PROJECT #

Z9-3288

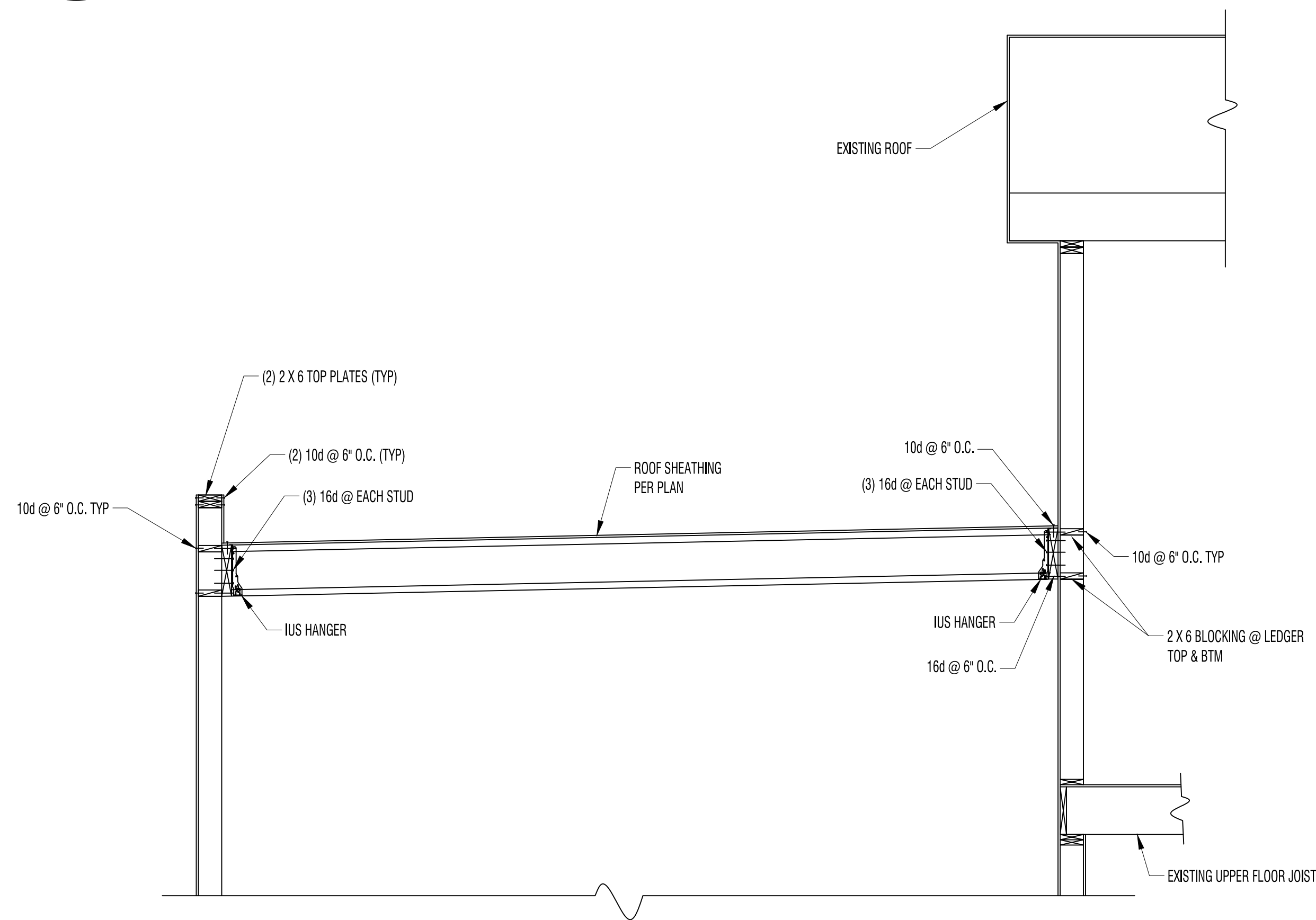
SHEET NO

S2.3

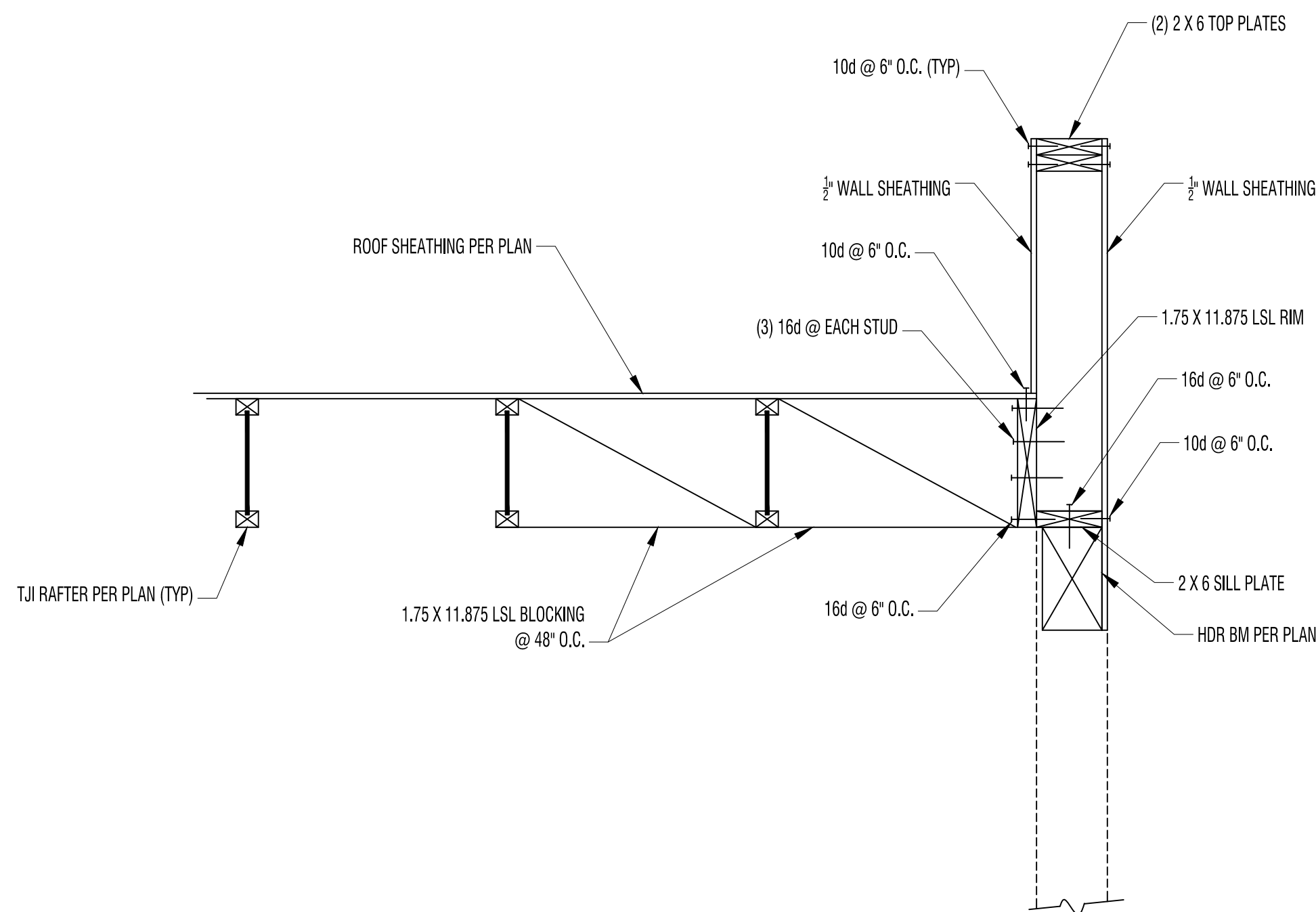


2 SECTION THRU RAFTERS (PARALLEL TO WALL)
NO SCALE

1 SECTION THRU SHOP
NO SCALE



3 SECTION THRU NEW AND EXISTING BLD
NO SCALE



4 SECTION THRU NEW AND EXISTING BLD (FRAMING PARALLEL)
NO SCALE

CUSTOM DESIGN
& ENGINEERING, INC

STRUCTURAL ANALYSIS & DESIGN
WWW.CDENGR.COM
