



Application for **SPECIAL USE PERMIT**

Department of Planning and Development Review  
Land Use Administration Division  
900 E. Broad Street, Room 511  
Richmond, Virginia 23219  
(804) 646-6304  
<http://www.richmondgov.com/>

Application is hereby submitted for: (check one)

- special use permit, new**
- special use permit, plan amendment**
- special use permit, text only amendment**

**Project Name/Location**

Property Address: 2057-2069 Moore Street Date: 9-5-2023  
 Tax Map #: See List --> Fee: \_\_\_\_\_  
 Total area of affected site in acres: .2375

(See **page 6** for fee schedule, please make check payable to the "City of Richmond")

- List:**  
 N00-010-04/004  
 N00-010-04/003  
 N00-010-04/002  
 N00-010-04/001

**Zoning**

Current Zoning: R-7

Existing Use: Vacant

**Proposed Use**

(Please include a detailed description of the proposed use in the required applicant's report)

Four (4) New Two-Family Attached Dwelling  
 Existing Use: Vacant

Is this property subject to any previous land use cases?

Yes  No  If Yes, please list the Ordinance Number: \_\_\_\_\_

**Applicant/Contact Person:** Will Gillette / Mark Baker

Company: Baker Development Resources  
 Mailing Address: 530 East Main Street, Suite 730  
 City: Richmond State: VA Zip Code: 23219  
 Telephone: (804) 874-6275 Fax: ( )  
 Email: markbaker@bakerdevelopmentresources.com

**Property Owner:** Carver Homes LLC

If Business Entity, name and title of authorized signee: \_\_\_\_\_

(The person or persons executing or attesting the execution of this Application on behalf of the Company certifies that he or she has or have been duly authorized and empowered to so execute or attest.)

Mailing Address: 107 S 1st Street  
 City: Richmond State: VA Zip Code: 23219  
 Telephone: ( ) Fax: ( )  
 Email: \_\_\_\_\_

**Property Owner Signature:** *Allen Luyonay*

The names, addresses, telephone numbers and signatures of all owners of the property are required. Please attach additional sheets as needed. If a legal representative signs for a property owner, please attach an executed power of attorney. **Faxed or photocopied signatures will not be accepted.**

**NOTE:** Please attach the required plans, checklist, and a check for the application fee (see Filing Procedures for special use permits)

# APPLICANT'S REPORT

*September 6<sup>th</sup>, 2023*

*Special Use Permit Request*

*2057-2069 Moore Street, Richmond, Virginia*

*Map Reference Numbers: N000-1004/004,003,002,001*

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Submitted to:

**City of Richmond**

Department of Planning and Development Review

Land Use Administration

900 East Broad Street, Suite 511

Richmond, Virginia 23219

Submitted by:

**Baker Development Resources**

530 East Main Street, Suite 730

Richmond, Virginia 23219

## Introduction

The property owner is requesting a special use permit (the "SUP") for 2057-2069 W Moore Street (the "Property"). The SUP would authorize the construction of four (4) two-family attached dwellings, configured as two attached pairs of dwellings. While the two-family dwelling use is permitted by the underlying R-7 Single- and Two-Family Urban Residential District, the two-family attached dwelling use is not and therefore a SUP is required.

## Existing Conditions

### SITE DESCRIPTION AND EXISTING LAND USE

The Property is located at the southeast corner of the intersection between Middlesex and W Moore Streets. The Property is referenced by the City Assessor as tax parcels N000-1004/004,003,002,001 and is currently vacant. The parcel is roughly 104' wide by 100' deep, containing approximately 10,348 square feet of lot area. The Property is accessible by an east-west alley to the rear of the Property.



Properties in the vicinity are mostly developed with residential uses. Single-family dwellings are the most common use, though a large multi-family complex is located across from the Property on the west side of Middlesex Street. Further across Leigh Street lies a distribution warehouse.

## EXISTING ZONING

The Property, and nearby properties to the east are zoned R-7 Single- And Two-Family Urban Residential. To the immediate north and west are properties zoned B-7 Mixed-Use Business. To the South, there is a large TOD-1 Transit Oriented Nodal District.

## TRANSPORTATION

The Property is located less than a half mile from the Allison Street bus stop which is served by the Pulse BRT and provides access from Willow Lawn to Rocketts Landing.

## MASTER PLAN DESIGNATION

The proposed development is consistent with the Richmond 300 Master Plan (“the Master Plan”), which recommends “Neighborhood Mixed-Use” for the Property. This use is described as “existing or new highly-walkable urban neighborhoods that are predominantly residential with a small, but critical, percentage of parcels providing retail, office, personal service, and institutional uses.” The Master Plan also recommends a development style to “feature a variety of building types that are close to one another and create a unified street wall. The building size, density, and zoning districts for these areas vary depending on historical densities and neighborhood characteristics.” Two-family dwellings are a contemplated primary use in the Neighborhood Mixed-Use land use designation.

In addition to the Property-specific guidance offered by the Vision and Core Concepts chapter, there are a number of other goals elsewhere within the Master Plan that support this request, including:

- Page 109 (Equitable Transportation Chapter), Objective 6.1 to “Increase the number of residents and jobs at Nodes and along enhanced transit corridors in a land development pattern that prioritizes multi-modal transportation options.”
- Page 136 (Diverse Economy Chapter), Objective 11.1 to “Increase the areas of appropriately zoned land near various transportation modes and housing to retain, create, and attract employers.”
  - d. Encourage the development of a variety of quality housing types to house employees across the economic spectrum (see Goal 14).
- Page 152 (Inclusive Housing Chapter) (see map on p. 153), Objective 14.5 to “Encourage more housing types throughout the city and greater density along enhanced transit corridors and at Nodes (shown in Figure 38 [p.153]) by amending the Zoning Ordinance.”
- Page 159 (Thriving Environment Chapter) Objective 15.1 to “Reduce air pollution related to transportation.”
  - a. Increase the number of Richmonders living in a development pattern that encourages density and reduces dependency on single-occupancy vehicles (see Goal 1, Goal 8, Goal 14).

- Page 86 (High-Quality Places Chapter), Objective 1.4, to “maintain and improve primarily residential areas by increasing their linkages to...corridors...and maintaining high-quality design standards”
- Page 100 (High Quality Places Chapter), Objective 4.1, to “create and preserve high-quality, distinctive, and well-designed neighborhoods and nodes throughout the City,” as the request introduces thoughtfully designed new construction in a manner not otherwise assured by-right.

## Proposal

### PROJECT SUMMARY

The applicant is proposing to build four (4) two-family attached dwellings, configured as two pairs, on the vacant parcels.

### PURPOSE OF REQUEST

The Property is 104 feet wide, contains 10,348 square feet of lot area, and is currently vacant. The owner is proposing to construct four (4) new two-family attached dwellings, configured as two pairs. While the two-family dwelling use is permitted by the underlying R-7 zoning district, the two-family attached dwelling use is not and, therefore, a special use permit is required.

In exchange for the SUP, the intent of this request is to ensure the development of four high-quality two-family dwellings. Also, the quality assurances conditioned through the SUP will guarantee a higher quality development and better neighborhood compatibility than might otherwise be guaranteed with a by-right development.

### PROJECT DETAILS

When complete, the proposed dwellings would each be two stories in height and configured as two pairs of attached two-family dwellings. To remain consistent with the existing buildings in the area, the dwellings have been designed with front and rear units which will present as attached single-family dwellings from the street. The new buildings would be of frame construction and clad in quality building materials including cementitious lap siding in order to ensure durability. A full-width first floor porch across the front and rear façades would engage the street and provide usable outdoor living space.

The dwellings would be configured as front and rear units, with each dwelling unit occupying two floors and including approximately 1,154 square feet of finished floor area. Entry to each unit would be provided from the first floor and accessed from a private, covered front porch. Each dwelling unit would include three bedrooms and three bathrooms. The dwelling unit layouts are modern with open kitchen and living areas on the first floor. The proposed dwellings massing, and architectural styles are designed to be compatible with nearby dwellings and are consistent with the historical homes found in the neighborhood. Six parking spaces, accessible from the rear alley, would be provided for the dwellings.

## Findings of Fact

The following are factors indicted in Section 17.11 of the Charter and Section 114-1050.1 of the Zoning Ordinance relative to the approval of special use permits by City Council. The proposed special use permit will not:

- ***Be detrimental to the safety, health, morals and general welfare of the community involved.***

The proposed special use permit will not impact the safety, health, morals and general welfare of the nearby neighborhoods.

- ***Tend to create congestion in streets, roads, alleys and other public ways and places in the area involved.***

The proposed special use permit will not result in significant traffic impacts to nearby residential neighborhoods. The proposed residential use would be limited in size, type and scale to avoid any traffic or parking concerns.

- ***Create hazards from fire, panic or other dangers.***

The property will be developed in a manner consistent with the requirements of the building code and in accordance with the requirements of Fire and Emergency Services. The City's codes applicable to this development are designed to eliminate such hazards.

- ***Tend to overcrowding of land and cause an undue concentration of population.***

The proposed special use permit will not tend to over crowd the land or create an undue concentration of population.

- ***Adversely affect or interfere with public or private schools, parks, playgrounds, water supplies, sewage disposal, transportation or other public requirements, conveniences and improvements.***

The proposed special use permit would not adversely affect the above referenced City services. To the contrary, the proposal would provide positive fiscal (tax) benefits that would enhance the City's ability to provide these services to the proposed development.

- ***Interfere with adequate light and air.***

The light and air available to the subject and adjacent properties will not be affected.

