

## Record Detail \* (This section is required.)

Permit Type	Permit Number	Opened Date
Building/Residential/Alteration/SFD	B22004594	12/22/2022

## Description of Work

"SFD/ Interior alterations to existing dwelling to include: Renovate 1st story owner full bath, full hall bath, and kitchen. Add 1st story mudroom & powder room. 2/9/23 REVISED PLANS UPLOADED STATE REMOVAL OF ANY WORK IN BASEMENT\*\*SMOKE DETECTORS REQUIRED

[check spelling](#)

## Address \* (This section is required.)

Search Reset Clear Get Parcel &amp; Owner

Street #	Street Name	Street Type
12850	TRIADELPHIA	RD
Unit Type	Unit #	X Coordinate
--Select--		-76.9594
		Y Coordinate
		39.27424
City	State	Zip Code
ELLICOTT CITY	MD	21042
	Primary	Yes

## Parcel \* (This section is required.)

Search Reset Clear Get Address &amp; Owner

GIS ID *	Parcel	Parcel Area	Land Value	Improved Value	Exemption Value	Plan Area
896823	162	2.07	250700	444400	193700	RURAL

## Legal Description

IMPSLOT 1 2.075 AR[ ]12850 TRIADELPHIA RD[ ]SYCAMORE SPRING

[check spelling](#)

Block	Lot	Census Tract	Council Dist	Inspection Dist	Supervisor Dist	Map #	DAP Zone
	1	603000	5				
Plan Area	State Tax Id	Subdivision Name					
	1403284395						
Section	Area	Tax Map					
		22					
Grid	Zoning District	ADC Map					
22-10	RR-DEO	4813-G7					
SDP No.	Final Plan No.	WP File No.					
Record Plat No.	WS Contract No.	FDP No.			Primary		
10 91					Yes		
Owner Occupied	Year Built	Historic District					
<input type="radio"/> Yes <input type="radio"/> No	1969	<input type="radio"/> Yes <input checked="" type="radio"/> No					
Historic District Registry No.	Stat Area	Flood Plain					
	3-08A	<input type="radio"/> Yes <input checked="" type="radio"/> No					
Building No							

## Owner (This section is not required.)

Search Reset Clear

Name \*  
HEINLEIN MAYDEN DELAINE E  
Address Line 1  
12850 Triadelphia Rd  
Address Line 2

Address Line 3

Mail City	Mail State	Mail Zip Code
Ellicott City	MD	21042
Phone	Primary	
443-622-4588	Yes	
E-mail		
dedeheinlein@gmail.com		
Cell Number	Fax Number	

## Professionals (This section is not required.)

License # *	Business Name
0	HOMEOWNER

Approved  
B22004594  
R1K  
2/23/2023

License Type *	First Name	Middle Name	Last Name
Property Owner	▼ DELAINE		HEINLEIN
Primary	Address Line 1		
Yes	▼ 12850 TRIADELPHIA ROAD		
	Address Line 2		
	City	State	ZIP Code
	ELLICOTT CITY	MD	21042
	Phone 1	Phone 2	Fax
	443-622-4588		
	E-mail		
	DEDEHEINLEIN@GMAIL.COM		

**Applicant** (This section is not required.)

Search	As Owner	As Lic. Prof	As Contact
Type *	First Name	MI	Last Name
Applicant	▼ KAREN		PITSLEY
Relationship	Full Name		
Applicant	▼ KAREN PITSLEY		
Primary	Organization Name		
No	TRANSFORMING ARCHITECTURE		
	Street Address		
	7612 BROWNS BRIDGE ROAD		
	Address Line 2		
	City	State	Zip Code
	HIGHLAND	MD	20777
	Phone	Cell	Fax
	301-776-2666	301-776-2886	
	E-mail *		
	karen@transformingarchitecture.com		

**Contact** (This section is not required.)

Search	As Owner	As Lic. Prof	As Contact
Type	First Name	MI	Last Name
Contact	▼ KAREN		PITSLEY
Relationship	Full Name		
Licensed Professional	▼ KAREN PITSLEY		
Primary	Organization Name		
Yes	T/B/D		
	Street Address		
	7612 BROWNS BRIDGE ROAD		
	Address Line 2		
	City	State	Zip Code
	HIGHLAND	MD	20777 000
	Phone	Cell	Fax
	3017762666		
	E-mail		
	info@TRANSFORMINGARCHITECTURE.COM		

**Addtl Info**

Est Construction Cost *	Housing Units *	Number of Buildings *	Public Owned
120000	0	0	No
Construction Type			
434 - Additions, Alterations and Conversions - Residential			

Execute Expression "Run expression exception, please contact agency administrator." error:

## RESIDENTIAL ALTERATION INFO

### RESIDENTIAL ALTERATION INFORMATION

Total Square Footage *	No of Stories *	Basement	Bedrooms	Full Baths	Half Baths	Water *	Sewage *
1235	2	Partially Finished	0	1	0	Private	Private
Existing Utilities *	Existing Heating System *	Existing Sprinkler System *	Type of New Fireplace	Expiration Date	Fee Exempt *		
Gas & Electric	Electric	None	--Select--	8/9/2023	<input type="radio"/> Yes <input checked="" type="radio"/> No		

Submit Cancel

Real Property Data Search ( )  
Search Result for HOWARD COUNTY

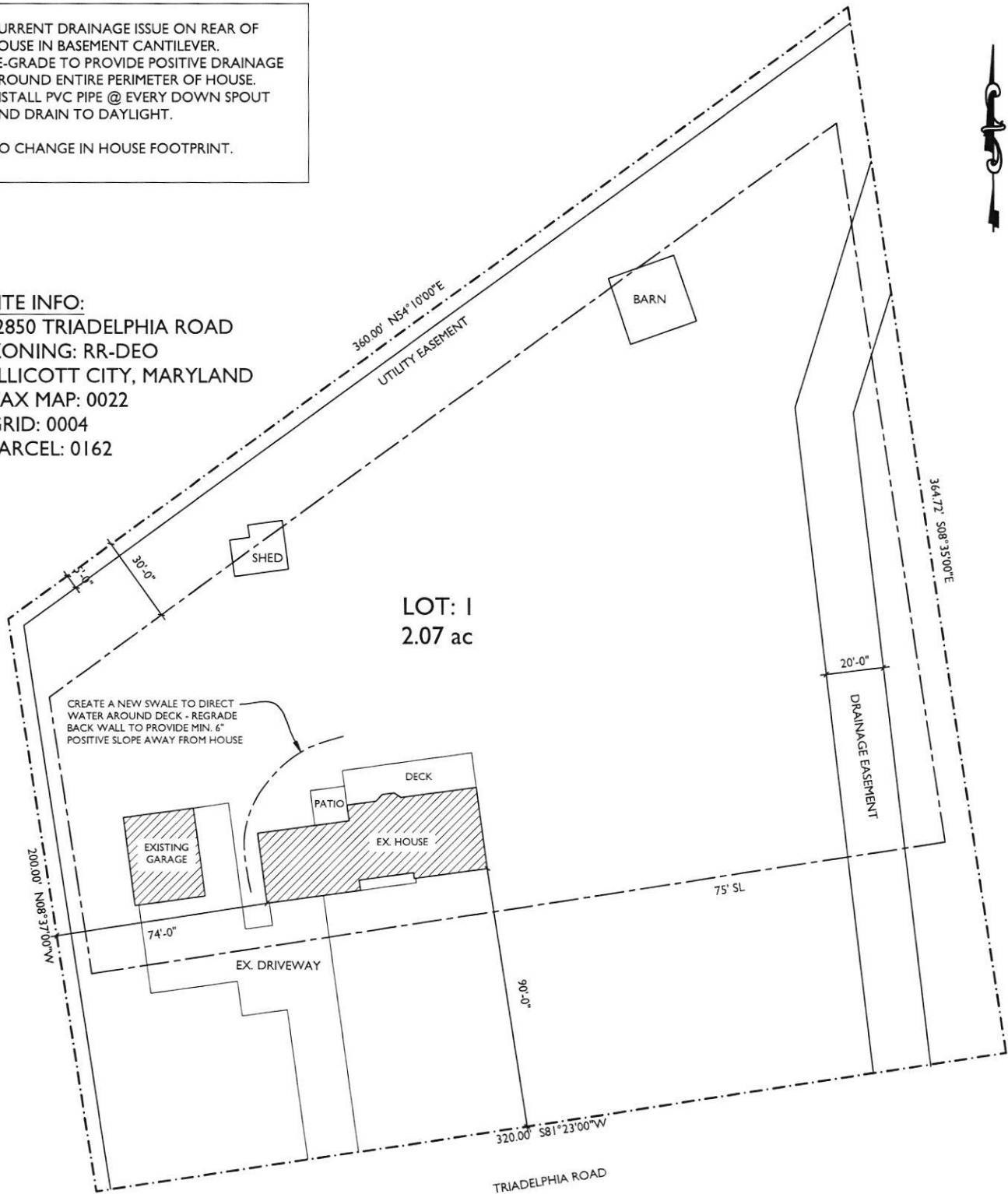
View Map	View GroundRent Redemption	View GroundRent Registration
Special Tax Recapture: None		
Account Identifier:		District - 03 Account Number - 284395
Owner Information		
Owner Name:	MAYDEN HARRY J HEINLEIN MAYDEN DELAINE E	Use: RESIDENTIAL Principal Residence: YES
Mailing Address:	12850 TRIADELPHIA RD ELLICOTT CITY MD 21042-1120	Deed Reference: /18627/ 00449
Location & Structure Information		
Premises Address:	12850 TRIADELPHIA RD ELLICOTT CITY 21042-0000	Legal Description: LOT 12.075 AR 12850 TRIADELPHIA RD SYCAMORE SPRING
Map: Grid: Parcel: Neighborhood: Subdivision: Section: Block: Lot: Assessment Year: Plat No: 10 91	0022 0004 0162 3020203.14 2003 1 2022	Plat Ref:
Town: None		
Primary Structure Built Above Grade Living Area Finished Basement Area Property Land Area County Use		
1969 1,561 SF 2.0700 AC		
StoriesBasementType	ExteriorQualityFull/Half BathGarage	Last Notice of Major Improvements
1 YES STANDARD UNITFRAME/4	1 full/1 half 1Att/1Det	
Value Information		
	Base Value	Value
		As of
		01/01/2022
Land:	250,700	286,900
Improvements	193,700	206,800
Total:	444,400	493,700
Preferential Land:	0	0
		460,833
		477,267
Transfer Information		
Seller: RILEY WILLARD J	Date: 04/17/2019	Price: \$460,000
Type: ARMS LENGTH IMPROVED	Deed1: /18627/ 00449	Deed2:
Seller: RILEY WILLARD J	Date: 12/22/1989	Price: \$0
Type: NON-ARMS LENGTH OTHER	Deed1: /02117/ 00163	Deed2:
Seller: TURNER COLIN	Date: 12/13/1985	Price: \$120,000
Type: ARMS LENGTH IMPROVED	Deed1: /01420/ 00003	Deed2:
Exemption Information		
Partial Exempt Assessments: Class	07/01/2022	07/01/2023
County:	000	0.00
State:	000	0.00
Municipal:	000	0.00 0.00
Special Tax Recapture: None		
Homestead Application Information		
Homestead Application Status: Approved 01/15/2020		
Homeowners' Tax Credit Application Information		
Homeowners' Tax Credit Application Status: No Application Date:		

CURRENT DRAINAGE ISSUE ON REAR OF  
HOUSE IN BASEMENT CANTILEVER.  
RE-GRADE TO PROVIDE POSITIVE DRAINAGE  
AROUND ENTIRE PERIMETER OF HOUSE.  
INSTALL PVC PIPE @ EVERY DOWN SPOUT  
AND DRAIN TO DAYLIGHT.

