INTRODUCED: April 14, 2025

AN ORDINANCE No. 2025-084

As Amended

To authorize the special use of the property known as 1707 Tyler Street for the purpose of one two-family detached dwelling, upon certain terms and conditions.

Patron – Mayor Avula (By Request)

Approved as to form and legality
by the City Attorney

PUBLIC HEARING: MAY 12 2025 AT 6 P.M.

WHEREAS, the owner of the property known as 1707 Tyler Street, which is situated in a R-53 Multifamily Residential District, desires to use such property for the purpose of one two-family detached dwelling, which use, among other things, is not currently allowed by section 30-418.4, concerning lot area and width, of the Code of the City of Richmond (2020), as amended; and

WHEREAS, in accordance with section 17.11 of the Charter of the City of Richmond (2020), as amended, it has been made to appear that, if granted subject to the terms and conditions set forth in this ordinance, the special use granted by this ordinance will not be detrimental to the safety, health, morals and general welfare of the community involved, will not tend to create

AYES:	8	NOES:	0	ABSTAIN:	
ADOPTED:	JUN 23 2025	REJECTED:		STRICKEN:	

congestion in streets, roads, alleys and other public ways and places in the area involved, will not create hazards from fire, panic or other dangers, will not tend to overcrowding of land and cause an undue concentration of population, will not adversely affect or interfere with public or private schools, parks, playgrounds, water supplies, sewage disposal, transportation or other public requirements, conveniences and improvements, and will not interfere with adequate light and air; and

WHEREAS, (i) the City Planning Commission has conducted a public hearing to investigate the circumstances and conditions upon which the Council is empowered to authorize such use, (ii) the City Planning Commission has reported to the Council the results of such public hearing and investigation and its recommendations with respect thereto, and (iii) the Council has conducted a public hearing on this ordinance at which the person in interest and all other persons have had an opportunity to be heard;

NOW, THEREFORE,

THE CITY OF RICHMOND HEREBY ORDAINS:

§ 1. **Finding.** Pursuant to section 30-1050.1 of the Code of the City of Richmond (2020), as amended, the Council hereby finds that the special use set forth in and subject to the terms and conditions of this ordinance will not (i) be detrimental to the safety, health, morals and general welfare of the community involved, (ii) tend to create congestion in streets, roads, alleys and other public ways and places in the area involved, (iii) create hazards from fire, panic or other dangers, (iv) tend to overcrowding of land and cause an undue concentration of population, (v) adversely affect or interfere with public or private schools, parks, playgrounds, water supplies, sewage disposal, transportation or other public requirements, conveniences and improvements, or (vi) interfere with adequate light and air.

§ 2. **Grant of Special Use Permit.**

(a) Subject to the terms and conditions set forth in this ordinance, the property known as 1707 Tyler Street and identified as Tax Parcel No. N000-0364/004 in the 2025 records of the City Assessor, being more particularly shown on a survey entitled [~~"Survey of Lot 4 Blk. 1, Duvals Addition,"~~] "Site Plan, Lot 4 ~ Blk. 1, Duvals Addition," prepared by Long Surveying, LLC, and dated [~~September 29, 2023~~] December 6, 2024, a copy of which is attached to and made a part of this ordinance, hereinafter referred to as "the Property," is hereby permitted to be used for the purpose of one two-family detached dwelling, hereinafter referred to as "the Special Use," substantially as shown on the plans entitled, "Dobrin Properties, 1707 Tyler Street, Richmond, Virginia," prepared by Hugh S. Winstead, with sheet 1 dated June 21, 2024, and sheets 2 through 8 dated March 17, 2024, hereinafter referred to as "the Plans," copies of which are attached to and made a part of this ordinance.

(b) The adoption of this ordinance shall constitute the issuance of a special use permit for the Property. The special use permit shall inure to the benefit of the owner or owners of the fee simple title to the Property as of the date on which this ordinance is adopted and their successors in fee simple title, all of which are hereinafter referred to as "the Owner." The conditions contained in this ordinance shall be binding on the Owner.

§ 3. **Special Terms and Conditions.** This special use permit is conditioned on the following special terms and conditions:

(a) The Special Use of the Property shall be as one two-family detached dwelling, substantially as shown on the Plans.

(b) The height of the Special Use shall not exceed two stories, substantially as shown on the Plans.

(c) All building materials, elevations, and site improvements shall be substantially as

shown on the Plans.

(d) All mechanical equipment serving the Property shall be located or screened so as not to be visible from any public right-of-way.

§ 4. **Supplemental Terms and Conditions.** This special use permit is conditioned on the following supplemental terms and conditions:

(a) All required final grading and drainage plans, together with all easements made necessary by such plans, must be approved by the Director of Public Utilities prior to the issuance of the building permit.

(b) Storm or surface water shall not be allowed to accumulate on the land. The Owner, at its sole cost and expense, shall provide and maintain at all times adequate facilities for the drainage of storm or surface water from the Property so as not to adversely affect or damage any other property or public streets and the use thereof.

(c) Facilities for the collection of refuse shall be provided in accordance with the requirements of the Director of Public Works. Such facilities shall be located or screened so as not to be visible from adjacent properties and public streets.

(d) Any encroachments existing, proposed on the Plans or contemplated in the future shall require separate authorization and shall be subject to the applicable provisions of the Code of the City of Richmond (2020), as amended, and all future amendments to such laws.

(e) In all other respects, the use of the Property shall be in accordance with the applicable underlying zoning regulations.

§ 5. **General Terms and Conditions.** This special use permit is conditioned on the following general terms and conditions:

(a) No permit implementing this special use permit shall be approved until satisfactory evidence has been presented to the Zoning Administrator that any delinquent real estate taxes

applicable to the Property have been paid.

(b) The Owner shall be bound by, shall observe and shall comply with all other laws, ordinances, rules and regulations applicable to the Property, except as otherwise expressly provided in this ordinance.

(c) Words and phrases used in this ordinance shall be interpreted to have the meanings ascribed to them by section 30-1220 of the Code of the City of Richmond (2020), as amended, unless the context clearly indicates that a different meaning is intended.

(d) Notwithstanding any other provision of law, this special use permit is being approved due, in part, to the mitigating effects of each and every condition attached hereto; consequently, if any portion of this ordinance is determined to be invalid for any reason by a final, non-appealable order of any Virginia or federal court of competent jurisdiction, the invalidity shall cause the entire ordinance to be void and of no further effect from the effective date of such order.

(e) The privileges granted by this ordinance may be revoked pursuant to the provisions of sections 30-1050.7 through 30-1050.11 of the Code of the City of Richmond (2020), as amended, and all future amendments to such laws. Failure to comply with the terms and conditions of this ordinance shall constitute a violation of section 30-1080 of the Code of the City of Richmond (2020), as amended, and all future amendments to such law, or any other applicable laws or regulations.

(f) When the privileges granted by this ordinance terminate and the special use permit granted hereby becomes null and void, whether as a result of the Owner relinquishing this special use permit in a writing addressed to the Director of Planning and Development Review or otherwise, use of the Property shall be governed thereafter by the zoning regulations prescribed for the district in which the Property is then situated.

§ 6. **Implementation.** The Commissioner of Buildings is authorized to issue a building

permit substantially in accordance with the Plans for the Special Use subject to the terms and conditions set forth in this ordinance. An application for the building permit shall be made within 1,096 calendar days following the date on which this ordinance becomes effective. If either the application for the building permit is not made within the time period stated in the previous sentence or the building permit terminates under any provision of the Virginia Statewide Building Code, this ordinance and the special use permit granted hereby shall terminate and become null and void.

§ 7. **Effective Date.** This ordinance shall be in force and effect upon adoption.

A TRUE COPY:
TESTE:

City Clerk

DATE: February 27, 2025

TO: The Honorable Members of City Council

THROUGH: The Honorable Dr. Danny Avula, Mayor (by request)
(This in no way reflects a recommendation on behalf of the Mayor)

THROUGH: Sabrina Joy-Hogg, Interim Chief Administrative Officer

THROUGH: Sharon L. Ebert, DCAO for Planning & Economic Development

FROM: Kevin J. Vonck, Director of Planning & Development Review

RE: To authorize the special use of the property known as 1707 Tyler Street for the purpose of one two-family detached dwelling, upon certain terms and conditions.

ORD. OR RES. No. _____

PURPOSE: The applicant seeks a Special Use Permit to use such property for the purpose of one two-family detached dwelling, which use, among other things, is not currently allowed by section 30-418.4, concerning lot area and width.

BACKGROUND: The property is located in the Chamberlayne Industrial Center neighborhood, between West Fells and School Streets. The City's Richmond 300 Master Plan designates a future land use for the subject property as Residential, which is defined as "Neighborhood consisting primarily of single-family houses on large- or medium-sized lots more homogeneous in nature." The current zoning for this property is R-53, multi-family residential. Adjacent properties are located within a mix of zoning, predominantly R-53, M-1 light Industrial, and B-3 General Business District.

COMMUNITY ENGAGEMENT: The property is not within or near a neighborhood association. Additional community notification will take place after staff introduction.

STRATEGIC INITIATIVES AND OTHER GOVERNMENTAL: Richmond 300 Master Plan; Ordinance to be considered by the Planning Commission on May 6, 2025

FISCAL IMPACT: $300 application fee.

DESIRED EFFECTIVE DATE: Upon adoption

REQUESTED INTRODUCTION DATE: April 14, 2025

CITY COUNCIL PUBLIC HEARING DATE: May 12, 2025

REQUESTED AGENDA: Consent

RECOMMENDED COUNCIL COMMITTEE: Planning Commission – May 6, 2025

AFFECTED AGENCIES: Office of Chief Administrative Officer; Law Department (for review of draft ordinance)

RELATIONSHIP TO EXISTING ORD. OR RES.: None

ATTACHMENTS: Application Form, Applicant's Report, Plans, Survey

STAFF: Madison Wilson, Planner, Land Use Administration (Room 511) 646-5734

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: 1707 Tyler Date:

Tax Map #: N000-0364/004 Fee: $300

Total area of affected site in acres: 0.094

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

Zoning

Current Zoning: R-53

Existing Use: Vacant

Proposed Use

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

Construction of two-family detached 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

City: Richmond State: VA Zip Code: 23219

Telephone: (804) 385-1675 Fax: ( )

Email: Walker@lbirmproperties.com

Property Owner Signature: Alex Livingood

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

August 14th, 2024

Special Use Permit Request
1707 Tyler Street, Richmond, Virginia
Map Reference Number: N000-0364/004

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 1707 Tyler (the "Property"). The SUP would authorize the construction of one two-family detached dwelling on the currently unimproved Property. While the two-family use is permitted by the underlying R-53 Multifamily Residential zoning district, certain feature requirements are not met and, therefore, a SUP is required.

Existing Conditions

SITE DESCRIPTION AND EXISTING LAND USE

The Property is located on the east side of Tyler Street between W Fells and School Streets and is referenced by the City Assessor as tax parcel N000-0364/004. The Property is 44' wide by 93' in depth, contains approximately 4,099 square feet of lot area, and is currently unimproved. Access is provided at the rear of the Property by means of a north-south alley.

The properties in the immediate vicinity are developed primarily with residential uses with a range of building forms. Single-family detached and attached dwellings as well as multi-family buildings are the most common uses found in the area. Additionally, the Property is located nearby the City-owned First Tee Golf Complex.

EXISTING ZONING

The Property and those to the north, east, south, and west are zoned R-53. Properties further east, along Chamberlayne parkway are zoned M-1 Light Industrial Residential district. Further south across Bacon Street are properties zoned B-3 General Business District.

TRANSPORTATION

Located less than a quarter mile from the Property are bus stops served by Route 1 which runs every 15 minutes and provides connection north to Parham and south to the Downtown Transfer Station which provides connectivity throughout the City.

MASTER PLAN DESIGNATION

The Richmond 300 Master Plan (the "Master Plan") suggests "Residential" use for the Property. The Master Plan suggests this future land use designation allow for a variety of housing types that are consistent with the scale, density, and design of what exists in the vicinity. This designation also encourages developments that reinforce a gridded street pattern to increase connectivity. Two-family dwellings are a contemplated use in the Residential future land use designation (p. 54).

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."
    - b. Develop housing at all income levels in and near Nodes and along major corridors (see strategies Goal 14).
- 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 150 (Inclusive Housing Chapter), Objective 14.1 to "Increase city-wide awareness of the importance of integrating housing at all income levels into every residential neighborhood so every household has housing choice throughout the city."
- 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 155 (Inclusive Housing Chapter), Objective 14.8 to "Develop inclusionary and equitable housing options for our gentrifying neighborhoods to prevent involuntary displacement."
- 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 construct a new two-family detached dwelling on the currently vacant Property.

