Bradley Heights Apartments

A 236-Unit Apartment Development Puyallup, Washington

Bradley Heights SS LLC

PROJECT TEAM

Bradley Heights SS LLC Owner/Developer 614 Boylston Ave E

Seattle, WA 98102 (206) 557-7236

Architect: Milbrandt Architects, Inc., P.S. 25 Central Way, Suite 210

Kirkland, WA 98033 (425) 454-7130

Structural Engineer Solutions 4 Structure, Inc 11605 135th St Ct E

> Puyallup, WA 98374 (253) 268-2923

(253) 770-3144

Civil Engineer Azure Green Consultants 409 East Pioneer Puyallup, WA 98372

Landscape Architect Nature By Design

1320 Alameda Avenue, Suite B Fircrest, WA 98466 (253) 460-6067

MEP Engineer Robison Engineering Inc. 19401 40th Avenue W, Suite 302

Lynnwood, WA 98036 (206) 364-3343

PROIECT INFORMATION

/2\ 206 27th Ave SE, Puyallup, WA 98374

Construction of 236 wood framed apartment units in eight Project Description: stacked flat buildings along with a leasing amenity building.

7.785 acres (+/- 339,107 SQ. FT.)

Tax Parcel Number:1 419036006

Occupancy Type: All Apartment Buildings are R2 occupancy

All Apartment Buildings are Type V-B construction Type of Construction with NFPA 13R automatic sprinklers

Applicable Codes:

2018 International Building Code 2018 Uniform Plumbing Code 2018 Washington State Energy Code 2018 International Mechanical code

2018 International Fire Code 2022 National Electrical Code ICC/ANSI A117.1-2009 Standard

Washington State Amendments as modified and adopted by the local jurisdiction.

RATED ASSEMBLIES

Rated assemblies shall be provided in accordance with IBC section 420

Assembly	Fire Rating	Detail
Common walls separating dwelling units:	1-hour	4/D1
Exterior walls:	non-rated	1/D1
Interior bearing walls:	non-rated	2/D1
Interior non-bearing walls:	non-rated	2/D1
Corridor-to-unit walls:	1-hour	3/D1
Floor/ceiling:	1-hour	13/D1
Roof/ceiling:	1-hour	17/D1
Penetrations (firestopping)	Per situation	17/D8
		D9
Stair fire barrier wall:	1-hour @ 3-story 2-hour @ 4-story	3/D1 7/D1

Fire Alarm systems and smoke alarms shall be provided in accordance with IBC section 420.5 Refer to unit plan sheets for smoke detector locations and requirements.

GENERAL NOTES

1. Comply with 2018 IBC and all applicable codes and ordinances of the local jurisdiction and the State of Washington.

2. Do not scale drawings. 3. Verify all rough-in dimensions for equipment provided in this contract or by

All rough-ins shall be approved and fireblocking shall be installed prior to

4. Verify size and location of and provide all openings through floors and walls, furring, anchors, inserts, rough bucks and backing for surface mounted items.

5. Provide furring as required to conceal mechanical and electrical work in all

6. All swinging doors not located by dimensions on plans, interior elevations, or details shall be 3" from face of stud to edge of rough openings or centered between room partitions as shown.

7. Plans are drawn assuming the following rough openings: Swinging doors: Nominal size +2". Bi-Fold doors: Nominal size +1-1/2". Bi-Pass doors: Nominal size +0". Windows: Nominal size +0".

Sliding glass doors: Nominal size +0". 8. Fill where required with earth free from organic material. Compact fill in

12" lavers maximum. 9. "Finish Floor" refers to the top of concrete slab or top of wood floor

10. Exterior walls shall be 2x6 studs at 16" o.c. and interior walls shall be 2x4

studs at 16" o.c., unless noted otherwise. 11. Unless otherwise noted, plan dimensions are to face of studs and face of concrete walls.

12. Refer to interior elevations for cabinet and counter lengths, dimensions, countertop materials and detail reference. Verify all existing dimensions

13. Provide caulking between sole plates and subfloor and between rim joists at both top plate and subfloor.

14. Hydrants shall be in service prior to start of framing. 15. Through penetrations and membrane penetrations of rated wall or

floor/ceiling assembly will require firestopping per 2018 IBC Section 714. See detail sheets for diagram of specifics. 16. Shall be no asbestos used on this project. 17. All Tub-Shower valves installed shall conform to UPC 408.3 & ASSE 1016

or ASME A112.18.1 18. Milbrandt Architects is not responsible for construction means, methods, techniques or procedures, or for the safety precautions and programs in connection with the work, and is not responsible for the failure of any contractor or subcontractor to carry out the work in accordance with the various contract documents and or governing jurisdiction, regardless of what

FEDERALLY DECLARED SAFE HARBOR

Declared Safe Harbor: HUD Fair Housing Accessibility Guidelines published on March 6, 1991 and the Supplemental Notice to Fair Housing Accessibility Guidelines: Questions and Answers about the Guidelines, published on June 28, 1994.

ACCESSIBILITY

is shown on these drawings.

Design is based on the 2018 IBC Chapter 11 which has been amended by the State of Washington, & 2009 ICC A117.1 Accessible & Useable Buildings & Facilities. None of the buildings are an elevator type building.

There are a total of 84 one-story dwelling units at ground level. All ground floor units are 1 or 2-bed unit designs. Provided total 84 accessible units: 12 Type A and 72 Type B units. Type A units meet the requirements for Type B units.

The 12 Type A units are proportioned as follows (see Site Plan):

• (7) 1-Bed units (1 BR) in each of Buildings A, C, D, E, F & G- for a total of 7. • (5) 2-Bed units (2 BR) in Buildings A, D, E, F & G - for a total of 5.

Section 1106.2 IBC requires 2% of each proposed parking stall type to be accessible. Of the 354 total open stalls, 12 are accessible, including 5 van stalls. Each accessible open stall is indicated by the wheelchair symbol on the site plan and further designated by the detail symbols 10/A3.

VENTILATION NOTES

1. Design Criteria: 2018 International Mechanical Code with Washington State

2. System Type: Balanced whole house fan system with energy recovery

3. Use: Group R occupancy.

4. Specifics: See mechanical plans by others.

ENERGY NOTES

FIRE SYSTEMS

permit for review and approval before installation.

DEFERRED SUBMITTALS

Shop drawings and calculations are required for:

SEPARATE PERMITS

2. Fire Alarm System.

The following required permits will be submitted separately:

1. Automatic Fire Sprinkler System (See fire systems note, this sheet).

DESIGN LOADS

See structural notes. Sheet S1.0

Chapter 4 using climate zone catagory 5 & marine 4 for

All residential units shall comply with the Requirements By Component Table 402.1.1 Including but not limited to the following: Associated Notes/Details **Showing Compliance** See Insul. Notes on sheets U1, Window U-Factor

U2, U3, U4, U5 Ceiling R-Value 13 / D1 Wood Frame Wall R-Value R-21 int. 1, 3, 4, 7 & 8 / D1 Floor R-Value N/A R-10, 2ft 1, 3, 5 & 6/ D2 Slab R-Value & Depth "int." (intermediate framing) denotes standard framing 16" o.c. with headers

insulated with a min. of R-10 (see 6/D6) All units need to have a certificate posted within 3 feet of the electrical distribution panel listing the following information: R-values, U-values, duct air leakage test results, building envelope air leakage test results, types and efficiencies of heating, cooling and service water heating equipment per R401.3

All insulation shall comply with table R402.4.1.1 WSEC Hot water piping shall be insulated to a minimum of R-3 per R403.5.2

Water heaters in unheated spaces, or on concrete floors shall be placed on minimum of R-10 incompressible insulated surface per R403.5.5

Mechanical ventilation shall be provided per R403.6 A minimum of 90% of all permanently installed lamps in lighting fixtures shall be high-efficacy lamps per R404.1 See Insulation Notes on the Unit Plans, and Insulation and Energy Notes on sheet D7.

Buildings shall have an NFPA 13R sprinkler system installed throughout per 2018 IBC

Section 903.3.1.2 which shall include a notification appliance which is activated upon

integral with the sprinkler system shall be considered part of the sprinkler system. The

sprinkler system design, therefore, needs to include any and all integrated alarms.

sprinkler flow. Any alarms, bells or lights required due to the design of the sprinkler system or

Plans and specifications for sprinklers shall be submitted to the city of Puyallup as a separate

1. Firestopping details. Firestopping methods and materials shall be determined by the Contractor

except where details or notes are indicated in these drawings. Firestopping locations are indicated in part

by detail sheet D9. Contractor shall submit UL assembly details and product cuts of all relevant situations

submitted to the Building Official for approval. Firestopping shall not be installed without City approval.

to the Architect for conformance to the building design. Upon the Architect's approval, they shall be

 $\frac{1}{2}$ Energy Credits used (see 2018 WSEC table 406.3 for all requirements): Fuel Normalization Credit System Type 4 0.0 CREDITS Option 2.1 Air Leakage Control 1.0 CREDITS 2.0 CREDITS Option 3.4 Ductless Mini-Split Heat Pump System Option 7.1 Appliance Package 1.5 CREDITS TOTAL PROVIDED 4.5 CREDITS



VICINITY MAP



Engineering Public Works

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permitee on site for inspection.

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

> City of Puyallup Building REVIEWED **FOR COMPLIANCE** SKinnear 05/14/2025 1:58:26 PM

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Bradley Heights **Apartments**

Puyallup,

Timberlane **Partners**

No. Date Description 8-30-24 Owner Changes/

Revisions

PRMU20240281

Initial Publish Date:

Date Plotted: 5-6-25 Job No.: Drawn By: TMK/HDM/APT

Sheet No.:

Bradley Heights Apartments

Building FPuyallup, Washington

Bradley Heights SS LLC

Bradley Heights Bu	uilding Areas
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S3.1 Details - Building F

All buildings are Type V-B construction; all occupancies are R-2; all have NFPA 13R sprinkler systems throughout.

a. Misc. Areas include SF of sprinkler riser rooms and basement storage rooms.

c. Base Area allowed is 7000SF per floor for Type V-B construction (Table 506.2). See area increase diagrams on sheet A4 for total area allowed.

Unit Area Summary

Onit Area Gamin	.u. y		
Unit		Unit SF	Patio/Deck SF
1-Bed-End	1BR/1BA	712	67
1-Bed-End-Alt	1BR/1BA	625	78
1-Bed-Int-1	1BR/1BA	684	61
1-Bed-Int-2	1BR/1BA	684	71
1-Bed-Int-Alt-1	1BR/1BA	634	74
1-Bed-Int-Alt-2	1BR/1BA	634	86
2-Bed	2BR/2BA	1019	66/60
2-Bed-Alt	2BR/2BA	980	60
2-Bed-2	2BR/2BA	1115	62
1-Bed-Int-3	1BR/1BA	795	57
1-Bed-Int-4	1BŘ/1BÁ	795	59

Per IBC 1006.3.2 section 5, Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit provided that the dwelling unit has a maximum occupant load of 20, is equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1 or 903.3.1.2, is provided with emergency escape and rescue openings in accordance with section 1030, and the common path of egress travel does not exceed 125'.

LIST OF DRAWINGS

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			S4.1	Details- Building F
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	A2	Site Plan	D1	Details
	A3	Site Standards	D2	Details
	A4	Area Increase Diagram	D3	Details
	A5	Grade Plane Calculations	D4	Details
			D5	Details
	B9	Building F - Basement & 1st Level Building Plans	D6	Details
	B10	Building F - 2nd & 3rd Level Building Plans	D7	Details
			D8	Details
	U1	1-Bed-Int Unit - Basement & 1st Level Floor Plans	<u>√1</u> √ D9	Details
Λ.	U2	1-Bed-Int Unit - 2nd & 3rd Level Floor Plans	(BE1	Building Envelope Details
1	Ú2.1	1-Bed-Int Alt Unit - 3rd Level Floor Plans	BE2	Building Envelope Details
	U2.2	1-Bed-Int Unit - 1st, 2nd, & 3rd Level Floor Plans	>BE3	Building Envelope Details <
	U4	2-Bed Unit - Basement & 1st Level Floor Plans	(BE4	Building Envelope Details
/	U5	2-Bed Unit - 2nd & 3rd Level Floor Plans	BE5	Building Envelope Details
$\sqrt{1}$	U5.1	2-Bed-2 Unit - 1st, 2nd, & 3rd Level Floor Plans	M0.0	Legend, General Notes & Drawing In
	Ú6 ·	Interior Elevations - 1-Bed-Int-1, 1-Bed-Int-2, -	M0.1	Project Notes
		Int-Alt-1, & 1-Bed-Int-Alt-2	M0.2	Tables & Calculations
<u> </u>	U7 [*]	Înterior Elevations - 1-Bed-Int-3 & 1-Bed-Int-4	M0.3	Mechanical Schedules & WSEC Form
<u>1</u> \	> U9	Interior Elevations - 2-Bed & 2-Bed-Alt	M2.0	Basement & 1st Floor HVAC Plans
(U10	Interior Elevations - 2-Bed-2	M2.1	2nd & 3rd Level HVAC Plans
(´ U11	Accessibility Standards	M3.0	HVAC Enlarged Plan
(> U13	Stair 2 - Floor Plans	M3.1	HVAC Enlarged Plan
(U14	Door Schedule	E0.00	Electrical Cover Sheet
	<u> </u>		E0.01	Electrical Cover Sheet
	F10	Building F - Partial Architectural Foundation Plan	E0.10	Power Site Plan
	F11	Building F - Partial Architectural Foundation Plan	E0.11	Power Site Plan
			E0.12	Lighting Site Plan
	R6	Building F - Roof Plan	E0.13	Lighting Site Plan
			E1.00	Basement Lighting Plan
	E12	Building F - Exterior Elevations	E1.01	1st Floor Lighting Plan
	E13	Building F - Building Sections	E1.02	2nd & 3rd Floor Lighting Plan
	S1.0	Structural Notes - Building F	E1.50	Lighting Notes
	S1.1	Structural Notes & Tables - Building F	E3.00	Basement & 1st Floor Power Plans
	S1.2	Shear Wall Notes - Building F	E3.01	2nd & 3rd Floor Power Plans
	S1.3	Shear Wall Notes - Building F	E3.02	Roof Power Plan
	S2.14	Foundation Plans - Building F	E5.00	Unit Plan Notes
	S2.15	2nd & 3rd Floor Framing Plans - Building F	E5.01	Unit Electrical Plans
	S2.16	Roof Framing Plan - Building F	E5.02	Unit Electrical Plans
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S3.0 Details - Building F

S4.0 Details - Building F S4.1 Details- Building F S5.0 Details - Building F S5.1 Details - Building F Details D2 Details Details Details D5 Details Details Details Details ∑ D9 Details Building Envelope Details **Building Envelope Details Building Envelope Details** BE4 Building Envelope Details BE5 Building Envelope Details M0.0 Legend, General Notes & Drawing Index M0.1 Project Notes M0.2 Tables & Calculations M0.3 Mechanical Schedules & WSEC Forms M2.0 Basement & 1st Floor HVAC Plans M2.1 2nd & 3rd Level HVAC Plans M3.0 HVAC Enlarged Plan M3.1 HVAC Enlarged Plan E0.00 Electrical Cover Sheet E0.01 Electrical Cover Sheet E0.10 Power Site Plan E0.11 Power Site Plan E0.12 Lighting Site Plan E0.13 Lighting Site Plan E1.00 Basement Lighting Plan E1.01 1st Floor Lighting Plan E1.02 2nd & 3rd Floor Lighting Plan E1.50 Lighting Notes

E6.00 One-Line Diagram & Notes

E6.01 Panel Schedule

P0F.00 Plumbing - Legend, General Notes & Drawing Index

P0F.01 Plumbing Notes & Tables

P0F.02 Plumbing Calculations P0F.03 Plumbing Schedules

P2F.00 Underslab Waste & Vent Plan

P2F.01 Basement Waste & Vent Plan

P2F.02 1st Floor Waste & Vent Plan

P2F.03 2nd Floor Waste & Vent Plan P2F.04 3rd Floor Waste & Vent Plan

P2F.05 Roof Waste & Vent Plan

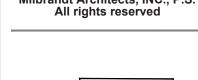
P3F.01 Basement Plumbing Supply Plan P3F.02 1st Floor Plumbing Supply Plan

P3F.03 2nd Floor Plumbing Supply Plan

P3F.04 3rd Floor Plumbing Supply Plan P7F.00 Details

P7F.01 Details

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Bradley Heights **Apartments**

Puyallup,

Timberlane Partners

Revisions

No. Date Description 8-30-24 Owner Changes/ Permit Corrections

PRMU20240281

Initial Publish Date:

Date Plotted: 5-6-25

Drawn By: Job No.: 23-06 TMK/HDM/APT Sheet No.:

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Wa

CITY OF PUYALLUP

Planning Division Approved Site Plan (253) 864-4165 MINIMUM SETBACK REQUIREMENTS

Front Yard: 10 ft Rear Yard: 0 ft

Additional Conditions/Comments

Street Side Yard: N/A

Staff: RNBrown Date: 03/24/2025

Zoning District: RM-Core

Interior Side Yard: Left: 0 ft Right: 0 ft

Front, rear, and side yard property lines shall be marked with string from surveying pins prior to footing

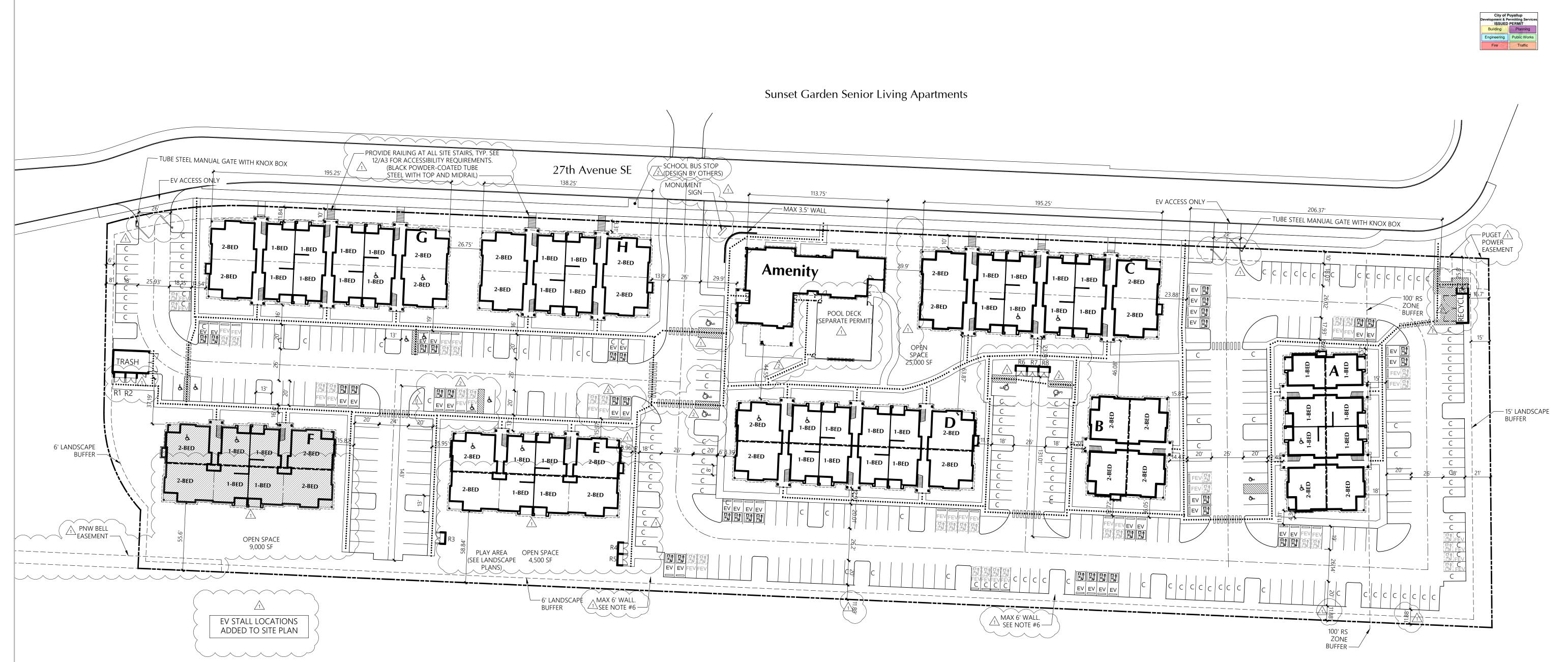
1 8-30-24 Owner Changes/ Permit Corrections 4-24-25 Permit Corrections

PRMU20240281

Initial Publish Date:

Date Plotted: 5-6-25 Job No.: Drawn By:

23-06 APT/HDM Sheet No.:





236 UNITS

SITE INFORMATION

SITE ADDRESS: [→] Puyallup, WA

PARCEL #: 419036006 SITE AREA: 339,107 SF (7.785 Acres)

ZONE: RM-CORE SETBACKS: NORTH/FRONT: 10 FT setback to buildings WEST/SIDE: 0 FT Building setback - 6 FT landscape buffer SOUTH/REAR: 0 FT Building setback - 6 FT landscape buffer

EAST/SIDE: 25 FT Building setback - 15 ft landscape buffer

BUILDING HEIGHT: 50' Max

DENSITY: Min 16 units per acre (125 units) no Max density

LOT COVERAGE: Max 90%

LANDSCAPE AREA: Min 10% of net lot area (33,910 SF) OPEN SPACE: 10% of net lot area (33,910 SF)

38,500 SF provided PRIVATE OPEN SPACE: 60 SF per ground floor unit

10' x 6['] per upper story unit

1.5 PARKING SPACES PER UNIT PARKING: Required Parking: 354 Stalls Provided Parking: 354 Stalls

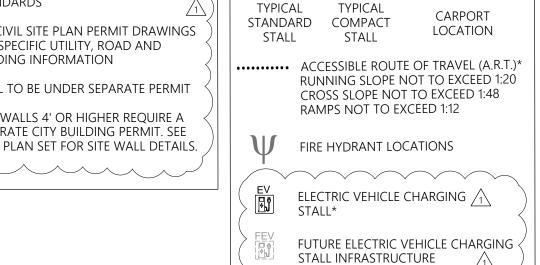
EASEMENTS: no existing easements on site

PARKING	G SUMMAR	RY
Parking Stalls Required	354	
Standard Stalls	125	
Compact Stalls 41.5%	99	
Parallel Stalls	0	
Carport Stalls	117	
Attached Garage Stalls	0	
Detached Garage Stalls	0	
Accessible Standard Stalls	6	
Accessible Van Stalls	4	$\stackrel{\wedge}{2}$
Accessible Parallel Stalls	0	
Accessible Carport Stalls	2	$\stackrel{\wedge}{\sim}$
Accessible Garage Stalls	0,	
Tandem Stalls	0	
Tandem Garage Stalls	0	
Subtotal	353	1.50 Stalls / D.U.
Aprons	0	
Total Parking Stalls Provided	353	1.50 Stalls / D.U.

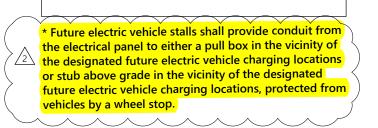
UNIT COL 1 BED 2 BED	137 (58%) 99 (42%)	
TOTAL	236	
Electric Ve Pro	ehicle Charging stations ovided: 36 Stalls (10% of provided parking) quired: 0 Stalls^)
Pro	ectric Vehicle Stall Infrastructure ovided: 36 Stalls (10%of provided parking) quired: 36 Stalls (10% of provided parking)^	
	panels sized to accommodate 72 EV Stalls rovided parking)^	
	ements from section 429 of 2018 IBC on State Amendment.)

PERMIT BLDG NAME	
А	206 27TH AVE SE, BLDG J
В	206 27TH AVE SE, BLDG H
С	206 27TH AVE SE, BLDG G
D	206 27TH AVE SE, BLDG E
E	206 27TH AVE SE, BLDG C
F	206 27TH AVE SE, BLDG A
G	206 27TH AVE SE, BLDG B
Н	206 27TH AVE SE, BLDG D
CLUBHOUSE	206 27TH AVE SE, BLDG F

NAME			1)	TYPICAL SIDEWALK WIDTH IS 6'	
4	206 27TH AVE SE, BLDG J		2)	A MINIMUM CLEAR WIDTH OF 44" IS REQUIRED FOR ALL EXTERIOR ACCESSIBLE	
3	206 27TH AVE SE, BLDG H			ROUTES PER WASHINGTON STATE AMENDMENT SECTION 1101.2.1	
	206 27TH AVE SE, BLDG G		3)	SEE SHEET A3 FOR SITE ACCESSIBILITY STANDARDS	
	206 27TH AVE SE, BLDG E		4)	SEE CIVIL SITE PLAN PERMIT DRAWINGS FOR SPECIFIC UTILITY, ROAD AND	
	206 27TH AVE SE, BLDG C			GRADING INFORMATION	
-	206 27TH AVE SE, BLDG A		5)	POOL TO BE UNDER SEPARATE PERMIT ANY WALLS 4' OR HIGHER REQUIRE A	
כ	206 27TH AVE SE, BLDG B			SEPARATE CITY BUILDING PERMIT. SEE CIVIL PLAN SET FOR SITE WALL DETAILS.	
1	206 27TH AVE SE, BLDG D				
HOUSE	206 27TH AVE SE, BLDG F				
		-			



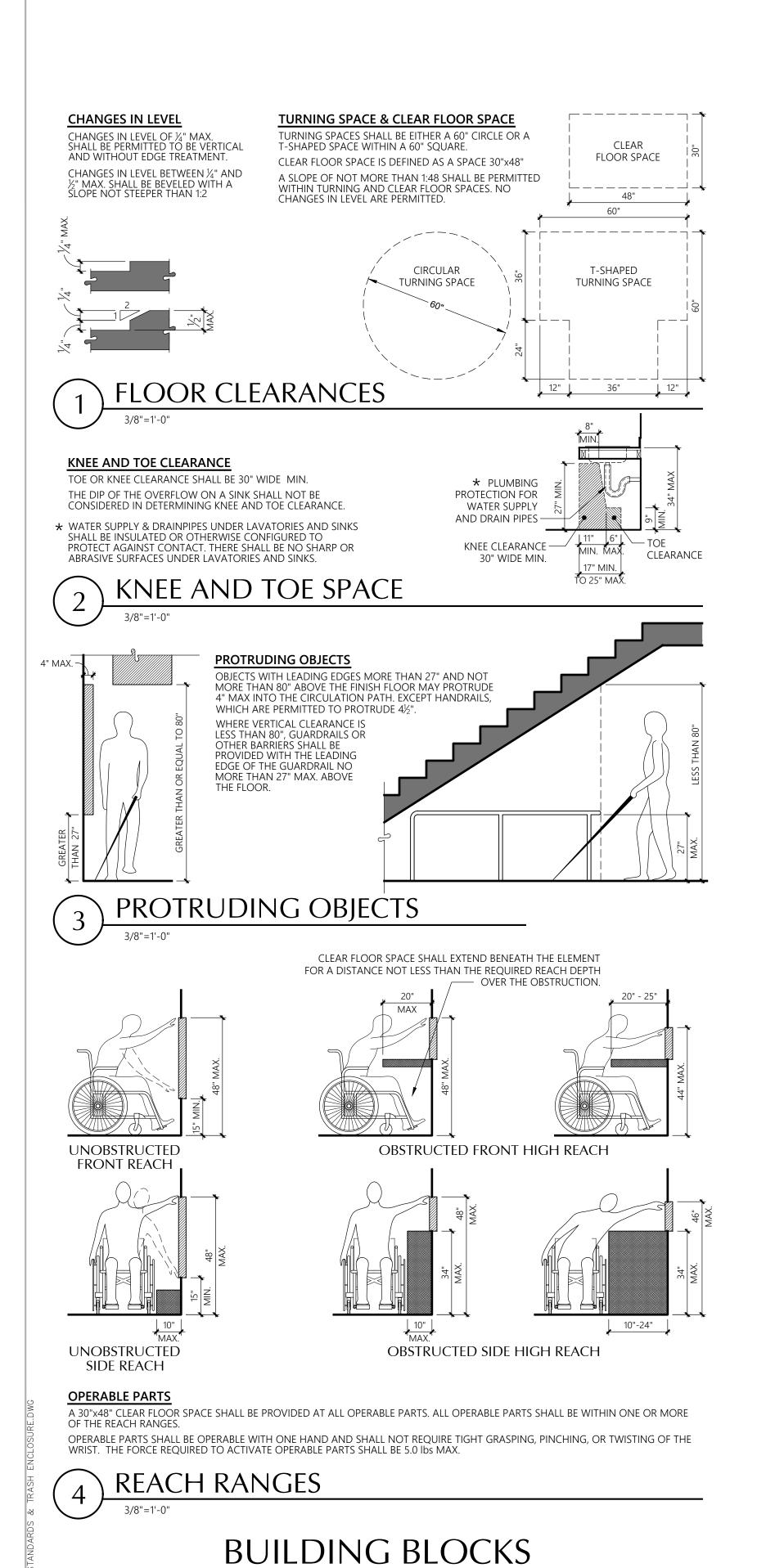
SITE NOTES



SITE KEY

2'-6" STEP LOCATION





CHAPTER 3

ACCESSIBLE ROUTE (PER IBC SECTION 1104) AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE SITE SHALL BE PROVIDED FROM PUBLIC Transportation Stops, accessible parking, accessible passenger loading zones, AND PUBLIC STREETS OR SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCES SERVED. when a building or portion of a building is required to be accessible, at least

ACCESSIBLE BUILDING ENTRANCES CONNECTING ACCESSIBLE WALKWAYS AND TO THE ACCESSIBLE ROUTES SHALL COINCIDE WITH OR BE LOCATED IN THE SAME AREAS AS A GENERAL CIRCULATION PATH.

ONE ACCESSIBLE ROUTE SHALL BE PROVIDED TO EACH PORTION OF THE BUILDING, TO

ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING COMPONENTS: WALKING SURFACES WITH A SLOPE NOT STEEPER THAN 1:20, DOORS & DOORWAYS, RAMPS, CURB RAMPS EXCLUDING THE FLARED SIDES, ELEVATORS, AND PLATFORM LIFTS.

WALKING SURFACES

SLOPE: THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48.

CHANGES IN LEVEL: CHANGES IN LEVEL SHALL COMPLY WITH SECTION 303 (see detail 1 ACC sheets) CLEAR WIDTH: THE WIDTH OF AN ACCESSIBLE ROUTE SHALL BE 36" MIN. THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32" MIN. FOR A LENGTH OF 24" MAX. PROVIDED THE REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48" MIN. IN LENGTH AND 36" MIN. IN WIDTH. FOR EXTERIOR ROUTES OF TRAVEL, THE CLEAR WIDTH

PASSING SPACE: AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60" SHALL PROVIDE PASSING SPACES AT MAXIMUM INTERVALS OF 200 FEET. PASSING SPACES SHALL BE EITHER A 60"x60" MIN. SPACE, OR AN INTERSECTION OF WALKING SURFACES WITH A -SHAPED TURNING SPACE (See detail 1 ACC sheets), PROVIDED THE BASE AND ARMS OF THE T-SHAPED SPACE EXTEND 48" MIN. BEYOND THE INTERSECTION.

CESSIBLE ROUTE ★ ADDITIONAL CLEARANCE IF DOOR HAS BOTH CLOSER AND LATCH MANEUVERING CLEARANCES MIN. MANEUVERING CLEARANCES SHALL COMPLY WITH THESE DIAGRAMS AND SHALL NOT INCLUDE KNEE & TOE CLEARANCE. THE FLOOR SURFACE WITHIN THE MANEUVERING CLEARANCE SHALL HAVE A SLOPE NOT GREATER THAN 1:48

HINGE APPROACH

DOORWAY CLEAR WIDTH: DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32" MIN. CLEAR OPENING OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED FROM THE FACE OF THE DOOR TO THE STOP WITH THE DOOR OPEN 90°

THRESHOLDS: IF PROVIDED, THRESHOLDS SHALL BE ½" MAX. IN HEIGHT & SHALL COMPLY WITH SECTIONS 302 & 303. (See detail 1 ACC sheets) DOOR HARDWARE: HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON IBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34" MIN. AND 48" MAX. ABOVE

CLOSING SPEED: DOORS WITH CLOSERS SHALL BE ADJUSTED SO THAT FROM A 90° OPEN POSITION, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12° FROM THE LATCH IS 5 SECONDS MIN.

FRONT APPROACH

CHANGE IN

DIRECTION

RUN

EXTENDED

LATCH APPROACH

DOORS WITH A SPRING HINGE SHALL BE ADJUSTED SO THAT FROM A 70° OPEN POSITION THE TIME REQUIRED TO MOVE THE DOOR TO A CLOSED POSITION IS 1.5 SECONDS MIN. DOOR OPENING FORCE: HINGED, SLIDING OR FOLDING DOORS OTHER THAN FIRE DOORS SHALL HAVE AN OPENING FORCE AS FOLLOWS: INTERIOR DOORS: 5 lbs. MAX. EXTERIOR DOORS: 10 lbs. MAX.

AT LEAST AS WIDE -

LANDING

AS RAMP RUN

DOORS

ACCUMULATION OF WATER.

DETECTABLE WARNING

(IF PROVIDED)

GENERAL: RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12. THE MAX. CROSS SLOPE OF A RAMP SHALL BE 1:48. THE MAX. RISE FOR ANY RAMP RUN SHALL BE 30". LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF WATER.

CHANGES IN LEVEL: CHANGES IN LEVEL SHALL COMPLY WITH SECTION 303 (See detail 1 ACC sheets) CLEAR WIDTH: THE CLEAR WIDTH SHALL BE 36" MIN. FOR EXTERIOR ROUTES OF TRAVEL THE

DIRECTION AT THE LANDING SHALL BE SIZED TO PROVIDE A TURNING SPACE

CLEAR WIDTH SHALL BE 44" MIN. THE HANDRAILS SHALL NOT PROJECT INTO THE REQUIRED 60" MIN. CLEAR WIDTH OF THE RAMP RUN. LANDINGS: RAMPS SHALL HAVE LANDINGS AT THE BOTTOM & TOP OF EACH RAMP RUN WITH A MAX. SLOPE OF 1:48. CLEAR WIDTH OF LANDINGS SHALL BE AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING AND A MIN. CLEAR LENGTH OF 60". RAMPS THAT CHANGE

(See detail 1 ACC sheets) HANDRAILS: RAMP RUNS WITH A RISE GREATER THAN 6" SHALL HAVE HANDRAILS **EDGE PROTECTION:** THE FLOOR SURFACE OF THE RAMP RUN OR LANDING SHALL EXTEND 12" BEYOND THE INSIDE FACE OF A RAILING OR THERE SHALL BE A 4" MIN. HEIGHT CURB OR A BARRIER AT THE EDGE OF THE RAMP OR LANDING CONSTRUCTED SO THAT IT PREVENTS THE

PASSAGE OF A 4" DIAMETER SPHERE BARRIER SHALL PREVENT -PASSAGE OF 4" SPHERE

The Curb ramp shall have a max. Slope of 1:12 with a max. Cross slope of 1 :48.

CURB RAMPS SHALL BE LOCATED OR PROTECTED TO

PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES

CURB RAMP 1:12 MAX. SLOPE

- Flared Sides 1:10 Max. Slope

— CURB RAMP FLARES PAINTED IF

ADJACENT CURB IS PAINTED

LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE

60" MIN. **EXTENDED SURFACE-**AT SAME LEVEL AS RAMP SURFACE 36" CLR. FLOOR SURFACE RAMP EDGE PROTECTION

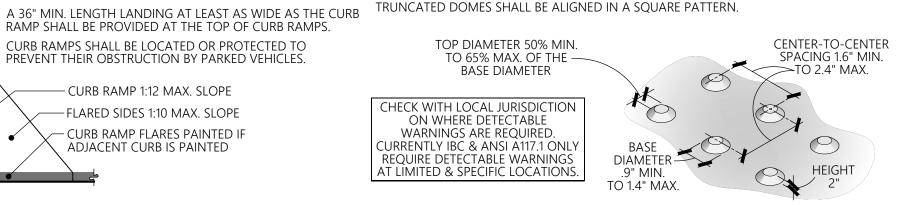
RAMP RUN

DETECTABLE WARNINGS

LANDING

THE MIN. WIDTH OF CURB RAMPS SHALL BE 36". ALL ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE CURB RAMP SHALL NOT BE STEEPER THAN 1:20.

DETECTABLE WARNINGS SHALL CONTRACTOR OF CURB RAMP SHALL NOT BE STEEPER THAN 1:20. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJACENT SURFACES, EITHER DETECTABLE WARNING SURFACES IN INTERIOR LOCATIONS SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT



CURB RAMPS AND DETECTABLE WARNINGS

ACCESSIBLE ROUTES **CHAPTER 4**

ACCESSIBLE PARKING SPACES

LOCATION: PER IBC SECTION 1106.6. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE. WHERE PRACTICAL THE ACCESSIBLE ROUTE SHALL NOT CROSS LANES OF TRAFFIC. WHERE CROSSING TRAFFIC LANES IS NECESSARY, THE ROUTE SHALL BE DESIGNATED AND MARKED AS A CROSSWALK.

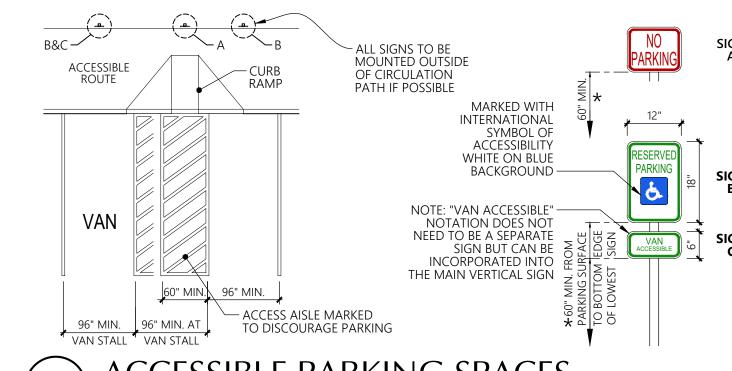
PARKING STALL SIZE: CAR AND VAN PARKING SPACES SHALL BE 96" MIN. WIDTH. ACCESS AISLES SERVING CAR PARKING SPACES SHALL BE 60" MIN. IN WIDTH. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96" MIN. IN WIDTH. ACCESS AISLE: CAR AND VAN PARKING SPACES SHALL HAVE AN ADJACENT ACCESS AISLE ON EITHER SIDE OF THE PARKING SPACE. THE ACCESS AISLES SHALL BE 60" MIN. IN WIDTH FOR CAR STALLS AND 96" MIN. IN WIDTH FOR VAN STALLS AND EXTEND THE FULL LENGTH OF AND AT THE SAME LEVEL AS THE PARKING SPACE THEY SERVE. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM

FLOOR SURFACES: PARKING STALLS & ADJACENT ACCESS AISLES SHALL HAVE A SURFACE SLOPE NOT GREATER THAN 1:48. VERTICAL CLEARANCE: ACCESSIBLE VAN PARKING STALLS, ACCESS AISLES SERVING THEM, & VEHICULAR ROUTES SERVING THE VAN SPACE SHALL HAVE A VERTICAL CLEARANCE OF 98" MIN.

IDENTIFICATION: ACCESSIBLE PARKING SPACES SHALL BE INDICATED BY A VERTICAL SIGN. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY THAT IS WHITE WITH A BLUE BACKGROUND. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE". A VERTICAL "NO PARKING" SIGN SHALL BE ERECTED AT THE HEAD OF EACH ACCESS AISLE LOCATED ADJACENT TO AN ACCESSIBLE PARKING SPACE. THESE SIGNS MAY INCLUDE ADDITIONAL LANGUAGE SUCH AS, BUT NOT LIMITED TO, AN INDICATION OF THE AMOUNT OF THE MONETARY PENALTY FOR PARKING IN THE SPACE WITHOUT A VALID PERMIT OR THE ACCESS AISLE. THESE SIGNS SHALL BE 60" MIN. ABOVE THE FLOOR OF THE PARKING SPACE MEASURED TO THE BOTTOM OF THE SIGN.

SIGN MOUNTING: SIGNS ARE TO BE MOUNTED COMPLETELY OUTSIDE OF CIRCULATION PATHS WHEREVER POSSIBLE WHERE MOUNTING IS NECESSARY WITHIN A PATH OF CIRCULATION, SIGNS SHALL MEET THE REQUIREMENTS OF IBC **SECTION 1003.3** FOR PROTRUDING OBJECTS AND POST-MOUNTED OBJECTS.

★ SIGNS MOUNTED ON POSTS WITHIN A CIRCULATION PATH SHALL BE INSTALLED WITH A VERTICAL CLEARANCE OF 80" MIN. FROM THE LOWEST POINT OF THE SIGN(S) TO THE WALKING SURFACE. IF A POST MOUNTED SIGN IS SIZED SUCH THAT IT PROTRUDES 4" MAX. FROM THE MOUNTING POST, THEN THE MOUNTING HEIGHT SHALL BE MOUNTED AT 60" MIN. ABOVE THE PARKING SURFACE SO AS TO NOT BE OBSTRUCTED BY ANY PARKED VEHICLES.

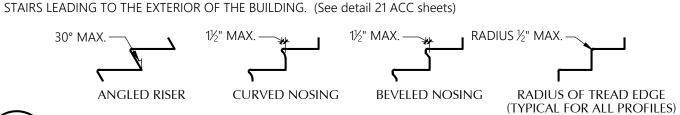


ACCESSIBLE PARKING SPACES

ACCESSIBLE STAIR REQUIREMENTS

ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTHS. RISERS SHALL BE 4" HIGH MIN. AND 7" HIGH MAX. TREADS SHALL BE 11" DEEP MIN. OPEN RISERS ARE NOT PERMITTED & TREADS SHALL HAVE A SLOPE NOT MORE THAN 1:48.

STAIR NOSINGS SHALL CONFORM TO THE DIAGRAMS SHOWN HERE AND THE LEADING 2" OF THE TREAD SHALL HAVE VISUAL CONTRAST OF DARK-ON-LIGHT OR LIGHT-ON-DARK FROM THE REMAINDER OF THE TREAD. STAIR TREADS & LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT ACCUMULATION OF WATER. FLOOR IDENTIFICATION SIGNS SHALL BE LOCATED AT EACH FLOOR LANDING ADJACENT TO THE STAIRWELL DOOR LEADING INTO THE CORRIDOR. SIGNS SHALL BE IN RAISED CHARACTERS & BRAILLE. "EXIT" SIGNS SHALL BE LOCATED AT

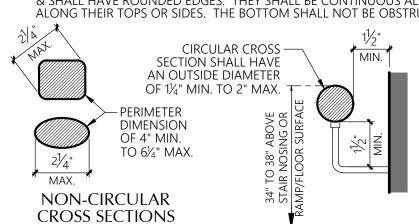


ACCESSIBLE STAIRS

HANDRAILS

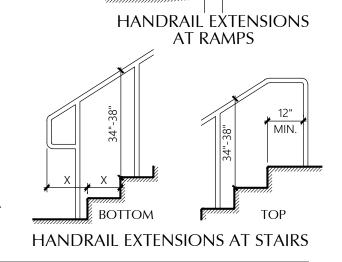
HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS & RAMPS. THEY SHALL BE CONTINUOUS FOR THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCHBACKS SHALL BE CONTINUOUS BETWEEN

HANDRAIL GRIPPING SURFACES & ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS & SHALL HAVE ROUNDED EDGES. THEY SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOM SHALL NOT BE OBSTRUCTED FOR MORE THAN 20% OF IT'S LENGTH



HANDRAIL EXTENSIONS EXTENSIONS SHALL EXTEND BEYOND AND IN THE SAME DIRECTION OF A STAIR FLIGHT OR RAMP RUN EXCEPT FOR THE INSIDE CONTINUOUS HANDRAIL AT SWITCHBACK STAIRS OR RAMPS HANDRAILS SHALL RETURN TO A WALL, GUARD OR THE LANDING SURFACE, OR BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT OR RAMP RUN.

AT THE BOTTOM OF A STAIR FLIGHT THE HANDRAIL SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE EQUAL TO ONE TREAD DEPTH BEYOND THE BOTTOM TREAD NOSING

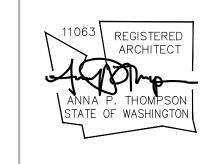


HANDRAILS

GENERAL SITE & BLDG. ELEMENTS CHAPTER 5

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Bradley Heights **Apartments**

Puyallup,

Timberlane **Partners**

Revisions No. Date Description



Initial Publish Date:

Date Plotted: 5-1-25 Job No.: Drawn By: APT/DJV/JLL

Sheet No.:



Portion of perimeter with 30 feet of open space

FRONTAGE INCREASE TO BUILDING AREA

Per IBC Section 506.3 buildings that adjoin or have access to a public way or qualifying green space for more than 25% of their total perimeter are eligible for an area factor increase based

To qualify for an area factor increase based on frontage, the public way or open space adjacent to the building perimeter shall have a minimum distance (W) of 20 feet, and only the first 30 feet shall be considered in the calculation. The measurement shall be to the nearest lot line, the entire width of a street, alley or public way, or the exterior face of an adjacent building on the

For purposes of simplifying this calculation only those portions of perimeter fronting right of way or green space with a dimension of 30 feet or more are considered. Those portions of perimeter that front areas that may qualify (are more than 20 feet, but are less than 30 feet) are not included in the frontage calculation.

Frontage Area increase calculation:

 $I_f = [F/P-0.25]W/30$

 I_f = area of increase due to frontage

F = Building perimeter that fronts on a public way or open space

P = Full building perimeter

W = Width of public way or open space (max of 30')

For Building F F = 400.55'

P = 416.31'W = 30'

 $I_f = [400.55'/416..31'-0.25]30'/30' = 0.71$ factor of increase due to frontage

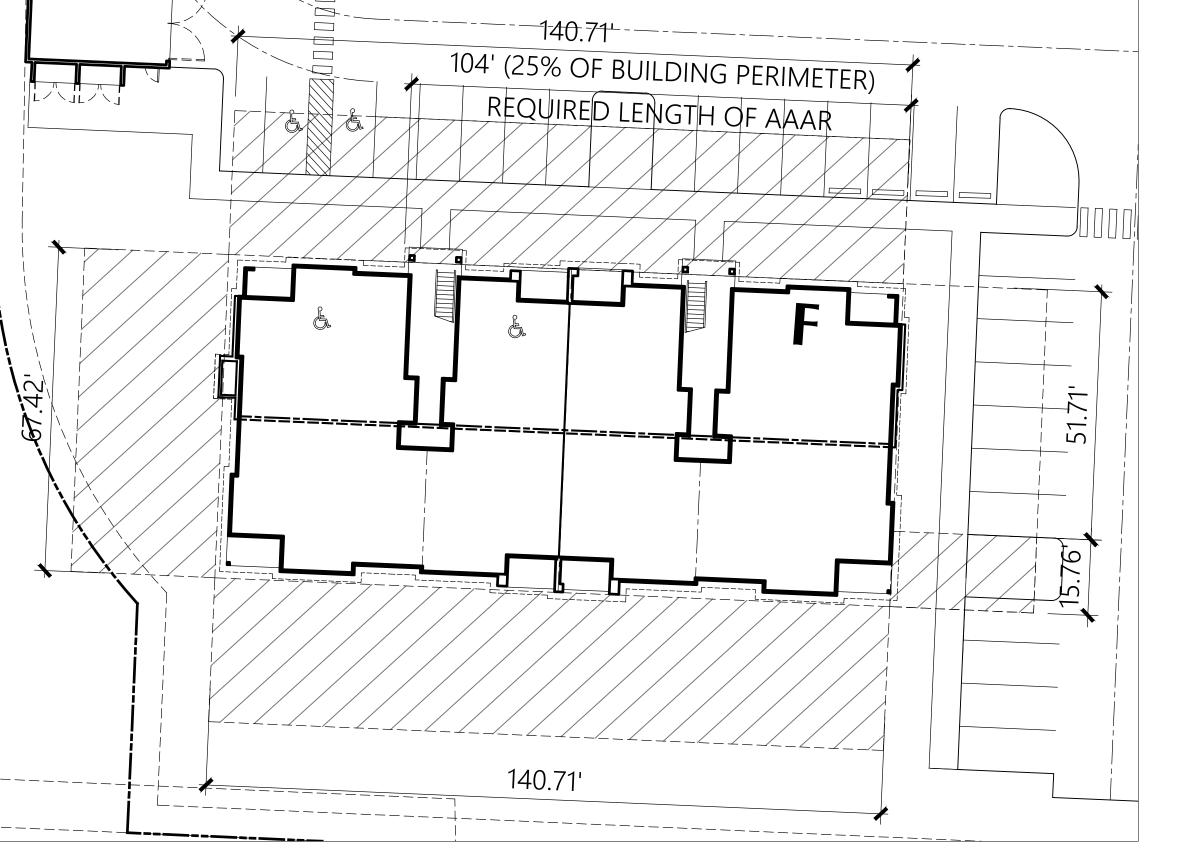
ALLOWABLE BUILDING AREA

Per IBC Table 506.2: Buildings of R-2 occupancy with VB construction type are allowed to have an area of 7,000 square feet per floor. With the area factor increase from above this allowable area per floor is increased as follows:

 $7,000 \text{ s.f.} + (7,000 \text{ s.f. } \times 0.71) = 11,970 \text{ square feet per floor allowed}$

Proposed floor area for Building F

4,198 s.f. Bsmt: Floor 1: \(\)\(\)\(\)\(8,066 \) s.f.\(\) Floor 2: 8,194 s.f. 8,046 s.f.

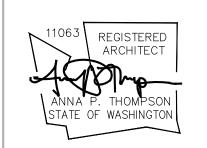


BUILDING F

AREA INCREASE DIAGRAM

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Revisions

No. Date Description 8-30-24 Owner Changes/ Permit Corrections

PRMU20240281

Initial Publish Date:

Date Plotted: 5-6-25 Job No.: Drawn By:

23-06 Sheet No.:

IBC SECTION 202 DEFINITIONS

BASEMENT. A STORY THAT IS NOT A STORY ABOVE GRADE PLANE (SEE "STORY ABOVE GRADE PLANE"). THIS DEFINITION OF "BASEMENT" DOES NOT APPLY TO THE PROVISIONS OF SECTION 1612 FOR FLOOD LOADS.

STORY ABOVE GRADE PLANE. ANY STORY HAVING ITS FINISHED FLOOR SURFACE ENTIRELY ABOVE GRADE PLANE, OR IN WHICH THE FINISHED SURFACE OF THE FLOOR NEXT ABOVE IS:

- 1. MORE THAN 6 FEET (1829 MM) ABOVE GRADE PLANE; OR
- 2. MORE THAN 12 FEET (3658 MM) ABOVE THE FINISHED GROUND LEVEL AT ANY POINT

GRADE PLANE. A REFERENCE PLANE REPRESENTING THE AVERAGE OF FINISHED GROUND LEVEL ADJOINING THE BUILDING AT EXTERIOR WALLS. WHERE THE FINISHED GROUND LEVEL SLOPES AWAY FROM THE EXTERIOR WALLS, THE REFERENCE PLANE SHALL BE ESTABLISHED BY THE LOWEST POINTS WITHIN THE AREA BETWEEN THE BUILDING AND THE LOT LINE OR, WHERE THE LOT LINE IS MORE THAN 6 FEET (1829 MM) FROM THE BUILDING, BETWEEN THE BUILDING AND A POINT 6 FEET (1829 MM) FROM THE BUILDING.

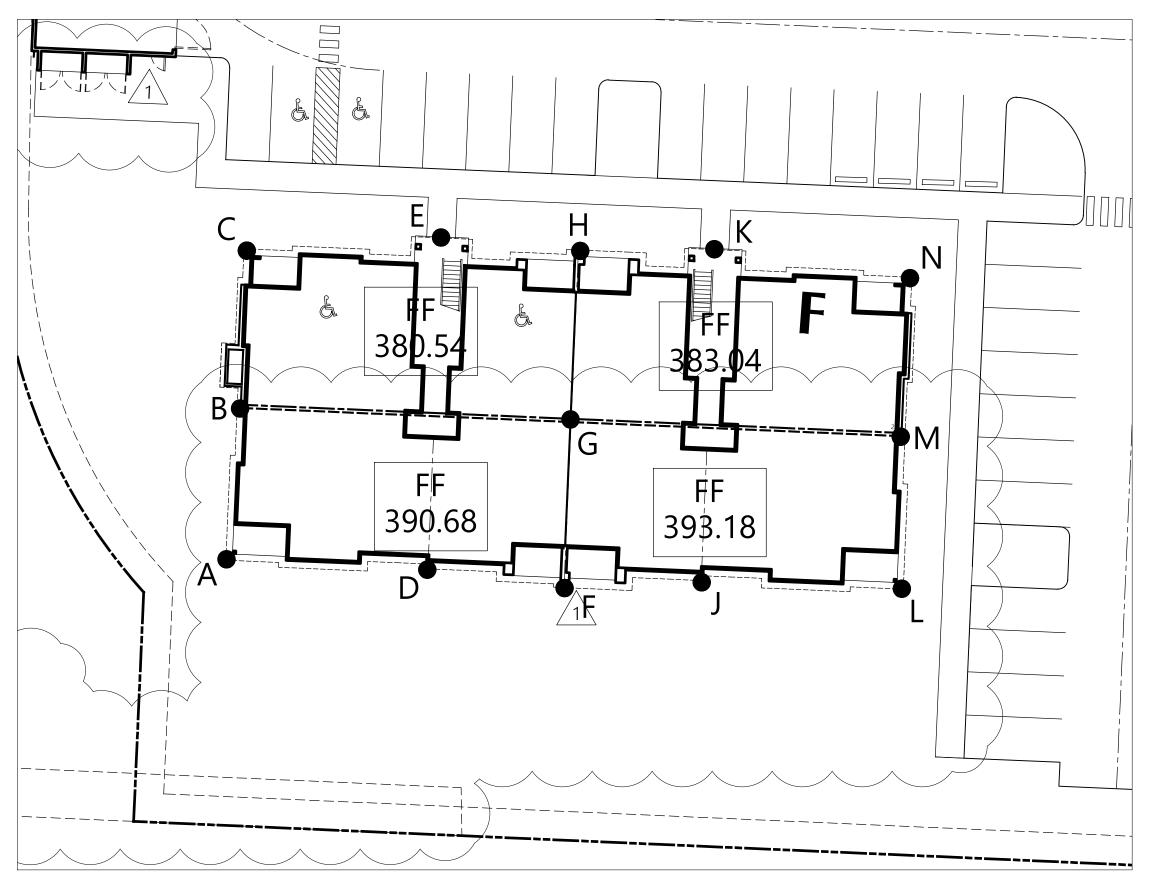
		BUILD	ING F	
	SEG	MENT 1	SEGI	MENT 2
	Α	390.01	F	392.23
	В	384.25	G	386.86
	C	379.87	Н	382.03
	D	390.01	J	392.51
	Е	379.96	Κ	382.46
	F	392.23	L	392.51
	G	386.86	М	388.27
	Н	382.03	Ν	382.37
CALCIII ATED AVEDACE				

CALCULATED AVERAGE GRADE PLANE:	385.65	387.41
1ST LEVEL FINISH FLOOR:	390.68	393.18
DIST. FROM AVERAGE GRADE PLANE TO 1ST LEVEL FINISH FLOOR:	5.03	5.78

FOR SEGMENT 1, THE FIRST FLOOR (FLOOR NEXT ABOVE GRADE PLANE) IS LESS THAN 6-FEET (ACTUAL 5.03 FEET) BELOW FIRST FLOOR FINISHED FLOOR ELEVATION OF 390.68.

FOR SEGMENT 2, THE FIRST FLOOR (FLOOR NEXT ABOVE GRADE PLANE) IS LESS THAN 6-FEET (ACTUAL 5.78 FEET) BELOW FIRST FLOOR FINISHED FLOOR ELEVATION OF 393.18.

BUILDING F QUALIFIES AS 3-STORY OVER BASEMENT



BUILDING F

1" = 20'

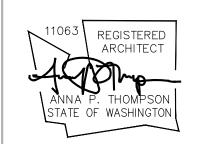
AVERAGE GRADE CALCULATIONS

AVERAGE GRADE PLANE SPOT ELEVATIONS AND CALCULATIONS UPDATED PER CURRENT CIVIL DRAWINGS

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No. Date Description 8-30-24 Owner Changes/ Permit Corrections 4-24-25 Permit Corrections

PRMU20240281

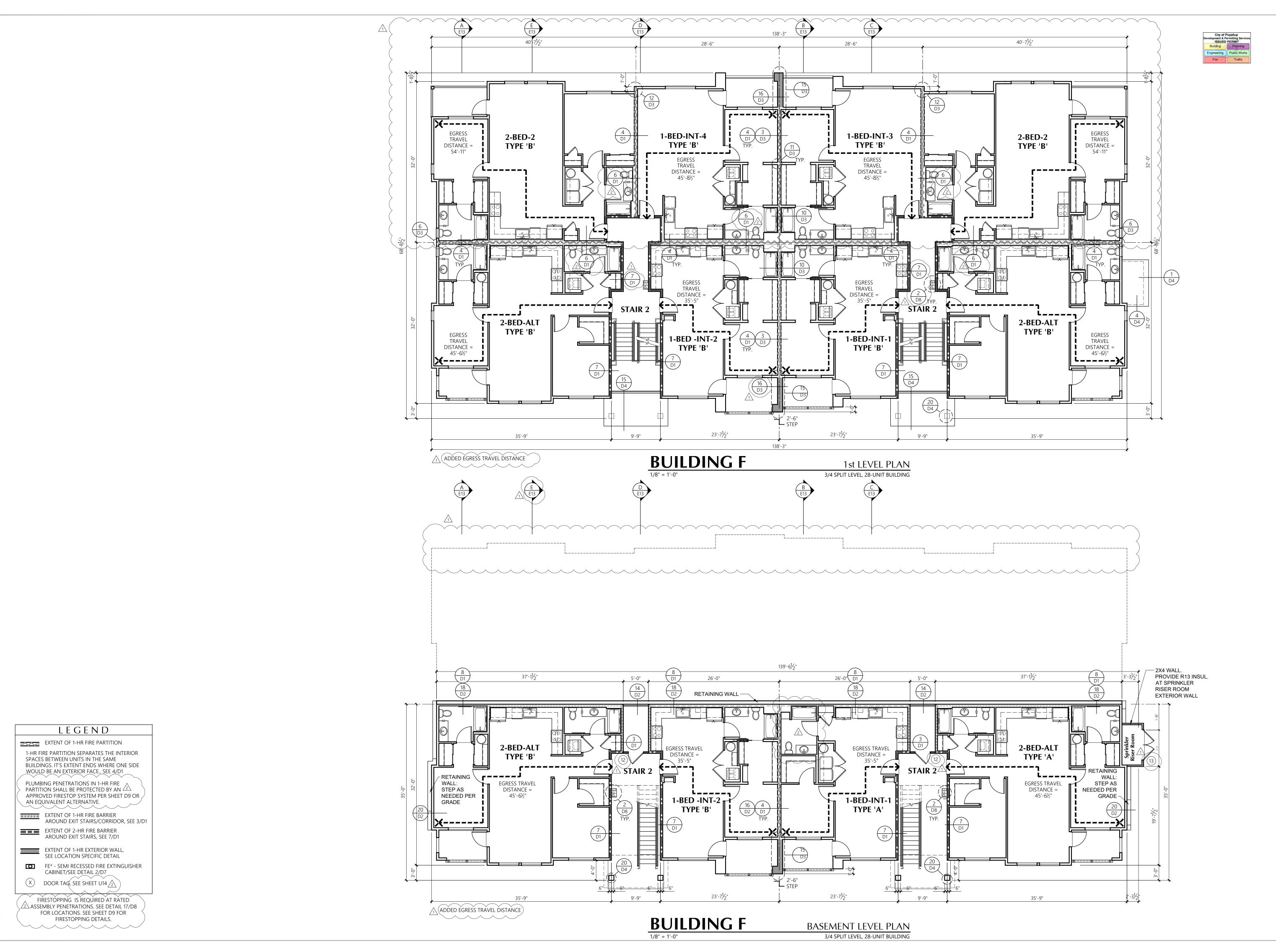
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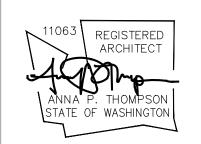
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No. Date Description 1 8-30-24 Owner Changes/ Permit Corrections

4-24-25 Permit Corrections

PRMU20240281

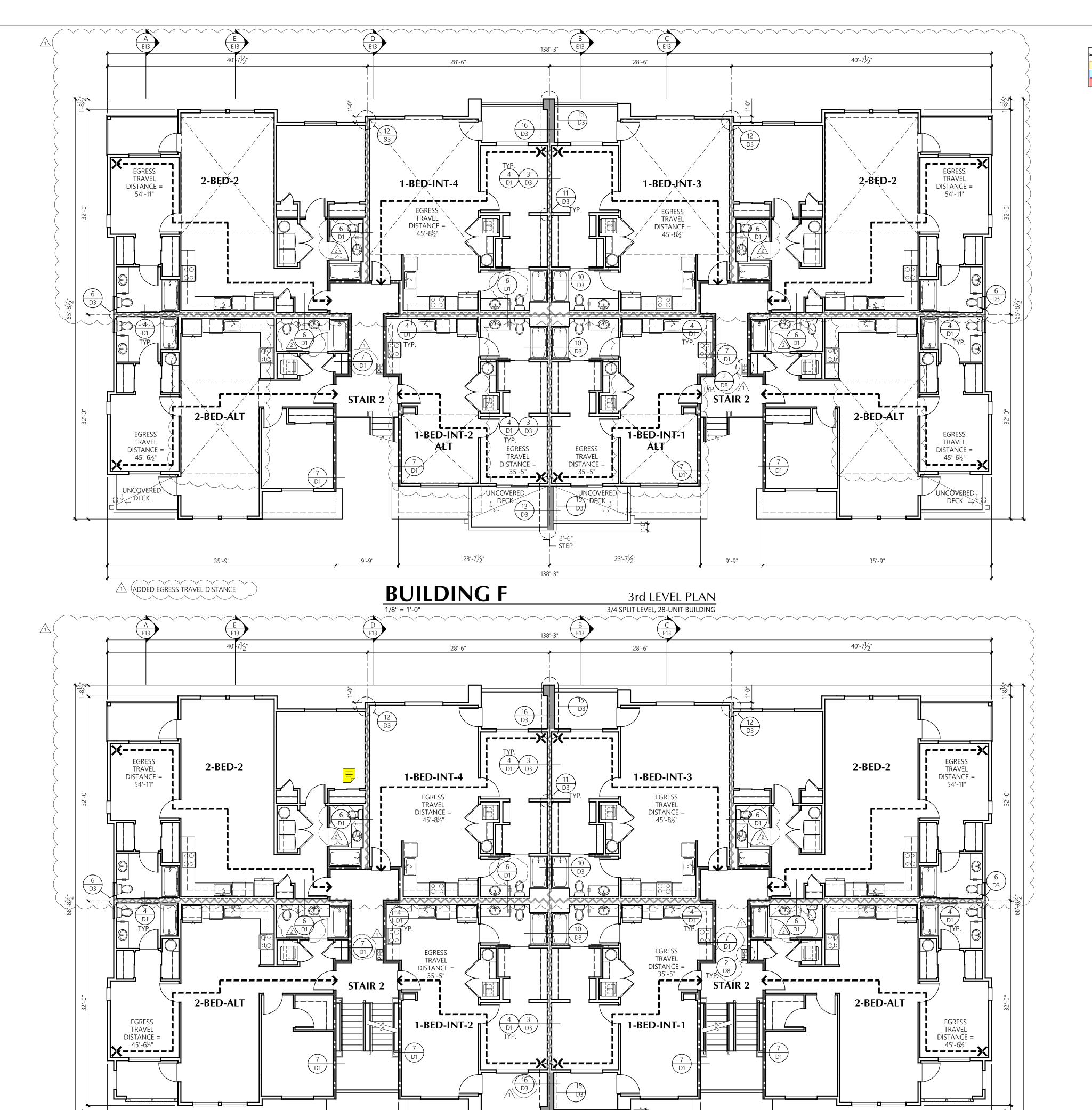
Initial Publish Date:

Sheet No.:

Date Plotted: 5-6-25

Job No.: Drawn By: 23-06 APT/HDM/TMK

B9



23'-71/2"

BUILDING F

9'-9"

ADDED EGRESS TRAVEL DISTANCE

23'-71/2"

2nd LEVEL PLAN

3/4 SPLIT LEVEL, 28-UNIT BUILDING

9'-9"

LEGEND

EXTENT OF 1-HR FIRE PARTITION 1-HR FIRE PARTITION SEPARATES THE INTERIOR SPACES BETWEEN UNITS IN THE SAME BUILDINGS. IT'S EXTENT ENDS WHERE ONE SIDE WOULD BE AN EXTERIOR FACE., SEE 4/D1

PLUMBING PENETRATIONS IN 1-HR FIRE PARTITION SHALL BE PROTECTED BY AN 2 APPROVED FIRESTOP SYSTEM PER SHEET D9 OR AN EQUIVALENT ALTERNATIVE.

EXTENT OF 1-HR FIRE BARRIER AROUND EXIT STAIRS/CORRIDOR, SEE 3/D1 EXTENT OF 2-HR FIRE BARRIER AROUND EXIT STAIRS, SEE 7/D1

EXTENT OF 1-HR EXTERIOR WALL, SEE LOCATION SPECIFIC DETAIL

FE* - SEMI RECESSED FIRE EXTINGUISHER CABINET/SEE DETAIL 2/D7 DOOR TAG, SEE SHEET U14 2

FIŘESTOPPING IS ŘEQUIRED AT RĂTED Δ assembly penetrations. See detail 17/D8

FOR LOCATIONS. SEE SHEET D9 FOR

FIRESTOPPING DETAILS.

Drawn By: 23-06 APT/HDM/TMK Sheet No.:

Permit Corrections

PRMU20240281

5-6-25

B10

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PRMU2024028

Initial Publish Date:

Drawn By: 23-06 APT/HDM/TMK

OF CABINETS -SHELVES -- COUNTER DEPTH FRIDGE ZZ **RADIUS** ~ 8 & B\ SEE 1/A3 BUILT-IN ^{/2}\SHELVES; SEE U6 FOR INT. ELEV. — SOFFIT TO SD +8'-3" A.F.F. — DOOR MANEUVERING CLEARANCE PER 6/A3 Patio 4'-10" 10'-11¹/5" - PROVIDE RAILING AT GROUND FLOOR UNIT WHERE GRADE DROPS MORE THAN 30" BELOW PATIO TYPE 'A' ACCESSIBLE 1-BED-INT-1 UNIT BASEMENT & 1st LEVEL FLOOR PLAN 1/4" = 1'-0"

AF	REA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	684	61
•	•	•

UNIT PLAN NOTES

2x6'S AT EXTERIOR WALLS FRAMING: 2x4'S AT INTERIOR WALLS UNLESS NOTED OTHERWISE.

R-21 BATT INSULATION U.N.O. ---- R-13 BATT INSULATION 3½" ACOUSTICAL INSULATION BOTH SIDES OF PARTYWALL, U.N.O. LOCATION OF SOFFIT FOR VENT

RUNS. SOFFIT HEIGHT +8'-0" A.F.F. U.N.O. ON PLANS; SEE DETAIL 1/D8

SMOKE DETECTOR CARBON MONOXIDE/SMOKE DETECTOR

CONCEALED SPACES SHALL BE FIRESTOPPED IN BOTH DIRECTIONS AT 10'-0" ON CENTER AND AT FLOORS. TYPICAL.

ALL ESCAPE OR RESCUE WINDOWS FROM SLEEPING ROOMS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM CLEAR OPENING HEIGHT DIMENSION SHALL BE 24". MINIMUM CLEAR OPENING WIDTH DIMENSION SHALL BE 20". EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE THE BOTTOM OF CLEAR OPENING NOT GREATER THAN 44 INCHES MEASURED FROM THE FLOOR.

WHERE THE OPENING OF THE SILL PORTION OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE AT A HEIGHT NOT LESS THAN 36 INCHES ABOVE THE FINISHED FLOOR SURFACE OF THE ROOM IN WHICH THE WINDOW IS LOCATED. OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 36 INCHES OF THE FINISHED FLOOR.

ALL GLAZING SHALL CONFORM TO THE 2018 IBC, CHAPTER 24, SEC. 2406, SAFETY GLAZING. GLAZING IN ALL DOORS SHALL BE SAFETY TYPE AND ALL GLAZING WITHIN A 24" ARC OF EITHER VERTICAL EDGE SHALL BE SAFETY TYPE.

PROVIDE %" TYPE 'X' (MIN.) GYPSUM SHEATHING ON WALLS BEHIND TUB/SHOWERS TO SATISFY FIRE REQUIREMENTS AT PARTYWALL CONDITION. PROVIDE $^3\!4$ " PLYWOOD UNDER TUB IN PLACE OF THE GYPCRETE, SEE DETAIL 14/D1

PROVIDE WATER RESISTANT GYPSUM WALLBOARD BEHIND TUB AND SHOWER ENCLOSURE MATERIALS TO A HEIGHT OF 70" MINIMUM ABOVE THE DRAIN INLET.

ALL BEDROOM AND BATHROOM DOORS SHALL BE UNDERCUT A MINIMUM OF 1/2" ABOVE THE ADJACENT FLOOR COVERING.

THE FRONT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IT MAY BE PROVIDED WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN, PROVIDED SUCH DEVICES ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL, AND MOUNTED NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR.

GYPSUM WALLBOARD SCHEDULE except where noted otherwise, 5/8" type 'x' gypsum WALLBOARD SHALL BE USED THROUGHOUT; ON INTERIOR NON-RATED WALLS, EXTERIOR WALLS, CORRIDOR WALLS, AND 1-HOUR AND 2-HOUR FIRE-RATED

STANDARD PLATE HEIGHT: 9'-1" SEE ELEVATION SHEETS FOR

FLOOR TO FLOOR HEIGHTS WINDOW HDR IS 8'-0"

UNLESS NOTED OTHERWISE

SEE SHEET U6 FOR INTERIOR ELEVATIONS

DOOR KEY:

X DOOR TAG. SEE SHEET U14 FOR SCHEDULE

WINDOW KEY:

FIX = FIXED/PICTURE SL = SLIDERSH = SINGLE HUNG SGD = SLIDING GLASS DOOR

INSULATION

FOUNDATION PERIMETER - R-10 RIGID INSULATION TO A DEPTH OF 24" OR TO TOP OF FOOTING AT HEATED PERIMETER

EXTERIOR WALLS: FIBERGLASS BATTS OR BLANKETS 2x6 WALLS - R21

FLOORS OVER UNHEATED SPACES - R30 ATTICS AND ROOF ASSEMBLIES - R-49 FULL HEIGHT OF UNCOMPRESSED INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES

EXTERIOR DOORS: MAIN ENTRY U=0.20 ALL OTHERS U=0.40

WINDOWS: MILGARD VINYL TYPE (VINYL) MODEL U-VALUE 6110 ARGON/LoE 0.24 or BETTER FIXED 6310 ARGON/LoE 0.24 or BETTER SINGLE HUNG 6210 ARGON/LoE 0.24 or BETTER DBL. SLIDER 8125 ARGON/LoE 0.24 or BETTER 6610 ARGON/LoE 0.24 or BETTER

NOTE: ALL CONCEALED OR EXPOSED INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450

ACCESSIBILITY NOTES:

ALL GROUND FLOOR UNITS IN THIS PROJECT MUST MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE B' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC.

INCLUDED IN THE ABOVE GROUND FLOOR UNITS 5% OF ALL UNITS NEED TO MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE A' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC.

SEE BUILDING PLANS FOR LOCATION OF 'TYPE A' UNITS

SEE SHEET U11 & U11.1 FOR SPECIFIC ADAPTABILITY STANDARD FOR BOTH TYPE A' AND 'TYPE B' ACCESSIBLE UNITS. SEE INTERIOR ELEVATION SHEETS FOR ADDITIONAL ACCESSIBILITY REQUIREMENTS.

LIGHTING CONTROLS, ELECTRICAL SWITCHES, ENVIRONMENTAL CONTROLS, OPERATING HARDWARE FOR DOORS AND WINDOWS, AND PLUMBING FIXTURE CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. EXCEPT FOR OPERABLE DOOR HARDWARE, SUCH ITEMS SHALL BE 15" MINIMUM AND 44" MAXIMUM ABOVE THE FLOOR (48" FOR WINDOWS).

OPERABLE ENTRY DOOR HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR.

OPENING FORCES FOR ENTRY DOOR SHALL BE: 15 POUNDS TO RELEASE THE LATCH 30 POUNDS TO SET DOOR IN MOTION 15 POUNDS TO OPEN DOOR TO FULL 90° FORCE MEASURED AT LATCH SIDE OF DOOR.

THE DOOR CLOSER ON THE ENTRY DOOR SHALL BE ADJUSTED TO CLOSE FROM AN OPEN POSITION OF 90° TO AN OPEN POSITION OF 12° IN NOT LESS THAN 5 SECONDS.

OPENING FORCE OF ALL SWINGING INTERIOR DOORS AND THE SLIDING GLASS DOOR SHALL NOT EXCEED 5 POUNDS APPLIED TO THE LATCH SIDE OF THE DOOR.

THE FORCE REQUIRED TO ACTIVATE ALL OTHER OPERABLE ITEMS LISTED ABOVE SHALL BE

*BIFOLD DOOR HARDWARE AT LAUNDRY TO BE

'FULL ACCESS HARDWARE'.

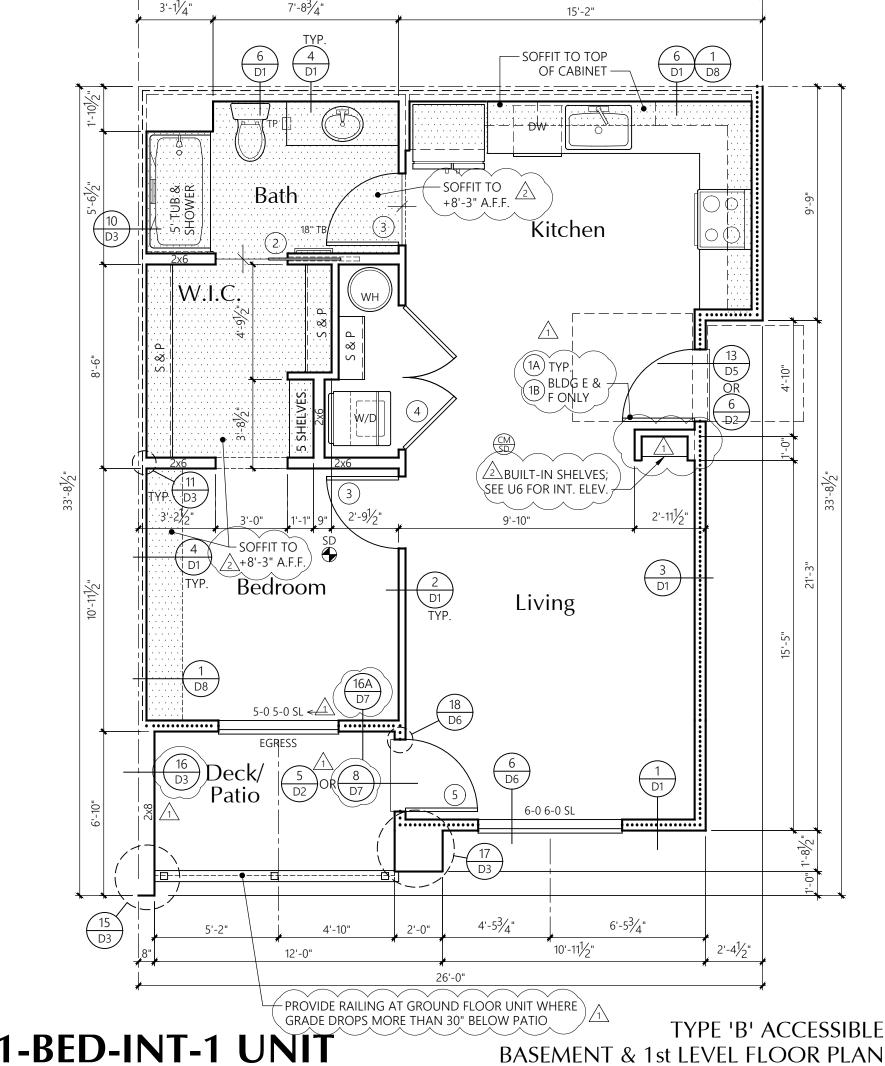
_____ THE 30"x48" CLEAR FLOOR 30X48 SPACE IS REQUIRED AT EACH FIXTURE OR LOCATION SHOWN ON THE FLOOR PLAN.

GRADE DROPS MORE THAN 30" BELOW PATIO

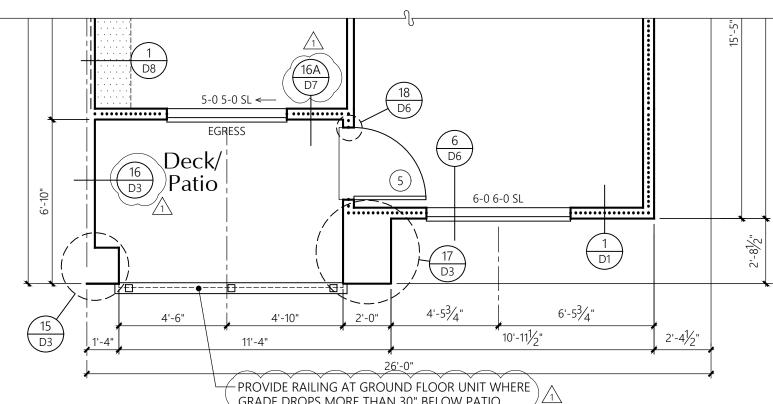
TYPE 'A' & 'B' ACCESSIBLE BASEMENT & 1st LEVEL FLOOR PLAN

*	SEE 1-BED-INT-1 UNIT TYPE 'A' OR	
	1-BED-1-INT TYPE 'B' FOR	
	REMAINDER OF UNIT	
	TENT IN THE ENGLISH OF OTHER	

AR	EA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	684	71



BASEMENT & 1st LEVEL FLOOR PLAN AREA SUMMARY Heated SF | Patio/Deck SF 684 Total SF



1-BED-INT-2 UNIT

1/4" = 1'-0"

Date Plotted: 5-1-25 Job No.:

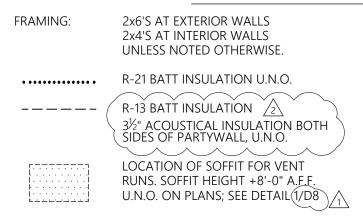
Sheet No.:

Initial Publish Date:

Date Plotted: 5-1-25 Job No.: Drawn By: 23-06

APT/HDM/TMK Sheet No.:

UNIT PLAN NOTES



SMOKE DETECTOR

CONCEALED SPACES SHALL BE FIRESTOPPED IN BOTH

CARBON MONOXIDE/SMOKE DETECTOR

DIRECTIONS AT 10'-0" ON CENTER AND AT FLOORS. TYPICAL. ALL ESCAPE OR RESCUE WINDOWS FROM SLEEPING ROOMS

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> STANDARD PLATE HEIGHT: 9'-1"

SEE ELEVATION SHEETS FOR FLOOR TO FLOOR HEIGHTS

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(x) DOOR TAG. SEE SHEET U14 FOR SCHEDULE

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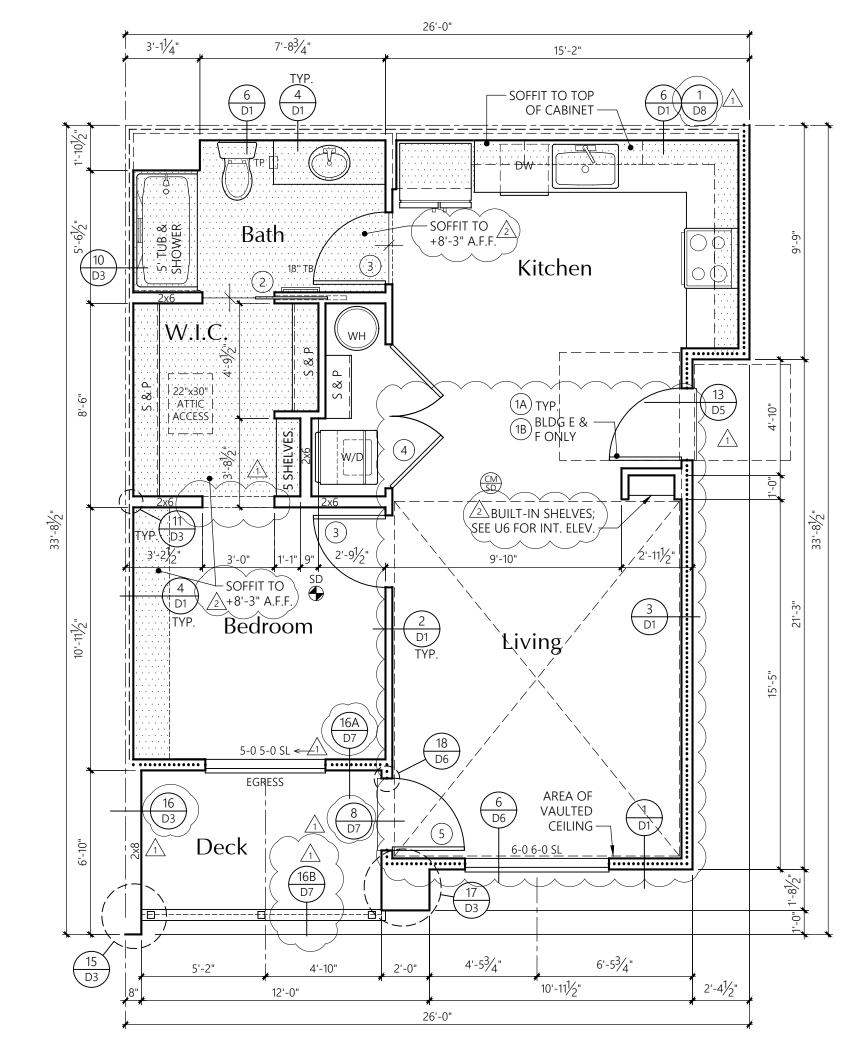
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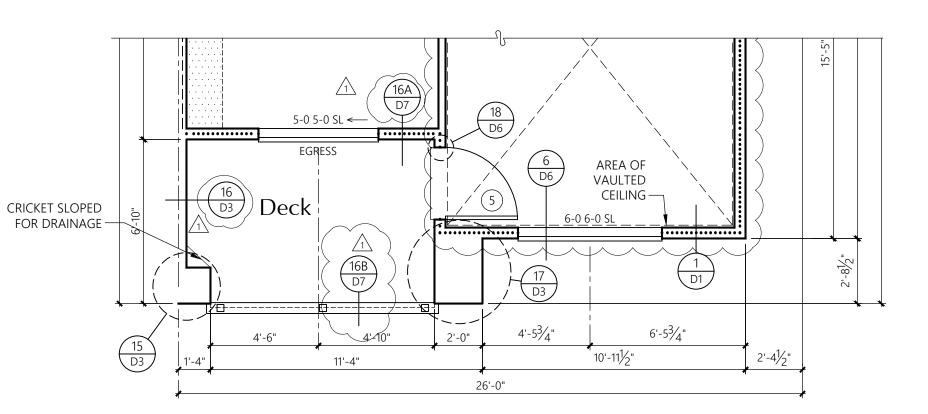
30X48



1-BED-INT-1 UNIT

NON-ACCESSIBLE 3rd LEVEL FLOOR PLAN

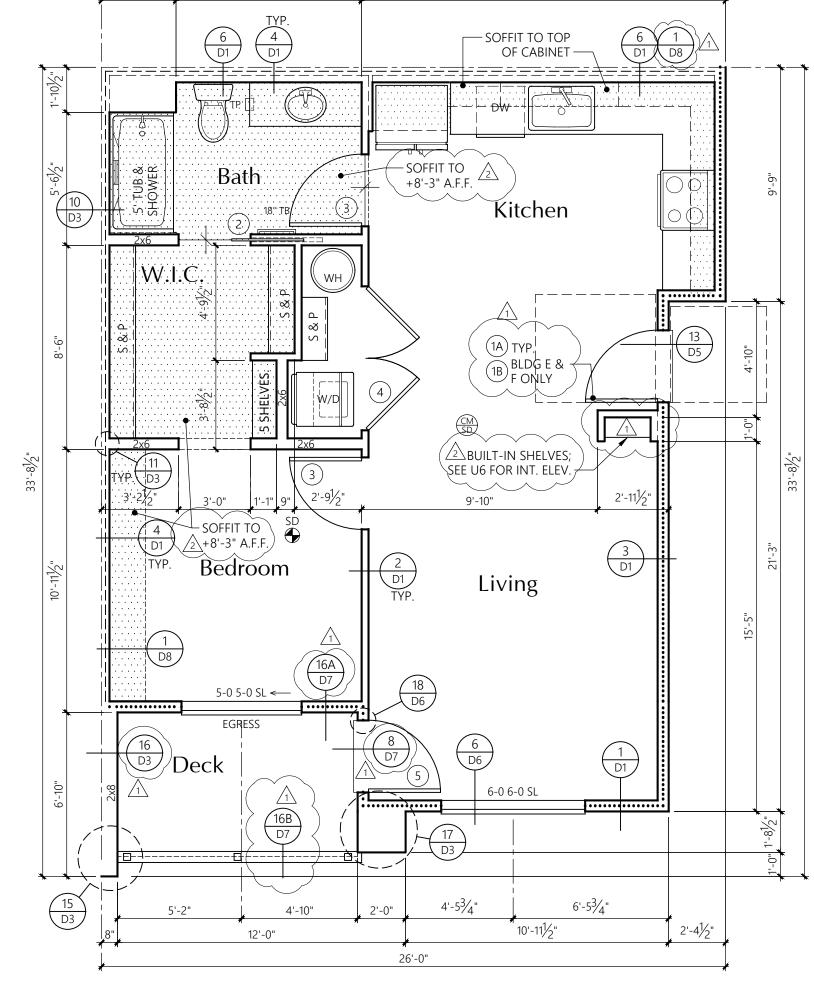
AR	EA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	684	61
* Side of exterior	walls to which are	a was measured



1-BED-INT-2 UNIT

NON-ACCESSIBLE 3rd LEVEL FLOOR PLAN

AREA SUMMARY						
Heated SF Patio/Deck SF						
Total SF	684	71				



15'-2"

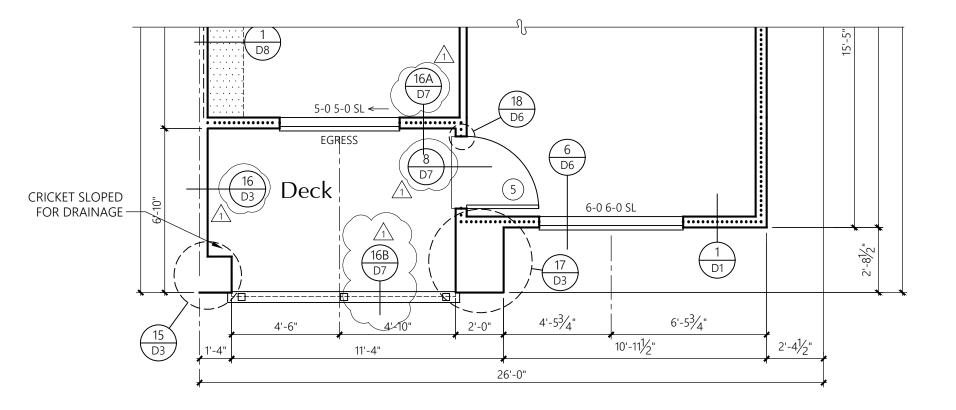
1-BED-INT-1 UNIT

3'-1¹/₄"

7'-8³/₄"

NON-ACCESSIBLE 2nd LEVEL FLOOR PLAN

AR	EA SUMMA	RY				
Heated SF Patio/Deck SF						
Total SF	684	61				
* Side of exterior	walls to which area	a was measured				



1-BED-INT-2 UNIT

NON-ACCESSIBLE 2nd LEVEL FLOOR PLAN

AR	EA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	684	71
* Side of exterior	walls to which are	a was measured

SEE SHEET U6 FOR INTERIOR ELEVATIONS

* Side of exterior walls to which area was measured

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Job No.: Drawn By: 23-06 APT/HDM/TMK Sheet No.:

U2.1

UNIT PLAN NOTES

FRAMING: 2x6'S AT EXTERIOR WALLS 2x4'S AT INTERIOR WALLS UNLESS NOTED OTHERWISE. R-21 BATT INSULATION U.N.O. $\sqrt{R-13}$ BATT INSULATION $\sqrt{2}$ 3½" ACOUSTICAL INSULATION BOTH SIDES OF PARTYWALL, U.N.O. LOCATION OF SOFFIT FOR VENT RUNS. SOFFIT HEIGHT +8'-0" A.F.F. U.N.O. ON PLANS; SEE DETAIL (1/D8)

SMOKE DETECTOR

CARBON MONOXIDE/SMOKE DETECTOR

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THE 30"x48" CLEAR FLOOR SPACE IS REQUIRED AT EACH FIXTURE OR LOCATION SHOWN ON THE FLOOR PLAN.

_____ 30X48

ACCESSIBILITY REQUIREMENTS.

WINDOWS).

BY CHAPTER 11 OF THE 2018 IBC.

SEE BUILDING PLANS FOR LOCATION OF 'TYPE A' UNITS

SEE SHEET U11 & U11.1 FOR SPECIFIC ADAPTABILITY STANDARD SEE INTERIOR ELEVATION SHEETS FOR ADDITIONAL

ENVIRONMENTAL CONTROLS, OPERATING HARDWARE

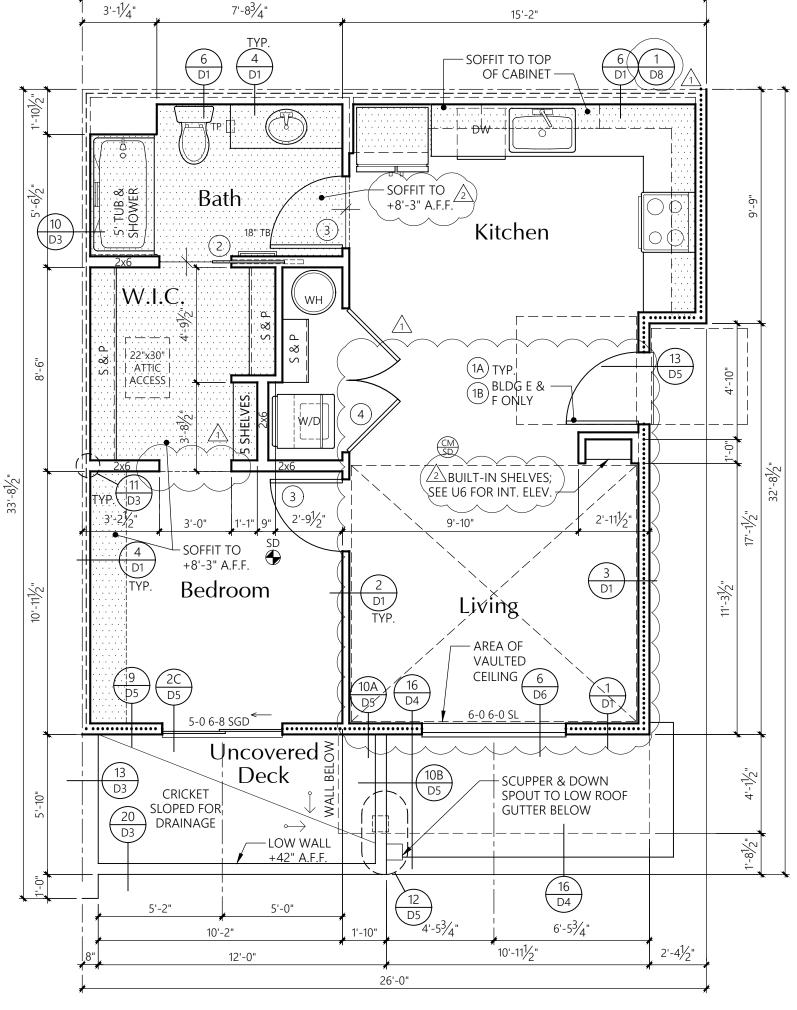
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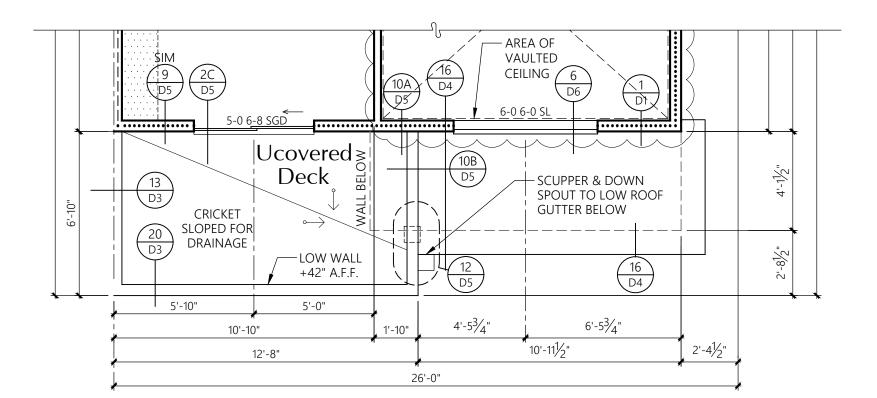
OPERABLE ITEMS LISTED ABOVE SHALL BE 5 POUNDS.



1-BED-INT-ALT-1

ALTERNATE 3rd LEVEL FLOOR PLAN

AREA SUMMARY Heated SF Deck/Patio SF Total SF 634



1-BED-INT-ALT-2

ALTERNATE 3rd LEVEL FLOOR PLAN

А	REA SUMMA	RY
	Heated SF	Deck/Patio SF
Total SF	634	86

R-13 BATT INSULATION 2

3½" ACOUSTICAL INSULATION BOTH SIDES OF PARTYWALL, U.N.O.

LOCATION OF SOFFIT FOR VENT

LOCATION OF SOFFIT FOR VENT
RUNS. SOFFIT HEIGHT +8'-0" A.F.F.
U.N.O. ON PLANS; SEE DETAIL 1/D8

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CARBON MONOXIDE/SMOKE DETECTOR

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ATTICS AND ROOF ASSEMBLIES - R-49
FULL HEIGHT OF UNCOMPRESSED INSULATION
EXTENDS OVER THE WALL TOP PLATE AT
THE EAVES

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TYPE (VINYL) MODEL U-VALUE
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SINGLE HUNG 6210 ARGON/LOE 0.24 or BETTER

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SEE SHEET U7 FOR INTERIOR ELEVATIONS

PROVIDE WATER RESISTANT GYPSUM WALLBOARD BEHIND TUB AND SHOWER ENCLOSURE MATERIALS TO A HEIGHT OF 70" MINIMUM ABOVE THE DRAIN INLET.

ALL BEDROOM AND BATHROOM DOORS SHALL BE UNDERCUT A MINIMUM OF 1/2" ABOVE THE ADJACENT FLOOR COVERING.

THE FRONT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IT MAY BE PROVIDED WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN, PROVIDED SUCH DEVICES ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL, AND MOUNTED NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR.

GYPSUM WALLBOARD SCHEDULE

EXCEPT WHERE NOTED OTHERWISE, %" TYPE 'X' GYPSUM WALLBOARD SHALL BE USED THROUGHOUT;

ON INTERIOR NON-RATED WALLS, EXTERIOR WALLS, CORRIDOR WALLS, AND 1-HOUR AND 2-HOUR FIRE-RATED WALLS.

DOOR KEY:

X DOOR TAG. SEE SHEET U14 FOR SCHEDULE

WINDOW KEY:

TYPE:

FIX = FIXED/PICTURE
SL = SLIDER
SH = SINGLE HUNG
SGD = SLIDING GLASS DOOR

ACCESSIBILITY NOTES:

ALL GROUND FLOOR UNITS IN THIS PROJECT MUST MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE B' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC.

INCLUDED IN THE ABOVE GROUND FLOOR UNITS 5% OF ALL UNITS NEED TO MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE A' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC. SEE BUILDING PLANS FOR LOCATION OF 'TYPE A' UNITS

SEE SHEET U11 & U11.1 FOR SPECIFIC ADAPTABILITY STANDARD FOR BOTH 'TYPE A' AND 'TYPE B' ACCESSIBLE UNITS.
SEE INTERIOR ELEVATION SHEETS FOR ADDITIONAL ACCESSIBILITY REQUIREMENTS.

LIGHTING CONTROLS, ELECTRICAL SWITCHES, ENVIRONMENTAL CONTROLS, OPERATING HARDWARE FOR DOORS AND WINDOWS, AND PLUMBING FIXTURE CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. EXCEPT FOR OPERABLE DOOR HARDWARE, SUCH ITEMS SHALL BE 15" MINIMUM AND 44" MAXIMUM ABOVE THE FLOOR (48" FOR WINDOWS).

OPERABLE ENTRY DOOR HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR.

OPENING FORCES FOR ENTRY DOOR SHALL BE:
15 POUNDS TO RELEASE THE LATCH
30 POUNDS TO SET DOOR IN MOTION
15 POUNDS TO OPEN DOOR TO FULL 90°
FORCE MEASURED AT LATCH SIDE OF DOOR.

THE DOOR CLOSER ON THE ENTRY DOOR SHALL BE ADJUSTED TO CLOSE FROM AN OPEN POSITION OF 90° TO AN OPEN POSITION OF 12° IN NOT LESS THAN 5 SECONDS.

OPENING FORCE OF ALL SWINGING INTERIOR DOORS AND THE SLIDING GLASS DOOR SHALL NOT EXCEED 5 POUNDS APPLIED TO THE LATCH SIDE OF THE DOOR.

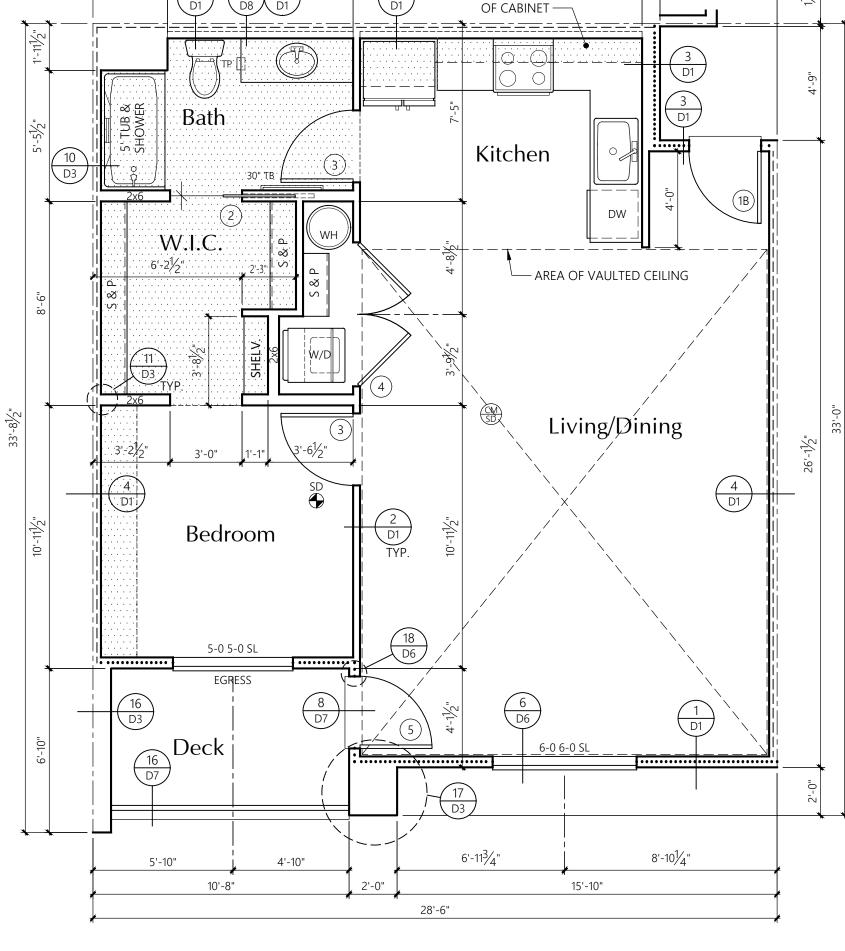
THE FORCE REQUIRED TO ACTIVATE ALL OTHER OPERABLE ITEMS LISTED ABOVE SHALL BE 5 POUNDS.

*BIFOLD DOOR HARDWARE AT LAUNDRY TO BE

'FULL ACCESS HARDWARE'.

THE 30"x48" CLEAR FLOOR 30X48

THE 30"x48" CLEAR FLOOR
SPACE IS REQUIRED AT EACH
FIXTURE OR LOCATION SHOWN
ON THE FLOOR PLAN.

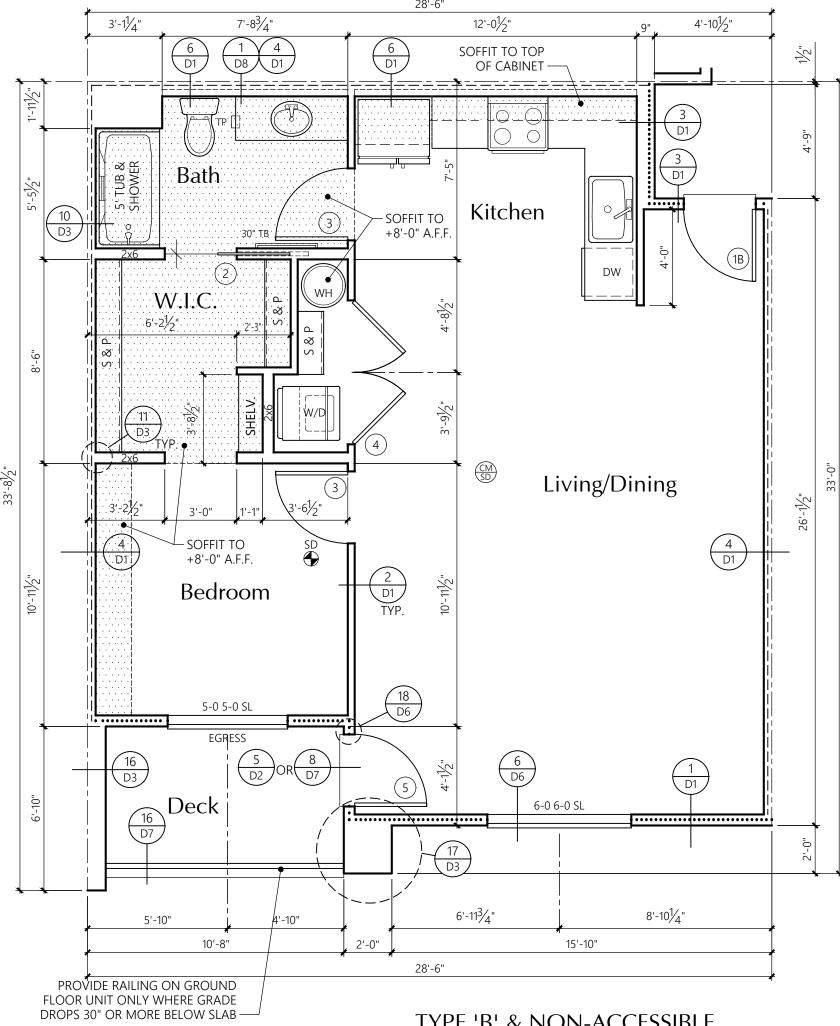


12'-01/5"

SOFFIT TO TOP

1-BED INT-3

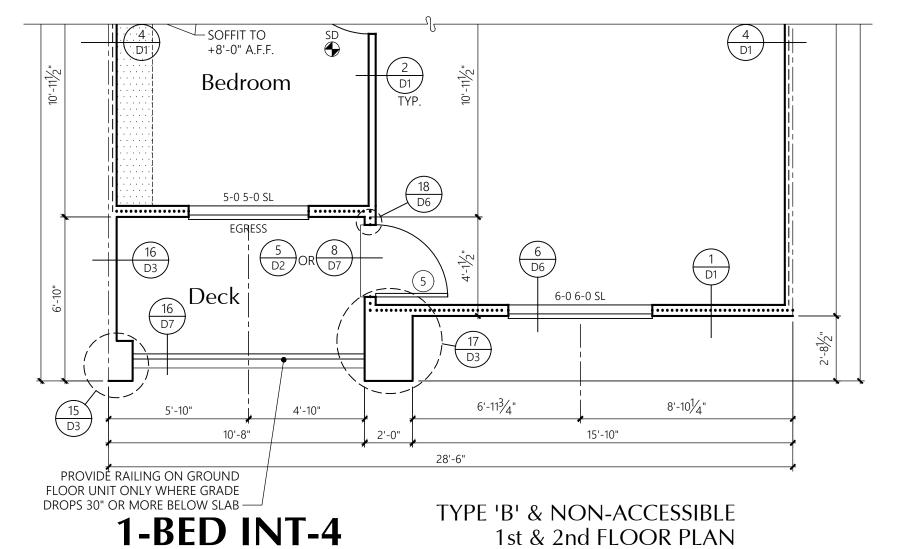
NON-ACCESSIBLE
3rd FLOOR PLAN
1-BED INT-4 SIMILAR



1-BED INT-3

TYPE 'B' & NON-ACCESSIBLE 1st & 2nd FLOOR PLAN

AR	EA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	795	62
* Side of exterior	walls to which area	a was measured



SHEET ADDED

AREA SUMMARY

Heated SF Patio/Deck SF

Total SF 795 64

* Side of exterior walls to which area was measured

MILBRANI

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1-Bed-Int Unit

Bradley Heights Apartments

> Puyallup, Wa

Timberlane Partners

Revisions

No. Date Description

1 8-30-24 Owner Changes/

PRMU20240281

Permit Corrections

Initial Publish Date:

Date Plotted: 5-1-25

Job No.: Drawn By:

23-06 APT/HDM/TMK
Sheet No.:

U2.2

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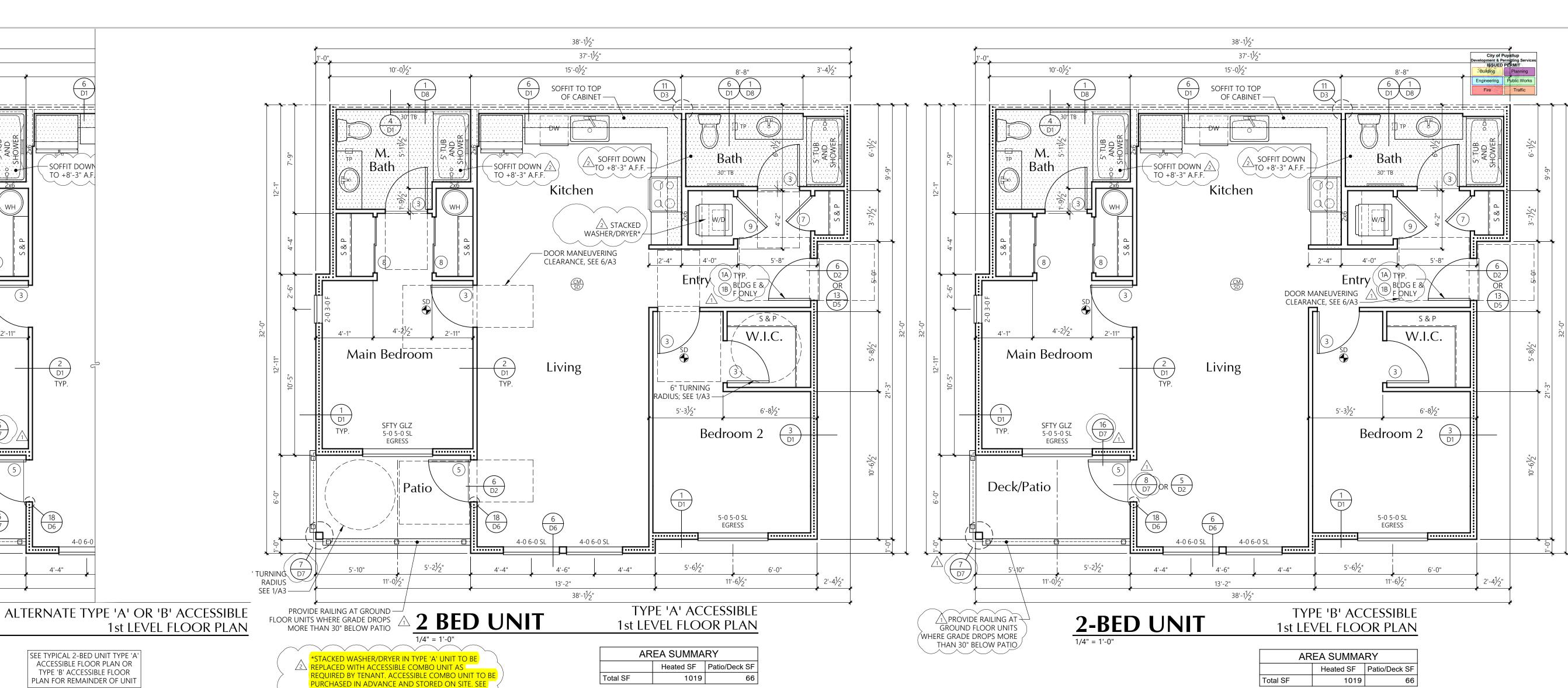
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RMU2024028

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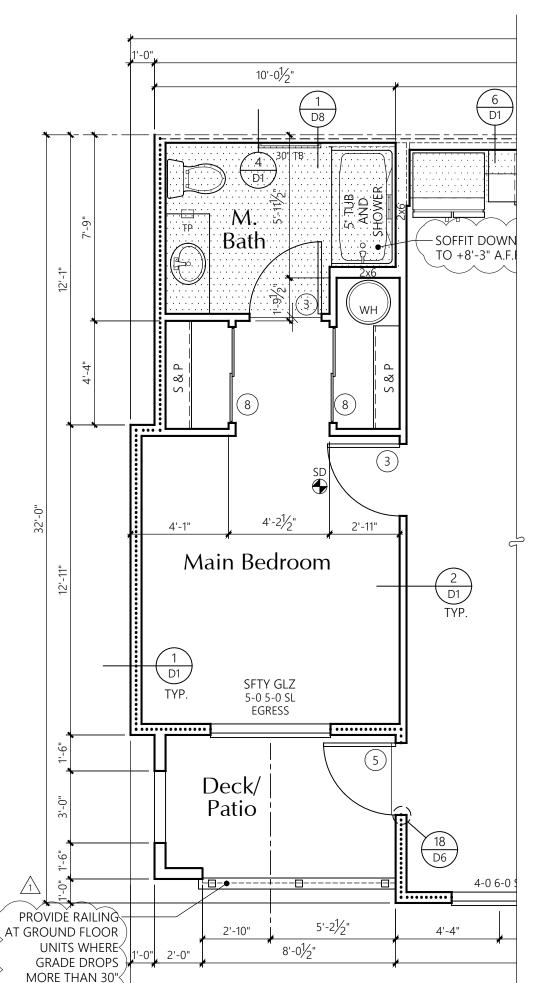
TYPE 'B' ACCESSIBLE FLOOR PLAN FOR REMAINDER OF UNIT

SEE TYPICAL 2-BED UNIT TYPE 'A'

ACCESSIBLE FLOOR PLAN OR

- SOFFIT DOWN

TO +8'-3" A.F.



10'-01/5"

Bath

Main Bedroom

SFTY GLZ

5-0 5-0 SL

EGRESS

Deck/

Patio

2-BED-ALT UNIT

PROVIDE RAILING AT GROUND FLOOR

UNITS WHERE

MORE THAN 30"

BELOW PATIO

BELOW PATIO

GRADE DROPS

UNIT PLAN NOTES

FRAMING: 2x6'S AT EXTERIOR WALLS 2x4'S AT INTERIOR WALLS UNLESS NOTED OTHERWISE.

DETAIL 20/U11.1 FOR ADDITIONAL REQUIREMENTS

R-21 BATT INSULATION U.N.O. ---- R-13 BATT INSULATION $\stackrel{\checkmark}{2}$ 3½" ACOUSTICAL INSULATION BOTH

SIDES OF PARTYWALL, U.N.O. LOCATION OF SOFFIT FOR VENT RUNS. SOFFIT HEIGHT +8'-0" A.F.F. U.N.O. ON PLANS; SEE DETAIL 1/D8

SMOKE DETECTOR

CONCEALED SPACES SHALL BE FIRESTOPPED IN BOTH

THAN 44 INCHES MEASURED FROM THE FLOOR.

CARBON MONOXIDE/SMOKE DETECTOR

ALL ESCAPE OR RESCUE WINDOWS FROM SLEEPING ROOMS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM CLEAR OPENING HEIGHT DIMENSION SHALL BE 24". MINIMUM CLEAR OPENING WIDTH DIMENSION SHALL BE 20". EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE THE BOTTOM OF CLEAR OPENING NOT GREATER

DIRECTIONS AT 10'-0" ON CENTER AND AT FLOORS. TYPICAL.

WHERE THE OPENING OF THE SILL PORTION OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE AT A HEIGHT NOT LESS THAN 36 INCHES ABOVE THE FINISHED FLOOR SURFACE OF THE ROOM IN WHICH THE WINDOW IS LOCATED. OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 36 INCHES OF THE FINISHED FLOOR.