NO CHANGE IN HOUSE FOOTPRINT.

**SITE INFO:**

12850 TRIADELPHIA ROAD  
ZONING: RR-DEO  
ELLICOTT CITY, MARYLAND  
TAX MAP: 0022  
GRID: 0004  
PARCEL: 0162



13953 Brighton Dam Rd  
Clarksville, MD 21029  
301-776-2666  
info@TransformingArchitecture.com  
www.TransformingArchitecture.com

**HEINLEIN RESIDENCE**

12850 Triadelphia Rd  
Ellicott City, MD 21042

**SITE PLAN**

SCALE: 1"=50'-0"

DATE: 12-22-22

PROJECT: 22-626

15

**COMPLETE THIS FORM WHEN DROPPING OFF ANY  
CORRESPONDENCE AND/OR PLANS TO THE HOWARD COUNTY  
DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS COUNTER:**

Date: 02/09/2023

To: Debbie Whalen Building Plans Review  
(Reviewer/Requestor's Name) (Division)

From: Karen Mosel, Transforming Architecture (301) 776-2666  
(Your Name, Company Name) (Phone Number)

Subject: Project name Heinlein Residence  
Project site address 12850 Triadelphia Rd, Ellicott City, MD 21042  
Permit # B22004594 SDP # \_\_\_\_\_  
Other information pertinent to this project CHANGES TO DRAWINGS TO REFLECT INITIAL SUBMISSION COMMENT

☒ Please check the attachments below that you are submitting with this transmittal:

- ☐ Letter of response to address plan review comment letter
- ☒ Revised plans and/or revised details: When submitting for a complete re-review, **duplicate sets shall be submitted.**
- ☐ Letter Summarizing Changes
- ☐ Energy conservation calculations
- ☐ Copies of \_\_\_\_\_ (be specific).  
☒ Health Department Request ☐ DPZ/ DED Request ☐ Applicant's Request
- ☐ Two sets of single-family model plans to be placed on permanent file: Model Name/ # \_\_\_\_\_
- ☐ Other \_\_\_\_\_

**Contact Person Information: (Required)**

Karen Mosel  
Please Print Name

Telephone No: (301) 776-2666

E-Mail Address: info@transformingarchitecture.com

**PLEASE ASSURE ALL DOCUMENTS AND/OR REVISIONS ARE APPROPRIATELY SIGNED AND SEALED, IF NECESSARY, BY A LICENSED ARCHITECT OR ENGINEER. PLEASE BE ADVISED THAT INSUFFICIENT INFORMATION MAY RESULT IN THE DELAY OF REVIEW BY THE PLANS EXAMINER. THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS WILL CONTACT YOU IF THERE IS A PROBLEM. IN ADDITION, ONCE THE BUILDING PERMIT IS APPROVED BY THE PLAN REVIEW DIVISION AND ALL OTHER REQUIRED SIGNATORY AGENCIES, AND THE BUILDING PERMIT IS READY FOR ISSUANCE, THE PERMIT DIVISION WILL NOTIFY THE APPROPRIATE CONTACT PERSON FOR PERMIT PICK UP. ALL PERMIT STATUS INQUIRIES SHALL BE DIRECTED TO THE PERMIT DIVISION AT 410-313-2455 OPTION #4 OR BY VISITING MYHOWARD.INFO. CODE RELATED QUESTIONS AND PLAN REVIEW INQUIRIES SHALL BE DIRECTED TO THE PLAN REVIEW DIVISION AT 410-313-2436. PLEASE ALLOW A MINIMUM OF FIVE (5) WORKING DAYS FOR ANY PLAN SUBMITTALS TO BE REVIEWED. THANK YOU.**

Received by MF

Revision



## SCOPE OF WORK

SFD/ INTERIOR ALTERATIONS TO EXISTING DWELLING TO INCLUDE:

RENOVATE 1ST STORY OWNER FULL BATH, FULL HALL BATH, AND KITCHEN. RAISE THE SUNKEN FLOOR TO MEET THE LIVING ROOM. ADD 1ST STORY MUDROOM & POWDER ROOM. APPROXIMATELY 980 SQFT.

REPLACE ALL SIDING AND WINDOWS ON THE EXTERIOR.

GRADE THE SITE TO REMEDY WATER INFILTRATION ISSUES IN THE FOUNDATION AND GARAGE.

NO CHANGE IN HOUSE FOOTPRINT.

## RESIDENTIAL NOTES &amp; SPECIFICATIONS

## GENERAL CONSTRUCTION NOTES

- THESE STRUCTURAL NOTES AND SPECIFICATIONS SHALL BE CONSIDERED PART OF THE FINAL DESIGN PACKAGE (INCLUDING CONSTRUCTION DRAWINGS) FOR THE PROJECT SPECIFICALLY DESCRIBED ABOVE. NEITHER THE CONTRACTOR NOR THE ARCHITECT SHALL BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AND SHALL NOTIFY THIS OFFICE OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS. SHOP DRAWINGS MUST BE SUBMITTED TO THE ARCHITECT BEFORE PROCEEDING WITH FABRICATION OF ASSEMBLIES, STEEL, STAIRS, ROOF AND/OR FLOOR TRUSSES.
- WHERE THERE IS CONFLICT BETWEEN DRAWINGS, SPECIFICATIONS OR DETAILS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CLARIFICATION.
- PROVIDE TRANSITION STRIPS AT ALL CHANGES IN FLOOR FINISHES.
- ALL CLOSETS ARE TO HAVE THE SAME FINISH AS THE ADJOINING ROOM UNLESS OTHERWISE NOTED.
- PROVIDE PLUMBING FIXTURE ACCESS PANEL AT EACH TUB AND SHOWER ENCLOSURE AS REQUIRED BY LOCAL JURISDICTION.
- PROVIDE HANDRAILS 34"-38" ABOVE NOSINGS ON ALL STAIRS. PROVIDE GUARDRAILS AT RAISED FLOORS, BALCONIES, ETC. 30" OR MORE ABOVE GRADE OR FLOOR BELOW. GUARDS SHALL BE MINIMUM 42" HIGH AND HAVE CLOSURES SPACED TO PREVENT PASSAGE OF A 4" SPHERE.
- PROVIDE NOMINAL 2X FIVE BLOCKING AT EVERY FLOOR INTERVAL, BULKHEAD AND CHASE. IF OPEN WEB FLOOR TRUSSES ARE UTILIZED, PROVIDE 1/2" GB DRAFTSTOPPING, NOT TO EXCEED 1,000 SF.
- PROVIDE A MINIMUM 6'-8" HEAD CLEARANCE FOR ALL STAIRS. STAIR RISERS SHALL NOT EXCEED 7-1/2" AND TREADS SHALL BE AT LEAST 10-1/2".
- PROVIDE SOFFIT VENTS, RIDGE VENTS, OR GABLE END VENTS AS SHOWN ON THE DRAWINGS. MAINTAIN MINIMUM 1,000 FREE VENTILATION FOR HORIZONTALLY PROJECTED ROOF AREA. INSTALL PLASTIC OR CARDBOARD Baffles IN EACH TRUSS/RAFTER BAY TO MAINTAIN FREE AIR FLOW.
- MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS SHALL BE REQUIRED TO SEAL ALL PENETRATIONS IN FLOORS AND EXTERIOR WALLS CAUSED BY THEIR TRADES.
- ROUGH CARPENTRY CONTRACTORS SHALL SEAL ALL PANEL BUTT JOINTS AND PLATES AT FLOORS, CEILINGS, WINDOWS, DOOR FLANGES AND JAMBS.
- SHEATHING PENETRATION SHALL BE PATCHED AND REPAIRED TO MANUFACTURER'S SPECIFICATIONS.
- SLOPE ALL EXTERIOR PLATFORMS, PORCHES, WALKS AND GARAGE SLABS 1/8" IN 12" TO DRAIN, OR AS NOTED ON PLANS.
- PROVIDE TERMITES PROTECTION INCLUDING SOIL TREATMENT BY LICENSED EXTERMINATOR.