## Summary

In summary we are enthusiastically seeking approval for the construction of four new, two-family attached dwellings on the Property. The SUP represents an ideal, small-scale urban infill development for this location. In exchange for the SUP, the quality assurances conditioned therein would guarantee the construction of a quality housing opportunity consistent with Master Plan guidance. This would contribute to the overall vibrancy of the block through the provision of an appropriate urban form and use that is consistent with the development pattern and surrounding neighborhood.



- Ⓐ 16' EASEMENT FOR INGRESS-EGRESS AND PARKING
- Ⓑ 3' EASEMENT FOR INGRESS-EGRESS CENTERED ON PROPERTY LINE (3' x 81')
- Ⓒ YARDS TO BE STRAW AND SEEDED
- Ⓓ 3' SIDEYARD BUILDING SETBACK
- Ⓜ CONCRETE WALK

PROPOSED TREE WELL TO BE POPULATED WITH DECIDUOUS TREE PER APPROVED URBAN FORESTRY LIST (TYPICAL)

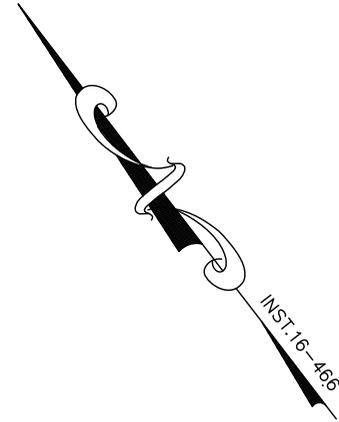
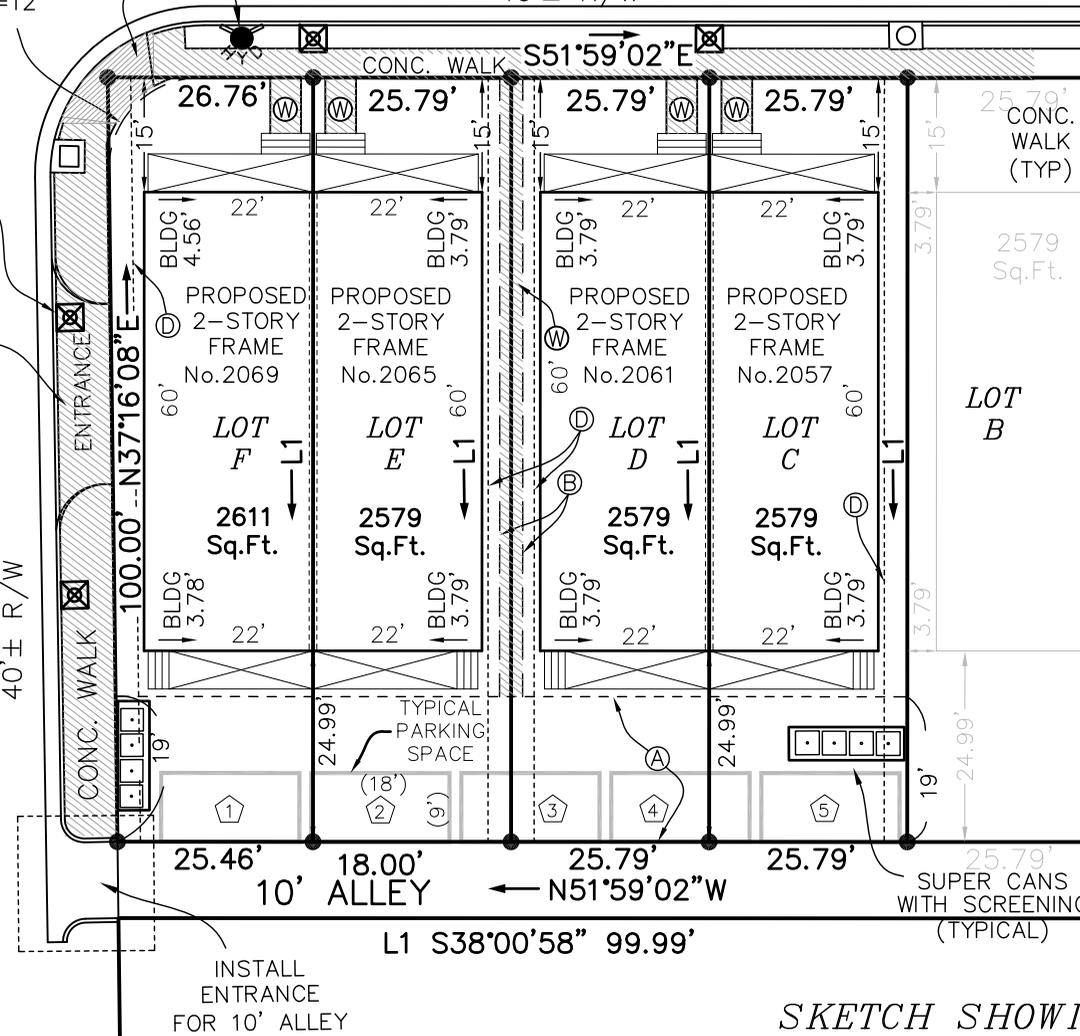
REMOVE ENTRANCE REPLACE CURB  
MIDDLESEX ST. 40± R/W

EASEMENT FOR SIDEWALK L=19.01' R=12'

ADA RAMP

FIRE HYD.

W. MOORE STREET 40± R/W



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 CHESTERFIELD, VA 23832  
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REVISED 1-30-2024  
 DATE: 8-23-2023  
 CERTIFIED BY JEFFREY K. FLOYD  
 VIRGINIA CERTIFICATE NO. 001905

SCALE: 1"=25'  
 JOB NO. 211014586

SKETCH SHOWING THE DIVISION OF LOTS C, D, E AND F, SQUARE "A", "RAVENSWOOD" No.2057, 2061, 2065 & 2069 W. MOORE STREET IN THE CITY OF RICHMOND, VA.





General Notes

- The general contractor and each trade contractor shall be required to check and be responsible for conformance of these plans with all requirements of the Virginia Uniform Statewide Building Code in force at the time of construction, local ordinances & construction requirements, and manufacturers recommendations prior to beginning work and during construction.
- During construction the contractor may expose conditions that are unstable or unsafe. If the contractor finds such conditions, he shall take emergency action to stabilize the conditions and notify the owner and architect immediately.
- The drawings are diagrammatic, intending to outline general design requirements only and are not intended to be complete in all details. specific implementation of the plans shall be the responsibility of the general contractor.
- The general contractor and each trade contractor shall protect theirs and others work from damage due to their operation and shall repair or replace, as required, all damaged work to the satisfaction of the owner.
- Protect existing construction to remain. If existing construction to remain is damaged during construction, the contractor shall repair or replace damaged areas to match the original condition.
- Measurements and working conditions for all work shall be taken at the site and coordinated with connecting work with each other trade contractor. All walls are drawn @ 4" width with dimension taken edge to edge. Adjust as needed for prefabricated tubs, stairs, and other appliances.
- Each trade contractor shall verify these drawings before laying out and proceeding with work and shall be held responsible for any errors resulting from their failure to exercise such verification.
- The general contractor is responsible for coordination of the design of the site, HVAC, plumbing, and electrical trade contractors. Any plumbing, HVAC, or electric diagrams included in this plan are only provided as a guide to placement, not necessarily the final placement.
- Smoke detectors are required in each bedroom or sleeping space and in adjacent entry space and on each level of the dwelling.

Exterior

- Exterior details (eg: columns, shutters, decorative items, etc.) Are shown for illustrative purposes only. Window and door grill patterns are illustrative only and will be determined by the manufacturer of the window specified or by the general contractor. The general contractor and trade contractor will determine final placement and materials for all exterior details as well as requirements for exposure of siding reveal and other items that may be fastened to the exterior cladding or veneer.
- Exterior detail may vary as predicted in elevation drawings. Field conditions and material variations or selections may affect final feature considerations and design.

Framing

- Sawn lumber shall be identified by a grade mark of an accredited lumber grading or inspection agency and have design values certified by an accreditation body that complies with DOC PS 20.
- Glued-laminated timbers shall be manufactured and identified as required in ANSI/AITC A190.1 and ASTM D 3737.
- All framing lumber unless otherwise noted shall be SP #2 or better and have a minimum fb=1,200 psi, fv=90 ps, and e=1,400,000 PSI. All laminated veneer lumber shall have minimum fb=2,800 psi, fv=285 psi, and e=2,000,000 psi.
- Wood structural panel sheathing shall conform to DOC PS 1, DOC PS 2 or, when manufactured in Canada, CSA Q437 or CSA Q325. Panels shall be identified for grade, bond classification, and performance category by a grade mark.
- Truss drawings on architectural plans are intended to be diagrammatic only. Sealed manufacturer's truss drawings are required to be submitted with these drawings.
- Braced wall panels to be placed in accordance with IRC §R602.10 or engineer design as indicated on plan. Where IRC prescriptive methods are used and indicated on plan minimum dimension of panel will govern placement of rough openings for openings in exterior and interior walls and may override center dimension of opening shown.
- Where access is provided to attic areas over two story homes where a future room may be constructed first floor walls to be framed in accordance with IRC §R603.2.1 and tables R602.3(5) and R602.3.1.
- Rafters framed to ridge members (ridge, hip, valley) labeled beam are required to be mechanically fastened with minimum Simpson A35 or equal.
- Where applicable temporary truss bracing will be the responsibility of the general contractor and his agents and will follow recommendations of the truss plate institute's guide "BCSI 1-03 Guide to Good Practice for Handling, Installing, & Bracing of Metal Plate Connected Wood Trusses."-
- Exterior walls of woodframe construction shall be designed and constructed in accordance with the provisions of Chapter 6 and Figures R602.3(1) and R602.3(2), or in accordance with AWC NDS.
- Components of exterior walls shall be fastened in accordance with Tables R602.3(1) through R602.3(4).
- Wall sheathing shall be fastened directly to framing members and, where placed on the exterior side of an exterior wall, shall be capable of resisting the wind pressures listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) and shall conform to the requirements of Table R602.3(3).
- Wall sheathing used only for exterior wall covering purposes shall comply with Section R703.
- Studs shall be continuous from support at the sole plate to a support at the top plate to resist loads perpendicular to the wall. The support shall be a foundation or floor, ceiling or roof diaphragm or shall be designed in accordance with accepted engineering practice.
  - Jack studs, trimmer studs and cripple studs at openings in walls that comply with Tables R602.1(1) and R602.2(2).
- The size, height and spacing of studs shall be in accordance with Table R602.3.(5).
- Studs shall be minimum Southern Pine No. 2 grade lumber.
- Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions.
- End joints in top plates shall be offset not less than 24 inches.
- Joints in plates need not occur over studs. Plates shall be not less than 2-inches nominal thickness and have a width not less than the width of the studs.
- Studs shall have full bearing on a nominal 2-by or larger plate or sill having a width not less than to the width of the studs.