PURPOSE OF REQUEST

The Property consists of a single lot of record which is approximately 44 feet wide and contains roughly 4,099 square feet of lot area. The owner is proposing to construct one new two-family detached dwelling on the currently undeveloped parcel. As the proposal does not meet the lot area requirement prescribed by the underlying R-53 zoning district a special use permit is required.

In exchange for the SUP, the intent of this request is to ensure the development of a high-quality infill dwelling. The overall project will be appropriately dense and efficient as contemplated by the Richmond 300 Master Plan. At the same time, it will remain respectful to the historic development pattern in the vicinity thereby remaining consistent with the predominant character of the area. Finally, the quality assurances conditioned through the SUP will guarantee a higher quality development than might otherwise be guaranteed with a by right development.

PROJECT DETAILS

The new two-family detached dwelling would be two stories in height and is intended to be consistent with the historic development pattern found throughout the neighborhood. The units would be configured as flats and each would contain three bedrooms and two bathrooms. The ground floor unit totals 1,332 square feet of floor area and the second-floor unit consists of 1,350 square feet. The exterior design would be traditional in style and would be consistent with the character of the area. The building would be designed with a single entrance on the front facade to have the appearance of a single-family detached dwelling from the street.

The new dwelling would be clad in quality building materials including cementitious lap siding in order to ensure durability. A front porch would engage the street and provide usable outdoor living space. The building's massing and architectural style is designed to be compatible with nearby dwellings and is consistent with the historical homes found in the neighborhood.

Findings of Fact

The following are factors indicated 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 for high-quality infill construction 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 negligible traffic generation will create no congestion on streets, roads, alleys or any other public right of way.

- ***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 special use permit will not adversely affect the above referenced City services. To the contrary, the proposal will provide positive fiscal (tax) benefits that will 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. The proposed building is of compatible massing and spacing to the existing in the vicinity. As a result, this request will not interfere with the provision of adequate light and air to the adjacent buildings.

Summary

In summary, we are enthusiastically seeking approval for the construction of the proposed two-family detached dwelling. The building has been thoughtfully designed in order to provide appropriate, high-quality, infill residential development. The request offers compatibility with the City's Master Plan in terms of use. The request would upgrade the Property while maintaining a desirable variation in housing style and type in the vicinity. The traditional building form would provide the much-desired traditional neighborhood design which is appropriate to this area of the City. Finally, the quality assurances conditioned through the SUP would guarantee a higher quality development than might otherwise be developed by right.

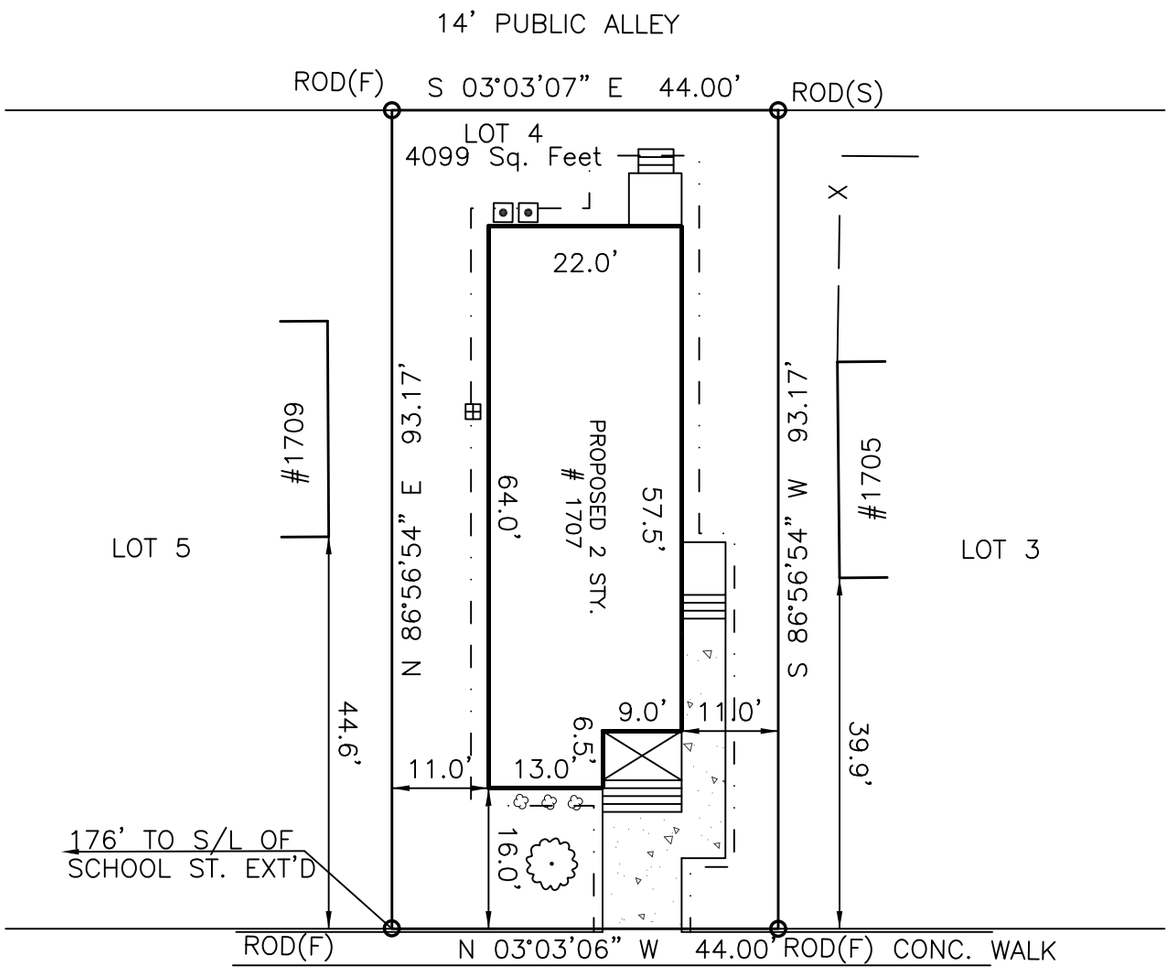
ADDRESS: 1707 TYLER STREET
PARCEL: N0000364004
ZONED R-53

PROPOSED BUSH
PROPOSED TRASH/ RECYCLE W/SCREENING
PROPOSED AC W/SCREENING
PROPOSED DICIDUOUS TREE PER APPROVED URBAN FORESTRY LIST

LOD 2601 Sq. Feet

COMMONWEALTH OF VIRGINIA
BRIAN M. LONG
Lic. No. 002372
12/6/24
LAND SURVEYOR

CITY BASELINE ASSUMED



TYLER STREET
40' PUBLIC R/W

SITE PLAN
LOT 4 ~ BLK. 1
DUVALS ADDITION

LONG SURVEYING, LLC
4650 FACTORY MILL ROAD
MAIDENS, VA 23012
804-314-5620

CITY OF RICHMOND
VIRGINIA
DEC. 6, 2024
SCALE: 1"=20'

DOBRIN PROPERTIES

1707 TYLER STREET

RICHMOND, VIRGINIA

CODES & LOAD REQUIREMENTS:

2021 VIRGINIA RESIDENTIAL CODE
w/ 2021 IRC MODIFICATIONS

LIVE & DEAD DESIGN LOAD: 50 LBS/SQ FT.
FLR LOAD REQ'D: 30/20# LIVE & 10# DEAD
ROOF LOAD REQ'D: 30# LIVE & 7# DEAD
WIND LOAD REQ'D: 90 M.P.H.
SOIL BEARG PRESSURE REQ'D: 2,000#/SQ FT.

OWNER:

DOBRIN PROPERTIES
107 S. FIRST STREET
RICHMOND VA. 2322-
phone (804) 517-6798

TABLE OF CONTENTS:

DESIGNER:

HUGH S. WINSTEAD, R.A., Ho. 4487 (Va.)
36 OLD MILL ROAD
RICHMOND VA. 23226
phone (703) 517-3519
e-mail: Hwinstead1@gmail.com

COMMONWEALTH OF VIRGINIA
HUGH STEWART WINSTEAD
Lic. No. 0401 004487
ARCHITECT

[redacted]

THIS IS TO CERTIFY THAT ON 9/29/23 I SURVEYED THE PROPERTY SHOWN ON THIS PLAT AND THAT THE TITLE LINES AND WALLS OF THE BUILDING ARE AS SHOWN ON THIS PLAT. THE BUILDINGS STAND STRICTLY WITHIN THE TITLE LINES AND THERE ARE NO ENCROACHMENTS OF OTHER BUILDINGS ON THE PROPERTY EXCEPT AS SHOWN

BRIAN LONG, L.S.

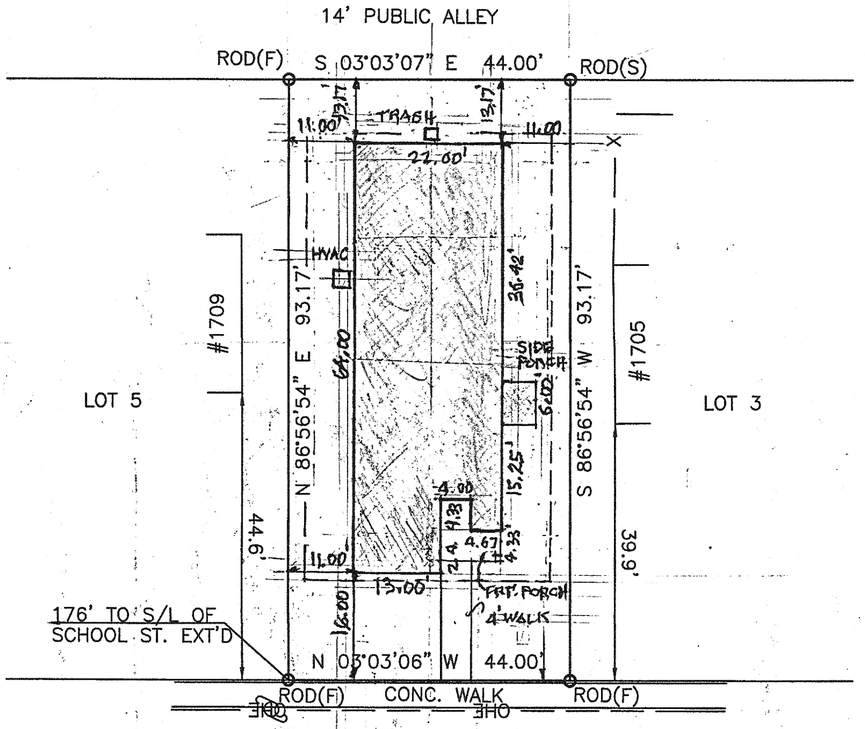
1) THIS PARCEL IS NOT IN A FEMA FLOOD HAZARD ZONE

2) THIS SURVEY IS BASED ON CURRENT FIELD WORK

3) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT, THEREFORE ALL ENCUMBRANCES MIGHT NOT BE SHOWN.