## SPECIFICATIONS - GENERAL CONDITIONS

- ALL WORK SHALL CONFORM TO ALL LOCAL AND NATIONAL ORDINANCES & BUILDING CODES APPLICABLE TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO INTERNATIONAL RESIDENTIAL CODE - 2018.
- DIMENSIONS GIVEN ON SCHEDULES ARE NOMINAL. CONTRACTOR AND MANUFACTURERS ARE TO COORDINATE ALL DIMENSIONS CONCERNING DOORS, PANELS, WINDOWS, EQUIPMENT, ETC. AND THEIR OPENINGS PRIOR TO FABRICATION AND CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES, BOUNDARIES, EASEMENTS AND CONSTRUCTION BEFORE PROCEEDING WITH THE WORK AND REPORT IMMEDIATELY ANY DISCREPANCIES TO THE ARCHITECT AND/OR OWNER.
- DESIGN STANDARDS  
USE GROUP: RESIDENTIAL  
CONST. TYPE: ONE STORY WOOD FRAME W/ BRICK & SIDING.  
5. DESIGN LOADS (IRC TABLE 301.5)  
WIND LOAD: 115 MPH  
ROOF LIVE LOAD: 40 PSF  
WIND SPEED: 115 MPH  
GROUND SNOW LOAD: 40 PSF  
IMPORT FACTOR: 1  
FLOOR LIVE LOAD (F.F.): 40 PSF  
EXP. FACTOR: "C"  
FLOOR LIVE LOAD (S.F.): 30 PSF  
SEISMIC DESIGN CAT: B  
ATTIC LIVE LOAD (ATTIC): 30 PSF  
WEATHERING: SEVERE  
GARAGE LIVE LOAD: 50 PSF  
ZONE: 4A  
DEAD LOAD: 15 PSF  
GUARD RAILS: 200 LBS. FORCE IN ANY DIRECTION  
SOIL BEARING: ASSUMED 2,000 PSF  
FROST LINE DEPTH - 30"  
TERMITES: VERY HEAVY  
DECAY: VERY HEAVY  
RADON RESISTANT CONSTRUCTION REQ'D: YES

## CONCRETE

- CONCRETE FOR THIS PROJECT SHALL BE NORMAL WEIGHT (145 PCF) AND CONCRETE WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) STANDARD 318-89.
- CONCRETE SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- ALL REINFORCING BAR SHALL BE GRADE 60 (FY 60,000 PSI).
- ALL INTERIOR CONCRETE SLABS SHALL BE 4" THICK AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI WITH 6X6 - W14 x W14 WWF AND BE POURED OVER A SIX (6) MIL POLY VAPOR BARRIER 4 OVER 4" POROUS GRANULAR FILL.
- ALL INTERIOR CONCRETE SLABS 30" OR GREATER IN ANY DIMENSION SHALL HAVE CONTROL JOINTS.
- ALL EXTERIOR CONCRETE SLABS SHALL BE AIR ENTRAINED (AIR CONTENT BETWEEN 5% AND 7%) INCLUDING THE GARAGE SLAB, AND HAVE 4" GRANULAR FILL MIN BELOW CONCRETE SLAB.
- WHERE PORCH (NOT MONOLITHICALLY POURED), PATIO OR OTHER CONCRETE FLAT WORK ABUTS AN EXISTING CONCRETE SLAB PROVIDE A 1/2" ASPHALT IMPREGNATED FIBER BOARD EXPANSION JOINT.
- ALL REINFORCING SHALL CONFORM TO "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT" (ASTM 1 615-60).
- WELDED WIRE FABRIC SHALL CONFORM TO LATEST ASTM A-185.
- REINFORCEMENT FOR THE ANCHORAGE OF CONNECTING WORK, IF NOT CONTINUOUS, AND REINFORCEMENT FOR TEMPERATURE AND ALL OTHER PURPOSES NOT SPECIFICALLY PROVIDED, SHALL LAP 30 BAR DIAMETERS OR 18" MINIMUM AT ALL SPICES, OR SHALL HAVE DOWELS OF THE SAME BAR SIZE AND SPACING AS THAT OF REINFORCING TO BE SPICED OR WORK TO BE CONNECTED.
- MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT:  
CONCRETE DEPOSITED AGAINST GROUND 3"  
FORMED CONCRETE IN CONTACT WITH GROUND 2"  
FORMED CONCRETE NOT IN CONTACT WITH GROUND 1 1/2"

## PREPARATION FOR SLAB

- REMOVE ALL VEGETATION AND TOP SOIL CONTAINING ORGANIC MATERIALS FROM THE ENTIRE AREA TO BE COVERED BY THE BUILDING.
- IF FILL IS REQUIRED TO RAISE SLAB, SCARIFY THE SUB GRADE TO A DEPTH OF 6" AND RECOMPACT TO A MINIMUM DENSITY OF 92% AND A MAXIMUM OF 98% OF STANDARD PROCTOR DENSITY (ASTM-D-698) WITH A MOISTURE CONTENT AT OR SLIGHTLY ABOVE OPTIMUM.
- INSTALL FILL IN LOOSE LIFTS OF 8" THICK AND UNIFORMLY COMPACTED AS IN THE NOTE ABOVE.
- FILL MATERIALS SHALL BE VERY SANDY TO CLAYEY SAND WITH A PLASTICITY INDEX (PI) IF BETWEEN 2 AND 15.

## FOUNDATION PERIMETER INSULATION

- INSTALL EXPANDED RIGID CLOSED CELL POLYSTYRENE FOAM BORDER FDE SPEC HH-4-542B. DENSITY 2.1 LBS PER CU. FT. "R" VALUE PER 1" THICKNESS - 5.41

## STAIR:

DIMENSION:

MAX R: 7 1/2"

MIN T: 10"

## SHEET INDEX

- A-100 PROJECT NOTES, SCHEDULES, ELECTRICAL & DEMO PLANS
- A-101 FIRST FLOOR PLAN & EXTERIOR ELEVATIONS
- A-102 LATERAL BRACING, FRAMING, AND FOUNDATION

ALL WORK PERTAINING TO THE BASEMENT RENOVATION HAS BEEN REMOVED.



## STRUCTURAL STEEL NOTES

## 1. MATERIALS

- STRUCTURAL STEEL AND PLATE ASTM A36  
UNFINISHED BOLTS ASTM A307  
HIGH-STRENGTH BOLTS ASTM A325  
WELDING ELECTRODES ASTM 1233, CLASS E70
- BEAM TO BEAM AND COLUMN CONNECTIONS SHALL BE AISC STANDARD (FULL DEPTH) WHERE REACTIONS EXCEED MINIMUM CONDITIONS. THE APPROPRIATE CONNECTIONS SHALL BE DETERMINED BY FABRICATOR (CONTRACTOR).
  - ALL MAJOR CONNECTIONS SHALL BE HIGH STRENGTH FRICTION BOLTS OR WELDS OF EQUAL STRENGTH. ANCHOR BOLTS SHALL BE UNFINISHED BOLTS.
  - STEEL WORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH LATEST AISC SPECIFICATIONS.
  - SUBMIT SHOP DRAWINGS FOR ALL STEEL WORK.
  - STEEL UNTELS - FOR ALL OPENINGS AND RECESSES IN STONE OR BRICK FACED WALLS NOT SPECIFICALLY DETAILED, PROVIDE ONE-STEP ANGLE FOR EACH 4 INCHES OF WALL THICKNESS. STEEL ANGLES TO HAVE MINIMUM BEARING OF 4" AT EACH END. HORIZONTAL LEG SHALL BE 3 1/2" UNLESS OTHERWISE SHOWN.
  - UNTEL SCHEDULE (UNLESS NOTED OTHERWISE ON PLANS) NOTE: ALL UNTELS ARE TO RECEIVE SHOP APPLIED CORROSION PROTECTION.
  - STEEL BEAM POCKETS, SIZE AS INDICATED ON PLANS. BEAMS SHALL HAVE A MINIMUM BEARING OF 4" IN LENGTH MEASURED PARALLEL TO THE BEAM UPON SOLID MASONRY NOT LESS THAN 4" IN THICKNESS OR UPON A METAL BEARING PLATE OF ADEQUATE DIMENSIONS TO DISTRIBUTE THE LOAD SAFELY. AREA AROUND BEAM TO RECEIVE PARGE FINISH.
  - 2x BEAM PLATE IS ANCHORED TO STEEL BEAM WITH 3/8" DIAMETER STEEL BOLTS OR EQUIVALENT POWER ACTIVATED FASTENERS AT 48" O/C. FASTENERS TO BE LOCATED A NEAR TO CENTER OF BEAM AS POSSIBLE.
  - STEEL BEAMS SHALL HAVE A MINIMUM BEARING OF 4 INCHES IN CONCRETE POCKETS AND A MINIMUM BEARING OF 3 INCHES IN STEEL COLUMNS. STEEL BEAMS SHALL BE CENTERED OVER COLUMNS BELOW.

## MASONRY

- MASONRY VENEER SHALL BE ATTACHED TO THE SUPPORTING WALL WITH CORROSION RESISTANT METAL TIES. EACH TIE SHALL BE 24" ON CENTER HORIZONTALLY AND SHALL SUPPORT NOT MORE THAN 1/4 SQUARE FEET OF WALL AREA. ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL OPENINGS GREATER THAN 16". THESE TIES SHALL BE SPACED NOT MORE THAN 3' ON CENTER AND PLACED WITHIN 12" OF THE WALL OPENING.
- CONCRETE MASONRY UNITS SHALL MEET ASTM C-90 GRADE A, 28 DAYS OLD BEFORE INSTALLATION. MINIMUM NET COMPRESSIVE STRENGTH OF BLOCK TO BE 2000 PSI.
- CARE AND PROPER MEASURES SHALL BE EMPLOYED TO PREVENT ANY SUPER IMPOSED LOADS (I.E. WIND LOADS, SHOVING OR OTHER LATERAL FORCES) FROM BUILDING OR DISTORTING FINISHED MASONRY WALLS BY WAY OF SHORING, BRACING OR OTHER MEANS AS SITE REQUIRE.
- USE TYPE "M" MORTAR FOR MASONRY BELOW GRADE IN CONTACT WITH EARTH.
- USE TYPE "N" MORTAR FOR EXTERIOR, ABOVE GRADE LOAD BEARING OR NON-LOAD BEARING MASONRY WALLS AND FOR OTHER AREAS IF NOT OTHERWISE NOTED. EXCEPTION - MASONRY CONSTRUCTION REQUIRING HEAT RESISTANT MORTAR SHALL HAVE A REFRACTORY AIR SETTING MORTAR.
- BRICK VENEER TO BE INSTALLED WITHIN 3/16" DIA VEEB HOLES SPACED AT A MAXIMUM OF 24" O.C. HORIZONTALLY.

## HEADERS

- ALL HEADERS ARE TO BE DOUBLE 2X12 UNLESS SPECIFICALLY NOTED OTHERWISE.