MUKILTEO, WA
(425) 343-7517
email: mail@cdengr.com

PROJECT NAME: LEGEND AUTO ADDITION

PROJECT ADDRESS:

1632 RIVER ROAD
PUYALLUP WA 98371

DWG TITLE: STRUCTURAL SECTIONS

Date:

10-30-2023

Revision:

CURRENT VERSION

Number:



PROJECT #

Z9-3288

SHEET NO

S3.0

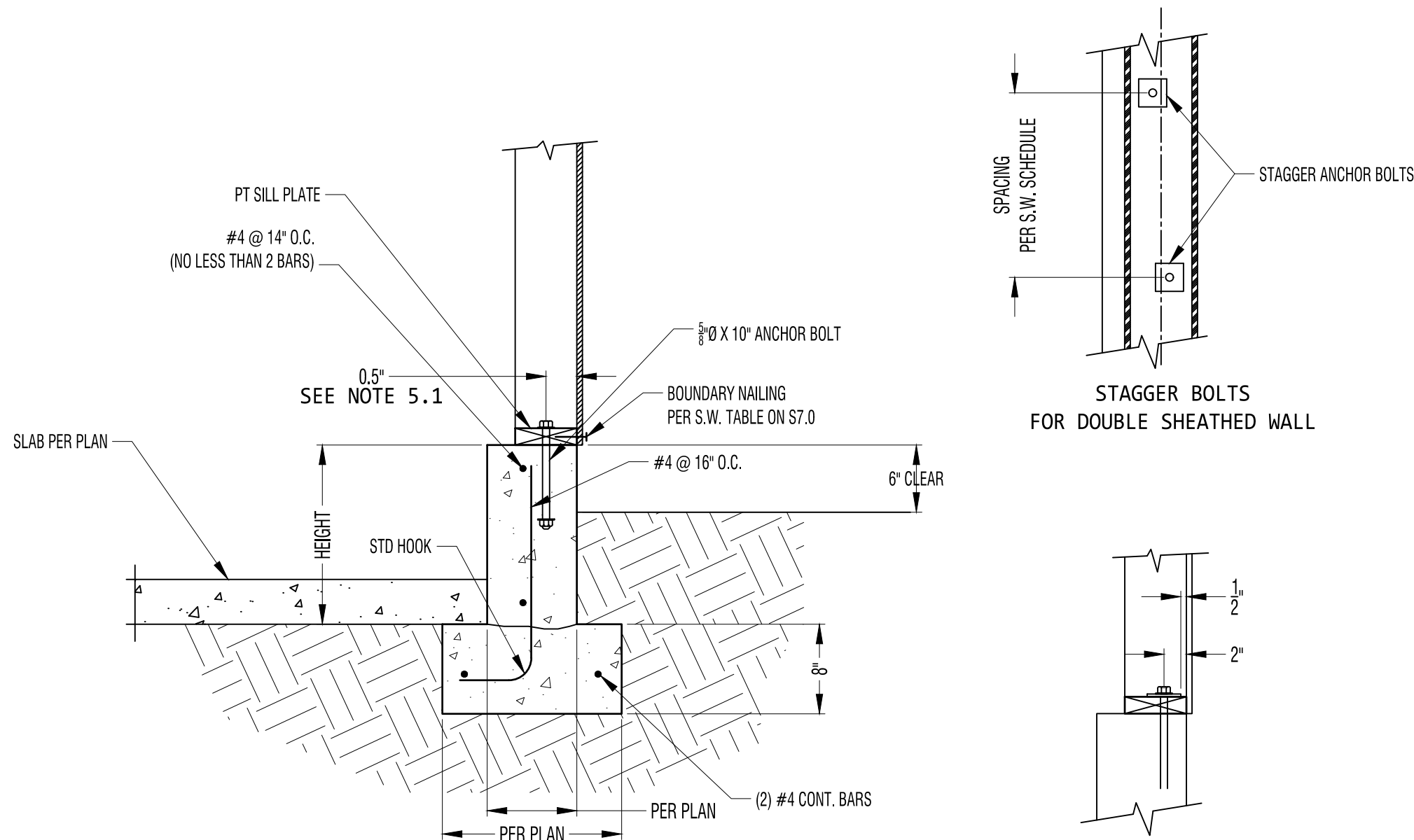
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1

TYPICAL FOOTING WITH SLAB

(NO SCALE)

