

Ruppert Residence

4 E Kirke Street Chevy Chase MD 20815



APPROVED
Montgomery County
Historic Preservation Commission

Karen Bulleit

REVIEWED
By Dan Bruechert at 12:52 pm, May 15, 2025

PROJECT INFO :
NEW 2-STORY REAR ADDITION WITH INTERIOR RENOVATION TO EXISTING 2-1/2 STORY SINGLE FAMILY HOME WITH CELLAR

ADDRESS: 4 E Kirke Street
Chevy Chase MD 20815

LOCATION: LOT 30. BLOCK 34. SECTION 2

OVERLAY: N/A

HISTORIC: Village of Chevy Chase

ZONING: R-60

SETBACKS: FRONT: 25'. SIDE: 7'. REAR: 20'

LOT AREA: 8125 SF

BUILDING HEIGHT: 28.15'

LOT COVERAGE: 35% (2,843.7 SF)

ALLOWED: 28.15'

PROPOSED: MEAN 22.7'
PEAK 27.25'
SEE CIVIL

BUILDING AREA:

	EXISTING:	PROPOSED:
BASEMENT FLOOR AREA:	897 SF	897 (NO CHANGE)
FIRST FLOOR AREA:	1356 SF	1385 SF
SECOND FLOOR AREA:	1094 SF	1268 SF
ATTIC AREA:	433 SF	433 (NO CHANGE)
TOTAL FLOOR AREA:	3780 SF	3983 SF
SHED AREA: (INCL.)	449 SF	96
TOTAL:	4229 SF	4079 SF

PLANS PREPARED BASED ON THE FOLLOWING CODES:
MONTGOMERY COUTNY MD
2018 INTERNATIONAL RESIDENTIAL CODE AND 2018 INTERNATIONAL ENERGY CONSERVATION CODE AS AMENDED BY MONTGOMERY COUNTY EXECUTIVE REGULATION 31-19.

MORTAR & THATCH
ARCHITECTS

300 Morse Street NW, Unit 833
Washington DC 20002
www.mortarandthatch.com
202-695-5586

Seal

Consultants

ARCHITECT

Mortar & Thatch LLC
Alexander Smith, NCARB
300 Morse Street NW, Unit 833
Washington DC 20002
202-695-5586

CONTRACTOR

Hilltop Builders
Josh Robins
301-450-2570

STRUCTURAL ENGINEER

APAC Engineering, Inc.
Robert Wixson, P.E.
8555 16th Street, Ste 200
Silver Spring MD 20910
301-565-0543

CIVIL ENGINEER

CAS Engineering
Jared Carhart
10 South Bentz Street
Frederick, MD 21701
301-703-2350

LANDSCAPE ARCHITECT

Campion Hruby Landscape Architects
Bob Hruby
111 Cathedral Street, Ste 100
Annapolis, MD 21401
410-280-8850

INTERIOR DESIGNER

Cameron Ruppert Interiors
Cameron Ruppert
5101 Wisconsin Avenue
Washington DC 20016
202-450-5947

Project No. 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Built
09-27-2024	Schematic Design Set
10-09-2024	Pricing Set
10-11-2024	Pricing Set Addendum
11-24-2024	Interior Set
12-09-2024	Updated Pricing Set
02-05-2025	HAWP Submission Set
02-28-2025	Updated CD Set
03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

Sheet Title

Cover

Sheet Number

0000

PERMIT SET

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ARCHITECTURAL

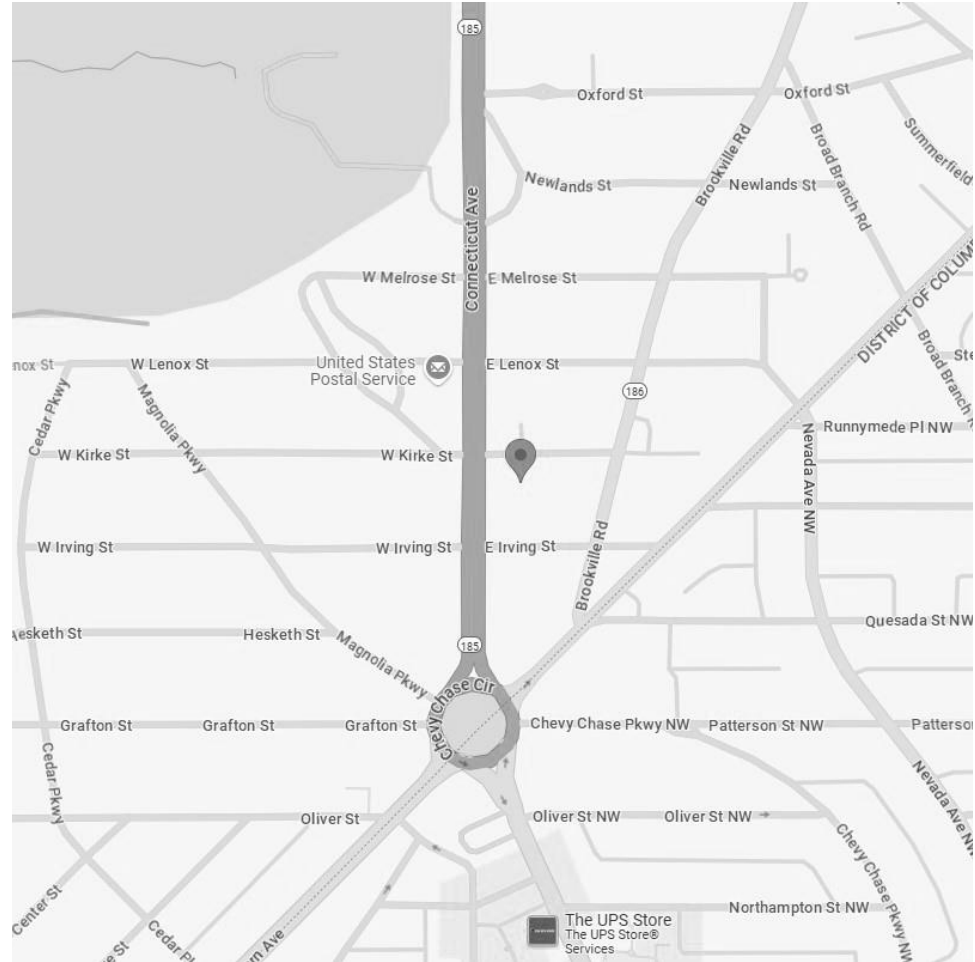
- 0000 Cover
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- 0002 Window & Door Schedule
- D000 Basement & First Demolition Plans
- D001 Second & Attic Demolition Plans
- S001 Foundation Plan
- S002 1st Floor Framing Plan
- S003 2nd Floor Framing Plan
- S004 Attic Framing Plan
- S005 Roof Framing Plan
- S100 Wind Bracing Plans
- S200 Structural Notes & Details
- S201 Structural Details
- A100 Basement & First Plans
- A101 Second & Attic Plans
- A200 Exterior Elevations
- A201 Exterior Elevations
- A202 Manufactured Shed Elevations
- A203 Building Sections
- E000 Basement & First Electrical Plan
- E001 Second & Attic Electrical Plan
- E002 Electrical Notes
- M000 Mechanical Plans

CIVIL

- 1 of 4 – Building Permit Site Plan, Stormwater Management Plan, and Sediment Control Plan
- 2 of 4 – Stormwater Management Calculations and Details
- 3 of 4 – Small Lot Drainage Plan
- 4 of 4 – Sediment Control Notes, Details, and Certifications

Project No. 2409

Vicinity Map



Applicant Name 4 E KIRKE STREET LLC
Date 4/15/2025
Applicant Address 4 E KIRKE STREET CHEVY CHASE MD 20815
Phone Number 202-495-5586
Building Address 4 E KIRKE STREET CHEVY CHASE MD 20815 Permit (A/P) #

Criteria	Required	Provided	Assembly Description
Windows/Doors - Maximum U-Factor Max SHGC - glazed fenestration	0.35 0.40	0.35 0.40	LEPAGE WINDOWS AND DOORS
Skiylights - Maximum U-Factor Max SHGC	0.55 0.40	N/A N/A	
Ceilings	R-49	R-49	CLOSED CELL SPRAY FOAM INSULATION
Walls (wood framing)	R-20 or 13+5	R-21	CONT. ZIP + OPEN CELL SPRAY FOAM INS.
Mass Walls	**R-8/13	N/A	N/A
Basement Walls	*R-10/13	R-10	RIGID BOARD INSULATION
Floors	R-19	R-19	OPEN CELL SPRAY FOAM INSULATION
Slab perimeter-R-value and Depth	R-10, 2ft	N/A	N/A
Crawlspace	*R-10/13	R-10	RIGID BOARD INSULATION

Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component R-value.
*The first R-value applies to continuous insulation, the second to framing cavity insulation. *10/13 means R-10 continuous insulating sheathing on the interior or exterior of the home or R-13 cavity insulation on the interior of the basement wall.
**The second R-value applies when more than half the insulation is on the interior of the mass wall.

Thermally Isolated Sunroom. Check box if applicable.

Minimum Ceiling R-Value for Sunroom (R-19)
Minimum Wall R-Value (R-13)

New wall(s) separating a sunroom from conditioned space shall meet the building thermal envelope requirements.

I hereby certify that the building design represented in the attached construction documents has been designed to meet or exceed the requirements of: 2

2018 Edition International Energy Conservation Code (IECC)

ALEXANDER SMITH MORTAR & THATCH ARCHITECTS 4/15/2025
Builder/Designer/Contractor Company Name Date

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*												
CLIMATE ZONE	FENESTRATION U-FACTOR†	SKYLIGHT U-FACTOR†	GLAZED FENESTRATION SHGC‡	CEILING R-VALUE	ROOF FLOOR R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE	CHAMF. SPACE WALL R-VALUE	
1	NB	0.75	0.25	30	13	34	13	0	0	0	0	
2	0.65	0.65	0.25	38	13	48	13	0	0	0	0	
3	0.35	0.58	0.25	38	20 or 10+5	51/5	19	51/5	0	0	51/5	
4	0.32	0.55	0.40	48	20 or 10+5	61/5	19	10/13	10, 2.5	10/13		
5	0.30	0.54	NB	60	20 or 10+5	73/5	24†	76/10	10, 2.5	76/10		
6	0.28	0.56	NB	60	20 or 10+5	79/20	24†	79/15	10, 2.5	79/15		
7 and 8	0.28	0.55	NB	60	20 or 10+5	89/20	24†	89/10	10, 4.5	89/10		

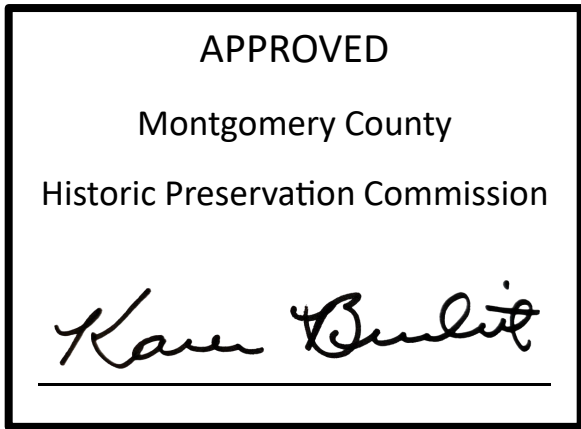
NB = Not Required. For SE 134 = 304.8 mm.
a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.
b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: In Climate Zones 1 through 3, skylights shall be permitted to be excluded from glazed fenestration SHGC requirements provided that the SHGC for such skylights does not exceed 0.30.
c. *10/13 means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation on the interior of the basement wall. *15/19 means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. Alternatively, compliance with *15/19 shall be R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home.
d. R-5 insulation shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-value for slabs, as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab.
e. There are no SHGC requirements in the Marine Zone.
f. Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.
g. Alternatively, insulation sufficient to fill the framing cavity and providing not less than an R-value of R-10.
h. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, *13+5 means R-13 cavity insulation plus R-5 continuous insulation.
i. Mass walls shall be in accordance with Section R602.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

TABLE 1: R-VALUE

EQUIVALENT U-FACTORS*												
CLIMATE ZONE	FENESTRATION U-FACTOR†	SKYLIGHT U-FACTOR†	CEILING U-FACTOR	MASS WALL U-FACTOR†	FLOOR U-FACTOR	ROOF U-FACTOR	BASEMENT WALL U-FACTOR	SLAB U-FACTOR & DEPTH	CRAWL SPACE WALL U-FACTOR	CHAMF. SPACE WALL U-FACTOR		
1	0.50	0.75	0.035	0.084	0.167	0.064	0.063	0.063	0.477			
2	0.40	0.60	0.030	0.084	0.160	0.064	0.063	0.063	0.477			
3	0.32	0.50	0.030	0.080	0.098	0.060	0.047	0.047	0.198			
4	0.30	0.55	0.030	0.080	0.098	0.060	0.047	0.063	0.063			
5	0.30	0.55	0.030	0.080	0.098	0.060	0.047	0.063	0.063			
6	0.30	0.55	0.030	0.080	0.098	0.060	0.047	0.063	0.063			
7 and 8	0.30	0.55	0.030	0.080	0.098	0.060	0.047	0.063	0.063			

a. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source.
b. Mass walls shall be in accordance with Section R602.2.5. Where more than half the insulation is on the interior, the mass wall U-factors shall not exceed 0.17 in Climate Zone 1, 0.14 in Climate Zone 2, 0.12 in Climate Zone 3, 0.087 in Climate Zone 4 except Marine, 0.063 in Climate Zone 5 and Marine 4, and 0.057 in Climate Zones 6 through 8.
c. In warm-humid locations as defined by Figure R301.1 and Table R301.1, the basement wall U-factor shall not exceed 0.360.

TABLE 2: U-VALUE



REVIEWED
By Dan Bruechert at 12:52 pm, May 15, 2025

TABLE R402.4.1.1

AIR BARRIER AND INSULATION INSTALLATION*		
COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Joints or joints in the air barrier shall be sealed. Joints or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material. The insulation in any dropped ceiling/soffit shall be aligned with the air barrier. Above finish floor
Ceilings/skylights	The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop-down stairs to knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier. Above finish floor
Walls	The junction of the foundation and all plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance, R-value, of not less than R-3 per inch. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between framing and sillsights, and the joints of windows and doors, shall be sealed.	---
Item joints	Item joints shall include the air barrier.	Item joints shall be insulated.
Floors, including cantilevered floors and floors above garages	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of soffits/drooping. Alternatively, floor framing cavity insulation shall be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing, and shall extend from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with complying joints taped.	Crawl space insulation, where provided instead of floor insulation, shall be permanently attached to the walls.
Shafts, penetrations	Door walls, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	---
Narrow cavities	---	Batts to be installed in narrow cavities shall be cut to fit or narrow cavities shall be filled with insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	---
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.
Plumbing and wiring	---	In exterior walls, batt insulation shall be cut neatly to fit around wiring and plumbing, or insulation, that on installation readily conforms to available spaces, shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate the wall from the shower or tub.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-sealed boxes shall be installed.	---
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	---
Connected sprinklers	Where required to be sealed, connected fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Cauting or other adhesion systems shall not be used to fill voids between the sprinkler cover plates and walls or ceilings.	---

a. Inspection of top walls shall be in accordance with the provisions of ICC 400.

TABLE 3: AIR SEALING NOTES

TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IN POUNDS PER SQUARE INCH)	
1. TABLE R301.5. Minimum design live load values shall conform to the following values:	
USE	LIVE LOAD
Attics With Storage (b)	20
Attics Without Storage (b)	10
Habitable attics and attics served with fixed stairs	30
Exterior Balconies and Decks	40
Fire Escapes	40
Guardrails and Handrails (d)	200 (h)
Guardrails In-Fill Components (f)	50 (h)
Passenger Vehicle Garages (a)	50 (a)
Rooms Other Than Sleeping Rooms	40
Sleeping Rooms	30
Stairs	40 (c)

- Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-area.
- No storage with slope roof not over 3 units in 12 units.
- Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whatever produces the greater stresses.
- A single concentrated load applied in any direction at any point along the top.
- See Section R502.2.1 for decks attached to exterior walls.
- Guard in-fill components (all those except the handrail), ballusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.

Residential Code Notes

- All construction shall be in conformance with the 2018 International Residential Code (IRC) and International Energy Conservation Code (IECC), 2018 edition, as amended by Montgomery County Executive Regulation No. 31-19. All chapters, tables, sections, figures, and appendices referenced here within are from IRC. This document contains items often written on approved plans and is provided for convenience only. It is not intended as a substitute for the code or all of its provisions.
- The residential construction design parameters are as follows:

GROUND SNOW LOAD	WIND SPEED	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			
			WEATHERING	FROST LINE DEPTH	TERMITE	DECAY
30 PSF	115 MPH	B	SEVERE	30 IN.	MODERATE TO HEAVY	SLIGHT TO MODERATE

WINTER DESIGN TEMP.	ICE SHIELD UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP.	SOIL BEARING CAPACITY
13 F	YES	JULY 2, 1979	300	55 F	2,000 PSF OR AS DETERMINED BY GEOTECHNICAL EVALUATION

Standard Abbreviations

1x	ONE-INCH NOMINAL THICKNESS	K	KIT
2x	TWO-INCH NOMINAL THICKNESS	L	LAVATORY
@	AT	LEV	LEVEL
ABV	ABOVE	LH	LEFT HAND
AC	AIR CONDITIONING	LHR	LEFT HAND REVERSE
ACOUS	ACOUSTICAL	LT	LIGHT
ACT	ACOUSTICAL CEILING TILE	LTG	LIGHTING
ADJ	ADJACENT, ADJUSTABLE		
AF	ABOVE FINISH FLOOR	M	MASONRY
ALT	ALTERNATE	MAT	MATERIAL
ALUM	ALUMINUM	MAX	MAXIMUM
ANCH	ANCHOR	MDF	MEDIUM DENSITY FIBERBOARD
ANNO	ANNODED	MDO	MEDIUM DENSITY OVERLAY
APPROX	APPROXIMATE	MECH	MECHANICAL
ASSY	ASSEMBLY	MEMB	MEMBRANE
AVG	AVERAGE	MEZZ	MEZZANINE
		MNFR	MANUFACTURER(S)
B	BOARD / BEAD	MIN	MINIMUM
BDG	BLOCKING	MISC	MISCELLANEOUS
BLKG	BLOCKING	MOLDG	MOLDING
BOLT	BOLT	MLWK	MILLWORK
BM	BEAM	MO	MASONRY OPENING
B.O.	BOTTOM	MTD	MOUNTED
B.O.T.	BOTTOM OF...	MTG	MOUNTING
BRG	BEARING	MTL	METAL
BRK	BRICK	MW	MICROWAVE
BSMT	BASEMENT		
BTWN	BETWEEN	N	NORTH
BYD	BEYOND	N.I.C.	NOT IN CONTRACT
		NO.	NUMBER
C	CABINET	NTS	NOT TO SCALE
CAB	CORE DRILL LOCATION		
CDL	CEMENT	O	OVERALL
CEM	CERAMIC	OA	ON CENTER
CFL	COMPACT FLUORESCENT LIGHT	OD	OUTSIDE DIAMETER
CJ	CONTROL JOINT	OFF	OFFICE
CL	CLOSET	OPNG	OPENING
CLADG	CLADDING	OPP	OPPOSITE
CLG	CEILING	OSB	ORIENTED STRAND BOARD
CLR	CLEAR		
CMU	CONCRETE MASONRY UNIT	P	POLE
COL	COLUMN	P	PARTITION
CONC	CONCRETE	PERMIT	PERMITTER
CONST	CONSTRUCTION	PG	PAINT GRADE
CONT	CONTINUOUS	PL	PLATE
CONTR	CONTRACTOR	PLAM	PLASTIC LAMINATE
COR	CORRIDOR	PLAS	PLASTER
CPR	COPPER	PFLX	PLEXGLASS
CPT	CARPET	PLB/G	PLUMBING
CS	CAST STONE	PLWD	PLYWOOD
CT	CERAMIC TILE	POLY	POLYETHYLENE
CTR	CENTER	PAIR	PAIR
CTRD	CENTERED	PSF	POUND PER SQUARE FOOT
CW	COLD WATER	PSI	POUND PER SQUARE INCH
		PT	PRESSURE TREATED
D	DOUBLE	PTD	PAINTED
DBL	DEMOLISH / DEMOLITION	PVC	POLYVINYL CHLORIDE
DEMO	DETAIL	PVMT	PAVEMENT
DET	DETAIL		
DF	DRINKING FOUNTAIN	Q	QUARRY TILE
DIA	DIAMETER	QTY	QUANTITY
DIM	DIMENSION		
DN	DOWN	R	RISER(S)
DS	DOWNSPOUT	R=	RADIUS
DW	DISHWASHER	RAD	RADIUS
DWG	DRAWING	RDG	REMOVABLE DOUBLE GLAZING
		RECPT	RECEPTACLE
E	EAST	REF	REFRIGERATOR
EACH	EACH	REF	REGISTER
EXPANSION JOINT	EXPANSION JOINT	REINF	REINFORCING
ELEC	ELECTRIC(AU)	REPL	REPLACE(MENT)
ELEV	ELEVATION / ELEVATOR	REQ	REQUIRED
EMER	EMERGENCY	RESIL	RESILIENT
EP	ELECTRICAL PANEL	REV	REVISION
EQ	EQUAL	RH	RIGHT HAND
EQUIP	EQUIPMENT	RHR	RIGHT HAND REVERSE
ETR	EXISTING TO REMAIN	ROOM	ROOM
EW	ELECTRIC WATER COOLER	RO	ROUGH OPENING
EXH	EXHAUST		
EXIST	EXISTING	S	SOUTH
EXP	EXPANSION / EXPOSED	S4S	SURFACE 4 SIDES
EXT	EXTERIOR	SCM	SOLID CORE METAL
		SCHED	SCHEDULE(D)
F	FIRE ALARM	SDG	SECT
FA	FURNISHED BY OWNER	SG	SINGLE GLAZED
F.B.O.	FLOOR DRAIN	SH	SHEET
FD	FOUNDATION	SHTG	SHEATHING
FINON	FIRE EXTINGUISHER (CABINET)	SHLWR	SHOWER
FF	FINISH FLOOR	SM	SMOOTH LUMBER MOULDING DESIGN
FGLS	FIBERGLASS	SPEC	SPECIFICATION
FIN	FINISH	SQ	SQUARE
FIX	FIXTURE	SSTL	STAINLESS STEEL
FLSHG	FLASHING	STD	STREET
FLR	FLOOR	STD	STANDARD
FLUOR	FLUORESCENT	STL	STL
F.O.M.	FACE OF MASONRY	STOR	STORAGE
F.O.S.	FACE OF STUD / STRUCTURE	STRUC	STRUCTURE
FP	FIRE PROOF	SUBFLR	SUBFLOOR
FRM/G	FRAMING	SURF	SURFACE
FRT	FIRE RETARDANT TREATED	SUSP	SUSPENDED
FS	FLOOR SINK		
FT	FEET / FOOT	T	TREAT(S)
FTG	FOOTING	T	TONGUE AND GROOVE
FURN	FURNITURE	T&G	TELEPHONE
FUR/G	FURRING	TEMP	TEMPERATURE
		THK	THICK
G	GAUGE	TLT	TOILET
GA	GALVANIZED	TOP	TOP OF...
GALV	GRAB BAR	TRTD	TREATED
GB	GENERAL CONTRACTOR	TYP	TYPICAL
GC	GROUND FAULT INTERRUPTER		
GFI	GLASS	U	UNDERWRITERS LABORATORIES, INC.
GL	GYPSSUM WALL BOARD	U.N.O.	UNLESS NOTED OTHERWISE
GWB	GYPSSUM	UTIL	UTILITY
GYP			
		V	VOLT
H	HOSE BIB	VB	VAPOR BARRIER
HC	HANDICAP	VCT	VINYL COMPOSITION
HM-W	HOLLOW METAL - WELDED	VENT	VENTILATE[OR]
HD	HEAD	VER	VERIFY IN FIELD
HBOD	HARDBOARD		
HDR	HEADER	W	WEST
HDWD	HARDWOOD	W/	WITHOUT
HDWR	HARDWARE	WC	WATER CLOSET
HORIZ	HORIZONTAL	WD	WOOD
HGT	HEIGHT	WIN	WINDOW
HWR	HEATER	WIF	WIDE FLANGE
HVAC	HEATING / VENTILATION / AC	WH	WATER HEATER
HW	HOT WATER	WP	WATERPROOFING
		WS	WEATHERSTRIPPING
I	ISOLATED GROUND	WT	WEIGHT
IG	INCH	WWM	WELDED WIRE MESH
INCL	INCLUDE(D)		
INSUL	INSULATION		
INT	INTERIOR		
		J	JANITOR
JAN	JANITOR	JST	JOIST
JST	JOIST	JOINT	JOINT

Section Materials

	BRICK
	STONE
	CONCRETE MASONRY UNIT
	CONCRETE
	STUCCO / GROUT
	PLYWOOD
	WOOD
	METAL
	EARTH
	GRAVEL

Surface Materials

	FLAGSTONE - RANDOM
	FLAGSTONE - RANDOM RECTANGULAR
	BRICK VENEER
	STONE VENEER
	CONCRETE MASONRY UNIT
	CONCRETE
	STUCCO / GROUT
	SIDING
	SHINGLES
	METAL ROOF
	WOOD
	TILE - SIZE VARIES
	STONE SLAB

Drawing Symbols

	DRAWING
	DRAWING
	SHEET
	DRAWING OF FACING WALL
	RUN
	RISE
	CENTERLINE
	ALIGN
	ALIGN WITH ESTABLISHED SURFACES
	COLE 8'-4"
	STRUCTURAL
	5'-6"
	Window
	Door
	THR
	12
	Revision

General Notes

File Name: "C:\Users\alexo\Dropbox\Mortar&Thatch\PROJECTS\2409 Ruppert Residence - 4 E Kirke Street Chevy Chase MD 20815\01_CAD\04_PERMIT\Ruppert Permit.dgn

Window Schedule									
ID	Qty	Units	Model/Size	Type	Manuf.	Lites	Location	Note	
W101	1	3	2-6x5-0 3W	Casement	LePage	3W5H	Breakfast Room	Note 9. Special order wood species : Walnut	
W102	1	3	2-6x5-0 3W	Casement	LePage	3W5H	Breakfast Room	Note 9. Special order wood species : Walnut	
W103	1	3	2-6x4-0 3W	Casement	LePage	3W4H	Kitchen	Note 9. Special order wood species : Walnut	
W104	1	2	2-6x4-6 2W	Casement	LePage	3W5H	Mudroom	Note 9.	
W105	1	1	3-3x3-6	Casement	LePage	3W3H	PDR	New window in exist. masonry opening	
W201	1	1	4-0x4-0	French Casement	LePage	2W4H	Primary Bedroom (window seat)	Note 9.	
W202	1	1	2-6x4-0	Casement	LePage	3W4H	Primary Bedroom	Note 9. 1-6 transom . see elevation	
W203	1	1	2-6x4-0	Casement	LePage	3W4H	Primary Bedroom	Note 9. 1-6 transom . see elevation	
W204	1	4	2-6x5-0 4W	Casement	LePage	3W5H	Primary Bath	Note 9.	

Exterior Door Schedule									
ID	Qty	Type	Manufacturer	Model/Size	Lites	Transom		Location	Note
						Height	Lites		
D101	1	Glazed/Paneled	LePage	2-10x7-0	3W4H			Front Door	2-14" thick, painted w/ (2) 1-3 side lites, see elev.
D102	1	French	LePage	2-6x7-0	2W3H			Back Door	Outswing, Dutch, int. pocket screen door by GC
D103	1	French	LePage	(2)2-6x7-0	2W5H			Study	Outswing

Exterior Door and Window Notes

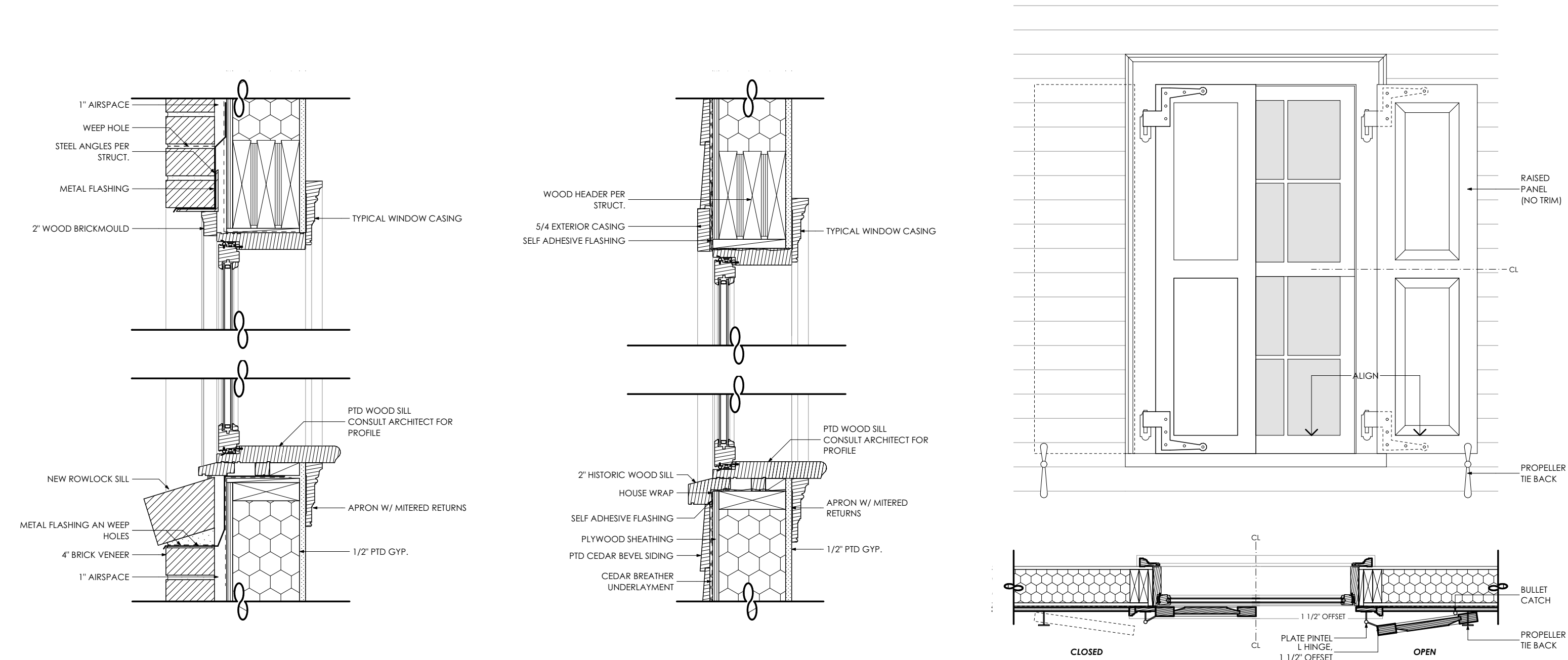
All windows and non-opaque door to meet minimum U-factor and SHGC values on Sheet 0002, Table 2

- Contractor and window supplier to review schedule for conflicts between order numbers and specified sizes and notify Architect of any discrepancies. Contractor to provide Architect window and door supplier's order form for review prior to confirming purchase. Assume two-week review time on Architect's part.
- Window to be **LePage** wood frame. Exterior: Finished: Primed. Interior: TBD. Glazing: Simulated Divided Lites SDL- 5/8" putty with spacer bars; Low E w/ Argon insulating glass ; Hardware: brass; double hung: Phelps LK 281 Sash Locks and LF25 Sash Lifts. casement: TCF 222 fasteners. Double Hung Screens: Invisible mesh, wood frame, Casement Screens: integrated roll-down. Provide custom sill extensions (w/ drip edge) for windows as required (see details). Provide extended sill horns as required. See elevations for locations of operable casement and awning units.
- All exterior doors by **LePage** in-swing french patio door, wood frame, wood door u.n.o. Exterior: Finished: Primed. Interior: Primed. Glazing: Simulated Divided Lites SDL- 5/8" putty with spacer bars; tempered Low E insulating glass; Hardware: TBD.
- All skylights to be fixed on site-built curb with **Low E insulating glass**. Follow all explicit installation instructions, directions, details and written recommendations from manufacturer when installing unit.
- Window is sized to meet the requirements for Emergency Escape and Rescue Openings section R310.1 of IRC building code. Provide Egress hinge on all windows marked as egress.
- Window is tempered to meet the requirements for Glazing in Hazardous Locations section R308.4 of IRC building code.
- Windows required to meet R312.2 shall have an approved opening limiter that comply with ASTM F2090.
- All Single Unit Jamb Depth are **6-9/16" U.N.O.**. All Ganged Unit Jamb Depth are **4-9/16" U.N.O.**
- All new casement windows to have integrated pull down screens, u.n.o.

Interior Door Schedule								
ID	Qty	Size	Type	Leaf Thickness	Lites	Operation	Hardware	Note
101	1	2-4x7-0	Four Panel	1 3/4"		Swing	Passage	
102	1	2-4x7-0	Four Panel	1 3/4"		Swing	Privacy	
103	1	2-6x7-0	Four Panel	1 3/4"		Swing	Magnetic Dummy	
201	1	2-0x6-8	Four Panel	1 3/4"		Swing	Magnetic Dummy	
202	1	2-6x6-8	Four Panel	1 3/4"		Swing	Privacy	
203	1	2-0x6-8	Shower	0 3/8"		Swing	Shower	3-6 x 6-8 opening. 2-0 x 6-0 door, 1-6 x 6-0 fixed panel w/ 4" curb
204	1	2-4x6-8	Four Panel	1 3/4"		Pocket	Passage	soft-close
205	1	2-8x6-8	Four Panel	1 3/4"		Swing	Privacy	
206	1	2-4x6-8	Four Panel	1 3/4"		Pocket	Privacy	soft-close
207	1	2-6x8-0	Shower	0 3/8"		Swing	Shower	2-6 x 6-8 door. 2-6 x 1-0 operable transom, 3" mull, curbless
208	1	2-4x6-8	Four Panel	1 3/4"		Swing	Privacy	2-6 x 1-0 fixed transom, 3" mull
209	1	2-6x6-8	Four Panel	1 3/4"		Swing	Privacy	Replace existing door in existing location
210	1	2-0x6-8	Four Panel	1 3/4"		Swing	Magnetic Dummy	Replace existing door in existing location
211	1	2-0x6-8	Four Panel	1 3/4"		Swing	Magnetic Dummy	Replace existing door in existing location
212	1	2-6x6-8	Four Panel	1 3/4"		Swing	Privacy	Replace existing door in existing location
213	1	2-0x6-8	Four Panel	1 3/4"		Swing	Privacy	
214	1	2-6x6-8	Four Panel	1 3/4"		Swing	Privacy	Replace existing door in existing location
215	1	2-0x6-8	Four Panel	1 3/4"		Swing	Magnetic Dummy	Replace existing door in existing location

Interior Door Notes

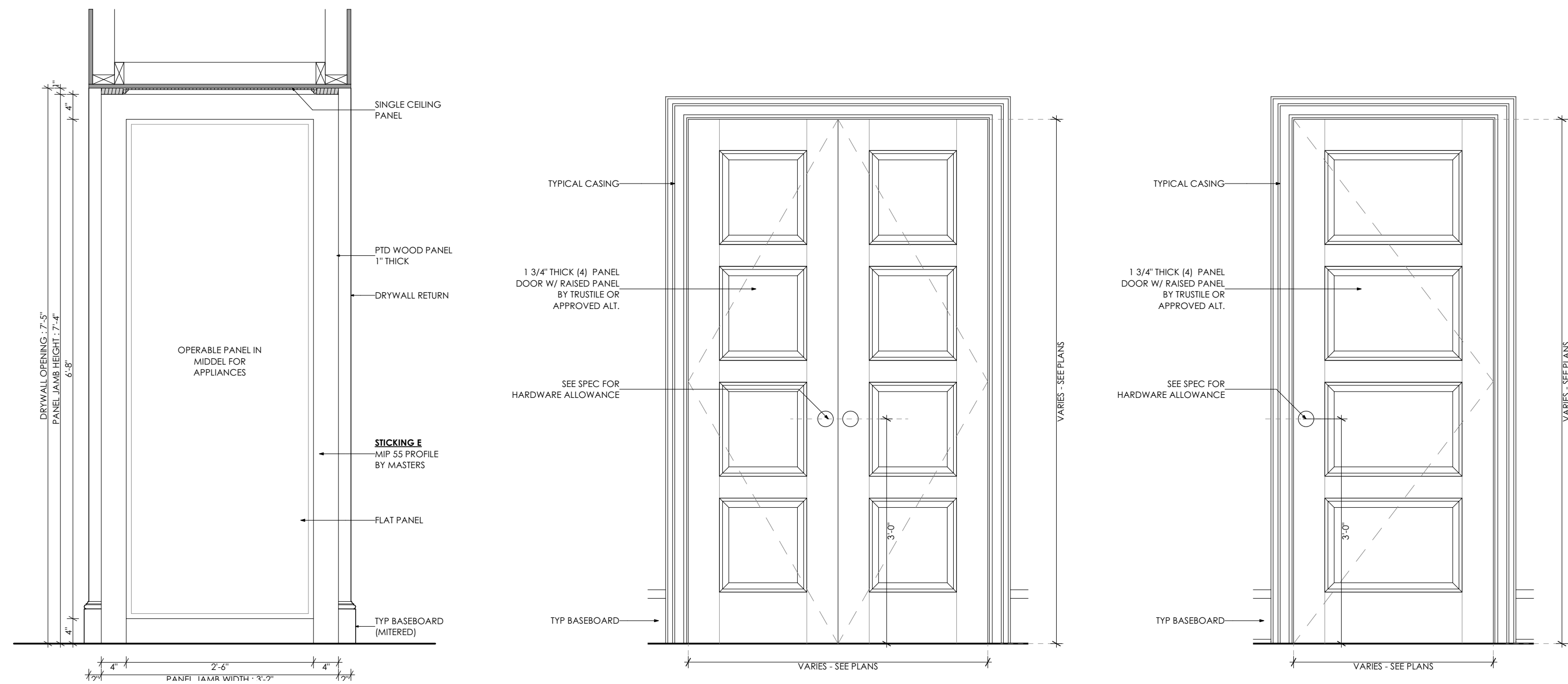
- Doors by **TRUSTILE**, pre-hung in frame TS-4100 doors with Quarter Bead Sticking (QB) and Raised Panel (A), u.n.o. All doors to be paint grade MDF, u.n.o. Doors not to be pre-bored; Contractor to field bore and install in the field
- Provide allowance **\$400/leaf** for hardware including square hinges with finials. Hardware selections to be classic brass with 1-3/4" rosettes. Review with Architect and Designer prior to ordering.
- Confirm handings, swings, and pocket doors by coordinating with floor plans.
- Contractor to confirm all quantities shown based on final, field verified, built conditions. Confirm final sizes and quantities of all doors in the field.



