

# 2021 IECC CODE COMPLIANCE

## IECC CODE COMPLIANCE

1.1 Climate zone 4A

2.2 Compliance Method: Mandatory and Prescriptive Provisions

2.1.1 Vapor Retarder: Wall assemblies in the building thermal envelope shall comply with vapor retarder requirements of Section R702.7 of the International Residential Code, 2018 Edition.

2.1.2 Attic Insulation: Raised Heel Trusses R-49 R-38

2.1.2 Wood Frame Wall: R-20 or R13 + R5 continuous insulation.

2.1.2 Basement Wall Insulation: R-13/R-10 Foil Faced Continuous, uninterrupted Batts Full Height

2.1.2 Crawl Space Wall Insulation: R-13/R-10 Foil faced Continuous Batts Full Height extending from floor above to finish grade level and then vertically or horizontally an additional 2' -0".

2.1.2 Floor Insulation over Unconditioned Space: R-19 batt insulation.

2.1.2 Heated Slab Insulation: 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.

2.1.2 Window U-Value/SHGC .32 (U-Value)/.40 (SHGC)

2.2.10 Slab on Grade Floors Less Than 12" Below Grade: R-10 Rigid Foam Board Under Slab Extending Either 2' -0" Horizontally or 2'-0" Vertically

2.2.4 Attic Access: Attic access scuttle will be weather-stripped and insulated R-49

2.4 Building Thermal Envelope (air leakage): Exterior walls and penetrations will be sealed per this section of the 2018 IECC with caulk, gaskets, weatherstripping or an air barrier suitable material. Sealing methods between dissimilar materials shall allow sealing for differential expansion and contraction.

2.4.1.1 Installation: The components of the building thermal envelope as indicated in Table

2.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria indicated in Table R402.4.1.1, as applicable to the method of construction.

2.4.1.2 Building Thermal Envelope Tightness Test: Building envelope shall be tested and verified as having an air leakage rate of not exceeding 3 air changes per hour. Testing shall be conducted in accordance with ASTM E779 or ASTM E 1827 with (blower door) at a pressure of 0.2 inches w.g. (50 pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building inspector.7/15

2.4.2 Fireplaces: New wood burning fireplaces will have tight-fitting flue dampers or doors, and outdoor combustion air. Fireplace doors shall be listed and labeled in accordance with UL 127 (factory built fireplace) and UL 907 (masonry fireplace).

2.4.4 Rooms containing fuel-burning appliances where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air shall be located outside the building thermal envelope or enclosed in a room isolated from inside the thermal envelope.  
Options: 1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside. 2. Fireplaces and stoves complying with Section R402.4.2 and Section R402.4.3 of the IRC.

2.4.5 Recessed Lighting: Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage.

3.1 Controls: All dwelling units will have at least (1) programmable thermostat for each separate heating and cooling system per 2018 IECC Section 403.1.1.

3.1.2 Where a Heat pump system having supplementary electric resistance heat is used the thermostat shall prevent the supplementary heat from coming on when heat pump can meet heating load.

3.3.1 Mechanical Duct Insulation: Supply and Return Ducts in Attic R-8 minimum, R-6 when less than 3 inches. Supply and Return Ducts outside of conditioned spaces R-8 minimum. All other ducts except those located completely inside the building thermal envelope R-6 minimum. Ducts located under concrete slabs must be R-6 minimum.

3.3.2 Duct Sealing: All ducts, air handlers, filter boxes will be sealed. Joints and seams will comply with section M1601.4.1 of the IRC. A duct tightness test ("Duct Blaster" duct leakage test) will be performed on all homes and shall be verified by either a post construction test or a rough-in test. Duct tightness test is not required if the air handler and ducts are located within the conditioned space.

3.3.6 Ducts Buried Within Ceiling Insulation: The supply and return ducts shall have an insulation R-value not less than R-8. At all points along each duct, the sum of the ceiling insulation R-value against and above the top of the duct, and against and below the bottom of the duct, shall be not less than R-19, excluding the R-value of the duct insulation. Penetrations of the supply duct that are less than 3 feet (914 mm) from the supply outlet shall not be required to comply with these requirements

3.6 Mechanical Ventilation: Outdoor (make-up and exhausts) air ducts to be provided with automatic or gravity damper that close when the ventilation system is not operating.

3.6.1 Whole-house mechanical ventilation system fan efficiency to comply with TABLE R403.6.1.

3.7 Equipment Sizing shall comply with R403.7.

4.1 Lighting Equipment: A minimum of 90% of all lamps (lights) must be high-efficacy lamps. This contractor also responsible for generating Certificate of Compliance and labeling to electrical panel or within 6 feet of the electrical panel and be readily visible.

4.4 ERI-Based Compliance: Compliance based on an ERI analysis requires that the rated design be shown to have an ERI less than or equal to the appropriate value indicated in Table R406.4 when compared to the ERI reference design.

## NOTES:

DOUBLE ALL FLOOR JOISTS UNDER WALLS ABOVE, THAT ARE FRAMED PARALLEL TO FLOOR FRAMING UNLESS NOTED OTHERWISE ON THE PLANS.

ALL FLOOR JOISTS, CEILING JOISTS & RAFTERS ARE TO BE S.P.F.

PROVIDE SOLID 2x10 BLOCKING TO BE LOCATED BETWEEN FLOOR JOISTS WHERE POSTS, FROM ABOVE, CARRYING STRUCTURAL HEADERS LAND BETWEEN FLOOR JOIST BELOW. BLOCKING TO BE BUILT UP TO THE SAME WIDTH AS POST IT IS CARRYING ABOVE.

PROVIDE ADEQUATE CLEARANCE @ PLUMBING STACKS AS REQ.

ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES ON THE PLANS, OR SPECIFICATIONS, MUST BE REPORTED TO THE ARCHITECT OR ENGINEER PRIOR TO THE START OF CONSTRUCTION.