## WOOD FRAMING

- UNLESS OTHERWISE NOTED, ALL INTERIOR PARTITIONS TO BE CONSTRUCTED WITH 2X4 STUDS, 16" O.C., WITH DOUBLE TOP PLATE. MINIMUM 2X12 HEADER/UNTELS AT ALL OPENINGS IN BEARING OR EXTERIOR WALLS. SHEATHING TO BE 5/8" CDX PLYWOOD OR OSB.
- ALL RAFTERS AND JOISTS SHALL HAVE WOOD OR METAL CROSSBRIDGING AT 8' O.C. OR AT CENTER OF SPAN WHICHEVER IS LESS.
- CONTINUOUS LOAD PATH: STEEL HARDWARE CONNECTORS TO GUARD AGAINST UPLIFT FORCES SHALL BE INSTALLED FROM THE FOUNDATIONS TO THE ROOF RAFTERS AT ALL STUDS. THESE SHALL INCLUDE BUT ARE NOT LIMITED TO FOUNDATION CONNECTORS, FLOOR TO FLOOR CONNECTORS, AND ROOF RAFTER HURRICANE CONNECTORS/ANCHORS.
- MINIMUM BEARING FOR WOOD JOIST, RAFTERS AND BEAMS SHALL BE 3 1/2" ON WOOD AND 4" ON MASONRY.
- INSTALL WOOD JOIST HANGER & WOOD BEAM HANGER CONNECTIONS AS FOLLOWS:  
JOIST HANGER MIN. CAPACITY: 800#  
BEAM HANGER MIN. CAPACITY: 3500#
- ALL JOINTS, SEAMS AND PENETRATIONS.
- SITE-BUILT WINDOWS, DOORS AND SKYLIGHTS.
- OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMBS AND FRAMING.
- UTILITY PENETRATIONS
- DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE.
- KNEE WALLS.
- WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
- BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS.
- COMMON WALLS BETWEEN DWELLING UNITS.
- ATTIC ACCESS OPENINGS.
- RIM JOIST JUNCTION.
- OTHER SOURCES OF INFILTRATION.

## FINISHES

- ALL FINISHES SHALL BE CLASS C OR BETTER WITH A FLAME SPREAD OF 76-200 OR BETTER AND A SMOKE DEVELOPED INDEX OF 0-450.

## AIR LEAKAGE

- BUILDING THERMAL ENVELOPE. THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER STRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FLUOR OR SOLID MATERIAL.
- ALL JOINTS, SEAMS AND PENETRATIONS.
  - SITE-BUILT WINDOWS, DOORS AND SKYLIGHTS.
  - OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMBS AND FRAMING.
  - UTILITY PENETRATIONS
  - DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE.
  - KNEE WALLS.
  - WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
  - BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS.
  - COMMON WALLS BETWEEN DWELLING UNITS.
  - ATTIC ACCESS OPENINGS.
  - RIM JOIST JUNCTION.
  - OTHER SOURCES OF INFILTRATION.

## ROOM FINISH SCHEDULE

ROOM NAME	FLOOR	WALLS	CEILING	TRIM	REMARKS
FIRST FLOOR	HARDWOOD FLOOR	LVT	PAINTED GYP BD	PAINTED GYP BD	RAISE FLOOR
	CERAMIC TILE	CERAMIC TILE	EX. TO REMAIN	EX. TO REMAIN	
	CERAMIC TILE	CERAMIC TILE	EX. TO REMAIN	EX. TO REMAIN	
	CERAMIC TILE	CERAMIC TILE	EX. TO REMAIN	EX. TO REMAIN	
	CERAMIC TILE	CERAMIC TILE	EX. TO REMAIN	EX. TO REMAIN	
	CERAMIC TILE	CERAMIC TILE	EX. TO REMAIN	EX. TO REMAIN	
KITCHEN	X		X	X	
MUDROOM	X		X	X	
LIVING / DINING	X		X	X	
POWDER ROOM		X	X	X	
HALL BATH		X	X	X	
OWNER BATH		X	X	X	

## DOOR SCHEDULE

NO.	DOOR	SIZE	INT/EXT	SADDLE	LABEL	REMARKS
101	3/0x6/8	EXT	YES	1 HR	SINGLE DOOR - SELF CLOSING	
102	2/4x6/8	INT	NO		POCKET DOOR	
103	3/0x6/8	INT	NO		POCKET DOOR	
104	(2)4/0x6/8	EXT	YES		SLIDING GLASS DOOR	
105	(2)4/0x6/8	EXT	YES		SLIDING GLASS DOOR	
106	(2)4/0x6/8	EXT	YES		SLIDING GLASS DOOR	
107	2/0x6/8	INT	NO		SINGLE DOOR	
108	2/6x6/8	INT	NO		SINGLE DOOR	
109	(2)4/0x6/8	EXT	YES		SLIDING GLASS DOOR	

## WINDOW SCHEDULE

TYPE	MAT.	SIZE	OPERATION	REMARKS
A	VINYL	4/0x5/0	DOUBLE HUNG	LOWER SOFFIT IN EXISTING OPENING
B	VINYL	3/0x5/0	DOUBLE HUNG	LOWER SOFFIT IN EXISTING OPENING
C	VINYL	(2)3/0x5/0	DOUBLE HUNG	LOWER SOFFIT IN EXISTING OPENING

MIN. DUAL PANE, LOW-E & ARGON GAS FILLED. MAX. U = .31  
TEMPER WINDOW AS NEC.  
ANDERSEN WINDOW OR APR. EQ.

TRIM TO BE WHITE  
\*EGRESS - SEE PLAN

## CABINET SCHEDULE

NO.	DESIGNATION	W-D-H	TYPE	REMARKS	EXTENDED STYLE TO BE TRIMMED AS NECESSARY
01	WR	36-24-18	WALL	WALL REFRIGERATOR	
02	BD 3	30-24-34.5	BASE	BASE THREE DRAWER	
03	B	9-24-34.5	BASE	SPICE PULLOUT	
04	B	9-24-34.5	BASE	TRAY DIVIDER	
05	BD 3	30-24-34.5	BASE	BASE THREE DRAWER	
06	T	36-24-68	TALL	TALL PANTRY W/ ROLL-OUT TRAY	
07	B	18-24-34.5	BASE	BASE SINGLE DOOR W/ TRAY DIVIDER	
08	SB	36-24-34.5	BASE	SINK BASE	
09	BWB	18-24-34.5	BASE	BASE WASTEBASKET	
10	B	18-24-34.5	BASE	BASE SINGLE DOOR W/ TRAY DIVIDER	
11	B	38-24-34.5	BASE	BASE DOUBLE DOOR	
12	B	38-24-34.5	BASE	BASE DOUBLE DOOR	
13	B	38-24-34.5	BASE	BASE DOUBLE DOOR	
14	VSB	36-21-34.5	BASE	VANITY SINK BASE	

CABINET DOOR COLOR: CABINET DOOR EDGE: CABINET DOOR STYLE: CABINET DRAWER STYLE:

## HEADER SCHEDULE (U.N.O.)

OPENING SIZE	HEADER SIZE
OPENINGS UP TO 3'	(2) 2x10
OPENINGS GREATER THAN 3' UP TO 6'	(2) 1.75 x 9.50 2.0E LVL
OPENINGS GREATER THAN 6' UP TO 8'	(2) 1.75 x 11.875 2.0E LVL
OPENINGS GREATER THAN 8' SEE FRAMING PLAN	

## ELECTRICAL LEGEND

- \$ SWITCH
- \$<sub>GD</sub> GARBAGE DISPOSAL SWITCH
- \$<sub>UC</sub> UNDER CABINET LIGHTING SWITCH
- OUTLET
- GH OUTLET
- 6" RECESSED LED CLG. LIGHT
- LED WALL MOUNT FIXTURE
- LED CLG. FIXTURE
- EXHAUST FAN
- QUIET CLG. FAN W/ LIGHT (OSCI)

## ELECTRICAL NOTES:

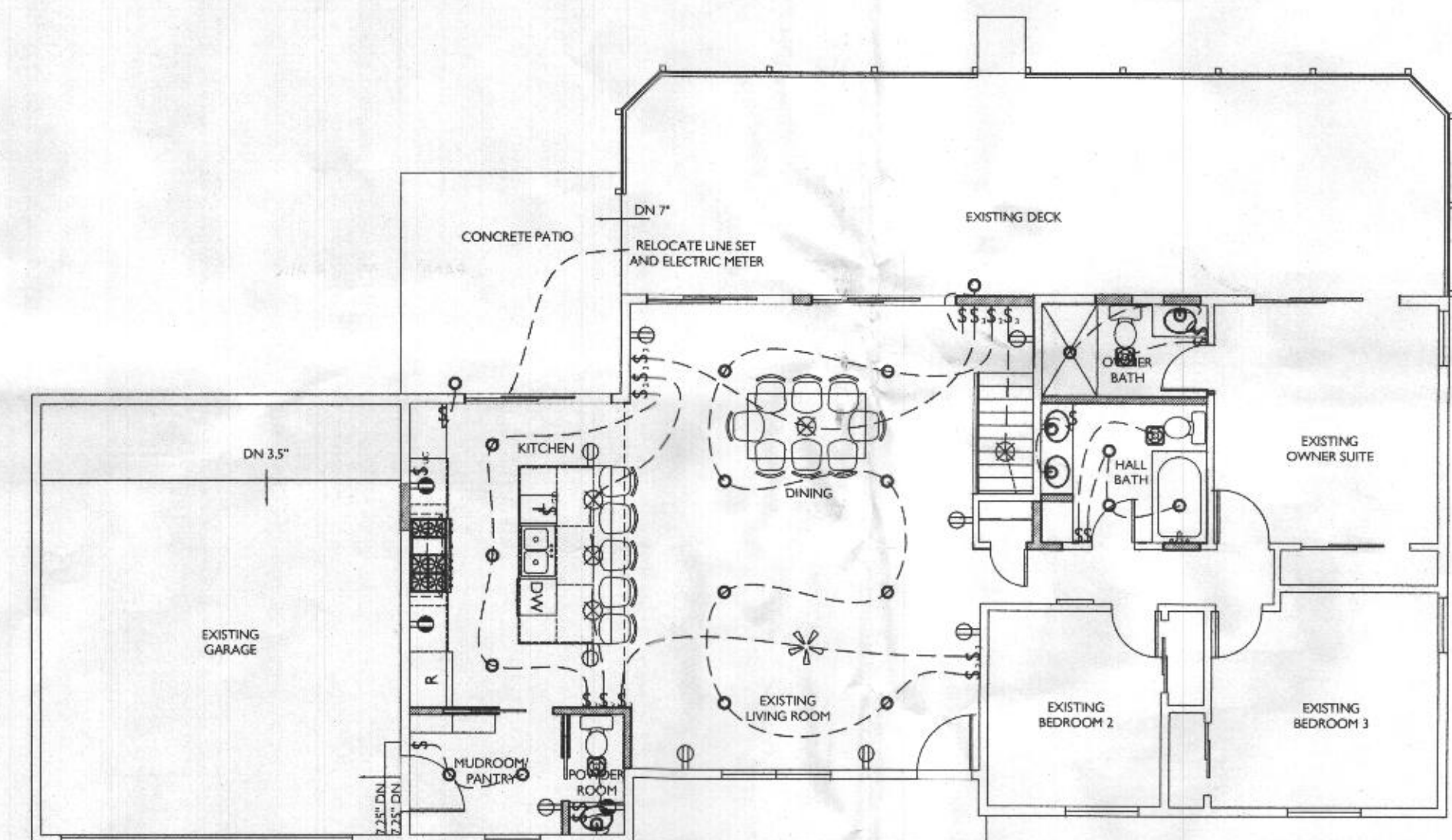
- REQUESTED OUTLETS SPECIFIED NOTED ON ELEC. LAYOUT. ALL OTHER OUTLETS PER CODE PER CODE @ 18" H, 42" H ABOVE COUNTERTOPS UNLESS OTHERWISE NOTED.
- MOUNT LIGHT SWITCHES @ 42" H. MAX. ROCKER-TYPE
- EXHAUST FANS W/ HUMIDISTAT (MAX. 7 SONE), EXHAUST TO EXTERIOR
- PROVIDE LED UNDER-CABINET LIGHTING
- HINGE SWITCHES IN ALL CLOSETS U.N.O
- ALL FIXTURES ON DIMMERS
- EXHAUST HOOD TO EXTERIOR - PROVIDE MAKE UP AIR AS REQ'D PER CODE
- HARDWIRED SMOKE DETECTOR W/ INTERNAL BATTERY & CARBON MONOXIDE DETECTOR (COMBINED UNIT) TO BE INSTALLED IN ACCORDANCE WITH SECTION R315 OF THE 2018 IRC
- LED RECESSED LIGHTS SPECS:  
2700K-2900K FOR LIVING ROOMS & BEDROOMS  
2900K-3500K FOR KITCHEN, OFFICE AND BASEMENTS