1 Window Detail - Brick
1 1/2" = 1'-0"

2 Window Detail - Siding
1 1/2" = 1'-0"

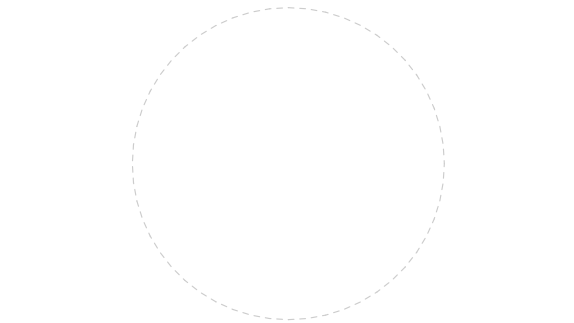
3 Window Shutters Detail
3/4" = 1'-0"



4 Interior Door Details
3/4" = 1'-0"

APPROVED
Montgomery County
Historic Preservation Commission
Kam Bunkit

REVIEWED
By Dan Bruechert at 12:52 pm, May 15, 2025

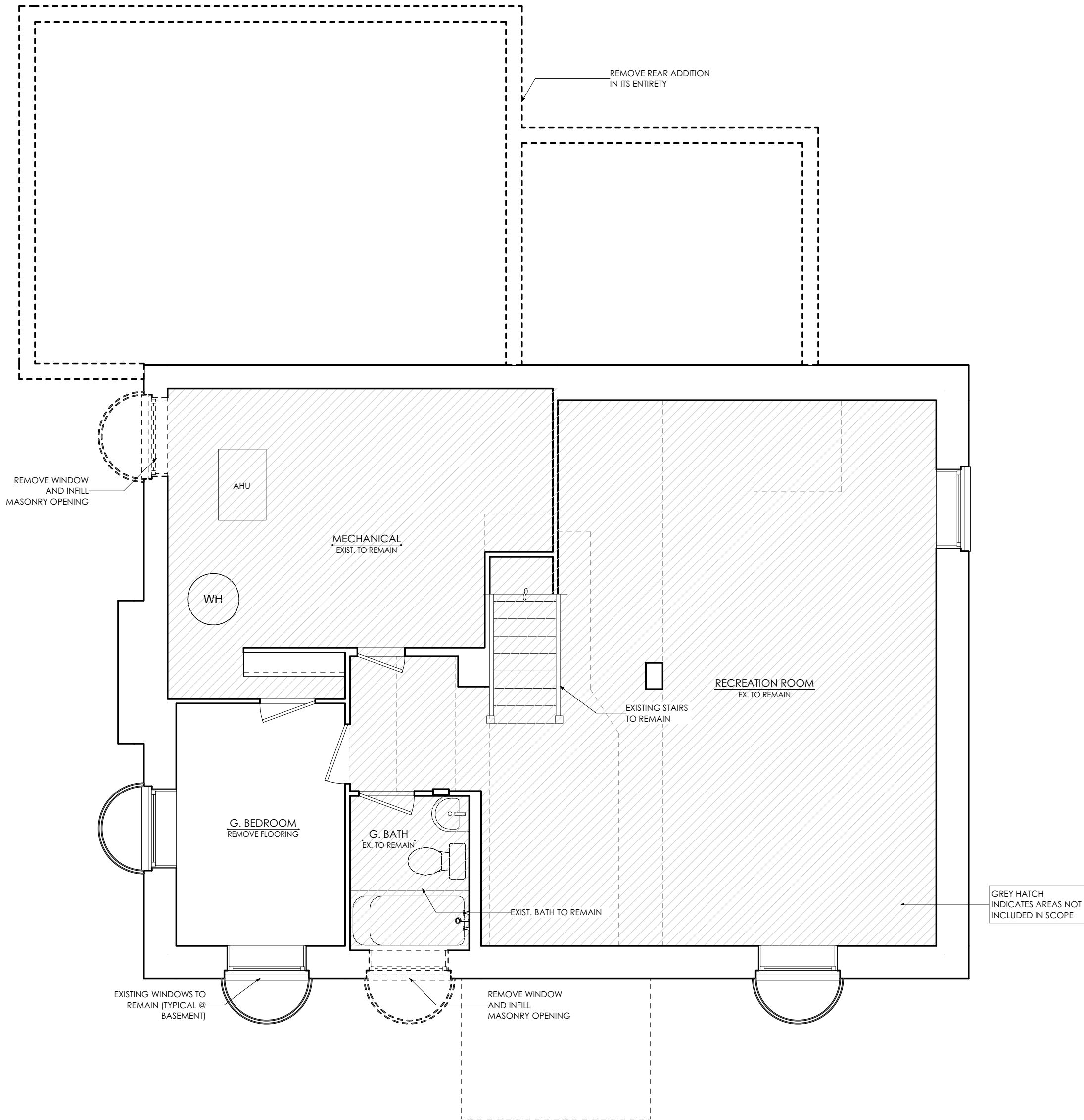


Date	Issue Description
09-13-2024	As-Builts
09-27-2024	Schematic Design Set
10-09-2024	Pricing Set
10-11-2024	Pricing Set Addendum
11-24-2024	Interior Set
12-09-2024	Updated Pricing Set
02-05-2025	HAWP Submission Set
02-28-2025	Updated CD Set
03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

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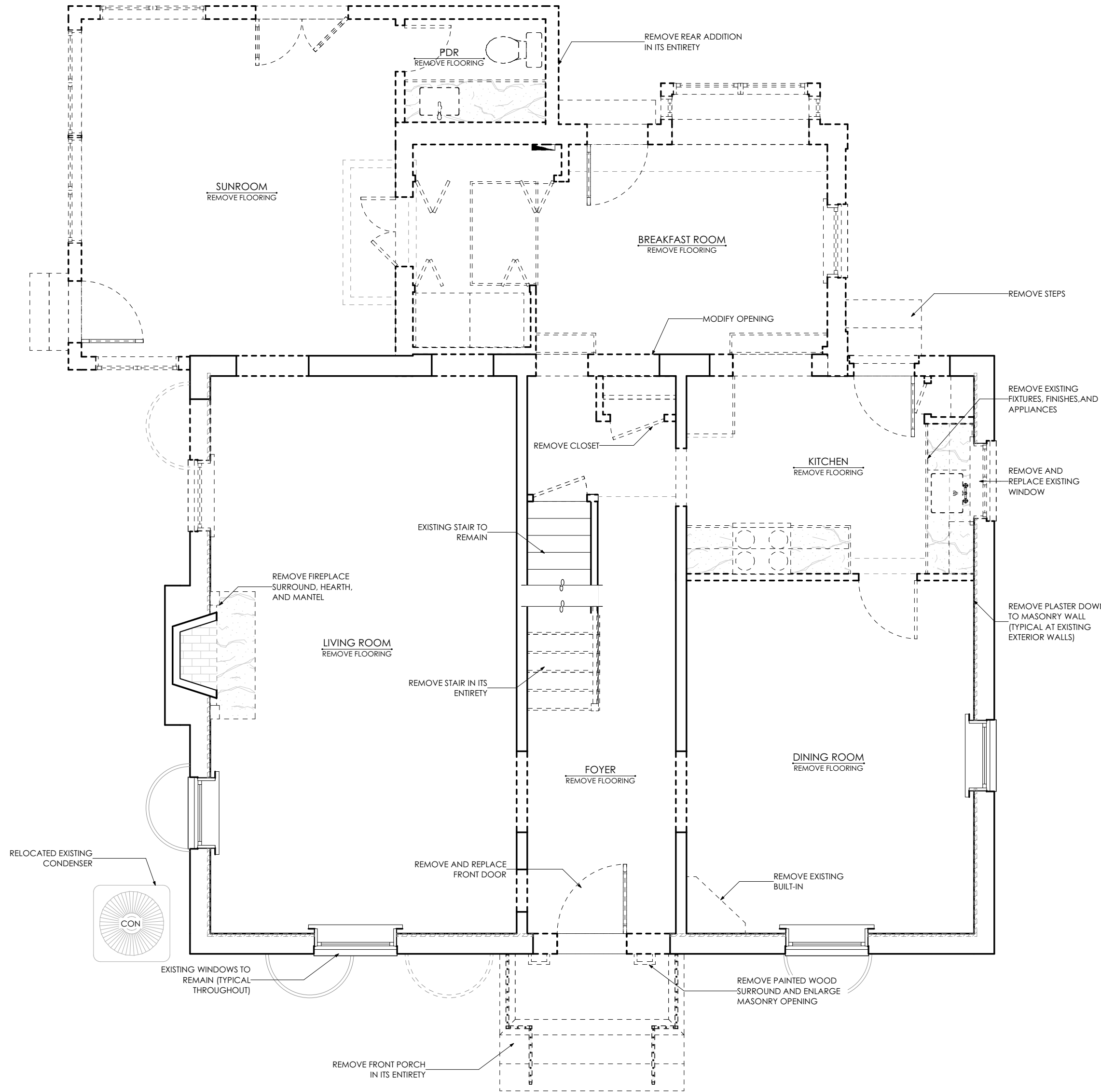
1 Basement Demolition Plan

1/4" = 1'-0"



2 First Floor Demolition Plan

1/4" = 1'-0"



APPROVED

Montgomery County

Historic Preservation Commission

Karen Bruechert

REVIEWED

By Dan Bruechert at 12:52 pm, May 15, 2025

DENOTES EXISTING WALLS

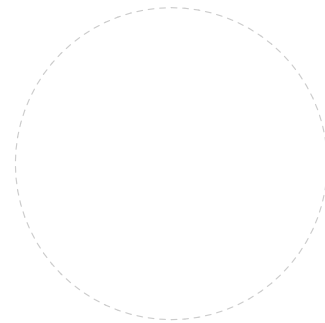
DENOTES WALLS TO BE DEMOLISHED

DENOTES AREA NOT INCLUDED IN SCOPE
- NO CHANGES TO EXIST. CONDITIONS

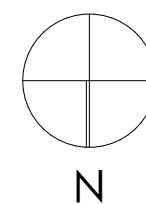
MORTAR & THATCH ARCHITECTS

300 Morse Street NW, Unit 833
Washington DC 20003

Seal



Project North



Project No: 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Builts
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03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

Sheet Title

Basement & First Demolition Plans

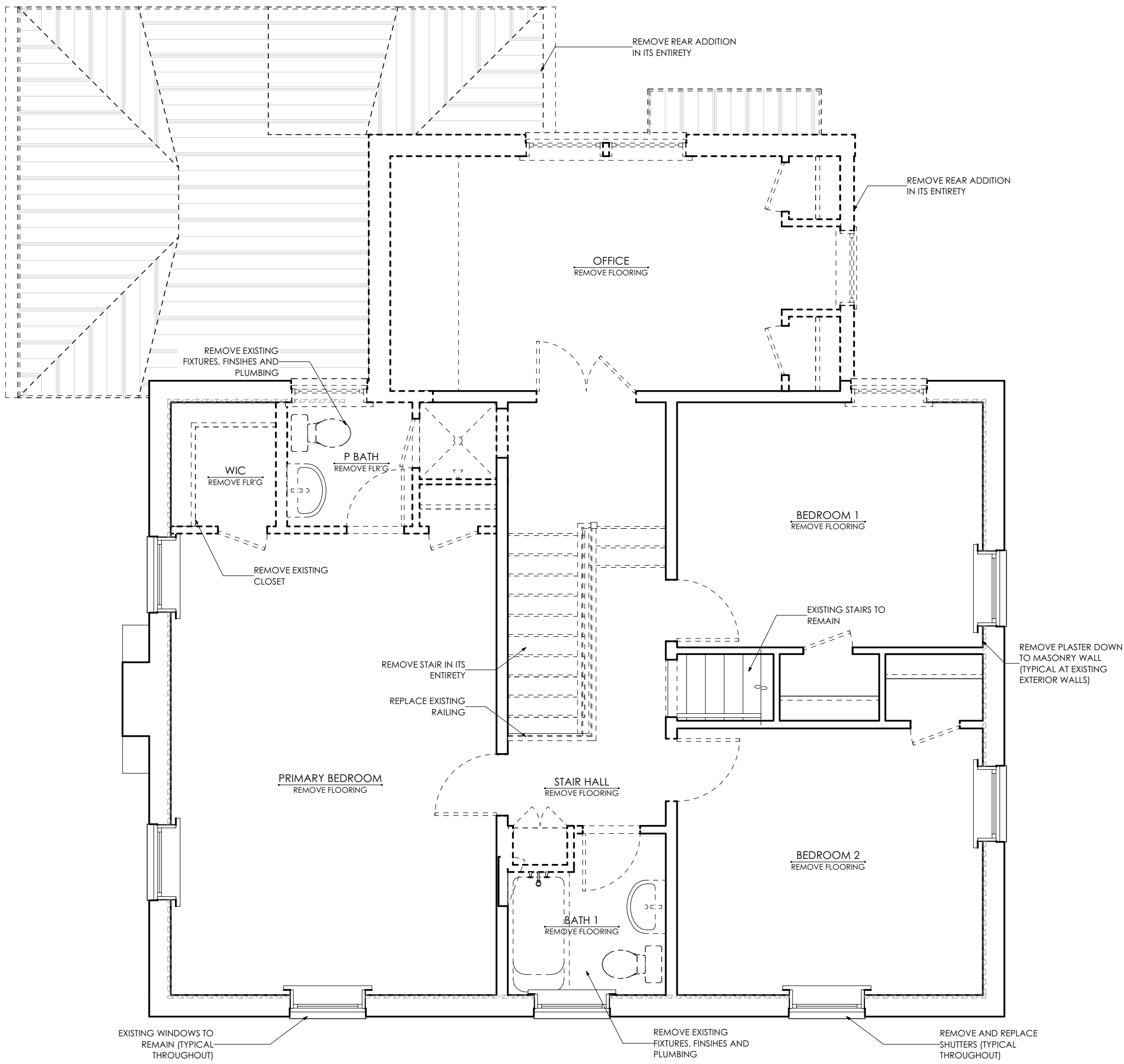
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D000

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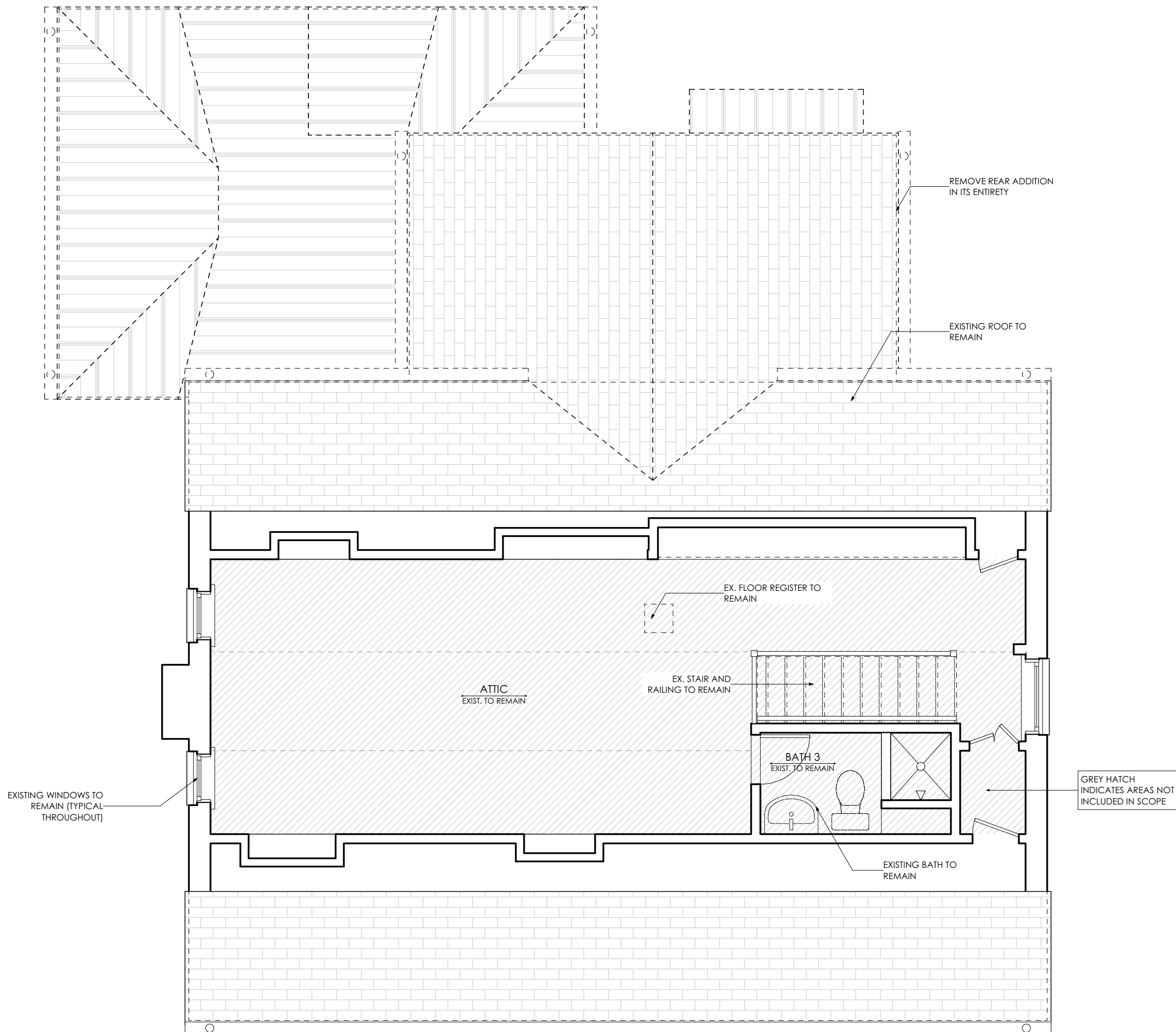
1 Second Floor Demolition Plan

1/4" = 1'-0"



2 Attic Floor Demolition Plan

1/4" = 1'-0"



APPROVED
Montgomery County
Historic Preservation Commission
Karen Bunk

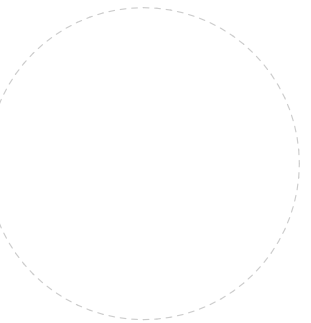
REVIEWED
By Dan Bruechert at 12:52 pm, May 15, 2025

MORTAR & THATCH ARCHITECTS

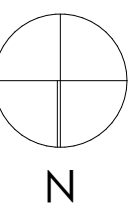
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202-495-5595

Seal



Project North



Project No: 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

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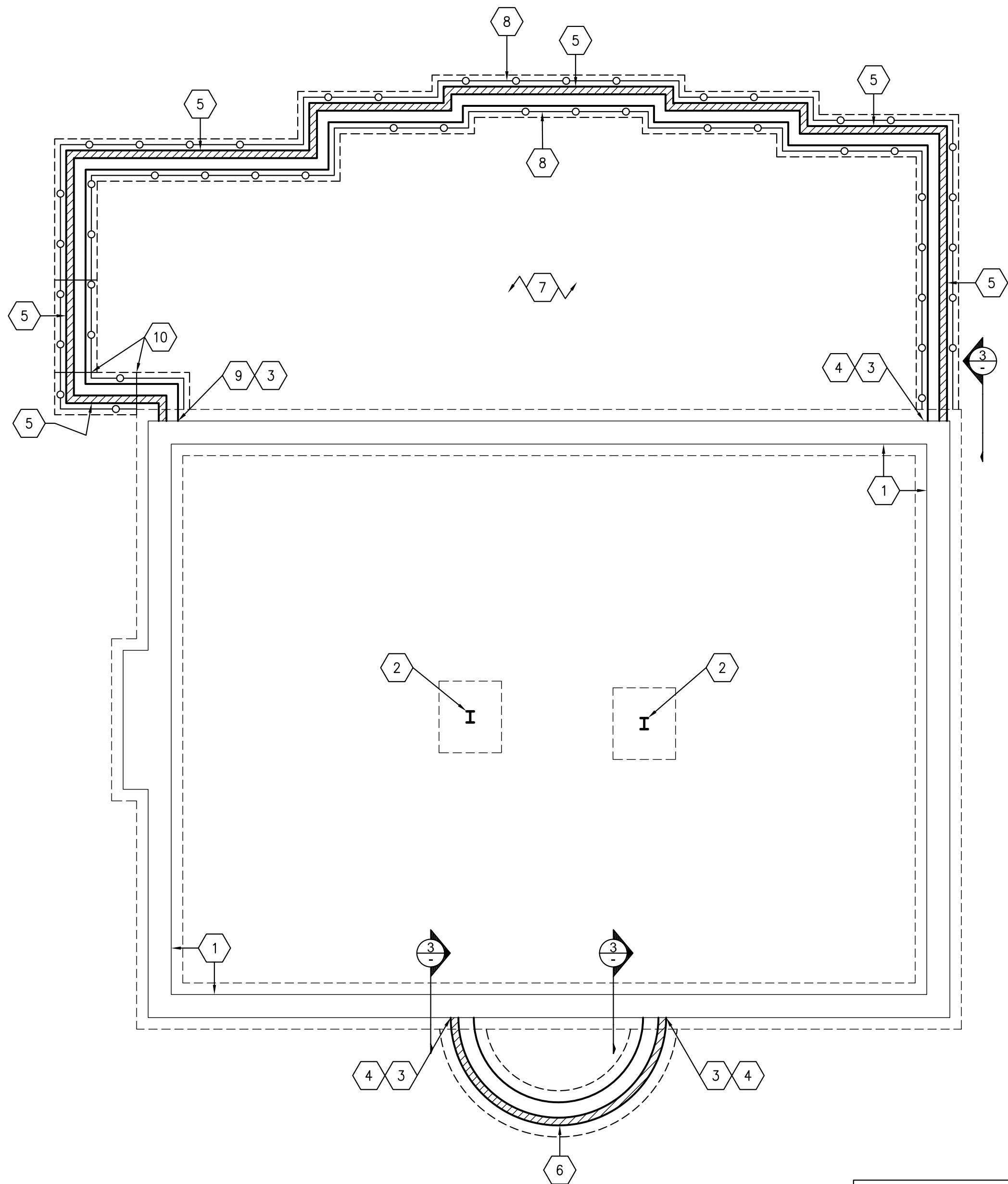
Sheet Title

Second & Attic Demolition Plans

Sheet Number

D001

Printed: 5/11/2025
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Foundation Plan

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

DIMENSIONS ARE SHOWN FOR STRUCTURAL DESIGN PURPOSES ONLY. DO NOT ORDER OR FABRICATE MATERIALS BASED ON THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS.

- EXISTING FOUNDATION WALL AND FOOTING. IF THE EXISTING WALL IS FOUND TO BOW INWARD BY 3/8" OR MORE, NOTIFY THE STRUCTURAL ENGINEER SO THAT REPAIR DETAILS CAN BE PROVIDED.
- EXISTING COLUMN AND FOOTING.
- DOWEL THE HORIZONTAL WALL REBAR INTO THE EXISTING WALL WITH SIMPSON SET-XP EPOXY AND 3" EMBEDMENT. CAULK THE JOINT BETWEEN THE NEW WALL AND THE EXISTING WALL WITH WATERSTOP RX BY CETCO. WHEN APPLICABLE, TOOTH THE NEW BRICK WALL INTO THE EXISTING WALL.
- THE FOOTING ACTS AS A GRADE BEAM NEXT TO THE EXISTING FOUNDATION WALL. POCKET THE FOOTING IN THE EXISTING FOUNDATION WALL PER THE STRUCTURAL DETAIL.
- 10" CONCRETE WALL BELOW GRADE AND 6" CONCRETE + 4" BRICK WALL ABOVE GRADE. PLACE THE WALL ON A 24X10 FOOTING REINFORCED WITH (3)#4 BARS. REINFORCE THE WALL WITH #4 BARS AT 24" O.C. IN EACH DIRECTION. PLACE THE REBAR IN THE CENTER OF THE WALL. PROVIDE #4 BAR DOWELS BETWEEN THE WALL AND THE FOOTING AT 48" O.C. BOND THE BRICK TO THE CONCRETE WITH METAL TIES AT 12" O.C. IN EACH DIRECTION AND BY FILLING THE JOINT BETWEEN THE TWO WITH MORTAR.
- 8" CONCRETE WALL. PLACE THE WALL ON A 24X10 FOOTING REINFORCED WITH (3)#4 BARS. REINFORCE THE WALL WITH #4 BARS AT 24" O.C. IN EACH DIRECTION. PLACE THE REBAR IN THE CENTER OF THE WALL. PROVIDE #4 BAR DOWELS BETWEEN THE WALL AND THE FOOTING AT 48" O.C. THE BOTTOM OF THE FOOTING SHALL BE 24" MAXIMUM ABOVE THE BASEMENT SLAB OR 30" BELOW GRADE WHICH EVER IS DEEPER.
- PLACE A 2" CONCRETE DUST SLAB ON A 6 MIL POLY VAPOR BARRIER ON INSULATION ON 4" GRAVEL IN THE CRAWL SPACE. ADD CARBON FIBERS TO THE SLAB TO MITIGATE CRACKING. SEE THE ARCHITECTURAL DRAWINGS FOR INSULATION REQUIREMENTS BELOW THE SLAB.
- 4"ø PERFORATED DRAIN WRAPPED WITH FILTER FABRIC. PLACE THE EXTERIOR DRAIN IN GRAVEL COVERED WITH FILTER FABRIC. FIELD DETERMINE THE DISCHARGE OF THE DRAIN.
- THE BOTTOM OF THE FOOTING SHALL MATCH THE BOTTOM OF THE EXISTING FOOTING. EPOXY DOWEL THE FOOTING REBAR INTO THE EXISTING FOOTING WITH SIMPSON SET-XP EPOXY AND 6" EMBEDMENT.
- FOOTING STEP PER THE TYPICAL DETAIL.

FRAMING NOTES:

- THE BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
- ALL HEADERS ARE ASSUMED TO BE SUPPORTED BY A DOUBLE JACK AND SINGLE KING STUD, UNLESS NOTED OTHERWISE.
- PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
- ATTACH ALL QUADRUPLE AND QUINTUPLE BEAMS TOGETHER WITH 2 ROWS OF 1/2"ø BOLTS AT 16" O.C. STAGGERED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING AND PROPOSED STRUCTURAL ELEMENTS OF THE HOME.
- ATTACH VENEER TO THE WOOD OR CMU BACKING STRUCTURE WITH METAL TIES AT 16" O.C. IN EACH DIRECTION. PROVIDE FLASHING, WATERSTOPS AND WEEP HOLES IN THE VENEER PER THE IRC CODE.
- ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 6" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
- ALL NAILS USED FOR EXTERIOR APPLICATIONS SHALL BE RING SHANK NAILS.
- ALL NAILS, HANGERS, BOLTS, AND SCREWS EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED.
- ALL LUMBER EXPOSED TO EXTERIOR CONDITIONS SHALL BE TREATED SOUTHERN PINE #2.
- ALL SLAB CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500PSI AND HAVE 6%±1% AIR ENTRAINMENT.
- WHEN ATTACHING EXISTING JOISTS TO FLUSH BEAMS USE OVERSIZED SIMPSON LUS HANGERS. ADD BLOCKING AS NEEDED TO FILL THE GAPS BETWEEN THE JOIST AND THE HANGER.
- THE CONTRACTOR SHALL SURVEY ALL EXPOSED MASONRY IN THE HOME AND POINT ANY DETERIORATED JOINT THAT IS DISCOVERED AND REPLACE ANY DETERIORATED BRICKS OR BLOCKS.
- TYPICAL JOIST HANGER SHALL BE A SIMPSON IUS OR SIMPSON LUS HANGER.
- TYPICAL RAFTER TO RIDGE HANGER SHALL BE A SIMPSON LSSR.
- TYPICAL RAFTER TO FLUSH BEAM HANGER SHALL BE A SIMPSON L70 ON EACH SIDE OF THE RAFTER.
- TYPICAL POST TO BEAM CONNECTOR SHALL BE A SIMPSON LPC ON EACH SIDE.
- TYPICAL POST TO FLOOR PLATE CONNECTOR SHALL BE A SIMPSON L30 ON EACH SIDE OF THE POST.
- TYPICAL STRINGER TO FRAMING CONNECTOR SHALL BE A SIMPSON MTS16 ON EACH SIDE.
- TYPICAL DIMENSIONAL BEAM TO BEAM HANGER SHALL BE A SIMPSON HU MAX.
- TYPICAL LVL TO LVL BEAM HANGER SHALL BE A SIMPSON HHUS.
- PERMACAST COLUMNS SHALL BE INSTALLED PER ESR 1361 AND HAVE AN ALLOWABLE LOAD OF 5,000LBS. AS AN ALTERNATE TO THE PERMACAST COLUMNS USE A PT6X6 POST INSIDE A DECORATIVE WRAP.
- PLACE A DOUBLE JOIST BELOW ALL WALLS THAT ARE PARALLEL TO THE FLOOR FRAMING. ALTERNATE: PLACE BLOCKING BETWEEN THE JOISTS BELOW THE WALLS AT 16" O.C.
- ADD BLOCKING TO THE WEB OF ENGINEERED JOISTS AS NEEDED FOR HANGERS, CONNECTORS, STRAPS OR NAILING MULTIPLE MEMBERS TOGETHER.
- ADD JOIST HANGERS TO ALL EXISTING FRAMING CONNECTIONS THAT ARE FOUND TO LACK THEM SUCH AS FRAMING AROUND PLUMBING STACKS, CHIMNEYS, OR THE EXISTING STAIRS.

APPROVED
Montgomery County
Historic Preservation Commission

Karen Bulleit

REVIEWED

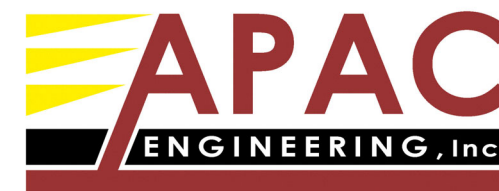
By Dan Bruechert at 12:52 pm, May 15, 2025

Mortar & Thatch
Architects

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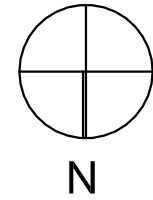


8555 16th Street #200
Silver Spring, MD 20910

301-565-0543
301-563-9477 (fax)

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/17/26.

Project North



Project No. 2409

Ruppert
Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Built
09-27-2024	Schematic Design Set
10-09-2024	Pricing Set
10-11-2024	Pricing Set Addendum
11-24-2024	Interior Set
12-09-2024	Updated Pricing Set

Sheet Title

Foundation Plan

Sheet Number

S001



HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Karen Burditt
Chair

May 15, 2025

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services

FROM: Dan Bruechert
Historic Preservation Section
Maryland-National Capital Park & Planning Commission

SUBJECT: Historic Area Work Permit #1106063 - Partial Demolition, Building Addition, and Accessory
Structure Construction

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** at the March 12, 2025 HPC meeting.

The HPC staff has reviewed and stamped the attached submission materials.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Cameron Ruppert
Address: 4 E. Kirke St., Chevy Chase

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete, the applicant will contact Dan Bruechert at 301-563.3408 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.





HISTORIC PRESERVATION COMMISSION

HAWP #: _____ at: _____

submitted on: _____

has been reviewed and determined that the proposal fits into the following category/categories:

Repair or replacement of a masonry foundation with new masonry materials that closely match the original in appearance;

Installation of vents or venting pipes in locations not visible from the public right-of-way;

New gutters and downspouts;

Removal of vinyl, aluminum, asbestos, or other artificial siding when the original siding is to be repaired and/or replaced in kind;

Removal of accessory buildings that are not original to the site or non-historic construction;

Repair or replacement of missing or deteriorated architectural details such as trim or other millwork, stairs or stoops, porch decking or ceilings, columns, railings, balusters, brackets shutters, etc., with new materials that match the old in design, texture, visual characteristics, and, where possible materials, so long as the applicant is able to provide one extant example, photographic evidence, or physical evidence that serves as the basis for the work proposed;

Construction of wooden decks that are at the rear of a structure and are not visible from a public right-of-way;

Roof replacement with -compatible roofing materials, or with architectural shingles replacing 3-Tab asphalt shingles;

Installation of storm windows or doors that are compatible with the historic resource or district;

Repair, replacement or installation of foundation-level doors, windows, window wells, and areaways, or foundation vents, venting pipes, or exterior grills that do not alter the character-defining features and/or the historic character of the resource;

Construction of fences that are compatible with the historic site or district in material, height, location, and design;

Fence is lower than 48" in front of rear wall plane;

Construction of walkways, parking pads, patios, driveways, or other paved areas that are not visible from a public right-of-way and measure no more than 150 square feet in size;

Replacement of existing walkways, parking pads, patios, driveways, or other paved areas with materials that are compatible with the visual character of the historic site and district and that are no greater than the dimensions of the existing hardscape;

Construction of small accessory buildings no larger than 250 square feet in size that are not visible from the public right-of-way;

Installations of skylights on the rear of a structure that will not be visible from the public right-of-way, and would not remove or alter character-defining roof materials;

Installation of solar panels and arrays in locations that are not readily visible from the public right-of-way or that are designed so as to have a minimal impact on the historic resource or the historic district (e.g., systems that are ground-mounted in areas other than the front or side yard of a corner lot, located on accessory or outbuildings, on non-historic additions, or on rear facing roof planes);

Installation of car charging stations in any location on a property or in the right-of-way;

Installation of satellite dishes;

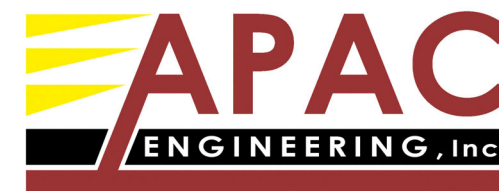
Removal of trees greater than 6" in diameter (d.b.h.) that are dead, dying, or present an immediate hazard.

Removal of trees greater than 6" in diameter (d.b.h.) in the rear of the property that will not impact the overall tree canopy of the surrounding district or historic site;

Replacement tree required as a condition; and,

Other minor alterations that may be required by the Department of Permitting Services post-Commission approval that would have no material effect on the historic character of the property.

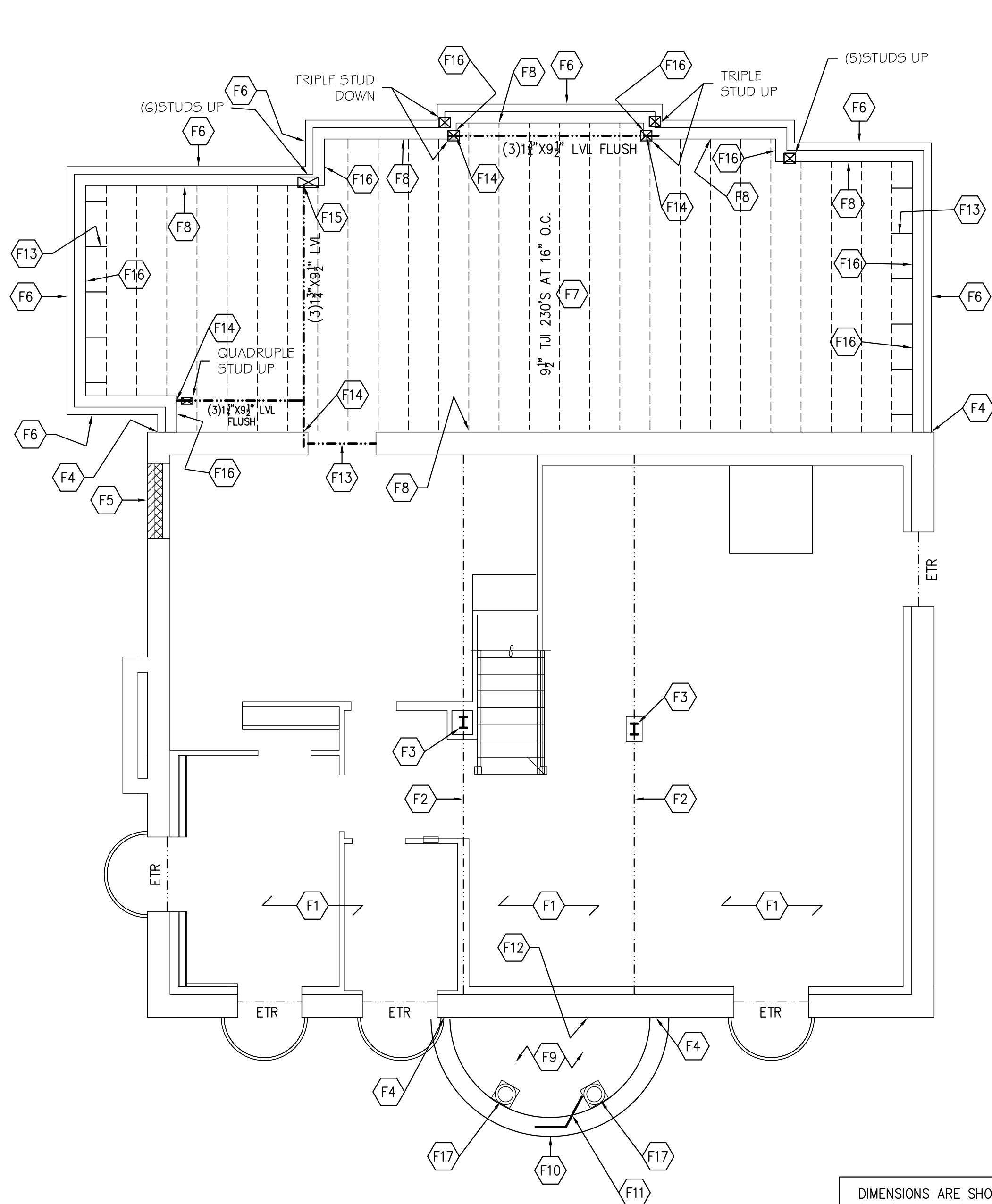
Staff finds the proposal complies with Chapter 24A, the Secretary of the Interior's Standards for Rehabilitation, and any additional requisite guidance. Under the authority of COMCOR No. 24A.04.01, this HAWP is approved by Don Brumsted on _____. The approval memo and stamped drawings follow.



8555 16th Street #200
Silver Spring, MD 20910

301-565-0543
301-563-9477 (fax)

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/17/26.



1st Floor Framing Plan

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

DIMENSIONS ARE SHOWN FOR STRUCTURAL DESIGN PURPOSES ONLY. DO NOT ORDER OR FABRICATE MATERIALS BASED ON THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS.

- F1 EXISTING 1ST FLOOR FRAMING. SISTER ANY DAMAGED JOIST THAT IS FOUND WITH A 2X10 OR A DOUBLE 2X8.
- F2 EXISTING STEEL BEAM.
- F3 EXISTING COLUMN.
- F4 DOWEL THE HORIZONTAL WALL REBAR INTO THE EXISTING WALL WITH SIMPSON SET-XP EPOXY AND 3" EMBEDMENT. CAULK THE JOINT BETWEEN THE NEW CONCRETE WALL AND THE EXISTING WALL WITH WATERSTOP RX BY CETCO. WHEN APPLICABLE, TOOTH THE NEW BRICK INTO THE EXISTING WALL.
- F5 INFILL THE EXISTING WALL WITH A BONDED 4" CMU + 4" BRICK WALL. BOND THE WALL TOGETHER WITH ROWLOCK COURSES THAT MATCH THE EXISTING HOME. WHEN APPLICABLE, TOOTH THE NEW WALL INTO THE EXISTING WALL.
- F6 EXTEND THE FOUNDATION WALL UP TO THE FLOOR DECKING. PLACE A PT2X6 SILL PLATE ON TOP OF THE FOUNDATION WALL. ATTACH THE SILL PLATE TO THE WALL WITH 3/8" ANCHOR BOLTS AT 48" O.C. WITH 7" EMBEDMENT. EACH SILL PLATE SHALL HAVE A MINIMUM OF (2) BOLTS.
- F7 PLACE BLOCKING BETWEEN THE JOISTS AT THE 1/3 POINTS OF THE SPAN.
- F8 9 1/2" LVL LEDGER FOR THE FLOOR JOISTS. ATTACH THE LEDGER TO THE NEW OR EXISTING WALL WITH (2) 1/2" SIMPSON TITEN SCREWS AT 4" O.C. ATTACH EACH JOIST TO THE LEDGER WITH A SIMPSON IUS HANGER. PLACE A 6 MIL POLY VAPOR BARRIER BETWEEN THE LEDGER AND THE NEW OR EXISTING WALL.
- F9 5" CONCRETE SLAB ON 4" GRAVEL. REINFORCE THE SLAB WITH #4 BARS AT 15" O.C. IN EACH DIRECTION. SLOPE THE SLAB AS NEEDED TO SHED WATER AWAY FROM THE HOME. ADD CARBON FIBERS TO THE CONCRETE TO MITIGATE CRACKING.
- F10 FORM THE STAIRS IN THE CONCRETE SLAB.
- F11 #4 BAR DOWELS BETWEEN THE SLAB AND THE WALL AT 24" O.C. EACH LEG SHALL BE 16" LONG.
- F12 TURN THE SLAB DOWN TO A GALVANIZED L4X4X1/2" STEEL ANGLE LEDGER ATTACHED TO THE EXISTING WALL WITH 1/2" GALVANIZED THRU BOLTS AT 12" O.C. CAULK THE JOINT BETWEEN THE SLAB AND THE WALL. THE BOTTOM OF THE LEDGER SHALL BE 8" BELOW THE TOP OF THE SLAB.
- F13 PLACE SOLID BLOCKING BETWEEN THE CLEAT AND THE 1ST JOIST AT 24" O.C.
- F14 POCKET THE BEAM IN THE WALL PER THE TYPICAL DETAIL. STOP THE LEDGER OR THE CLEAT AT THE SIDE OF THE BEAM.
- F15 ATTACH THE BEAM TO THE LEDGER WITH A SIMPSON HU HANGER.
- F16 9 1/2" RIM BOARD CLEAT FOR THE FLOOR DECKING. ATTACH THE CLEAT TO THE WALL WITH (2) 1/2" SIMPSON TITEN SCREWS AT 16" O.C. PLACE A 6 MIL POLY VAPOR BARRIER BETWEEN THE CLEAT AND THE WALL.
- F17 PERMACAST COLUMN UP WITH AN ALLOWABLE LOAD OF 1,500 LBS. ATTACH THE COLUMN TO THE SLAB PER THE MANUFACTURERS RECOMMENDATIONS. THE CONNECTION SHALL HAVE AN ALLOWABLE UPLIFT LOAD OF 500LBS.