ANY VARIATION FROM THESE PLANS THAT WILL REQUIRE CHANGES TO THE STRUCTURAL MEMBERS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.

WHERE APPLICABLE, REFER TO ENGINEERED LUMBER MFR'S SPECIFICATIONS FOR MULTI-MEMBER INSTALLATION & CONNECTION REQUIREMENTS

FASTEN MULTIPLE MEMBER JACKS TOGETHER W/ MIN. 10d NAILS @ 8" O.C. STAGGERED ALONG ENTIRE LENGTH OF MEMBERS. PROVIDE NAILING W/IN 3" OF TOP OR BOTTOM OF MEMBERS.

FASTEN MULTIPLE MEMBER BEAMS TOGETHER W/ MIN 16d NAILS @ 12" O.C. STAGGERED ALONG ENTIRE LENGTH OF MEMBERS. TWO ROWS REQUIRED FOR DEPTHS UP TO 12". THREE ROWS REQUIRED FOR DEPTHS OF 12-18". PROVIDE NAILING W/IN 22" OF EACH END OF MEMBERS. FOR BEAMS 7" OR GREATER IN WIDTH PROVIDE BOLTED CONNECTION W/ ASTM GRADE A-307 (OR BETTER) 1/2" DIA. BOLTS IN TWO ROWS 3" FROM EACH END OF BEAM @ 24" O.C. STAGGERED.

## DESIGN CRITERIA

CLIMATE AND GEOGRAPHIC DESIGN CRITERIA - table 301.2 (1)

GROUND SNOW LOAD (lbs./s.f.)		40
WIND PRESSURE (pounds per square foot)		19 +/- ( 100 m.p.h.)
SEISMIC CONDITION BY ZONE		B
SUBJECT TO DAMAGE	WEATHERING	SEVERE
	FROST LINE DEPTH	30
	TERMITE	MODERATE
	DECAY	MODERATE
WINTER DESIGN TEMP. FOR HEAT. FACILITIES		13'
RADON RESISTANT CONSTRUCTION REQ		
FLOOD ZONE		

## CODE INFORMATION

ALL WORK SHALL COMPLY WITH INTERNATIONAL CODE W/ LOCAL AMENDMENTS

2021 International Residential Code  
2021 International Energy Conservation Code  
2021 International Mechanical Code  
2018 International Plumbing Code  
2021 NFPA 101 Life Safety Code  
2020 National Electrical Code (NFPA 70)  
2009 National Fuel Gas Code (NFPA 54)

### ITEMS OF PARTICULAR NOTE

- Contractor, sub-contractor or supplier shall verify all job conditions and measurements prior to commencing work or ordering materials. Discrepancies between dimensions shown on drawings and actual field conditions should be brought to the Architect and Owner's attention immediately for clarification prior to proceeding with work. These plans are not to be scaled for Construction purposes. Written dimensions and notes supersede all scaled reference. If there are any conflicts, discrepancies or ambiguity with dimensioning the Contractor shall notify the Architect immediately for clarification. Field verify ALL proposed dimensions

- As a matter of record, JRArchitecture, LLC shall not be responsible for construction means and methods or omissions by the contractor, sub-contractor or any other persons performing work in accordance with these drawings.

- On this Project, the Contractor shall have sole supervision over, and exclusive responsibility for: demolition and temporary construction; construction means, methods, techniques, sequences, procedures, safety precautions and safety programs in connection with all demolition and construction work; and protection of persons and property during construction until final completion is attained. Services performed by Architect or its consultants during construction, if any, are intended to promote the goal that, in general, the construction work, when fully completed, will be consistent with the design intent reflected in the permit or construction drawings. Means and methods responsibility always shall be the exclusive responsibility of the Contractor and Contractor shall separately engage specialty engineers or other consultants as required to fulfill this responsibility.

## DRAWING LIST

0.01	COVER SHEET
0.02	GENERAL INFO
0.03	SIMPLIFIED PLANS
0.51	DEMOLITION PLANS
1.01	ELEVATIONS
1.02	ELEVATIONS
2.01	FOUNDATION PLAN
3.01	FIRST FLOOR PLAN
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5.01	SECTIONS
5.02	SECTIONS
5.10	WALL SECTIONS
6.01	SCHEDULES
E3.01	ELEC-FIRST FLOOR PLAN
S001	STRUCTURAL NOTES
S002	STRUCTURAL NOTES
S003	FOUNDATION PLAN
S004	FIRST FLOOR FRAMING
S005	ROOF FRAMING
S006	BRACING PLAN
S007	BRACING CALCULATIONS
S008	STRUCTURAL DETAILS

## AREA INFO

FLOOR	SQUARE FOOTAGE
GARAGE	653 s.f.
CRAWL SPACE	1,592 s.f.
FIRST FLOOR	1,728 s.f.



PROFESSIONAL CERTIFICATION  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678 Expiration Date: 6/30/2024

WARNING: THIS DOCUMENT IS AN INSTRUMENT OF PROFESSIONAL SERVICE PREPARED BY JONATHAN RIVERA ARCHITECT. ALTERATION OF THIS DOCUMENT BY ANY PARTY OTHER THAN JONATHAN RIVERA ARCHITECT IS A VIOLATION OF LAW THAT WILL BE PROSECUTED TO THE FULLEST EXTENT.