## PLUMBING NOTES:

- 

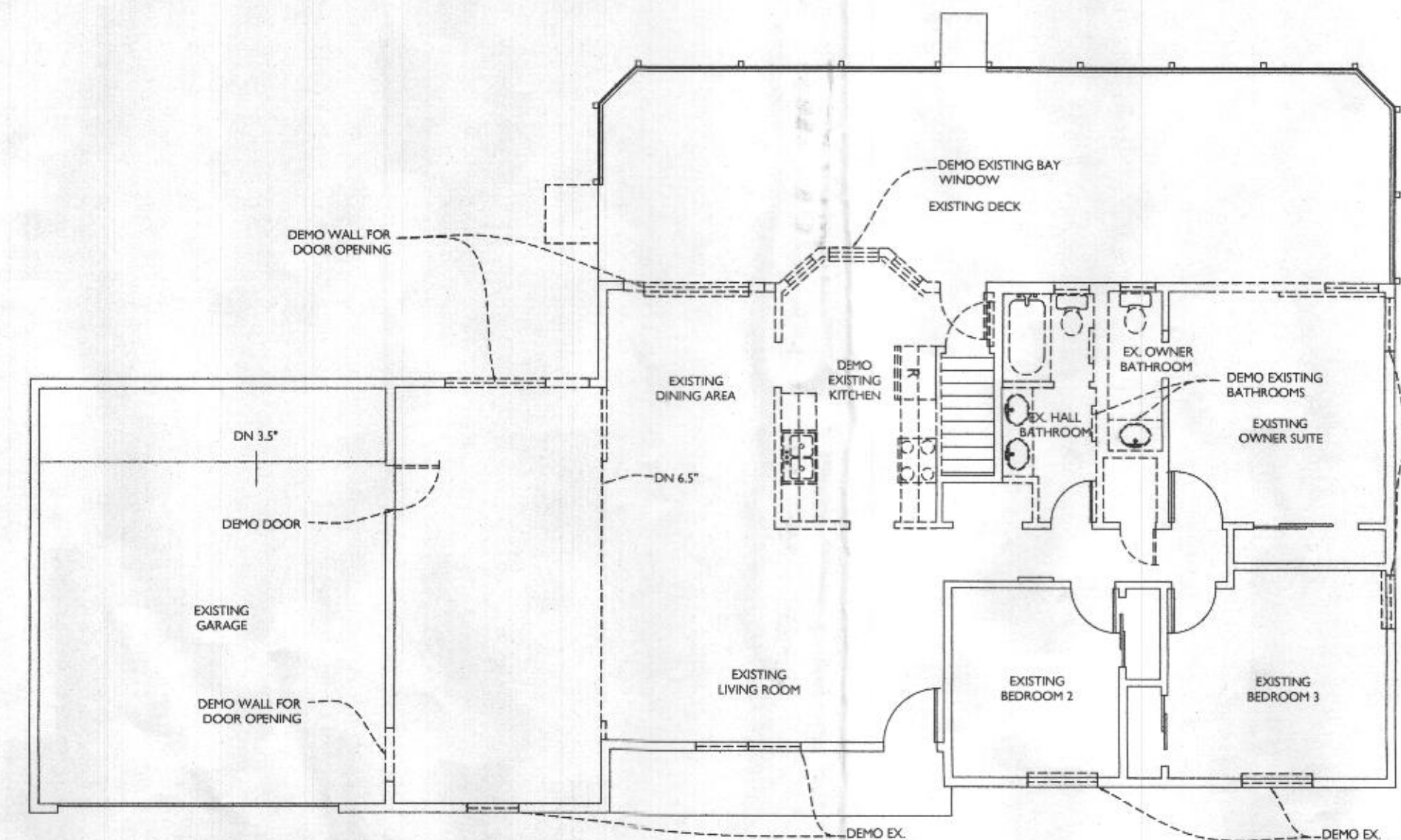
## HVAC NOTES:

- HVAC CONTRACTOR TO RECOMMEND SOLUTIONS FOR HEATING & COOLING NEW-HOUSE CONFIGURATION



2 FIRST FLOOR ELECTRICAL PLAN

SCALE: 1/8"=1'-0"



1 FIRST FLOOR DEMO PLAN

SCALE: 1/8"=1'-0"

## LINE TYPE KEY:

- NEW WALL
- EXIST. WALL
- ABOVE LINE
- FDN. WALL
- DEMO WALL



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I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 13662, EXPIRATION 10-22-2023.

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## PROJECT PHASE

PERMIT

## PROJECT TITLE

THE HEINLEIN RESIDENCE

12850 Triadelphia Road

Elliott City, MD 21042

## REVISIONS

SYMBOL	DATE	ISSUED FOR
1	2/9/2023	PERMIT REVISIONS

Approved  
1322001594  
2/14 2/23/2023

PROJECT NUMBER 22-626

DATE 2/9/2023

SCALE AS NOTED

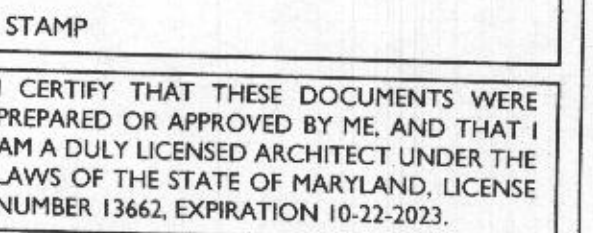
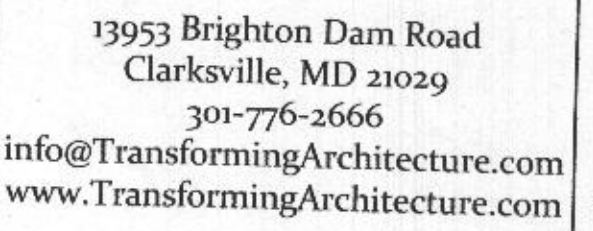
## DRAWING TITLE

PROJECT NOTES, ELECTRICAL, + DEMO PLANS

## SHEET NUMBER

A-100





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## PROJECT PHASE

PROJECT TITLE

THE  
HEINLEIN  
RESIDENCE

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Ellicott City, MD 21042






REVISIONS		
AMOUNT	DATE	ISSUED FOR
	2/9/2023	PERMIT REVISIONS

JECT NUMBER	22-626
E	2/9/2023
LE	AS NOTED

# ELEVATIONS + FLOORPLANS

T NUMBER

**A-101**

NEW WALL	
EXIST. WALL	
ABOVE LINE	
FDN. WALL	
DEMO WALL	

TYPICAL WALL CONSTRUCTION U.N.O.

TYP. INT. WALL CONSTR.: 2x4  
WD STUDS U.N.O. @ 16" O.C.  
W/ 1/2" GYP. BD. EACH SIDE

TYP. EXT. WALL CONSTR.:  
2x6 WD STUDS U.N.O. @ 16" O.C., R-5  
RIGID BOARD EXT., R-20 BATT. INS., 7/16  
OSB SHEATHING, BUILDING PAPER,  
SIDING, & 1/2" GYP. BD. INTERIOR

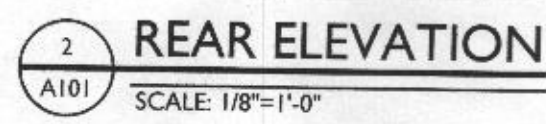
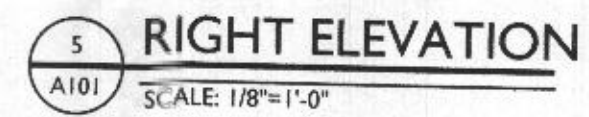
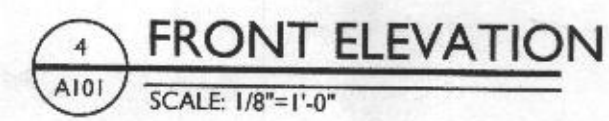