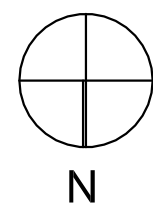
FRAMING NOTES:

- THE BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
- ALL HEADERS ARE ASSUMED TO BE SUPPORTED BY A DOUBLE JACK AND SINGLE KING STUD, UNLESS NOTED OTHERWISE.
- PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
- ATTACH ALL QUADRUPLE AND QUINTUPLE BEAMS TOGETHER WITH 2 ROWS OF 1/2" BOLTS AT 16" O.C. STAGGERED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING AND PROPOSED STRUCTURAL ELEMENTS OF THE HOME.
- ATTACH VENEER TO THE WOOD OR CMU BACKING STRUCTURE WITH METAL TIES AT 16" O.C. IN EACH DIRECTION. PROVIDE FLASHING, WATERSTOPS AND WEEP HOLES IN THE VENEER PER THE IRC CODE.
- ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 6" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
- ALL NAILS USED FOR EXTERIOR APPLICATIONS SHALL BE RING SHANK NAILS.
- ALL NAILS, HANGERS, BOLTS, AND SCREWS EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED.
- ALL LUMBER EXPOSED TO EXTERIOR CONDITIONS SHALL BE TREATED SOUTHERN PINE #2.
- ALL SLAB CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500PSI AND HAVE 6%±1% AIR ENTRAINMENT.
- WHEN ATTACHING EXISTING JOISTS TO FLUSH BEAMS USE OVERSIZED SIMPSON LUS HANGERS. ADD BLOCKING AS NEEDED TO FILL THE GAPS BETWEEN THE JOIST AND THE HANGER.
- THE CONTRACTOR SHALL SURVEY ALL EXPOSED MASONRY IN THE HOME AND POINT ANY DETERIORATED JOINT THAT IS DISCOVERED AND REPLACE ANY DETERIORATED BRICKS OR BLOCKS.
- TYPICAL JOIST HANGER SHALL BE A SIMPSON IUS OR SIMPSON LUS HANGER.
- TYPICAL RAFTER TO RIDGE HANGER SHALL BE A SIMPSON LSSR.
- TYPICAL RAFTER TO FLUSH BEAM HANGER SHALL BE A SIMPSON L70 ON EACH SIDE OF THE RAFTER.
- TYPICAL POST TO BEAM CONNECTOR SHALL BE A SIMPSON LPC ON EACH SIDE.
- TYPICAL POST TO FLOOR PLATE CONNECTOR SHALL BE A SIMPSON L30 ON EACH SIDE OF THE POST.
- TYPICAL STRINGER TO FRAMING CONNECTOR SHALL BE A SIMPSON MTS16 ON EACH SIDE.
- TYPICAL DIMENSIONAL BEAM TO BEAM HANGER SHALL BE A SIMPSON HU MAX.
- TYPICAL LVL TO LVL BEAM HANGER SHALL BE A SIMPSON HHUS.
- PERMACAST COLUMNS SHALL BE INSTALLED PER ESR 1361 AND HAVE AN ALLOWABLE LOAD OF 5,000LBS. AS AN ALTERNATE TO THE PERMACAST COLUMNS USE A PT6X6 POST INSIDE A DECORATIVE WRAP.
- PLACE A DOUBLE JOIST BELOW ALL WALLS THAT ARE PARALLEL TO THE FLOOR FRAMING. ALTERNATE: PLACE BLOCKING BETWEEN THE JOISTS BELOW THE WALLS AT 16" O.C.
- ADD BLOCKING TO THE WEB OF ENGINEERED JOISTS AS NEEDED FOR HANGERS, CONNECTORS, STRAPS OR NAILING MULTIPLE MEMBERS TOGETHER.
- ADD JOIST HANGERS TO ALL EXISTING FRAMING CONNECTIONS THAT ARE FOUND TO LACK THEM SUCH AS FRAMING AROUND PLUMBING STACKS, CHIMNEYS, OR THE EXISTING STAIRS.



REVIEWED
By Dan Bruechert at 12:52 pm, May 15, 2025

Project North



Project No. 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

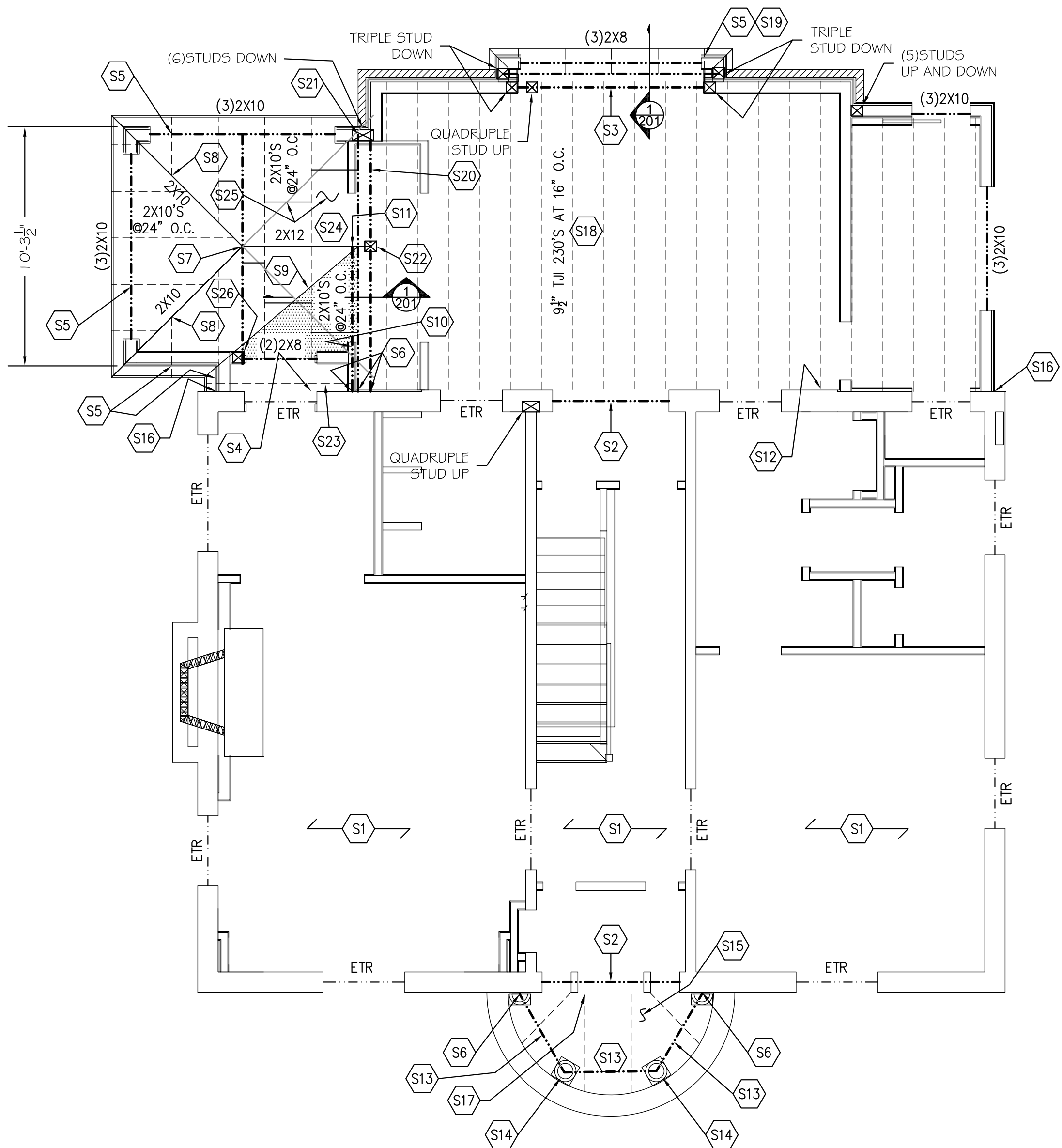
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11-24-2024	Interior Set
12-09-2024	Updated Pricing Set

Sheet Title

1st Floor Framing Plan

Sheet Number

S002



2nd Floor Framing Plan

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

DIMENSIONS ARE SHOWN FOR STRUCTURAL DESIGN PURPOSES ONLY. DO NOT ORDER OR FABRICATE MATERIALS BASED ON THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS.

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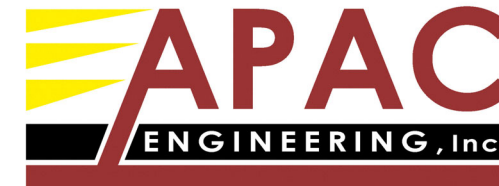
1. THE BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
2. ALL HEADERS ARE ASSUMED TO BE SUPPORTED BY A DOUBLE JACK AND SINGLE KING STUD, UNLESS NOTED OTHERWISE.
3. PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
4. ATTACH ALL QUADRUPLE AND QUINTUPLE BEAMS TOGETHER WITH 2 ROWS OF 1/2" BOLTS AT 16" O.C. STAGGERED.
5. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING AND PROPOSED STRUCTURAL ELEMENTS OF THE HOME.
6. ATTACH VENEER TO THE WOOD OR CMU BACKING STRUCTURE WITH METAL TIES AT 16" O.C. IN EACH DIRECTION. PROVIDE FLASHING, WATERSTOPS AND WEEP HOLES IN THE VENEER PER THE IRC CODE.
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23. PLACE A DOUBLE JOIST BELOW ALL WALLS THAT ARE PARALLEL TO THE FLOOR FRAMING. ALTERNATE: PLACE BLOCKING BETWEEN THE JOISTS BELOW THE WALLS AT 16" O.C.
24. ADD BLOCKING TO THE WEB OF ENGINEERED JOISTS AS NEEDED FOR HANGERS, CONNECTORS, STRAPS OR NAILING MULTIPLE MEMBERS TOGETHER.
25. ADD JOIST HANGERS TO ALL EXISTING FRAMING CONNECTIONS THAT ARE FOUND TO LACK THEM SUCH AS FRAMING AROUND PLUMBING STACKS, CHIMNEYS, OR THE EXISTING STAIRS.

- S1 EXISTING 2ND FLOOR FRAMING. SISTER ANY DAMAGED JOIST THAT IS FOUND WITH A 2X10 OR A DOUBLE 2X8.
- S2 (2)L6X3 1/2"X 5/8" STEEL ANGLE LINTEL.
- S3 (5)1 1/2"X9 1/2" LVL HEADER. THE OUTER TWO PLIES SHALL BE PLACED BELOW THE BRICK VENEER. PLACE A 6 MIL POLY VAPOR BARRIER BETWEEN THE TOP OF THE BEAM AND THE VENEER. THE OUTER TWO PLIES SHALL BE LONGER THAN THE INNER 3 PLIES PER THE GEOMETRY OF THE BAY.
- S4 PT2X CLEAT FOR THE ROOF AND CEILING. ATTACH EACH CLEAT TO THE EXISTING OR NEW WALL WITH 1/2"Ø SIMPSON TITEN SCREWS AT 12" O.C. TOP AN BOTTOM STAGGERED. EACH CLEAT SHALL MATCH THE SIZE OF THE ADJACENT RAFTERS AND CEILING JOISTS.
- S5 ATTACH EACH RAFTER TO THE SUPPORTING WALL WITH A SIMPSON H2.5A HURRICANE TIE. HOLD THE TOP OF THE RAFTERS UP AS NEEDED FOR VENTILATION AND INSULATION AT THE EAVE.
- S6 POCKET THE BEAM IN THE WALL PER THE TYPICAL DETAIL.
- S7 STEEL PLATE GIRDER PER THE STRUCTURAL DETAIL. ATTACH THE HIP BEAMS TO THE GIRDER WITH A SIMPSON HRC CONNECTOR. ATTACH THE RIDGE BEAM TO THE GIRDER WITH A SIMPSON LUS HANGER.
- S8 ATTACH EACH RAFTER TO THE HIP WITH (6)10d TOE NAILS. AND A SIMPSON LS90 ON ONE SIDE OF THE RAFTER.
- S9 OVERBUILT CRICKET. USE 2X10 RAFTERS AT 24" O.C. RIP THE RAFTERS AND PLACE THEM ON THE LOWER ROOF. ATTACH EACH RAFTER TO THE LOWER ROOF WITH (3)10d TOE NAILS AND A SIMPSON LS50 ON EACH SIDE OF THE RAFTER.
- S10 PLACE A DOUBLE 2X10 BEAM NEXT TO THE VENEER FOR THE THE OVERBUILT ROOF. ATTACH EACH RAFTER TO THE LEDGER WITH A SIMPSON LSSR HANGER.
- S11 ATTACH THE BEAM IN THE OVERBUILT ROOF TO THE RIDGE BEAM WITH A SIMPSON L90 ON ONE SIDE AND (6)10d TOE NAILS.
- S12 9 1/2" LVL LEDGER FOR THE FLOOR JOISTS. ATTACH THE LEDGER TO THE WALL WITH (2)1/2"Ø SIMPSON TITEN SCREWS AT 4" O.C. ATTACH EACH JOIST TO THE LEDGER WITH A SIMPSON IUS HANGER. PLACE A 6 MIL POLY VAPOR BARRIER BETWEEN THE LEDGER AND THE EXISTING WALL.
- S13 TRIPLE PT2X8 BEAM. PAD THE BEAM WITH FURRING STRIPS AS NEEDED TO MAKE THE CURVED SHAPE. ATTACH EACH RAFTER TO THE BEAM WITH A SIMPSON LS70. THE MID-HEIGHT OF THE CONNECTOR SHALL BE AT THE TOP OF THE BEAM.
- S14 PERMACAST COLUMN DOWN WITH AN ALLOWABLE LOAD OF 1,500 LBS. ATTACH THE BEAM TO THE COLUMN PER THE MANUFACTURERS RECOMMENDATIONS. THE BEAM TO COLUMN CONNECTION SHALL BE CAPABLE OF RESISTING 500 LBS OF WIND UPLIFT.
- S15 FRAME THE ROOF WITH 2X RAFTERS AT 16" O.C. RIP THE TOP OF THE RAFTERS TO MAKE THE ROOF SLOPE.
- S16 ATTACH THE 1ST STUD TO THE EXISTING WALL WITH 1/2"Ø SIMPSON TITEN SCREWS AT 12" O.C. WHEN APPLICABLE, TOOTH THE NEW BRICK INTO THE WALL.
- S17 RIPPED PT2X LEDGER ATTACHED TO THE EXISTING WALL WITH (2) 1/2"Ø SIMPSON TITEN SCREWS AT 8" O.C. ATTACH EACH RAFTER TO THE LEDGER WITH A SIMPSON LUS HANGER OR WITH A SIMPSON LS70 ON ONE SIDE AND (4)10d TOE NAILS.
- S18 PLACE BLOCKING BETWEEN THE JOISTS AT THE 1/3 POINTS OF THE SPAN.
- S19 FRAME THE ROOF WITH RIPPED 2X RAFTERS AT 24" O.C. SEE THE STRUCTURAL DETAIL FOR MORE INFORMATION.
- S20 (5)1 1/2"X11 1/2" LVL BEAM. THE OUTER TWO PLIES SHALL BE PLACED BELOW THE BRICK VENEER. PLACE A 6 MIL POLY VAPOR BARRIER BETWEEN THE TOP OF THE BEAM AND THE VENEER.
- S21 PLACE FLASHING OVER THE PORTION OF THE OUTER PLIES OF THE BEAM THAT PROTRUDE ABOVE THE ROOF.
- S22 POCKET THE RIDGE BEAM IN THE WALL AND PLACE IT ON A DOUBLE STUD DOWN TO THE INNER PLIES OF THE BEAM BELOW. PLACE ROOF PAPER BETWEEN THE VENEER AND THE RIDGE BEAM.
- S23 FRAME THE ROOF WITH 2X10 RAFTERS AND 2X8 CEILING JOISTS AT 24" O.C.
- S24 ATTACH EACH RAFTER TO THE RIDGE WITH A SIMPSON LSSR HANGER. HOLD THE TOP OF THE RIDGE DOWN AS NEEDED FOR VENTILATION AND SO THAT THE BOTTOM OF THE RIDGE IS EVEN WITH OR DEEPER THAN THE BOTTOM OF THE RAFTERS.
- S25 FRAME THE FAKE HIP CEILING WITH 2X6 CEILING JOISTS AT 24" O.C. ATTACH EACH CEILING JOIST TO THE LVL BEAM ON THE RIGHT WITH A SIMPSON L50 ON EACH SIDE OF THE CEILING JOIST. PLACE BLOCKING BETWEEN THE RAFTERS ON THE LEFT SIDE AT EACH CEILING JOIST AND ATTACH THE CEILING JOISTS TO THE BLOCKING WITH (4)10d NAILS.
- S26 PLACE THE GIRDER ON THE HEADER. PLACE THE HEADER ON A DOUBLE JACK STUD AND DOUBLE KING STUD DOWN.

Mortar & Thatch
Architects

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202-695-551

Seal

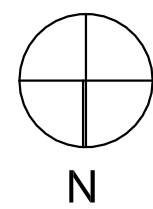


8555 16th Street #200
Silver Spring, MD 20910

301-565-0543
301-563-9477 (fax)

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/17/26.

Project North



Project No. 2409

Ruppert
Residence

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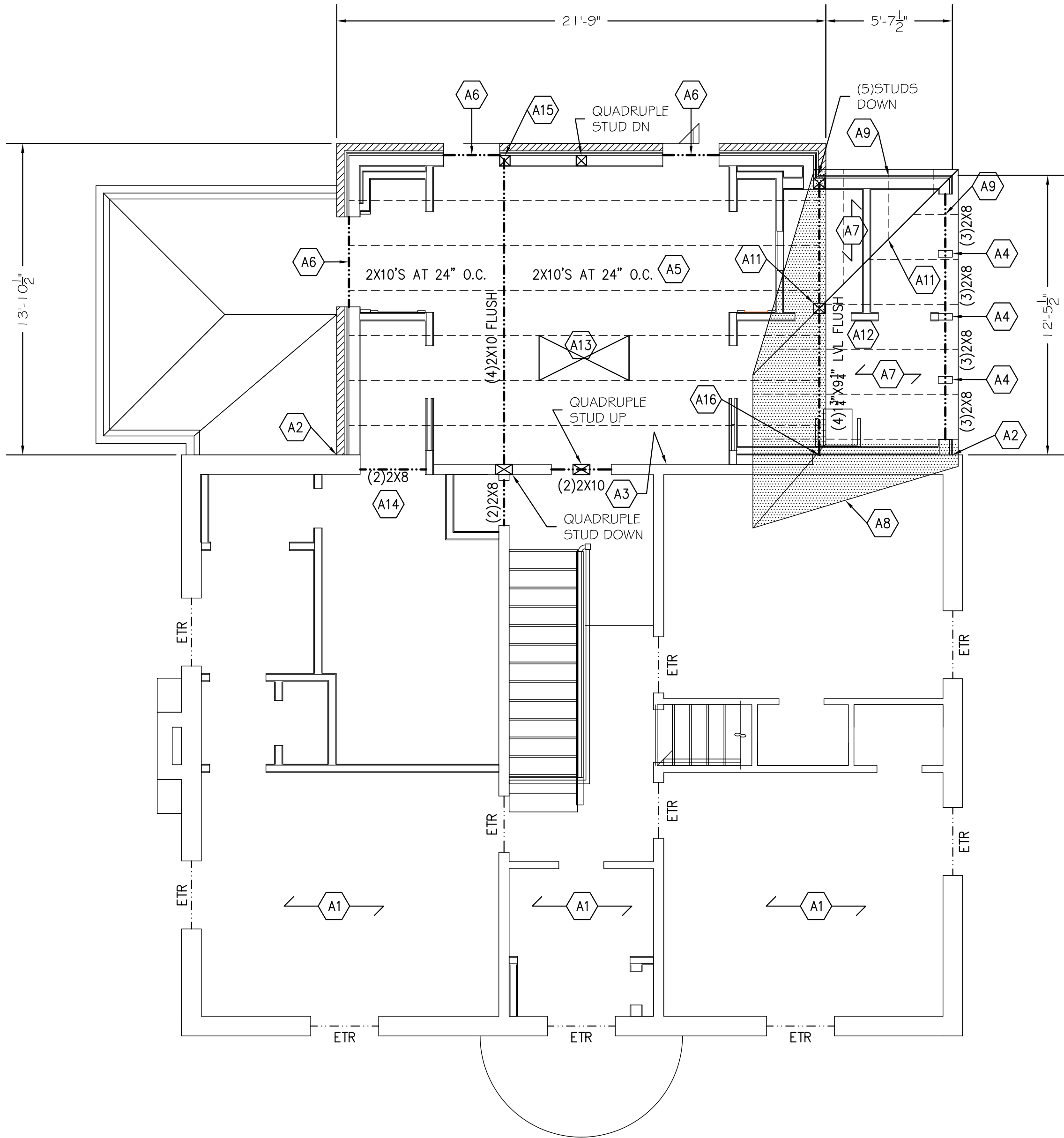
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11-24-2024	Interior Set
12-09-2024	Updated Pricing Set

Sheet Title

2nd Floor Framing Plan

Sheet Number

S003



Attic Framing Plan

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

DIMENSIONS ARE SHOWN FOR STRUCTURAL DESIGN PURPOSES ONLY. DO NOT ORDER OR FABRICATE MATERIALS BASED ON THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS.

- A1 EXISTING ATTIC JOISTS. SISTER ANY DAMAGED JOIST THAT IS FOUND WITH A 2X8 OR A DOUBLE 2X6.
- A2 ATTACH THE 1ST STUD TO THE EXISTING WALL WITH 1/2" SIMPSON TITEN SCREWS AT 12" O.C. WHEN APPLICABLE, TOOTH THE NEW BRICK INTO THE WALL.
- A3 CUT OFF THE ENDS OF THE EXISTING RAFTERS AS NEEDED TO FIT ABOVE THE CEILING. ATTACH THE 1ST ATTIC JOIST TO THE CUT OF RAFTERS WITH (2)#10 SCREWS AT EACH RAFTER. ATTACH EACH RAFTER TO EACH RAFTER TIE WITH (6)10d NAILS.
- A4 PLACE A DOUBLE JACK STUD BETWEEN EACH WINDOW.
- A5 PLACE BLOCKING BETWEEN THE JOISTS AT THE MID POINT OF THE SPAN.
- A6 (3)2X8 AND AN L4X3 1/2"X4" STEEL ANGLE LINTEL.
- A7 FRAME THE ROOF WITH 2X8 RAFTER AND 2X8 CEILING JOISTS AT 24" O.C. THE CEILING JOISTS SHALL CHANGE DIRECTION AT THE HIP SO THAT THEY REMAIN PARALLEL TO THE RAFTERS.
- A8 OVERBUILT ROOF. RIP THE RAFTERS AND PLACE THEM ON THE LOWER ROOF. ATTACH EACH RAFTER TO THE LOWER ROOF WITH (3)10d TOE NAILS AND A SIMPSON LSSO ON EACH SIDE OF THE RAFTER.
- A9 ATTACH EACH RAFTER TO THE SUPPORTING WALL WITH A SIMPSON H2.5A HURRICANE TIE. HOLD THE TOP OF THE RAFTER UP AS NEEDED FOR VENTILATION AND INSULATION AT THE EAVE.
- A10 PLACE A 2X8 HIP BEAM IN THE ROOF AND A DIAGONAL 2X8 BEAM IN THE CEILING. ATTACH EACH RAFTER AND EACH CEILING JOIST TO THE HIP BEAM AND DIAGONAL BEAM WITH (6)10d TOE NAILS AND A SIMPSON LS70 ON ONE SIDE OF THE RAFTER OR JOIST. RIP THE TOP OF THE DIAGONAL BEAM AT THE EXTERIOR CORNER AND ATTACH IT TO THE HIP BEAM WITH A SIMPSON LTP4 PLATE ON EACH SIDE OF THE DIAGONAL BEAM. ATTACH THE DIAGONAL BEAM TO THE BEAM IN THE CEILING AT THE CENTER OF THE ADDITION WITH A SIMPSON SUR/L SKEWED ANGLE HANGER.
- A11 PLACE A DOUBLE STUD BETWEEN THE HIP AND THE FLUSH BEAM BELOW.
- A12 PLACE THE BEAM FLUSH WITH THE ATTIC JOISTS.
- A13 NEW ATTIC HATCH PLACED BETWEEN TWO JOISTS. ADJUST THE LOCATION OF THE JOISTS IF NEEDED TO PLACE THE HATCH. PLACE SOLID BLOCKING AT THE LEFT AND RIGHT SIDE OF THE HATCH.
- A14 POCKET THE HEADER IN THE EXISTING WALL ON THE LEFT SIDE OF THE OPENING. PLACE THE HEADER ON A DOUBLE JACK STUD AND SINGLE KING STUD ON THE RIGHT SIDE OF THE OPENING.
- A15 PLACE THE BEAM ON THE HEADER. PLACE THE HEADER ON A DOUBLE JACK STUD AND DOUBLE KING STUD DOWN.
- A16 SET THE BEAM ON THE EXISTING SILL PLATE. IF NO SILL PLATE EXISTS, PLACE THE BEAM ON A 6 MIL POLY VAPOR BARRIER PLACED ON THE EXISTING WALL. FILL HOLLOW CELLS SOLID BELOW THE BEAM.

FRAMING NOTES:

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APPROVED

Montgomery County

Historic Preservation Commission

Karen Bulleit

REVIEWED

By Dan Bruechert at 12:52 pm, May 15, 2025

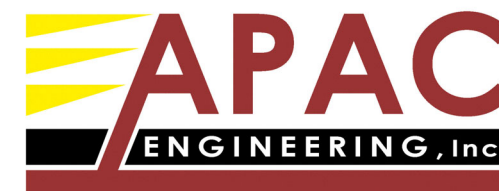
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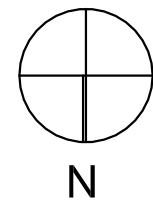


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Project No. 2409

Ruppert

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Attic Framing Plan

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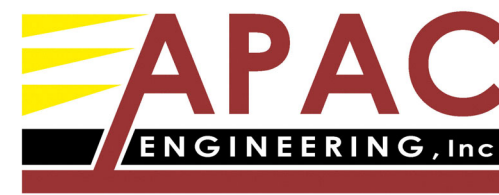
S004



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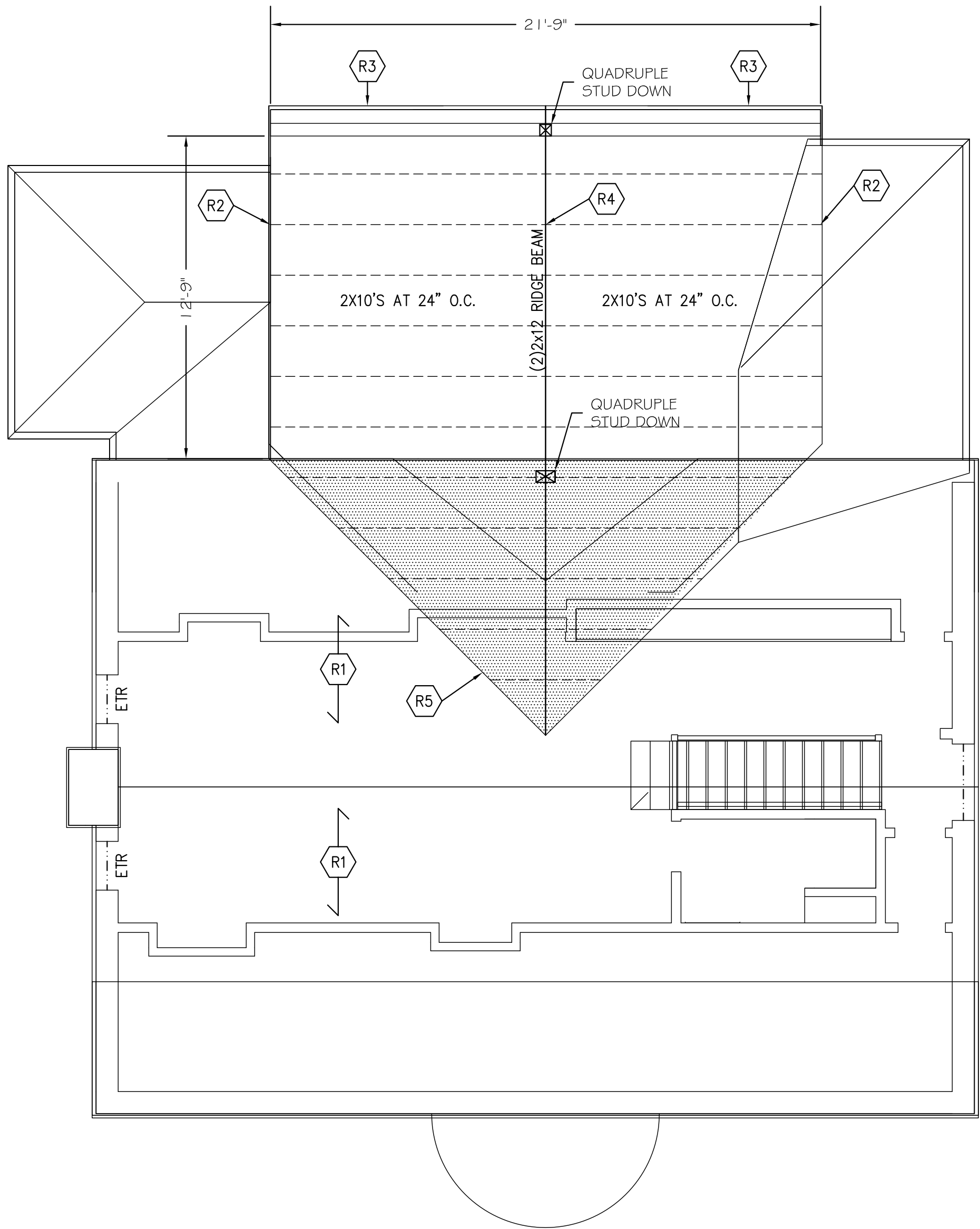
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- R3 THE ROOF DECKING SHALL CANTILEVER OVER THE END WALL TO SUPPORT THE RAKE. NO SPLICE SHALL OCCUR IN THE ROOF DECKING WITHIN 4'-0" OF THE END WALL. PROVIDE 2X LADDER FRAMING AT 24" O.C. OR BLOCKING AS NEEDED TO FORM THE RAKE DETAIL.
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- R5 OVERBUILT ROOF. RIP THE RAFTERS AND PLACE THEM ON THE LOWER ROOF. ATTACH EACH RAFTER TO THE LOWER ROOF WITH (3)10d TOE NAILS AND A SIMPSON LS50 ON EACH SIDE OF THE RAFTER.

FRAMING NOTES:

- THE BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
- ALL HEADERS ARE ASSUMED TO BE SUPPORTED BY A DOUBLE JACK AND SINGLE KING STUD, UNLESS NOTED OTHERWISE.
- PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
- ATTACH ALL QUADRUPLE AND QUINTUPLE BEAMS TOGETHER WITH 2 ROWS OF $\frac{3}{4}"$ ϕ BOLTS AT 16" O.C. STAGGERED.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING AND PROPOSED STRUCTURAL ELEMENTS OF THE HOME.
- ATTACH VENEER TO THE WOOD OR CMU BACKING STRUCTURE WITH METAL TIES AT 16" O.C. IN EACH DIRECTION. PROVIDE FLASHING, WATERSTOPS AND WEEP HOLES IN THE VENEER PER THE IRC CODE.
- ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 6" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
- ALL NAILS USED FOR EXTERIOR APPLICATIONS SHALL BE RING SHANK NAILS.
- ALL NAILS, HANGERS, BOLTS, AND SCREWS EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED.
- ALL LUMBER EXPOSED TO EXTERIOR CONDITIONS SHALL BE TREATED SOUTHERN PINE #2.
- ALL SLAB CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4500PSI AND HAVE 6%±1% AIR ENTRAINMENT.
- WHEN ATTACHING EXISTING JOISTS TO FLUSH BEAMS USE OVERSIZED SIMPSON LUS HANGERS. ADD BLOCKING AS NEEDED TO FILL THE GAPS BETWEEN THE JOIST AND THE HANGER.
- THE CONTRACTOR SHALL SURVEY ALL EXPOSED MASONRY IN THE HOME AND POINT ANY DETERIORATED JOINT THAT IS DISCOVERED AND REPLACE ANY DETERIORATED BRICKS OR BLOCKS.
- TYPICAL JOIST HANGER SHALL BE A SIMPSON IUS OR SIMPSON LUS HANGER.
- TYPICAL RAFTER TO RIDGE HANGER SHALL BE A SIMPSON LSSR.
- TYPICAL RAFTER TO FLUSH BEAM HANGER SHALL BE A SIMPSON L70 ON EACH SIDE OF THE RAFTER.
- TYPICAL POST TO BEAM CONNECTOR SHALL BE A SIMPSON LPC ON EACH SIDE.
- TYPICAL POST TO FLOOR PLATE CONNECTOR SHALL BE A SIMPSON L30 ON EACH SIDE OF THE POST.
- TYPICAL STRINGER TO FRAMING CONNECTOR SHALL BE A SIMPSON MTS16 ON EACH SIDE.
- TYPICAL DIMENSIONAL BEAM TO BEAM HANGER SHALL BE A SIMPSON HU MAX.
- TYPICAL LVL TO LVL BEAM HANGER SHALL BE A SIMPSON HHUS.
- PERMACAST COLUMNS SHALL BE INSTALLED PER ESR 1361 AND HAVE AN ALLOWABLE LOAD OF 5,000LBS. AS AN ALTERNATE TO THE PERMACAST COLUMNS USE A PT6X6 POST INSIDE A DECORATIVE WRAP.
- PLACE A DOUBLE JOIST BELOW ALL WALLS THAT ARE PARALLEL TO THE FLOOR FRAMING. ALTERNATE: PLACE BLOCKING BETWEEN THE JOISTS BELOW THE WALLS AT 16" O.C.
- ADD BLOCKING TO THE WEB OF ENGINEERED JOISTS AS NEEDED FOR HANGERS, CONNECTORS, STRAPS OR NAILING MULTIPLE MEMBERS TOGETHER.
- ADD JOIST HANGERS TO ALL EXISTING FRAMING CONNECTIONS THAT ARE FOUND TO LACK THEM SUCH AS FRAMING AROUND PLUMBING STACKS, CHIMNEYS, OR THE EXISTING STAIRS.

DIMENSIONS ARE SHOWN FOR
STRUCTURAL DESIGN PURPOSES
ONLY. DO NOT ORDER OR
FABRICATE MATERIALS BASED ON
THE DIMENSIONS SHOWN ON THE
STRUCTURAL PLANS.