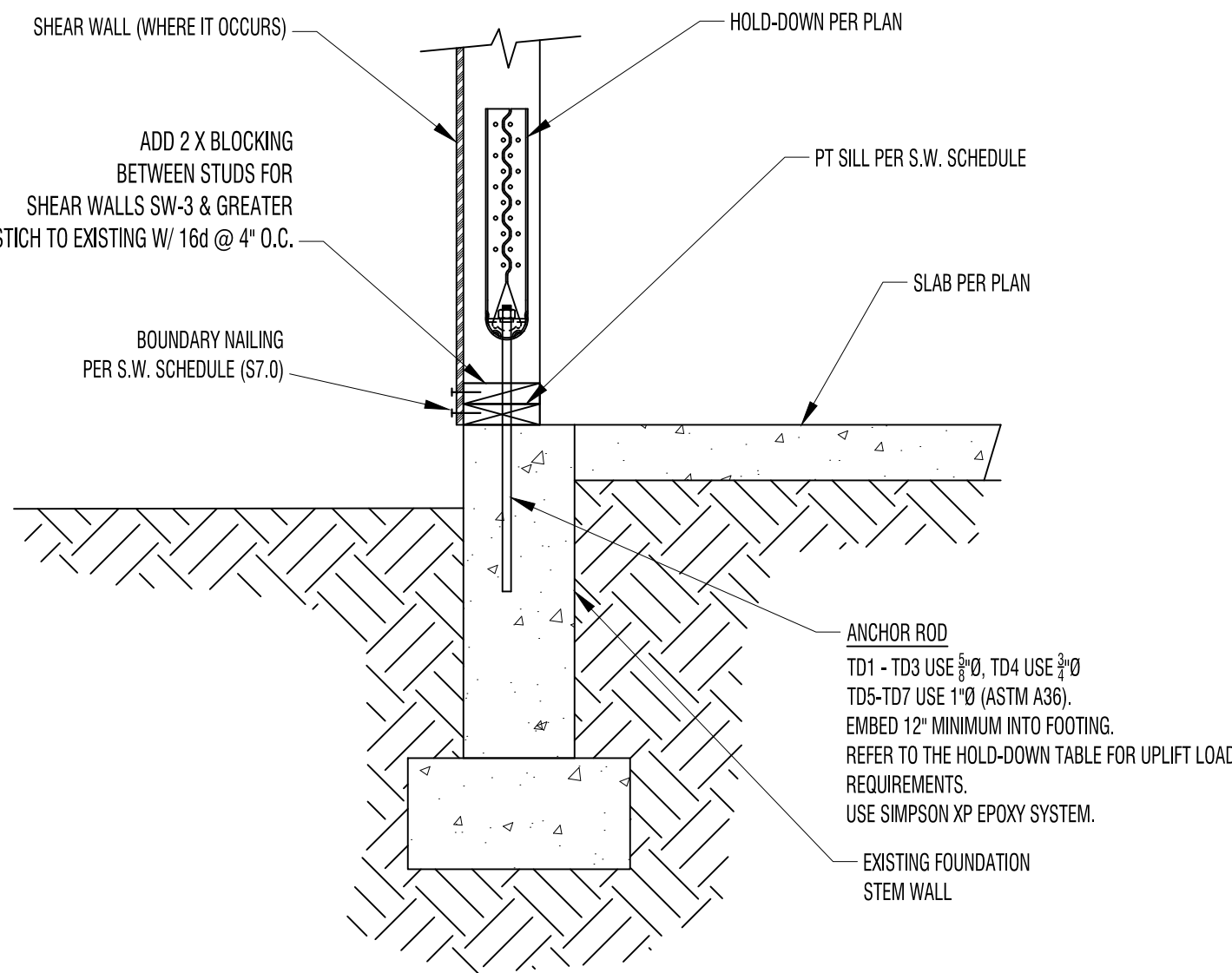
- NOTES:
1. MAXIMUM ALLOWED HEIGHT OF WALL IS 4 FT.
 2. 3" COVER REQD FOR ALL REINFORCEMENT.
 3. USE GRADE 40 OR GRADE 60 REINFORCEMENT.
 4. REFER TO SHEAR WALL TABLE ON S7.0 FOR THE BOLTED SILL PLATE. 3 X REQUIRED FOR SW-3 AND GREATER.
 5. ANCHOR BOLT (A.B.) REQUIREMENTS:
 - 5.1. ALL WASHERS SHALL BE 3 X 3 X $\frac{1}{2}$ " PLATE. MAX DISTANCE FROM EDGE OF PLATE WASHER TO SHEATHING SHALL BE 1/2".
 - 5.2. SPACE A.B. @ 48" O.C. IN NON SHEAR WALLS.
 - 5.3. FOR A.B. AS SPECIFIED PER THE SHEAR WALL (S.W.) PLANS, REFER TO S.W. TABLE ON S7.0.



2

POST INSTALLED ANCHOR DETAIL - AT SLAB LEVEL

SPECIAL INSPECTION AND OBSERVATION REQUIRED TO ENSURE EPOXY SYSTEM IS APPLIED PER MANUFACTURERS REQUIREMENTS



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PROJECT NAME: LEGEND AUTO ADDITION

1632 RIVER ROAD
PUYALLUP WA 98371

FOUNDATION DETAILS

DWG TITLE

PROJECT NAME:

PROJECT ADDRESS:



PROJECT #

Z9-3288

SHEET NO

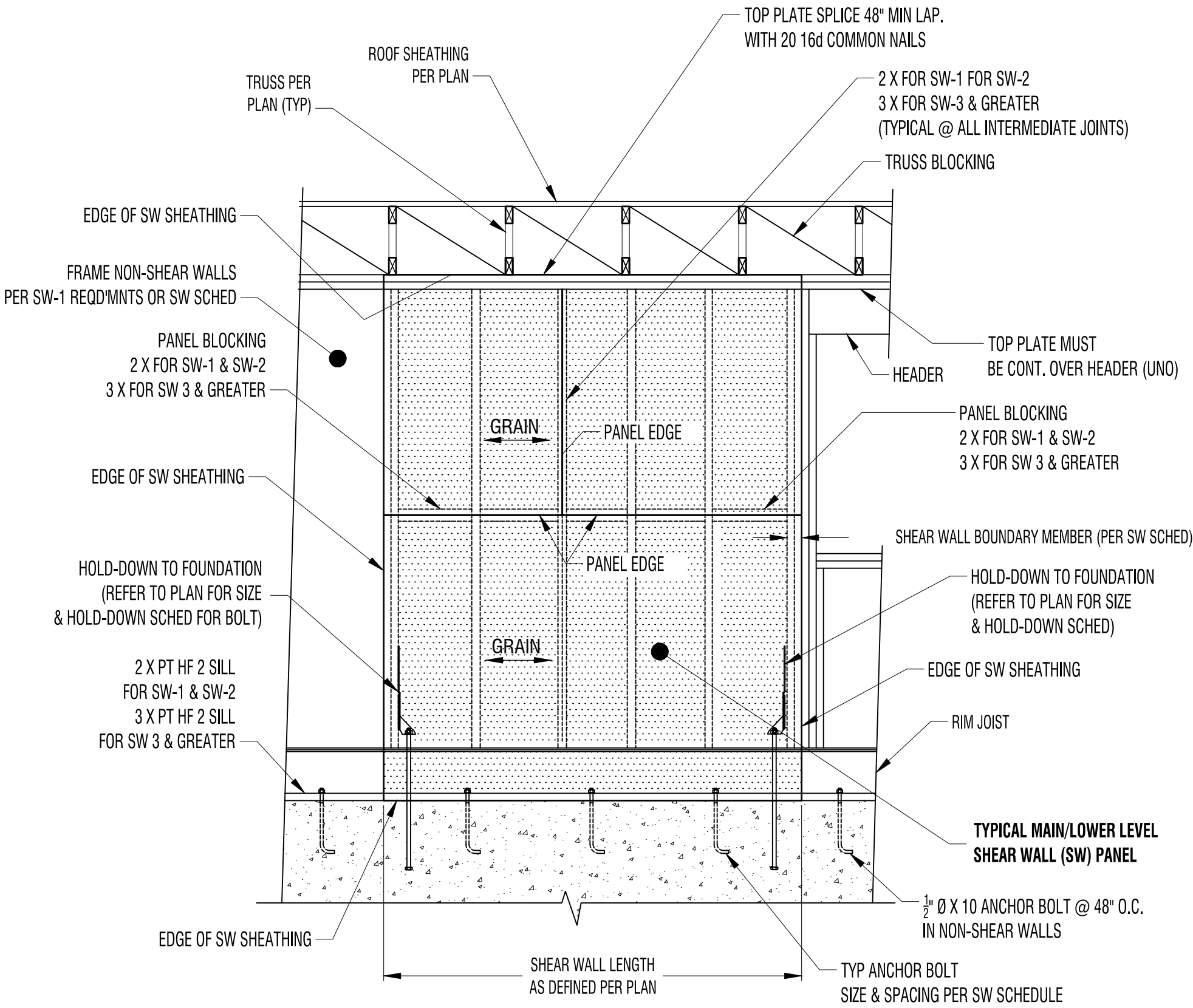
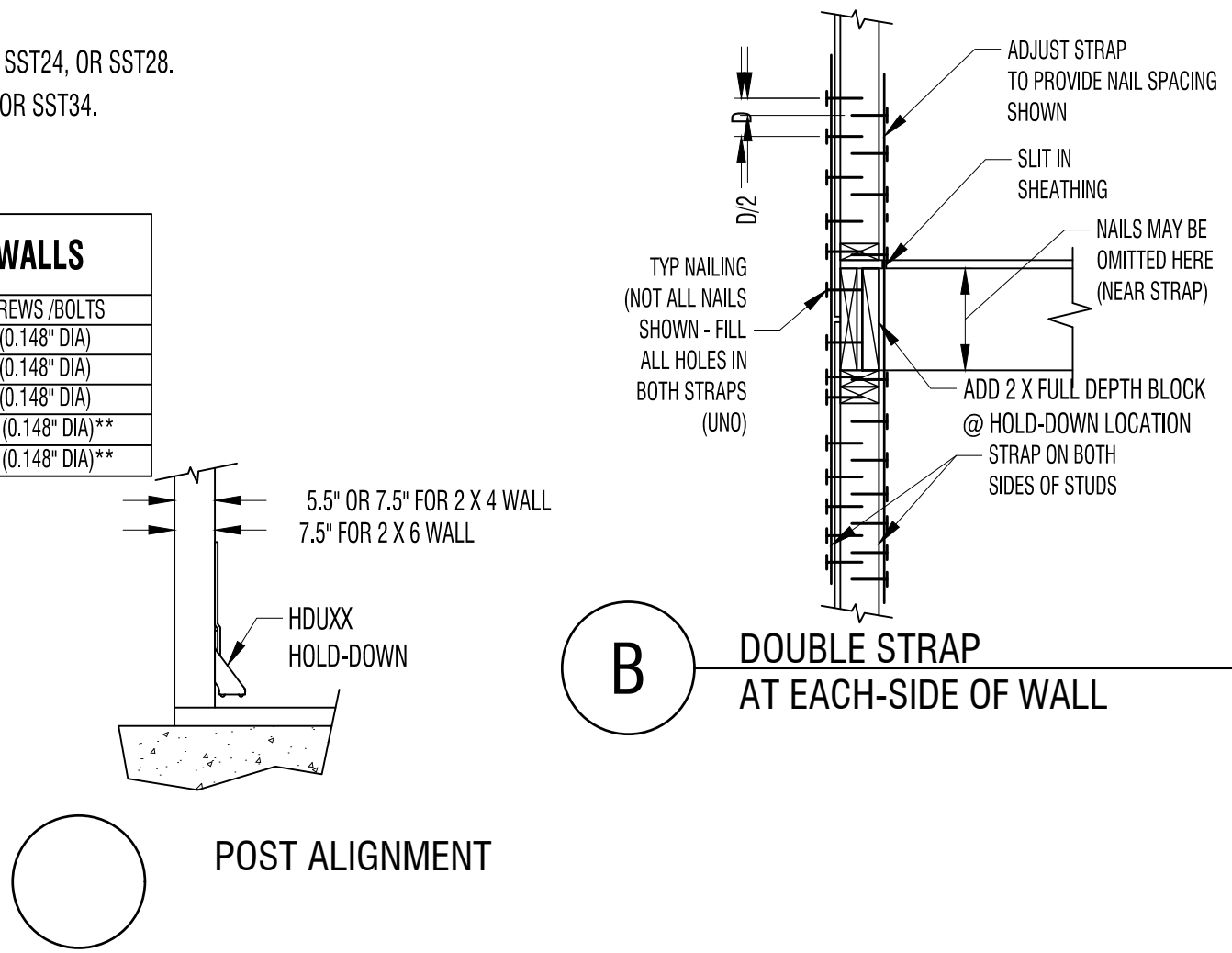
S4.0