ALL GLAZING SHALL CONFORM TO THE 2018 IBC, CHAPTER 24, SEC. 2406, SAFETY GLAZING. GLAZING IN ALL DOORS SHALL BE SAFETY TYPE AND ALL GLAZING WITHIN A 24" ARC OF EITHER VERTICAL EDGE SHALL BE SAFETY TYPE.

PROVIDE %" TYPE 'X' (MIN.) GYPSUM SHEATHING ON WALLS BEHIND TUB/SHOWERS TO SATISFY FIRE REQUIREMENTS AT PARTYWALL CONDITION. PROVIDE $^3\!4$ " PLYWOOD UNDER TUB IN PLACE OF THE GYPCRETE, SEE DETAIL 14/D1

PROVIDE WATER RESISTANT GYPSUM WALLBOARD BEHIND TUB AND SHOWER ENCLOSURE MATERIALS TO A HEIGHT OF 70" MINIMUM ABOVE THE DRAIN INLET.

ALL BEDROOM AND BATHROOM DOORS SHALL BE UNDERCUT A MINIMUM OF 1/2" ABOVE THE ADJACENT FLOOR COVERING.

THE FRONT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IT MAY BE PROVIDED WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN, PROVIDED SUCH DEVICES ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL, AND MOUNTED NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR.

GYPSUM WALLBOARD SCHEDULE XCEPT WHERE NOTED OTHERWISE, 5/8" TYPE 'X' GYPSUM WALLBOARD SHALL BE USED THROUGHOUT; ON INTERIOR NON-RATED WALLS, EXTERIOR WALLS, CORRIDOR WALLS, AND 1-HOUR AND 2-HOUR FIRE-RATEI

HEIGHT: 9'-1" SEE ELEVATION SHEETS FOR FLOOR TO FLOOR HEIGHTS

STANDARD PLATE

WINDOW HDR IS 8'-0" UNLESS NOTED OTHERWISE

SEE SHEET U9 FOR INTERIOR ELEVATIONS

DOOR KEY:

WINDOW KEY:

INSULATION

FOUNDATION PERIMETER - R-10 RIGID INSULATION TO A DEPTH OF 24" OR TO TOP OF FOOTING AT HEATED PERIMETER

EXTERIOR WALLS: FIBERGLASS BATTS OR BLANKETS

ALL OTHERS U=0.40

WINDOWS: MILGARD VINYL TYPE (VINYL) MODEL U-VALUE SLIDING 6110 ARGON/LoE 0.24 or BETTER FIXED 6310 ARGON/LoE 0.24 or BETTER SINGLE HUNG 6210 ARGON/LoE 0.24 or BETTER DBL. SLIDER 8125 ARGON/LoE 0.24 or BETTER 6610 ARGON/LoE 0.24 or BETTER

NOTE: ALL CONCEALED OR EXPOSED INSULATION

(X) DOOR TAG. SEE SHEET U14 FOR SCHEDULE

FIX = FIXED/PICTURE SL = SLIDERSH = SINGLE HUNG

SGD = SLIDING GLASS DOOR

2x6 WALLS - R21

FLOORS OVER UNHEATED SPACES - R30 ATTICS AND ROOF ASSEMBLIES - R-49 FULL HEIGHT OF UNCOMPRESSED INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES

EXTERIOR DOORS: MAIN ENTRY U=0.20

SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450

ALL GROUND FLOOR UNITS IN THIS PROJECT MUST MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE B' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC.

ACCESSIBILITY NOTES:

INCLUDED IN THE ABOVE GROUND FLOOR UNITS 5% OF ALL UNITS NEED TO MEET THE ACCESSIBILITY REQUIREMENTS OF 'TYPE A' ACCESSIBLE UNITS AS REQUIRED BY CHAPTER 11 OF THE 2018 IBC. SEE BUILDING PLANS FOR LOCATION OF 'TYPE A' UNITS

SEE SHEET U11 & U11.1 FOR SPECIFIC ADAPTABILITY STANDARD FOR BOTH TYPE A' AND 'TYPE B' ACCESSIBLE UNITS. SEE INTERIOR ELEVATION SHEETS FOR ADDITIONAL ACCESSIBILITY REQUIREMENTS.

LIGHTING CONTROLS, ELECTRICAL SWITCHES, ENVIRONMENTAL CONTROLS, OPERATING HARDWARE FOR DOORS AND WINDOWS, AND PLUMBING FIXTURE CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. EXCEPT FOR OPERABLE DOOR HARDWARE, SUCH ITEMS SHALL BE 15" MINIMUM AND 44" MAXIMUM ABOVE THE FLOOR (48" FOR WINDOWS).

OPERABLE ENTRY DOOR HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR.

OPENING FORCES FOR ENTRY DOOR SHALL BE: 15 POUNDS TO RELEASE THE LATCH 30 POUNDS TO SET DOOR IN MOTION 15 POUNDS TO OPEN DOOR TO FULL 90° FORCE MEASURED AT LATCH SIDE OF DOOR.

THE DOOR CLOSER ON THE ENTRY DOOR SHALL BE ADJUSTED TO CLOSE FROM AN OPEN POSITION OF 90° TO AN OPEN POSITION OF 12° IN NOT LESS THAN 5 SECONDS.

OPENING FORCE OF ALL SWINGING INTERIOR DOORS AND THE SLIDING GLASS DOOR SHALL NOT EXCEED 5 POUNDS APPLIED TO THE LATCH SIDE OF THE DOOR.

THE FORCE REQUIRED TO ACTIVATE ALL OTHER OPERABLE ITEMS LISTED ABOVE SHALL BE 5 POUNDS.

*BIFOLD DOOR HARDWARE AT LAUNDRY TO BE 'FULL ACCESS HARDWARE'.

_____ THE 30"x48" CLEAR FLOOR 30X48 SPACE IS REQUIRED AT EACH FIXTURE OR LOCATION SHOWN ON THE FLOOR PLAN.

2-BED-ALT UNIT ALT. 'A' OR 'B' ACCESSIBLE RASEMENT DI ANI SEE TYPICAL 2-BED UNIT TYPE 'A" ACCESSIBLE FLOOR PLAN OR TYPE 'B' ACCESSIBLE FLOOR PLAN FOR REMAINDER OF UNIT

Bradley Heights **Apartments**

Timberlane

Puyallup,

Partners

Revisions No. Date Description 1 8-30-24 Owner Changes/

PRMU20240281

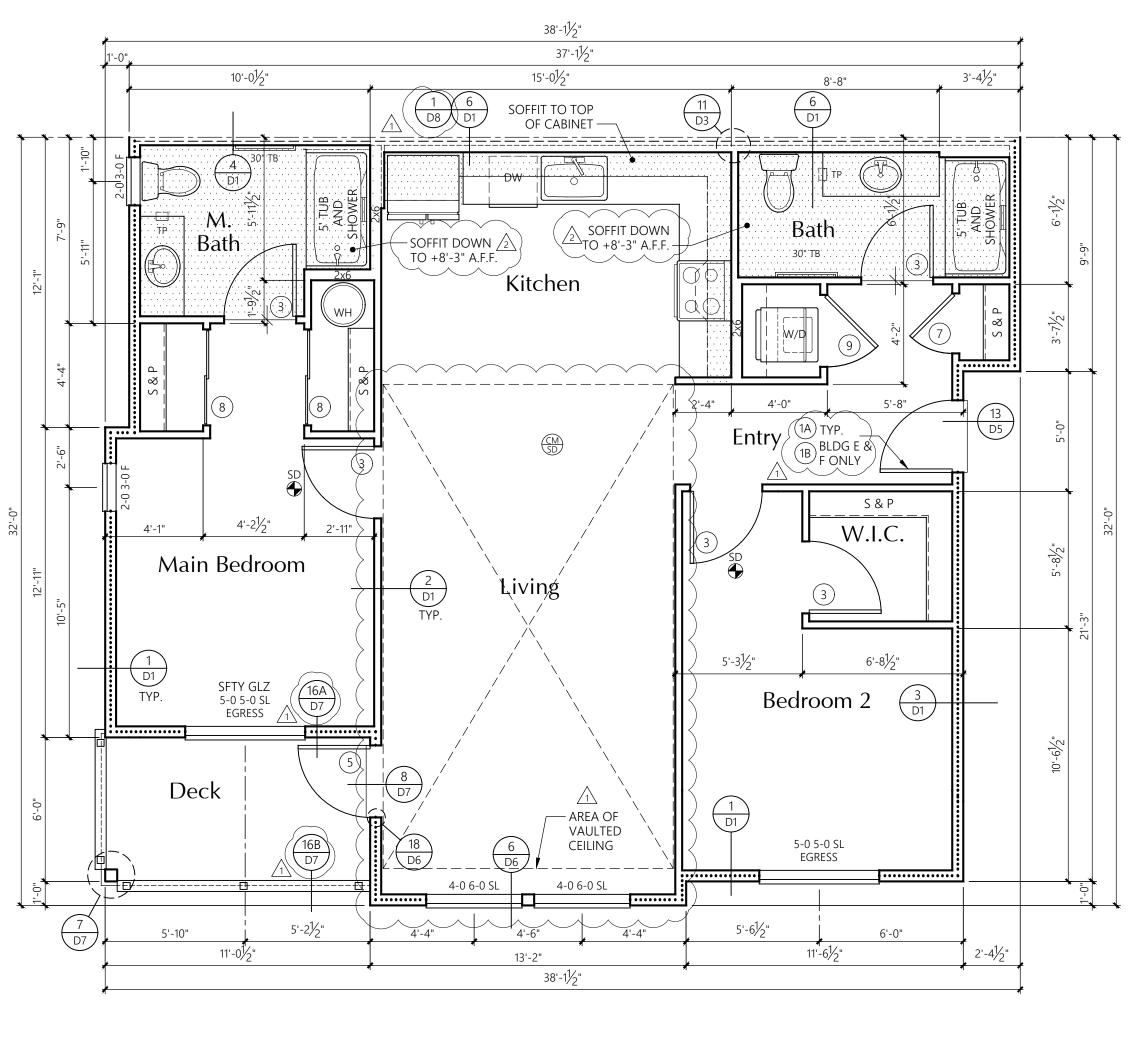
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Initial Publish Date:

Date Plotted: 5-1-25 Drawn By:

Job No.: 23-06 APT/HDM/TMK Sheet No.:

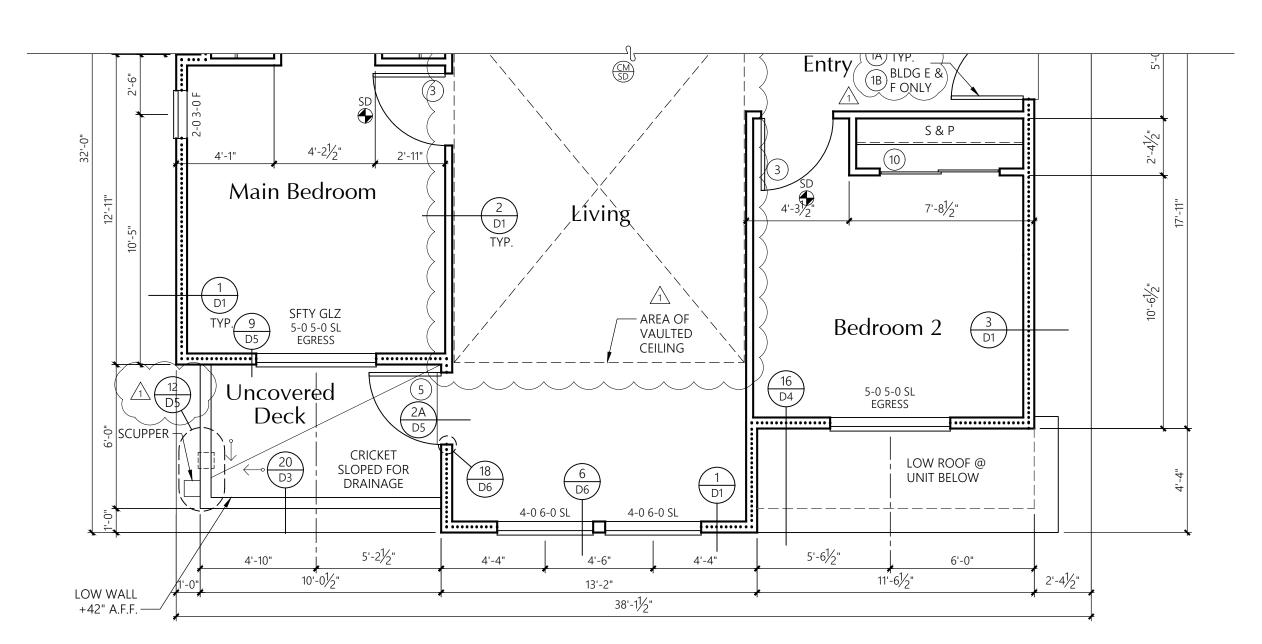
U5



2-BED UNIT

NON-ACCESSIBLE 3rd LEVEL FLOOR PLAN

AREA SUMMARY Heated SF | Patio/Deck SF | Total SF 1019



2-BED-ALT UNIT1/4" = 1'-0"

ALTERNATE 3rd LEVEL FLOOR PLAN

AR	EA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	980	60
* Side of exterior	walls to which area	a was measured

2-BED UNIT

2nd LEVEL FLOOR PLAN

AR	REA SUMMA	RY
	Heated SF	Patio/Deck SF
Total SF	1019	66

UNIT PLAN NOTES

Bath

Main Bedroom

SFTY GLZ 5-0 5-0 SL EGRESS

Deck

(16A)

2x6'S AT EXTERIOR WALLS FRAMING: 2x4'S AT INTERIOR WALLS UNLESS NOTED OTHERWISE.

R-21 BATT INSULATION U.N.O. ---- R-13 BATT INSULATION 2 3½" ACOUSTICAL INSULATION BOTH SIDES OF PARTYWALL, U.N.O. LOCATION OF SOFFIT FOR VENT RUNS. SOFFIT HEIGHT +8'-0" A.F.F. U.N.O. ON PLANS; SEE DETAIL 1/D8

SMOKE DETECTOR

CARBON MONOXIDE/SMOKE DETECTOR

ALL ESCAPE OR RESCUE WINDOWS FROM SLEEPING ROOMS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM CLEAR OPENING HEIGHT DIMENSION SHALL BE 24". MINIMUM CLEAR OPENING WIDTH DIMENSION SHALL BE 20". EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE THE BOTTOM OF CLEAR OPENING NOT GREATER THAN 44 INCHES MEASURED FROM THE FLOOR.

CONCEALED SPACES SHALL BE FIRESTOPPED IN BOTH

DIRECTIONS AT 10'-0" ON CENTER AND AT FLOORS. TYPICAL.

WHERE THE OPENING OF THE SILL PORTION OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE AT A HEIGHT NOT LESS THAN 36 INCHES ABOVE THE FINISHED FLOOR SURFACE OF THE ROOM IN WHICH THE WINDOW IS LOCATED. OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 36 INCHES OF THE FINISHED FLOOR.

ALL GLAZING SHALL CONFORM TO THE 2018 IBC, CHAPTER 24, SEC. 2406, SAFETY GLAZING. GLAZING IN ALL DOORS SHALL BE SAFETY TYPE AND ALL GLAZING WITHIN A 24" ARC OF EITHER VERTICAL EDGE SHALL BE SAFETY TYPE.

PROVIDE % " Type 'X' (MIN.) Gypsum sheathing on walls behind tub/showers to satisfy fire requirements at PARTYWALL CONDITION. PROVIDE $^3\!4$ " PLYWOOD UNDER TUB IN PLACE OF THE GYPCRETE, SEE DETAIL 14/D1

PROVIDE WATER RESISTANT GYPSUM WALLBOARD BEHIND TUB AND SHOWER ENCLOSURE MATERIALS TO A HEIGHT OF 70" MINIMUM ABOVE THE DRAIN INLET.

4-0 6-0 SL

4-0 6-0 SL

13'-2"

38'-11/5"

38'-11/5"

15'-01/2"

SOFFIT TO TOP

CM SD

Living

OF CABINET —

SOFFIT DOWN

√2`TO +8'-3" A.F.F. −

4'-0"

BLDG E & FONLY

Bedroom 2

5-0 5-0 SL

11'-6¹/5"

EGRESS

W.I.C

6'-81/5"

6'-0"

NON-ACCESSIBLE

DOOR KEY:

FIX = FIXED/PICTURE

SH = SINGLE HUNG

SL = SLIDER

WINDOW KEY:

SGD = SLIDING GLASS DOOR

(x) DOOR TAG. SEE SHEET U14 FOR SCHEDULE

Entry/

37'-1¹/5"

ALL BEDROOM AND BATHROOM DOORS SHALL BE UNDERCUT A MINIMUM OF 1/2" ABOVE THE ADJACENT FLOOR COVERING.

THE FRONT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IT MAY BE PROVIDED WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN, PROVIDED SUCH DEVICES ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL, AND MOUNTED NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR.

GYPSUM WALLBOARD SCHEDULE CEPT WHERE NOTED OTHERWISE, 5/8" TYPE 'X' GYPSUM WALLBOARD SHALL BE USED THROUGHOUT; ON INTERIOR NON-RATED WALLS, EXTERIOR WALLS, CORRIDOR WALLS, AND 1-HOUR AND 2-HOUR FIRE-RATED

> STANDARD PLATE HEIGHT: 9'-1" SEE ELEVATION SHEETS FOR FLOOR TO FLOOR HEIGHTS

WINDOW HDR IS 8'-0" UNLESS NOTED OTHERWISE

SEE SHEET U9 FOR INTERIOR ELEVATIONS

INSULATION FOUNDATION PERIMETER - R-10 RIGID INSULATION

TO A DEPTH OF 24" OR TO TOP OF FOOTING AT HEATED PERIMETER EXTERIOR WALLS: FIBERGLASS BATTS OR BLANKETS 2x6 WALLS - R21

FLOORS OVER UNHEATED SPACES - R30 ATTICS AND ROOF ASSEMBLIES - R-49 FULL HEIGHT OF UNCOMPRESSED INSULATION EXTENDS OVER THE WALL TOP PLATE AT

THE EAVES EXTERIOR DOORS: MAIN ENTRY U=0.20 ALL OTHERS U=0.40 WINDOWS: MILGARD VINYL

MODEL TYPE (VINYL) U-VALUE 6110 ARGON/LoE 0.24 or BETTER SLIDING 6310 ARGON/LoE 0.24 or BETTER SINGLE HUNG 6210 ARGON/LoE 0.24 or BETTER DBL. SLIDER 8125 ARGON/LoE 0.24 or BETTER 6610 ARGON/LoE 0.24 or BETTER

NOTE: ALL CONCEALED OR EXPOSED INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450

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1 8-30-24 Owner Changes Permit Corrections

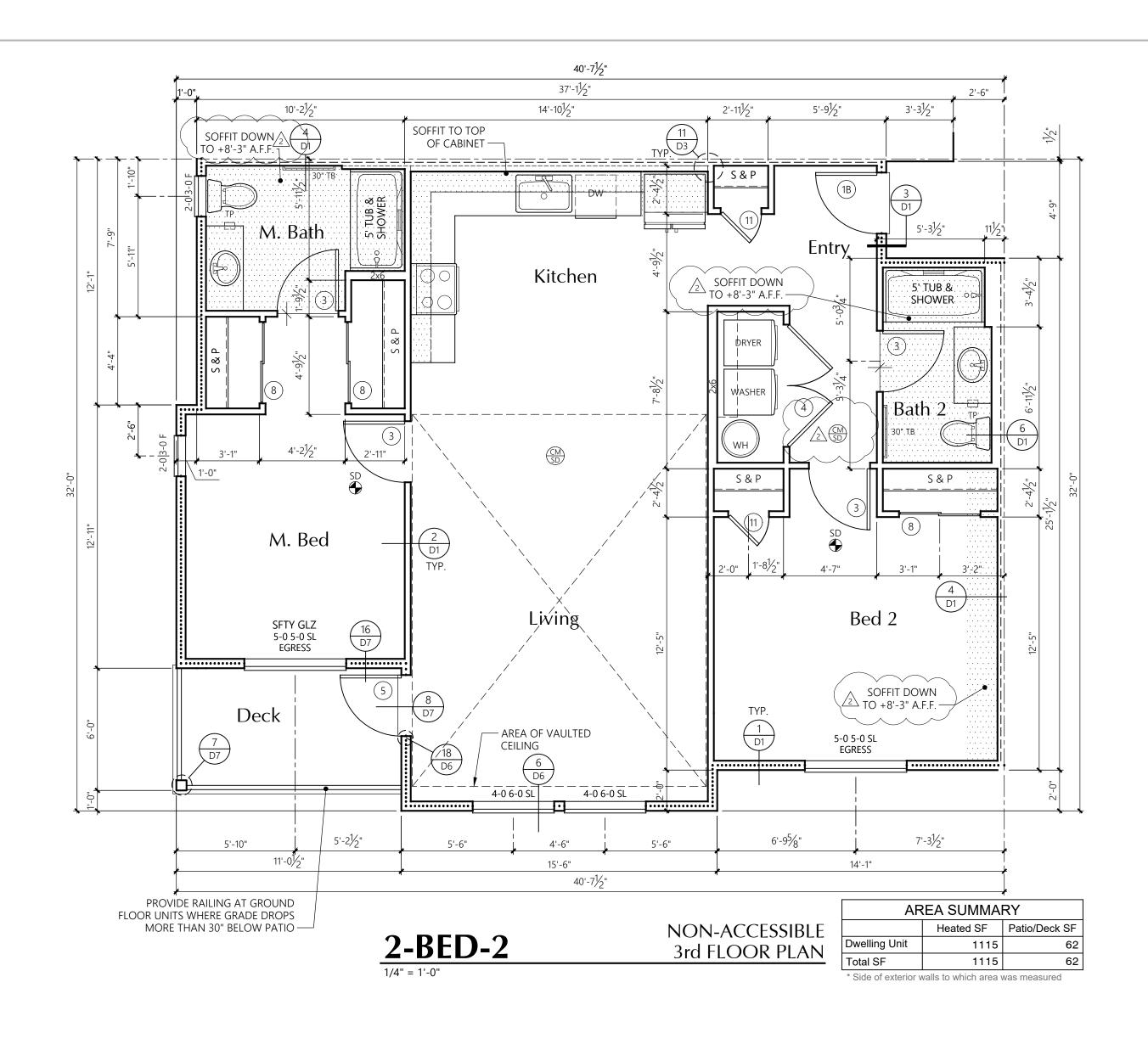
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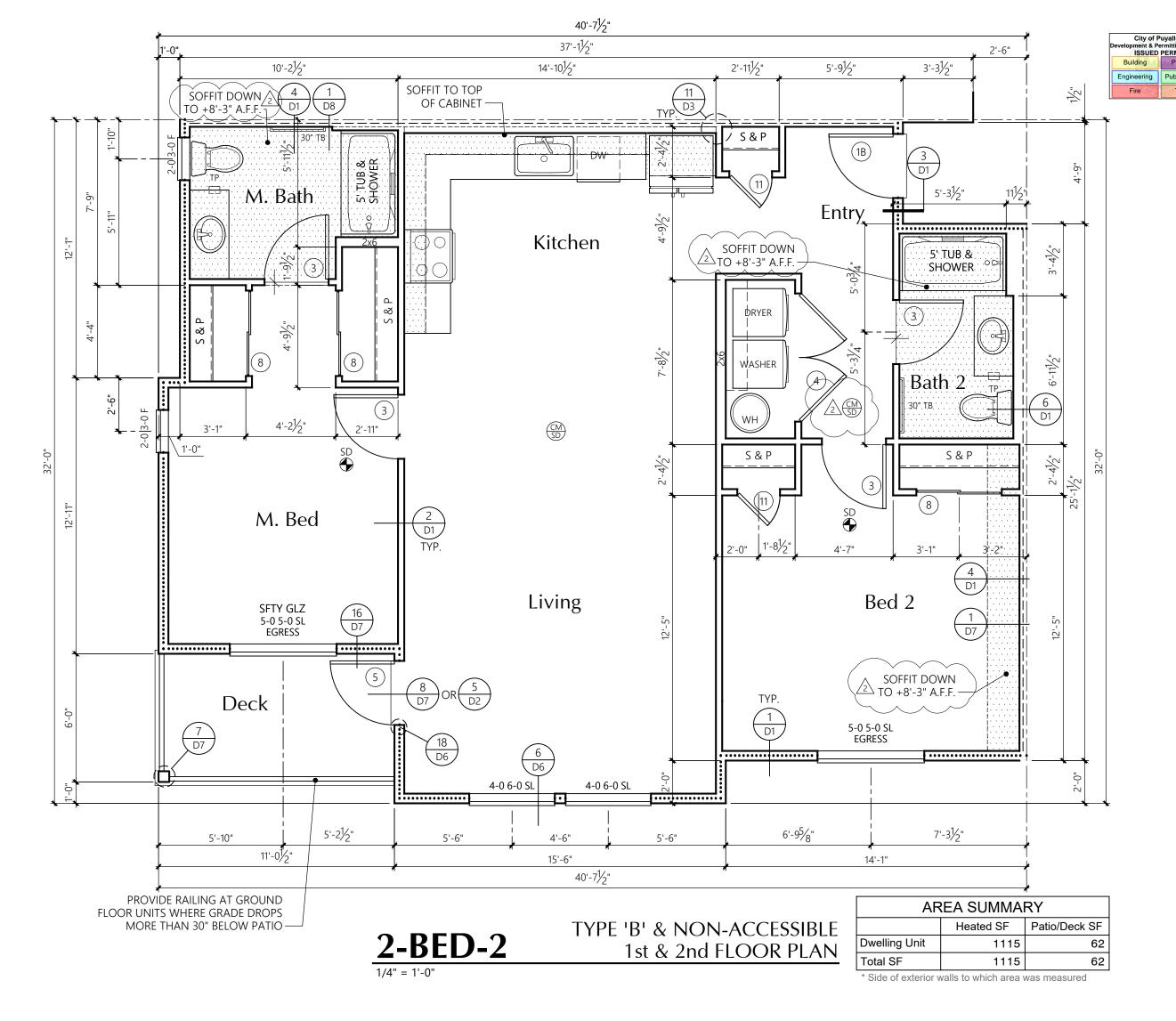
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Date Plotted: 5-1-25 Job No.: Drawn By:

23-06 APT/HDM/TMK Sheet No.:





UNIT PLAN NOTES

FRAMING: 2x6'S AT EXTERIOR WALLS 2x4'S AT INTERIOR WALLS UNLESS NOTED OTHERWISE. R-21 BATT INSULATION U.N.O.

---- R-13 BATT INSULATION $\sqrt{2}$ 3½" ACOUSTICAL INSULATION BOTH SIDES OF PARTYWALL, U.N.O.

CARBON MONOXIDE/SMOKE DETECTOR

LOCATION OF SOFFIT FOR VENT RUNS. SOFFIT HEIGHT +8'-0" A.F.F. U.N.O. ON PLANS; SEE DETAIL 1/D8

SMOKE DETECTOR

CONCEALED SPACES SHALL BE FIRESTOPPED IN BOTH

DIRECTIONS AT 10'-0" ON CENTER AND AT FLOORS. TYPICAL.

ALL ESCAPE OR RESCUE WINDOWS FROM SLEEPING ROOMS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM CLEAR OPENING HEIGHT DIMENSION SHALL BE 24". MINIMUM CLEAR OPENING WIDTH DIMENSION SHALL BE 20". EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE THE BOTTOM OF CLEAR OPENING NOT GREATER THAN 44 INCHES MEASURED FROM THE FLOOR.

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ALL BEDROOM AND BATHROOM DOORS SHALL BE UNDERCUT A MINIMUM OF 1/2" ABOVE THE ADJACENT FLOOR COVERING.

THE FRONT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. IT MAY BE PROVIDED WITH A NIGHT LATCH, DEAD BOLT OR SECURITY CHAIN, PROVIDED SUCH DEVICES ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR TOOL, AND MOUNTED NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR.

GYPSUM WALLBOARD SCHEDULE except where noted otherwise, 5/8" type 'x' gypsum WALLBOARD SHALL BE USED THROUGHOUT; ON INTERIOR NON-RATED WALLS, EXTERIOR WALLS, Corridor Walls, and 1-hour and 2-hour fire-ratei

STANDARD PLATE HEIGHT: 9'-1"

SEE ELEVATION SHEETS FOR FLOOR TO FLOOR HEIGHTS

WINDOW HDR IS 8'-0"

UNLESS NOTED OTHERWISE

SEE SHEET U10 FOR INTERIOR ELEVATIONS

DOOR KEY: 2 X DOOR TAG. SEE SHEET U14 FOR SCHEDULE

WINDOW KEY:

SGD = SLIDING GLASS DOOR

FIX = FIXED/PICTURESL = SLIDERSH = SINGLE HUNG

FOUNDATION PERIMETER - R-10 RIGID INSULATION TO A DEPTH OF 24" OR TO TOP OF FOOTING AT HEATED PERIMETER

INSULATION

EXTERIOR WALLS: FIBERGLASS BATTS OR BLANKETS 2x6 WALLS - R21

FLOORS OVER UNHEATED SPACES - R30 ATTICS AND ROOF ASSEMBLIES - R-49 FULL HEIGHT OF UNCOMPRESSED INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES

EXTERIOR DOORS: MAIN ENTRY U=0.20 ALL OTHERS U=0.40

WINDOWS: MILGARD VINYL TYPE (VINYL) MODEL SLIDING 6110 ARGON/LoE 0.24 or BETTER FIXED 6310 ARGON/LoE 0.24 or BETTER SINGLE HUNG 6210 ARGON/LoE 0.24 or BETTER

DBL. SLIDER 8125 ARGON/LoE 0.24 or BETTER

NOTE: ALL CONCEALED OR EXPOSED INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450

6610 ARGON/LoE 0.24 or BETTER

LIVING ROOM

BUILT-IN SHELVING

MDF SHELVES

LIVING ROOM

BUILT-IN SHELVING

1-BED-INT-1

& 1-BED-INT-2

TYPE 'A' & 'B'

LAUNDRY PLAN,

1-BED-INT-1

& 1-BED-INT-2

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Inter

Bradley Heights **Apartments**

Puyallup,

Timberlane

Partners Revisions

8-30-24 Owner Changes/ Permit Corrections

PRMU20240281

Initial Publish Date:

Date Plotted: Drawn By:

Job No.: 23-06 APT/HDM/TMK Sheet No.:

U6

CLEAR FLOOR SPACE LEGEND

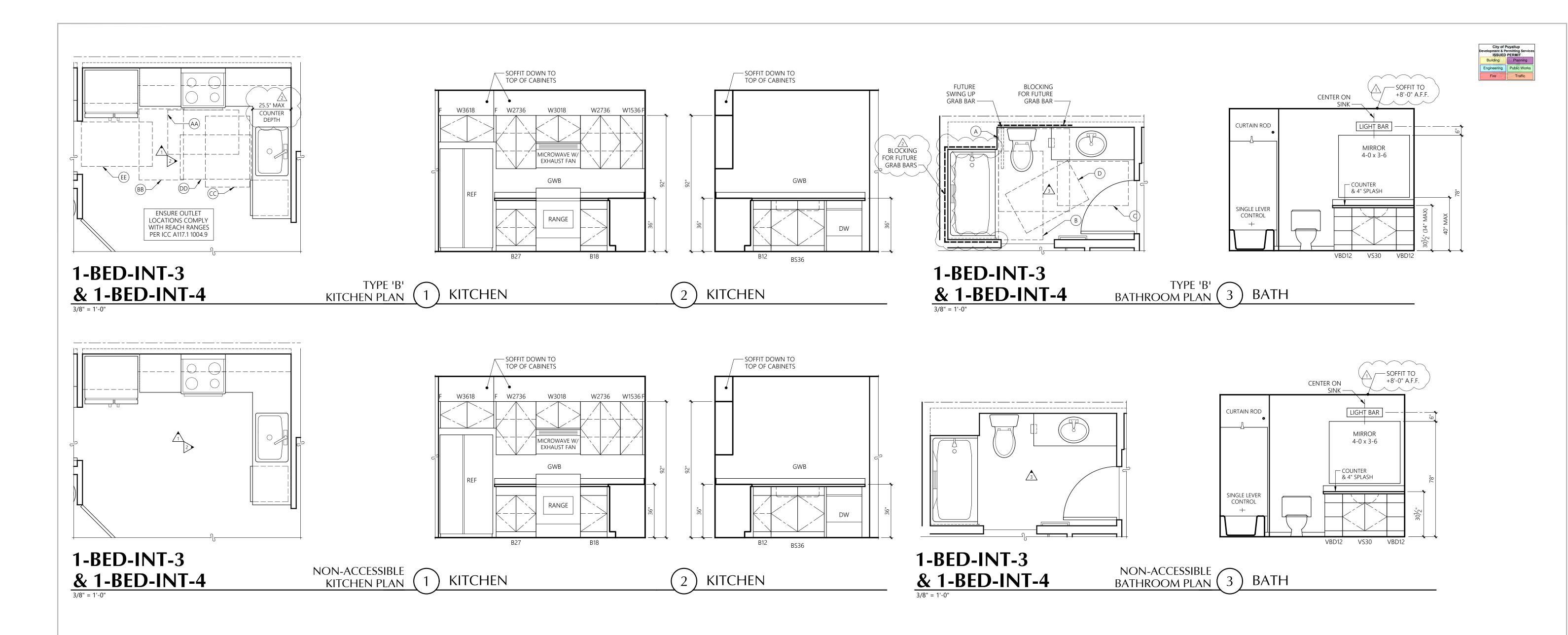
30x48 CLEAR FLOOR SPACE AT SINK.

30x48 CLEAR FLOOR SPACE AT DISHWASHER.

30x48 CLEAR FLOOR SPACE AT REFRIGERATOR.

(GG) 30x48 CLEAR FLOOR SPACE AT WASHER/DRYER

- CC 30x48 CLEAR FLOOR SPACE AT SINK.
- (DD) 30x48 CLEAR FLOOR SPACE AT DISHWASHER.
- (EE) 30x48 CLEAR FLOOR SPACE AT REFRIGERATOR.
- (FF) 30x48 CLEAR FLOOR SPACE AT WORK SURFACE
- (GG) 30x48 CLEAR FLOOR SPACE AT WASHER/DRYER



SHEET ADDED

*SEE SHEET U11 FOR ACCESSIBILITY STANDARDS

*SEE SHEET U11 & △ U11.1 FOR ADDITIONAL ACCESSIBILITY STANDARDS

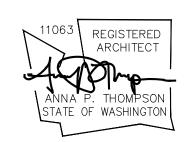
CLEAR FLOOR SPACE LEGEND TYPE B UNIT

(A) 48x56 CLEAR FLOOR SPACE AT TOILET.

- B 30x48 CLEAR FLOOR SPACE AT TUB.
- C 30"x48" CLEAR FLOOR SPACE CENTERED ON SINK
- D 30"x48" CLEAR FLOOR SPACE BEYOND ARC OF DOOR.
- (AA) 30x48 CLEAR FLOOR SPACE AT STOVE.
- (BB) 30x48 CLEAR FLOOR SPACE AT OVEN.
- CC 30x48 CLEAR FLOOR SPACE AT SINK.
- DD 30x48 CLEAR FLOOR SPACE AT DISHWASHER.
- (EE) 30x48 CLEAR FLOOR SPACE AT REFRIGERATOR.
- (GG) 30x48 CLEAR FLOOR SPACE AT WASHER/DRYER

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Inter

Bradley Heights **Apartments**

Puyallup,

Timberlane

Partners

Revisions No. Date Description 8-30-24 Owner Changes/ Permit Corrections

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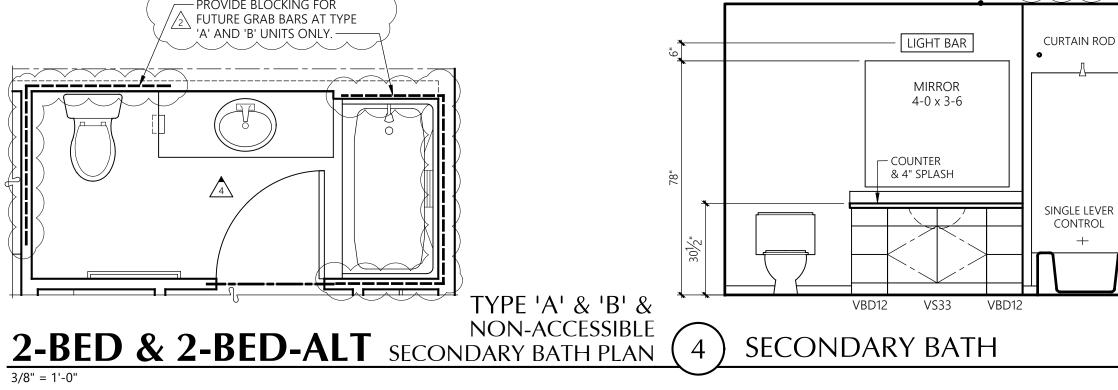
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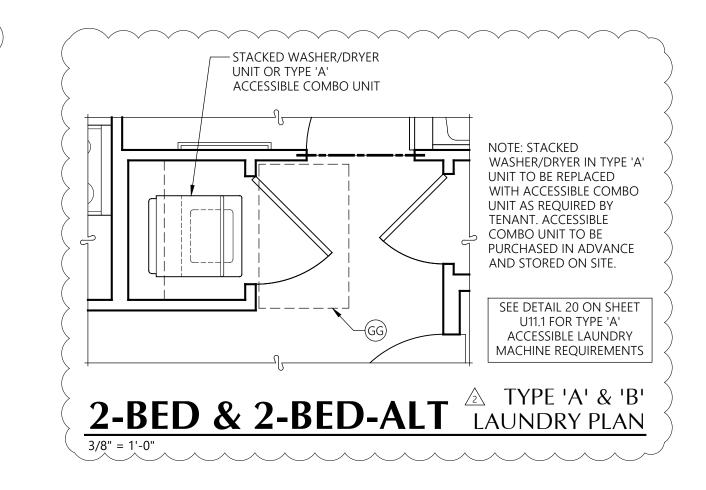
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Sheet No.: **U7**







- 60" DIAMETER TURNING CIRCLE
- OR T-SHAPE TURNING SPACE AA) 30x48 CLEAR FLOOR SPACE AT STOVE.
- 30x48 CLEAR FLOOR SPACE AT OVEN.
- CC 30x48 CLEAR FLOOR SPACE AT SINK.
- DD 30x48 CLEAR FLOOR SPACE AT DISHWASHER.
- (EE) 30x48 CLEAR FLOOR SPACE AT REFRIGERATOR.
- 30x48 CLEAR FLOOR SPACE AT WORK SURFACE.
- GG 30x48 CLEAR FLOOR SPACE AT WASHER/DRYER

- 30"x48" CLEAR FLOOR SPACE BEYOND ARC OF DOOR.
- (AA) 30x48 CLEAR FLOOR SPACE AT STOVE.
- 30x48 CLEAR FLOOR SPACE AT OVEN.
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Initial Publish Date:

Date Plotted: 5-1-25

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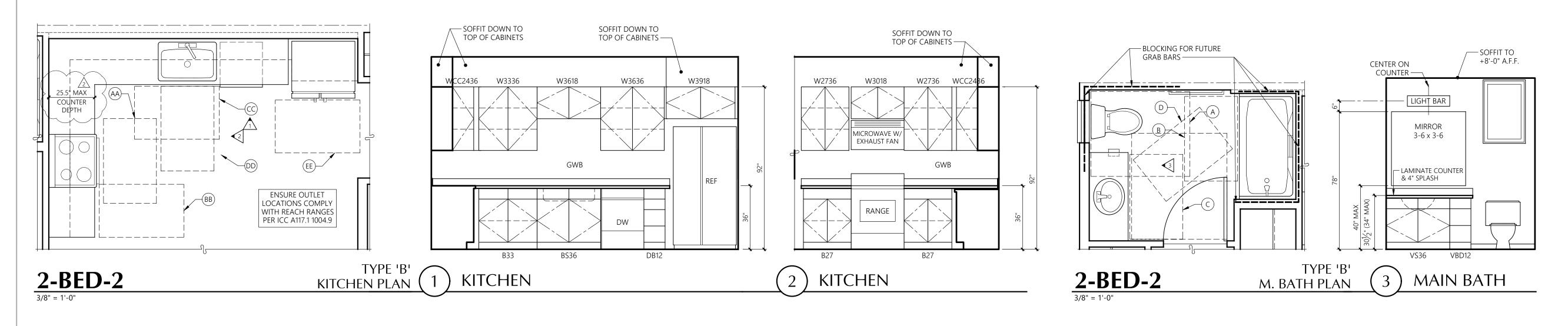
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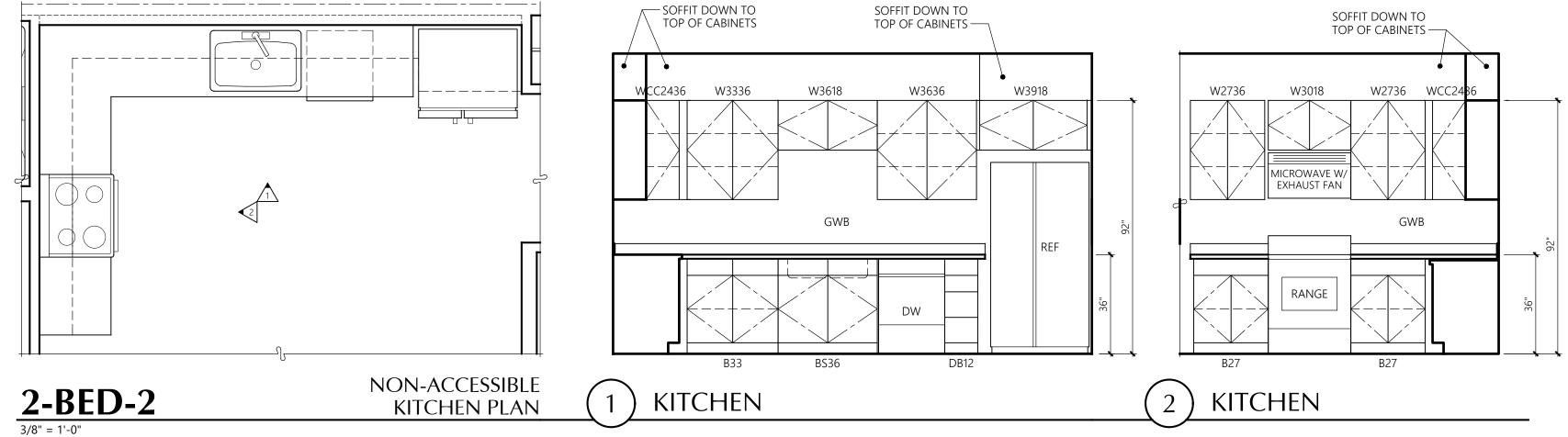
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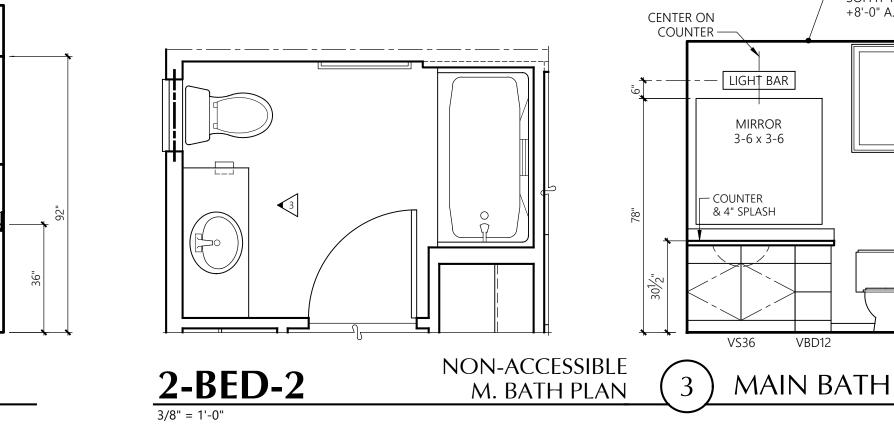
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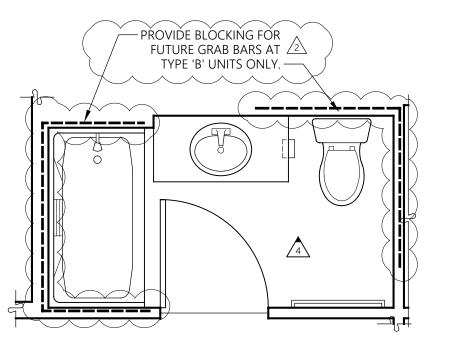
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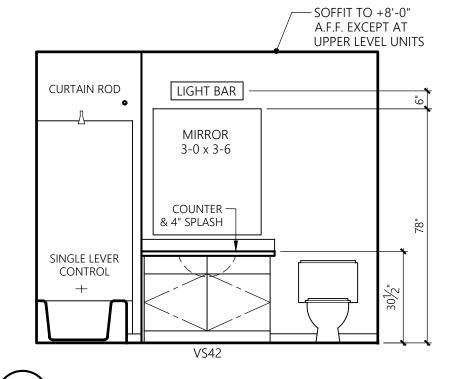
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2-BED-2
3/8" = 1'-0"

TYPE 'B' & NON-ACCESSIBLE SECONDARY BATHROOM PLAN SECONDARY

*SEE SHEET U11 & DITIONAL ACCESSIBILITY STANDARDS

SOFFIT TO +8'-0" A.F.F.

CLEAR FLOOR SPACE LEGEND TYPE B UNIT

(A) 48x56 CLEAR FLOOR SPACE AT TOILET.

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(DD) 30x48 CLEAR FLOOR SPACE AT DISHWASHER.

(EE) 30x48 CLEAR FLOOR SPACE AT REFRIGERATOR.

GG 30x48 CLEAR FLOOR SPACE AT WASHER/DRYER

Engineering Public Works

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NUMBER OF TYPE A UNITS IN GROUP R-2 OCCUPANCIES CONTAINING MORE THAN 10 DWELLING UNITS OR SLEEPING UNITS AT LEAST 5% BUT NOT LESS THAN ONE OF THE UNITS HALL BE A TYPE A UNIT. ALL UNITS ON THE SITE SHALL BE CONSIDERED TO DETERMINE THE TOTAL NUMBER OF UNITS AND THE REQUIRED NUMBER OF TYPE A UNITS. EXISTING STRUCTURES ON A SITE SHALL NOT CONTRIBUTE TO THE TOTAL NUMBER OF UNITS ON A SITE. TYPE A UNITS SHALL BE DISPERSED AMONG THE VARIOUS CLASSES OF UNITS. THE NUMBER OF TYPE A UNITS IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH CONDITIONS

DEFINED IN SECTION 1107.7 OF THE IBC. **ACCESSIBLE ROUTE**

AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ALL SPACES AND ELEMENTS THAT ARE PART OF THE UNIT. ACCESSIBLE ROUTES SHALL COINCIDE WITH OR BE LOCATED IN THE SAME AREA AS THE GENERAL CIRCULATION PATH. (See detail 5 sheet A3)

TURNING SPACE & CLEAR FLOOR SPACE ALL ROOMS SERVED BY AN ACCESSIBLE ROUTE SHALL PROVIDE A TURNING SPACE EXCEPT FOR BATHROOMS THAT ARE NOT REQUIRED TO MEET ACCESSIBILITY STANDARDS, OR CLOSETS OR PANTRIES THAT ARE 48" MAX

(See detail 1 sheet A3) **NOTE:** BALCONIES AND CORRIDORS ARE NOT ROOMS AND AS SUCH DO NOT NEED TO HAVE A TURNING SPACE

DOORS AND DOORWAYS THE PRIMARY ENTRANCE DOOR AND ALL DOORS INTENDED FOR USER PASSAGE, SHALL COMPLY WITH SECTION 404. (See detail 6 sheet A3) BALCONY DOORS: THRESHOLDS AT EXTERIOR SLIDING DOORS SHALL BE PERMITTED TO BE 3/4" MAX. IN HEIGHT PROVIDED THEY ARE BEVELED WITH

WHERE EXTERIOR SPACE DIMENSIONS OF BALCONIES ARE LESS THAN THE REQUIRED MANEUVERING CLEARANCE, DOOR MANEUVERING CLEARANCES ARE NOT REQUIRED ON THE EXTERIOR SIDE OF THE DOOR.

BATHROOM DOORS: BATHROOMS NOT REQUIRED TO BE ACCESSIBLE ONLY NEED TO PROVIDE DOOR MANEUVERING CLEARANCE ON THE OUTSIDE OF THE DOOR. BATHROOM DOORS MAY SWING INTO THE BATHROOM AND INTO THE REQUIRED CLEAR FLOOR SPACE AT ANY FIXTURE WHEN A CLEAR FLOOR

SPACE OF AT LEAST 30"x48" IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING. **OPERABLE PARTS**

LIGHTING CONTROLS, ELECTRICAL PANELBOARDS, ELECTRICAL SWITCHES & RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, APPLIANCE CONTROLS, OPERATING HARDWARE FOR OPERABLE WINDOWS, PLUMBING FIXTURE CONTROLS, AND USER CONTROLS FOR SECURITY OR INTERCOM SYSTEMS SHALL COMPLY WITH SECTION 309. (See detail 4 sheet A3) **EXCEPTIONS:**

. Receptacle outlets serving a dedicated use. 2. Where two or more receptacle outlets are provided in a kitchen above a counter top that is uninterrupted by a sink or appliance, one receptacle outlet shall not be required to comply with Section 309. 3. Floor receptacle outlets. 4. HVAC diffusers.

Controls mounted on ceiling fans. 6. Where redundant controls other than light switches are provided for a single element, one control shall not be required to be accessible. Reset buttons & shut-offs serving appliances, piping & plumbing fixtures. 8. Electrical panelboards shall not be required to comply with Section 309.4.

WINDOWS ONLY WINDOWS REQUIRED TO BE OPERABLE FOR NATURAL VENTILATION OR TO PROVIDE AN EMERGENCY ESCAPE AND RESCUE OPENING NEED TO HAVE OPERABLE PARTS COMPLYING WITH SECTION 309. (See detail 4 sheet A3)

ı MIN.

A LAVATORY

COMPLYING WITH

PERMITTED WITHIN L

WATER CLOSET ——

CLEAR FLOOR SPACE

IF THE CLEAR FLOOR

SPACE IS INCREASED

AT WATER CLOSET

COUNTER TOP:

ALLOWED AT

ONE END OF

CLEARANCE *

★ COUNTER TOP⁷ & CABINET MUST

WALL FINISHES EXTENDED

BELOW & BEHIND CABINET

BE REMOVABLE WITH FLOOR &

AND CABINET

TUB/SHOWER PLAN

TO 66" IN DEPTH

30x48 CLEAR

| FLOOR SPACE

FORWARD APPROACH

PLAN

GENERAL TYPE A UNIT NOTES

★ CABINETRY PERMITTED UNDER

THE LAVATORY PROVIDED IT IS

| removable without need for

THE LAVATORY. FLOOR FINISH

SHALL EXTEND UNDERNEATH

AND THE WALLS BEHIND AND

SURROUNDING THE CABINETRY

SHALL BE FINISHED.

BLOCKING FOR -

BARS AT SIDE

PLAN

FUTURE GRAB

AND REAR

WALLS

FAUCET CONTROLS SHALL MEET THE

REQUIREMENTS FOR OPERABLE PARTS.

LAUNDRY EQUIPMENT

WASHING MACHINES AND CLOTHES DRYERS SHALL COMPLY WITH SECTION 611 (See detail 20 sheet U11.1) **TOILET AND BATHING FACILITIES**

AT LEAST ONE TOILET AND BATHING FACILITY SHALL CONTAIN: ONE LAVATORY ONE WATER CLOSET AND EITHER A BATHTUB OR SHOWER WITHIN THE UNIT THAT MEETS THE REQUIREMENTS DETAILED FOR TYPE A FIXTURES (See details 23 thru 28 this sheet). THE ACCESSIBLE TOILET AND BATHING FIXTURES SHALL BE IN A SINGLE TOILET/BATHING AREA SUCH THAT TRAVEL BETWEEN FIXTURES DOES NOT REQUIRE TRAVEL THROUGH OTHER PARTS OF THE UNIT ALL TOILET & BATHING FACILITIES WITHIN A TYPE A UNIT SHALL PROVIDE REINFORCEMENT FOR THE **FUTURE INSTALLATION** OF GRAB BARS AT WATER CLOSETS, BATHTUBS AND SHOWER SEATS. REINFORCEMENT IS NOT REQUIRED IN A ROOM CONTAINING ONLY A LAVATORY AND A WATER CLOSET, PROVIDED

THE ROOM DOES NOT CONTAIN THE ONLY LAVATORY OR WATER CLOSET ON

THE ACCESSIBLE LEVEL OF THE DWELLING UNIT.

ACCESSIBLE AUDIBLE AND VISIBLE ALARMS AND NOTIFICATION APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 LISTED IN SECTION 105.2.2, BE POWERED BY A COMMERCIAL LIGHT AND POWER SOUCE, BE PERMANENTLY CONNECTED TO THE WIRING OF THE PREMISES ELECTRIC SYSTEM, AND BE PERMANENTLY INSTALLED.

VISIBLE NOTIFICATION APPLIANCES

IN GROUP R-2 OCCUPANCIES REQUIRED TO HAVE A FIRE ALARM SYSTEM, EACH STORY THAT CONTAINS DWELLING UNITS & SLEEPING UNITS SHALL BE PROVIDED WITH THE CAPABILITY TO SUPPORT VISIBLE ALARM NOTIFICATION APPLIANCES. Such Capability Shall accommodate wired or wireless equipment. The FUTURE CAPABILITY SHALL INCLUDE ONE OF THE FOLLOWING:

The interconnection of the building fire alarm system with the unit smoke alarms. Replacement of audible appliances with combination audible/visible appliances. The future extension of the existing wiring from the unit smoke alarm location to required locations for visible appliances.

VISIBLE NOTIFICATION APPLIANCES, WHERE PROVIDED AS PART OF THE UNIT SMOKE DETECTION SYSTEM OR BUILDING FIRE ALARM SYSTEM, SHALL BE ACTIVATED UPON SMOKE DETECTION OR WITH ACTIVATION OF THE BUILDING FIRE ALARM. THE SAME VISIBLE NOTIFICATION APPLIANCE CAN BE USED FOR BOTH SMOKE DETECTION AND FIRE ALARM ACTIVATION, BUT SHALL NOT BE USED FOR ANY OTHER PURPOSE WITHIN THE UNIT.

UNIT PRIMARY ENTRANCE

MIRROR

FRONT

FRONT

THIS MUST

OBSTRUCT

- Grab bar u

BLOCKING

GRAB BAR

CONTROLS

WITHIN THIS

MUST BE

NOTE: ALL DIMENSIONS

ARE MEASURED TO FACE

OF FINISHED SURFACE

REINFORCEMENT FOR

WHERE REAR GRAR -

A 24" GRAB BAR

CENTERED ON THE

OILET IS PERMISSIBLE 💳

CONTROL ON

OPEN SIDE

BAR WOULD OVERLAP

WITH A LAVATORY

REINFORCEMENT FOR

ROD

4" MAX.

FROM FRONT

EDGE OF TUB -

GRAB BAR

18" MIN.

BATHTUB & TUB / SHOWER COMBO

UTURE VERTICAL

FUTURE 36" GRAB ———

THE ACCESSIBLE PRIMARY ENTRANCE SHALL BE ON AN ACCESSIBLE ROUTE FROM PUBLIC AND COMMON AREAS.

COMMUNICATION FEATURES SHALL BE PROVIDED AT THE UNIT PRIMARY INTRANCE. A HARD-WIRED ELECTRIC DOORBELL SHALL BE PROVIDED. A BUTTON OR SWITCH SHALL BE PROVIDED ON THE PUBLIC SIDE OF THE UNIT PRIMARY FNTRANCE WHERE A SYSTEM PERMITTING VOICE COMMUNICATION BETWEEN A VISITOR AND THE OCCUPANT OF THE UNIT IS PROVIDED AT A LOCATION OTHER THAN THE UNIT ENTRY DOOR, THE SYSTEM SHALL INCLUDE THE CAPABILITY OF SUPPORTING VOICE AND TTY COMMUNICATION WITH THE UNIT INTERFACE. A MEANS FOR VISUALLY IDENTIFYING A VISITOR WITHOUT OPENING THE UNIT ENTRY DOOR SHALL BE PROVIDED. PEEPHOLES, WHERE USED SHALL PROVIDE A MINIMUM 180-DEGREE RANGE OF VIEW. PEEPHOLES SHALL BE PLACED AT A STANDARD HEIGHT FOR BOTH STANDING PERSONS AND WHEELCHAIR USERS.

TOP OF COUNTER OR RIM OF

COUNTER OR INSTALL BRACE

INTERFERE W/ CABINET REMOVA

54" MIN.

42" GRAB BAR

B) SIDE

CURTAIN —

GRAB BAR -

ROD 🔪

SIDE

WITHIN CARINFT - CANNOT

— (See detail 2 ACC sheets)

-FINISHED END PANEL

PROVIDE KNEE &

TOE CLEARANCE

BLOCKING

- GRAB BARS

BLOCKING-

SOLID

- SINK WHICHEVER IS HIGHER

MUST BE WITHIN THIS AREA - VERTICAL PROVIDE GRAE GRAB BAI BAR ALONG 18" MIN. CONTROL WALL PROVIDE BLOCKING AS NECESSARY FOR ALL GRAB BARS SIDE (D) BACK WALL B) BACK WALL C) WALL STANDARD LAYOUT ALTERNATE LAYOUT OPTIONS TRANSFER SHOWER **ROLL-IN SHOWER CONTROL WALL OPTIONS** CONTROL WALL **ALIGN GRAB BAR END WITH** 6"MAX. BACK WALL FEDGE OF SEAT -6" MAX. **NOTE**: INSIDE FINISHED DIMENSIONS ARE MEASURED AT THE **CENTER POINTS OF** OPPOSING SIDES OF SHOWER COMPARTMENT FOLD-UP SEAT **LAVATORY CLEAR FLOOR SPACE** PERMITTED IN ALIGNED WITH CLEAR FLOOR CONTROL WALL

ALIGNED WITH

TOP OF SHELF

OR TOWFI BAR

ALL UNITS

WALL FIXTURES

IN BATHROOMS

MOUNTED ON WALL OR

FROM EDGE OF TOILET

ALL OTHER UNITS TYPE A UNITS

CONTROLS AND

HAND SHOWER

TOILET PAPER

DISPENSER

CONDITIONS ALLOW. MAX 9"

FROM EDGE

CURTAIN → 4" MAX. FROM

FRONT FDGE

ROD

OR SHOWER —

EDGE OF TUB

TRANSFER TYPE SHOWER PLAN SHOWER COMPARTMENTS

FOLDING OR FIXED

CONTROL WALL

INSTALLED OPPOSITE

SEAT TO BE

A SINK AT 34" MAX. HEIGHT WITH CLEAR FLOOR SPACE SHALL BE PROVIDED FOR A FORWARD APPROACH (NOT NECESSARILY CENTERED ON THE SINK) WITH KNEE AND TOE CLEARANCE. NOTE: THE KNEE & TOE CLEARANCE

ONLY NEEDS TO APPLY TO ONE BOWL OF A MULTI-BOWL SINK. CABINETRY SHALL BE PERMITTED UNDER THE SINK PROVIDED IT IS

REMOVABLE AND THE FLOOR AN WALL FINISH IS EXTENDED UNDER AND BEHIND THE REMOVABLE CABINETS.

APPLIANCES DISHWASHER: A CLEAR FLOOR SPACE SHALL BE POSITIONED ADJACENT TO THE DISHWASHER DOOR SO THAT THE DOOR IN THE OPEN POSITION DOESN'T OBSTRUCT THE CLEAR FLOOR SPACE. COOKTOP: A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR A PARALLEL APPROACH CENTERED ON THE APPLIANCE. THE LOCATION OF CONTROLS SHALL NOT REQUIRE REACHING ACROSS BURNERS. **OVEN:** A CLEAR FLOOR SPACE SHALL BE POSITIONED ADJACENT TO THE OVEN DOOR SUCH THAT THE DOOR IN THE OPEN POSITION DOES NOT OBSTRUCT THE CLEAR FLOOR SPACE. A COUNTERTOP SHALL BE LOCATED ADJACENT TO ONE SIDE OF THE OVEN. THE LOCATION OF CONTROLS SHALL NOT REQUIRE REACHING ACROSS BURNERS. REFRIGERATOR/FREEZER: A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR A PARALLEL APPROACH OFFSET 24" MAX. FROM THE CENTERLINE OF THE APPLIANCE. COMBINATION REFRIGERATORS AND FREEZERS SHALL HAVE AT LEAST 50% OF THE FREEZER COMPARTMENT SHELVES INCLUDING THE BOTTOM OF THE FREEZER 54" MAX. ABOVE THE FLOOR WHEN THE SHELVES ARE INSTALLED AT THE MAX. HEIGHT POSSIBLE IN

ELEMENTS IS PERMITTED, PROVIDED ROUGH-IN PLUMBING PERMITS CONNECTIONS

ADJUSTABLE COUNTERTOP ALTERNATIVE

LINEAR KITCHEN

WORK SURFACE

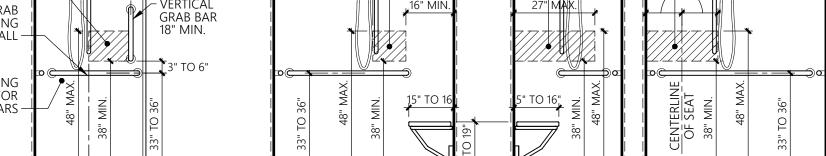
BEHIND THE REMOVABLE CABINETS.

GALLEY KITCHEN SINK AND COUNTER THAT IS ADJUSTABLE TO VARIABLE HEIGHTS 29" MIN. AND 36" MAX. OR THAT CAN BE RELOCATED WITHIN THAT RANGE WITHOUT CUTTING THE COUNTER OR DAMAGING ADJACENT CABINETS, WALLS, DOORS AND STRUCTURAL

OF SUPPLY AND DRAIN PIPES FOR SINKS MOUNTED AT THE HEIGHT OF 29". PROVIDED, DO NOT NEED TO MEET ACCESSIBILITY - 27" KNEE CLEARANCE REQUIRED **FAUCET CONTROLS** REQUIREMENTS SHALL MEET THE AT ONLY ONE BOWL OF REQUIREMENTS FOR MULTI-BOWL SINK ** SURFACE TOP OF COUNTER OPERABLE PARTS. OR RIM OF SINK WHICHEVER IS HIGHER 30x48 CLEAR FLOOR SPACE ★ CABINETRY PERMITTED UNDER THE SINK & WORK SURFACE PROVIDED FOR FORWARD APPROACH IS REMOVABLE WITHOUT NEED FOR PROVIDED FOR SINK & removal or replacement of the | CENTERED ON WORK SURFACE | 🔼 SINK. FLOOR FINISH SHALL EXTEND JNDERNEATH & THE WALLS BEHIND & SURROUNDING THE CABINETRY 30" MIN. KITCHEN PLAN OR CABINET WITH REMOVABLE CABINETS 🛨 FINISHED END KITCHENS & KITCHENETTES

THE COMPARTMENT.

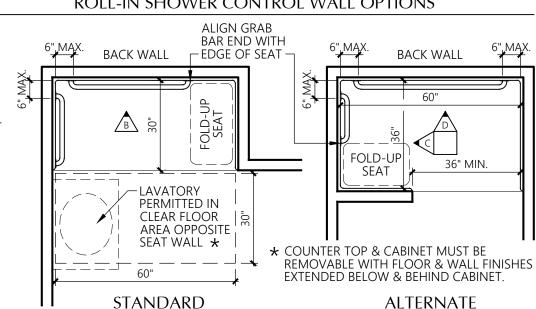
TYPE A DWELLING UNITS **CHAPTER 10 SECTION 1003**



ALL UNITS

SHOWER

CURTAIN



WHERE PROVIDED

ENTRY DOOR

PEEPHOLES

. ACCESSORY & FIXTURE MOUNTING HEIGHTS

ALTERNATE ROLL-IN TYPE SHOWER PLAN

Cabinetry shall be permitted under the work surface provided it

IS REMOVABLE AND THE FLOOR AN WALL FINISH IS EXTENDED UNDER AND

MINIMUM CLEARANCES

BATHROOM CONFIGURATION AT LEAST ONE SECTION OF COUNTER SHALL PROVIDE A WORK SURFACE 30" MIN. IN LENGTH AND 34" MAX. IN HEIGHT. PROVIDE A CLEAR FLOOR FORWARD APPROACH LAVATORY OR OTHER SPACE FOR A FORWARD APPROACH WITH KNEE AND TOE CLEARANCE.

PERMITTED IF REMOVABLE

CABINET IS PROVIDED

30x48 CLEAF

FLOOR SPACE

PARALLEL

APPROACH

LAVATORY

OPTION A FIXTURE REQUIREMENTS

OPTION B FIXTURE REQUIREMENTS

SINK: A CLEAR FLOOR SPACE OF 30"x48" POSITIONED FOR A PARALLEL APPROACH SHALL BE PROVIDED CENTERED ON THE SINK BOWL.

CENTERED ON THE WHOLE SINK PLUMBING FIXTURE

DOES NOT OBSTRUCT THE CLEAR FLOOR SPACE.

APPROACH CENTERED ON THE APPLIANCE.

NOTE: ON A MULTI-BOWL SINK THE CLEAR FLOOR SPACE SHALL BE

DISHWASHER: A CLEAR FLOOR SPACE SHALL BE POSITIONED ADJACENT TO

THE DISHWASHER DOOR SUCH THAT THE DOOR IN THE OPEN POSITION

COOKTOP: A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR A PARALLEL

1/4"=1'-0"

MINIMUM CLEARANCES

MIN.

CLEARANCE BETWEEN OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES, OR WALLS IN KITCHEN WORK AREAS

HALL BE 40" MIN. OR 60" MIN. AT U-SHAPED KITCHENS. U-SHAPED KITCHEN

AS AN ALTERNATIVE TO 34" HIGH COUNTERTOPS FOR WORK SURFACE AND SINK, A 📗 ★ NOTE: THE 30" WIDE CLEARANCE FOR FORWARD APPROACH AND KNEE CLEARANCE DOES NOT NEED TO BE CENTERED ON THE SINK. IF IT IS PROVIDED AT ONLY ONE BOWL OF A MULTI-BOWL SINK, ENSURE THE 30" CLEARANCE IS PROVIDED UNDER THE BOWL AND TO THE SIDE ADJACENT TO THE BOWL

KITCHENS AND KITCHENETTES

TYPE B DWELLING UNITS **CHAPTER 10 SECTION 1004**

CLEARANCE BETWEEN ALL OPPOSING BASE CABINETS, COUNTER TOPS, APPLIANCES, OR WALLS WITHIN KITCHEN WORK AREAS SHALL BE 40" MIN. OR 60"

NUMBER OF TYPE B UNITS

HALL BE INSTALLED WITHIN |

OF STORAGE AREA FIXTURES

ACCESSIBLE REACH RANGES.

ALL UNITS

SWITCHES, AND OUTLETS

ELECTRICAL CONTROLS

(15" MIN. - 48" MAX.)

SANS SERIF -

TO 2" IN HEIGH

BRAILLE TO BE

WHERE PROVIDED

TACTILE SIGNS

AT DOORS

SHOWER MUST B

IN GROUP R-2 OCCUPANCIES WHERE THERE ARE 4 OR MORE DWELLING UNITS OR SLEEPING UNITS INTENDED TO BE OCCUPIED AS A RESIDENCE IN A SINGLE STRUCTURE, EVERY DWELLING UNIT AND SLEEPING UNIT SHALL BE A TYPE B UNIT. THE NUMBER OF TYPE B UNITS IS PERMITTED TO BE REDUCED IN ACCORDANCE WITH CONDITIONS DEFINED IN SECTION 1107.7 OF THE IBC. THIS REDUCTION OF TYPE B UNITS IS TYPICALLY FOR UNITS THAT ARE ON UPPER STORIES OF A MULTISTORY BUILDING WITHOUT ELEVATOR SERVICE OR MULTI-STORY DWELLING UNITS (SEE IBC FOR SPECIFIC CONDITIONS ALLOWING REDUCTION OF TYPE B UNITS).

UNIT PRIMARY ENTRANCE

SAME REQUIREMENTS AS FOR TYPE A UNITS EXCEPT THAT ONLY A SINGLE PEEPHOLE NEED BE PROVIDED AT A STANDARD HEIGHT FOR STANDING PERSONS. **ACCESSIBLE ROUTE**

STORAGE

SAME REOUIREMENTS AS FOR TYPE A UNITS EXCEPT YOU ARE PERMITTED TO HAVE ONE OF THE FOLLOWING: A RAISED / SUNKEN FLOOR AREA IN A LIVING, DINING OR SLEEPING ROOM OR A MEZZANINE THAT IS NOT ENCLOSED AND DOES NOT HAVE PLUMBING FIXTURES. CHANGES IN LEVEL

SAME REQUIREMENTS AS FOR TYPE A UNITS EXCEPT WHERE EXTERIOR DECK, PATIO OR BALCONY SURFACE MATERIALS ARE IMPERVIOUS, TH IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE INTERIOR FLOOR LEVEL.

SAME REQUIREMENTS AS FOR TYPE A UNITS EXCEPT

DOORS INTENDED FOR USER PASSAGE SHALL HAVE A CLEAR OPENING WIDTH OF 313/4" MIN. MEASURED BETWEEN THE FACE OF THE DOOR & THE STOP WITH THE DOOR OPENED 90°. BATHROOM DOORS: BATHROOM DOORS MAY

SWING INTO THE REQUIRED CLEAR FLOOR SPACE AT ANY FIXTURE WHEN A CLEAR FLOOR SPACE OF AT LEAST 30"x48" IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING.

SAME REQUIREMENTS AS FOR TYPE A UNITS EXCEPT FOR THESE ADDITIONAL EXCEPTIONS: . Controls or switches mounted on appliances. Plumbing fixture controls.

NOTE: OPERABLE CONTROLS FOR ALL APPLIANCES

PROVIDED INCLUDING THOSE NOT DEPICTED

HERE (INCLUDING LINT SCREENS, DETERGENT

EXHAUST FANS ETC.) MUST BE WITHIN REACH

RANGES PER ICC A117.1 SECTION 308.

LOCATION OF CONTROLS SHALL NOT

require reaching across burners –

LAUNDRY

COMPARTMENTS, WATER/ICE DISPENSERS, RANGE

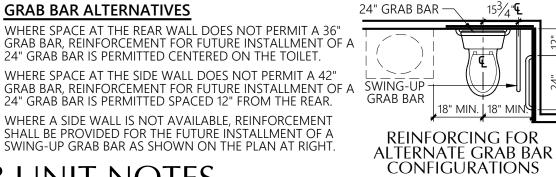
10. Within kitchens & bathrooms, lighting controls, electrical switches & receptacle outlets are permitted to be located over cabinets with countertops 36" max. in height & 25½" max. in depth.

LAUNDRY EQUIPMENT A 30"x48" CLEAR FLOOR SPACE SHALL BE PROVIDED. A PARALLEL APPROACH SHALL BE PROVIDED FOR TOP LOADING MACHINES. A FORWARD OR PARALLEL APPROACH SHALL BE PROVIDED FOR

FRONT LOADING MACHINES. **TOILET AND BATHING FACILITIES**

REINFORCEMENT FOR FUTURE GRAB BAR INSTALLATION SHALL BE PROVIDED FOR ALL TOILET & BATHING FACILITIES (Regardless of the option chosen for the fixture clearances). REINFORCEMENT SHALL BE THE SAME AS FOR TYPE A UNITS (See detail 23 this sheet) EXCEPT REINFORCEMENT IS NOT REQUIRED FOR SHOWER SEATS IN SHOWERS THAT ARE LARGER THAN 36"x36" AND REINFORCEMENT AT WATER CLOSETS CAN BE MODIFIED FOR ALTERNATE GRAB BAR

CONFIGURATIONS DETAILED BELOW. **GRAB BAR ALTERNATIVES** WHERE SPACE AT THE REAR WALL DOES NOT PERMIT A 36" GRAB BAR, REINFORCEMENT FOR FUTURE INSTALLMENT OF A 24" GRAB BAR IS PERMITTED CENTERED ON THE TOILET. WHERE SPACE AT THE SIDE WALL DOES NOT PERMIT A 42" GRAB BAR, REINFORCEMENT FOR FUTURE INSTALLMENT OF A 24" GRAB BAR IS PERMITTED SPACED 12" FROM THE REAR.



RANGES & COOKTOPS REFRIGERATOR

TYPE A UNITS ONLY

APPLIANCES & CONTROLS

GENERAL **type b** unit notes

ALL UNITS SELECT LOCATIONS 'ALL OTHER

IN TYPE A UNITS

SHELVES COAT & BEDROOM CLOSETS

LOCATIONS

WITH TOILET AND BATHING AREAS WITHIN TYPE B UNITS EITHER ALL TOILET AND BATHING AREAS PROVIDED SHALL COMPLY WITH OPTION A OR ONE TOILET AND BATHING AREA SHALL COMPLY WITH OPTION B.

WATER CLOSET AND

LAVATORY PERMITTED

AT ONE END OF TUB

BATHTUB

(FRONT APPROACH)

LAVATORY: SAME REQUIREMENTS AS FOR OPTION A EXCEPT THAT

BATHING FIXTURES: THE ACCESSIBLE BATHING FIXTURE SHALL BE A

Control end of the tub or a shower compartment with the

TYPE B - TOILET & BATHING FIXTURES

WATER CLOSET: SAME REQUIREMENTS AS FOR OPTION A

MIN. AT U-SHAPED KITCHENS. SEE MINIMUM CLEARANCE DIAGRAMS FOR TYPE A UNITS (Detail 28 this sheet).

SAME REQUIREMENTS AS THE OPTION A SHOWER.

BATHTUB WITH A CLEARANCE OF 30"x48" ALIGNED WITH THE

THE HEIGHT OF THE LAVATORY SHALL BE 34" MAX. ABOVE THE FLOOR.

EVERY FIXTURE PROVIDED IN ALL TOILET AND BATHING AREAS SHALL COMPLY WITH THE REQUIREMENTS LISTED ONE OF EACH TYPE OF FIXTURE PROVIDED SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS AND BE LOCATED IN A SINGLE OPTION B TOILET/BATHING AREA.



COMMON OPTION A

OBSTRUCTION PERMITTED

IN CLEAR FLOOR AREA

WATER CLOSE



COMMON OPTION B BATHROOM CONFIGURATION

BATHTUB

(SIDE APPROACH)

LAVATORY HEIGHT

OBSTRUCT THE CLEAR FLOOR SPACE.

OR FORWARD APPROACH SHALL BE PROVIDED.

OVEN: A CLEAR FLOOR SPACE SHALL BE POSITIONED ADJACENT TO THE OVEN DOOR SUCH THAT THE DOOR IN THE OPEN POSITION DOES NOT

REFRIGERATOR/FREEZER: A CLEAR FLOOR SPACE SHALL BE PROVIDED FOR

trash compactor: A clear floor space positioned for a parallel

A PARALLEL APPROACH OFFSET 24" MAX. FROM THE CENTERLINE OF THE

CLEAR FLOOR -SPACE ALIGNED WITH CONTROL WALL

BATHTUB

NOTE: NOTHING PERMITTEÏ

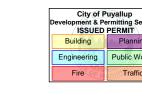
WITHIN FIXTURE CLEARANCE

SHOWER

RMU2024028 1

Initial Publish Date:

5-1-25



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Bradley Heights **Apartments**

Puyallup,

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PRMU20240281

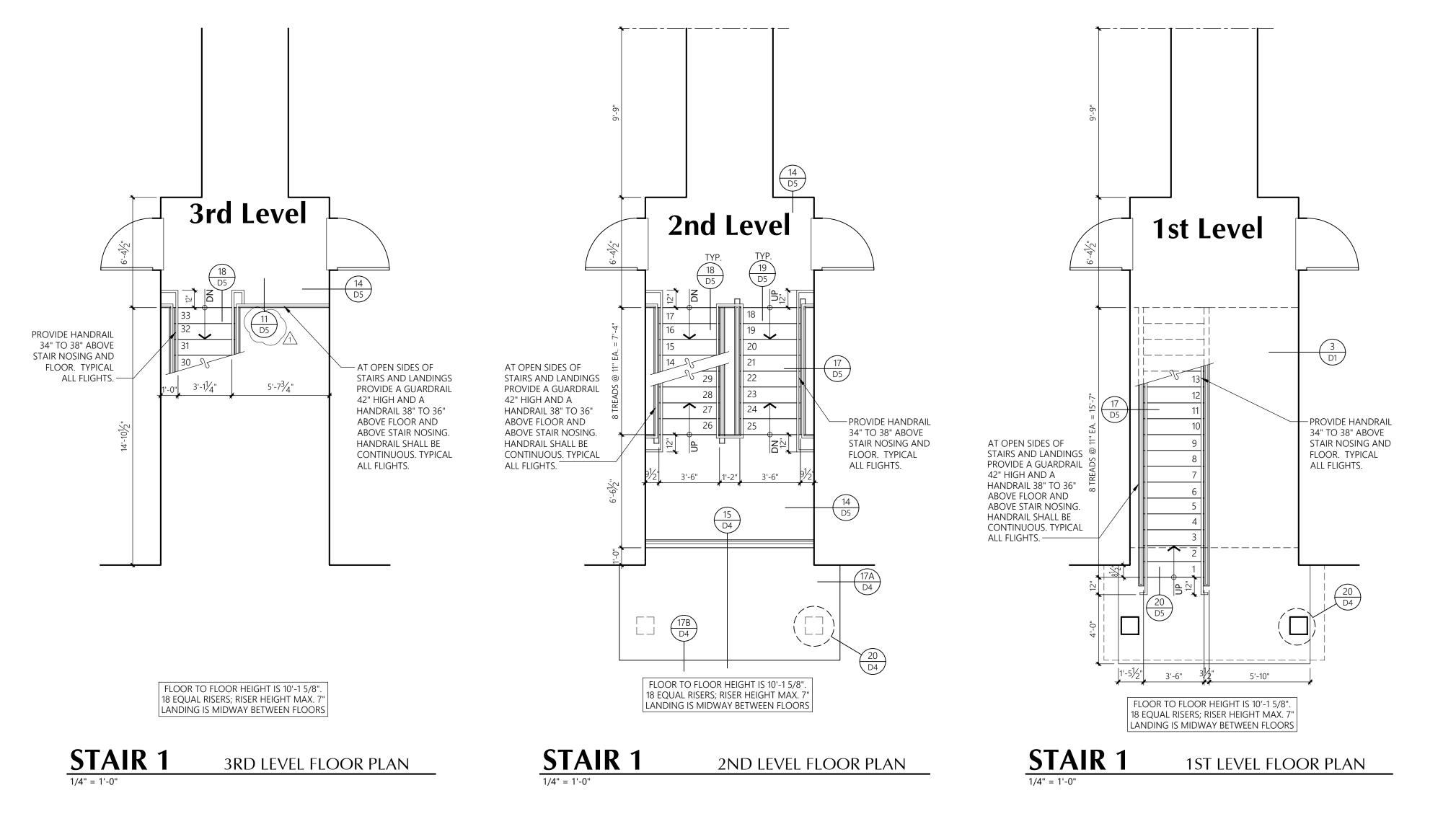
Initial Publish Date:

Date Plotted:

5-1-25 Job No.: Drawn By: 23-06 APT/HDM/TMK

WASHING MACHINES AND CLOTHES DRYERS -CLEAR FLOOR SPACE: A 30"X48" CLEAR FLOOR SPACE FOR A PARALLEL APPROACH SHALL BE 30"x48" CLEAR FLOOR SPACE CENTERED ON I PROVIDED. FOR TOP LOADING MACHINES, THE CLEAR FLOOR SPACE SHALL BE CENTERED ON THE APPLIANCE. FOR FRONT LOADING MACHINES, THE CENTERLINE OF THE CLEAR FLOOR OFFSET UP TO 24" SPACE SHALL BE OFFSET 24" MAX. FROM THE CENTERLINE OF THE DOOR OPENING. **OPERABLE PARTS:** OPERABLE PARTS INCLUDING DOORS, LINT SCREENS, DETERGENT & BLEACH COMPARTMENTS, SHALL BE WITHIN ACCESSIBLE REACH RANGES & MEET THE REQUIREMENTS FOR OPERABLE PARTS. (See detail 4 sheet A3 & 32 sheet U11) **HEIGHT:** TOP LOADING MACHINES SHALL HAVE THE DOOR TO THE LAUNDRY COMPARTMENT 36" MAX. ABOVE THE FLOOR. FRONT LOADING MACHINES SHALL HAVE THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARTMENT 15" MIN. & 36" MAX. ABOVE THE FLOOR FRONT LOAD APPLIANCE TOP LOAD APPLIANCE





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Stair 1 Floor Plans

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Permit Corrections



Initial Publish Date:

Date Plotted: 5-1-25

Job No.: Drawn By:
23-06 APT/HDM/TMK
Sheet No.:

U12



oor Plans

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No. Date Description

8-30-24 Owner Changes/ Permit Corrections

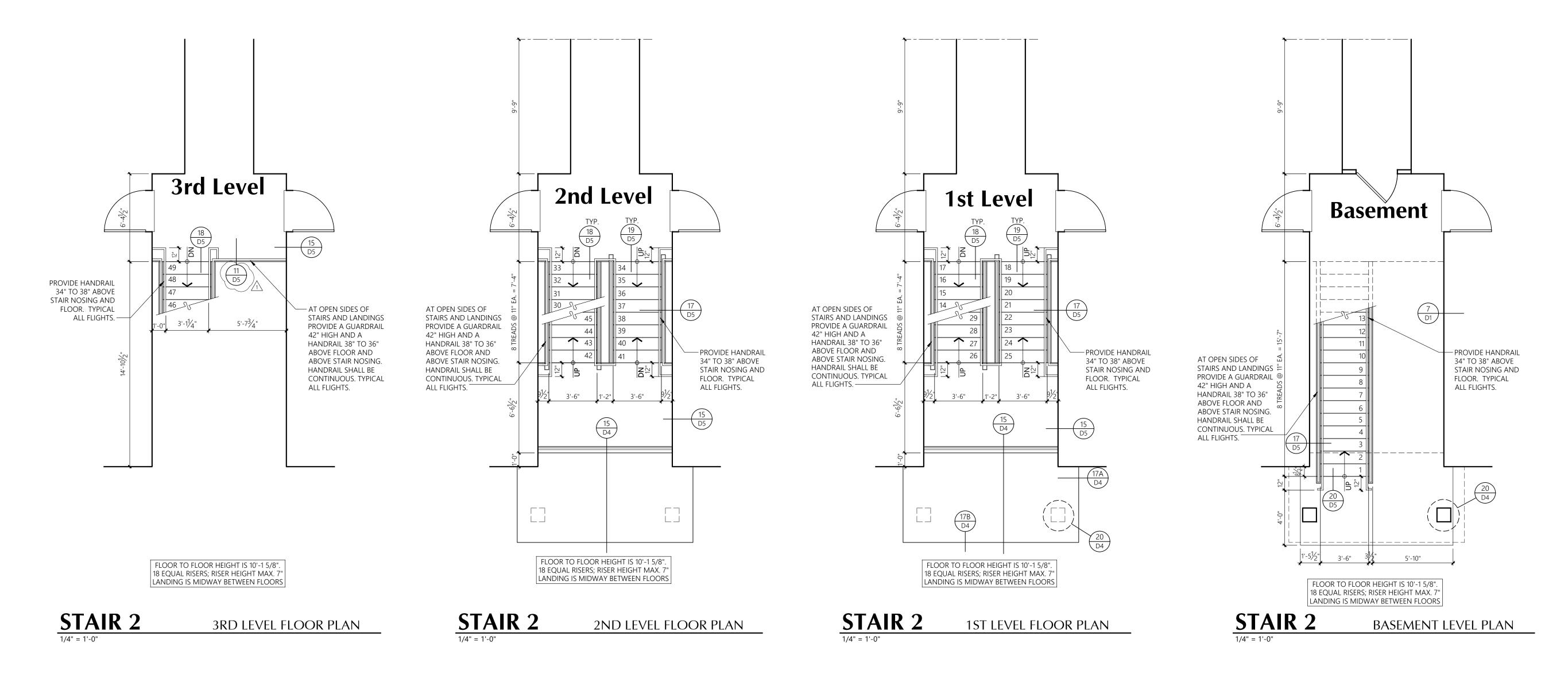
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23-06 APT/HDM/TMK

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Schedule

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> Puyallup, Wa

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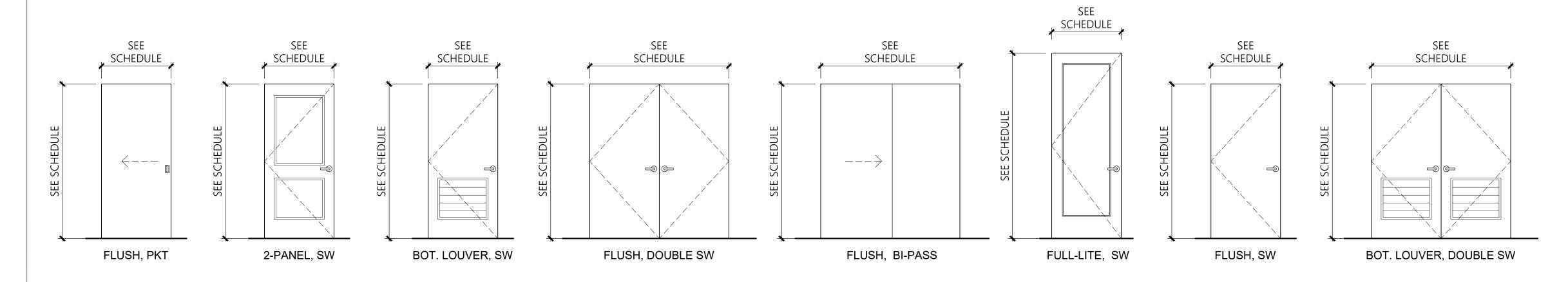
Initial Publish Date:

SHEET ADDED

Date Plotted: 5-1-25

Job No.: Drawn By: 23-06 APT/HDM/TMK Sheet No.:

U14



Door Schedule - Units

Door No.	Туре	Size	Thickness	Construct	Finish	Fire Rating	Frame or H	ead/Jamb	Remarks	Min. U	Max.
							Construct.	Finish		Factor	SHGC
1A	2-Panel, SW	3'-0" x 8'-0"	1-3/4"	INSUL MTL	PP	20 min.	Wood	PP	Keylock, Dead Bolt w/Thumb, Self Closure/Smoke Seal, Flush Threshold, Weatherstrip, Ext. Grade Door, Peep Sight, Self Closing	0.24	-
1B	2-Panel, SW	3'-0" x 8'-0"	1-3/4"	INSUL MTL	PP	90 min.	MTL	PP	Keylock, Dead Bolt w/Thumb, Self Closure/Smoke Seal, Flush Threshold, Weatherstrip, Ext. Grade Door, Peep Sight, Self Closing	0.24	-
2	2-Panel, PKT	3'-0" x 6'-8"	1-3/8"	HCW	PP		Wood	PP	Privacy Lock @ Bath	-	_
3	2-Panel, SW	3'-0" x 6'-8"	1-3/8"	HCW	PP		Wood	PP	Privacy Lock @ Bath	-	_
4	Bot. Louver Dbl, SW	6'-0" x 6'-8"	1-3/8"	HCW	PP		Wood	PP		-	-
5	Full-Lite, SW	3'-0" x 8'-0"	1-3/4"	INSUL FBGL	PP		Wood	PP	Keylock, Safety Glass, Flush Threshold, Weatherstrip, Ext. Grade Door	0.24	0.61
6	2-Panel, SW	2'-4" x 6'-8"	1-3/8"	HCW	PP		Wood	PP		-	-
7	2-Panel, SW	2'-6" x 6'-8"	1-3/8"	HCW	PP		Wood	PP		-	_
8	ВР	4'-0" x 6'-8"	1-3/8"	HCW	PP		GWB	PP		-	-
9	Bot. Louver, SW	3'-0" x 6'-8"	1-3/8"	HCW	PP		Wood	PP		-	-
10	ВР	5'-0" x 6'-8"	1-3/8"	HCW	PP		GWB	PP		-	_
11	2-Panel, SW	2'-0" x 6'-8"	1-3/8"	HCW	PP		Wood	PP		-	_
12	Flush, SW	3'-0" x 8'-0"	1-3/8"	MTL	PP	90 min.	Wood	PP	Lockable from outside, Ext. Grade Door	-	-
13	Flush, Dbl SW	6'-0" x 6'-8"	1-3/8"	INSUL MTL	PP		MTL,	PP	Lockable from outside, Ext. Grade Door	0.24	-
14	Flush, SW	3'-0" x 8'-0"	1-3/8"	MTL	PP	20 min.	\uparrow MTL $\stackrel{2}{\sim}$	PP	Lockable from outside, Ext. Grade Door	_	_

DOOR KEY:

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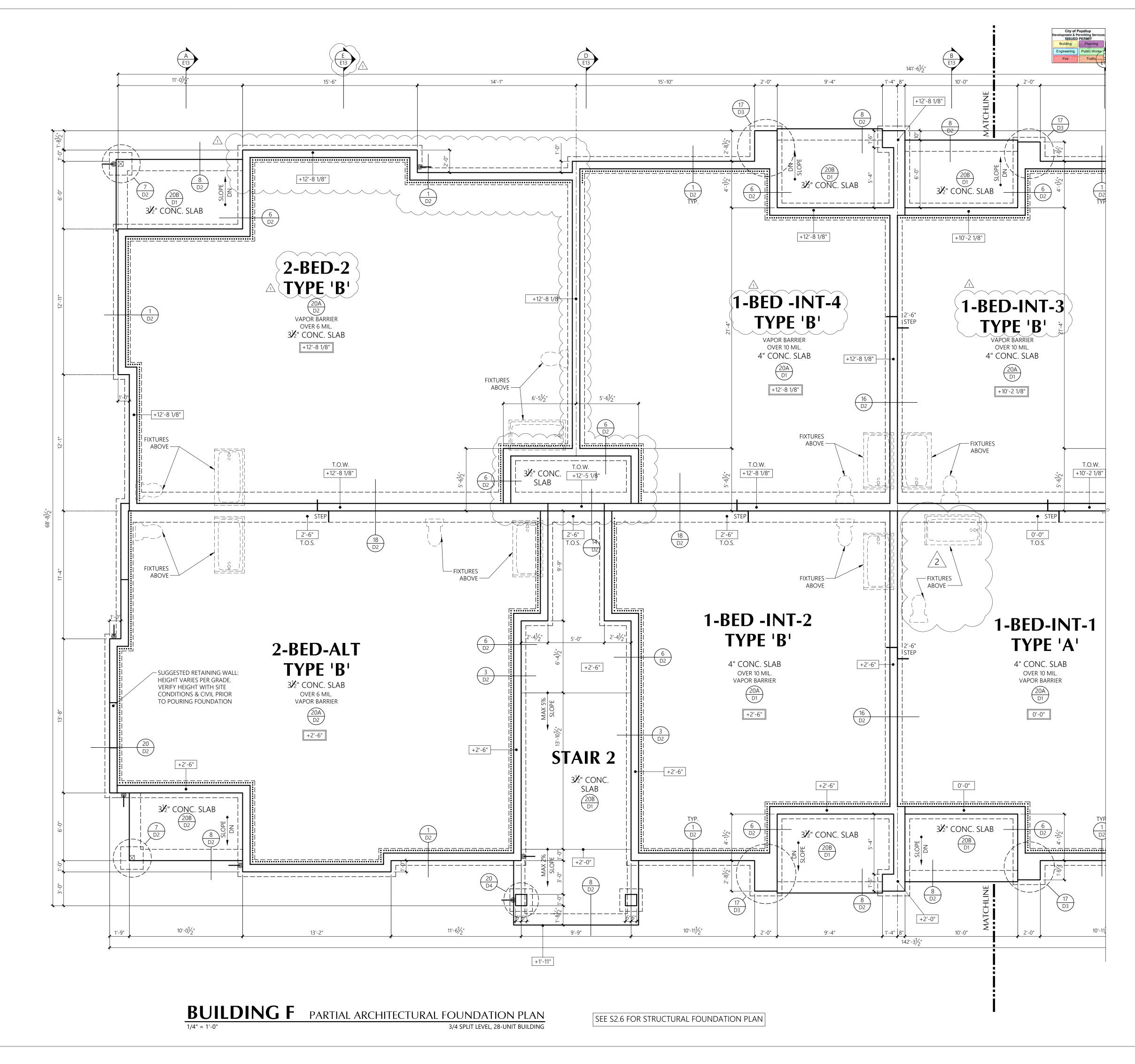
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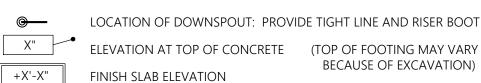
Initial Publish Date:

Date Plotted: 5-1-25 Drawn By: Job No.: 23-06 APT/HDM/TMK Sheet No.:

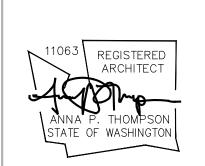
F10



FOUNDATION NOTES



ELEVATION AT TOP OF CONCRETE (TOP OF FOOTING MAY VARY BECAUSE OF EXCAVATION) FINISH SLAB ELEVATION R-10 RIGID PERIMETER INSULATION



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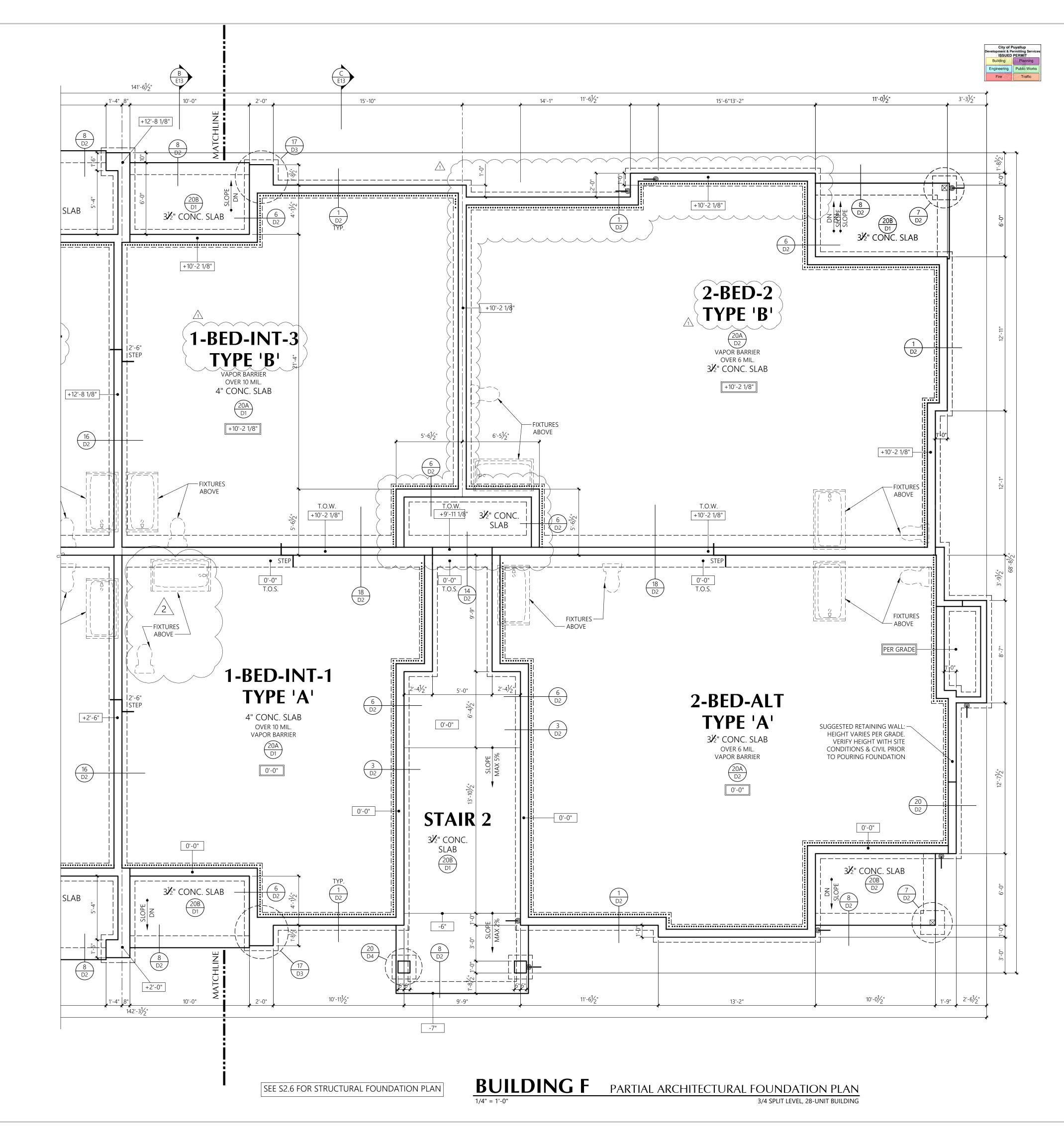
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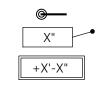
Initial Publish Date: Date Plotted: 5-1-25

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F11



FOUNDATION NOTES



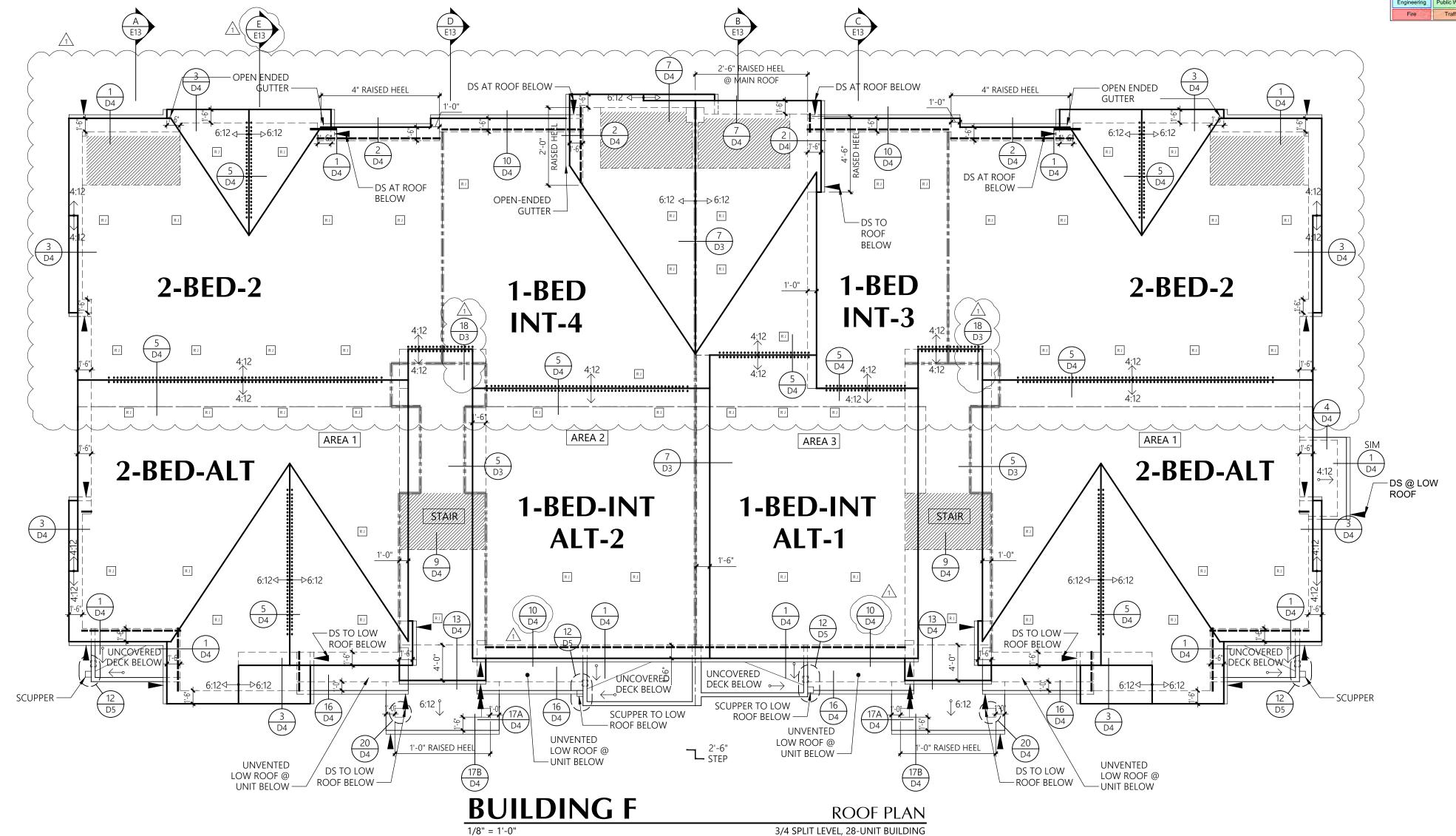
LOCATION OF DOWNSPOUT: PROVIDE TIGHT LINE AND RISER BOOT ELEVATION AT TOP OF CONCRETE (TOP OF FOOTING MAY VARY BECAUSE OF EXCAVATION)

FINISH SLAB ELEVATION

R-10 RIGID PERIMETER INSULATION

Attic spaces will be draft stopped per 2021 Washington State Building Code, Section 708.4.2.

In Group R-2 occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m2) or above every two dwelling units, whichever is smaller.



					R	OOF VEN	ITING CA	LCULAT	ONS						
Area Description	Attic Area		nting	Required Venting	Low Eave Vent (LF)	Low Jacks (Qty)	High Jacks (Qty)	Vented Soffit (SF)	Ridge Vent (LF)		Ver	nting Provid	led (SI)	* %	of req'a
	(SF)	Ra	itio	(SI)	2.4	50.0	50.0	5.9	12.0	Lower	%	Upper	%	Total	%*
AREA 1	2,249	1/	300	1,080	32	11	8	58	56	969	47%	1,072	53%	2,041	189%
AREA 2	1,552	1/	300	745	44	3	5	65	22	639	55%	514	45%	1,153	155%
AREA 3	1,543	1/	300	741	38	4	6	58	18	633	55%	516	45%	1,149	155%
STAIR	1,543	1/ 1/	150			1	0	62	18	633 416	100%	516	45% 0%	416	16

ROOF LEGEND

ROOF JACK 50 SQ.IN. NET FREE AREA \longleftrightarrow 4:12 SLOPE INDICATOR U.N.O. ← 6:12 SLOPE INDICATOR U.N.O. ---- BUILDING OUTLINE

EAVE VENTING 2.4 SQ.IN./LF. NET FREE AREA **SECOND SECOND S** UNIT SEPARATION AND DRAFT STOPPING LOCATIONS AT ATTIC

GUTTER (DOUBLE LINE)

DOWNSPOUT LOCATION VENTED FIBER CEMENT SOFFIT 5.9 SQ.IN./LF. NET FREE AREA

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R6

D4

2-BED-ALT UNIT

DECK AND STAIR RAILINGS SHALL BE WOOD
PER DETAIL CALLOUTS WITH

PRE-MANUFACTURED METAL ALTERNATE.

PRE-MANUFACTURED OF METAL ALTERNATE

THE TOP RAIL SHALL BE A MINIMUM OF 42" ABOVE THE ADJACENT WALKING SURFACE OR STAIR NOSING.

RAILS AND BALUSTERS SHALL BE SPACED
SUCH THAT A 4" DIAMETER SPHERE CANNOT
PASS BETWEEN THEM.
THEY SHALL MEET THE STRUCTURAL
REQUIREMENTS OF THE 2018
INTERNATIONAL BUILDING CODE.

WINDOW HEADER HEIGHT 8' A.F.F. U.N.O.



Building F xterior Elevations

Bradley Heights Apartments Puyallup, Wa

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1 8-30-24 Owner Change

8-30-24 Owner Changes/ Permit Corrections

2 2-24-25 Permit Corrections

PRMU20240281

Initial Publish Date: Date Plotted:

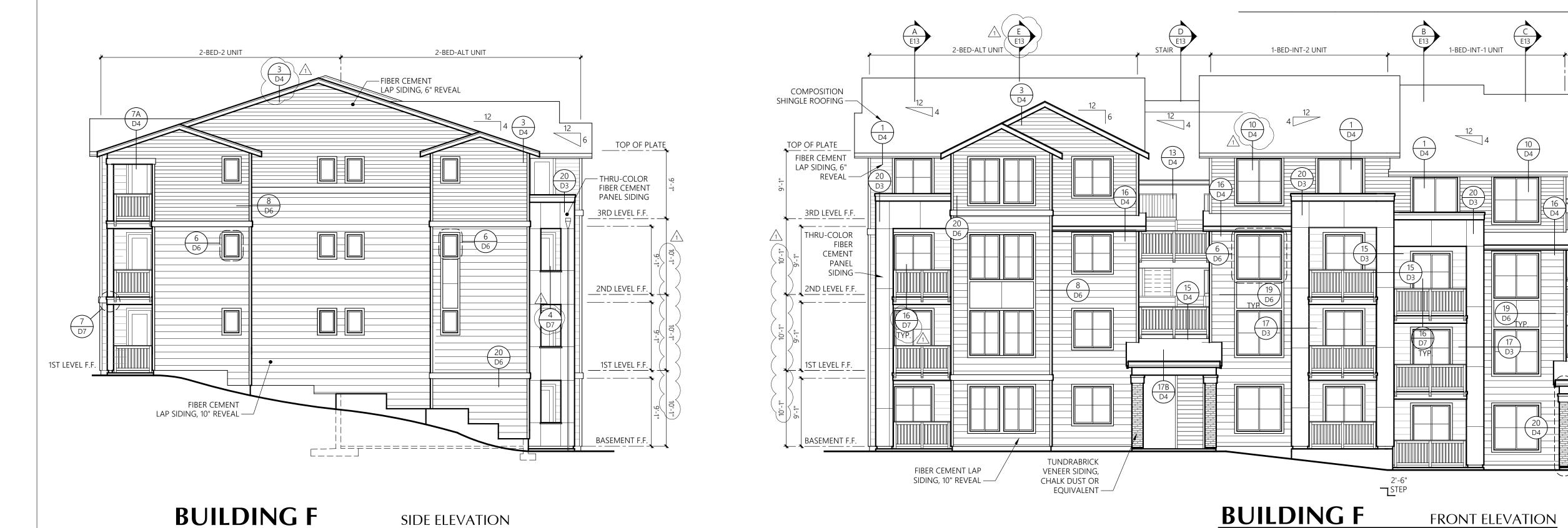
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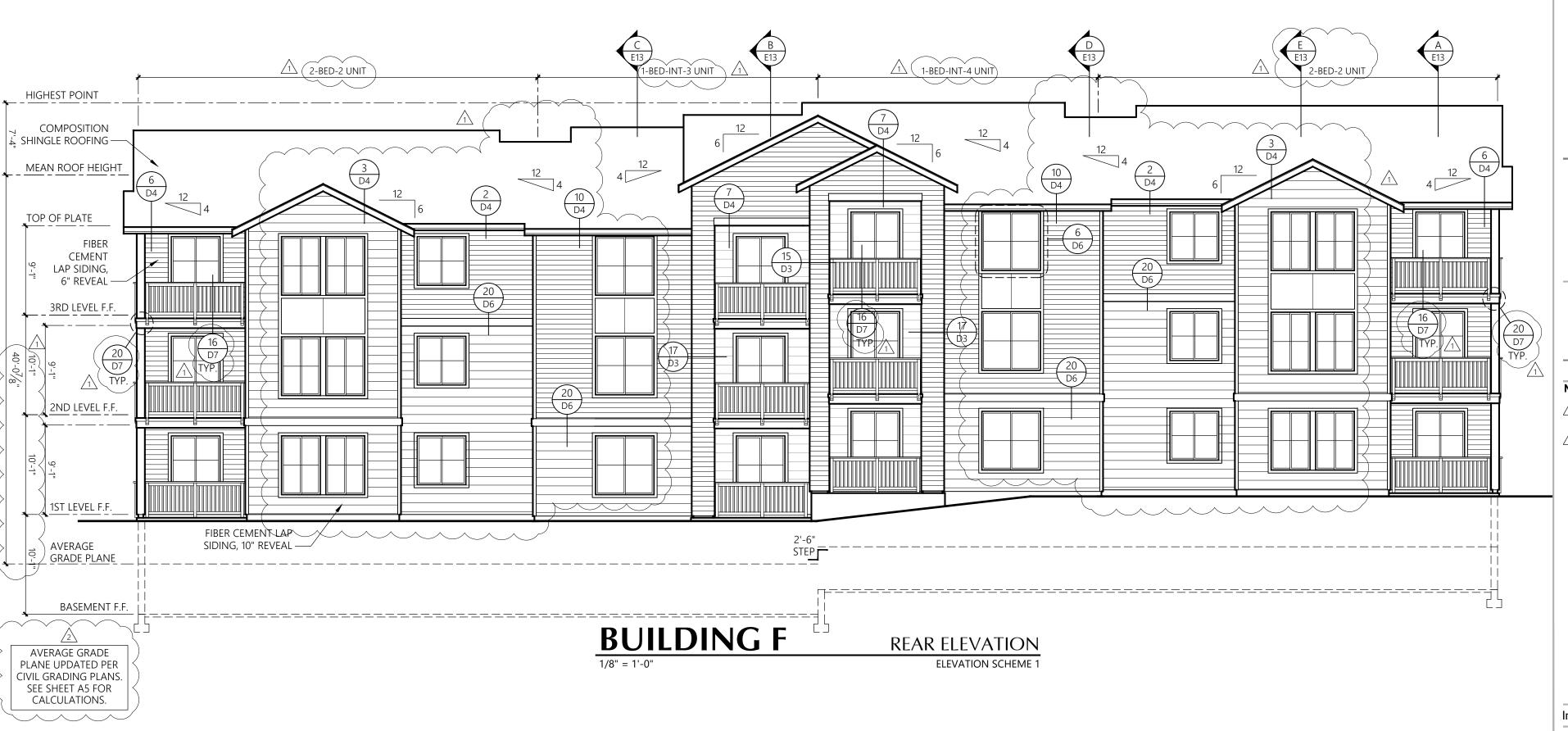
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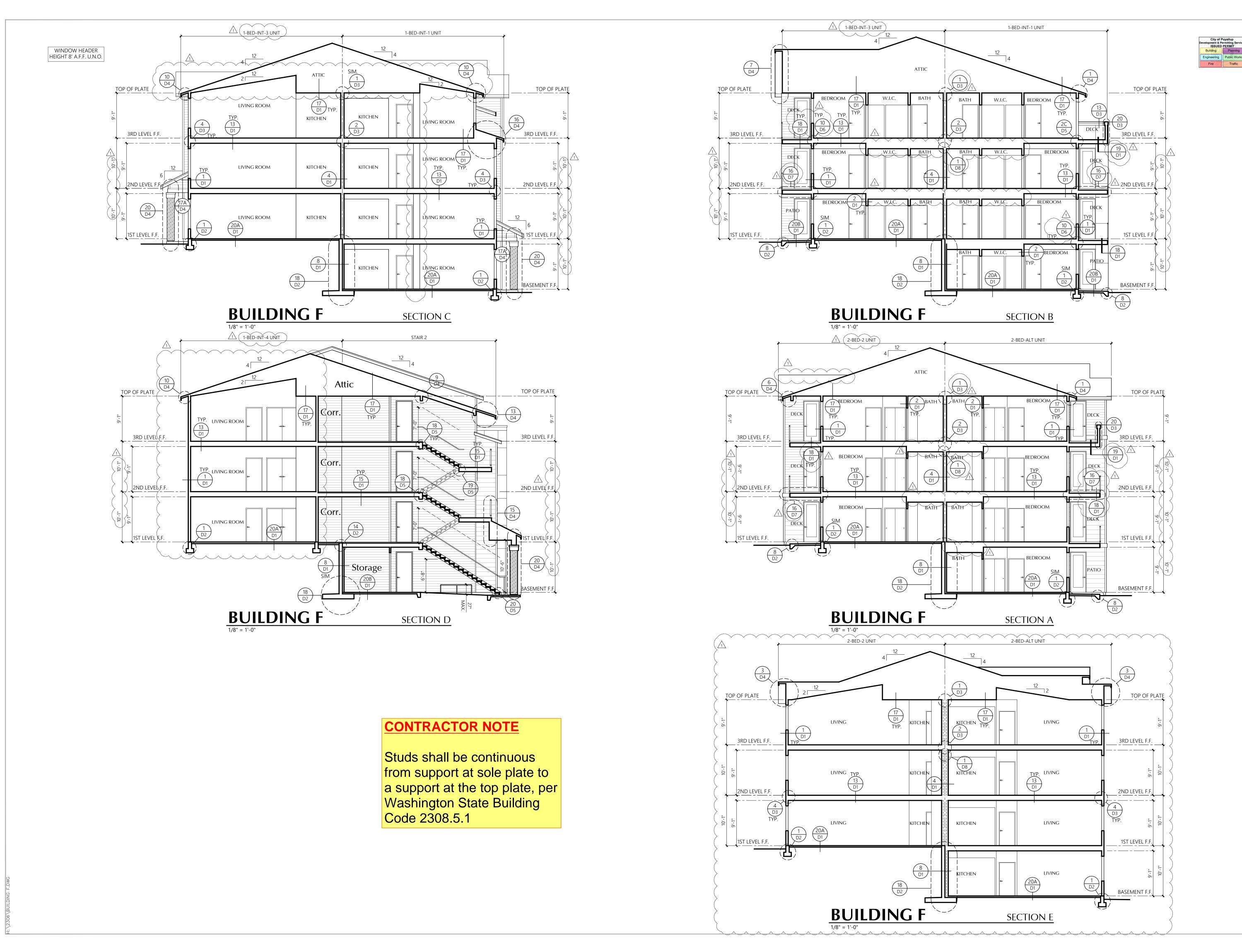
E12





1/8" = 1'-0"





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Building Sections

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No. Date Description

1 8-30-24 Owner Changes/
Permit Corrections

PRMU20240281

Initial Publish Date: Date Plotted:

Job No.: Drawn By:

23-06 APT/HDM/TMK

Sheet No.:

E13

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC), AS AMENDED AND ADOPTED BY THE STATE OF WASHINGTON; A.C.I. 318-14; A.I.S.C. 14TH EDITION; AWS D1.1-06; A.I.T.C. 2ND EDITION; NDS 2018 WITH 2018 WIND & SEISMIC PROVISIONS AND A.I.S.I 2012 EDITION

THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING AND SHORING DURING CONSTRUCTION.