COMMONWEALTH OF VIRGINIA
BRIAN M. LONG
Lic. No. 002372
9/29/23
LAND SURVEYOR

CITY BASELINE ASSUMED



1707 TYLER STREET

40' PUBLIC R/W

SURVEY OF LOT 4 ~ BLK. 1 DUVALS ADDITION

LONG SURVEYING, LLC
4650 FACTORY MILL ROAD
MAIDENS, VA 23012
804-314-5620

CITY OF RICHMOND
VIRGINIA
SEPT. 29, 2023
APPROX SCALE: 1"=16'

LOT 4

4099 SQ. FT.
0.0941 ACRES

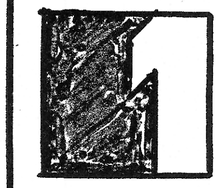
SETBACKS:

15' - FRONT
3' - SIDE
8' - REAR

AVAIL. BLDG. PAD
38.00' x 70.17'

NOTE:

SKETCH BLDG. PLAN DRAWN OVER BLDG. SITE PLAN PDT
OTHERS; NOT PART OF LAND SURVEYOR'S WORK.
HSC Unstead., ARCH 6-22-24



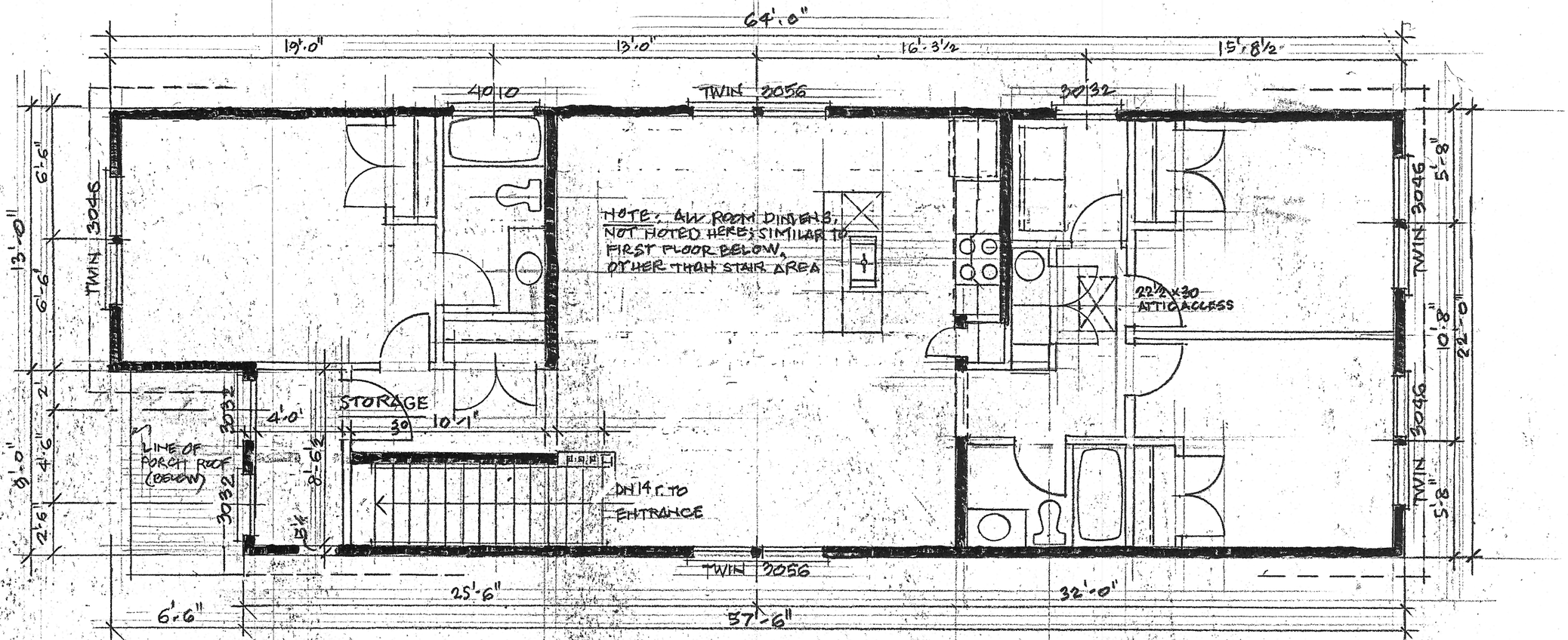
RIDGE VENT
FIBERGLAS SHING. ON 15# ROOF FELT ON 1/2" OSB OR EHG. WD. TRUSS
VENT VINYL SOFFIT
6" OH
HARDIW. SIDING (PRIMED)
2" WD. CORNERS
W/HD. TRIM 4" SIDES 6" HDS & SILLS
4/4 BRK TO BACK FOUND.
CRAWL SPACE
BRK STOOP & STAIR
FRONT PORCH
3068 W/TRANS ABT 3046
12
6" FASCIA W/ DET. 4" FRIEZE
UNDERSIDE OF WL. BRG.
TOP OF SUB-FLR.
TOP OF WALL
10" DIA WD. COL.
TOP OF SUB-FLR
TOP OF FOUND.
GRADE
BOTTOM OF FOOTG
FRONT ELEVATION
1/4" = 1'-0"

GABLE FLUSH @ BACK ELEVATION
SIDE 6" OH
SIDE 6" OH
6'-8" FR DR
DECK & STAIR
CRAWL SPACE
REAR ELEVATION
1/4" = 1'-0"

FRONT ONLY 6" BARGE LADDR @ GABLES
FRONT 6" OH
FRONT PORCH
MONO-TRUSS ON 2 NO. 2x10's BEAM W/ 12x12 WD. COL.
12
7"
NOTE: SIDE PORCH FIRE RETARDENT FRAMING MATER.
2 NO. 10" DIA. WOOD COL.
ALT. 6'x5' SIDE PORCH
FRONT PORCH
MAS. STOOP & BRK. STEPS TO FRONT & BACK

RIDGE VENT
FIBERGLAS SHINGLES ON 15# ROOF FELT ON 1/2" OSB PLYW'D SHTG.
1x6" FASCIA
2" VENT STRIP W/ 1/2" MDO SOFFIT
5/4"x6" WD. WINDOW TRIM & HD & SILL W/ 2" SIDES
6" LAP HARDY BOARD SIDING
4/4 BRK/BLOCK TO GRADE
RAISED HEEL TRUSS
TOP OF WL. BRG.
REAR: NO O.H.
TOP OF 2ND FLR
TOP OF WL.
TOP OF 1ST SUB-FLR.
TOP OF FOUND WL.
GRADE
FOOTING
SIDE ELEVATION
1/4" = 1'-0"

COMMONWEALTH OF VIRGINIA
HUGH STEWART WOOLSTEAD
Lic. No. 0401-004487
3-17-09
ARCHITECT


64'-0"
19'-0"
13'-0"
16'-3½"
15'-8½"
4010
TWIN 3056
3032
13'-0"
6'-6"
6'-6"
TWIN 3046
NOTE: ALL ROOM DIMENS. NOT NOTED HERE; SIMILAR TO FIRST FLOOR BELOW, OTHER THAN STAIR AREA
22½x30 ATTIC ACCESS
TWIN 3046
5'-8"
10'-8"
22'-0"
9'-0"
4'-6"
2'-6"
2'
4'-0"
STORAGE
30
10'-1"
LINE OF PORCH ROOF (BELOW)
3032
8'-6½"
DN 14 r. TO ENTRANCE
TWIN 3056
25'-6"
32'-0"
6'-6"
57'-6"
SECOND FLOOR PLAN; UNIT 2 = 1,350 SQ.FT.
1/4"=1'-0"
64'-0"
19'-0"
13'-0"
16'-0½"
15'-8½"
5½
13'-4¼"
2'-1"
5'-0¼"
20'-1"
2'
5'-8½"
10'-7½"
4010
TWIN 3056
3032
13'-5"
3'-1"
3'-7"
2'-0"
D. SP
LAUNDRY
W. SP
KITCHEN
DW
SINK & DISPOSAL
REF. SP
RANGE
BRG. WL
B.R. #1
BATH #1
LIV'G. RM
B.R. #2
WH
4H
TS
STR
48"V.
BEAR'G WL
13'-0"
12'-1"
6'-8½"
5'-1"
4'-0"
5'-0¼"
7'-1"
9'-9¼"
3'-7"
2'-1"
ISLAND
UP 4 r.
FRONT PORCH
UP 1 r.
ALT. 3046
3068 DR.
HALL #1
HALL #2
DIN'G RM
FAM. RM./ OPT. BR. #3
BATH #2
30"V.
3068
UP 14 r.
36" EXIT RADIUS
ALT. ENTRY DOOR 3068
PORCH RAIL
PORCH BEAM
10" DIA. RND. COL.
2'
4'-6"
14'-6½"
18'-3"
10'-0½"
7'-3"
ALT. SIDE ENTRY
TWIN 3056
10'-0½"
8'-1"
32'-0"
57'-6"
GROUND FLOOR PLAN; UNIT ONE = 1,332 SQ.FT.
32-3¼
1/4"=1'-0"
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64'-0"

24" 24" ETC.

13'-0"

5'-4 3/4"

5'-4 3/4"

5'-4 3/4"

9'-0"

12" BARGE LADDER @ OH.

GABLE TRUSS

GABLE TRUSS

12" BARGE LADDER

3 No. 13'-0" 7/12 FINK TRUSSES W/ 1 1/4" DIA @ BOTH ENDS

28 No. 22'-0" 7/12 FINK 7/12 TRUSSES W/ 1 1/4" DIA @ BOTH ENDS

P.C. LITE ABOVE

22 1/2 x 30 ATTIC ACCESS

NOTE: 2 No PER HVAC DUCTWORK RUN IN CEILS TO AIR HANDLER IN 2ND FLR. UNIT

GABLE TRUSS

5 1/4"

22'-0"

5 1/4"

LINE OF PORCH ROOF (BELOW)

6'-6"

LINE OF ATT. SIDE PORCH ROOF (BELOW)

57'-6"

ROOF TRUSS LAYOUT

1/4" = 1'-0"

64'-0"

4" x 8" ROUND VENTS @ 3'-0" EA CORNER

8"

8"

8"

8"

22'-0"

13'-0"

9'-0"

11'-8"

20'-8"

9'-0"

8"

8"

5'-0"

8"

8"

5'-0"

22'-0"

TYPICAL FOUNDATION:
3 CRS. 4/4 BRK. BLOCK ABOVE GRADE ON 2 CRS. 8" BLK. BURRIED ON 8" x 16" CONC. FOOT'G TO FROST

8" BLOCK EDGE SUPPORT FOR FRONT PORCH SLAB

CRAWL SPACE

4" GRAVEL ON 6 MIL V.B.

OPT. SUMP PUMP @ BLD'RS DISCRETION

24" x 30" CRAWL SPACE ACCESS DR.

20'-8"

FIRST FLR. HVAC SYSTEM: 8" x 16" MAIN SUPPLY & SECONDARY DUCTS RUN TO AIR HANDLER IN 1ST FLR. UNIT.

R-19 BATT INSUL. IN FLOOR SYSTEM

No 2 10 = 14' T.J.I.C 16" O.C.

2'

4'-6"

15'-3"

6'-0"

ALT. SIDE ENTRY PORCH FOUNDATION 4/4 BLK / BRK. 2 CRS ON 2 CRS @ 8" BLK

36'-3"

FOUNDATION PLAN:

1/4" = 1'-0"