HOLD-DOWN SCHEDULE - HOLD DOWNS ATTACHED TO CONCRETE						
MARK	TYPE	CAPACITY	ANCHOR BOLT (MONO POUR)	ANCHOR BOLT (TWO POUR)	NUMBER OF STUDS / SOLID COLUMN	NAILS / SCREWS / BOLTS
TD1	STD14 OR HDU4-SDS2.5	3285	SSTB24 (FOR HDU4)	SSTB24 (FOR HDU4)	(2) 2 X HEM-FIR	30 - 10d (0.148" DIA)
TD2	HDUS-SDS2.5 (SPF/HF)	4065	SSTB24 (FOR HDUS)	SSTB24 (FOR HDUS)	(2) 2 X DOUG-FIR	38 - 10d (0.148" DIA)
TD3	HDUS-SDS2.5 (DF/SP)	5645	3" Ø X 24 ASTM A307	3" Ø X 24 ASTM A307	(2) 2 X DOUG-FIR	40 - 10d (0.148" DIA)
TD4	HDUS-SDS2.5	7460	SSTB28	SSTB34	(2) 2 X DOUG-FIR	20 - 3" X 3 - SCREWS
TD5	HDU11-SDS2.5	9540	1" Ø X 24 ASTM A307	1" Ø X 24 ASTM A307	6 X 6 OF 2 POST	26 - 3" X 3 - SCREWS
TD6	HDU11-SDS2.5	11175	1" Ø X 24 ASTM A307	1" Ø X 24 ASTM A307	6 X 6 OF 1 POST	
TD7	HDU14-SDS2.5	14445	1" Ø X 24 ASTM A307	1" Ø X 24 ASTM A307	6 X 6 OF 1 POST	
TD8	HD12	15510	1-1/8" X 24 ASTM A307	1-1/8" X 24 ASTM A307	6 X 6 OF 1 POST	
TD9	HD19	19070	1-1/4" X 24" ASTM 307	1-1/4" X 24" ASTM A307	6 X 6 OF 1 POST	

- NOTES:
- HOLDDOWNS SHALL BE MANUFACTURED BY THE SIMPSON STRONG-TIE CO. OR EQUIVALENT.
 - ALL BUILTUP STUDS SHALL RECEIVE SHEAR WALL EDGE NAILING.
 - INSTALL HOLD-DOWN BOLTS THRU THE THICKER SECTION OF THE SOLID POST.
 - 5/8" DIA ASTM A36 THREADED ROD EMBEDDED 12 INCHES IS ACCEPTABLE SUBSTITUTION FOR SST20, SST24, OR SST28.
 - 3/4" DIA ASTM A36 THREADED ROD EMBEDDED 12 INCHES IS ACCEPTABLE SUBSTITUTION FOR SST28 OR SST34.
 - ALL HOLD-DOWNS, FRAMING ANCHORS AND SHEAR WALLS MUST BE INSPECTED BEFORE COVERING.

HOLD-DOWN SCHEDULE - HOLD DOWNS ATTACHED BETWEEN FRAMED WALLS			
TYPE (2)	CAPACITY (3)(4)	NUMBER OF STUDS / SOLID COLUMN	NAILS / SCREWS / BOLTS
MST37	2010	(2) 2 X HEM-FIR	30 - 10d (0.148" DIA)
MST48	3105	(2) 2 X DOUG-FIR	38 - 10d (0.148" DIA)
MST60	4800	(2) 2 X DOUG-FIR	40 - 10d (0.148" DIA)
(2) MST48	6210	(2) 2 X DOUG-FIR	(2) 38 - 10d (0.148" DIA)**
(2) MST60	9600	(3) 2 X DOUG-FIR	(2) 40 - 10d (0.148" DIA)**

- NOTES:
- FILL ALL HOLES WITH 10d COMMONS NAILS (EXCEPTION SEE NOTE 3).
 - WHERE DOUBLE STRAPS ARE INDICATED SUCH AS (2) MST37 USE 10d X 1-1/2" COMMONS NAILS. SEE DETAIL A/S7.0 FOR DETAIL.
 - THE VALUES ABOVE ARE BASED ON A 16" CLEAR SPAN WITH HEM-FIR FRAMING & WIND LOAD DURATION.
- ** STAGGER NAILING PER DETAIL B



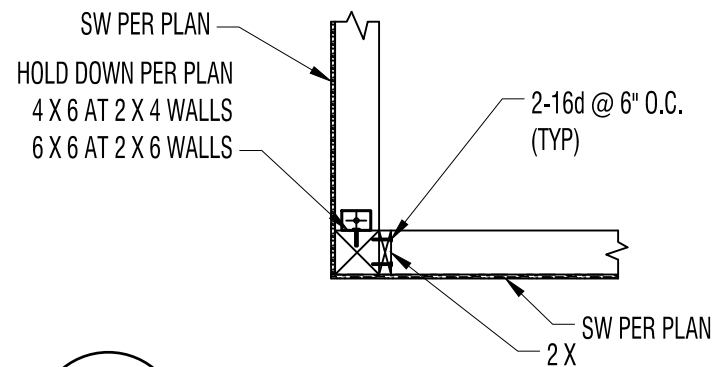
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TYPICAL SEGMENTED SHEAR WALLS (SW)

NO SCALE

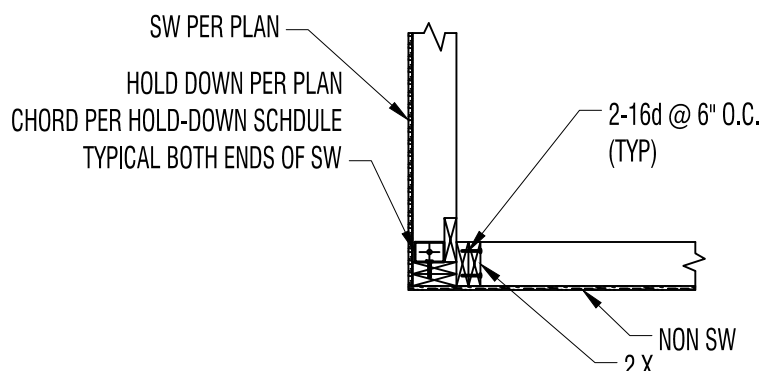
- REFER TO PLAN FOR SHEAR WALL LENGTH & HOLD-DOWN SIZES.
- REFER TO SHEAR WALL SCHEDULE FOR SW PANEL SIZE, NAILING AND BLOCKING.
- REFER TO SHEAR WALL SCHEDULE FOR BOUNDARY MEMBERS.
- REFER TO HOLD-DOWN SCHEDULE FOR HOLD-DOWNS & BOLTS.