1.2 DESIGN CRITERIA

A. VERTICAL LOADS

LIVE LOADS

ROOF (SNOW) Is = 1.0	25 PS
FLOORS (RESIDENTIAL)	40 PS
DECKS (RESIDENTIAL POST/BM SUPPORT)	60 PS
STAIRS/EXITS	100 PS

DEAD LOADS

B. LATERAL LOADS:

LATERAL FORCES ARE TRANSMITTED BY DIAPHRAGM ACTION OF THE FLOORS TO SHEAR WALLS. LOADS ARE THEN TRANSFERRED TO THE FOOTINGS, WHERE ULTIMATE DISPLACEMENT IS RESISTED BY PASSIVE PRESSURE OF EARTH AND SLIDING FRICTION OF EARTH. OVERTURNING IS RESISTED BY THE DEAD LOAD OF THE STRUCTURE.

EXPOSURE B ELEVATION = 386 FEET BASIC WIND SPEED = 97 M.P.H. (3 SECOND GUST, ULTIMATE).

IMPORTANCE FACTOR, Iw = 1.0SIMPLE DIAPHRAGM BUILDING, ENCLOSED Kzt = 1.0

SFISMIC: IMPORTANCE FACTOR, IE = 1.0 OCCUPANCY CATEGORY II MAPPED SPECTRAL RESPONSE COEFFICIENTS, Ss = 1.263 AND

SPECTRAL RESPONSE COEFFICIENTS, SDs = 1.010 AND SD1 = 0.435 SEISMIC DESIGN CATEGORY = DSEISMIC RESPONSE COEFFICIENT Cs = 0.2021 (ULTIMATE STRENGTH) RESPONSE MODIFICATION FACTOR R = 6.5

SUBMIT SUFFICIENT COPIES OF SHOP DRAWINGS TO ARCHITECT/ENGINEER FOR THE FOLLOWING:

- REINFORCING STEEL (CONCRETE / MASONRY) CONCRETE / GROUT MIX DESIGNS (CONCRETE / MASONRY)
- COMPOSITE FLOOR/ROOF JOISTS P.E. ROOF/FLOOR TRUSSES
- GLUE—LAMINATED MEMBERS

SOIL SITE CLASS = C

DO NOT FABRICATE PRIOR TO ARCHITECT'S/ENGINEER'S APPROVAL. ALL SHOP DRAWINGS SUBMITTED TO THE ENGINEER SHALL BEAR THE STAMPED APPROVAL OF THE CONTRACTOR. SHOP DRAWING APPROVAL BY ANDERSONCHASE STRUCTURAL ENGINEERS SHALL NOT IMPLY THAT THE PROJECT MAY BE BUILT FROM THE SHOP DRAWINGS. RATHER. THE PROJECT PLANS SHALL BE USED FOR CONSTRUCTION. ALL PERMANENT BRACING FOR TRUSSES SHALL BE DETAILED AND DESIGNED BY THE TRUSS SUPPLIER. CONTRACTOR SHALL REVIEW SHOP DRAWINGS AND STAMP INDICATING THIS PRIOR TO REVIEW BY ENGINEER OF RECORD.

2.0 SITE WORK

2.1 SOIL DATA (PER GEOTECHNICAL REPORT DATED FEBRUARY 10, 2022 PREPARED BY GEO RESOURCES #0419036006

FOR LOCATIONS SEE SOILS REPORT. SOIL BEARING @ CONT. SPREAD FOOTINGS = 2000 PSF. ACTIVE AND PASSIVE PRESSURES ARE 35 PCF AND 300 PCF RESPECTIVELY. WHERE GEOTECHNICAL REPORT HAS NOT BEEN PROVIDED, THE ABOVE VALUES ARE ASSUMED AND THESE VALUES SHALL BE FIELD VERIFIED.

2.2 EXCAVATION

EXCAVATE PER GEOTECH REPORT, PROOFROLL SUBGRADES TO ATLEAST 92% MDD PER ASTM D1557 TEST METHOD FOR FOOTINGS DOWN TO DEPTH SHOWN ON DRAWINGS OR TO FIRM UNDISTURBED MATERIAL. AREAS OVER-EXCAVATED SHALL BE BACKFILLED WITH LEAN CONCRETE (f'c = 2000 PSI), OR BE STRUCTURALLY FILLED PER SECTION 2.3 AND SHALL BE AT THE CONTRACTOR'S EXPENSE.

2.3 BACKFILL AND COMPACTION

BACKFILL SHALL NOT BE PLACED UNTIL AFTER THE REMOVAL OF ALL FORMS, SCREEDS, OTHER WOOD DEBRIS AND MATERIAL SUBJECT TO ROT OR CORROSION. USE ONLY MATERIALS APPROVED FOR BACKFILL. IN AREAS UNDER SLABS OR FOOTINGS, MATERIAL SHOULD BE GRANULAR IN NATURE, PLACED IN 6-INCH LIFTS AND COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO COMPACTION TEST, PROCEDURE T-180. THE FILL SHOULD BE LIMITED TO CLEAN, GRANULAR MATERIAL.

3.0 CONCRETE

3.1 GENERAL

NORMAL WEIGHT CONCRETE MEETING THE REQUIREMENTS OF ACI 301-05 ESTABLISH PROPORTIONS OF CEMENT, COARSE AND FINE AGGREGATES, WATER, AND ADMIXTURES TO PRODUCE THE PROPERTIES SPECIFIED FOR EACH CONCRETE MIX TYPE PER ACI-301 ON THE BASIS OF PREVIOUS FIELD EXPERIENCE OR TRIAL BATCHES. USE ADMIXTURES IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS. USE AMOUNTS OF WATER-REDUCING ADMIXTURE THAT WILL PERMIT PLACING WITHOUT SEGREGATION, HONEYCOMBING OR ROCK POCKETS. THE SLUMPS SPECIFIED ARE THE SLUMPS REQUIRED AT THE POINT OF PLACEMENT INTO THE STRUCTURE. USE INTERIOR MECHANICAL VIBRATORS WITH 7000 RPM MINIMUM FREQUENCY. DO NOT OVER-VIBRATE. DO NOT MOVE THE CONCRETE HORIZONTALLY USING THE VIBRATOR. CONCRETE SHALL BE POURED MONOLITHICALLY BETWEEN CONSTRUCTION OR CONTROL JOINTS. PROTECT ALL FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE HOT OR COLD TEMPERATURES FOR SEVEN DAYS AFTER POURING. PROVIDE ENGINEER WITH PROPOSED CONSTRUCTION OR CONTROL JOINT LOCATIONS FOR HIS APPROVAL, OR USE JOINTS AS SHOWN ON THE DRAWINGS. ALL REINFORCEMENT TIE WIRES AND FORM ANCHORS SHALL BE CUT OFF FLUSH WITH THE SURFACE; SURFACES WHERE EXPOSED SHALL BE SMOOTH AND FREE FROM IRREGULARITIES.

3.2 STRENGTH

DESIGN MIXES TO PROVIDE NORMAL WEIGHT CONCRETE WITH THE FOLLOWING PROPERTIES:

APPLICATION	W/C RATIO	DESIGN STRENGTH F'c (PSI)	F'c PER ACI
FOOTINGS	.45	2500	4500²
FOUNDATION WALLS	.45	2500	4500²
EXT. SLABS ON GRADE	.45	2500	4500²
INT. SLABS ON GRADE	.50	2500	3000

- 1. CONCRETE EXPOSED TO WEATHER FOR EXPOSURE CLASS F2 AND SLABS ON GRADE
- SHALL HAVE A MIN F'C PER TABLE AND HAVE 5% AIR ENTRAINMENT. 2. DESIGN STRENGTH F'c (USED IN DESIGN). F'c PER ACI TABLE 19.3.2.1 FOR F2
- 3. PER IBC 1705.3 SPECIAL INSPECTION STRENGTH TESTS NOT REQUIRED FOR CONCRETE f'c>2500 WHERE STRENGTH IS INCREASED FOR DURABILITY.

3.3 MATERIAL - CEMENT, WATER & AGGREGATES PER ACI 301

- A. CEMENT MUST CONFORM TO ASTM C-150, TYPE I OR TYPE II. ENGINEER'S APPROVAL IS REQUIRED FOR USE OF TYPE III CEMENT.
- B. WATER TO BE CLEAN AND POTABLE.
- C. COARSE AND FINE AGGREGATES TO CONFORM TO ASTM-C33.

3.4 MATERIALS

- A. WATER REDUCING ADMIXTURES: CONCRETE USING POZZOLITH ADMIXTURES TO PRODUCE FLOWABLE CONCRETE MAY BE USED WITH THE ENGINEER'S APPROVAL AND MUST CONFORM TO ASTM-C494, POZZOLITH POLYHEED, POZZOLITH 100XR, OR POZZUTECH 20. POZZOLITH SHALL BE INCORPORATED INTO ALL CONCRETE IN EXACT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ADMIXTURES AND DOSAGES WILL VARY DEPENDING ON CLIMATIC CONDITIONS AND THE CONTRACTOR'S JOBSITE REQUIREMENTS. MAXIMUM SLUMP FOR SUCH CONCRETE SHALL NOT EXCEED 8" WITH A MINIMUM OF 10 OUNCES OF POLYHEED PER 100 OUNCES OF CEMENT. USE IN ACCORDANCE WITH MANUFACTURER'S
- B. AIR ENTRAINMENT: CONFORM TO ASTM-C260 AND ASTM-C494, MBVR OR MICRO-AIR BY MASTER BUILDER. NO AIR ENTRAINMENT IN COLUMNS WITHOUT PRIOR WRITTEN PERMISSION BY ENGINEER OF RECORD. ENTRAIN 5% +/- 1% AIR BY VOLUME IN ALL EXPOSED CONCRETE.
- C. OTHER ADMIXTURE: NO OTHER ADMIXTURES PERMITTED UNLESS PRIOR APPROVAL IS GIVEN BY THE ENGINEER. NO ADMIXTURES CONTAINING CHLORIDES ARE PERMITTED.

3.5 REINFORCING STEEL

DETAIL, FABRICATE AND PLACE PER ACI-315 AND ACI-318. SUPPORT REINFORCEMENT WITH APPROVED CHAIRS, SPACERS, OR TIES.

- A. STEEL REINFORCEMENT SHALL BE NEW, DEFORMED BILLET STEEL, MEETING ASTM STANDARD A-615, A-706 AT BOUNDARY ELEMENTS; GRADE 60 FOR #3 AND LARGER BARS UNLESS NOTED OTHERWISE ON THE PLANS. SHOP DRAWINGS SHALL BE MARKED ACCORDINGLY AND SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. GRADE 60 REBARS SHALL NOT BE BENT IN FIELD AFTER CONCRETE PLACEMENT. ALL BEND SHALL BE PER ACI.
- B. REINFORCEMENT IN ALL WALLS, SLABS, AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS OR CORNER BARS PROVIDED, BOTH VERTICAL AND HORIZONTAL.
- C. LAPS: ALL TENSION SPLICES ARE ACCORDING TO ACI 318, CLASS B AND ALL COMPRESSION SPLICES ARE 30 DIAMETERS FOR I'C GREATER THAN 3000 PSI AND ARE 40 DIAMETERS FOR I'C WHICH IS LESS THAN 3000 PSI, UNLESS NOTED OTHERWISE. SEE DETAIL 17/S3.0 FOR TYPICAL SPLICE AMOUNTS BASE ON BAR SIZE.
- D. TRIM REINFORCING: AROUND ALL OPENINGS SHALL BE A MINIMUM 1-#5 TOP AND BOTTOM, EXTENDING 2'-6" BEYOND OPENING AT EACH CORNER. SEE TYPICAL DETAILS.
- WELDING: TACK WELDING OF REBAR IS NOT PERMITTED UNLESS CALLED FOR AND APPROVED BY THE ENGINEER.
- MINIMUM REINFORCING: WHERE REINFORCEMENT IS NOT SHOWN ON THE DRAWINGS, THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) SHALL BE REFERRED TO FOR PROPER REINFORCEMENT.
- G. REBAR COVER: PROVIDE CONCRETE PROTECTION FOR REINFORCEMENT AS FOLLOWS:

1	COVER	CONDITION
	3"	CONCRETE DEPOSITED AGAINST EARTH
	2"	CONCRETE DEPOSITED AGAINST FORMS BUT
		EXPOSED TO EARTH
		MAIN REINFORCING IN BEAMS
	1-1/2"	TO TIES IN COLUMNS, AND TIED REBAR IN WALLS
	1-1/2"	FOR BARS IN SLABS ON GROUND
	3/4"	FOR BARS IN SLABS ON FORMS

- H. WELDED WIRE FABRIC: ASTM-A185 AND ASTM-A82
- I. DEFORMED BAR ANCHORS: ASTM-A496
- K. FIBREMESH: PROVIDE FIBREMESH STRANDS WITHIN CONCRETE PER THE MANUFACTURERS SPECIFICATION (1.5#/CU. YARD TYPICALLY) WHERE REQUIRED BY THE OWNER IN LIEU OF UTILIZING WELDED WIRE FABRIC WITHIN SLABS ON GRADE.

3.6 EPOXY DOWELED REINFORCEMENT

- A. ALL REINFORCEMENT WHICH IS TO BE DOWELED INTO EXISTING CONCRETE SHALL BE INSTALLED USING THE SIMPSON SET-XP ADHESIVE ANCHORING SYSTEM PER ICC REPORT ESR-2508 OR APPROVED EQUAL. ADHESIVE ANCHORS SHALL BE INSTALLED PER THE MANUFACTURERS SPECIFICATIONS OR APPROVED EQUAL.
- B. EPOXY SHALL BE MIXED. APPLIED, AND CURED IN ACCORDANCE WITH THE MANUFACTURERS GUIDELINES. REINFORCEMENT AND CONCRETE SHALL BE CLEAN AND FREE OF IRREGULARITY. EPOXY SHALL NOT BE MIXED OR CURED IN AIR AND OR CONCRETE TEMPERATURES BELOW MINIMUM PER MANUFACTURER'S SPECIFICATIONS.
- C. EPOXY DOWELING OF REINFORCEMENT IN OVERHEAD APPLICATIONS SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.

4.0 METALS

A. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE" & D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL."

B. ALL WELDING SHALL BE DONE BY AWS/WABO (WASHINGTON STATE ASSOCIATION OF BUILDING OFFICIALS) CERTIFIED WELDERS. FOR ALL MOMENT FRAMES WELDERS SHALL HAVE ADDITIONAL CERTIFICATION SHOWING QUALIFIED IN ACCORDANCE WITH AWS D1.8, SECTION 5, WELDER QUALIFICATION, THE SUPPLEMENTAL WELDER QUALIFICATION FOR RESTRICTED ACCESS WELDING.

5.0 STRUCTURAL STEEL

ANGLES.

A. ALL DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE AISC "MANUAL OF STEEL CONSTRUCTION." STEEL SHALL CONFORM TO THE FOLLOWING, UNO:

> ALL STEEL, UNO ASTM A992. ASTM A572, GRADE 50, A447,

Fy = 50 KSI OR A588 Fy = 50 KSI ONLY WPRIOR APPROVAL OF ENGINEER OF RECORD. ASTM A36, Fy = 36 ksi

CHANNELS, EMBEDMENTS ASTM A36, Fy = 36 ksi OR STEEL TYPES LISTED UNDER IN CONCRETE AND MISC. METALS, UNO "ALL STEEL"

SQUARE AND RECTANGULAR ASTM A500, GRADE B, Fy = 46 ksi STRUCTURAL TUBES

STEEL PIPE DIAMETER LESS ASTM A53, TYPE E OR S, THAN OR EQUAL TO 12" NOM GRADE B, Fy = 35 ksi

B. ALL WORK SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATION. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER BEFORE COMMENCING FABRICATION. ALL STEEL ANCHORS AND TIES AND OTHER MEMBERS EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED. DIMENSIONAL TOLERANCE FOR BUILD-UP MEMBERS SHALL BE PER AWS D1.1. GENERAL NOTES FOR STEEL CONNECTIONS SHALL APPLY TO ALL STEEL CONNECTIONS, UNO.

C. STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSIONAL POINTS. MINIMUM CONNECTIONS SHALL BE A TWO-BOLT CONNECTION USING 7/8-INCH DIAMETER A325 BOLTS IN SINGLE SHEAR. OPTIONAL TO USE F1554 BOLTS WITH PRIOR APPROVAL OF ENGINEER OF RECORD. ALL HIGH-STRENGTH BOLTS SHALL BE INSTALLED, TIGHTENED AND INPSECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS. THE CRITERIA FOR SLIP-CRITICAL CONNECTIONS SHALL APPLY TO ALL CONNECTIONS UNLESS SPECIFICALLY NOTED AS SNUG TIGHT ON THE STRUCTURAL DRAWINGS. WHERE CONNECTIONS ARE NOTED SNUG TIGHT THE CONTRACTOR MAY INSTALL PER CRITERIA FOR SNUG TIGHT BOLTS. SLIP CRITICAL CONNECTIONS SHALL USE LOAD INDICATOR WASHERS OR TENSION CONTROL BOLTS. ALL ASTM A307 BOLTS SHALL BE PROVIDED WITH LOCK WASHERS UNDER NUTS OR SELF-LOCKING NUTS. ALL BOLT HOLES SHALL BE STANDARD SIZE, UNO.

- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS THAT INCLUDE, BUT ARE NOT LIMITED TO: ERECTION ANGLES; LIFT HOLES, AND OTHER AIDS.
- E. METAL PROTECTION ALL MISCELLANEOUS STEEL AND HARDWARE EXPOSED TO VIEW OR IN UNHEATED PORTION OF BUILDING SHALL BE GALVANIZED PER ASTM A-123 WITH 1.25 OZ OF ZINC SPELTER PER SQUARE FOOT OF SURFACE AREA. ALL OTHER STEEL SURFACES TO BE SHOP PAINTED AFTER FABRICATION.
- F. ALL STEEL BEAM COPING SHALL CONFORM TO AISC STANDARD PRACTICE.
- G. GROUT FOR BEARING PLATES SHALL BE NON-SHRINK EMBECO BY MASTER BUILDERS, INC. OR APPROVED EQUAL.

ALL EXPOSED STRUCTURAL MATERIALS OR MATERIAL IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED (SEE SECTION 7.10).

6.0 LIGHT GAUGE STEEL

Structural Notes

7.0 CARPENTRY

7.1 ROUGH CARPENTRY

ALL 2x FRAMING LUMBER SHALL BE STUD GRADE HEM-FIR FOR STUDS AND STANDARD OR BETTER FOR PLATES UNLESS OTHERWISE NOTED ON THE DRAWINGS OR BELOW. ALL 2" LUMBER SHALL BE KILN DRIED (KD) OR SURFACE DRIED (SD). EACH PIECE OF LUMBER SHALL BEAR THE STAMP OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) OR WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) SHOWING GRADE MARK OR APPROVED EQUAL. OTHER MATERIALS SHALL BE AS SHOWN BELOW:

MEMBER	SPECIES
2x & 3x STUDS	STUD GRADE HEM FIR
2x JOISTS	#2 HEM FIR
4x HEADERS	#2 HEM FIR
6x HEADERS	#2 DOUGLAS FIR
4x COLUMNS	#2 HEM FIR
6x COLUMNS	#2 DOUGLAS FIR

ALL EXPOSED STRUCTURAL MATERIALS OR MATERIAL IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED (SEE SECTION 7.10).

7.3 PRE-ENGINEERED ROOF TRUSSES

ALL PREFABRICATED WOOD ROOF AND FLOOR TRUSSES SHALL BE DESIGNED BE OR UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE STRUCTURE IS LOCATED. THE TRUSS SHOP DRAWINGS SHALL BEAR THE STAMP OF THAT ENGINEER. ALL NECESSARY BRIDGING, BLOCKING, PRE-NOTCHED PLATES, HANGERS, ETC. SHALL BE DETAILED OR SPECIFIED. AND FURNISHED BY THE MANUFACTURER. ALL PERMANENT BRACING FOR TRUSSES SHALL BE DETAILED AND DESIGNED BY THE TRUSS SUPPLIER. THE TRUSS MANUFACTURER SHALL VERIFY ALL SETBACKS, DIMENSIONS, AND BEARING POINTS PRIOR TO FABRICATION. MAXIMUM ALLOWABLE DEFLECTIONS SHALL BE AS FOLLOWS:

ROOF TOTAL LOAD SPAN/240 OR 1.5" ROOF LIVE LOAD SPAN/360 OR 1"

TRUSSES SHALL BE DESIGNED FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ADDITIONAL CONCENTRATED LOADS FROM MECHANICAL UNITS, AND MISCELLANEOUS EQUIPMENT, ETC. SHALL BE ACCOUNTED FOR/COORDINATED WITH THE SUB-CONTRACTORS. ARCHITECT AND TRUSS ENGINEER. ALTERATION OF THE TRUSS LAYOUT INDICATED ON THE PLANS MAY REQUIRE SUPPORTING STRUCTURAL AND FOUNDATION CHANGES, THEREFORE PRIOR APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER IS REQUIRED. TRUSSES SHALL NOT BE FIELD ALTERED PRIOR TO WRITTEN APPROVAL OF THE ENGINEER OF RECORD DESIGNING THE TRUSSES.

TRUSS CONNECTIONS TO NON-LOAD BEARING WALLS SHALL BE PER THE TYPICAL DETAILS. SLIDE CLIPS SHALL NOT BE USED UNLESS APPROVED BY THE ENGINEER.

7.4 CARPENTRY HARDWARE

- A. BOLTS SHALL BE ASTM A-307.
- B. WASHERS SHALL BE STANDARD CUT WASHERS OR MALLEABLE IRON WASHERS.
- C. ALL NAILS SHALL BE COMMON WIRE NAILS OR EQUIVALENT PNEUMATICALLY DRIVEN NAILS (P-NAILS), AMERICAN OR CANADIAN MANUFACTURER ONLY AS INDICATED BELOW. P-NAILS SHALL BE INSTALLED PER THE MANUFACTURERS GUIDELINES.

COMMON WIRE NAIL	PNEUMATIC NAIL	MINIMUM NAIL LENGTH	NAIL APPLICATION
16d COMMON	0.162" P-NAIL	3-1/2"	FRAMING
12d COMMON	0.148" P-NAIL	3-1/4"	FRAMING
N/A	0.131" P-NAIL	3"	FRAMING
10d COMMON	0.148" P-NAIL	2-1/2"	SHEATHING
8d COMMON	0.131" P-NAIL	2-1/2"	SHEATHING

- D. LAG SCREWS, SHEAR PLATES
- E. ANCHORS AND CONNECTORS SHALL BE SIMPSON, USP, OR OTHER ICBO APPROVED.
- F. HARDWARE EXPOSED TO WEATHER OR TO VIEW SHALL BE GALVANIZED OR PROTECTED WITH OTHER APPROVED MEANS OF CORROSION PROTECTION. FOR ADDITIONAL REQUIREMENTS REGARDING HARDWARE IN EXPOSED CONDITIONS SEE SECTION 7.10.

7.5 MINIMUM NAILING — PER IBC TABLE 2304.9.1. — SEE SHEET S1.1

7.6 ANCHOR BOLTS

FOUNDATION PLATE OR SILL BOLTING SHALL BE PER IBC CHAPTER 23. PER IBC 2308.6 & 2304.3.1 ALL FOUNDATION PLATES OR SILLS SHALL BE BOLTED TO CONCRETE OR MASONRY WITH MINIMUM 1/2" NOMINAL DIAMETER ANCHOR BOLTS EMBEDDED AT LEAST 7" AND SPACED NOT MORE THAN 6 FEET APART. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES OR LESS THAN 4 INCHES FROM EACH FND OF FACH PIFCE. 3" x 3" x 0.229" WASHERS ARE REQUIRED AT ALL ANCHOR BOLTS PER AF&PA SDPWS-2008 SECTION 4.3.6.4.3 THE PLATE WASHER ARE PERMITTED TO HAVE A DIAGONAL SLOT. FOR SHEAR WALL TYPES W3 AND GREATER THE PLATE WASHER MUST EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON SIDE(S) WITH SHEATHING.

7.7 PLYWOOD/OSB SHEATHING

EACH SHEET SHALL BEAR THE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ALL GRADING AND INSTALLATION SHALL CONFORM TO MOST CURRENT VERSION OF PS2 FOR OSB. USE THICKNESS AND NAILING AS SHOWN ON THE DRAWINGS. SHEATHING SHALL HAVE EXPOSURE RATING AS APPROPRIATE PER THE CONTRACTOR'S CONSTRUCTION AND WEATHER CONDITIONS SPECIFIED BY CONTRACTOR. EXCEPT AS OTHERWISE SHOWN OR NOTED, PROVIDE 0.131" DIA P-NAILS OR 8d COMMON NAILS AT 6" ON CENTER @ SUPPORTED PANEL EDGES AND 0.131" DIA P-NAILS OR 8d COMMON NAILS AT 12" ON CENTER ON OTHER SUPPORTING MEMBERS FOR WALLS AND ROOFS. FOR FLOORS, USE THE SAME SPACING PATTERN AS STATED FOR WALLS OR ROOF EXCEPT USE 0.148" DIA P-NAILS OR 10d COMMON NAILS.

NOTE: EQUIVALENT RATED PLYWOOD MAY BE USED IN LIEU OF OSB CALLED OUT. ALL THICKNESS AND GRADING SHALL CONFORM TO PS1 OR PS2. SHEATHING SHALL HAVE EXPOSURE RATING AS APPROPRIATE PER THE CONTRACTOR'S CONSTRUCTION AND WEATHER CONDITIONS SPECIFIED BY CONTRACTOR.

ROOF DIAPHRAGM: 1/2" MIN OSB (MIN PANEL INDEX = 24/16), WITH 0.131" DIA P-NAILS OR 8d COMMON NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND AT 12" O.C. AT FIELD TYPICAL UNLESS NOTED OTHERWISE ON PLAN. WHERE REQUIRED, USE PLY-CLIPS INSTALLED PER MANUFACTURER'S GUIDELINES AND APA GUIDELINES. FLOOR DIAPHRAGM: 3/4" TONGUE AND GROOVE OSB (MIN PANEL INDEX = 32/16), WITH

0.148" DIA P-NAILS OR 10d COMMON NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND AT 12" O.C. AT FIELD TYPICAL UNLESS NOTED OTHERWISE ON PLAN. SHEATHING SHALL BE GLUE-NAILED TO FRAMING WITH APPROVED ADHESIVE PER THE ARCHITECT. FIELD NAILING SHALL BE 6" O.C. AT ALL INTERIOR SHEARWALL LOCATIONS INSTEAD OF TYPICAL 12" O.C.

7.8 MANUFACTURED TIMBER BEAMS

A. GLULAMINATED TIMBER BEAMS (GLULAM BEAMS)

ALL STRUCTURAL GLUE-LAMINATED TIMBER, MATERIALS, MANUFACTURE AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH VOLUNTARY PRODUCT STANDARD P.S.56 "STRUCTURAL GLUED LAMINATED TIMBER". AND ALL MEMBERS SHALL BE MARKED WITH A QUALITY MARK THEREOF. ALL PLY LAYOUTS SHALL BE PER P.S. 56. CAMBERS ARE AS SHOWN ON THE DRAWINGS. ALL MEMBERS SHALL BE EITHER COMBINATION 24F-V4 (SIMPLE SPAN) OR 24F-V8 (CANTILEVERED OR CONTINUOUS SPAN) AS APPLICABLE. ALL MEMBERS SHALL BE ARCHITECTURAL APPEARANCE AND SHALL BE GLUED WITH WATERPROOF ADHESIVE PER P.S. 56. ARCHES SHALL BE COMBINATION 24F-V8 AND HAVE EXTERIOR GLUE, ARCHITECTURAL GRADE.

7.9 SHRINKAGE

WOOD MEMBERS WERE EVALUATED USING KILN DRIED (KD) OR SURFACE DRIED (SD) LUMBER (HEM-FIR WITH MOISTURE CONTENT = 19% OR LESS). THE FLOOR TO FLOOR COMPRESSION OF SUCH WOOD MEMBERS (PLATES AND JOISTS TOTALING 15.25") DUE TO A MOISTURE CONTENT CHANGE OF 10% WILL BE APPROXIMATELY 3/8 INCHES PER FLOOR. ADDITIONAL FLOOR TO FLOOR COMPRESSION OF WOOD STUDS DUE TO FULL COMPRESSIVE LOAD WILL BE APPROXIMATELY 1/32 INCHES PER FLOOR. ADDITIONAL COMPRESSION OF WOOD FRAMING MAY OCCUR DUE TO FRAMING TECHNIQUES AND LOCAL STRESS CONCENTRATIONS. ALL FULL BUILDING HEIGHT ELECTRICAL, MECHANICAL, AND PLUMBING SYSTEMS AS WELL AS EXTERIOR FINISHES SHOULD BE DESIGNED TO ACCOMMODATE THESE MOVEMENTS. USE OF WOOD STUDS, PLATES & JOISTS WHICH WILL HAVE MOISTURE CONTENT CHANGES GREATER THAN 10% WILL EXPERIENCE GREATER MOVEMENT. FLOOR ASSEMBLIES UTILIZING DEPTHS GREATER THAN THOSE ASSUMED ABOVE MAY EXPERIENCE GREATER MOVEMENTS. LOCALIZED HEADERS MAY EXPERIENCE SIMILAR SHRINKAGE AS DESCRIBED ABOVE.

7.10 PRESERVATIVE TREATMENT

A. PRESERVATIVE TREATMENTS

SEE ARCH FOR ALL PRESERVATIVE TREATED REQUIREMENTS AND FINISHES OF EXPOSED TIMBER MEMBERS AND AT EXTERIOR CONDITIONS.

ALL EXPOSED FRAMING LUMBER, PLYWOOD AND DECK MATERIALS SHALL BE PRESSURE TREATED PER AWPA SPECIFICATION P-5 OR OTHER APPROVED TREATMENT. ALL CUTTING AND BORING AFTER PRESSURE TREATMENT SHALL BE CARED FOR IN ACCORDANCE WITH AWPA SPECIFICATION M-4.

ACZA PRESERVATIVE TREATMENT SHALL NOT BE PERMITTED EXCEPT WHERE HARDWARE (INCLUDING NAILS) IN CONTACT WITH THE TREATED PRODUCT IS COMPOSED ENTIRELY OF STAINLESS STEEL MATERIAL. STAINLESS STEEL HARDWARE SUBSTITUTED FOR HDG PRODUCTS SHALL MEET OR EXCEED THE STRENGTH AND PERFORMANCE OF THE SUBSTITUTED HDG PRODUCT ORIGINALLY SPECIFIED.

B. GALVANIZATION OF HARDWARE (EXPOSED OR IN CONTACT WITH PRESERVATIVE TREATED WOOD)

PROTECTED ENVIRONMENT

ALL HARDWARE (HANGERS, NAILS, BOLTS, LAG SCREWS, FLASHING ETC ...) SHALL BE HOT-DIP GALVANIZED (HDG) TO A MINIMUM COATING LEVEL OF G185 (1.85 oz/ft2 OF ZINC) WHEN IN CONTACT WITH PRESERVATIVE TREATED WOOD CONTAINING PRODUCTS SUCH AS, BUT NOT LIMITED TO; CCA, ACQ, OR CBA. HDG PRODUCTS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS AS APPLICABLE; ASTM A653, ASTM A123, AND ASTM A153. WHEN USING STAINLESS STEEL OR HOT-DIP GALVANIZED CONNECTORS, THE CONNECTORS AND FASTENERS SHALL BE OF THE SAME MATERIAL.

EXPOSED ENVIRONMENT

ALL HARDWARE (INCLUDING CONNECTORS) IN CONTACT WITH PRESSURE TREATED WOOD IN AN EXPOSED OR POTENTIAL TO BE EXPOSED ENVIRONMENT (HAVING POTENTIAL FOR WIND BLOWN RAIN TO REACH) SHALL BE STAINLESS STEEL.

8.0 MECHANICAL AND EPOXY FASTENERS

- A. MECHANICAL FASTENERS (PRE-DRILLED ANCHORS)
- 1. TYPICAL MECHANICAL ANCHORS WHICH ARE INSTALLED IN CONCRETE SHALL BE AS MANUFACTURED BY THE SIMPSON, INC. AND SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURERS GUIDFLINES AND PER ICC REPORT ESR-1771 FOR WEDGE ANCHORS OR PER ICC REPORT ESR-2713 FOR SCREW TYPE ANCHORS OR APPROVED EQUALS.
- 2. SPECIAL CARE SHALL BE TAKEN DURING THE DRILLING / INSTALLATION OF FASTENERS WITHIN POST-TENSIONED CONCRETE. ANCHORS SHALL BE INSTALLED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH / DAMAGE REINFORCEMENT.
- B. EPOXY CONNECTIONS (PRE-DRILLED ANCHORS)
 - 1. ADHESIVE ANCHORS SHALL BE OF THE SIZE AND LENGTH AS CALLED OUT ON THE PLANS USING THE SIMPSON SET-XP ADHESIVE ANCHORING SYSTEM PER ICC RFPORT ESR-2508 OR APPROVED EQUAL. ADHESIVE ANCHORS SHALL BE INSTALLED PER THE MANUFACTURERS SPECIFICATIONS.
- 2. ALL EPOXY ANCHORS OR FASTENERS REQUIRE SPECIAL INSPECTION.
- 3. ANCHORS SHALL BE INSTALLED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH / DAMAGE REINFORCEMENT.

9.0 SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1704 OF THE 2018 IBC AND ARE REQUIRED DURING THE FOLLOWING:

- A. THE EXCAVATION OF FOOTINGS PRIOR TO CONCRETE PLACEMENT,
- B. THE TAKING OF CONCRETE TEST SPECIMENS. SEE PARAGRAPH 3.2, NOTE 4 FOR EXCEPTION WITH I'C GREATER THAN 2500 PSI.

C. THE PLACEMENT OF REINFORCING STEEL OF ALL STRUCTURAL FOOTINGS, COLUMNS,

D. THE CONSTRUCTION OF THE LATERAL WOOD SYSTEM TO VERIFY APPROPRIATE ELEMENTS, NAILING, HARDWARE & CONNECTIONS PRIOR TO FINAL APPROVAL.

E. ALL EPOXY DOWELED APPLICATIONS.

WALLS, SLABS AND APPENDAGES,

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE A SCHEDULE OF REQUIRED INSPECTIONS AND SHALL SUBMIT THIS SCHEDULE TO THE ARCHITECT AND ENGINEER FOR APPROVAL.

INSPECTION IS INSPECTION PERFORMED BY THE BUILDING OFFICIAL AT VARIOUS STAGES OF A

PROJECT AS OUTLINED IN IBC SECTION 109 TO ENSURE COMPLIANCE TO THE BUILDING CODE. SPECIAL INSPECTION SHALL BE DONE BY AN INDEPENDENT 3RD PARTY INSPECTOR BY OWNER. WHERE IBC CHAPTER 17 (REF SECTION 1704) REQUIRES SPECIAL EXPERTISE TO ENSURE COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

STRUCTURAL OBSERVATION SHALL BE PERFORMED BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AS DEFINED IN IBC SECTION 1702. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR INSPECTION AS REQUIRED BY IBC.

10.0 MISCELLANEOUS

VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO PROCEEDING. PROVIDE ERECTION BRACING AS NECESSARY UNTIL PERMANENT SUPPORT AND STIFFNESS ARE INSTALLED. REFER TO ARCHITECTURAL PLANS FOR WALL OPENING, ARCHITECTURAL TREATMENT AND DIMENSIONS NOT SHOWN. REFER TO MECHANICAL AND ELECTRICAL PLANS FOR SIZE AND LOCATION OF ALL OPENINGS FOR DUCTS, PIPES, CONDUITS, ETC., NOT SHOWN.

Special Inspection required per Chapter 17 of the 2018 IBC - SUBMIT REPORTS TO INSPECTORS WITH THE CITY OF PUYALLUP

PROPERTEngineering

PLYWD. PLYWOOD Fire

ROOF DRAIN

REFER TO ..

REINFORCED

ROUGH OPFNING

REQUIRED

SCHEDULE

STRUCTURAL

SQUARE FOOT

SPECIFICATION

STAINLESS STEEL

ENGINEER OR RECOF

SECTION

SHEET

SIMILAR

SQUARE

STAGGERED

STANDARD

STIFFENER

STRUCTURAL

TOP AND BOTTOM

UNLESS NOTED

OTHERWISE

TONGUE & GROOVE

STEEL

TREAD

THICK

TOP OF

VERIFY

WITH

WITHOUT

PLATE

CENTERLINE

Revisions*

VERTICAL

TYPICAL

ROOM

R.D.

RE:

REINF.

REQ'D.

RM

R.O.

SCHED.

SECT.

SER

SIM.

SPEC.

S.S.

STD.

STIFF

STL.

TR

STRUC.

T & B

T & G

THK.

TYP.

U.N.O.

VER

VERT.

W/

W/0

STAGG.

Abbreviations

FLOOR DRAIN

FOUNDATION

FINSH FLOOR

FOUNDATION

F.O.C. FACE OF CONCRETE

FULL SIZE

FOOTING

FURRING

GAUGE

GRADE

GYP. BD. GYPSUM BOARD

HEIGHT

HEATING, VENT AND

AIR CONDITIONING

INSIDE DIAMETER

INSULATION

INTERIOR

JOINT

JOIST

MAXIMUM

MINIMUM

METAL

NUMBER

NOT TO SCALE

ON CENTER

OVFRHEAD

OPENING

OPPOSITE

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PCT. PRE-CAST

MANUFACTURER

MISCELLANEOUS

MASONRY OPENING

OUTSIDE DIAMETER

GYPSUM

GALVINIZED

FACE OF BRICK

FOOT OR FEET

FINISH

FLOOR

FDN.

FLR.

FND.

F.O.B.

F.S.

FTG.

FURR.

GALV.

GYP.

INSUL.

JST.

MAX.

MIN.

MISC.

M.O.

MTL.

N.T.S.

0.D.

OPG.

OPP.

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TOTAL NUMBER OF SHEETS

* LATEST INDIVIDUAL SHEET REVISION ISSUED

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ANCHOR BOL

ARCHITECTURA

AGGREGATE

ALTERNATE

BOARD

BUILDING

BLOCK

RFAM

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PALTIMN

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DEGREE

DRAWING

FXISTING

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AND FINISH SYSTEM

E.I.F.S. EXTERIOR INSULATION

EACH

EQUAL

EACH WAY

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raming Details

Framing Details

Framing Details

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Foundation Plan - Recreation Building

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DET./DTL. DETAIL

DIAG. DIAGONAL

DIA. ø DIAMETER

EL. ELEV. ELEVATION

ELEV. ELEVATION

EQUIP. EQUIPMENT

EXT. EXTERIOR

CLEAR

BLK'G. BLOCKING

BTWN. BETWEEN

APPROX. APPROXIMATE

AGGR.

ALT.

ARCH.

BLDG.

BD.

BLK

BM.

BOT.

C.J.

CLR.

COL.

CONC.

CONN.

CONT.

DEG.

DWG.

(E)

EQ.

EXP.

Sheet

S1.0

CSE

C.M.U.

0

-20 20

SUBMITTAL SET ONLY NOT FOR CONSTRUCTION THESE DRAWINGS ARE SUBJECT TO REVISIONS PENDING LOCAL JURISDICTIONAL REVIEW.

- Solutions (4). Structures A Structural Engineering Corporation

NET WIND PRESSURES AT ROOF SURFACES = VALUE FROM TABLE ABOVE $\pm 2/3$ DEAD LOAD (DEAD LOAD REDUCES NEGATIVE PRESSURE ± 4 ADDS TO POSITIVE PRESSURES) ZONES ARE DEFINED BY FIGURE 30.6-1 ASCE/SE1 07-10 FOR ROOF AND WALL ELEMENTS

2018 International Building Code - Statement of Special Inspection

SOIL & FOUNDATIONS						
MATERIAL/ TYPE	IBC CODE	REFERENCE	FRE	QUENCY APPLICA	BLE	
INSPECTION	REFERENCE	STANDARD		to this project	Ī	SCOPE OF SERVICE
INSPECTION	ILI LILINGE	STANDAND	CONT.	PERIODIC	REQUIRED	SCOPE OF SERVICE
Site Preparation	Table 1705.6 Item 5	-	_	X	N/A	Inspection to determine that the site has been prepared in accordance with the approved soils or geotechnical report.
Prepared Fill — During Fill Preparation	Table 1705.6 Item 4	-	Х	-	YES	Inspection to determine that the materials being used and maximum lift thicknesses comply with the approved report as specified in Section 1804.2.
Evaluation of in-place Density	Table 1705.6 Item 3	-		Х	YES	Tests to determine, at the approved frequency, that the in-place dry density of the compacted fill complies with the approved report.
Footings and Foundations	1805.1 — 1805.9 Table 1705.6 Item 1	-	-	X	YES	Confirm soils suitable for the design allowable soil bearing pressure are present at bearing grade. Confirm the footing dimensions are as specified on the project plans.
Foundation Depth	Table 1705.6 Table 1705.6 Item 2	-	-	X	YES	Confirm excavation are extended to proper depth and have reached proper materials.

2018 International Building Code — Statement of Special Inspection CONCRETE CONSTRUCTION

MATERIAL/ TYPE	IBC CODE	REFERENCE	REFERENCE FREQUENCY APPLICABLE TO THIS PROJECT			SCOPE OF SERVICE
INSPECTION	REFERENCE	STANDARD	CONT.	PERIODIC	REQUIRED	
Materials	1705.3.1, Table 1705.3 Item 1	Applicable ASTM material spec.; AISC 360, Section A3.3	-	X	YES	Manufacturer's Certificates of Compliance or Tests per Chapter 3 of ACI 318, per ASTM A 706, and per 1705.3.1
Installation of Reinforcing Steel	1910.4 Table 1705.3 Item 1	ACI 318:3.5; 7.1 – 7.7	-	X	YES	Inspection to confirm compliance with details shown on approved Construction Documents, Shop Drawings, ACI 318 and Code Section 1910.4
Welding of Reinforcing Steel	Table 1705.3 Item 2	AWS D1.4, ACI 318:3.5.2	-	-	N/A	Observation of reinforcing steel welding in accordance with Table 1705.2.2, Item 2, (see attached steel construction table).
Bolt Installation	1908.5, 1901.1 Table 1705.3 Item 3	ACI 318: 8.1.3, 21.2.8	X	-	YES	Observation of anchor bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased.
Formwork	Table 1705.3 Item 12	ACI 318:6.1.1	ı	X	YES	Inspection for compliance with ACI 318, Section 6.1, 6.2, for shape, location and dimensions of concrete member being formed.
Concrete Strength	1910.10, Table 1705.3 Item 6	ASTM C 172, ASTM C 31, ACI 318:5.6, 5.8	-	Х	NO	Evaluation of Concrete strength in accordance with ACI 318, Section 5.6 and in accordance with the requirements of IBC 1905.6.
Concrete Mixes	1904.2, 1910.2, 1910.3 Table 1705.3 Item 5	ACI 318: 4, 5.2-5.4	-	X	YES	Inspection for use of proper mix proportions and techniques, ACI 318, Chapter 4, Sections 5.2 — 5.4.
-	-		-	-	-	-
Concrete Sampling	1910.10 Table 1705.3 Item 6	ASTM C 172, ASTM C 31, ACI 318:5.6, 5.8	Х	-	MO	
Concrete Placement	1910.6, 1910.7, 1910.8, Table 1705.3 Item 7	ACI 318:5.9, 5.10	Χ	-	YES	Inspection for proper application techniques; ACI 318, Sections 5.9 and 5.10
Curing Temperatures and Techniques	1910.9 Table 1705.3 Item 8	ACI 318: 5.11-5.13	-	Х	NO	Inspection for maintenance of curing temperatures and techniques; ACI 318, Sections 5.11, 5.12 and 5.13.
Prestressed Concrete: Application Prestressing Forces	Table 1705.3 Item 9a	ACI 318: 18.20, ACI 18.18.4	Х	-	NO	Field inspections of precast concrete members in accordance with ACI 318, Section 18.20.
Prestressed Concrete: Grouting of unbonded prestressing tendons in seismic—force—resisting system	Table 1705.3 Item 9b	ACI 318: 18.20, ACI 18.18.4	Х	-	NO	Field inspections of precast concrete members in accordance with ACI 318, Chapter 18.18.4.
Manufacture of Precast Concrete	1704.2.1	-	-	Х	NO	Certificate from Independent Agency and current agreement for periodic (minimum 6 month intervals) in—plant quality assurance inspections.
Erection of Precast Concrete	Table 1705.3 Item 10	ACI 318: 16	-	Х	NO	Field inspections of precast concrete members in accordance with ACI 318, Chapter 16.
Post Tensioning	Table 1705.3 Item 11	ACI 318: 6.2	-	Х	NO	Verification of in—situ concrete strength, prior to stressing of tendons in post—tensioned concrete and prior to removal of shores and forms for beams and structural slabs in accordance with ACI 318, Section, 6.2.
Post Installed Anchors	1909.1, Table 1705.3 Item 11	ACI 318: 3.8.6, 8.1.3, 21.1.8	-	Х	YES	Verification of anchors post installed in hardened concrete members.

2018 International Building Code - Statement of Special Inspection

WOOD CONSTRUCTION										
MATERIAL/ TYPE INSPECTION	IBC CODE REFERENCE	REFERENCE	FREQUENCY APPLICABLE TO THIS PROJECT SCOPE OF SERVICE		SCOPE OF SERVICE					
INSPECTION	REFERENCE STANDARD		CONT.	PERIODIC	REQUIRED					
Fabrication — Inspection of Fabricator's	1704.2.5	-	-	Χ	YES	Certificate from Independent Agency and current agreement for periodic				

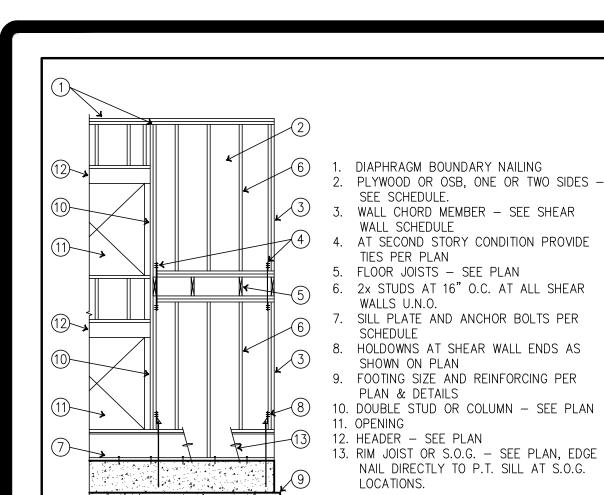
MATERIAL/ TYPE INSPECTION	IBC CODE REFERENCE	REFERENCE STANDARD	FREQUENCY APPLICABLE TO THIS PROJECT			SCOPE OF SERVICE	
INSPECTION	REFERENCE	STANDARD	CONT.	PERIODIC	REQUIRED		
Structural Steel	1705.11.1	AISC 341	Х	_	N/A	Observation of structural welding in accordance with AISC Seismic. Not required for 5/16" single pass fillet welds or welding of metal deck.	
Structural Wood: Inspection of field gluing operations of elements of the seismic force resisting system.	1705.11.2	-	Х	_	N/A	Inspection of field gluing operations of elements of the seismic force resisting system.	
Structural Wood: Inspection of nailing, bolting, anchoring and other fastening components the seismic force resisting system, including drag struts, braces and hold—downs.	1705.11.2	-	-	X	YES	Inspection of nailing, bolting, anchoring and other fastening components within the seismic force resisting system, including drag struts, braces and hold—downs. Not required for nailing o.c. spacing greater that 4" o.c.	
Cold—formed Steel Framing	1705.11.3	-	-	Х	NO	Inspection of welding operations of elements of the seismic force resisting system.	
Cold—formed Steel Framing	1705.11.3	-	-	Х	NO	Inspection of screw attachments, bolting, anchoring and other fastening components within the seismic force resisting system, including struts, braces and hold—downs.	

2018 International Building Code — Statement of Special Inspection STRUCTURAL: OBSERVATIONS

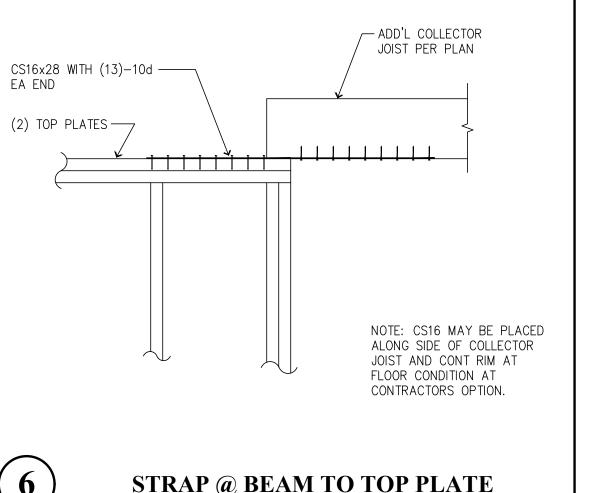
RUCTURAL: OBSERVATIONS									
MATERIAL/ TYPE INSPECTION	IBC CODE REFERENCE	REFERENCE STANDARD		QUENCY APPLICA TO THIS PROJEC		SCOPE OF SERVICE			
INSPECTION	REFERENCE	STANDARD	CONT.	PERIODIC	REQUIRED				
Strucutral Observations	1704.5	-	ı	X		Structural observations to be preformed to observe general conformance to the construction documents.			

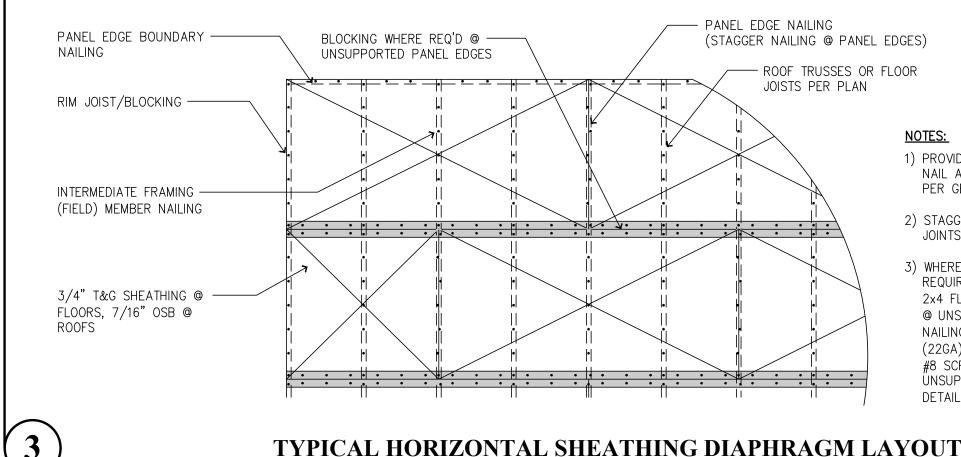
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4'-0" MIN 1-1/2" 1-1/2" (12) 0.148"øx3" NAILS PER SPLICE └─ SPLICE **SPLICE** WHERE PLATE DISCONTINUITIES ARE CREATED BY BEAMS & PIPES, ETC. STRAP W/ (1)-SIMPSON CS16 x 28" W/ (13)-8d NAILS EA END AT EACH PLATE NOT ACHIEVING 4'-0" LAP UNLESS NOTED OTHERWISE TYPICAL TOP CHORD SPLICE





1) PROVIDE APA APPROVED GLUE, NAIL ALL SHEATHING TO JOISTS PER GENERAL NOTES ON S1.0.

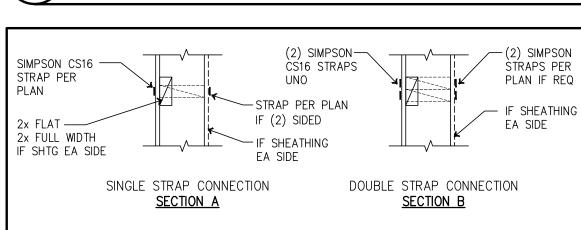
2) STAGGER PANELS TO OFFSET JOINTS AS SHOWN.

3) WHERE BLOCKED DIAPHRAGM IS REQUIRED, PROVIDE TIMBER BLKG 2x4 FLAT (MIN) BELOW SHEATHING @ UNSUPPORTED EDGES W/ EDGE NAILING OR PROVIDE 3" x 27mil (22GA) x CONT STEEL STRAP W/ #8 SCREWS @ 6" O.C. TO EA UNSUPPORTED PANEL EDGE PER DETAIL 7/S1.3.

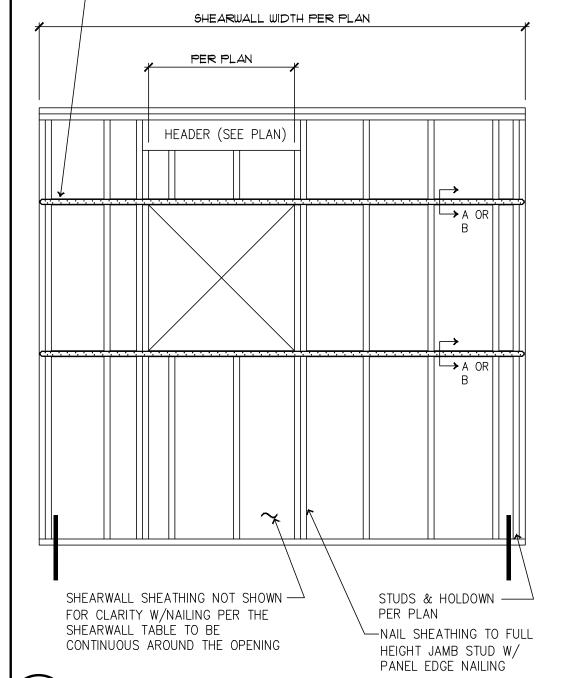
N.T.S

TYPICAL SHEAR WALL ELEVATION

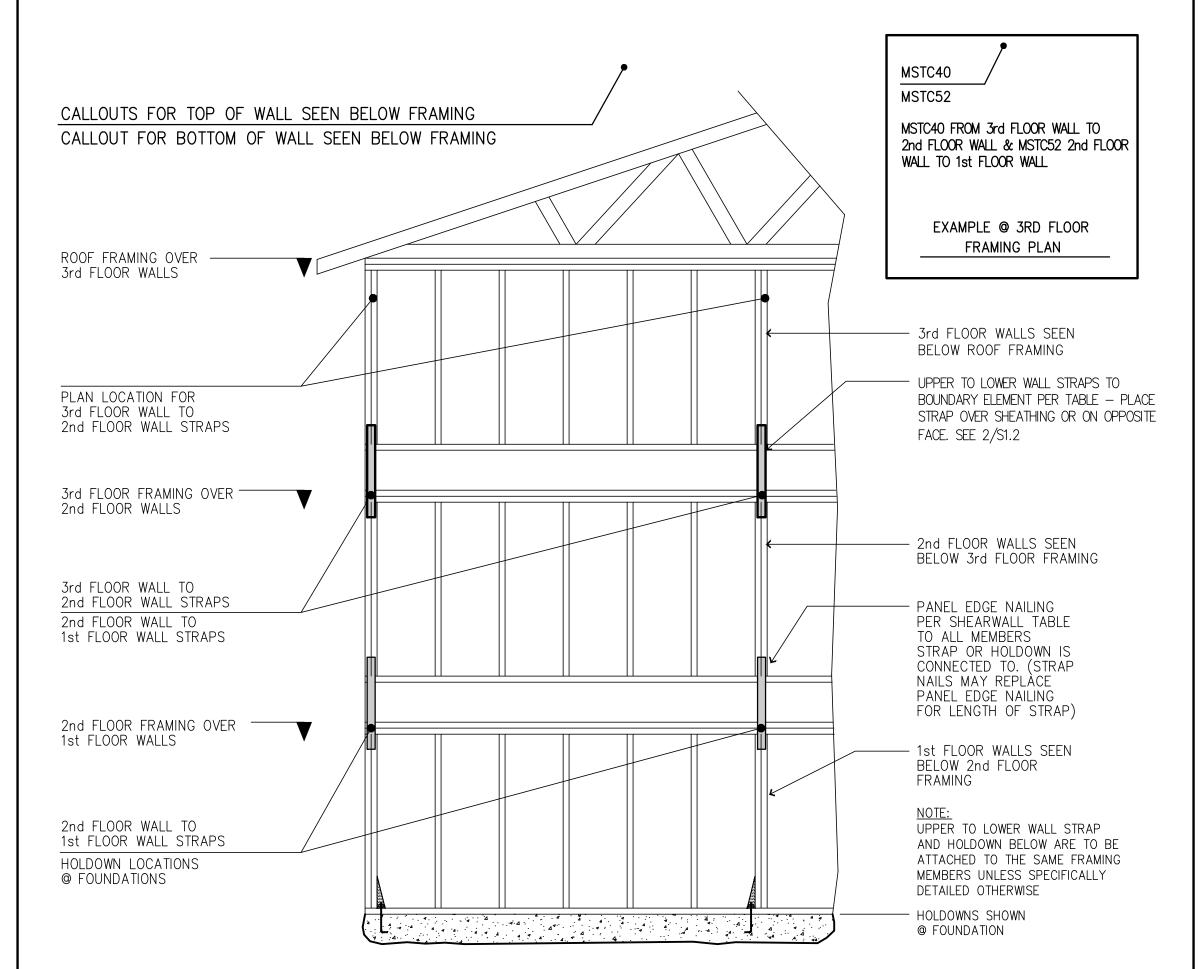
OPTIONAL SHEAR WALL INSTALLED — W/ LONG DIMENSION ACROSS STUDS, STAGGER VERTICAL JOINTS. PANEL SHEATHING USED AS $-\!-\!$ CORNER BRACING W/ LONG DIMENSION PARALLEL TO STUDS ─ WALL FRAMING SIDING & W.R.B. 🕂 ≝RIM JOIST AT FLOOR. MATERIAL PER EDGE NAIL DIRECTL ARCHITECTURAL TO P.T. SILL AT S.O.G. Bd NAILS OR 0.131"ø P-NAIL @ 6" O.C. AT EDGE NAILING TO BOT – EDGES & SEAMS @ 12" PLATE & P.T. SILL O.C. IN FIELD U.N.O. ON SHEAR WALL SCHEDULE TYPICAL WALL SHEATHING

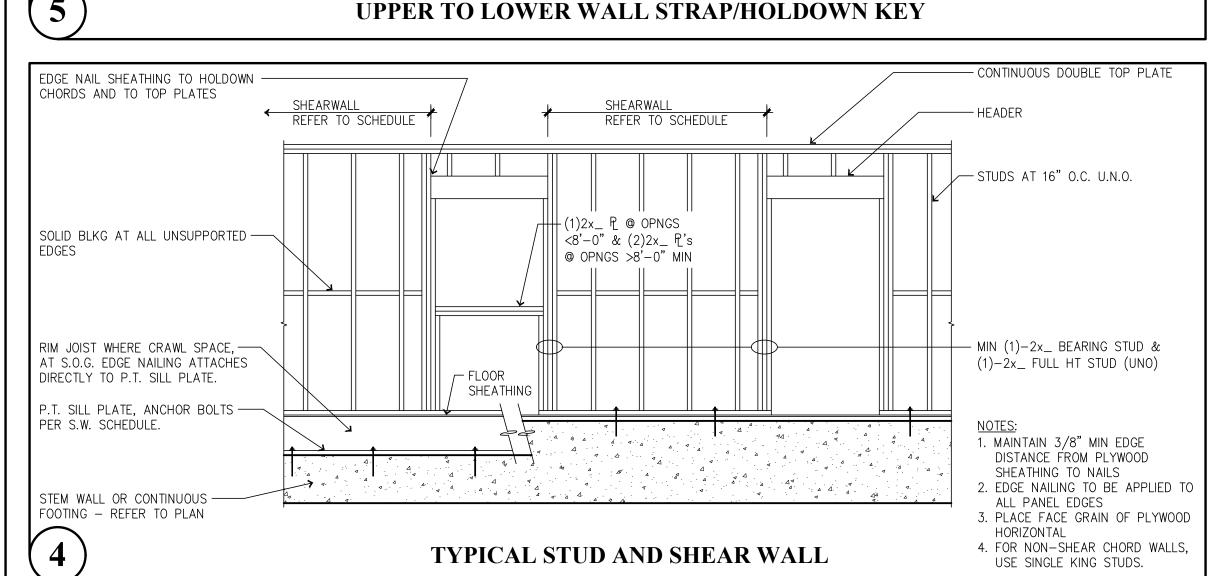


— CS16 STRAP MIN UNO PER PLAN ◎ TOP & BOTTOM OF WINDOW TO EXTEND FULL WIDTH OF SHEARWALL. STRAP TO BE APPLIED OVER THE SHEARWALL SHEATHING TO 2x_ BLKG AT WINDOW HEAD/SILL PLATES TYP. SEE SECTION A FOR SINGLE STRAP (1 OR 2 SIDED). WHERE (2) STRAPS IS CALLED OUT ON PLAN PROVIDE STRAPS PER PLAN SIDE BY SIDE @ HEAD & SILL OF OPENING FULL WIDTH OF SHEARWALL SEE SECTION B.



SPECIAL SHEARWALL WITH OPENINGS





HOLDOWN TABLE BOUNDARY ELEMENT MIN EDGE DISTANCE 2x4 WALL 2x6 WALL **FASTENERS** DIAMETER **EMBEDMENT** WITHOUT ADD'L REINF 4x4 #2 HF 4x6 #2 HF (20) 16d N/A MST37 N/A N/A 4x4 #2 HF 4x6 #2 HF MST48 (32) 16d N/A N/A N/A 4x6 #2 HF 6x6 #2 DF (46) 16d N/A N/A (2)MST48 4x6 #2 HF 4x6 #2 HF MST60 (64) 16d N/A N/A N/A (2)MST60 4x6 #2 HF 6x6 #2 DF PER MFR N/A N/A N/A 4x4 #2 HF 4x6 #2 HF PER MFR 5/8" HDU2 5/8" HDU4 4x4 #2 HF 4x6 #2 HF PER MFR 4x6 #2 HF 4x6 #2 HF 5/8" PER MFR HDU8 4x6 #2 DF 6x6 #2 DF PER MFR 7/8" 4x6 #2 DF 6x6 #2 DF PER MFR 12" HDU11 4x8 #2 DF 6x6 #2 DF HDU14 PER MFR

1) STRAP HOLDOWNS MAY BE APPLIED DIRECTLY TO BOUNDARY MEMBER ON OPPOSITE SIDE OF SHEATHING OR APPLIED DIRECTLY OVER PWD/OSB SHEATHING. DO NOT LOCATE STRAPS UNDER WOOD SHEATHING OF ANY TYPE OR OVER GYPSUM SHEATHING. (DO NOT INSTALL MSTC TYPE STRAPS OVER SHEATHING, SEE 4/S1.3) 2) NAIL SHEATHING PER SHEARWALL TABLE TO EACH BOUNDARY ELEMENT PER TABLE ABOVE.

3) ALIGN FLOOR TO FLOOR STRAPS WITH HOLDOWNS AT FOUNDATION, TYP. (SEE DETAIL 5/S1.2)

- 4) HOLDOWNS/STRAPS MUST BE ATTACHED TO FULL HEIGHT MEMBERS UNLESS NOTED OTHERWISE. BOUNDARY ELEMENTS ARE IN ADDITION TO TRIMMER/BEARING STUDS CALLED OUT ON PLAN. (SEE DETAILS 1,2 & 3/S1.3)
- 5) ANCHOR BOLTS SHALL BE CAST IN PLACE AND ALL ANCHORS EXCEPT HDU2 AND HDU4 REQUIRE ADDITIONAL REBAR IF EMBEDDED IN STEMWALLS OR IF MIN EDGE DISTANCE IS LESS THAN AS NOTED USE A STANDARD WASHER WITH A STANDARD NUT ON EACH SIDE AT BOTTOM OF ANCHOR. ADDITIONAL REINFORCEMENT SHALL BE PER DETAILS

6) THREADED RODS/ANCHORS ARE ASTM A307 OR ASTM F1554 U.N.O.

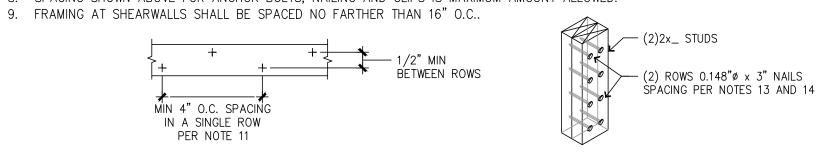
7) STRAPS/HOLDOWNS SHALL BE INSTALLED WITH THE FASTENERS SPECIFIED BY THE MANUFACTURER TO ACHIEVE THE MAXIMUM TABULATED LOAD & AS INDICATED IN THE

8) INSTALL HALF OF SPECIFIED FASTENERS EACH END OF STRAPS PER SIMPSON STRONGTIE.

9) SEE DETAIL 4/S1.3 FOR MSTC - HOLDOWN STRAPS FROM SHEARWALL TO BEAM & DETAIL 6/S1.3 FOR MSTC - HOLDOWN STRAPS @ END OF BEAM TO POST/COLUMN. (*) SYMBOL AT END OF MSTC STRAP CALLOUT (i.e. (2)MSTC48B3*) INDICATES STRAP IS INVERTED AND ATTACHES END OF BEAM TO POST BELOW PER

	SHEARWALL COMPONENT TABLE											
MARK	14 MARK	COMPONENTS	1/2" A.B. PL TO CONCRETE SPACING (IN)	5/8" A.B. PL TO CONCRETE SPACING (IN)	10d COMMON PL TO PL SPACING (IN)	SIMPSON A35 CLIP ANGLE SPACING (IN)	SIMPSON LTP4 CLIP ANGLE SPACING (IN)					
W1	W1P	7/16" PWD OR OSB, BLOCKED, W/ 8d NAILS @ 6" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD.	47" O.C.	68" O.C.	8.1" O.C.	30" O.C.	29" O.C.					
W2	W2P	7/16" PWD OR OSB, BLOCKED, W/ 8d NAILS @ 4" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD.	32" O.C.	47" O.C.	5.5" O.C.	20" O.C.	20" O.C.					
	W3P	7/16" PWD OR OSB, BLOCKED, W/ 8d NAILS @ 3" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD. SEE NOTE 2	25" O.C.	36" O.C.	4.3" O.C.	16" O.C.	15" O.C.					
W4	W4P	7/16" PWD OR OSB, BLOCKED, W/ 8d NAILS @ 2" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD. SEE NOTE 2	19" O.C.	28" O.C.	(2) ROWS 6.6" O.C. EA ROW	12" O.C.	12" O.C.					
W5	W5P	7/16" PWD OR OSB, BLOCKED, W/ 10d NAILS @ 2" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD. SEE NOTE 2.	16" O.C.	23" O.C.	(2) ROWS 5.6" O.C. EA ROW	10" O.C.	10" O.C.					
W6	W7P	15/32" PWD OR OSB, (2) LAYERS (ONE EACH SIDE), BLOCKED, W/ 10d NAILS @ 3" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD. SEE NOTE 2. 3 & 15	12" O.C.	18" O.C.	(2) ROWS 4.3" O.C. EA ROW	8" O.C.	8" O.C.					
	W7P	15/32" PWD OR OSB, (2) LAYERS (ONE EACH SIDE), BLOCKED, W/ 10d NAILS @ 2" O.C. @ PANEL EDGES AND @ 12" O.C. @ FIELD. SEE NOTE 2, 3, & 15	9" O.C.	14" O.C.	(2) ROWS 3" O.C. EA ROW STAGGERED	5" O.C.	5" O.C.					

- 1. ALL NAILING PER ANSI/AF & PA SDPWS 2018 TABLE 4.3A
- . USE 3x_ STUDS AT ALL ABUTTING PANEL EDGES. NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED AT 2" O.C.
- IF CALLOUT REQUIRES BLOCKING, SHEATHING MAY BE PLACED WITH THE LONGITUDINAL DIRECTION VERTICAL. STUDS AND PLATES WILL BE CONSIDERED TO ACT AS BLOCKING. 4. WALL SHEATHING CALLED OUT SHALL EXTEND FOR ENTIRE WALL LENGTH AT THAT ELEVATION AND SHALL BE CONTINUOUS AROUND OPENINGS TYPICALLY.
- 5. 8d NAILS ARE TO BE .131" AND 2-1/2" IN LENGTH. 10d NAILS ARE TO BE .148" AND A MINIMUM OF 3" IN LENGTH. 16d NAILS ARE TO BE .162" AND 3-1/4" IN LENGTH.
- NAILS SHALL BE INSTALLED SO AS TO NOT SPLIT THE TIMBER FRAMING. 6. SIMPSON A35 OR LTP4 CLIP ANGLES SHALL BE INSTALLED WITH THE APPROPRIATE FASTENERS PER THE MANUFACTURER'S SPECIFICATIONS
- 7. USE 3"x3"x0.229" PLATE WASHERS AT ALL ANCHOR BOLTS PER SECTION 4.3.6.4.3
- 8. SPACING SHOWN ABOVE FOR ANCHOR BOLTS, NAILING AND CLIPS IS MAXIMUM AMOUNT ALLOWED.

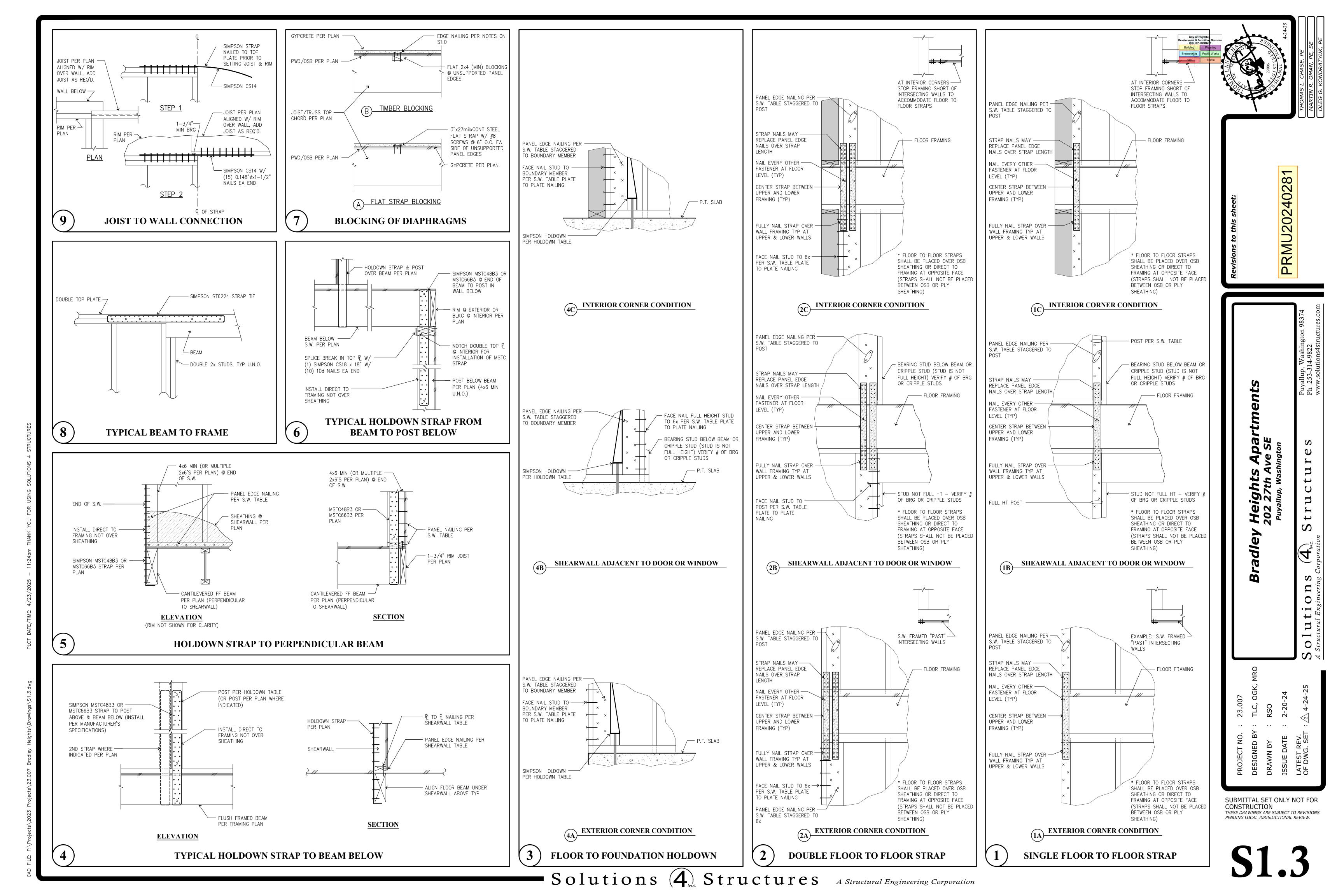


- 10. MINIMUM NAIL SPACING IN A SINGLE ROW SHALL BE 4 INCHES ON CENTER. USE (2) ROWS IF SPACING LESS THAN THIS. USE 2ND RIM BOARD, RIM JOIST OR BLOCKING WHERE THREE ROWS OF NAILING CALLED OUT.
- 11. EXTEND SHEATHING UP TO DOUBLE TOP PLATES AND INSTALL NAILS THROUGH SHEATHING INTO UPPER TOP PLATE PER TYPICAL DETAILS. NO PLATE TO PLATE NAILING REQUIRED IN DOUBLE TOP PLATES WITH THIS CONFIGURATION. 12. OPTIONAL TO USE (2) 2x's IN PLACE OF SINGLE 3x IN SHEARWALLS W3, W4 AND W5 W/ STITCH NAILING.
- 13. (2) ROWS OF 0.148" x 3" STITCH NAILING (2)2x_ STUDS TOGETHER @ 10" O.C. FOR W3 SHW, 8" O.C. FOR W4 SHW & 6" O.C. FOR W5 SHW PER SECTION 4.37 NOTE 4. 14. THE "W_P" INDICATES SHEAR WALL TYPE WITH OPENINGS. PROVIDE SHEATHING AROUND ALL OPENINGS AND ABOVE AND BELOW ALL OPENINGS. PROVIDE HORIZONTAL STRAPS & NAILING AT OPENINGS PER 8/S1.2

SUBMITTAL SET ONLY NOT FOR CONSTRUCTION THESE DRAWINGS ARE SUBJECT TO REVISIONS PENDING LOCAL JURISDICTIONAL REVIEW.

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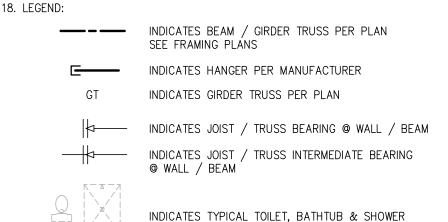


ROOF AND FLOOR JOIST LOCATIONS ARE SCHEMATICALLY SHOWN ON THE PLANS. IT IS NOT THE INTENT OF THE STRUCTURAL PLANS TO GRAPHICALLY LOCATE ALL FRAMING MEMBERS. THE ARCHITECT SHALL VERIFY THE COMPATIBILITY OF JOIST LAYOUT AND FRAMING W/ MECHANICAL, ELECTRICAL & PLUMBING AND ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR SPACING FRAMING MEMBERS AS NOTED ON THE PLANS AND GENERATING MEMBER LAYOUT FOR SHOP DRAWINGS AND QUANTITY TAKEOFFS.

- FOR ALL UNITS TYPES SEE WALL STUD SCHEDULE FOR BEARING WALL STUD REQUIREMENTS. ALL OTHER NON-BEARING 2x4 & 2x6 WALLS ARE AT 16" O.C.
- THE TRUSS AND JOIST MANUFACTURER SHALL VERIFY BEARING COMPATIBILITY (CRUSHING) WITH THE PLATE MATERIAL. TYPICALLY, COMPOSITE BEAMS SHALL BE FULLY BEARING ON 2x_ WALLS. I.E. BREAK RIM OR BLOCKING TO ALLOW FULL BEARING OVER PLATES.
- PLACE LONG DIRECTION OF ALL OSB SHEETS PERPENDICULAR TO TRUSS/RAFTER OR JOIST DIRECTION, SEE DETAIL 3/S1.2. FLOOR SHEATHING IS TO BE CONTINUOUS FROM UNIT TO UNIT. TYPICAL NAILING AT FLOOR AND ROOF DIAPHRAGMS IS PROVIDED IN THE GENERAL STRUCTURAL NOTES ON SHEETS S1.0
- W-DENOTES THE SHEARWALL TYPE, SEE THE SHEARWALL TABLE ON SHEET INDICATES SHEARWALL LOCATION, THE CALLOUTS ON THE SHEARWALL TABLE APPLY ONLY ALONG THE LENGTH OF WALL SHOWN SHADED. PROVIDE SOLID BLOCKING IN FLOOR SPACE BELOW PERPENDICULAR SHEARWALLS. _P\ INDICATES SHEAR WALL TYPE WITH OPENINGS. PROVIDE SHEATHING AROUND ALL OPENINGS AND ABOVE AND BELOW ALL OPENINGS. PROVIDE
- THE DOUBLE TOP PLATE IS TO BE CONTINUOUS ALONG ALL EXTERIOR WALLS AND AT ALL WALL LINES CONTAINING SHEARWALLS. TYPICAL WALL TOP PLATE SPLICES SHALL BE PER DETAIL 7/S1.2 TYP.

HORIZONTAL STRAPS & NAILING AT OPENINGS PER 8/S1.2

- WHERE COMPOSITE JOISTS AND BEAMS ARE USED AS DRAG STRUTS THE MANUFACTURER SHALL PROVIDE THE FRAMING MEMBERS WITH THE CAPACITY
- TYPICAL FLOOR JOISTS SHALL BE 2x12 HF#2 MIN @ 16" O.C. TYP U.N.O. THE MANUFACTURER SHALL BE RESPONSIBLE FÖR ALL JOIST AND BEAM HANGERS, WEB STIFFENERS, SOLID BLOCKING, AND ADDITIONAL RIM OR JOIST MATERIAL T ACCOMMODATE FLUSH-FRAMED CONDITIONS (F.F.), CANTILEVERED CONDITIONS, CONCENTRATED BEARING LOADS AND NAILING FROM SHEARWALLS ABOVE AND
- 9. F.F. = FLUSH-FRAMED BEAM. VERIFY FLUSH OR DROPPED BEAM CONDITION
- 10. ALL BEAMS PER SCHEDULE U.N.O. ALL NON BEARING BEAMS SHALL BE A MIN OF (2)2x8 U.N.O. ALL OTHER BEAMS ARE AS MARKED ON PLANS.
- 1. AT ALL BEAM BEARING/JAMB LOCATIONS, AT MINIMUM PROVIDE BEARING (TRIMMER) STUDS AND FULL HEIGHT (KING) STUDS PER THE JAMB STUD SCHEDULE FOR EACH BUILDING. IF NO CALLOUT, PROVIDE (1) 2X_ BEARING AND (1) 2X_ FULL HEIGHT STUD MINIMUM.
- 2. EXPOSED FRAMING SHALL BE PRESSURE TREATED (P.T.) VERTICAL & HORIZONTAL FRAMING @ WATERPROOFED WALKWAYS AND PRIVATE DECKS. ALL EXPOSED BEAM HANGERS SHALL BE POST HOT-DIPPED GALVANIZED AND HAVE CONCEALED FLANGES, VERIFY W/ ARCHITECT. SEE NOTE ON SHEET S1.0
- 3. FOR TYPICAL HOLDOWN ASSEMBLIES SEE THE HOLDOWN TABLE ON 2/S1.2 AND DETAILS ON SHEET S3.0.
- 14. SEE ARCHITECTURAL PLANS FOR STAIR FRAMING DETAILS & STAIR FRAMING DETAILS AND NOTES, CONTROL JOINTS IN CONCRETE FLOORING AND ROOF VENTILATION REQUIREMENTS AND DETAILS.
- 5. SEE CIVIL AND ARCHITECTURAL PLANS FOR TOP OF WALL HEIGHTS AND ELEVATIONS. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE DIMENSIONS ARE SHOWN ON THE STRUCTURAL PLANS, CONTRACTOR SHALL VERIFY COMPATIBILITY W/ ARCHITECTURAL PLANS. WHERE DISCREPANCY EXISTS, CONTRACTOR SHALL NOTIFY BOTH THE ENGINEER AND ARCHITECT FOR
- WINDOW SUPPLIER TO VERIFY THAT WINDOW AND WINDOW FRAMES TRANSFER WIND LOADS EVENLY TO STRUCTURAL FRAMING ON ALL 4 SIDES OF WINDOW. PLANE OF ALL WINDOWS AND ALLOW FOR L/240 DEFLECTION (PERPENDICULAR) AT WINDOW MULLIONS.
- 17. SEE GENERAL STRUCTURAL NOTES ON S1.0 TO S1.3 FOR ADDITIONAL INFORMATION



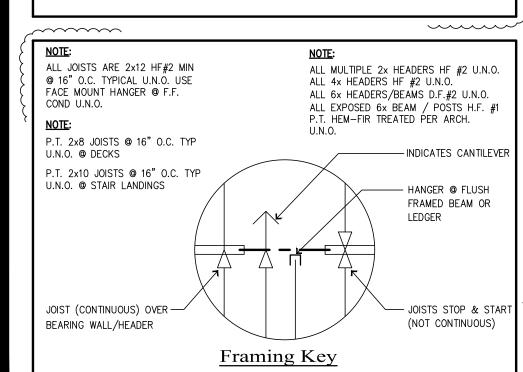
LAYOUT. CONTRACTOR TO COORDINATE JOIST LAYOUT

WITH FIXTURE LOCATIONS TO AVOID PLUMBING &

INDICATES ROOF OVERFRAMING - SEE DETAILS 5/S5.0

FRAMING CONFLICTS.

- 20. PROVIDE WALL FIREBLOCKING @ DROPPED SOFFITS SHOWN ON ARCH. PROVIDE WALL BLOCKING FOR ALL WALL MOUNTED EQUIPMENT (SUCH AS TOWEL
- BARS, GRAB BARS, TOILET PAPER HOLDERS, DOOR STOPS, ETC.). 22. LFA INDICATES - LOAD FROM ABOVE
- 23. FF INDICATES FLUSH FRAMED BEAM
- 24. S/ INDICATES STRAP HOLDOWN, SEE SHEET 2/S1.2 FOR HOLDOWN TABLE & UPPER TO LOWER WALL STRAP/HOLDOWN KEY.
- 25. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FLOOR ELEVATIONS.
- 6. SIMPSON STRONG TIE PRODUCTS ARE CALLED OUT ON THE DRAWINGS. HOWEVER, EITHER SIMPSON OR KC METALS PRODUCTS MAY BE USED PROVIDED IT HAS



SEE SHEET S1.2 FOR SHEARWALL AND HOLDOWN TABLES

11'-0 1/2"

	Beam Schedule				
MARK	BEAM SIZE				
B1	4x8				
B2	4x10				
ВЗ	6x10 DF #2				
B4	3-1/8 x 10-1/2 GLB				
B5	P.T. 4x8				
B6	P.T. 4x10				
В7	P.T. 6x10 HF#1				
B8	P.T. 3-1/8 x 10-1/2 GLB				
В9	P.T. 5-1/8 x 10-1/2 GLB				
B10	5-1/8x10-1/2 GLB OR 5-1/4x11-7/8 PSL				
B11	4x12 OR 3-1/2x11-7/8 LSL				

Jamb Stud Schedule							
TYPE	C1	C2	C3	C4	C5	C6	_
BEARING/FULL HT STUDS	1/2	1/3	2/1	2/2	2/3	2/4	-
JOTE: STUD SIZE SH	OULD MAT	CH WALL	SIZE PER E	PLAN			

Wall Stud Schedule

FRAMING LEVEL	2x6 EXTERIOR	2x6 BRG INT @ SINGLE WALL	2x6 BRG INT @ PARTY WALLS		2x4 BRG @ PARTY WALLS
ROOF	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.
3RD	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.
2ND	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.
BASEMENT	2x6 @ 16" O.C.	2x6 @ 12" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 12" O.C.	2x4 HF#2 @ 16" O.C.
					-

- ALL STUD MATERIAL SHALL BE HEM FIR STUD GRADE OR BETTER UNLESS NOTED OTHERWISE AND PLATE MATERIAL SHALL BE HEM FIR STANDARD OR BETTER UNLESS NOTED OTHERWISE. STUDS CALLED OUT IN THIS SCHEDULE ARE FOR WALL SUPPORTING THE FRAMING LEVEL INDICATED,
- THAT IS WALLS BELOW THE FRAMING LEVEL SHOWN. THIS SCHEDULE COVERS BUILDING UNITS 3 STORIES IN HEIGHT. FIRST, DETERMINE THE NUMBER OF STORIES FOR THE UNIT, SECOND, DETERMINE THE FRAMING LEVEL, THIRD, READ SCHEDULE HORIZONTALLY FOR THE WALL LOCATION.

Foundation Notes

- TYPICAL DIMENSIONS ARE TO FACE OF WALL OR TO CENTERLINE OF COLUMN OR FOOTING. VERIFY ALL DIMENSIONS & ELEVATIONS WITH THE ARCHITECT.
- PROVIDE FOOTING SUBSTRATE PREPARATION PER THE SOILS REPORT. . F-.- INDICATES ISOLATED FOOTING TYPICAL ISOLATED FTG SHALL BE
- EXTEND ALL CONTINUOUS FOOTINGS AT END WALLS 1'-0" MIN. BEYOND END OF ALL BEARING WALLS & SHEARWALLS. (TYPICAL) UNO
- ALL EXTERIOR WALLS SHALL HAVE AN 8" STEMWALL AND A 18" WIDE x 8" DEEP FOOTING W/ STEEL REINFORCING 3" CLR. OF SOIL UNLESS NOTED OTHERWISE
- ADD STRIP DRAINS AT FACE OF BUILDINGS WHEN WALKS SLOPE TOWARD BUILDING, CONNECT TO TIGHTLINE.

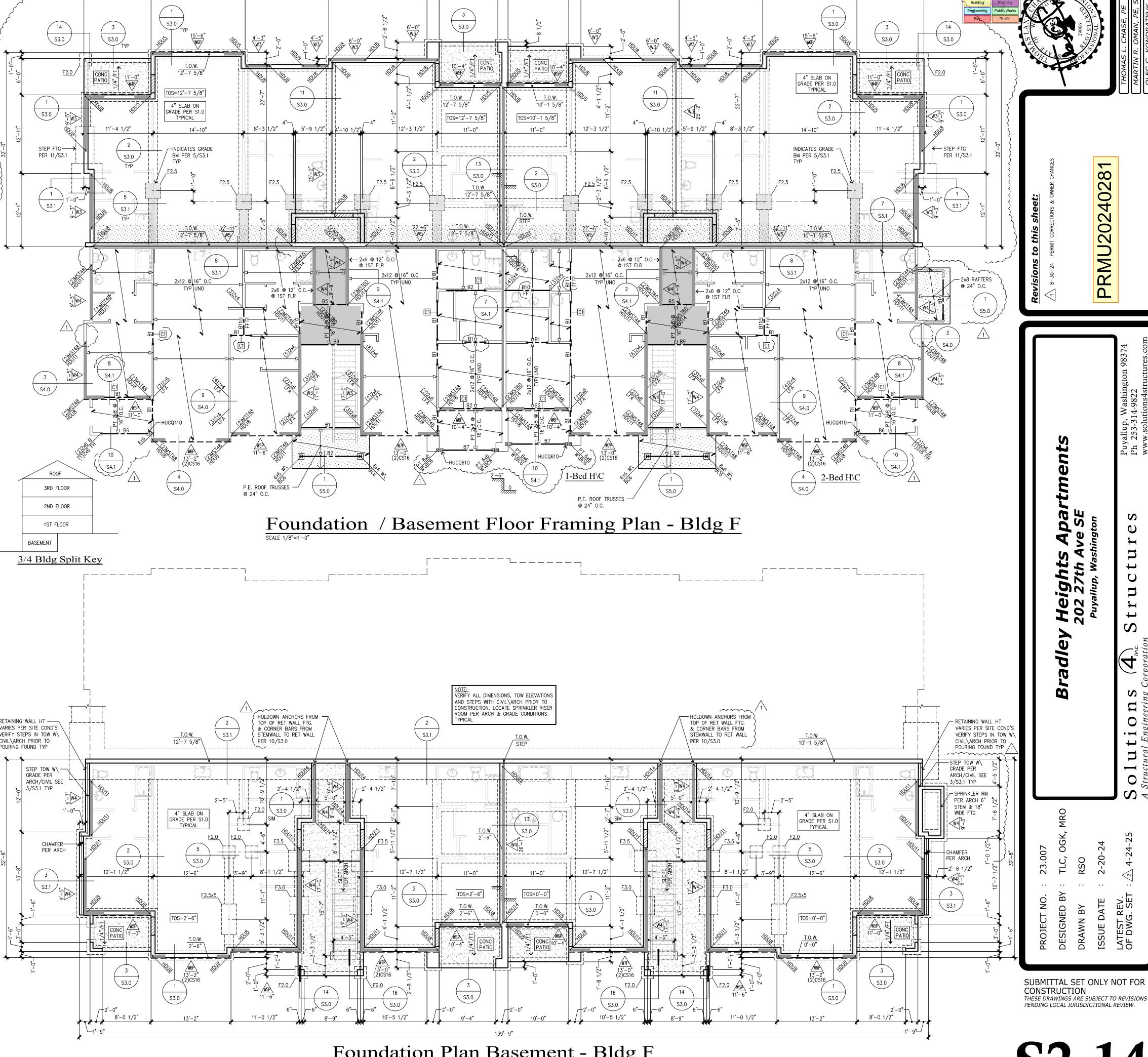
CONSTRUCTED PER FOOTING SCHEDULE 5/S3.0.

- PROVIDE #4-24" x 24" CORNER BARS TO MATCH ALL HORIZONTAL REINFORCEMENT IN STEMWALLS AND FOOTINGS. (TYPICAL)
- FLOOR SLABS 4" CONC. SLAB ON GRADE 6x6 W1.2xW1.2 WWF @ CENTER-LINE OR FIBER MESH PER MANUFACTURER OVER SUBSTRATE PER SOILS ENGINEER, USE WWF WHERE INDICATED. PROVIDE CONTROL JOINTS PER DETAIL 15/S3.0 AT THE DIRECTION OF THE ARCHITECT.
- . ENTRY SLABS 4" CONC. SLAB (BROOM FINISH)
- O. PATIO SLABS 4" CONC. W/ THICKENED EDGES. SLOPE AWAY FROM BUILDING AT 1/4"/FT. SEE 3/S3.0
- . ALL THICKENED SLABS FOR BEARING WALLS AND PARTY WALLS SHALL BE 18" WIDE x 12" DEEP W/ (2) #4 BARS CONTINUOUS UNLESS NOTED OTHERWISE. DEEPEN LOCALLY AT HOLDOWNS TO OBTAIN EMBEDMENT DEPTH +3" MIN.
- 2. ALL THICKENED EDGE SLABS SHALL BE 8" WIDE \times 8" DEEP W/ (1) #4 BAR CONTINUOUS (3" FROM BOTTOM) UNLESS NOTED OTHERWISE. SEE 3/S3.0.
- 13. <u>W-\</u> DENOTES THE SHEARWALL TYPE, SEE THE SHEARWALL TABLE ON SHEET INDICATES SHEARWALL LOCATION, THE CALLOUTS ON THE SHEARWALL TABLE APPLY ONLY ALONG THE LENGTH OF WALL SHOWN SHADED. PROVIDE SOLID BLOCKING IN FLOOR SPACE BELOW PERPENDICULAR SHEARWALLS.
- INDICATES SHEAR WALL TYPE WITH OPENINGS. PROVIDE SHEATHING AROUND ALL OPENINGS AND ABOVE AND BELOW ALL OPENINGS. PROVIDE HORIZONTAL STRAPS & NAILING AT OPENINGS PER 8/S1.2
- INDICATES HOLDOWN, SEE 2/S1.2 FOR HOLDOWN TABLE & UPPER TO LOWER WALL STRAPS HOLDOWN/KEY.
- 15. VERIFY ALL TOP OF SLAB ELEVATIONS AND BUILDING STEPS WITH ARCH/CIVIL PLANS TYPICAL.
- 16. TYPICAL PERIMETER FOOTING SHALL BE LOCATED A MIN. 18" BELOW GRADE OR AS REQUIRED BY LOCAL JURISDICTION. 17. SEE DETAILS FOR TYPICAL STEMWALL/FOOTING & THICKENED
- T.O.F. = TOP OF FOOTING

SLAB CONSTRUCTION.

- T.O.S. = TOP OF SLAB19. SEE THE GENERAL STRUCTURAL NOTES ON SHEET S1.0 FOR ADDITIONAL
- 20. VERIFY WITH CIVIL GRADING PLAN FOR GARAGE SLAB ELEVATION @ GARAGE
- . DEEPEN FOOTINGS AS NECESSARY TO MAINTAIN MINIMUM COVER. COORDINATE WITH CIVIL GRADING PLAN FOR GRADE CONDITIONS.
- 22. INDICATES DEPRESSED TOP OF STEMWALL AT DOORWAY. POUR SLAB OVER SEE 4/S3.0.
- 23. ALL INTERSECTING FOOTINGS / STEM WALLS SHALL HAVE CORNER BARS TO MATCH HORIZ REINFORCEMENT SEE 10/S3.0

	Continuous Wall Footing Schedule						
ſ			REINFO	RCMENT			
L	"W"	"D"	LONGITUDINAL	TRANSVERSE			
	1'-6"	12"	(2)-#4 BOT	-			
	2'-0"	12"	(3)-#4 BOT	-			
, [3'-0"	14"	(3)-#5 BOT	#4 @ 18" O.C. BOT			



Foundation Plan Basement - Bldg F

Solutions 4 Structures A Structural Engineering Corporation

11'-0 1/2"

- FOR ALL UNITS TYPES SEE WALL STUD SCHEDULE FOR BEARING WALL STUD REQUIREMENTS. ALL OTHER NON-BEARING 2x4 & 2x6 WALLS ARE AT 16" O.C.
- THE TRUSS AND JOIST MANUFACTURER SHALL VERIFY BEARING COMPATIBILITY (CRUSHING) WITH THE PLATE MATERIAL. TYPICALLY, COMPOSITE BEAMS SHALL BE FULLY BEARING ON 2x_ WALLS. I.E. BREAK RIM OR BLOCKING TO ALLOW FULL BEARING OVER PLATES.
- PLACE LONG DIRECTION OF ALL OSB SHEETS PERPENDICULAR TO TRUSS/RAFTER OR JOIST DIRECTION, SEE DETAIL 3/S1.2. FLOOR SHEATHING IS TO BE CONTINUOUS FROM UNIT TO UNIT. TYPICAL NAILING AT FLOOR AND ROOF DIAPHRAGMS IS PROVIDED IN THE GENERAL STRUCTURAL NOTES ON SHEETS \$1.0
- W-\DENOTES THE SHEARWALL TYPE, SEE THE SHEARWALL TABLE ON SHEET INDICATES SHEARWALL LOCATION, THE CALLOUTS ON THE SHEARWALL TABLE APPLY ONLY ALONG THE LENGTH OF WALL SHOWN SHADED. PROVIDE SOLID BLOCKING IN FLOOR SPACE BELOW PERPENDICULAR SHEARWALLS.
- W_P INDICATES SHEAR WALL TYPE WITH OPENINGS. PROVIDE SHEATHING AROUND ALL OPENINGS AND ABOVE AND BELOW ALL OPENINGS. PROVIDE HORIZONTAL STRAPS & NAILING AT OPENINGS PER 8/S1.2
- THE DOUBLE TOP PLATE IS TO BE CONTINUOUS ALONG ALL EXTERIOR WALLS AND AT ALL WALL LINES CONTAINING SHEARWALLS. TYPICAL WALL TOP PLATE SPLICES SHALL BE PER DETAIL 7/S1.2 TYP.
- WHERE COMPOSITE JOISTS AND BEAMS ARE USED AS DRAG STRUTS THE MANUFACTURER SHALL PROVIDE THE FRAMING MEMBERS WITH THE CAPACITY CALLED OUT ON THE PLANS.
- TYPICAL FLOOR JOISTS SHALL BE 2x12 HF#2 MIN @ 16" O.C. TYP U.N.O. THE MANUFACTURER SHALL BE RESPONSIBLE FÖR ALL JOIST AND BEAM HANGERS, WEB STIFFENERS, SOLID BLOCKING, AND ADDITIONAL RIM OR JOIST MATERIAL TO ACCOMMODATE FLUSH-FRAMED CONDITIONS (F.F.), CANTILEVERED CONDITIONS, CONCENTRATED BEARING LOADS AND NAILING FROM SHEARWALLS ABOVE AND
- 9. F.F. = FLUSH-FRAMED BEAM. VERIFY FLUSH OR DROPPED BEAM CONDITION
- 10. ALL BEAMS PER SCHEDULE U.N.O. ALL NON BEARING BEAMS SHALL BE A MIN OF (2)2x8 U.N.O. ALL OTHER BEAMS ARE AS MARKED ON PLANS.
- 1. AT ALL BEAM BEARING/JAMB LOCATIONS, AT MINIMUM PROVIDE BEARING (TRIMMER) STUDS AND FULL HEIGHT (KING) STUDS PER THE JAMB STUD SCHEDULE FOR EACH BUILDING. IF NO CALLOUT, PROVIDE (1) 2X_ BEARING AND (1) 2X_ FULL HEIGHT STUD MINIMUM.
- 2. EXPOSED FRAMING SHALL BE PRESSURE TREATED (P.T.) VERTICAL & HORIZONTAL FRAMING @ WATERPROOFED WALKWAYS AND PRIVATE DECKS. ALL EXPOSED BEAM HANGERS SHALL BE POST HOT-DIPPED GALVANIZED AND HAVE CONCEALED FLANGES, VERIFY W/ ARCHITECT. SEE NOTE ON SHEET S1.0
- 3. FOR TYPICAL HOLDOWN ASSEMBLIES SEE THE HOLDOWN TABLE ON 2/S1.2 AND DETAILS ON SHEET S3.0.
- 14. SEE ARCHITECTURAL PLANS FOR STAIR FRAMING DETAILS & STAIR FRAMING DETAILS AND NOTES, CONTROL JOINTS IN CONCRETE FLOORING AND ROOF VENTILATION REQUIREMENTS AND DETAILS.
- 15. SEE CIVIL AND ARCHITECTURAL PLANS FOR TOP OF WALL HEIGHTS AND ELEVATIONS. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE DIMENSIONS ARE SHOWN ON THE STRUCTURAL PLANS, CONTRACTOR SHALL VERIFY COMPATIBILITY W/ ARCHITECTURAL PLANS. WHERE DISCREPANCY EXISTS, CONTRACTOR SHALL NOTIFY BOTH THE ENGINEER AND ARCHITECT FOR
- 6. WINDOW SUPPLIER TO VERIFY THAT WINDOW AND WINDOW FRAMES TRANSFER WIND LOADS EVENLY TO STRUCTURAL FRAMING ON ALL 4 SIDES OF WINDOW. PLANE OF ALL WINDOWS AND ALLOW FOR L/240 DEFLECTION (PERPENDICULAR) AT WINDOW MULLIONS.
- 17. SEE GENERAL STRUCTURAL NOTES ON S1.0 TO S1.3 FOR ADDITIONAL INFORMATION

18. LEGEND: ---- INDICATES BEAM / GIRDER TRUSS PER PLAN SEE FRAMING PLANS INDICATES HANGER PER MANUFACTURER INDICATES GIRDER TRUSS PER PLAN INDICATES JOIST / TRUSS BEARING @ WALL / BEAM INDICATES JOIST / TRUSS INTERMEDIATE BEARING @ WALL / BEAM

INDICATES TYPICAL TOILET, BATHTUB & SHOWER LAYOUT. CONTRACTOR TO COORDINATE JOIST LAYOUT WITH FIXTURE LOCATIONS TO AVOID PLUMBING & FRAMING CONFLICTS.

INDICATES ROOF OVERFRAMING - SEE DETAILS 5/S5.0

D. PROVIDE WALL FIREBLOCKING @ DROPPED SOFFITS SHOWN ON ARCH.

- PROVIDE WALL BLOCKING FOR ALL WALL MOUNTED EQUIPMENT (SUCH AS TOWEL BARS, GRAB BARS, TOILET PAPER HOLDERS, DOOR STOPS, ETC.).
- 22. LFA INDICATES LOAD FROM ABOVE
- 23. FF INDICATES FLUSH FRAMED BEAM
- 24. S// INDICATES STRAP HOLDOWN, SEE SHEET 2/S1.2 FOR HOLDOWN TABLE & UPPER TO LOWER WALL STRAP/HOLDOWN KEY.
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FLOOR ELEVATIONS.
- 6. SIMPSON STRONG TIE PRODUCTS ARE CALLED OUT ON THE DRAWINGS. HOWEVER, EITHER SIMPSON OR KC METALS PRODUCTS MAY BE USED PROVIDED IT HAS SAME OR GREATER CAPACITY.

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	NOTE: ALL JOISTS ARE 2x12 HF#2 MIN @ 16" O.C. TYPICAL U.N.O. USE FACE MOUNT HANGER @ F.F. COND U.N.O. NOTE: P.T. 2x8 JOISTS @ 16" O.C. TYP U.N.O. @ DECKS P.T. 2x10 JOISTS @ 16" O.C. TYP U.N.O. @ STAIR LANDINGS	NOTE: ALL MULTIPLE 2× HEADERS HF #2 U.N.O. ALL 4× HEADERS HF #2 U.N.O. ALL 6× HEADERS/BEAMS D.F.#2 U.N.O. ALL EXPOSED 6× BEAM / POSTS H.F. #1 P.T. HEM—FIR TREATED PER ARCH. U.N.O. INDICATES CANTILEVER HANGER @ FLUSH FRAMED BEAM OR LEDGER
	JOIST (CONTINUOUS) OVER————————————————————————————————————	JOISTS STOP & START (NOT CONTINUOUS)
	Framing	g Key

SEE SHEET S1.2 FOR SHEARWALL AND HOLDOWN TABLES

	Beam Schedule					
MARK	BEAM SIZE					
B1	4x8					
B2	4x10					
В3	6x10 DF #2					
B4	3-1/8 x 10-1/2 GLB					
B5	P.T. 4x8					
В6	P.T. 4x10					
В7	P.T. 6x10 HF#1					
B8	P.T. 3-1/8 x 10-1/2 GLB					
В9	P.T. 5-1/8 x 10-1/2 GLB					
B10	5-1/8x10-1/2 GLB OR 5-1/4x11-7/8 PSL					
B11	4x12 OR 3-1/2x11-7/8 LSL					

Jamb Stud Schedule								
TYPE	C1	C2	С3	C4	C5	C6	-	-
BEARING/FULL HT STUDS	1/2	1/3	2/1	2/2	2/3	2/4	_	_
NOTE: STUD SIZE SH	HOULD MAT	CH WALL S	SIZE PER F	PLAN.				

	Wall Stud Schedule						
FRAMING LEVEL	2x6 EXTERIOR	2x6 BRG INT @ SINGLE WALL		2x4 BRG © Single W all	2x4 BRG @ PARTY WALLS		
ROOF	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.		
3RD	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.		
2ND	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" O.C.		
BASEMENT	2x6 @ 16" O.C.	2x6 @ 12" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 12" O.C.	2x4 HF#2 @ 16" O.C.		

HORIZONTALLY FOR THE WALL LOCATION.

ALL STUD MATERIAL SHALL BE HEM FIR STUD GRADE OR BETTER UNLESS NOTED OTHERWISE AND PLATE MATERIAL SHALL BE HEM FIR STANDARD OR BETTER UNLESS NOTED OTHERWISE. THAT IS WALLS BELOW THE FRAMING LEVEL SHOWN. THIS SCHEDULE COVERS BUILDING UNITS 3 STORIES IN HEIGHT. FIRST, DETERMINE THE NUMBER OF

STORIES FOR THE UNIT, SECOND, DETERMINE THE FRAMING LEVEL, THIRD, READ SCHEDULE

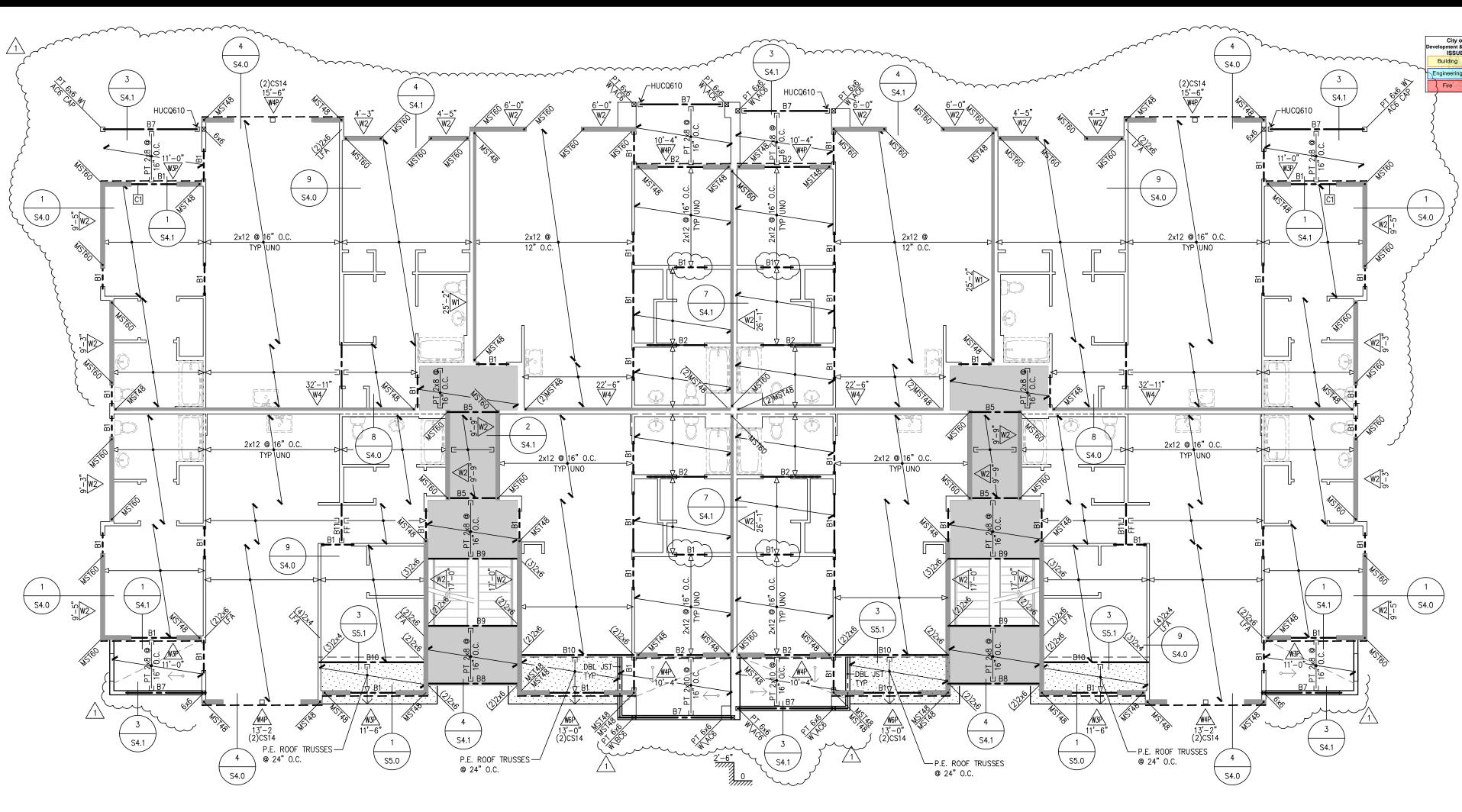
ROOF 3RD FLOOR

3/4 Bldg Split Key

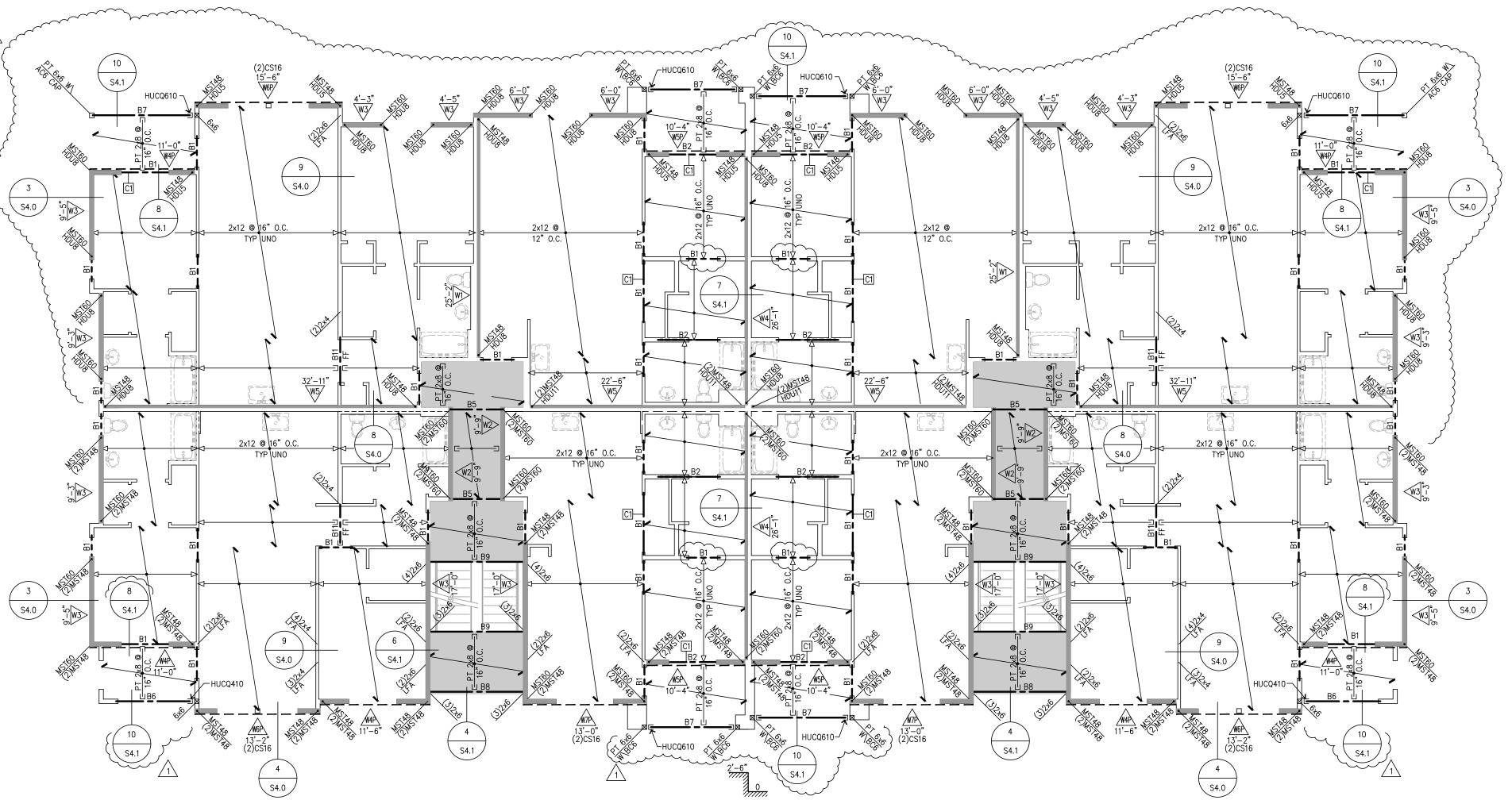
BASEMENT

2ND FLOOR

1ST FLOOR



3rd Floor Framing Plan - Bldg F



2nd Floor Framing Plan - Bldg F

S2.15

CONSTRUCTION

SUBMITTAL SET ONLY NOT FOR

THESE DRAWINGS ARE SUBJECT TO REVISIONS PENDING LOCAL JURISDICTIONAL REVIEW.

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2. FOR ALL UNITS TYPES SEE WALL STUD SCHEDULE FOR BEARING WALL STUD REQUIREMENTS. ALL OTHER NON-BEARING 2x4 & 2x6 WALLS ARE AT 16" O.C.