Egress / Windows / Doors

- All egress openings from bedrooms shall have a minimum net clear opening of 5.7 square feet, be not more than 44" from finished floor to sill height, and have a minimum net clear opening height of 24" and width of 20".
- Contractor to verify height of window sill above grade and determine need for guard rail or other remedy if over 36 inches from finished grade at exterior.
- All exterior openings shall be protected from water intrusion by generally accepted building practices and as required by the Virginia USBC.
- Handrails shall be continuous, the full length of the stairs and ends shall be returned or terminated in novel posts. Handgrip portions shall not be more than 2-5/8" in cross sectional dimension or as approved by the building official.

Footing

- Since the house is not located in a shrink swell area, in lieu of a complete geotechnical evaluation, the load-bearing values shall be assumed to be 1500psi as per Table R401.4.1.
- Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:
  - Extended below the frost line specified in Table R301.2.(1), 18".
  - Constructed in accordance with Section R403.3.
  - Constructed in accordance with ASCE 32.
  - Erected on solid rock.
- Exceptions:
  - Protection of freestanding accessory structures with an area of 600 square feet (56 m<sup>2</sup>) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
  - Protection of freestanding accessory structures with an area of 400 square feet (37 m<sup>2</sup>) or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
  - Decks not supported by a dwelling need not be provided with footings that extend below the frost line.
- The footings shall be placed on clean undisturbed soil or compacted fill verified by an independent engineering firm.
- The design does not allow for variation in bearing unless otherwise noted.
- Concrete to be minimum compressive strength of 3000psi and shall comply with Section R605.1.1 concrete material requirements as referenced by IRC §R402.2
- Concrete shall be placed with a slump of 4"
- Concrete exposed to weather shall have 6% air entrainment.
- Concrete shall be thoroughly compacted and vibrated during placement and around embedded items and into corners of forms.
- All reinforcing bar placed in concrete shall have a minimum 3" cover to all edges.
- Reinforcing bars shall be deformed conforming to ASTM A-615, grade 60 (fy=60 ksi)
- Do not backfill against walls retaining earth until masonry or concrete has cured for 28 days
- Backfill shall be placed in 8" loose layers and compacted to 95% of dry density in accordance with ASTM D698.
- Footings shall be a minimum of 18" deep.

Foundation

- Grout collar joint solid in composite masonry foundation wall construction under all bearing points where indicated on plan.
- In areas where columns or posts are shown on foundation plan the CMU cells shall be filled solid.
- Brick columns supporting raised decks and porches shall be filled solid from footing to cap.
- Foundation walls that retain earth and enclose interior spaces and floors below grade shall be dampproofed from the higher of (a) the top of the footing or (b) 6 inches below the top of the basement floor, to the finished grade. Masonry walls shall have not less than 3/8 inch Portland cement parging applied to the exterior of the wall. The parging shall be dampproofed in accordance with one of the following:
  - Bituminous coating.
  - Three pounds per square yard of acrylic modified cement.
  - One-eighth-inch coat of surface-bonding cement complying with ASTM C 887.
  - Any material permitted for waterproofing in Section R406.2.
- All sills in contact with masonry to be pressure treated (PT) material. Fasteners in contact with PT material to be hot dipped galvanized conforming to ASTM A153 except foundation bolts greater than 1/2" dia. Wood sill plates shall be anchored to the foundation with minimum 1/2-inch diameter anchor bolts spaced a maximum of 6 feet on center or approved anchors or anchor straps spaced as required to provide equivalent anchorage to 1/2-inch diameter (12.7 mm) anchor bolts. Bolts shall extend a minimum of 7 inches into concrete or grouted cells of concrete masonry units. The bolts shall be located in the middle third of the width of the plate. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches or less than seven bolt diameters from each end of the plate section.

Drainage

- Foundation walls that retain earth and enclose interior spaces and floors below grade shall be dampproofed from the higher of (a) the top of the footing or (b) 6 inches below the top of the basement floor, to the finished grade. Masonry walls shall have not less than 3/8-inch Portland cement parging applied to the exterior of the wall. The parging shall be dampproofed in accordance with one of the following:
  - Bituminous coating: three pounds per square yard (1.63 kg/m<sup>2</sup>) of acrylic modified cement.
  - One-eighth-inch coat of surface-bonding cement complying with ASTM C887.
  - Other approved methods or materials.
  - Exception: Parging of unit masonry walls is not required where a material is approved for direct application to the masonry
- Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend not less than 1 foot beyond the outside edge of the footing and 6 inches above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.
- Window wells and bulkhead enclosures shall be designed for proper drainage by connecting to the building's foundation drainage system.
- Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches within the first 10 feet.
  - Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within 10 feet, drains or swales shall be constructed to ensure drainage away from the structure.
- Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 percent away from the building.

Ventilation

Crawlspace

- The under-floor space between the bottom of the floor joists and the earth under the building shall have ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall be not less than 1 square foot for each 150 square feet of under-floor space area. One such ventilating opening shall be within 3 feet of each corner of the building.
- Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/4 inch (6.4 mm):
  - Perforated sheet metal plates not less than 0.070 inch thick.
  - Expanded sheet metal plates not less than 0.047 inch thick.
  - Cast-iron grill or grating.
  - Extruded load-bearing brick vents.
  - Hardwore cloth of 0.035 inch wire or heavier.
  - Corrosion-resistant wire mesh, with the least dimension being 1/8 inch thick.

Roof

- Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow.
- Ventilation openings shall have a least dimension of 1/16 inch minimum and 1/4 inch maximum.
- Ventilation openings having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth or similar material with openings having a least dimension of 1/16 inch minimum and 1/4 inch maximum.
- Required ventilation openings shall open directly to the outside air.
- The minimum net free ventilating area shall be 1/150 of the area of the vented space.
- Where eave or cornice vents are installed, insulation shall not block the free flow of air. Not less than a 1-inch space shall be provided between the insulation and the roof sheathing and at the location of the vent.
- Ventilators shall be installed in accordance with manufacturer's instructions.
- Installation of ventilators in roof systems shall be in accordance with the requirements of Section R903.
- Installation of ventilators in wall systems shall be in accordance with the requirements of Section R703.1.

Roofing

- The home shall have a controlled method of water disposal from roofs that will collect and discharge roof drainage to the ground surface not less than 5 feet (1524 mm) from foundation walls or to an approved drainage system.
- Ice and water shield shall be applied at the eaves to 24" inside the exterior wall line. All valleys to be lined with ice and water shield or equivalent.
- Drip edge shall be installed on all roof edges. Install drip edge on eaves first with underlayment installed over the drip edge. Install drip edge on rakes after underlayment is installed, with the drip edge fastened over the underlayment. Joints in drip edge shall be lapped minimum 2 in with the upslope piece lapped over the down slope piece. Install fastener 8 in to 10 in on center, approximately 1-3/4 in (44 mm) from the outside edge of the drip edge.
- Rafters shall be framed not more than 11/2-inches offset from each other to board or directly opposite from each other with a gusset plate as a tie.
- Ridge board shall be not less than 1-inch nominal thickness and not less in depth than the cut end of the rafter.
- At valleys and hips there shall be a valley or hip rafter not less than 2-inch nominal thickness and not less in depth than the cut end of the rafter.
- Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the special load at that point.
- Where the roof pitch is less than three units vertical in 12 units horizontal (25-percent slope), structural members that support rafters and ceiling joists, such as ridge beams, hips and valleys, shall be designed as beams.
- Where ceiling joists are not connected to the rafters at the top wall plate, joists connected higher in the attic shall be installed as rafter ties, or rafter ties shall be installed to provide a continuous tie.
- Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be not less than 2 inches by 4 inches (nominal), installed in accordance with the connection requirements in Table R802.5.(19), or connections of equivalent capacities shall be provided.
- Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or girder designed in accordance with accepted engineering practice.
- Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space with 4-10d box (3" x 0.128"); or 3-10d common (3" x 0.148"); or 4-3" x 0.131" nails faced nailed to each rafter.
- Collar ties shall be not less than 1 inch by 4 inches (nominal), spaced not more than 4 feet on center.
- Ends of ceiling joists shall be lapped not less than 3 inches or butted over bearing partitions or beams and toenailed to the bearing member. Where ceiling joists are used to provide resistance to rafter thrust, lapped joists shall be nailed together in accordance with Table R402.5.(9) and butted joists shall be tied together in a manner to resist such thrust.
- Joists that do not resist thrust shall be permitted to be nailed in accordance with Table R602.3(1).
- Wood structural panels shall conform to DOC PS 1, DOC PS 2, CSA Q437 or CSA Q325, and shall be identified for grade, bond classification and performance category by a grade mark or certificate of inspection issued by an approved agency. Wood structural panels shall comply with the grades specified in Table R503.2.1.(1).
- Roofing material dead loads based on:
  - 40 yr composite shingle: 3.0 lbs/sf
  - quarried slate: 11 lbs/sf
  - concrete tile: 12.5 lbs/sf