REFER TO SHEET S-1 FOR LICENSE AND USAGE INFORMATION



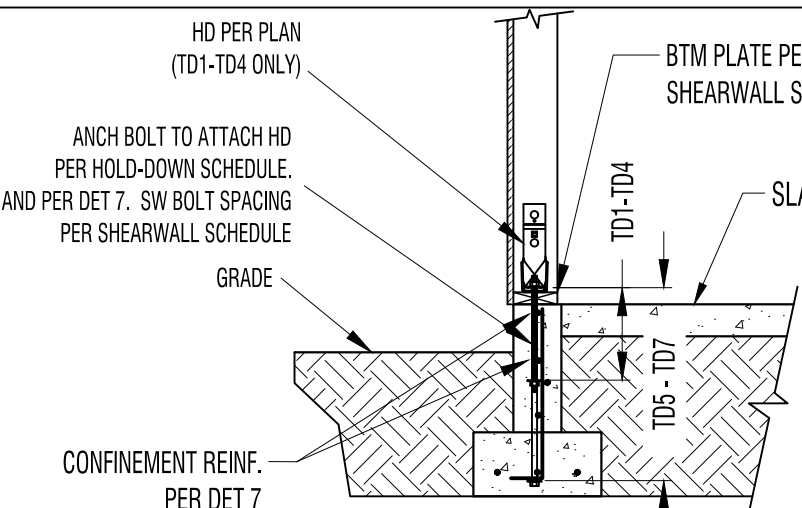
3A HOLD DOWN AT CORNER (WHERE IT OCCURS)

SEE VIEW 3B FOR OPTION (SW1-SW3 ONLY)

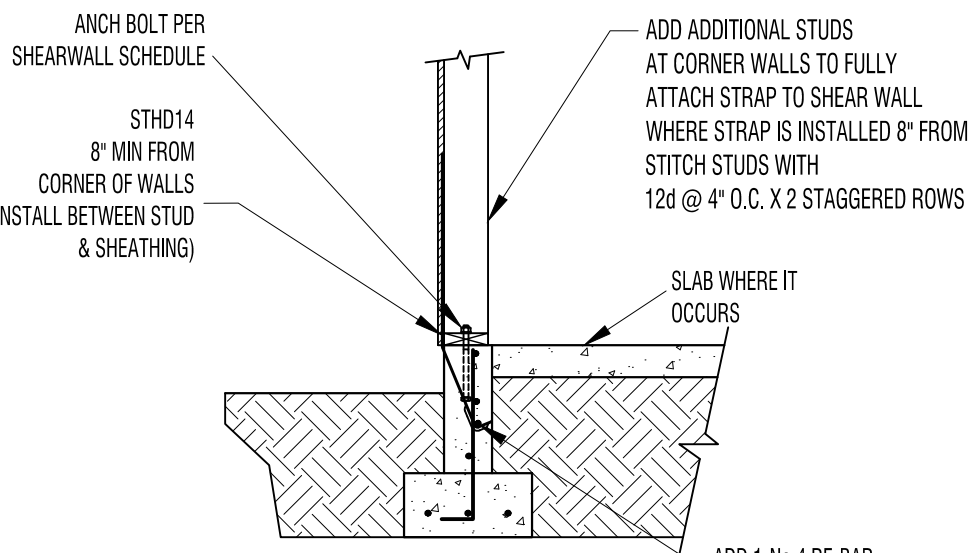


3B HOLD DOWN AT CORNER (WHERE IT OCCURS)

SW1-SW3 ONLY



BOLTED/LAG BOLTED HOLD-DOWN INSTALLATION WHERE SLAB OCCURS



OPTIONAL STD14 INSTALLATION WHERE SLAB OCCURS (TD1 & TD2 ONLY)