MEMBER LAYOUT FOR SHOP DRAWINGS AND QUANTITY TAKEOFFS.

- THE TRUSS AND JOIST MANUFACTURER SHALL VERIFY BEARING COMPATIBILITY (CRUSHING) WITH THE PLATE MATERIAL. TYPICALLY, COMPOSITE BEAMS SHALL BE FULLY BEARING ON 2x_ WALLS. I.E. BREAK RIM OR BLOCKING TO ALLOW FULL BEARING OVER PLATES.
- 4. PLACE LONG DIRECTION OF ALL OSB SHEETS PERPENDICULAR TO TRUSS/RAFTER OR JOIST DIRECTION, SEE DETAIL 3/S1.2. FLOOR SHEATHING IS TO BE CONTINUOUS FROM UNIT TO UNIT. TYPICAL NAILING AT FLOOR AND ROOF DIAPHRAGMS IS PROVIDED IN THE GENERAL STRUCTURAL NOTES ON SHEETS S1.0.
- 5. ______DENOTES THE SHEARWALL TYPE, SEE THE SHEARWALL TABLE ON SHEET S1.2 ______ INDICATES SHEARWALL LOCATION, THE CALLOUTS ON THE SHEARWALL TABLE APPLY ONLY ALONG THE LENGTH OF WALL SHOWN SHADED. PROVIDE SOLID BLOCKING IN FLOOR SPACE BELOW PERPENDICULAR SHEARWALLS. ______ INDICATES SHEAR WALL TYPE WITH OPENINGS. PROVIDE SHEATHING
- HORIZONTAL STRAPS & NAILING AT OPENINGS PER 8/S1.2

 THE DOUBLE TOP PLATE IS TO BE CONTINUOUS ALONG ALL EXTERIOR WALLS AND AT ALL WALL LINES CONTAINING SHEARWALLS. TYPICAL WALL TOP PLATE

AROUND ALL OPENINGS AND ABOVE AND BELOW ALL OPENINGS. PROVIDE

7. WHERE COMPOSITE JOISTS AND BEAMS ARE USED AS DRAG STRUTS THE MANUFACTURER SHALL PROVIDE THE FRAMING MEMBERS WITH THE CAPACITY CALLED OUT ON THE PLANS.

SPLICES SHALL BE PER DETAIL 7/S1.2 TYP.

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- 17. SEE GENERAL STRUCTURAL NOTES ON S1.0 TO S1.3 FOR ADDITIONAL INFORMATION

	INDICATES BEAM / GIRDER TRUSS PER PLAN SEE FRAMING PLANS
<u> </u>	INDICATES HANGER PER MANUFACTURER
GT	INDICATES GIRDER TRUSS PER PLAN
 	INDICATES JOIST / TRUSS BEARING @ WALL / BEAM
	INDICATES JOIST / TRUSS INTERMEDIATE BEARING WALL / BEAM
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19. INDICATES ROOF OVERFRAMING — SEE DETAILS 5/S5.0

FRAMING CONFLICTS.

- 20. PROVIDE WALL FIREBLOCKING @ DROPPED SOFFITS SHOWN ON ARCH.
- 21. PROVIDE WALL BLOCKING FOR ALL WALL MOUNTED EQUIPMENT (SUCH AS TOWEL BARS, GRAB BARS, TOILET PAPER HOLDERS, DOOR STOPS, ETC.).
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B11	4x12 OR 3-1/2x11-7/8 LSL				

Jamb Stud Schedule								
TYPE	C1	C2	C3	C4	C5	C6	_	_
BEARING/FULL HT STUDS	1/2	1/3	2/1	2/2	2/3	2/4	_	_
NOTE: STILL SIZE SHOULD MATCH WALL SIZE DED DLAN								

NOTE:	STUD	SIZE	SHOULD	MATCH	WALL	SIZE	PER	PLAN.	

Wall Stud Schedule								
FRAMING LEVEL	2x6 EXTERIOR	2x6 BRG INT @ SINGLE WALL	2x6 BRG INT @ PARTY WALLS	2x4 BRG <b>©</b> Single Wall	2x4 BRG @ PARTY WALLS			
ROOF	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" 0.0			
3RD	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" 0.0			
2ND	2x6 @ 16" O.C.	2x6 @ 16" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 16" O.C.	2x4 HF#2 @ 16" 0.0			
BASEMENT	2x6 @ 16" O.C.	2x6 @ 12" O.C.	2x6 @ 16" O.C.	(2)2x4 HF#2 @ 12" O.C.	2x4 HF#2 @ 16" 0.0			

#### OTES:

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  PLATE MATERIAL SHALL BE HEM FIR STANDARD OR BETTER UNLESS NOTED OTHERWISE.
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- THAT IS WALLS BELOW THE FRAMING LEVEL SHOWN.

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City of Puyallup
Development & Permitting Services
| ISSUED PERMIT
| Building | Planning
| Engineering | Public Works
| Fire | Traffic |
| Traffic | Traffic | Traffic |
| Traffic | Traff

**Sions to this sheet:**-30-24 PERMIT CORRECTIONS & OWNER CHANGES

PRMIIOORECTIONS & OV

Puvallup Washington 98372

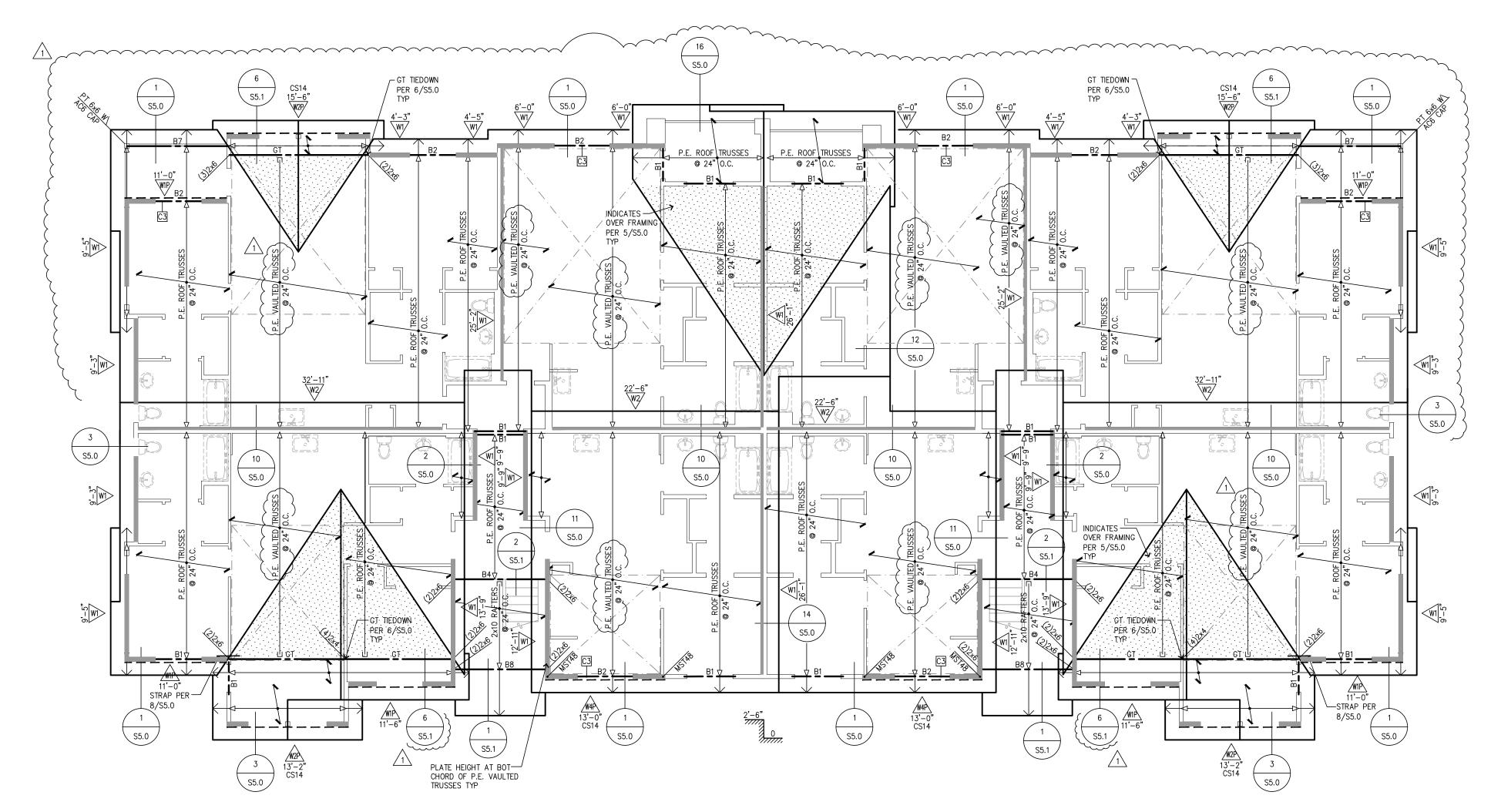
Puyallup, Washington

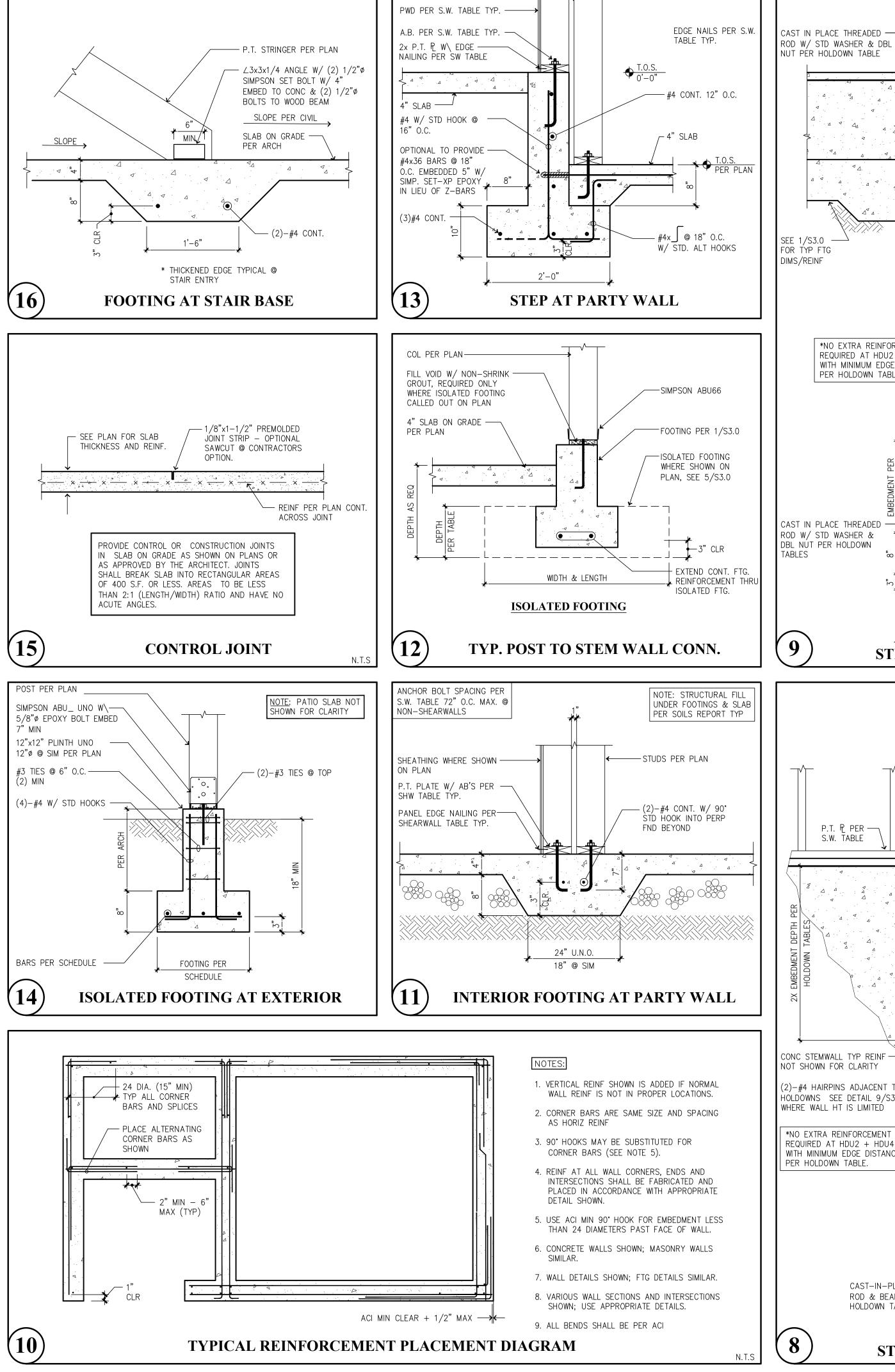
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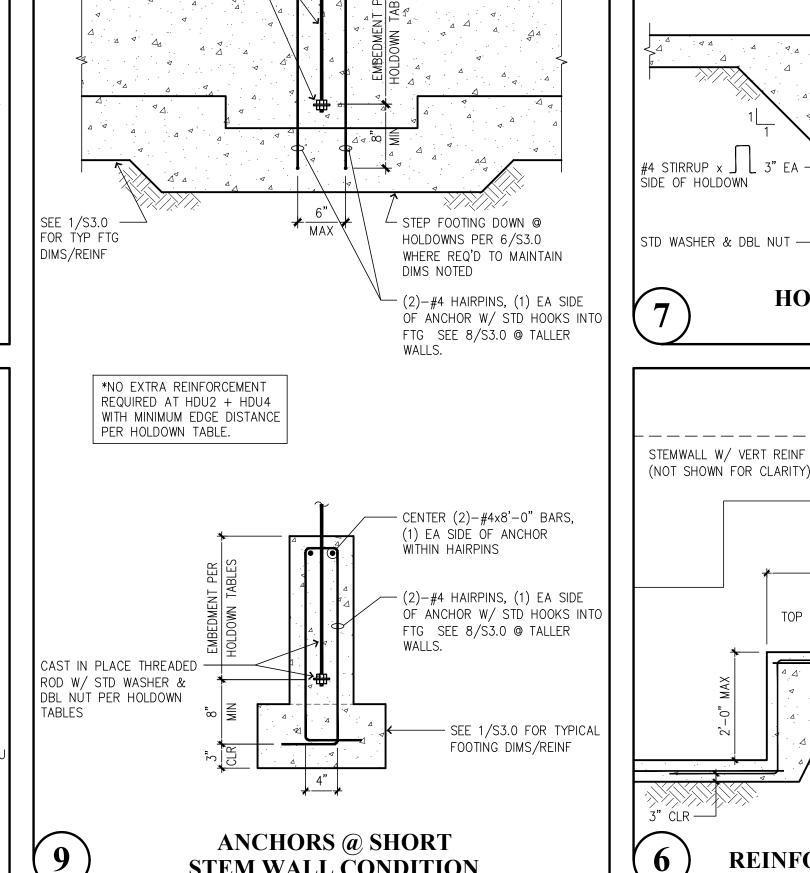
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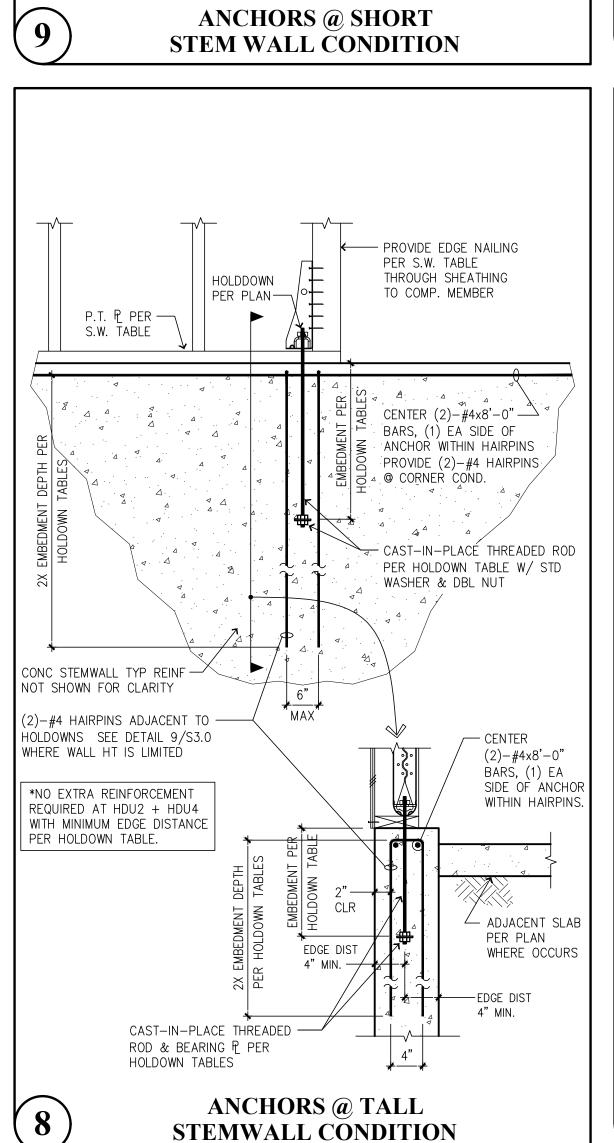
SUBMITTAL SET ONLY NOT FOR CONSTRUCTION
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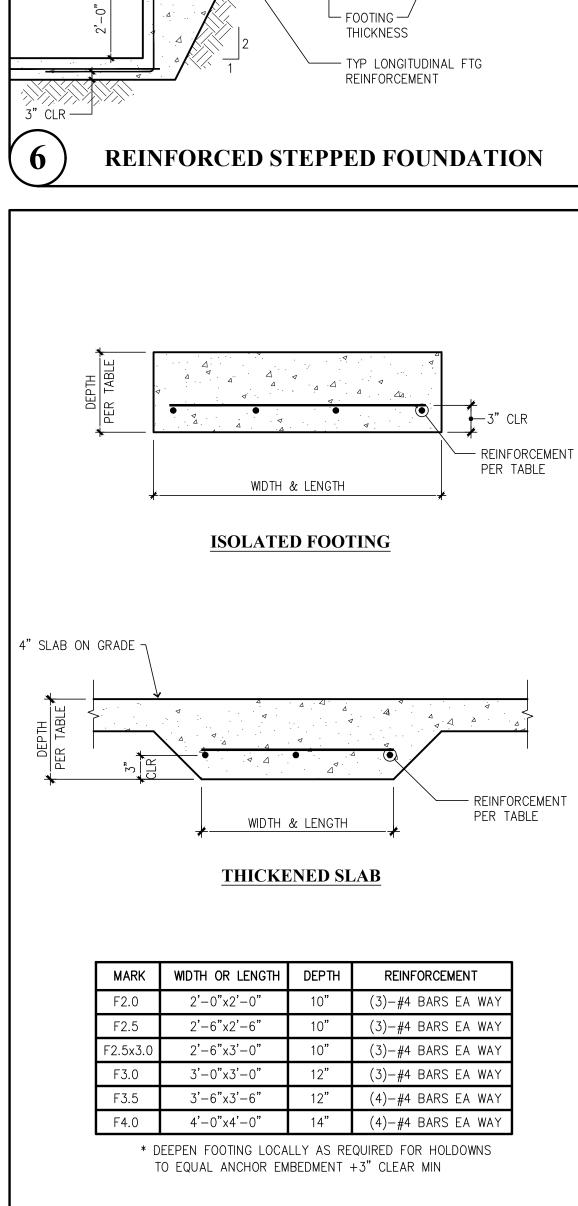
S2.16











STUDS PER PLAN ----

OSB/PWD PER S.W. TABLE -

EDGE NAILS PER S.W. TABLE -

CENTER (2)-#4x8'-0" BARS,-

STEMWALL W/ VERT REINF PER DETAILS —

(NOT SHOWN FOR CLARITY)

I) EA SIDE OF ANCHOR

WITHIN HAIRPINS

— CENTER (2)—#4x8'—0"

BARS, (1) EA SIDE OF

ANCHOR WITHIN HAIRPINS

----- HOLDOWN PER TABLE

P.T. 2x P PER S.W. TABLE

PER HOLDOWN TABLES

DEEPEN FOOTINGS

MATCH WIDTH OF

SHEARWALL FOOTING

4'-0" MIN

TOP OF FOOTING -

**HOLDOWNS** @ THICKENED

**SLAB FOOTINGS** 

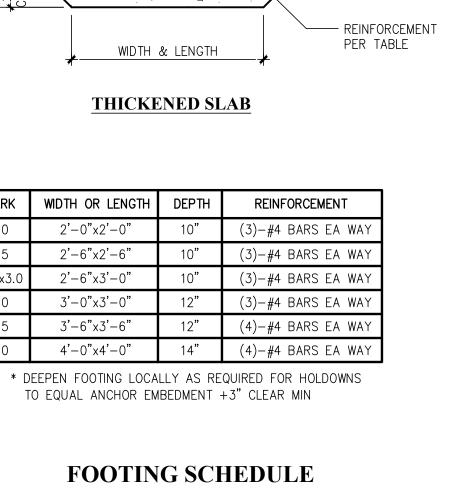
LOCALLY TO PROVIDE

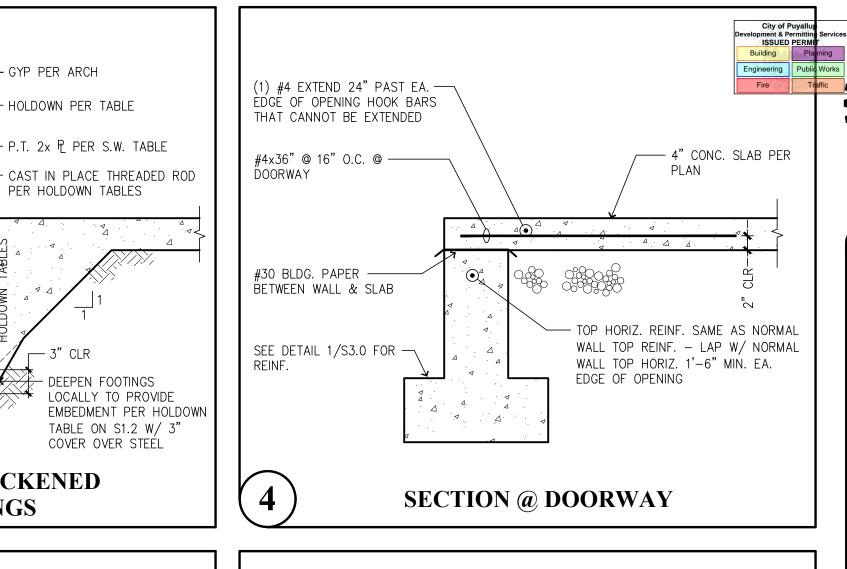
COVER OVER STEEL

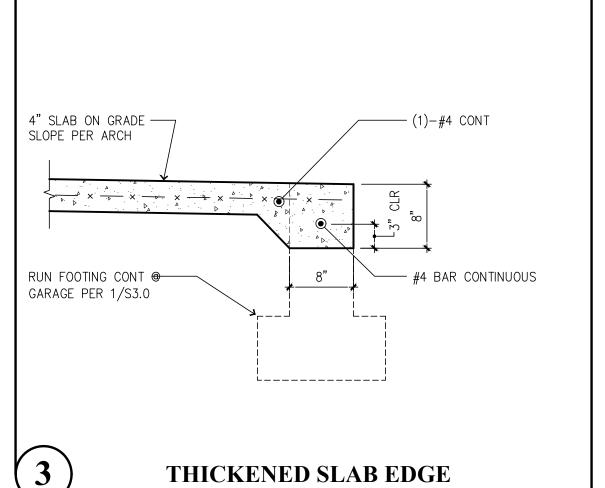
24" LAP

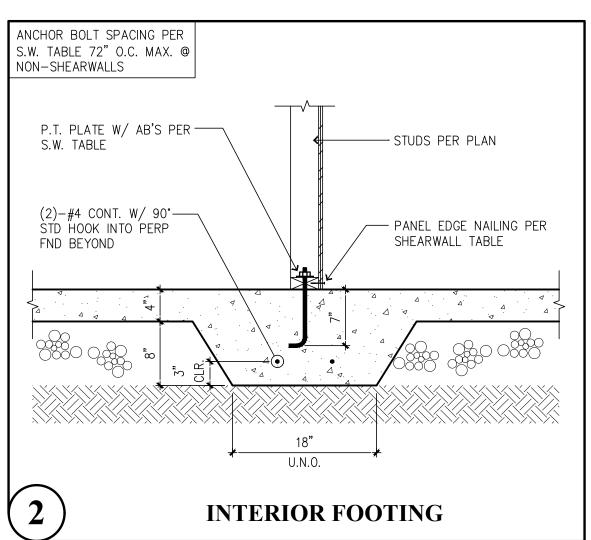
TYP @ STEP

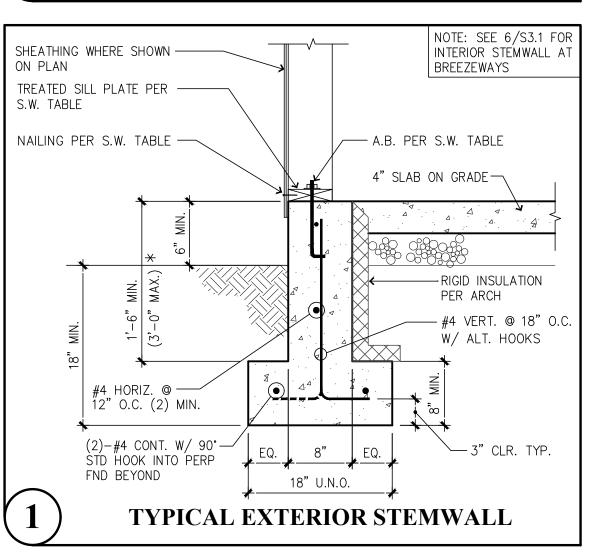
UNDISTURBE











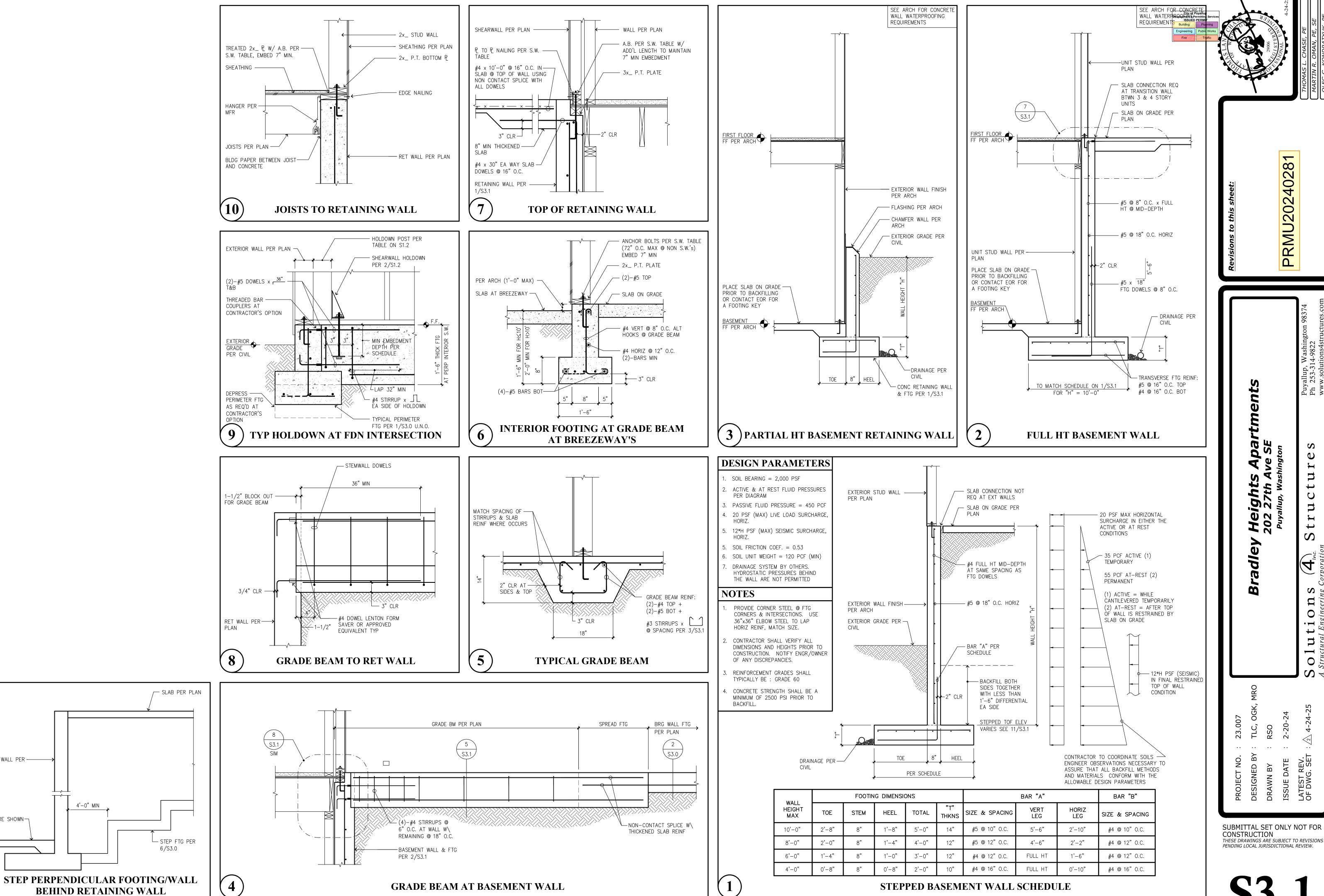


RSO

 $\overline{\phantom{a}}$ 

Heights
202 27th Av

Solutions (4). Structures A Structural Engineering Corporation



Solutions 4. Structures A Structural Engineering Corporation

RETAINING WALL PER ---

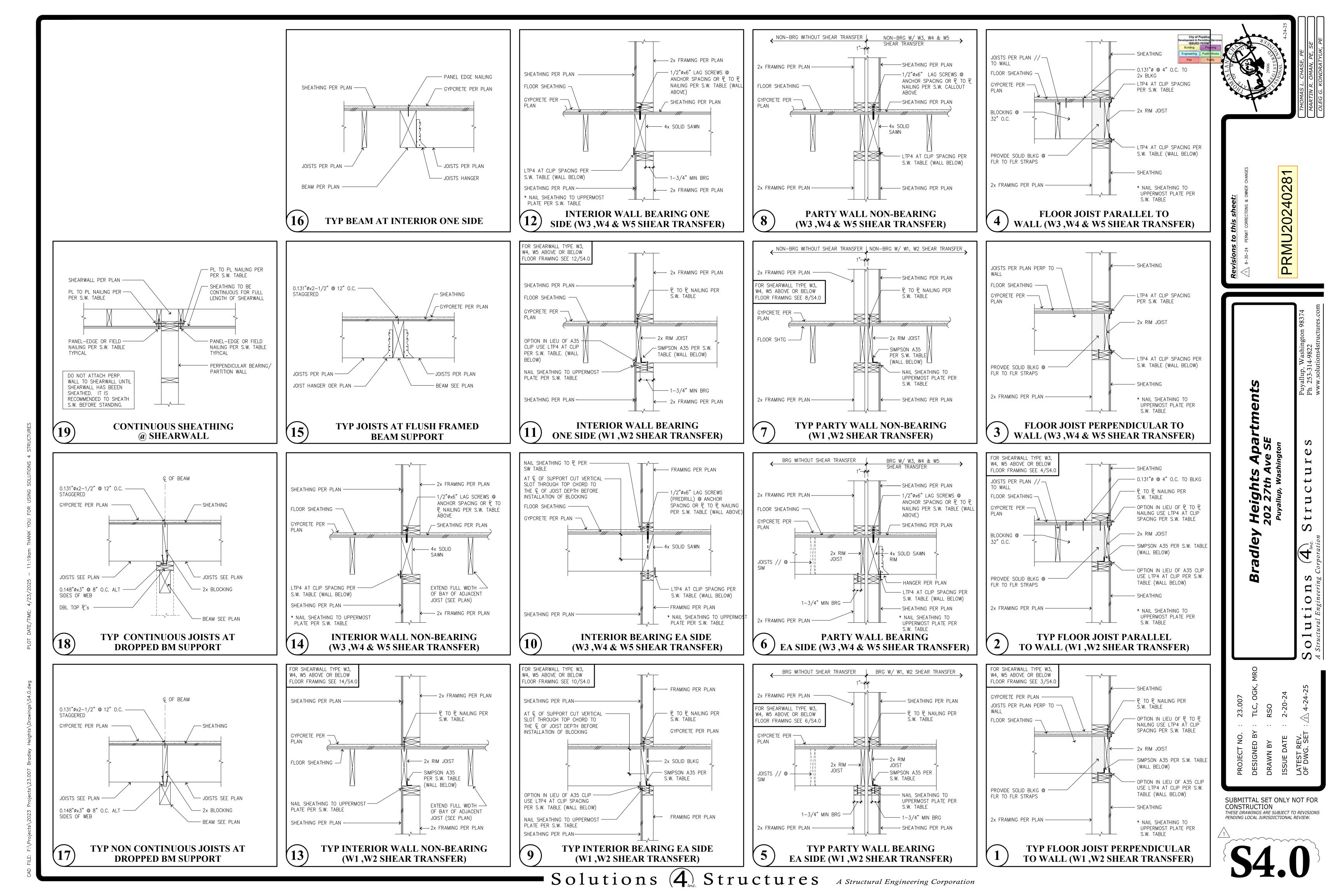
SLAB WHERE SHOWN -

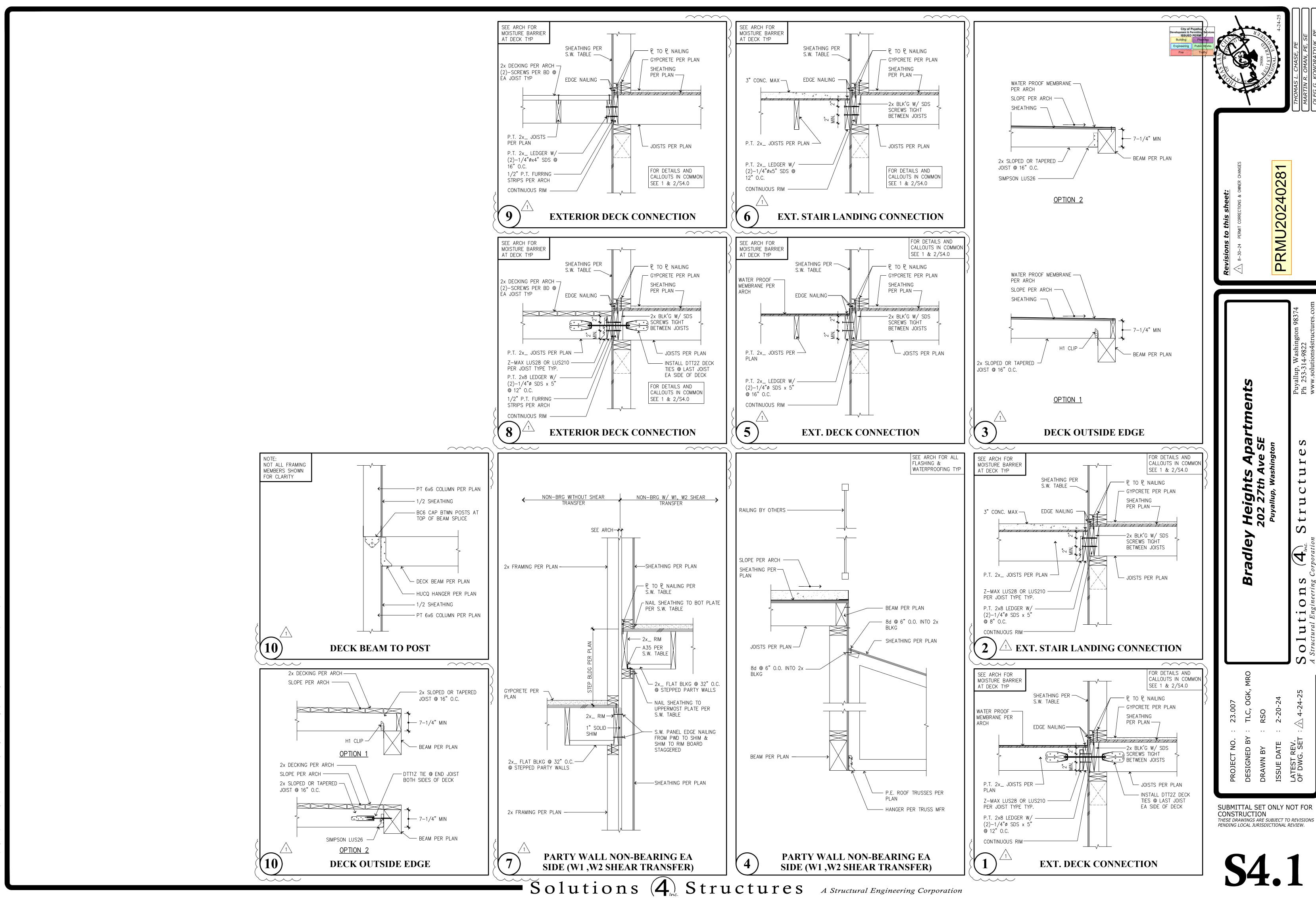
ON PLAN

4'-0" MIN

01

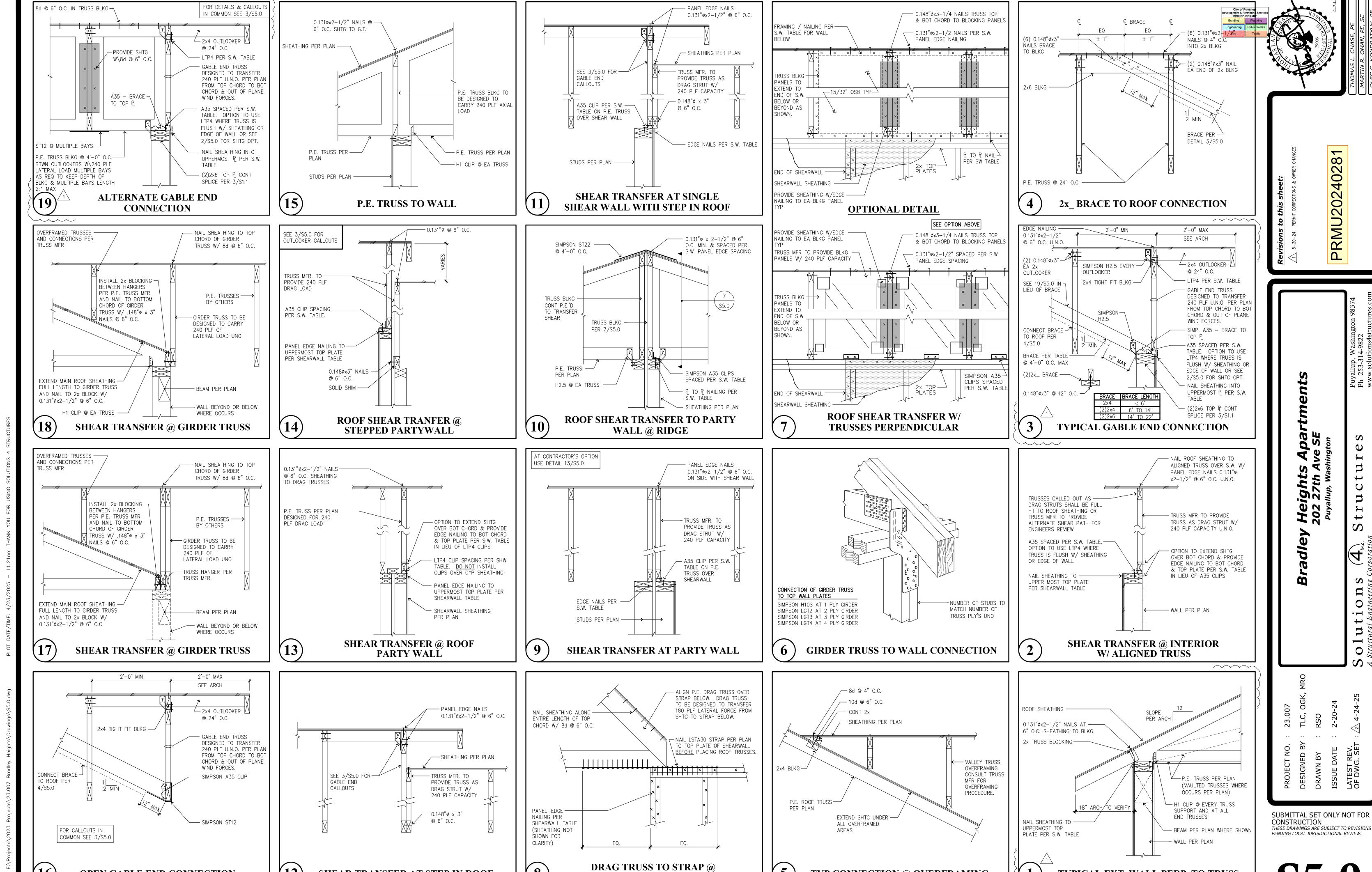
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01

MU20240281



SHEARWALL TOP PLATE

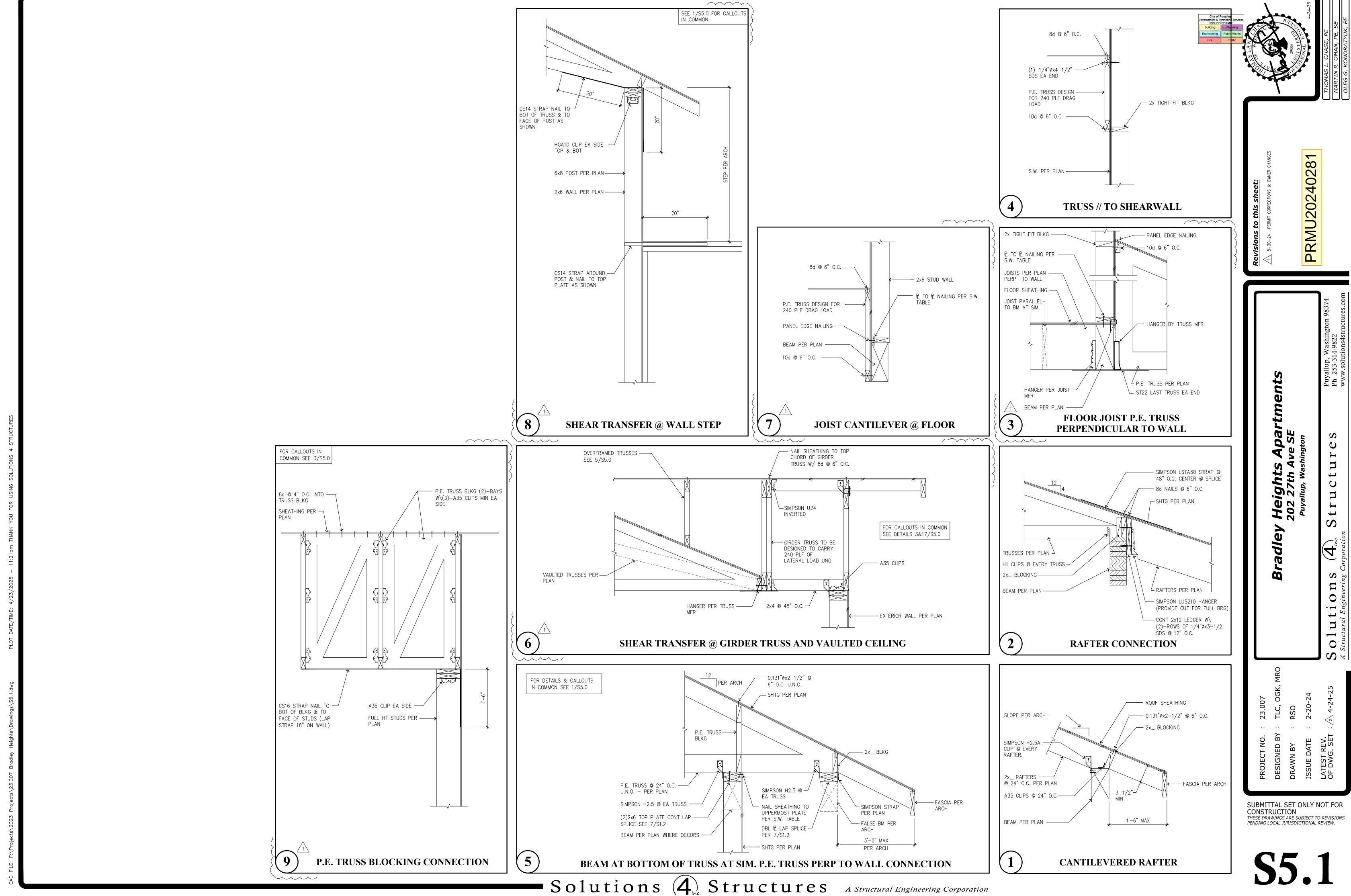
TYP CONNECTION @ OVERFRAMING

- Solutions (4) Structures A Structural Engineering Corporation

**OPEN GABLE END CONNECTION** 

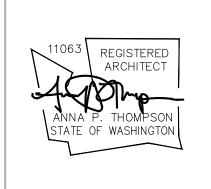
SHEAR TRANSFER AT STEP IN ROOF

TYPICAL EXT. WALL PERP. TO TRUSS





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**Bradley** Heights **Apartments** 

Timberlane **Partners** 

/1 8-30-24 Owner Changes/ Permit Corrections

FIN.#2: %" TYPE 'X' GWB O/ SHEAR PANEL OVER 2x4 STUDS AT 16" O.C. TYP. EACH SIDE OF DOUBLE 2x4 WALL ON SEPARATE PLATES W/ 1" AIR SPACE At shear walls, increase fastener length by the thickness of the shear panel PROVIDE HORIZONTAL FIREBLOCKING AT 10'-0" MAX. O.C. USING FIBERGLASS INSUL. FIRMLY ATTACHED  $-3\frac{1}{2}$ " insulation both sides (NO INSULATION AT SIMILAR COND.) CONTINUE EITHER FIN.#1 OR FIN.#2 TO THE NEAREST CORNER BEFORE

TRANSITION

Drawn By: 23-06

Job No.: APT/HDM Sheet No.:

1" GYPCRETE (1 1/4" GYPCRETE AT CARPET) OVER 1 HR. UL L514 SYSTEM 9 1/4" SOUND MAT OVER 15/32" MIN. PLYWOOD SUBFLOOR OVER Finish Flooring - Floor Topping Mixture* - Min. 3/4 in. thickness of floor topping mixture having 2X12 AT 16" O.C. -

SECTION

CORRIDOR CEILING

MUST MEET CLASS

C FLAME SPREAD

INSULATION

Sub-flooring - 15/32 in thick plywood min grade "C-D" of Sheathing. Face grain of plywood 3½" THICK GLASS FIBER INSULATION 5/8" TYPE 'X' GWB perpendicular to resilient channels and the side edges of the board located between joists. SOUND TEST USED GENERIC CUSHIONED OVER 1/2" RESILIENT Fastened to resilient channels with 1 in. long Type S bugle head screws spaced 8 in. OC. VINYL AND CARPET W/ PAD CHANNELS AT 24" OC ALTERNATIVES TO THE SPEC'D MANUFACTURES BELOW ALLOWED. SOUND 60 STC R-TL 81-16 7. Finish System - Vinyl, dry or premixed joint compound, applied in two coats to joints and CARPET & PAD - ASCEND BY DWELLINGS

55 IIC R-IN 81-1 CUSHIONED VINYL 56 IIC R-IN 81-6 CARPET & PAD*

MOHAWK VESSEL PAD VINYL PLANK - CYRUS BY MSI

**SECTION** 

VINYL PLANK

*TEST WAS DONE WITHOUT GLASS FIBER INSULATION. ADDITION WILL INCREASE THE IIC VALUE.

TYPICAL FLOOR

3/4" PLYWOOD SUB FLOOR —

GWB OVER 1/2"

CHANNELS AT

RESILIENT

24" OC —

3/4" PLYWOOD FINISH FLOOR O/

1/4" ISO-STEP FLOOR UNDERLAYMENT O/

a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions

Alternate Floor Mat Material* - (Optional) Floor mat material nominal 2-9.5 mm thick loose

Vapor Barrier - (Optional) Commercial asphalt saturated felt 0.030 in. thick.

laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

5. Resilient Channels - Formed of 25 MSG galv steel, spaced 24 in. OC

End joints of wallboard similarly fastened to additional pieces of resilient

distance from sides and 1/2 in. min from ends of wallboard sheets.

Formulated Materials LLC - Types M1, M2, M3, Elite, Duo, R1 and R2

6B. Gypsum Board* - Nom.5%" in. thick, 4 ft wide, installed with long dimension

perpendicular to joists. Channels overlapped at splices 4 in. and fastened to each

channel to extend a min of 3 in. beyond ends of butt joint. Screw located 3/4 in min

screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all

joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire

Formulated Materials LLC - Types FR-25, FR-30 and SiteMix

2. Wood Joists - Min. 2 by 10, spaced 16 in. OC, firestopped

3. Cross Bridging - 1 by 3 in. or min. 2x10 solid blocking

joist with 1 1/4 in. long furring channel screw.

accompanying the material for specific mix design.

to be perpendicular to joists with joints staggered.

surface of gypsum board.

**SECTION** 

VENTED FIBER CEMENT SOFFIT O/ FURR STRIPS

SECTIONS 705.2.2 & 705.2.3 WHERE

SPRINKLER PROTECTION EXTENDS TO THE

AT DECK/CORRIDOR

SPACE DECKING -P.T. FRAMING PER STRUCTURAL SPACE DECKING -

WATERPROOF MEMBRANE (60 MIL

VINYL DECK MEMBRANE, GRAY

DURADECK OR SIMILAR) OVER

1/2" & 3/4" EXT. GRADE PLYWOOD —

FRAMING PER

STRUCTURAL —

_____

- VENTED FIBER

**CEMENT SOFFIT** 

- (2) LAYERS %" TYPE 'X' GWB ATTACHED TO UNDERSIDE OF MANUFACTURED ROOF TRUSSES ALLOWED TO BE NON-RATED PER IBC

1-HR GA File No. RC 2602

with  $1\frac{1}{4}$ " Type W or S drywall screws 24" o.c. **Face** layer  $\frac{5}{8}$ " type X gypsum wallboard or gypsum veneer base applied at right angles to trusses with  $\frac{1}{8}$ " Type W or S drywall screws 12" o.c. at

joints and intermediate trusses and 1½" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood trusses supporting ½" wood

TYPICAL 1-HR ROOF/CEILING

structural panels applied at right angles to trusses with 8d nails. Appropriate roof covering.

Base layer %" type X gypsum wallboard applied at right angles to wood roof trusses 24" o.c.

P.T. FRAMING PER STRUCTURAL

WATERPROOF MEMBRANE (60 MIL

VINYL DECK MEMBRANE, GRAY

1/2" & 3/4" EXT. GRADE PLYWOOD —

DURADECK OR SIMILAR) OVER

- VENTED FIBER

**CEMENT SOFFIT** 

INSULATION

AT UNIT

AT 24" O.C. PROVIDE PVA WALL PRIMER (with

perm rating not exceeding 1.0) AS CLASS II

VAPOR RETARDER ON INSIDÉ FACE OF GWB

Ceiling provides one hour fire resistance protection for trusses.

1 HR. GA File No. FC5538 1/2" type X gypsum wallboard or veneer base applied at right angles to resilient furring channels

24" o.c. with 1" Type S drywall screws 8" o.c. at ends and 12" o.c. at intermediate furring channels. Gypsum board end joints located midway between continuous channels and attached to additional pieces of channel 64" long with screws 8" o.c. Resilient channels applied at right angles to 2 x 10 wood joists 16" o.c. with 6d coated nails 1\%" long, .085 shank, 1/4" heads, two per joist. Wood joists supporting %" interior plywood with exterior glue subfloor and \( \frac{3}{8} \)" particle board, 1.5 psf. 3\( \frac{1}{2} \)" glass fiber insulation batts, .7 pcf, friction fit in joist cavities supported alternately every 12" by wire

rods and resilient channels. SOUND 51 STC TL 03-061a 61 IIC (BASED ON ENGINEERING ANALYSIS OF TL 03-027 WITH THE ADDITION OF  $\frac{1}{4}$ " ISO-STEP UNDERLAYMENT (42 IIC + 19 IIC))

FLOOR BENEATH TUB

3" CONCRETE SELF-ADHERED W/ BROOM FINISH WATERPROOFING OVER 3/4" EXTERIOR MEMBRANE GRADE PLYWOOD FRAMING PER STRUCTURAL

FLOOR AT CORRIDOR/LANDING

FIBER CEMENT VENTED

SOFFIT BOARD

4" CONCRETE SLAB O/ 10 MIL VAPOR BARRIER O/ 3.5" CONCRETE SLAB O/ 4" FREE DRAINING MATERIAL O/ 4" FREE DRAINING MATERIAL O/ COMPACTED FILL COMPACTED FILL **EXTERIOR CORRIDORS** LIVING UNITS

ASSEMBLY ALLOWED TO BE NON-RATED

PER OSSC SECTIONS 705.2.2 AND 705.2.3

WITH FIRE SPRINKLERS PROTECTING DECK

WATERPROOF DECK FLOOR

yp. slab-on-grade

**SECTION** 

& PATIOS

EARTH SIDE - WATERPROOFING △ CONC. RETAINING WALL < (SEE STRUCT. FOR SIZE & REINF.) SPACE -EXTERIOR SHEATHING PER STRUCTURAL 5/8" TYPE 'X' GWB; PROVIDE PVA WALL -R-21 HIGH DENSITY INTERIOR PRIMER (with perm rating not exceeding INSULATION 1.0) AS CLASS II VAPOR RETARDER ON INSIDE FACE OF GWB — CONCRETE WALL SHALL BE DRY TO THE TOUCH AND NO SPRAY-ON OR SHEET-TYPE CAVITY SHALL BE CLEAN OF VAPOR BARRIER AT INTERIOR SIDE. DEBRIS BEFORE INSTALLING PAINT W/ LATEX PAINT ONLY. INSULATION AND GWB.

Concrete wall @ exterior wall PLAN

EARTH SIDE - WATERPROOFING SYSTEM △ CONC. RETAINING WALL < PROVIDE VERTICAL AND HORIZONTAL (SEE STRUCT. FOR SIZE & REINF.) DRAFTSTOPS AT 10'-0" MAX. O.C. FIBERGLASS INSUL. FIRMLY ATTACHED -R-21 HIGH DENSITY SPACE INSULATION 5/8" TYPE 'X' GWB; PROVIDE PVA WALL **INTERIOR** PRIMER (with perm rating not exceeding 1.0) AS CLASS II VAPOR RETARDER ON INSIDE FACE OF GWB — CONCRETE WALL SHALL BE DRY TO THE TOUCH AND NO SPRAY-ON OR SHEET-TYPE CAVITY SHALL BE CLEAN OF VAPOR BARRIER AT INTERIOR SIDE. PAINT W/ LATEX PAINT ONLY. INSULATION AND GWB.

BASEMENT RETAINING WALL 1-1/2" = 1'-0"

DEBRIS BEFORE INSTALLING

PLAN

FURRED PLUMBING WALL PLAN CORRIDOR ____(2) LAYERS ½" TYPE 'X' GWB OVER 2x STUDS AT 16" O.C. TYP. EACH SIDE SIDING PER ELV. OVER W.R.B.

NOTE: 2x6 STUDS U.N.O. ON PLANS - ADD SHEAR PANEL WHERE INDICATED ON SHEAR PLANS. EXTEND SHEAR PANEL TO NEAREST BATT/INSULATION WHERE INDICATED ON PLANS RESILIENT CHANNEL AT DWELLING UNIT TO ACHIEVE REQUIRED SOUND RATING 2-HR GA File No. WP4136 STC 50 (TL-93-103)

COMMON OR CORRIDOR WALL

%" TYPE 'X' GWB OVER

2x STUDS AT 16" O.C.

CONTINUOUS BEHIND

- GYP TO BE ∠2\

FURRED 2X WALL

Base layer ½" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 2 x 4 wood studs 16" o.c. with 1 1/4" Type W drywall screws 12" o.c. Face layer 1/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side with 1 1/8" Type W drywall screws 12" o.c. and offset 6" from screws in base layer. Joints staggered 16" each layer and side. At shear walls, increase fastener length by the thickness of the shear panel.

Add resilient channel and 3" insulation to achieve sound rating TYP. 2-HR FIRE BARRIER WALI AT EXIT CORRIDOR PLAN

UNIT Sound STC 59 STC (W-28-69)

**EXTERIOR SIDING** 

PER STRUCTURAL

**EXTERIOR SHEATHING -**

1 TYVEK COMMERCIAL W.R.B. —

INTERIOR

NOTE: SHEAR DIAPHRAGM

%" GWB OVER 2x STUDS AT 16" OC. ─

CORRIDOR

MAY OCCUR ON EITHER

SIDE OF THE WALL OR

ON BOTH SIDES.

SEE ELEVATIONS -

EXTERIOR

Thermal insulation

NHERE (ND)(CATED ON PLANS)

 $-\frac{5}{8}$ " Type 'X' GWB OVER 2x6 STUDS AT 16" O.C.

TYPICAL EXTERIOR WALL

 $^{-}\%$ " GWB OVER 2x STUDS AT 16" OC

TYP. INTERIOR WALL

GWB INSTALLED OVER SHEAR PANEL

AT SHEAR WALLS‡, SEE SHEAR PLANS -

CONTINUE SHEAR PANEL

INSULATION

between studs. 3" mineral or glass fiber insulation in stud space.

TO THE NEAREST CORNER

PROVIDE PVA WALL PRIMER (with perm rating not exceeding 1.0)

2X6 STUDS AT EXTERIOR

WALL U.N.O. ON PLANS

−%" GWB OVER SHEAR PANELS

WHERE INDICATED

ON SHEAR PLANS

%" TYPE 'X' GWB OVER 2x STUDS AT 16" O.C.

OVER W.R.B

── 5/4" TYPE 'X' GWB OVER RESILIENT CHANNELS AT

24" O.C. OVER 2x STUDS AT 16" O.C.

1-HR GA File No. WP3243 50-54 STC Sound

Resilient channels 24" o.c. attached at right angles to ONE SIDE of 2x4* wood studs 24" o.c. with 11/4"

OPPOSITE SIDE - One layer \( \frac{5}{8} \)" Type X gypsum wallboard or or gypsum veneer base applied parallel

or at right angles to studs with 6d cement coated nails 1%" long, 0.0915" shank, 1%4" heads, 7" o.c. Vertical joints staggered 24" on opposite sides. (LOAD-BEARING)

* Per general note 16 greater stud sizes are permitted than those specified.

Type S drywall screws. One layer \(^{\%}\)" Type X gypsum wallboard or gypsum veneer base applied at right angles to channels with 1" Type S drywall screws 8" o.c. with vertical joints located midway

PLAN

PLAN

AS CLASS II VAPOR RETARDER ON INSIDE FACE OF GWB

1-HR Using Calculated Fire Resistance Method Using IBC Section 722, Tables 722.6.2(1) and 722.6.2(2), ⁵/₈" Type 'X' GWB (40 min.) and studs at 16" o.c. (20 min.) provide 60 minutes of protection

DETAIL SIMILAR WHERE UNIT SEPARATION WALL CONTINUES DOWN TO GARAGES TYP. 1-HR COMMON WALL

SEPARATING DWELLING UNITS PLAN

Puyallup,

Revisions No. Date Description

(see plans for actual stud size)

‡ At shear walls, increase fastener length by the thickness of the shear panel TYP. 1-HR CORRIDOR WALL PLAN FIN.#1: (1) LAYERS %" TYPE 'X' GWB

PRMU2024028

Initial Publish Date: Date Plotted: 5-6-25

SLOPE GRADE

AWAY FROM

4" FTG. DRAIN

**SECTION** 

**SECTION** 

EXT. STAIR

— %" TYPE 'X'
EXTERIOR GYP.
— SIDING SEE
ELEVATIONS
— FLASHING

D1

─½" EXPANSION

**SECTION** 

CORRIDOR

— CONC. SLAB

— FIRM BEARING

SECTION

TYP. EXTERIOR WALL FOOTING

INTERIOR

CONC. SLAB

- FIRM BEARING

BUILDING

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etails 



**Timberlane** 

**Partners** Revisions

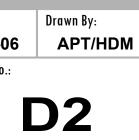
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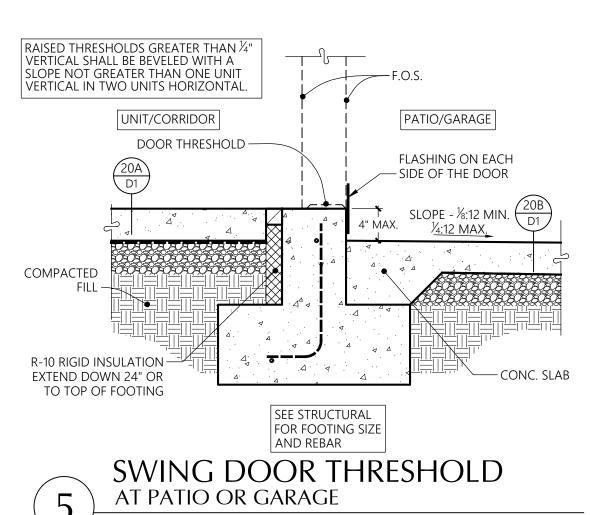


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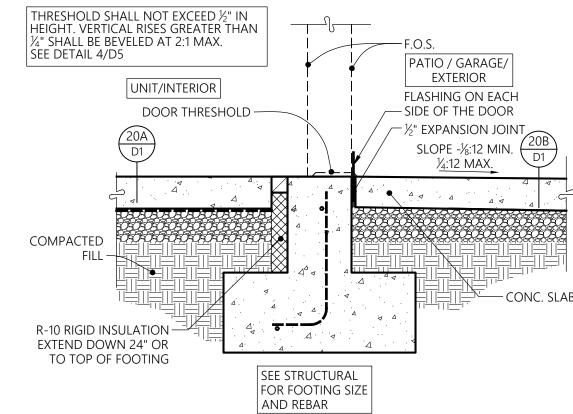
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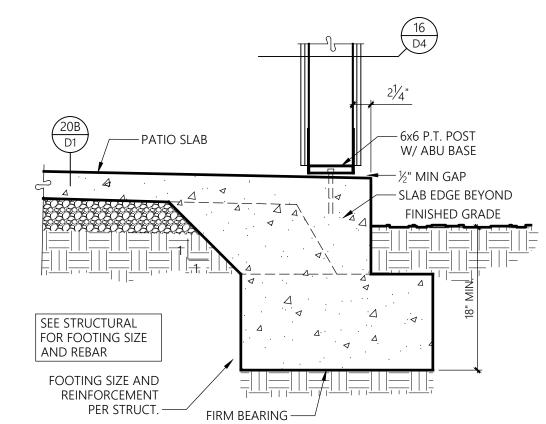




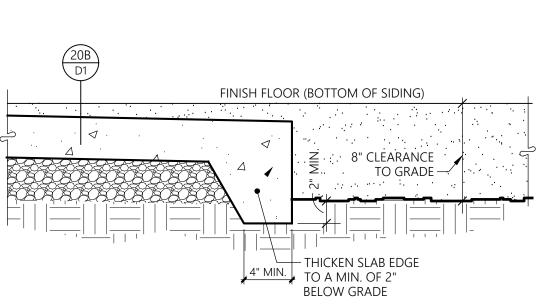
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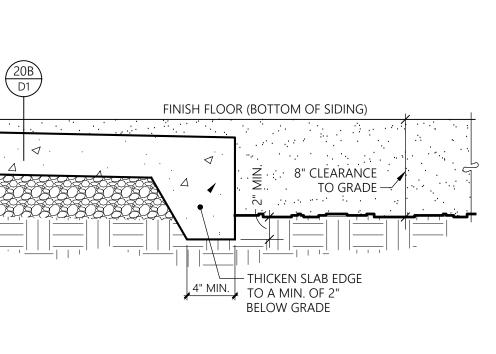
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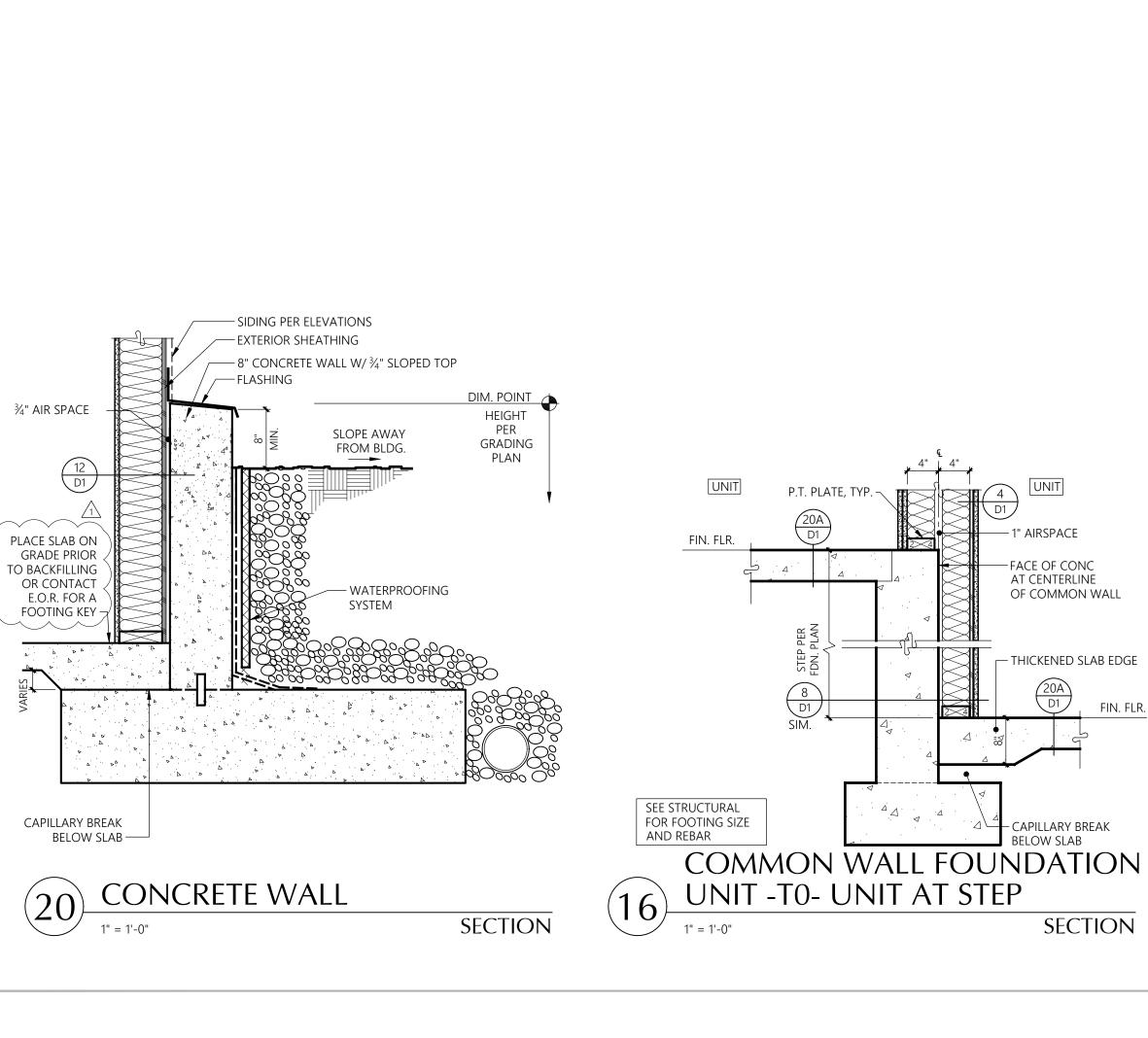


POST FOOTING AT PATIO SECTION



THICIKENED CONC. SLAB EDGE AT PORCH / PATIO SECTION





THE INSTALLATION OF ANY

INSTRUCTIONS.

CORRIDOR / SLAB FLASHING

WATERPROOFING DECK SYSTEM

SHALL BE PER MANUFACTURERS

- WATER PROOFING

LAP OVER VERTICAL

FLASHING 6" MIN. -FLASHING OVER DAMPPROOFING,

FIBERBOARD AND RAIN SCREEN

- DAMPPROOFING

– "TUFF-N-DRY"

**FIBERBOARD** 

-RAIN SCREEN

THE INSTALLATION OF ANY

-P.T. FRAMING & SPACING PER

STRUCTURAL

EXTERIOR

CORRIDOR

INSTRUCTIONS.

EXTERIOR

CORRIDOR

CORRIDOR / SLAB TRANSITION

WATERPROOFING DECK SYSTEM

SHALL BE PER MANUFACTURERS

TYP. FLOOR D1 AT CORRIDOR/STAIR

**SECTION** 

**SECTION** 

TOP ANGLE FLASHING

MEMBRANE

SEE I SHEETS

UNIT

UNIT

- WATERSTOP STRIP

REQUIRED AT COLD

JOINT (2 PART POUR)

FOR RETAINING WALL

3/4" FIBER BOARD

**EXPANSION JOINT -**

1-1/2" = 1'-0"

WATERPROOFING

FACE OF CONCRETE WALL AND

UNIT

SLAB-ON-GRADE -

DAMPPROOFING COATING

BACKFILL WITH 1½" WASHED

DRAIN ROCK LEAVING CLEAN

WATERPROOFING TO FULLY

COVER FORM BRACKETS

RAIN SCREEN PRODUCT

OVER TOP OF FOOTING,

RUN PAST FOOTING EDGE—

(POUNDED FLAT)

LET CURE 1 DAY -

SLOPE TOP OF FOOTING TO DRAIN

CONTINUOS 6" PERFORATED

DRAIN PIPE AS SPECIFIED

BY SOILS REPORT.

CAPILLARY BREAK

BASEMENT RETAINING WALL

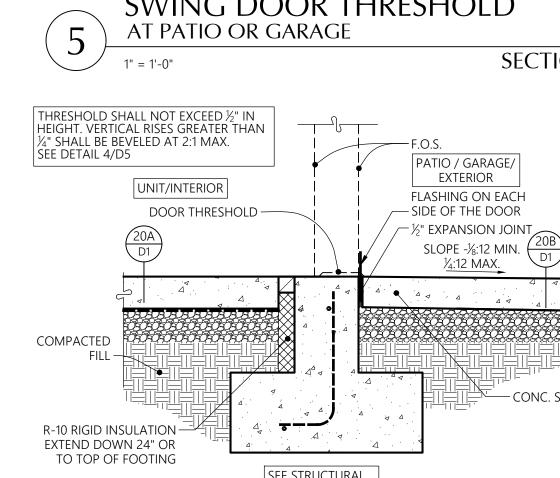
BELOW SLAB -

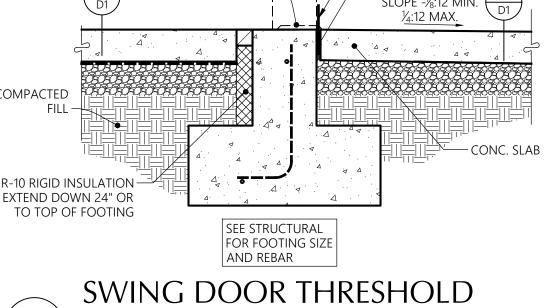
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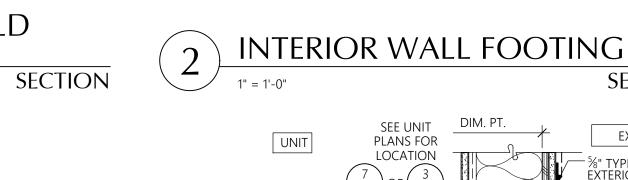
SURFACE

TO THE TOP -

CENTERLINE OF PARTY WALL -







INTERIOR

SEE STRUCTURAL

AND REBAR

FOR FOOTING SIZE

R-10 RIGID INSULATION -EXTEND DOWN 24" OR

TO TOP OF FOOTING

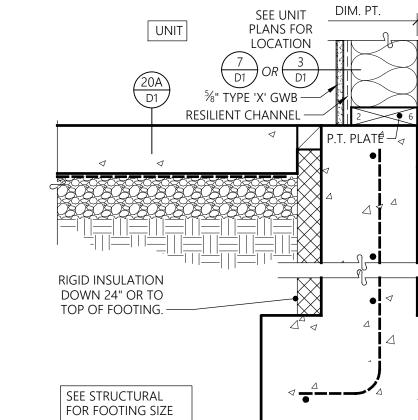
INTERIOR

P.T. PLATE –

SEE STRUCTURAL

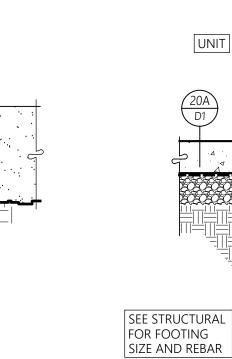
AND REBAR

FOR FOOTING SIZE





P.T. PLATE -



COMMON WALL FOUNDATION



STRUC. PANEL (\$905) REPURITED BOARD OVER GABLE TRUSS
WHERE DRAFF DRAFF PRINCE P

INDICATED ON ROOF PLANS

PARALLEL TRUSS

CONDITION

- Typical floor ( D1

BETWEEN UNITS

- RIM JOISTS

- BLOCKING PER STRUC. AND

FRAMING PLANS

BEARING

SITUATION

FLOOR FRAMING

— FIRE-SAFING INSUL.

AS FIREBLOCK, TYP

COMMON

COMMON WALL AT STEPPED FLOOR

PER PLANS

**SECTION** 

NON-BEARING

SITUATION

**SECTION** 

**SECTION** 

UNIT SEP. WALL AT ROOF TRUSSES

VERTICAL ROOF TRUSS

PROVIDE FIREBLOCKING AT FLOORS AND CEILINGS USING FIBERGLASS

INSULATION FIRMLY ATTACHED

PERPENDICULAR

TRUSS CONDITION

FRAMING

PER PLANS -

FIREBLOCKING -

SITUATION

1-1/2" = 1'-0"

3½" ACOUST. BATT INSUL. -

FLOOR FRAMING

1-1/2" = 1'-0"

PER PLANS

UNIT SEPAR. AT FLOOR

MEMBER BEYOND -

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**Timberlane** 

**Partners** 

Revisions No. Date Description 8-30-24 Owner Changes/ **Permit Corrections** 

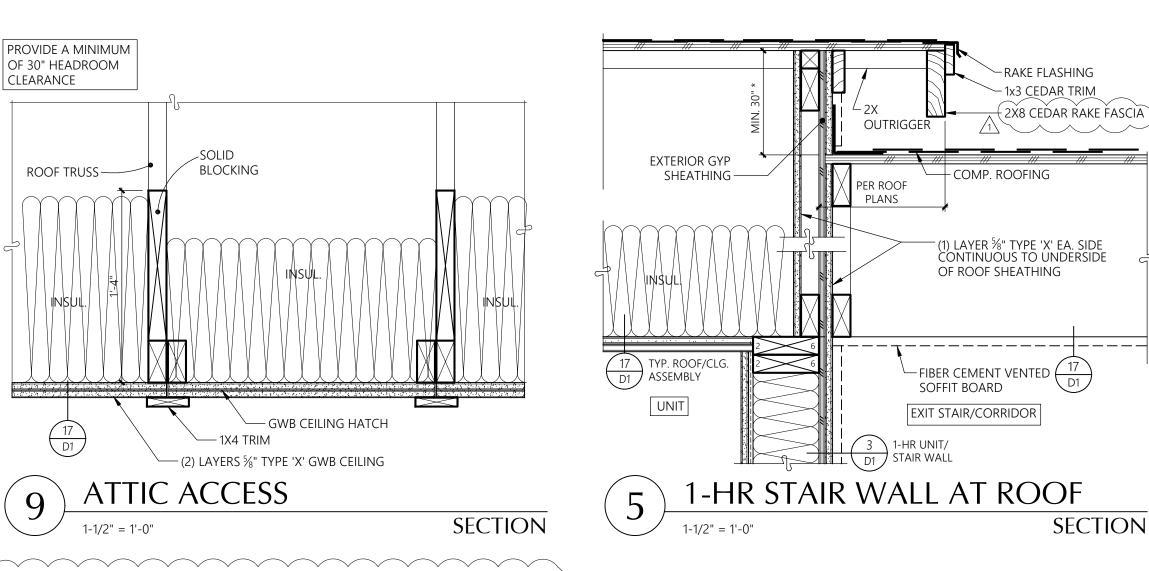
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Initial Publish Date:

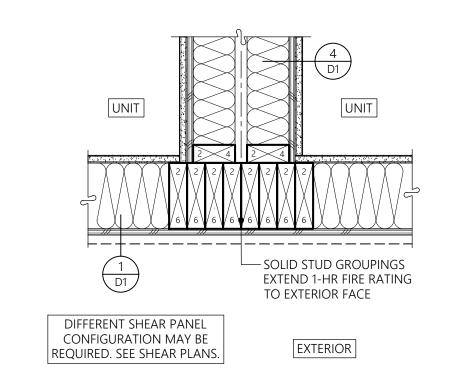
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Job No.: 23-06

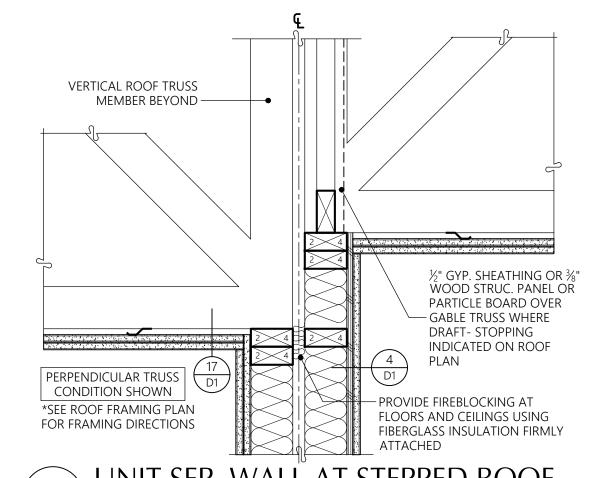
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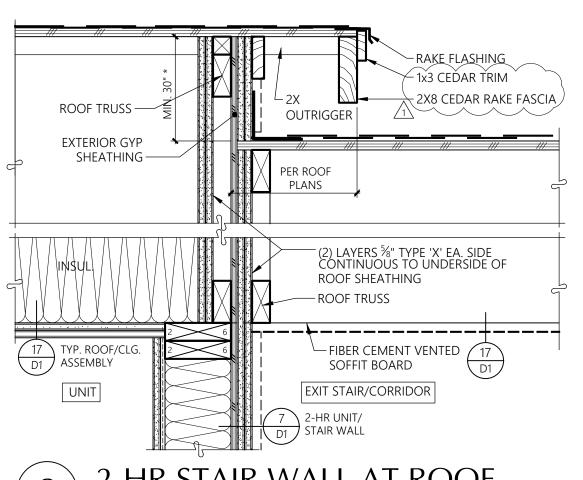




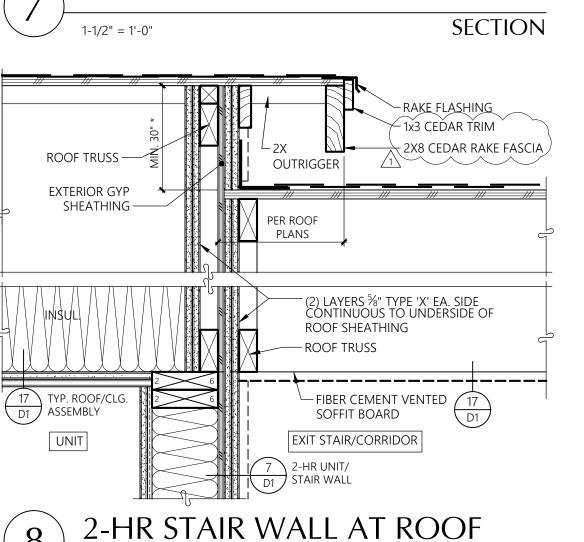


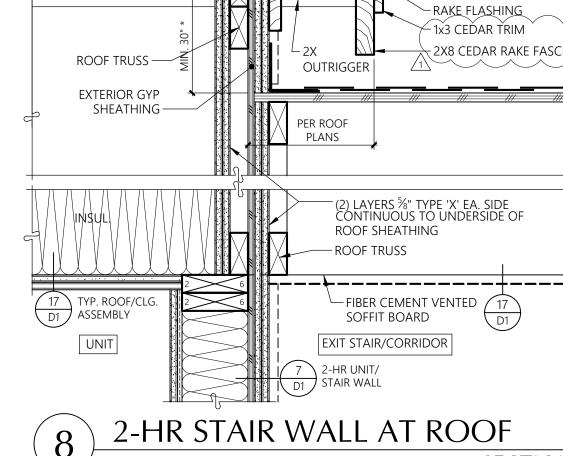




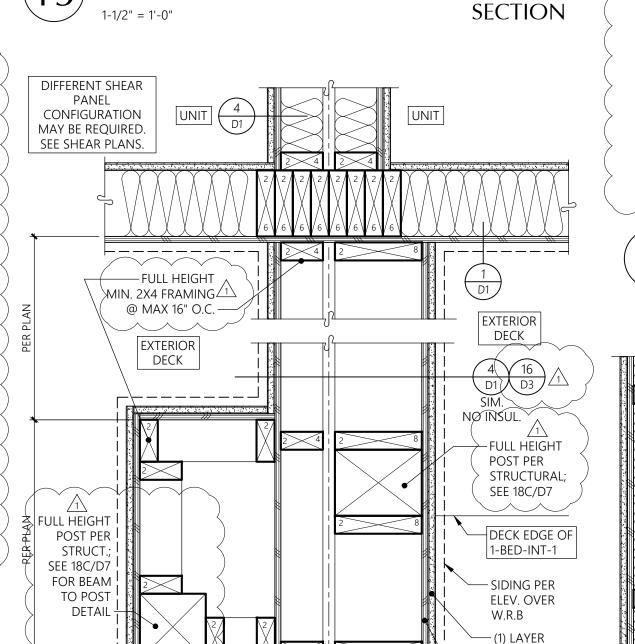


2-HR STAIR WALL AT ROOF SECTION









STEPPED COMMON WALL

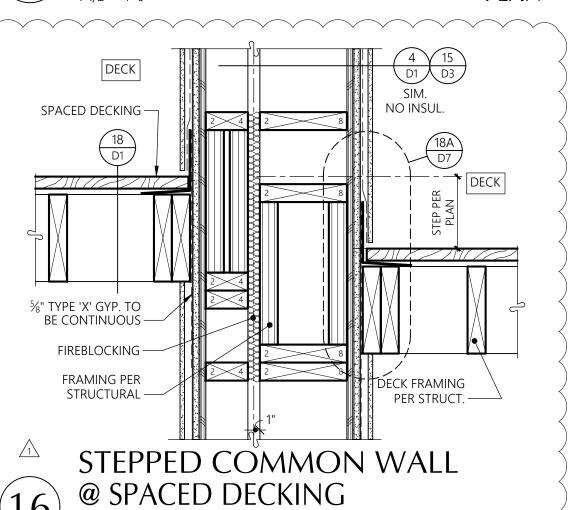
AT WATERPROOF DECK

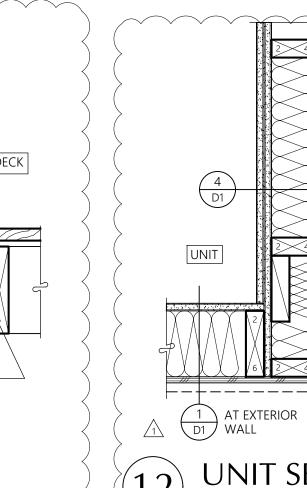


DECK EDGE OF

(1) LAYER 5/8 TYP 'X' GYP. CONT.

1 to underside of roof or





**FURRED OUT** 

WALL

1-1/2" = 1'-0"

OF 30" HEADROOM

ROOF TRUSS—

2x4 BLOCK BEHIND

TUB NAILING FLANGE -

CLEARANCE

GYP. CONTINUOUS

EA. SIDE

-EXTERIOR

Wall cap at uncovered decks

SHEATHING

- SIDING PER ELEV.

OVER W.R.B.

1 HR. SEPARATION

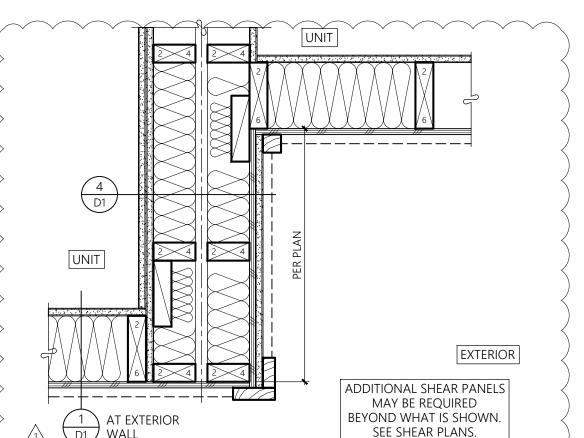
NO INSULATION

DECK

5⁄8" TYPE 'X' EXTERIOR GYP

- EXTERIOR

SHEATHING



BASE LAYER:

FACE LAYER:

METALLIC (*

TUB/SHOWER AT 1-HR SEP. WALL

− 5⁄8" TYPE 'X' GWB

- RUN GWB -

CONTINUOUS

THROUGH WALL

INTERSECTION

O/ 2x4 AT 16" O.C.

¾" TYPE 'X' GWB

BENEATH TUB/SHOWER:

WATER-RESISTANT %" TYPE 'X' GWB

CONTINUOUS BEHIND TUB/SHOWER.

COVERS TUB/SHOWER NAIL FLANGE

3/4" PLYWOOD FINISH FLOOR OVER SOUND MAT

**INTERIOR PARTITION** 

INTERSECTION

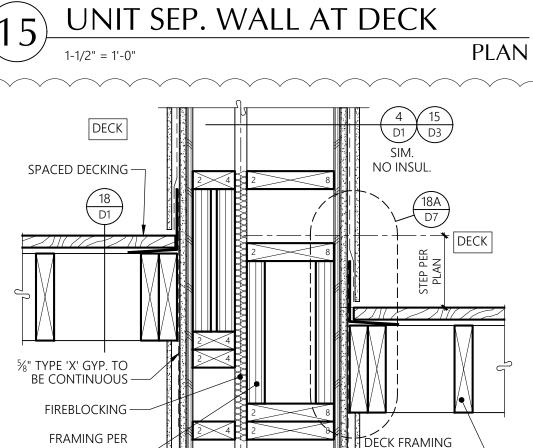
– APPROVED FIRESTOPPING D1

MATERIAL

**SECTION** 

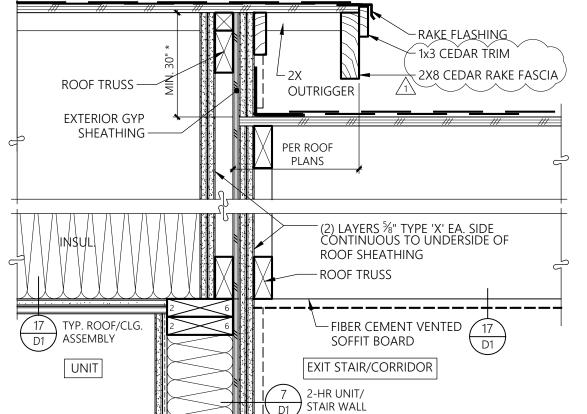
PLAN

OVER T&G FLOOR SHEATHING, SEE 14/D1



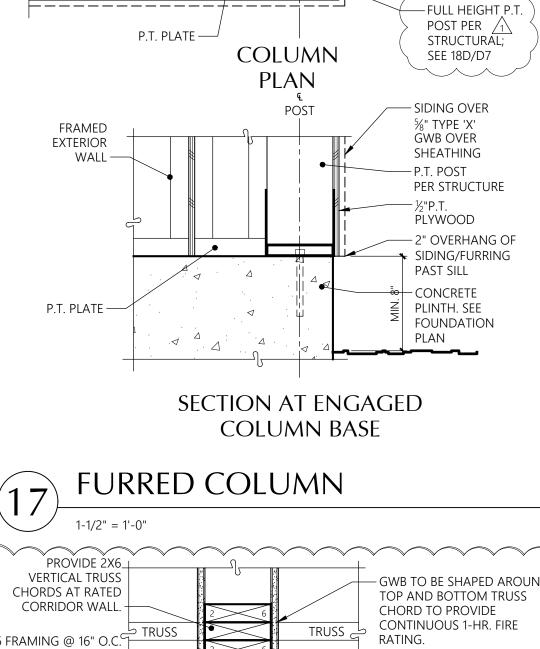
**SECTION** 

UNIT SEP. WALL AT BLDG. JOG



FIN. FLOOR -LVL RIM JOIST FLOOR FRAMING PER PLANS — WALL BATT INSUL. → SIDING, SEE ELEVATIONS

EXTERIOR WALL AT FLOOR **SECTION** 



SIDING PER ELEV,

OVER W.R.B.

SHEATHING

PLYWOOD

**OVER EXTERIOR** 

WRAP W.R.B.

WALL -

LAP W.R.B.

OVER

OVER TOP OF

IDING PER ELEV.

OVER W.R.B. -

**EXTERIOR** 

DECK FLASHING -

WATER PROOF MEMBRANE TO

EXTEND UP WALL SURFACE -

SEE FRAMING

%" TYPE 'X' GYP. TO

BE CONTINUOUS TO

SIDING PER ELEV.

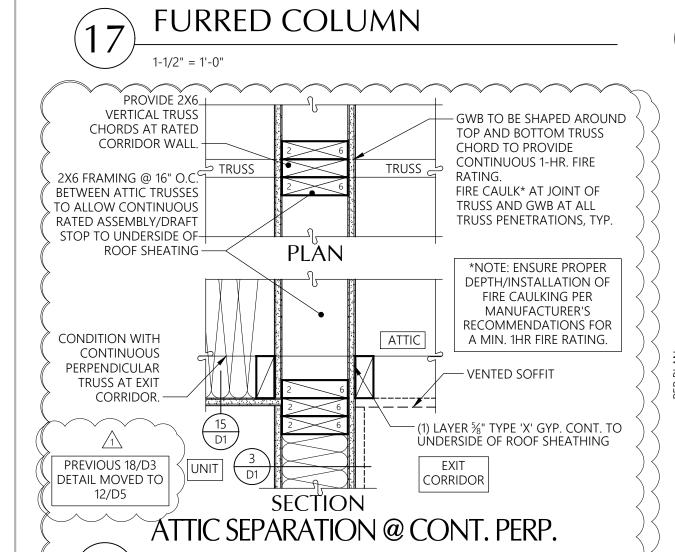
OVER W.R.B. -

SHEATHING —

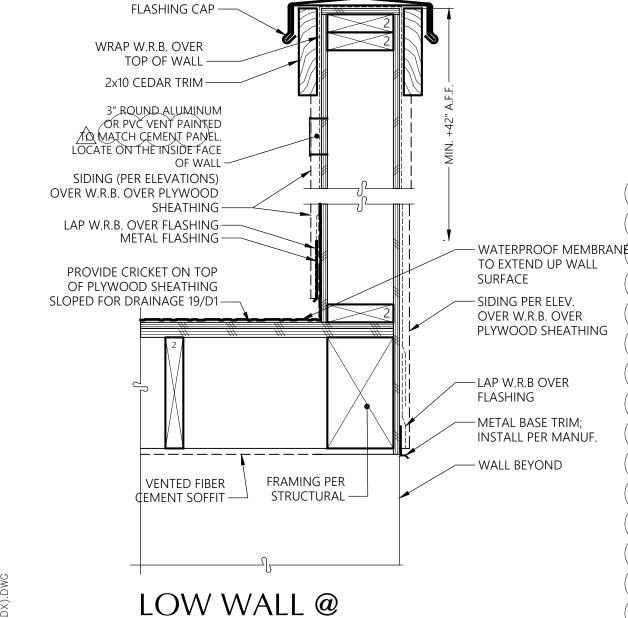
UNDERSIDE OF DECK

PLANS FOR SIZE

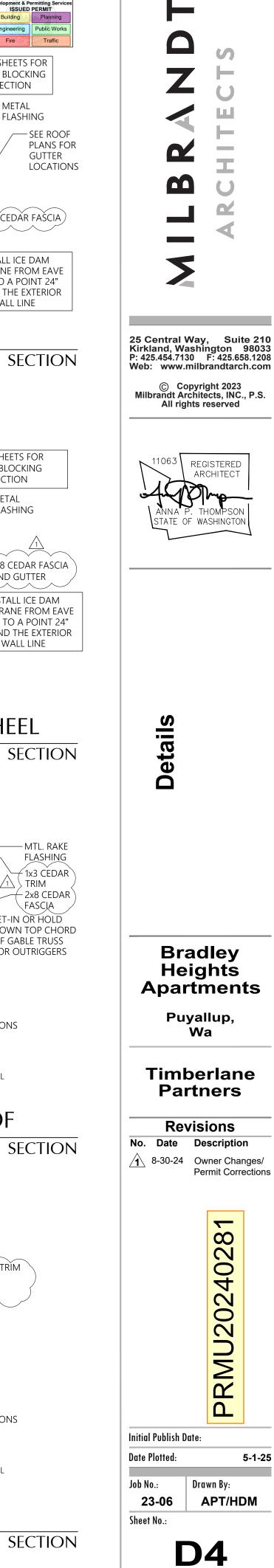
METAL FLASHING —



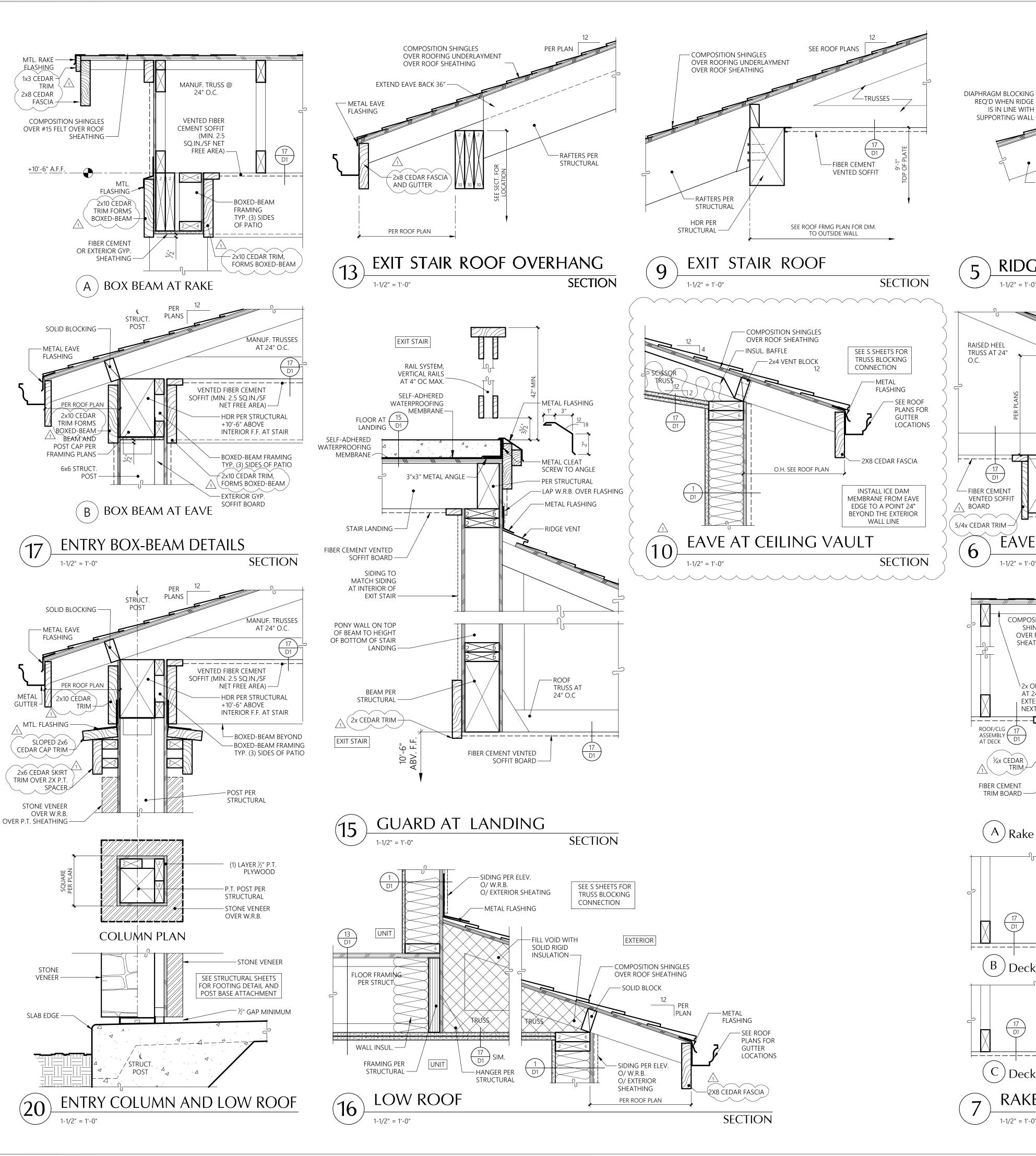


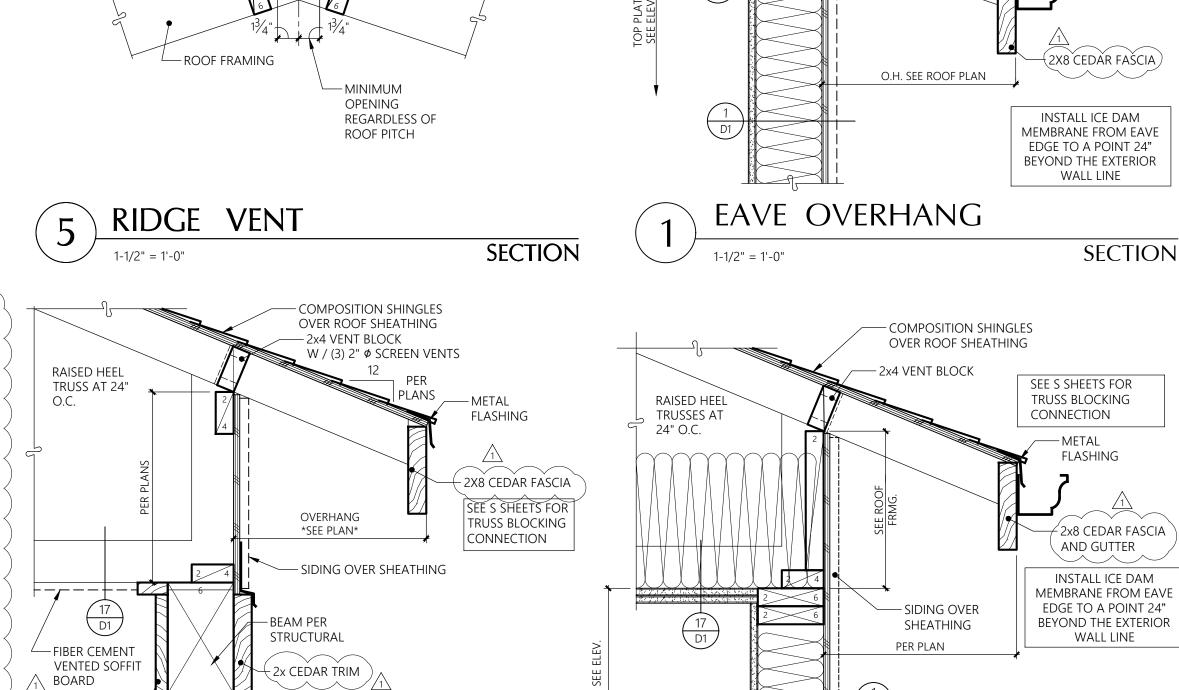


WATERPROOF DECK EDGE 1-1/2" = 1'-0"



5-1-25





— PREFABRICATED RIDGE VENT

FIBER CEMENT TRIM BOARD

1-1/2" = 1'-0"

SEE ROOF PLANS

COMPOSITION SHINGLES

OVER ROOF SHEATHING

— 2x4 VENT BLOCK

OVERHANG W/ RAISED HEEL

SEE S SHEETS FOR

- METAL

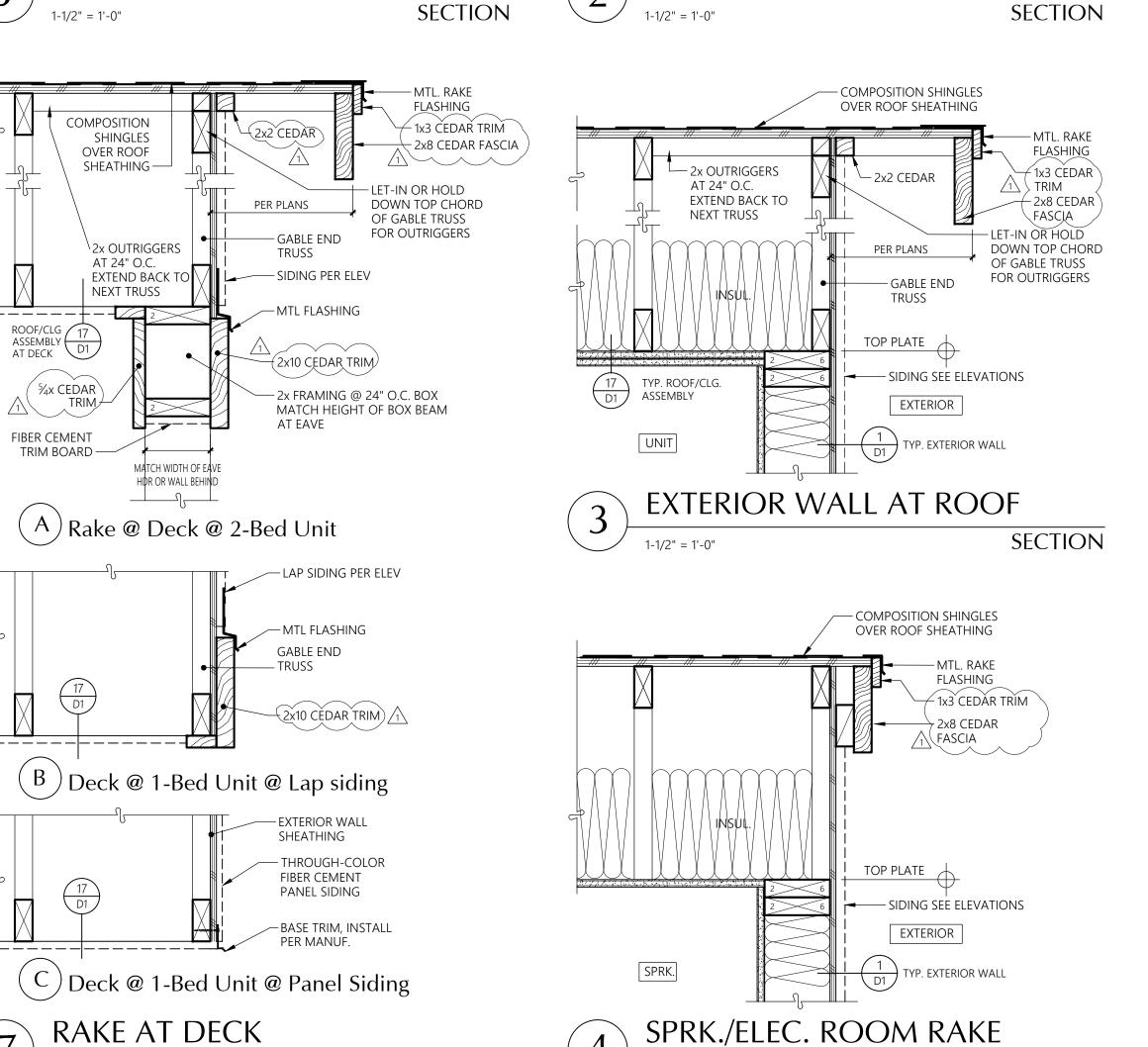
FLASHING

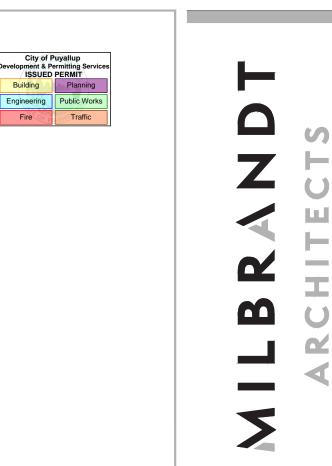
TRUSS BLOCKING

CONNECTION

PLAN

-INSUL. BAFFLE





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11063 \ REGISTEREF ARCHITEC1

**Bradley** Heights **Apartments** 

> Puyallup, Wa

**Timberlane Partners** 

Revisions No. Date Description

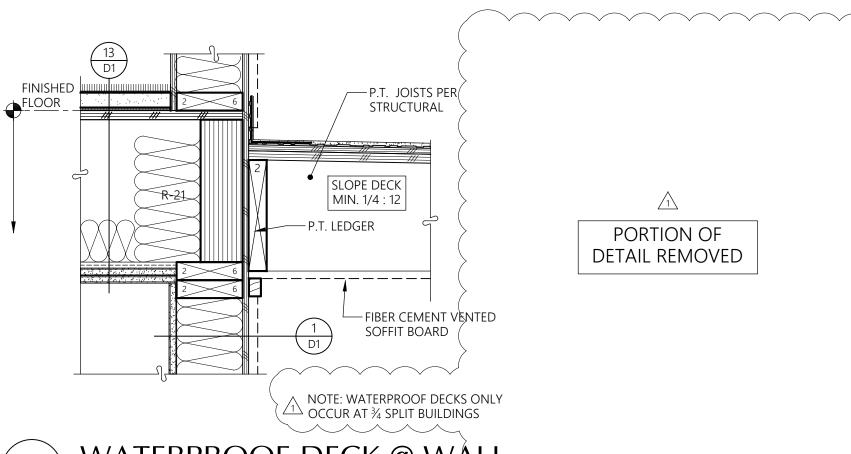
CHANGES IN LEVLE OF 1/4" MAX.

PRMU20240281

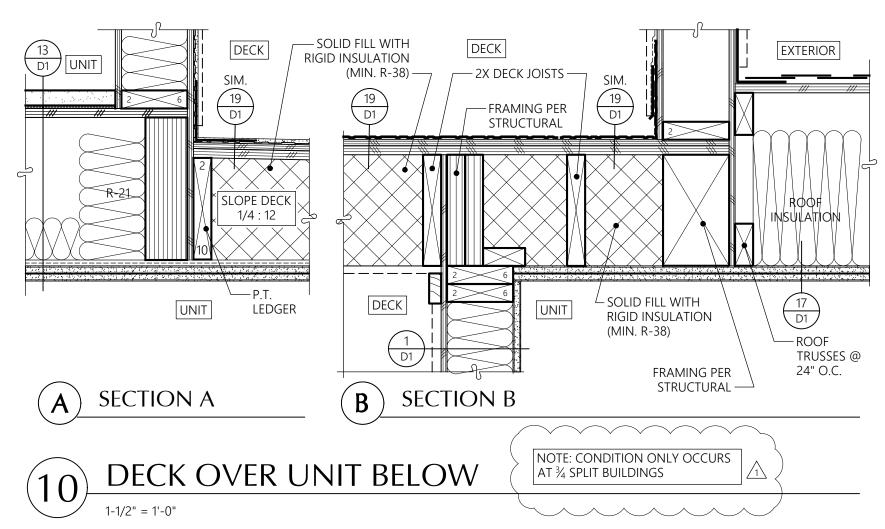
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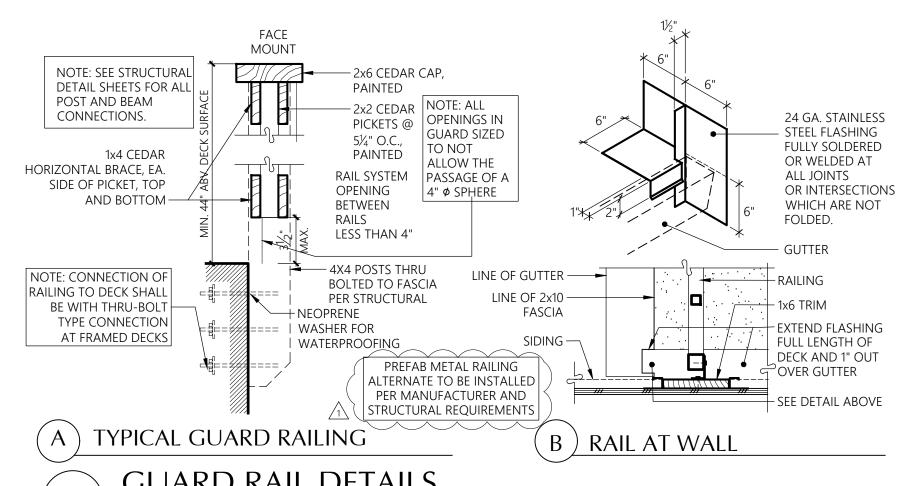
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**D5** 

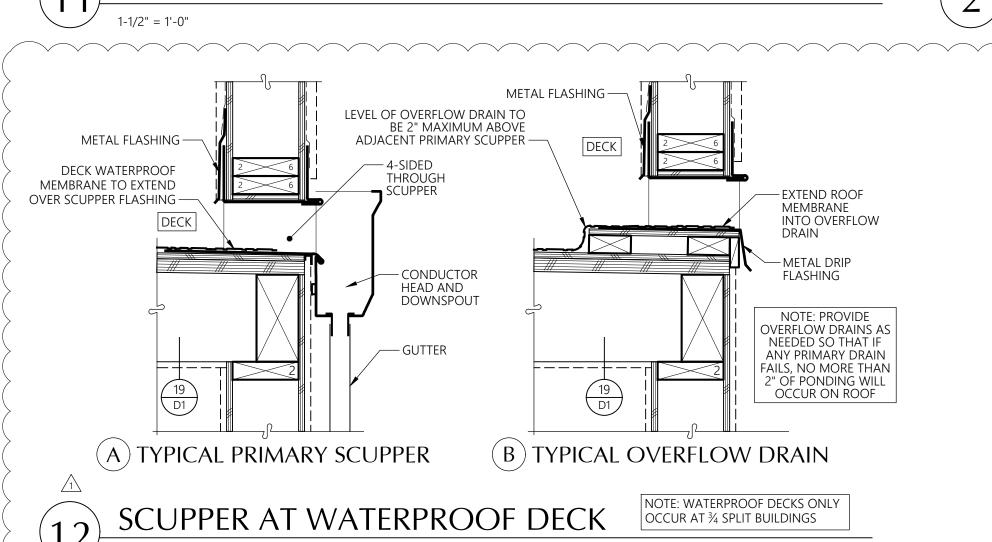


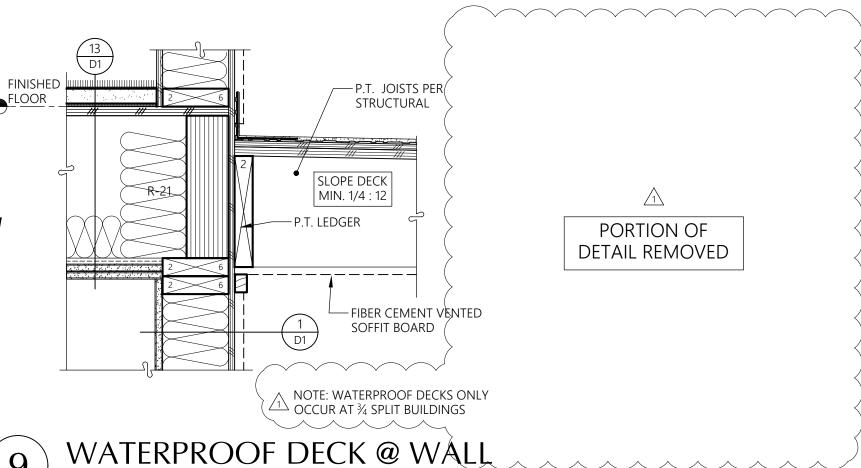














— THRESHOLD TO TERMINATE

EXIT STAIR/CORRIDOR

15 TYP. FLOOR

D1 AT EXIT STAIR

OVER TRANSITION.

SEE STRUCTURAL

FOR CONNECTION

FIBER CEMENT

BOARD

**VENTED SOFFIT** 

EXIT STAIR/CORRIDOR

UNIT

METAL INSULATED DOOR

INSTALLED PER MANUF.

RECOMENDATIONS

TYP. FLOOR/CLG. -

CONSTRUCTION

UNIT

RESILIENT

**CHANNELS** 

- SEE DETAIL 17/D4 FOR RAILING DESIGN.

-1½" ROUND CEDAR

HANDGRIP

FIBER CEMENT

STRINGER/RAILING AT WALI

UPPER FLOOR STAIR DETAIL

PRECAST

— T-BAR ∧

EXTERIOR

- BEAM PER STRUCTURAL

SEE STAIR FRAMING PLANS

ALL EXTERIOR

TRIM TO BE 5/4

FIBER CEMENT

U.N.O.

MEMBRANE

CONCRETE TREAD —

T-BAR. CUT AROUND

STRUCTURAL BRACKETS —

CONNECTIONS PER

4X12 P.T.

STRINGER -

PRECAST

CONC. TREADS

STRUCTURAL

CONNECTIONS

PER STRUCTURAL

STRIP VENT PERP.