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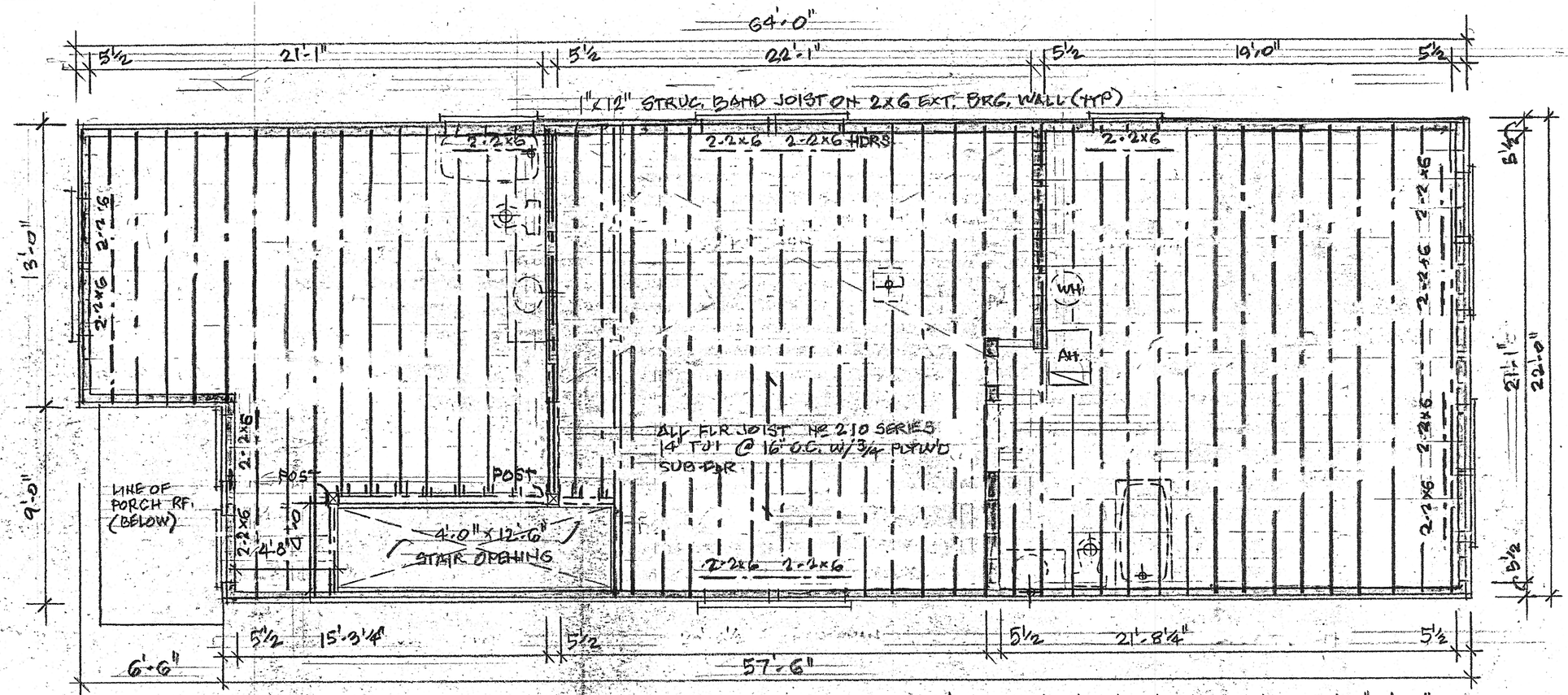
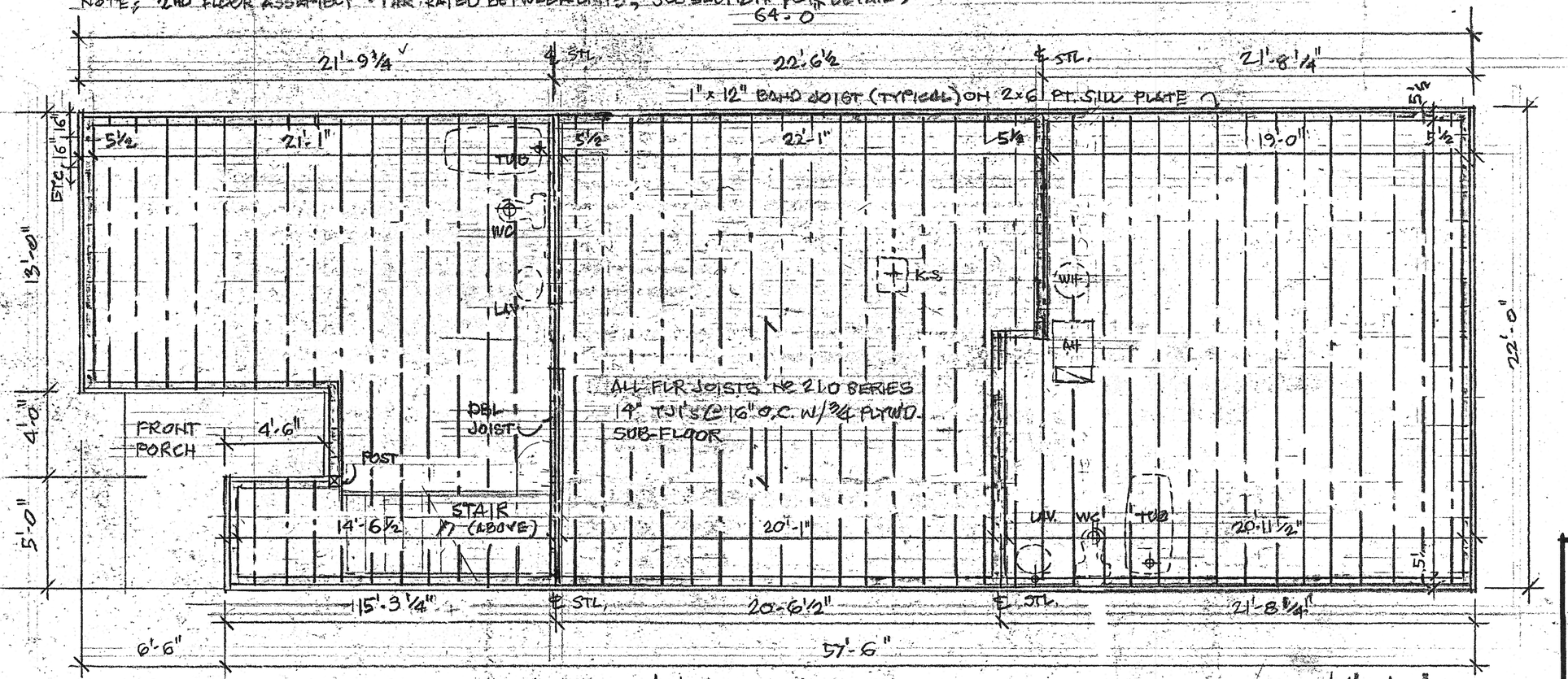
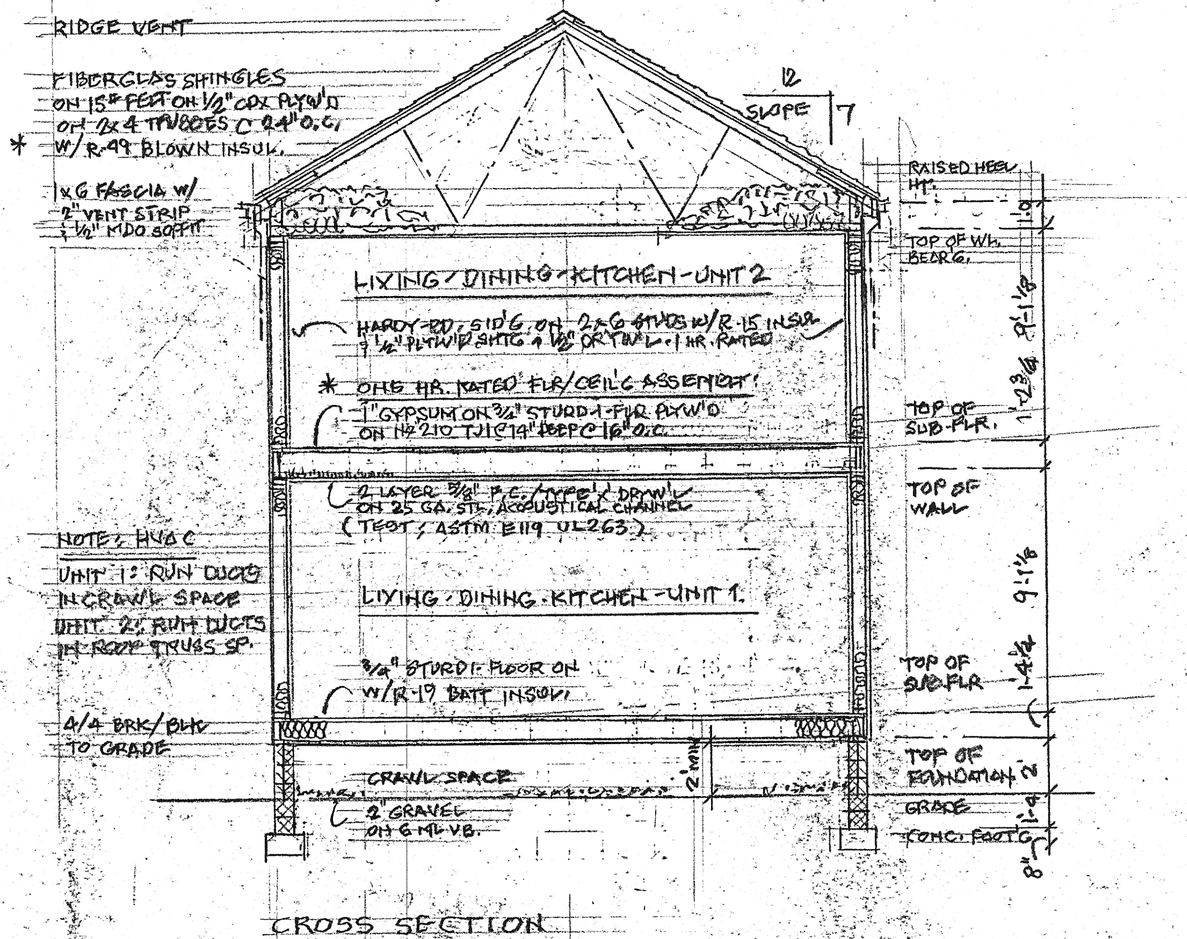


SECOND FLOOR JOIST LAYOUT: 8'-1⅛" WALL HT W/ CATH. CEIL'G @ LIV'G/DIN'G/KITCHEN 1/4"-1'-0"

NOTE; 2ND FLOOR ASSEMBLY - 1HR RATED BETWEEN UNITS, SEE SECTION FOR DETAIL.



FIRST FLOOR JOIST LAYOUT: 8'-1⅛" WALL HEIGHT 1/4"=1'-0"

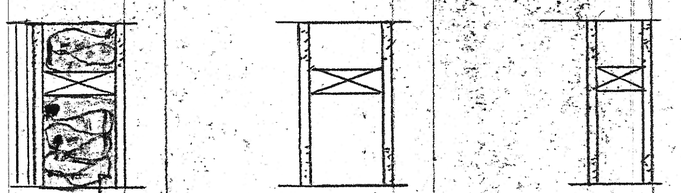


NOTE: INSULATION REQUIREMENTS PER 2018 V.R.C.:

WALLS	R-15;	PROVIDED R-15
* ATTIC/CEIL'G	R-49;	R-38
FLOOR OVER CRAWL	R-19;	R-19

PER TABLE 1102.2.1 (R-302.3)

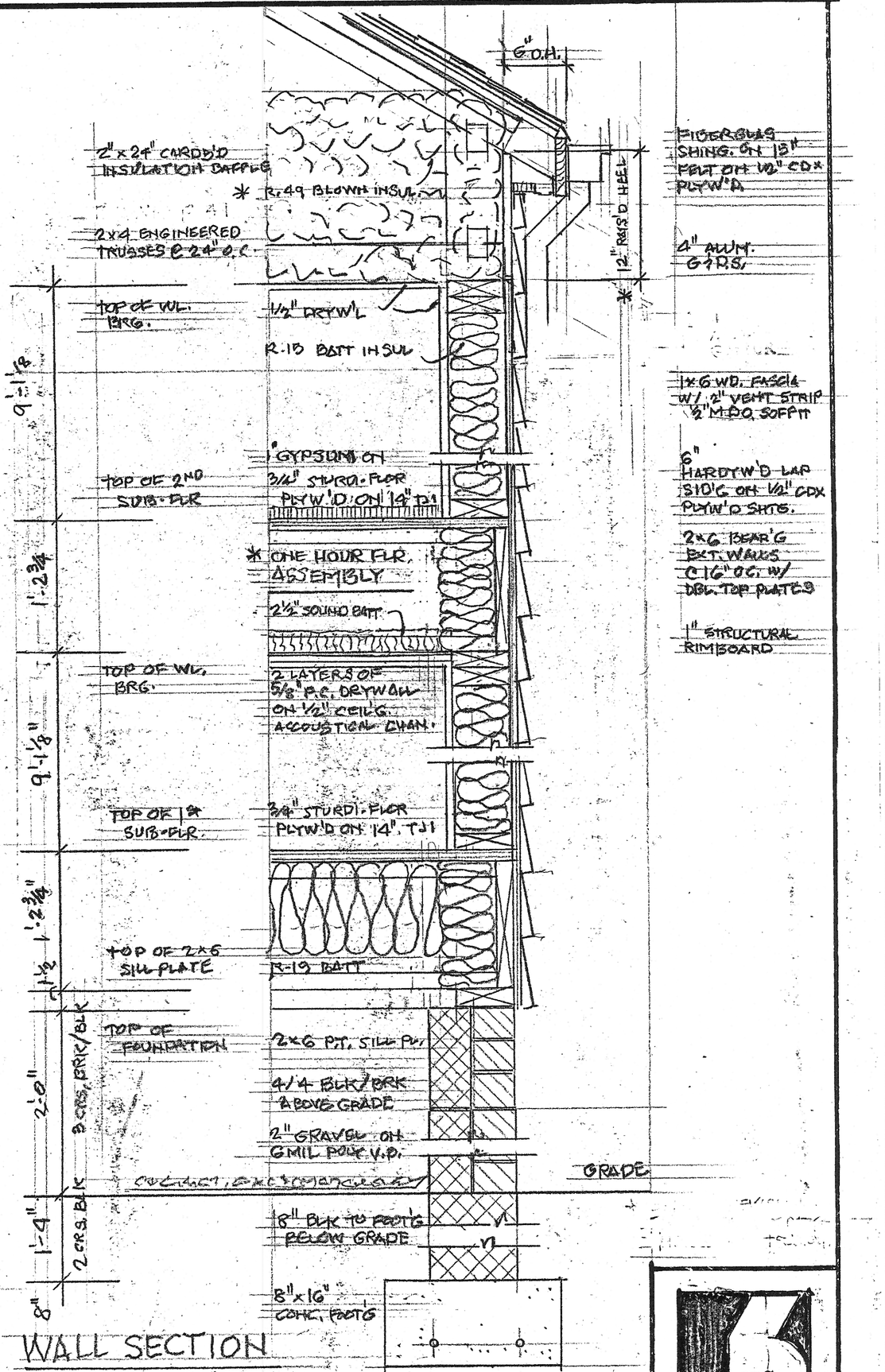
* NOTE: ONE-HOUR FLOOR SEPERATION ASSEMBLY BETWEEN UNITS PER TABLE 721.1(3), ITEM 21.1.1 OF 2018 VRC, AS TESTED: ASTM E 119 UL 263