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## PROPOSED EXPANSION HERRERA-FRANKLIN ADDITION

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### ISSUE DATE

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SCALE: N/A

### COVER SHEET

# 0.01

PRINT DATE:  
Thursday, September 28, 2023

# WEATHER/THERMAL

- Insulation for slab on grade construction shall begin at the inside intersection of the slab and the foundation wall and shall extend for a minimum distance of 24" down the inside face of the foundation wall and horizontally 24" under the slab. For unheated slabs a material with an R-value of 42 is required; for heated slabs an R-value of 63 is required (or as per local code)

- Sill Sealer-compressible material shall be installed under all mud plates (foundation wall and wood floor systems) and sole plates (slab on grade)

R-Value	Thickness	Location
R-11 FS25	3 1/2"	Basement Walls
R-21	5 1/2"	2x6 Walls (exterior)
R-38	9"	Crawl Space
R-38	.	Floors exposed to unheated condition
R-49 Batt.	12"	Roof
R-49 Blown	.	Apply blown insulation as required by manufacturer's specifications

- Provide vents as per local code.

- Flashing: Prefinished aluminum or equal, at all roof offsets, chimneys, roof openings, hips, valleys, ridges, dormers and where roof intersects wall.

- Contractor shall maintain in all circumstances proper fire, sound and insulation ratings when penetrating through walls, floors, ceilings and roofs.

- All miscellaneous penetrations during construction shall be patched and repaired according to manufacturer's specifications and as per code.

- All exterior joints between windows, doors and other surfaces shall be caulked and sealed appropriately.

- DAMPPROOFING: Apply (1) coat of asphalt emulsion to exterior of all below grade walls at basement conditions. When habitable space occurs below grade, provide waterproofing membrane, aqueous based elastomeric, vinyl acrylic mastic, 35 Mil. min. thickness or other approved equal.

- SLAB VAPOR BARRIER: 6 Mil. polyethylene sheet where noted on drawings. Overlay all edges 6".

- SILL SEALER: 1/2" x 5 1/2" compressible fiberglass beneath all exterior sill plates or other approved sill sealer.

- Provide approved corrosion-resistive flashing at the intersections of masonry and wood frame construction; over projecting wood trim; where decks, porches etc. attach to wood frame construction; at wall and roof intersection; at chimney and roof intersections; in roof valleys; at all roof penetrations; and at wall openings if recommended by window and door manufacturers.

- Slab perimeters exposed to outside or within 30" of grade: 4.5x24", either vertical or horizontal from slab intersection.

- ROOFING: unless noted otherwise, roofing shall be min 200# Class "C" Fiberglass based asphalt shingles over 15 pound felt. Eave flashing to a point 24" inside of interior face of wall line may be also installed at the owner discretion.

- WALL SHEATHING: As shown on drawings and installed in accordance with MANUFACTURER'S RECOMMENDATIONS.

- GUTTERS AND LEADERS: .032" Prefinished aluminum gutters with .024" prefinished aluminum leaders. Lead to splashblocks or collector as required.

# MASONRY

- Maximum vertical distance of unbalanced fill measured from the top of the lower level slab to outside finished grade shall not exceed the following, for unreinforced walls where unstable soil or ground water conditions do not exist.

Type of Wall	Height of Fill
8" C.M.U.	4'-0"
12" C.M.U. (hollow)	6'-0"
12" C.M.U. (solid)	7'-0"
8" Poured Concrete	7'-0"
10" Poured Concrete	8'-0"

- Masonry veneer shall be installed over 15# felt or approved water repellent sheathing. Through-wall flashing and weeps shall be provided at any location where interior space projects beyond the face of the veneer, i.e. bay windows, Off-set chimneys, etc..

- Masonry veneer shall be attached and anchored in accordance with the local code requirements.

- Walls over 7'-0" or on unstable soil shall be engineered and certified by a registered professional engineer.

- Concrete masonry units shall meet ASTM C-90 Grade A solid block or ASTM C-145 Grade B Standards and be 28 DAYS OLD before installation. Minimum net compression strength of block to be 2000 psi.

- Parging over CMU walls to be not less than 3/8" Portland cement parging from footing to finished grade. Parging and poured concrete walls shall be covered with a coat of approved bituminous material applied at the recommended rate below grade.

- MASONRY LINTELS: Provide lightweight pre-cast lintels for all openings and recesses in CMU walls. Provide (1) 4x8 lintel for each 4" of wall thickness. Reinforce each lintel with two #4 bars at top and bottom and with #2 ties spaced 9" O.C., unless noted otherwise. Precast lintel to have minimum 8" bearing at each end. Such lintels shall not support any superimposed loads.

- Use Type "M" mortar for masonry below grade in contact with earth.

- Use Type "N" mortar for exterior above-grade load bearing and non-load bearing walls, and for other applications where another type is not indicated.

# CONCRETE

- Concrete works shall conform to American Concrete Institute Standard 318-83

- Bottom of all footings shall be located a minimum of 3 3/8" (or as per local code) below finished grade. Slope or depth of footing / foundation may vary according to local site or frost conditions.

- All interior concrete slabs shall have 6"x6"x10" W.W.M. at control joints. Monolithic turned down slabs for townhouses shall have a control joint between units.

- Concrete used in exposed areas implicit to freezing and thawing (both during construction and service life) shall be air-entrained in accordance with local code. Exterior flat-work shall be coated with an approved curing compound.

- Foundation walls of habitable rooms located below grade shall be dampproofed or water proofed using materials and methods approved by local building jurisdiction.

- All work shall comply to local code.

Type of Concrete Construction	Minimum Specified Compressive Strength
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- Footings 3000 PSI
- Interior Basement Slabs 3500 PSI
- Foundation Walls 3000 PSI
- Garage and Exterior Slabs 3500 PSI

(or as per local code)

- Concrete works shall conform to American Concrete Institute Standard 318-83

- All Interior Concrete footings and slabs shall have a minimum 28 Day Compressive Strength of 2500 psi - unless noted otherwise.

- REINFORCING RODS: ASTM A-615 and A-305 MESH: 6x6 - 1.4/1.4 WWF ASTM A-185. Reinforcing in footings is required where variations in soil conditions may exist.

- All interior slabs of 30 FEET or more in any dimension shall have WWF. Control Joints, or Fiber Reinforcement.