**UPPER FLOOR STAIR DETAIL** 

TO JOISTS

STAIR

FIBER CEMENT

WATERPROOF MEMBRANE —

-LAG SCREW INTO

SOLID 2x BLOCKING

- 6x6x1.5 BLOCK AT

UNIT-TO-CORRIDOR WALL

PREFAB METAL

**RAILING ALTERNATE** 

MANUFACTURER

AND STRUCTURAL

REQUIREMENTS

SECTION

STAIR

FACE OF STUD

− WATERPROOF (15 \ FLOOR AT

— BEAM PER STRUCTURAL SEE STAIR FRAMING PLANS

CORRIDOR

D1 CORRIODR

– STRIP VENT

` 4x12 P.T.

STRINGER

ALL EXTERIOR

TRIM TO BE

FIBER CEMENT

U.N.O.

PERP. TO JOISTS

to be installed per

4'-0" O.C. TRIMMED

CAPABLE OF

**SUPPORTING** 

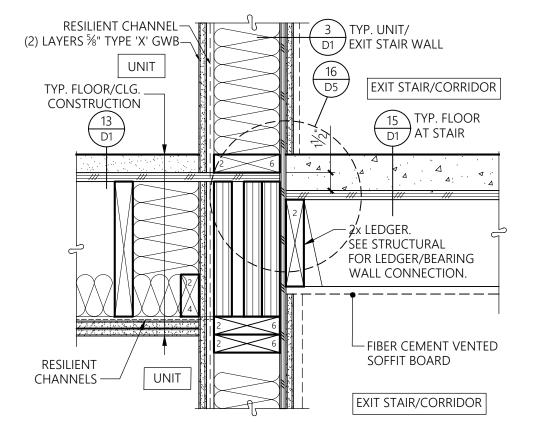
200 POUNDS

OUTPULL

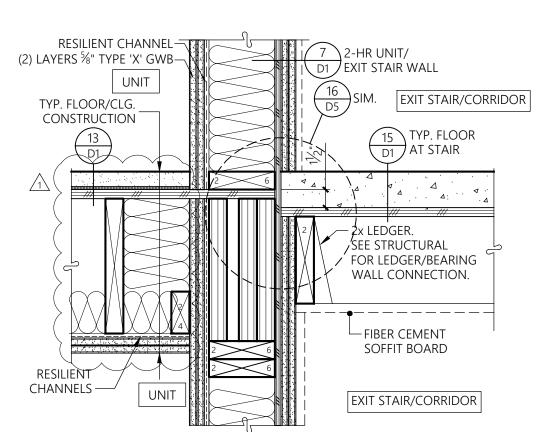
AS REQD.

J-MOLD

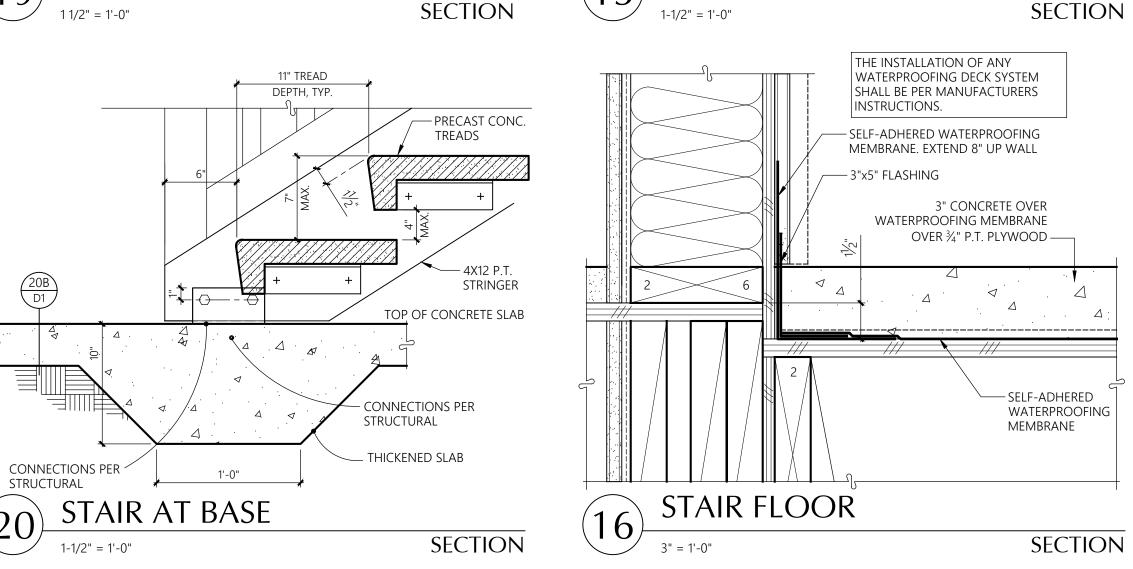
STUD OR BLOCKING

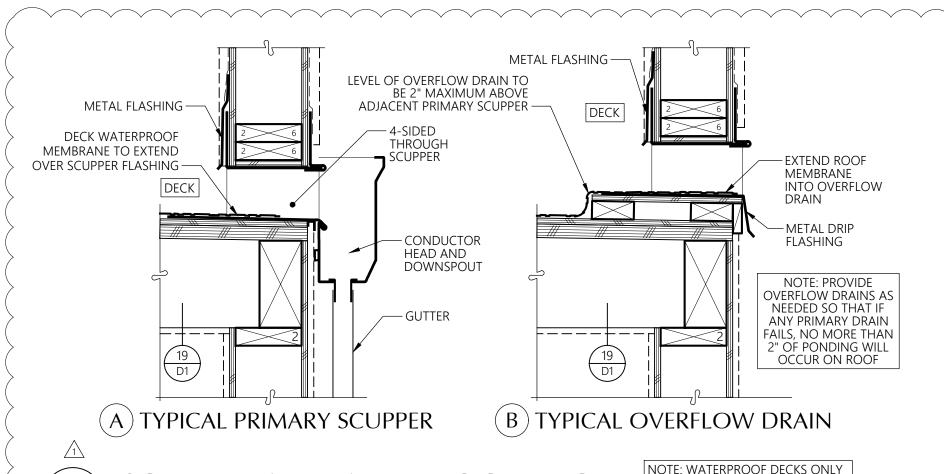


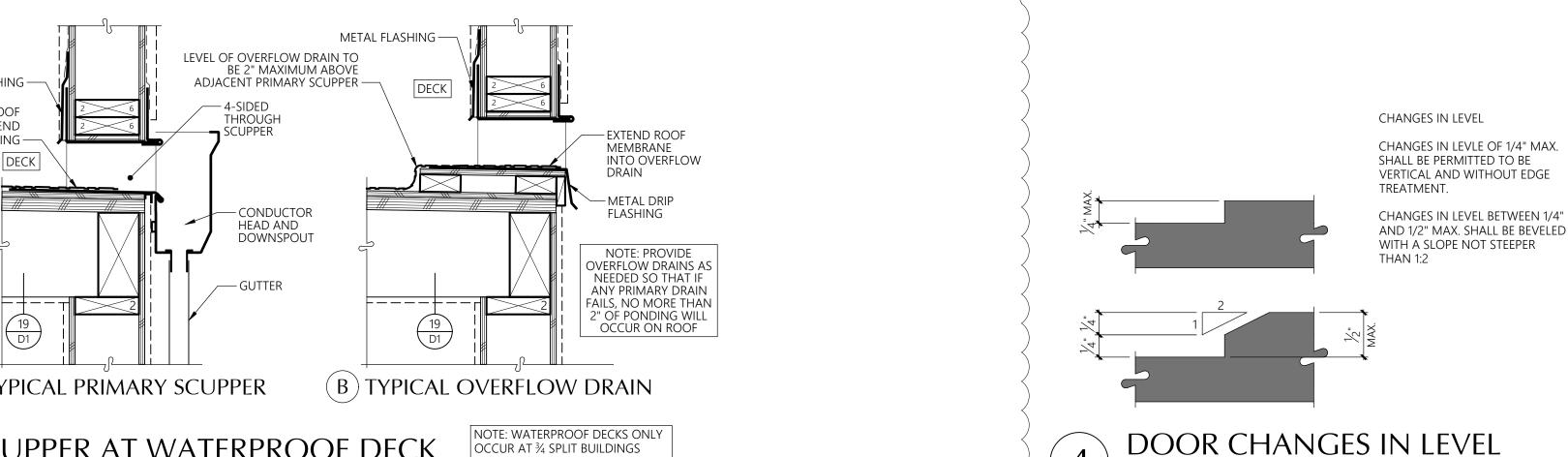


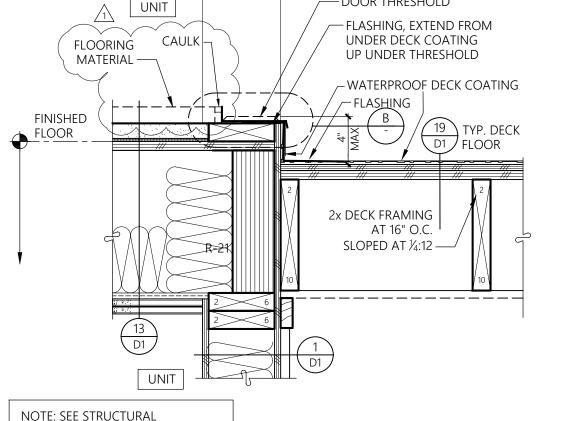










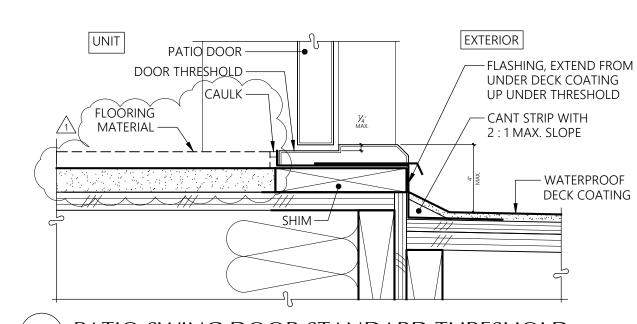


DECK

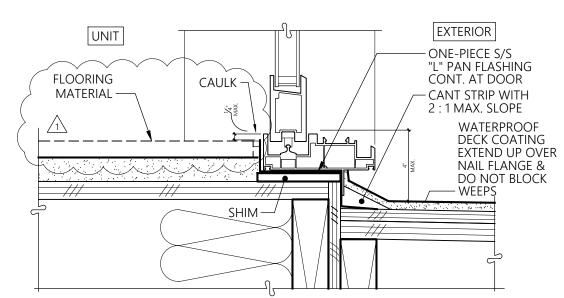
-DOOR THRESHOLD







( **B** ) PATIO SWING DOOR STANDARD THRESHOLD

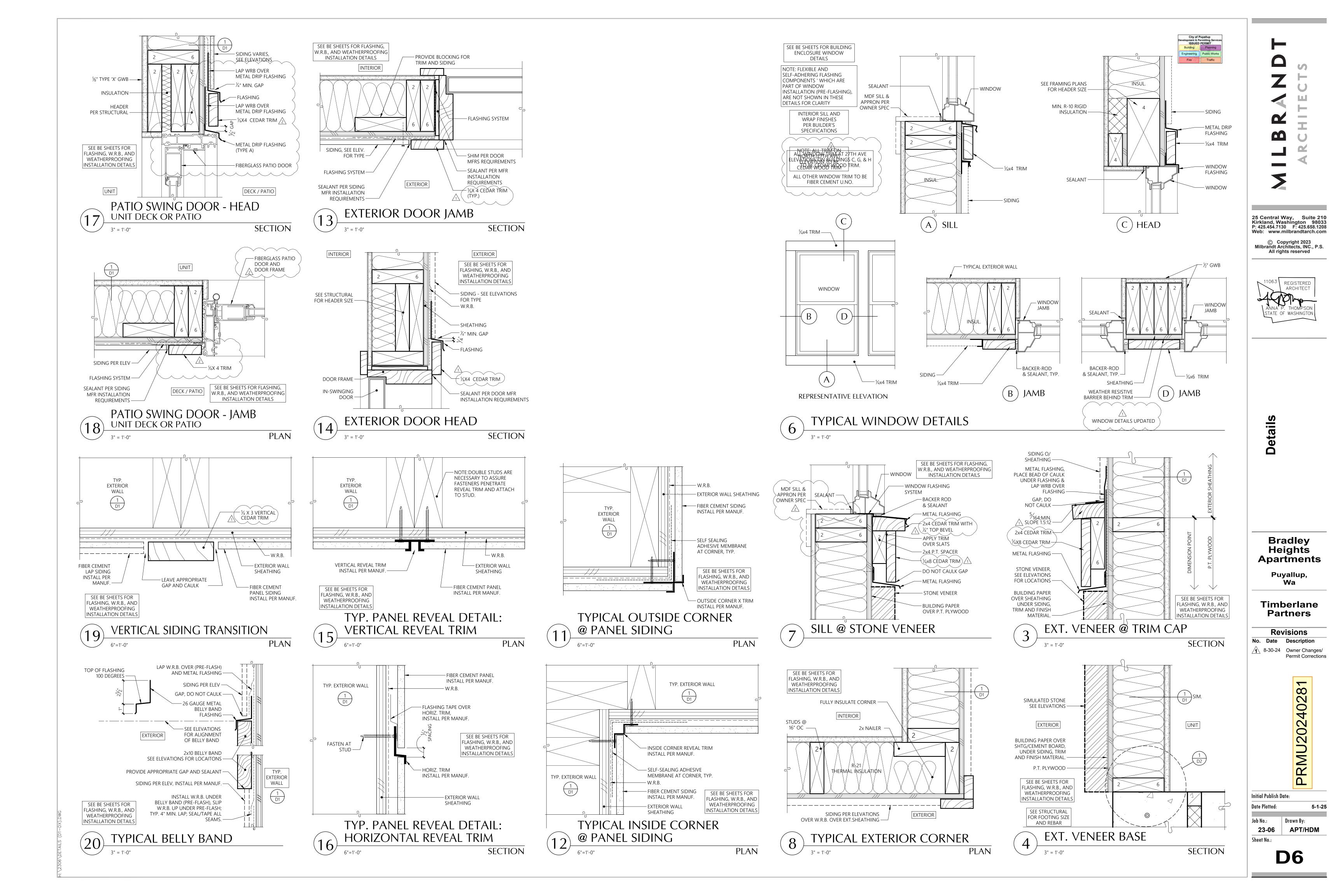


SLIDING GLASS DOOR STANDARD CONDITION

WATERPROOF DECK THRESHOLD DETAILS







— FULL HEIGHT POST PER STRUCTURAL [[]

— W.R.B.

—— SIDING PER ELEVATIONS

— SAM "BOOT" FLASHING AT

AND SEAL BOTTOM EDGE

BEAM TO WALL CONNECTION

— METAL FLASHING OVER LEDGER

— SAM FLASHING OVER LEDGER

--1/2" gap; do not caulk

P.T. BEAM PER

HANGER PER STRUCT.

ATTACHMENT PER STRUCT.

— W.R.B OR PRE-FLASHING (RUN UP TO

— W.R.B. (SLIP UNDER PRE-FLASHING)

TOP OF METAL FLASHING LEG ABOVE)

STRUCT.

— 2x P.T. LEDGER AND

- LAP W.R.B. OVER METAL FLASHING

— SAM FLASHING OVER BEAM/BOOT FLASHING

SEE DETAIL 20/D7 FOR

BEAM TO WALL FLASHING

INSTALLATION

25 Central Way, Suite 210 Kirkland, Washington 98033 P: 425.454.7130 F: 425.658.1208 Web: www.milbrandtarch.com

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**SECTION** 

Heights **Apartments** Puyallup,

**Bradley** 

Timberlane **Partners** 

Revisions No. Date Description 8-30-24 Owner Changes Permit Corrections

PRMU20240281

Initial Publish Date: Date Plotted:

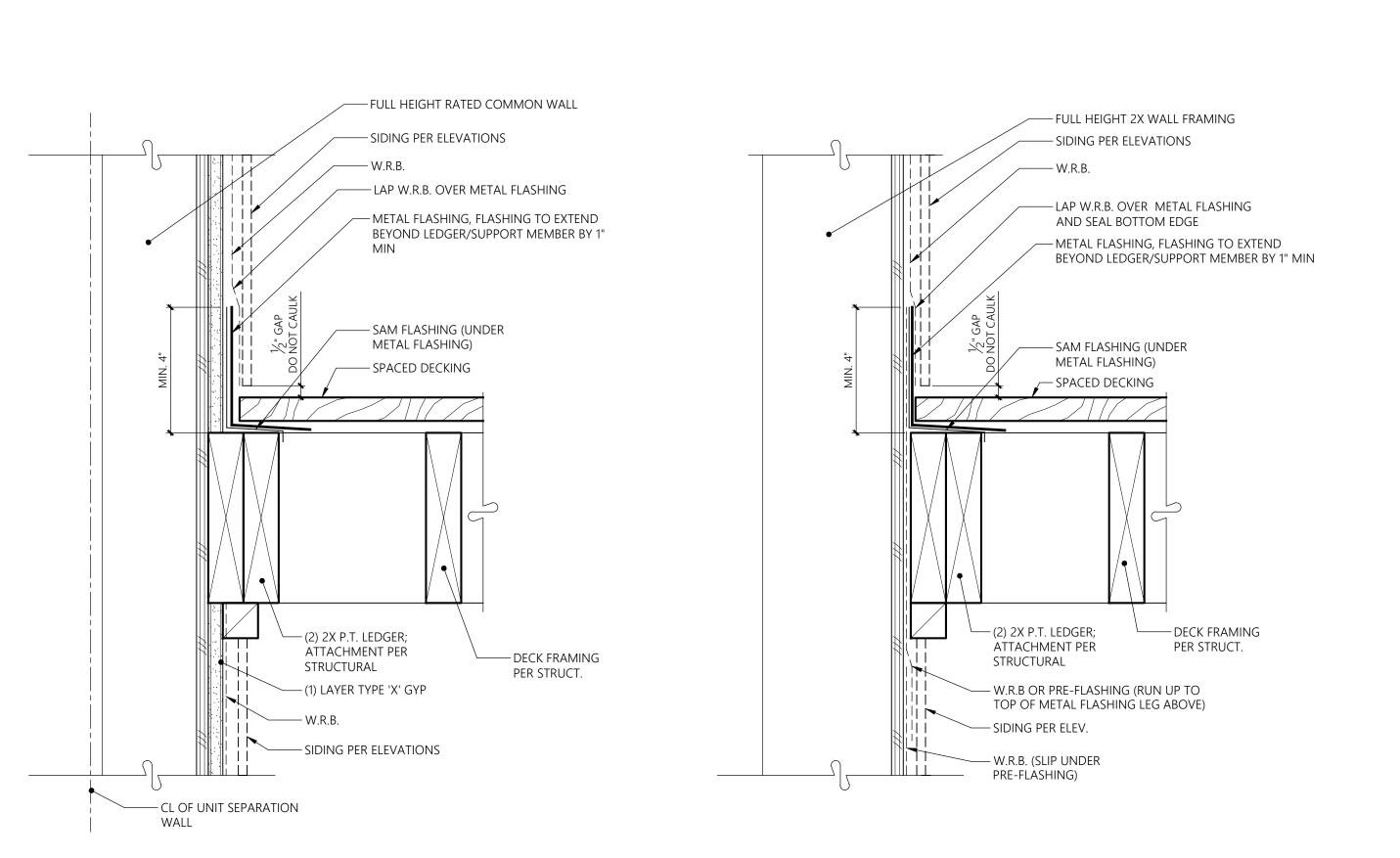
5-1-25 Job No.: Drawn By: 23-06

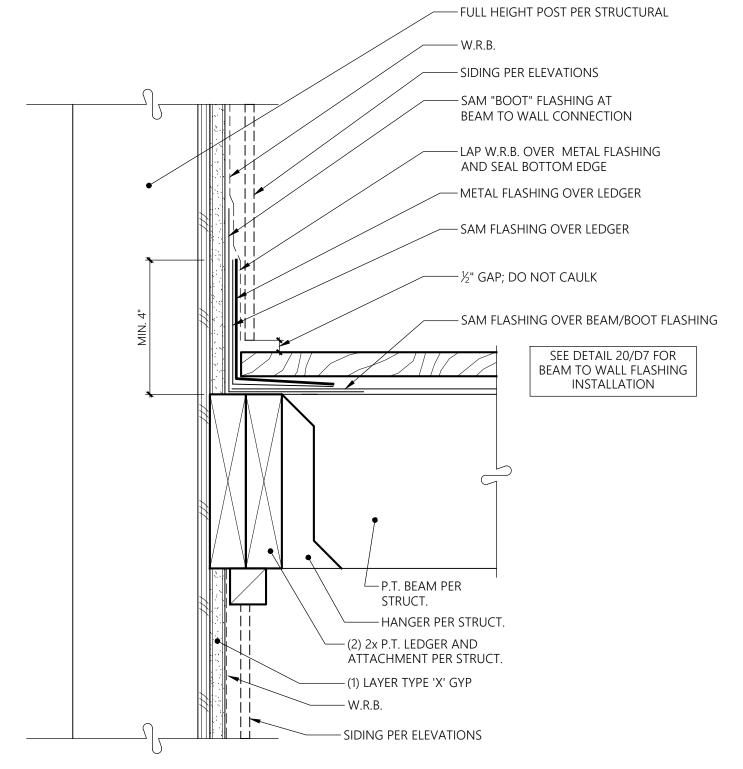
WALL BEYOND

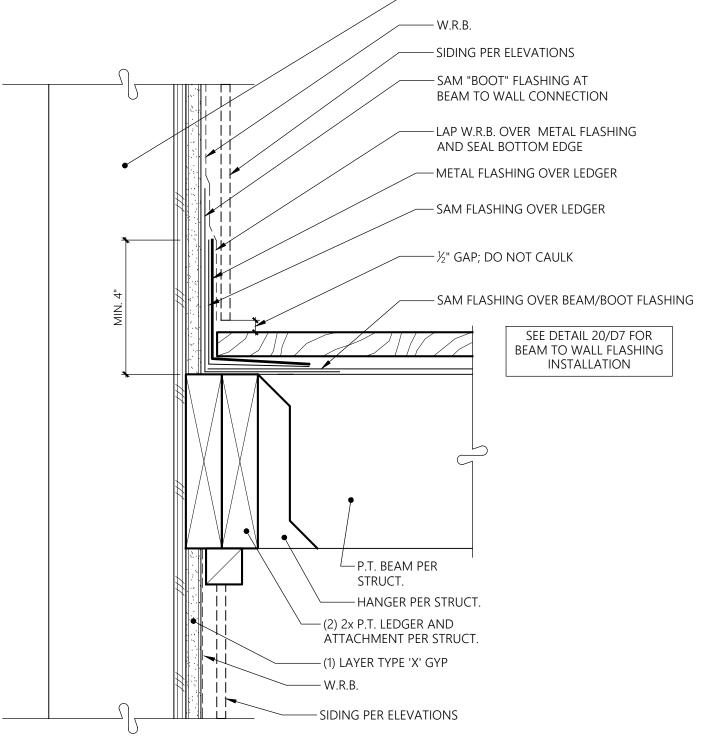
SECTION

WALL @ SPACED DECKING

APT/HDM Sheet No.:

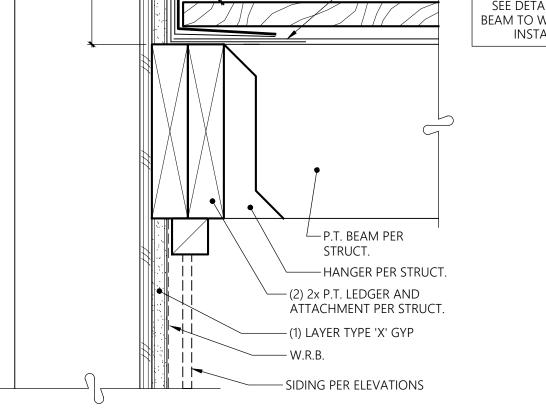






6x6 P.T. POST —

POST PLAN





ALL EXTERIOR WOOD

TO BE CEDAR



— 1/2" CEDAR SPACERS OR P.T. FURR STRIPS

DECK AT UN-RATED WALL

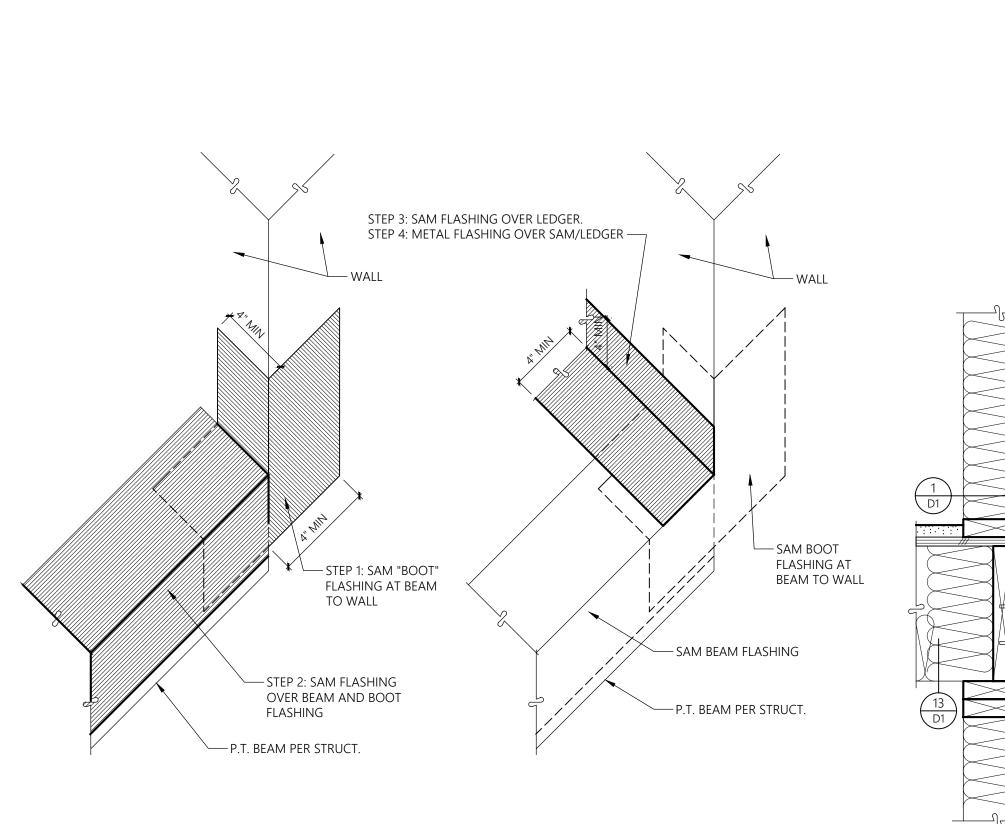
SHEET ADDED WITH

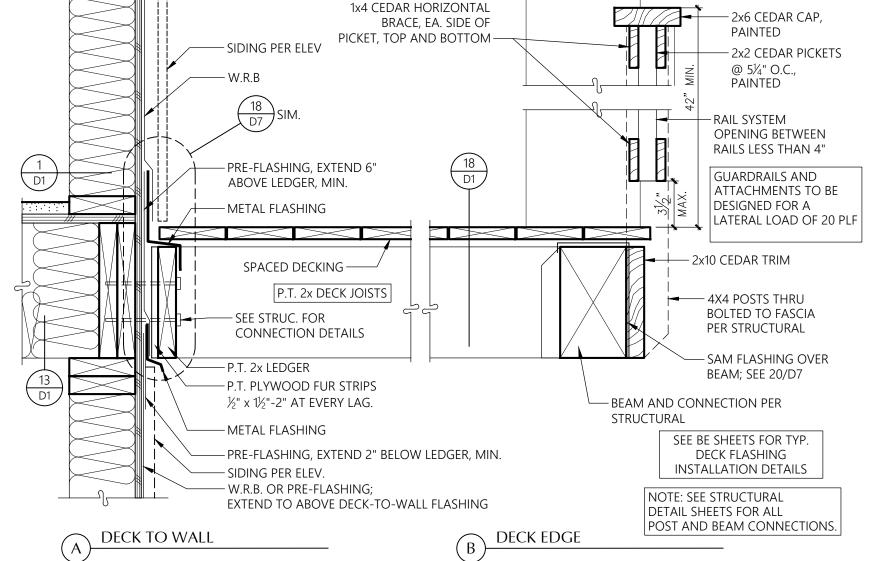
SPACED DECKING DETAILS



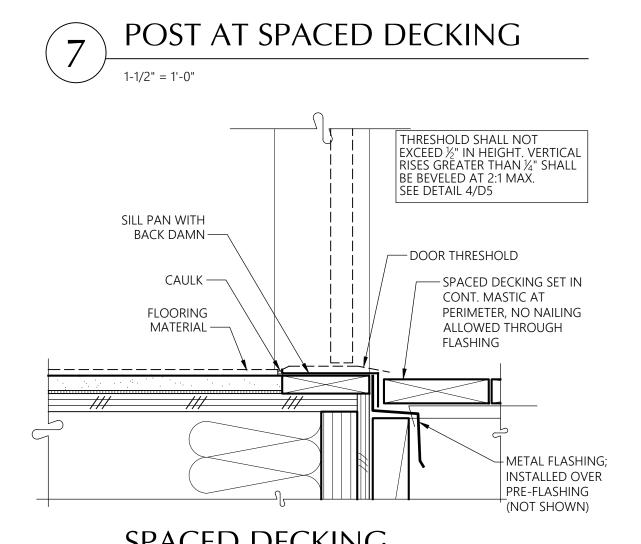
DECK AT RATED WALL

BEAM TO WALL FLASHING





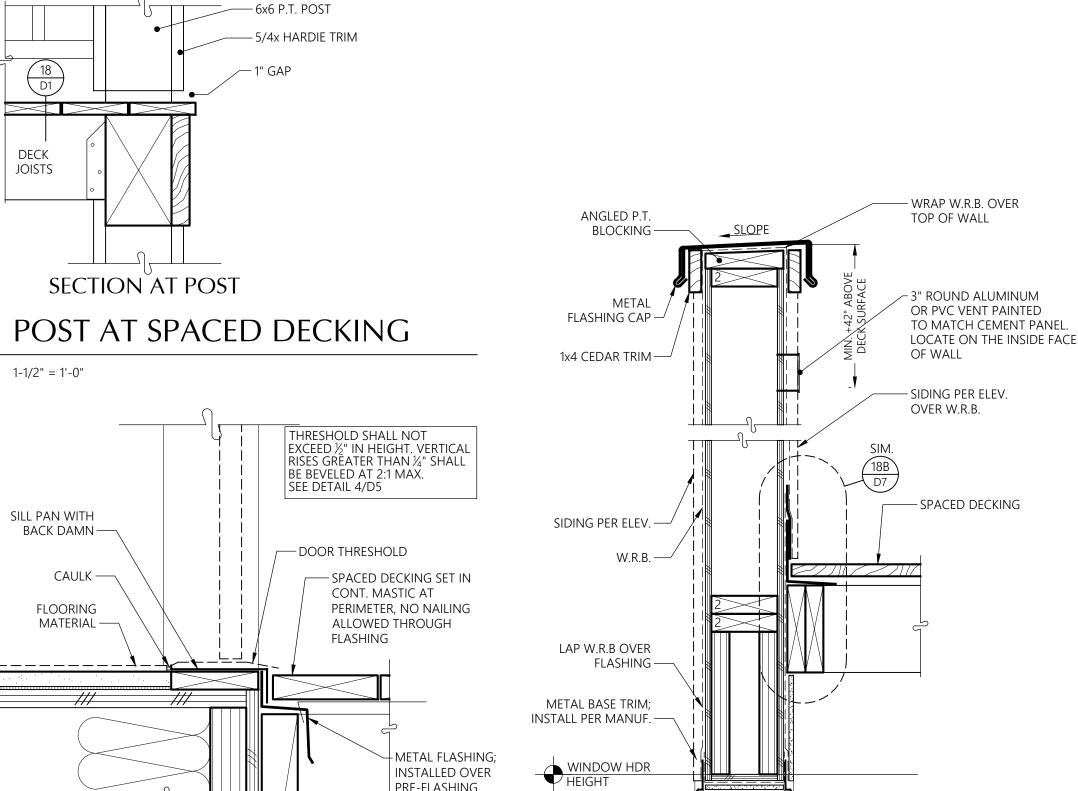
TYP. SPACED DECKING DETAILS











THE PURPOSE OF THIS DETAIL IS TO INDICATE TYPES OF LOCATIONS OF WALL, CEILING AND FLOOR PENETRATIONS THAT NEED TO BE FIRESTOPPED IN ACCORDANCE WITH 706, 708, 711, 713, 714 AND 717 OF THE 2018 INTERNATIONAL BUILDING CODE. THE THICK LINES IN THE DETAIL INDICATE A PENETRATION BY A PIPE, CONDUIT, VENT, ETC., WHETHER PLASTIC (COMBUSTIBLE) OR

NON-COMBUSTIBLE.
IN GENERAL THESE PENETRATIONS (OR THE ANNULAR SPACE AROUND THEM) WOULD COMPROMISE THE INTEGRITY OF THE FIRE-RATED ASSEMBLY UNLESS IT WERE CLOSED OFF AND PROTECTED DURING A FIRE. COMMON WALLS BETWEEN UNITS ARE FIRE-RATED WALLS. UNRATED WALLS WITHIN UNITS (EVEN THOUGH THEY MAY HAVE RATED WALLBOARD) NEED NOT BE PROTECTED. HOWEVER, PENETRATION OF THE TOP

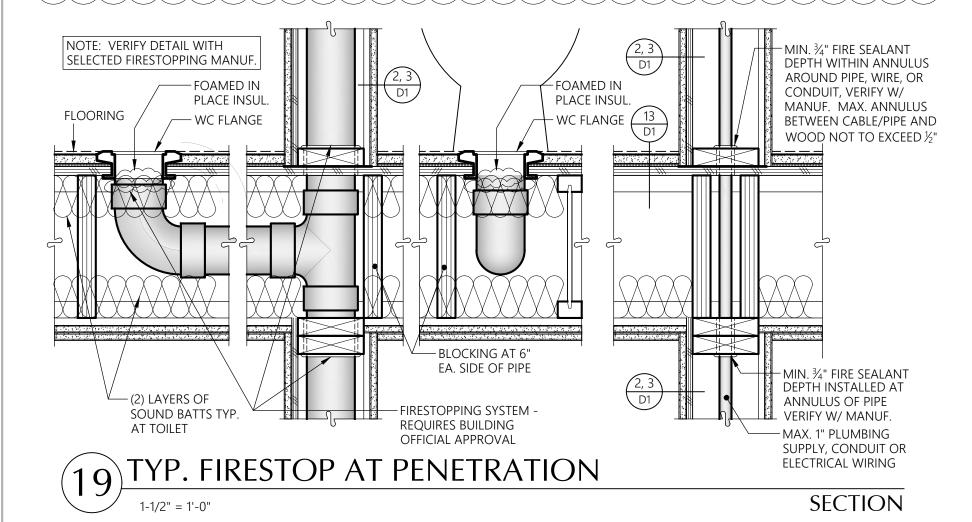
AND BOTTOM PLATES OF UNRATED WALLS INTO THE RATED FLOOR ASSEMBLY NEEDS TO BE FIRESTOPPED.
THE CONTRACTOR SHALL DETERMINE FIRESTOPPING FOR EACH SITUATION, AND TESTED ASSEMBLIES

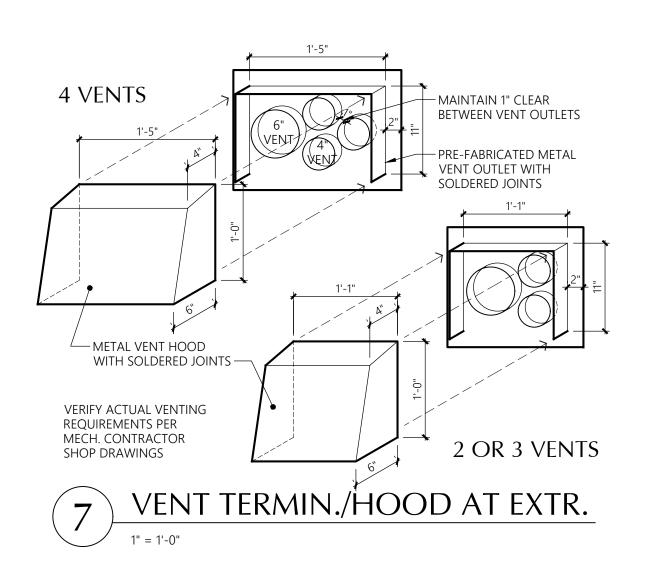
THE CONTRACTOR SHALL DETERMINE FIRESTOPPING FOR EACH SITUATION, AND TESTED ASSEMBLIES SHALL BE SUBMITTED TO THE ARCHITECT AND THE CITY IN ACCORDANCE WITH THE "DEFERRED SUBMITTALS" SECTION ON THE COVER SHEET.

PENETRATION LOCATIONS FOR FIRESTOPPING

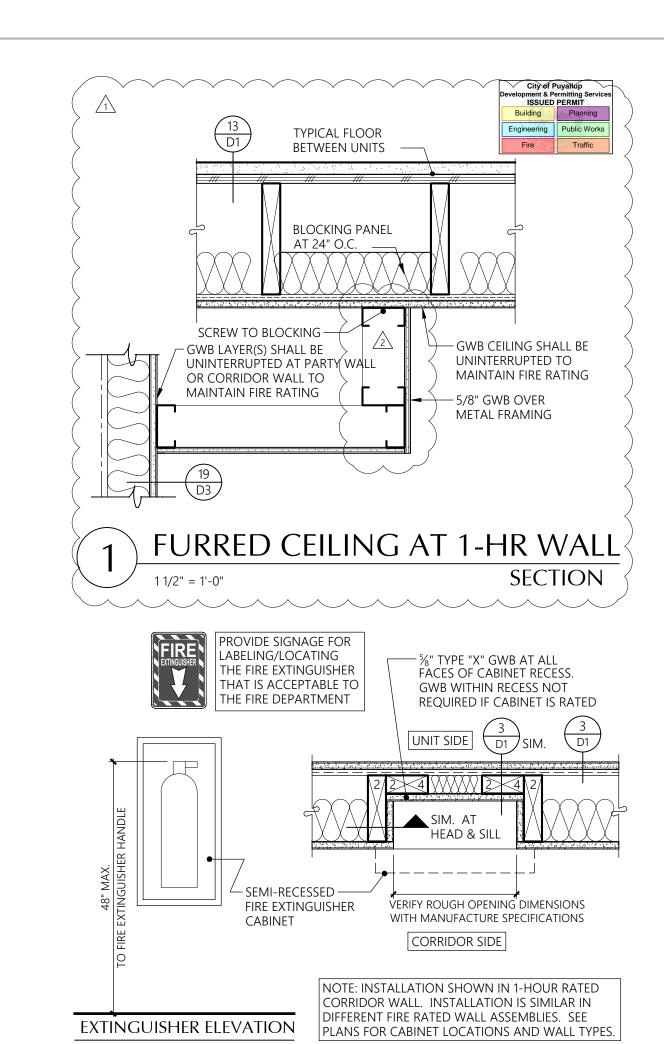
ALE SEC

DETAIL 18/D8 REMOVED











# INSULATION AND ENERGY NOTES

# Insulation - General

All insulation materials shall be installed according to the manufacturer's instructions to achieve proper densities, and maintain uniform R-values. Substantial contact of the insulation with the surface being insulated is required.

Where required, insulation shall be installed with clearances according to manufacturer's specifications. Insulation shall be installed so that required ventilation is unobstructed. For blown or poured loose fill insulation clearances shall be maintained through installation of a permanent retainer.

# Slab on Grade

R-10 slab on grade insulation shall be installed inside the foundation wall.

# Insulated Floors

Floor insulation shall be installed in a permanent manner in substantial contact with the surface being insulated. Insulation supports shall be installed so spacing is no more than twenty-four inches on center.

Floors separating conditioned space from unconditioned space shall have a vapor barrier installed. Vapor barrier shall be installed on the warm side of the insulation. The vapor barrier shall have a one perm dry cup rating or less (i.e. four mil. polyethylene or kraft faced material). The floor sheathing may be used as the vapor barrier if rated (and so stamped) at one perm (max.) Otherwise place vapor barrier on top of joists before placing sheathing.

# Exterior Walls

All wall insulation shall fill the entire cavity. Exterior wall cavities isolated during framing shall be fully insulated to the levels of the surrounding walls. All faced insulation shall be face stapled to avoid compression.

Walls separating conditioned space from unconditioned space shall have a vapor barrier installed. Faced batt insulation shall be face stapled. Vapor barrier shall be installed on the warm side of the insulation.

# Air Leakage

These air leakage notes apply to those locations separating outdoor ambient conditions from interior spaces that are heated or mechanically cooled.

Exterior joints around windows and door frames, between wall cavities and window or door frames, openings between walls and foundation, between walls and roof and wall panels; openings at penetrations of utility services through walls, floors and roof; and all other openings in the building envelope shall be sealed, caulked, gasketed, or weatherstripped to limit air leakage in a manner approved by the building official.

# Doors All exterior doors or doors serving as access to an enclosed

perimeter when in a closed position.

The thermal transfer characteristics of insulated doors shall be determined per NFRC 100-91.

unheated area shall be weatherstripped to limit leakage around their

# Windows:

Glazing U-values shall be determined in accordance with

NFRC 100-91.

Windows and SGD shall be double glazed vinyl type with the U-values indicated on the unit plans.

Windows shall be furnished with outdoor air inlets as indicated on the Unit Electrical plans. Inlets shall have a controllable and secure opening and be capable of a total opening area of not less than four (4) square inches and tested by a nationally recognized standard or approved agency and located to avoid drafts. Inlets shall be screened or otherwise protected from entry by insects, leaves, or other material.

# Roof/Ceilings:

Roof/Ceiling insulation: Open-Blown or poured loose fill insulation may be used in attic spaces where the slope of the ceiling is more than 4 in 12 and there is at least 44 inches of clear distance from the top of the bottom chord of the truss or ceiling joist to the underside of the sheathing. When eave vents are installed, baffling of the vent openings shall be provided so as to deflect the incoming air above the surface of the insulation. Baffles shall be rigid material, resistant to wind driven moisture. When feasible, the baffles shall be installed from the top of the outside of the exterior wall, extending inward, to a point six inches vertically above the height of noncompressed insulation, and twelve inches vertically above loose fill insulation. Baffles shall be in place at the time of framing inspection.

Where the ventilation space above the insulation is less than an average of twelve inches roof ceiling assemblies shall be provided with a vapor barrier having a 0.5 perm cup rating or less. Faced batt insulation where used as a vapor barrier shall be face stapled.

where used as a vapor barrier shall be face stapled.

Vapor barriers shall not be required in roof/ceiling assemblies where the ventilation space above the insulation averages twelve inches or greater.

Vapor barriers shall be installed on the warm side of the ulation.

# MILBRANDT

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**Details** 

# Bradley Heights Apartments

Wa

Puyallup,

# Timberlane Partners

Revisions

No. Date Description

1 8-30-24 Owner Changes/
Permit Corrections

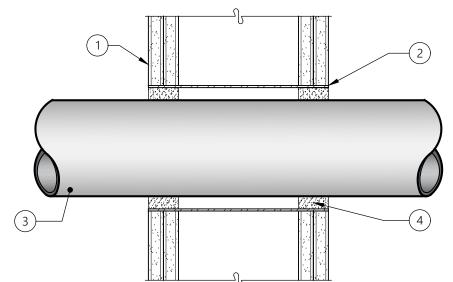


Initial Publish Date: Date Plotted:

Date Plotted: 5-6-25

Job No.: Drawn By:
23-06 APT/HDM

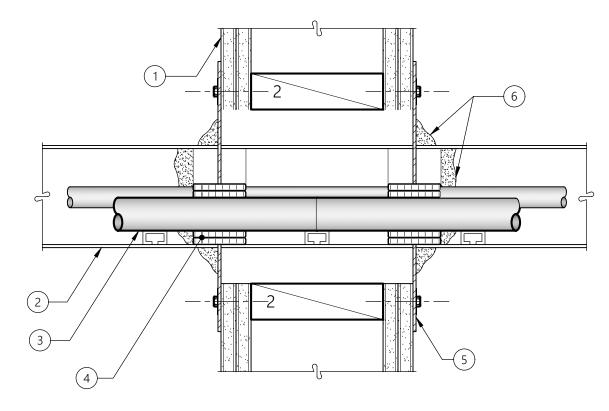




- (1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET DI FOR DETAILS
- 2 METALLIC SLEEVE OPTIONAL SEE MANUFACTURER INFORMATION FOR ACCEPTABLE METALLIC SLEEVES
- (3) ONE NONMETALLIC PIPE WITHIN FIRESTOP SYSTEM. PIPE MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 DEGREES FROM PERPENDICULAR. PIPE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. THE SPACE BETWEEN THE PIPE AND PERIPHERY OF THE OPENING SHALL BE MIN.  $\frac{1}{4}$ " TO MAX  $\frac{1}{16}$ ". SEE MANUFACTURER INFORMATION FOR ACCEPTABLE PIPE TYPES AND SIZES.
- (4) FOR 1 HR F RATING, MIN. 5/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF THE WALL. FOR 2 HOUR F RATING, MIN 1-1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. HILTI FS-ONE OR FS-ONE MAX INTMESCENT SEALANT

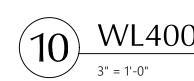


**SECTION** 

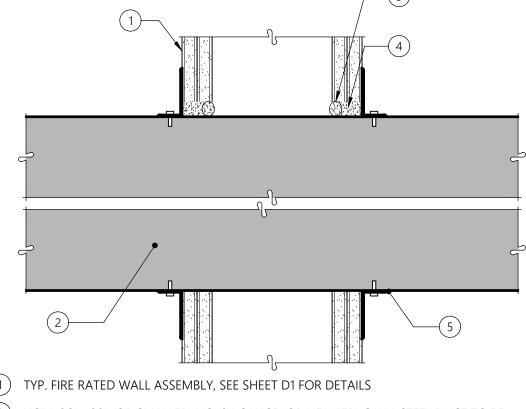


- (1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS
- ( 2 ) MAX 24" WIDE BY MAX 4" DEEP OPEN LADDER STEEL OR ALUMINUM CABLE TRAY. CABLE TRAY TO CONSIST OF CHANNEL-SHAPED SIDE-RAILS WITH BOXED CHANNEL RUNGS SPACED 9" O.C. CABLE TRAY CENTERED IN FRAMED OPENING AND RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.
- (3) AGGREGATE CROSS-SECTIONAL AREA OF CABLES IN CABLE TRAY NOT TO EXCEED 32% OF THE CROSS-SECTIONAL AREA OF THE CABLE TRAY BASED ON A MAX 3" CABLE LOADING DEPTH WITHIN THE CABLE TRAY. ACCEPTABLE TYPES AND SIZES OF CABLE AS NOTED BY
- (4) RIGID ALUMINUM FOIL-FACED SHEET WITH GALV. STEEL SHEET BACKER. SHEETS CUT TO TIGHTLY FOLLOW THE CONTOURS OF THE CABLES AROUND THE ENTIRE PERIMETER OF THE CABLE TRAY AND CABLE FILL. SHEETS CUT TO LAP A MIN. OF 2" ON THE WALL ON ALL SIDES OF THE OPENING ON BOTH SIDES OF THE WALL.
- (5) MIN. 2" WIDE STRIP OF MIN 0.020" THICK (26 GAUGE) GALV. STEEL CENTERED OVER ENTIRE LENGTH OF EACH BUTTED SEAM OR SLIT MADE IN THE INTUMESCENT SHEET. INSTALL PER
- (6) ONE LAYER OF  $\frac{1}{2}$ " x  $\frac{1}{16}$ " ADHESIVE BACKED GRAPHITE INTUMESCENT SEAL POSITIONED UNDER INTUMESCENT SHEET AROUND ENTIRE PERIMETER OF THROUGH OPENING OR MIN.  $\frac{1}{4}$ " DIAM. CONTINUOUS BEAD OF CAULK OR PUTTY APPLIED TO EDGE OF INTUMESCENT SHEET AT ITS INTERFACE WITH SURFACE OF FLOOR OR WALL AROUND ENTIRE PERIMETER OF THROUGH OPENING. CAULK APPLIED TO FILL ALL INTERSTICES BETWEEN CABLES AND BETWEEN CABLES AND WRAP STRIP (ITEM 4). CAULK DEPTH TO BE MIN. 2" WITHIN CONFINES OF WRAP STRIP ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. GENEROUS APPLICATION OF CAULK TO BE APPLIED AROUND THE BASE OF THE CABLE TRAY SIDE-RAILS AND CONTOUR APPLIED WRAP STRIPS AT THEIR EGRESS FROM THE INTUMESCENT SHEET ON BOTH SIDES OF THE WALL ASSEMBLY. CAULK ALSO APPLIED TO COVER ALL EXPOSED EDGES OF WRAP STRIPS TO A MIN. THICKNESS OF 1/8"

SEE MANUF. INFORMATION FOR USE OF PUTTY AS CAULKING ALTERNATIVE.



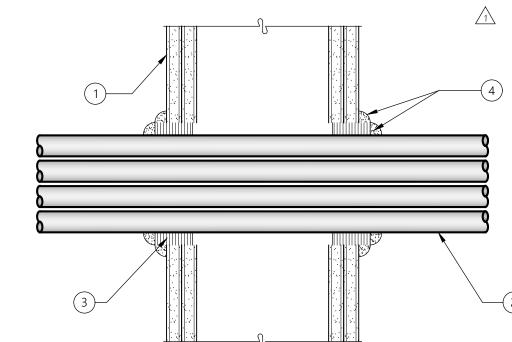




- (1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS
- ( 2 ) NOM. 36" x 30" (OR SMALLER) NO. 24 GAUGE (OR HEAVIER) GALV. STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. AN ANNULAR SPACE OF MIN 0" TO MAX 2" IS REQUIRED WITHIN THE FIRESTOP SYSTEM.
- (3) PACKING MATERIAL (OPTIONAL) POLYETHYLENE BACKER ROD, MINERAL WOOL BATT INSULATION OR FIBERGLASS BATT INSULATION FRICTION-FIT INTO ANNULAR SPACE FOR 2 HR RATED WALL ASSEMBLIES ONLY. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL (ITEM
- (4) MIN. 5/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL ASSEMBLY. AT THE POINT CONTACT LOCATION BETWEEN DUCT AND WALLBOARD, A MIN  $\frac{1}{4}$ " DIAM. BEAD OF SEALANT SHALL BE APPLIED AT THE WALLBOARD/DUCT INTERFACE ON BOTH SURFACES OF WALL ASSEMBLY.
- (5) MIN. 16 GAUGE GALV. STEEL ANGLES SIZED TO LAP DUCT A MIN OF 2" AND LAP WALL SURFACES OF A MIN OF 1". ANGLES ATTACHED TO DUCT ON BOTH SIDES OF WALL WITH MIN ½" LONG, NO. 10 (OR LARGER) SHEET METAL SCREWS SPACED A MAX OF 1" FROM EACH END OF DUCT AND SPACED A MAX OF 6" OC.



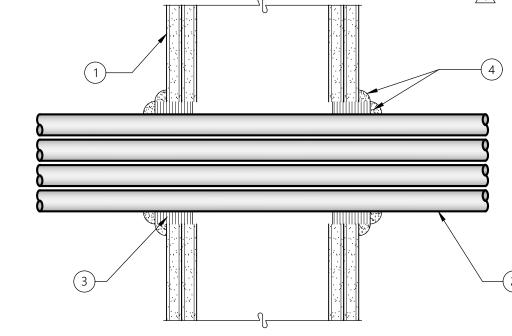
**SECTION** 



- (2) CABLES MAX 4 IN. DIAM TIGHT BUNDLE OF CABLES CENTERED IN CIRCULAR CUTOUTS IN GWB AND RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. SEE
- (3) WRAP STRIP NOM ¼" THICK INTUMESCENT MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN NOM 2 IN. WIDE STRIP TIGHTLY WRAPPED AROUND CABLE BUNDLE (FOIL SIDE OUT) WITH SEEM BUTTED. WRAP STRIP SECURELY BOUND WITH STEEL WIRE TIE AND SLID INTO ANGULAR SPACE APPROX. 1-1/4" SUCH THAT APPROX 3/4" OF THE WRAP WIDTH PROTRUDES FROM WALL SURFACE ON EACH SIDE OF ASSEMBLY
- MIN. ½" THICKNESS DIAM OF MOLDABLE PUTTY APPLIED TO THE WRAP STIP/WALL INTERFACE AND TO THE EXPOSED EDGE OF WRAP STRIP APPROX 3/4" FROM WALL SURFACE ON EITHER SIDE OF ASSEMBLY. PUTTY TO BE FORCED INTO INTERSTICES OF CABLE BUNDLE TO MAX EXTENT POSSIBLE WITHIN CONFINES OF THE WRAP STRIP EACH SIDE OF ASSEMBLY



WL3030

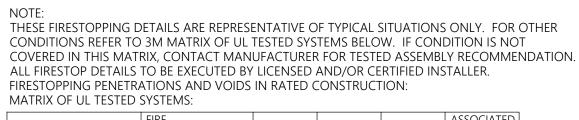


(1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS

MANUFACTURER INFORMATION FOR ACCEPTABLE TYPES AND SIZES CABLES.

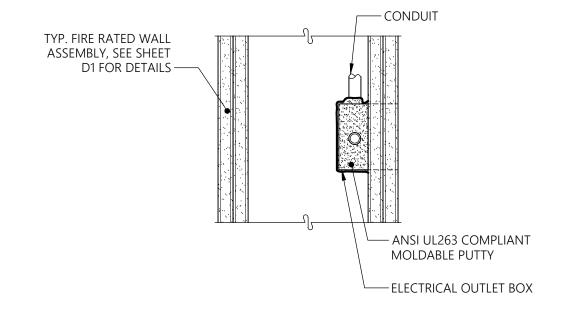


**SECTION** 

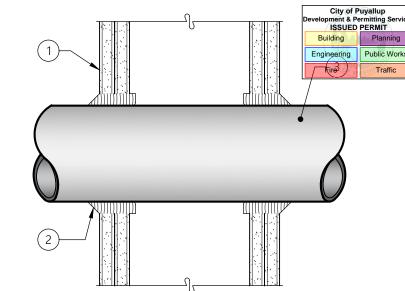


PENETRATING ITEM	FIRE ASSEMBLY	RATING	SYSTEM	PROD	ASSOCIATED DETAIL	
METAL PIPE/CONDUIT	GYP. WALLS	1,2&3 HR	WL1001	CP25WB+	1/D9 <u>2</u>	
MULTIPLE METAL	GYP. WALLS	1&2 HR	WL1016	CP25WB+	2/D9 <u>2</u>	
INSULATED PIPE	GYP. WALLS	1&2 HR	WL5039	CP25WB+	4/D9 <u>2</u>	
HVAC DUCTS	GYP. WALLS	1&2 HR	WL7008	CP25WB+	6/D9 <u>2</u>	
BUND CABLES	GYP. WALLS	1&2 HR	WL3031	MOLDABLE PUTTY	7/D9 <u>2</u>	
ELEC. OUTLET BOXES	GYP. WALLS	1&2 HR	ANSI UL263	MOLDABLE PUTTY	8/D9 <u>2</u>	
CABLE TRAYS	GYP. WALLS	1&2 HR	WL4004	CP25WB+ CS195+	10/D9/2	

MATRIX OF UL TESTED SYSTEMS FOR FIRESTOPPING



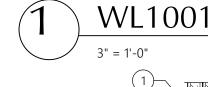
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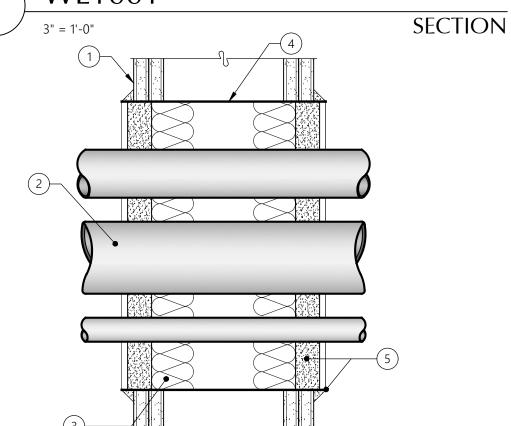


(1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS

(2) MIN. 5/8", 11/4", 17/8" THICKNESS OF CAULK FOR 1, 2, 3 HOUR, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN ¼" DIA. BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL.

(3) METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (POINT CONTACT) TO MAX 2 IN.





(1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS

(2) NOM 3 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, STEEL CONDUIT OR STEEL ELECTRICAL METALLIC TUBING. MULTIPLE PIPES AND/OR CONDUIT PERMITTED IN SLEEVED OPENING PROVIDED A MIN SEPARATION OF 1/4" IS MAINTAINED BETWEEN PIPES OR

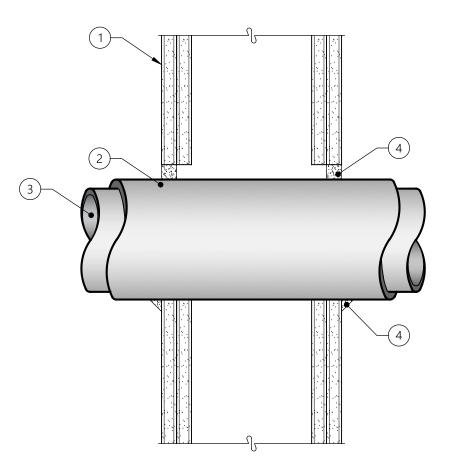
MIN. 1" THICKNESS OF RIGID GLASS FIBER INSULATION OR MINERAL WOOL BATT (3) INSULATION FIRMLY PACKED INTO STEEL SLEEVE ON BOTH SIDES OF WALL ASSEMBLY AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED MIN. %" FROM SURFACE OF WALL ON BOTH SIDES OF WALL ASSEMBLY.

4 NO 28 GALIGE GALV SHEET STEEL FORMED INTO MAX 12 IN DIA OR MAX 12 IN BY 9 IN SLEEVE WITH NOM 2 IN. OVERLAP AT SEAM. LENGTH OF SLEEVE TO BE APPROX. 1 IN. GREATER THAN OVERALL THICKNESS OF WALL ASSEMBLY, SUCH THAT, WHEN INSTALLED, THE ENDS OF THE SLEEVE WILL PROJECT APPROX. 1/2 IN. BEYOND THE SURFACE OF THE WALL ON BOTH SIDES OF THE WALL ASSEMBLY.

(5) CAULK OR SEALANT APPLIED TO FILL THE STEEL SLEEVE TO A MIN. DEPTH OF 1" ON BOTH SIDES OF WALL ASSEMBLY. A NOM. ½" DIA. CONTINUOUS BEAD OF CAULK SHALL BE APPLIED AROUND THE CIRCUMFERENCE OF THE STEEL SLEEVE AT ITS EGRESS FROM THE GYPSUM WALLBOARD LAYERS ON BOTH SIDES OF THE WALL ASSEMBLY.

WL1016

**SECTION** 



1) TYP. FIRE RATED WALL ASSEMBLY, SEE SHEET D1 FOR DETAILS

( 2 ) NOM. ½" TO 2" THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN 3.5 PCF) GLASS FIBER UNITS FOR 1 HR RATED ASSEMBLIES, NOM ½" TO 1½" THICK CYLINDRICAL HEAVY DENSITY GLASS FIBER UNITS FOR 2 HR RATED ASSEMBLIES, JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. THE ANNULAR SPACE BETWEEN THE INSULATED PIPE AND THE EDGE OF THE THROUGH OPENING SHALL BE MIN 0" TO MAX. 11/4"

(3) ONE METALLIC PIPE OR TUBE TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL

(4) MIN. %" THICKNESS OF CAULK APPLIED WITHIN ANNULAR SPACE FLUSH WITH EACH SURFACE OF WALL. A MIN. ½" DIAM. BEAD OF CAULK SHALL BE APPLIED TO THE PIPE INSULATION/ WALLBOARD INTERFACE AT THE POINT CONTACT LOCATION ON BOTH SIDES OF WALL.



WL5039

**SECTION** 

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**Bradley** Heights **Apartments** 

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**Partners** Revisions

No. Date Description /1\ 8-30-24 Owner Changes/ Permit Corrections



Initial Publish Date:

Date Plotted: 5-1-25 Job No.: Drawn By: 23-06 APT/HDM Sheet No.:

NOTE: ALL DETAILS ON THIS SHEET ARE RECOMMENDED FIRE RATED PENETRATION DETAILS BASED ON PRODUCTS LISTED IN 12/D9. OTHER PRODUCTS MEETING THE SAME LEVEL OF ASSEMBLY SHALL BE DEEMED ACCEPTABLE.

-WOOD FRAMING

—P.T. SHEATHING

-CONC. FDN. WALL

FASTEN AT

CONCRETE

STEM WALL -

△ 24"

HIGH

\ P.T. WALL SHEATHING

12" WIDE APPROVED

CORNER, OVER P.T.

CORNER AT FDN. STEP

PRE-FLASHING AT INSIDE

OF HIGH CONCRETE WALL

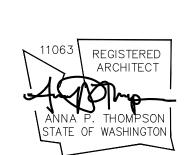
SHEATHING, PRIOR TO BUILDING

PAPER, EXTEND 6" ABOVE TOP

(SHOWN IN CUTAWAY)

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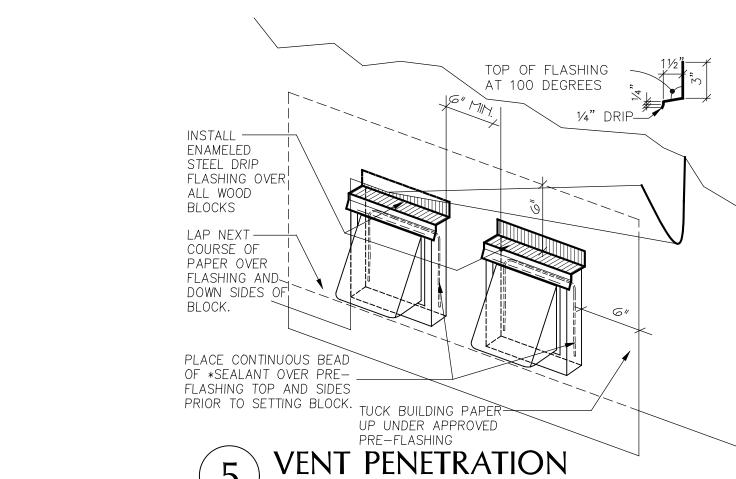
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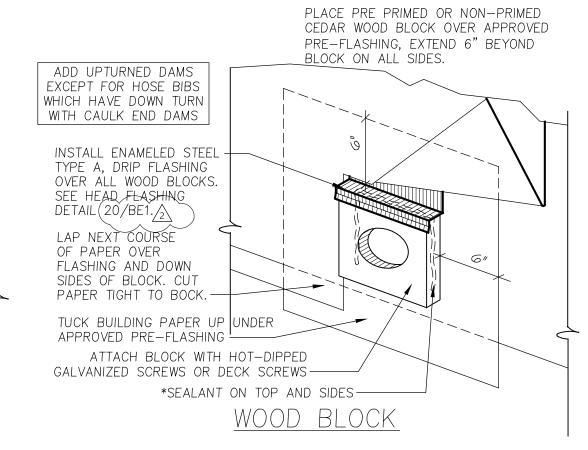
Initial Publish Date: Date Plotted:

Job No.: Drawn By: 23-06 REW/DJV

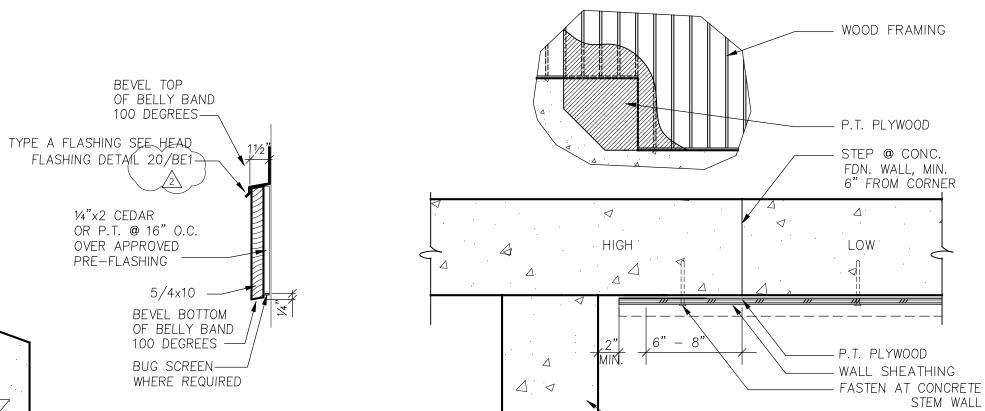
Sheet No.:

BE1





PENETRATION DETAIL



STEP @ CONC.

FDN. WALL —

<LOW

RETAINING WALL SIDING AT FDN. STEP

**BE-Sheet Disclaimer** 

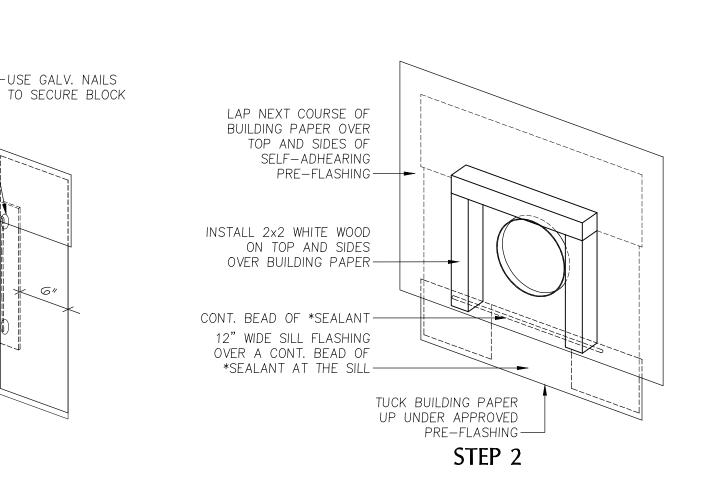
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All manufacturer recommendations should be followed when installing specific materials.

If a Subcontractor or installer finds a situation where the BE-Sheet details conflict or fall below any standards set forth by the organizations mentioned above, it will be the responsibility of the Subcontractor to seek appropriate and written clarification from the Contractor before proceeding. The Contractor reserves its right to add, change, modify or update any of the details at any time. *All components, sealants, fasteners, or materials shall be approved for specific use or application described by the designs, and shall be compatible with all material with which each component comes in contact

with.

NO SCALE



WALL

APPROVED PRE-FLASHING

½"x 2" CEDAR

OR P.T. @ 16" O.C. OVER FLASHING OR BUILDING PAPER

OR BUILDING PAPER-

INSTALL 60 MIN. GRADE D

WEATHERBOARD FASHION

BUILDING PAPER

воттом.

STARTING FROM THE

" OVERLAP AT ALL HORIZONTAL JOINTS

OVERLAP AT

AIR VENT (8" OR LARGER)

STEP 1

MIN.12" WIDE SELF-

ADHERING PRE-FLASHING

TO BE INSTALLED WITH

1" OVERLAP ON METAL

VENT FLANGES. SIDES

FIRST, THEN TOP.

INSTALL VENT PER

PLACE CONT. BEAD OF

PRE-FLASHING TOP AND

FIRST, APPLY APPROVED

ON ALL SIDES OF VENT-

PRE-FLASHING, EXTEND 6"

NAIL SLOTS <u>PRIOR</u> TO

SIDES, OVER OR INSIDE OF

MANUFACTURER -

*SEALANT OVER

SETTING VENT-

12" WIDE WRAP

AT INSIDE AND

OUTSIDE CORNERS

BUILDING PAPER INSTALLATION

USE GALV. NAILS

NOTE FOR ALL STYLES: UP-TURNED END DAMS TO BE USED AT EVERY TERMINATION POINT AT ALL LOCATIONS

AREAS OF USE: 100 DEGREES -Bellybands -Windows -All exterior doors -Garage wraps END DAM--Non-vinyl penetration blocks FLASHING TYPE A

> AREAS OF USE: 100 DEGREES -Column base shoe -Anywhere  $\frac{1}{4}$ " kick-out

would not be acceptable or at locations where kick-out could be dangerous for homeowners. FLASHING TYPE B

PAPER OVER FLASHING — INSTALL 1 PIECE CORNER FLASHING OVER BELLY BAND FLASHING, SET IN *SEALANT — PLACE *SEALANT TO SEAL EDGES -TYPE A BELLY BAND FLASHING SEE DETAIL 20/BE1— STEP 2 SEE DETAIL 8/BE1 FOR

BÉLLYBAND FLASHING

6" MIN. AROUND CORNER STEP 1 LAP BUILDING EXTEND BELLYBAND 6" MIN. AROUND CORNER ADDITIONAL BÉLLYBAND INFORMATION.

WALL

EXTEND BELLYBAND

EXTEND BELLYBAND STEP ' 6" MIN. AROUND CORNER LAP BUILDING PAPER OVER FLASHING INSTALL 1 PIECE CORNER FLASHING OVER BELLY BAND FLASHING, SET IN *SEALÁNT BELLY BAND FLASHING, SEE DEVAIL PLACE *SEALANT 20/BE1 /2 TO SEAL EDGES -SEE DETAIL 8/BE1 FOR ADDITIONAL BELLYBAND EXTEND BELLYBAND INFORMATION. 6" MIN. AROUND CORNER STEP 2

— USE GALV. NAILS

MIN. 12" WIDE APPROVED

PRE-FLASING AT JAMBS

MIN. 12" WIDE APPROVED

PRE-FLASHING AT JAMBS —

MIN. 12" WIDE SILL FLASHING

INSTALL METAL COLLAR

PER MANUFACTURER

OVER A CONTINUOUS

THE SILL ——

PLACE CONTINUOUS

BEAD OF *SEALANT

OR INSIDE OF NAIL

COLLAR. —

APPROVED

½"x 2" CEDAR

OR P.T. @ 16" O.C.

OVER FLASHING -

PRE-FLASHING
OR BUILDING PAPER —

OVER PRE-FLASHING

TOP AND SIDES, OVER

SLOTS PRIOR TO SETTING

TUCK BUILDING PAPER

WALL

WALL

UP UNDER APPROVED

PRE-FLASHING ----

DIRECT VENT F.P.

BEAD OF *SEALANT AT

TO SECURE BLOCK

BELLYBAND FLASHING

EXTEND BUILDING PAPER OVER METAL FLASHING — — OVERLAP FLASHING 6" AND SEAL WITH SEALANT. INSTALL ENAMELED - STEEL TYPE A FLASHING OVER BELLY BAND. SEE DETAL 20/BE1 🛕 −¼"x2 CEDAR OR P.T. @ 16" O.C. OVER PAPER SLIP BUILDING PAPER UP UNDER APPROVED PRE-FLASHING OR BUILDING PAPER A MINIMUM OF 2" ---

> STARTING FROM THE BOTTOM. BELLY BAND

INSTALL 60 MIN. GRADE D BUILDING

PAPER WEATHERBOARD FASHION

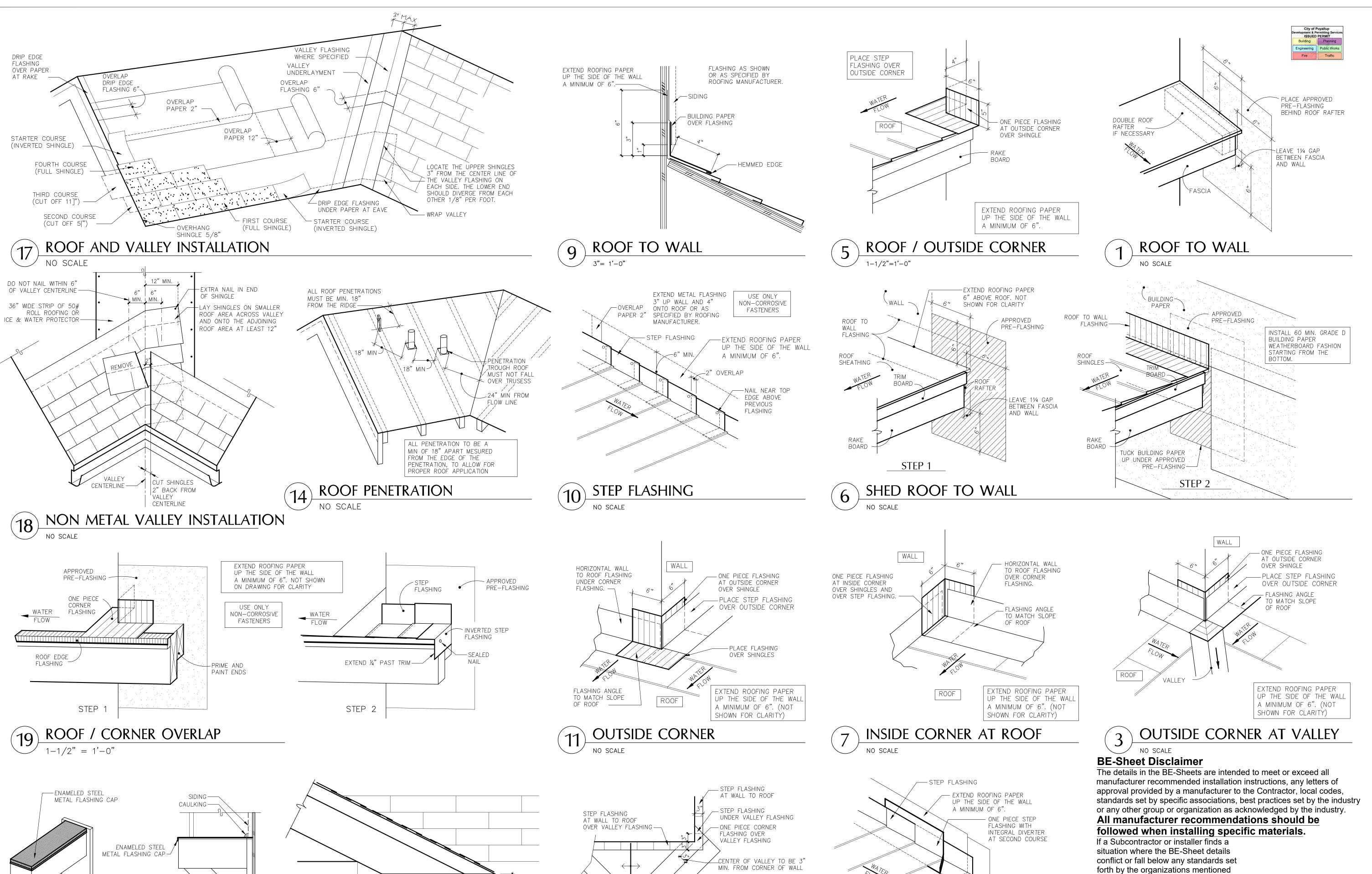
BUG SCREEN — WHERE REQUIRED

TRIM OR SIDING. RAIN SCREEN/WRB NOT SHOWN FOR CLARITY. MINIMUM 2" PAST WIDEST PART OF SIDING OR TRIM DISTANCE MAY VARY BUT NO LESS THAN 1" UPTURNED END DAM--HEMMED EDGE AREAS OF USE: ¾" BLIND -Water tables CAULK JOINT-

100 DEGREES

FLASHING TYPE C

HEAD FLASHING TYPES



_VALLEY FLASHING

- LAP VALLEY FLASHING AT RIDGE AND ROOF

PLAN VIEW

CRICKET DETAIL

PROVIDE 2" GAP BETWEEN
ALL TRIM AND ROOFING

ROOF SEPARATION

NO SCALE

ALL END CUTS TO BE PRIMERED

ADD 2 GASKETED

SCREWS EACH SIDE TO

PREFABRICATED

BRACE/CORBEL

NO SCALE

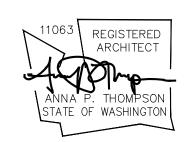
DECORATIVE

SECURE TO CORBEL

DECORATIVE CORBEL/BRACE

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above, it will be the responsibility of

and written clarification from the

details at any time.

with.

APPROVED PRE-FLASHING

FASCIA

ROOF DIVERTER

MIN. 6" ALL SIDES. SEE DETAIL 1/BE2 2

Contractor before proceeding. The

Contractor reserves its right to add

change, modify or update any of the

*All components, sealants, fasteners,

specific use or application described

compatible with all material with which

or materials shall be approved for

each component comes in contact

by the designs, and shall be

the Subcontractor to seek appropriate

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BE2

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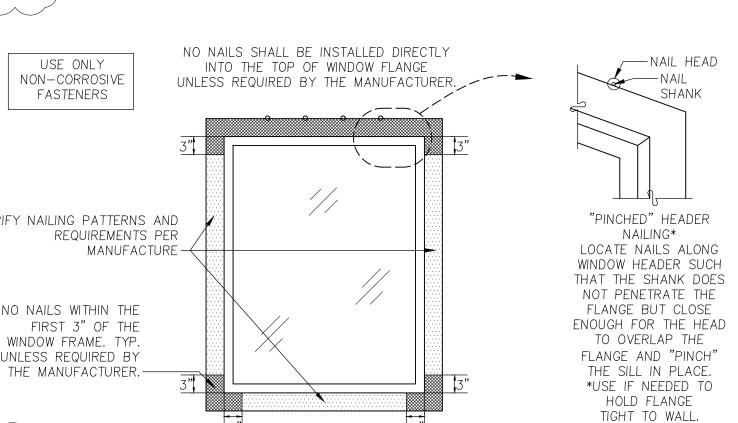
- APPROVED PRE-FLASHING

BETWEEN WINDOWS

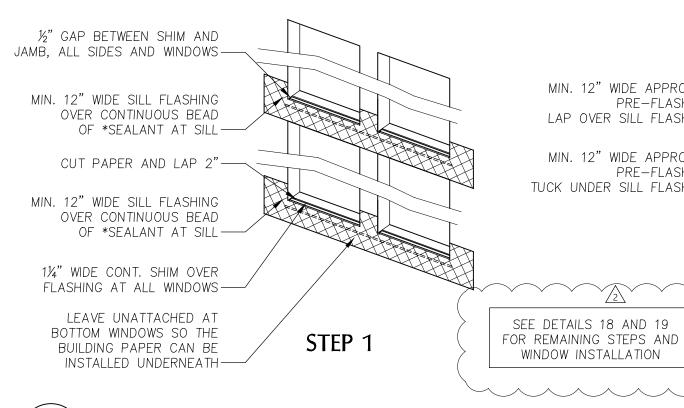
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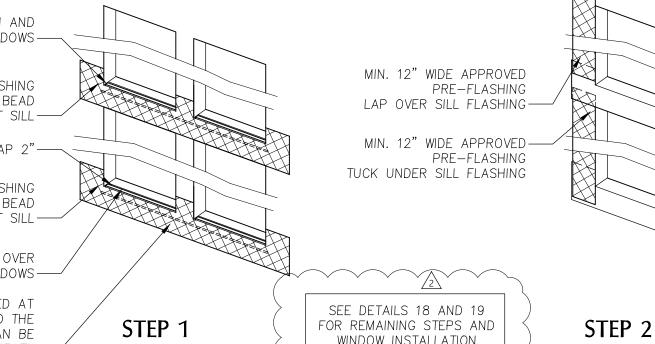
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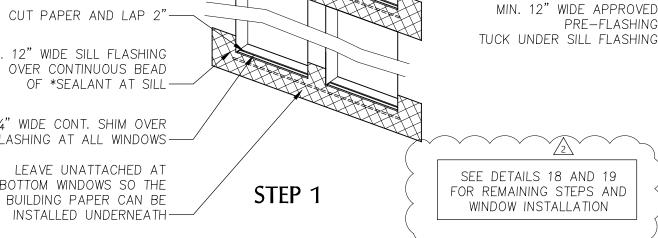
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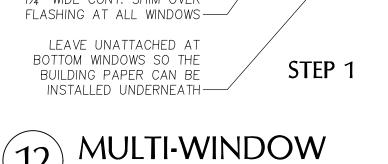


TYPICAL WINDOW FLANGE NAILING

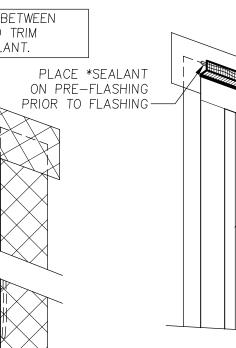


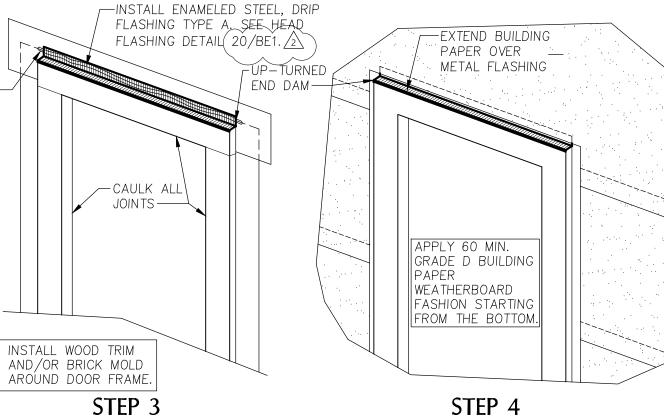












FILL GAP BETWEEN JAMB AND TRIM USE ONLY -APPROVED PRE-FLASHING OVER NON-CORROSIVE A CONTINUOUS BEAD OF *SEALANT WITH SEALANT. FASTENERS DECK TO -NO FASTENERS THIS FACE MIN. 12" WIDE WALL, FLASHING APPROVED -ONE PIECE GALVANIZED DOOR PAN. DO PRE-FLASHING-NOT PIERCE HORIZONTAL FLASHING -INSTALL CONTINUOUS BEAD OF *SEALANT TO DOOR SILL INSTALL CONTINUOUS BEAD PRIOR TO SETTING DOOR PAN. OF *SEALANT TO PAN APPLY DECK EXTEND TO EDGES OF PAN PRIOR TO SETTING DOOR. BASE COAT AND UP WALL. PRIOR TO CONT. BEAD OF *SEALANT SETTING DOOR PAN ON BOTH JAMB *DO NOT PLACE SEALANT AND TRIM SIDE BEHIND SILL FLANGE -OF PRE-FLASHING LAP DOOR PAN OVER PAN OUT DECK TO WALL FLASHING. FLASHING - INSTALL PRE-FLASHING -DOOR PAN AND TO SPAN GAP AND ATTACH TO JAMB DECK SURFACE STEP 1 (ALL DOORS) STEP 2 SET DOOR ON PAN

AND SECURE TO FRAMING

DOOR INSTALLATION PROCEDURE

NO SCALE

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etails Building

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BE4

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5-1-25

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approval provided by a manufacturer to the Contractor, local codes,

-BUILDING PAPER

- SEE STRUC. FOR CONNECTION DETAILS

— P.T. PLYWOOD FUR STRIPS  $\frac{1}{2}$ " x  $\frac{1}{2}$ "-2" AT EVERY LAG.

— P.T. 2x LEDGER

— TYPE A FLASHING

SEE DETAIL 19/BE5

DECK TO WALL FLASHING

SPACED DECKING

1-1/2" = 1'-0"

PRE-FLASHING, EXTEND 6" ABOVE LEDGER, MIN.

METAL Z-FLASHING,
TYPE B, SEE DETAIL 20/BE1 2

P.T. 2x JOISTS

— PRE-FLASHING, EXTEND 2" BELOW LEDGER, MIN.

EXTEND TO ABOVE DECK-TO-WALL FLASHING

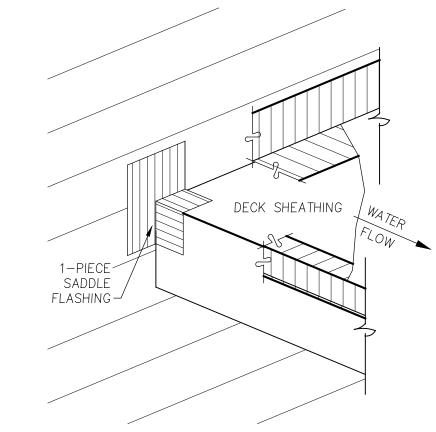
SECTION

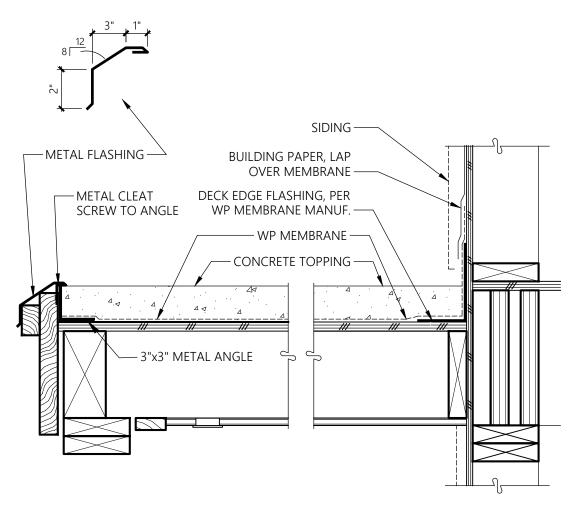
— BUILDING PAPER OR PRE-FLASHING;

If a Subcontractor or installer finds a

situation where the BE-Sheet details conflict or fall below any standards set forth by the organizations mentioned above, it will be the responsibility of the Subcontractor to seek appropriate and written clarification from the Contractor before proceeding. The Contractor reserves its right to add, change, modify or update any of the details at any time. *All components, sealants, fasteners, or materials shall be approved for specific use or application described by the designs, and shall be compatible with all material with which each component comes in contact

**BE-Sheet Disclaimer** 



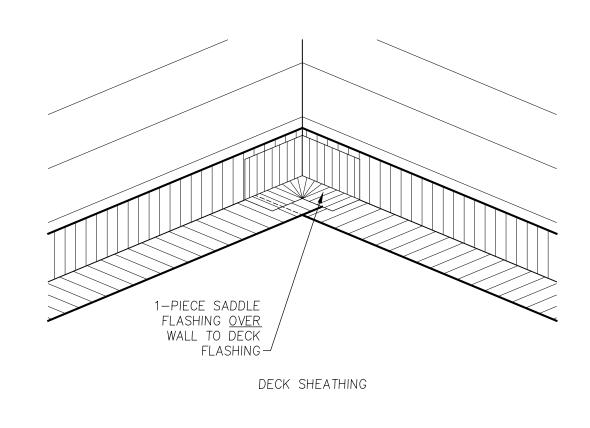


CLEAN AND PREPARE SURFACES

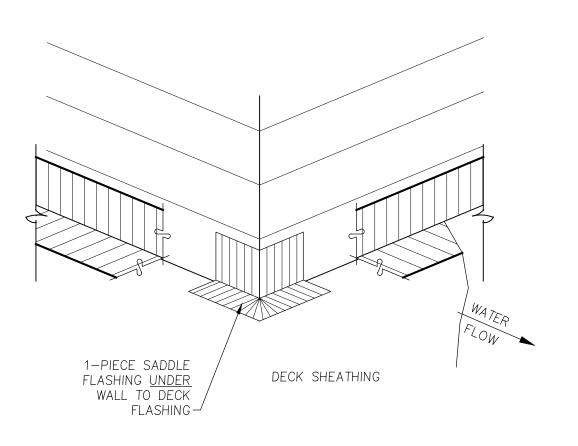
INSTRUCTIONS FOR BEST PRACTICES.

PRIOR TO COATING, REFER TO MANUFACTURER'S INSTALLATION

1-PIECE DECK SADDLE FLASHING

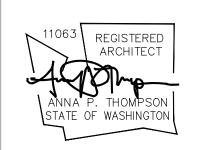


— OVERLAP 6" MIN. AND BACK-CAULK (WHEN REQUIRED) — 4"x 4" WALL TO DECK FLASHING – DECK EDGE FLASHING 1-PIECE SADDLE FLASHING — DIVERTER — DECK EDGE FLASHING SEE - DECK GUTTER AT LOW SIDE DECK FLASHING - INSIDE CORNER



16 DECK FLASHING - OUTSIDE CORNER

DECK DETAILS



uildin

# **Bradley** Heights **Apartments**

Puyallup,

# Timberlane **Partners**

Revisions No. Date Description

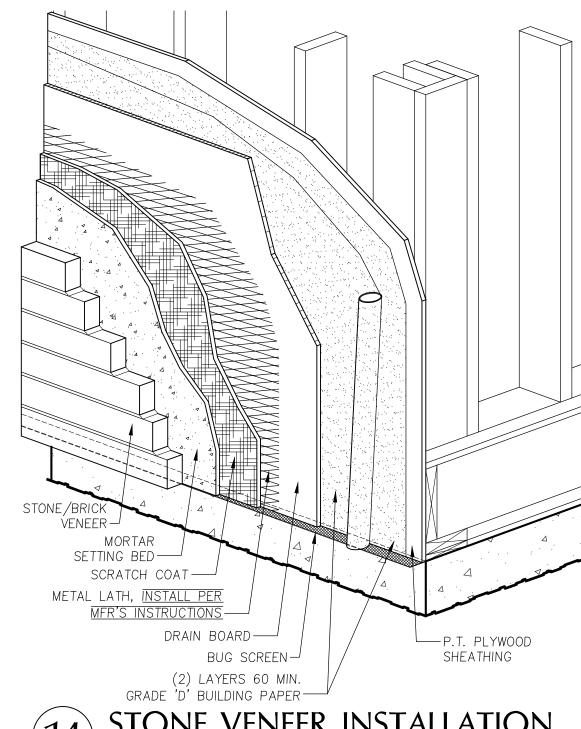


Initial Publish Date:

Date Plotted: 5-1-25 Job No.: Drawn By:

23-06 **REW/DJV** Sheet No.:

BE5



2 LAYES OF 60 MIN. GRADE D BUILDING PAPED-P.T. PLYWOOD — VERICAL FURRING BEYOND -3" VENT AT BOTTOM OF COLUMN — PREPARE SETTING BED PER VENEER MANUFACTURER'S INSTALLATION INSTRUCTIONS 1/2" CLEARANCE AT BASE — INSTALL BUG SCREEN -BOTTOM OF COLUMNS TO BE WRAPPED W/ 12" PRE-FLASHING. BUILDING PAPER TO START 6" ABOVE SURFACE—

SIMULATED STONE

BRICK VENEER SCRATCH COAT-

MORTAR JOINT

WHERE REQUIRED -

# STONE VENEER INSTALLATION NO SCALE

PLYWOOD TO BE

USE ONLY

NON-CORROSIVE

**FASTENERS** 

EXTEND 1" PAST TOP OF CONCRETE

TO FINISHED

1/2" TO CONCRETE

PRESSURE—TREATED

PREPARE SETTING BED PER

INSTALLATION INSTRUCTIONS

VENEER MANUFACTURER'S

SIMULATED STONE /

BRICK VENEÉR

MORTAR JOINT

WHERE REQUIRED-

MORTAR SETTING BED -

COMBED SCRATCH COAT -

K-LATH: ATTACH PER

MANUF. INSTALLATION

(2) LAYERS 60 MIN.

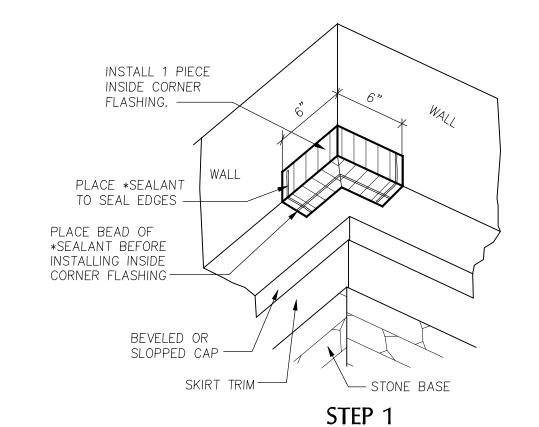
INSTALL BUG SCREEN-

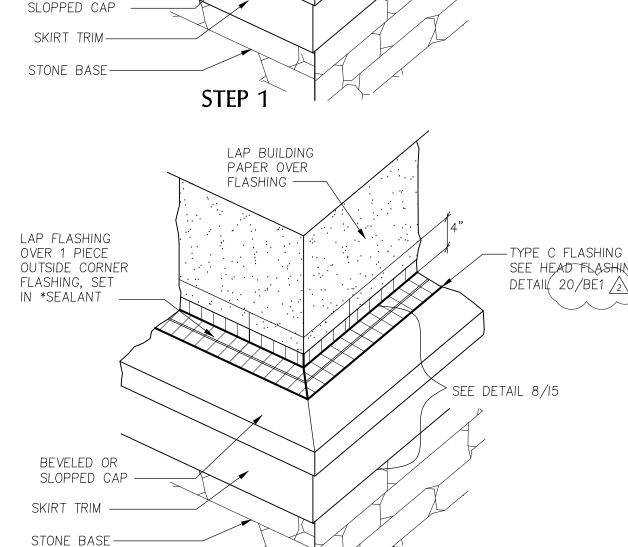
INSTRUCTIONS -

DRAIN BOARD-

INSTALL 1 PIECE OUTSIDE CORNER FLASHING. PLACE *SEALANT TO SEAL EDGES PLACE BEAD OF *SEALANT BEFORE INSTALLING OUTSIDE CORNER FLASHING -BEVELED OR SLOPPED CAP

BRICK VENEER AT COLUMN BASE





LAP BUILDING PAPER OVER FLASHING LAP FLASHING OVER 1 PIECE INSIDE CORNER FLASHING, SET IN *SEALANT TYPE C FLASHING 4 SEE HEAD FLASHING

DETAIL 20/BE1 SLOPPED CAP-SKIRT TRIM-

STEP 2

INSIDE CORNER

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and written clarification from the

details at any time.

Contractor before proceeding. The

Contractor reserves its right to add,

change, modify or update any of the

*All components, sealants, fasteners,

specific use or application described

compatible with all material with which

each component comes in contact

or materials shall be approved for

by the designs, and shall be

The details in the BE-Sheets are intended to meet or exceed all

manufacturer recommended installation instructions, any letters of

approval provided by a manufacturer to the Contractor, local codes,

or any other group or organization as acknowledged by the industry.

All manufacturer recommendations should be

followed when installing specific materials.

standards set by specific associations, best practices set by the industry

**OUTSIDE CORNER** 

# WOOD BLOCK AND TRIM OVER 2 LAYERS OF BUILDING PAPER USE ONLY NON-CORROSIVE **FASTENERS** MORTAR SETTING BED-GRADE 'D' BUILDING PAPER ---PREPARE SETTING BED PER VENEER MANUFACTURER'S COMBED SCRATCH COAT — EXTEND 1" PAST TOP OF CONCRETE

— EXTERIOR

SHEATHING

P.T. PLYWOOD

NOTE: COMPONENT SPACING EXAGGERATED FOR CLARITY

PLYWOOD TO BE PRESSURE-TREATED

USE ONLY NON-CORROSIVE

FASTENERS

BUILDING PAPER

OVER METAL FLASHING-

METAL FLASHING TYPE C

(SEE HEAD FLASHING

SLOPED WOOD/CPVC CAP-

WOOD BLOCK AND TRIM OVER (2) LAYERS 60 MIN. GRADE

PREPARE SETTING BED PER VENEER MANUFACTURER'S

INSTALLATION INSTRUCTIONS

BUILDING PAPER OVER METAL

METAL FLASHING TYPE C

(SEE HEAD FLASHING

SLOPED WOOD/CPVC

SIMULATED STONE /

K-LATH: ATTACH PER

MANUF. INSTALLATION

(2) LAYERS 60 MIN.

INSTALL BUG SCREEN.

GRADE 'D' BUILDING PAPER-

INSTRUCTIONS -

DRAIN BOARD

INSTALLATION

INSTRUCTIONS

BRICK VENEER

MORTAR JOINT

WHERE REQUIRED

DETAI( 20/BE1)

BEVELED OR

FLASHING -

DETAIL 20/BE1-

BEVELED OR

'D' BLDG PAPER-

2" MIN.

SIMULATED STONE -

DRAIN BOARD.-

TYPICAL WATERTABLE TRIM

MORTAR SETTING BED -

COMBED SCRATCH COAT -

K-LATH: ATTACH PER MANUF.

MORTAR JOINT WHERE REQUIRED-

INSTALLATION INSTRUCTIONS -

STONE WATERTABLE ON FRAMING

TO FINISHED

1/2" TO CONCRETE

GRADE OR

STONE ON FRAMING (FULL-HEIGHT) SECTION

# SEE HEAD FLASHING DETAIL 20/BE1 2

STEP 2

12) STONE TRIM FLASHING (WATER TABLE TRIM)

NO SCALE

# **GENERAL NOTES**

#### GENERAL NOTES - MECHANICAL

- REFERENCE TO RELATED WORK: "REF" INDICATIONS DENOTE WORK COVERED ELSEWHERE (ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL, LANDSCAPE, OR KITCHEN), OR ITEM BASED ON A SPECIFIC MANUFACTURER'S DIMENSIONS (VERIFY).
- ELECTRICAL CHARACTERISTICS: REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS (VOLTAGES, ETC. OF MECHANICAL EQUIPMENT, UNLESS OTHERWISE INDICATED.
- CODES: COMPLETE INSTALLATION OF THE MECHANICAL SYSTEM SHALL BE PER THE APPLICABLE BUILDING MECHANICAL, ENERGY, PLUMBING, FIRE, AND HEALTH CODES AND REGULATIONS AS ADOPTED BY THE LOCAL AHJ.
- PREPARE AND SUBMIT FOR REVIEW A SHOP DRAWING BASED ON FINAL STRUCTURAL SHOP DRAWINGS FOR LOCATING AND ROUTING ALL DUCTWORK, DAMPERS, EQUIPMENT, PIPING, ETC.
- A. COORDINATE FLOOR AND BEAM PENETRATIONS WITH STRUCTURAL B. COORDINATE FINAL LOCATION AND ROUTING WITH
- CEILING, LIGHTS, WALLS, FIRE SPRINKLER PIPING, AND OTHER TRADES WORK C. INCLUDE ADDITIONAL OFFSETS, ELBOWS, ROUTING, EQUIVALENT DUCT SIZING EXCHANGE, RELOCATING, ETC.
- D. PROVIDE SHOP DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

AS REQUIRED FOR A COMPLETE OPERATING MECHANICAL

- MECHANICAL CONTRACTOR SHALL LOCATE AND COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITHIN THE STRUCTURE.
- ACCESS DOORS: COORDINATE WITH ARCHITECT AND LOCATE ALL ACCESS DOORS ON SHOP DRAWINGS PRIOR TO BEGINNING OF CONSTRUCTION. ACCESS DOORS IN FIRE RATED STRUCTURE SHALL BE FIRE RATED. VERIFY ACCESS DOOR LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO BIDDING.
- RATED PENETRATION: DUCT PENETRATIONS THROUGH RATED ENCLOSURES SHALL BE FIRE/SMOKE DAMPERED PER THE LATEST EDITION OF THE UNDERWRITERS LABORATORIES(UL) FIRE RESISTANCE WITH HOURLY RATINGS FOR THROUGH-PENETRATION FIRE STOPS SYSTEM VOLUME #2, OR SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S UL LISTINGS (3M OR EQUIVALENT). DETERMINE REQUIREMENTS WITH GENERAL CONTRACTOR PRIOR TO BID.
- EXHAUST OUTLETS: SOURCE-SPECIFIC FANS SHALL BE VENTED TO OUTDOORS WITH A MINIMUM 3' CLEARANCE BETWEEN VENT OUTLETS AND BUILDING OPENINGS, AND 10' MINIMUM BETWEEN VENT OUTLETS AND MECHANICAL AIR
- ROOF PENETRATIONS: SEE ARCHITECTURAL DRAWINGS FOR ROOF CAP, ROOF CURB, ROOF DRAIN, AND VTR DETAILS.
- 10. EXPOSED PIPING: PROVIDE CHROME PLATING FOR EXPOSED PIPING IN FINISHED ROOMS.
- 11. PENETRATIONS: PROVIDE ESCUTCHEON PLATES FOR EXPOSED PIPING PENETRATIONS AND SHEET METAL FLASHING FOR EXPOSED DUCTWORK PENETRATIONS.
- 12. SHAFT AND PLENUM CONNECTIONS: SEAL CONNECTIONS TO AIR SHAFTS AIRTIGHT. PROVIDE AIRTIGHT SEAL AROUND PENETRATIONS IN AIR PLENUMS.
- 13. LIGHT FIXTURE CLEARANCE: COORDINATE LOCATIONS OF MECHANICAL WORK TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND REPLACEMENT.
- 14. MOTORS: COMPLY WITH ENERGY CODE ENFORCED BY AHJ FOR MINIMUM EFFICIENCIES UNDER FULL LOAD.
- 15. ACCESS CLEARANCES FOR MAINTENANCE AND REPLACEMENT: VERIFY PHYSICAL DIMENSIONS OF EQUIPMENT TO ENSURE THAT ACCESS CLEARANCES CAN BE MET. COORDINATE LOCATIONS OF MECHANICAL WORK AND WORK OF OTHER TRADES TO PROVIDE ACCESS CLEARANCES FOR SERVICE AND MAINTENANCE.

# COORDINATION REQUIREMENTS

- PIPING: COORDINATE WITH STRUCTURAL FOR EXACT LOCATION OF ALL STRUCTURAL FRAMING AND FOOTINGS AND FINALIZE THE EXACT ROUTING OF ALL PIPES WITH STRUCTURAL AND AT THE SITE PRIOR AND DURING THE CONSTRUCTION.
- DUCTWORK: LOCATE AND COORDINATE THE EXACT LOCATION OF DUCTWORK WITH STRUCTURAL PLANS AND WITH THE GENERAL CONTRACTOR PRIOR TO INSTALLATION OF ANY STRUCTURE OR EQUIPMENT. COORDINATE WITH FRAMING CONTRACTOR TO ASSURE JOIST SPACES LINE UP WHEN DUCTWORK MUST PASS THROUGH DIFFERENT JOIST SPACES.
- ADJUSTMENTS: ALL EQUIPMENT, MOTORS, FANS GAS BURNERS, IGNITION DEVICES, DRIVES, ETC. SHALL BE ADJUSTED AND BALANCED TO OPERATE AT SPECIFIED RATINGS AS REQUIRED FOR THIS PROJECT SITE AND ACCOUNTING FOR ELEVATION ABOVE SEA LEVEL.
- APPROVALS: MECHANICAL AND PLUMBING EQUIPMENT SHALL BE APPROVED FOR INSTALLATION IN THE PROJECT LOCATION AND SHALL HAVE ALL CERTIFICATIONS AND RATINGS TO MEET ALL ENERGY, POLLUTION, ENVIRONMENTAL, SEISMIC, ETC. CODES AND REGULATIONS. THE CONTRACTOR SHALL COORDINATE WITH HIS MANUFACTURE SUPPLIERS AND SHALL INCLUDE ALL COSTS REQUIRED TO MEET THESE REQUIREMENTS IN HIS BID.
- FIRE PROTECTION: CONTRACTOR SHALL PROVIDE A FULLY DESIGNED FIRE PROTECTION SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA AND LOCAL CODES. PROVIDE DESIGN, PERMITS, MATERIALS, INSTALLATION, TESTING AND ALL OTHER FOR A FULLY OPERATIONAL SYSTEM. LOCATION OF ALL PIPING TO BE COORDINATED WITH OTHER TRADES.

#### PIPING NOTES

- 1. DISASSEMBLY PROVISIONS: PROVIDE UNIONS OR FLANGES AT PIPING CONNECTIONS TO EQUIPMENT. COILS. TRAPS. CONTROL VALVES, AND OTHER COMPONENTS TO ALLOW DISASSEMBLY FOR MAINTENANCE.
- REDUCERS: PROVIDE AS REQUIRED FROM LINE PIPE SIZE TO EQUIPMENT, TRAP, COIL, AND CONTROL VALVE CONNECTION SIZES.
- 3. OFFSETS: PROVIDE FOR BRANCH LINES TO EQUIPMENT.
- DIELECTRIC UNIONS: PROVIDE AT CONNECTIONS OF DISSIMILAR PIPE.
- 5. REFRIGERANT PIPING: PROVIDE SIZING & INSTALLATION IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- CONDENSATE DRAIN: PROVIDE A P-TRAP FOR EACH HVAC UNIT CONDENSATE PAN WITH PLUG TEES FOR CLEANING. CONDENSATE DRAINS SHALL BE DISCHARGED TO AN INDIRECT WASTE OR OUTSIDE.

#### INSULATION/LINING NOTES

- 1. ENERGY CODE: AS A MINIMUM. COMPLY WITH THICKNESSES AND TYPES LISTED IN ENERGY CODE ENFORCED BY AHJ.
- EXTENT OF INTERNAL DUCT LINING: A. GRILLE AND DIFFUSER BOXES AND BOOTS. . TRANSFER DUCTS.

SPECIFIED TO BE INTERNALLY LINED.

C. THE FIRST 10 FEET OF SUPPLY AND RETURN DUCTWORK FROM THE AIR HANDLER. EXTENT OF EXTERNAL DUCT INSULATION:

A. SUPPLY AND RETURN AIR IN UNCONDITIONED SPACES.

- MECHANICAL ROOMS, ELECTRICAL ROOMS, AND EQUIPMENT ROOMS NOT SPECIFIED TO BE INTERNALLY B. SUPPLY AIR ABOVE CEILINGS OR EXPOSED NOT
- MISCELLANEOUS DUCT FITTINGS (CONICAL TAKEOFFS, ETC.): WRAP WITH INSULATION FOR CONDENSATION CONTROL.

#### <u>PLAN NOTES</u>

1. DUCTWORK SHALL BE METALLIC DUCTWORK

C. OUTDOOR AIR INTAKE.

- 2. TEST AND BALANCE WORK SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE AGENCY. PROVIDE (3) COPIES OF TEST AND BALANCE REPORT TO OWNER.
- 3. COORDINATE DUCTWORK WITH MISCELLANEOUS OBSTRUCTIONS IN CEILING SPACE.
- 4. RESTROOM EXHAUST SHALL BE A MINIMUM OF 10' FROM ANY MECHANICAL OUTSIDE AIR INTAKES.
- 5. ROUTE DUCTWORK UNDERNEATH JOISTS UON.
- 6. TRANSITION DUCT UNDER BEAMS AND DUCTS. FIELD VERIFY AVAILABLE CEILING CAVITY DIMENSIONS.
- 7. COORDINATE MOUNTING HEIGHT OF DIFFUSERS WITH ARCHITECTURAL PLANS.

# SHEET METAL NOTES

- REFERENCE: SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE, CURRENT EDITION.
- 2. CLEARANCE: COORDINATE DUCTWORK WITH MISCELLANEOUS OBSTRUCTIONS IN CEILING SPACE.
- ROUND ELBOWS AND OFFSETS: FULL RADIUS (R/D = 1.5). 5-PIECE SEGMENTED OR STAMPED. REFER TO SMACNA HVAC FIG 2-7, 3-3. DO NOT USE ANGLED OFFSET (TYPE 1). MITERED OFFSET (TYPE 2) MAY BE USED UP TO 30 DEGREE OFFSET ANGLE.
- ROUND TEES AND LATERALS: CONICAL TEE PER SMACNA HVAC FIG 3-5; DO NOT USE STRAIGHT TEE; DO NOT USE CONICAL SADDLE TAP FOR EXPOSED DUCTWORK IN FINISHED SPACES. 90-DEGREE TEE WITH OVAL TO ROUND TAP, LATERAL, AND 45-DEGREE RECTANGULAR LEAD-IN PER SMACNA HVAC FIG 3-4.
- 5. RECTANGULAR ELBOWS AND OFFSETS: FULL RADIUS WHERE SPACE PERMITS, R/W = 1.5; OTHERWISE USE SQUARE CORNER ELBOW WITH TURNING VANES.
- RECTANGULAR DIVIDED FLOW FITTINGS: USE GENERALLY, EXCEPT BRANCHES TO TERMINALS; SMACNA HVAC FIG 2-5, TYPES 1, 2, 4A, AND 4B. DO NOT USE TYPE 3.
- TURNING VANES: H.E.P. MANUFACTURER OR APPROVED HIGH EFFICIENCY PROFILE AIRFOIL TYPE FOR RECTANGULAR SQUARE THROAT ELBOWS. ACOUSTICAL TYPE FOR RETURN AIR MITERED ELBOWS.
- 8. TAKEOFFS TO OPENINGS: CONICAL TYPE WITH VOLUME DAMPER FOR ROUND DUCT BRANCHES PER SMACNA HVAC FIG 2-6, MINIMUM INLET DIAMETER 2 INCHES LARGER THAN DUCT SIZE. 45 DEGREE ENTRY FITTING FOR RECTANGULAR DUCT BRANCHES PER SMACNA HVAC FIG 2-6.
- FLEXIBLE CONNECTIONS: PROVIDE AT EACH DUCT CONNECTION TO FANS, PACKAGED HVAC EQUIPMENT, EXTERNALLY ISOLATED AIR HANDLING UNITS, FAN COIL UNITS, AND SIMILAR EQUIPMENT. EXCEPTION: EQUIPMENT IN CORRIDOR CEILING SPACES WHERE FIRE RATING IS REQUIRED.
- 10. ALL DUCT WORK SHALL BE CLASSIFIED FOR LOW PRESSURE SYSTEMS PER IMC SECTION 603.
- 11. ALL DUCTS AND JOINTS SHALL BE SEALED PER IMC SECTION 603.

# HVAC NOTES

1. ATTACHMENTS: AIR DISTRIBUTION OUTLETS AND LOUVERS

SHALL HAVE ALL REQUIRED ACCESSORIES AND ATTACHMENTS FOR A COMPLETE CONNECTION TO THE SPECIFIC TYPE OF STRUCTURE THAT THEY ARE BEING ATTACHED TO. THIS INCLUDES, BUT IS NOT LIMITED TO EXTERIOR BRICKS, GWB WALLS, GWB CEILING, ETC.

- DUCTWORK: DUCTWORK SHALL BE SMOOTH SHEET METAL (CLASS-1). DUCTWORK THROUGH FIRE RATED STRUCTURE AND FLOOR SHALL BE MIN. 26 GA. STEEL. MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE 5'-0", UNLESS OTHERWISE NOTED ON DRAWINGS. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
- SEISMIC: PROVIDE SEISMIC RESTRAINTS FOR MECHANICAL EQUIPMENT, PIPING, AND DUCTWORK PER SMACNA AND LOCAL REGULATIONS.
- FILTER CLEARANCE: PROVIDE ADEQUATE CLEARANCE FOR CHANGING AIR FILTERS
- DUCTWORK AND PIPING OUTSIDE OF MECHANICAL ROOMS SHALL BE CONCEALED, COORDINATE WITH THE GENERAL CONTRACTOR TO FUR-OUT AS REQUIRED.
- FIRE RATINGS: RATED FLOOR/CEILING JOINT SPACES HAVING DUCTWORK INSIDE THEM SHALL BE FIRE/SMOKE PROTECTED TO MAINTAIN THE 1-HOUR FLOOR/CEILING RATING PER LOCAL JURISDICTIONS. EXHAUST DUCTWORK PENETRATING THE 1-HOUR ROOF/CEILING OR FLOOR/CEILING ASSEMBLY SHALL HAVE ACCESSIBLE CEILING FIRE DAMPERS. ALTERNATIVELY, THE EXHAUST DUCTWORK SHALL BE ROUTED INSIDE A RATED SHAFT TO PROTECT THE CEILING/ROOF RATING PER THE LOCAL JURISDICTIONS
- 7. FIRESTOP: PIPE, DUCT AND CONDUIT PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRE AND SMOKE STOPPED PER CODE.
- DUCTWORK: DUCTWORK SHALL BE SMOOTH SHEET METAL (CLASS-1). DUCTWORK THROUGH FIRE RATED STRUCTURE AND FLOOR SHALL BE MIN. 26 GA. STEEL. MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE 5'-0" UNLESS OTHERWISE NOTED ON DRAWINGS. DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
- VOLUME DAMPERS: PROVIDE AN ACCESSIBLE MANUAL VOLUME DAMPER FOR EACH SUPPLY, RETURN, OSA AND EXHAUST OPENING, LOCATED AS FAR UPSTREAM AS POSSIBLE FROM THE OPENING. PROVIDE A MANUAL VOLUME DAMPER FOR BRANCH MAINS SERVING MORE THAN ONE OPENING. VOLUME DAMPERS IN NON-ACCESSIBLE CEILING SHALL HAVE A CONTROL ARM EXTENDED TO AN ACCESSIBLE LOCATION. PROVIDE "YOUNG" REGULATOR OR EQUAL. EXACT LOCATION OF CONTROL DEVICES VISIBLE IN FINISHED SPACES SHALL BE COORDINATED WITH THE
- 10. CORRIDOR THERMOSTAT: PROVIDE TAMPERPROOF THERMOSTATS IN CORRIDORS, DO NOT PROVIDE PLASTIC GUARDS TO MAKE THE THERMOSTATS TAMPERPROOF PROVIDE BLANK SECURABLE THERMOSTAT COVERS.