TABLE R602.3(1)  
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER (*a,*b,*c)	SPACING OF FASTENERS
<b>ROOF</b>			
1	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL	3-8d (2½" x 0.113")	-----
2	CEILING JOISTS TO PLATE, TOE NAIL	3-8d (2½" x 0.113")	-----
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAP OVER PARTITIONS, FACE NAIL	3-10d	-----
4	COLLAR TIE RAFTER, FACE NAIL OR ½" x 20 GAGE RIDGE STRAP	3-10d (3" x 0.128")	-----
5	RAFTER TO PLATE, TOE NAIL	2-16d (3½" x 0.135")	-----
6	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS: TOE NAIL FACE NAIL	4-16d (3½" x 0.135") 3-16d (3½" x 0.135")	-----
<b>WALL</b>			
7	BUILT-UP CORNER STUDS	10d (3" x 0.128")	24" o.c.
8	BUILT-UP HEADER, TWO PIECES WITH ½" SPACER	16d (3½" x 0.135")	16" o.c. ALONG EACH EDGE
9	CONTINUED HEADER, TWO PIECES	16d (3½" x 0.135")	16" o.c. ALONG EACH EDGE
10	CONTINUOUS HEADER TO STUD, TOE NAIL	4-8d (2½" x 0.113")	-----
11	DOUBLE STUDS, FACE NAIL	10d (3" x 0.128")	24" o.c.
12	DOUBLE TOP PLATES, FACE NAIL	10d (3" x 0.128")	24" o.c.
13	DOUBLE TOP PLATES, MINIMUM 48-INCH OFFSET OF END JOINTS, FACE NAIL IN LAPPED AREA	8-16d (3½" x 0.135")	-----
14	SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d (3½" x 0.135")	16" o.c.
15	SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	3-16d (3½" x 0.135")	16" o.c.
16	STUD TO SOLE PLATE, TOE NAIL	3-8d (2½" x 0.113") OR 2-16d (3½" x 0.135")	-----
17	TOP OR SOLE PLATE TO STUD, END NAIL	2-16d (3½" x 0.135")	-----
18	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS, FACE NAIL	3-10d (3" x 0.128")	-----
19	1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1½"	-----
20	1" x 6" SHEATHING TO EACH BEARING, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1½"	-----
21	1" x 8" SHEATHING TO EACH BEARING, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1½"	-----
22	WIDER THAN 1" x 8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d (2½" x 0.113") 3 STAPLES 1½"	-----
<b>FLOOR</b>			
23	JOIST TO SILL OR GIRDER, TOE NAIL	3-8d (2½" x 0.113")	-----
24	1" x 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1½"	-----
25	2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d (3½" x 0.135")	-----
26	RIM JOIST TO TOP PLATE, TOE NAIL (ROOF APPLICATIONS ALSO)	8d (2½" x 0.113")	6" o.c.
27	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16d (3½" x 0.135")	AT EACH BEARING
28	BUILT-UP GIRDERS AND BEAMS, 2 INCH LUMBER LAYERS	10d (3" x 0.128")	NAIL EACH LAYER AS FOLLOWS: 32" o.c. AT TOP AND BOTTOM AND STAGGERED. TWO NAILS AT ENDS AND AT EACH SPLICE.
29	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16d (3½" x 0.135")	AT EACH JOIST OR RAFTER

TABLE R602.3(1) - CONTINUED  
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER (*b,*c,*e)	SPACING OF FASTENERS
<b>WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING</b>			
30	¾" - ½"	6d common (2" x 0.113") nail (subfloor wall) <sup>f</sup> 8d common (2½" x 0.131") nail (roof)	6 12" g
31	¾" - ½"	6d common (2" x 0.113") nail (subfloor, wall) 8d common (2½" x 0.131") nail (roof) <sup>f</sup>	6 12" g
32	1½" - 1"	8d common (2½" x 0.131")	6 12" g
33	1½" - 1"	10d common (3" x 0.148") nail or 8d common (2½" x 0.131") deformed nail	6 12
<b>OTHER WALL SHEATHING<sup>g,h</sup></b>			
34	½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	½" galvanized roofing nail, ¾" crown or 1" crown staple 16ga., 1½" long	3 6
35	¾" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1¼" galvanized roofing nail, ¾" crown or 1" crown staple 16ga., 1½" long	3 6
36	½" GYPSUM SHEATHING <sup>d</sup>	1½" galvanized roofing nail, staple galvanized, 1½" long; 1¼" screws, Type W or S	7 7
37	¾" GYPSUM SHEATHING <sup>d</sup>	1¾" galvanized roofing nail; staple galvanized, 1½" long; 1½" screws, Type W or S	7 7
<b>WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING</b>			
38	¾" AND LESS	6d deformed (2" x 0.120") nail or 8d common (2½" x 0.131") nail	6 12
39	¾" - 1"	8d common (2½" x 0.131") nail or 8d deformed (2½" x 0.120") nail	6 12
40	1½" - 1¼"	10d common (3" x 0.148") nail or 8d deformed (2½" x 0.120") nail	6 12

- \*a - All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inches or less.
- \*b - Staples are 16 ga. wire and have a minimum ¼ inch on diameter crown width.
- \*c - Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- \*d - Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.
- \*e - Spacing of fasteners not included in this table shall be based on Table R602.3(2).
- \*f - For regions having a basic wind speed of 110mph or greater, 8d deformed (2½" x 0.120") nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.
- \*g - For regions having a basic wind speed of 100mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. When basic wind speed is greater than 100mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4-inches on center to gable end wall framing.
- \*h - Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.
- \*i - Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

TABLE R602.10.4.1  
BRACING METHODS

METHOD	MATERIAL	MINIMUM THICKNESS	CONNECTION CRITERIAL
CS-WSP	WOOD STRUCTURAL PANEL	¾"	6d common (2" x 0.113") nails at 6" spacing (panel edges) and at 12" spacing (intermediate supports) or 16ga. x 1½ staples at 3" spacing (panel edges) and 6" spacing (intermediate supports)
CS-G	WOOD STRUCTURAL PANEL ADJACENT TO GARAGE OPENINGS AND SUPPORTING ROOF LOAD ONLY <sup>a,b</sup>	¾"	See Method CS-WSP
CS-PF	CONTINUOUS PORTAL FRAME	See Section R602.10.4.1.1	See section R602.10.4.1.1

- <sup>a</sup> - Applies to one wall of a garage only.  
<sup>b</sup> - Roof covering dead loads shall be 3 psf or less.

TABLE N1102.4.1.1  
AIR BARRIER AND INSULATION INSPECTION

COMPONENT	CRITERIA
AIR BARRIER AND THERMAL BARRIER	EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS IS INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH BUILDING ENVELOPE AIR BARRIER. BREAKS OR JOINTS IN THE AIR BARRIER ARE FILLED OR REPAIRED. AIR-PERMEABLE INSULATION IS NOT USED AS A SEALING MATERIAL.
CEILING/ ATTIC	AIR BARRIER IN ANY DROPPED CEILING/ SOFFIT IS SUBSTANTIALLY ALIGNED WITH INSULATION AND ANY GAPS ARE SEALED. ATTIC ACCESS (EXCEPT UNVENTED ARRIC), KNEE WALL DOOR, OR DROP DOWN STAIR IS SEALED.
WALLS	CORNERS AND HEADERS ARE INSULATED. JUNCTION OF FOUNDATION AND SILL PLATE IS SEALED.
WINDOWS AND DOORS	SPACE BETWEEN WINDOW/ DOOR JAMBS AND FRAMING IS SEALED.
RIM JOISTS	RIM JOISTS ARE INSULATED AND INCLUDE AN AIR BARRIER.
FLOORS (including above garage and cantilevered floors)	INSULATION IS INSTALLED TO MAINTAIN PERMANENT CONTACT WITH UNDERSIDE OF SUBFLOOR DECKING. AIR BARRIER IS INSTALLED AT ANY EXPOSED EDGE OF FLOOR.
CRAWLSPACE WALLS	INSULATION IS PERMANENTLY ATTACHED TO WALLS. EXPOSED EARTH IN UNVENTED CRAWLSPACES IS COVERED WITH CLASS I VAPOR RETARDER WITH OVERLAPPING JOINTS TAPED.
SHAFTS, PENETRATIONS	DUCT SHAFTS, UTILITY PENETRATIONS, KNEE WALLS AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE ARE SEALED.
NARROW CAVITIES	BATTS IN NARROW CAVITIES ARE CUT TO FIT, OR NARROW CAVITIES ARE FILLED BY SPRAYED/ BLOWN INSULATION.
GARAGE SEPARATION	AIR SEALING IS PROVIDED BETWEEN THE GARAGE AND CONDITIONED SPACES.
RECESSED LIGHTING	RECESSED LIGHT FIXTURES ARE AIRTIGHT, IC RATED AND SEALED TO DRYWALL. EXCEPTION --- FIXTURES IN CONDITIONED SPACE.
PLUMBING AND WIRING	INSULATION IS PLACED BETWEEN OUTSIDE AND PIPED. BATT INSULATION IS CUT TO FIT AROUND WIRING AND PLUMBING, OR SPRAYED/ BLOWN INSULATION EXTENDS BEHIND PIPING AND WIRING.
SHOWER/TUB ON EXTERIOR WALL	SHOWERS AND TUBS ON EXTERIOR WALLS HAVE INSULATION AND AN AIR BARRIER SEPARATING THEM FROM THE EXTERIOR WALL.
ELECTRICAL/PHONE BOX ON EXTERIOR WALL	AIR BARRIER EXTENDS BEHIND BOXES OR AIR SEALED TYPE BOXES ARE INSTALLED.
COMMON WALL	AIR BARRIER IS INSTALLED IN COMMON WALL BETWEEN DWELLING UNITS.
HVAC REGISTER BOOTS	HVAC REGISTER BOOTS THAT PENETRATE BUILDING ENVELOPE ARE SEALED TO SUBFLOOR OR DRYWALL.
FIREPLACE	FIREPLACE WALLS INCLUDE AN AIR BARRIER.