- Vapor barrier under all slabs EXCEPT garages: 6 Mil Polyethylene, Lap all edges 6", Lay over 4" Gravel bed.

- Exterior Concrete Slabs: 5% to 7% Air Entrained and shall have a minimum 28 Day Compressive Strength of 2500 psi - unless noted otherwise.

- Foundation Walls: Poured in place walls shall have a minimum 28 Day Compressive Strength of 3000 PSI. (SEE 4.01)

# SITWORK

- GENERAL: These drawings do not cover sitework, grading or landscaping

- Building foundations have been designed based on an assumed soil bearing capacity of 3000 PSF. Additional engineering is required if soil bearing capacity is less than 3000 PSF.

- Provide continuous perimeter foundation drainage in accordance with local code requirements. Where both interior and exterior drains are required, provide minimum 1 1/2" dia. bleeder pipes through mid line of footing at max 8" o.c. Typically, drains shall lead to sump pits or to positive daylight discharge points.

- Slope all stoops, porches, walks and garage slabs away from building 1/8" minimum per foot.

- All work shall comply to local code.

# SPECIALTIES

- Concrete works shall conform to American Concrete Institute Standard 318-83

- FIREPLACES: Pre-built U.L. Approved, selected by the owner, and installed according to code and manufacturer's recommendations, IF APPLICABLE.

- Toilet and bath accessories per plans or by owner.

- MIRRORS: TBD by builder or by owner.

- Provide two towel bars for each full bath, one per powder room.

- Provide either shower rods 80" a.f.f. or tempered or safety laminate glass doors, per owner.

# DOORS and WINDOWS

- Provide safety glazing as required by local code.

- Garage door into dwelling shall be fire rated minimum 45 minute or as per local building code. The threshold of the door opening between the garage and the adjacent interior space shall not be less than 4" above the garage door. (or as per local code)

- All doors and windows shall be installed in accordance with manufacturer's specifications, and as per local code.

# MISCELLANEOUS

- Pre-Built fireplace shall be UL approved and installed according to code and manufacturer's specifications and recommendations.

- Chimneys shall extend a minimum of 2'-0" above any roof structure within 10'-0".

- Provide overflow pans and drains for wet appliances when located on bedroom level, or as noted on plans.

- Provide 22"x54" attic access with pull chain light (or as per local code)

- Kitchen and bath plans are approximate. See manufacturer's plans for exact layout and dimensions.

# WOOD

- Wall bracing shall be installed as per local code.

- All roof trusses and floor systems shall be engineered by others.

- All roof trusses and floor systems shall be braced and installed per manufacturer's specifications and as per local code. See manufacturer's plans for exact layout and construction.

- All trusses are stamped and certified by a registered engineer and meet TPI manufacturers minimum requirement.

- See drawings for type of floor construction.

- Tongue and groove floor decking glued and nailed on (SPF #2) 2x8 or 2x10 or 2x12 floor joists at 16" o.c. maximum to meet the American Plywood Association Sturd-I-Floor system.

- Tongue and groove floor decking glued and nailed on pre-engineered wood joists/trusses at 24" o.c. maximum to meet the American Plywood Association Sturd-I-Floor system.

- Fire-stopping shall be provided to cut-off concealed draft openings and to form an effective fire barrier between stories as per local code.

- Structural lumber to have minimum bending stress of 1,200 psi

- All exterior walls are 2x6 stud #16" centers, minimum SPF stud grade unless otherwise noted.

- All interior walls are 2x4 stud #16" centers, minimum SPF stud grade unless otherwise noted.

- All opening headers to be 3-2x10's unless noted otherwise

- Joist hangers to be installed as required.

- All wood less than 8" from grade shall be pressure treated. All sole plates on slabs shall be pressure treated.

- Provide bearing at all structural members as required by local code.

- All materials shall be installed per manufacturer's specifications and as per applicable building codes.

- All work shall comply to local code.

# METAL

- Strap anchors or anchor bolts shall be local code and building inspector approved: Minimum 2 straps/bolts per section of plating 12" Max. from each end and with intermediate strap/bolts at 6'-0" o.c. maximum. (or as per local code)

- Galvanized metal brick ties shall be installed as per local code.

- All steel shall conform to ASTM Specs for A-36 Steel.

- All steel designed for maximum bending stress of 24,000 psi

- Metal Joist hangers (Standard wood ledger) Shall be used where required at joist without direct bearing and be 18 GA. galvanized steel. Use all nails specified by the manufacturer.

- Veneer ties shall be 1" wide, 22 GA., galvanized steel installed 24" O.C. Horizontally and 16" O.C. Vertically.

- Steel lintels for all opening and recesses in brick or Brick Faced Masonry wall not specifically detailed: Provide (1) steel angle for each 4" of wall thickness. Steel angles to have minimum 6" bearing at each end. Horizontal leg shall be 3 1/2" unless noted otherwise.

- LINTEL SCHEDULE (UNLESS NOTED OTHERWISE ON PLANS):

L-1	3 1/2"x3-1/2"x5/16"	STEEL ANGLE	UP TO 3' OPG.
L-2	4"x 3-1/2"x5/16"	STEEL ANGLE	3' TO 5' OPG.
L-3	5"x 3-1/2"x3/8"	STEEL ANGLE	5' TO 6'-6" OPG.
L-4	6"x3-1/2"x1/2"	STEEL ANGLE	UP TO 9' OPG.
L-5	6"x 4"x5/8"	STEEL ANGLE	UP TO 10'-0"
L-6	8" OR 9"x4"x9/16"	STEEL ANGLE	16' GARAGE

- Lintels shown shall not support any superimposed loads.

- All steel angles in masonry walls are to be flashed and painted.

- Paint all exterior ferrous or galvanized metals EXCEPT completely pre-finished factory items.

- All work shall comply to local code.