# APPLICABLE CODE

# **BUILDING CODE:**

- 2018 WASHINGTON STATE ENERGY CODE-RESIDENTIAL BY WASHINGTON ADMINSTRATIVE CODE CHAP 51-50 (WSEC)
- 2018 INTERNATIONAL RESIDENTIAL CODE WITH ADMINISTRATIVE CODE CHAP 51-51 (WSRC)
- 2018 INTERNATIONAL MECHANICAL CODE WITH ADMINISTRATIVE CODE CHAP 51-52 (WSMC)

DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS

FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

# PRE-CON MEETING NOTES

CONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH THE ENGINEER FOR THE PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING ANY EQUIPMENT OR PERFORMING ANY WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT SITE ON A DATE AND TIME TO BE MUTUALLY AGREED. THE MEETING WILL BE A WORKING SESSION. THE MEETING WILL BE FACILITATED BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DETAILED REVIEW OF THE PLANS AND SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR COORDINATION ISSUES, REVIEW OF PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND METHODS.AND ON-SITE INVESTIGATION OF FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THAT COULD AFFECT THE WORK. PERSONS ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF THE PROJECT AND SHALL BE THE SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PROJECT THROUGH TO COMPLETION. IF REQUIRED, REVISED PLANS WILL BE ISSUED THROUG OFFICIAL CHANNELS. CHANGES IN THE BID PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILL BE ISSUED UNLESS PROCESSED THOUGH OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD THAT THE ENGINEER HAS NO AUTHORITY TO ISSUE CHANGE

THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE MINIMUM TIME INDICATED:

MECHANICAL SHEET METAL 4 HOURS 4 HOURS PLUMBING/PIPING ELECTRICAL 4 HOURS 2 HOURS SPRINKLER GENERAL CONTRACTOR ALL SESSIONS

# **ANNOTATIONS**

AIR CONDITIONING UNIT ABOVE FINISHED FLOOR AIR HANDLING UNIT BDD BACKDRAFT DAMPER BHP BRAKE HORSEPOWER BTUH COMMON CAP CAPACITY CC COOLING COIL CD CFILING DIFFUSER CFM CUBIC FEET PER MINUTE CLG CEILING, COOLING CO CLEANOUT COMB COMBUSTION CONT CONTINUE. CONTROL CONTR CONTRACTOR COP COEFFICIENT OF PERFORMANCE CHILLED WATER SUPPLY CWS CHILLED WATER RETURN CWR DIAMETER DB DRY BULB. DECIBEL DEG DEGREE DIM DIMENSION DISCH DISCHARGE DN DOWN EXHAUST AIR ENTERING AIR TEMPERATURE EER ENERGY EFFICIENCY RATIO EXHAUST FAN EFFICIENCY EXHAUST GRILLE. ENGINE

**GENERATOR** ELEC ELECTRIC EQUIV **EQUIVALENT** ESP EXTERNAL STATIC PRESSURE

EXH **EXHAUST** EXT EXTERIOR. EXTERNAL **FAHRENHEIT** FD FIRE DAMPER FCU FAN COIL UNIT FLR FLOOR FPM FEET PER MINUTE FPS FEET PER SECOND FSD

GRD GRILLES, REGISTERS, AND DIFFUSERS GWB GYPSUM WALLBOARD HORIZ HORIZONTAL HORSEPOWER, HEAT PUMP HRU HEAT RECOVERY UNIT HVAC

CONDITIONING HEATING AND VENTILATION UNIT HWR RETURN

HWS SUPPLY HEAT EXCHANGER НΧ ID  $\mathsf{KW}$ KILOWATT

LONG, LENGTH POUND LOW WALL RETURN LWR LOW WALL SUPPLY LWS MBH MECH MECHANICAL

MOCP MAXIMUM OVER CURRENT PROTECTION MTD MOUNTED OSA OUTDOOR AIR OBD OPPOSED BLADE DAMPER

OD OPNG OPENING PD PRESSURE DROP POC POINT OF CONNECTION PRV PSIG

RA REF REFERENCE RELIEF FAN RG RETURN GRILLE RPM SUPPLY AIR

SCH SCHEDULE SUPPLY FAN, SQUARE FOOT SENS SENSIBLE SUPPLY GRILLE SMACNA SHEET METAL AND AIR

NATIONAL ASSOCIATION SCREENED OPENING STATIC PRESSURE SS STAINLESS STEEL, SANITARY SEWER

TYP TYPICAL UNIT HEATER UH UON VENT VTR VENT THRU ROOF

AUTHORITY HAVING JURISDICTION BRITISH THERMAL UNIT PER HOUR

FIRE/SMOKE DAMPER

HEATING, VENTILATING, AND AIR HIGH WALL RETURN, HOT WATER HIGH WALL SUPPLY, HOT WATER

INDIRECT DRAIN, INSIDE DIAMETER

THOUSAND BTU PER HOUR MINIMUM CIRCUIT AMPACITY MCA

OUTSIDE DIMENSION OR DIAMETER

PRESSURE REDUCING VALVE POUNDS PER SQUARE INCH GAUGE RETURN AIR

REVOLUTIONS PER MINUTE

CONDITIONING CONTRACTORS

SQUARE TRANSFER GRILLE

> UNLESS OTHERWISE NOTED VENTILATION, VENTILATOR WASTE, WATT, WIDE WET BULB (TEMPERATURE)

**SYMBOLS** 

**DUCTWORK** 

PRESSURE

OR ROOF

VOLUME DAMPER

2-HR RATED, UON

RATED, UON

TURNING VANES

90° TAKE-OFF OR TEE

90° CONICAL TAKE-OFF

45° LATERAL TAKE-OFF

FLAT ON TOP, FOB = FLAT ON

WYE FITTING

45° TAPER

TRANSITION OR REDUCER (FOT =

90° RECTANGULAR TAKE-OFF WITH

90° DIVERGING RECTANGULAR TEE,

EITHER RADIUS OR TURNING VANES

CONNECTION, EITHER RADIUS OR

LEGEND, GENERAL NOTES, & DRAWING INDEX

MECHANICAL SCHEDULES & WSEC FORMS

HVAC PLAN - BASEMENT & 1ST LEVEL

PROJECT NOTES & CALCULATIONS

HVAC PLAN - 2ND & 3RD LEVEL

HVAC ENLARGED PLANS

HVAC ENLARGED PLANS

HVAC ENLARGED PLANS

**DRAWING INDEX** 

Sheet Title

PARALLEL FLOW BRANCH

ROUND DUCT INDICATOR

TURNING VANES

FLEXIBLE DUCT

DUCT SECTION, NEGATIVE

DUCT PENETRATION THRU FLOOR

FIRE/SMOKE DAMPER  $(-- \blacktriangleleft = -$ 

FIRE DAMPER  $(-- \blacktriangleleft = HORIZ)$ 

90° ELBOW, R/D OR R/W=1.5

SQUARE CORNER ELBOW WITH

ROUND DUCT SECTION

18x12

DOWN

UP

 $\searrow$ 

UP

Sheet Number

M0.1

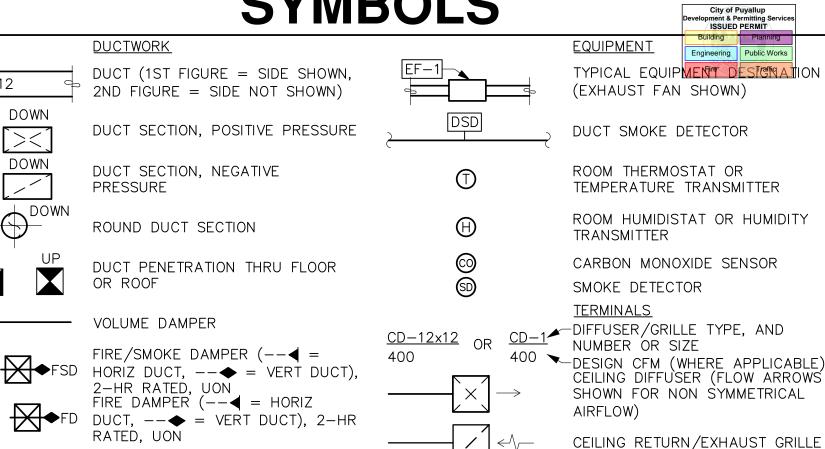
M0.2

M0.3

M2.0

M2.1

DETAILS



MOUNTED (FLOW ARROWS SHOWN

FOR NON SYMMETRICAL AIRFLOW)

WALL RETURN/EXHAUST GRILLE

TRANSFER GRILLE (TG), DUCT

OPTIONAL CFM SHOWN

DUCT CONNECTION

TRANSFER GRILLE, CEILING

Χ

X

X | X

 $\times$  |  $\times$  |  $\times$ 

 $\times$  |  $\times$  |  $\times$ 

 $\times$  |  $\times$  |  $\times$ 

 $X \mid X \mid X$ 

 $X \mid X \mid X \mid X$ 

 $\times$  |  $\times$  |  $\times$  |  $\times$ 

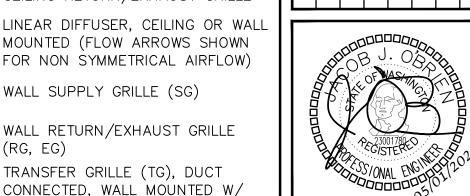
 $\times$  |  $\times$  |  $\times$  |  $\times$ 

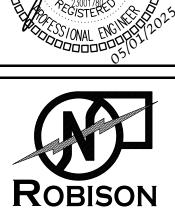
CONNECTED, WALL MOUNTED W/

MOUNTED WITH FULL-SIZED LINED

WALL SUPPLY GRILLE (SG)

(RG, EG)





ENGINEERING, INC

YNNWOOD, WA 98036

19401 40TH AVE W., SUITE 30

206-364-3343 TEL REI PROJECT NO.: 777-006

CONTACT: ARIK ESPINELI

Z O BUIL

2 **ENTS** RTM

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HEI

100

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05/01/2025

LEGEND, GENERAL NOTES, & DRAWING INDEX

# **ENERGY CODE NOTES**

# WHOLE HOUSE VENTILATION NOTES

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building Planning
Engineering Public Works
Fire Traffic

#### WASHINGTON STATE ENERGY CODE

1. HVAC THERMOSTATS SHALL BE SET TO MAINTAIN A MINIMUM DEADBAND OF 5°F IN AREAS SERVED AS REQUIRED PER WSEC C403.2.4.2.

#### 2. PER WSEC, ALL DUCTS SHALL BE INSULATED AS FOLLOWS:

		DUCT INSULATION SCHEDULE		
CODE	DUCT SYSTEM	DUCT LOCATION AND USE (1)(2)(3)	MATERIAL	R-VALUE (MIN. INSTALLED)
		>= 2800 CFM INSIDE CONDITION SPACE AND UPSTREAM OF AUTOMATIC SHUTOFF DAMPER	MINERAL-WOOL BLANKET	16.0
<b>WSEC</b> TABLE C403.10.1.1	OUTSIDE AIR (4)	>= 2800 CFM INSIDE CONDITION SPACE AND DOWNSTREAM OF AUTOMATIC SHUTOFF DAMPER TO HVAC UNIT UNIT OR ROOM	MINERAL-WOOL BLANKET	8.0
		< 2800 CFM INSIDE CONDITION SPACE	MINERAL-WOOL BLANKET	7.0
		OUTSIDE THE BUILDING (OUTDOOR AND EXPOSED TO WEATHER) WHICH INCLUDE ATTICS ABOVE INSULATION CEILINGS, PARKING GARAGE AND CRAWL SPACE	MINERAL-WOOL BLANKET	8.0
	SUPPLY AIR & RETURN AIR (4)	UNCONDITIONED SPACE (ENCLOSED BUT NOT IN THE BUILDING CONDITIONED ENVELOPE)	MINERAL-WOOL BLANKET	6.0
		UNCONDITIONED SPACE WHERE THE DUCT CONVEYS AIR THAT IS WITHIN 15°F OF THE AIR TEMPERATURE OF THE SURROUNDING UNCONDITIONED SPACE (5)	MINERAL-WOOL BLANKET	3.3
		WHERE LOCATED IN THE BUILDING ENVELOPE ASSEMBLY	MINERAL-WOOL BLANKET	16.0
<b>WSEC</b> TABLE C403.10.1.2	SUPPLY AIR (4)	WITHIN CONDITIONED SPACE WHERE SUPPLY DUCT CONVEYS AIR <55°F OR >105°F	MINERAL-WOOL BLANKET	3.3
		WITHIN CONDITIONED SPACE THAT THE DUCT DIRECTLY SERVES WHERE SUPPLY DUCT CONVEYS AIR <55°F OR >105°F	MINERAL-WOOL BLANKET	0.0
		WITHIN CONDITIONED SPACE WHERE SUPPLY DUCT CONVEYS AIR >55°F OR <105°F	MINERAL-WOOL BLANKET	0.0
	RETURN OR EXHAUST AIR	WITHIN CONDITION SPACE, DOWNSTREAM OF AN ENERGY RECOVERY MEDIA, UPSTREAM OF AUTOMATIC SHUTOFF DAMPER	MINERAL-WOOL BLANKET	8.0
	RELIEF OR EXHAUST AIR	CONDITION SPACE AND DOWNSTREAM OF AN AUTOMATIC SHUTOFF DAMPER	MINERAL-WOOL BLANKET	16
		NOTES (1) DUCT INSULATION SHALL COMPLY WITH WSEC (2) INSULATION SHALL HAVE A MAXIMUM FLAME SPREAD INDEX OF 25 INDEX OF 50 PER WSEC 604.3 (3) EXTERAL DUCT INSULATION IS IDENTIFIABLE PER WSEC 604.7 (4) VAPOR RETARDER IS INSTALLED ON SUPPLY AND OUTSIDE AIR DUCTONDENSATION CONTROL FOR DUCTWORK		DEVELOPED

3. MOTORIZED DAMPERS: PER **WSEC** C403.7.8.1 PROVIDE MOTORIZED DAMPERS ON ALL OUTSIDE AIR INTAKES, EXHAUST OUTLETS AND RELIEF OUTLETS SERVING CONDITIONED SPACES WHICH CLOSE AUTOMATICALLY WHEN THE SYSTEM IS OFF. RETURN AIR DAMPERS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS. SEE **WSEC** C402.4.5.2 FOR EXCEPTIONS AND ADDITIONAL REQUIREMENTS.

# RESIDENTIAL ENERGY CODE

- 1. WHOLE-HOUSE FAN EFFICACY PER TABLE R403.6.1.
- 2. EQUIPMENT AND APPLIANCE SIZING PER R403.7, HEATING AND COOLING EQUIPMENT AND APPLIANCES SHALL BE SIZED IN ACCORDANCE WITH ACCA MANUAL S OR OTHER APPROVED SIZING METHODOLOGIES BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH ACCA MANUAL J OR OTHER APPROVED HEATING AND COOLING CALCULATION METHODOLOGIES
- 3. ELECTRIC RESISTANCE ZONE PER R403.7.1, ELECTRIC ZONAL HEATING AS PRIMARY HEAT SOURCE SHALL INSTALL DUCTLESS MINI—SPLIT HEAT PUMP IN THE LARGEST ZONE IN THE DWELLING UNLESS TOTAL INSTALLED HEATING CAPACITY OF 2 KW PER DWELLING OR LESS.
- PROVIDED ONE THERMOSTAT FOR EACH HEATING AND COOLING SYSTEM PER R403.1
- 5. PER R403.3.6, SUPPLY AND RETURN DUCTS IN CEILING INSULATION SHALL HAVE MIN R-8 INSULATION ALL AROUND. THE SUM OF THE CEILING INSULATION OF THE TOP AND BELOW OF THE DUCT SHALL BE MIN R-19, EXCLUDING THE R-VALUE OF THE DUCT INSULATION
- 6. MECHANICAL SYSTEM PIPING CARRYING FLUIDS ABOVE 105F OR BELOW 55F SHALL BE INSULATED WITH MIN R-6 PER R403.4. INSULATION SHALL BE PROTECTED FROM DAMAGE AND SHALL PROVIDE SHIELDING FROM SOLAR RADIATION. ADHESIVE TAPE SHALL NOT

#### OUTSIDE AIR

OUTSIDE AIR TO EACH RESIDENTIAL UNIT IS PROVIDED BY THE WHOLE HOUSE VENTILATION FAN (BEF-1). RATES WERE OBTAINED FROM TABLE 403.8.1. AIR PROVIDED THROUGH OPERABLE OPENINGS INSTALLED WITHIN THE WINDOW SYSTEM (TRICKLE VENTS). THE QUANTITY OF 4 SQUARE INCH TRICKLE VENTS ARE IDENTIFIED IN THE WHOLE HOUSE VENTILATION CRITERIA SCHEDULE. TRICKLE VENTS MAY BE COMBINED INTO LARGER VENT OF EQUIVALENT AREA. EACH EXTERIOR OCCUPIABLE LIVING SPACE SHALL BE PROVIDED WITH WITH AT LEAST ONE TRICKLE VENT.

THE BATHROOM EXHAUST FAN SHALL BE USED AS THE WHOLE HOUSE EXHAUST FAN. WHOLE HOUSE FAN TO BE EQUIPPED WITH AN ECM MOTOR AND 2—SPEED MOTOR. FAN TO RUN CONTINUOUSLY ON LOW SPEED AND HIGH SPEED SHALL BE ACTIVATED BY A FACTORY MOUNTED MOTION SENSOR. WHOLE HOUSE VENTILATION FANS SHALL OPERATE CONTINUOUSLY.

EXHAUST FAN ONLY VENTILATION SYSTEMS SHALL BE PROVIDED WITH OUTDOOR AIR TO EACH OCCUPIED SPACE, AND OR ANY SPACE THAT CAN BE OCCUPIED THROUGH ONE OF THE FOLLOWING METHODS:

OUTDOOR AIR MAY BE DRAWN THROUGH AIR INLETS INSTALLED IN EXTERIOR WALLS OR WINDOWS. THE

- AIR INLETS SHALL COMPLY WITH ALL OF THE FOLLOWING: IMC W/WASHINGTON AMENDMENTS 403.8.6.1

  1. INLETS SHALL HAVE CONTROLLABLE, SECURE OPENINGS AND SHALL BE DESIGNED TO NOT
- COMPROMISE THE THERMAL PROPERTIES OF THE BUILDING ENVELOPES.

  2. INLETS SHALL BE ACCESSIBLE TO OCCUPANTS INCLUDING COMPLIANCE WITH THE BARRIER FREE
- 3. INLETS SHALL BE SCREENED OR OTHERWISE PROTECTED FROM ENTRY BY INSECTS, LEAVES OR
- OTHER MATERIAL.
  4. INLETS SHALL PROVIDE NOT LESS THAN 4 SQUARE INCHES OF NET FREE AREA FOR EACH 10
- CFM OF OUTDOOR AIR REQUIRED.

  5. ANY INLET WHICH PROVIDES 10 CFM AT 10 PASCALS AS IN ACCORDANCE WITH HVI 916 HOME VENTILATION INSTITUTE AIR FLOW TEST PROCEDURE, AND HVI 920 HOME VENTILATION INSTITUTE PRODUCT PERFORMANCE CERTIFICATION PROCEDURE ARE DEEMED EQUIVALENT TO 4 SQUARE INCHES OF NET FREE AREA.
- 6. EACH OCCUPIABLE SPACE SHALL HAVE A MINIMUM OF ONE AIR INLET THAT HAS A MINIMUM OF 4 SQUARE INCHES OF NET FREE AREA.

# CALCULATIONS

RESIDENTIAL VENTILATION CALCULATIONS									
			2018 IN	IC CRITERIA (1)		VENTILATION QUALITY	MINIMUM WHOLE HOUSE	TOTAL CFM PROVIDED	
UNIT TYPE	UNIT SQUARE FOOTAGE	NUMBER OF BEDROOMS	FLOOR AREA, SQFT	NUMBER OF BEDROOMS	REQUIRED CFM (2)	ADJUSTMENT COEFFICIENT (3)	MINIMUM WHOLE HOUSE VENTILATION RATE, CFM	BY WHOLE HOUSE FAN SYSTEM	
1 BEDROOM	660	1	500 - 1,000	1	30	1.5	45	55	
2 BEDROOM	1000	2	500 - 1,000 2 35 1.5 53 55						
NOTE:	TE: (1) VENTILATION CRITERIA IS PER THE 2018 IMC, TABLE 403.4.2.								

(2) MINIMUM OSA FOR CONTINUOUSLY OPERATING FAN(S).

(3) ADJUSTMENT COEFFICIENT IS PER 2018 IMC, TABLE 403.4.3 FOR A BALANCED, AND DISTRIBUTED WHOLE HOUSE VENTILATION SYSTEM.

# **RANGE HOOD VENTILATION NOTES**

RESIDENTIAL UNIT NOTES:

- 1. PENETRATIONS OF THE RATED WALL ASSEMBLIES SHALL BE PROTECTED IN ACCORDANCE WITH IBC SECTION 717. REFER TO ARCHITECTURAL PLANS FOR PENETRATION DETAILS.
- PER OWNER, THE FOLLOWING RANGE HOODS ARE BEING INSTALLED: STANDARD UNITS (MICRO/HOOD COMBO): WHIRLPOOL WMH31017H PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, DUCT CONNECTION TO HOODS ARE 6Ø. MINIMUM SIZE ROUND DUCT FOR HOOD VENTING SHALL BE

STANDARD HOOD: WHIRLPOOL WMH31017H

MAXIMUM LENGTH (FT)

	HOOD VENT LENGTH CALCULATION								
UNIT TYPE	DRYER VENT LENGTH	RECTANGULAR TO ROUND TRANSITION	NUMBER OF 45 ELBOWS	NUMBER OF 90 ELBOWS	WALL CAP	TOTAL LENGTH			
1-BED-END	30	1	0	2	1	95			
1-BED-INT-2	55	1	0	3	1	130			
2-BED	33	1	2	2	1	108			

NOTE:

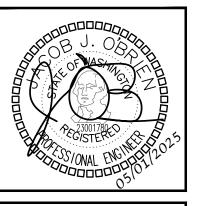
1 1 0 2 1 1 NOTE:

(1) PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS EQUIVALENT LENGTH OF DUCT FITTINGS ARE AS FOLLOWS:

______

STANDARD	FITTINGS
FITTING	EQUIVALENT VENT LENGTH (FT)
RECTANGULAR TO ROUND TRANSITION	5
90 ELBOW	10
45 ELBOW	5
WALL CAP	40

2 5/2/25 PERMIT RESUBMITTAL #2 1 2/4/25 PERMIT RESUBMITTAL #1 NO. DATE DESCRIPTION REVISIONS





DESIGNED: ABE
CHECKED: ABE
APPROVED: JOB

CHEC CHEC APPR

PRMU2024

BUILDING

**APARTMENTS** 

HEIGHT AVE SE

BRA

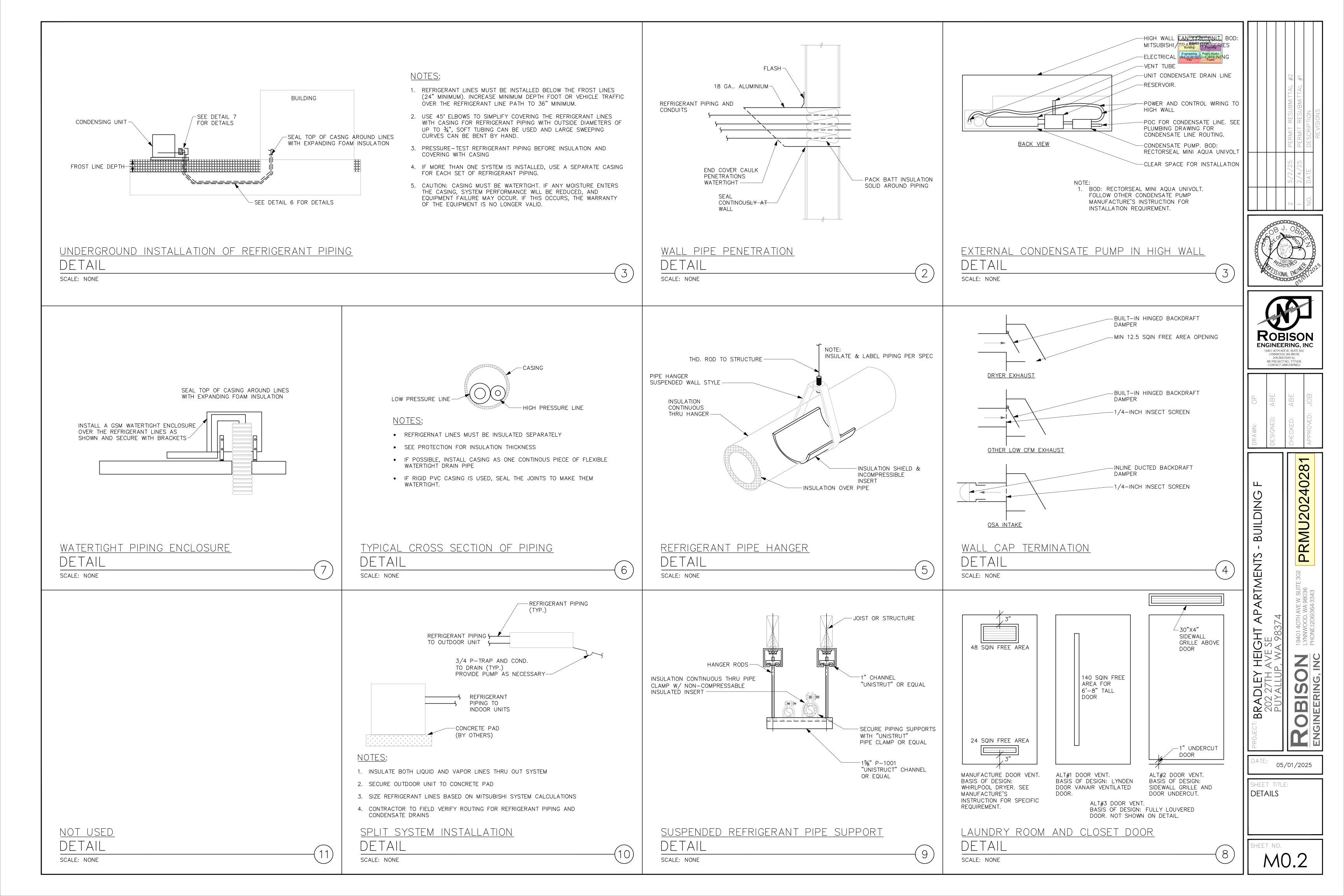
01 4OTH AVE W. SUITE 302 NWOOD, WA 98036

PUYALLUP, WA

TE: 05/01/2025

PROJECT
NOTES &
CALCULATIONS

MO.1



# MECHANICAL SCHEDULES



	ELECTRIC HEATERS							
EQUIP NO.	EQUIP NO. SERVICE	MOUNTING/ DISCHARGE	HEATING	ELECTRICAL	BASIS OF DESIGN (3)			
EQUIF NO.	SERVICE	MOUNTING/ DISCHARGE	KW	VOLTAGE	DASIS OF DESIGN (3)			
EWH-1	APARTMENT UNIT	WALL	1.0	208V/1P	(1)(2)			
EWH-2	APARTMENT UNIT	WALL	1.5	208V/1P	(1)(2)			

NOTES: (1) BROAN, KING, CADET OR EQUIVALENT.

(2) PROVIDE REMOTE THERMOSTAT. COORDINATE FINAL LOCATION WITH ELECTRICAL DRAWINGS.

(3) ALL ELECTRIC HEATERS TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.

	FAN SCHEDULE									
EQUIP NO.	SERVICE	TYPE	AIRFLOW,	AIRFLOW, FSP IN WC		ELECTRICAL		WEIGHT, LBS	BASIS OF DESIGN	
LQUII NO.	SERVICE	IIIE	CFM	CFM ESP. IN WG	VOLTAGE	HP	- OPERATION	WEIGHT, LDS	(1)(2)(3)	
BEF-1	RESTROOM	CEILING MOUNTED	55/80	0.5	115V/1P	FHP	CONTINUOUS	10	GREENHECK SP-AP0511W (4)	
BEF-2	RESTROOM	CEILING MOUNTED	50	0.5	115V/1P	FHP	(2)	10	GREENHECK SP-AP0511W	
KEF-1	KITCHEN	CEILING MOUNTED	30	0.5	115V/1P	FHP	CONTINUOUS	10	GREENHECK SP-AP0511W	

PROVIDE BACKDRAFT DAMPERS ON EXHAUST FANS.

VIBRATION ISOLATION: FANS < 125 LBS RUBBER ISOLATORS, FANS > 125 LBS SPRING ISOLATORS

FAN SHALL BE 2-SPEED: 35 CFM CONTINUOUS LOW SETTING AND 80 CFM HIGH SPEED ACTIVATED BY INTEGRAL OCCUPANCY SENSOR ON GRILLE.

	SPLIT SYSTEM HEAT PUMP SCHEDULE - INDOOR UNIT									
	FOUR NO SERVICE MOUNTING/		FA	N	ELECTRICAL			BASIS OF DESIGN	CONNECTED OUTDOOR	
EQUIP NO.	SERVICE		AIRFLOW, CFM	ESP. IN WG	VOLTAGE	MCA	МОСР	(1)(2)(4)	UNIT	
FCU-1-X	RES. UNIT	HIGH WALL	473	N/A	(3)	(3)	(3)	DAIKIN FTXB12BXVJU	HP-1-X	
FCU-2-X	res. unit	HIGH WALL	716	N/A	(3)	(3)	(3)	DAIKIN FTXB18BXVJU	HP-2-X	

(1) INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS.

(2) PROVIDE MANUFACTURER'S OPTIONAL CONDENSATE PUMP WITH RESERVOIR AND SENSOR.

(3) INDOOR UNIT POWERED FROM OUTDOOR UNIT.

(4) "X" DENOTES THE UNIT BEING SERVED.

	SPLIT SYSTEM HEAT PUMP SCHEDULE - OUTDOOR UNIT											
EQUIP NO.	SERVICE	CAPACITY, TONS	TOTAL COOLING CAPACITY, BTUH	SEER2	TOTAL HEATING CAPACITY, BTUH		ELECTRICAL		WEIGHT, LBS	BASIS OF DESIGN (1)(2)(3)(4)(5)(6)	CONNECTED FAN COIL UNIT	
		10143	CALACITI, BIOTI		CAPACITY, BIUH		VOLTAGE	MCA	MOCP	LDS	(1)(2)(3)(4)(3)(6)	COIL UNII
HP-1-X	RES. UNIT	1.0	11,000	18.0	11,300	9.0	208V/1P	12.40	15	62	DAIKIN RXB12BXVJU	FCU-1
HP-2-X	RES. UNIT	1.5	18,000	18.0	17,900	8.5	208V/1P	16.55	20	97	DAIKIN RXB18BXVJU	FCU-1
LOTEC	C. (1) INICIALLINIACCORDANICE WITH MANUE ACTURER'S INICIAL ATION PROHIBERATION											

(1) INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS.

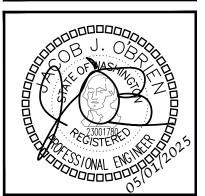
(2) ARI LISTED WITH ALL STANDARD FEATURES, INSTALLATION ACCESSORIES AND COMPRESSOR SHORT CYCLING PROTECTION. FILTER DRIVER, REFRIGERANT LINE FILTER, LIQUID SOLENOID

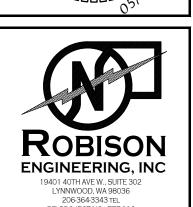
VALVE, AND SAFETY PRESSURE SWITCHES. INSTALL REFRIGERANT TUBING AND LENGTH IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(4) ROUTING OF REFRIGERANT LINES FROM INDOOR TO OUTDOOR UNITS NOT SHOWN ON PLANS. CONTRACTOR TO FIELD COORDINATE ROUTING.

(5) REFRIGERANT SHALL BE R-410A.

(6) "X" DENOTES THE UNIT BEING SERVED.



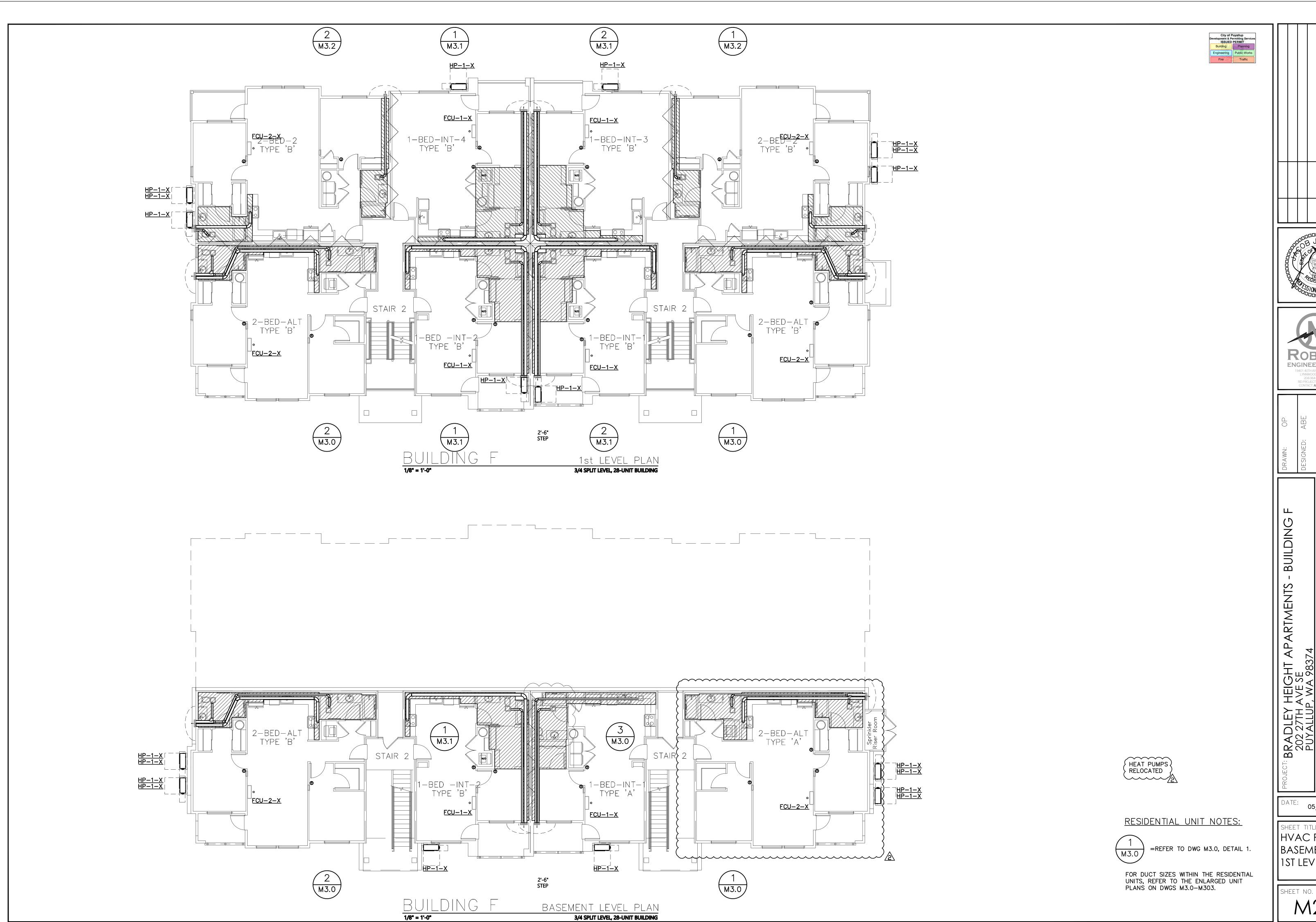


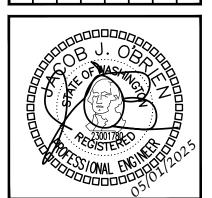
BUILDING

HEIGHT APARTMENTS AVE SE BRADLEY 202 27TH /

05/01/2025

MECHANICAL SCHEDULES &







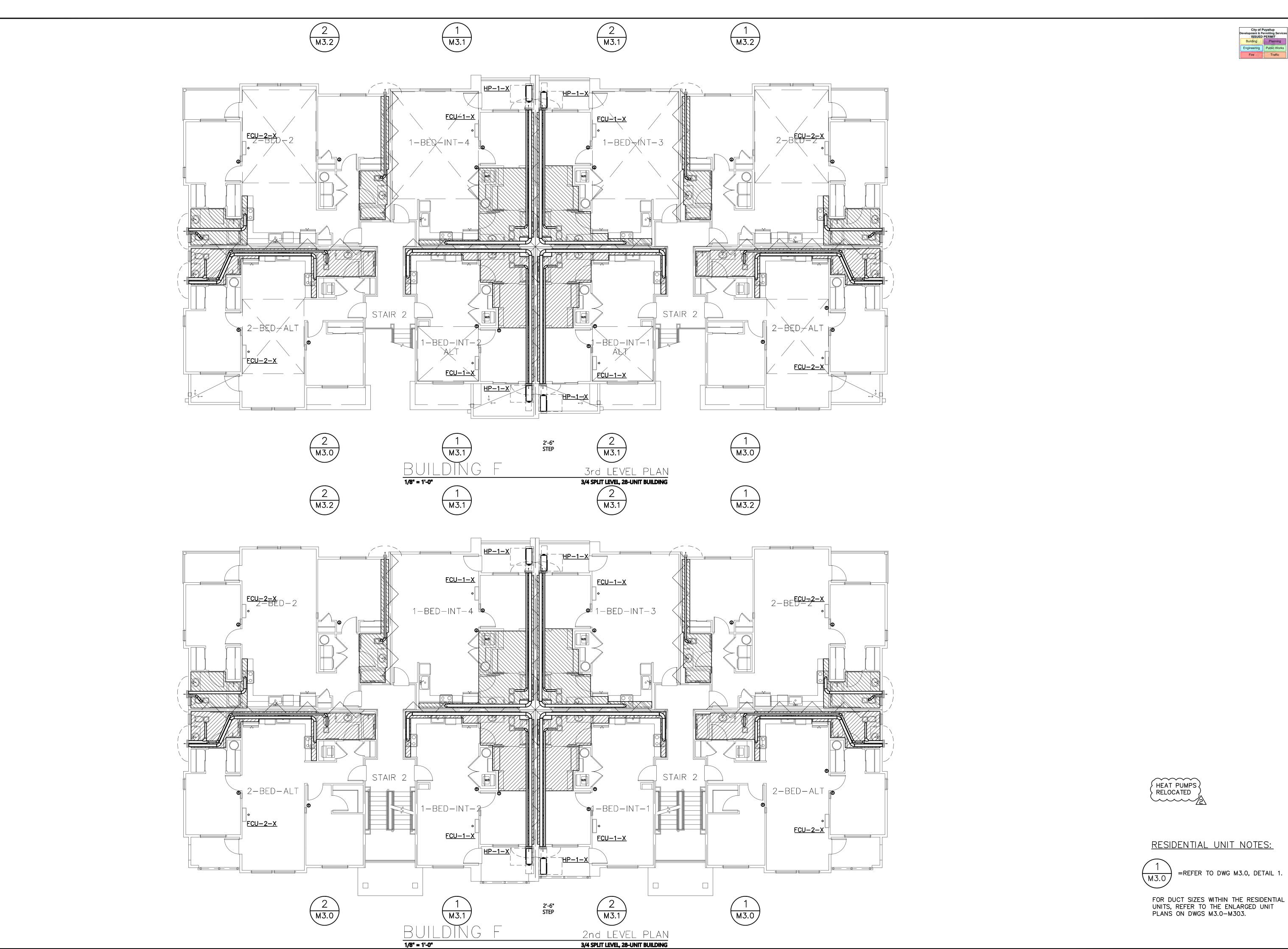
			31
	DESIGNED:	CHECKED:	APPROVED:
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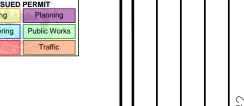
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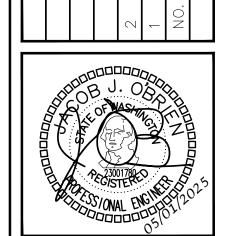
HVAC PLAN -BASEMENT & 1ST LEVEL

SHEET NO.

M2.0









202

BUILDING

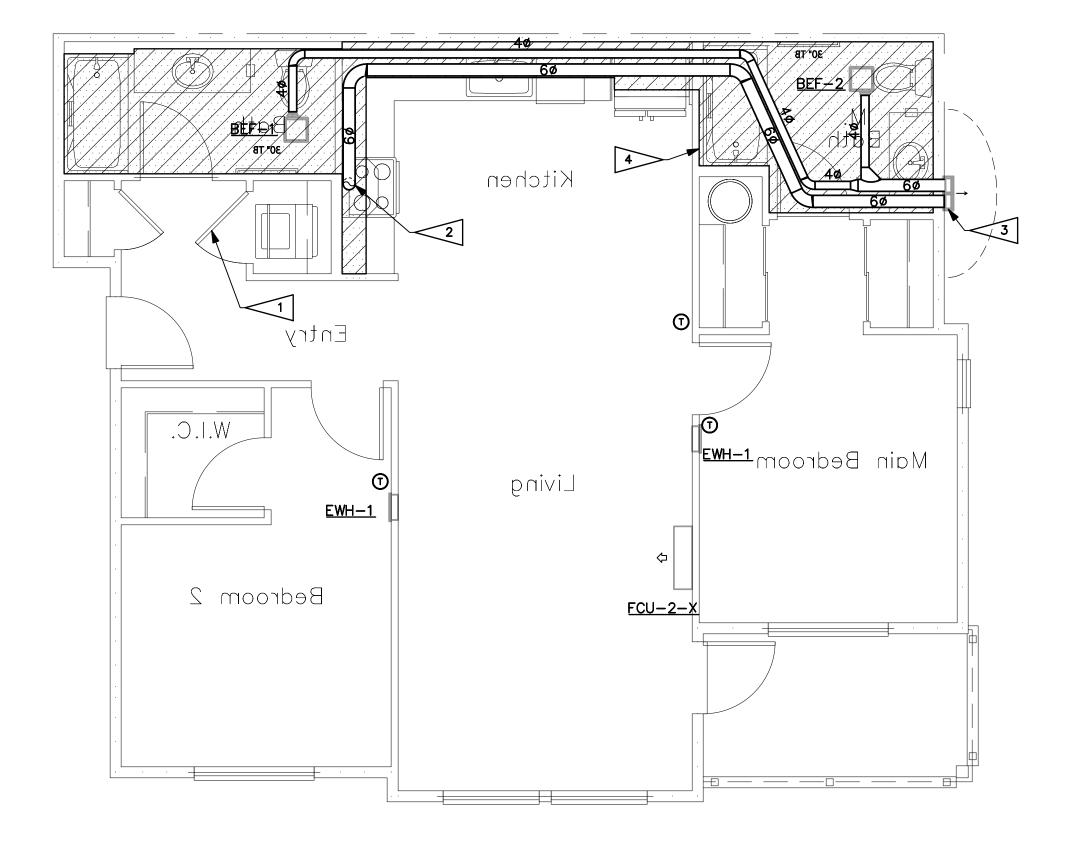
HEIGHT APARTMENTS -AVE SE P, WA 98374

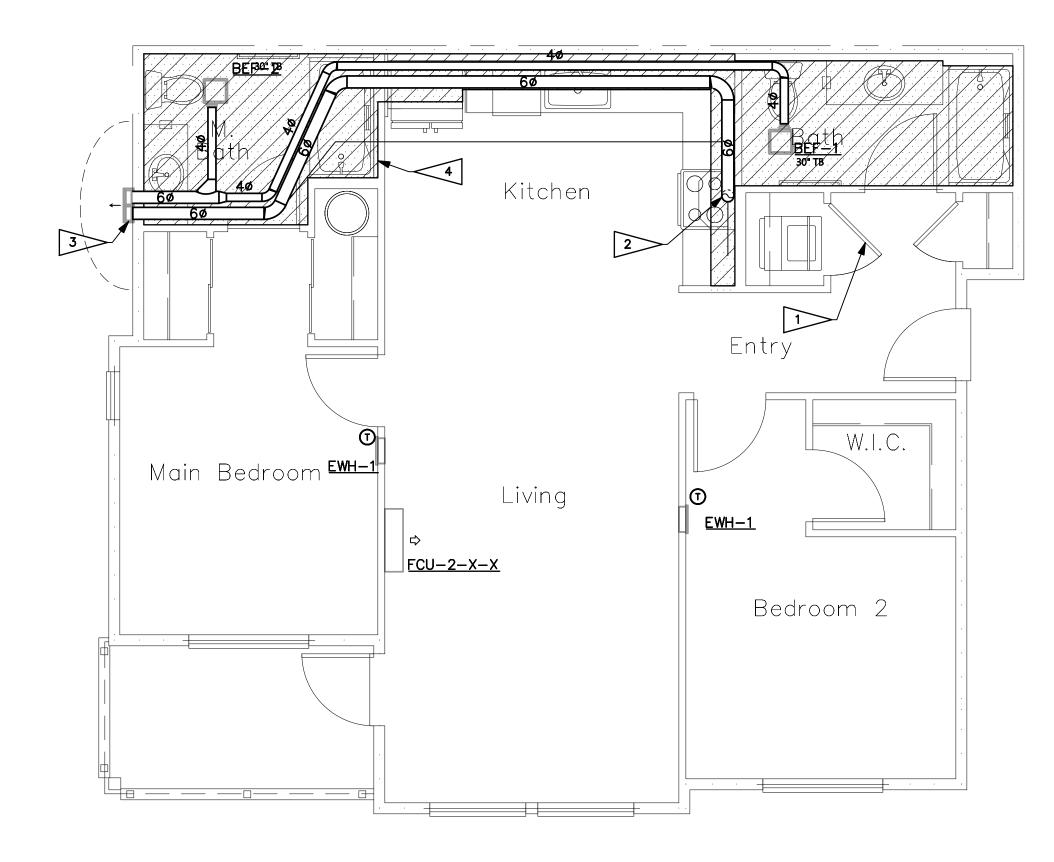
05/01/2025

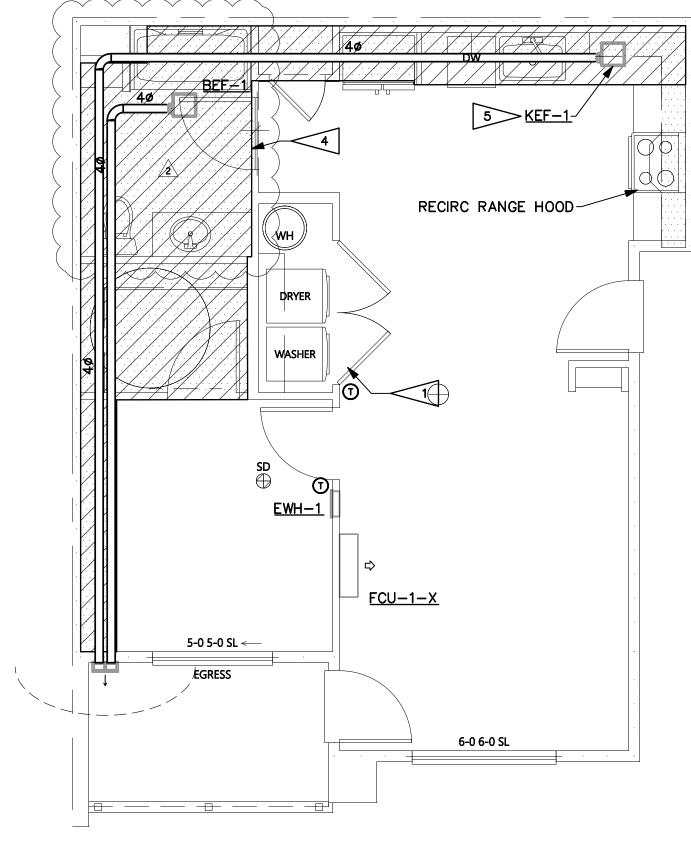
SHEET TITLE: HVAC PLAN -2ND & 3RD LEVEL

SHEET NO.









HVAC ENLARGED PLANS

2-BED MIRROR

SCALE: 1/4" = 1'-0"

M3.0

HVAC FNLARGED PLANS

2-BED

SCALE: 1/4" = 1'-0"

(M3.0)

HVAC FNLARGED PLANS

1-BED-INT ACCESSIBLE

# GENERAL NOTES:

- 1. ENVIRONMENTAL EXHAUST TERMINATIONS: MAINTAIN 3 FOOT SEPARATION FROM PROPERTY LINES AND OPERABLE OPENINGS INTO BUILDING, 10 FEET FROM MECHANICAL AIR INTAKES.
- 2. MOUNT REMOTE THERMOSTATS 48" AFF. PER WSEC C403.4.9, AT LEAST ONE THERMOSTAT SHALL BE PROGRAMMABLE ON A 5-2 SCHEDULE.
- 3. UNDERCUT ALL BATHROOM DOORS BY MINIMUM 1/2" TO ALLOW TRANSFER OF MAKEUP AIR FOR BATHROOM EXHAUST.
- 4. ELECTRIC WALL HEATERS SHALL BE RECESSED IN WALL UNLESS FIRE RATED OR EXTERIOR WALL. FOR HEATERS MOUNTED ON SUCH WALL, PROVIDE SURFACE-MOUNT WALL CAN.
- 5. PROVIDE ACCESSIBLE MANUAL VOLUME DAMPERS AT BRANCHES OR OPPOSED-BLADE DAMPERS AT GRILLES FOR AIR BALANCING PER VOLUME DAMPERS NOTE ON SHEET MO.OO.

# FLAG NOTES: #

CLOSETS CONTAINING DRYERS SHALL BE PROVIDED WITH LOUVERED DOOR OR 100 SQ. IN FREE-AREA OPENING ABOVE DOOR. OPENING PROVIDES PATH FOR EXHAUST AIR DURING WASHER OPERATION PER WSMC TABLE 403.3.1.1 NOTE (i) AND MAKEUP AIR DURING DRYER OPERATION PER 504.6.

- 2. POC TO DOMESTIC KITCHEN RANGE HOOD. SEE PLANS FOR SIZE. DUCT SHALL REMAIN SEPARATE FROM OTHER EXHAUST SYSTEMS UP TO TERMINATION.
- 3. DOMESTIC KITCHEN RANGE HOOD EXHAUST TERMINATION WALL CAP WITH SCREEN. PROVIDE BACKDRAFT DAMPER AT TERMINATION. CLEARANCES PER GENERAL NOTE 1

- 4. LOWERED SOFFIT FOR MECHANICAL EQUIPMENT.
- 5. KEF-1 TO OPERATE CONTINUOUSLY TO PROVIDE GENERAL EXHAUST TO KITCHEN PER WSMC 403.4.7. KITCHEN RANGE HOOD SHALL BE SET TO RECIRIC MODE.

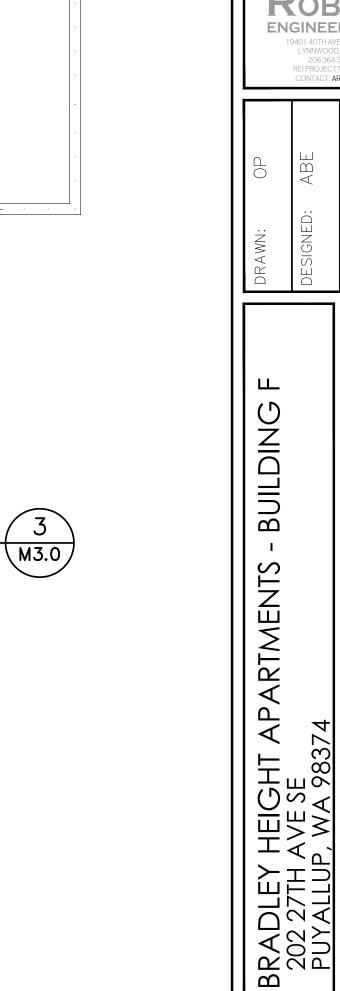
SCALE: 1/4" = 1'-0"

05/01/2025 SHEET TITLE: HVAC

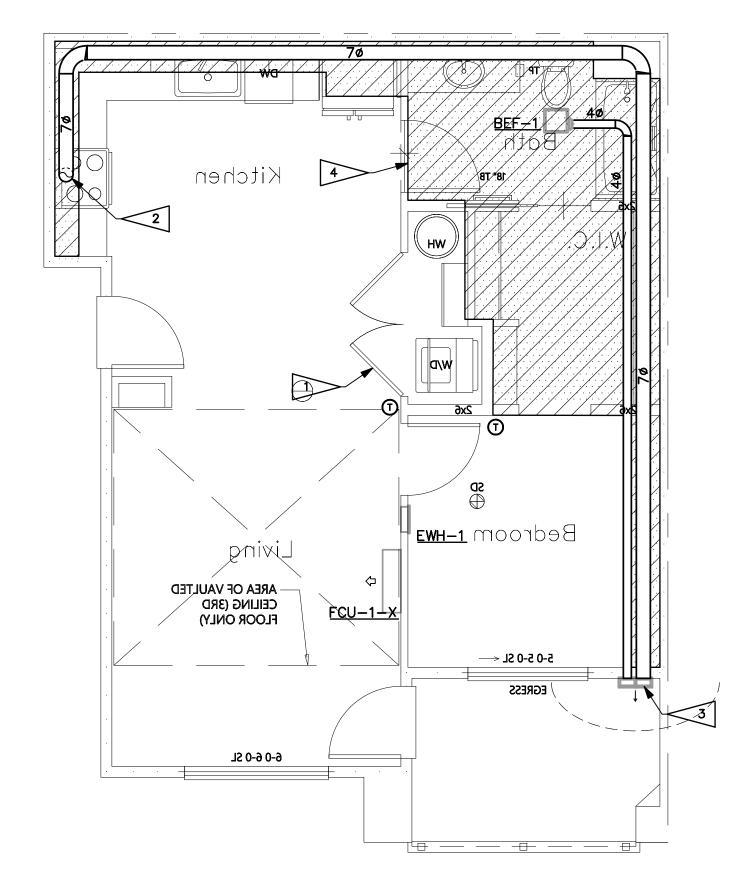
202

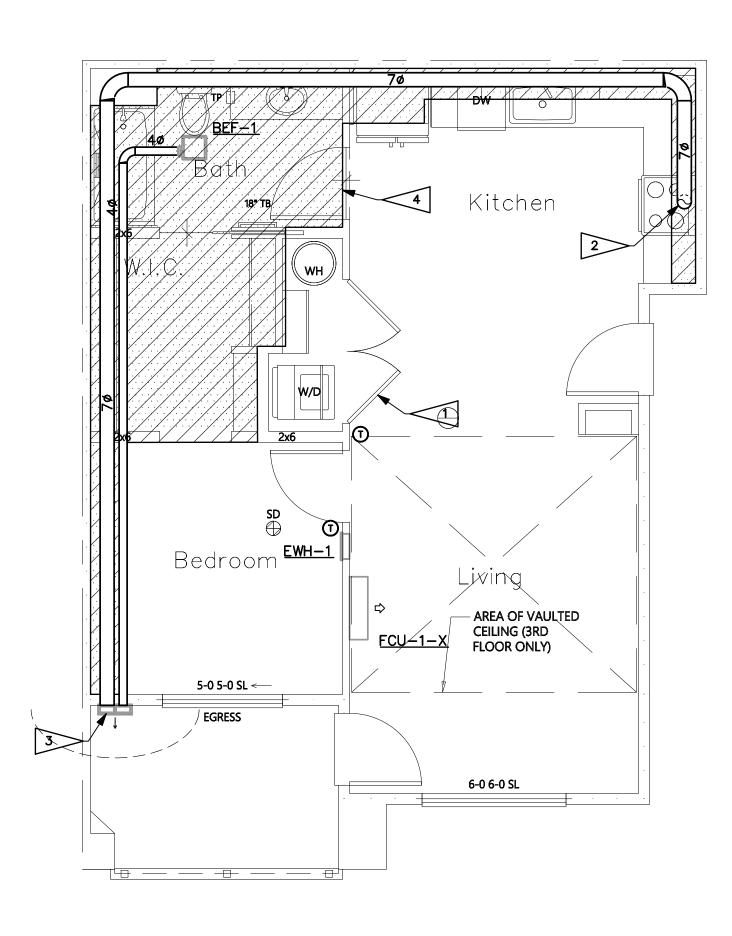
ENLARGED PLANS SHEET NO.

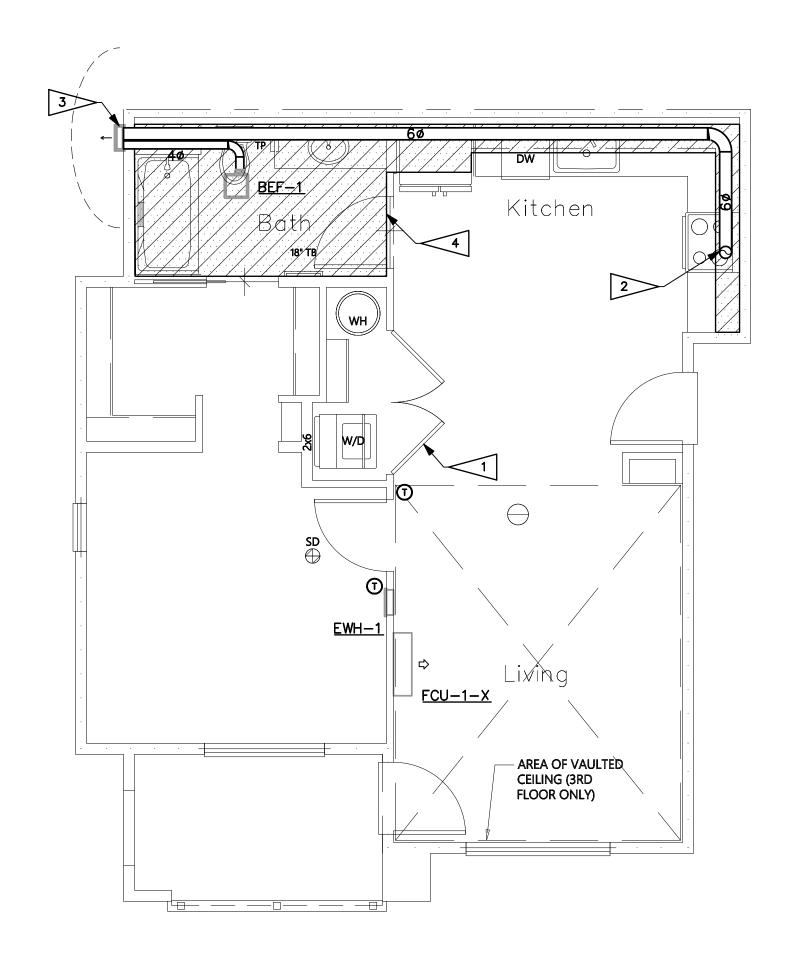
ENTIRE SHEET HAS BEEN UPDATED 











# HVAC ENLARGED PLANS

1-BED-INT-2-MIRROR SCALE: 1/4" = 1'-0"

M3.1

# HVAC ENLARGED PLANS

1-BED-INT-2 2 M3.1 SCALE: 1/4" = 1'-0"

HVAC ENLARGED PLANS

1-BED-END M3.1 SCALE: 1/4" = 1'-0"

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4. LOWERED SOFFIT FOR MECHANICAL EQUIPMENT.

BUILDING 202

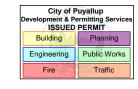
HEIGHT APARTMENTS AVE SE P, WA 98374

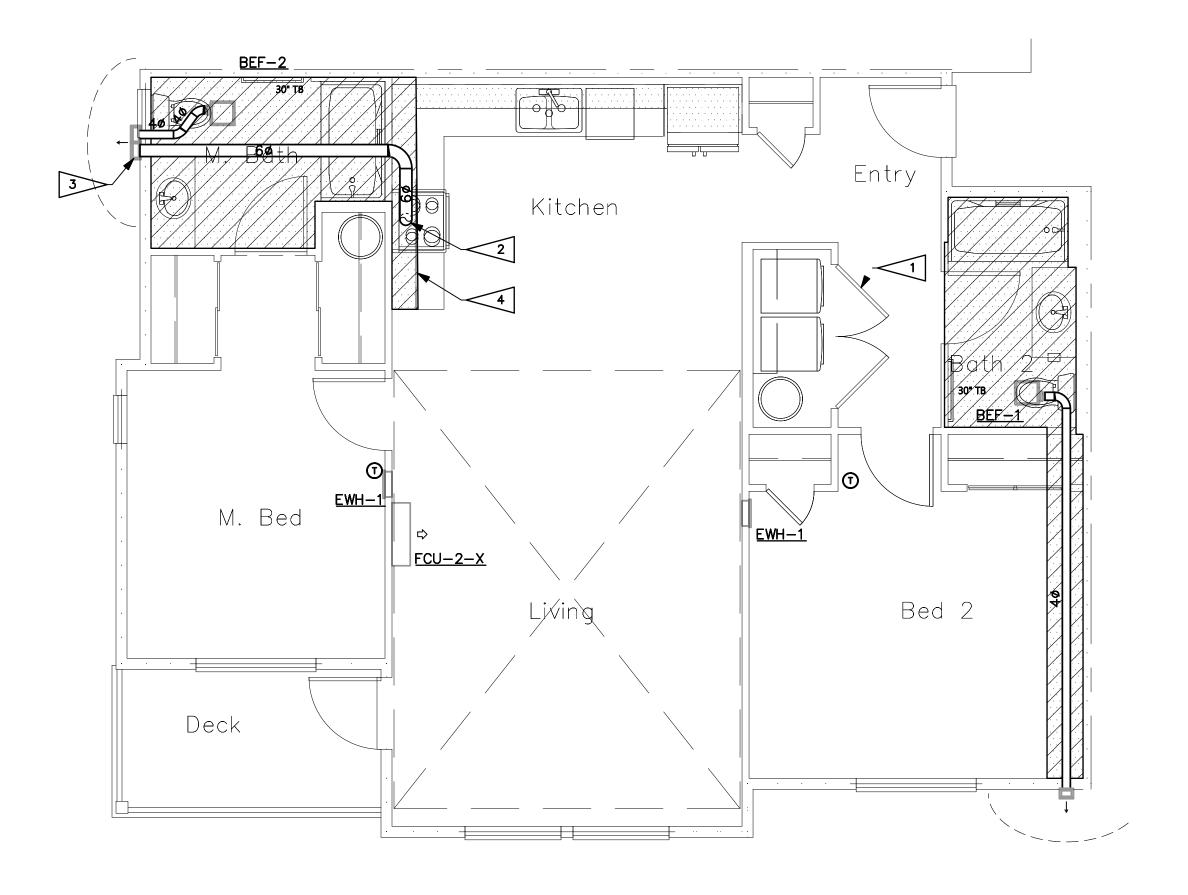
BRADLEY 202 27TH , PUYALLUP

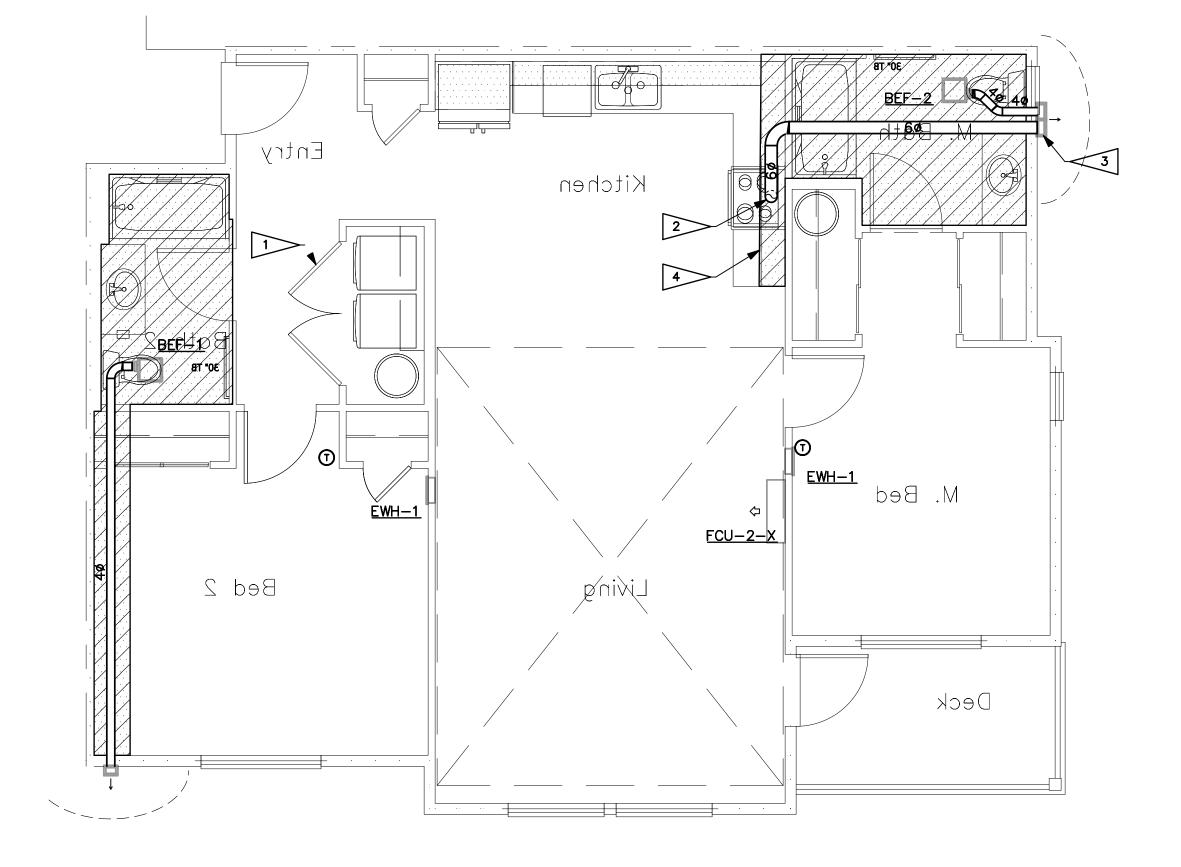
05/01/2025

SHEET TITLE: HVAC ENLARGED PLANS

(ENTIRE SHEET HAS )
BEEN UPDATED 







HVAC ENLARGED PLANS

2-BED MIRROR (BUILDING/EZ&F) SCALE: 1/4" = 1'-0"

HVAC ENLARGED PLANS

2-BED (BUILDING E&F) SCALE: 1/4" = 1'-0"

M3.2

# GENERAL NOTES:

- 1. ENVIRONMENTAL EXHAUST TERMINATIONS: MAINTAIN 3 FOOT SEPARATION FROM PROPERTY LINES AND OPERABLE OPENINGS INTO BUILDING, 10 FEET FROM MECHANICAL AIR INTAKES.
- 2. MOUNT REMOTE THERMOSTATS 48" AFF. PER WSEC C403.4.9, AT LEAST ONE THERMOSTAT SHALL BE PROGRAMMABLE ON A 5-2 SCHEDULE.
- 3. UNDERCUT ALL BATHROOM DOORS BY MINIMUM 1/2" TO ALLOW TRANSFER OF MAKEUP AIR FOR BATHROOM EXHAUST.
- 4. ELECTRIC WALL HEATERS SHALL BE RECESSED IN WALL UNLESS FIRE RATED OR EXTERIOR WALL. FOR HEATERS MOUNTED ON SUCH WALL, PROVIDE SURFACE-MOUNT WALL CAN.
- 5. PROVIDE ACCESSIBLE MANUAL VOLUME DAMPERS AT BRANCHES OR OPPOSED-BLADE DAMPERS AT GRILLES FOR AIR BALANCING PER VOLUME DAMPERS NOTE ON SHEET MO.OO.

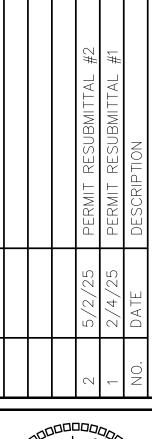
# FLAG NOTES: #

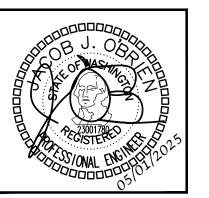
CLOSETS CONTAINING DRYERS SHALL BE PROVIDED WITH LOUVERED DOOR OR 100 SQ. IN FREE-AREA OPENING ABOVE DOOR. OPENING PROVIDES PATH FOR EXHAUST AIR DURING WASHER OPERATION PER WSMC TABLE 403.3.1.1 NOTE (i) AND MAKEUP AIR DURING DRYER OPERATION PER 504.6.

_____

- 2. POC TO DOMESTIC KITCHEN RANGE HOOD. SEE PLANS FOR SIZE. DUCT SHALL REMAIN SEPARATE FROM OTHER EXHAUST SYSTEMS UP TO TERMINATION.
- 3. DOMESTIC KITCHEN RANGE HOOD EXHAUST TERMINATION WALL CAP WITH SCREEN. PROVIDE BACKDRAFT DAMPER AT TERMINATION. CLEARANCES PER GENERAL NOTE 1

4. LOWERED SOFFIT FOR MECHANICAL EQUIPMENT.







202

BUILDING

BRADLEY HEIGHT APARTMENTS 202 27TH AVE SE PUYALLUP, WA 98374

05/01/2025

SHEET TITLE: HVAC ENLARGED PLANS

1 ENTIRE SHEET HAS BEEN UPDATED 

SHEET NO.

	SYMBOLS	ABBREVIATIONS	GENERAL NOTES					
DETAIL IDENTIFICATION  SYMBOL  1	LIGHT LINE INDICATES NON-ELECTRICAL OR BACKGROUND (THIS IS NOT CONTRACTUAL DEFINITION OF WORK)  HEAVY LINE INDICATES NEW WORK (THIS IS NOT CONTRACTUAL DEFINITION OF WORK)  NAME  FLAG NOTE  REVISION NOTE  REVISION DEFINITION, AREA ENCIRCLED CONTAINS DRAWING	A AMPERE AC ALTERNATING CURRENT, ABOVE COUNTER AFF ABOVE FINISHED FLOOR AIC AMPS INTERRUPTING CAPACITY AL ALUMINUM AMP AMPERE AWG AMERICAN WIRE GAUGE BKR BREAKER BLDG BUILDING C COIL or CONDUIT CKT CIRCUIT CO CONDUIT/RACEWAY ONLY CT CURRENT TRANSFORMER CU COPPER CW COOL WHITE D DIMMER	GENERAL  1. PROVIDE ELECTRICAL INSTALLATION IN ACCORDAN ELECTRICAL CODE, LOCAL CODES, ORDINANCES ALL COMPANIES FURNISHING SERVICES TO INSTALLATION  2. PROVIDE ALL WORK AND ITEMS NECESSARY FOR ELECTRICAL SYSTEMS. THE ELECTRICAL DRAWING NOT NECESSARILY SHOW EVERY CONDUIT, BOX, OF FOR A COMPLETE INSTALLATION.  3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONDITIONS WHICH MAY AFFECT BID. ANY ITEMS BE BROUGHT TO THE ATTENTION OF THE ARCHITE	ND REQUIREMENTS OF UTILITY ON.  COMPLETE AND FUNCTIONAL SOLUTION ALES ARE DIAGRAMMATIC AND DOCUMENT OF SIMILAR ITEMS  TO BID AND DETERMINE SOLUTION OF SHALL	7. WIRING: PROVIDE MINIMUM #10 AWG COPPER CONDUCTOR SIZE IN 12 O Yraffer NCH CIRCUIT RUNS OVER 75' IN LENGTH.  SITE ELECTRICAL  1. TRENCHING: COORDINATE ALL TRENCHING WORK WITH OTHER UTILITY LOCATIONS AND DRAINAGE TRENCHES.  2. UNDERGROUND CONDUITS: PROVIDE PVC, SCHEDULE 40, 3/4" MINIMUM. PROVIDE GRC CONDUIT TRANSITION ELBOW WHEN TURNING UP TO ABOVE GRADE.  3. DIRECT—BURIED CONDUITS: CONDUIT FOR BRANCH CIRCUITS OUTSIDE BUILDINGS NOT BENEATH DRIVEWAYS OR PARKING AREAS SHALL BE DIRECTLY BURIED		S/PERMIT CORRECTION SET	TION REVISIONS
SWITCHES  \$a \$os  \$  \$  \$  \$  \$  \$  \$  \$  \$  \$  \$  \$  \$	SWITCH, SINGLE POLE; WITH SWITCHING SUBSCRIPT OCCUPANCY SENSOR SWITCH SWITCH, SINGLE POLE; WITH SWITCHING SUBSCRIPT "D" INDICATES WALLBOX DIMMER CEILING MOUNTED OCCUPANCY SENSOR SWITCH, TIMER. SWITCH, THREE WAY.	DED DEDICATED  EC ELECTRICAL CONTRACTOR  EF EXHAUST FAN  ELEC ELECTRICAL  EMT ELECTRICAL METALLIC TUBING  EQUIP EQUIPMENT  EXIST EXISTING  FAA FIRE ALARM ANNUNCIATOR  FACP FIRE ALARM CONTROL PANEL  FLUOR FLUORESCENT  GC GENERAL CONRACTOR  GFCI GROUND FAULT CIRCUIT INTERRUPTER  GND GROUND  GRS GALVANIZED RIGID STEEL  HID HIGH INTENSITY DISCHARGE  HP HORSEPOWER  IG ISOLATED GROUND  KCMIL THOUSAND CIRCULAR MILLS  KVA KILOVOLT AMPERES  KW KILOWATT  LTG LIGHTING  LV LOW VOLTAGE  MFR MANUFACTURER	<ol> <li>"REF" INDICATIONS DENOTE WORK COVERED ELSE'S STRUCTURAL, OR MECHANICAL).</li> <li>REFERENCE ARCHITECTURAL DRAWING FOR EXACT QUESTIONS CONCERNING THE LOCATION OF DEVIC DIRECTED TO THE ARCHITECT. FAILURE TO COORD NO WAY RESULT IN ADDITIONAL COMPENSATION E CONTRACTOR.</li> <li>WHEREVER THE WORD "PROVIDE" IS USED, IT MEAN COMPLETE AND READY FOR USE."</li> <li>COORDINATE LOCATION OF ELECTRICAL WITH OTHER LOCATION, ETC.) OF MECHANICAL EQUIPMENT, UN COORDINATE INSTALLATION AND LOCATION OF ALICONTRACTOR. VERIFY ALL FUSE RATINGS, WIRE SPRIOR TO INSTALLATION.</li> </ol>	LOCATION OF DEVICES. ES AND EQUIPMENT SHALL BE DINATE REQUIREMENTS SHALL IN BEING PROVIDED TO THE  ANS, "FURNISH AND INSTALL  ER TRADES.  L CHARACTERISTICS (SIZE, LESS OTHERWISE INDICATED. L EQUIPMENT WITH MECHANICAL	WITHOUT CONCRETE ENCASEMENT. THE DEPTH TO THE TOP OF BURIED CONDUITS SHALL BE 36". PROVIDE MARKER TAPE 12" BELOW GRADE.  4. BELOW SLAB: CONDUIT ROUTED BELOW ON—GRADE FLOOR SLABS SHALL BE INSTALLED PRIOR TO FLOOR SLAB POUR. ROUTE CONDUITS BELOW SLAB AS STRAIGHT AS POSSIBLE TO MINIMIZE BENDS.  5. ALL CONDUITS PENETRATING THE BUILDING ENVELOPE BELOW GRADE SHALL FOLLOW WATERPROOFING REQUIREMENTS IN THE ARCHITECTURAL DRAWINGS.  NEUTRALS  1. AT CONTRACTORS OPTION, NEUTRALS MAY BE SHARED ON COMBINED HOMERUNS UNLESS THE CIRCUIT HAS A GFCI BREAKER, AN ISOLATED GROUND, OR IS FROM A PANEL WITH TVSS PROTECTION. ANY NEUTRAL DOWNSTREAM FROM A DIMMER SHALL BE DEDICATED TO THE DIMMED LOAD.  2. NEUTRAL WIRES SHOWN FOR TWO AND THREE POLE MECHANICAL AND KITCHEN EQUIPMENT MAY BE OMITTED UPON VERIFICATION THAT THEY ARE NOT REQUIRED EITHER FOR OPERATION OR CONTROL CIRCUITS PER MANUFACTURER'S SPECIFICATIONS.  LIGHTING		OF WASHINGTON  OF WAS	
RECEPTACLES	SINGLE RECEPTACLE  DUPLEX RECEPTACLE: WALL MOUNTED, +18" AFF  CONTROLLED AND NON CONTROLLED DUPLEX RECEPTACLE (SPLIT WIRED RECEPTACLE)  DUPLEX RECEPTACLE — ABOVE COUNTER  DUPLEX GFCI ABOVE COUNTER  DUPLEX GFCI  DUPLEX RECEPTACLE, WITH HEIGHT ABOVE FINISHED FLOOR INDICATED  CEILING MOUNTED DUPLEX RECEPTACLE  DOUBLE DUPLEX RECEPTACLE: WALL MOUNTED, +18" AFF  FLOOR BOX ONE DUPLEX RECEPTACLE  FLOOR BOX ONE DUPLEX RECEPTACLE + ONE DATA  FLOOR BOX ONE DUPLEX RECEPTACLE + ONE DATA + ONE VOICE  SPECIAL PURPOSE RECEPTACLE, AS NOTED  JUNCTION BOX: 4SQ MOUNTED  JUNCTION BOX: 4SQ MOUNTED  JUNCTION BOX: 4SQ WALL MOUNTED  JUNCTION BOX: 4SQ TRACK  CONNECTION FOR LIGHTED MIRROR COORDINATE LOCATION AND	MIN MINIMUM MLO MAIN LUGS ONLY N NEUTRAL NEC NATIONAL ELECTRICAL CODE (NFPA—70) NEMA NATIONAL ELECTRICAL MANUFACTURERS	<ol> <li>MATERIALS AND METHODS</li> <li>PROVIDE RACEWAY AND WIRING ROUTED CONCEAL WHERE POSSIBLE. WHERE RACEWAY CANNOT BE (INSTALLED PER PROJECT MANAGER'S DIRECTION. INSTALLED IN NEAT SYMMETRICAL LINES HORIZON BUILDING COLUMNS AND ROOF LINES. CONDUITS SUPPORTS WHEREVER POSSIBLE.</li> <li>EXPOSED CONDUIT ROUTING: CONDUITS MAY BE MECHANICAL AND ELECTRICAL ROOMS ONLY. EXF SECURED A MINIMUM OF 6" ABOVE FLOOR.</li> <li>OUTDOOR EXPOSED CONDUIT ROUTING: CONDUIT TO WEATHER SHALL BE GRC, PVC OR LIQUID—TIG CONNECTIONS AND FITTINGS.</li> <li>CLEARANCES: VERIFY PHYSICAL DIMENSIONS OF ACCESS CLEARANCES CAN BE MET.</li> <li>CONNECTIONS: PROVIDE GRS, METALLIC FLEX, OF FOR CONNECTIONS TO MOTORS OR MOTORIZED ECONNECTIONS TO MOTORS OR MOTORIZED ECONNECTIONS TO BE 1/2". FLEXIBLE CONDUIT AND THROUGHOUT THE BUILDING.</li> </ol>	CONCEALED, IT SHALL BE ALL CONDUIT SHALL BE TAL OR PERPENDICULAR TO SHALL BE GROUPED ON COMMON  ROUTED EXPOSED IN POSED CONDUITS SHALL BE  S ROUTED ON ROOF OR EXPOSED HT FLEX. PROVIDE WATER—TIGHT  R LIQUIDTITE FLEX CONDUITS QUIPMENT.  IF CONDUIT IS TO BE USED	1. PROVIDE LIGHT FIXTURES WITH PROPER FITTING FLANGES, MOUNTING SUPPORTS, AND ACCESSORY ITEMS, UL LISTED FOR CONDITIONS OF USE.  LOW VOLTAGE LIGHTING  1. PROVIDE LOW VOLTAGE TRANSFORMERS IN NEARBY ACCESSIBLE CEILING SPACE.  2. PROVIDE LOW VOLTAGE CONDUCTORS SIZED PER MANUFACTURER'S GUIDELINES TO MINIMIZE VOLTAGE DROP.  LIGHTING CONTROL  1. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A TWENTY AMPERE CIRCUIT LOADED TO NOT MORE THAN EIGHTY PERCENT. A MASTER CONTROL MAY BE INSTALLED PROVIDED THE INDIVIDUAL SWITCHES RETAIN THEIR CAPABILITY TO FUNCTION INDEPENDENTLY.  2. EMERGENCY FIXTURES: EMERGENCY BATTERY/CHARGER SHALL BE CONNECTED TO AN UNSWITCHED LEG OF THE DESIGNATED CIRCUIT.	ENGIN 19401 LYN REI PI CON	O5/O2, O5/O2, O5/O2, O5/O2, OS/O2, OS	<b>ON</b> , INC
① SIGNAL/COMMUNICATION  ▼  ▼	THERMOSTAT  DATA OUTLET: WALL MOUNTED @ +18" AFF U.O.N.  TELEPHONE/DATA OUTLET: WALL MOUNTED @ +18" AFF U.O.N.  TELEVISION OUTLET: WALL MOUNTED @ +18" AFF U.O.N.	WP WEATHERPROOF W/ WITH W/O WITHOUT XFMR TRANSFORMER XFR TRANSFER Z IMPEDANCE OR ZONE  GENERAL REQUIF	REMENTS		DRAWING INDEX	BUILDING	YALLUF, W	0202402
POWER  WP  WP  MAU-1,5HP,480,3  PEF-1,12KVA,208,1	PANELBOARD  NON-FUSED DISCONNECT SWITCH (WP = NEMA 3R WHERE APPROPRIATE )  FUSED DISCONNECT SWITCH  MOTOR CONNECTION (EQUIPMENT NAME, HORSEPOWER, VOLTAGE, AND PHASE INDICATED)  EQUIPMENT CONNECTION (EQUIPMENT NAME, LOAD, VOLTAGE, AND PHASE INDICATED)	<ol> <li>DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENE EQUIPMENT REQUIRED.</li> <li>THE DRAWINGS SHALL NOT BE SCALED FOR EXACT</li> <li>REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION</li> <li>REFER TO MANUFACTURER'S STANDARD INSTALLATION AND INSTALLATION REQUIREMENTS.</li> <li>PROVIDE CONNECTIONS, ACCESSORIES, OFFSETS, AND SYSTEM.</li> </ol>	MEASUREMENT. ONS. ION DRAWINGS FOR EQUIPMENT CONNECTIONS	DWG DESC E0.00 LEGEND, GENERAL N	APARTMENTS 574 ST ST DI		MA 98036 864-3343	
T M	TRANSFORMER, DRY TYPE, SHOWN TO SCALE  KW METER AND BASE	CONTRACTOR SUBSTITU	JTIONS & REVISIONS	E0.01 PROJECT NOTES  E0.10 SITE POWER PLAN - E0.11 SITE POWER PLAN -	- EAST X X X X X X X X X X X X X X X X X X X		→ N N N N N N N N N N N N N N N N N N N	WOOD, V
FACP P  SO  SO	FIRE ALARM SYSTEM CONTROL PANEL FIRE ALARM SYSTEM PULL STATION FIRE ALARM SYSTEM STROBE/SPEAKER FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR AND SPEAKER.	<ol> <li>PLEASE SUBMIT PROPOSALS FOR SUBSTITUTIONS OR REVORDERING MATERIAL OR DOING WORK.</li> <li>FOR EQUIPMENT THAT IS SCHEDULED BY MANUFACTUREF MANUFACTURER'S PUBLISHED DATA AND/OR SPECIFICATI SPECIFICATION.</li> <li>ENGINEERING COSTS FOR REVISING MEP PLANS SHALL B SUBSTITUTION PROPOSAL.</li> <li>CONTRACTOR TO COORDINATE WITH ENGINEER AND DETE COSTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OTHE RESULTING FROM SUBSTITUTIONS OR REVISIONS.</li> </ol>	VISIONS FOR REVIEW AND APPROVAL PRIOR TO R'S NAME AND CATALOG DESIGNATIONS, THE ION FOR THAT ITEM ARE CONSIDERED PART OF THE ADDRESSED IN THE COST ANALYSIS OF THE TRAINE ASSOCIATED DESIGN AND PERMITTING	E0.12 SITE LIGHTING PLAN  E0.13 SITE LIGHTING PLAN  E1.00 LIGHTING & PHOTOM  E1.01 LIGHTING & PHOTOM  E1.02 LIGHTING PLAN — 21  E1.50 LIGHTING NOTES & L	- WEST	SRADLEY HEIG		EERING, INC
PART OF THE DESIGN/BUILD FIRE ALARM SYSTEM	FIRE ALARM COMBINATION PHOTOELECTRIC SMOKE DETECTOR, CARBON MONOXIDE DETECTOR, AND SPEAKER, GUESTROOM.  CARBON MONOXIDE DETECTOR.	PRE-CON MEETING		E5.00 UNIT PLANS NOTES E5.01 UNIT PLANS & SCHE E5.02 UNIT PLANS & SCHE	EDULES X X X X X X X X X X X X X X X X X X X	JECT:		ENGINE
DSD	ELECTRO-MAGNETIC DOOR HOLDER  DUCT SMOKE DETECTOR	CONTRACTORS SHALL ATTEND A PRE—CONSTRUCTION ME PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT MUTUALLY AGREED. THE MEETING WILL BE A WORKING SI BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DE SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THE ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PREQUIRED, REVISED PLANS WILL BE ISSUED THROUGH OF PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILD OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD THAT THE ISSUE CHANGE ORDERS.  THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE FOLLOWING SHEET METAL  MECHANICAL SHEET METAL  4 HOURS PLUMBING/PIPING  4 HOURS SPRINKLER 2 HOURS GENERAL CONTRACTOR  ALL SESSIONS	ANY EQUIPMENT OR PERFORMING ANY CT SITE ON A DATE AND TIME TO BE ESSION. THE MEETING WILL BE FACILITATED TAILED REVIEW OF THE PLANS AND R COORDINATION ISSUES, REVIEW OF METHODS, AND ON—SITE INVESTIGATION OF AT COULD AFFECT THE WORK. PERSONS F THE PROJECT AND SHALL BE THE ROJECT THROUGH TO COMPLETION. IF FFICIAL CHANNELS. CHANGES IN THE BID LL BE ISSUED UNLESS PROCESSED THOUGH HE ENGINEER HAS NO AUTHORITY TO	E6.00 ONE-LINE DIAGRAM E6.01 PANELS SCHEDULES	Separate Electrical Permit is required with the Washington State Department of Labor & Industries.  https://lni.wa.gov/licensing-permits/electrical /electrical-permits-fees-and-inspections or call for Licensing Information: 1-800-647-0982	NOTE SHEET N	05/02/20	ERAL VING

# **APPLICABLE CODES**

THE FOLLOWING PROJECT DESIGN IS BASED ON THE FOLLOWING CODES:

- -2020 NATIONAL ELECTRICAL CODE (NEC)
- -2018 WASHINGTON STATE ENERGY CODE (WSEC)
- -2018 INTERNATIONAL BUILDING CODE (IBC) & WASHINGTON STATE AMENDMENTS -2018 INTERNATIONAL FIRE CODE (IFC) & WASHINGTON STATE AMENDMENTS
- -2018 INTERNATIONAL MECHANICAL CODE (IMC) & WASHINGTON STATE AMENDMENTS
- -2018 UNIFORM PLUMBING CODE (UPC) & WASHINGTON STATE AMENDMENTS

# VIBRATION AND ACOUST City of Purple Services and COUST City of Purple Services and Coust of Purple Serv **ISOLATION**

THE FOLLOWING MEASURES SHALL BE TAKEN TO MINIMIZE VIBRATION AND NOISE TRANSMISSION FROM MECHANICAL AND ELECTRICAL EQUIPMENT TO THE INTERIOR SPACES:

#### TRANSFORMERS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT

B) MOUNT TRANSFORMERS ON NEOPRENE GROMMET ISOLATORS.

SUBDUCT EXHAUST FANS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT CONNECTION.

ENCLOSED GARAGE EXHAUST FANS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT CONNECTION.

ROOFTOP AIR HANDLERS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT CONNECTION. FAN COIL UNITS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT CONNECTION.

ROOF MOUNTED CONDENSERS:

A) PROVIDE FLEXIBLE CONDUIT OR MC CABLE AT EQUIPMENT CONNECTION.

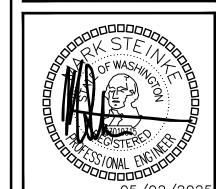
FLEXIBLE CONDUIT OR MC CABLE CONNECTIONS FOR VIBRATION ISOLATION SHALL BE A MINIMUM OF TWO FEET LONG.

# TEMPERATURE LIMITATION OF CONDUCTORS

ADDITIONAL ADJUSTMENTS FOR CONDUITS EXPOSED TO SUNLIGHT ON OR ABOVE ROOFTOPS SHALL BE FACTORED PER NEC TABLE 310.15(B)(2)(C)

# **CONDUIT & CONDUCTOR** FIRE RATING

- 1. CONDUIT FOR ELECTRICAL CONDUCTORS BY THE FACP OR FIRE ALARM SYSTEM SHALL BE IN 2 HOUR RATED ENCLOSURES OR ENCASED IN 2-INCH OF CONCRETE AND RATED CABLE ASSEMBLIES, OR BE CONDUCTORS IN 2 HOUR-RATED RACEWAYS PER NFPA 72.
- 2. THE EQUIPMENT AND CONTROL WIRING SHALL BE ENCLOSED BY FIRE BARRIERS CONSTRUCTED IN ACCORDANCE WITH IBC SECTION 707 OR HORIZONTAL ASSEMBLIES CONSTRUCTED IN ACCORDANCE WITH IBC SECTION 711, OR USING A 2 HR RATED CABLE SYSTEM OR ENCLOSED WITHIN 2" OF CONCRETE.
- 3. FIRE ALARM WIRING SHALL COMPLY WITH IBC 907.6.1. WIRING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 70.
- 4. RACEWAYS FOR THE DEDICATED BRANCH CIRCUIT(S) REQUIRED FOR PRIMARY POWER TO THE FIRE ALARM CONTROL PANEL (FACP) SHALL BE IN 2 HOUR RATED ENCLOSURES OR ENCASED IN 2-INCH OF CONCRETE AND RATED CABLE ASSEMBLIES, OR BE CONDUCTORS IN 2 HOUR-RATED RACEWAYS PER IBC 907 AND NFPA 72 SECTION 10.6.11.3.1.3



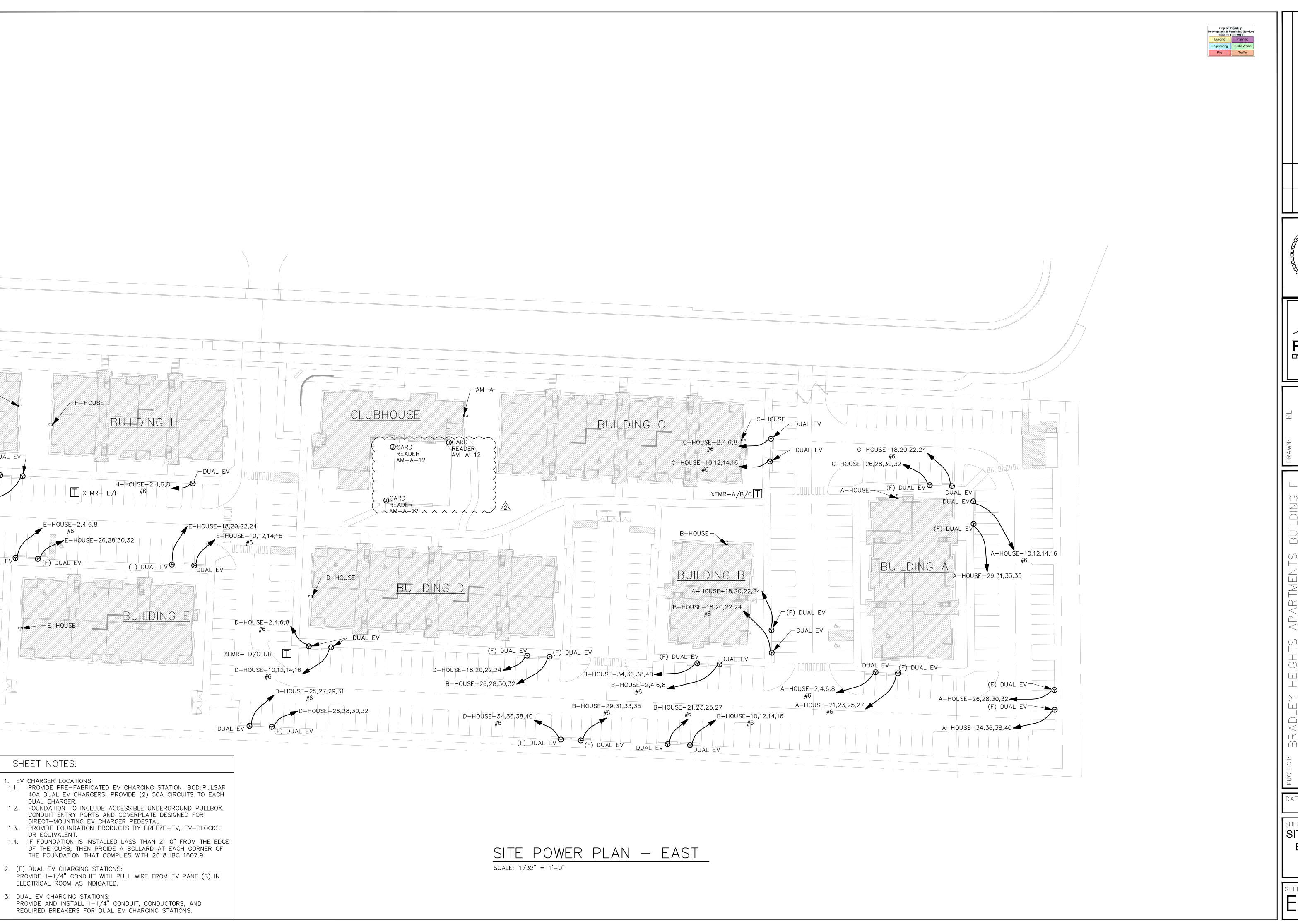


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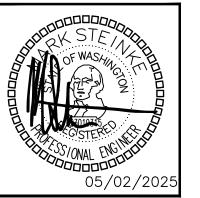
202

05/02/2025

SHEET TITLE: LEGEND, GENERAL NOTES, DRAWING INDEX



NO. DATE DESCRIPTION
REVISIONS





CHECKED: PSR APPROVED: JAY

RMU20240281

1 40TH AVE W. SUITE 302 PR WOOD, WA 98036

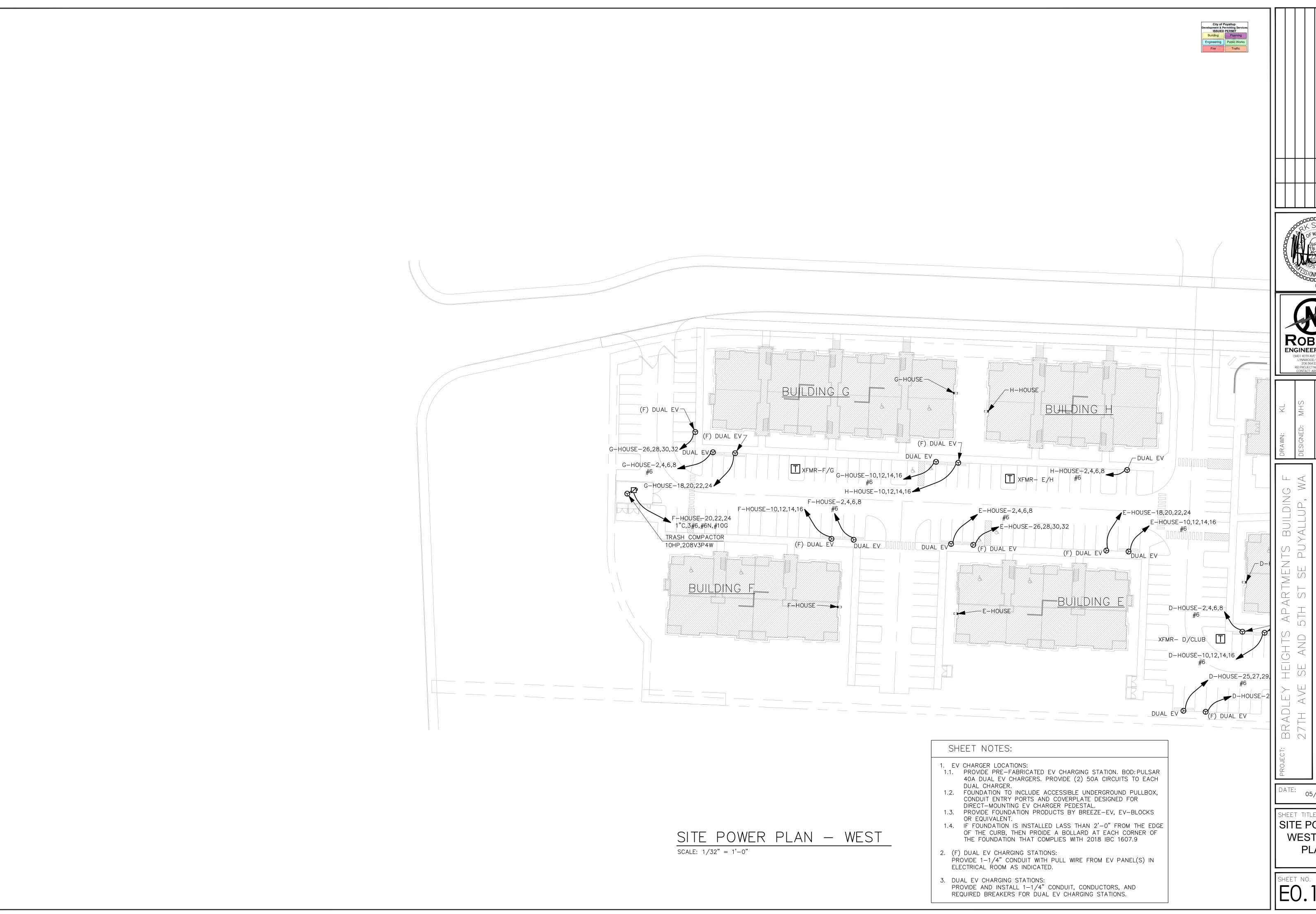
OBISON 1940 LYNN

E: 05/02/202

DATE: 05/02/2025

SHEET TITLE:
SITE POWER
EAST SITE
PLAN

SHEET NO. EO.10



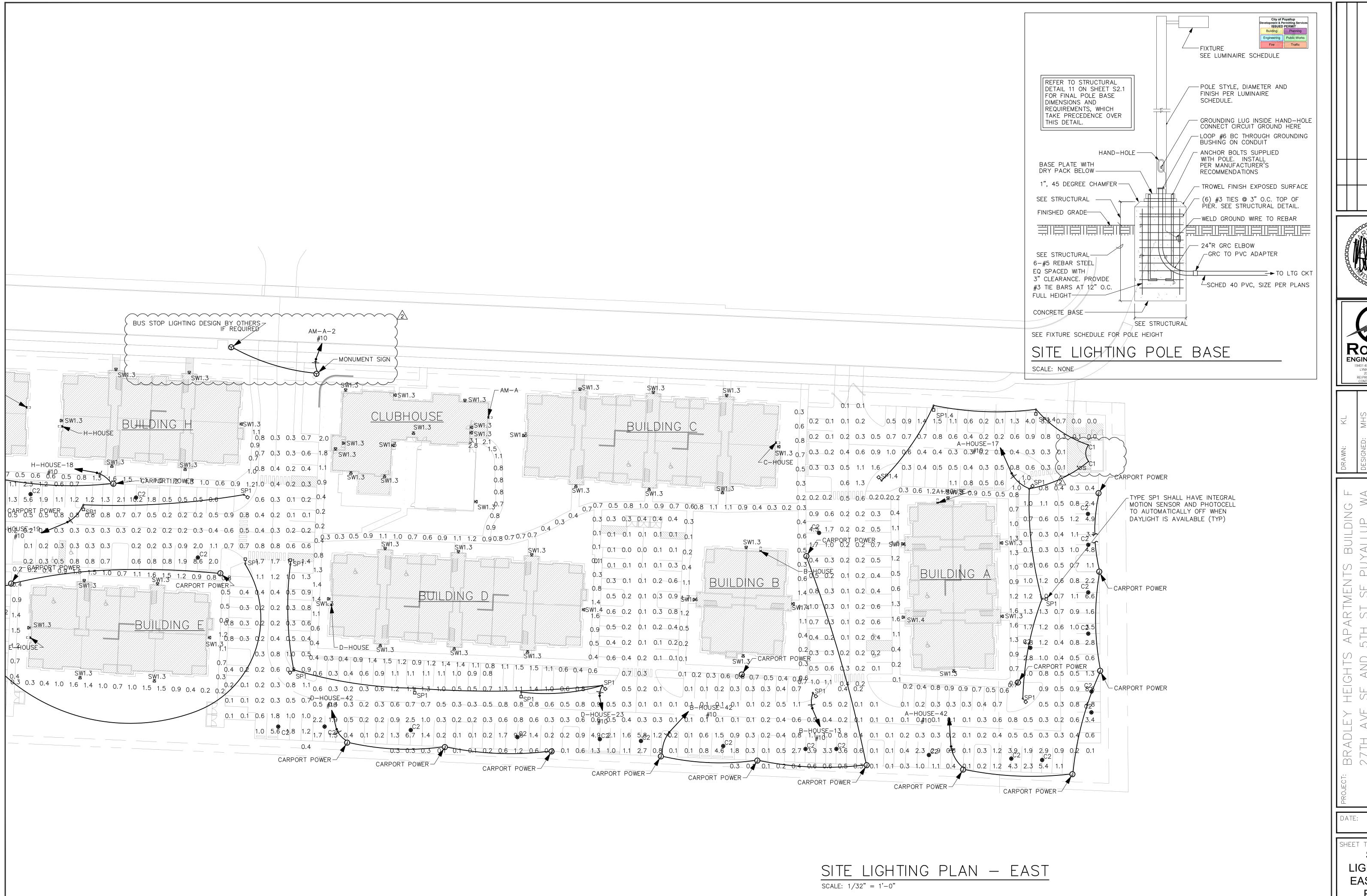




20240281

05/02/2025

SHEET TITLE: SITE POWER WEST SITE PLAN



0281

DESIGNED: MHS
CHECKED: PSF

H SI SE PUYALLUP, WA

SUITE 302

PRMU20240281

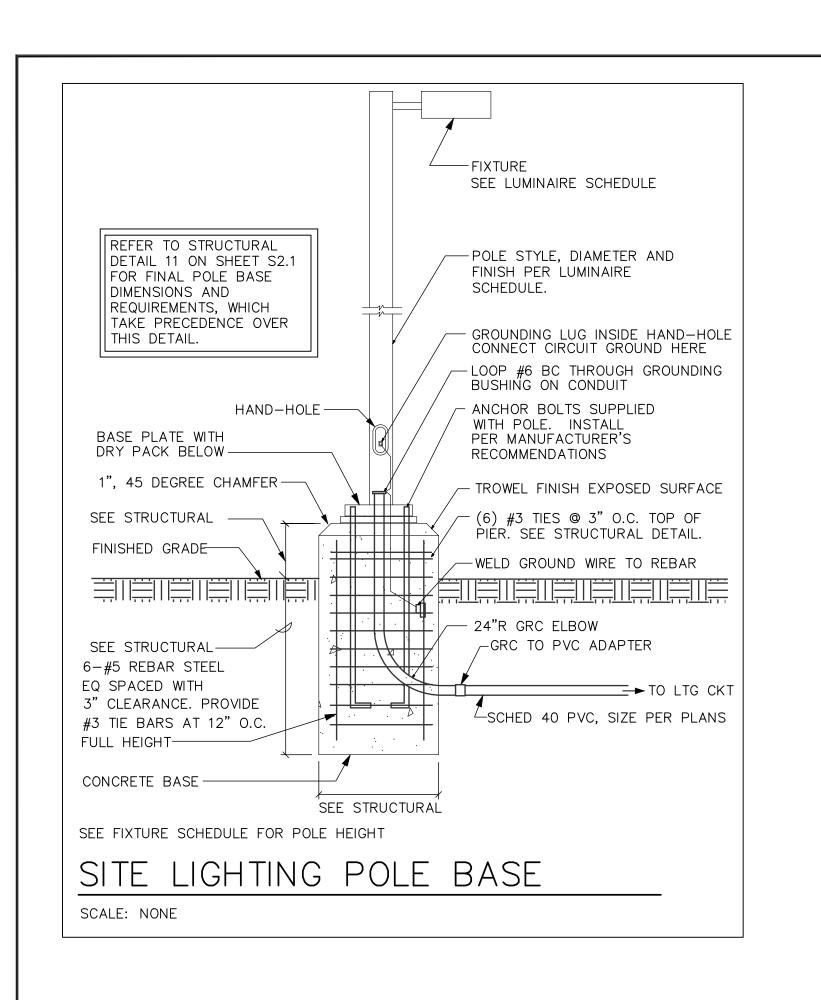
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ATE: 05/02/2025

DATE: 05/02/20

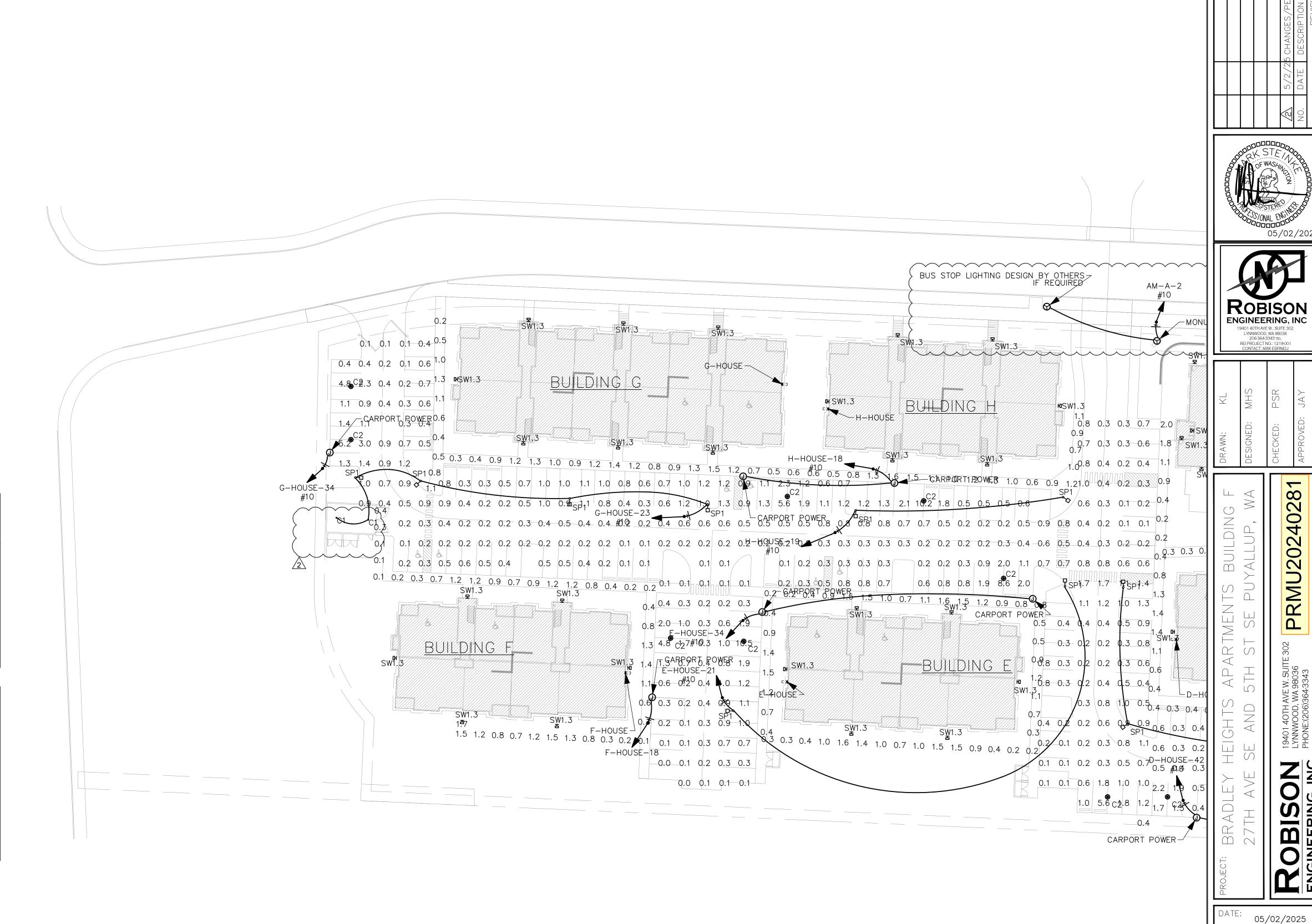
SITE
LIGHTING EAST SITE
PLAN

SHEET NO. EO.12



Drive Aisle Photometric Schedule							
AVERAGE FOOT-CANDLES	0.74						
MAXIMUM FOOT-CANDLES	10.5						
MINIMUM FOOT-CANDLES	0.0						
MAXIMUM TO MINIMUM FC RATIO	912.07						
AVERAGE TO MINIMUM FC RATIO	64.31						

Walkway Photometric Schedule	
AVERAGE FOOT-CANDLES	0.82
MAXIMUM FOOT-CANDLES	3.1
MINIMUM FOOT-CANDLES	0.1
MAXIMUM TO MINIMUM FC RATIO	41.68
AVERAGE TO MINIMUM FC RATIO	11.02



SITE LIGHTING PLAN - WEST SCALE: 1/32" = 1'-0"

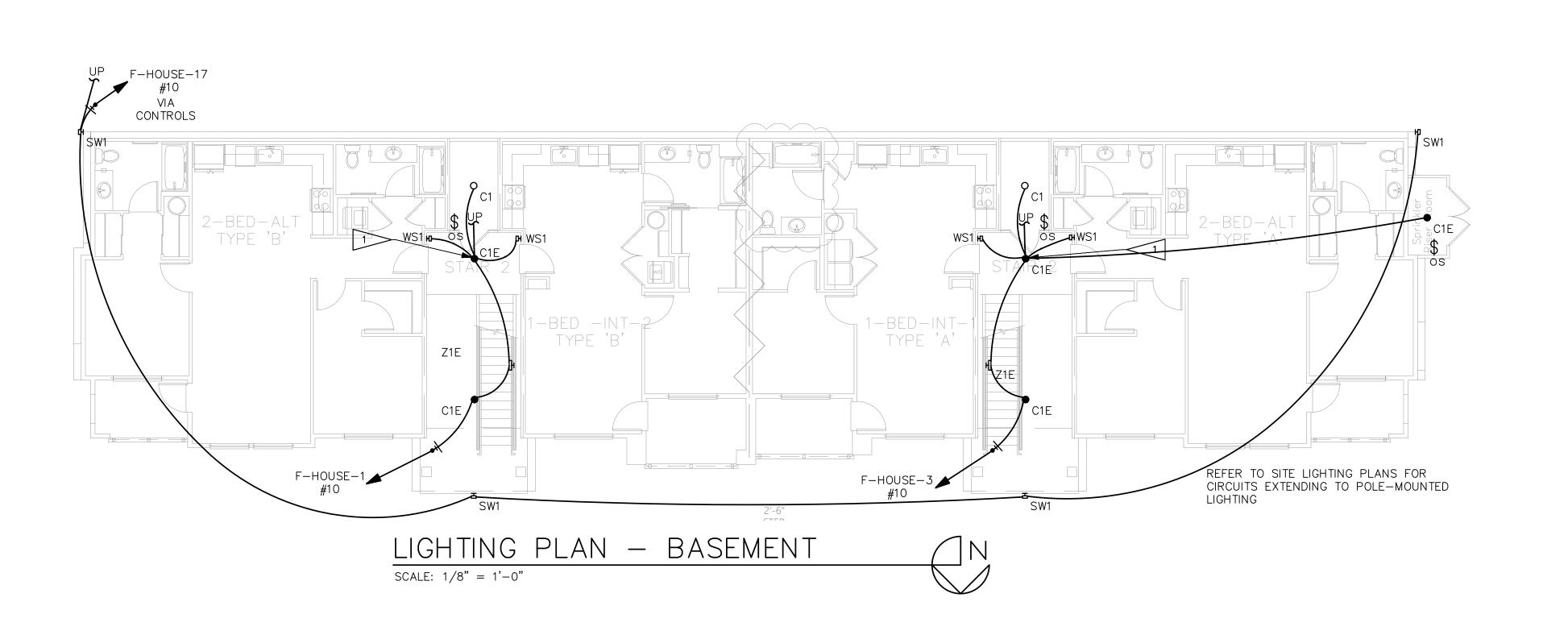
SITE LIGHTING -WEST SITE PLAN

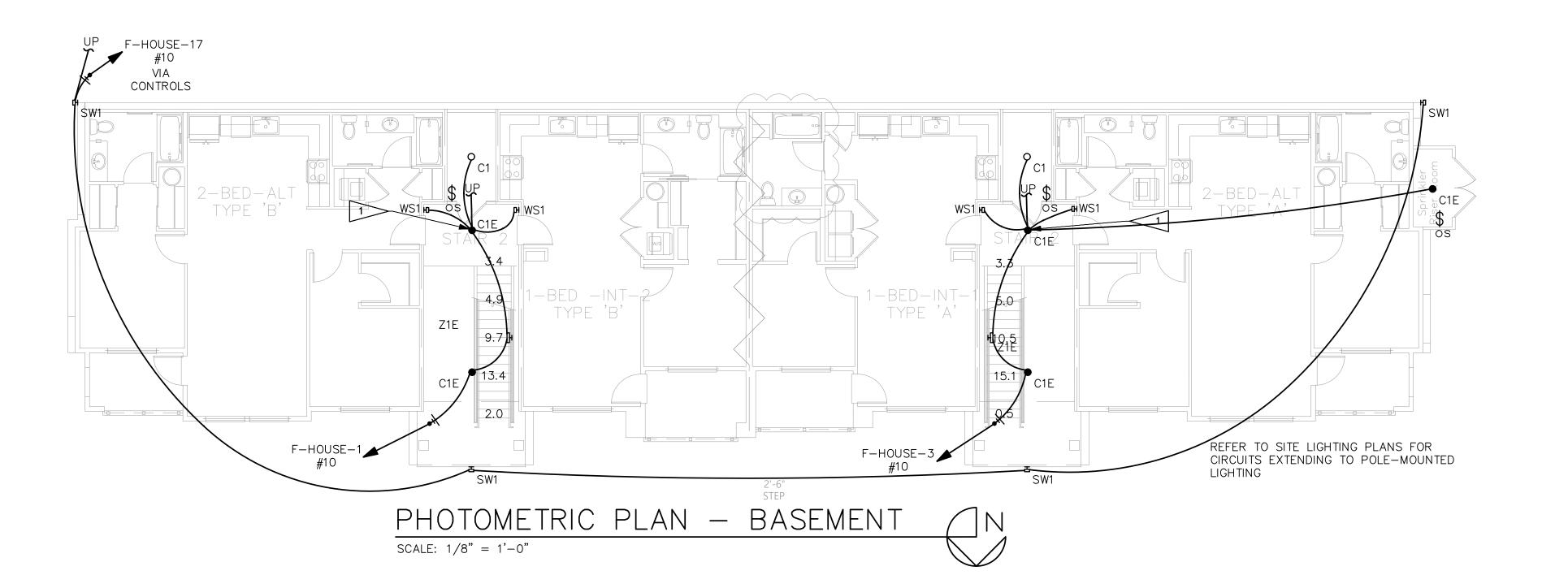
05/02/2025

PRMU20240281

E0.13

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building Planning
Engineering Public Works
Fire Traffic



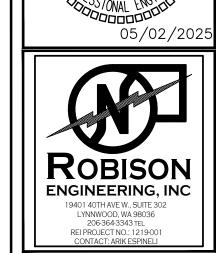


# GENERAL NOTES

- 1. EMERGENCY EGRESS LIGHTING: EMERGENCY LUMINAIRES WITH 90 MINUTE BATTERY BACKUP.
- 2. REFER TO SERIES E500 DRAWINGS FOR TYPICAL UNIT PLANS SHOWING ELECTRICAL AND LIGHTING LAYOUT.
- 3. SEE SHEET E1.50 FOR LUMINAIRE SCHEDULE AND LIGHTING NOTES.