**PRESCRIPTIVE COMPONENT REQUIREMENTS - METHOD 1**

- BASED ON R-VALUES OR U-FACTORS
1. THE EXACT LOCATION OF ALL OF THE BUILDING THERMAL ENVELOPE SHALL BE MARKED OUT ON THE PLANS, DETAILS, AND CROSS-SECTIONS.
2. PROVIDE ALL INSULATION R-VALUES OR U-FACTORS, MATERIAL, AND LOCATIONS TO BE INSTALLED (WALLS, CEILINGS, CANTILEVER FLOORS, FLOORS OVER GARAGE, CRAWL SPACE, BASEMENT WALLS, ETC.) PER TABLES 402.1.1 OR 402.1.3 OR 402.2.5 FOR STEEL-FRAMED CONSTRUCTION.
3. PROVIDE ALL PENETRATION U-FACTORS FOR ALL GLAZING FOR EACH WINDOW AND DOOR PER TABLE 402.1.1 (SCHEDULE SUPPLIED BY DESIGNER).
4. INDICATE HOW ALL AREAS LISTED IN SECTION 402.4.2 (TABLE) WILL BE PROTECTED AGAINST AIR LEAKAGE.
5. INDICATE IF CRAWLSPACE(S) ARE CONDITIONED OR VENTED, MUST HAVE VAPOR BARRIER IF CONDITIONED.
6. INDICATE DUCT INSULATION R-VALUES, MINIMUM R-6, R-8 IN ATTICS.
7. INDICATE DUCT SEALING METHODS PER IRC M601.4.1
8. INDICATE LOCATION OF HVAC EQUIPMENT ON PLANS (INSIDE OR OUTSIDE THE ENVELOPE)

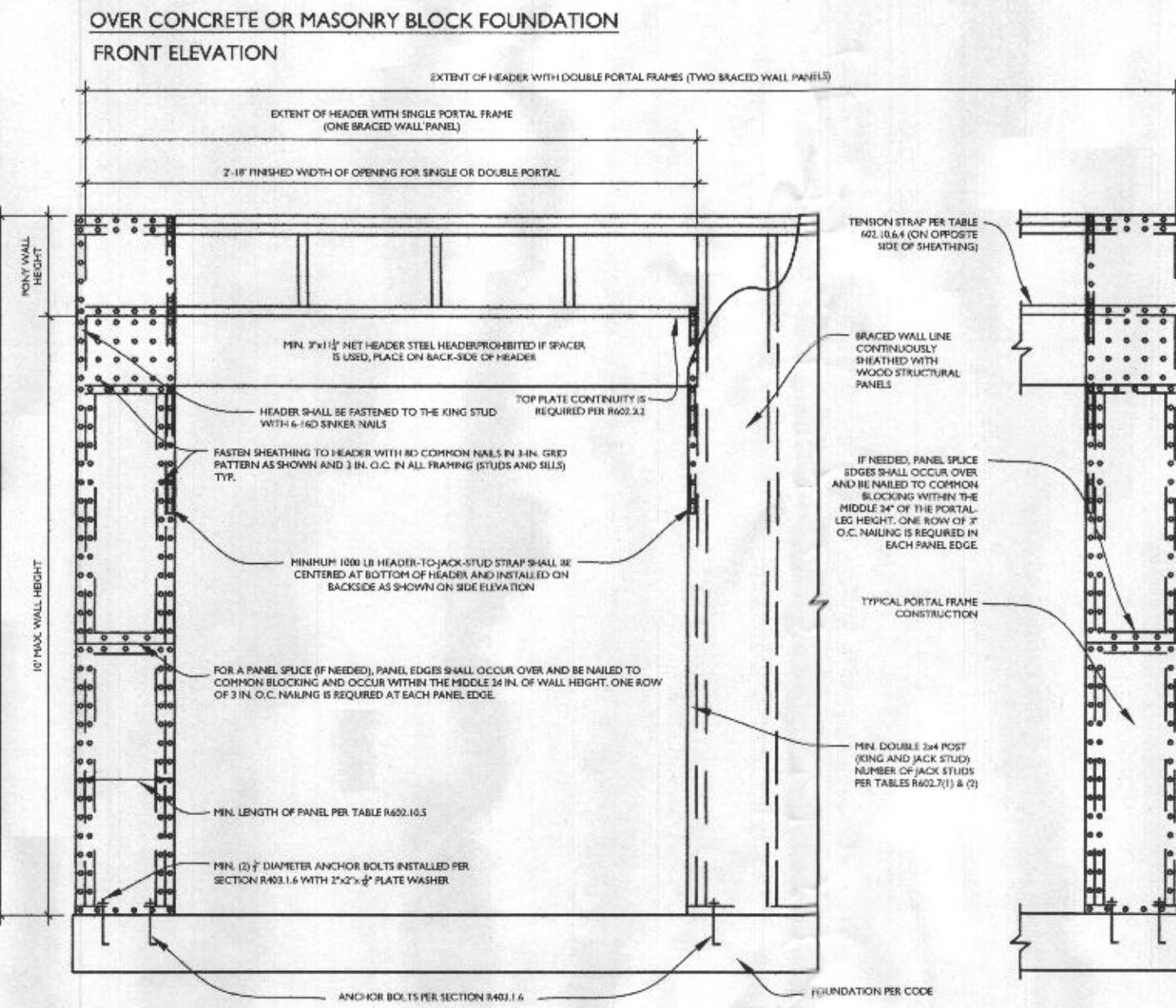
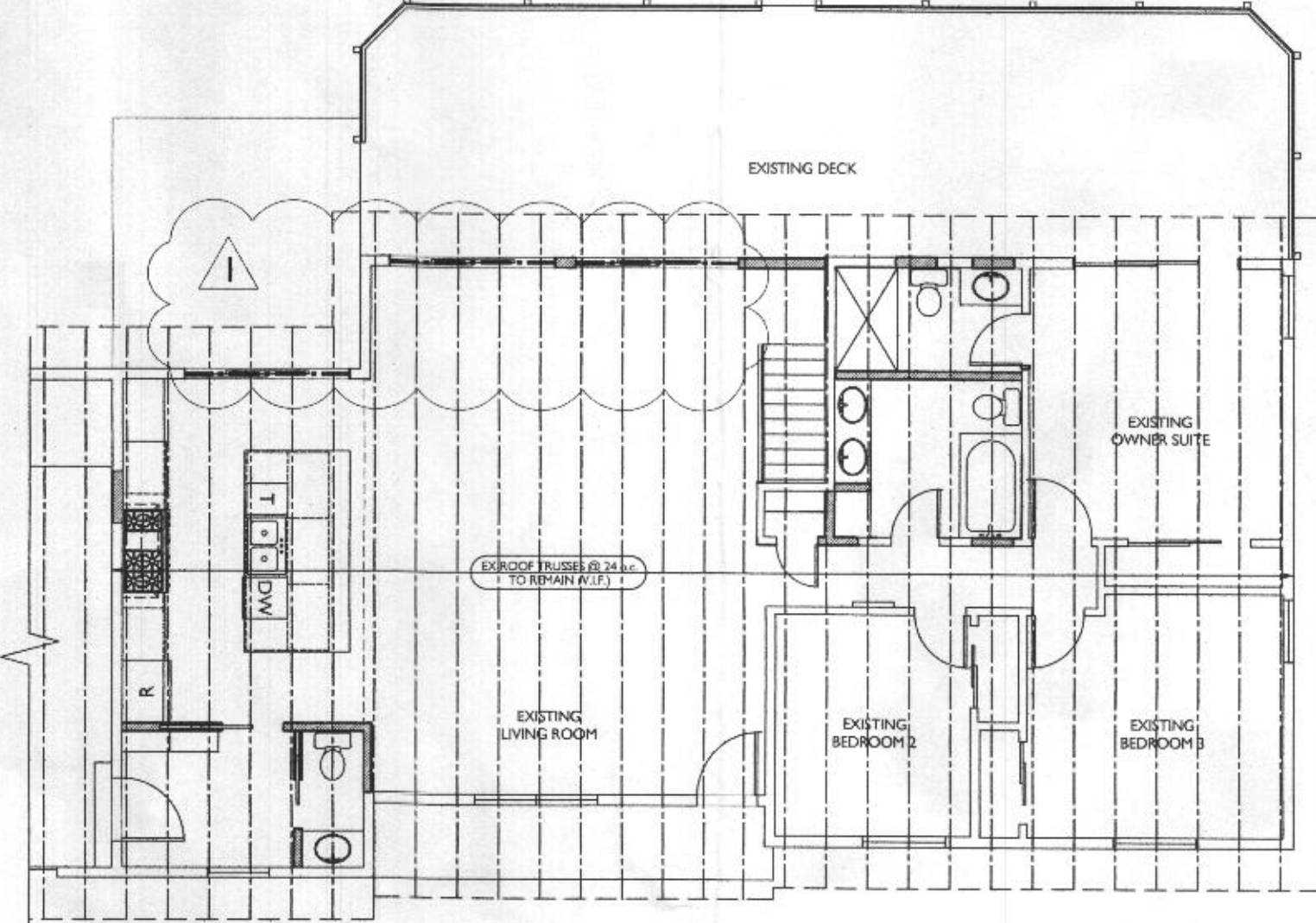
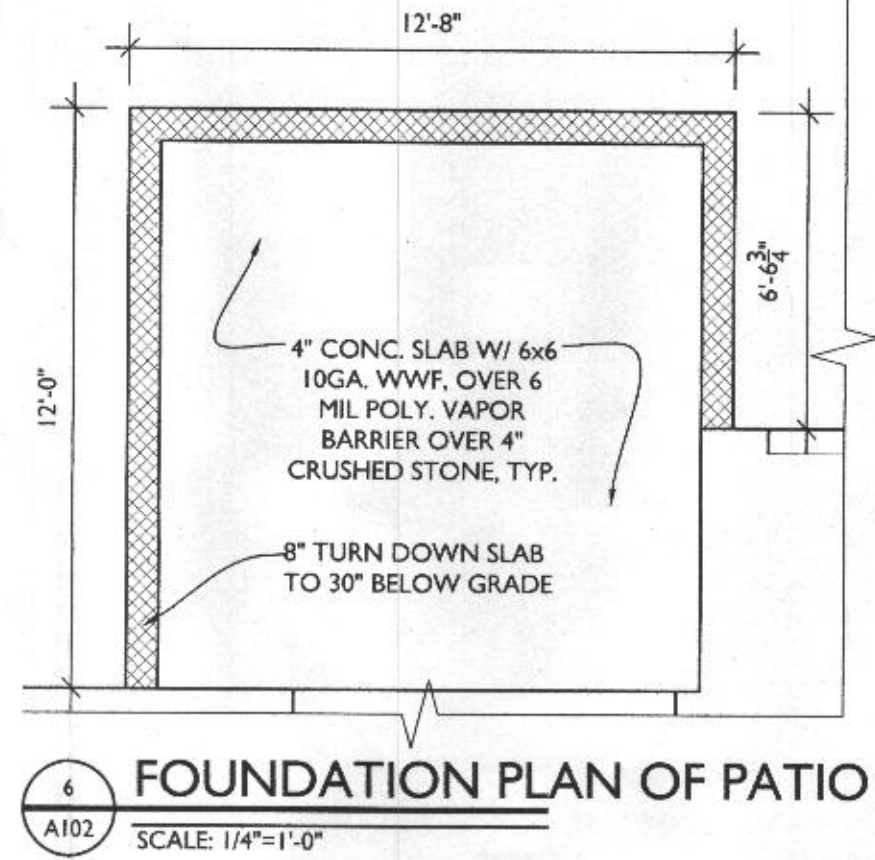