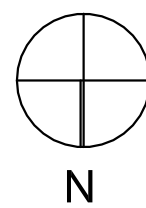
Roof Framing Plan

Scale: $\frac{3}{4}"$ = 1'-0"



REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

Project North



Project No. 2409

Ruppert
Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Builts
09-27-2024	Schematic Design Set
10-09-2024	Pricing Set
10-11-2024	Pricing Set Addendum
11-24-2024	Interior Set
12-09-2024	Updated Pricing Set

Sheet Title

Roof Framing Plan

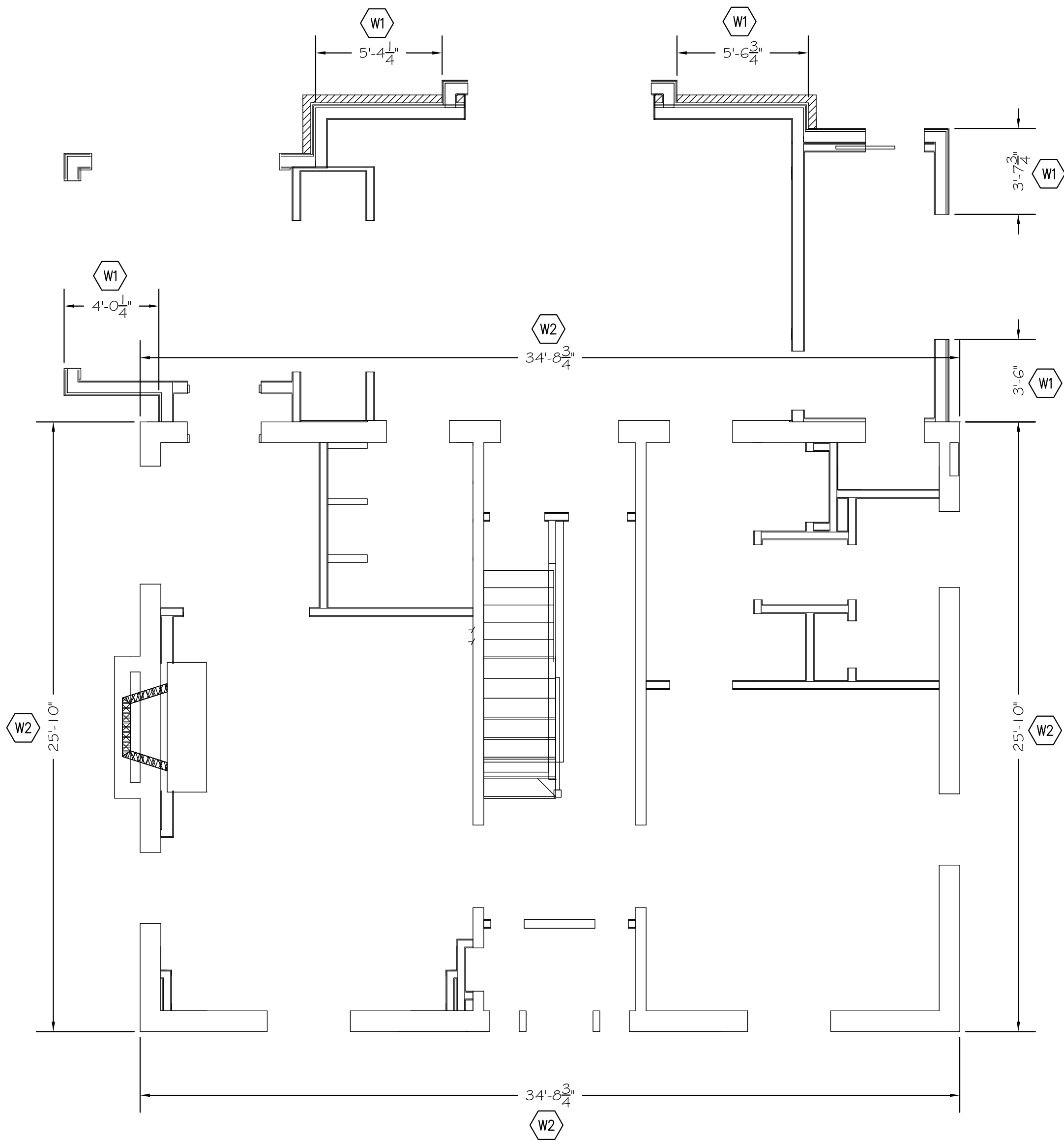
Sheet Number

S005

WIND BRACING NOTES:

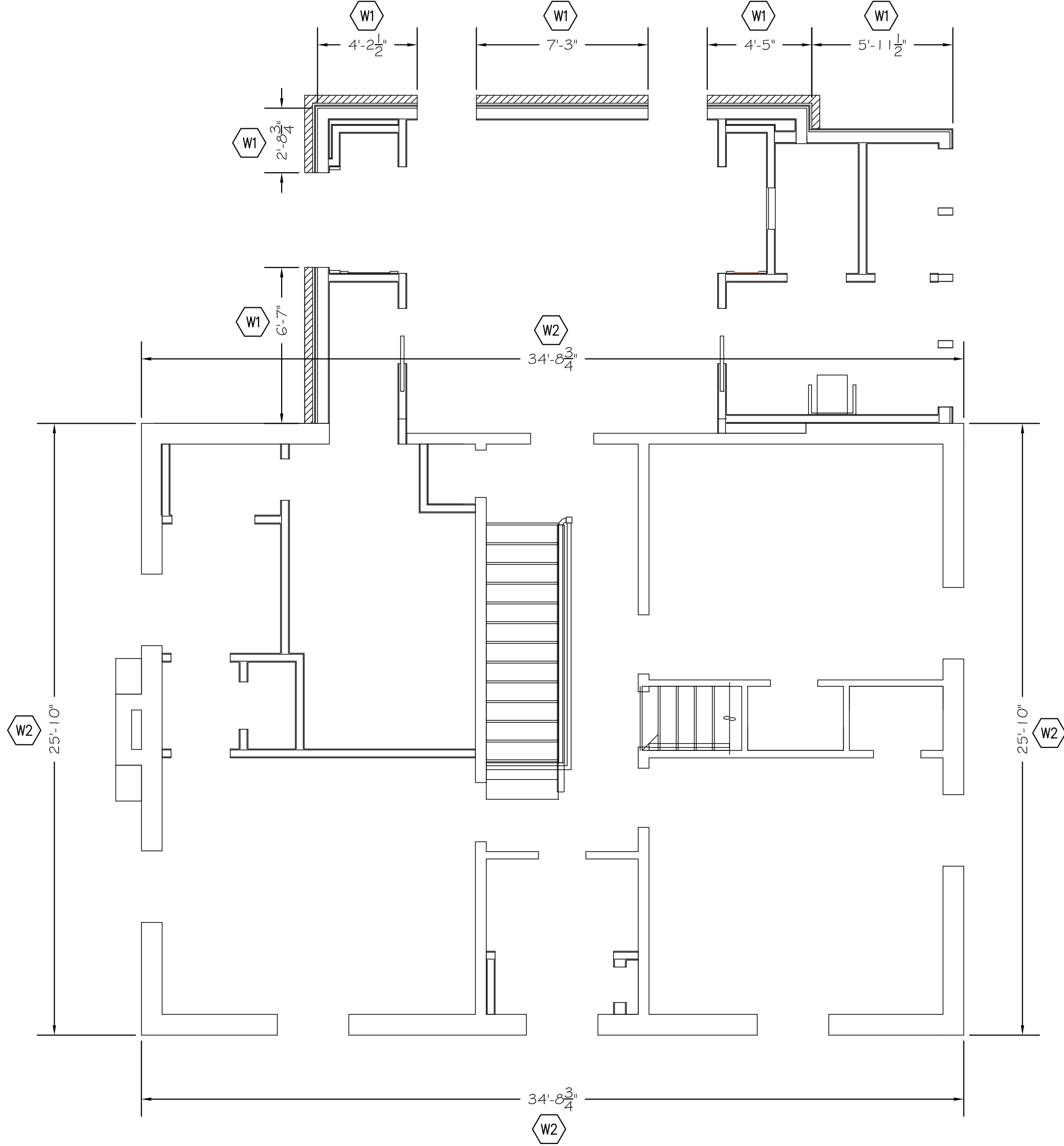
1. WALLS BRACED PER IRC R602.10 AND R301.1.3 "ENGINEERED DESIGN".
2. APPLY $\frac{7}{8}$ " OSB SHEATHING TO ALL EXTERIOR WALLS.
3. ATTACH OSB TO WOOD FRAMING WITH 8d NAILS AT 4" O.C. AT PANEL EDGES AND 8" O.C. ELSEWHERE.
4. EDP DENOTES "ENGINEERED DESIGNED PANEL".
5. ATTACH THE BOTTOM PLATE OF THE WALL TO THE JOISTS OR BLOCKING WITH 1-16d (0.135X3 $\frac{3}{4}$) NAIL. ATTACH THE BOTTOM PLATE TO THE RIM BOARD WITH 16d NAILS AT 12" O.C.
6. ATTACH EACH JOIST AND RAFTER TO THE TOP PLATE OF THE WALL WITH 2-16d (0.135X3 $\frac{3}{4}$) TOE NAILS.
7. ATTACH THE RIM BOARD TO THE TOP PLATE OF THE WALL WITH 16d (0.135X3 $\frac{3}{4}$) TOE NAILS AT 12" O.C.
8. ATTACH RIM BOARD TO SILL PLATE WITH 16d (0.135X3 $\frac{3}{4}$) TOE NAILS AT 12" O.C.

- W1 EDP WIND BRACING PANEL.
- W2 EXISTING PERFORATED MASONRY SHEAR WALL.



1st Floor Wind Bracing Plan

Scale: $\frac{1}{4}$ " = 1'-0"



2nd Floor Wind Bracing Plan

Scale: $\frac{1}{4}$ " = 1'-0"

APPROVED

Montgomery County

Historic Preservation Commission

Karen Bunkit

REVIEWED

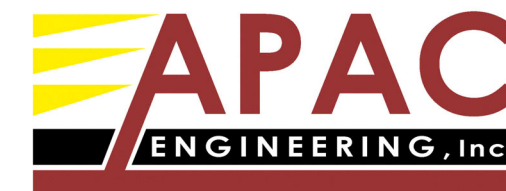
By Dan Bruechert at 12:53 pm, May 15, 2025

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Architects

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Seal

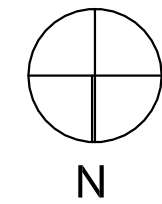


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Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/17/26.

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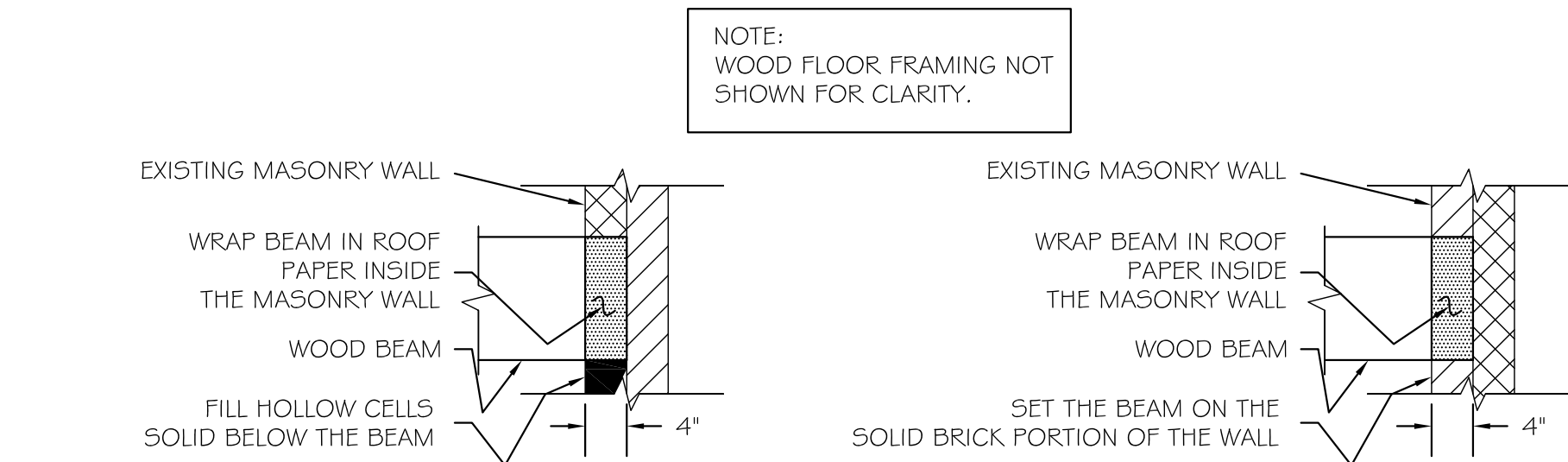
Date	Issue Description
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09-27-2024	Schematic Design Set
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Sheet Title

Wind Bracing Plans

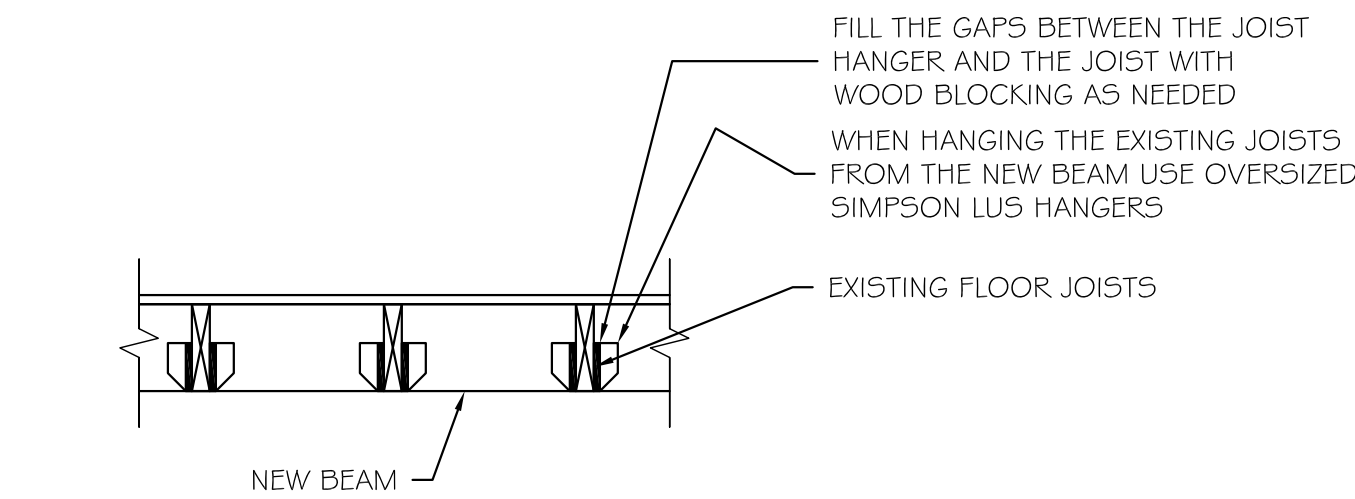
Sheet Number

S100



Typical Wood Beam to Masonry Wall Details

Scale: $\frac{3}{4}$ " = 1'-0"



Typical Detail at Holes in LVL's or Dimensional Lumber Beams or Joists

Scale: NOT TO SCALE

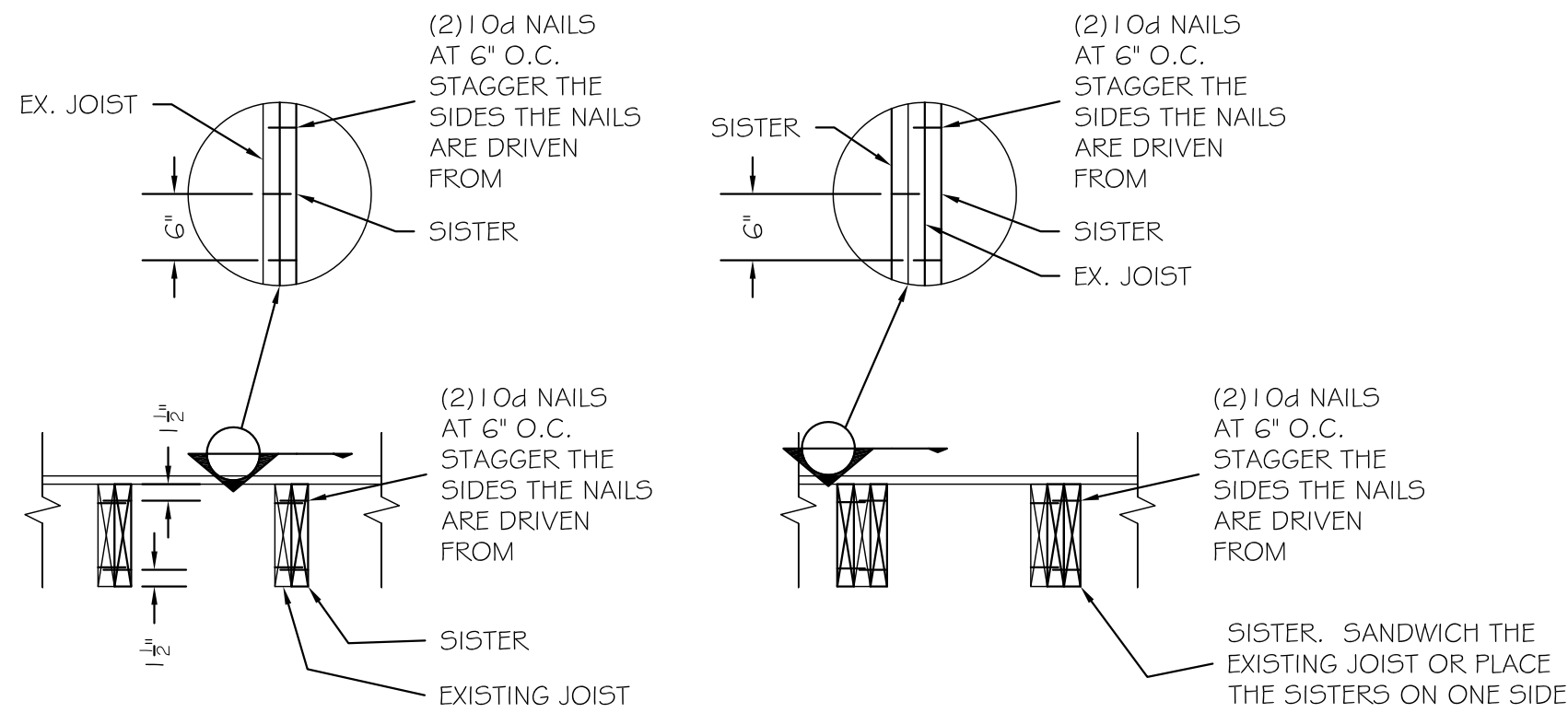
Typical Ex. Joist to New Beam Detail

Scale: $\frac{3}{4}$ " = 1'-0"

- Structural Notes**
- All work and materials to comply with the requirements of the 2021 IBC and IRC codes as revised by Montgomery County.
 - Codes: the following design standards are applicable by reference:
TMS 402-2016 Building Code Requirements for Masonry Structures.
AWC NDS -2018 - Wood Frame Construction Manual for One and Two Family Dwellings.
ACI 318-14 Building Code Requirements for Reinforced Concrete
AISC - 360-16 Specifications for Steel Buildings.
 - Foundations: footings, underpinning and slab on grades are designed to bear on native soil type SM or SC with an allowable bearing pressure of 2000 psf. A qualified soil-bearing inspector prior to placement of concrete shall verify all bearing values.
 - Structural steel:
 - All structural steel, including detail material shall conform to ASTM A572 Fy = 50ksi, U.N.O.
 - All structural tubing shall conform to ASTM A500, grd.B
 - All steel pipe shall be ASTM A53, type E or S, grade B
 - All welders shop and field, shall be certified. Use E70xx electrodes only.
 - All steel exposed to weather and exterior masonry support shall receive one shop coat of corrosion-inhibiting primer.
 - Detailing, fabrication and erection shall be in accordance with AISC. Adequately brace all steel against lateral loads during erection.
 - All exterior structural steel shall receive rust preventative paint.
 - Connections:
 - All beam connections shall be simple shear connections, U.N.O. Where no reaction is provided, the beam shall be assumed to carry 120 % of the allowable uniform load in Kips for beams laterally supported, as given in the AISC steel construction manual.
 - Except as noted, all fasteners shall be 3/4" diameter ASTM A325 bolts, designed to act in bearing type connections with threads included.
 - Lumber:
 - Lumber shall be SPF #2 with a min. Fb = 875psi Min. Fv = 135psi and min. E = 1,400,000psi.
 - LVL and PSI shall have a min. Fb = 2850psi; Fv = 285psi; E = 2,000,000psi.
 - Floor decking shall be 3/4" APA rated decking. Roof decking shall be 5/8" APA rated decking. Wall sheathing shall be 5/8" APA rated sheathing. Glue and screw the floor decking to the joists with #8 screws at 6" O.C. at panel edges and 12" O.C. elsewhere. Place blocking between the joists below all splices in the decking perpendicular to the floor joists.
 - Interior wood walls shall be 2x4 studs at 16" O.C. and exterior walls shall be 2x6 studs at 16" O.C. with a double top plate and single bottom plate. Provide solid blocking at the midheight of each wall and at a minimum of 48" O.C. vertically. Place blocking between the studs behind all splices in the sheathing perpendicular to the studs.
 - Provide double joists under all walls that run parallel to floor framing.
 - Nail all multiple members together per the manufacturer's recommendations and at a minimum use 2-10d nails at 6" O.C. stagger sides that nails are driven from.
 - U.N.O. all members shall be fastened together per table R602.3(1).
 - Provide bridging at center of all joist spans Exceeding 8'-0" and at 1/3 points of all joist spans exceeding 16'-0". Provide solid blocking at all bearing points on top of walls or beams.
 - Provide solid blocking below all wood posts.
 - All posts shall have Simpson Cap and Base Plates typ.
 - All joists shall have Simpson Hangers where applicable.
 - Glue all multiple studs together. Nail together with 2-10d nails at 3" O.C. Stagger the sides of the studs that the nails are driven from.
 - All lumber in contact with masonry or concrete or within in 8" of soil shall be pressure treated. All lumber to conform to IRC R317 and R318 for protection against corrosion and termite damage.
 - All lumber shall be kiln dried. Store lumber on site in such a manner as to prevent the seepage of water into the wood.
 - Wood Lintels shall be as follows:
 - Opening \leq 3'-0" - 2-2x6
 - 3'-0" < Opening \leq 5'-0" - 2-2x8
 - 5'-0" < Opening \leq 8'-0" - 2-2x10
 - Greater than 8'-0" - See plans

- Fasteners:
 - All prefabricated angles, bearing plates, and joist hangers shall be installed per the manufacturer recommendations.
 - Follow the manufacturer recommendations for setting epoxy bolts.
 - Expansion bolts shall be rawl power studs.
- Masonry:
 - Masonry construction shall be in conformance with the applicable sections of TMS 402-2016, "Building Code Requirements for Masonry Structures."
 - Concrete masonry units shall be hollow load bearing units (ASTM C90) grade n-1 with a net strength of 2000psi and F'm - 1500psi.
 - All joints to be filled solid with mortar.
 - Mortar to comply with ASTM C270 (type M or S).
 - Provide corrugated masonry ties between brick facia and wood walls or cmu walls at 16" O.C. in each direction.
 - Provide 9ga truss style joint reinforcement @ 16" O.C. vertically.
 - Lintels shall be as follows:
 - Opening \leq 3'-0" - L4x3 $\frac{1}{2}$ x $\frac{1}{2}$ LLV/ 4" of wall
 - 3'-0" < Opening \leq 7'-0" - L6x3 $\frac{1}{2}$ x $\frac{1}{2}$ LLV/ 4" of wall.
 - Opening > 7'-0" - See Plan
- Cast in place concrete:
 - Concrete construction shall be in conformance with the applicable sections of ACI 318-14, "Part 3 - Construction Requirements."
 - Concrete shall have a minimum compressive strength at 28 days of 3000psi, UNO (unless noted otherwise).
 - All concrete shall be placed with a slump of 4" (\pm 1")
 - All concrete shall be normal weight, UNO.
 - All concrete exposed to weather shall have 6% \pm 1% entrained air.
 - Contractor shall pour extra concrete to account for the deflection of the formwork to provide a flat finished surface.
 - Concrete cover for reinforcement shall be:
 - Columns and beams 1 $\frac{1}{2}$ "
 - Slabs 3 $\frac{1}{2}$ "
 - Footings 3"
- Reinforcement:
 - Reinforcing bars shall be deformed bars conforming to ASTM A615, grade 60 (Fy = 60ksi)
 - Welded wire fabric (wvf) shall conform to ASTM A185. Lap edges of wire fabric at least 6" in each direction.
- Dimensions: The contractor shall field verify all dimensions prior to fabrication of structural components.
- Coordination: The contractor shall coordinate all sleeves, duct openings and holes between trades. Any conduits or pipes embedded in concrete must be in accordance with ACI 318-14, chapter 6. Where sleeves are closely spaced in a group, the group shall be treated as an opening and reinforced accordingly. Submit drawings showing all opening sizes and locations for the approval by the structural engineer.

Dead Loads:	
SPF #2 -	25 PCF
1/2 Decking -	1.7 PSF
3/4" Decking -	2.5 PSF
Asphalt Shingles -	2.5 PSF
Slate Shingles -	15 PSF
1/2 Drywall -	2.2 PSF
Insulation -	1.5 PSF
Siding -	2.0 PSF
CMU -	87 PCF
Brick -	130 PCF
LIVE LOADS:	
DECK:	40PSF
ATTIC:	20PSF
FLOOR:	40PSF
BALCONY	60PSF
BEDROOM	40PSF
ROOF:	30PSF
WIND LOADS:	
WIND SPEED:	Vult = 115mph; Vasd = 89mph
WIND LOAD IMPORTANCE FACTOR:	1.0
WIND EXPOSURE FACTOR:	B
WIND DESIGN PRESSURE:	11PSF
SNOW LOADS:	
GROUND SNOW LOAD (PG):	30PSF
FLAT ROOF SNOW LOAD(PF):	30PSF
SNOW EXPOSURE FACTOR (CE):	0.9
SNOW IMPORTANCE FACTOR (I):	1.0
Deflection Limitations:	
Rafters:	L/240
Interior Walls and Partitions:	H/180
Floors and Plastered Ceilings:	L/360
All Other Structural Members:	L/240
Ext. Walls with plaster or stucco finishes:	L/360
Ext. Walls - Wind Loads with Brittle Finishes:	L/240
Ext. walls - Wind Loads with Flexible Finishes:	L/120
SEISMIC DESIGN DATA:	
SEISMIC IMPORTANCE FACTOR (Ie):	1.0
SPECTRAL RESPONSE ACCELERATIONS:	
(Ss):	20.0%
(S1):	8.0%
SPECTRAL RESPONSE COEFFICIENTS:	
(Sds):	33%
(Sd1):	18.7%
SEISMIC DESIGN CATEGORY:	B
SEISMIC SITE CLASSIFICATION:	D
SEISMIC COEFFICIENT (Cs):	0.22
SEISMIC MODIFICATION FACTOR (R):	1.5
BASE SHEAR:	11.8k
ANALYSIS PROCEDURE:	EQUIV. LATERAL FORCE
BASIC SFRS:	ORDINARY MASONRY WALLS

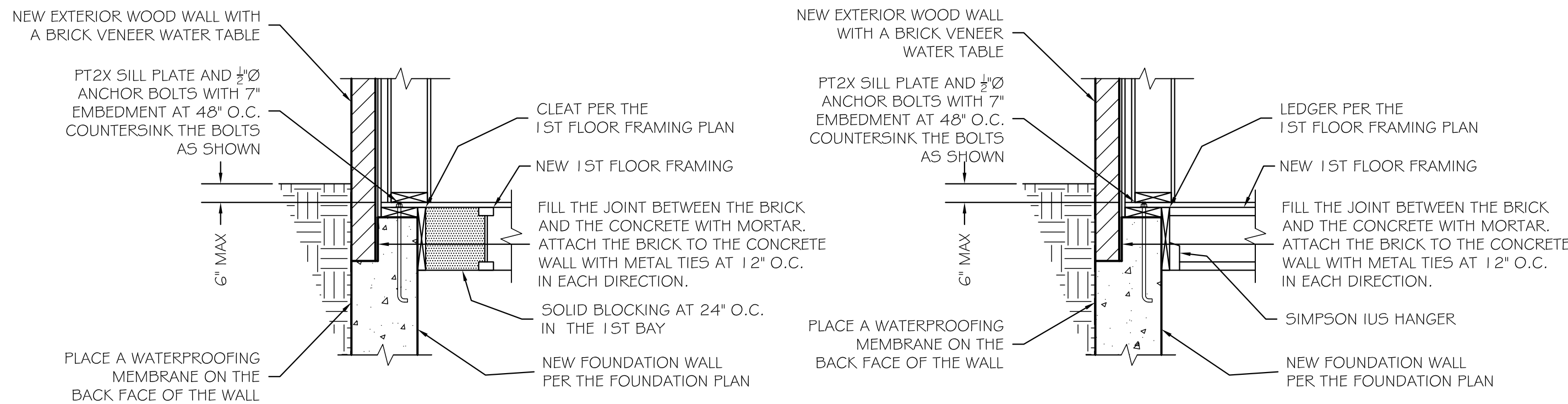


@Single Sister

@Double Sister

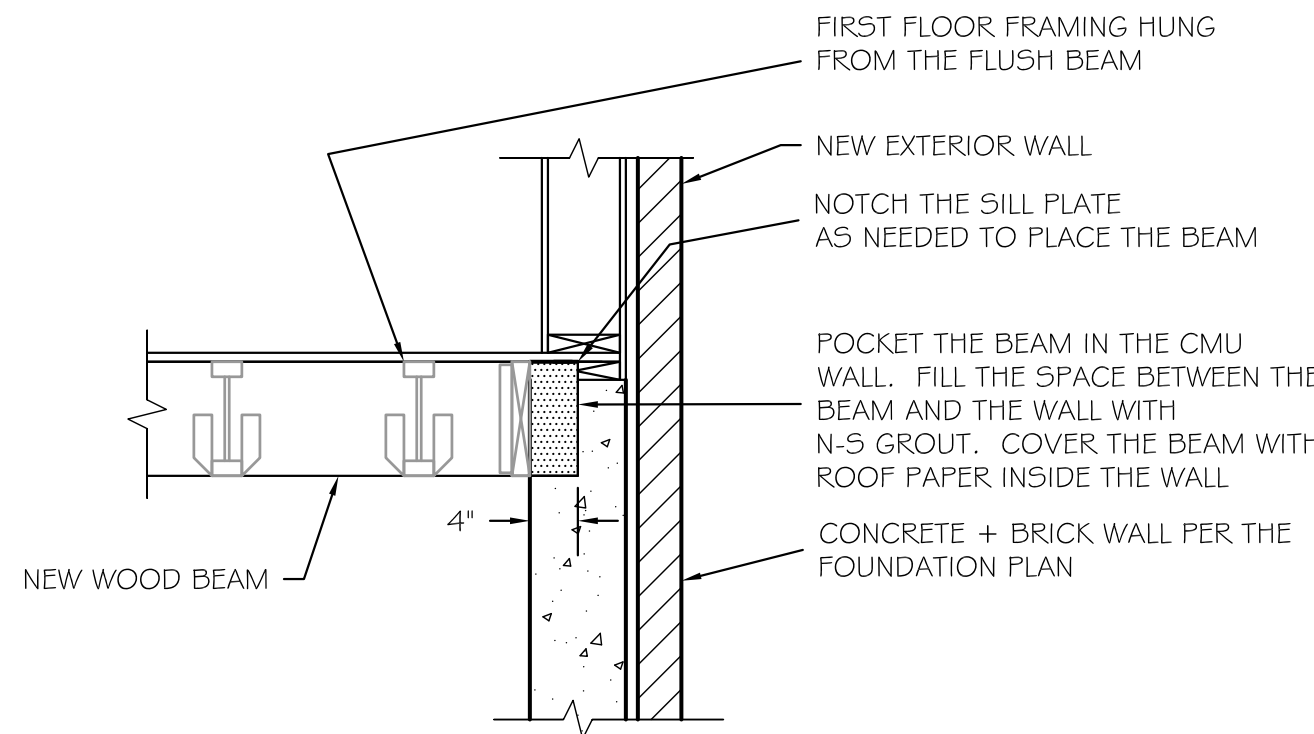
Typical Sistering Details

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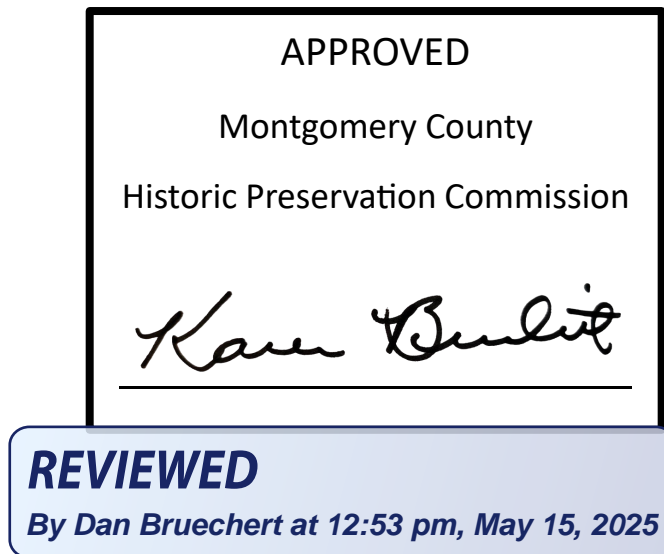
Details at Keynotes

Scale: $\frac{3}{4}$ " = 1'-0"



Typical Wood Beam to New Concrete Wall Detail

Scale: $\frac{3}{4}$ " = 1'-0"

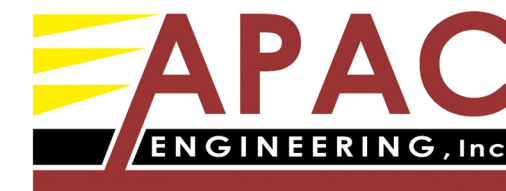


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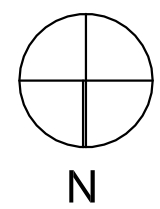
8555 16th Street #200
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Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/17/26.



Project North



Project No. 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
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12-09-2024	Updated Pricing Set
4-15-2025	Permit Set

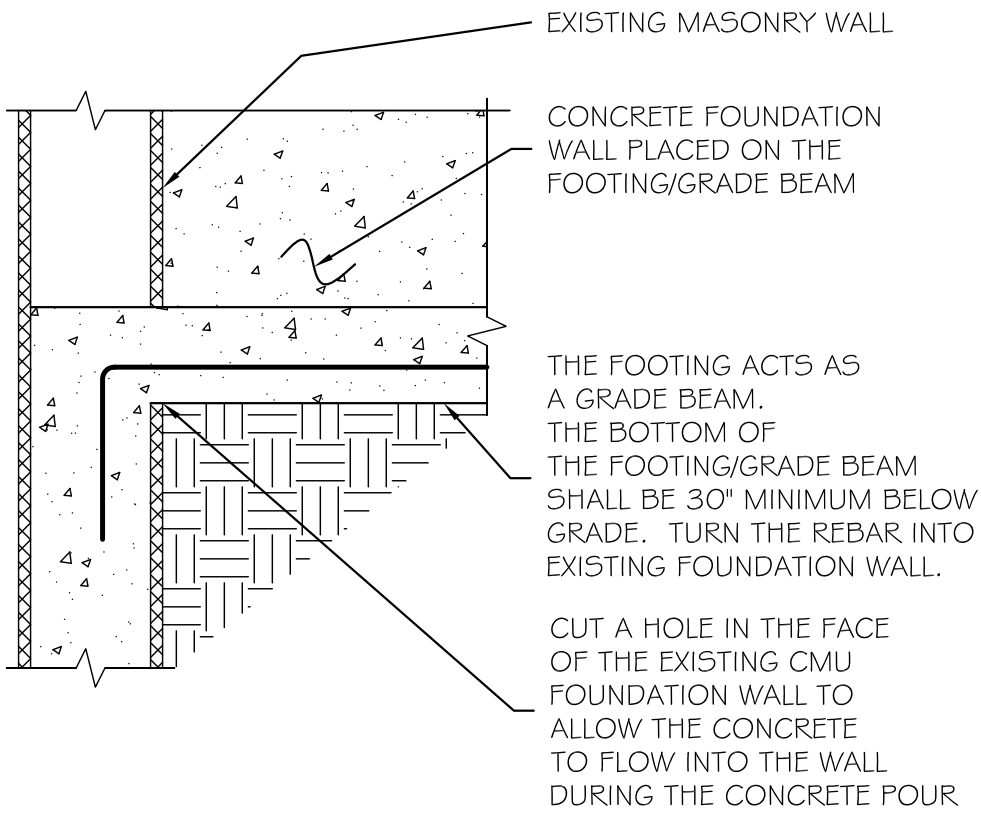
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Structural Notes and Details

Sheet Number

S200

SECTION 1
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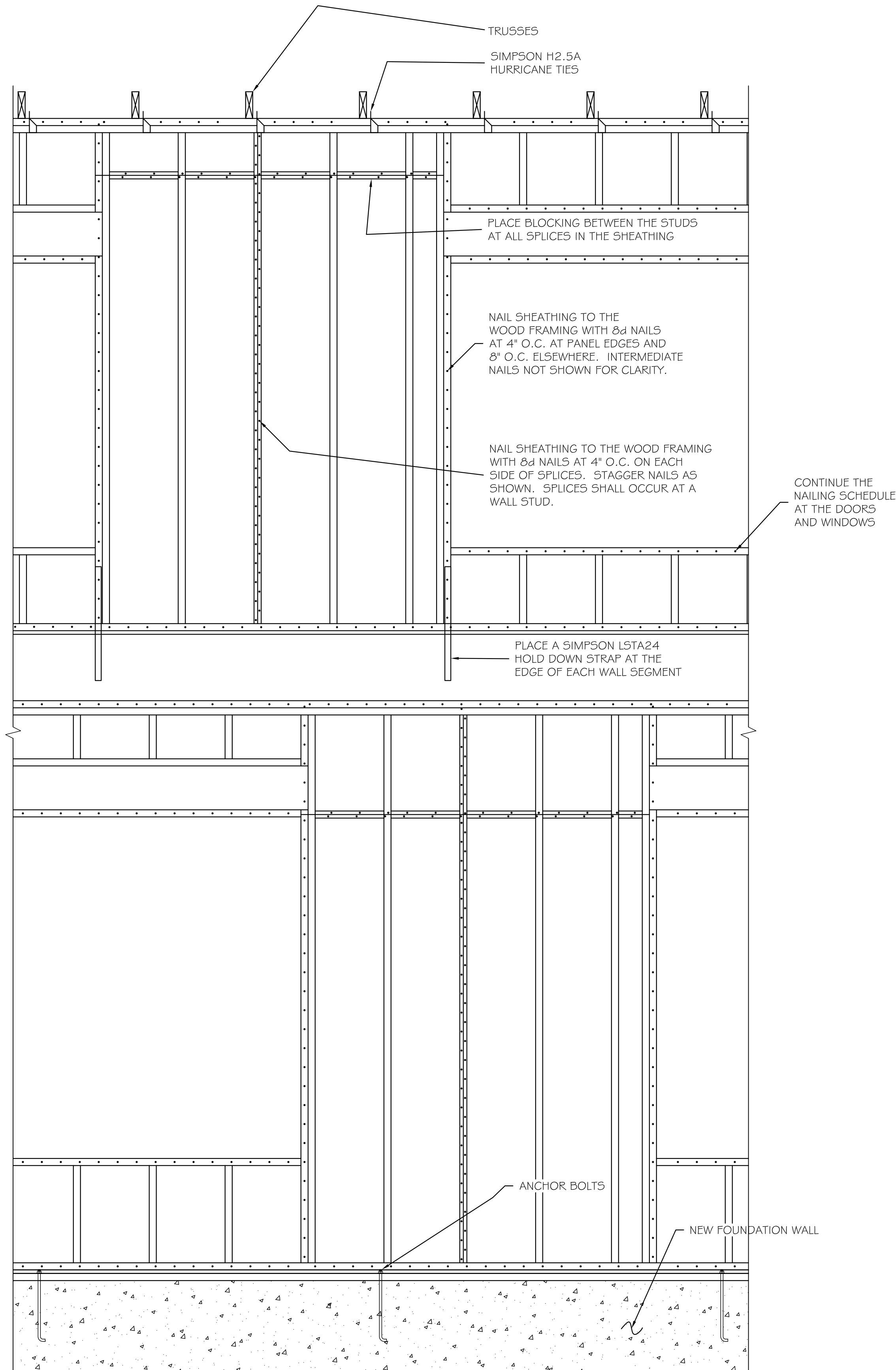


SECTION 2
SCALE: 3/4" = 1'-0"

SECTION 3
SCALE: 3/4" = 1'-0"



REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025



Typical Framing Elevation at EDP Panels

Scale: 3/4" = 1'-0"±

Mortar & Tatch
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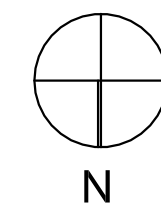


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Sheet Title

Structural Details

Sheet Number

S201

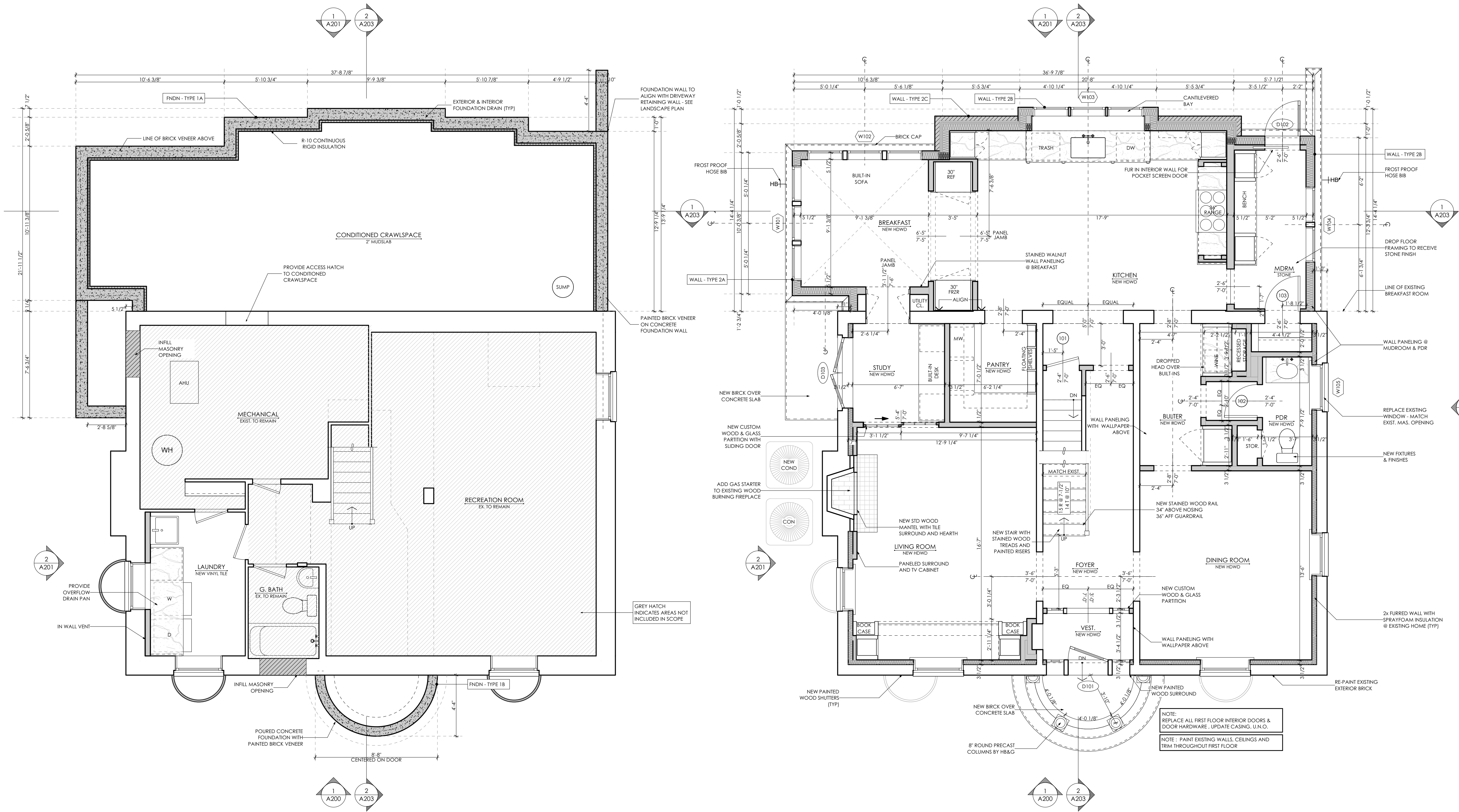
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1 Basement Plan