# #> FLAG NOTES <#

- 1. CIRCUIT STAIRS VERTICALLY. LUMINAIRE(S) IN STAIRWELL
- 2. EXIT SIGNS: PROVIDE UNSWITCHED HOT.



SIGNED: MHS

ECKED: PSR

PROVED: JAY

PRMU20240281

1 40TH AVE W. SUITE 302 WOOD, WA 98036 JE:(206)364-3343

SOBISON 194

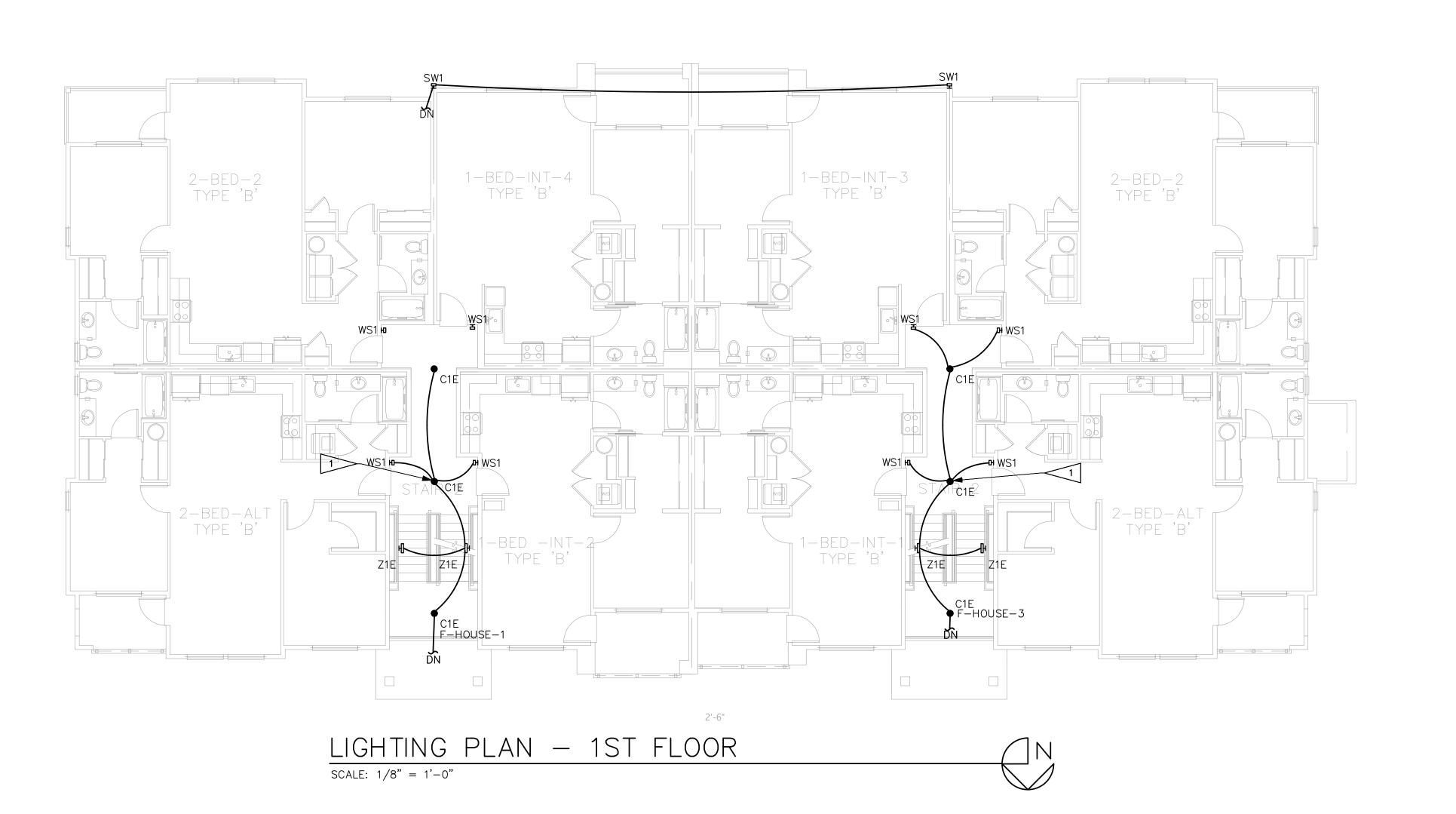
OATE: 05/02/2025

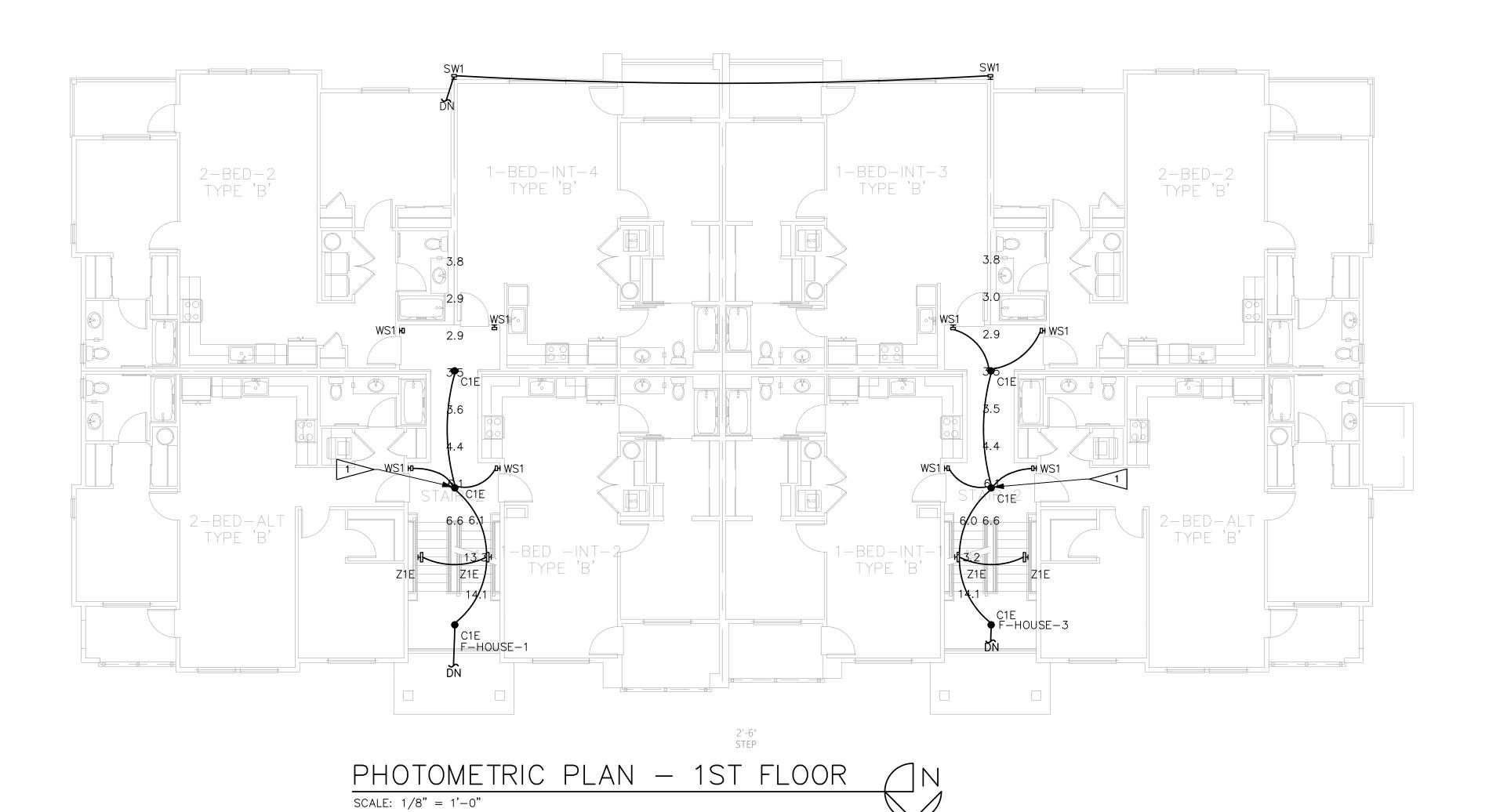
SHEET TITLE:
LIGHTING &
PHOTOMETRIC
PLAN BASEMENT

SHEET NO.

Egress Basement Stairs Photometric Schedule

Schedule	
AVERAGE FOOT—CANDLES	6.69
MAXIMUM FOOT-CANDLES	13.4
MINIMUM FOOT-CANDLES	2.0
MINIMUM TO MAXIMUM FC RATIO	0.15
MAXIMUM TO MINIMUM FC RATIO	6.75
AVERAGE TO MINIMUM FC RATIO	3.36





- EMERGENCY EGRESS LIGHTING: EMERGENCY LUMINAIRES WITH 90 MINUTE BATTERY BACKUP.
- 2. REFER TO SERIES E500 DRAWINGS FOR TYPICAL UNIT PLANS SHOWING ELECTRICAL AND LIGHTING LAYOUT.
- 3. SEE SHEET E1.50 FOR LUMINAIRE SCHEDULE AND LIGHTING NOTES.

# #> FLAG NOTES <#

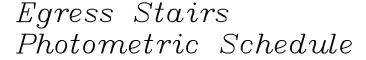
- 1. CIRCUIT STAIRS VERTICALLY. LUMINAIRE(S) IN STAIRWELL
- 2. EXIT SIGNS: PROVIDE UNSWITCHED HOT.

# Egress Stairs

AVERAGE FOOT-CANDLES	11.17
MAXIMUM FOOT-CANDLES	14.1
MINIMUM FOOT-CANDLES	6.1
MINIMUM TO MAXIMUM FC RATIO	0.43
MAXIMUM TO MINIMUM FC RATIO	2.30
AVERAGE TO MINIMUM FC RATIO	1.82

1 10000110001 0	
AVERAGE FOOT—CANDLES	4.18
MAXIMUM FOOT-CANDLES	6.6
MINIMUM FOOT-CANDLES	2.9
MINIMUM TO MAXIMUM FC RATIO	0.44
MAXIMUM TO MINIMUM FC RATIO	2.25
AVERAGE TO MINIMUM FC RATIO	1.43

rnocometri	c screaue
AVERAGE FOOT—CANDLES	6.53
MAXIMUM FOOT-CANDLES	12.3
MINIMUM FOOT-CANDLES	1.9
MINIMUM TO MAXIMUM FC RATIO	0.16
MAXIMUM TO MINIMUM FC RATIO	6.36
AVERAGE TO MINIMUM FC RATIO	3.37



	1
AVERAGE FOOT—CANDLES	11.17
MAXIMUM FOOT-CANDLES	14.1
MINIMUM FOOT-CANDLES	6.1
MINIMUM TO MAXIMUM FC RATIO	0.43
MAXIMUM TO MINIMUM FC RATIO	2.30
AVERAGE TO MINIMUM FC RATIO	1.82

Egress	Corri	dor
Photom	etric	Schedule

# Egress Long Stairs Photometric Schedule

Photometri	c Schedule
AVERAGE FOOT-CANDLES	6.53
MAXIMUM FOOT-CANDLES	12.3
MINIMUM FOOT-CANDLES	1.9
MINIMUM TO MAXIMUM FC RATIO	0.16
MAXIMUM TO MINIMUM FC RATIO	6.36
AVERAGE TO MINIMUM FC RATIO	3.37

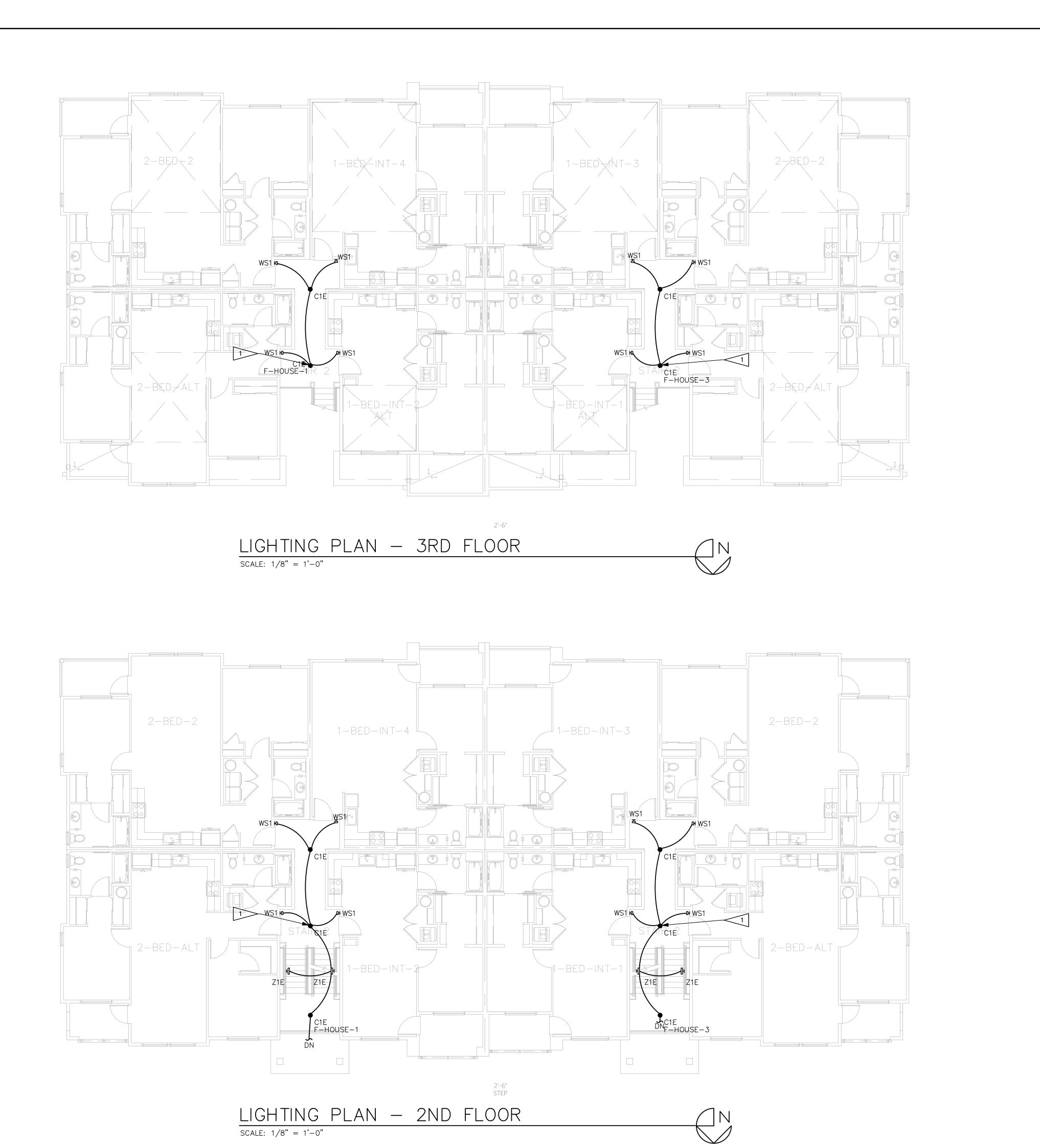




PRMU20240281

05/02/2025

LIGHTING & PHOTOMETRIC PLAN - 1ST FLOOR



City of Puyallup
Development & Permitting S
//SSUED PERMIT

Building Planni

Engineering Public W

Fire Traff

- 1. EMERGENCY EGRESS LIGHTING: EMERGENCY LUMINAIRES WITH 90 MINUTE BATTERY BACKUP.
- 2. REFER TO SERIES E500 DRAWINGS FOR TYPICAL UNIT PLANS SHOWING ELECTRICAL AND LIGHTING LAYOUT.
- 3. SEE SHEET E1.50 FOR LUMINAIRE SCHEDULE AND LIGHTING NOTES.

# #> FLAG NOTES <#

- 1. CIRCUIT STAIRS VERTICALLY. LUMINAIRE(S) IN STAIRWELL
- 2. EXIT SIGNS: PROVIDE UNSWITCHED HOT.

S/2/26 CHANGES/PERMIT CORRECT NO. DATE DESCRIPTION REVISIONS





CHECKED: PSR
APPROVED: JAY

PRMU20240281

40TH AVE W. SUITE 302 WOOD, WA 98036 E:(206)364-3343

ROBISON 194 PHO

TE: 05/02/2025

LIGHTING
PLAN - 2ND &
3RD FLOOR

SHEET NO.

### EXTERIOR LUMINAIRE SCHEDULE CALLOUTSYMBOLMOUNTINGDESCRIPTION MODELVOLTAGETYPECRI / CCT LAMPINGWATTAGESP1 16' POLE POLE LIGHT - PARKING & DRIVE AISLE GARDCO: P20 C A02 830 T1S AR1 120 MULTIPLE INTEGRAL 80 / 3000K (1) 36W LED 36 $\circ$ - COMFORT OPTICS - B2 U0 G2 BL30-MW PCB CONTROLS SURFACE -WALL SCONCE - AREA LIGHT - B1 U0 | GARDCO: GWM A06 830 T3M 120 MW30 SW1 80 / 3000K | (1) 16W LED 16 INTEGRAL 12'AFF CONTROLS

### NOTES:

CONTRACTOR TO FURNISH AND INSTALL ALL FIXTURES.

LUMINAIRE SCHEDULE IS BOD ONLY. CONTRACTOR TO SUBMIT FIXTURE MODEL OR EQUIVALENT. CONTRACTOR TO COORDINATE FIXTURE FINISHES WITH ARCHITECT/OWNER. 3. FIXTURE CATALOG NUMBERS DO NOT NECESSARILY DENOTE SPECIFIC MOUNTING ACCESSORIES. CONTRACTOR TO PROVIDE ALL NECESSARY ACCESSORIES TO SUCCESSFULLY COMPLETE THE

INSTALLATION.

4. 'BUG' RATING ON EXTERIOR FIXTURES INDICATES 'BACKLIGHT', 'UPLIGHT', AND 'GLARE' AS STANDARDS IN CLASSIFYING OUTDOOR LIGHT FIXTURES.

CALLOUT	SYMBOL	MOUNTING	DESCRIPTION	MODEL	VOLTAGE	TYPE	CRI / CCT	LAMPING	WATTAGE
B1		SURFACE	4' NARROW WRAP - BOH	DAY-BRITE CFI: FSW440L835 UNV DIM	120	0-10V DIMMING	80 / 3000K	(1) 31.4W LED	31.4
C1E	•	SURFACE	4" SURFACE DOWNLIGHT	DMF: DRDH N JO 70S EM / DRD5S 4 R 07 9 30 EM	- R 120 0-10V 90 / 3000K			(1) 9W LED	9
D1	٥	RECESSED	RECESSED DOWNLIGHT — SLOPED CEILING	DOWNLIGHT - SLOPED		90 / 3000K	(1) 12W LED	12	
P1	٥	PENDANT	STEM MOUNT DOWNLIGHT — SLOPED CEILING — 4' STEM	DMF: DCR T4 S X A 30 FL 0 00 30 XX O 00 [FINISH]	120	0-10V DIMMING	90 / 3000K	(1) 40W LED	40
WS1	ю	SURFACE	WALL SCONCE - EM BATTERY BACKUP	TBD	120	TBD DIMMING	TBD / TBD	(1) 5W LED	5
X1	⊗	SURFACE	EXIT SIGN — EMERGENCY BATTERY BACKUP — HATCH INDICATES LIT FACE	LSI: EMS WB SERIES (OR EQUAL)	MULTIPLE	EM	EM / EM	(1) 5W EM	5
X2	⊗	SURFACE	COMBO EXIT SIGN	LSI: CEC (OR EQUAL)	MULTIPLE	EM	EM / EM	(1) 5W EM	5
X3		SURFACE	EMERGENCY LIGHT — EMERGENCY BATTERY BACKUP DAMP LOCATION RATED — MAX 35' SPACING	LITHONIA: ELM2LF (OR EQUAL)	120	ЕМ	EM / EM	(1) 5W EM	5
X4	H	WALL	EXTERIOR EMERGENCY LIGHT — EMERGENCY ON ONLY — MAX SPACING 35'	NORA LIGHTING: NE-902LED	120	ЕМ	35' MAX SPACING	(1) 5W LED	5
Z1E	Н	WALL	WALL PACK	LITHONIA: WPX1 LED P1 30K MVOLT	120	EM	70 / 3000K	(1) 11W LED	11

CONTRACTOR TO FURNISH AND INSTALL ALL FIXTURES.

LUMINAIRE SCHEDULE IS BOD ONLY. CONTRACTOR TO SUBMIT FIXTURE MODEL OR EQUIVALENT. CONTRACTOR TO COORDINATE FIXTURE FINISHES WITH ARCHITECT/OWNER. 3. FIXTURE CATALOG NUMBERS DO NOT NECESSARILY DENOTE SPECIFIC MOUNTING ACCESSORIES. CONTRACTOR TO PROVIDE ALL NECESSARY ACCESSORIES TO SUCCESSFULLY COMPLETE THE

INSTALLATION.

LIGHTING CONTROLS LEGEND								
SYMBOL	CONTROL TYPE	CONTROL FUNCTION						
\$ \$ \$	TOGGLE SWITCH	MANUAL ON/OFF LIGHTING CONTROL. SUBSCRIPT INDICATES WHICH FIXTURES ARE TO BE CONTROLLED BY WHICH SWITCH (WSEC C405.2.3). SUBSCRIPT 'k' INDICATES TAMPER RESISTANT KEYED SWITCH FOR USE BY AUTHORIZED PERSONNEL ONLY.						
ФФ	DIMMER SWITCH	MANUAL MULTI-LEVEL LIGHTING CONTROL. SWITCH SHALL ALSO HAVE MANUAL ON/OFF FUNCTIONALITY. SUBSCRIPT INDICATES WHICH FIXTURES ARE TO BE CONTROLLED BY WHICH DIMMER. (C405.2.3)						
vs vs os os \$	TOGGLE/DIMMER SWITCH WITH OCCUPANCY SENSOR	SWITCHES LABELED 'os' OR 'vs' SHALL TURN OFF ALL CONNECTED LUMINAIRES WITHIN 20 MINUTES OF SPACE BEING VACANT. (C405.2.1.1)						
CS-01	CONTROL STATION; SEE LIGHTING CONTROL ZONE TABLE ON PLANS.	MANUAL LOCAL LIGHTING CONTROL (C405.2.1.1). CONTROL STATION SHALL HAVE CAPACITY TO CONTROL MULTIPLE ZONES AND MULTIPLE SCENES AS NEEDED. SUBSCRIPT CORRESPONDS TO 'LIGHTING CONTROLS' TABLE ON PLANS.						
©S)	SURFACE MOUNTED OCCUPANCY SENSOR	AUTOMATIC LIGHTING CONTROL SHALL TURN OFF ALL CONNECTED LUMINAIRES WITHIN 20 MINUTES OF SPACE BEING VACANT. (C404.2.1.1)						
ax PS	MULTIZONE PHOTOSENSOR	AUTOMATIC LIGHTING CONTROL SHALL AUTOMATICALLY ADJUST THE LIGHT OUTPUT OF ALL CONNECTED LUMINAIRES BASED ON THE DAYLIGHT LEVEL IN THE PRIMARY AND SECONDARY ZONES (C405.2.4). SUBSCRIPT INDICATES WHICH FIXTURES ARE TO BE CONTROLLED BY ZONE; 'x' INDICATES MULTIPLE ZONE CONTROL.						

### GENERAL LIGHTING NOTES

- 1. LIGHTING CONTROLS SHALL BE INSTALLED WHICH MEET ALL REQUIREMENTS OF LOCAL ENERGY CONTROLS
- 2. EMERGENCY LIGHT FIXTURES: IN ADDITION TO SWITCH—LEG, PROVIDE UNSWITCHED HOT TO SERVE INTERNA BATTERY AND CHARGER.
- 3. LOCATIONS OF OCCUPANCY SENSORS, PHOTO SENSORS, DIMMERS, AND SWITCHES ARE DIAGRAMMATIC. CONTRACTOR TO COORDINATE QUANTITIES AND OPTIMAL LOCATIONS WITH LIGHTING CONTROL MANUFACTURER AND ARCH/OWNER.
- 4. AUTOMATIC LIGHTING SHUT-OFF CONTROLS SHALL BE PROVIDED BY LOCAL OCCUPANCY SENSORS UNLESS OTHERWISE NOTED. PUBLIC SPACES ARE ACTIVE 24/7 AND THEREFORE EXEMPT FROM AUTOMATIC LIGHTING SHUT-OFF REQUIREMENTS FOR SECURITY. (WSEC C405.2)
- 5. DAYLIGHT ZONES ARE SHOWN ON PLANS AS DEFINED BY WASHINGTON STATE ENERGY CODE (WSEC) C405.2.4.2. SIDELIGHT DAYLIGHT ZONES ARE REFERRED TO AS 'PRIMARY' AND 'SECONDARY' ON PLANS AND DENOTED BY DASHED LINES.
- 6. FOR CUSTOM FF&E FIXTURES, IT IS THE MANUFACTURER'S RESPONSIBILITY TO FURNISH PRODUCTS WHICH ARE COMPLIANT WITH ALL REQUIREMENTS OF LOCAL ENERGY CODES, AS WELL AS MATCH THE ELECTRICAL SPECIFICATIONS PROVIDED IN THE LUMINAIRE SCHEDULES. PROVIDE SUBMITTAL SHOP DRAWINGS WITHIN 30 DAYS OF RECEIVING FIXTURE ORDER. SUBMITTALS SHALL CLEARLY INDICATE LAMPING AND MAXIMUM WATTAGE RATING OF LAMP SOCKETS. NON-COMPLIANT FIXTURES REJECTED BY ELECTRICAL INSPECTOR SHALL BE RETURNED TO THE MANUFACTURER FOR REWORKING AND/OR RE-LABELING.
- 7. ALL FIXTURES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
- 8. CONTRACTOR SHALL BE RESPONSIBLE TO ORDER ALL NECESSARY HARDWARE, ELECTRICAL CABLE, TIMERS, TRANSFORMERS, ETC., AS REQUIRED FOR COMPLETION OF INSTALLATION OF A FULLY FUNCTIONING SYSTEM.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR EQUIPPING ALL FIXTURES WITH THE EXACT LAMPS SPECIFIED IN THE FIXTURE SCHEDULE.
- 10. WHERE FIXTURES REQUIRE REMOTE TRANSFORMERS OR BALLASTS, THE CONTRACTOR SHALL DETERMINE LOCATIONS AS REQUIRED FOR EVEN LOAD DISTRIBUTION, SERVICE ACCESS, AND VENTILATION.
- 11. THE CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL ENGINEER FOR EXACT LOCATIONS OF TIMERS AND/OR PHOTO CELLS, IF ANY.
- 12. WHERE APPLICABLE, THE CONTRACTOR SHALL AIM AND ADJUST LIGHTING FIXTURES AS DIRECTED BY THE LIGHTING DESIGNER UPON COMPLETION OF THE INSTALLATION.

SPECIAL NOTE TO THE CONTRACTOR:

I. FIXTURE SUBMITTALS THAT DO NOT INCLUDE LAMP SPECIFICATIONS WILL BE CONSIDERED INCOMPLETE AND WILL NOT BE REVIEWED.

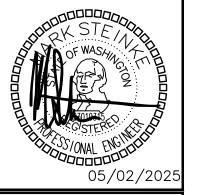
## LIGHTING CONTROL SYSTEM REQUIREMENTS

- 1. CONTRACTOR TO PROVIDE A FULLY OPERATIONAL LIGHTING CONTROL SYSTEM.
- 2. CONTRACTOR SHALL VERIFY THE COMPATIBILITY OF DIMMING AND CONTROL MODULES WITH FIXTURE TYPES PRIOR TO INSTALLATION.
- 3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH A LIGHTING CONTROLS VENDOR TO OBTAIN LIGHTING CONTROL SYSTEM PACKAGE COMPLETE WITH DEVICES. WIRING DIAGRAMS. ANNOTATED PLANS INDICATING WHICH DEVICE TO BE USED IN EACH LOCATION, CONNECTION REQUIREMENTS, SET UP INSTRUCTIONS, COMMISSIONING AND CHECK-OUT FOLLOWING COMPLETION. PROVIDE ALL LOW VOLTAGE WIRING AS REQUIRED FOR CONTROL DEVICE INTERCONNECTIONS.
- 4. INSTALLER QUALIFICATIONS: TECHNICIAN INSTALLING AND WIRING THE LIGHTING CONTROL SYSTEM SHALL HAVE INSTALLED THIS SAME SYSTEM AT LEAST ONCE PREVIOUSLY. TECHNICIAN SHALL HAVE RECEIVED TRAINING BY FACTORY REPRESENTATIVE ON THE SYSTEM BEING INSTALLED.
- 5. PROVIDE LIGHTING CONTROL SYSTEM TO PERFORM THE FUNCTIONS DESCRIBED BELOW:
- 5.1. LIGHTING CONTROL SCHEDULE: PROVIDE SEPARATE SWITCHING AND DIMMING CONTROL FOR LIGHTING ZONES AS INDICATED.
- 5.2. AUTOMATIC LIGHTING CONTROLS: 5.2.1. UNLESS OTHERWISE NOTED ON PLANS, OCCUPANCY SENSORS SHALL AUTOMATICALLY TURN OFF ALL CONNECTED LIGHTING WITHIN 20 MINUTES OF SPACE BEING UNOCCUPIED. OCCUPANCY SENSORS SHALL EITHER BE MANUAL ON OR SHALL BE CONTROLLED TO AUTOMATICALLY TURN THE LIGHTING ON TO NOT MORE THAN 50 PERCENT POWER EXCEPT WHERE MANUAL ON WOULD ENDANGER THE SAFFTY OR SECURITY OF THE ROOM OR BUILDING OCCUPANTS. (C405.2.1.1)
- 5.2.2. MULTI-ZONE PHOTO-SENSORS SHALL PROVIDE SEPARATE CONTROL FOR LUMINAIRES IN EACH TYPE
- OF DAYLIGHT ZONE. (C405.2.4.1) EXTERIOR LIGHTING CONTROLS SHALL AUTOMATICALLY TURN OFF ALL EXTERIOR LIGHTING AS A FUNCTION OF AVAILABLE DAYLIGHT. BUILDING FACADE AND LANDSCAPE LIGHTING SHALL HAVE CONTROLS THAT AUTOMATICALLY SHUT OFF THE LIGHTING FOR A MINIMUM OF 6 HOURS PER NIGHT OR NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSING TO NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING, WHICHEVER IS LESS. OTHER LIGHTING SHALL HAVE CONTROLS CONFIGURED TO AUTOMATICALLY REDUCE THE CONNECTED LIGHTING POWER BY AT LEAST 30 PERCENT FROM NO LATER THAN 12 MIDNIGHT TO 6 AM OR FROM ON HOUR AFTER BUSINESS CLOSING TO ONE HOUR BEFORE BUSINESS OPENING OR DURING ANY PERIOD WHEN NO ACTIVITY HAS BEEN DETECTED FOR A TIME OF NO LONGER THAN 15 MINUTES. (C405.2.6)
- 6. MEANS OF EGRESS ILLUMINATION: AT ANY TIME THE BUILDING IS OCCUPIED, THE MEANS OF EGRESS SHALL BE ILLUMINATED AT AN INTENSITY OF NOT LESS THAN 1 FOOTCANDLE AT FLOOR LEVEL. (IBC 1008.2.1)
- DURING EMERGENCY CONDITIONS EMERGENCY LIGHTING CIRCUITS SHALL BYPASS ALL LIGHTING CONTROLS IN ORDER TO ENERGIZE ALL CONNECTED LUMINAIRES AT FULL CAPACITY. PROVIDE UL924 RELAYS AS REQUIRED TO BYPASS AREA CONTROLS.
- 7.1. EMERGENCY PATHWAY EGRESS LIGHTING: ILLUMINATION PROVIDED ALONG THE EGRESS PATH AT FLOOR LEVEL SHALL AVERAGE AT LEAST 1 FOOT CANDLE. (IBC 1008.3.5)
- 7.2. EMERGENCY LIGHTING SHALL BE SUPPLIED BY: ELECTRICAL CONTRACTOR

## EXIT SIGN NOTES

DURING CONSTRUCTION UPON COMPLETION OF A TYPICAL FLOOR FRAMING AND BEFORE WALL COVER, ELECTRICAL CONTRACTOR SHALL WALK THE EGRESS PATHS WITH THE LOCAL INSPECTOR (AHJ) TO CONFIRM THAT ALL THE EXIT SIGNS ARE LOCATED PER THE AHJ'S SATISFACTION AND IDENTIFY ANY ADDITIONAL EXIT SIGNS THAT THE AHJ WISHES TO BE INSTALLED (IBC 1013.1). CONTRACTOR SHALL PROVIDE UP TO 10% ADDITIONAL EXIT SIGNS AT NO ADDITIONAL COST.

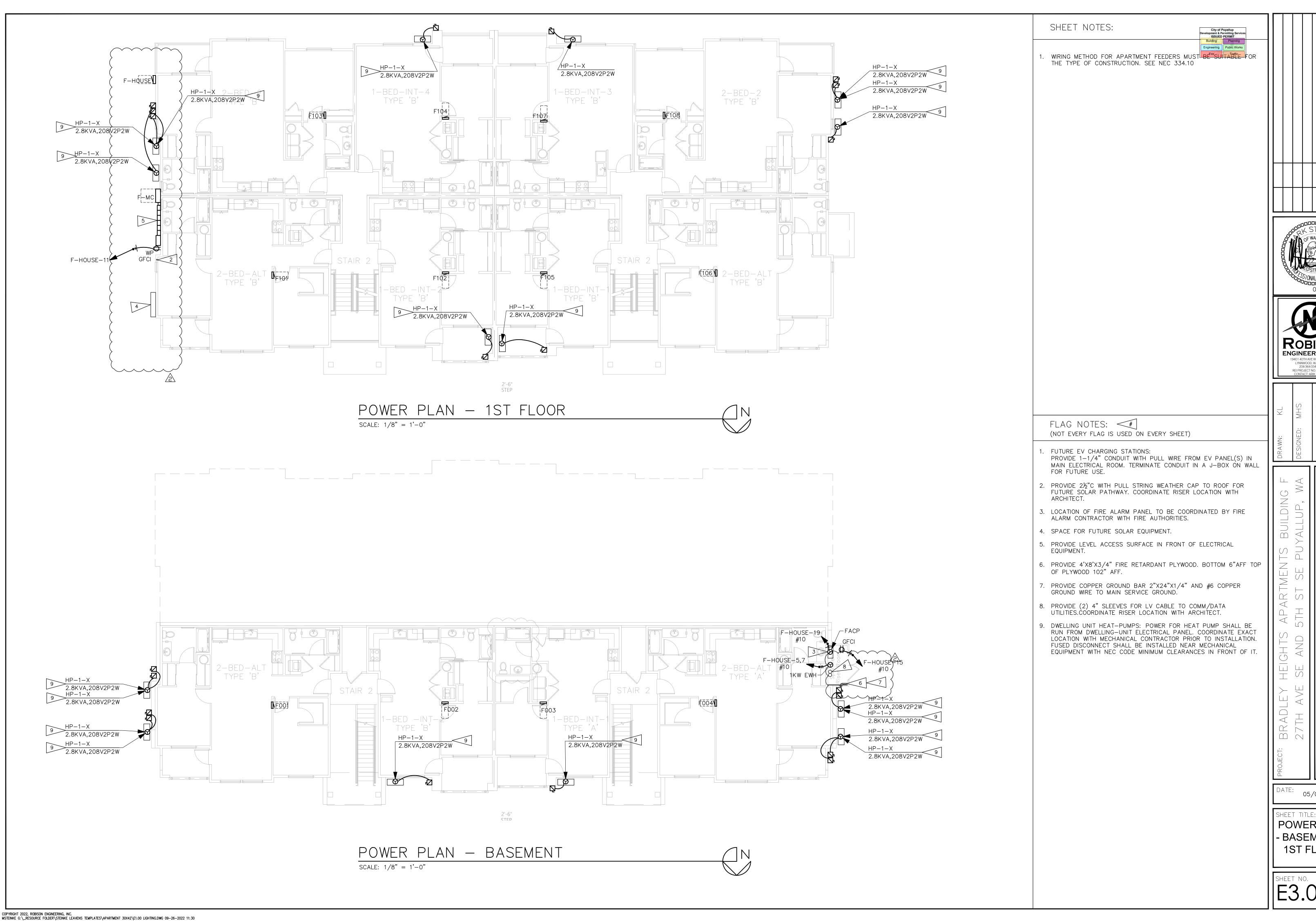
City of Puyallup
Development & Permitting Services





05/02/2025

HEET TITLE: LIGHTING NOTES & LUMINAIRE SCHEDULE



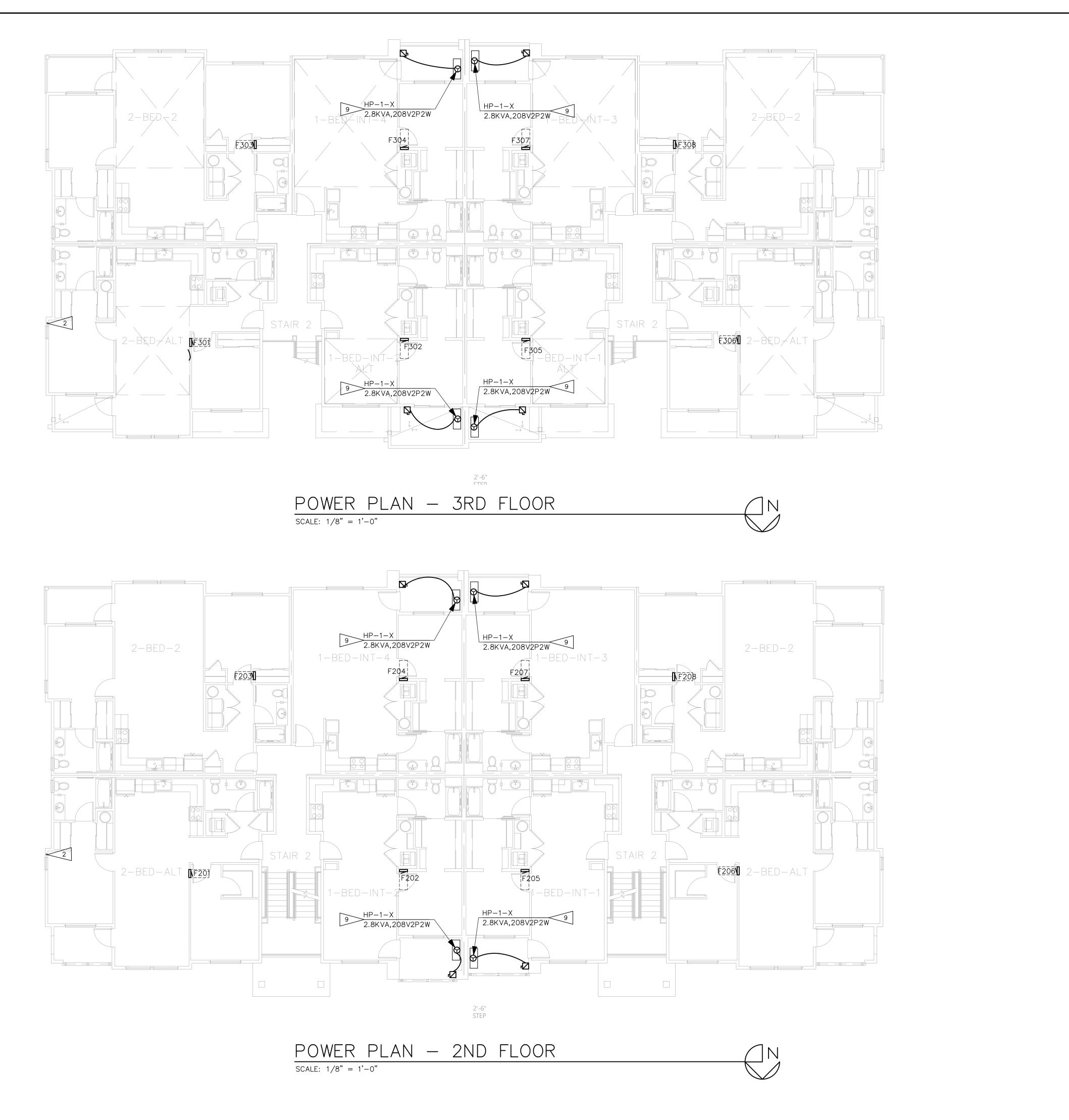




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05/02/2025

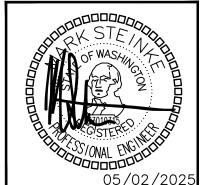
POWER PLAN - BASEMENT & 1ST FLOOR



SHEET NOTES:

1. WIRING METHOD FOR APARTMENT FEEDERS MUST BE SUITABLE FOR THE TYPE OF CONSTRUCTION. SEE NEC 334.10

NO. DATE DESCRIPTION
REVISIONS





FLAG NOTES: #

(NOT EVERY FLAG IS USED ON EVERY SHEET)

- 1. FUTURE EV CHARGING STATIONS:
  PROVIDE 1-1/4" CONDUIT WITH PULL WIRE FROM EV PANEL(S) IN
  MAIN ELECTRICAL ROOM. TERMINATE CONDUIT IN A J-BOX ON WALL
  FOR FUTURE USE.
- 2. PROVIDE 2½"C WITH PULL STRING WEATHER CAP TO ROOF FOR FUTURE SOLAR PATHWAY. COORDINATE RISER LOCATION WITH ARCHITECT.
- 3. LOCATION OF FIRE ALARM PANEL TO BE COORDINATED BY FIRE ALARM CONTRACTOR WITH FIRE AUTHORITIES.
- 4. SPACE FOR FUTURE SOLAR EQUIPMENT.
- 5. PROVIDE LEVEL ACCESS SURFACE IN FRONT OF ELECTRICAL EQUIPMENT.
- 6. PROVIDE 4'X8'X3/4" FIRE RETARDANT PLYWOOD. BOTTOM 6"AFF TOP OF PLYWOOD 102" AFF.
- 7. PROVIDE COPPER GROUND BAR 2"X24"X1/4" AND #6 COPPER GROUND WIRE TO MAIN SERVICE GROUND.
- 8. PROVIDE (2) 4" SLEEVES FOR LV CABLE TO COMM/DATA UTILITIES.COORDINATE RISER LOCATION WITH ARCHITECT.
- 9. DWELLING UNIT HEAT-PUMPS: POWER FOR HEAT PUMP SHALL BE RUN FROM DWELLING-UNIT ELECTRICAL PANEL. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. FUSED DISCONNECT SHALL BE INSTALLED NEAR MECHANICAL EQUIPMENT WITH NEC CODE MINIMUM CLEARANCES IN FRONT OF IT.

PANEL(S) IN
-BOX ON WALL

SE PUYALLUP, WA

PRMU20240281

19401 4OTH AVEW. SUITE 302

ROBISON 1940 LYNI PHO

TE: 05/02/2025

POWER PLAN
- 2ND & 3RD
FLOOR

SHEET NO. **E3.01** 

UNIT LUMINAIRE SCHEDULE										
CALLOUT	SYMBOL	MOUNTING	DESCRIPTION	MODEL	VOLTAGE	TYPE	LAMPING	WATTAGE	NOTES	
U1	0	CEILING	4" DOWNLIGHT	DMF: DRD5S-4-R-10-9-30-0	120	0-10V DIMMING	(1) 12W LED 3000K	12		
U2	0	CEILING	4" DOWNLIGHT WET RATED	DMF: DRD5S-4-S-10-9-30-0	120	0-10V DIMMING	(1) 12W LED 3000K	12		
U3	H	WALL	24" VANITY LIGHT	MAXIM - 52102	120	ELV DIMMING	(1) 16W LED 3000K	16		
U4	Ю	WALL	SLIM BALCONY LIGHT	MAXIM - 26106BK	120	NON DIMMING	(1) 10W LED 3000K	10		
U5	0	SURFACE	6" FLUSH MOUNT DOWNLIGHT	MAXIM - 57413WTWT	120	0-10V DIMMING	(1) 11W LED 3000K	11		

# DWELLING UNIT VENTILATION WIRING DIAGRAM DETAIL

ELECTRIC HEATERS										
FOUID NO	SED/40E	MOUNTING/	HEATING	ELECTRICAL	DACIS OF DESIGN					
EQUIP NO.	SERVICE DISCHARGE		KW	VOLTAGE	BASIS OF DESIGN					
EWH-1	BEDROOM	WALL	1	208V/1P	(1)					
EWH-2	LIVING ROOM	WALL	1.5	208V/1P	(1)					

(1) BROAN, CADET OR EQUIVALENT.

NOTES:

(2) PROVIDE REMOTE THERMOSTAT.

# ACCESSIBILITY NOTES:

- 1. ALL SWITCHES AND CONTROLS 15" MIN; 48" MAX TO CONTROL.
- 2. GENERAL OUTLETS MIN 18" AFF.
- 3. ALL SWITCHES/CONTROLS ABOVE COUNTERTOPS 48" MAX.
- 4. ELECTRICAL SUB-PANELS IN UNITS MUST COMPLY WITH ABOVE REACH RANGES.
- 5. SWITCHES FOR EXHAUST HOODS AND GARBAGE DISPOSALS MUST COMPLY WITH ABOVE REACH RANGES. INSTALL SWITCHES ON FACE OF CABINETS IF REQUIRED TO COMPLY.

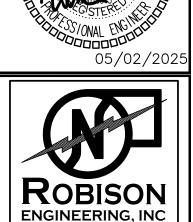
- APARTMENT NOTES.

  City of Puyallup
  Development & Permitting Services
  ISSUED PERMIT

  Building Planning
  Public Works
  AND NATIONAL CODES.

  Fire Traffic
- 2. DEVICE BOXES ON OPPOSITE SIDES OF DEMISING WALLS SHALL BE IN SEPARATE STUD BAYS. PROVIDE BACKING EQUIVALENT TO LOWRY'S OUTLET BOX PADS. CONDUIT FROM ONE UNIT SHALL NOT PASS THROUGH STUDS OF A SHARED WALL(DOUBLE STUDS) FROM AN ADJACENT UNIT(BRIDGING).
- 3. PROVIDE ARC—FAULT PROTECTION, TAMPER PROOF AND GFCI RECEPTACLES AS REQUIRED BY CODE AND LOCAL AHJ. ARC—FAULT PROTECTION MUST BE PROVIDED FOR CIRCUITS IN THE AREAS LISTED IN NEC 210.12(A).
- 4. PROVIDE SUFFICIENT DUPLEX RECEPTACLES TO MEET NEC 210.52.
- 5. THERMOSTATS SHALL NOT INTERFERE WITH DOOR SWINGS.
- 6. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS FOR KITCHEN APPLIANCES. COORDINATE ALL J-BOX LOCATIONS WITH APPLIANCE INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.
- 7. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CORD AND PLUG ASSEMBLY FOR EACH DISPOSER.
- 8. PROVIDE A DEDICATED 20 AMP CIRCUIT TO EACH UNIT BATHROOM RECEPTACLE. BATHROOM LIGHTS, FAN TO BE ON SAME CIRCUIT PER 210.11(C)(3) EXCEPTION.
- 9. HOME RUNS AND LOOPS CONNECTING LIGHT FIXTURES, WIRING DEVICES, AND HVAC EQUIPMENT ON PLANS INDICATE CIRCUITING SCHEME. SEE TYPICAL PANEL SCHEDULES FOR ACTUAL CIRCUIT NUMBERS FOR TYPICAL APARTMENT.
- 10. LIGHTS WITHIN 3' HORIZONTAL OF SHOWER OR TUB TO BE WET LOCATION RATED AND HAVE FULLY ENCLOSED TRIMS. PROVIDE GFCI PROTECTION IF THE LUMINAIRE INSTALLATION MANUAL STATES IT IS REQUIRED.
- 11. PROVIDE SMOKE DETECTORS AND CO ALARMS AS REQUIRED. DETECTORS AND ALARMS TO BE HARDWIRED AND PROVIDED WITH BATTERY BACKUP.
- 12. ELECTRICAL CONTRACTOR SHALL INSTALL RECEPTACLES AND TV, DATA/PHONE OUTLETS UNDER COMMON COVER PLATE WHERE POSSIBLE. PROVIDE AND INSTALL DIVIDERS AS REQUIRED FOR CABLE/POWER SEPARATION.
- 13. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND LAYOUTS OF ALL DEVICES.
- 14. ALL WALL PENETRATIONS SHALL BE CAULKED WITH APPROVED MATERIAL TO MAINTAIN THE FIRE RATING OF ALL WALLS AND FLOORS.
- 15. ALL CONDUIT SHALL BE INSTALLED IN NEAT SYMMETRICAL LINES HORIZONTAL OR PERPENDICULAR TO BUILDING COLUMNS AND ROOF LINES. CONDUITS SHALL BE GROUPED ON COMMON SUPPORTS WHEREVER POSSIBLE.
- 16. REFERENCE MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT.
- 17. ELECTRICAL CONTRACTOR SHALL VERIFY ALL FUSE RATING WIRE SIZES AND DISCONNECT SIZES WITH EQUIPMENT SERVED ON THE JOB PRIOR TO INSTALLATION.
- 18. SEE ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR ADDITIONAL DETAILS AND CASEWORK DIMENSIONS.
- 19. DEVICE LOCATIONS IN 1ST DWELLING/RESIDENT UNIT SHALL BE REVIEWED AND APPROVED BY OWNER PRIOR TO ROUGH-IN OF REMAINING UNITS
- 20. CONFIRM FINAL LOCATION OF HEATERS AND THERMOSTATS IN FIELD PRIOR TO ROUGH—IN

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CHECKED:
APPROVED:

RMU20240281

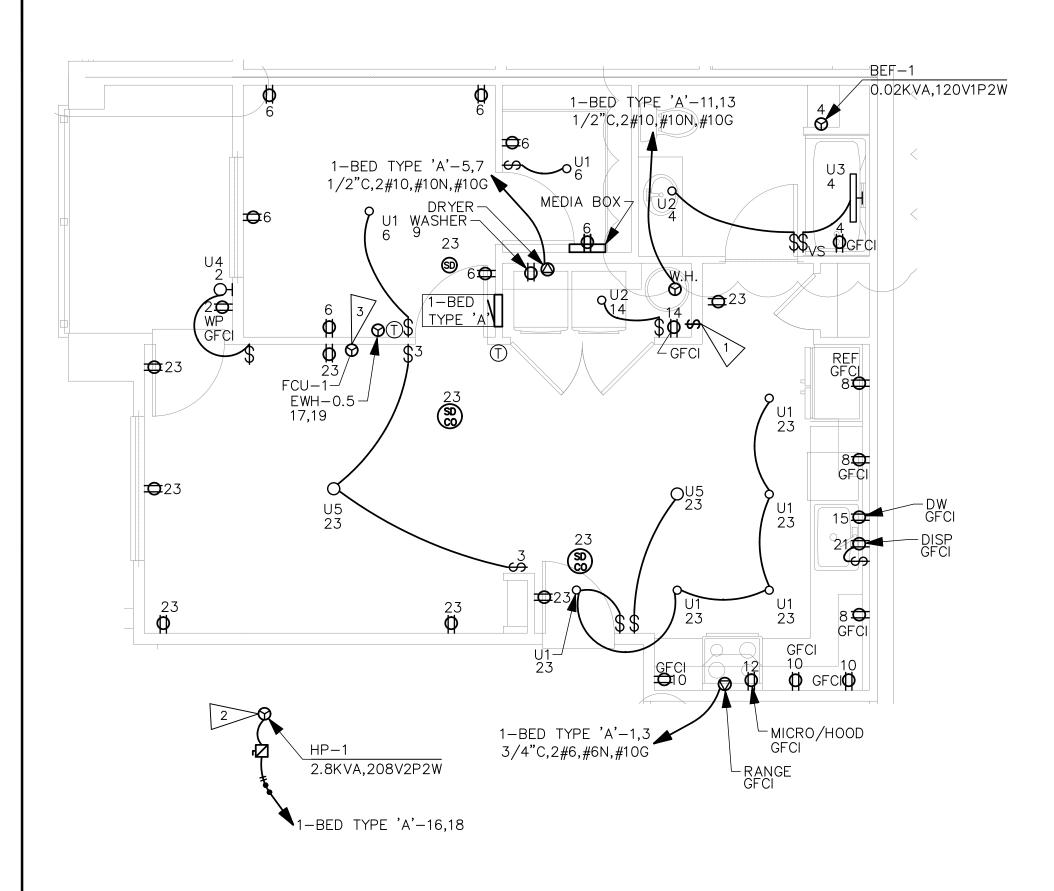
OTH AVE W. SUITE 302 DOD, WA 98036 (206)364-3343

**ZOBISON**IGINEERING INC

ATE: 05/02/2025

SHEET TITLE:
UNIT PLANS
NOTES

SHEET NO. **E5.00** 

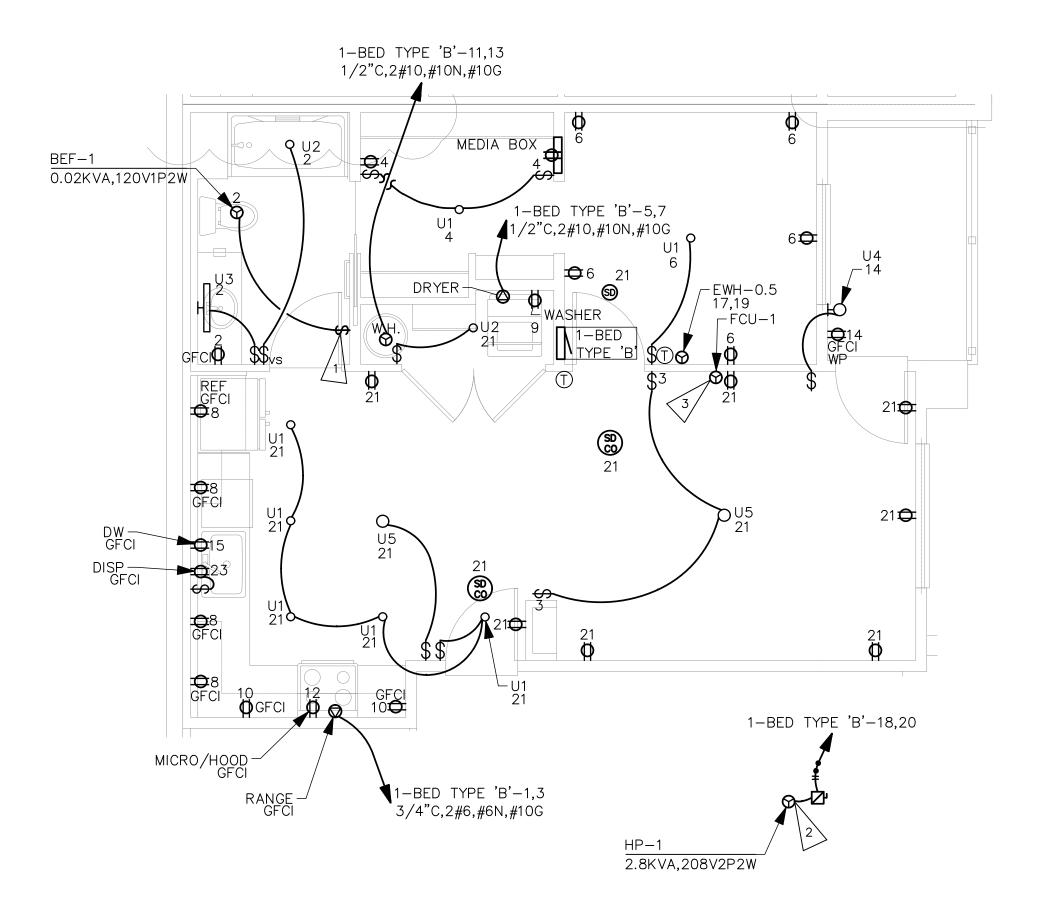


UNIT TYPICALS

1-BED-INT-2 TYPE 'A'

SCALE: 1/4" = 1'-0"

1	-B	ED	T\	<u>YPE</u>	'A'								
M( FE	DOM DUNTING ED FROM DTE	FLUSH			VOLTS <b>208,</b> BUS AMPS NEUTRAL <b>1</b> 0	125	5	2P 3W			N	AIC <b>22,00</b> Main Bkr Lugs <b>sta</b>	MLO
CKT #	CKT BKR	LOAD KVA	CIRCUI	T DESCRIF	PTION		CKT #	CKT BKR	LO.		CIRC	UIT DESC	RIPTION
1 3 5	50/2       30/2	8	RANGE DRYER			a b a	2 4 6	20/1 20/1 20/1	0.1 0.2 1.2	23	BEF-	TING, MEDI	NG, RECEPTACLE
7 9 11 13	   20/1   30/2 	1.5 4.4	WASHEI WATER	R HEATER		b	8 10 12 14	20/1 20/1 20/1 20/1	1.5 1.5 1.5 0.1	8	RECEPTACLE SMALL APPLIANCE SMALL APPLIANCE MICRO/HOOD LIGHTING, RECEPTACLE		NCE
15 17 19 21 23	20/1 20/2   20/1 20/1	1.2 0.5 0.7 1.49	DISHWA WALL F DISPOS LIGHTIN	IEATER AL	TACLE, SDCO	а b а	16 18 20 22 24	20/2    -/1  -/1  -/1	2.8 0 0 0	}	SPAC SPAC		
OP	 TIONAL D	  WELLING	UNIT C	ALCULATIO CONN KVA	DN (NEC 220.8	<b>11</b> 32)					NN VA	CALC KVA	
LIGHTING AND RECEPTACLES SMALL—APPLIANCE 3			871 SF (3 VA/SF)	(	U	ERAL LOA P TO 10 KVA	٩D	10		10	(100%)		
LAUNDRY 1.5 APPLIANCES 8.47				OVER 10 KVA <b>13.6</b>			6	5.43	(40%)				
ELECTRIC COOKING 8				MAX HEATING OR COOLING				3.19	(220.82(C)(4))				
TOTAL GENERAL LOAD 23.6					BAL PH	AL LOAD ANCED LO ASE A ASE B	DAC			18.6 89.5 A 98.3% 102%	•		



UNIT TYPICALS

1-BED-INT-1 TYPE 'B'

SCALE: 1/4" = 1'-0"

M( FE	OOM DUNTING D FROM DTE	ED FLUSH	TY	<u>PE</u>	VOLTS 208/ BUS AMPS NEUTRAL 10	12	5	2P 3W			N	AIC <b>22,00</b> Main Bkr Lugs <b>Sta</b>	MLO
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRIF	TION		CKT #	CKT BKR		DAD VA	CIRC	:UIT DESC	RIPTION
1 3	50/2	8	RANGE			аЬ	2 4	20/1 20/1	0.	23 372	BEF-		NG, RECEPTACLE
5 7 9 11	30/2     20/1   30/2	4.99 1.5 4.4	DRYER WASHER	R HEATER		арар	6 8 10 12	20/1 20/1 20/1 20/1	1.		LIGH SMAI SMAI	TING, REC LL APPLIA LL APPLIA O/HOOD	NCE
3  5  7	20/1	1.2	DISHWAS	SHER		о о о о	14 16	20/1 20/1 20/2	0.	19 38	LIGH	TING, REC EPTACLE,	
21 23	20/1 20/1	1.5 0.7	LIGHTING		TACLE, SDCO	a	22 24	, •	0		SPA(		
OP	TIONAL D	WELLING	UNIT CA	ALCULATIO CONN KVA	N (NEC 220.8	2)					DNN VA	CALC KVA	
SI	GHTING A RECEPTAC MALL—AP	CLES		2.61	871 SF (3 VA/SF)		U	ERAL LOA P TO 10 KVA	λD	10		10	(100%)
Α	AUNDRY PPLIANCE LECTRIC (			1.5 8.47 8			MAX	VER 10 KVA HEATING OLING	9 0	<b>13.</b> 6 R	6	5.43 3.19	(40%) (220.82(C)(4)
T	OTAL GEN	IERAL LO	DAD	23.6			TOT. BAL PH	AL LOAD ANCED LO ASE A ASE B	DAC	)		18.6 89.5 A 100% 99.7%	•

### GENERAL NOTES:

- 1. COORDINATE FINAL LOCATION OF THERMOSTATS, SWITCHES, RECEPTACLES, DATA, PHONE, LIGHT FIXTURES AND J-BOXES WITH ARCHITECTURAL ELEVATIONS AND INTERIOR DESIGN PLANS PRIOR TO ROUGH-IN.
- 2. ADA UNITS SHALL HAVE HOOD CONTROLS INSTALLED IN THE FACE OF THE LOWER CABINET WORK.
- 3. PROVIDE TAMPER RESISTANT RECEPTACLES PER NEC 406.12.
- 4. ALL UNITS: PROVIDE SWITCH CONTROLLING GARBAGE DISPOSAL TO BE LOCATED ABOVE BACKSPLASH NEXT TO SINK OR ON COUNTER. SEE ARCHITECTURE.
- 5. BATHROOM GFCI RECEPTACLES TO HAVE INTEGRAL NIGHTLIGHT.
- 6. RECESSED CEILING LIGHT IN BATHROOM SHALL BE LED RATED FOR WET LOCATIONS W/ SHATTER PROOF LENS.
- 7. ALL RECEPTACLES SHALL MEET REQUIREMENTS OF NEC ARTICLE 210.
- 8. PROVIDE TELEPHONE & CABLE T.V. MEDIA
  TERMINATION ENCLOSURE (MEDIA BOX):
  PROVIDE LEVITON COMPACT MEDIA
  ENCLOSURE OR EQUVALENT IN WALL WITH
  TOP NO HIGHTER THAN 60" AFF WITH 120V
  RECEPTACLE ADJACENT.
- 9. PROVIDE COMBINATION HARDWIRED 120VAC PHOTOELECTRIC SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR WITH BATTERY-BACKUP
- DETECTOR SHALL BE MINIMUM 6'
  HORIZONTAL DISTANCE FROM PERMANENT
  COOKING APPLIANCE PER CFC 90.2.11.8.
- •• DETECTOR SHALL BE MINIMUM 3'
  HORIZONTAL DISTANCE FROM THE DOOR
  OF A BATHROOM THAT CONTAINS A
  BATHTUB OR SHOWER PER CFC 90.2.11.8.
- PROVIDE INTERCONNECTION WIRING SUCH THAT ACTUATION OF ONE ALARM WILL ACTIVATE ALL ALARMS IN THE DWELLING UNIT.
   COORDINATE WITH AHJ ON
- INTERCONNECTING EACH DWELLING UNIT INTO THE FIRE ALARM SYSTEM FOR THE BUILDING.

  •• COORDINATE WITH AHJ AS TO THE NUMBER AND LOCATION OF DEVICES
- PRIOR TO ROUGH—IN. DEVICES SHOWN ARE DIAGRAMMATIC.

  10. DISHWASHER OUTLET SHALL BE ACCESSIBLE. RECEPTACLE SHALL BE LOCATED IN SPACE
- 11. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT FOR THE LIVING ROOM.

ADJACENT TO THE DISHWASHER.

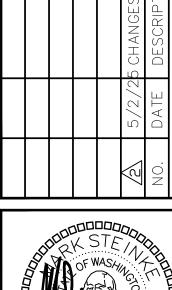
# #>FLAG NOTES

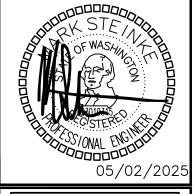
- 1. INTERLOCK ERV/BEF TO ON/OFF SWITCH. PROVIDE PERMANENT LABEL SAYING, "WHOLE HOUSE VENTILATION. LEAVE ON UNLESS OUTDOOR AIR QUALITY IS VERY POOR." ADHERE PERMANENT LABEL TO WALL ABOVE WALL SWITCH.
- 2. COORDINATE OUTDOOR LOCATION OF INDIVIDUAL HP UNITS WITH MECHANICAL PLANS.
- 3. POWERED FROM OUTDOOR UNIT.

# AFCI/GFCI REQUIREMENTS FOR DWELLING UNITS:

- ALL 15 AND 20A, 120V SINGLE PHASE CIRCUITS NOT INCLUDING THE BATHROOM SHALL BE AFCI PROTECTED (210.12).
- ALL DWELLING UNIT CIRCUITS IN BATHROOMS, GARAGES, OUTDOORS, KITCHENS, LAUNDRY AREAS, AND AREAS WITHIN 6' OF A SINK SHALL BE GFCI PROTECTED (210.8).
   BATHROOM CIRCUIT TO BE GFCI PROTECTED VIA A GFCI RECEPTACLE, WHILE OTHER CIRCUITS SHALL BE
- 3. UTILIZE "DUAL FUNCTION" BREAKER WHEN BOTH AFCI AND GFCI PROTECTION IS REQUIRED.

PROTECTED AT THE BREAKER.







DESIGNED: MHS
CHECKED: PSR
APPROVED: JAY

MU20240281

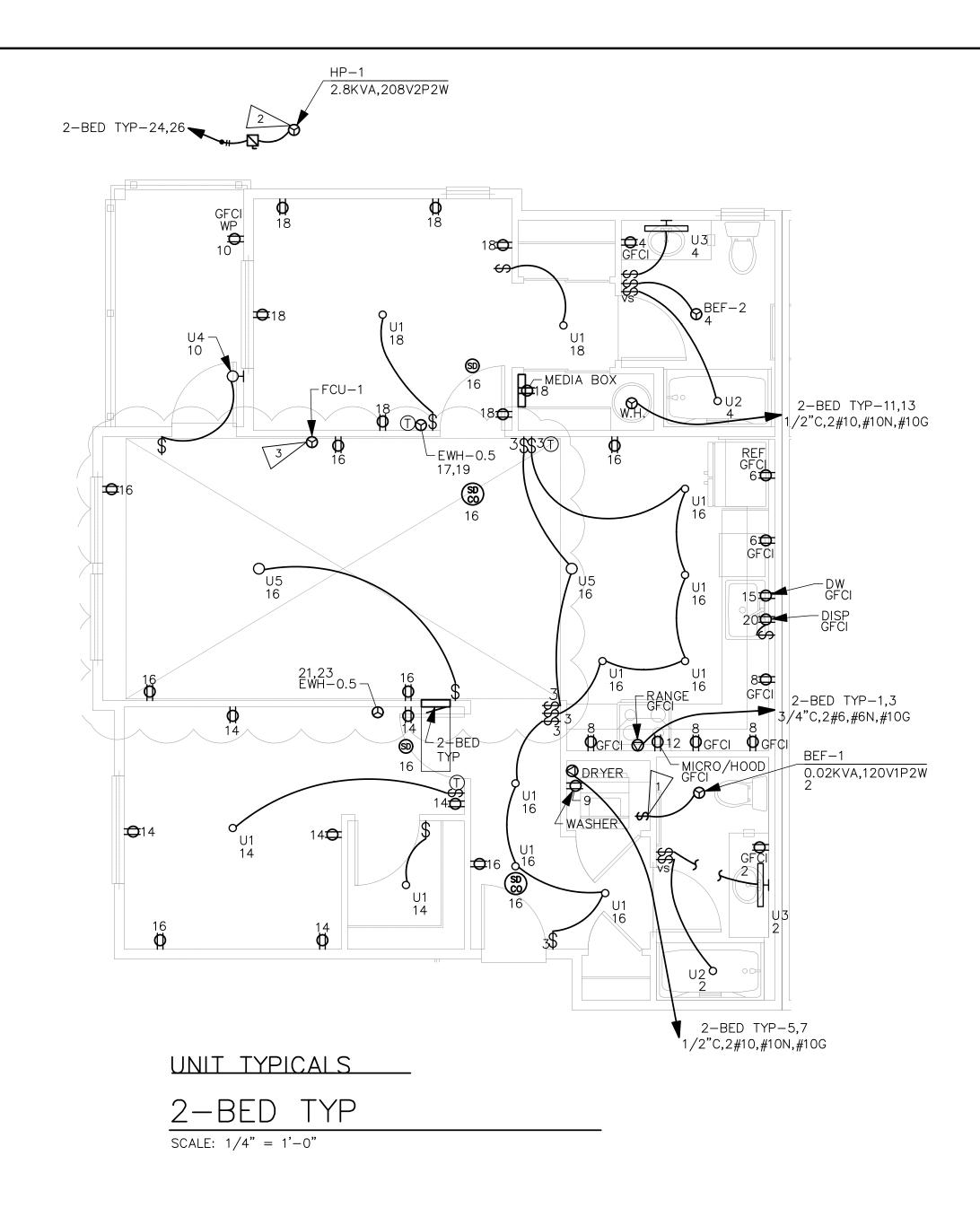
11 4OTH AVE W. SUITE 302 NWOOD, WA 98036 NE:(206)364-3343

20BISON LY

TE: 05/02/2025

SHEET TITLE:
UNIT PLANS &
SCHEDULES

E5.01



2	2-B	ED	TY	P								
M( FE	DOM DUNTING D FROM DTE	FLUSH			VOLTS 208 BUS AMPS NEUTRAL 1	125	5	2P 3W		N	AIC <b>22,00</b> Main Bkr Lugs <b>Sta</b>	MLO
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRIP	TION		CKT #	CKT BKR	LOAD KVA	CIRC	UIT DESCI	RIPTION
1 3	50/2	8	RANGE			a b	2	20/1 20/1	0.23 0.308	BATH	EX FAN,	NG, RECEPTACLE LIGHTING,
5 7 9 11 13 15 17 19 21 23 25	30/2   20/1 30/2   20/1 20/2   20/2   -/1	4.99 1.5 4.4 1.2 0.5 0.5	DRYER WASHER WATER H DISHWAS WALL HE WALL HE	HEATER SHER EATER		р а р а р	8 10 12 14 16 18 20 22	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	1.5 1.5 0.19 1.58 1.1 1.19 1.28 0.7 0.2 2.8	SMAL SMAL LIGH MICR LIGH LIGH	)	NCE EPTACLE EPTACLE EPTACLE
OP.	TIONAL D'	WELLING	UNIT CA	LCULATIO CONN KVA	N (NEC 220.	82)				DNN VA	CALC KVA	
l SI	GHTING A RECEPTAC MALL—APF	CLES		3.52 3	1,173 SF (3 VA/SF)	(	U	ERAL LOA P TO 10 KVA	AD <b>10</b>		10	(100%)
	AUNDRY PPLIANCE:	S		1.5 8.47				VER 10 KVA	6.4	9	2.6	(40%)
T(	OTAL GEN	ERAL LO	AD -	16.5		١		HEATING OLING	G OR		3.51	(220.82(C)(4))
							BAL, PHA	AL LOAD ANCED LO ASE A ASE B	DAD		16.1 77.4 A 98.8% 101%	

THERMOSTATS, SWITCHES, RECEPTACLES, DATA, PHONE, LIGHT FIXTURES AND J-BOXES WITH ARCHITECTURAL ELEVATIONS AND INTERIOR DESIGN PLANS PRIOR TO ROUGH-IN.

Engineering Public Works

- 3. PROVIDE TAMPER RESISTANT RECEPTACLES PER NEC 406.12.
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- •• DETECTOR SHALL BE MINIMUM 6' HORIZONTAL DISTANCE FROM PERMANENT COOKING APPLIANCE PER CFC 90.2.11.8.
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- •• PROVIDE INTERCONNECTION WIRING SUCH THAT ACTUATION OF ONE ALARM WILL ACTIVATE ALL ALARMS IN THE DWELLING
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- 3. UTILIZE "DUAL FUNCTION" BREAKER WHEN BOTH AFCI AND GFCI PROTECTION IS REQUIRED.

### GENERAL NOTES:

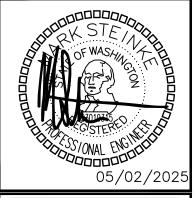
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  - 9. PROVIDE COMBINATION HARDWIRED 120VAC PHOTOELECTRIC SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR WITH BATTERY-BACKUP
  - BATHTUB OR SHOWER PER CFC 90.2.11.8.

  - •• COORDINATE WITH AHJ AS TO THE
- 10. DISHWASHER OUTLET SHALL BE ACCESSIBLE.

# #>FLAG NOTES

2. COORDINATE OUTDOOR LOCATION OF INDIVIDUAL HP UNITS WITH MECHANICAL PLANS.





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05/02/2025

UNIT PLANS & SCHEDULES

# REQUIRED ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

- WHERE PARKING IS PROVIDED, TEN PERCENT OF PARKING SPACES SHALL BE PROVIDED WITH ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.
- ELECTRICAL ROOM(S) SERVING PARKING AREAS SHALL BE DESIGNED TO ACCOMMODATE THE ELECTRICAL EQUIPMENT AND DISTRIBUTION REQUIRED TO SERVE A MINIMUM OF 20 PERCENT OF THE TOTAL PARKING SPACES WITH 208/240 V 40-AMP ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.
- MINIMUM ONE ACCESSIBLE PARKING SPACE SHALL BE SERVED BY ELECTRIC VEHICLE CHARGING INFRASTRUCTURE.

TOTAL NUMBER OF PARKING SPACES = 354 AVERAGE NUMBER OF PARKING SPACES PER BUILDING = 354/8 =45;  $45 \times 0.2 = 9$ 

5 OUTDOOR EV CHARGERS WITH INFRASTRUCTURE 4 CONDUITS TO FUTURE EV CHARGING LOCATIONS

BY 50%. 208A/2 = 37.5KVA (104)A @ 208V 3 PHASE

CAPACITY FOR 9 CHARGERS  $\times$  208V/1PH  $\times$  40A = 74.9 KVA = (208)A 3 PHASE POWER @ 120/208V UTILIZING LOAD MANAGEMENT INFRASTRUCTURE, EV LOAD CAN BE REDUCED

PER WAC 427, ELECTRICAL INFRASTRUCTURE FOR EACH BUILDING SHALL BE DESIGNED TO ACCOMMODATE 104 AMPS OF EV ELECTRICAL LOAD.

### GROUNDING NOTES AND REQUIREMENTS:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, POWER COMPANY, PHONE COMPANY, INTERNET COMPANY, CABLE TV COMPANY, AND THE SATELLITE TV COMPANY TO ENSURE REQUIRED GROUNDING IS INSTALLED FOR EACH SYSTEM.

THIS SHALL BE DONE PRIOR TO AND DURING INSTALLATION OF FOUNDATION RE-BAR AND CONTINUE DURING THE CONSTRUCTION PHASES, TO ENSURE EACH SYSTEM HAS IT'S REQUIRED GROUNDING INSTALLED FOR PROPER OPERATION OF THE SYSTEM.

- 1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND PROVIDE WHAT IS REQUIRED TO DO THE FOLLOWING:
- 2. FOOTING GROUND RE-BAR COMES UP IN THE ELECTRICAL ROOM AND THE RE-BAR IS SNUGLY SECURED TO THE FOOTING RE-BAR.
- 3. THE MSB GROUNDING TIES TO THE FOOTING RE-BAR. COUNTERPOISE, BUILDING STEEL, AND WATER PIPING.
- 4. THE GROUND WIRE FOR THE COUNTERPOISE SHALL BE STRANDED, INSULATED WIRE IN CONDUIT UNTIL IT REACHES THE FIRST BAR OF THE COUNTERPOISE. BETWEEN THE COUNTERPOISE BARS IT SHALL BE A STRANDED BARE COPPER WIRE.

GENE	ERAL $I$	FEEDER SCHEDULE	
ID	FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
1	100	1-1/2"C,3#1/0 AL,#1/0 AL N,#6 AL G	POOL
2	125	2"C,3#2/O AL,#2/O AL N,#4 AL G	AM-B
3	200	2"C,3#3/0,#3/0N,#6G	A-HOUSE, B-HOUSE, C-HOUSE, D-HOUSE, E-HOUSE, F-HOUSE, G-HOUSE, H-HOUSE
4	400	(2)2-1/2"C,3#250kcmil AL,#250kcmil AL N,#1/0 AL G	AM-CT
(5)	400	(2)2-1/2"C,3#250kcmil AL,#250kcmil AL N,#1 AL G	AM-DISC
6	400	3-1/2"C,3#500kcmil,#500kcmil N,#2G	AM-A
7	800	(3)3"C,3#400kcmil AL,#400kcmil AL N,#4/0 AL G	B-MC
8	1000	(4)3"C,3#350kcmil AL,#350kcmil AL N,#4/0 AL G	H-MC
9	1200	(4)3-1/2"C,3#500kcmil AL,#500kcmil AL N,#250kcmil AL G	A-MC, C-MC, D-MC, E-MC, F-MC, G-MC
(11)	125	1-1/2"C,2#2/0 AL,#2/0 AL N,#4 AL G	A-001, A-002, A-003, A-004, A-101, A-102, A-103, A-104, A-105, A-106, A-107, A-108, A-201, A-202, A-203, A-204, A-205, A-206, A-207, A-208, A-301, A-302, A-303, A-304, A-305, A-306, A-307, A-308, B-001, B-002, B-101, B-102, B-103, B-104, B-201, B-202, B-203, B-204, B-301, B-302, B-303, B-304, C-101, C-102, C-103, C-104, C-105, C-106, C-107, C-108, C-109, C-110, C-111, C-112, C-201, C-202, C-203, C-204, C-205, C-206, C-207, C-208, C-209, C-210, C-211, C-212, C-301, C-302, C-303, C-304, C-305, C-306, C-307, C-308, C-309, C-310, C-311, C-312, D001, D002, D003, D004, D005, D006, D101, D102, D103, D104, D105, D106, D107, D108, D109, D110, D111, D112, D201, D202, D203, D204, D205, D206, D207, D208, D209, D210, D211, D212, D301, D302, D303, D304, D305, D306, D307, D308, D309, D310, D311, D312, E001, E002, E003, E004, E101, E102, E103, E104, E105, E106, E107, E108, E201, E202, E203, E204, E205, E206, E207, E208, E301, E302, E303, E304, E305, E306, E307, E308, F001, F002, F003, F004, F101, F102, F103, F104, F105, F106, F107, F108, F201, F202, F203, F204, F205, F206, F207, F208, F301, F302, F303, F304, F305, F306, F307, F308, G101, G102, G103, G104, G105, G106, G107, G108, G109, G110, G111, G112, G201, G202, G203, G204, G205, G206, G207, G208, G209, G210, G211, G212, G301, G302, G303, G304, G305, G306, G307, G308, G309, G310, G311, G312, H101, H102, H103, H104, H105, H106, H107, H108, H201, H202, H203, H204, H205, H206, H207, H208, H301, H302, H303, H304, H305, H306, H307, H308

FEEDER SCHEDULE NOTES:

- CONDUIT FILL: * FOR CONDUIT SIZES 1-1/2" AND BELOW, FILL IS BASED ON EMT.
- * FOR CONDUIT SIZES 2" AND ABOVE, FILL IS BASED ON SCHEDULE 40 PVC.
- IN LOCATIONS APPROVED FOR THE PURPOSE. CONTRACTOR MAY USE MC CABLE.
- IN LOCATIONS APPROVED FOR THE PURPOSE CONTRACTOR MAY USE OTHER CONDUIT TYPES, INCLUDING RMC, FMC AND LFMC. CONTRACTOR REQUIRED TO ENSURE CONDUIT FILL DOES NOT EXCEED 40%.

CONTRACTOR RESPONSIBLE TO ENSURE TERMINATION/LUG CAPACITY FOR ALL SCHEDULED FEEDERS.

XHHW/THHN/THWN SHALL BE USED FOR INSULATION OF THE CONDUCTOR.

# SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C 1/O AND ABOVE

COORDINATION AND ARC FLASH STUDIES:

IMMEDIATELY UPON SELECTION OF ACTUAL EQUIPMENT BEING PROVIDED FOR THE PROJECT, THE ELECTRICAL CONTRACTOR SHALL PERFORM AN ARC FLASH ANALYSIS AND COORDINATION STUDY ON THE STANDBY DISTRIBUTION BASED ON ACTUAL EQUIPMENT TO BE PROVIDED, CONDUCTOR TYPES/SIZES/LENGTHS, ETC. COORDINATION SHALL BE CONFIRMED BASED ON FAULT NUMBERS SHOWN ON THIS DRAWING.

STUDIES SUBMITTED SHALL BE STAMPED BY A PROFESSIONAL ELECTRICAL ENGINEER HOLDING A CURRENT LICENSE FROM THE STATE

PRELIMINARY ARC FLASH AND COORDINATION STUDIES ARE TO BE SUBMITTED WITH THE SUBMITTALS FOR THE PROTECTIVE DEVICES, PANELBOARDS, SWITCHBOARDS, AND OTHER ELECTRICAL EQPT.

THE ELECTRICAL CONTRACTOR SHALL SUBMIT THE STAMPED AND SIGNED ARC FLASH AND COORDINATION STUDY TO THE AHJ AS

THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL PERMANENT LABELS INDICATING ARC FLASH HAZARD RISK CATEGORIES ON ALL DISTRIBUTION POINTS (SWITCHBOARDS, PANELBOARDS, VFDS, DISCONNECT SWITCHES, ETC). LABELS SHALL COMPLY WITH NFPA 70E.

### SHEET NOTES:

- A. CONTRACTOR TO OBTAIN UTILITY APPROVAL OF ALL SERVICE AND METERING EQUIPMENT PRIOR TO ORDERING.
- B. DISTRIBUTION SYSTEM AS DESIGNED IS FULLY RATED. CONTRACTOR WILL BE RESPONSIBLE FOR ENGINEERING IF SERIES RATED SYSTEMS ARE SUBMITTED, THE SUBMITTED SYSTEM SHALL MEET NEC 240.86(B) REQUIREMENTS FOR TESTED COMBINATIONS, AND SHALL NOT BE USED IF MOTOR CONTRIBUTION EXCEEDS LIMITS PER 240.86(C). NEC 110.22 MARKING REQUIREMENTS MUST BE MET.
- C. PROVIDE PERMANENT WARNING LABELS FOR ARC FLASH AND PPE REQUIREMENTS FOR THE SERVICE EQUIPMENT AND PANELS.

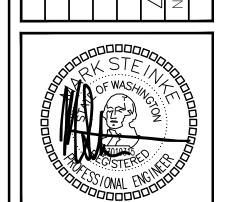
### FLAG NOTES:

**#** 

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building Planning

Engineering Public Works

- 1. GROUNDING ELECTRODE CONDUCTOR AND SYSTEM GROUNDING SIZED PER N.E.C. 250
- 2. PROVIDE ARC ENERGY REDUCTION: ENERGY REDUCING MAINTENANCE SWITCH PER NEC 240.87(B)(3)
- 3. PROVIDE A LISTED SURGE PROTECTIVE DEVICE FOR DWELLING UNITS AS REQUIRED BY NEC 230.67. CONTRACTOR TO CONFIRM LOCATION IS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION. OBTAIN PRICING FOR OPTION TO HAVE SPDs LOCATED IN UNIT PANELS VS UPSTREAM.
- 4. METER ELEVATIONS AND METERS PER STACK SHALL BE INSTALLED PER UTILITY ELECTRICAL PROVIDER REQUIREMENTS . METER SOCKET IN ELECTRICAL ROOM. VERIFY EXACT LOCATION AND REQUIREMENTS WITH ELECTRIC UTILITY (TYPICAL)
- 5. PROVIDE (1) 2 1/2" CONDUITS FOR SOLAR READY PATHWAY AND RESERVE SPACE IN THE MAIN ELECTRIC ROOM FOR FUTURE SOLAR EQUIPMENT. RESERVE SPACE FOR INSTALLATION OF FUTURE SOLAR CIRCUIT BREAKER AND PERMANENTLY MARK THIS LOCATION AS "FOR FUTURE SOLAR ELECTRIC".



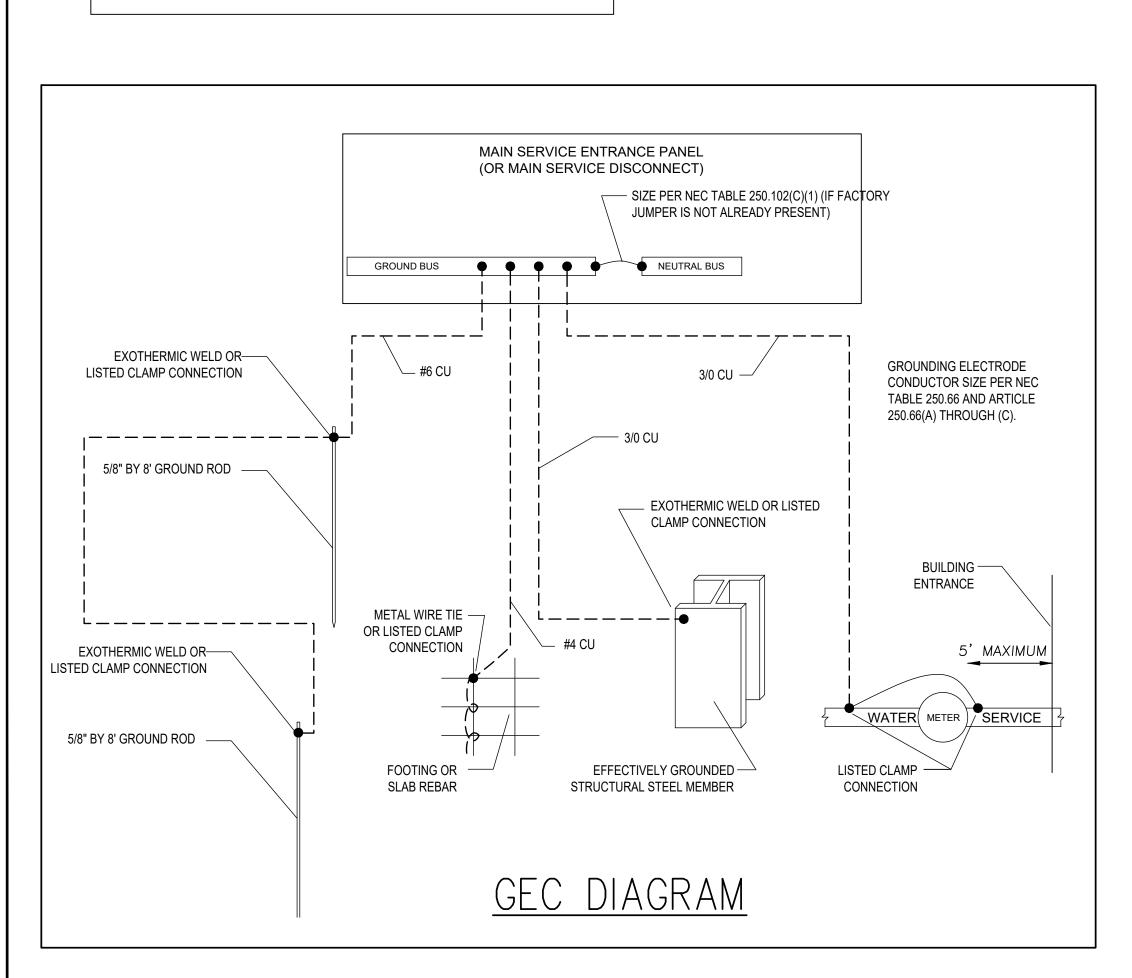


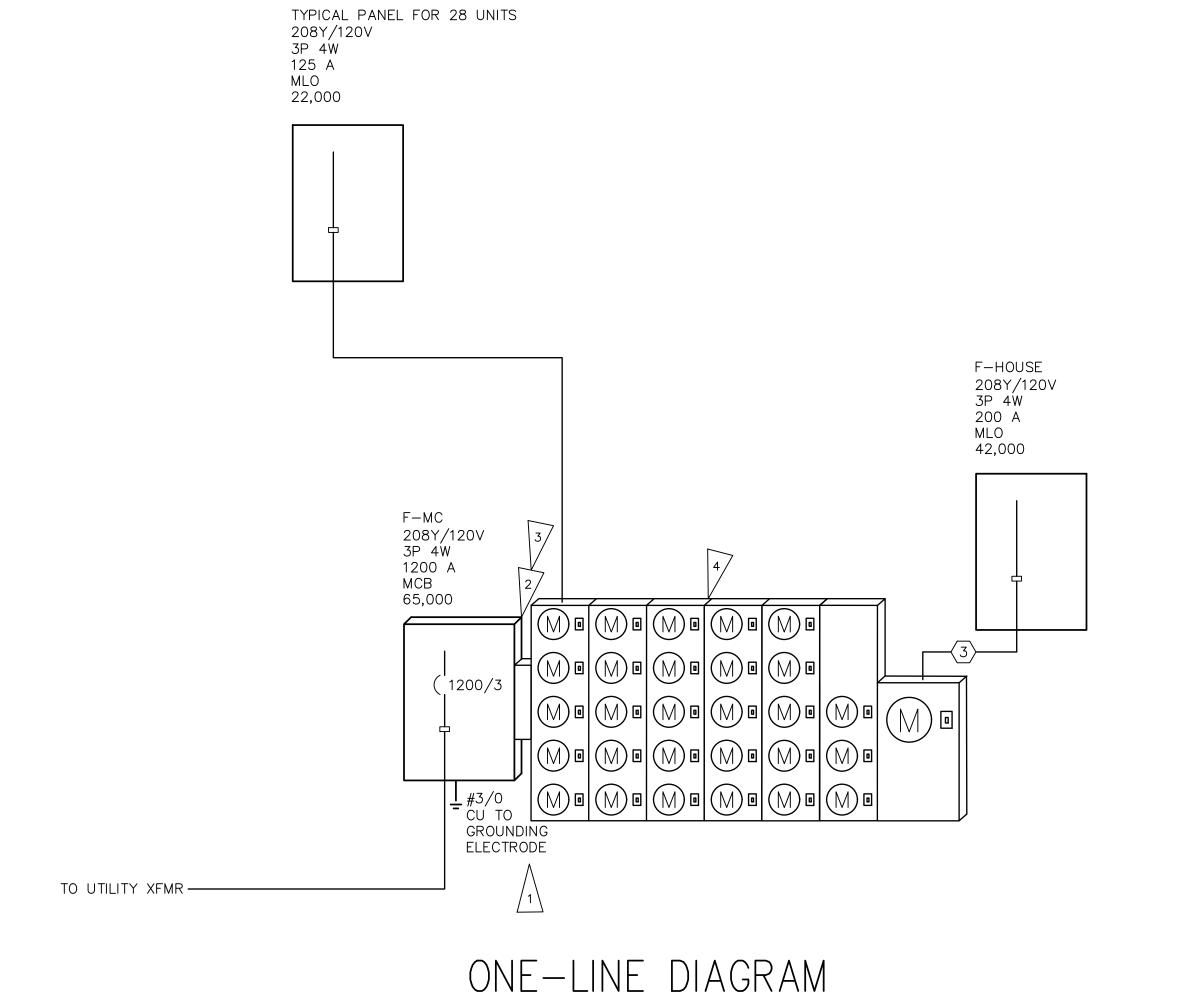
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05/02/2025

**ONE-LINE** DIAGRAM & NOTES

E6.00





DEVICE	FEEDE	R	BRANCH CIRCU	UIT	TOTAL
	VOLTAGE DROP	WIRE SIZE	MAX VOLTAGE DROP	WIRE SIZE	─ VOLTAGE DROF
XFMR A/B/C	0%		_	_	0%
A-MC	1.61%	(4)#500kcm AL	il —	_	1.61%
A-HOUSE	1.93%	#3/0	1.06% (CKT 19)	#10	2.99%
В-МС	0.51%	(3)#400kcm AL	il —	_	0.51%
B-HOUSE	0.79%	#3/0	1.4% (CKT 3)	#10	2.18%
C-MC	0.74%	(4)#500kcm AL	il —	_	0.74%
C-HOUSE	0.91%	#3/0	1.56% (CKT 7)	#10	2.48%
XFMR D/CLUB	0%		_	_	0%
AM-CT	0.35%	(2)#250kcm AL	il —	_	0.35%
AM-DISC	0.57%	(2)#250kcm AL	il —	_	0.57%
AM-A	0.85%	#500kcmil	1.95% (CKT 41)	#12	2.79%
АМ-В	2.33%	#2/0 AL	2.18% (CKT 33,35)	#8	4.51%
POOL	0.89%	#1/0 AL-1	0.28% (CKT 1)	#12	1.18%
D-MC	2.76%	(5)#600kcm AL	il –	_	2.76%
D-HOUSE	3.01%	#3/0	1.52% (CKT 21)	#10	4.53%
XFMR E/H	0%		_	_	0%
E-MC	0.64%	(4)#500kcm AL	il —	_	0.64%
E-HOUSE	0.82%	#3/0	1.1% (CKT 19)	#10	1.92%
H-MC	0.97%	(4)#350kcm AL	il —	_	0.97%
H-HOUSE	1.11%	#3/0	1.1% (CKT 17)	#10	2.21%
XFMR F/G	0%		_	_	0%
F-MC	1.6%	(4)#500kcm AL	il —	_	1.6%
F-HOUSE	1.85%	#3/0	1.1% (CKT 19)	#10	2.95%
G-MC	0.54%	(4)#500kcm AL	il –	_	0.54%
G-HOUSE	0.71%	#3/0	1.52% (CKT 21)	#10	2.23%

T								
F'AUL DEVICE	FAULT	$\frac{RRENT}{\Gamma}$	SCHE UTILITY		FROM	FFF	'DER	TOTAL
DEVICE	T AUDI	RATING	FAULT	DEVICE	FAULT	SIZE	LENGTH	MOTOR
								FAULT
XFMR A/B/C	64,515	N/A	60,300					4,215
A-MC	35,355	65,000	33,084	XFMR A/B/C	60,300	(4)#500kcm AL	il126'	2,271
A-HOUSE	23,930	42,000	22,899	A-MC	33,084	#3/0	21'	1,031
В-МС	38,026	65,000	36,129	XFMR A/B/C	60,300	(3)#400kcm AL	il 70'	1,897
B-HOUSE	26,195	42,000	25,329	В-МС	36,129	#3/0	18'	866
C-MC	45,210	65,000	42,184	XFMR A/B/C	60,300	(4)#500kcm AL	il68'	3,026
C-HOUSE	29,061	42,000	27,827	C-MC	42,184	#3/0	19'	1,234
XFMR D/CLUB	42,183	N/A	39,700					2,483
AM-CT	10,600	42,000	10,279	XFMR D/CLUB	39,700	(2)#250kcm AL	il180'	321
AM-DISC	9,613	42,000	9,311	AM-CT	10,279	(2)#250kcm AL	il 23'	302
AM-A	8,641	22,000	8,350	AM-DISC	9,311	#500kcmil	33'	291
АМ-В	3,955	22,000	3,774	AM-A	8,350	#2/0 AL	108'	181
POOL	7,226	22,000	7,025	AM-A	8,350	#1/0 AL-1	14'	201
D-MC	33,991	65,000	31,558	XFMR D/CLUB	39,700	(5)#600kcm AL	i183'	2,433
D-HOUSE	24,675	42,000	23,388	D-MC	31,558	#3/0	19'	1,287
XFMR E/H	42,497	N/A	39,700					2,797
E-MC	25,915	65,000	23,937	XFMR E/H	39,700	(4)#500kcm AL	il155'	1,978
E-HOUSE	19,299	42,000	18,197	E-MC	23,937	#3/0	21'	1,102
H-MC	29,457	65,000	27,480	XFMR E/H	39,700	(4)#350kcm AL	il 92'	1,977
H-HOUSE	18,568	42,000	17,791	H-MC	27,480	#3/0	30'	777
-MC	31,879	65,000	29,797	XFMR F/G	60,300	(4)#500kcm AL	il155'	2,082
F-HOUSE	19,185	42,000	18,353	F-MC	29,797	#3/0	31'	832
G-MC	27,460	65,000	25,243	XFMR F/G	60,300	(4)#500kcm AL	il 207'	2,217
G-HOUSE	20,163	42,000	18,965	G-MC	25,243	#3/0	20'	1,198

MC FE	DOM DUNTING D FROM DTE		Œ		VOLTS <b>20</b> BUS AMPS NEUTRAL	<b>20</b>	0	3P 4W		MA	C 42,00 AIN BKR IGS <b>ST</b> /	
CKT #	CKT BKR	LOAD KVA	CIRCUI	T DESCRIF	PTION		CKT #	CKT BKR	LOAD KVA	CIRCU	IT DESC	CRIPTION
1 3 5 7 9 11 13 15 17	20/1 20/2   -/1 20/1 -/1 20/1 20/1 -/1 -/1 -/1 -/1 -/1 -/1 -/1 -/1	0.229 0.229 1 0 0.18 0 0.18 0.096 0.5 0 0 0 0	LIGHTIN LIGHTIN EWH SPACE RECEP SPACE RECEP LIGHTIN FACP SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE	TACLE TACLE IG		арсарсар	16 18 20 22 24 26 28 30 32 34	-/1 -/1 -/1 -/1 -/1	8.3 8.3 8.3 0.05 11.6 0 0 0 0 0	EV CH (F) EV (F) EV		GER WER
L/ N	GHTING ARGEST MOTOR OTORS	1	CONN KVA <b>0.554</b> <b>1.6</b> <b>1.6</b>	CALC KVA 0.692 2.91 11.6	(125%) (25%) (100%)		EV I CON NON HEA TOT BAL LO PHA		S 0.3 33. 0.5 10US 0.0 1	2 5 -	CALC KVA 0.36 20.8 0.625 0.05 1 38 106 A 111% 107% 82%	- (50%>10) (63%) (125%) (100%) (100%)

	-MC									Development & Permitting Service ISSUED PERMIT Building Planning
	101 🔾									Engineering Public Works Fire Traffic
ROOM	TIMO CUREA	\ <b>r</b>		TS <b>208Y/12</b>		9 4W		AIC <b>65,00</b>		Smitalic
	TING SURFAC			AMPS 1200	)			MAIN BKR		
NOTE	ROM <b>XFMR F</b>	·/G	NEU	TRAL <b>100%</b>				LUGS <b>STA</b>	NDARD	
CKT	BREAKER				LO	AD KV	A			
#	TRIP/POLES	CIRCUIT DESCRIP	ΓΙΟΝ		А	В	С	FEEDER RACEWAY A	ND CONDUCTOR	S
1	125/2	PANEL FO01		10	6.6	17.1		1-1/2"C,2#2/0 AL,#	2/0 AL N,#4 A	AL G
2	125/2	PANEL F002				16.2		1-1/2"C,2#2/0 AL,#		
3	125/2	PANEL F003		10	6.3		15.7	1-1/2"C,2#2/0 AL,#	2/0 AL N,#4 A	L G
4	125/2	PANEL FOO4		10	6.6	17.1		1-1/2"C,2#2/0 AL,#	2/0 AL N,#4 A	L G
5	125/2	PANEL F101				16.6	17.1	1-1/2"C,2#2/0 AL,#		
6	125/2	PANEL F102		1	6.1			1-1/2"C,2#2/0 AL,#		
7	125/2	PANEL F103		l l	17	16.8		1-1/2"C,2#2/0 AL,#	•	
8	125/2	PANEL F104			.	15.7	15.5	1-1/2"C,2#2/0 AL,#		
9	125/2	PANEL F105		1	6.1	10.7		1-1/2"C,2#2/0 AL,#		
10	125/2	PANEL F106		l l	6.6	17.1	10.2	1-1/2"C,2#2/0 AL,#		
11	-			} ''	0.0		15.5			
l l	125/2	PANEL F107				15.7	1	1-1/2"C,2#2/0 AL,#	•	
12	125/2	PANEL F108		· · · · · · · · · · · · · · · · · · ·	8.8		17	1-1/2"C,2#2/0 AL,#		
13	125/2	PANEL F201		10	6.6	17.1		1-1/2"C,2#2/0 AL,#		
14	125/2	PANEL F202				16.2		1-1/2"C,2#2/0 AL,#		
15	125/2	PANEL F203		l l	6.8		17	1-1/2"C,2#2/0 AL,#		
16	125/2	PANEL F204		15	5.7	15.5		1-1/2"C,2#2/0 AL,#	•	
17	125/2	PANEL F205				16.2		1-1/2"C,2#2/0 AL,#		
18	125/2	PANEL F206		1	7.1		16.6	1-1/2"C,2#2/0 AL,#	2/0 AL N,#4 A	L G
19	125/2	PANEL F207		19	5.7	15.5		1-1/2"C,2#2/0 AL,#	2/0 AL N,#4 A	L G
20	125/2	PANEL F208				17	16.8	1-1/2"C,2#2/0 AL,#		
21	125/2	PANEL F301		1	7.1			1-1/2"C,2#2/0 AL,#		
22	125/2	PANEL F302		l l	6.2	16.1		1-1/2"C,2#2/0 AL,#	•	
23	125/2	PANEL F303				17	16.8	1-1/2"C,2#2/0 AL,#		
24	125/2	PANEL F304		1 1!	5.5	• •		1-1/2"C,2#2/0 AL,#		
25	125/2	PANEL F305		l l	6.2	16.1	1017	1-1/2"C,2#2/0 AL,#		
26	125/2	PANEL F306		'`	0.2	16.6	17.1	1-1/2"C,2#2/0 AL,#		
27	125/2	PANEL F307		1 1	5.5	10.0		1-1/2"C,2#2/0 AL,#		
28	125/2	PANEL F308		l l	17	16.8	13.7	1-1/2 °C,2#2/0 AL,#		
29	200/3	PANEL F-HOUSE			13	17.6	16.7	2"C,3#3/0,#3/0N,#6		il G
29	200/3	PANEL P-HOUSE				17.0	10.7	2 0,5#5/0,#5/011,#0	<u> </u>	
		TOTAL CONNE	CTED KVA R	Y DHASE 3	25	330	310			
)PTIO	NAL MIII TIFAI	MILY DWELLING CA			23		310			
<u> </u>	TYNE WOLIN / I	WIET DWELLING ON			LLING	UNIT I	OADS			
			KVA						KVA	
				27,919 SF		CON	NECTED	LOAD	<del></del>	•
LIGH	TING AND RE	CEPTACLES	83.8	(3 VA/SF)						
SMAI	_L-APPLIANCI	E	84	, , ,			LLING L		28	
LAUN			42				AND FA		(33%)	
	LIANCES		237			CAL	CULATE	D LOAD	248	
	TRIC COOKING	G	160							
HEAT			144	(100%)						
					HOUSI	E LOAD	 )S			
		CONN KVA	CALC KVA					CONN KV	A CALC KVA	
LIGH [*]	TING	0.554	0.692	(125%)		E\/	_OAD	33.2	20.8	(63%)
	GEST MOTOR	0.55 <del>4</del> 11.6	2.91	(125%)			LUAD TINUOU:		20.8 0.625	(63%) (125%)
		11.6		• •			CONTIN			,
	270	11.0	11.6	(100%)				JOUS <b>0.05</b>	0.05	(100%)
MOTO	EPTACLES	0.36	0.36	(50%>10)		11 - 1	TING	4	4	(100%)

TOTAL LOAD

TOTAL LOAD

BALANCED 3-PHASE LOAD

KVA

286 794 A

KVA

248

38

TOTAL DWELLING UNIT LOAD

TOTAL HOUSE LOAD



3150N 19401 40TH AVE W. SUITE 3C LYNNWOOD, WA 98036

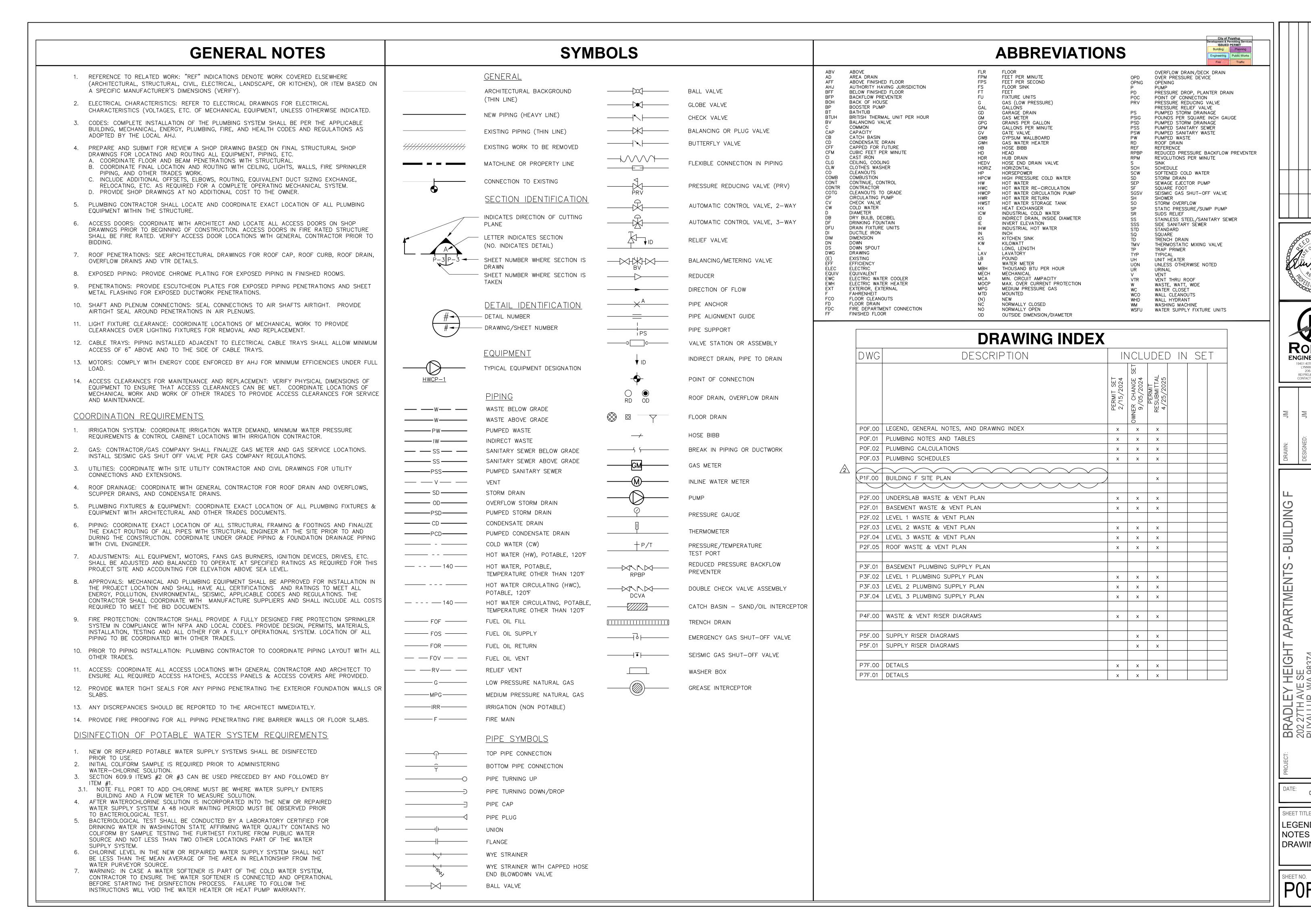
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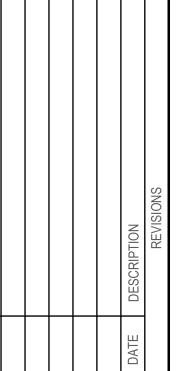
DATE: 05/02/2025

**PANELS** 

SCHEDULES

SHEET NO. **E6.01** 









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04/25/2025

SHEET TITLE:

LEGEND GENERAL NOTES AND DRAWING INDEX

### PIPE INCLU ATION SCHEDULE

	PIPE III	DULATION SCHI	EDULE			
CED) #OF	OPTION	1	OF	PTION 2	VAPOR RETARDER	NOTEC
SERVICE	MATERIAL	THICKNESS	MATERIAL	THICKNESS	REQUIRED	NOTES
DOMESTIC COLD WATER, IRRIGATION WATER, CONDENSATE DRAINS, STORM DRAIN (IN CONDITIONED SPACE)	MINERAL-FIBER WITH JACKET	ALL SIZES: ½"	PVC/NBR	ALL SIZES: ¾"	YES	12,13
DOMESTIC COLD WATER, IRRIGATION WATER, CONDENSATE DRAINS, WASTE (OUTSIDE THE CONDITIONED SPACE)	MINERAL-FIBER WITH JACKET	(R-3) ½" PIPE: ½" ALL OTHER SIZES: 1"	PVC/NBR	(R-3) ½" PIPE: ½" ALL OTHER SIZES: ¾"	YES	7,8,10
ROOF DRAIN BODIES	MINERAL-FIBER OR CELLULAR GLASS WITH JACKET	1"	PVC/NBR	1"	YES	12
DOMESTIC HOT WATER AND RECIRCULATED HOT WATER (RESIDENTIAL)	MINERAL-FIBER WITH JACKET	(R-3) ½" PIPE: ½" ALL OTHER SIZES: 1"	PVC/NBR	(R-3) ½" PIPE: ½" ALL OTHER SIZES: ¾"	NO	2,10
DOMESTIC HOT WATER AND RECIRCULATED HOT WATER (NONRESIDENTIAL)	MINERAL-FIBER WITH JACKET	½"-1¼" PIPE: 1" 1½"-4" PIPE:1.5"	PVC/NBR	½"-1¼" PIPE: 1" 1½"-4" PIPE:1.5"	NO	3,9
EXPOSED SANITARY DRAINS AND DOMESTIC WATER SUPPLIES AND STOPS FOR ADA FIXTURES.	TRUEBRO LAV-GUARD	N/A	N/A	N/A	NO	11

PIPING INSULATION EXPOSED TO THE WEATHER SHALL BE PROTECTED FROM DAMAGE. CONTRACTOR SHALL PROVIDE SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE PERMITTED

PER 2018 WSEC SECTION R403.5.3 (RESIDENTIAL) INSULATION FOR HOT WATER PIPE SHALL HAVE A MINIMUM R-VALUE OF R-3.

PIPING FROM WATER HEATER TO THE TERMINATION OF HEATED WATER SUPPLY PIPE SHALL BE INSULATED IN ACCORDANCE WITH TABLE C403.2.9. 4. ON BOTH THE INLET AND OUTLET PIPING OF A STORAGE HOT WATER HEATER, THE FIRST 8 FEET OF PIPING OR PIPING FROM WATER HEATER TO HEAT TRAP SHALL BE INSULATED.

HEAT TRACED PIPING SHALL BE INSULATED IN THE SAME MANNER AS NON HEAT TRACED PIPING OR PER THE HEAT TRACE MANUFACTURER'S INSTRUCTIONS.

TUBULAR PIPING INSULATION SHALL NOT BE REQUIRED FOR THE FOLLOWING:

6.1. THE TUBING FROM THE CONNECTION AT THE TERMINATION OF THE FIXTURE SUPPLY PIPING TO A PLUMBING FIXTURE OR PLUMBING APPLIANCE.

VALVES, PUMPS, STRAINERS, AND THREADED UNIONS IN PIPING THAT IS 1 INCH OR LESS IN NOMINAL DIAMETER.

6.3. PIPING FROM USER-CONTROLLED SHOWER AND BATH MIXING VALVES TO THE WATER OUTLETS.

COLD WATER PIPING OF A DEMAND RECIRCULATION WATER SYSTEM.

TUBING FROM A HOT DRINKING-WATER HEATING UNIT TO THE WATER OUTLET. 6.6. PIPING AT LOCATIONS WHERE A VERTICAL SUPPORT OF THE PIPING IS INSTALLED.