Decks

- Decks to be constructed in accordance with the IRC Section R507 in force at the issuance of the building permit as illustrated by the American Forest and Paper Association's Guide Prescriptive Residential Wood Deck Construction (<https://awc.org/codes-standards/publications/dcaec>)

Stairways

- Width. Stairways shall be not less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. The clear width of stairways at and below the handrail height, including treads and landings, shall be not less than 31 1/2 inches where a handrail is installed on one side and 27 inches where handrails are installed on both sides.
- Headroom. The headroom in stairways shall be not less than 6 feet 8 inches measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.
- Vertical rise. A flight of stairs shall not have a vertical rise larger than 151 inches between floor levels or landings.
- Risers. The riser height shall be not more than 8 1/4" inches. The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees from the vertical. At open risers, openings located more than 30 inches, as measured vertically, to the floor or grade below shall not permit the passage of a 4-inch-diameter sphere.
- Treads. The tread depth shall be not less than 9 inches. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch.
- Nosings. Nosings at treads, landings and floors of stairways shall have a radius of curvature at the nosing not greater than 9/16 inch (14 mm) or a bevel not greater than 1/2 inch (12.7 mm). A nosing projection not less than 3/4 inch (19 mm) and not more than 1 1/4 inches (32 mm) shall be provided on stairways. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) within a stairway.
- Landings. There shall be a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel shall be not less than the width of the flight and not more than 38 inches. Handrails shall not project more than 4 1/2 inches on either side of the stairway. Handrails adjacent to a wall shall have a space of not less than 1 1/2" inches between the wall and the handrails. Handrails shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in novel posts or safety terminals. Required handrails shall be of one of the following types or provide equivalent graspability.
  - Type 1. Handrails with a circular cross section shall have an outside diameter of not less than 1 1/4 inches and not greater than 2 inches. If the handrail is not circular, it shall have a perimeter of not less than 4 inches and not greater than 6 1/4 inches and a cross section of not more than 2 1/4 inches.
  - Type II. Handrails with a perimeter greater than 6 1/4 inches shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within 3/4 inch measured vertically from the tallest portion of the profile and have a depth of not less than 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for not less than 3/8 inch to a level that is not less than 1 1/4 inches below the tallest portion of the profile. The width of the handrail above the recess shall be not less than 1 1/4 inches and not more than 2 3/4 inches.

Glazing

- Each pane of glazing installed in hazardous locations shall be provided with a manufacturer's designation specifying who applied the designation, the type of glass and the safety glazing standard with which it complies, and that is visible in the final installation.
- Regular, float, wired or patterned glass in jalousies and louvered windows shall be not less than nominal 3/16 inch thick and not more than 48 inches in length. Exposed glass edges shall be smooth.
- Glazing in fixed and operable panels of swinging, sliding and bifold doors shall be considered to be a hazardous location.
  - Glazing in an individual fixed or operable panel adjacent to a door shall be considered to be a hazardous location where the bottom exposed edge of the glazing is less than 60 inches above the floor or walking surface and it meets either of the following conditions:
    - Where the glazing is within 24 inches of either side of the door in the plane of the door in a closed position.
    - Where the glazing is on a wall less than 180 degrees from the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door.
  - Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:
    - The exposed area of an individual pane is larger than 9 square feet.
    - The bottom edge of the glazing is less than 18 inches above the floor.
    - The top edge of the glazing is more than 36 inches above the floor.
    - One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing.
- Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered to be a hazardous location.
- Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor or outdoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing. Exception: Glazing that is more than 60 inches, measured horizontally and in a straight line, from the water's edge of a bathtub, hot tub, spa, whirlpool or a str swimming pool or from the edge of a shower, sauna or steam room.
- Glazing where the bottom exposed edge of the glazing is less than 36 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered to be a hazardous location.
  - Exceptions: Where glazing is adjacent to a walking surface and a horizontal rail is installed at 34 to 38 inches above the walking surface. The rail shall be capable of withstanding a horizontal load of 90 pounds per linear foot without contacting the glass and have a cross-sectional height of not less than 1 1/2 inches.
  - Glazing 36 inches or more measured horizontally from the walking surface.
- Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within a 60-inch horizontal arc less than 180 degrees (±14 rad) from the bottom tread nosing shall be considered to be a hazardous location.
  - Exception: Where the glazing is protected by a guard complying with Section R312 and the plane of the glass is more than 18 inches (457 mm) from the guard.

Smoke Alarms

- Smoke alarms shall comply with NFPA 72
- Smoke alarms shall be listed in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034.
- Smoke alarms shall be installed in the following locations:
  - In each sleeping room.
  - Outside each separate sleeping area in the immediate vicinity of the bedrooms.
  - On each additional story of the dwelling, including basements and habitable attics and not including crawl spaces and uninhabitable attics.
- In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.
- Smoke alarms shall be installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by this section.
- Where more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
- Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms.
- Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Carbon Monoxide Alarms