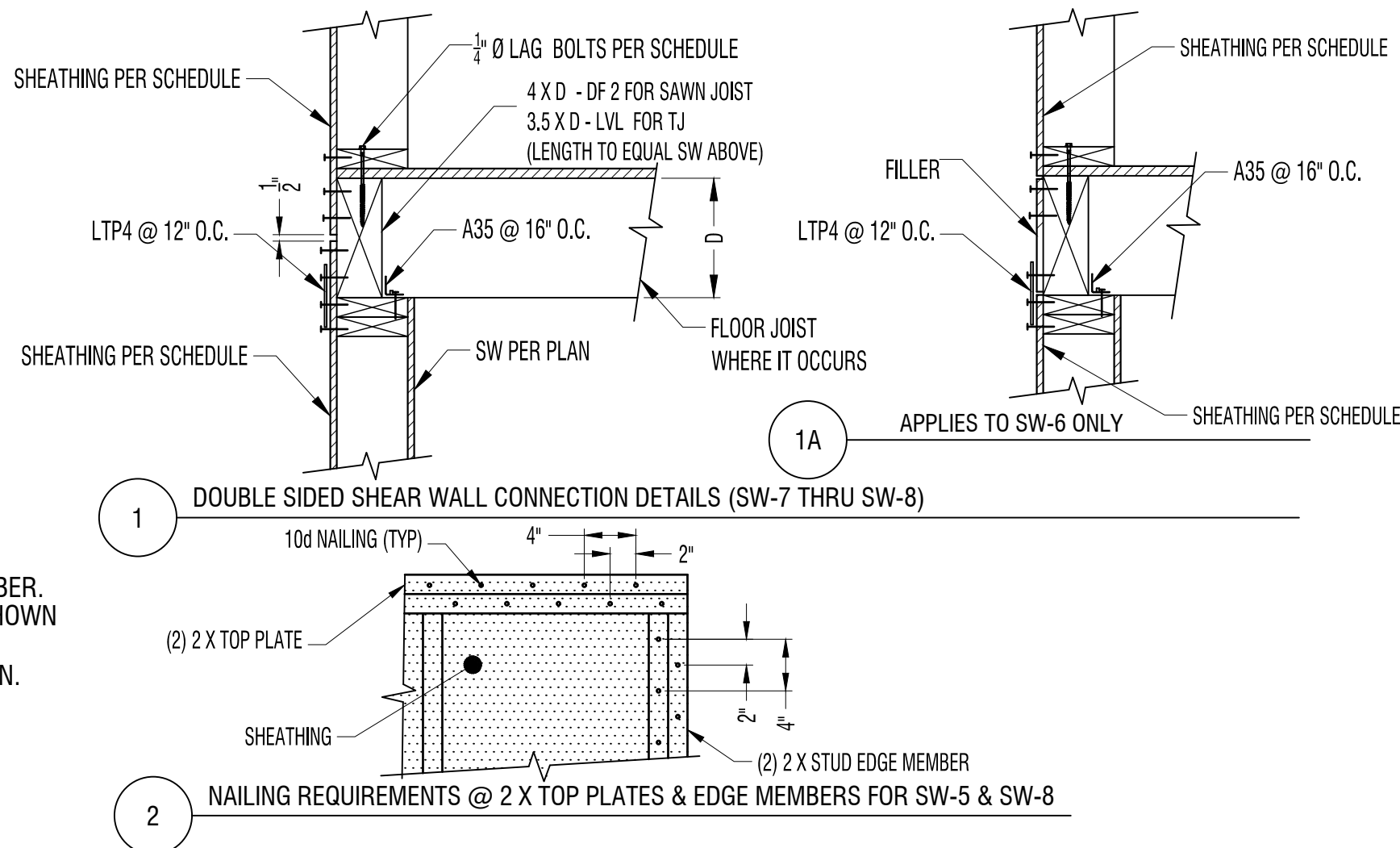
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TYPICAL HOLD-DOWN ATTACHED DIRECTLY TO CONCRETE

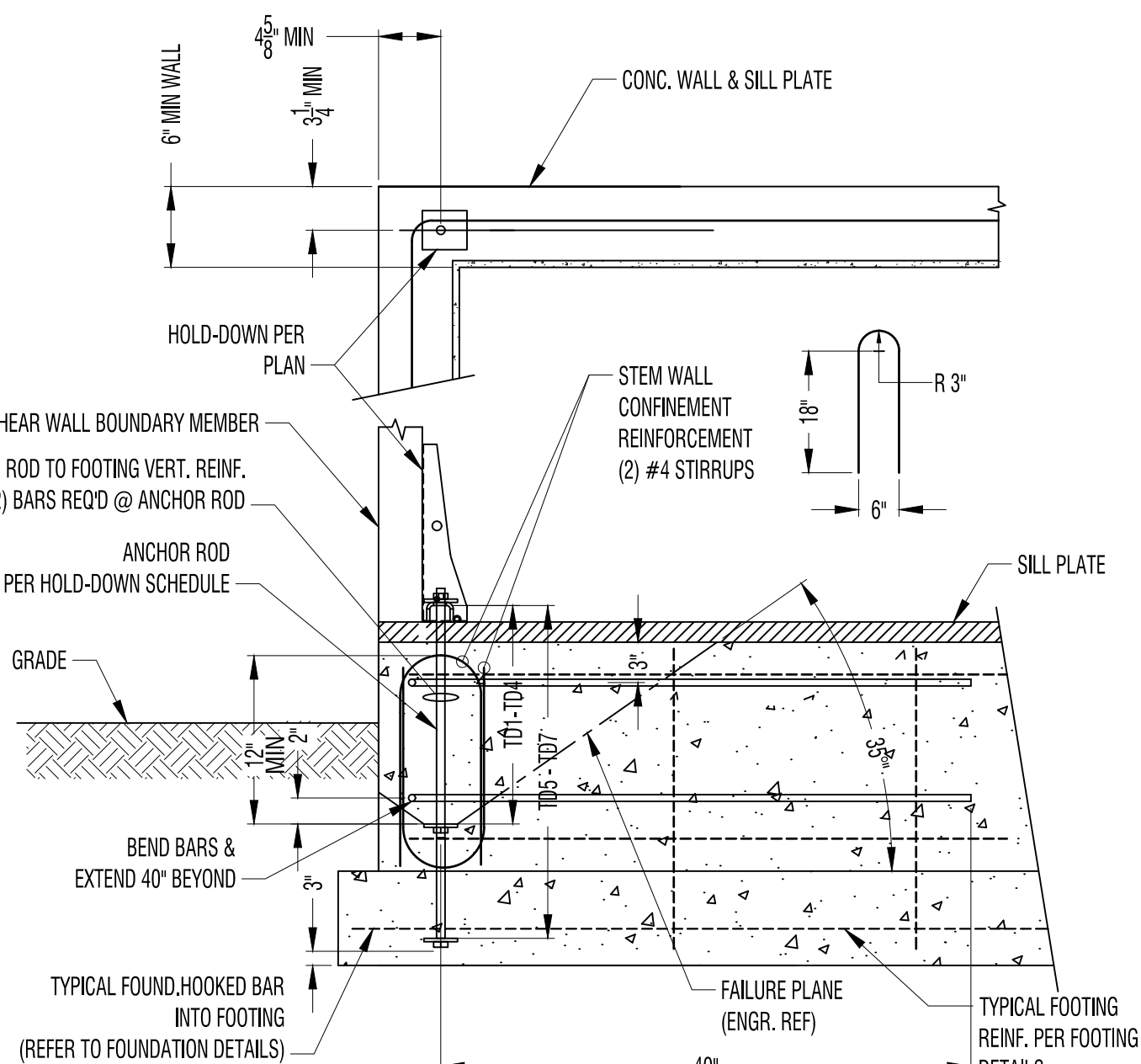
SHEAR WALL SCHEDULE												
MARK	CAPACITY (LB/FT) (1)	SHEATHING (PLYWOOD/OSB) (2)	NAIL SIZE (3)	EDGE NAIL SPACING (4)	FIELD NAIL SPACING	BOTTOM PLATE NAILING (2ND FLOOR) (6)	SILL PLATE CONN. TO FOUNDATION (10)	SHEAR CLIP SPACING (LTP4 OR A35 REFER TO DETAILS)	TYP FRAMING (U.N.O)	FRAMING AT ABUTTING EDGES (11)	FOUNDATION SILL PLATES	PLATES
SW-1	213	7/16	8d (0.131" DIA)	6	SEE NOTE 5	16d @ 6" O.C.	3" X 10 @ 35" O.C.	LTP4 or A35 @ 18" O.C.	2 X	2 X	2 X	(2) 2 X
SW-2	254	7/16	8d (0.131" DIA)	4	SEE NOTE 5	16d @ 4" O.C.	3" X 10 @ 30" O.C.	LTP4 or A35 @ 18" O.C.	2 X	2 X	2 X	(2) 2 X
SW-3	350	7/16	8d (0.131" DIA)	3	SEE NOTE 5	16d @ 4" O.C.	3" X 10 @ 20" O.C.	LTP4 or A35 @ 18" O.C.	2 X	3 X	3 X	(2) 2 X
SW-4	492	15/32	10d (0.148 DIA)	3	SEE NOTE 5	16d @ 3" O.C.	3" X 10 @ 24" O.C.	LTP4 or A35 @ 12" O.C.	2 X	3 X	3 X	(2) 2 X
SW-5	631	15/32	10d (0.148 DIA)	2	SEE NOTE 5	16d @ 2" O.C.	3" X 10 @ 18" O.C.	LTP4 or A35 @ 9" O.C.	2 X	3 X	3 X	(2) 2 X
SW-6	836	15/32 BOTH SIDES	10d (0.148 DIA)	4	SEE NOTE 5	3" DIA LAG SCREW @ 4" O.C.	3" X 10 @ 18" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X
SW-7	1200	15/32 BOTH SIDES	10d (0.148 DIA)	3	SEE NOTE 5	3" DIA LAG SCREW @ 3" O.C.	3" X 10 @ 14" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X
SW-8	1540	15/32 BOTH SIDES	10d (0.148 DIA)	2	SEE NOTE 5	3" DIA LAG SCREW @ 3" O.C.	3" X 10 @ 24" O.C.	SEE DETAIL 1	2 X	3 X	3 X	(2) 2 X