1/4" = 1'-0"

2 First Floor Plan

1/4" = 1'-0"



APPROVED
Montgomery County
Historic Preservation Commission
Karen Bulleit
REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

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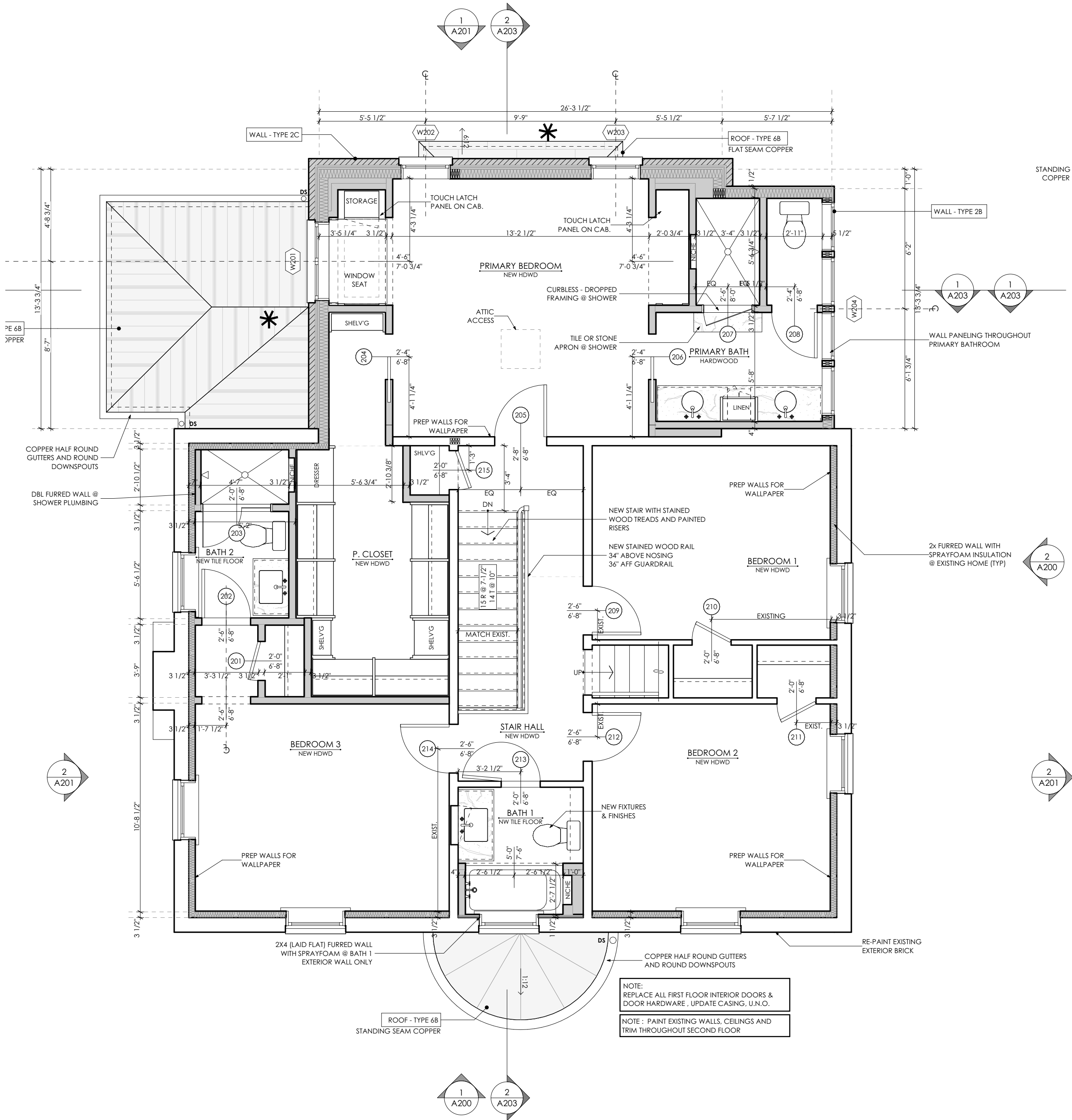
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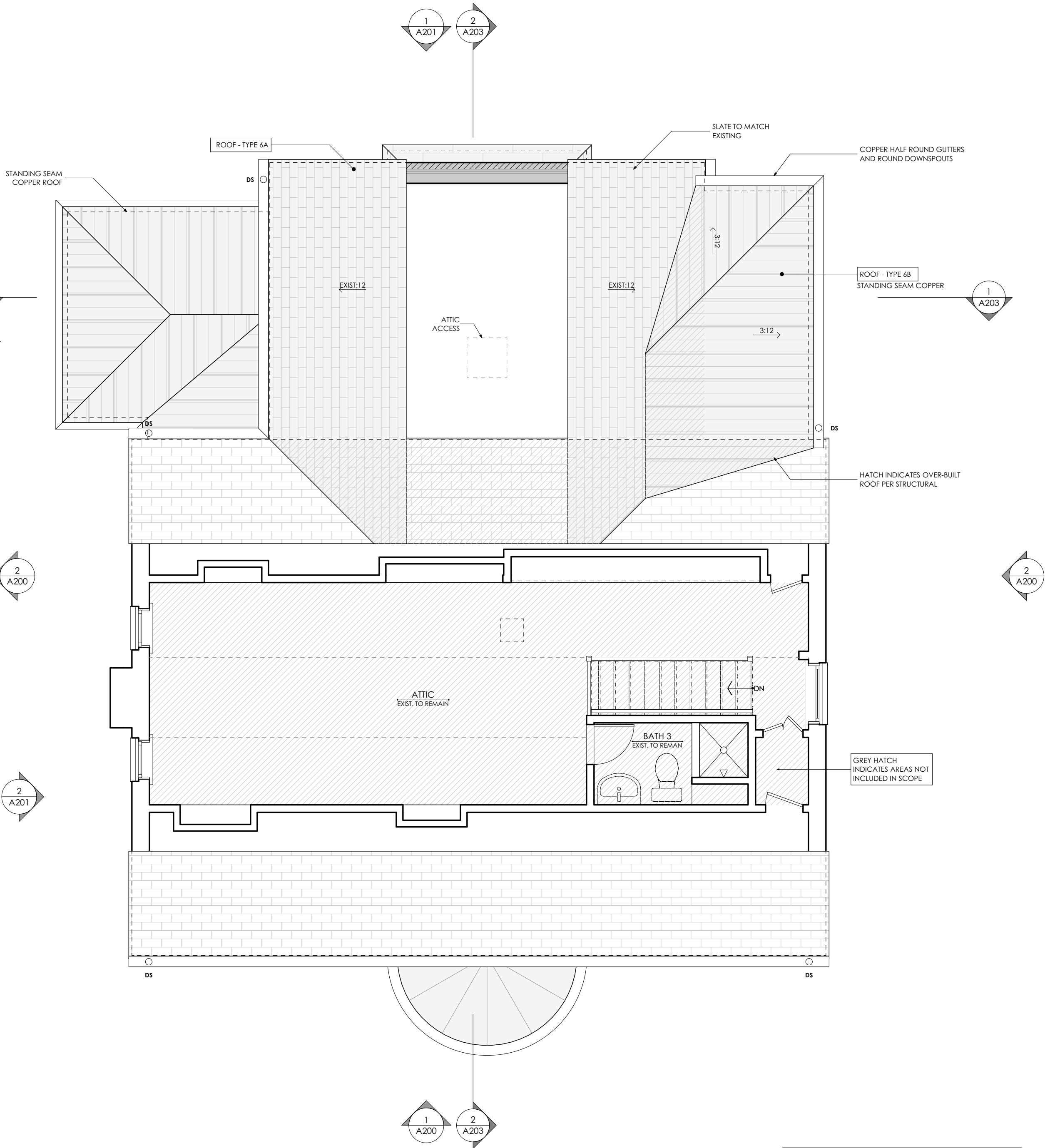
1 Second Floor Plan

1/4" = 1'-0"



2 Attic Floor Plan

1/4" = 1'-0"



APPROVED
Montgomery County
Historic Preservation Commission
Karen Bullett

REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

DENOTES EXISTING WALLS

DENOTES PROPOSED WALLS

DENOTES AREA NOT INCLUDED IN SCOPE
- NO CHANGES TO EXIST. CONDITIONS

NOTE: *

ALL BEDROOM (I.E. SLEEPING ROOMS) SHALL HAVE AN EMERGENCY ESCAPE WINDOW (IRC 2015. 310). THIS WINDOW SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT WITH A CLEAR HEIGHT OF 24 INCHES AND A CLEAR WIDTH OF 20 INCHES. THE MAXIMUM HEIGHT OF THE CLEAR OPENING FROM THE FLOOR IS 44 INCHES (IRC 2015. 310)

NET OPEN AREA
5.7 SQ. FT

WINDOW DETAIL

- GENERAL NOTES:**
- UNLESS INDICATED OTHERWISE, DIMENSIONS ARE TO FACE OF FRAMING.
 - ALL INTERIOR PARTITIONS NOT DIMENSIONED SHALL BE 3 1/2".
 - SEE FRAMING PLANS FOR COORDINATION OF POST REQUIREMENTS.
 - COORDINATE BEAM POCKETS AS REQUIRED WITH STRUCTURAL DRAWINGS.
 - PROVIDE BLOCKING FOR IN WALL ACCESSORIES, GRAB BARS, WALL MOUNTED TV'S, ETC. SEE INTERIOR ELEVATIONS FOR LOCATIONS.
 - ALL ANGLES ARE 90 AND OR 45 UNLESS NOTED OTHERWISE.
 - ALL DOOR DIMENSIONS GIVEN IN FEET AND INCHES.
 - ALL CASED OPENING DIMENSIONS GIVEN ARE FINISHED DIMENSIONS.
 - ALL INTERIOR DOORS & CASED OPENINGS THAT ARE NOT DIMENSIONED TO CENTER LINE SHALL BE CENTERED IN THE WALL OR HELD MIN. DISTANCE FROM CORNER FOR COMPLETE CASING. U.N.O.
 - ALL EXTERIOR WINDOW AND DOOR DIMENSIONS ARE FROM FACE OF STUD TO OPENING CENTER LINES. U.N.O.
 - REFER TO EXTERIOR ELEVATIONS & DOOR/ WINDOW SCHEDULE FOR WINDOW HEAD HEIGHTS.
 - VERIFY ALL EXTERIOR RISER AND TREAD DIMENSIONS IN THE FIELD.
 - ALL STAIRS HANDRAILS AND GUARDS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R311 AND R312 OF THE 2015 IRC.
 - THIS SYMBOL DENOTES SMOKE / CARBON MONOXIDE DETECTORS:
 - ALL DETECTORS TO BE HARD-WIRED TO DEDICATED CIRCUIT, INTERCONNECTED & PROVIDED WITH BATTERY BACKUP. PROVIDE ONE SMOKE DETECTORS INSIDE EACH BEDROOM PLUS ONE PER FLOOR AS SHOWN. PROVIDE CARBON MONOXIDE ALARMS PER R315.1
 - PROVIDE R-13 FIBERGLASS INSULATION IN WALLS, CEILING & FLOOR OF THE FOLLOWING ROOMS. U.N.O:
BATHROOMS
LAUNDRY ROOMS
MECHANICAL ROOMS

- TYPICAL CONSTRUCTION NOTES**
- 1A. TYP. FOUNDATION WALL AT CRAWLSPACE**
10" CONCRETE FOUNDATION WALL W/ #4 @ 48" O.C. VERT. W/ EXTERIOR CEMENT WATERPROOF COATING. R-10 CONTINUOUS RIGID INSULATION ON INTERIOR. 4" LEDGE W/BRICK VENEER ABOVE GRADE. REFER TO STRUCTURAL.
- 1B. TYP. FOUNDATION WALL AT FRONT PORCH**
8" CONCRETE FOUNDATION WALL W/ #4 @ 48" O.C. VERT. W/ EXTERIOR CEMENT WATERPROOF COATING. 4" LEDGE W/BRICK VENEER ABOVE GRADE. REFER TO STRUCTURAL.
- 2A. TYP. EXTERIOR paneled WALL CONSTRUCTION**
PAINTED WOOD WALL PANELING (5-1/2" RAILS & STILES) OVER 1-1/2" CONTINUOUS R-5 WRAP ZIP INSULATED SHEATHING WITH TYPAR OR EQUIVALENT HOUSEWRAP. 2X6 STUD WALL WITH R-21 OPEN CELL SPRAY FOAM INSULATION UNDER 1/2" GYP. BOARD. PROVIDE BLOCKING AT HALF HEIGHT.
- 2B. TYP. EXTERIOR SIDING WALL CONSTRUCTION**
PAINTED WOOD [VERTICAL FLUSH PLANKS WITH 6" EXPOSURE] OVER 1-1/2" CONTINUOUS R-5 WRAP ZIP INSULATED SHEATHING WITH TYPAR OR EQUIVALENT HOUSEWRAP. 2X6 STUD WALL WITH R-21 OPEN CELL SPRAY FOAM INSULATION UNDER 1/2" GYP. BOARD. PROVIDE BLOCKING AT HALF HEIGHT.
- 2C. TYP. EXTERIOR BRICK VENEER WALL CONSTRUCTION**
PAINTED BRICK VENEER WITH 1" AIR GAP OVER 1-1/2" CONTINUOUS R-5 WRAP ZIP INSULATED SHEATHING WITH TYPAR OR EQUIVALENT HOUSEWRAP. 2X6 STUD WALL WITH R-21 OPEN CELL SPRAY FOAM INSULATION UNDER 1/2" GYP. BOARD. PROVIDE BLOCKING AT HALF HEIGHT.
- 3. TYP. INTERIOR WALL CONSTRUCTION**
1/2" GYPSUM WALL BOARD ON 2X4 OR 2X6 STUDS (SEE PLANS) @ 16" O.C. (U.N.O) PRESSURE TREATED SILL AT BASEMENT, MOISTURE RESISTANT (GREEN BOARD) AT ALL BATHROOMS, LAUNDRY ROOMS AND ADDITIONAL AREAS CALLED OUT ON PLANS.
- 4. TYP. CRAWLSPACE SLAB**
2" MUD SLAB PER STRUCTURAL ON 8 MIL POLY VAPOR BARRIER OVER 3" R-10 RIGID STYROFOAM INSULATION ON 4" CRUSHED AGGREGATE ON UNDISTURBED SOIL.
- 5. TYP. FLOOR CONSTRUCTION**
3/4" T&G PLYWOOD SUBFLOOR ADVANTATCH OR APPROVED EQUAL (GLUED AND NAILED) WOOD T JOIST WITH 1/2" GYP (SEE FRAMING PLANS FOR SIZE AND SPACING) R-21 @ PERIMETER BLOCKING AND R-49 AT CANTILEVERS/OVERHANGS.
- 6A. TYP. ROOF/CEILING CONSTRUCTION**
SLATE SHINGLE ON 30 LB ROOFING FELT WITH ICE AND WATER GUARD AT VALLEYS, EAVE, AND ALL SLOPES LESS THAN 4:12 ON 5/8" PLYWOOD WITH "H" CLIPS. SEE FRAMING PLANS FOR RAFTER SIZE/SPACING. R-49 CLOSED CELL SPRAY FOAM INSULATION.
- 6B. TYP. METAL ROOF**
STANDING SEAM OR FLAT SEAM (SEE PLANS) COPPER ROOF ON 30 LB ROOFING FELT WITH ICE AND WATER COVER DIMENSIONAL LUMBER RAFTERS WITH 5/8" SHEATHING AND R-49 OPEN CELL SPRAY FOAM INSULATION. SEE FRAMING PLANS FOR SIZE/SPACING.

PROJECT NOTES :

NOTE 1 : PROVIDE HEAD BLOCKING AT ALL WINDOW OPENINGS. 12" TALL AND 12" WIDER THAN WINDOW OPENING

MORTAR & THATCH ARCHITECTS

300 Morse Street NW, Unit 833
Washington DC 20002
www.mortarandthatch.com
202-495-5595

Seal

Project North

Project No: 2409

Ruppert Residence

4 E Kike Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Builts
09-27-2024	Schematic Design Set
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02-28-2025	Updated CD Set
03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

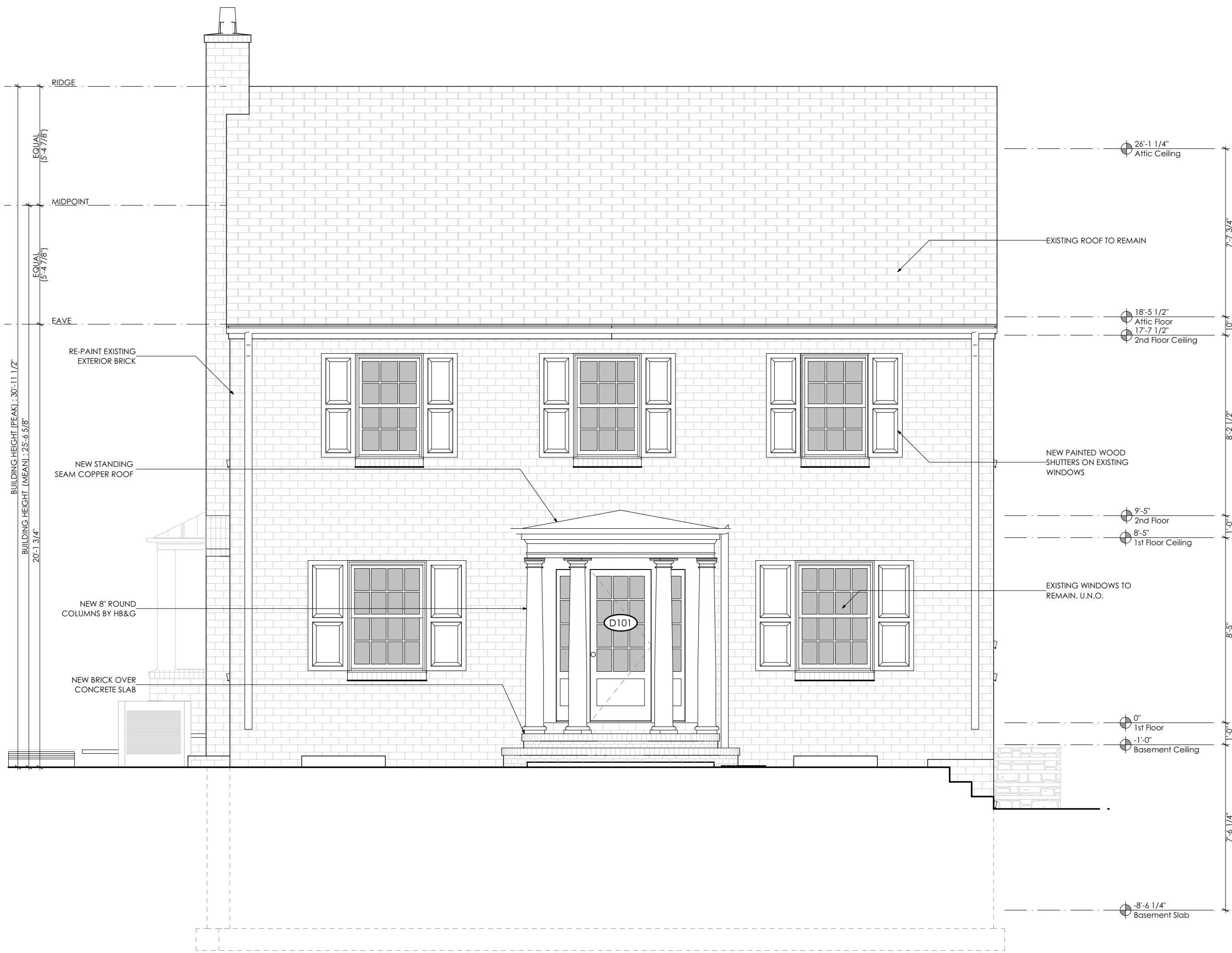
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Second & Attic Plans

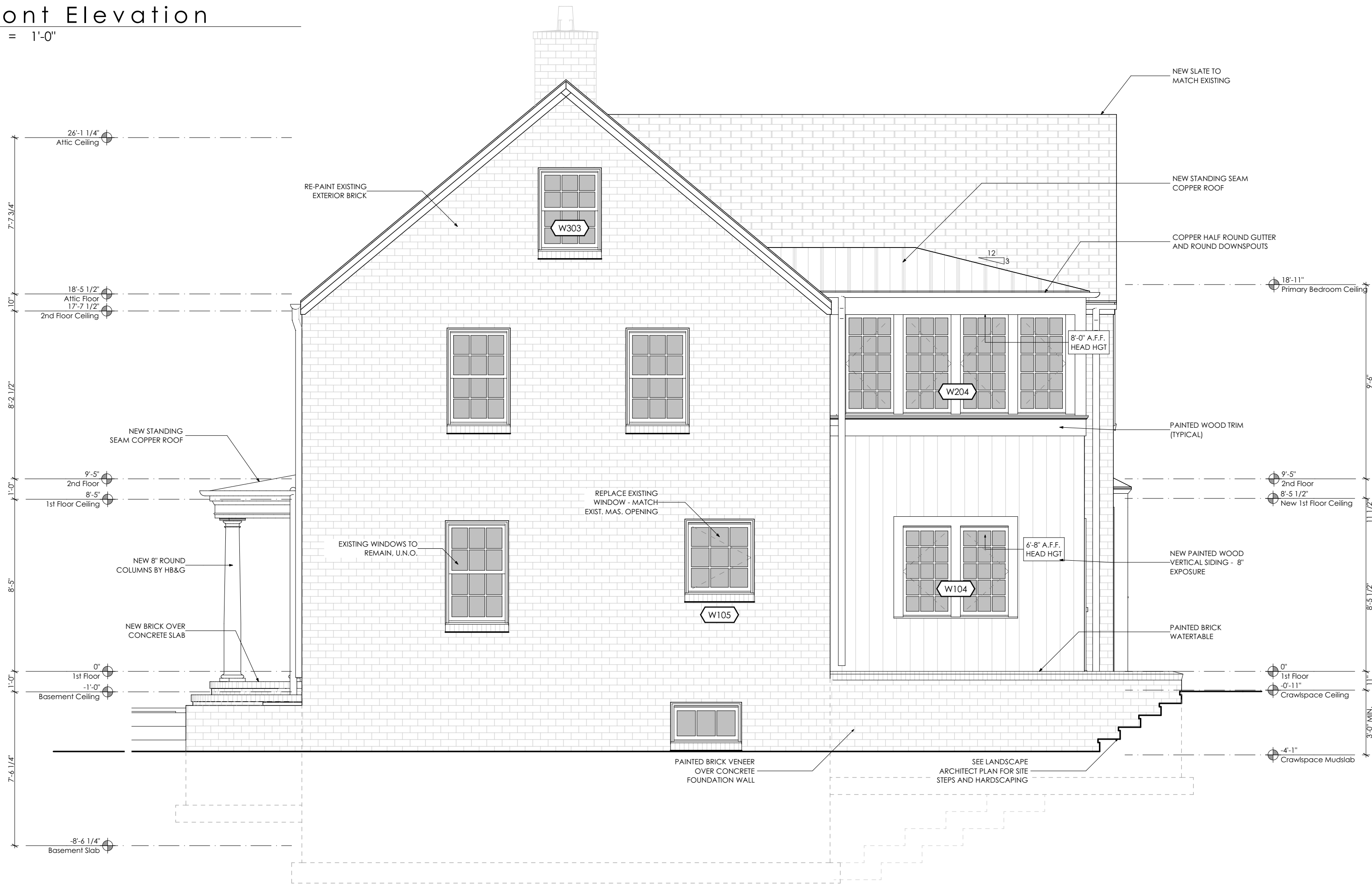
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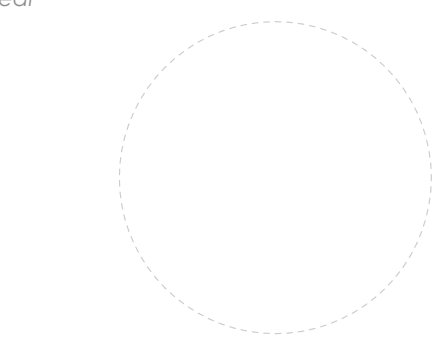
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1 Front Elevation
1/4" = 1'-0"



2 Right Elevation
1/4" = 1'-0"



Project No: 2409

Ruppert
Residence
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Sheet Title

Exterior Elevations

Sheet Number

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1 Rear Elevation



2 Left Elevation

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Montgomery County

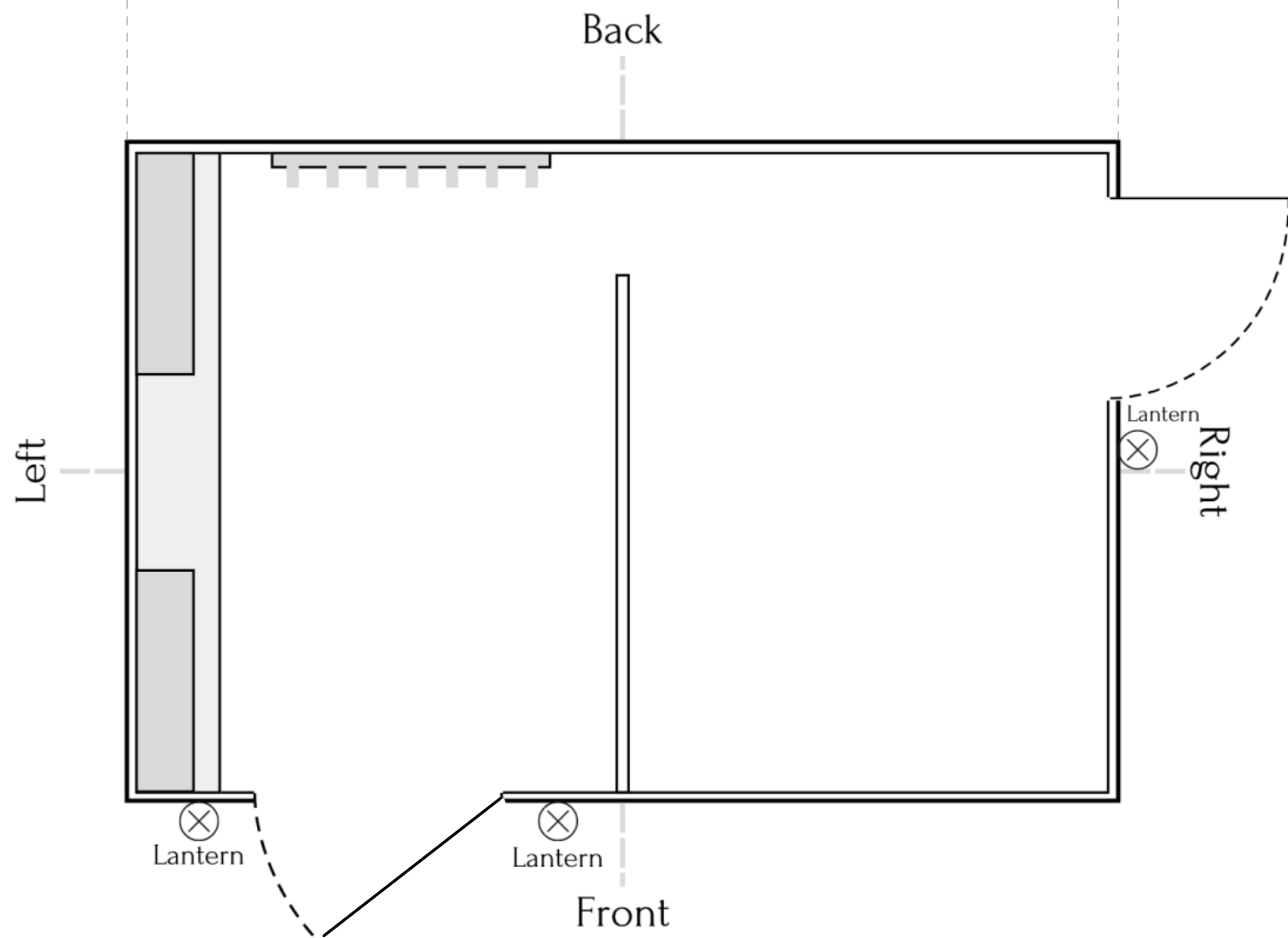
Historic Preservation Commission

REVIEWED

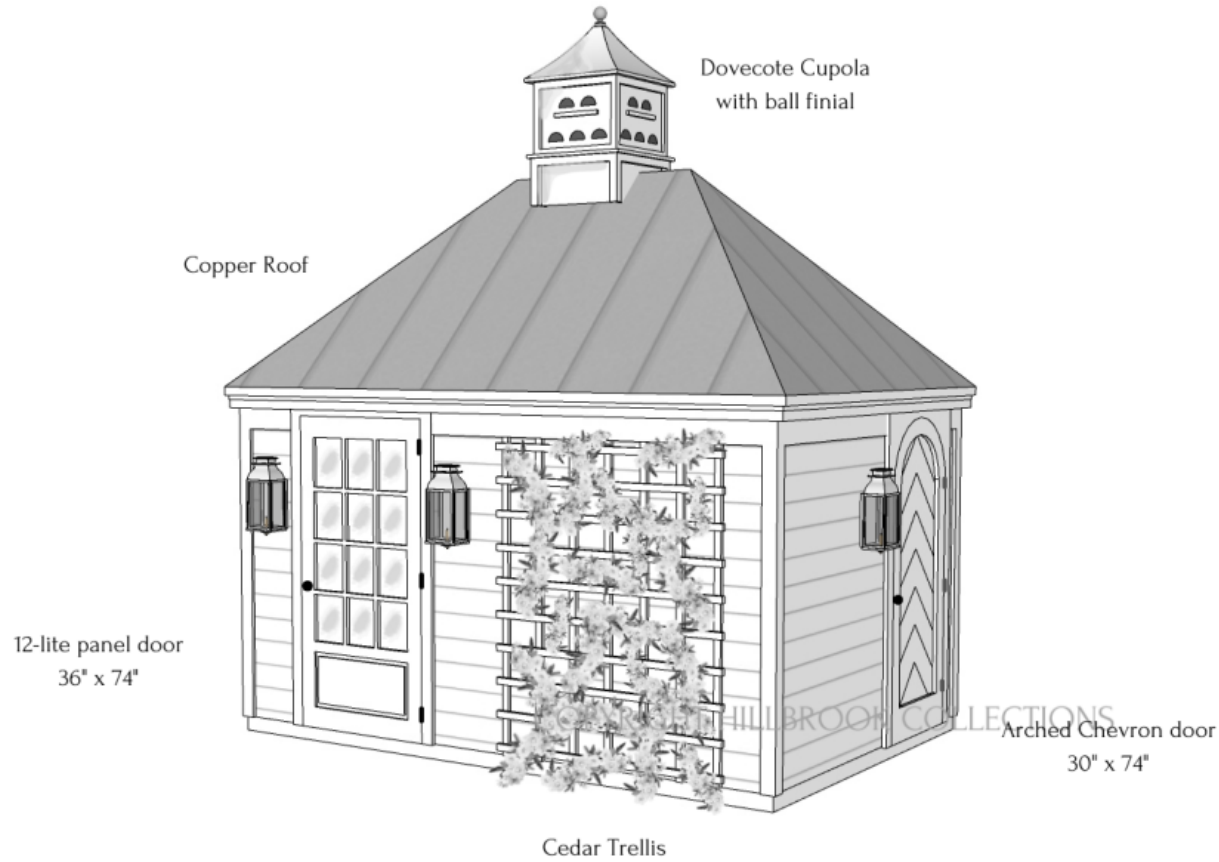
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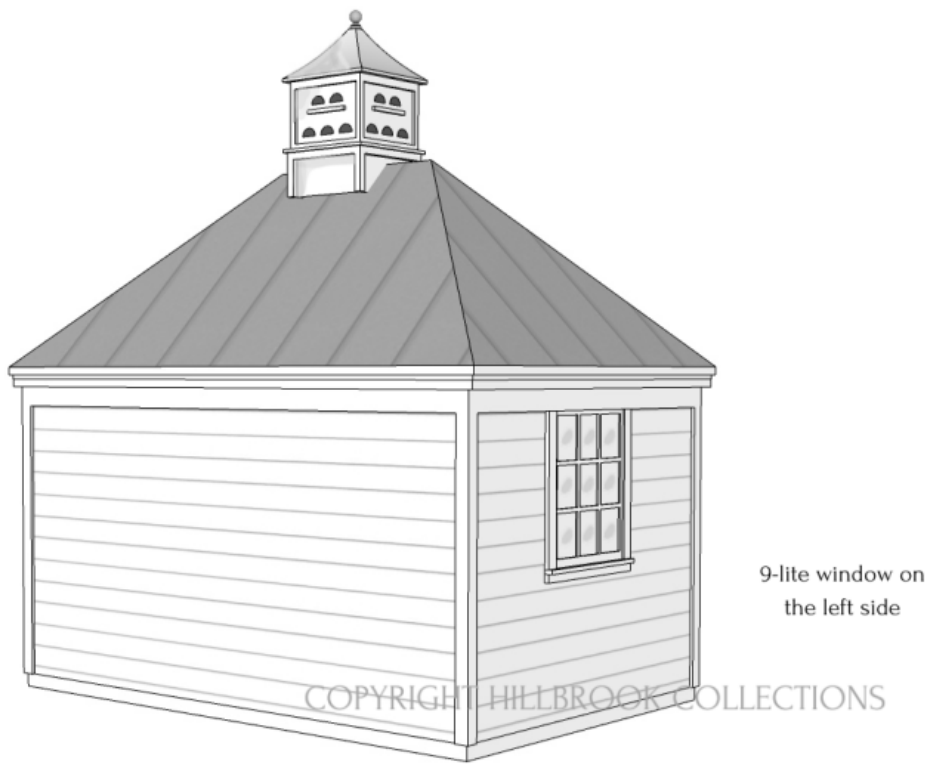
1 Shed Front Elevation
1/2" = 1'-0"



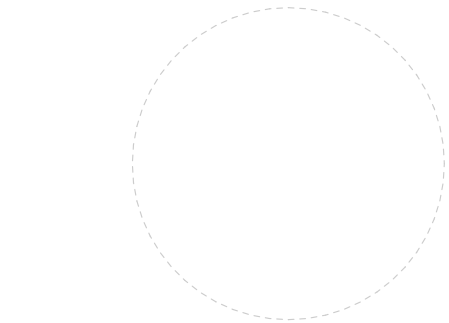
2 Shed Plan



3 Front 3d View



4 Front 3d View



Project No: 2409

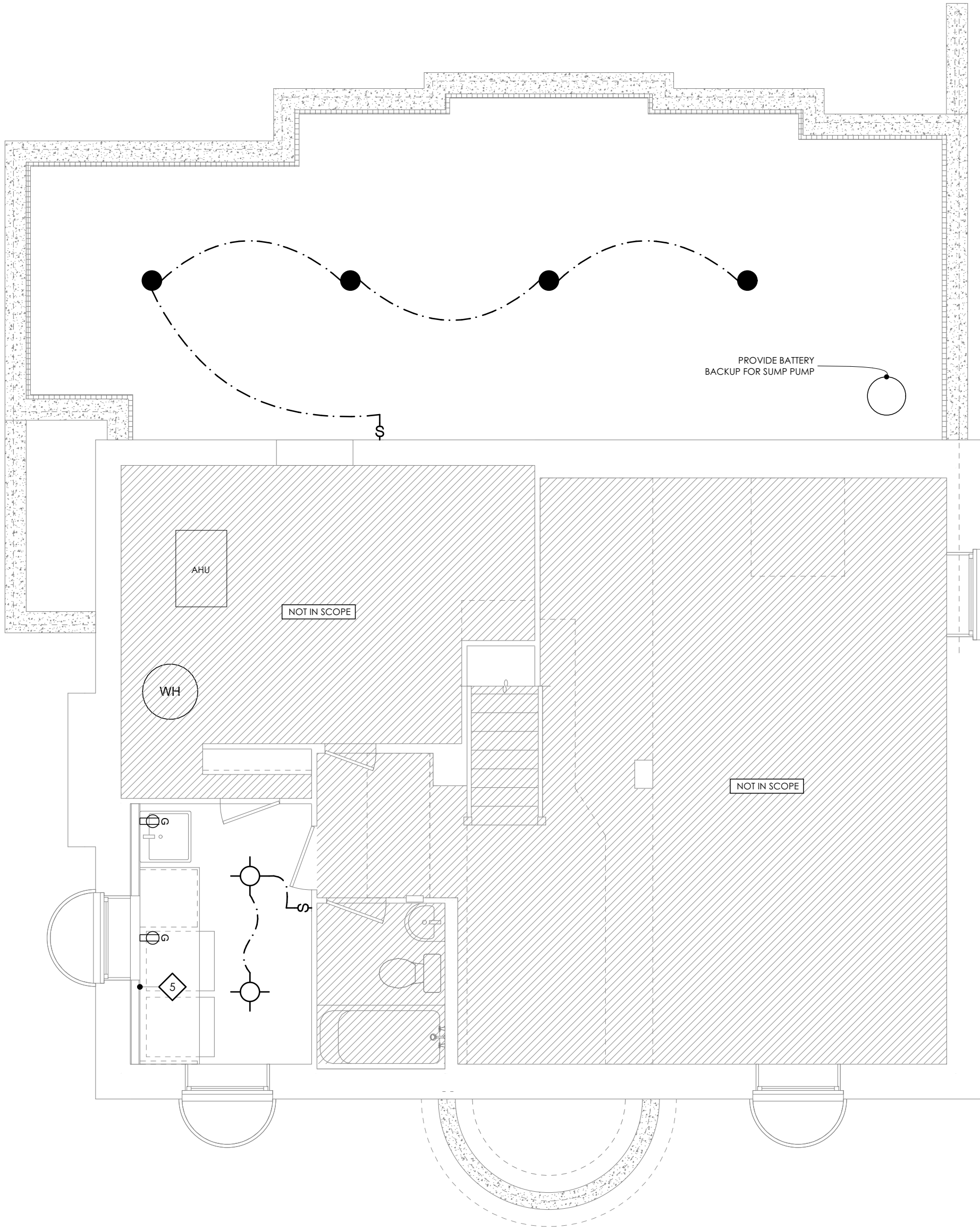
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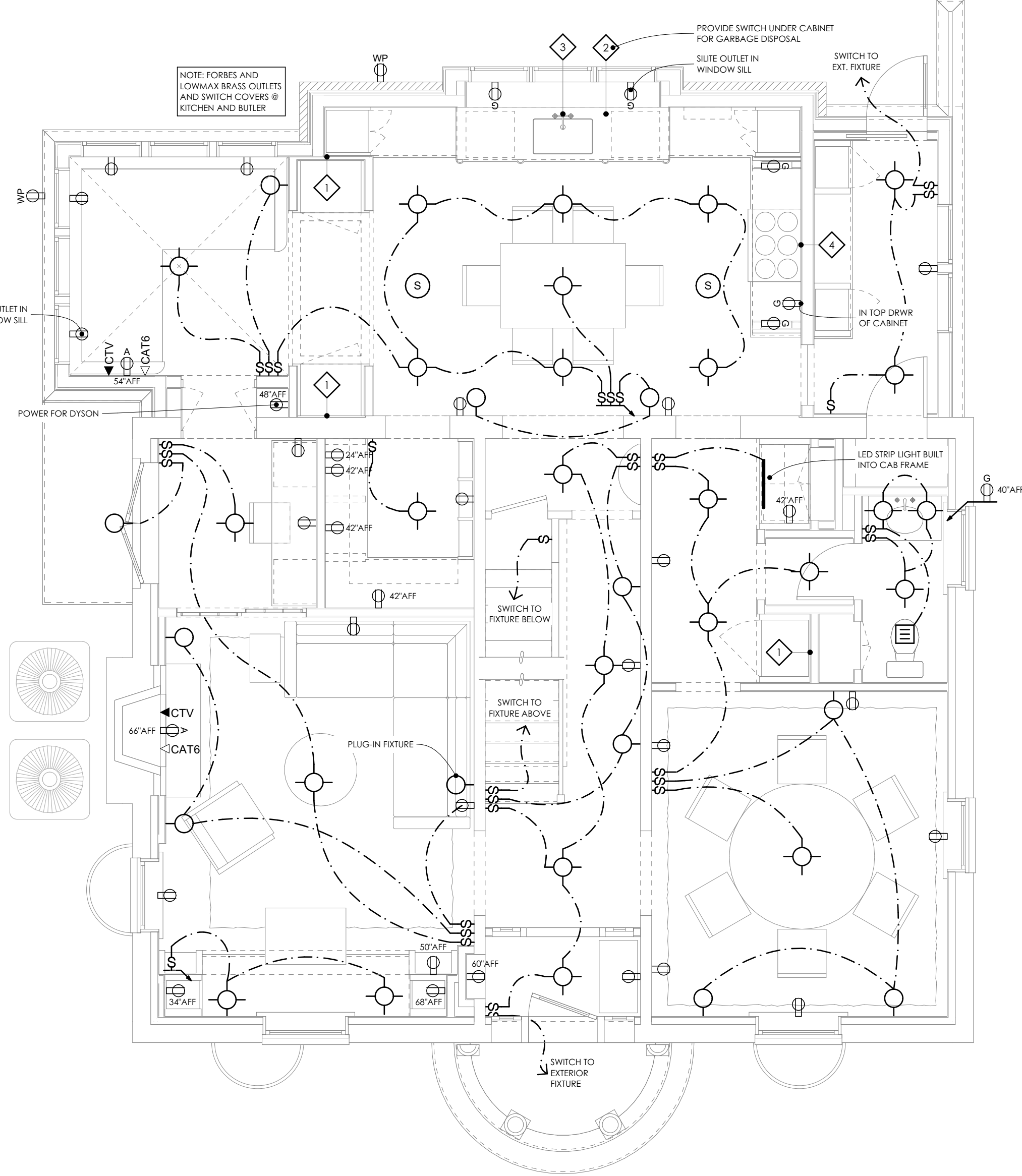
1 Basement Electrical Plan