2x6's @ 16" O.C. (R-15) W/ DBL. TOP PLATE W/ 1/2" D'WALL 1 SIDE + SIDING ON 1/2" PLYW'D (EXT.) BRG. WALL

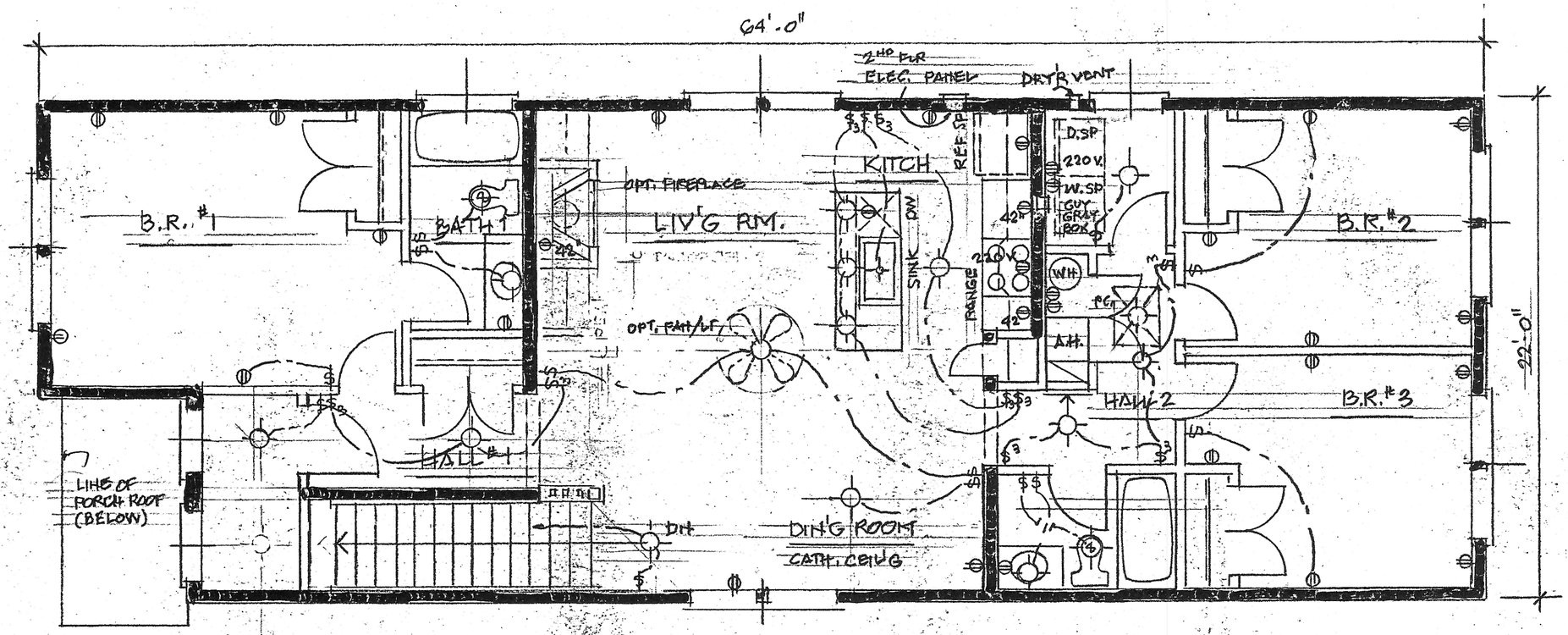
2x6's @ 16" O.C. (INT.) W/ DBL. TOP PLATE + 1/2" D'WL EA SIDE (BRG. WALL)

2x4's @ 16/24" OC (INT.) W/ SINGLE TOP PLATE + 1/2" D'WL, EA SIDE (NON-BRG. WALL)



WALL SECTION

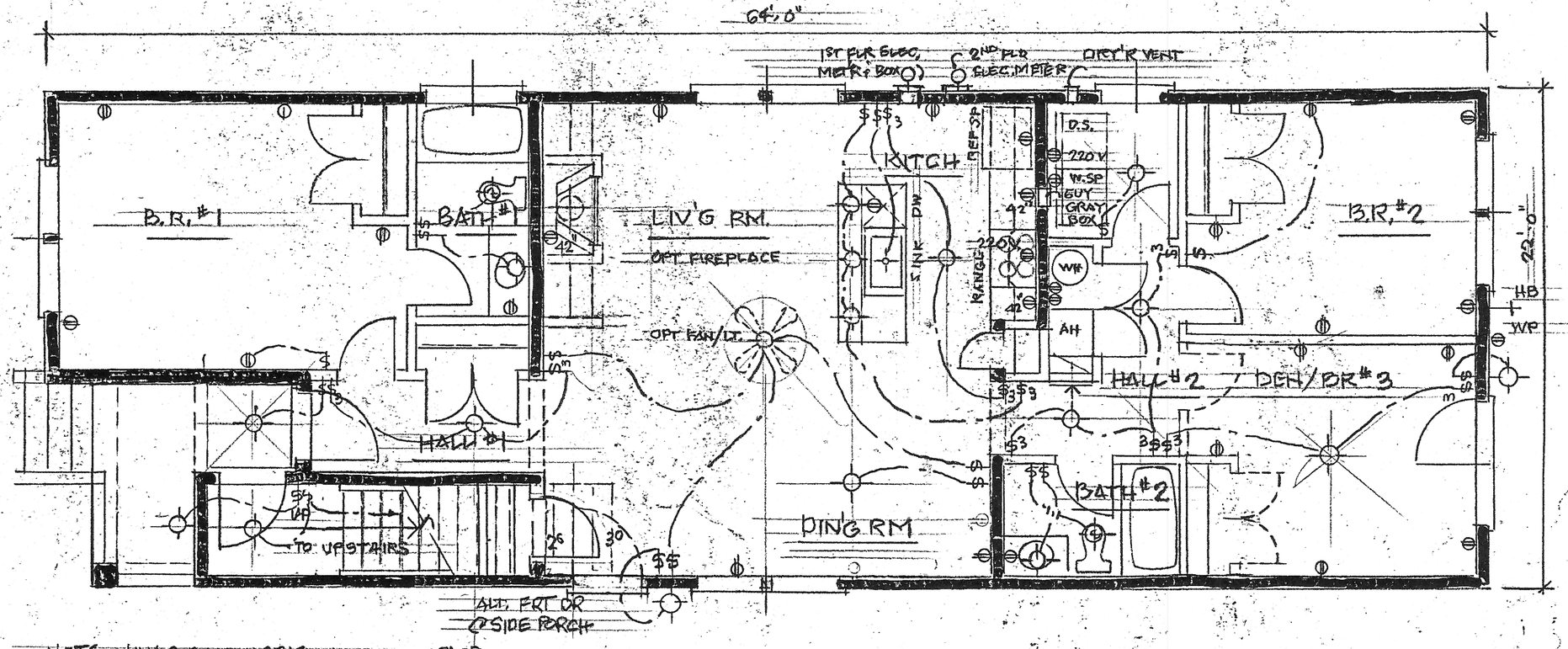
1 1/2" = 1'-0"



NOTE; HVAC DUCTWORK IN ATTIC

SECOND FLOOR ELECTRICAL PLAN

1/4" = 1'-0"



NOTE: HVAC DUCTWORK IN CRAWL SPACE

GROUND FLOOR ELECTRICAL PLAN:

1/4" = 1'-0"

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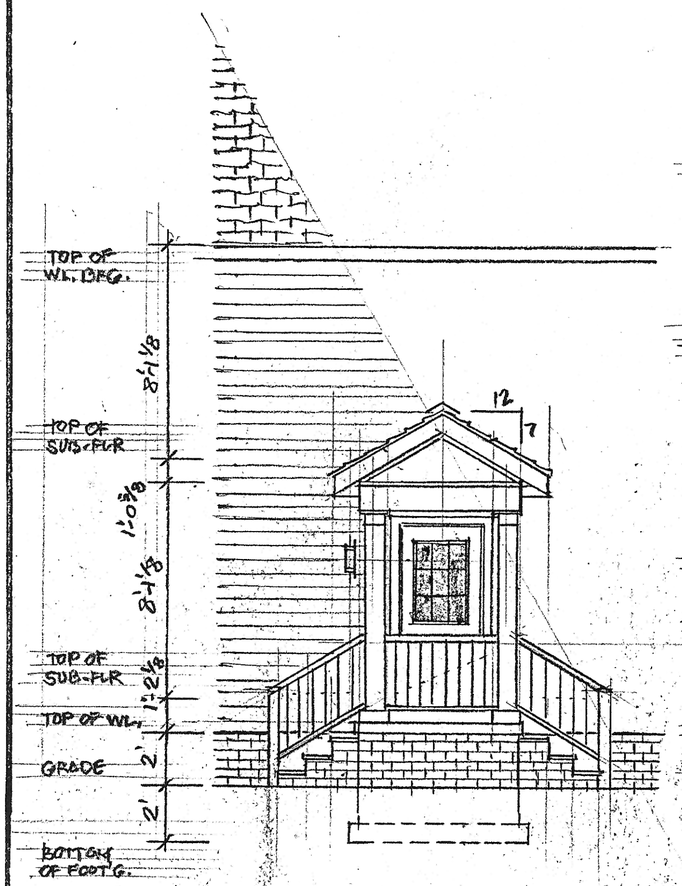
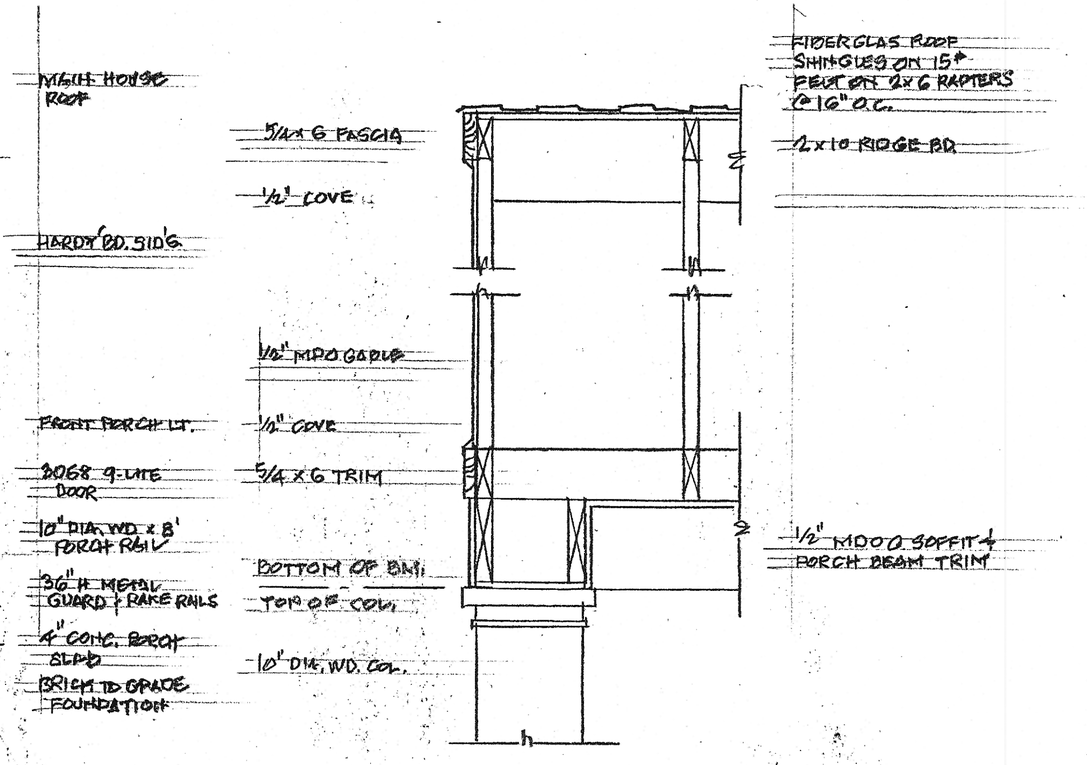