6.7. PIPING SURROUNDED BY BUILDING INSULATION WITH A THERMAL RESISTANCE (R-VALUE) OF NOT LESS THAN R-3.

HOT WATER PIPING THAT IS PART OF THE FINAL PIPE RUN TO THE PLUMBING FIXTURE AND IS NOT PART OF THE HEATED—WATER CIRCULATION SYSTEM CIRCULATION PATH IS NOT REQUIRED TO MEET THE MINIMUM INSULATION REQUIREMENTS OF C404.6.

PER 2018 UPC SECTION 312.6 NO WATER, SOIL, OR WASTE PIPE SHALL BE INSTALLED OR PERMITTED OUTSIDE OF A BUILDING, IN ATTICS OR CRAWL SPACES, OR IN AN EXTERIOR WALL UNLESS, WHERE NECESSARY, ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPE FROM FREEZING. ALL HOT AND COLD WATER PIPES OUTSIDE THE CONDITIONED SPACE SHALL BE PROVIDED WITH INSULATION WITH A MINIMUM R-VALUE OF

HEAT TRACING SHALL BE PROVIDED FOR COLD WATER AND IRRIGATION WATER IN UNCONDITIONED SPACES. CONTACT ENGINEERING IF NECESSARY. PER 2018 WSEC SECTION C403.12.3 FREEZE PROTECTION SYSTEMS, SUCH AS HEAT TRACING OF OUTDOOR PIPING, SHALL INCLUDE AUTOMATIC CONTROLS CONFIGURED TO SHUT OFF THE SYSTEMS WHEN OUTDOOR AIR TEMPERATURES ARE ABOVE 40°F.

9. PER 2018 WSEC TABLE C403.2.9 INSULATION FOR HOT WATER AND HOT WATER RECIRCULATION SHALL HAVE A THERMAL CONDUCTIVITY OF 0.21-0.28 (BTU.IN/H.FT2.°F) AT OPERATING TEMPERATURE.

10. INSULATION R-VALUE SHALL MEET THE MINIMUM REQUIREMENT. THICKNESS IS BASED ON GRAINGER SAMPLE DATA FOR K-FLEX(PVC/NBR) AND OWENS CORNING(FIBER GLASS).

11. ALL ADA P-TRAPS, HOT WATER SUPPLY TUBING, AND SHUT-OFF COCKS SHALL BE PROTECTED WITH APPROVED COVERS TO PREVENT SCALDING.

12. REQUIRED BY ENGINEERING BASED ON BEST PRACTICE.

\13. INSULATION IS NOT REQUIRED ON PLASTIC COLD WATER PIPING. 

### HANGER SPACING FOR WATER PIPING

ALL SUSPENDED WATER SUPPORTED AS FOLLOW		
	MAX. HORIZONTAL SPACING	MAX. VERTICAL SPACING
COPPER PIPE ≤1½"	6 FT.	10 FT.
COPPER PIPE >2"	10 FT.	10 FT.
COPPER TUBING ≤1½"	6 FT.	10 FT.
COPPER TUBING >2"	10 FT.	10 FT.
CPVC <u>&lt;</u> 1"	3 FT.	10 FT.
CPVC > 1¼"	4 FT.	10 FT.

### HANGER SPACING FOR WASTE AND VENT PIPING

SUPPORTED AS FOLLOWS PER 2018	UPC TABLE 3	313.3:
	MAX. HORIZ.	
	SPACING	SPACING
ABS	4 FT.	10 FT.
PVC (TYPE DWV)	4 FT.	10 FT.
CAST-IRON HUBLESS*	EVERY	15 FT.
	OTHER JOINT	
*CAST-IRON OVER 4' SHALL BE SUI	PPORTED AT E	EVERY JOINT

ALL SUSPENDED SANITARY AND VENT PIPE SHALL BE

PLUMBING FIXTURE FLO	OW RATES PER 2018 UPC (	CH. 4
FIXTURE TYPE	FLOW RATE	NOTES
SHOWERHEADS	1.8 GPM @ 80 PSI	
LAVATORY FAUCETS, RESIDENTIAL	1.2 GPM @ 60 PSI	1
LAVATORY FAUCETS, NON-RESIDENTIAL	0.5 GPM @ 60 PSI	2
KITCHEN FAUCETS	1.8 GPM @ 60 PSI	3
GRAVITY TANK-TYPE WATER CLOSETS	1.28 GALLONS/FLUSH	4
FLUSHOMETER TANK WATER CLOSETS	1.28 GALLONS/FLUSH	4
FLUSHOMETER VALVE WATER CLOSETS	1.28 GALLONS/FLUSH	4
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.28 GALLONS/FLUSH	4
URINALS	0.5 GALLONS/FLUSH	

### NOTES:

LAVATORY FAUCETS SHALL NOT HAVE A FLOW RATE LESS THAN 0.8 GPM AT 20 PSI.

WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS RATED AT 0.35 GPM OR OTHER MEANS MAY BE USED TO ACHIEVE

KITCHEN FAUCETS MAY TEMPORARILY INCREASE FLOW ABOVE THE MAXIMUM RATE, BUT NOT ABOVE 2.2 GPM @ 60 PSI AND MUST

DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GPM @ 60 PSI.

INCLUDES SINGLE AND DUAL FLUSH WATER CLOSETS WITH AN EFFECTIVE FLUSH OF 1.6 GALLONS OR LESS. SINGLE FLUSH TOILETS - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.6 GALLONS. THE EFFECTIVE FLUSH VOLUME IS THE AVERAGE FLUSH VOLUME WHEN TESTED IN ACCORDANCE WITH ASME A112.19.2 DUAL FLUSH TOILETS - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.6 GALLONS. THE EFFECTIVE FLUSH VOLUME IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH. FLUSH VOLUMES WILL BE TESTED IN ACCORDANCE WITH ASME A112.19.2 AND ASME A112.19.14.

# NOTE TO CONTRACTOR

### DRAWINGS ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

# CONTRACTOR SUBSTITUTIONS & REVISIONS

PLEASE SUBMIT PROPOSALS FOR SUBSTITUTIONS OR REVISIONS FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIAL OR DOING WORK. FOR EQUIPMENT THAT IS SCHEDULED BY MANUFACTURER'S NAME AND CATALOG DESIGNATIONS, THE MANUFACTURER'S PUBLISHED DATA AND/OR SPECIFICATION FOR THAT ITEM ARE CONSIDERED PART OF SPECIFICATION. ENGINEERING COSTS FOR REVISING MEP PLANS SHALL BE ADDRESSED IN THE COST ANALYSIS OF THE SUBSTITUTION PROPOSAL. CONTRACTOR TO COORDINATE WITH ENGINEER AND DETERMINE ASSOCIATED DESIGN AND PERMITTING COSTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OTHER COSTS ASSOCIATED WITH UNFORESEEN ISSUES RESULTING FROM SUBSTITUTIONS

# PRE-CONSTRUCTION MEETING NOTES

CONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH THE ENGINEER FOR THE PURPOSE OF REVIEWING THE WORK PRIOR TO ORDERING ANY EQUIPMENT OR PERFORMING ANY WORK. THE MEETING SHALL BE LOCATED AT THE PROJECT SITE ON A DATE AND TIME TO BE MUTUALLY AGREED. THE MEETING WILL BE A WORKING SESSION. THE MEETING WILL BE FACILITATED BY THE ENGINEER AND THE AGENDA WILL INCLUDE A DETAILED REVIEW OF THE PLANS AND SPECIFICATIONS, CROSS CHECK WITH OTHER TRADES FOR COORDINATION ISSUES, REVIEW OF PROPOSED PRODUCTS, REVIEW OF PLANNED MEANS AND METHODS, AND ON-SITE INVESTIGATION OF FIELD CONDITIONS RELATIVE TO EXISTING CONDITIONS THAT COULD AFFECT THE WORK PERSONS ATTENDING THE MEETING SHALL BE KNOWLEDGEABLE OF THE PROJECT AND SHALL BE THE SPECIFIC PERSONS INTENDED TO CONTINUE WITH THE PROJECT THROUGH TO COMPLETION. IF REQUIRED, REVISED PLANS WILL BE ISSUED THROUGH OFFICIAL CHANNELS. CHANGES IN THE BID PRICE WILL BE DISCUSSED, BUT NO CHANGE ORDERS WILL BE ISSUED UNLESS PROCESSED THOUGH OFFICIAL CHANNELS. IT SHALL BE UNDERSTOOD

THE FOLLOWING TRADES SHALL BE REPRESENTED FOR THE MINIMUM TIME INDICATED:

THAT THE ENGINEER HAS NO AUTHORITY TO ISSUE CHANGE ORDERS.

4 HOURS

MECHANICAL SHEET METAL PLUMBING/PIPING

4 HOURS ELECTRICAL 4 HOURS SPRINKLER 2 HOURS GENERAL CONTRACTOR ALL SESSIONS

- CONNECTIONS: PROVIDE PLUMBING FIXTURE CONNECTIONS TO BUILDING 26. DISASSEMBLY PROVISIONS: PROVIDE UNIONS OR FLANCES AT PIPING WASTE, VENT, COLD WATER, AND HOT WATER SYSTEM IN ACCORDANCE WITH DRAWINGS, MANUFACTURER'S RECOMMENDATIONS, AND LOCAL CODES. CONNECT TO EACH FIXTURE, EQUIPMENT, ETC. WITH ALL ACCESSORIES, VALVES, VACUUM BREAKERS, REGULATORS, UNIONS, ETC. AS REQUIRED AND AS RECOMMENDED BY THE MANUFACTURERS. REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE ON PLANS.
- 2. HOT AND COLD: WATER PIPING CONNECTION TO EACH FIXTURE SHALL BE COLD WATER ON THE RIGHT HAND SIDE AND HOT WATER ON THE LEFT HAND SIDE.
- 3. HOT WATER: NON-CIRCULATING HOT WATER PIPE SHALL NOT EXCEED 10' UNLESS OTHERWISE SHOWN ON DRAWINGS.
- 4. VENT STACKS: COORDINATE VENT STACK WITH HVAC EQUIPMENT TO MAINTAIN MINIMUM 10' CLEARANCE FROM OUTSIDE AIR INTAKES.
- CLEANOUTS: PROVIDE CLEANOUTS PER CURRENT UPC AND AS REQUIRED BY LOCAL JURISDICTIONS. CLEANOUTS SHALL BE LOCATED IN WALLS/FLOORS WHERE THEY ARE NOT HIGHLY VISIBLE. FLOOR CLEANOUTS IN CARPETED AREAS TO BE FITTED WITH CARPET INSERTS. LOCATIONS SHALL BE SUBMITTED TO ARCHITECT FOR APPROVAL. NOTE: NOT ALL CLEANOUTS ARE SHOWN ON THE PLUMBING DRAWINGS.
- SUDS RELIEF: PROVIDE SUDS RELIEF IN ACCORDANCE WITH 2018 UPC SECTION 711.0, STATE AND LOCAL CODES.
- 7. SHUT-OFFS: PROVIDE 1/4 TURN BALL VALVE ANGLE STOP SHUT-OFF VALVES AND BRAIDED STAINLESS STEEL FLEX CONNECTORS AT HOT AND COLD WATER SUPPLY TO EACH FIXTURE. EXCEPTION: PROVIDE SCREWDRIVER STOPS AT BATH/SHOWERS.
- 8. TUB SPOUTS SHALL BE THREADED (NO PUSH-ON FITTINGS).
- 9. TRAP ARMS: PROVIDE TRAP ARMS SUCH THAT THE MAXIMUM LENGTH WILL NOT EXCEED CODE REQUIREMENTS.
- 10. ADA INSULATION: AT PLUMBING PIPING EXPOSED UNDER LAVATORIES, INSULATE THE EXPOSED PIPING AND TRAPS WITH PRODUCT SPECIFICALLY DESIGNED FOR THIS APPLICATION MEETING ADA REQUIREMENTS. PROVIDE HANDI-LAV GUARD OR EQUIVALENT. OFFSET P-TRAPS TO CLEAR WHEELCHAIR ACCESS.
- GAS EQUIPMENT: GAS EQUIPMENT SHALL BE INSTALLED PER EQUIPMENT LISTINGS, APPLICABLE SFGC, SPC, LOCAL CODES & NFPA STANDARDS.
- GAS CONNECTIONS: INSTALL FLEXIBLE QUICK DISCONNECT ASSEMBLIES FOR ALL GAS FIRED KITCHEN EQUIPMENT PER APPLICABLE SFGC, SPC, LOCAL CODES & NFPA STANDARDS. PROVIDE LOCKABLE GAS SHUT-OFF VALVES FOR FIREPLACES & BBQS IN UNATTENDED PUBLIC LOCATIONS IN THE BUILDING.
- 13. GAS PIPING CONNECTIONS TO WATER HEATERS, BOILERS AND FURNACES SHALL HAVE DIRT LEGS AND UNIONS PROVIDED ON APPLIANCE SIDE OF SHUTOFF VALVE.
- 14. GAS PIPING INSTALLATION: STEEL OR MALLEABLE IRON FUEL LINES 2" OR SMALLER SHALL BE ASSEMBLED USING THREAD SEALANT SUITABLE FOR NATURAL GAS. GAS PIPING LARGER THAN 2" SHALL HAVE WELDED FITTINGS.
- 15. GAS PIPING UNDERGROUND: WHERE INSTALLED BELOW GRADE THROUGH THE OUTER FOUNDATION OR BASEMENT WALL OF A BUILDING. SHALL BE ENCASED IN A PROTECTIVE PIPE SLEEVE. THE ANNULAR SPACE BETWEEN THE GAS PIPING AND THE SLEEVE SHALL BE SEALED.
- 16. GAS PIPING ABOVE GROUND: WHERE PASSING THROUGH AN OUTSIDE WALL, GAS PIPING SHALL BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BETWEEN THE PIPING AND THE SLEEVE SHALL BE SEALED.
- 17. GAS PIPE SUPPORT: FUEL LINES SHALL BE SUPPORTED OR STRAPPED, AND SHALL BE PLUMB AND SQUARE.

18. GAS PIPING ON ROOFTOPS SHALL BE SUPPORTED AND ANCHORED TO

- THE ROOF.
- 19. GAS PIPING SHALL NOT BE BURIED UNDER A BUILDING, SLAB OR OTHER STRUCTURE.
- 20. GAS PIPING PROTECTIVE COATING: PAINT ALL EXTERIOR EXPOSED GAS PIPING WITH TWO COATS OF RUST INHIBITIVE PAINT. COLOR: GRAY.
- 21. WATER HAMMER ARRESTORS: PROVIDE AT THE END OF HOT AND COLD WATER LINES SERVING TWO OR MORE FIXTURES; SIZE IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE (PDI) REQUIREMENTS. WATER HAMMER ARRESTORS ARE REQUIRED FOR QUICK CLOSING VALVES, SUCH AS LAUNDRY WASHERS, FLUSH VALVES (PUBLIC TOILETS), ETC.
- 22. TRAP PRIMERS AS SPECIFIED: PROVIDE TRAP PRIMERS AND PIPING FOR FLOOR DRAINS, FLOOR SINKS, AREA DRAINS & HUB DRAINS. ARRANGE PIPING TO ACHIEVE EQUAL FLOW TO EACH DRAIN AND FLOOR SINK FOR TRAP PRIMERS SERVING MULTIPLE DRAINS AND FLOOR SINKS. COORDINATE EXACT LOCATIONS WITH ARCHITECT & ELECTRICAL ENGINEER.
- 23. P-TRAPS: ALL EXPOSED P-TRAPS SHALL BE CHROME-PLATED BRASS. P-TRAPS SERVING HANDICAPPED COUNTER TOP LAVATORIES SHALL BE
- 24. THROUGHOUT THE PROJECT PROVIDE BALL VALVES. GATE VALVES SHALL NOT BE USED. NO EXCEPTIONS.
- 25. HOT WATER RECIRCULATING BALANCING VALVES SHOULD BE BELL & GOSSETT CIRCUIT SETTER (WATTS OR EQUAL) WITH INTEGRAL READOUT PORTS, ADJUSTMENT KNOB, DRAIN CONNECTION, AND POSITIVE SHUTOFF.

- CONNECTIONS TO EQUIPMENT, COILS, TRAPS, CONTROL VALVES, AND OTHER COMPONENTS TO ALLOW DISASSEMBLY FOR MAINTENANCE.
- 27. REDUCERS: PROVIDE AS REQUIRED FROM LINE PIPE SIZE TO

EQUIPMENT, TRAP, COIL, AND CONTROL VALVE CONNECTION SIZES.

- 28. VALVE TAGS: PROVIDE VALVE TAGS PER SPECIFICATIONS TO IDENTIFY VALVE AND THE AREA IT SERVES.
- 29. OFFSETS: PROVIDE FOR BRANCH LINES TO EQUIPMENT.
- 30. ALL TEMPERATURE MIXING VALVES SHALL COMPLY WITH ASSE-1070 SAFETY STANDARDS.
- 31. PROVIDE PIPE MARKER WITH DIRECTION OF FLOW. LABEL "NON-POTABLE WATER DO NOT DRINK" CLEARLY ON NON-POTABLE
- 32. PROVIDE EXPANSION LOOPS/EXPANSION JOINTS IN PIPING PER 2018 UPC TABLE 313.3 AND MANUFACTURER INSTALLATION INSTRUCTIONS.
- 33. PROVIDE APPROVED PIPE HANGERS & PIPE SUPPORTS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND 2018 UPC TABLES 313.3 & 313.6. SUBMIT FOR APPROVAL.
- 34. DIELECTRIC UNIONS: PROVIDE AT CONNECTIONS OF DISSIMILAR PIPE.
- ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. 36. CONDENSATE DRAIN: PROVIDE A P-TRAP FOR EACH HVAC UNIT

35. REFRIGERANT PIPING: PROVIDE SIZING & INSTALLATION IN STRICT

- CONDENSATE PAN WITH PLUG TEES FOR CLEANING. CONDENSATE DRAINS SHALL BE DISCHARGED TO AN INDIRECT WASTE OR OUTSIDE.
- 37. PIPING & EQUIPMENT SUPPORTS/HANGERS & SEISMIC RESTRAINTS TO BE DESIGNED BY DESIGN BUILT CONTRACTOR.
- 38. IF NEEDED, PROVIDE VACUUM BREAKERS AT ALL HOSE BIBBS.
- 39. FLOOR DRAINS OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE AND SUBJECT TO INFREQUENT USE SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEALS IN ACCORDANCE WITH 2018 UPC 1007.0.
- 40. INSULATION MATERIAL SHALL MEET CITY OF FERNDALE QUALITY STANDARDS.
- 41. ALL PIPING AND DUCTWORK SHALL BE INSULATED CONSISTENT WITH THE 2018 WASHINGTON STATE ENERGY CODE.
- BUILDING DRAIN AND VENT PIPING MATERIALS SHALL COMPLY WITH 2018 UPC 701.0 AND 903.0.
- 43. ALL SANITARY SYSTEM MATERIAL SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
- 44. ALL STORAGE WATER HEATING EQUIPMENT SHALL BE PROVIDED WITH AN APPROVED. LISTED EXPANSION TANK OR OTHER DEVICE DESIGNED FOR INTERMITTENT OPERATION FOR THERMAL EXPANSION CONTROL PER 2018 UPC 608.3.
- 45. WATER HEATERS SHALL BE ANCHORED OR STRAPPED TO RESIST HORIZONTAL DISPLACEMENTS DUE TO SEISMIC MOTION PER 2018 UPC
- 46. MATERIAL EXPOSED WITHIN A DUCT OR PLENUM SHALL COMPLY WITH 2018 IMC 602.2.1.
- 47. HVAC EQUIPMENT AND WATER HEATERS SHALL COMPLY WITH 2018 IMC CHAPTER 3.
- 48. BOILERS SHALL COMPLY WITH ALL THE REQUIREMENTS OF 2018 IMC
- PROVIDE EXPANSION TANKS FOR BOILERS PER 2018 IMC SECTION
- SHOWERS AND TUB/SHOWER COMBINATIONS SHALL BE PROVIDED WITH MIXING VALVES PER 2018 UPC 408.0.
- 51. PLUMBING FIXTURES AND FITTINGS SHALL COMPLY WITH CITY OF FERNDALE WATER CONSERVATION STANDARDS.
- CONTRACTOR SHALL PROVIDE FIRESTOPPING AT PENETRATIONS AS NECESSARY TO RETAIN THE FIRE RATING OF ALL ASSEMBLIES. ALL WORK SHALL BE IN COMPLIANCE WITH CODE REQUIREMENTS FOR THE BUILDING CONSTRUCTION TYPE.
- 53. ALL GARAGE DRAINS, TRASH ROOMS DRAINS & GARAGE TRENCH DRAINS SHALL BE TAKEN TO SAND/OIL INTERCEPTOR(S) BEFORE CONNECTING TO THE SANITARY SEWER SYSTEM.

54. PLUMBING CONTRACTOR SHALL PROVIDE REDUCED PRESSURE

BACKFLOW PREVENTERS OR OTHER APPROVED BACKFLOW PREVENTION DEVICE WHERE REQUIRED BY HEALTH AUTHORITIES, FOOD SERVICE DRAWINGS, APPLIANCE MANUFACTURER INSTRUCTIONS AND BY CODE.

PROVIDE REQUIRED & PROPER BACK FLOW PREVENTERS AS SPECIFIED FOR THE APPLIANCES INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

- ICE MACHINES AND ICE MAKERS CARBONATED BEVERAGE DISPENSING SYSTEMS
- COFFEE BREWERS ESPRESSO MACHINES

STEAM OR HOT WATER BOILERS

- WATER FILTERS
  - IRRIGATION SYSTEM FIRE PROTECTION SYSTEM
- CHEMICAL TREATMENT SYSTEM
- SOAP/CHEMICAL DISPENSER SYSTEM COMMERCIAL WASHER

# **APPLICABLE CODES**

THE FOLLOWING PROJECT DESIGN IS BASED ON THE FOLLOWING CODES:

- -2018 INTERNATIONAL BUILDING CODE (IBC)
- -2018 INTERNATIONAL MECHANICAL CODE (IMC)
- -2018 UNIVERSAL PLUMBING CODE (UPC)
- -2018 WASHINGTON STATE ENERGY CODE (WSEC) COMMERCIAL PROVISIONS

ROBISON ENGINEERING, INC 19401 40TH AVE W., SUITE 30: REI PROJECT NO.: 1219-0 CONTACT: JEFF MACGILLIVRAY

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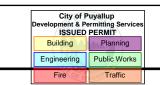
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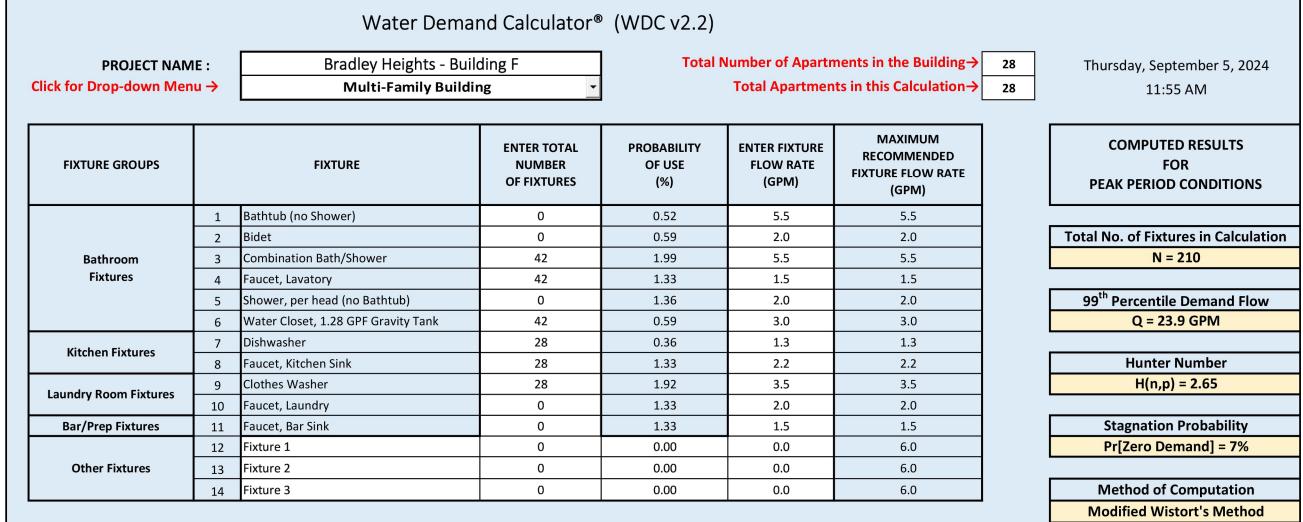
PLUMBING NOTES

AND TABLES

P0F.01

# PLUMBING CALCULATIONS





1. ADD 4 GPM FLOW RATE FOR HOSE BIBBS - TOTAL FLOW IS 27.9 GPM.

CALCULATIONS BASED ON 2018 UPC															
1 Bedroom Units (1 Bath)															
5W5U55		FIXTUI	RE UNITS							# OF FIXTURES	TOTAL QTY		TOTAL F	IXTURE UNITS	<b>I</b>
FIXTURE	TOTAL	CW	HW	W/V	В	1	2	3	R	PER UNIT	OF FIXTURES	SERVICE	CW ONLY	HW ONLY	W/V ONLY
WATER CLOSET	2.5	2.5	0	3	2	4	4	4	0	1	14	35	35	0	42
LAVATORY	1	0.75	0.75	1	2	4	4	4	0	1	14	14	10.5	10.5	14
BATHTUB	4	3	3	2	2	4	4	4	0	1	14	56	42	42	28
CLOTHES WASHER	4	3	3	3	2	4	4	4	0	1	14	56	42	42	42
KITCHEN SINK W/ DISHWASHER	3	2.25	2.25	2	2	4	4	4	0	1	14	42	31.5	31.5	28
											TOTAL:	203	161	126	154
2 Bedroom Unit (2 Bath)															
FIXTURE		FIXTUI	RE UNITS		В	1	2	3	R	# OF FIXTURES	TOTAL QTY		TOTAL F	IXTURE UNITS	
TIXTUNE	TOTAL	CW	HW	W/V	_ B			,	11	PER UNIT	OF FIXTURES	SERVICE	CW ONLY	HW ONLY	W/V ONLY
WATER CLOSET	2.5	2.5	0	3	2	4	4	4	0	2	28	70	70	0	84
LAVATORY	1	0.75	0.75	1	2	4	4	4	0	2	28	28	21	21	28
BATHTUB	4	3	3	2	2	4	4	4	0	2	28	112	84	84	56
CLOTHES WASHER	4	3	3	3	2	4	4	4	0	1	14	56	42	42	42
KITCHEN SINK W/ DISHWASHER	3	2.25	2.25	2	2	4	4	4	0	1	14	42	31.5	31.5	28
											TOTAL:	308	248.5	178.5	238
Public Fixtures															
FIXTURE		FIXTUI	RE UNITS		В	1	2	3	R		TOTAL QTY		TOTAL F	IXTURE UNITS	
	TOTAL	CW	HW	W/V							OF FIXTURES	SERVICE	CW ONLY	HW ONLY	W/V ONLY
HOSE BIB	2.5/1	2.5/1	0	0	2	0	0	0	0		2	3.5	3.5	0	0
4" FLOOR DRAIN	0	0	0	8	1	0	0	0	0		1	0	0	0	8
											TOTAL:	3.5	3.5	0	8
		•	•	•		•									
	TOTAL	CW	HW	W/V											
TOTAL FIXTURE UNITS:	514.5	413	304.5	400											
PEAK FLOW:	FOR SUPPLY	USE APPENDIX	K M CALCULAT	IONS											
	SUPPLY	WASTE													
REQUIRED SERVICE SIZE IN BUILDING:	2"	6"													
REQUIRED METER SIZE:	1"														

BRADLEY HEIGHTS APARTMENTS - WATER SUPP		RE
CALCULATIONS ARE BASED ON 2018 UPC AP FROM STREET TO RPBP	PENDIX A	
STREET PRESSURE, PSI		75
MINIMUM STREET PRESSURE, PSI		75
ASSUME +/- 5 PSI FLUCTUATION		
EQUIPMENT LOSSES, PSI		
WATER METER LOSS		4
BACKFLOW PREVENTER		10
SITE SERVICE LINE (ESTIMATE)		
PIPING SYSTEM LENGTH, FEET	50	
FITTING ALLOWANCE, FEET	12.5	
FROM STREET TO RPBP		
ZONE FRICTION LOSS FACTOR, PSI/100'	3.0	
TOTAL ZONE FRICTION LOSS, PSI		1.88
MINIMUM PRESSURE AT RPBP, PSI		59.13
FROM RPBP TO FURTHEST APARTMENT	UNIT	
MINIMUM PRESSURE AT END PREVIOUS ZONE, PSI		59.1
EQUIPMENT LOSSES, PSI		
THERMOSTATIC MIXING VALVE LOSS		4
STATIC HEAD, PSI		
TOTAL ELEVATION GAIN, FT	30	13.0
PIPING FRICTION LOSSES		
PIPING SYSTEM LENGTH, FEET	150	
FITTING ALLOWANCE, FEET	22.5	
ZONE FRICTION LOSS FACTOR, PSI/100'	3.0	
TOTAL ZONE FRICTION LOSS, PSI		5.175
MINIMUM PRESSURE AT FURTHEST APARTMENT UNIT, PSI		37.0
FROM FURTHEST APARTMENT UNIT TO FURTHE	ST FIXTURE	<b>E</b>
MINIMUM PRESSURE AT FURTHEST APARTMENT UNIT, PSI		37.0
PIPING FRICTION LOSSES		
RISER TO MANIFOLD, FEET	4	
FITTING ALLOWANCE, FEET	6	
FROM MANIFOLD TO FURTHEST FIXTURE	35	
ZONE FRICTION LOSS FACTOR, PSI/100'	14.0	
TOTAL ZONE FRICTION LOSS, PSI		6.3
MINIMUM PRESSURE AT FURTHEST FIXTURE, PSI		30.7





PRMU20240281

BRADLEY HEIGHT APARTMENTS - BUILDING F 202 27TH AVE SE PUYALLUP, WA 98374

CALCULATIONS

P0F.02

# PLUMBING SCHEDULES

City of Puyallup Development & Permitting Services ISSUED PERMIT				
Building	Planning			
Engineering	Public Works			
Fire	Traffic			

PIPE MATERIALS					
PIPE TYPE MATERIAL JOINT					
WATER DISTRIBUTION PIPING	COPPER, TYPE L.	SOLDERED	2		
APARTMENT WATER PIPING	PEX-A	EXPANSION OR PUSH-FIT FITTINGS	2		
WASTE AND VENT PIPING	SCHEDULE 40 SOLID CORE PVC	SOLVENT CEMENT	1,3		
CONDENSATE DRAIN PIPING	COPPER, TYPE M.	SOLDERED OR PROPRESS FITTINGS			

- 1. ALL SANITARY SYSTEM MATERIALS SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
- PROVIDE THERMAL EXPANSION LOOPS FOR ALL WATER PIPING IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.
- 3. PROVIDE CAST IRON PIPING FOR WASTE DISCHARGE EXCEEDING 110 DEGREES FAHRENHEIT.

PIPE	PIPE SIZING SCHEDULE - COPPER TYPE L AT 3.0 PSI/100 FEET							
	C	OLD WATER, FLUSH	TANK		HOT WATER			
PIPE SIZE	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS		
1/2"	0.8	1.8	2.4	1.0	2.0	2.8		
3/4"	5.5	4.7	3.1	6.5	5.5	3.6		
1"	12.8	9.8	3.8	15.2	11.2	4.4		
1-1/4"	25.5	17.3	4.4	29.3	19.6	5.0		
1-1/2"	46.6	27.7	5.0	46.8	27.7	5.0		
2"	166.0	58.2	6.0	116.9	48.2	5.0		
2-1/2"	395.0	104.0	7.0	246.9	74.4	5.0		
3"	735.1	167.3	7.9	405.8	106.2	5.0		
4"	1782.4	303.2	8.0	872.0	189.5	5.0		
6"	6381.3	669.1	8.0	2847.0	418.2	5.0		

PIPE SIZING SCHEDULE - PEX AT 14.0 PSI/100 FEET							
	СО	LD WATER, FLUSH TA	ANK		HOT WATER		
PIPE SIZE	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	FIXTURE UNITS	FLOW, GPM	VELOCITY, FPS	
1/2"	1.9	2.9	5.3	3.4	3.4	6.2	
3/4"	9.0	7.5	6.8	11.2	8.6	7.8	
1"	21.2	14.7	8.1	20.9	14.6	8.0	
1-1/4"	40.8	25.3	9.3	33.5	21.8	8.0	
1-1/2"	76.3	37.9	10.0	53.3	30.3	8.0	
2"	199.8	65.0	10.0	134.8	52.0	8.0	
2-1/2"	369.5	98.9	10.0	270.6	79.1	8.0	
3"	588.9	141.0	10.0	439.0	112.8	8.0	

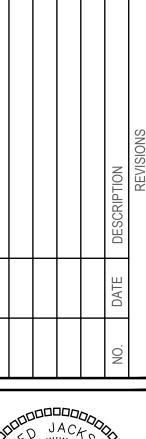
ELECTRIC WATER HEATER													
EQUIP NO.	SERVICE	GPH RECOVERY	STORAGE IN	RY STORAGE	RECOVERY STORAGE II	ORAGE INLET/OUTLET (	DRAGE INLET/OUTLET OPERATING WEIGHT	INLET/OUTLET OPERATING WEIGHT		ELECTRICAL	_	BASIS OF DESIGN	NOTES
EQUIP NO.	SER VICE	AT 100°F TR	(GAL)	AL) CONNECTION (LBS) VOLTAGE		AMPS	HEATER KW	DASIS OF DESIGN	NOTES				
WH-1	APARTMENTS	16	50	3/4"	550	208V/3P	18.75	4.5	BRADFORD WHITE RE250T6-1NCWW	1,2,3,4,5			

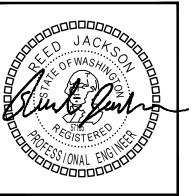
- 1 PROVIDE CONDENSATE NEUTRALIZER. VENT PER MANUFACTURER'S INSTRUCTIONS.
  2. FOR WATER HEATER PIPING SEE DETAIL 2/P7F.00.

  - 3. UNITS SHALL BE CERTIFIED IN THE AIR QUALITY MANAGEMENT DISTRICT HAVING JURISDICTION.
  - 4. FACTORY AUTHORIZED START-UP AND OWNERS TRAINING REQUIRED. OWNER, ENGINEER, AND CONTRACTOR TO RECEIVE A COPY OF START UP REPORT.
  - 5. ALL DOMESTIC WATER EQUIPMENT SHALL BE NSF-61 LISTED.

EXPANSION TANK									
EQUIP SERVICE		CAPACITY PRE-CHARGE PRESSURE,		TANK SIZE		OPERATING WEIGHT,	BASIS OF	NOTES	
NO.	NO. SERVICE	GAL. PSI	DIAMETER	HEIGHT	LBS	DESIGN	NOTES		
ET-1	DOMESTIC HOT WATER	4.5	50	11	15	9	THERM-X-TROL ST-12	1	

1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS



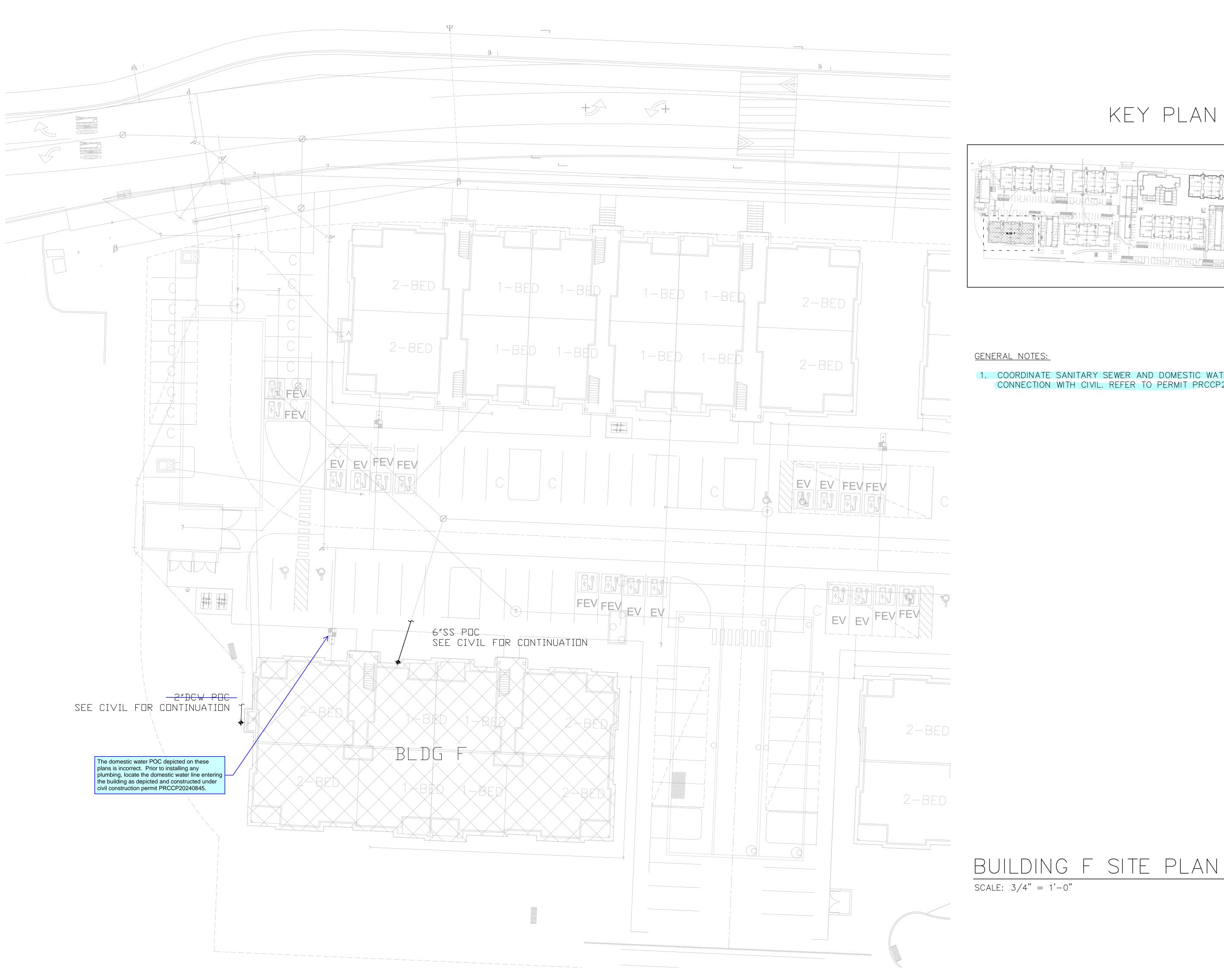




5	MC	RJ	JR	
	DESIGNED:	CHECKED:	APPROVED:	

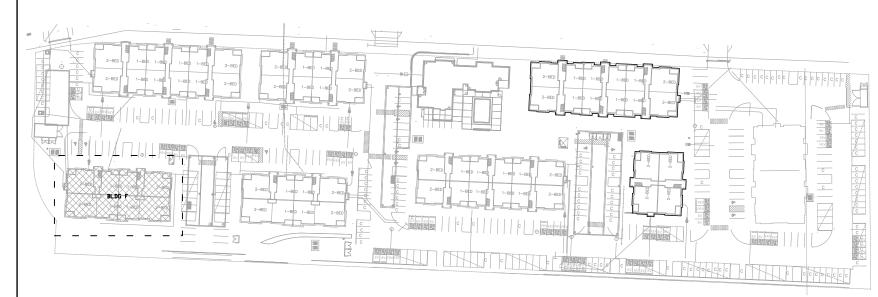
PLUMBING SCHEDULES

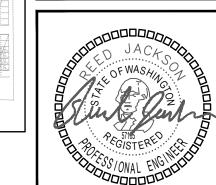
P0F.03





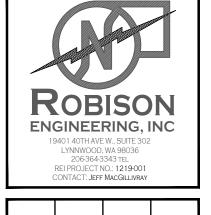
# KEY PLAN





### GENERAL NOTES:

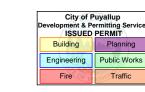
1. COORDINATE SANITARY SEWER AND DOMESTIC WATER POINTS OF CONNECTION WITH CIVIL. REFER TO PERMIT PRCCP20240845.

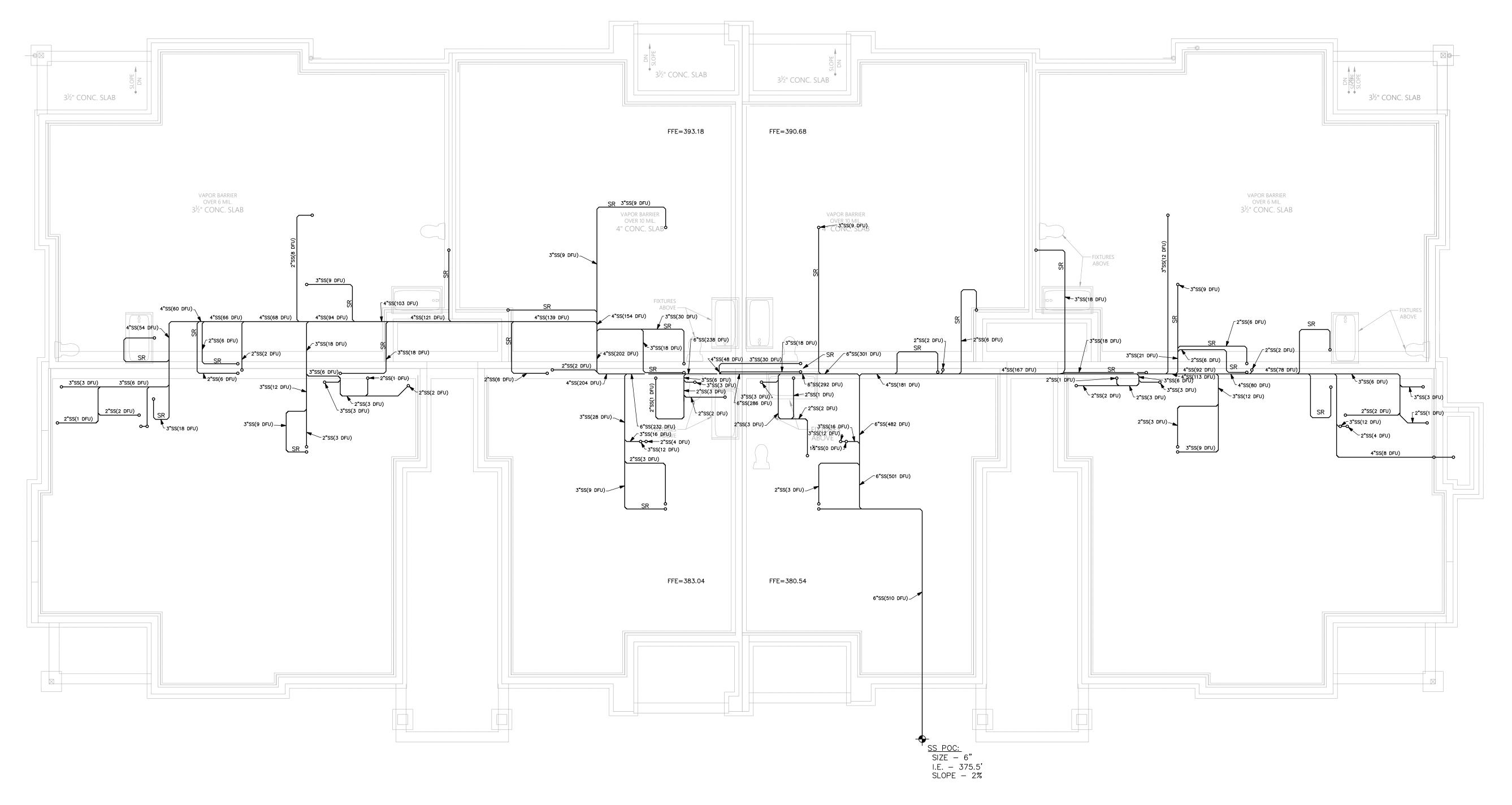


PRMU20240281 HEIGHT APARTMENTS - BUILDING F

04/25/2025

SHEET TITLE: BUILDING F SITE PLAN





- 1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.
- 2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE	SIZE	VERTICAL	HORIZONTAL	VENT
1½"		2 DFU	1 DFU	8 DFU
2"		16 DFU	8 DFU	24 DFU
3"		48 DFU	35 DFU	84 DFU
4"		256 DFU	172 DFU	256 DFU
6"		1,380 DFU	576 DFU	1,380 DFU
8"		3,600 DFU	2,112 DFU	3,600 DFU

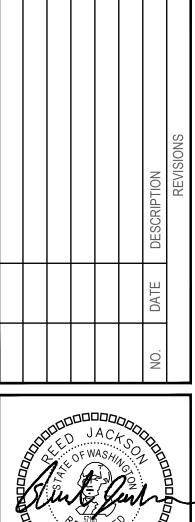
# FLAG NOTES #

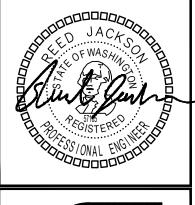
NOT USED

BACKWATER VALVE ANALYSIS — SS POC:

IF UPSTREAM MANHOLE RIM ELEVATION IS HIGHER THAN FINISH FLOOR ELEVATION CONTACT ENGINEER FOR FURTHER EVALUATION.

> UNDERSLAB WASTE & VENT PLAN SCALE: 3/16" = 1-0"







ML	RJ	JR
DESIGNED:	CHECKED:	APPROVED:

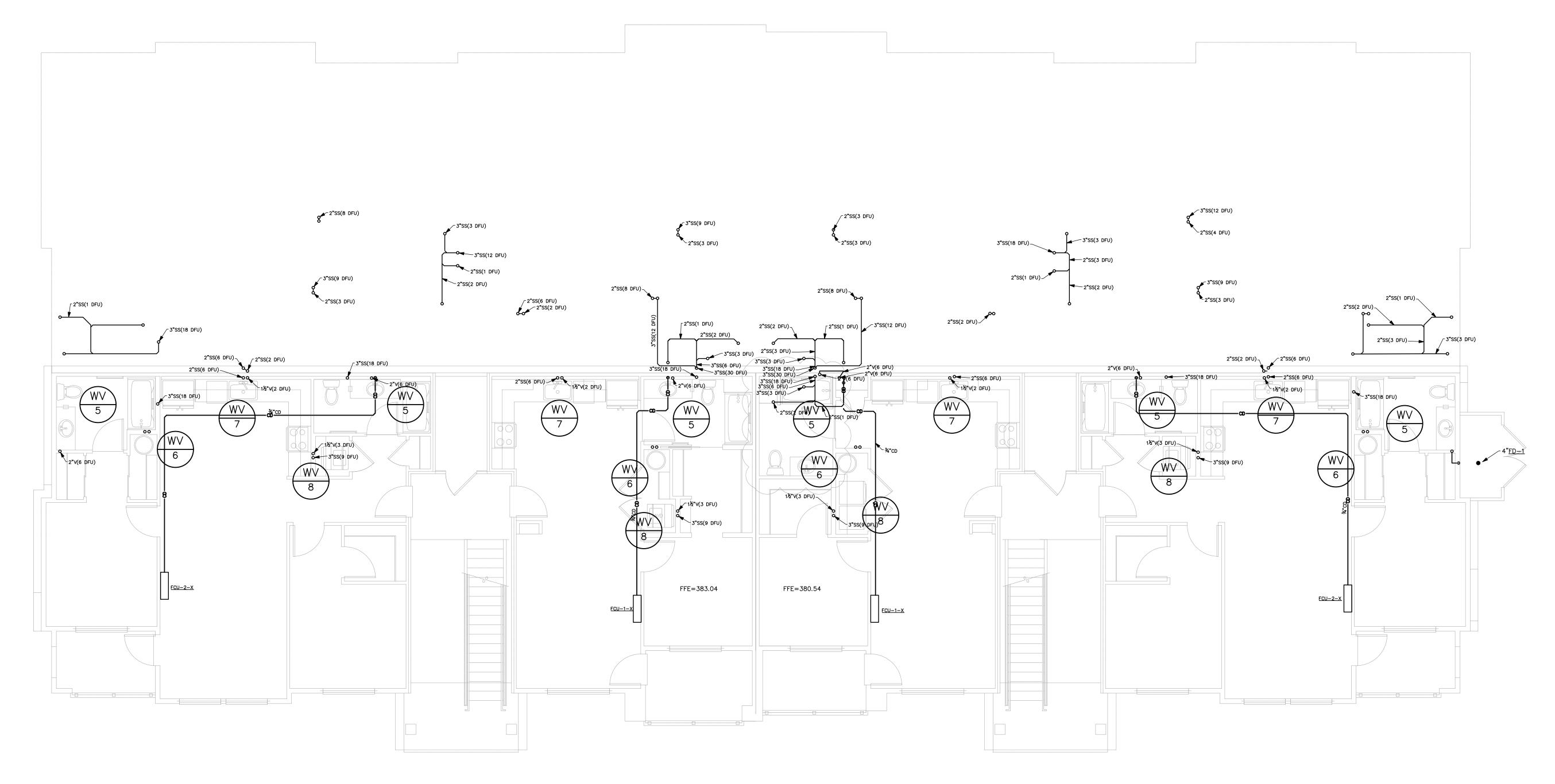
APARTMENTS - BUILDING F

04/25/2025

SHEET TITLE: UNDERSLAB WASTE & VENT PLAN

2





1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.

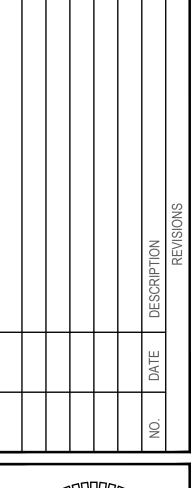
2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

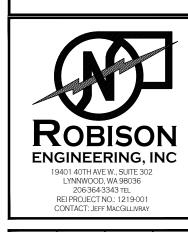
# FLAG NOTES #

NOT USED









ML	RJ	JR
DESIGNED:	CHECKED:	APPROVED:

PRMU20240281

APARTMENTS - BUILDING F

19401 4OTH AVE W. SUITE 302 LYNNWOOD, WA 98036

PUYALLUP, WA 983
OBISON 194

DATE: 04/25/2025

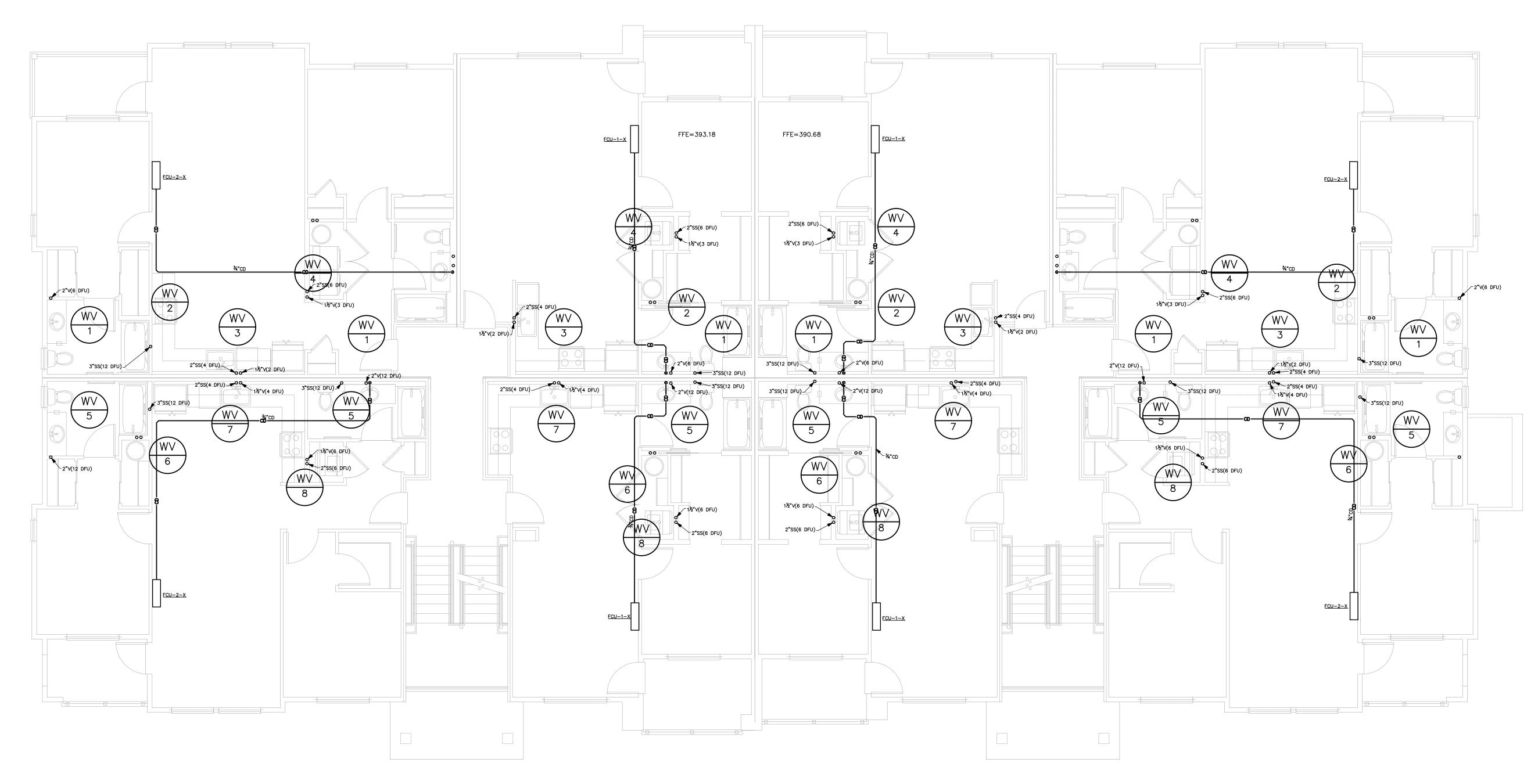
SHEET TITLE:

BASEMENT
WASTE & VENT
PLAN

2

SHEET NO. P2F.01





 $\sqrt{2}$ 

1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.

2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

# FLAG NOTES #

NOT USED



DATE: 04/25/2025

SHEET TITLE:
LEVEL 1 WASTE & VENT PLAN

2

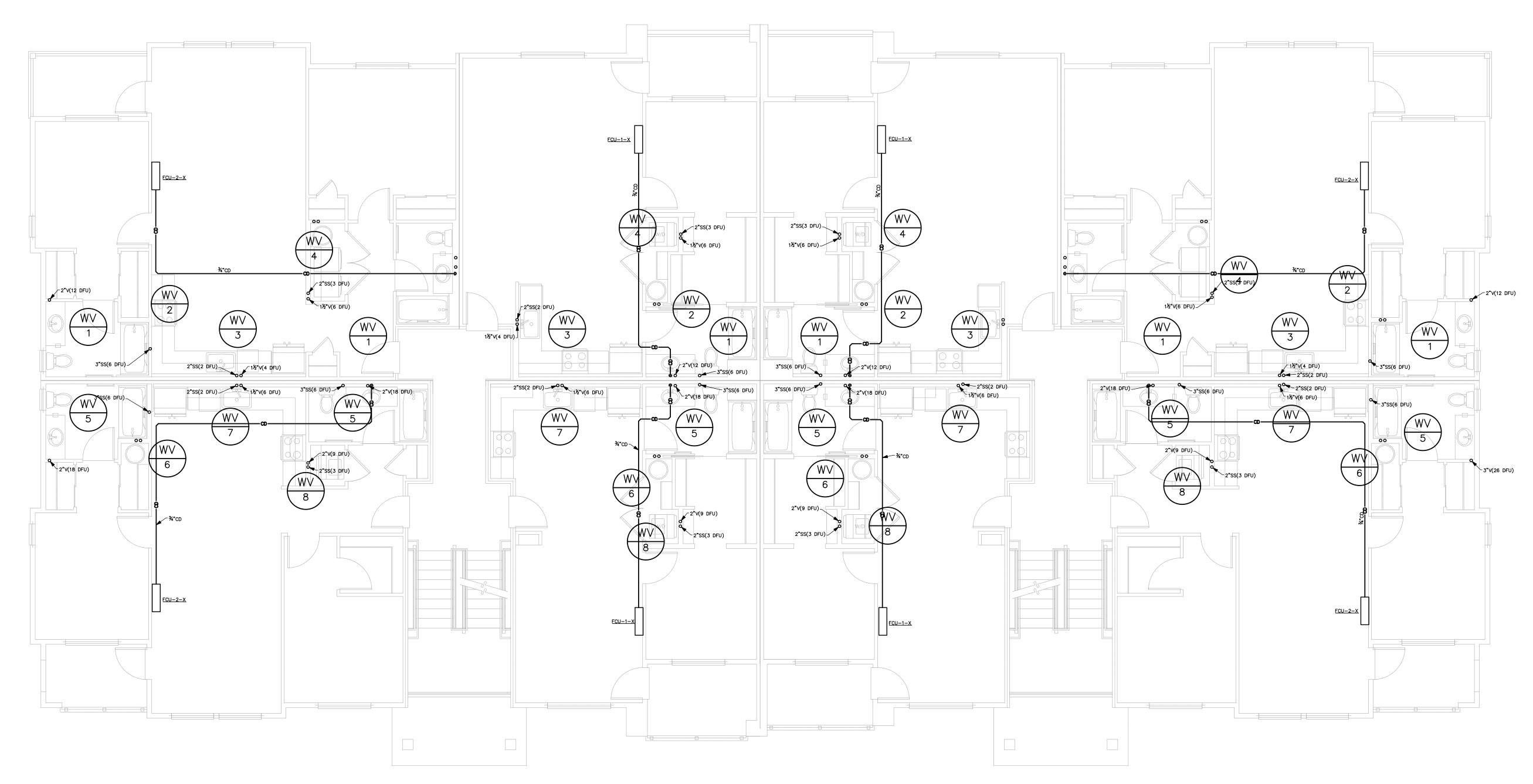
ROBISON ENGINEERING, INC 19401 40TH AVE W. SUITE 302 LYNNWOOD, WA 98036 2063643343 TEL REI PROJECT NO.: 1219001 CONTACT: JEFF MACGILLIVRAY

PRMU20240281

APARTMENTS - BUILDING F

SHEET NO. P2F.02





- 2
- 1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.
- 2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

# FLAG NOTES #

NOT USED

LEVEL 2 WASTE & VENT PLAN

SCALE: 3/16" = 1-'0"



2

SHEET TITLE:
LEVEL 2 WASTE &
VENT PLAN

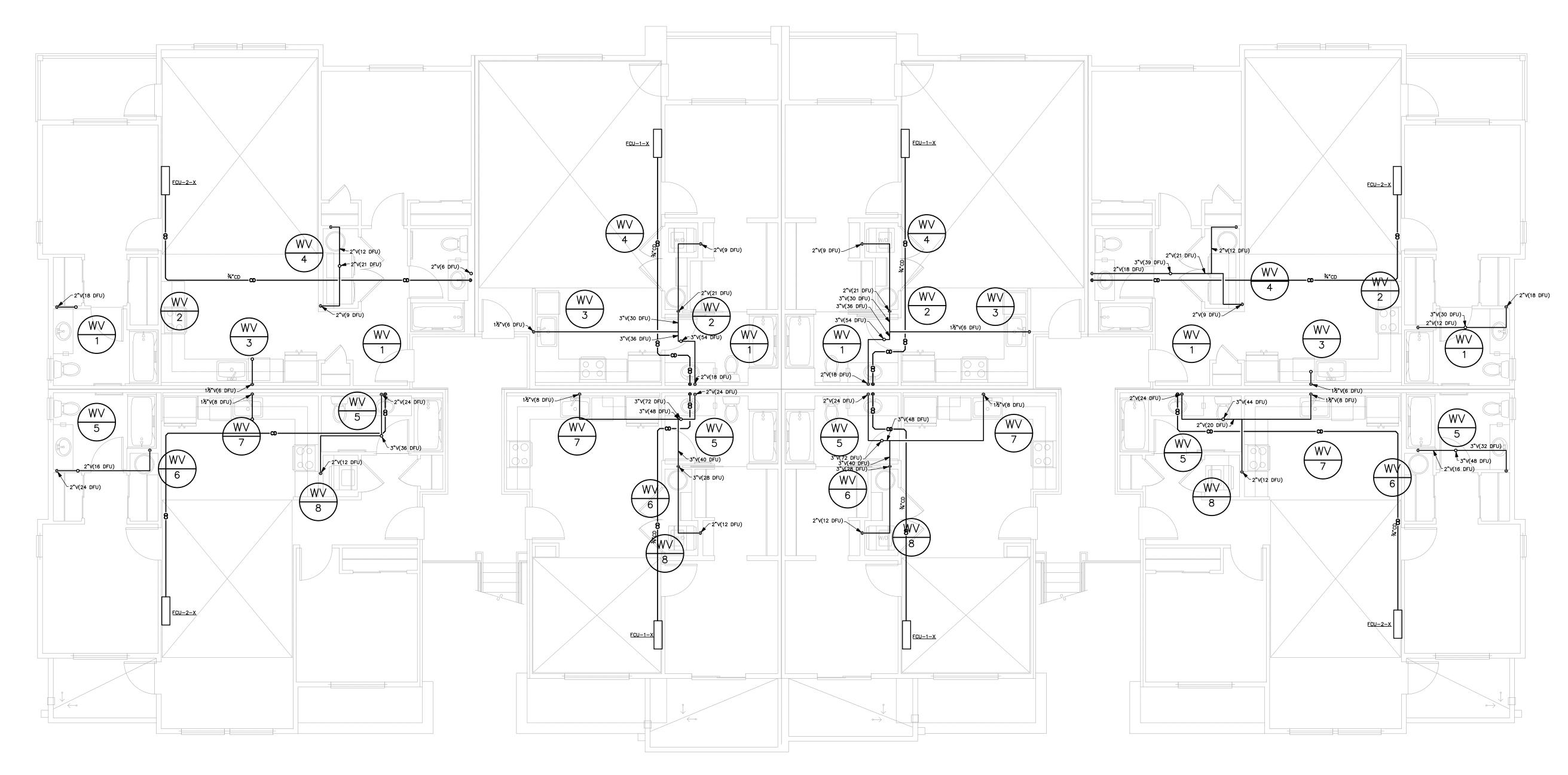
P2F.03

ROBISON ENGINEERING, INC 19401 40TH AVE W., SUITE 302 LYNNWOOD, WA 98036 2063643343 TEL REI PROJECT NO.: 1219001 CONTACT: JEFF MACGILLIVRAY

PRMU20240281

APARTMENTS - BUILDING F





 $\sqrt{2}$ 

1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.

2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

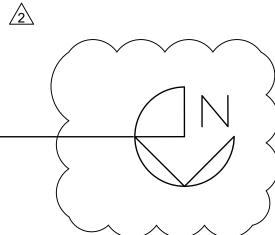
PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

# FLAG NOTES #

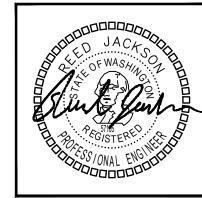
NOT USED

LEVEL 3 WASTE & VENT PLAN

SCALE: 3/16" = 1-'0"



NO. DATE DESCRIPTION
REVISIONS





DESIGNED: JM
CHECKED: RJ
APPROVED: JR

PRMU20240281

DTH AVE W. SUITE 302 NOD, WA 98036

SRADLEY HEIGHT APARTMENTS - BUILDING F 202 27TH AVE SE PUYALLUP, WA 98374

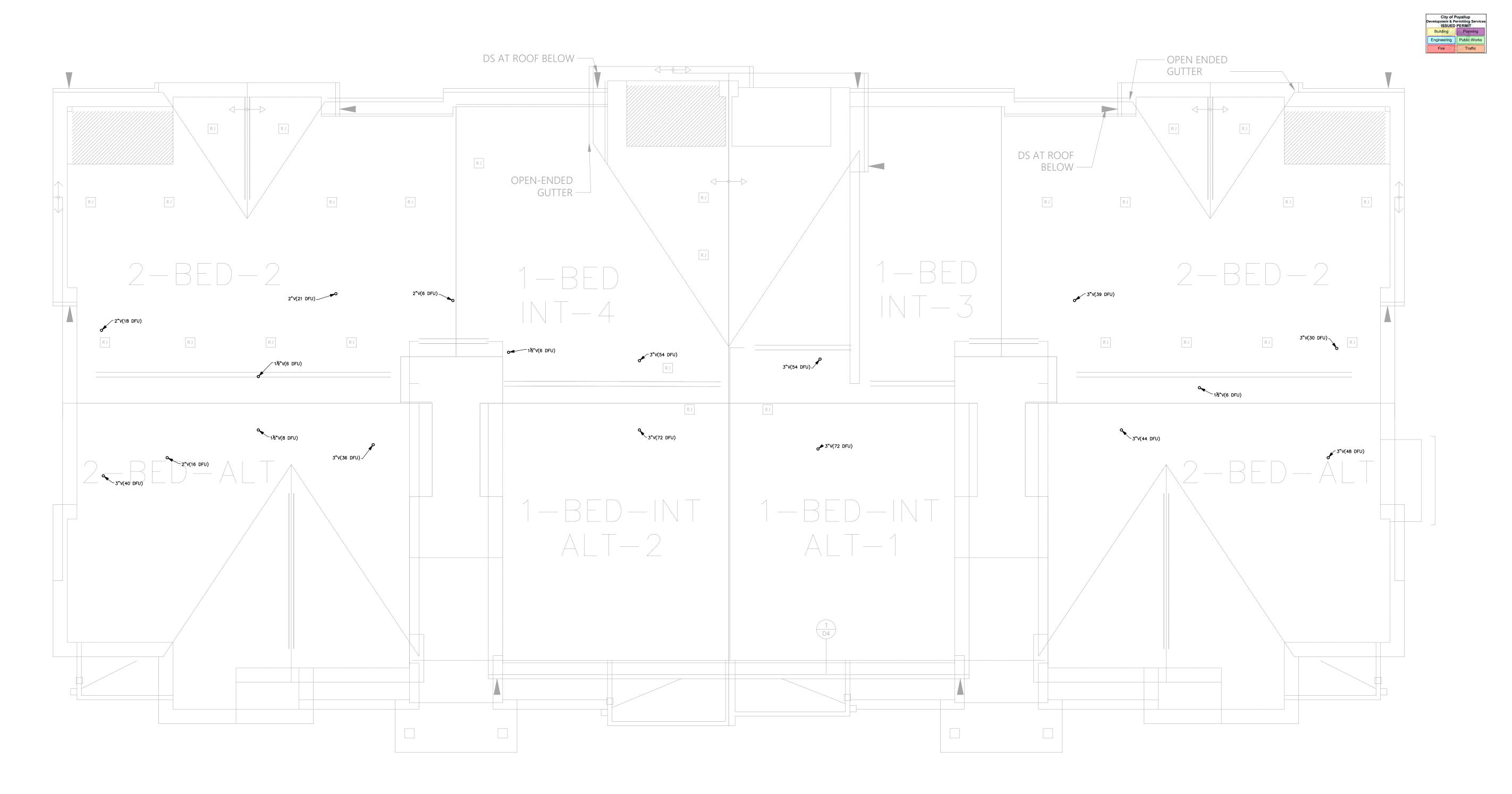
DATE: 04/25/2025

SHEET TITLE:

LEVLE 3 WASTE &

VENT PLAN

SHEET NO. P2F.04

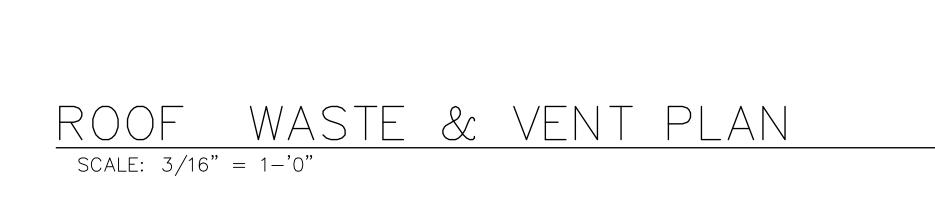


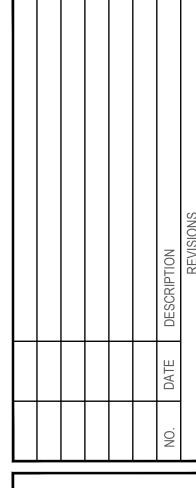
- 1. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS PER 2018 UPC 1007.1. SEE DETAIL 5/P7F.01.
- 2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	VENT
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	172 DFU	256 DFU
6"	1,380 DFU	576 DFU	1,380 DFU
8"	3,600 DFU	2,112 DFU	3,600 DFU

# FLAG NOTES #

NOT USED









DESIGNED: JM
CHECKED: RJ
APPROVED: JR

PRMU20240281

APARTMENTS - BUILDING F

19401 40TH AVE W. SUITE 302 PR LYNNWOOD, WA 98036

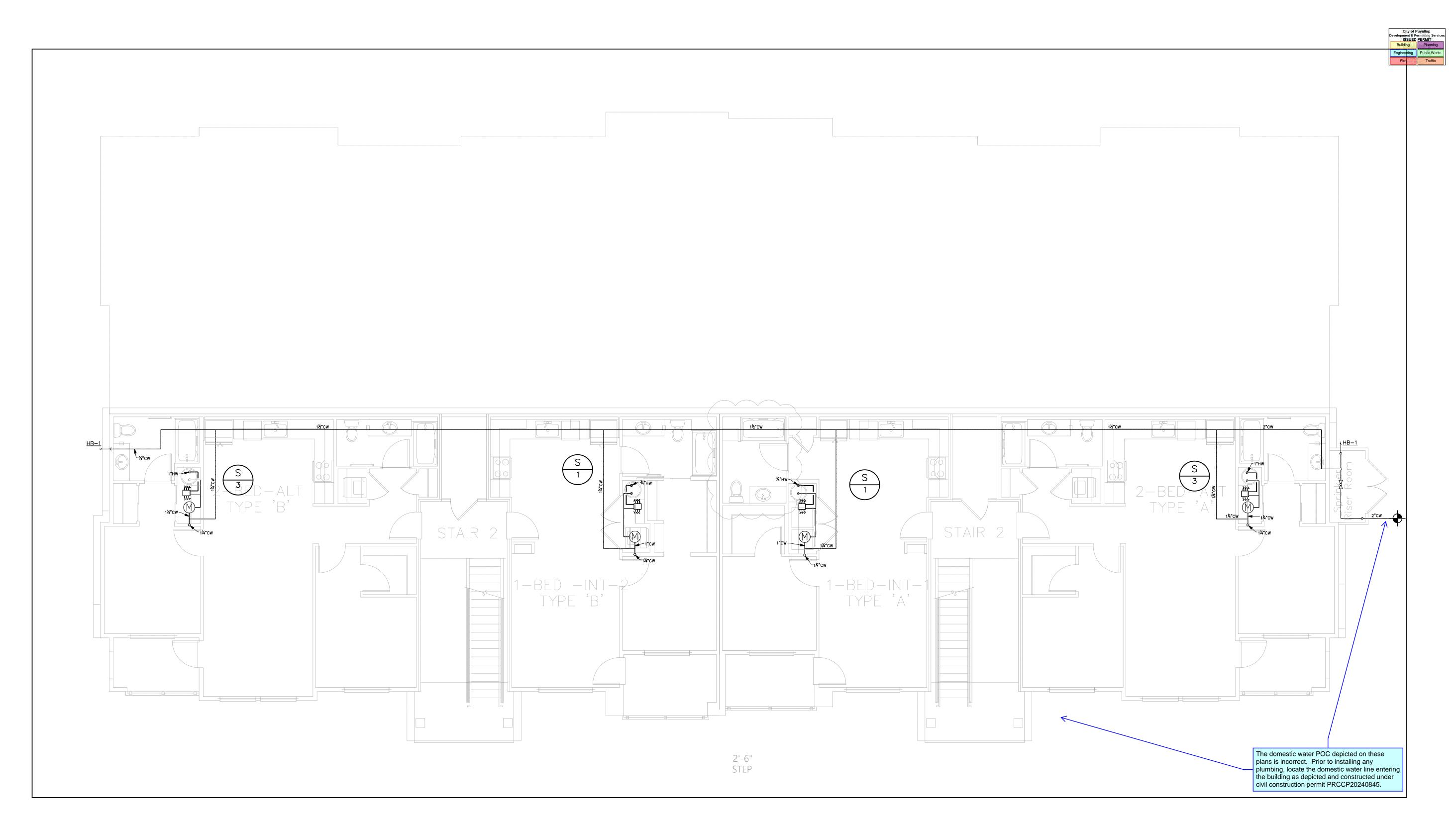
OBISON 19401

DATE: 04/25/2025

SHEET TITLE:
ROOF WASTE &
VENT PLAN

2

P2F.05



1. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS. SEE DETAIL 3/P7F.01.

2. INSTALL HEAT TRACE ON SUPPLY PIPE IN NON CONDITIONED SPACES.

FLAG NOTES #

NOT USED



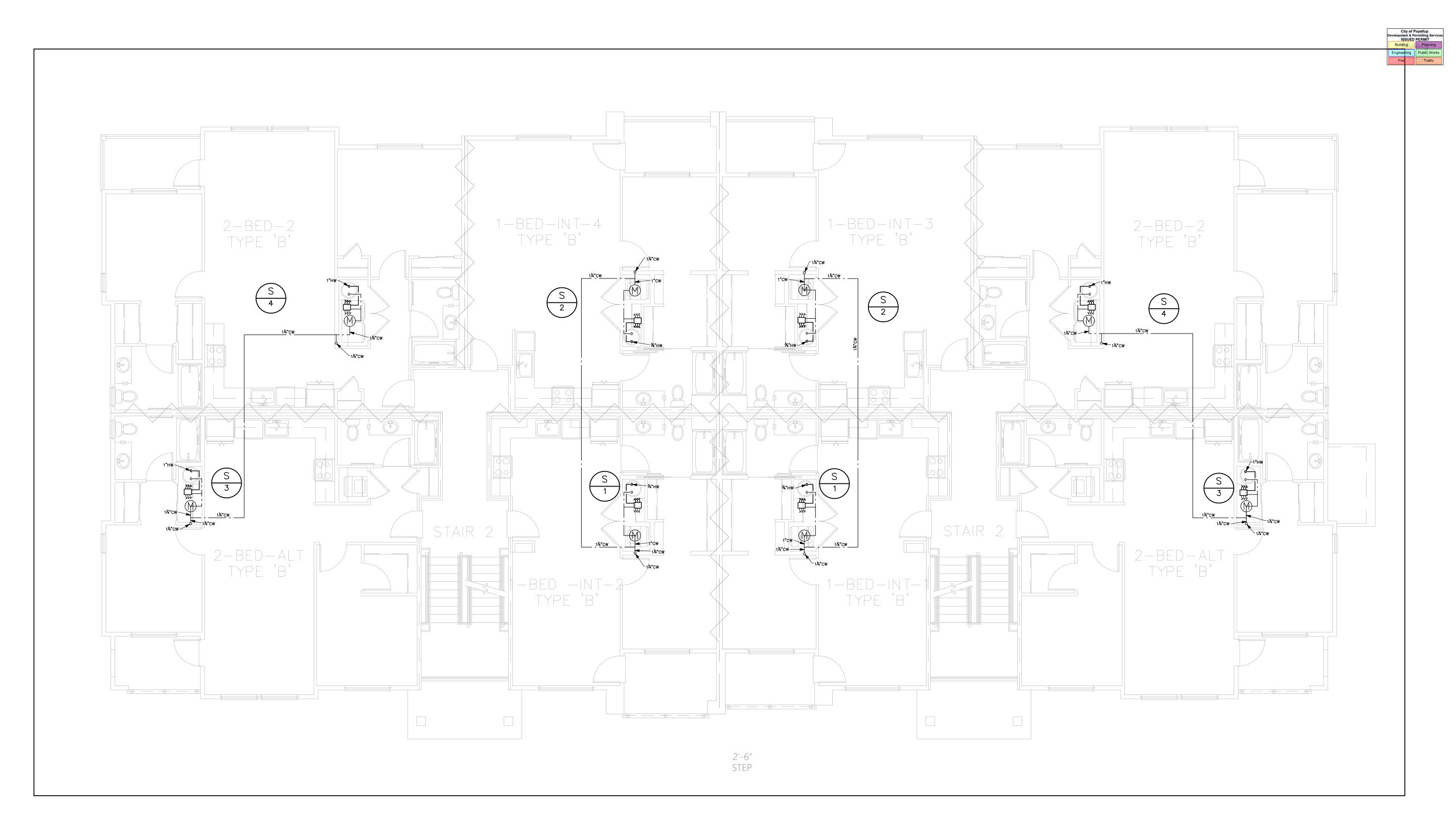




BRADLEY HEIGHT APARTMENTS - BUILDING F 202 27TH AVE SE PUYALLUP, WA 98374

04/25/2025

SHEET TITLE: BASEMENT PLUMBING SUPPLY PLAN



1. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS. SEE DETAIL 3/P7F.01.

2. INSTALL HEAT TRACE ON SUPPLY PIPE IN NON CONDITIONED SPACES.

FLAG NOTES #

NOT USED



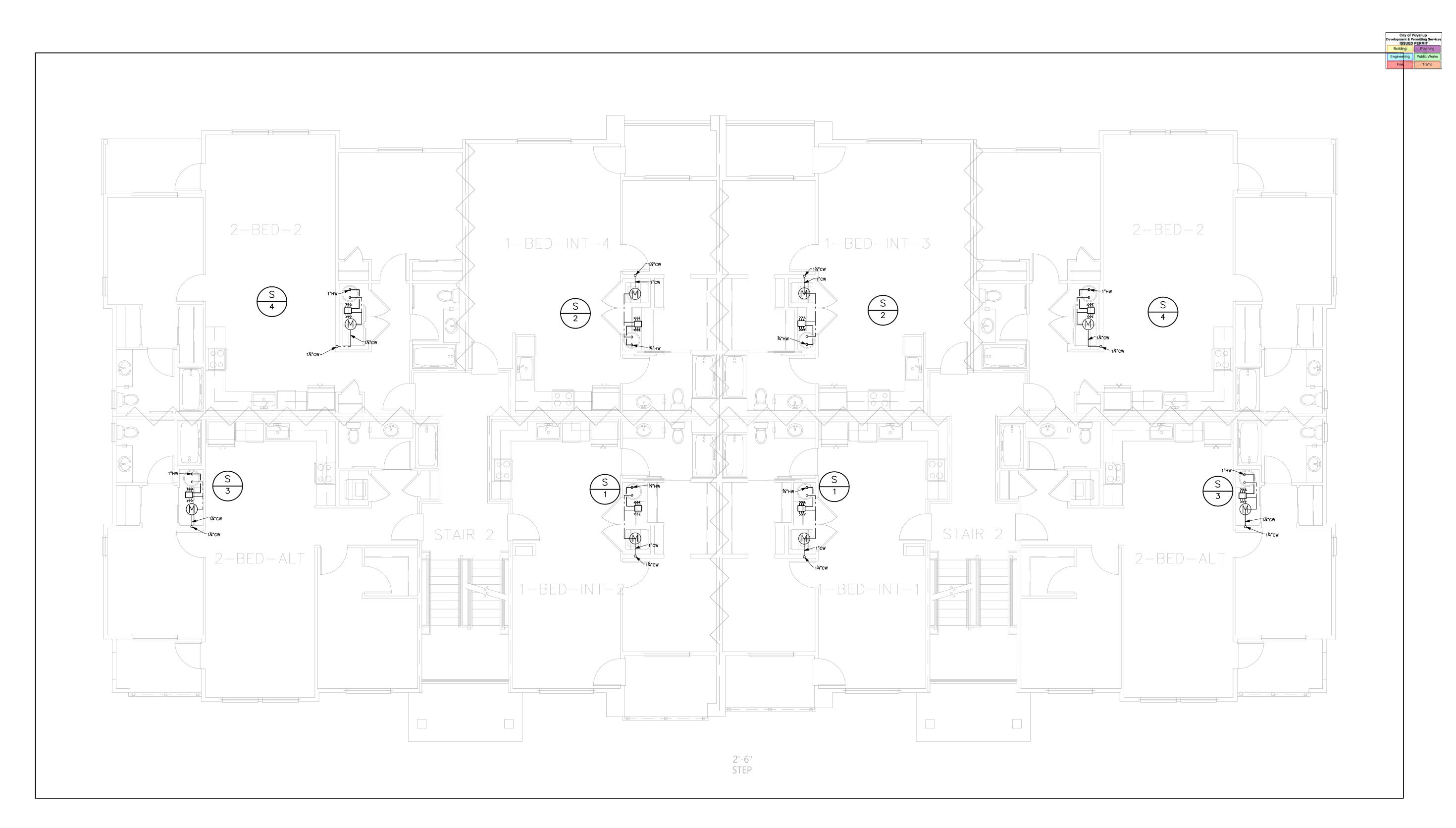




PRMU20240281 APARTMENTS - BUILDING F

04/25/2025

LEVEL 1 PLUMBING SUPPLY PLAN



1. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS. SEE DETAIL 3/P7F.01.

2. INSTALL HEAT TRACE ON SUPPLY PIPE IN NON CONDITIONED SPACES.

FLAG NOTES #

NOT USED

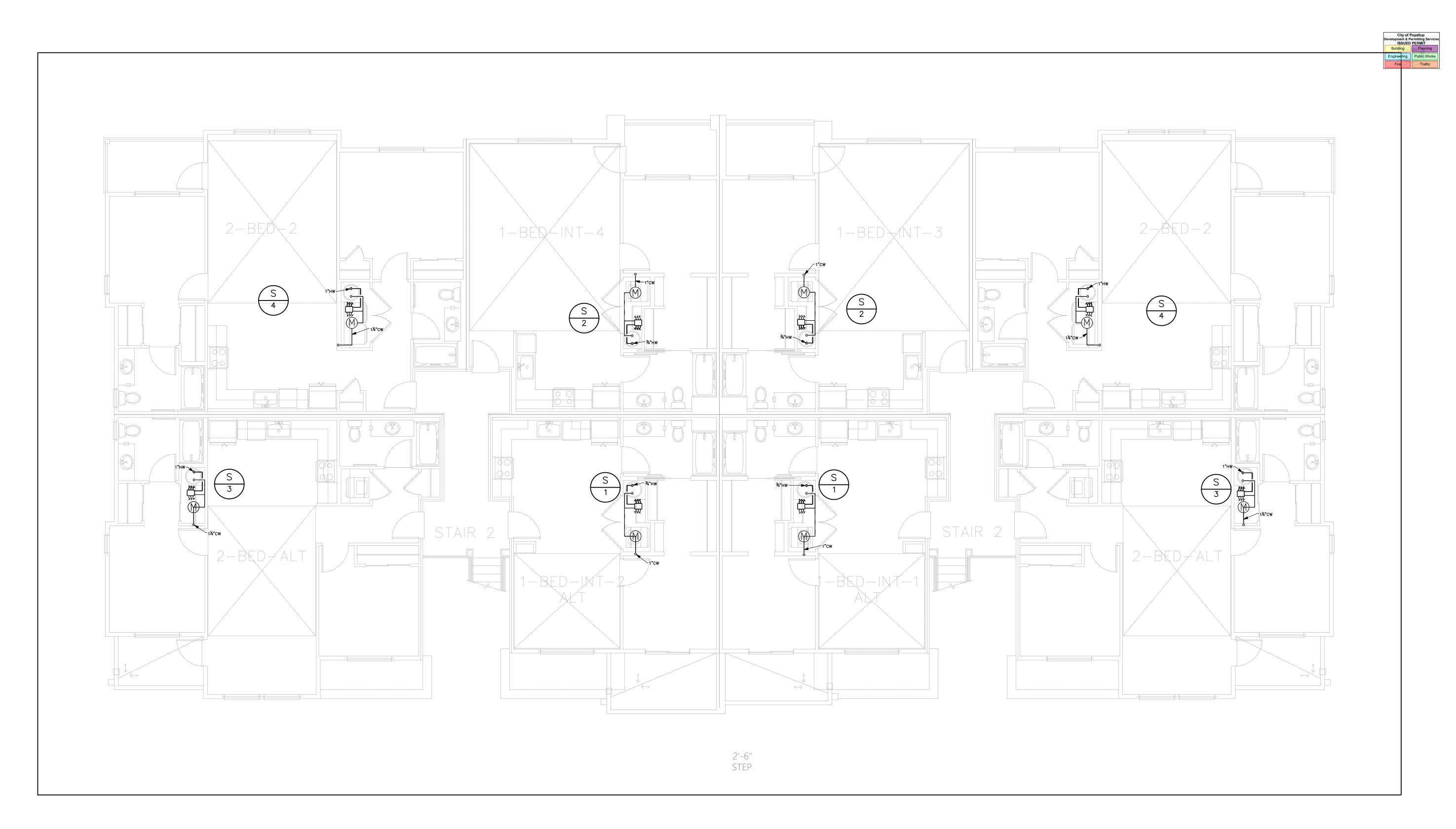






PRMU20240281 BRADLEY HEIGHT APARTMENTS - BUILDING F 202 27TH AVE SE PLIYALLIP WA 98374

LEVEL 2 PLUMBING SUPPLY PLAN



FLAG NOTES #

1. PROVIDE EXPANSION LOOPS FOR ALL WATER PIPING PER THE MANUFACTURER'S INSTRUCTIONS. SEE DETAIL 3/P7F.01.

2. INSTALL HEAT TRACE ON SUPPLY PIPE IN NON CONDITIONED SPACES.

NOT USED







PRMU20240281 APARTMENTS - BUILDING F

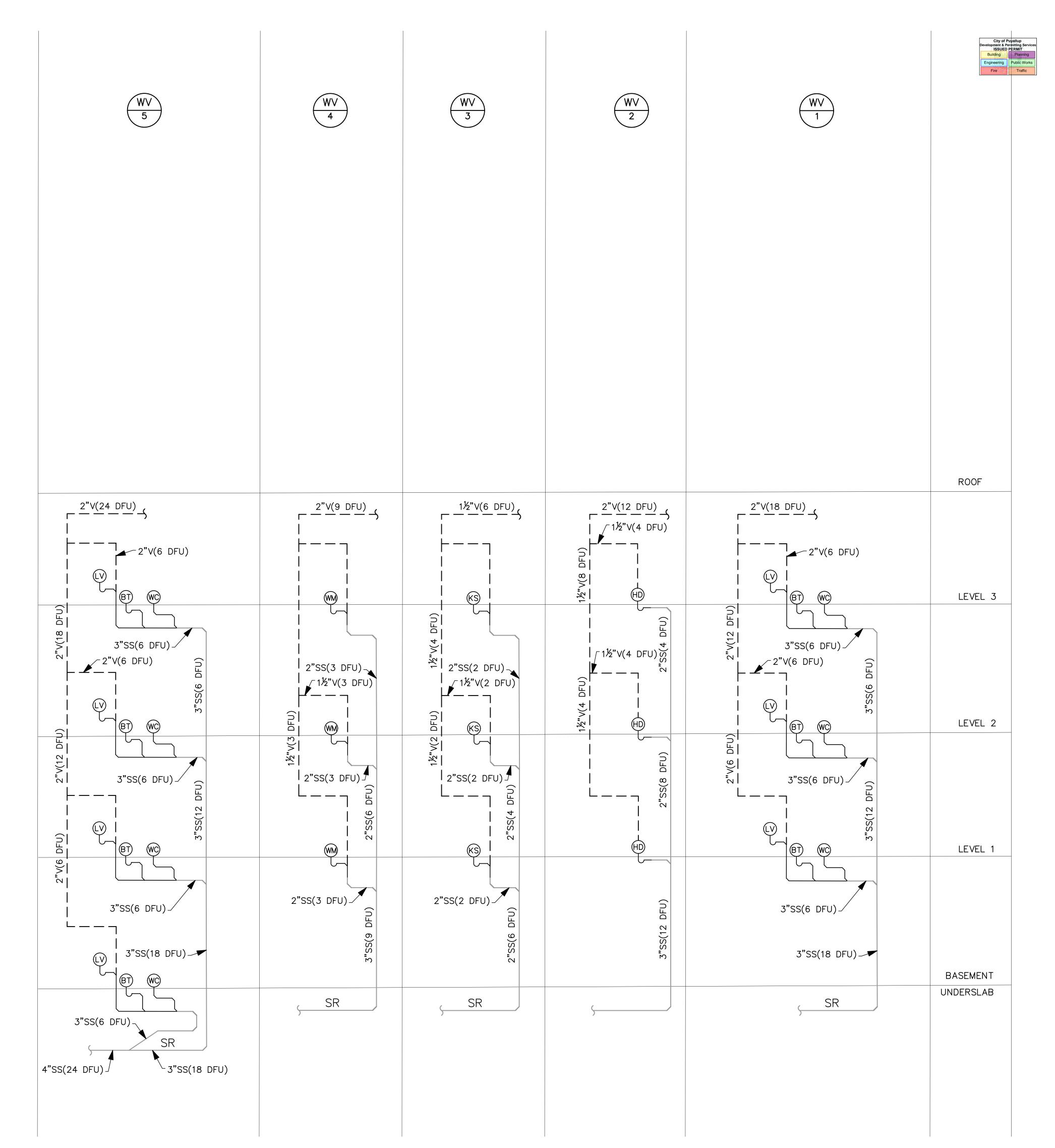
LEVEL 3 PLUMBING SUPPLY PLAN

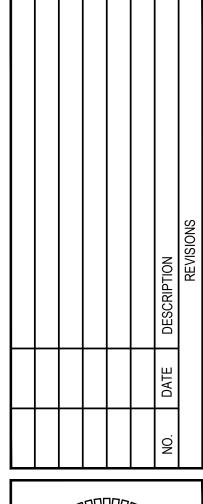


- WASTE & VENT RISER IDENTIFICATION (I.E. RISER "#"). REFER TO P2 SERIES FOR FLOOR PLANS.
- 1. SUD RELIEF PIPING WITH LENGTH OF 8FT WILL BE USED.
- 2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

PIPE SIZE	VERTICAL	HORIZONTAL	<u>VENT</u>
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
<b>3</b> "	48 DFU	35 DFU	84 DFU
4"	256 DFU	216 DFU	256 DFU
6"	1,380 DFU	720 DFU	1,380 DFU
8"	3,600 DFU	2,640 DFU	3,600 DFU

ABBREVIATION LEGEND:	
LV = LAVATORY BT = BATHTUB SH = SHOWER KS = KITCHEN SINK WITH DISHWASHER WM = WASHING MACHINE WC = WATER CLOSET UR = URINAL FD = FLOOR DRAIN FS = FLOOR SINK HD = HUB DRAIN	(1 DFU) (2 DFU) (2 DFU) (2 DFU) (3 DFU) (3 DFU) (2 DFU) (2 DFU) (4 DFU) (4 DFU)









		5
	DESIGNED:	MC
	CHECKED:	ß
)281	APPROVED:	꼾

PRMU20240

BUILDING

BRADLEY HEIGHT APARTMENTS 202 27TH AVE SE PUYALLUP, WA 98374

ROBISON ENGINEERING, INC

DATE: 04/25/2025

SHEET TITLE:

WASTE RISER DIAGRAMS

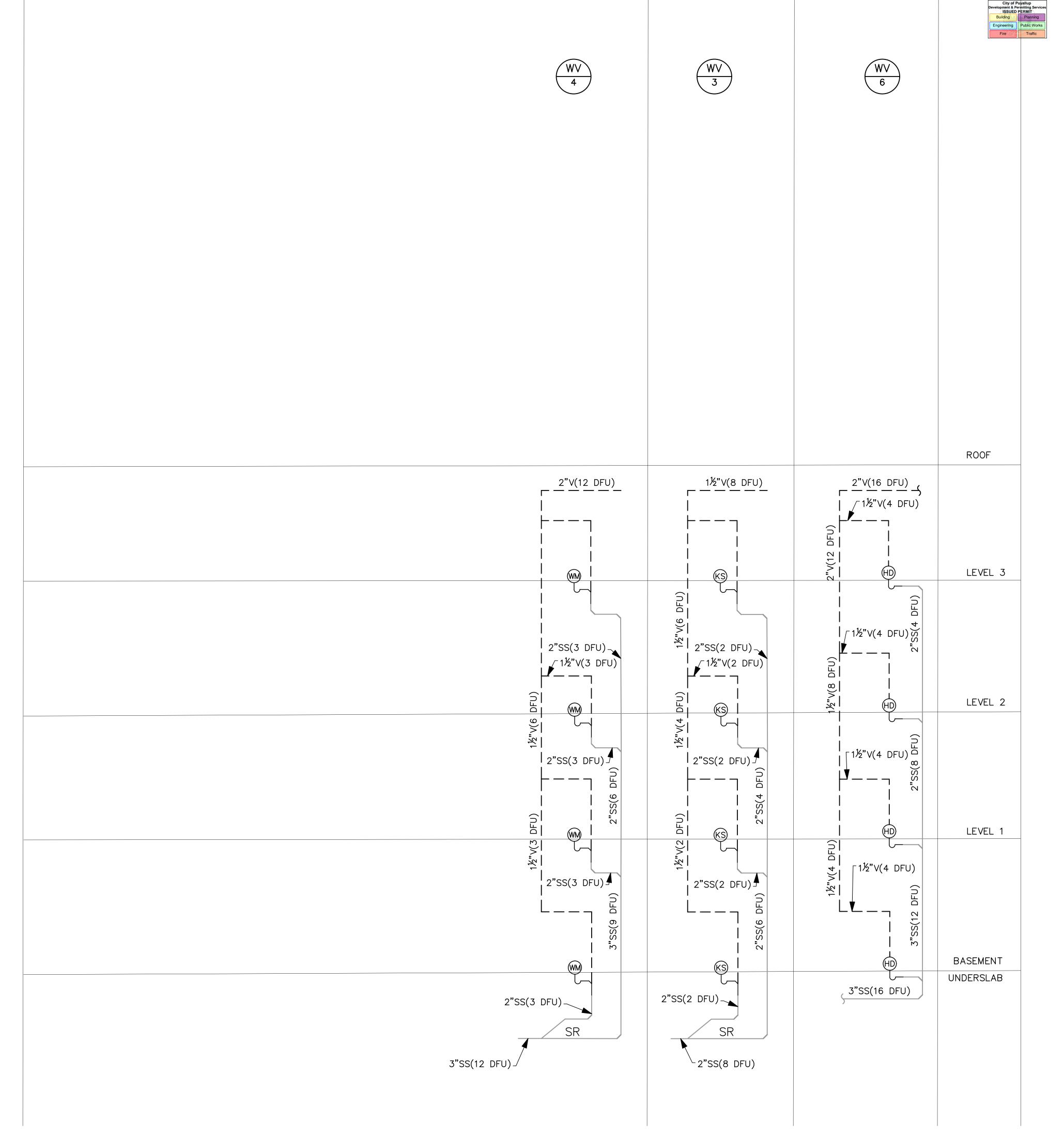
P4F.00

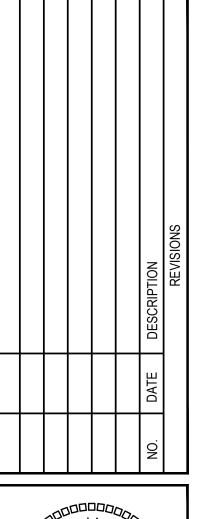


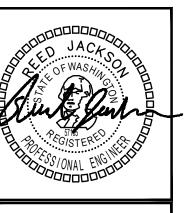
- = WASTE & VENT RISER IDENTIFICATION (I.E. RISER "#"). REFER TO P2 SERIES FOR FLOOR PLANS.
- 1. SUD RELIEF PIPING WITH LENGTH OF 8FT WILL BE USED.
- 2. WASTE & VENT SIZING: WASTE & VENT PIPING IS SIZED PER 2018 UPC TABLE 703.2. DRAINAGE PIPING SHALL BE SLOPED AT 1/4" PER FOOT OR 2%. WHERE IT IS IMPRACTICAL TO OBTAIN A SLOPE OF 2% DUE TO THE DEPTH OF THE STREET SEWER OR TO STRUCTURAL FEATURES OF THE BUILDING, DRAINAGE PIPING 4" AND LARGER MAY BE SLOPED AT 1/8" PER FOOT OR 1% WITH APPROVAL FROM THE AHJ.

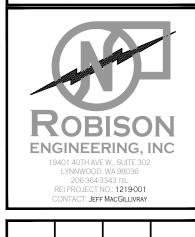
PIPE SIZE	VERTICAL	HORIZONTAL	<u>VENT</u>
1½"	2 DFU	1 DFU	8 DFU
2"	16 DFU	8 DFU	24 DFU
3"	48 DFU	35 DFU	84 DFU
4"	256 DFU	216 DFU	256 DFU
6"	1,380 DFU	720 DFU	1,380 DFU
8"	3,600 DFU	2,640 DFU	3,600 DFU

ABBREVIATION LEGEND:	
LV = LAVATORY BT = BATHTUB SH = SHOWER KS = KITCHEN SINK WITH DISHWASHER WM = WASHING MACHINE WC = WATER CLOSET UR = URINAL FD = FLOOR DRAIN FS = FLOOR SINK HD = HUB DRAIN	(1 DFU) (2 DFU) (2 DFU) (2 DFU) (3 DFU) (3 DFU) (2 DFU) (2 DFU) (4 DFU) (4 DFU)









	DESIGNED: JM
	 CHECKED: RJ
28,	APPROVED: JR

PRMU202402

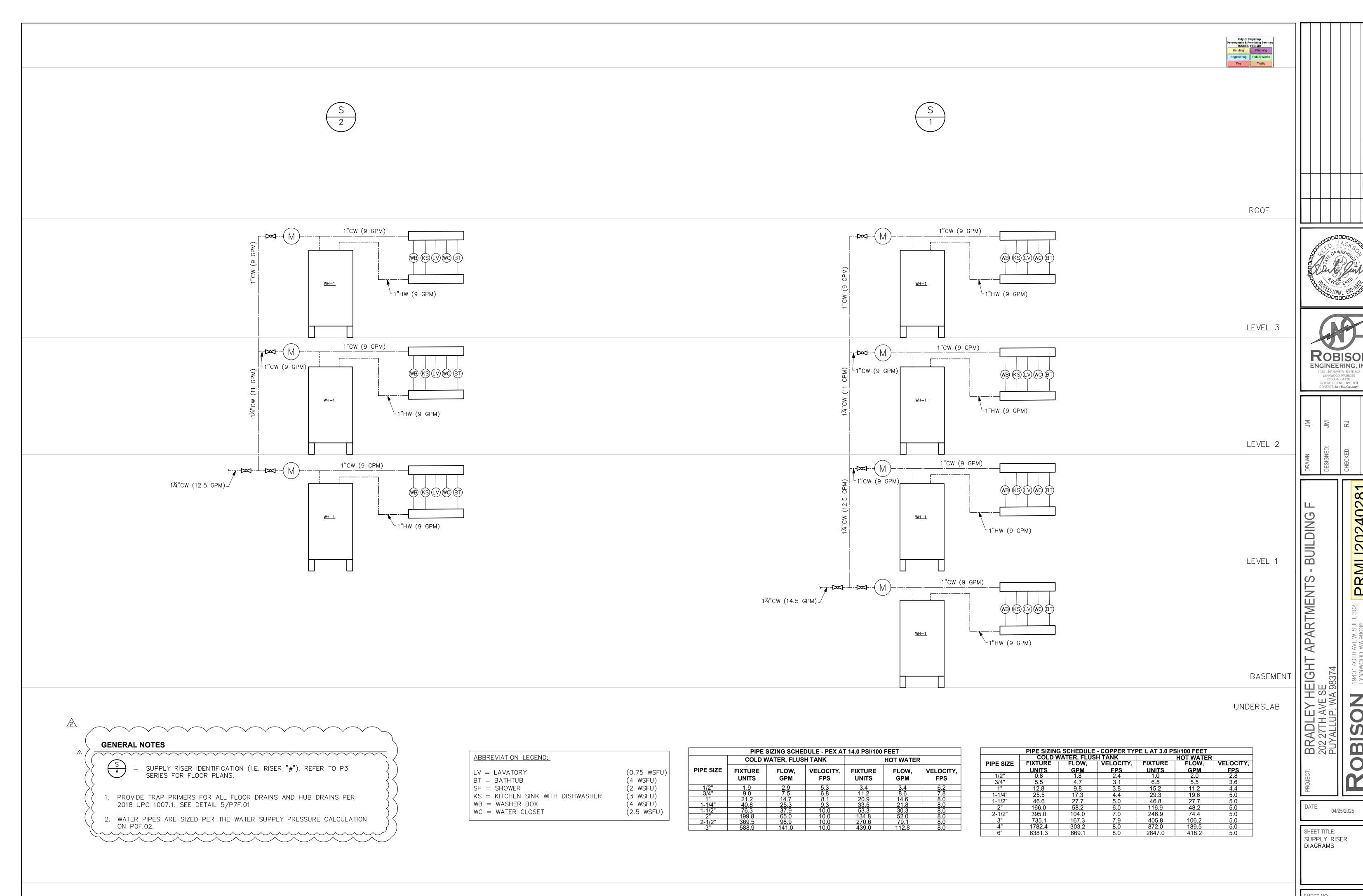
BRADLEY HEIGHT APARTMENTS 202 27TH AVE SE PUYALLUP, WA 98374

04/25/2025

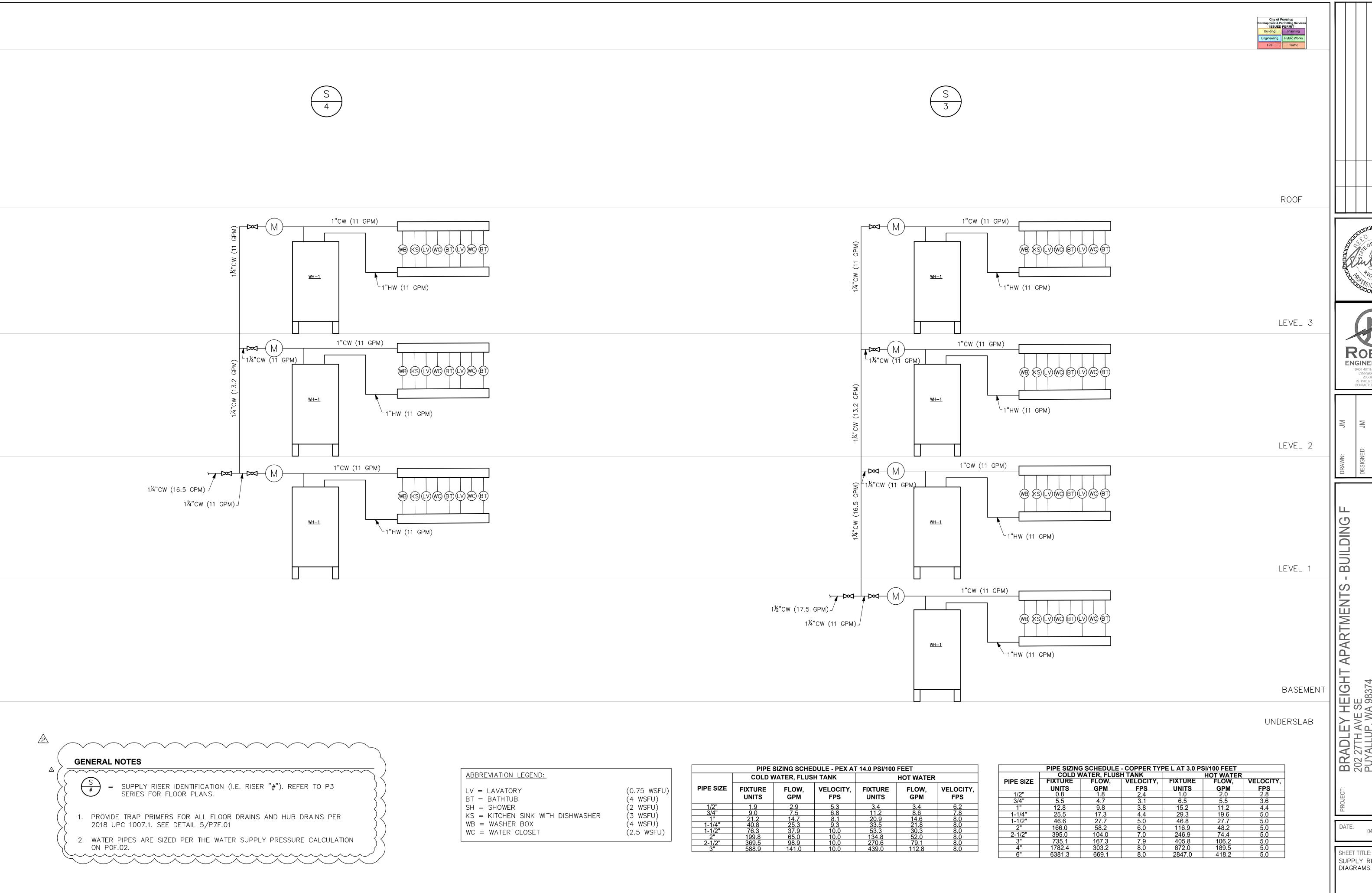
DATE:

SHEET TITLE: WASTE RISER DIAGRAMS

P4F.01



281





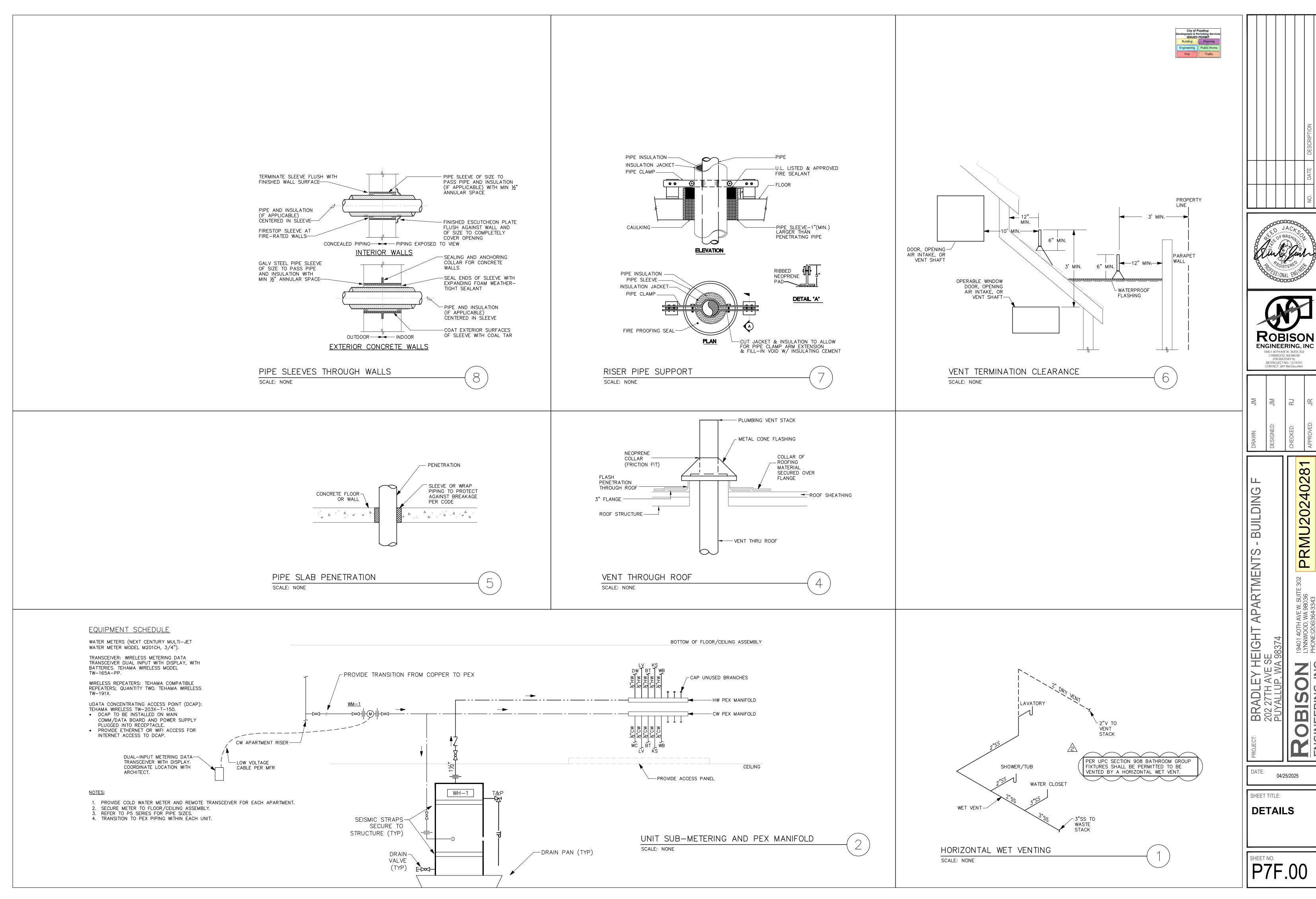


	DRAWN:	$\succeq$
	DESIGNED:	MC
	CHECKED:	RJ
	APPROVED:	JR

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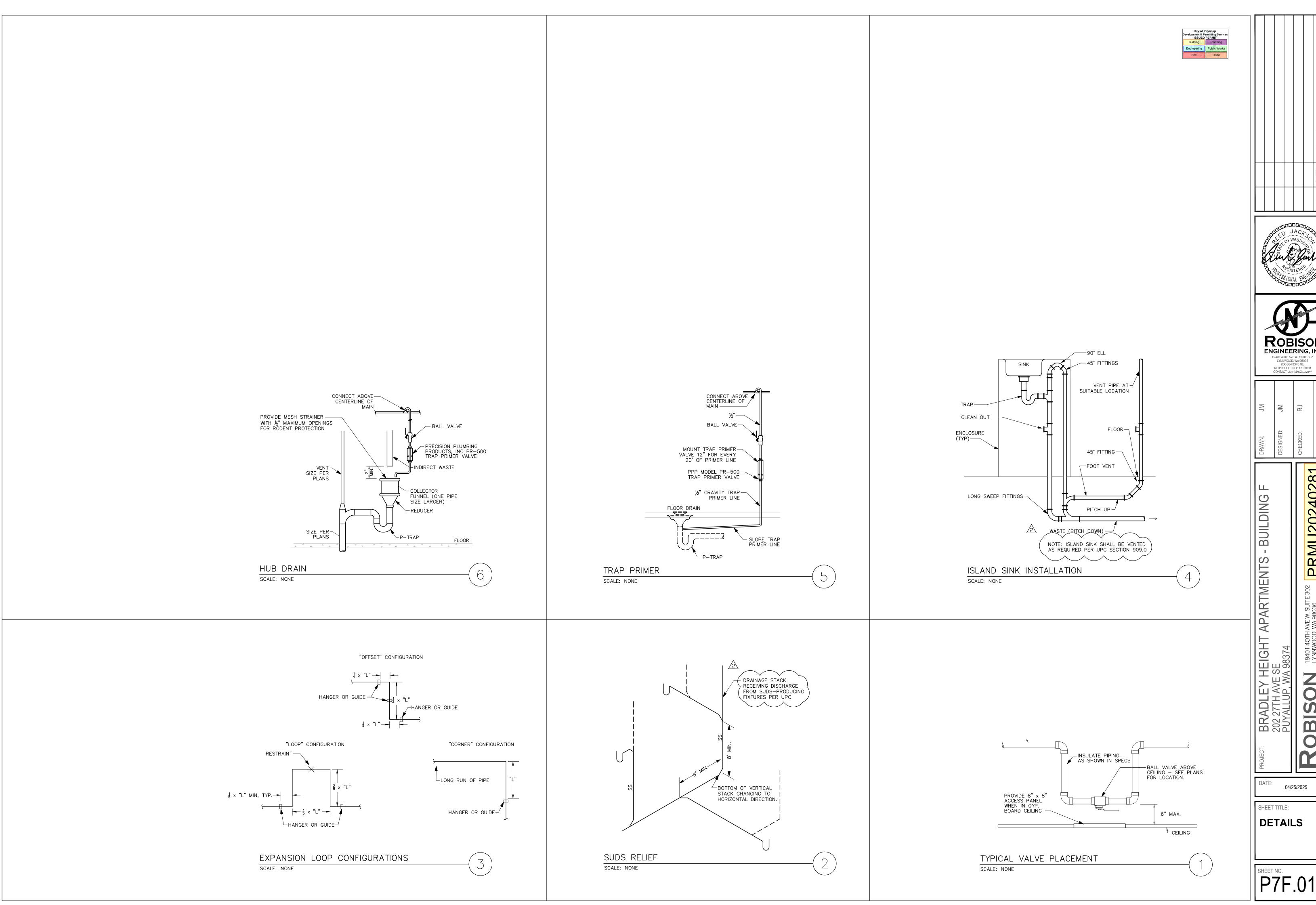
04/25/2025

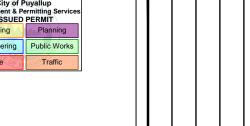
SHEET TITLE: SUPPLY RISER DIAGRAMS

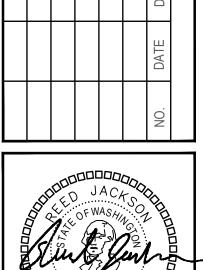














ML	RJ	JR
DESIGNED:	снескер:	APPROVED:

PRMU20240281

04/25/2025

SHEET TITLE:

DETAILS