1/4" = 1'-0"



2 First Floor Electrical Plan

1/4" = 1'-0"



APPROVED

Montgomery County

Historic Preservation Commission

Karen Benoit

REVIEWED

By Dan Bruechert at 12:53 pm, May 15, 2025

Electrical Notes

- ELECTRICIAN TO LOCATE ALL FIXTURES, SWITCHES, OUTLETS (BLUE BOXES) PRIOR TO RUNNING WIRING, OWNER, ELECTRICIAN & ARCHITECT TO MEET TO REVIEW LOCATIONS.
- ELECTRICAL CONTRACTOR SHALL SIZE AND ARRANGE ALL CIRCUITS IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRIC CODES (NEC)
- PROVIDE HIGH EFFICIENCY LED LAMPS FOR ALL LIGHTS - 75% OF ALL PERMANENT FIXTURES TO USE HIGH EFFICIENCY LAMPS
- DECORATIVE FIXTURES
 - MOUNTING HEIGHTS ARE TO BE VERTICAL CENTER OF THE EQUIPMENT TO THE FINISHED ELEVATION OF THE FLOOR
 - SOLID BLOCK FOR 100LBS PENDANT FIXTURE AT ALL PENDANT LOCATIONS
- ALL INTERIOR LIGHTS SHALL HAVE DIMMERS
 - EXCEPTION: ALL BATHROOM FIXTURES & FANS UNO.
 - EXCEPTION: ALL CLOSET FIXTURES UNO
- IC-RATED RECESSED LIGHTING FIXTURES SHALL BE SEALED AT HOISING/INTERIOR FINISH AND LABELED TO INDICATED < OR = TO 2.0 CFM LEAKAGE AT 75 PA
- ALL NEW SWITCH & OUTLET STYLES ARE TO BE APPROVED BY OWNER PRIOR TO INSTALLATION
- PROVIDE LISTED TAMPER RESISTANT RECEPTACLES AT ALL 15A AND 20A RECEPTACLES TO COMPLY WITH NEC 406.12
- OUTLETS AND SWITCHES:
 - PROVIDE COMMON COVER PLATES FOR GANGED RECEPT.
 - SWITCHES ARE TO BE MOUNTED 4'-0" AFF. U.N.O.
 - OUTLETS ARE TO BE MOUNTED 1'-6" AFF. U.N.O.
 - OUTLETS @ WALL PANELING TO BE LOCATED IN BASEBOARD
 - PHONE / DATA LOCATIONS TO HAVE (1) COMMON FACEPLATE
- PROVIDE ARC-FAULT PROTECTION AT ALL BEDROOMS AND LIVING SPACES AND SIMILAR SPACES PER NEC 210.12.
- PROVIDE GFCI PROTECTION FOR ALL AREAS UNDER NEC 210.8(A)(1)-8
- THE INSTALLATION OF ALL RECESSED BOXES IN FIRE RATED WALLS MUST MEET ONE OF THE FOLLOWING INSTALLATIONS
 - (1) BE SEPARATED BY A HORIZ DISTANCE OF NO LESS THAN 24"
 - (2) BE SURROUND A BIRE RATED GYP ON 5 SIDES
 - (3) BACK OF BOXES WRAPPED IN FIRE RESISTANT PUTTY
- PROVIDE HARDWIRED INTERCONNECTED 120V SMOKE DETECTORS W/ BATTERY BACKUP PER IRC SECTION R313 & LOCAL JURISDICTION AMENDMENTS - NO DETECTOR TO BE INSTALLED WITHIN 3 FT OF ANY HVAC AIR SUPPLY REGISTER OR BATHROOM DOOR

Dimming Controls

LIGHTOLIER MULTI-SET PRO NETWORKABLE PRESET DIGITAL DIMMER
--

Electrical Symbols

	SURFACE/ PENDANT LIGHT FIXTURE
	WALL LIGHT FIXTURE (SCONCE)
	RECESSED LIGHT
	WALL MOUNTED STEP LIGHT
	WATERPROOF RECESSED FIXTURE
	BATH FAN
	SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR
	HUMIDITY SENSING FAN/ LIGHT
	UNDER-CABINET LIGHTING FINISH TO MATCH CABINETS
	TELEPHONE, CABLE, ETHERNET JACK
	WALL RECEPTACLE, DUPLEX/QUAD/220
	U.C. PLUG/WIREMOLD
	FLOOR RECEPTACLE, DUPLEX/QUAD
	GFCI RECEPTACLE, AFCI RECEPTACLE, WATERPROOF RECEPTACLE
	SWITCH, DIMMER SWITCH, JAMB SWITCH, KEY PAD, FLOOR HEAT THERMOSTAT
	ZONE WIRING DESIGNATIONS
	CEILING SPEAKER, OUTDOOR SPEAKER
	SWITCH PATH
	CEILING FAN

Light Fixture Schedule

Housing	Module	Trim
	DMF DRD Module DRD2M1093WFLT	DMF Beveled M4TR5WH
	DMF DRD Module DRD2M1093WFLT	DMF Beveled M4TR5WH

Electrical Plan Notes

1	DEDICATED OUTLET FOR REFRIGERATOR
2	OUTLET FOR DISHWASHER
3	OUTLET BELOW SINK FOR GARBAGE DISPOSAL
4	DEDICATED OUTLET FOR RANGE/ OVEN
5	DEDICATED OUTLET FOR WASHER/ DRYER

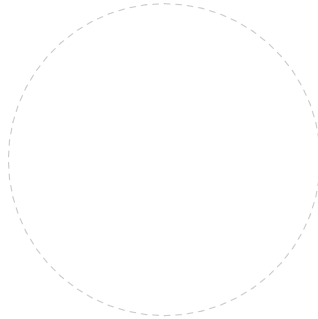
MORTAR & THATCH

ARCHITECTS

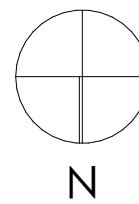
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Seal



Project North



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Basement & First Electrical Plan

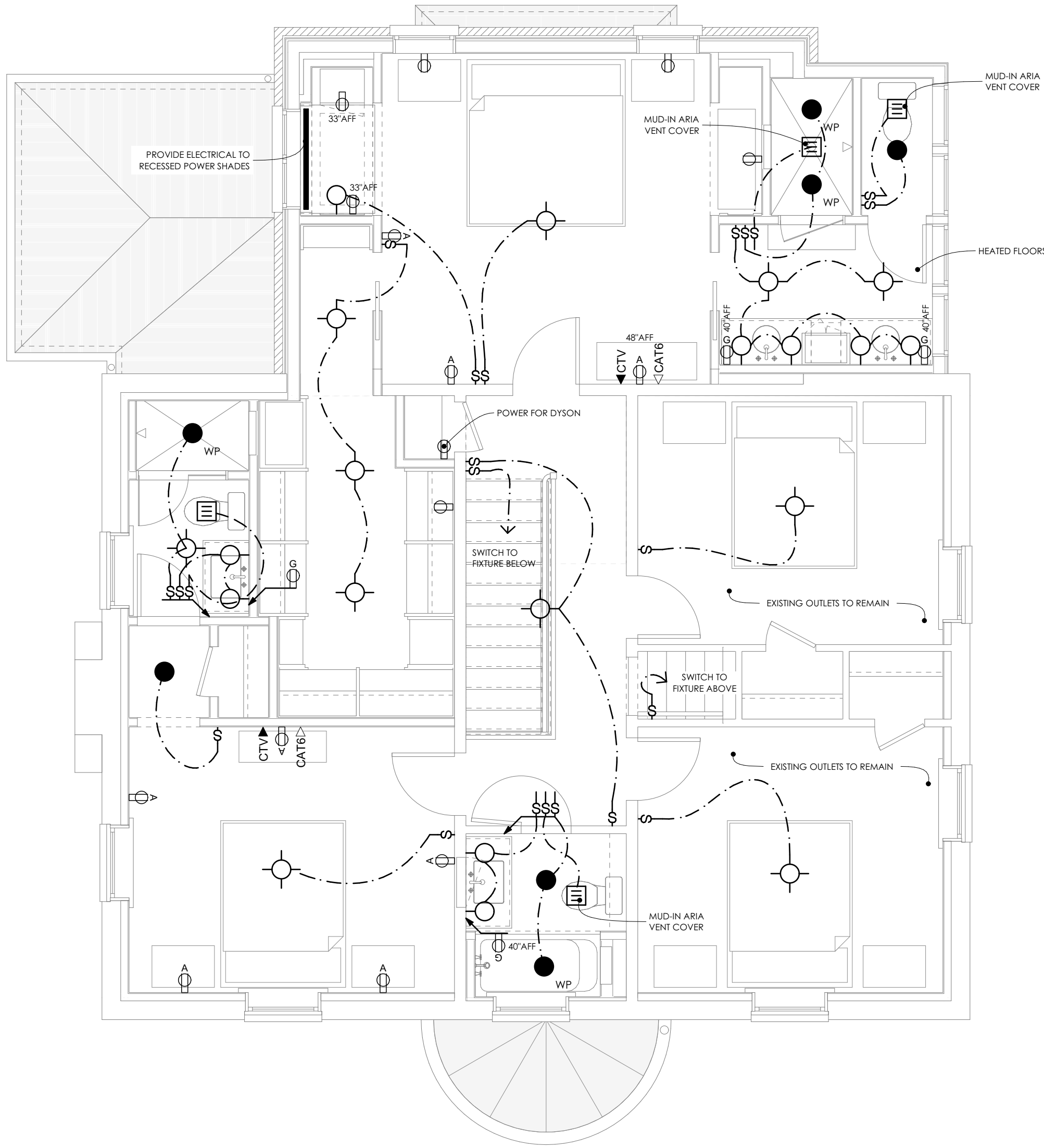
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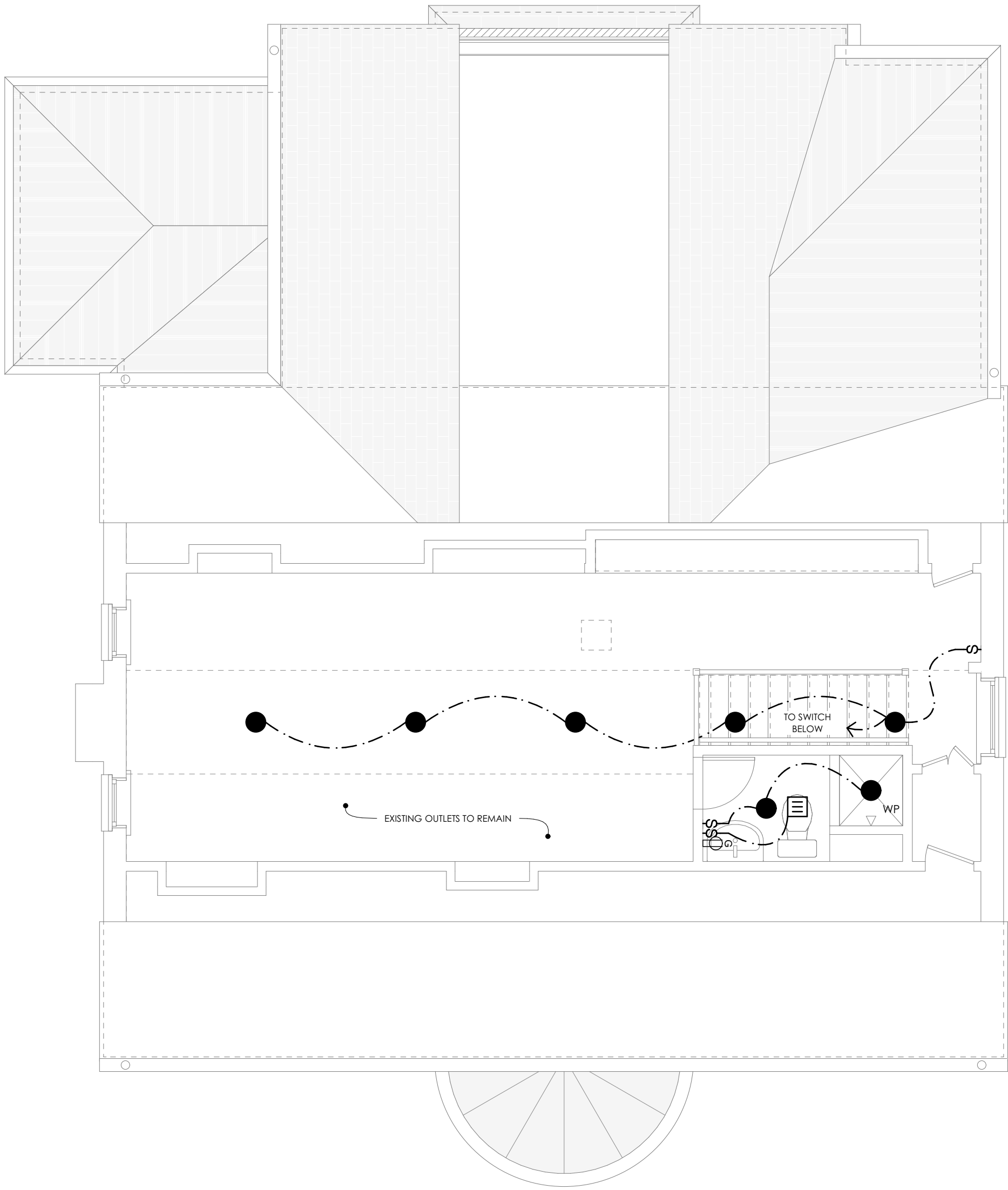
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1/4" = 1'-0"



2 Attic Electrical Plan

1/4" = 1'-0"



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Montgomery County

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Karen Bulleit

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 - PHONE / DATA LOCATIONS TO HAVE (1) COMMON FACEPLATE
- PROVIDE ARC-FAULT PROTECTION AT ALL BEDROOMS AND LIVING SPACES AND SIMILAR SPACES PER NEC 210.12.
- PROVIDE GFCI PROTECTION FOR ALL AREAS UNDER NEC 210.8(A)(1)-8
- THE INSTALLATION OF ALL RECESSED BOXES IN FIRE RATED WALLS MUST MEET ONE OF THE FOLLOWING INSTALLATIONS
 - (1) BE SEPARATED BY A HORIZ DISTANCE OF NO LESS THAN 24"
 - (2) BE SURROUND A BIRE RATED GYP ON 5 SIDES
 - (3) BACK OF BOXES WRAPPED IN FIRE RESISTANT PUTTY
- PROVIDE HARDWIRED INTERCONNECTED 120V SMOKE DETECTORS W/ BATTERY BACKUP PER IRC SECTION R313 & LOCAL JURISDICTION AMENDMENTS - NO DETECTOR TO BE INSTALLED WITHING 3 FT OF ANY HVAC AIR SUPPLY REGISTER OR BATHROOM DOOR

Dimming Controls

LIGHTOLIER MULTI-SET PRO NETWORKABLE PRESET DIGITAL DIMMER
--

Electrical Symbols

	SURFACE/ PENDANT LIGHT FIXTURE
	WALL LIGHT FIXTURE (SCONCE)
	RECESSED LIGHT
	WALL MOUNTED STEP LIGHT
	WATERPROOF RECESSED FIXTURE
	BATH FAN
	SMOKE DETECTOR AND CARBON MONOXIDE DETECTOR
	HUMIDITY SENSING FAN/ LIGHT
	UNDER-CABINET LIGHTING FINISH TO MATCH CABINETS
	TELEPHONE, CABLE, ETHERNET JACK
	WALL RECEPTACLE, DUPLEX/QUAD/220
	U.C. PLUG/WIREMOLD
	FLOOR RECEPTACLE, DUPLEX/QUAD
	GFCI RECEPTACLE, AFCI RECEPTACLE, WATERPROOF RECEPTACLE
	SWITCH, DIMMER SWITCH, JAMB SWITCH, KEY PAD, FLOOR HEAT THERMOSTAT
	ZONE WIRING DESIGNATIONS
	CEILING SPEAKER, OUTDOOR SPEAKER
	SWITCH PATH
	CEILING FAN

Light Fixture Schedule

	Housing DMF M Series M4NCRS	Module DMF DRD Module DRD2M109SWFLT	Trim DMF Beveled M4TRSWH
	Housing DMF M Series M4NCRS	Module DMF DRD Module DRD2M109SWFLT	Trim DMF Beveled M4TRLWH

Electrical Plan Notes

1	DEDICATED OUTLET FOR REFRIGERATOR
2	OUTLET FOR DISHWASHER
3	OUTLET BELOW SINK FOR GARBAGE DISPOSAL
4	DEDICATED OUTLET FOR RANGE/ OVEN
5	DEDICATED OUTLET FOR WASHER/ DRYER

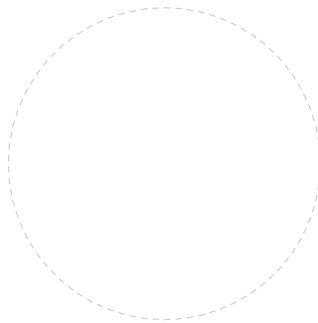
MORTAR & THATCH

ARCHITECTS

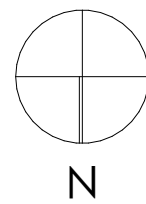
300 Morse Street NW, Unit 833
Washington DC 20003

www.mortarandthatch.com
202-495-5595

Seal



Project North



Project No: 2409

Ruppert Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Builts
09-27-2024	Schematic Design Set
10-09-2024	Pricing Set
10-11-2024	Pricing Set Addendum
11-24-2024	Interior Set
12-09-2024	Updated Pricing Set
02-05-2025	HAWP Submission Set
02-28-2025	Updated CD Set
03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

Sheet Title

Second & Attic Electrical Plan

Sheet Number

E001

M Series



INSTALLATION
Ceiling Thickness
New Construction: 1/2" up to 1 3/4"
Spray Foam: 1/2" up to 2"
Standard Recessed: 1/2" up to 1 1/4"
Pre-Run Recessed: 5/8" up to 1 1/4"
Low Profile: 1/2" up to 1 1/4"
Extension Collar: 1 3/4" up to 2"
Super Shadow: 1/2" up to 2"
Ceiling Material
Drywall, Masonry, Concrete
Acoustic Ceiling Tiles
TRIMS
Aperture
4
Shape
Round
Style
Standard: Flangeless, Hyperbolic, Vial Wave-Striped Ceiling, Pinhole, Marine Grade (IP65), Decorative
Finish
White, Black, Bronze, Clear Diffuse, Custom Color (RAL Color)
Light Output & Distribution
Module
Downlight
Standard Recessed: 1/2" up to 1 1/4"
Pre-Run Recessed: 5/8" up to 1 1/4"
Low Profile: 1/2" up to 1 1/4"
Extension Collar: 1 3/4" up to 2"
Super Shadow: 1/2" up to 2"
Ceiling Material
Drywall, Masonry, Concrete
Acoustic Ceiling Tiles
TRIMS
Aperture
4
Shape
Round
Style
Standard: Flangeless, Hyperbolic, Vial Wave-Striped Ceiling, Pinhole, Marine Grade (IP65), Decorative
Finish
White, Black, Bronze, Clear Diffuse, Custom Color (RAL Color)
Power & Controls
Input Voltage
120/277V
Dimming
0-10V (TM), DALI-2 (E-TM), TRIAC/ELV (TM), Lutron-Alexa Wireless (TM) (Dimming Only)
Color Quality
93 CRI, 2-step SDCM
Color Temperature
2700K, 3000K, 3500K, 4000K, Warm Dim (3000K-1800K), Tunable White (4000K-1800K) (R900K-2700K)
Beam Spread
15° Narrow Spot, 25° Spot, 40° Flood, 60° Wide Flood, 80° General, 90° Linear Spread
Warranty
5 year limited warranty, 50,000 hours
Product Builder - Embedded Triac/ELV, 0-10V, & DALI-2
PROJECT CODE
INSTALLATION
SHAPE
FINISH
M Series
4" Round Downlight
PHOTOMETRY

4" Round Downlight
Modular System Flexibility during and after installation with interchangeable modules, optics and trims
Quick Install Embedded driver and plug-and-play connection requiring no wiring
High Performance Precision lighting control without sacrificing energy efficiency
Enhanced Dimming Smooth, Flicker-free dimming options down to 0.1%

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

dmf

PRODUCT BUILDER - EMBEDDED TRIAC/ELV, 0-10V, & DALI-2
PROJECT CODE
INSTALLATION
SHAPE
FINISH
M Series
4" Round Downlight
PHOTOMETRY

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

M Series

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

dmf

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

M Series

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

dmf

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

M Series

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

dmf

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
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Values in candela

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Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

M Series

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

PHOTOMETRY
Luminous Intensity
Zonal Lumen Summary
Beam Angle: 15°
Values in candela

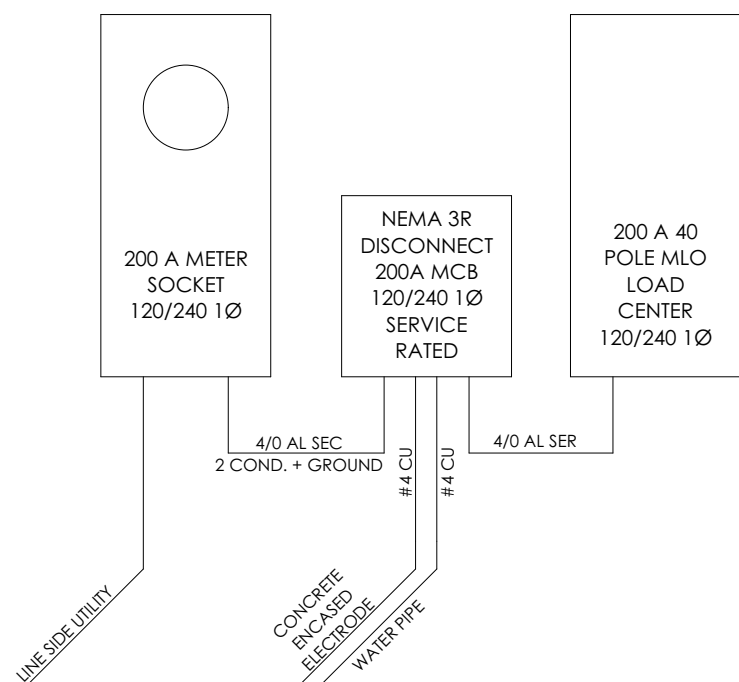
LED Recessed Light Specs

NEC Standard Electrical Load Calculation for Single Family Dwellings
(Only for Service Ratings of 120/240V, 225 Amp Max)

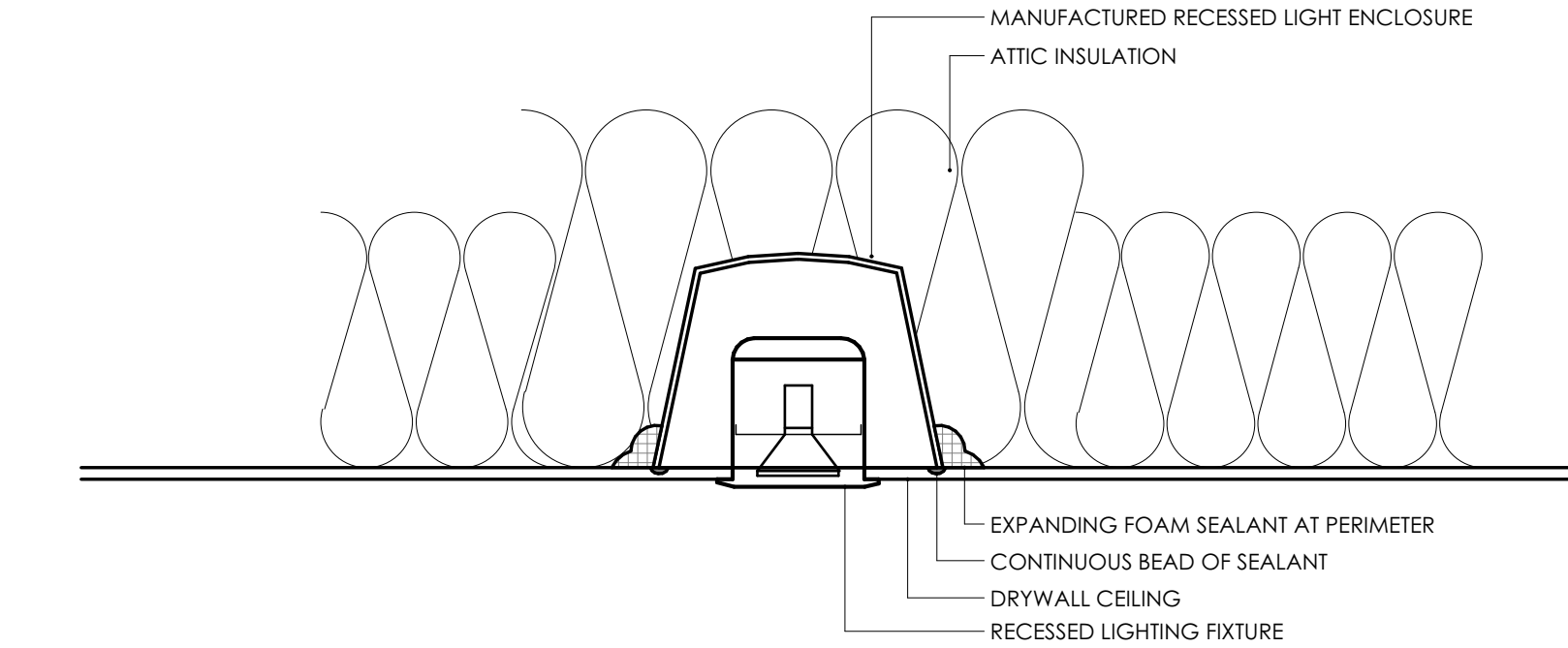
Owner: Ruppert Residence Location: 4 E Kirke Street
Total Floor Area of Dwelling (NEC 220.12) 4,079 SQFT.

Factor	Quantity	Volt Amperes (VA)
"General Lighting"		
1. General Lighting (SQFT X 3 VA/SQ FT (Table 220.12)	3 X 4,079	12,237
2. Small Appliance Circuits (1500 VA per circuit) (NEC 220.52(A)) (minimum 2)	1500 X 2	3,000
3. Laundry Circuit (1500 VA per circuit) (NEC 220.52(B))	1500 X 1	1,500
4. Total General Lighting Load (Add lines 1, 2 & 3):		16,737
5. First 3000 VA @ 100%:		3,000
6. Total General Lighting Load - 3000 = 13,737 @ 35%:		4,808
7. Net General Lighting Load (Per NEC 220.42) (Add lines 5 & 6):		7,808
*Fixed Appliances(if insufficient space, use back):		
• Garbage Disposal	X	450
• Bathroom Fan	X	360
• Microwave	X	1,000
• Dishwasher	X	1,800
• Other:		
• Other:		
Total		3,610
8. 3 or less Appliances, Total Appliance VA: 4 or more Appliances, 75% of Total Appliance VA (NEC 220.53):		2,708
*Other Loads (including motors, EV charger(s), etc.)		
9. Electric Range (8000VA or Nameplate)**	X	8,000
10. HVAC	X	14,000
11. Electric Oven		
12. Electric Dryer (5000 VA minimum)**	X	5,000
13. Electric Vehicle Charger		
14. Other:		
15. Other:		
16. 25% of largest motor (NEC 430.24)		
Total Service Load Volt-Amperes (VA) (Add lines 7, 8 & 9 thru 16) =		37,516
Total Service Load Volt-Amperes / 240-volts = 156 Amperes		
***Service Rating (Amperes)= 200		

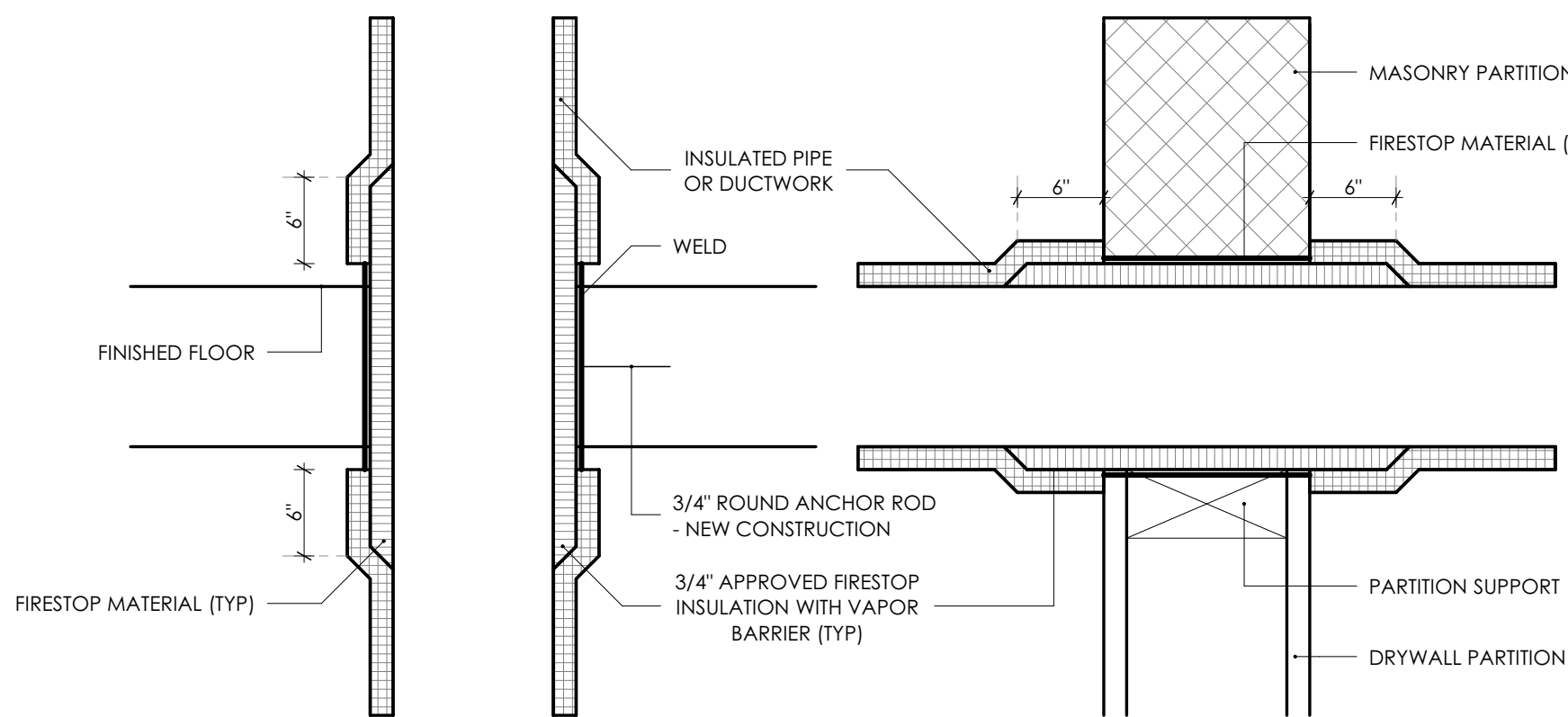
* For every "YES" answer, indicate VA rating of equipment
** Nameplate rating must be used if larger
*** Service Rating shall be greater than or equal to the Service load