# GENERAL NOTES

- All work shall comply to all applicable local codes.

- All construction shall be classified as and comply to either of the following:

-- Use Group R-4 under the 2021 International Residential Code.

- All work shall comply to International Energy Conservation Code, 2021 edit. SEE IECC CODE COMPLIANCE notes below

- These plans and notes are the property and sole responsibility of JRArchitecture, LLC. Use of these plans without the written consent of JRArchitecture, LLC. is prohibited.

- These plans are subject to modification as necessary to meet code requirements and or facilitate mechanical/plumbing installations or to incorporate design improvements. The Architect and the Owner reserves the right to make any changes, for any reason, at any time, providing they comply with the code.

- The Sub-Contractor shall compare and coordinate all drawings. When a discrepancy or an error or omission exists, he shall comply with the code and contact the Architect and the Owner in writing for proper adjustment.

- These plans are not to be scaled for Construction purposes. Written dimensions and notes supersede all scaled reference.

- In the event certain features of Construction are not fully shown on the drawings, their construction shall be of the same character as for similar conditions that are shown or noted.

- Integral garages in dwelling units shall be separated from all adjacent living space with fire separation as required by local code.

- Field verify ALL dimensions

# DESIGN - LIVE LOADS

RECOMMENDED MINIMUMS:		SNOW LOADS:	
- Ground Snow Load	55 psf	ROOF:	: 12.6 PSF
- Roof	40 psf	GROUND:	: 20.0 PSF
- Sleeping Floors	30 psf	FLAT ROOF:	: 14.0 PSF
- Living Floors	40 psf	EXP. FACTOR:	: 0.07
- Exterior Decks	60 psf	IMPORT FACTOR:	: 1.0
- Stairs	100 psf	ATTIC AREAS	: 10PSF
- Garage Slabs	50 psf	UNACCESSIBLE:	: 20 PSF
- Wind Load	17 psf	ACCESSIBLE:	: 14 PSF (EXPOSURE C)
- Dead Load	10 psf	WIND LOAD:	: 30 PCF MAXIMUM
- Guardrails	200'	FLUID PRESSURE:	at any point in any direction.

(or as per local code)

LOADS GREATER THAN 30 PCF REQUIRE FOUNDATION WALLS TO BE ENGINEERED.

# STAIR CRITERIA

- INTERIOR and EXTERIOR STAIRS

- All stairs shall comply with all local codes.  
 - Minimum finish width: 36"  
 - McWhorter finished headroom height: 6'-8"  
 - Maximum riser height: 7 3/4" Exterior 7"  
 - Minimum tread depth: 11"  
 - Maximum space between balusters: 4"  
 - Handrail height shall not be less than 34" or greater than 38" and may not project more than 3 1/2" into stair width.

- Provide a minimum of 1 1/2" space between handrail and wall.

- Stair winder shall have a minimum inside width of 6" and a minimum of a 9" tread when measured 12" from inside corner.  
 - Stair landings shall be a minimum of 36" x 36"

- Stairways with 3 or more risers are required to have a handrail.

# MECH. PLUMB. ELEC.

- Mechanical contractor is responsible for the design and installation of mechanical systems including duct sizes, trunk and register size for air conditioning and heating. Systems shall be installed per manufacturer's specifications and recommendations and as per all applicable building codes.

- Plumbing contractor is responsible for the design and installation of plumbing and piping. All plumbing, piping and fixtures shall be installed per manufacturer's specifications and recommendations and as per all applicable codes.

- Electrical contractor is responsible for the design and installation of all electrical systems. All electrical work shall meet the requirements of the National Electric Code, the local power company and all applicable codes. Fixtures and apparatus are selected by the builder and shall be UL approved.

- Smoke & Carbon Monoxide detectors - Provide a minimum of one ceiling mounted fixture per floor, hard wired to a nearby circuit and interconnected for simultaneous activation with battery backup. Provide detectors at each sleeping room if required by local code. Provide detectors outside each sleeping area within 10'-0" of each door. Supply and install Per IRC R314 and R315. Provide Radon vent per code.

- Fire suppression systems shall be installed as per local building code.

- All work shall comply to local code.



PROFESSIONAL CERTIFICATION  
 I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678 Expiration Date: 6/30/2024