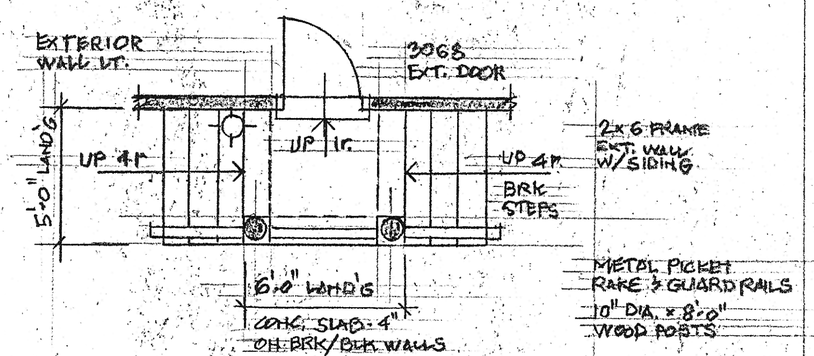
SIDE PORCH ELEVATION

1/4" = 1'-0"



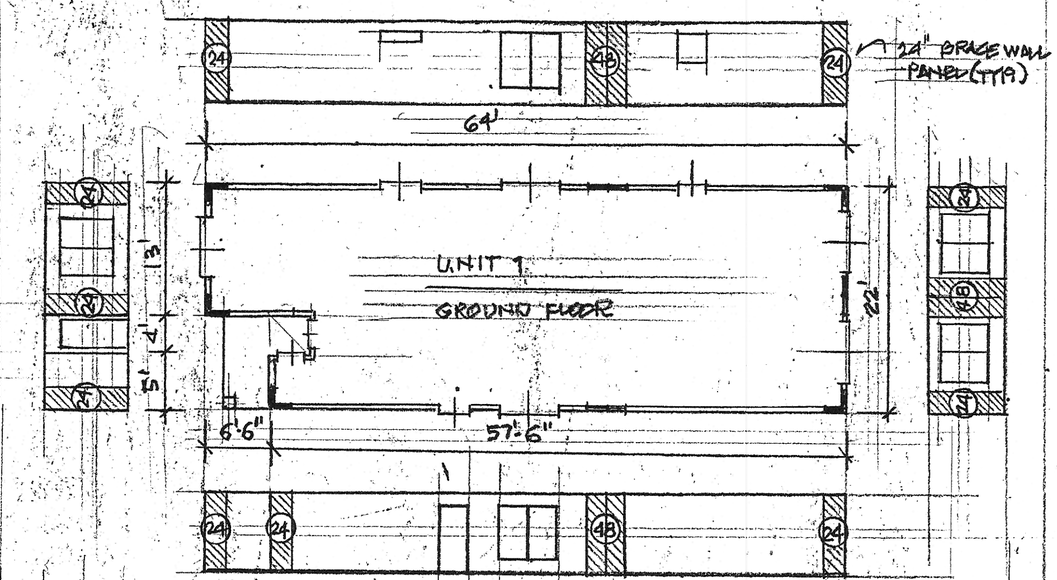
SIDE PORCH ROOF DETAIL

1" = 1'-0"



SIDE PORCH PLAN

1/4" = 1'-0"



FIRST FLOOR BRACED WALL LAYOUT (2ND FLR - SIMILAR)

SEE SECTION R-602.4 FOR BRACED WALL SPECS, FOR FASTEN'G REQM'TS, 3/32" = 1'-0"
& FIGURE R-602.10.4 FOR LAYOUT CRITERIA; FOR CONT. PLYW'D

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1.0 GENERAL

The work shall comply with all applicable local and state codes, ordinances, regulations and amendments and all other authorities having jurisdiction. The work shall comply with interpretations of the local building official. If the interpretation of the local building official is at variance with these documents, inform the architect prior to proceeding.

1.02 CONSTRUCTION METHODS AND TECHNIQUES
The architect is not responsible for construction means, methods, techniques, procedures, or for safety measures in connection with the work, and shall not be subcontractors or anyone performing the work, to carry out the work in accordance with the contract documents.

1.03 FIELD CONDITIONS AND DIMENSIONS
On-site verification of all dimensions and conditions shall be the responsibility of the general contractor and his contractors. Noted dimensions take precedence over scaled dimensions Architect shall be notified promptly of any discrepancies in information and of any discrepancies between field conditions and information on the drawings prior to construction.

1.04 TYPICAL CONDITIONS
The general notes and typical details apply throughout the job unless indicated otherwise. Where conditions are not specifically shown or detailed, the character and quality of the work shall be the same as that indicated for similar conditions.

1.05 DRAWING COORDINATION
The contractor shall coordinate and compare all drawings between the different consultants and trades and shall promptly notify the architect of any discrepancies which may be found.

1.06 STRUCTURAL NOTES
In case of any discrepancies between these notes and notes on the structural drawings the structural notes shall take precedence

1.07 TEMPORARY BRACING
Use temporary bracing as required to stabilize foundation and basement walls and superstructure until permanent construction is in place.

1.08 LIVE LOADS
All framing material shall be installed in accordance with the following loads:

Bedroom Areas	30 PSF (except for buildings use group R-3, 40 PSF)	Stairs Railings Windload	100 PSF 50 PSF 15 PSF
Living Areas	40 PSF		
Balconies	60 PSF		
Roof	30 PSF		
Garages	50 PSF		
Attic Floor	20 PSF		
Basement Walls	30 PSF		
Cantilevered Walls	30 PSF		

1.09 Mechanical units and any other equipment with weights shown in plan and supported by the structure were considered in the design of the structure. Any additional equipment not shown on structural drawings and having a weight in excess of 400 pounds shall be brought to the attention of the structural engineer prior to installation

1.10 The basic stability of the structure is dependent upon the diaphragm action of floors, walls & roof acting together. Contractor to provide all huys, braces, struts, etc. as required to accommodate all live, dead, and wind loads until all final connections between these elements are made.

1.11 PRODUCT LITERATURE AND MANUFACTURER'S RECOMMENDATIONS
Comply with the manufacturer's or fabricator's instructions or recommendations for the preparation of substrates and installation and use of material.

1.12 SOIL TREATMENT FOR TERMITE CONTROL(IF APPLICABLE)

Apply toxicant to soil in entire area to be occupied by structure and to 2' beyond perimeter line of structure. Use approved toxicant with a five-year guarantee.

1.13 FIRE RATED ASSEMBLIES

It is the responsibility of the general contractor and his subcontractors to verify and construct all rated assemblies to comply exactly with the requirements of the test reports listed. The architect shall be notified promptly of any change in materials prior to construction, and any change in materials must have the prior approval of the architect. All fire rated assemblies are continuous unless otherwise noted. Assembly materials shall take precedence over materials specified in these drawings.

1.14 RADON TESTING

Contractor to provide the following passive radon mitigation measures.
1.- All sub-stab 6 mil. vapor barrier to be double lapped 6" min.
2.- All perimeter basement slab joints & penetrations to be sealed with 25 yr. rated radon caulking .
3.- Compression sealed sump crock w/ metal lid & space for 4" passive flue pipe vent thru roof to outside air.

1.15 Mechanical/Plumbing/Electrical contractors shall be required to seal all horizontal and vertical penetrations in the exterior wall caused by their trade.

1.16 All sheathing penetrations caused by erection shall be patched and repaired according to manufactured specifications.

1.17 Details of construction of any retaining wall built must be submitted to the office of the building inspector for approval prior to construction, if applicable.

1.18 Crawl space shall be provided under floor joist not less than 18" in depth and such space shall be vented with screened openings and have a clear area of not less than one-third (1/3) of one (1) percent of the enclosed building area. (If applicable)

1.19 General contractor is responsible to locate and provide necessary structural, mechanical, electrical and plumbing sleeves, anchors, vent opening, etc., that might be required.

1.20 Basement and foundation walls are dependent upon the completed installation of floors for their stability. Contractor shall not place backfill until these elements are completely installed, or contractor must provide shoring and bracing.

2.0 SITE WORK

2.01 These drawings do not cover site work, excavation, grading and landscaping. Refer to the site drawings prepared by the civil engineer for these items.

2.02 EXCAVATION – shall be sufficient to provide full design dimensions or to allow for forming as required. No footings shall be placed on frozen earth. No footings shall be placed on soft material.

2.03 BACKFILL AND COMPACTION – Use only clean, well-graded earth containing no organic material, trash, muck, roots, logs, stumps, concrete, asphalt or other deleterious substances. Backfill shall be compacted to 95% of maximum density as determined by the ASTM D698 standard proctor test. Do not backfill against masonry walls until super structure is in place. Prior to placing fill, the existing surface shall be cleared of all refuse or organic materials. Place and compact backfill so as to minimize settlement and avoid damage to the walls and waterproofing and other work in place. Building official shall determine whether soil test is required ,if required soil fill material must be approved by soils engineer prior to placement. Equivalent fluid pressure of soil backfill not to exceed 60 P.C.F. uniform class SM or better.

2.04 FOUNDATIONS – All foundations are to be placed on undisturbed or compacted soil not less than 1'-0" below existing grade or 2'-6" below adjacent finished exterior grade unless otherwise noted on the drawings. Maintain 1:2 slope (vertical to horizontal) from bottom edge of footing to bottom of any adjacent foundation. Soil bearing valued assumed to be 2,000 PSF minimum unless otherwise noted on drawings. Architect/Engineer to be notified immediately should insufficient bearing capacity of high water table be encountered.
2.05 INSPECTIONS – Footing excavation shall be inspected by the building official prior to the placing of any concrete The building official shall be given notice for this inspection.

2.06 SOIL INVESTIGATION AND REPORT – All earthwork, compaction and foundation work shall be done in accordance with the soils investigation report which shall be provided by the owner. Notify architect if on-site test bearing indicates lesser values before proceeding with the work. Soil values to be determined by a registered engineer experienced in soils engineering.

2.07 DRAINAGE OF FOOTINGS – Unless otherwise noted, provide perimeter basement walls with 4" diameter drain tile laid on 2" gravel base with 6-8" gravel cover, with joints covered with filter cloth for perforated tile. Slope drain tile as required to drain to storm sewer or outfall. 18" gravel all around foundation.

2.08 WATERPROOFING FOR CONCRETE AND MASONRY FOUNDATIONS – Exterior foundation walls of masonry construction enclosing basements shall be damp proofed by applying not less than 1/2" of portland cement parging to the wall from footing to finish grade. The parging shall be covered with coat of approved bituminous material applied at the recommended rate. Exterior foundation walls of concrete construction enclosing basements shall be damp proofed by applying a coat of approved bituminous material to the wall from the footing to the finish grade at the recommended rate. Foundation walls of habitable rooms located below grade shall be waterproofed with membranes extending from the edge of the footing to the finish grade line. The membrane shall consist of either 2-ply hot mopped felts, 6-mil polyvinyl chloride, 5-pound roll roofing or equivalent material. The laps in the waterproofing membrane shall be sealed and firmly affixed to the wall.

3.0 CONCRETE

3.01 CONCRETE – Shall reach minimum compressive strength of (Fc)(see table below). All concrete to be poured in accordance with VRC2018 referenced by VUSBC per ACI 318-02. Concrete exposed to weather to be air entrained.

MINIMUM SPECIFIED COMPRESSIVE STRENGTH TO CONCRETE (1)

Type or location of concrete construction	Minimum Specified Compressive Strength (Fc) Severe Weathering Potential
Basement slabs and interior slabs on grade, except garage floor slabs	2,500 (3)
Basement walls, foundation walls, exterior walls, and other vertical concrete work exposed to the weather.	3,000 (4)
Porches, carport slabs and steps exposed to the weather, and garage floor slabs.	3,500 (4)

(1) at 28 days psi

(3) Concrete in the locations which may be subject to freezing and thawing during construction shall be air-entrained concrete in accordance with footnote 4

(4) Concrete shall be air-entrained. Total air content(percent by volume or concrete) shall be not less than 5 percent or more than 7 percent.

Use of additives shall not be permitted unless specifically approved by the structural engineer. Use of additives containing calcium chloride shall not be permitted.

3.02 REINFORCING RODS – Shall conform to ASTM A-615 grade 60 WWF shall conform to ASTM A-185, MESH 6x6 drawings. Placing plans and shop fabrication details shall be in accordance with the manual of standard practice for detailing reinforced concrete structures". Furnish support bars and all required accessories in accordance with C.R.S.I. standards.

All reinforcing steel marked "continuous" shall be lapped 36 bar diameters at places and around corner or intersection with a standard 90 degree bend on corner bars. Lap welded wire mesh one full mesh at side and end laps.

3.03 SLABS ON GRADE – 4" thick with WWF placed midway in slab thickness, slabs poured on 6 mil poly. Film vapor barrier on minimum 4" gravel. Overlap joints of barrier 12". Seal or tape penetrations by plumbing and avoid puncturing of film. Seal edges to foundation walls.
3.04 COMPACTION – Provide 95% compaction at all slabs and footings. All compaction shall be verified through in-place density tests by a qualified soils engineering consultant.