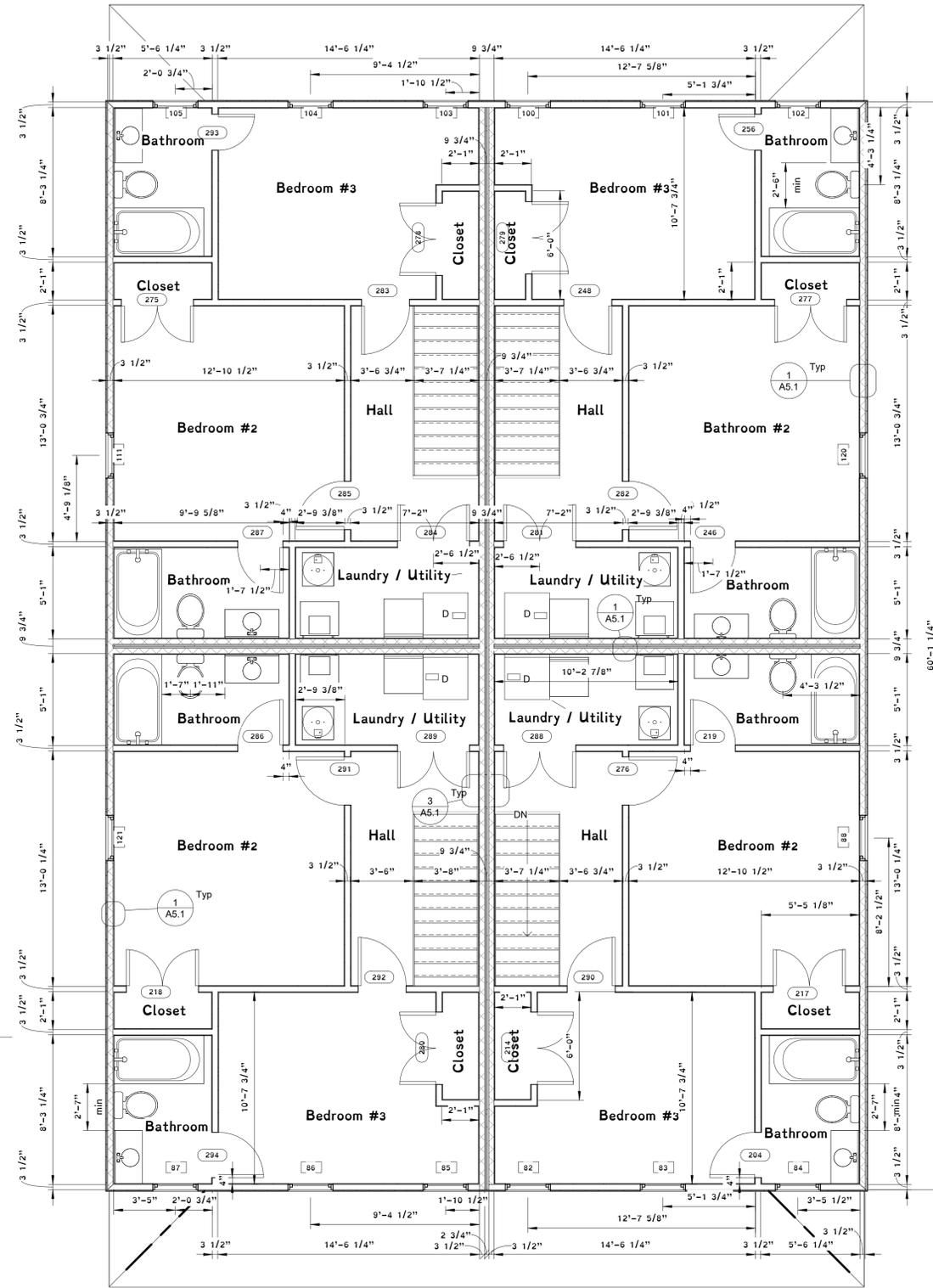
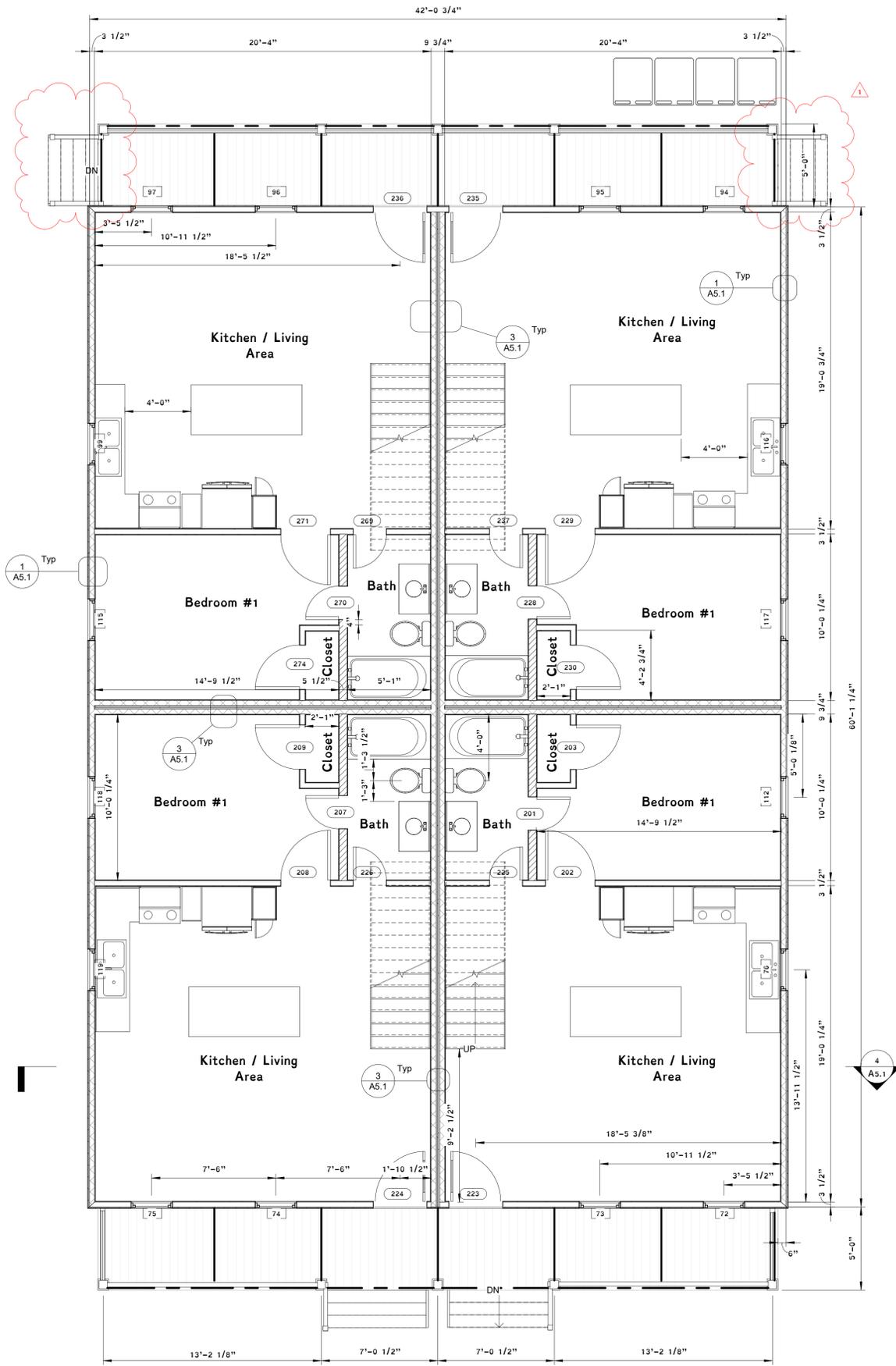
- Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.
- Carbon monoxide alarms shall be provided in accordance with Sections R315.2.1 and R315.2.2 conditions exist.
  - The dwelling unit contains a fuel-fired appliance.
  - The dwelling unit has an attached garage with an opening that communicates with the dwelling unit.
- Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.
- Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.
- Where more than one carbon monoxide alarm is required to be installed, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
- Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Exceptions:
  - Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power.
  - Carbon monoxide alarms installed in accordance with Section R315.2.2 shall be permitted to be battery powered.

Flashing

- Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply with AAMA 711. Fluid-applied membranes used as flashing in exterior walls shall comply with AAMA 714. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashings shall be installed at the following locations:
  - Exterior window and door openings. Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish or to the water-resistant barrier complying with Section 703.2 for subsequent drainage. Mechanically attached flexible flashings shall comply with AAMA 712. Flashing at exterior window and door openings shall be installed in accordance with one or more of the following:
    - The fenestration manufacturer's installation and flashing instructions, or for applications not addressed in the fenestration manufacturer's instructions, in accordance with the flashing manufacturer's instructions. Where flashing instructions or details are not provided, pan flashing shall be installed at the sill of exterior window and door openings. Pan flashing shall be sealed or sloped in such a manner as to direct water to the surface of the exterior wall finish or to the waterresistive barrier for subsequent drainage. Openings using pan flashing shall incorporate flashing or protection at the head and sides.
    - In accordance with the flashing design or method of a registered design professional.
    - In accordance with other approved methods.
  - At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting joists on both sides under stucco copings.
  - Under and at the ends of masonry, wood or metal copings and sills.
  - Continuously above all projecting wood trim.
  - Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
  - At wall and roof intersections.
  - At built-in gutters.

Attic Access

- Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that have a vertical height of 30 inches or greater over an area of not less than 30 square feet. The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.
- The rough-framed opening shall be not less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other location with ready access. Where located in a wall, the opening shall be not less than 22 inches wide by 30 inches high (559 mm wide by 762 mm high). Where the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.



A1.1

Rev.	Date	Description
1	1/2/24	moved rear porch entry for side access

**Proposed Floor Plan**  
 2057, 2061, 2065, 2069 West Moore Street  
 Dobrin Property Management  
 City of Richmond, VA  
 November 7, 2023

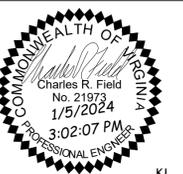


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Rev.	Date	Description
2	1/2/24	showing roof HVAC, and proposed screening
1	1/2/24	moved rear porch entry for side access

**Elevations**  
 2057, 2061, 2065, 2069 West Moore Street  
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① Proposed North  
1/4" = 1'-0"



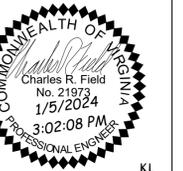
② Proposed West  
1/4" = 1'-0"



Rev.	Date	Description
2	1/2/24	showing roof HVAC, and proposed screening
1	1/2/24	moved rear porch entry for side access

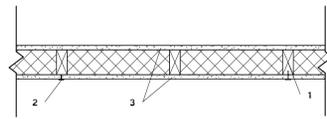
**Elevations**  
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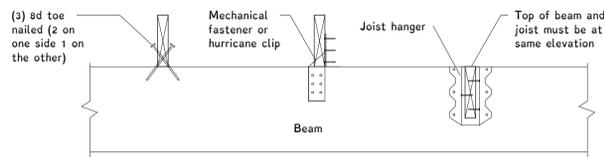
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Design No. U305  
Bearing Wall Rating - 1 Hr.



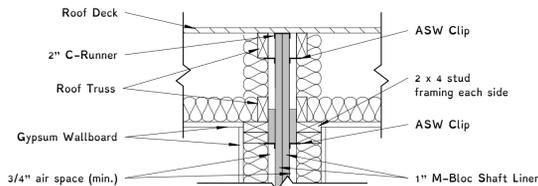
1. Wood Studs - Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.
  2. Joints and Nail-Heads - Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.
  3. Gypsum Board\* - 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 8d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
- Exterior grade drywall to be used on exterior walls.

1 Hr Wall - Stud, U305  
1" = 1'-0"

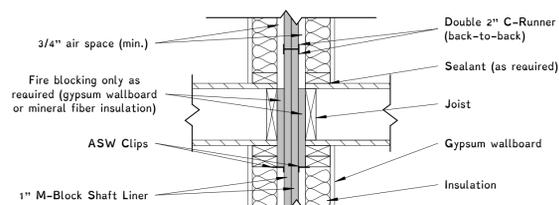


Joist to Beam Connection  
1" = 1'-0"

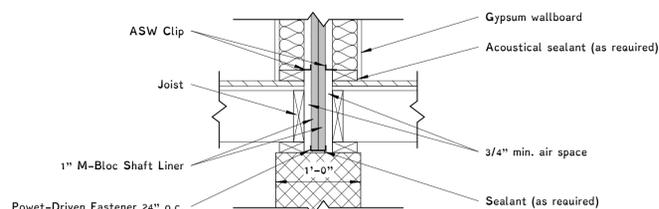
Design No. U336  
2 Hr Fire Rated Wall  
STC Rating - 61



Intersection at Roof



Intermediate Floor Intersection



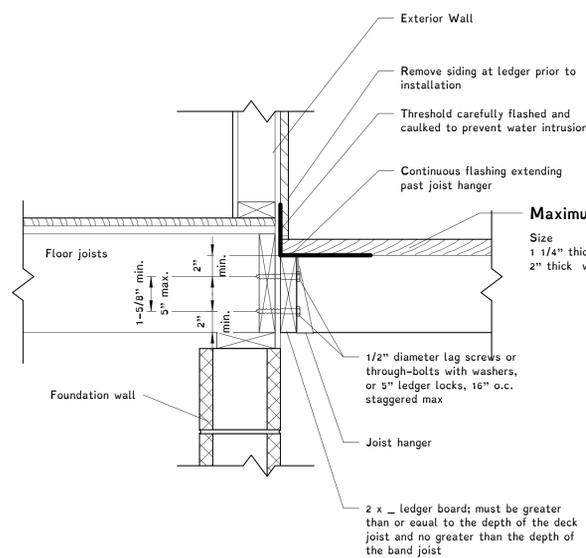
Foundation

UL 336 - 2 hr Fire Rated Wall (Townhouse)  
1" = 1'-0"