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**PROPOSED EXPANSION**  
**HERRERA-FRANKLIN ADDITION**

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ISSUE DATE

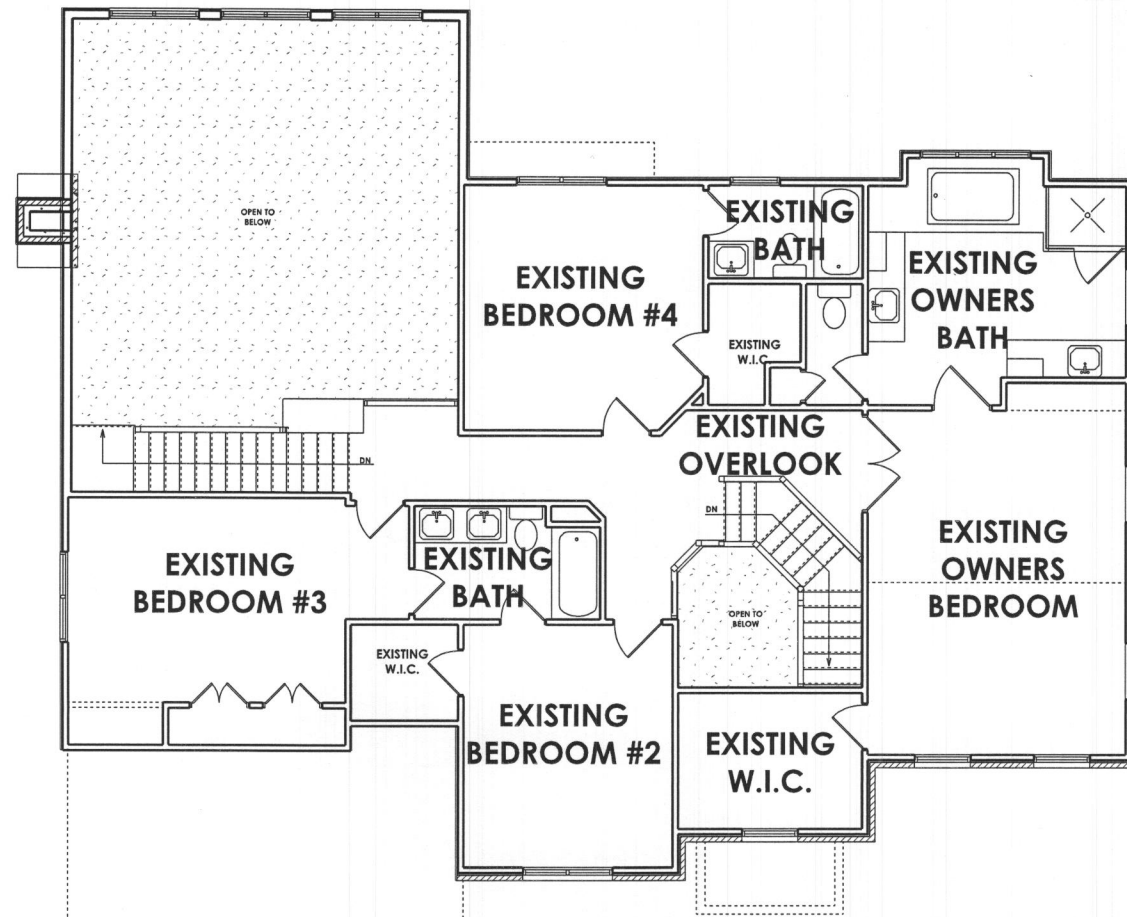
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SCALE: N.T.S.