NOTES

- ALLOWABLE SHEAR CAPACITY ASSUMES HEM-FIR FRAMING, AND IS BASED ON THE 2018 IBC WITH INCREASES FOR LOAD DURATION. **SW-7 & SW-8 REQUIRES DOUG-FIR FRAMING.**
- UPON ENGINEERS APPROVAL, 19/32" RATED SHEATHING MAY BE USED WITH NO CAPACITY REDUCTION. O.S. INDICATES ONE SIDE OR WALL TO BE SHEATHED, B.S. INDICATES SHEATHING ON BOTH SIDES.
- 8d NAILS = 0.131" dia 10d NAILS = 0.148" dia
- FOR SHEAR WALL TYPES SW-3 AND HIGHER, ALL PANEL EDGE NAILING AND FOUNDATION SILL NAILING SHALL BE STAGGERED.
- 12" FIELD NAILING FOR STUDS 16" O.C. AND 6" FIELD NAILING FOR STUDS 24" O.C.
- WHERE LAG SCREWS ARE REQUIRED, SCREW LENGTH MUST BE ADEQUATE TO ENSURE 2-1/4" PENETRATION OF THE LAG INTO THE RIM JOIST BELOW. PRE DRILL WITH 3/16" DIA LEAD HOLE.
- ADDITIONAL BOTTOM PLATE ANCHORS ARE ONLY REQUIRED AT WALLS DESIGNATED ON PLANS AS PERFORATED SHEAR WALLS. THESE ANCHORS ARE NOT REQUIRED AT FOUNDATION SILL PLATES.
- ALIGN STRAPS WITH WALL STUDS AND CENTER AT FLOOR SHEATHING.
- WALLS WITH OUT SHEAR WALL ID SHALL CONFORM SW-1.
- 3" x 3" x 1/4" GALVANIZED PLATE WASHER IS REQUIRED. EMBED ANCHOR BOLTS 7.5" MINIMUM. REFER TO S-1 TO PRESSURE TREATING NOTES FOR ANCHOR BOLTS IN CONTACT WITH PRESSURE TREATED LUMBER. REFER TO FOUNDATION WALL SILL BOLTING REQUIREMENTS WHERE ANCHOR BOLT SPACING MAY LESS THAN SHOWN PER THIS TABLE.
- REFER TO HOLD-DOWN TABLE WHERE SHEAR WALL EDGE MEMBERS ARE CONTROLLED BY THE REQ'D HOLD-DOWN. AS A MINIMUM REQUIREMENT, A 3X MEMBER AT HOLD DOWNS SHALL BE USED. WHERE (3) 2 X MEMBERS ARE REQUIRED PER THE HOLD-DOWN TABLE, USE (1) 3 X & (1) 2 X.
- ALL HOLD-DOWNS, FRAMING ANCHORS AND SHEAR WALLS MUST BE INSPECTED BEFORE COVERING.
- FOR DOUBLE SIDED SHEAR WALLS - DO NOT INSTALL SECOND SHEATHING LAYER UNTIL ITEM 12 ABOVE IS SATISFIED.



2 NAILING REQUIREMENTS @ 2 X TOP PLATES & EDGE MEMBERS FOR SW-5 & SW-8



7

TREADED ROD HOLD-DOWN REQUIREMENTS

- THIS A TYPICAL DETAIL IS APPLICABLE TO HOLD-DOWNS TD1-TD9. AND FOUNDATION WALLS AT LEAST 48" LONG. REFER TO SPECIFIC DETAILS FOR OTHER CONDITIONS.
- THIS DETAIL IS APPLICABLE TO FOUNDATIONS WITH CRAWLSPACE. EXTEND TREADED ABOVE FLOOR RIM.

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LEGEND AUTO ADDITION

PROJECT NAME:

PROJECT ADDRESS:

WOOD FRAMING DETAILS

DWG TITLE

Date

10-30-2023

Number:

Revision

CURRENT VERSION



PROJECT #

Z9-3288

SHEET NO

S7.0