Print plans at 24" x 36", Arch D



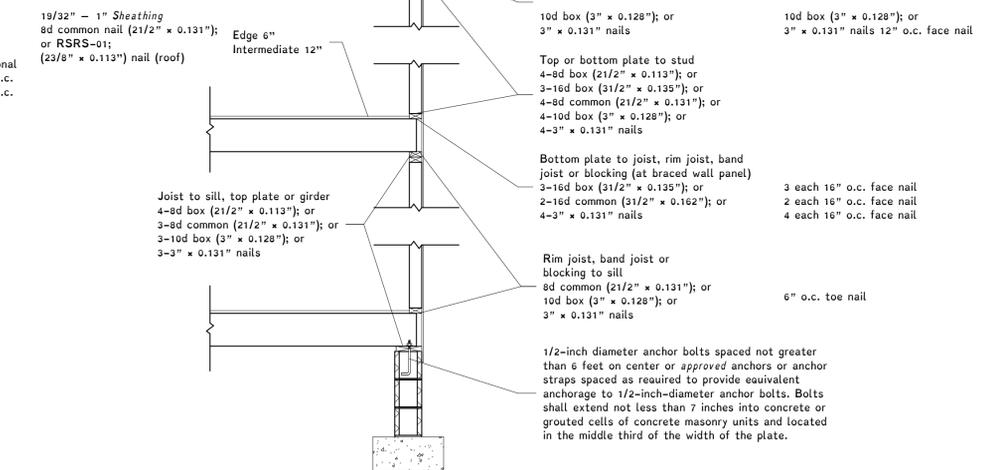
Section 3  
1/4" = 1'-0"



Ledger Attachment - deck to rim board  
1 1/2" = 1'-0"

Maximum Joist Spacing

Size	Perpendicular	Diagonal
1 1/4" thick wood	16" o.c.	12" o.c.
2" thick wood	24" o.c.	16" o.c.



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

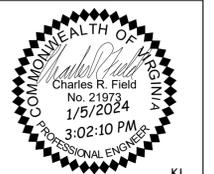
A5.1

Rev.	Date	Description

Details

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Rev.	Date	Description

**Structure**

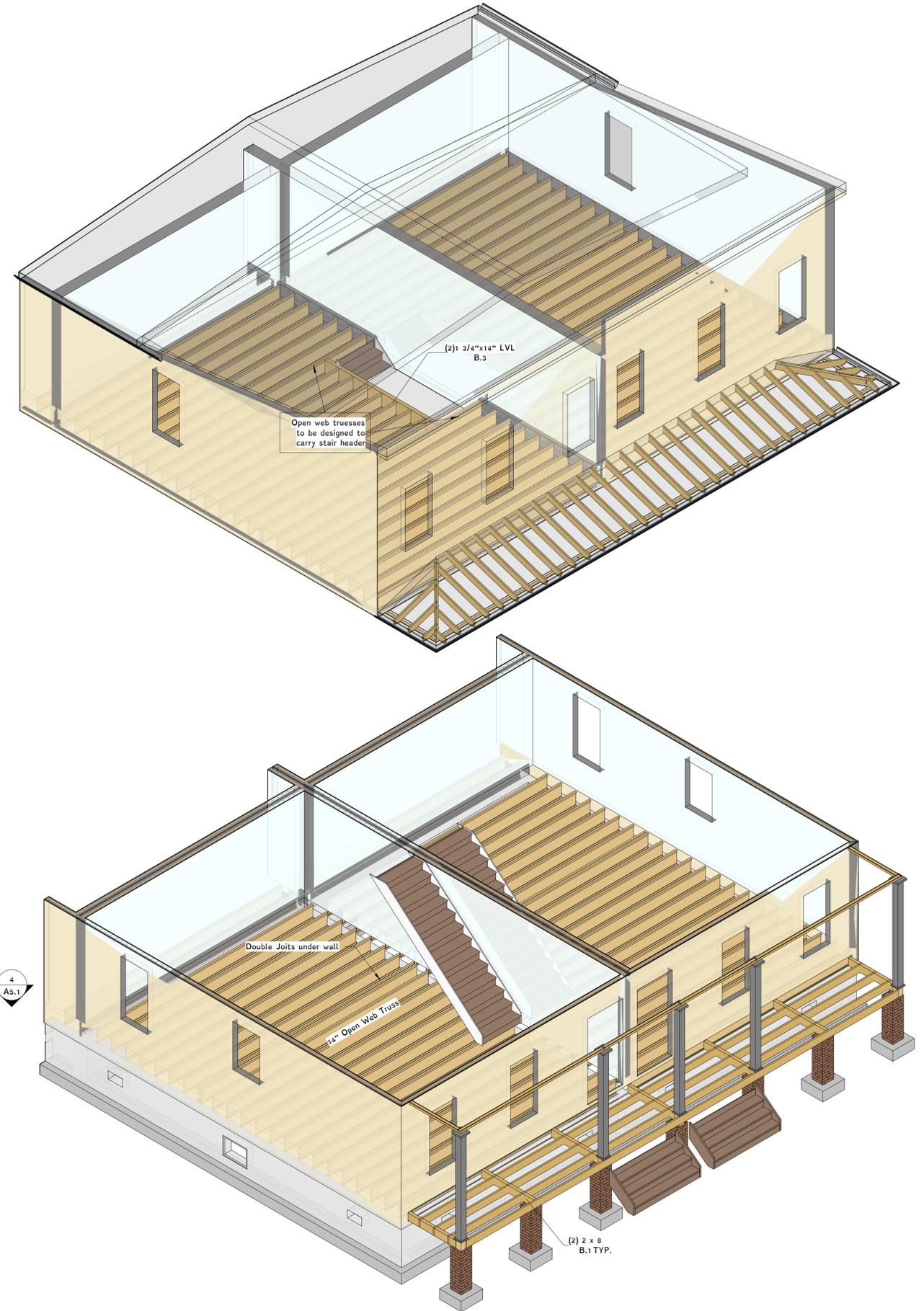
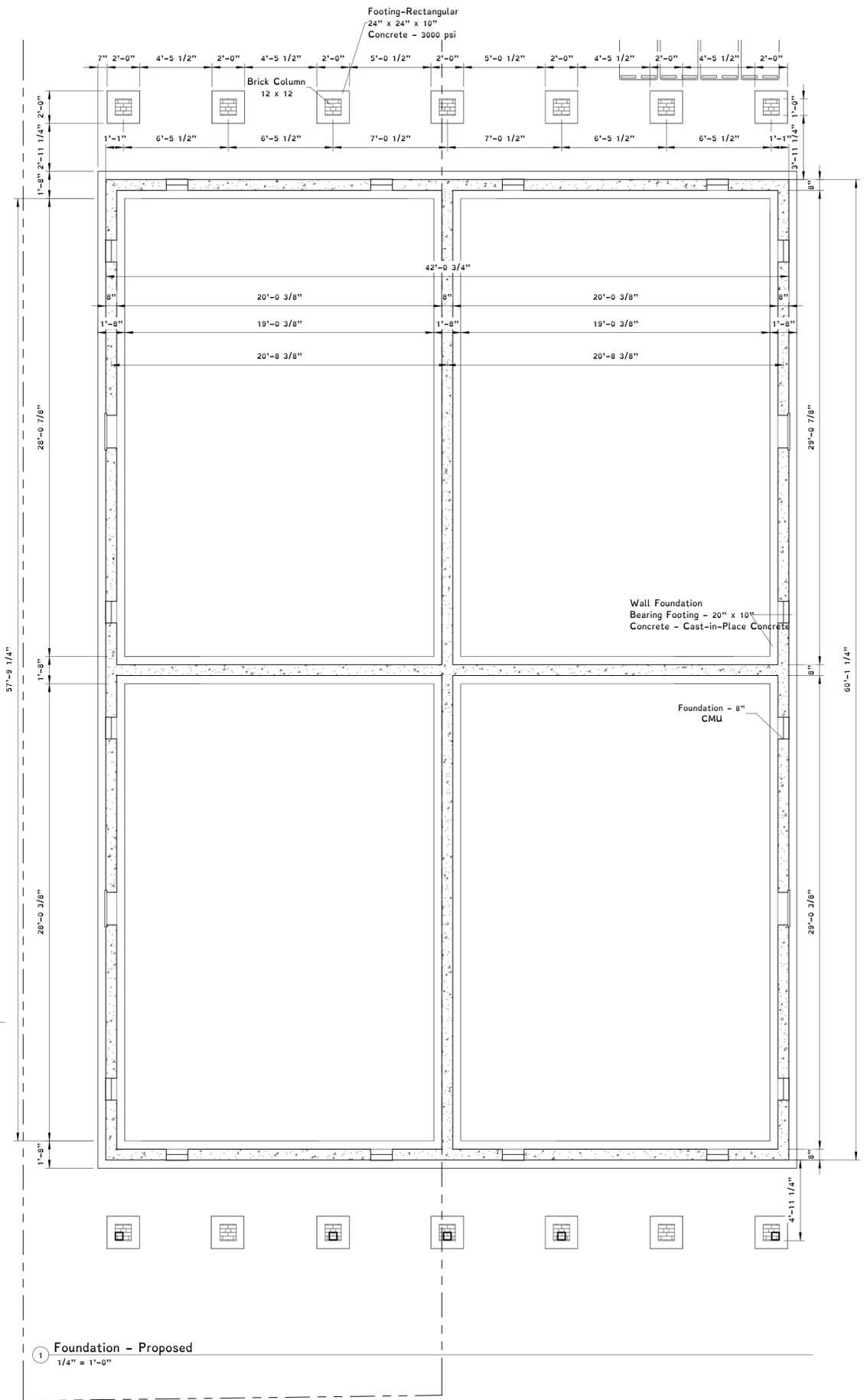
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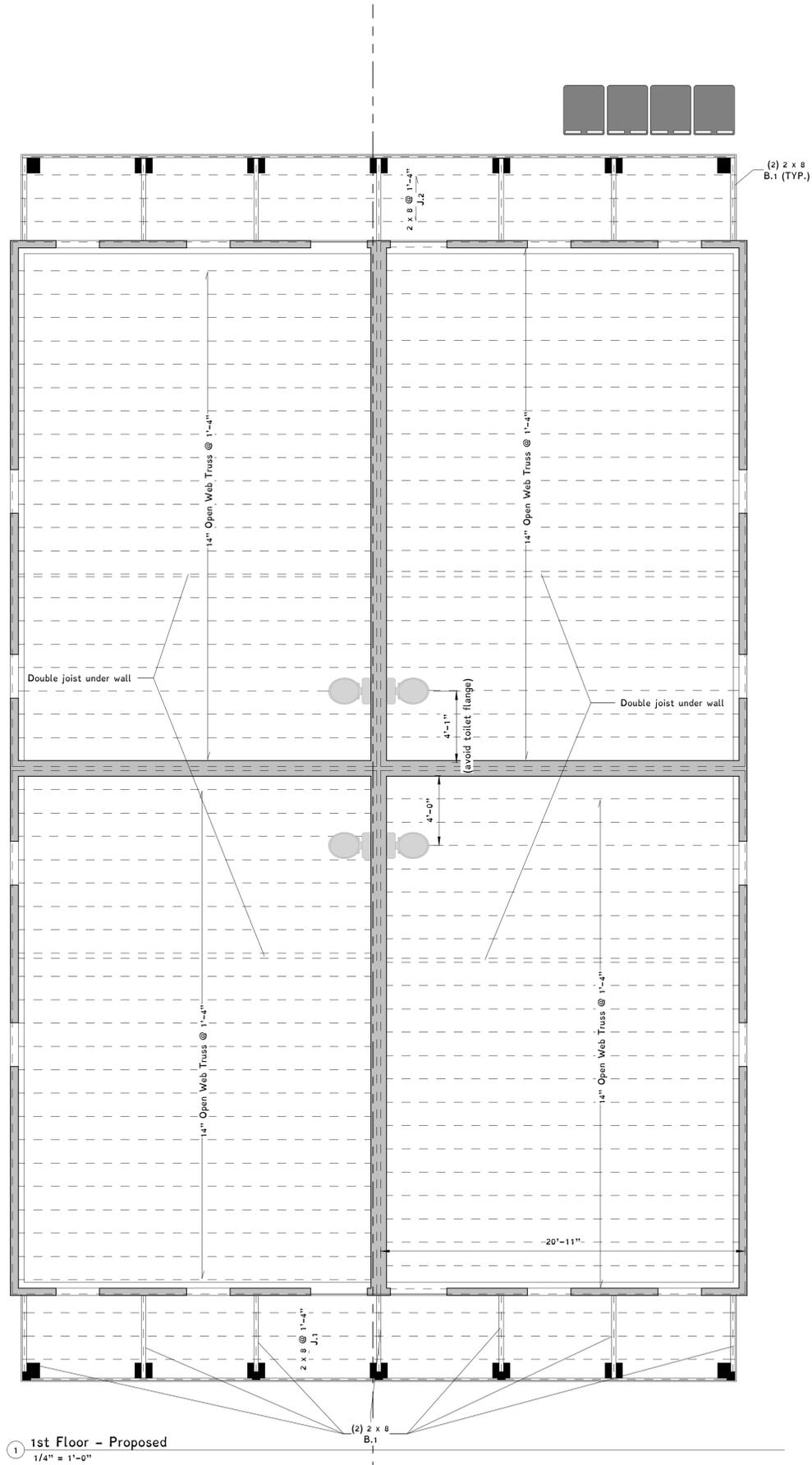