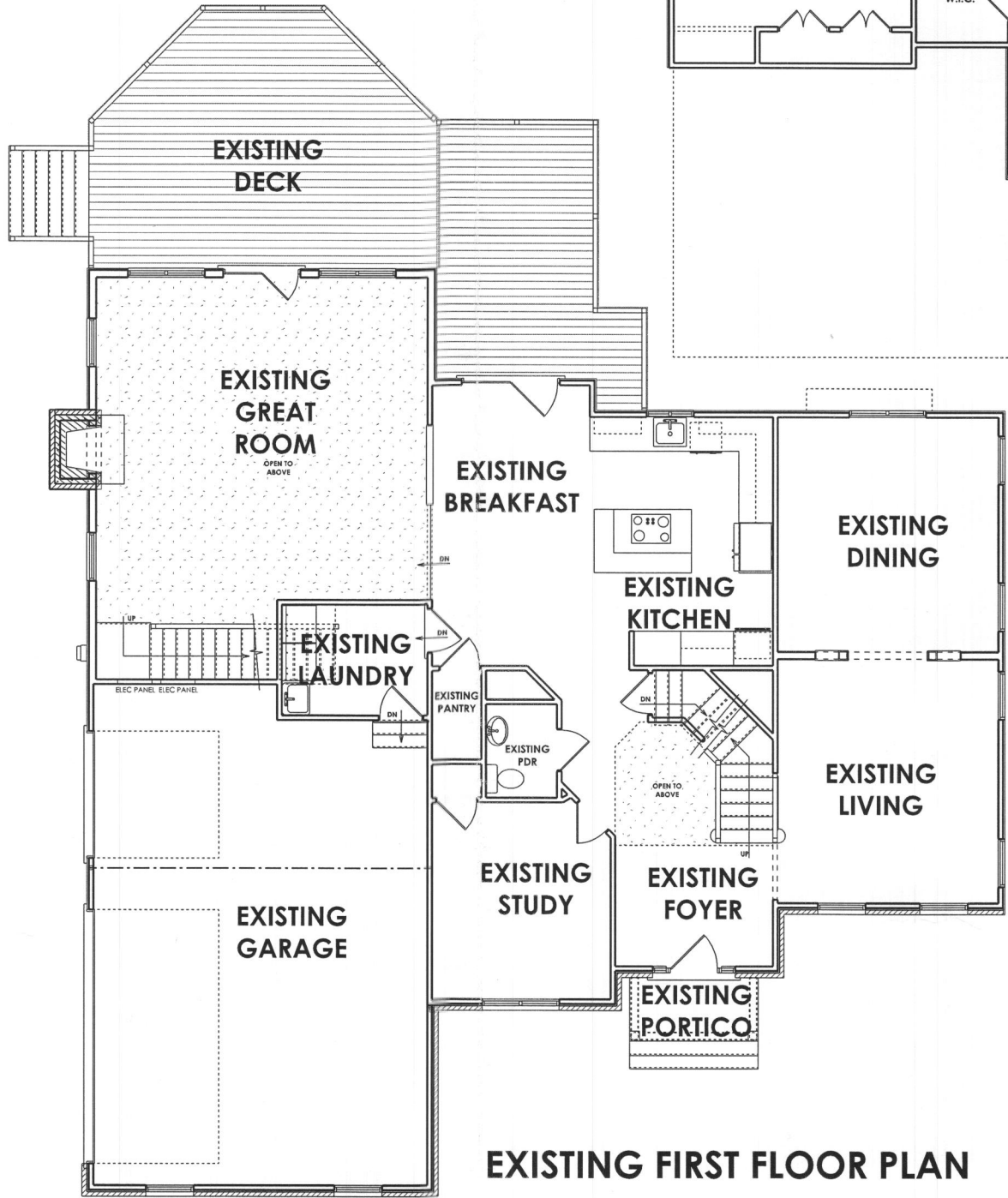
SIMPLIFIED PLANS

**0.03**

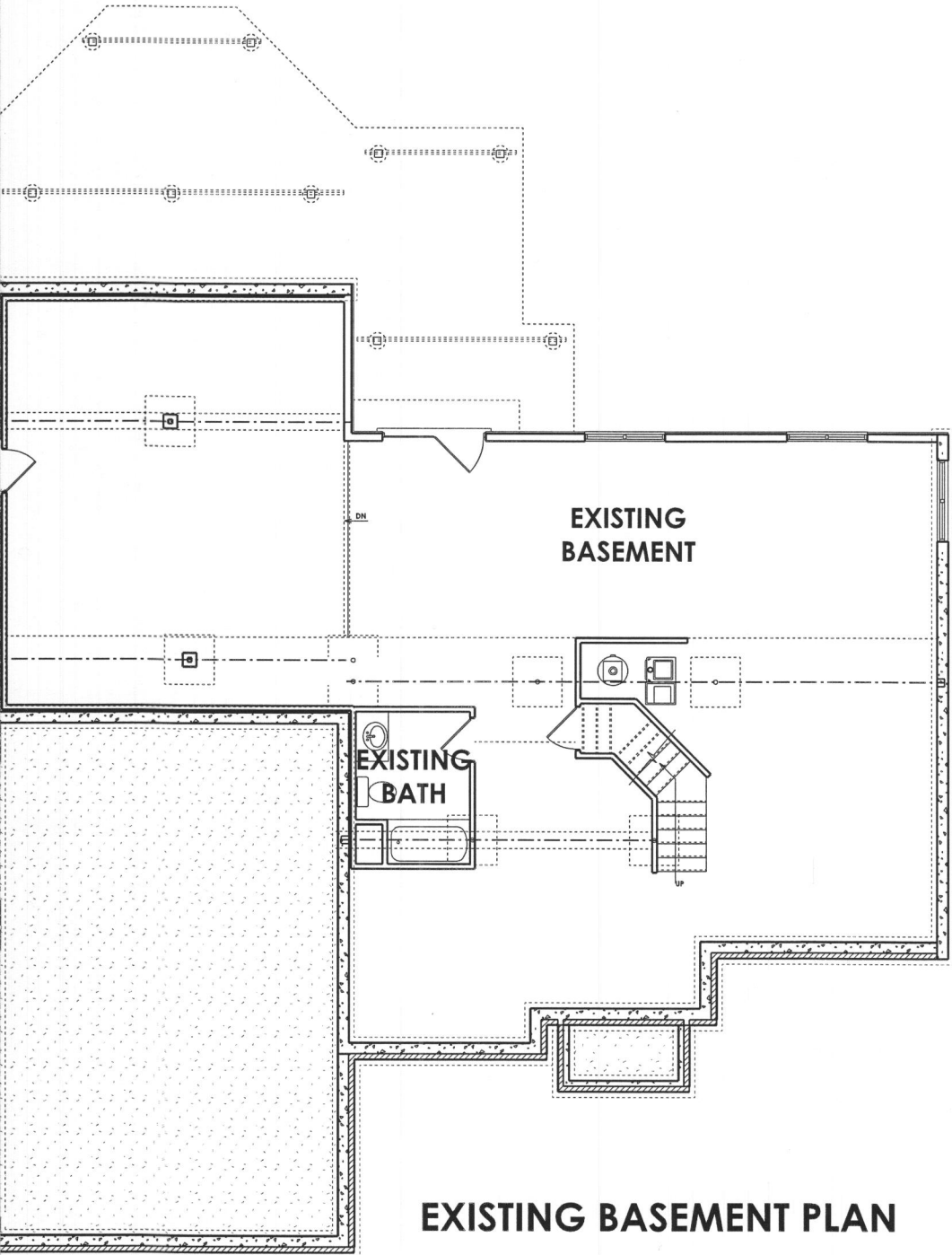
PRINT DATE:  
 Tuesday, October 10, 2023