3.05 RMWORK – To be well braced, true to dimension, level and plumb.

3.06 rovide clear distance to outermost reinforcing as follows: Provide concre protection for reinforcing as follows:

Footings	3" (bottom)
Piers:	1-1/2" to ties
Walls:	2" to outside face, 1-1/2" to inside face
Garage slab beams:	1" to top, 3" to bottom

(See structural also for placement locations)

3.07 Not less than #5 bars shall be provided around all window and door openings. Such bars shall extend at least 24 inches beyond the corners of opening. (If applicable)

3.08 The sills of door openings between the garage and adjacent interior spaces shall be raised not less than 4" above the garage floor. Garage slabs shall be structural when fill exceeds 8".

4.0 MASONRY

4.01 CONCRETE MASONRY UNITS (CMU) – To be ASTM C-90, grade A for load bearing masonry. Solid black ASTM C-145 grade B. Minimum net compressive strength 2,000 PSI.

4.02 MORTAR TYPE – To be ASTM C-270 type compressive strength 2,000 PSI.

4.03 MASONRY REINFORCEMENTS

A. Horizontal reinforcements – duro wall at 16" O.C. vertically (no reinforcing required on walls less than 4 courses high).

B. Unless otherwise noted. 12" masonry foundation walls shall be reinforced as follows if applicable for 8'-0" from slab to underside of joist (H):

- Exterior grade = H to .75H.....#4 @ 24
- Exterior grade = Less than .75H.....None

- For 9'-0" from slab to underside of joints (H):

- Exterior grade = H to .75H.....#6 @ 32
- Exterior grade = .75H to .50H.....#5 @ 48
- Exterior grade = Less than .5H.....None

- For 10'-0" From slab to underside of joists (H):

- Exterior grade = H to .75H.....#5 @ 8
- Exterior grade = .75 to .50H.....#5 @ 32
- Exterior grade = Less than .50H.....#4 @ 48*

*Alternately grout wall solid with no reinforcing.

Provide dowels from all footings to masonry walls to match size and spacing of all vertical reinforcing. Grout all reinforced cores solid.

4.04 PARGING – 1 coat portland cement above grade – below grade see 2.08.

4.05 SOLID MASONRY – Provide minimum 8" deep below all concentrated loading conditions

Top Courses of block foundation walls shall be filled or solid including the courses under any steel beam.
4.06 Lintels for masonry walls shall be as follows:
Provide 1 angle for each 4" of wall thickness as follows:
Openings to 3'-0" = 3 1/2"x1/4"
3'-1" to 5'-0" = 4"x3 1/2"x5/16", with 3 1/2" Horizontal
5'-1" to 6'-6" = 5"x3 1/2"x5/16, with 3 1/2" Horizontal
6'-6" to 8'-1" = 6"x4"x3/8", with 4" horizontal
(nonrated wall only, 3/8" diameter bolts wo wood lintel @ 32" O.C. – Typ.)
4.07 MASONRY VENEER CONSTRUCTION – To have vertical ties at 16" O.C. and horizontal ties @ 32 O.C. flash at base and provide weep holes at 24" O.C.

4.08 STONE MASONRY – 5" stone veneer, color as selected by architect.

5.0 METALS

5.01 SIMPSON "MAB" TYPE STRAP ANCHORS OR FOUNDATION ANCHOR BOLTS – Shall be provided at maximum 6'-0" O.C. intervals and placed 12" from the end of each section with minimum two anchor bolts per section of wall. Anchor bolt shall be minimum 1/2" diameter and shall be embedded in foundation in depth minimum 8" of poured in place concrete and not less than 15" in grouted unit masonry. Anchor bolt can be substituted with metal strap per manufacturers specifications. All bearing plates shall bear on minimum 8" deep solid masonry.
5.02 STEEL – A) All metal anchors, fasteners, joist hangers, etc to be galvanized. All structural steel to conform to ASTM-36. Pipe to be A53. Tube to be A500 or A501. Detailing to be accordance with AISC structural steel detailing manual. Connections shall be capable of supporting allowable uniform load stress of 24 KSL. Bolted field connection shall be 3/4" diameter high strength bolts meeting ASTC spec. A-3254. Bolted joints to be bearing type using the turn-of-the-nut method of tightening. Except add hardened washer under turned element.

B) Submit complete shop and erection drawings for approval prior to fabrication and erection.

C) All welders shall be certified in accordance with the American Welding Society. All welding electrodes, machines, etc., shall be compatible with the type of steel being welded.

5.03 Provide galvanized metal-let in bracing at all exterior corners of frame walls (Note: May delete with structural grade sheathing).

5.04 NAILING SCHEDULE – As per 2021 VIRGINIA RESIDENTIAL codes, or manufacturers recommended standards but not less than that required by code.

5.05 Provide base plate for all structural steel beams bearing on masonry.

5.06 Holes shall not be cut through beams unless indicated or approved by engineer. Provide standard angle wall anchors for a beam resting on masonry.

6.0 WOOD

6.01 SILL PLATE – Plate treated to meet American Wood Preserves Institute Standard LP-2 or LP-4 where indicated on plans. Bolts shall be 1/2" diameter at 6' O.C., 7" into concrete, not more than 12" from corner.

6.02 ALL EXPOSED EXTERIOR LUMBER or lumber in contact with masonry or concrete shall be pressure preservative treated in accordance with industry standards. Provide fire retardant sheathing and lumber where indicated on drawings.

6.03 MAXIMUM MOISTURE CONTENT – Of all lumber shall be 19%. Lumber may be kiln dried but drying process must be regulated to cause a minimum amount of checking and kiln dried lumber shall be comparable to air dried stock.

6.04 STRENGTH OF FRAMING MATERIALS – All framing lumber shall be hem fir, grade 2 or better, having the following minimum properties.

A. -Bending stress "Fb" = 850 PSI for single member use
-Bending stress "Fb" = 975 PSI for repetitive member use
-Horizontal shear "Fv" = 75 PSI
-Compression perpendicular to grain "Fc" = 405 PSI
-Compression parallel to grain "Fc11" = 875 PSI
-Modules of elasticity "E" – 1,400,000 PSI

B. All structural posts shall be southern yellow pine grade 2 or better, having the following minimum properties.

-Bending stress "Fb" = 1200 PSI for single member use
-Bending stress "Fb" = 1400 PSI for repetitive member use
-Horizontal shear "Fv" = 90 PSI
-Compression perpendicular to grain "Fc" = 565 PSI
-Compression parallel to grain "Fc11" = 1000 PSI
-Modules of elasticity "E" – 1,600,000 PSI

C. Plywood laminated (LVL) beams shall have the following minimum properties.

-Shall be 1-3/4"
-Bending stress "Fb" = 2800 PSI
-Horizontal shear "Fv" = 285 PSI
-Modules of elasticity "E" = 2,000,000 PSI
-Tension parallel to grain = 1850 PSI
-Compression perpendicular to grain = 500 PSI
-Compression parallel to grain – 2700 PSI
-Prefabricated structural timber beams shall conform to one of the following specifications:

Microlam (ML) – NRB-126
Parallam (PI) – NER-292
ASI – BOCA 82-47
SBCCI-8302
KBO 4035
GNI – BOCA-85-5
SBCCI-8525
HUD #SEB-1091

D. Cutting and notching of floor joists shall conform to the following, or per manufacturers specifications.

-Notch depth in the top or bottom of the joists and beams shall not exceed one-sixth the depth of the members and shall not be located in the middle one-third of the span (including bird mouth cuts).

-Notch depth at the ends of the member shall not exceed one-fourth the depth of the member.

-The tension side of beams, joists and rafters of four inches or greater nominal thickness shall not be notched, except at ends of members.

-Holes bored or cut into joists shall not be closer than two inches to the top or bottom of the joists. The diameter of the hole shall not exceed one-third the depth of the joists.

E. Stress grade lumber shall be clearly stamped with the lumber inspection association seal showing the stress grade. All fabrication, erection and other procedures shall conform to the current "national design specification for stress grade lumber and its fastenings."

F. Prefabricated timber shall be installed and braced per manufacturers recommendation. Timber member shall not be cut or drilled unless so authorized by the manufacturer.

G. Where double members are indicated on the drawings, mechanically fasten both members in a manner such that both members share the superimposed loads, including loads from headers.

6.05 WOOD FLOOR AND ROOF TRUSSES – Shall be designed and fabricated by the truss manufacturer and shall comply with the national design specification for stress grade lumber and its fastenings. Submit shop drawings and calculations sealed by the P.E., the jurisdictional plan reviewer as required by government authority.

The design and detail of all trusses shall meet the requirements of F.H.A. G4541.1 design criteria for trussed rafters the "National specification for stress grade lumber and its fastenings," and all applicable building codes. Manufacturer must be a "TPI" (Truss Plate Institute member).

6.06 WOOD STUDS – At bearing wall to be 2x4's at 16" O.C. except at grade floor bearing wall of buildings more than two stories high shall be 2x4's at 12" O.C. Where height of stud wall exceeds 10'-0" provide 2x6's at 16" O.C. See plans for stud sizes and spacing at walls, – typical. All bearing partitions to be braced midway between all stories. Wall studs to be SPF stud grade or better, having the following minimum properties: Compression parallel to grain Fc = 425 PSI Fb rep = 650 PSI, E = 1,200,000. Holes bored in bearing wall studs shall not exceed 1/3 of stud width.

Whatever height of stud wall exceeds 10'-0", in addition to providing 2'x6' at 16" O.C., studs shall extend continuously, in one piece, to full height of the wall, unless noted otherwise.

6.07 WOOD JOISTS – Shall have a minimum bearing of 1 1/2". Wood floor trusses to have minimum bearing as per manufacturers recommendations. All joists and rafters to be bridged midway at intervals of 8'-0" max. All rafters and trusses shall be connected at bearing points with one prefabricated galvanized metal connector, minimum 18 ga., with capacity to resist 450# loading unless shown otherwise on drawings.

A. Prefab joists and beam hangers shall be sized and attached for manufacturers recommendations. Holes through wood I's shall not exceed manufacturers recommendations. No cuts or holes are allowed through top or bottom chord.

B. Wood floor joists shall be per depth and spacing shown on drawings. Supplier shall confirm that members provided can carry the loading designated in Section 1.08.

C. Provide 2-3/4" exterior plywood bands at all perimeter bearing walls. Provided squash block and stiffeners as required to distribute loading and shear reinforcing as required at concentrated loads.

D. Bearing studs should be at 16" O.C. with 2 top plates, and care shall be exercised to ensure locating supported floor joists or roof trusses within 5 inches of the studs beneath.

E. Provide solid blocking at 1'-0" O.C. between band and joist and first interior parallel joist.

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F. All prefabricated trusses and truss joists shall be designed for the following loads unless noted otherwise:

Roof: Snow load/Live load–30PSF
Dead load top chord–7PSF
Dead load bottom chord–10PSF

Floor: Live load–40PSF
Dead load–15PSF

Submit shop drawings and calculations for review. Affix seal of engineer registered in the state of the proposed project.

G. Prefabricated truss joists shall be designed to resist the loading shown with a maximum liveload deflection of 1/480 of the span.

6.08 All lintels over all framed openings to be shown below unless noted otherwise:

2 – 2x8 – Openings up to 4'–6"
2 – 2x10 – Openings up to 5'–6"
2 – 2x12 – Openings up to 7'–0"

6.09 PLYWOOD – All plywood used structurally shall meet the performance standards, and all other requirements of applicable U.S. commercial standards for the type, grade and species of plywood and shall be so identified by an approved testing agency.

FIRE RETARDANT TREATED PLYWOOD AND DIMENSIONAL LUMBER – (Where applicable). If fire retardant treated plywood is applied to a structure, (fire retardant plywood must be applied 4'–0" to either side of fire walls or party walls unless noted otherwise) it is to be accompanied by certification that acid hydrolyses will not occur in the product at temperatures below 400 Fahrenheit this certification must come from the manufacturer and be approved by a certified testing agency and local building officials.

Fairfax county's department of environmental management (D.E.M.), has approved the following manufacturers:

1. "Dricon" Manufactured by Koppers/Hickson.
   Approval was authorized on April 26, 1989.
2. "Pyroguard" by Hoover. Approval was authorized on April 28, 1989.

6.10 PLYWOOD – Subfloor to be 3/4" T and G plywood standard sturd–I–floor F.F.I.S., unless otherwise noted. Roof deck – 1/2" C–D–X – D.F.P.S. with exterior glue unless otherwise noted. Direct bearing at all edges, glued and nailed. All end joints shall be staggered. The face grain of the plywood shall be laid at right angles to the joists and trusses and parallel to the studs use plywood clips with 1/2" roof plywood (if applicable).