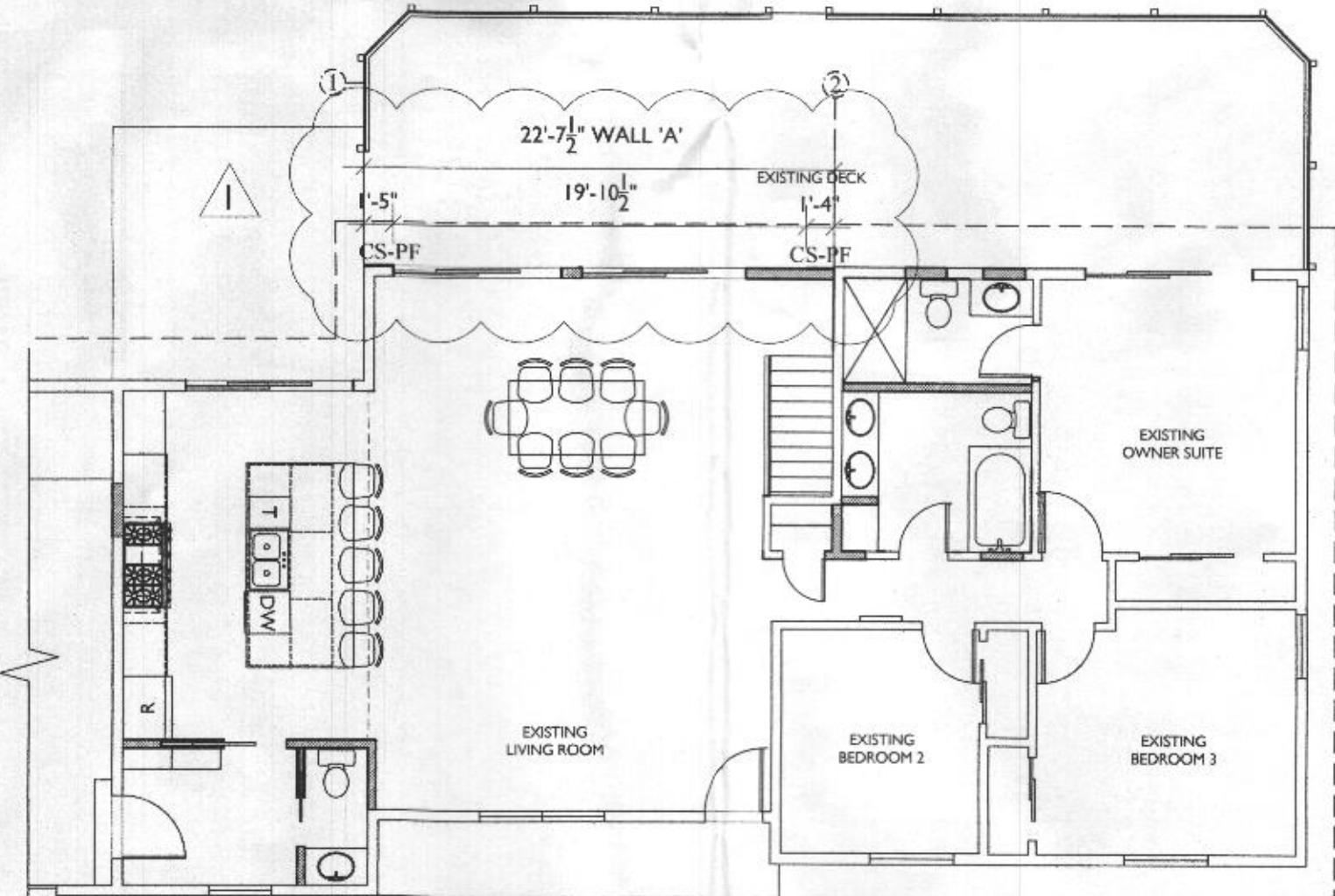
FIGURE R602.10.6.4 METHOD CS-PF -- CONTINUOUSLY SHEATHED PORTAL FRAM PANEL CONSTRUCTION

**WALL BRACING NEEDED & PROVIDED  
IRC R602.10.4 WALL BRACING METHOD  
CS-PF MIN WIDTH FOR 8' CLG. = 16"**

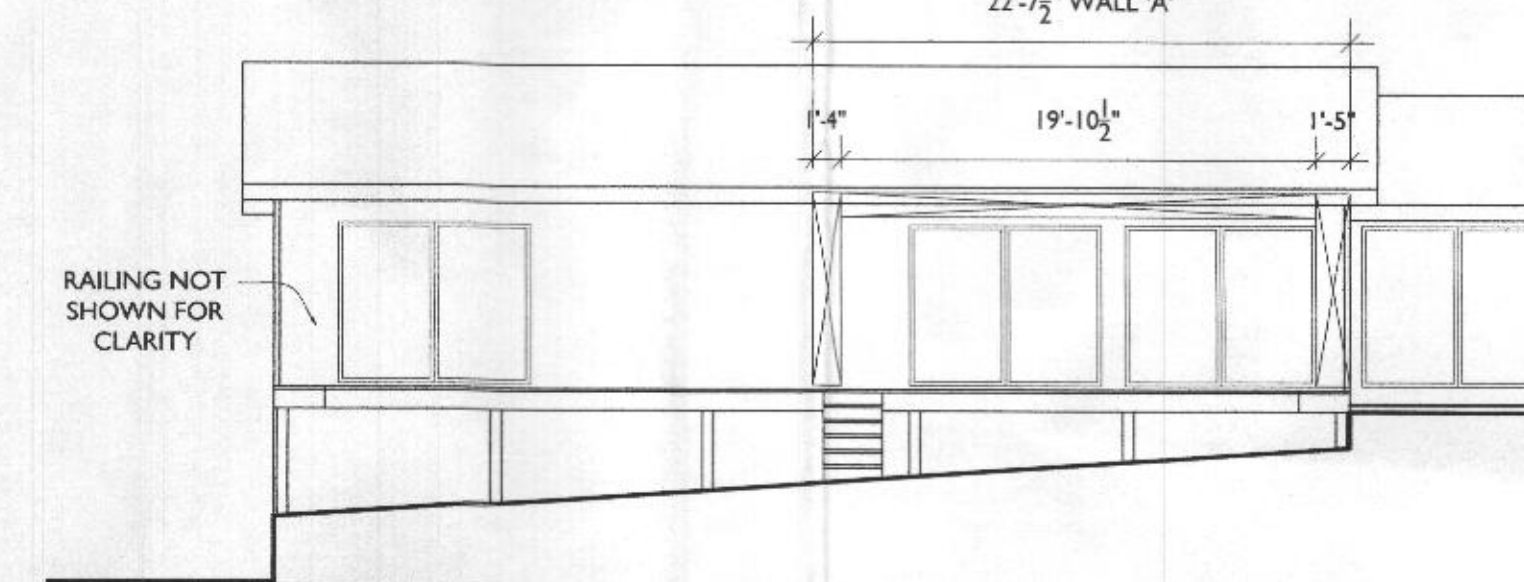
- 1ST FLOOR - 8' CLG - 22'-7½" LONG WALL 'A'  
BRACING NEEDED: 3'-6" x 0.9 = 3'-2" MIN.  
P.F. PROVIDED: 2'-9" x 1.5=4'-0"
- BRACED WALL PANEL  
WOOD STRUCTURAL PANEL (UNLESS OTHERWISE NOTED)



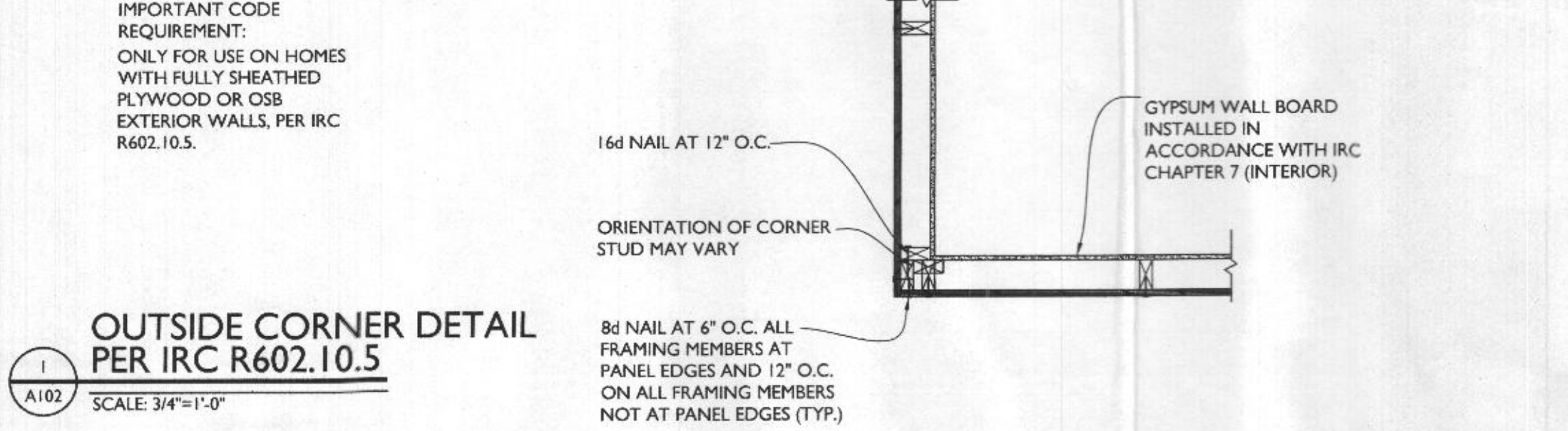
5 ROOF FRAMING PLAN  
SCALE: 1/8"=1'-0"



4 LATERAL BRACING PLAN  
SCALE: 1/8"=1'-0"



3 LATERAL BRACING ELEVATION  
SCALE: 1/8"=1'-0"



OUTSIDE CORNER DETAIL  
PER IRC R602.10.5



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**STAMP**

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**PROJECT PHASE**

PERMIT

**PROJECT TITLE**

THE  
HEINLEIN  
RESIDENCE

12850 Triadelphia Road  
Elicott City, MD 21042

**REVISIONS**

SYMBOL	DATE	ISSUED FOR
⚠	2/9/2023	PERMIT REVISIONS

PROJECT NUMBER 22-626  
DATE 2/9/2023  
SCALE AS NOTED

DRAWING TITLE  
**FRAMING,  
FOUNDATION +  
LATERAL BRACING**

SHEET NUMBER  
**A-102**