Rev.	Date	Description

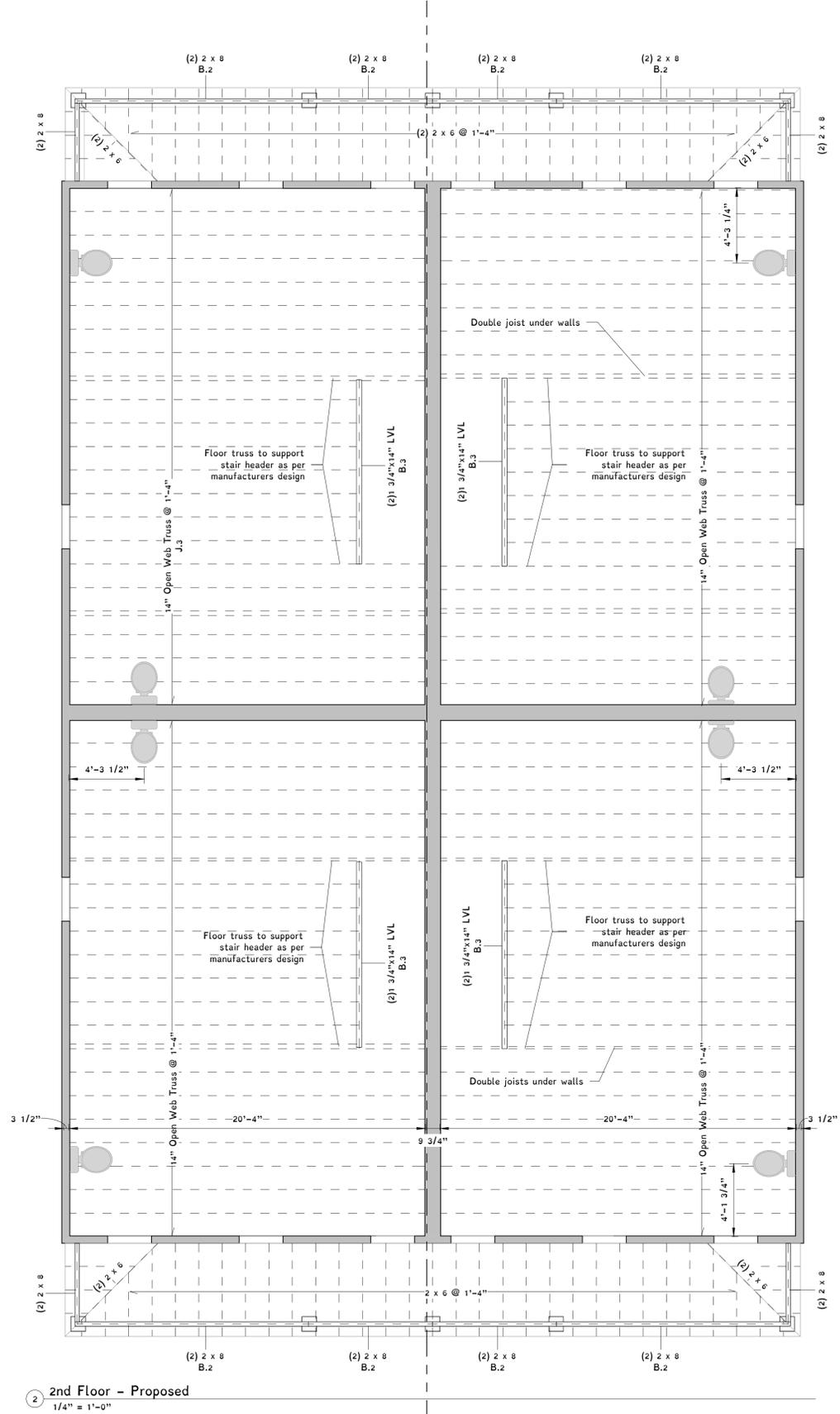
**Structure**  
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1 1st Floor - Proposed  
 1/4" = 1'-0"

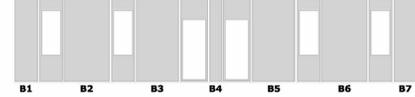


2 2nd Floor - Proposed  
 1/4" = 1'-0"





WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 1st Story, 1, CS-WSP, 1.16, 10.42, 1.1, 11.79, 11.79, 24.34, Compliant.

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Rows B1 through B7.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 5/14

1

WALL LINE ELEVATION VIEW



Total Wall Line Length: 60' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 2nd Story, B, CS-WSP, 0.86, 3.09, 1, 8.2, 8.2, 60.08, Compliant.

Furthest Distance to Adjacent BWL 20' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 60' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Row B1.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 9/14

5

WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 1st Story, 2, CS-WSP, 1.16, 10.42, 1.1, 11.79, 11.79, 42.08, Compliant.

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Row B1.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 6/14

2

WALL LINE ELEVATION VIEW



Total Wall Line Length: 60' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 2nd Story, C, CS-WSP, 0.86, 3.09, 1, 8.2, 8.2, 55.09, Compliant.