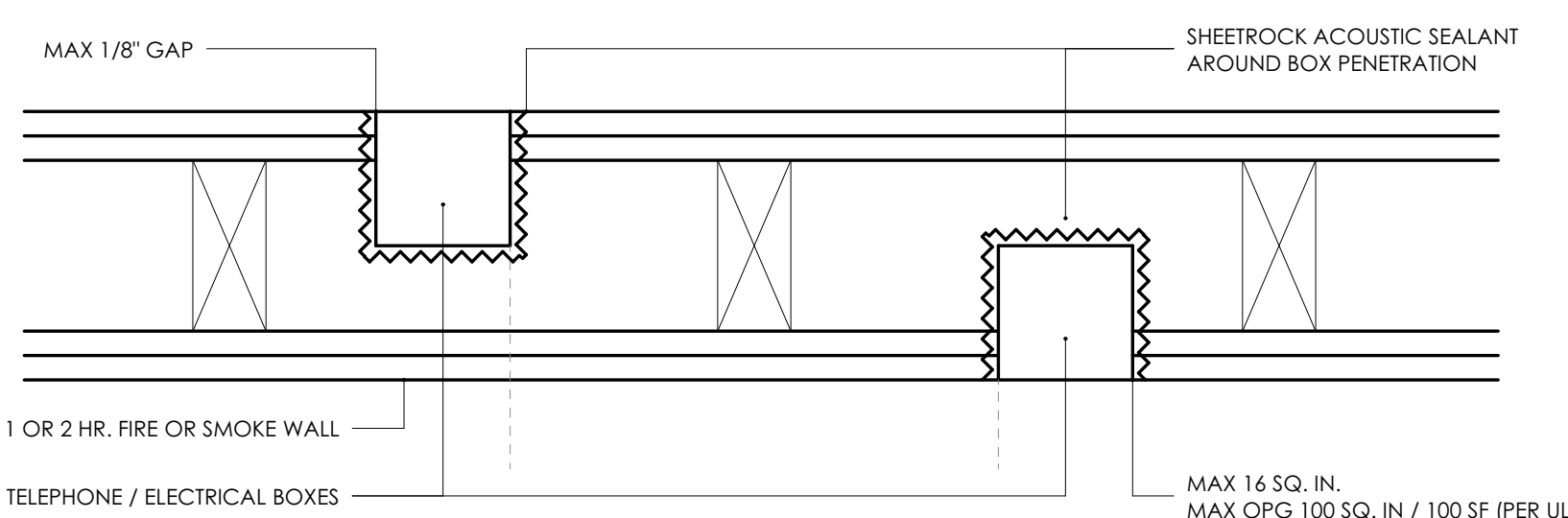
Riser Diagram



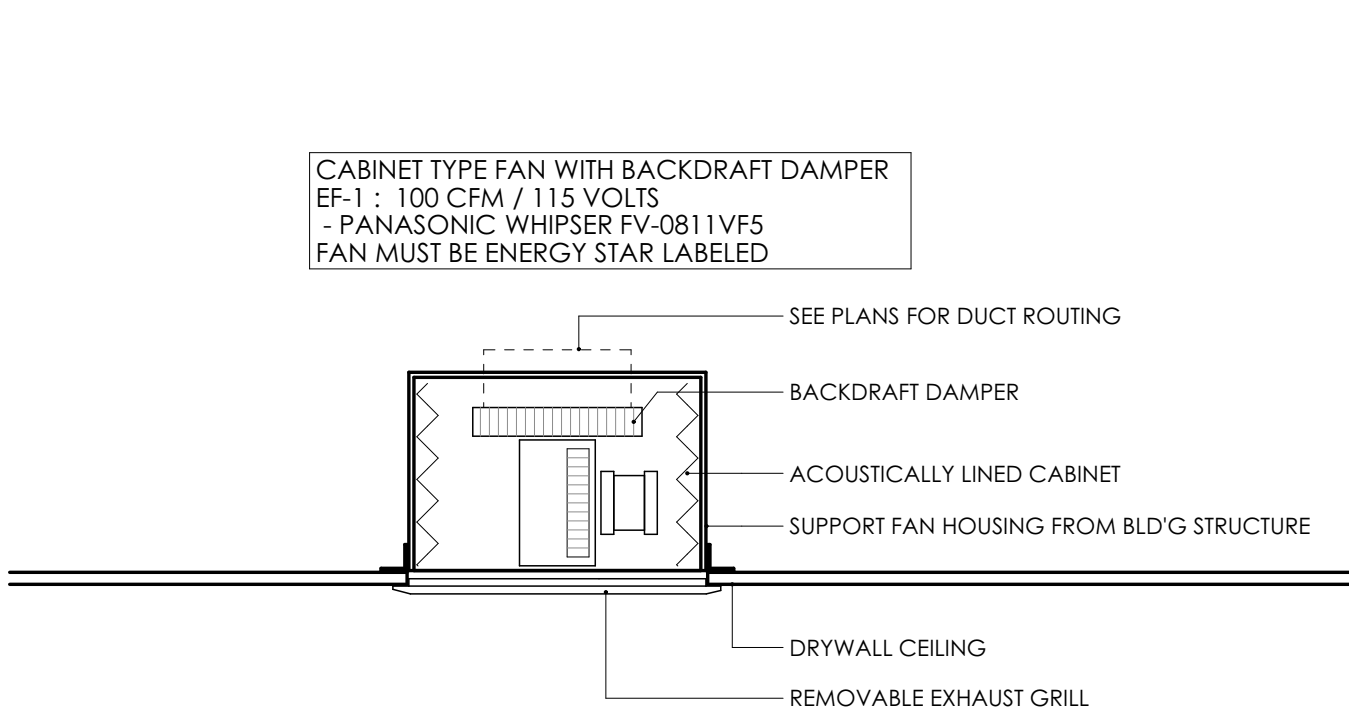
1 Recessed Light Air Sealing Detail



3 Penetration of Fire / Smoke Barrier



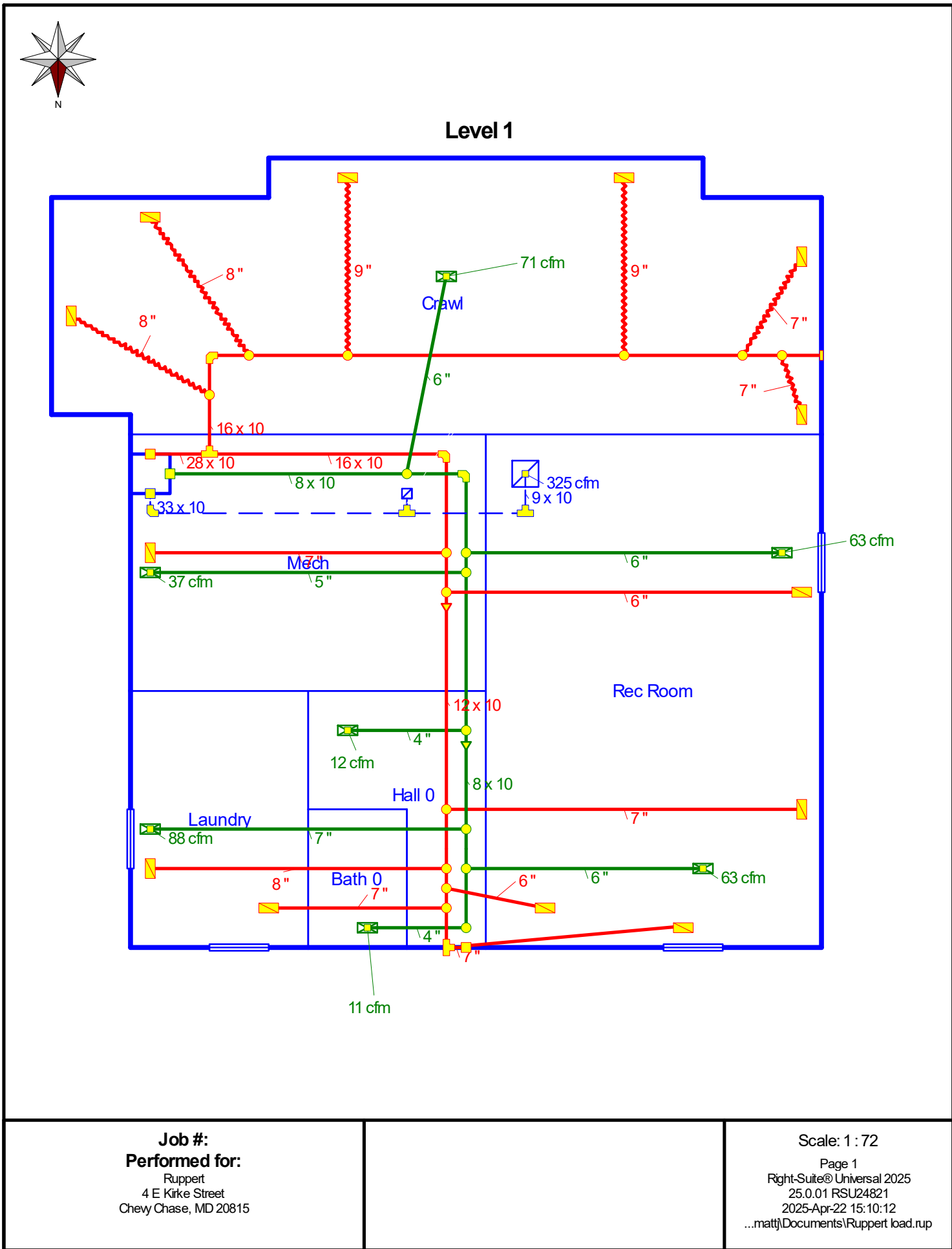
2 Electrical Box in Fire Rated Walls



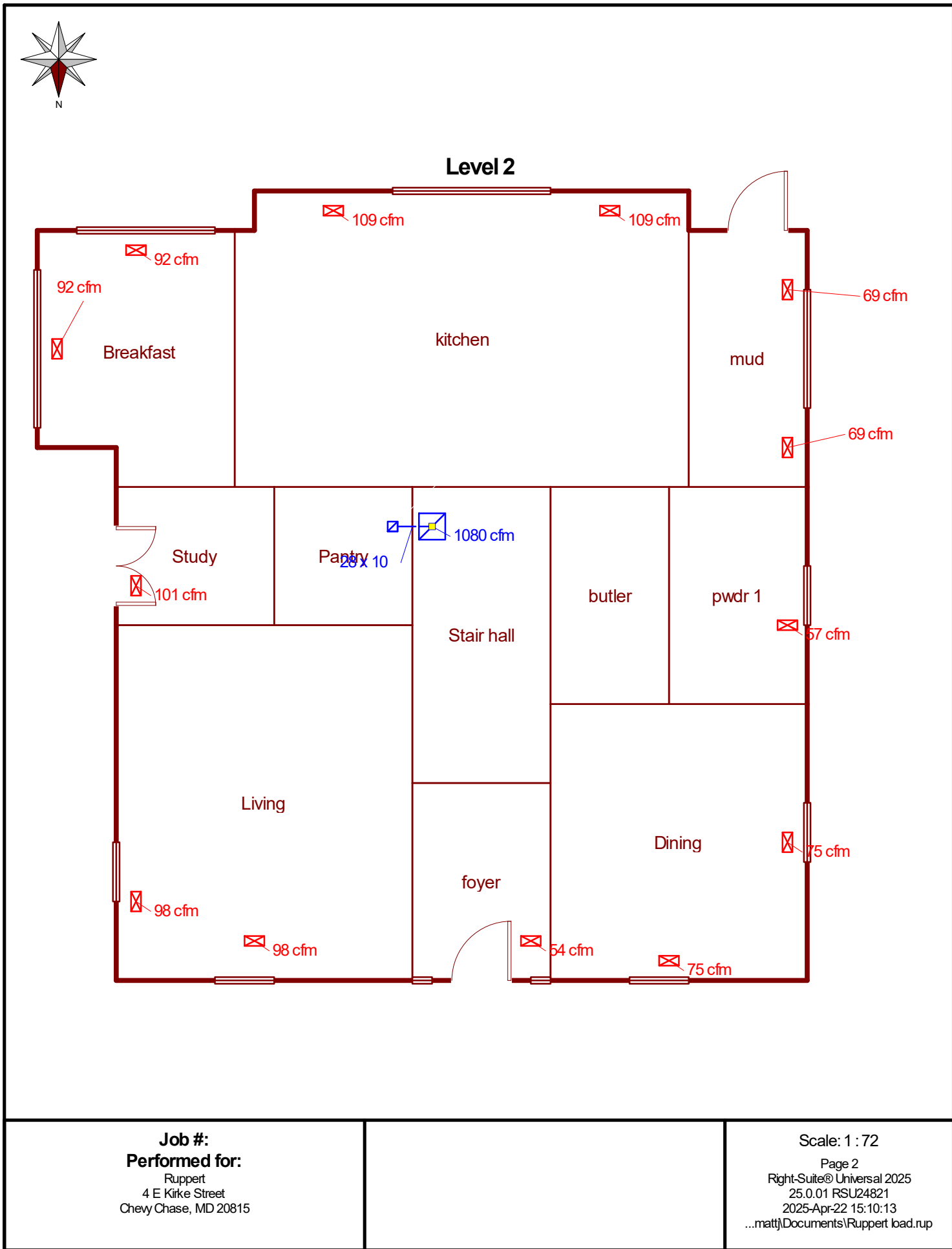
4 Bathroom Exhaust Fan Detail

APPROVED
Montgomery County
Historic Preservation Commission
Karen Bunkit
REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

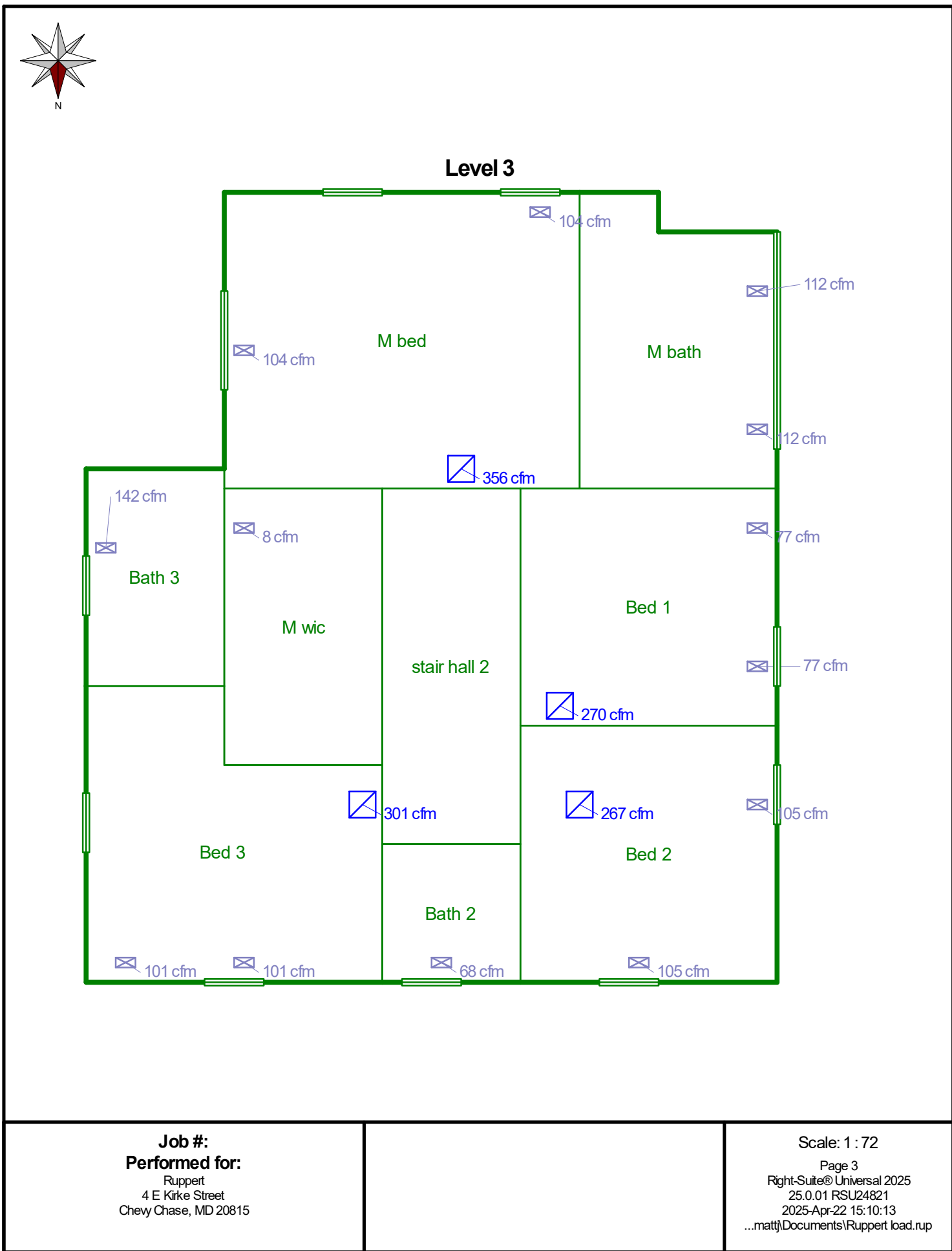
File Name: "C:\Users\alexo\Dropbox\Mortar&Thatch\PROJECTS\2409 Ruppert Residence - 4 E Kirke Street\Chevy Chase MD 20815\01_CAD\04_PERMIT\Ruppert Permit.pln



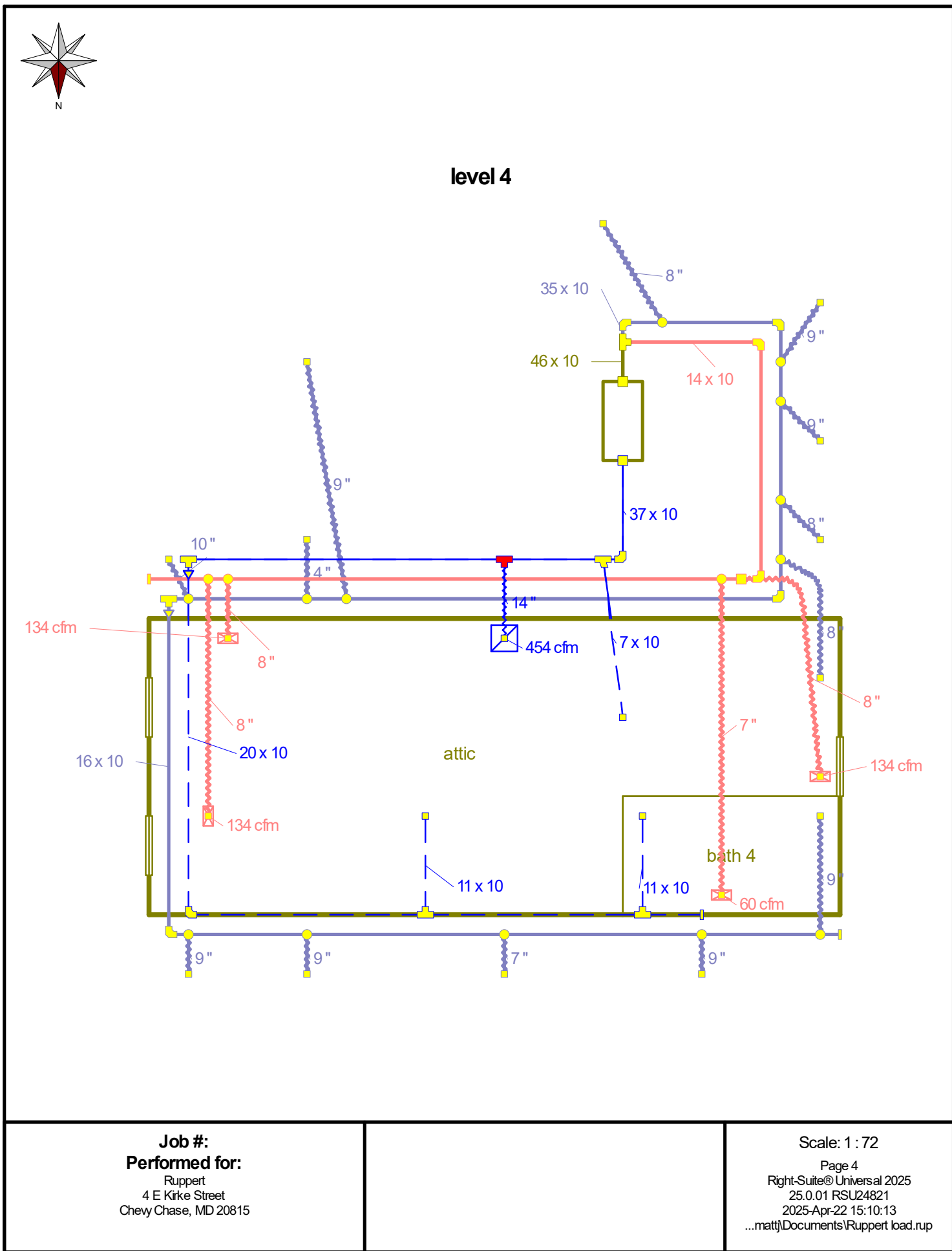
1 Basement Mechanical Plan



2 First Floor Mechanical Plan



3 Second Floor Mechanical Plan



4 Attic Floor Mechanical Plan

- GENERAL NOTES:
1. MECHANICAL EQUIPMENT AND INSTLLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF THE 2017 DC CONSTRUCTION CODES, 2015 INTERNATIONAL RESIDENTIAL CODE, 2015 CONSERVATION CODE, NFPA 70, 2013 ANSI / ASHRAE / IES 90.1, 2012 GREEN CONSTRUCTION CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES.
 2. FURNISH ALL LABOR, MATERIALS, FIXTURES EQUIPMENT AND SERVICES NECESSARY FOR THE INSTALLATION OF A COMPLETE AND PROPERLY FUNCTIONING H.V.A.C. SYSTEM, PLUMBING SYSTEM, AND ELECTRICAL SYSTEM.
 3. APPLY FOR AND PAY FOR ALL PERMITS AND CONNECTION FEES REQUIRED FOR THE WORK.
 4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK TO BE DONE AND SHALL EXAMINE THE SITE AND CONSIDER THE CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO OPERATE IN THE PERFORMANCE OF THE CONTRASCTED WORK. NO ALLOWANCES SHALL BE MADE SUBSEQUENTLY IN THIS CONNECTION, FOR ANY ERRORS THROUGH NEGLIGENCE ON HIS PART. THE CONTRACTOR IS HERE BY ADVISED THAT HE WILL BE REQUIRED TO OBSERVE ALL RECOMMENDED PRACTICES FOR FIRE AND SAFETY PRECAUTIONS FOR THE PROTECTION OF THE FACILITY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LOCATIONS AND CLEARANCES AND COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO STARTING OF WORK.
 5. FOR OTHER DETAILS, THE ARCHITECTURE, STRUCTURAL, HVAC, PLUMBING, ELECTRICAL PLANS AND EXISTING CONSTRUCTION SHALL BE FOLLOWED AND ALL WORK PERFORMED UNDER THIS SPECIFICATION SHALL BE NEATLY FITTED THERETO.
 6. ALL DUCTWORK SHALL BE FABRICATED FROM FIELD TAKEN DIMENSIONS AND NOT FROM DRAWINGS. PRIOR TO DUCT FABRICATION, CEILING CLEARANCES SHALL BE VERIFIED WITH ALL ELECTRICAL, PLUMBING AND ARCHITECTURAL WORKS.
 7. SUBMIT SIX COPIES OF EACH SHOP DRAWINGS FOR THE FOLLOWING: HIGH EFFICIENCY FURNACE, SPLIT SYSTEM COOLING COILS, AIR COOLED CONDENSING UNIT, THERMOSTAT, GRILLES, REGISTERS, DUCTS, TRIMS, PIPES, JOINING METHODS, WATER HEATER, GUY GRAY UNIT, FLOOR DRAINS, BREAKER PANEL, CIRCUIT BREAKERS, SWITCHES, LUMINAIRES, MOTION DETECTORS, DISCONNECT SWITCHES AND OUTLETS.
 8. ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR CONTROLLERS, PILOT OTHER DEVICES, AND SHALL DO ALL WIRING REQUIRED EXCEPT A.T.C. WIRING.
 9. DUCTWORK SHALL BE SHEET METAL, GALVANIZED, CONSTRUCTED, BRACED AND SUPPORTED IN ACCORDANCE WITH SMACNA LOW PRESSURE GUIDES. SEAL ALL JOINTS TO BE AIRTIGHT USING HRDCAST # AM- 401 TAPE APPLIED OVER CLEAN, DRY DUCT.
 10. ALL SUPPLY AND RETURN DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED WITH 1/2" FIBERGLASS INSULATION WITH ASI VAPOR BARRIER OR EQUAL.
 11. GRILLES, REGISTER, AND DIFFUSERS SHALL BE OF CAPACITIES, INDICATED, SIZE IN ACCORDANCES WITH MANUFACTURERS PRINTED LITERATURE FOR RESIDENTIAL SOUND LEVELS AND THROWS. MOUNT TIGHT TO CONSTRUCTION USING NEOPRENE GASKET TO PREVENT AIR LEAKAGE AND STREAKING. BRANCHES FROM MAIN TO OUTLETS SHALL BE MADE USING ADJUSTABLE DEFLECTORS POSITIONED AND SECURED TO PROVIDE SPECIFIED AIR QUANTITIES. REGISTERS AND GRILLES SHALL BE MFD. BY LUMA OR EQUAL, AND SHALL MATCH COLOR OF ADJACENT CEILING OF WALL. COORDINATE LOCATION OF CEILING REGISTER WITH LIGHT.
 12. CUTTING OF FLOORS, WALLS AND CEILINGS SHALL BE REQUIRED FOR THE INSTALLATION OF PIPES, CONDUITS, DUCTS, WIRING, SLEEVES AND SEAL AS REQUIRED AND DIRECTED BY THE ARCHITECT.
 13. ALL SYSTEMS SHALL BE ADJUSTED AND BALANCED WITH AIR QUANTITIES NOTED OR AS DIRECTED. TOLERANCE SHALL BE FROM MINUS 5 PERCENT TO PLUS 25 PRECENT.
 14. ALL EQUIPMENT SHALL BE CLEANED AND ADJUSTED AD REQUIRED TO GIVE SATISFACTORY OPERATION.
 15. ASSEMBLE PRINTED INSTRUCTION FOR THE OPERATION AND MAINTENANCE OF EACH MAJOR ITEM. BIND TOGETHER WITH EQUIPMENT CUTS AND CONTROL WIRING DIAGRAMS. DELIVER THREE COPIES TO ARCHITECT.
 16. FINAL INSPECTION AND TEST SHALL BE MADE BY THE CONTRACTOR IN THE PRESENCE OF THE ARCHITECTOR. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, INSTRUMENTS AND MISCELLANEOUS EQUIPMENT REQUIRED FOR THE TESTS. FINAL PAYMENT SHALL HELD PENDING SATISFACTORY OUTCOME OF THE FINAL INSPECTION. PROVIDED ALL INSPECTION REPORTS AND APPROVALS BY UTILITIES, GOVERNMENT, OR AUTHORITIES AS REQUIRED, INCLUDING OCCUPANCY PERMIT.
 17. PROVIDE TURNING VANES, SPLITTER DAMPERS AND VOLUME DAMPERS AS NECESSARY TO BALANCE THE AIR SYSTEM. ALL SYSTEMS SHALL BE ADJUSTED AND BALANCED WITH AIR QUANTITIES AS SHOWN ON DRAWINGS BY INDEPENDENT BALANCING COMPANY OR PROFESSIONAL ENGINEER.

APPROVED
Montgomery County
Historic Preservation Commission

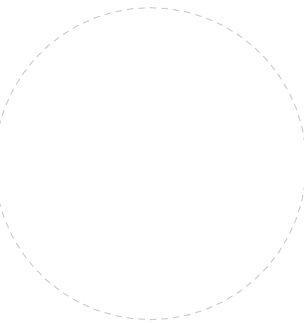
Karen Buehler

REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

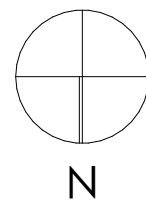
MORTAR & THATCH
ARCHITECTS

300 Morse Street NW, Unit 833
Washington DC 20002
www.mortarandthatch.com
202-465-5366

Seal



Project North



Project No: 2409

Ruppert
Residence

4 E Kirke Street
Chevy Chase MD 20815

Date	Issue Description
09-13-2024	As-Builts
09-27-2024	Schematic Design Set
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03-23-2025	Construction Pricing Set
04-15-2025	Permit Set

Sheet Title

Mechanical Plans

Sheet Number

M000

GENERAL NOTES

- Boundary information and two-foot contour data are based upon surveys performed by CAS Engineering, dated October, 2024.
- Total lot area: Lot 30 = 8,125 sq. ft. (0.186 acres)
- Property is located on Tax Map HN341 and WSSC 200' Sheet 208NW04.
- Property is located on Sols Survey Map Number 27.
Soil type(s): SUB, Glenelg Urban land complex, HSD "B".
- Flood zone "X" per F.E.M.A. Firm Maps, Community Panel Number 24031C0455D.
- Property is located in the Little Falls Watershed, Use Class (I.P.).
- Water Category - 1, Sewer Category - 1
- Local utilities include:
Water / Sewer - Washington Suburban Sanitary Commission
Electric - PEPCO
Telephone - Verizon
Gas - Washington Gas
- Property is located in the incorporated municipality of Chevy Chase Village.
- Property is not located in a Special Protection Area.
- Property is located in the Chevy Chase Village Historic District.

ZONING DATA - MONTGOMERY COUNTY

- Zoning: R-40**
Min. Lot Area = 6,000 sq. ft.
Min. Lot Width at R/W = 25 ft.
Min. Lot Width at Front Building Line = 60 ft.
Side Setback = 7 ft. min. each side (20' @ 14' 11")
(1) Per Montgomery County Code Section 4.1.4.1.1, the Established Building Line does not apply to an alteration or addition to an existing house.
(2) Per Montgomery County Code Section 7.7.1.D.2.2, a detached house on a plat, lot, parcel, or part of a previously platted lot that has not changed in size or shape since June 1, 1958, exclusive of changes due to public acquisition, may be constructed or reconstructed in a manner that satisfies the maximum height, lot coverage and established building line of its zone when the building permit is submitted and the side yard and rear setback required by its pre-1958 zoning in effect when the lot, parcel or part of a lot was first created.
(3) This property was created prior to January 1, 1954, therefore 7 foot side setbacks are permitted.
(4) No part of any building or structure shall be erected or maintained within seven (7) feet of the side or rear lot lines, per Chevy Chase Village, The Chevy Chase Village building regulations should be consulted for additional building restrictions, rules, and prohibitions.
- Verify (Non-Infill) lot coverage in accordance with the Zoning Ordinance.**
Coverage is the area of a lot or site occupied by a building, including an accessory building, structured parking, or other roofed structure such as a porch, patio, deck, or steps.
Coverage does not include paved areas such as a driveway, a pedestrian walkway, a bay window measuring 10 feet in width or less and 3 feet in depth or less, an uncovered porch or patio, deck, a swimming pool, or roof overhang.
Allowable Lot Coverage: 35% of total lot area.
Lot 30 = 8,125 sq. ft. (Per Plat)
8,125 x 0.35 = 2,843.75 sq. ft.
Allowable area to be covered by buildings (including acc. buildings) = 2,843.7 sq. ft.
Total area covered by buildings = 1,418.2 sq. ft. (Ex. House + Prop. Addition) + 96 sq. ft. (Prop. Shed) = 1,514.2 sq. ft.

- Mean Building Height Requirements (Addition)**
Verify mean building height in accordance with the Zoning Ordinance.
First floor elevation: 363.3 ft.
Mean height of addition from first floor: 22.7 ft. (Per Architect)
Elevation at mean height of addition: 386.0 ft.
Average elevation along front of building: 361.85 ft.
Mean height of addition = 386.0 - 361.85 = 24.15 feet
Allowable mean height of building = 30 feet
Proposed mean height of Addition = 24.15 feet

- Accessory Structure Mean Building Height Requirements (Shed)**
Verify accessory structure mean height in accordance with the Zoning Ordinance.
Garage floor elevation: 363.5 ft.
Mean height of accessory structure from first floor: 9.0 ft. (0.1" per Architect)
Elevation at mean height of accessory structure: 372.5 ft.
Average elevation along front of accessory structure: 362.2 ft.
Mean height of accessory structure = 372.5 - 362.2 = 10.3 ft.
Allowable mean height accessory structure = 15 feet (for 5 ft. setbacks)
Proposed mean height of accessory structure = 10.38 feet

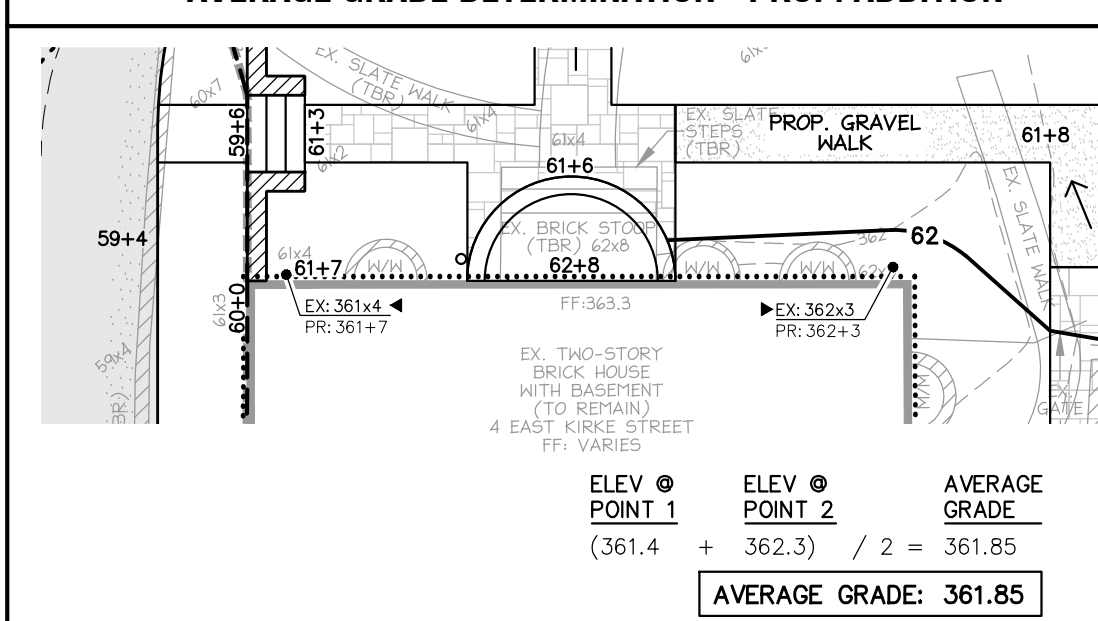
ZONING DATA - CHEVY CHASE VILLAGE

- Verify lot coverage in accordance with the Chevy Chase Village Ordinance.**
Per Chevy Chase Village: Lot coverage is the portion of a lot which is covered by buildings, accessory buildings, and related structures such as covered and uncovered porches, balconies, and decks, covered and uncovered steps, stairways, and stoops, and bay and bow windows. Lot coverage does not include: (1) eaves, gutters, and similar overhangs, and (2) features that are not raised such as walkways, patios, terraces, driveways, swimming pools and tennis courts.
Allowable Lot Coverage: 35% of total lot area.
Lot 30 = 8,125 sq. ft. (Per Plat)
8,125 x 0.35 = 2,843.75 sq. ft.
Allowable area to be covered by buildings (including acc. buildings) = 2,843.75 sq. ft.
Total area covered by buildings = 2,008.7 sq. ft.

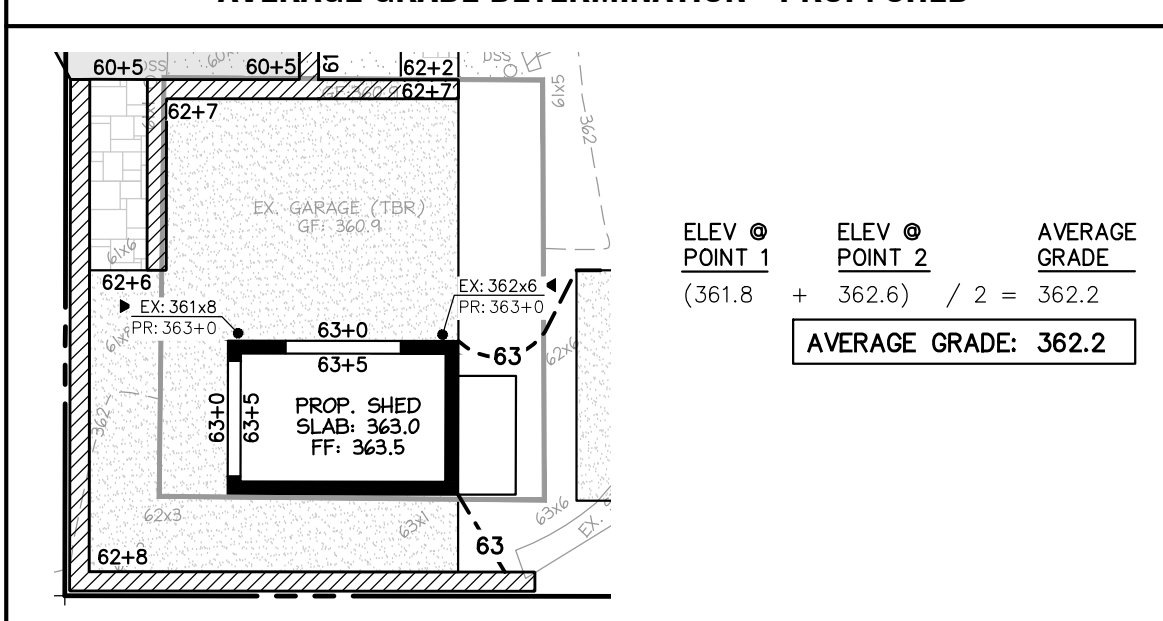
- Building Height Requirements (Addition)**
Verify building height in accordance with the Chevy Chase Village Ordinance, Section Section 6-20(a)(2).
a. Height of the main building shall not exceed thirty-five (35) feet when measured to the highest point of the roof surface, regardless of roof type.
First floor elevation: 363.3 ft.
First floor to peak of Addition roof surface: 27.25 ft. (Per Architect)
Elevation at peak of Addition roof surface: 390.55 ft.
Average grade elevation along front of building: 361.85 ft.
Height of building = 390.55 - 361.85 = 28.7 feet
Allowable peak height of building = 35 feet
Proposed Height of Building = 28.7 feet
* See Montgomery County Zoning Data for Mean Building Height calculation.

- Accessory Structure Building Height Requirements**
Verify accessory structure building height in accordance with the Chevy Chase Village Ordinance, Section Section 6-20(a)(2).
a. Height of any detached garage or other accessory building, when measured from the average grade in front of the building to the highest point of the roof surface regardless of roof type, shall not exceed sixteen (16) feet.
First floor elevation: 363.5 ft.
Height of building to peak of roof surface: 11.25 ft. (11'-3" Per Architect) ft.
Elevation at peak of roof surface: 374.75 ft.
Average grade elevation along front of building: 362.2 ft.
Height of building = 374.75 ft. - 362.2 ft. = 12.55 feet
Allowable peak height of building = 16 feet
Proposed Height of Building = 12.55 feet

AVERAGE GRADE DETERMINATION - PROP. ADDITION



AVERAGE GRADE DETERMINATION - PROP. SHED



RELATED REQUIRED PERMITS

TO BE COMPLETED BY THE CONSULTANT AND PLACED ON THE FIRST SHEET OF THE SEDIMENT CONTROL/STORMWATER MANAGEMENT PLAN SET FOR ALL PROJECTS.					
IT IS THE RESPONSIBILITY OF THE PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE SEDIMENT CONTROL PERMIT					
TYPE OF PERMIT	REQ'D	NOT REQ'D	PERMIT NUMBER	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain District					
WATERWAYS/WETLAND(S):					
a. Corps of Engineers		X			
b. MDE		X			
c. MDE Water Quality Certification		X			
MDE Dam Safety		X			
MSDC Small Pond Approval		X			
DPS Roadside Trees Protection Plan				Approval Date	
**N.P.D.S. Notice of Intent		X			
FEMA LOMR - Letter of Map Revision (Required Post Construction)		X			
OTHERS (Please List):		X			

* A copy of the Roadside Tree Protection Plan must be delivered to the Sediment Control Inspector at the pre-construction meeting.
** When a Notice of Intent is required, the sediment control permit may be issued until confirmation of authorization under the MDE's 28-CP Permit has been submitted to DPS.

CONSTRUCTION INSPECTION CHECK-OFF LIST FOR DRY WELL/RECHARGE CHAMBER

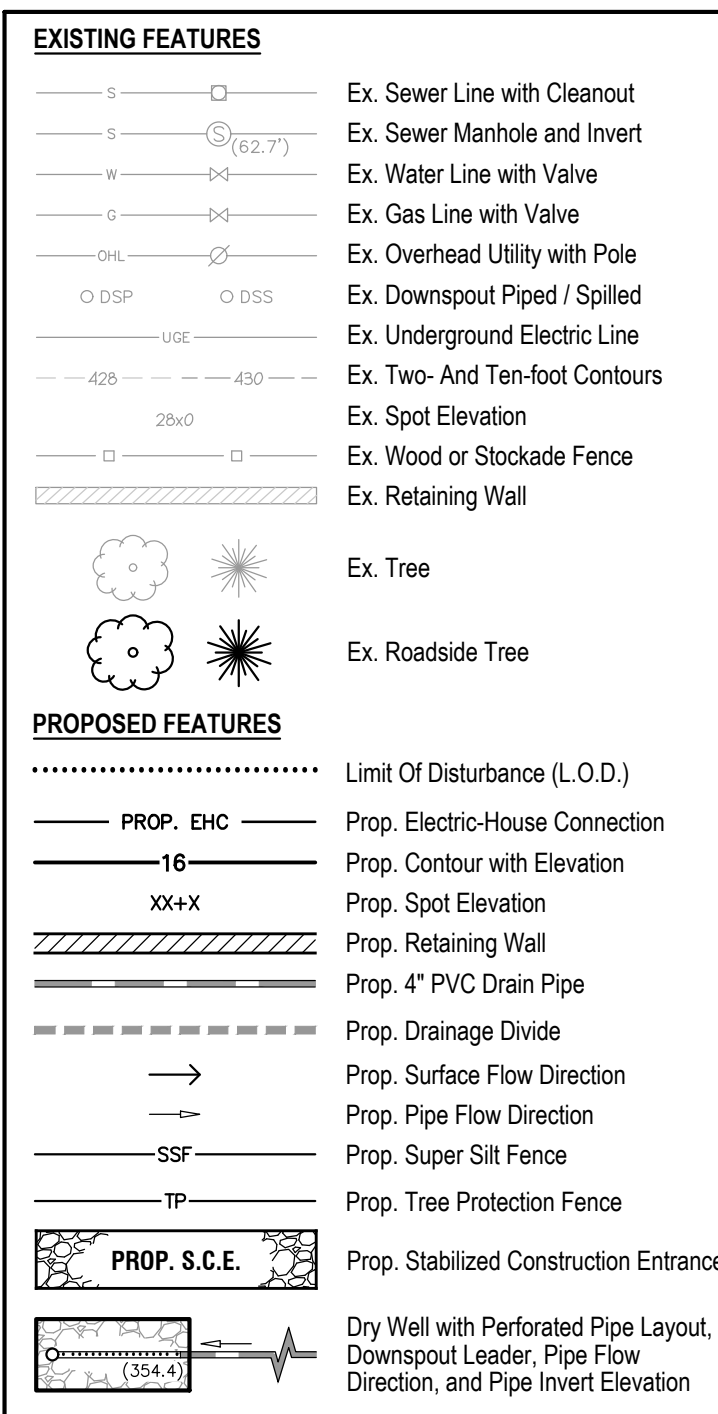
STAGE	MCDPS INSPECTOR	OWNER/DEVELOPER
MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDPS Inspector twenty-four (24) hours notice (DPS telephone 240-777-0311). The DPS Inspector may waive an inspection, and allow the owner/developer to make the required inspection per a pre-scheduled arrangement which has been confirmed with the DPS Inspector in writing. Work completed without MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead. Each of the steps listed below must be verified by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
1. Excavation for Dry Well conforms to approved plans		
2. Placement of backfill, perforated inlet pipe and observation well conforms to approved plans		
3. Placement of geotextiles and filter media conforms to approved plans		
4. Connecting pipes, including connection to downspout, constructed per the approved plans		
5. Final grading and permanent stabilization conforms to approved plans		
TOTAL NUMBER OF DRY WELLS INSTALLED PER THIS PERMIT:	APPROVED	CONSTRUCTED

RECORD DRAWING CERTIFICATION

A record set of approved Sediment Control/Stormwater Management plans must be maintained onsite at all times. In addition to stormwater management items, these plans must include the number and location of these proposed to be planted to comply with the Tree Canopy Law. Any approved modifications or deletions of stormwater practices or tree canopy plantings or information must be shown on the record set of plans and on the Tree Canopy Requirements table. Upon completion of the project, the record set of plans, including thereon this signed Record Drawing Certification, must be submitted to the MCDPS Inspector. In addition to this Record Drawing Certification, a formal Stormwater Management As-Built submission is required. It is required to be required for this project.

Owner/Developer Signature _____ Date _____
FIELD CHECK OF RECORD DRAWING BY MCDPS INSPECTOR: INITIALS _____ DATE _____

LEGEND



TREE CANOPY REQUIREMENTS

TO BE COMPLETED BY THE CONSULTANT AND PLACED ON THE FIRST SHEET OF THE Sediment Control/Stormwater Management Plan set for all projects. A fee in lieu of planting will be charged for any required canopy trees that are not planted.

EXEMPT: YES ☐ NO ☐
If exempt under Section 55-5 of the code, please check the applicable exemption category below.

Number of Trees Requiring Payment of Fee in Lieu: (Trees Required-Trees Proposed) = XX Trees

Required Number of Shade Trees:	AREA OF THE LIMITS OF DISTURBANCE (SQUARE FEET) FROM	NUMBER OF SHADE TREES REQUIRED
1-50	0-5,000 SQ. FT.	5
6-100	5,001-10,000 SQ. FT.	6
101-150	10,001-15,000 SQ. FT.	7
151-200	15,001-20,000 SQ. FT.	8
201-250	20,001-25,000 SQ. FT.	9
251-300	25,001-30,000 SQ. FT.	10
301-350	30,001-35,000 SQ. FT.	11
351-400	35,001-40,000 SQ. FT.	12
401-450	40,001-45,000 SQ. FT.	13
451-500	45,001-50,000 SQ. FT.	14
501-550	50,001-55,000 SQ. FT.	15

Exemption Categories:

- (1) 55-5(a) any activity that is subject to Article 4 of Chapter 224.
- (2) 55-5(b) any commercial logging or timber harvesting operation with an approved exemption from Article 4 of Chapter 224.
- (3) 55-5(c) any activity conducted by the County Parks Department.
- (4) 55-5(d) notice or emergency maintenance of an existing, deteriorated, or damaged utility, including an existing structure, or a structure that is in the process of being replaced.
- (5) 55-5(e) any utility that is in the process of being replaced.
- (6) 55-5(f) any utility that is in the process of being replaced.
- (7) 55-5(g) any utility that is in the process of being replaced.
- (8) 55-5(h) any utility that is in the process of being replaced.
- (9) 55-5(i) any utility that is in the process of being replaced.
- (10) 55-5(j) any utility that is in the process of being replaced.
- (11) 55-5(k) any utility that is in the process of being replaced.
- (12) 55-5(l) any utility that is in the process of being replaced.
- (13) 55-5(m) any utility that is in the process of being replaced.
- (14) 55-5(n) any utility that is in the process of being replaced.
- (15) 55-5(o) any utility that is in the process of being replaced.
- (16) 55-5(p) any utility that is in the process of being replaced.
- (17) 55-5(q) any utility that is in the process of being replaced.
- (18) 55-5(r) any utility that is in the process of being replaced.
- (19) 55-5(s) any utility that is in the process of being replaced.
- (20) 55-5(t) any utility that is in the process of being replaced.
- (21) 55-5(u) any utility that is in the process of being replaced.
- (22) 55-5(v) any utility that is in the process of being replaced.
- (23) 55-5(w) any utility that is in the process of being replaced.
- (24) 55-5(x) any utility that is in the process of being replaced.
- (25) 55-5(y) any utility that is in the process of being replaced.
- (26) 55-5(z) any utility that is in the process of being replaced.