6.11 All wood blocking, nailers, etc. shall be attached to steel or concrete framing with power activated fasteners or 3/8" diameter bolts unless noted otherwise. Fasteners shall be spaced at 24" maximum O.C. and shall be staggered. Fasteners shall have a minimum capacity of 100 pounds in shear and pullout unless noted otherwise.

6.12 INTERIOR TRIM – Windows, door and bases may be finger jointed, 2–1/2" traditional profile or as indicated on drawings.

6.13 INTERIOR STAIRS – Prefab wood unless noted otherwise.

6.14 SHELVING – 3/4" filled flakeboard with taped front edge, ship and metal brackets, 42" O.C., Max., unless indicate otherwise on drawings or vinyl wrap wire shelving as selected by builder (owner).

6.15 Railings or handrails shall be installed on any exterior porch or stair exceeding 3 risers in height or 24" above grade.

6.16 HANDRAILS – At stair (if applicable) 34" height measured vertically from the nosing of the tread.

6.17 GUARDRAILS – Not less than 42" height measured vertically, except for buildings of use group R–3 shall be not less than 36". Construct such that a sphere with a diameter of 4" cannot pass through any opening.

7.0 THERMAL AND MOISTURE PROTECTION

7.01 SILL SEAL – 1/2"x3–1/2" compressible fiberglass beneath all exterior sill plates.

7.02 INSULATION: UNFINISHED BASEMENT WALLS RIGID–R–13

7.021 WALLS – R–13, 3–5/8" batt insulation with draft paper face vapor barrier, min., unless otherwise noted.

7.022 CEILINGS AT ROOF – R–38 fiberglass batt with draft paper face vapor barrier, or blow insulation, R–38 min.

7.023 CRAWL SPACES – and other floors exposed to unheated spaces below, R–19 fiberglass batt with draft paper vapor barrier. Bay Window Floor–R–30

7.024 PERIMETER SLAB – insulation to be rigid exterior grade, min. R–7 extending 2'–0" vertically and 2'–0" horizontally, min. perimeter insulation to be extruded polystyrene closed cell.

7.025 VAPOR BARRIERS – to face warm side of space (interior) unless noted otherwise on drawings.

7.03 ROOFING

7.031 SHINGLES – 235# or 215/fiberglass shingles class 'c' or better on #15 roofing felt on slopes of 4" to 12" or greater. On slopes less than 4" to 12" but greater than 2" to 12" provide double coverage asphalt/fiberglass shingles on two layers 15" roofing felt. Shingles shall be installed per manufacturer's specifications and applicable building codes.

7.032 VALLEY FLASHING – Open valleys shall be flashed with min. No. 28 gauge galvanized corrosion–resistant sheet metal and shall extend min. 8" from center line each way. Closed valley flashing shall be 2 layers 90# mineral surfaced cap sheet with bottom layer minimum 12" wide and top layer 24" wide, cemented together. Closed valleys may also be of 36" wide foil roofing material not less than No. 50 in valley over the underlayment.

7.033 RIDGE–FLASHING – Install as per manufacturers specifications.

7.034 ROOF EDGE – Provide non–corrosive aluminum drip edge flashing at roof edge.

7.035 BUILT UP ROOFING – To be as detailed on drawings and installed as per manufacturers specifications.

7.04 EXTERIOR WALLS

7.040 Roofing and sheet metal installation shall be in accordance with standards and details established by the Sheet Metal and Air Conditioning Contractors National Assoc., Inc. "SMACNA" – refer to 4th Editions, 1987 for specific detail installation.

7.041 FLASHING – To be non corrosive aluminum provided at tops and sides of beams and other projections through exterior walls or roof surfaces.

7.045 EXTERIOR SHEATHING – 1/2" OSB. sheathings installed per manufacturers specifications unless noted otherwise on drawings.

7.045A Lateral bracing requirements (per local building code requirements) Provide lateral bracing on both sides of the fire wall (typical).

1. Wood let–in and/or steel let–in (as approved). Brace at corners both directions and at intervals along the wall as required by the building code.
2. 4'–0" plywood panel at corners, both directions and at intervals along the wall as required by the building code.
3. Approved structural grade sheathing to include 1/2" CDX plywood, 5/8" OSB, or other approved material.

7.046 CAULKING/SEALANT as selected by builder (owner) – submit product literature to architect for approval.

7.05 FIRESTOPPING – Shall be provided to cut off all concealed draft openings (both vertical and horizontal) in the following locations:

1. In exterior or interior stud walls, at ceiling and floor levels and so placed that the maximum dimensions of any concealed space is not more than 10'.

2. Between stair stringers at top and bottom and between studs in line with stair run.

3. Spaces between chimneys and wood framing shall be filled with loose non combustible material (2" min. thickness), placed in non supports tightly fitted to the chimney.

4. Other locations not mentioned above such as holes for pipes, sleeves, behind framing strips and other similar places which could afford a passage for flames.

7.051 FIRESTOPS – When of wood, shall be min., 2" nominal thickness and may also be made of gypsum board, mineral wood or other non combustible material.

7.052 DRAFTSTOPPING – Provide draft stopping where required in accordance with applicable codes.

7.06 SIDING – To be as called for on drawings and installed as per manufacturer's specifications.

7.07 VENTILATION

7.07.1 Roof Spaces: 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 and snow. The openings shall be covered with corrosion resistant mesh not less than 1/8" (3mm) nor more than 1/4" (6mm) in any direction.

7.07.1.1 Ventilating Spaces: The minimum required net free ventilating area shall be 1/150 of the area of the space ventilated, except that the minimum required area shall be reduced to 1/300 where at least 50 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

7.07.2 Crawl Spaces: Crawl space areas, other than those used as an under floor plenum, shall be ventilated by an approved mechanical means or by openings in exterior foundation walls. Openings shall be located as close to corners as practicable and shall provide cross ventilation on at least two approximately opposite sides. The openings shall be covered with corrosion mesh not less than 1/8–inch (3mm) nor more than 1/4–inch (6mm) in any direction.

7.07.2.1 Opening Size: Openings shall have a net area of not less than 1 square foot (0.093 m2) for each 150 square feet (13.95 m2) of foundation space.

7.08 GUTTERS AND LEADERS (if applicable) Pre finished aluminum lead to splash blocks.

7.09 All wood shall be minimum 8" above finish grade or pressure treated less than 8" above finish grade. All siding shall be minimum 6" above finish grade.

7.10 FLASHING – When veneer of brick, clay tile, concrete or natural or artificial stone are used 20 mil plastic flashing shall be attached to the sheathing wherever necessary to prevent moisture penetration behind the veneer.

7.11 Rough carpentry contractors shall seal with construction adhesive, plates at floor and ceiling, and caulk all window and door flanges/jambs and all panel butt joints prior to and during erection.

7.12 All pipes, ducts, vents, wiring, and chases which penetrate ceilings directly below a truss or roof assembly shall be firestopped.

8.0 DOORS AND WINDOWS

8.01 DOORS – Specified by builder.

8.02 EXTERIOR ENTRANCE DOOR – 1–3/4" solid wood core. See drawings for raised panel design. Provide complete weather stripping and metal threshold.

8.03 PATIO DOORS – 1–3/4" Solid Wood Core. Low E, Tempered Glass. See drawings for glass design. Provide complete weather stripping and metal threshold.

8.04 GARAGE TO UNIT DOORS –B–label steel with 20 min. (minimum) firerating.

8.05 INTERIOR DOORS – Solid Wood or Hollow Core Wood with wood veneer.

8.06 DOOR SIZES – Refer to door schedule.

8.1 WINDOWS – Vinyl DH, Low E, with Argon

8.11 GENERAL – Glazing in locations subject to human impact such as entry doors and sidelights, sliding glass doors, shower doors, tub enclosures and storm doors shall be fully tempered in accordance with the 2021VRC. Fixed panels with area in excess of 9 sq. Ft. with the lowest edge less than 18" above the finished floor or walking surface within 36" of such glazing unless a horizontal member not less then 1–1/2" width located between 24" and 36" above the walking surface shall be fully tempered. See 2021VRC for exceptions to hazardous locations (if applicable).

8.12 WEATHER PROOFING – All sliding, swinging doors, and windows opening to the exterior shall be fully weather–stripped, caulked, gasketed or otherwise treated to limit air infiltration. Provide maximum air infiltration as follows:

1. Windows shall have an air infiltration rate of less then 0.5 CFM per foot of such crack.
2. Sliding glass doors shall have an air infiltration rate of less than 0.5 CFM per square foot or door area, or
3. Swinging doors shall have an air infiltration rate of less then 1.25 CFM per square foot of door area.

8.13 EMERGENCY EGRESS – Every sleeping room below the fourth story shall have at least one operable window or door for emergency egress or rescue. Egress windows shall have a maximum sill height of 44" above finished floor and shall have a minimum net clear opening of 5.7 Sq. Ft. with a minimum clear opening height of 24" and minimum opening width of 20". Grade floor windows may have a minimum net clear opening of 5 sq. ft.

8.14 ALL OPERABLE WINDOWS – Shall have non corrosive screens and sash locks.

9.0 FINISHES

9.01 GYPSUM WALLBOARD – Shall be installed in accordance with U.S. gypsum recommendations and shall meet the requirements of 2009 IRC and other applicable codes. Typical interior partitions to have 1/2" tapered edge taped and finished. Provide 5/8" type "X" fire–rated gypsum board at walls & ceilings where called for on the drawings.

9.02 GYPSUM WALLBOARD – Shall not be installed until weather protection for the installation is provided.

9.03 SUPPORT – All edges and ends of gypsum board shall occur on framing members except those edges perpendicular to framing members.

9.04 MOISTURE–RESISTANT GYPSUM BOARD – Provide moisture resistant gypsum board at all tub/shower locations in bathrooms and wherever moisture conditions can exist.

9.05 CERAMIC TILE – Ceramic tile shall be 4–1/4"x4–1/4" glazed tile, thin set application on water–resistant drywall. Provide base and miscellaneous trim. Tile color as selected by owner. Provide marble threshold for transition between ceramic floor tile and other floor finishes. Floor tile shall be non slip.

Grout – Commercial waterproof grout cement.

9.06 RESILIENT FLOORING – Shall be sheet vinyl or vinyl composition tile installed as per manufacturer's specifications.

9.07 UNDERLAYMENT – Provide suitable floor underlayment for all ceramic tile and resilient flooring.

9.08 PAINT INTERIOR

Ceilings – Latex flat, 2 coats
Walls – Latex flat, 2 coats
Trim – Latex semi–gloss, 2 coats

Kitchen and Bathrooms

Ceiling – Latex flat, 2 coats
Walls – Latex flat, 2 coats

9.09 PAINT EXTERIOR
Trim – Latex (1) coat prime (1) coat finish

10 SPECIALTIES

10.01 BATH VANITIES – As selected by builder (owner)

10.02 BATH FIXTURES – As selected by builder (owner)

11.0 EQUIPMENT

NONE

12.0 FURNISHINGS

NONE

13.0 SPECIAL CONSTRUCTION

NONE

14.0 CONVEYING SYSTEMS

NONE

15.0 MECHANICAL

15.01 H.V.A.C. – Kitchen and a bath ventilation metal ducts to exterior where indicated and/or required by applicable codes. Complete installation circulating air combustion to meet all requirements of the manufacture and the state. Bath exhaust fans shall be 50 c.f.m. minimum.

15.02 PLUMBING – Sanitary cold and hot waters and all other piping shall conform to the requirements, local and state.

15.03 Provide minimum 18" walking space in front of all plumbing fixtures in bathrooms and 14"x30" access panel at tub connections unless otherwise noted. All shower stalls shall have a minimum finished area of 1,024 sq. in. with a minimum of 30" in any direction. Water closets to be a minimum of 15" from wall to centerline of fixture.

16.0 ELECTRICAL

16.01 ELECTRIC – Shall conform to the requirements of the National Electric Code, the local Power CO., and all applicable local regulations. Obtain all permits and pay fees required for this work. Have the installation inspected and approved by and inspection agency of the fire underwriter's association. Submit a certificate of final approval by the inspection agency upon completion. Fixtures and apparatus as selected by builder, unless otherwise noted.

16.02 SMOKE DETECTORS – Are required and shall be installed inside of each separate sleeping area and on each additional story of the dwelling including basements and cellars. All detectors shall be approved and listed and shall be installed in accordance with the manufacturer's instructions. Smoke detectors shall be hard wired with battery backup.

COMMONWEALTH OF VIRGINIA
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