Furthest Distance to Adjacent BWL 20' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 60' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

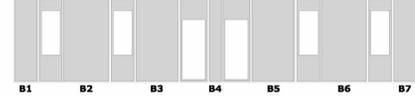
Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Rows B1, B2, B3.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 10/14

6

WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 1st Story, 3, CS-WSP, 1.16, 10.42, 1.1, 11.79, 11.79, 24.34, Compliant.

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Rows B1 through B7.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 7/14

3

WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 2nd Story, 1, CS-WSP, 0.86, 3.86, 1, 5.68, 27.08, Compliant.

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Rows B1 through B7.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 11/14

7

WALL LINE ELEVATION VIEW



Total Wall Line Length: 60' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 2nd Story, A, CS-WSP, 0.86, 3.09, 1, 8.2, 55.09, Compliant.

Furthest Distance to Adjacent BWL 20' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 60' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

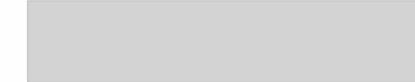
Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Rows B1, B2, B3.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

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4

WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW

Table with columns: Story, Wall Line, Bracing Method, Wind Factors, Wind Bracing Amount, Seismic Factors, Seismic Bracing Amount, Required Bracing, Qualified Bracing, Bracing Status. Row 1: 2nd Story, 2, CS-WSP, 0.86, 3.86, 1, 5.68, 42.08, Compliant.

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted
Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf
Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf
Gypsum Included
Blocking Included

Table with columns: Wall Line Segment, Wall Height, Story Height, Bracing Method, Segment Length, Adjacent Opening Height, Qualified Segment, Nails, Tension Tie, Hold Down. Row B1.

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

about:blank 12/14

8

S7.2

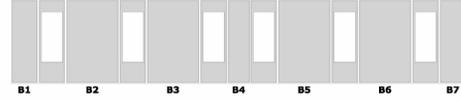
Table with columns: Description, Date, Rev. (empty table)

Calculations
2057, 2061, 2065, 2069 West Moore Street
Dobrin Property Management
November 7, 2023
City of Richmond, VA



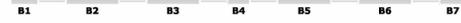
obsidian
A Professional Engineering Practice
417 North 22nd Street
Richmond, VA 23223
804.647.1589

WALL LINE ELEVATION VIEW



Total Wall Line Length: 42' 1"

WALL LINE PLAN VIEW



Story	Wall Line	Bracing Method	Wind Factors	Wind Bracing Amount	Seismic Factors	Seismic Bracing Amount	Required Bracing	Qualified Bracing	Bracing Status
2nd Story	3	CS-WSP	0.86	3.86	1	5.68	5.68	27.08	Compliant

Furthest Distance to Adjacent BWL 29' 11" Stone or Masonry Veneer Omitted  
 Roof Eave to Ridge Height 5 feet Wall Dead Load > 8 psf but <= 15 psf  
 Wall Line Length 42' 1" Roof/Ceiling Dead Loads <= 15 psf  
 Gypsum Included  
 Blocking Included

Wall Line Segment	Wall Height	Story Height	Bracing Method	Segment Length	Adjacent Opening Height	Qualified Segment	Nails	Tension Tie	Hold Down
B1	8'	9'	CS-WSP	2' 6"	5' 0"	2.5	6"/12"		
B2	8'	9'	CS-WSP	5' 0"	5' 0"	5	6"/12"		
B3	8'	9'	CS-WSP	5' 0"	5' 0"	5	6"/12"		
B4	8'	9'	CS-WSP	2' 1"	5' 0"	2.08	6"/12"		
B5	8'	9'	CS-WSP	5' 0"	5' 0"	5	6"/12"		
B6	8'	9'	CS-WSP	5' 0"	5' 0"	5	6"/12"		
B7	8'	9'	CS-WSP	2' 6"	5' 0"	2.5	6"/12"		

When SDC C Townhouse and D0-D2 are selected, check that irregularities in R301.2.2.2.5 are evaluated.

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# S7.3

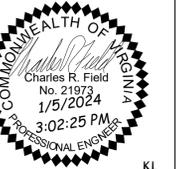
Rev.	Date	Description

## Calculations

2057, 2061, 2065, 2069 West Moore Street  
 Dobrin Property Management

November 7, 2023

City of Richmond, VA



KL

**Obsidian**  
 A Professional Engineering Practice  
 417 North 22nd Street  
 Richmond, VA 23223  
 804.647.1589



## FD LETTERHEAD

The submitted plans for your commercial or multi-family project are under review with Fire & Emergency Services. Applications which only require conceptual plans will be reviewed to the appropriate level of detail for this stage of development planning.

Per the Department of Planning & Development Review, Final Subdivision Plat site plan and Building Permit architectural plan reviews require 100% construction drawings. When applicable, the following sheets should be noted in the Table of Contents of the plan set. Any symbols, fire lines, hydrants, etc. pertaining to our review should be in noted in red.

- Site Layout
- Utility Layout
- First Floor Plan
- Life Safety Plan
- Roof Plan
- Elevation Drawings

Please respond to the checklist items below *\*and include the corresponding sheet number when asked to provide locations\** to expedite our review process. Further discussion may be necessary to provide approval from this department on your application's plans.

***We reserve the right to change or amend*** our decisions should new evidence be discovered, site conditions change during the review period, or revisions on subsequent submissions for this application modify previously approved items which fall within our scope of review.

We look forward to working with you to design a safe project for our city's residents and visitors.

**Office of the Fire Marshal**  
**City of Richmond Fire Department**  
201 East Franklin Street  
Richmond, VA 23219



FD LETTERHEAD  
FIRE & EMERGENCY PLAN REVIEW CHECKLIST

**Project Summary**

1. Is this new construction or a rehabilitation project?  
**Four (4) New Two-Family Attached Dwellings**
2. What is the height of the building(s)? How many stories?  
**Two (2) story**
3. Is there an accessory parking garage or parking garage levels?  
**No**
4. Are any levels below street level or below grade?  
**No**

**Building Occupant Egress**

5. Provide locations of roof access points on the plans.  
**N/A**
6. If there is a basement or floors below street level, provide locations for egress on the plans.  
**N/A**
7. For projects with 6 stories or more, stairways must be noted with compass directions (North, South, etc.) and the inside of stairwells must note each floor number.  
**N/A**
8. If a fire escape is part of the structure, it must be inspected by a design engineer and necessary repairs or replacements must be made before a Certificate of Occupancy can be issued.  
**N/A**

**Suppression Systems**

9. A temporary standpipe is required on site during construction. Its operative should be on the finished floor below the next floor being constructed. Provide the location on the plans.  
**N/A**
10. Alarm panel box. This must be in the first-floor lobby area on the street address side of the building. Provide location on the plans.  
**N/A**
11. Knox-Box® Rapid Entry System. One is required on any new construction or renovated enclosed multi-story building. Provide the location on the plans.  
**N/A**
12. Fire pump(s). Provide the location on the plans.  
**N/A**
13. Command Center. This needs to be clearly marked outside of the door. Provide the location on the plans.  
**N/A**
14. Sprinkler shut off valve. Provide the location on the plans.  
**N/A**
15. Sprinkler connections. There should be two on either side of the building. Provide the location on the plans.  
**N/A**



## FD LETTERHEAD

### Hydrants & Fire Department Connections

16. More than one hydrant may be required to support the project. How many existing hydrants are near the project? How many are proposed? Provide the locations on the plans.  
**N/A**
17. The dedicated hydrant should be public. Special circumstances may allow for a private hydrant if an ISO Class 1 Rating can be maintained and the Department of Public Utilities approves of it. A private hydrant must also be maintained in accordance with NFPA 291 and the current Virginia Statewide Fire Prevention Code.  
**N/A**
18. The FDC for each building. Provide the location on the plans. Signage is required around it (i.e. FDC Connection, No Parking) and curbing before it must be painted yellow. We highly recommend a Knox FDC secure system to safeguard the sprinkler system.  
**N/A**
19. The FDC should be at least 50 feet from its dedicated hydrant, but no more than 100 feet.  
**N/A**

### Emergency Vehicle Access to Site

20. New construction projects require at least (2) two roads for emergency vehicles *to access the site* and shall comply with Chapter 5 of Statewide Virginia Fire Prevention Code Fire Service Features.  
***This site is accessible by public streets; as such, these public roads satisfy Chapter 5 of the Statewide Virginia Fire Prevention Code Fire Service Features.***
21. Proposed or improved road surfaces used for emergency access must be able to support a minimum weight of 75,000 lbs.  
***This site is accessible by public streets; as such, these public roads will support the minimum weight.***
22. Proposed or improved road surfaces used for emergency access must be at least 20 feet in width. In some cases, 27 feet may be required.  
***This site is accessible by public streets; as such, these public roads are of sufficient width.***
23. Curb cuts into and around the site for emergency access must support a fire apparatus turning radii of 36' inside and 52' outside.  
***This site is accessible by public streets.***
24. New construction projects may require *access to all sides of the building* for emergency vehicles.  
**N/A**

### Environmental Concerns

25. Are you aware of any underground storage tanks (USTs) or above ground storage tanks (ASTs) which currently hold, or may have at one time held, flammable or combustible substances? If any are discovered during land disturbance, excavation, or construction activities, they must be immediately reported to the Fire Marshal's Office. A permit is required before removal or abandonment. All documents pertaining environment reports shall be forwarded to the Fire Marshal's Office.  
***Noted. The owner is not currently aware of any such tanks.***
26. Are you aware of any environmental concerns that need to be mitigated before construction, i.e. leaks, spills, etc.?  
***No, The owner is not currently aware of any environmental concerns.***
27. Will this project involve any rock blasting? A rock blasting permit shall be obtained from the Fire Marshal's Office.  
***No, this project will not involve any rock blasting.***