TOPSOIL NOTE

TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS".

RUNOFF STATEMENT

I understand that DPS approval of this sediment control/stormwater management plan is for demonstrated compliance with required environmental runoff treatment standards. The DPS approval of this sediment control/stormwater management plan approval does not relieve me of professional responsibility. I have analyzed the proposed design for sediment control permit no. 299746 and hereby certify that, based on my background, training and experience, I have determined that the proposed improvements shown on this plan meet relevant laws and regulations. I further acknowledge that I have analyzed the post development runoff patterns for this project from the standpoint of my responsibilities under current Maryland Law and have determined that a permit is required from adjacent property owners. I have obtained a and have made copies of those permissions available to DPS.

UTILITY INFORMATION

EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED. UTILITY LOCATIONS ARE BASED UPON AVAILABLE RECORDS AND ARE SHOWN TO THE BEST OF OUR ABILITY.
FOR LOCATION OF UTILITIES, CALL "MISS UTILITY" AT 1-800-252-7777, OR LOG ON TO WWW.MISSUTILITY.ORG 48 HOURS IN ADVANCE OF ANY WORK. IN THIS MONTH, THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

FRONT YARD PARKING AREA COVERAGE

R-40: 35% MAXIMUM
FRONT YARD PARKING AREA: 443.8 SF
FRONT YARD AREA: 2,989.2 SF
COVERAGE: 17.1% (+35%)

APPROVED
Montgomery County
Historic Preservation Commission
Karen Bullett
REVIEWED
By Dan Bruechert at 12:53 pm, May 15, 2025

OWNER/APPLICANT

4 E Kirke Street LLC
Attn: Cameron Ruppert
4445 Willard Ave, Suite 740
Chevy Chase, MD 20815
240-401-7377
cameron@cameronupperinteriors.com

ARCHITECT

Mortar & Thatch Architects
300 Morse Street NE, Unit 833
Washington, DC 20002
Attn: Alex Smith
202-695-5586
alexander@mortarandthatch.com

LANDSCAPE ARCHITECT

Campion Hruby Landscape Architects
Attn: Stephen Makrinos
111 Cathedral Street, Suite 100
Annapolis, MD 21401
410-280-8850
steve@campionhruby.com

4 East Kirke Street
Lot 30, Block 34,
Chevy Chase, Section 2
Building Permit Site Plan,
Stormwater Management Plan,
and Sediment Control Plan
Sediment Control Permit #: 299746

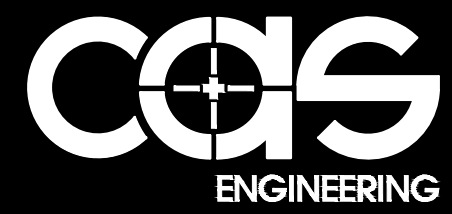
TECHNICAL REVIEW OF SEDIMENT CONTROL	ADMINISTRATIVE REVIEW	299746 SEDIMENT CONTROL PERMIT NO.	DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not relieve the permittee of professional responsibility. The permittee must obtain written approval from the MCDPS Sediment Control Inspector before proceeding with any additional clearing, grubbing, or grading.
REVIEWED _____ DATE _____	REVIEWED _____ DATE _____	N/A	I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 57000, expiration date 05/04/2027, and that this plan meets MCDPS criteria for building and sediment control permit applications.
TECHNICAL REVIEW OF STORMWATER MANAGEMENT	SMALL LOT DRAINAGE APPROVAL	N/A	
REVIEWED _____ DATE _____	REVIEWED _____ DATE _____	STORMWATER MANAGEMENT FILE NO.	
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.	MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.		

DATE	REVISION
10/28/24	LAK - Building Permit Site Plan Base Sheet to Client and Architect
11/27/25	LAK - Preliminary Site / Grading Plan to Client & Architect
04/25/25	LAK - Draft SCP To Client & Architect



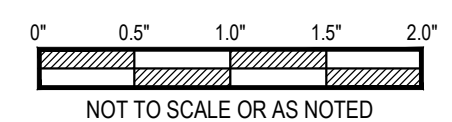
PROFESSIONAL ENGINEER CERTIFICATION:
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 57600, expiration date 05/01/2027, and that this plan meets MCDPS criteria for building and sediment control permit applications.

Lot 30, Block 34, Chevy Chase, Section 2
Plat Book 2, Plat No. 106, Recorded 04/17/1940
Bethesda (7th) Election District, Montgomery County, MD
4 East Kirke Street
Chevy Chase, Maryland 20815

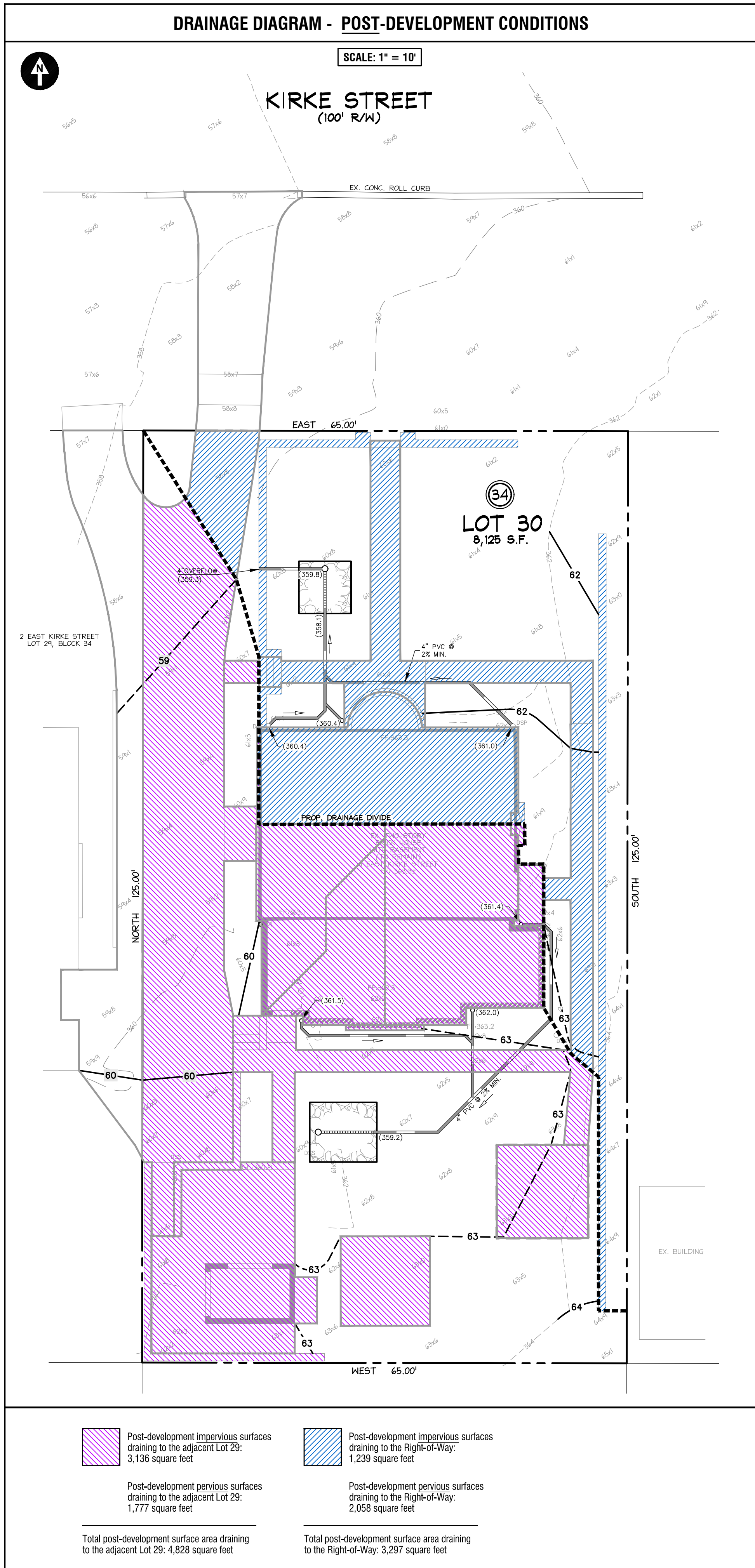
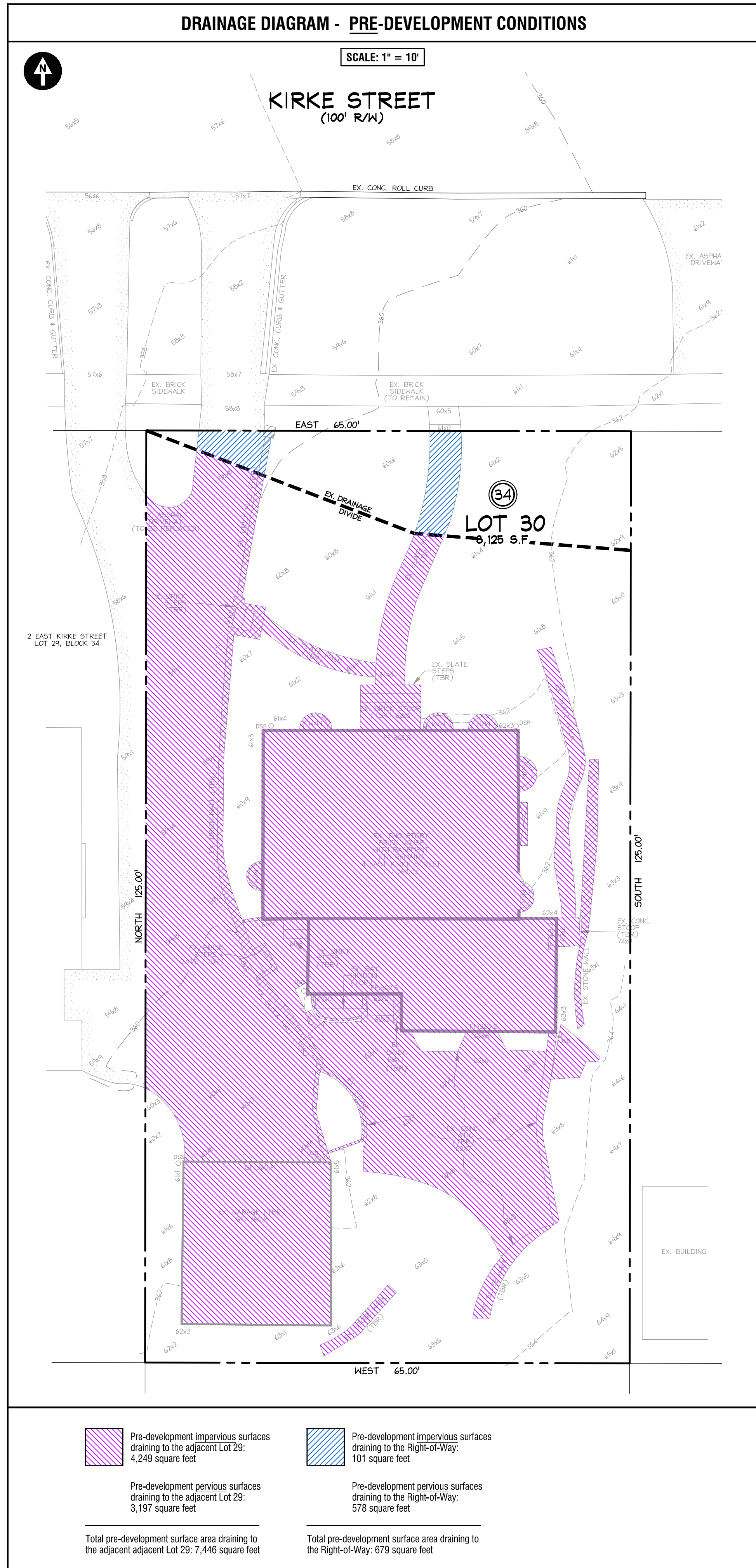


CAS ENGINEERING-MD
10 South Bend Street
Frederick, Maryland 21701
301-507-5031 Phone
info@casengineering.com
www.casengineering.com

CAS ENGINEERING-DC, LLC
4836 MacArthur Boulevard, NW, 2nd Floor
Washington, DC 20007
202-393-7200 Phone
info@cas-dc.com
www.cas-dc.com



SHEET TITLE:
Small Lot Drainage Plan



SMALL LOT DRAINAGE ANALYSIS: SECTION 8-29(B)

ANALYSIS OF ON-SITE DRAINAGE - 4 EAST KIRKE STREET TO PUBLIC R/W

ANALYSIS OF DRAINAGE, 1.5" / 24 HR

EXISTING CONDITIONS		POST-DEVELOPMENT CONDITIONS *	
ONSITE DRAINAGE AREA =	679 S.F.	ONSITE DRAINAGE AREA =	3,297 S.F.
IMPERVIOUS AREA =	101 S.F.	IMPERVIOUS AREA =	1,239 S.F.
% IMPERVIOUS = $\frac{I_{avg}}{A_{tot}}$	14.87%	% IMPERVIOUS = $\frac{I_{avg}}{A_{tot}}$	37.58%
$R_v = (0.05 + 0.009 * I_{avg}) =$	18.40%	$R_v = (0.05 + 0.009 * I_{avg}) =$	38.80%
$DV_{req} = [1.5" * (R_v) A_{tot}] / 12 =$	15.6 C.F.	$DV_{req} = [1.5" * (R_v) A_{tot}] / 12 =$	159.9 C.F.
INCREASE			144.3 C.F.

ANALYSIS OF ON-SITE DRAINAGE - 4 EAST KIRKE STREET TO ADJACENT LOT 29

ANALYSIS OF DRAINAGE, 1.5" / 24 HR

EXISTING CONDITIONS		POST-DEVELOPMENT CONDITIONS	
ONSITE DRAINAGE AREA =	7,446 S.F.	ONSITE DRAINAGE AREA =	4,828 S.F.
IMPERVIOUS AREA =	4,249 S.F.	IMPERVIOUS AREA =	3,136 S.F.
% IMPERVIOUS = $\frac{I_{avg}}{A_{tot}}$	57.08%	% IMPERVIOUS = $\frac{I_{avg}}{A_{tot}}$	64.95%
$R_v = (0.05 + 0.009 * I_{avg}) =$	56.40%	$R_v = (0.05 + 0.009 * I_{avg}) =$	63.50%
$DV_{req} = [1.5" * (R_v) A_{tot}] / 12 =$	524.9 C.F.	$DV_{req} = [1.5" * (R_v) A_{tot}] / 12 =$	383.2 C.F.
DECREASE			141.7 C.F.

SECTION 8-29(B) - SMALL LOT DRAINAGE NARRATIVE

In the pre-development condition, the majority of the subject property drains to the northeast onto the adjoining Lot 29 (2 East Kirke Street). In the post-development condition, runoff onto adjoining Lot 29 is decreased by draining a larger portion of the subject property to the East Kirke Right-of-Way, implemented via site grading and proposed retaining walls. Therefore, the project is compliant with Section 8-29B, as there is no increase in runoff onto an adjacent private property.

APPROVED
Montgomery County
Historic Preservation Commission
Karen Bruechert

REVIEWED
By Dan Bruechert at 12:54 pm, May 15, 2025

4 East Kirke Street
Lot 30, Block 34,
Chevy Chase, Section 2
Small Lot Drainage Plan
Sediment Control Permit #: 299746

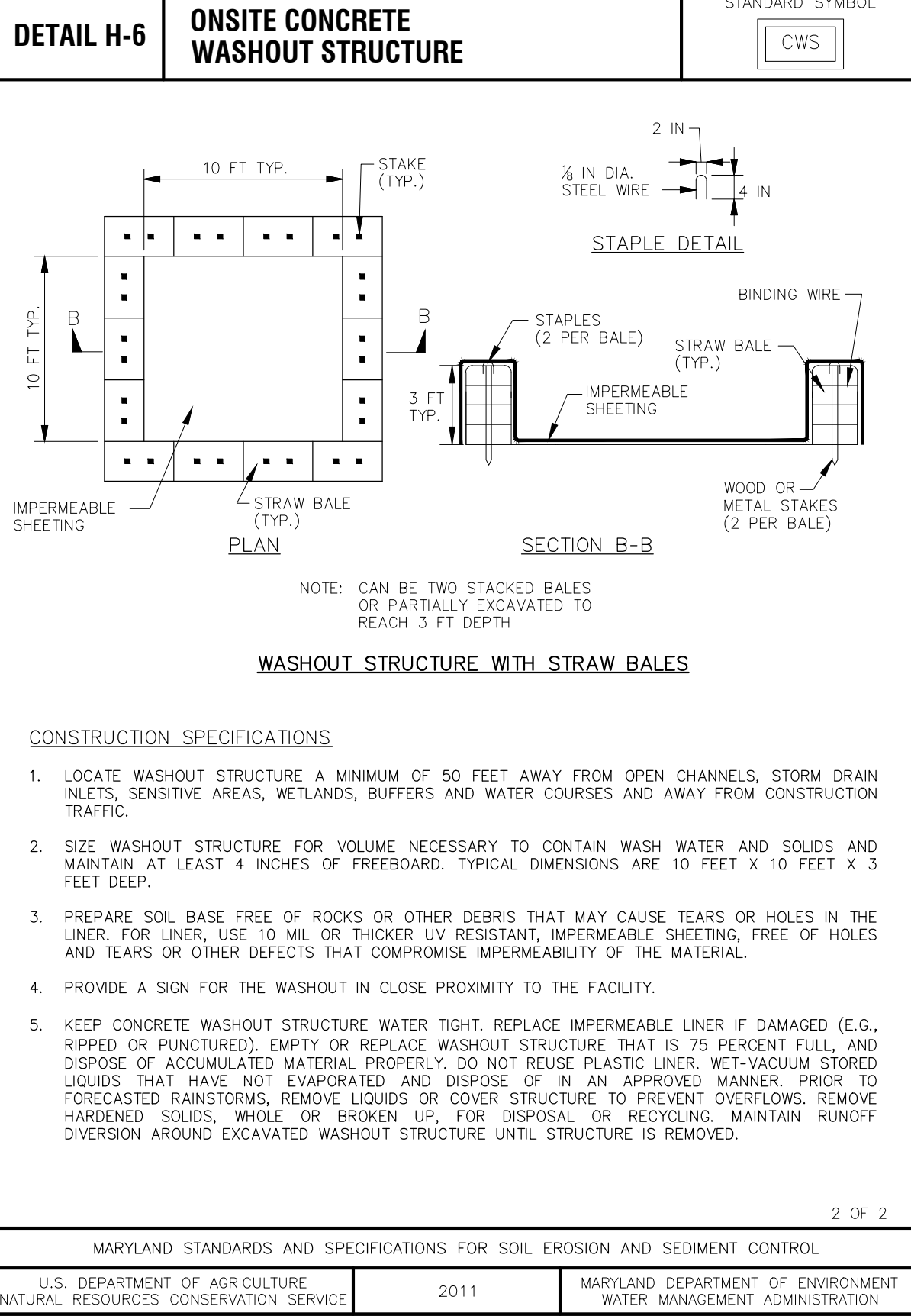
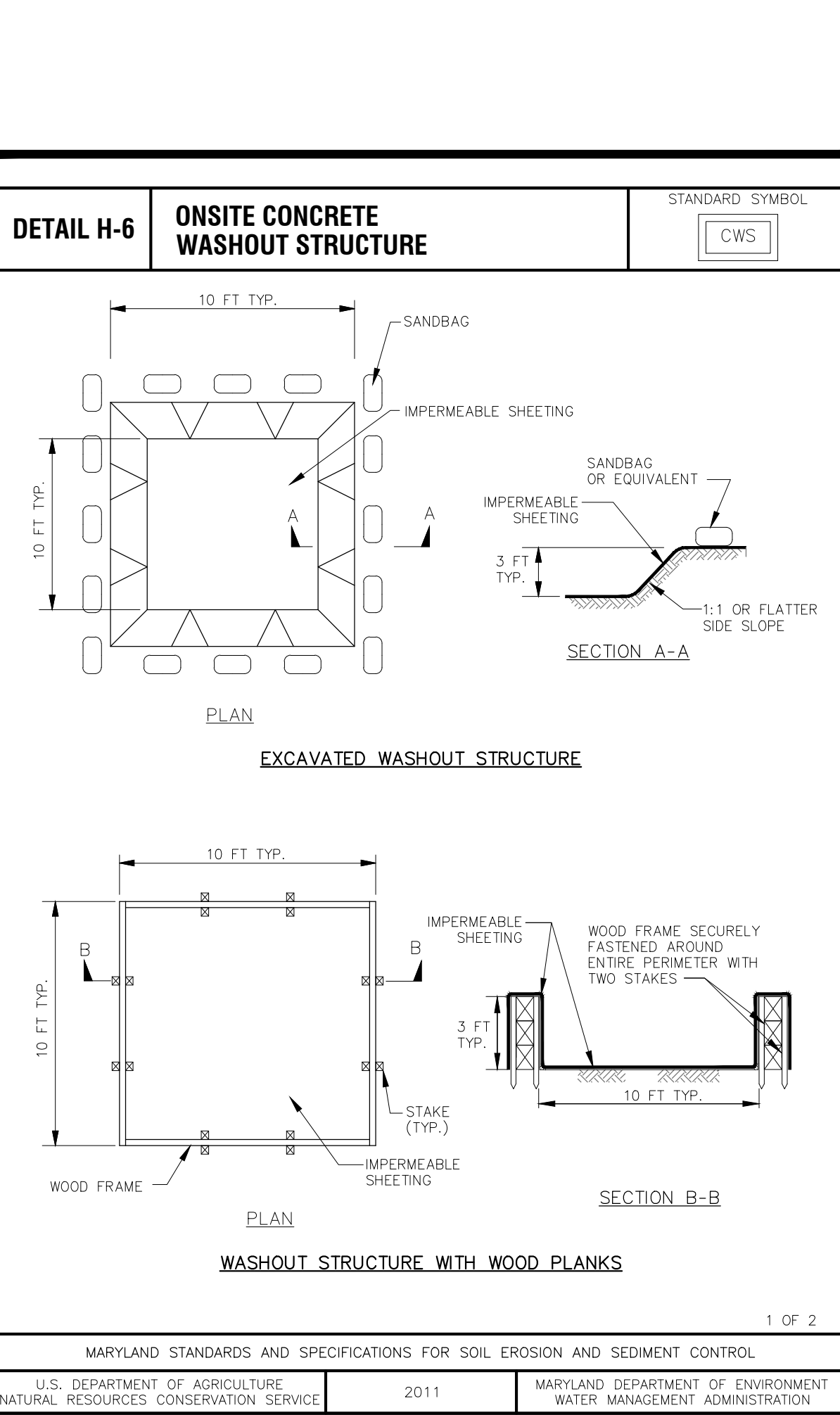
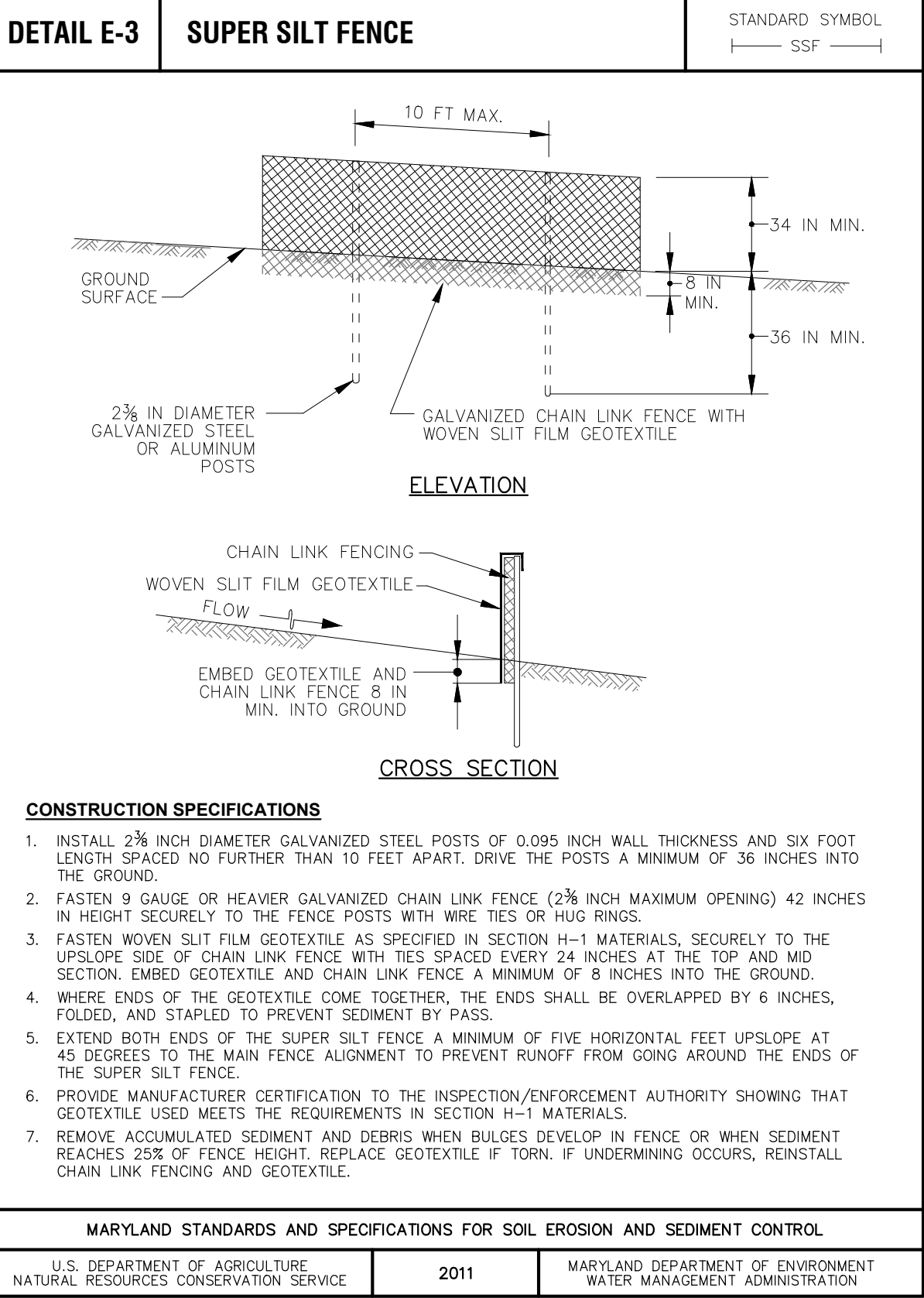
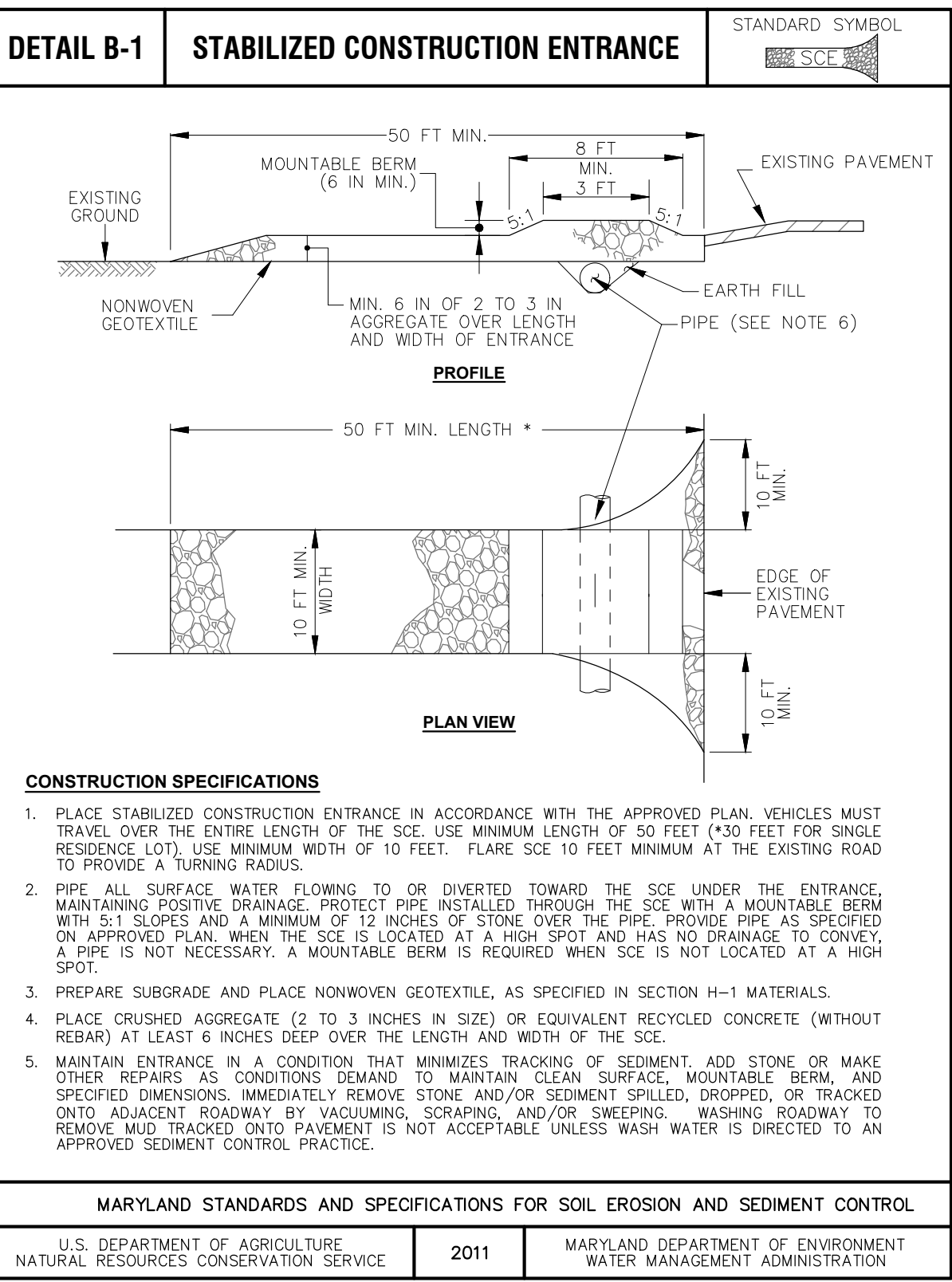
STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. The permittee shall notify the Department of Permitting Services (DPS) forty-eight (48) hours before commencing any land disturbing activity and, unless waived by the Department, shall be required to hold a pre-construction meeting between them or their representative, their engineer, and an authorized representative of the Department.
2. The permittee must obtain inspection and approval by DPS at the following points:
- At the required pre-construction meeting
 - Following installation of sediment control measures and prior to any other land disturbing activity
 - During the installation of a sediment basin or stormwater management structure at the required inspection points (see Inspection Checklist on plan). Notification prior to commencing construction is mandatory.
 - Prior to removal or modification of any sediment control structure(s).
 - Prior to final acceptance.
3. The permittee shall construct all erosion and sediment control measures per the approved plan and construction sequence, shall have them inspected and approved by the Department prior to beginning any other land disturbances, shall ensure that all runoff from disturbed areas is directed to the sediment control devices, and shall not remove any erosion or sediment control measure without prior permission from the Department.
4. The permittee shall protect all points of construction ingress and egress to prevent the deposition of materials onto traversed public thoroughfare(s). All materials deposited onto public thoroughfare(s) shall be removed immediately.
5. The permittee shall inspect periodically and maintain continuously in effective operating condition, all erosion and sediment control measures until such time as they are removed with prior permission from the Department. The permittee is responsible for immediately repairing or replacing any sediment control measures which have been damaged or removed by the permittee or any other person.
6. * Following initial soil disturbance or re-disturbance, permanent or temporary stabilization must be completed within:
- Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes and all slopes steeper than 3:1 horizontal to 1 vertical (3:1); and
 - Seven (7) calendar days as to all other disturbed or graded areas on the project site not under active grading.
- All areas disturbed outside of the perimeter sediment control system must be minimized and stabilized immediately. Maintenance must be performed as necessary to ensure continued stabilization.
7. The permittee shall apply "soil, seed, and anchored straw mulch, or other approved stabilization measures to all disturbed areas within seven (7) calendar days after stripping and grading activities have ceased on that area. Maintenance shall be performed as necessary to ensure continued stabilization. Active construction areas such as borrow or stockpile areas, roadway improvements, and areas within fifty (50) feet of a building under construction may be exempt from this requirement, provided that erosion and sediment control measures are installed and maintained to protect those areas.
8. Prior to removal of sediment control measures, the permittee shall stabilize all contributory disturbed areas with required soil amendments and topsoil, using sod or an approved permanent seed mixture and an approved anchored mulch. Wood fiber mulch may only be used in seeding season when the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized within seven (7) calendar days of establishment. When property is brought to finished grade during the months of November through February, and permanent stabilization is found to be impractical, an approved temporary seed and straw anchored mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be completed prior to the following April 15.
9. The site permit, work, materials, approved SCISM plans, and test reports shall be available at the site for inspection by duly authorized officials of Montgomery County.
10. Surface drainage flow over undisturbed cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing mechanical devices to lower the water down slopes without causing erosion. Dikes shall be installed and maintained at the top of cut or fill slopes until the slope and drainage area to it are fully stabilized, at which time they must be removed, and final grading done to promote sheet flow drainage. Mechanical devices must be provided at points of concentrated flow where erosion is likely to occur.
11. Permanent swales or other points of concentrated water flow shall be stabilized within 3 calendar days of establishment with "sod or seed with an approved erosion control matting or by other approved stabilization measures.
12. Sediment control devices shall be removed, with permission of the Department, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.
13. * No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas or on residential lots. A slope gradient of up to 2:1 will be permitted in non-maintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.
14. The permittee shall install a splashblock at the bottom of each downspout unless the downspout is connected by a drain line to an acceptable outlet.
15. For finished grading, the permittee shall provide adequate gradients so as to prevent water from standing on the surface of lawns more than twenty-four (24) hours after the end of a rainfall, except in designated drainage courses and swale flow areas, which may drain as long as forty-eight (48) hours after the end of a rainfall.
16. Sediment traps or basins are not permitted within 20 feet of a building which is existing or under construction. No building may be constructed within 20 feet of a sediment trap or basin.
17. All inlets in non-sump areas shall have asphalt berms installed at the time of base paving establishment.
18. The sediment control inspector has the option of requiring additional sediment control measures, as deemed necessary.
19. All trap elevations are relative to the outlet elevation, which must be on existing undisturbed ground.
- * Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control.
20. Sediment trap(s)/basin(s) shall be cleaned out and restored to the original dimensions when sediment has accumulated to the point of one-half (1/2) the wet storage depth of the trap/basin (1/4 the wet storage depth for ST-III) or when required by the sediment control inspector.
21. Sediment removed from traps/basins shall be placed and stabilized in approved areas, but not within a floodplain.
22. All sediment basins and traps must be surrounded with a welded wire safety fence. The fence must be at least 42 inches high, have posts spaced no farther apart than 8 feet, have mesh openings no greater than two inches in width and four inches in height, with a minimum of 14-gauge wire. Safety fence must be maintained in good condition at all times.
23. No excavation in the areas of existing utilities is permitted unless their location has been determined. Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work.
24. Off-site spoil or borrow areas must have prior approval by DPS.
25. Sediment trap/basin dewatering for cleanout or repair may only be done with the DPS inspector's permission. The inspector must approve the dewatering method for each application. The following methods may be considered:
- A. Pump discharge may be directed to another on-site sediment trap or basin, provided it is of sufficient volume and the pump intake is floated to prevent agitation or suction of deposited sediments; or
 - B. The pump intake may utilize a Removable Pumping Station and must discharge into an undisturbed area through a non-erosive outlet; or
 - C. The pump intake may be floated and discharge into a Dirt Bag (12 oz. non-woven fabric), or approved equivalent, located in an undisturbed buffer area.
- Remember:** Dewatering operation and method must have prior approval by the DPS inspector.
27. The permittee must notify the Department of all utility construction activities within the permitted limits of disturbance prior to the commencement of those activities.
- * Topsoil must be applied to all previous areas within the limits of disturbance prior to permanent stabilization in accordance with MDE "Standards and Specifications for Soil Preparation, Topsoiling, and Soil Amendments".
- * Class of topsoil used must be Maryland State Certified. Soil labels must be made available to the job foreman and the Sediment Control Inspector.

APPROVED
Montgomery County
Historic Preservation Commission

Karen Bulleit

REVIEWED
By Dan Bruechert at 12:54 pm, May 15, 2025



CAS JOB NO.: 24-642
DATE: 04/20/25

DATE	REVISION
10/28/24	LAK - Building Permit Site Plan Base Sheet to Client and Architect
12/17/25	LAK - Preliminary Site / Grading Plan to Client & Architect
04/23/25	LAK - Draft SCP To Client & Architect

PROFESSIONAL ENGINEER CERTIFICATION:

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 57600, expiration date 05/02/27, and that these documents meet the requirements of the Professional Engineer Act of 1991, and that these documents meet the requirements of the Professional Engineer Act of 1991, and that these documents meet the requirements of the Professional Engineer Act of 1991.

LANE A. KURKJIAN, P.E.
05/02/25

Lot 30, Block 34, Chevy Chase, Section 2
Plat Book 2, Plat No. 106, Recorded 04/17/1940
Bethesda (7th) Election District, Montgomery County, MD

4 East Kirke Street
Chevy Chase, Maryland 20815

DESIGN CERTIFICATION

I hereby certify that this plan has been prepared in accordance with the "2011 Maryland Standards and Specification for Soil Erosion and Sediment Control", Montgomery County Department of Permitting Services Executive Regulations 5-90, 7-02AM and 36-90, and Montgomery County Department of Public Works and Transportation "Storm Drain Design Criteria" dated August 1988.

Lane Kurkjian
DESIGNER
LANE A. KURKJIAN, P.E.
PRINTED NAME AND TITLE

05/02/25
DATE
No. 57600
REGISTRATION NUMBER

CERTIFICATION OF THE QUANTITIES

I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to 10 cubic yards of excavation, 10 cubic yards of fill and the total area to be disturbed as shown on these plans has been determined to be 8,200 square feet.

Lane Kurkjian
DESIGNER
LANE A. KURKJIAN, P.E.
PRINTED NAME AND TITLE

05/02/25
DATE
No. 57600
REGISTRATION NUMBER

OWNER/DEVELOPER CERTIFICATION

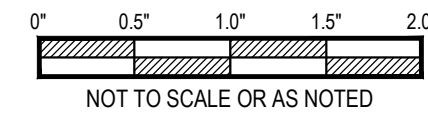
I/We hereby certify that all clearing, grading, construction, and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

Lane Kurkjian
DESIGNER
LANE A. KURKJIAN, P.E.
PRINTED NAME AND TITLE

05/02/25
DATE
No. 57600
REGISTRATION NUMBER

CAS ENGINEERING-MD
10 South Bend Street
Frederick, Maryland 21701
301-507-8031 Phone
info@casengineering.com
www.casengineering.com

CAS ENGINEERING-DC, LLC
4836 MacArthur Boulevard, NW, 2nd Floor
Washington, DC 20007
202-393-7200 Phone
info@cas-dc.com
www.cas-dc.com



SHEET TITLE:
Sediment Control
Notes, Details, and
Certifications