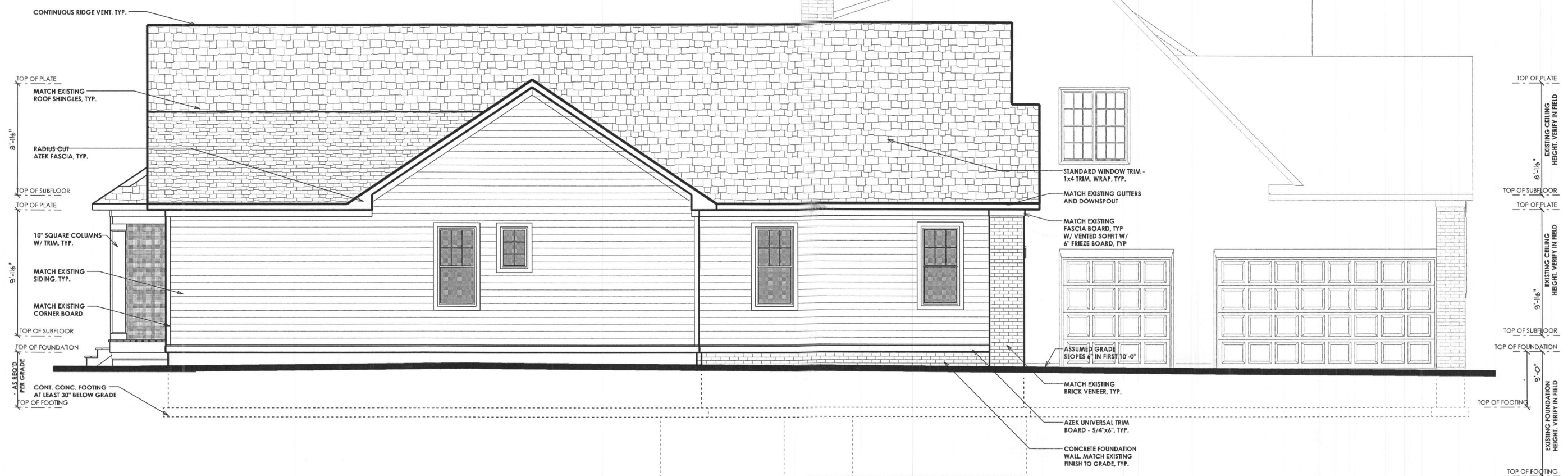
**EXISTING SECOND FLOOR PLAN**



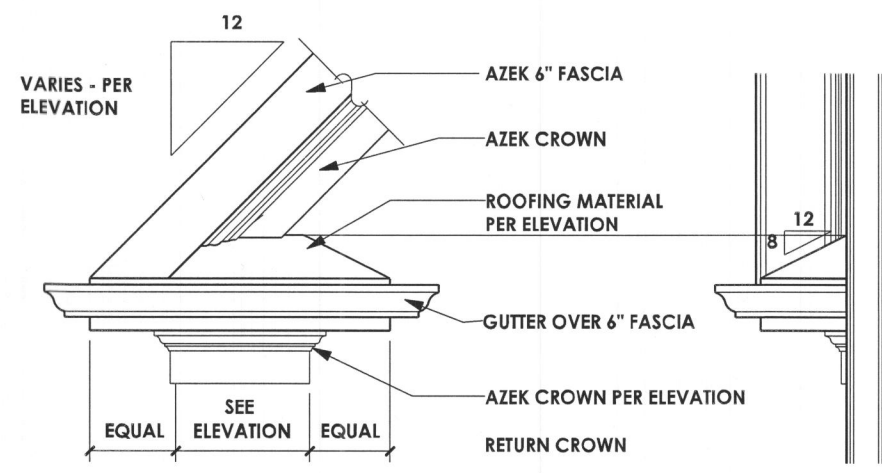
**EXISTING FIRST FLOOR PLAN**



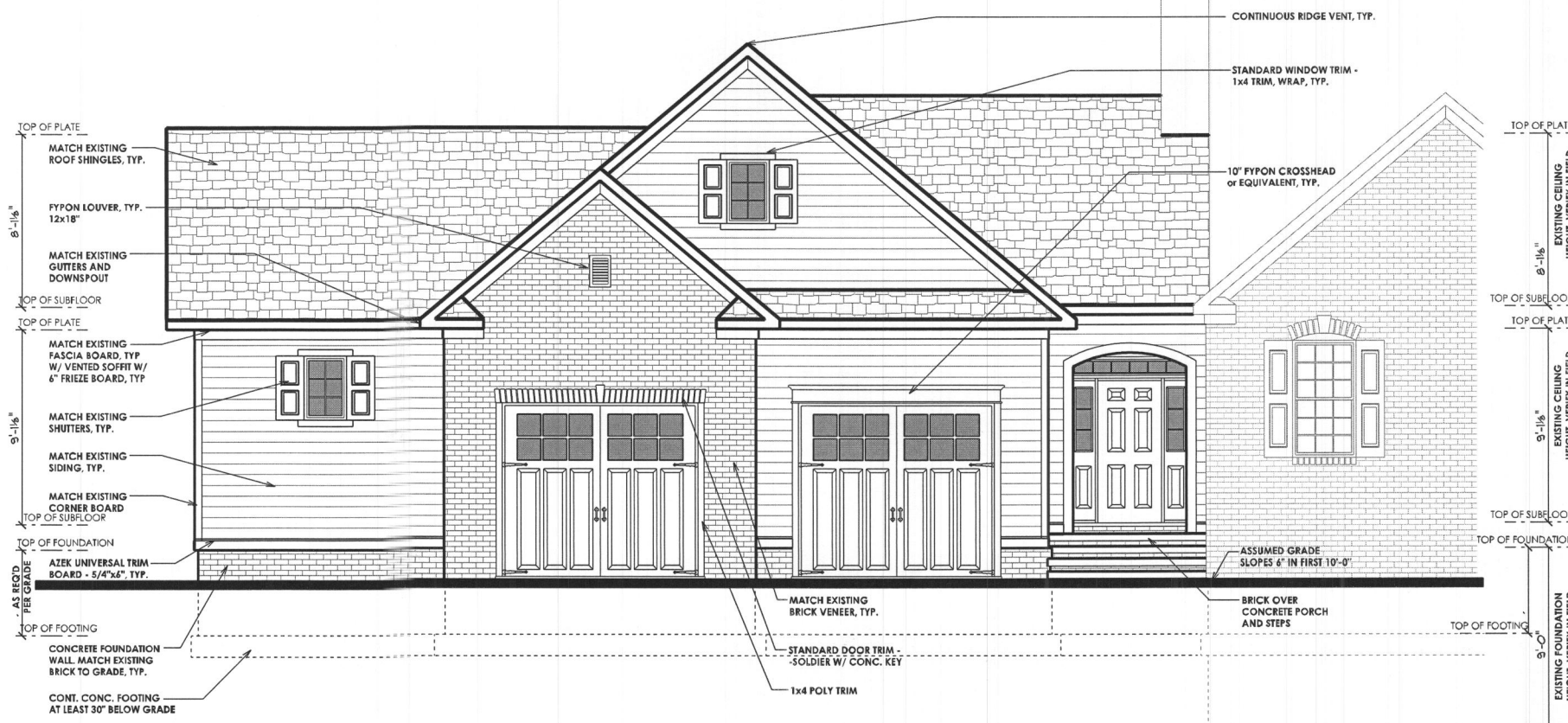
**EXISTING BASEMENT PLAN**



**LEFT ELEVATION**



**RETURN DETAIL**  
 GUTTER OVER ALL HORIZONTAL FASCIA



**FRONT ELEVATION**