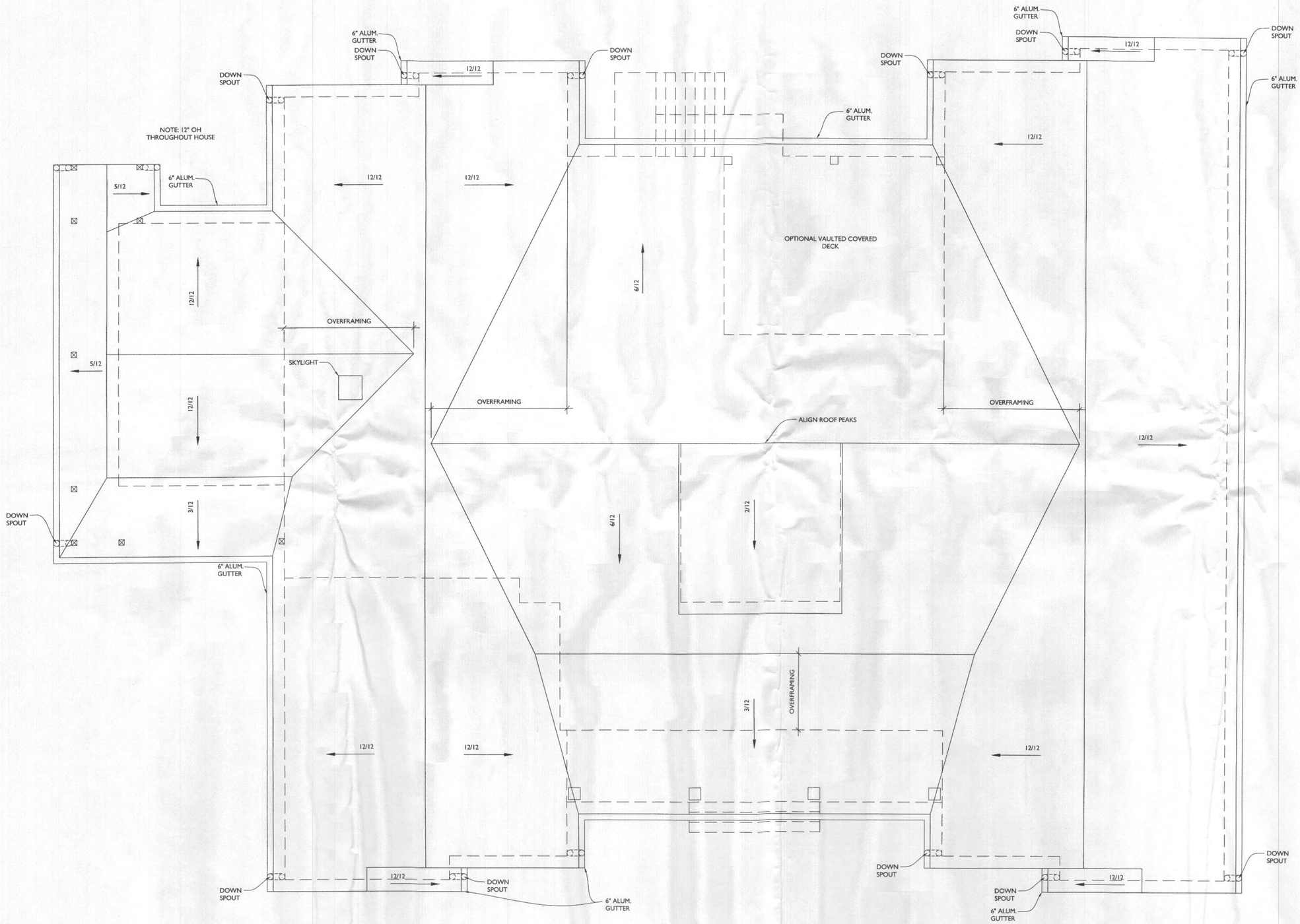
LINE TYPE KEY:

NEW WALL

ABOVE LINE



1 / A106 ROOF PLAN

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

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PROJECT PHASE

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PROJECT TITLE

THE STERKIS RESIDENCE

13429 Highland Rd
Highland, MD 20777

REVISIONS

SYMBOL	DATE	ISSUED FOR

PROJECT NUMBER	21-578
DATE	09/15/2021
SCALE	AS NOTED

DRAWING TITLE

ROOF PLAN

SHEET NUMBER

A-106

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
	ROOF		
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 1¼" 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")	----- -----
	WALL		
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 1¾"	-----
20	1" x 6" SHEATHING TO EACH BEARING, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1¾"	-----
21	1" x 8" SHEATHING TO EACH BEARING, FACE NAIL	2-8d (2½" x 0.113") 2 STAPLES 1¾"	-----
22	WIDER THAN 1" x 8" SHEATHING TO EACH BEARING, FACE NAIL	3-8d (2½" x 0.113") 3 STAPLES 1¾"	-----
	FLOOR		
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 1¾"	-----
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	
			EDGES (INCHES)*i	INTERMEDIATE SUPPORTS*c,*e (INCHES)
	WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING			
30	⅜"-½"	6d common (2" x 0.113") nail (subfloor wall)*f 8d common (2½" x 0.131") nail (roof)	6	12*g
31	¾"-⅞"	6d common (2" x 0.113") nail (subfloor, wall) 8d common (2½" x 0.131") nail (roof)*f	6	12*g
32	1⅛"- 1"	8d common (2½" x 0.131")	6	12*g
33	1⅛"- 1¼"	10d common (3" x 0.148") nail or 8d common (2½" x 0.131") deformed nail	6	12
	OTHER WALL SHEATHING*h			
34	½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	½" galvanized roofing nail, 7/16" crown or 1" crown staple 16ga., 1¼" long	3	6
35	25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1¾" galvanized roofing nail, 7/16" crown or 1" crown staple 16ga, 1½" long	3	6
36	½" GYPSUM SHEATHING*d	1½" galvanized roofing nail, staple galvanized, 1½" long; 1¼" screws, Type W or S	7	7
37	⅝" GYPSUM SHEATHING *d	1¾" galvanized roofing nail; staple galvanized, 1⅝" long; 1⅝" screws, Type W or S	7	7
	WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
38	¾" AND LESS	6d deformed (2" x 0.120") nail or 8d common (2½" x 0.131") nail	6	12
39	⅞"-1"	8d common (2½" x 0.131") nail or 8d deformed (2½" x 0.120") nail	6	12
40	1⅛"- 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 7/16 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	⅜"	6d common (2" x 0.113") nails at 6" spacing (panel edges) and at 12" spacing (intermediate supports) or 16ga. x 1¾ 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*a,*b	⅜"	See Method CS-WSP
CS-PF	CONTINUOUS PORTAL FRAME	See Section R602.10.4.1.1	See section R602.10.4.1.1

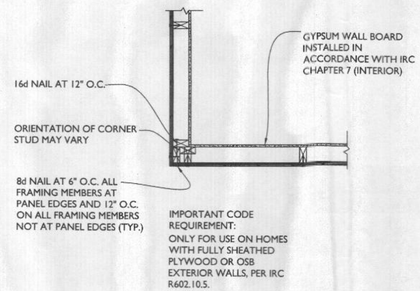
*a - Applies to one wall of a garage only.
*b - Roof covering dead loads shall be 3 psf or less.

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 REISTER 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 FENESTRATION 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 M1601.4.1
8. INDICATE LOCATION OF HVAC EQUIPMENT ON PLANS (INSIDE OR OUTSIDE THE ENVELOPE)



1 / A103 OUTSIDE CORNER DETAIL PER IRC R602.10.5
SCALE: 3/4"=1'-0"

WALL BRACING NEEDED & PROVDED
IRC R602.10.4 WALL BRACING METHOD
BRACED PANEL MIN WIDTH FOR 10' H. CLG = 30"
CS-PF MIN WIDTH FOR 10' CLG.= 20"

1ST FLOOR - 22'-0" WALL '1' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 8'-0"	1ST FLOOR - 37'-4" WALL 'A' BRACING NEEDED: 6 x 1 = 6' MIN. BRACING PROVIDED: 10'-0"
1ST FLOOR - 18'-5" WALL '2' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 8'-0"	1ST FLOOR - 14'-0" WALL 'B' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 4'-0"
1ST FLOOR - 18'-5" WALL '3' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 4.25'	1ST FLOOR - 56'-0" WALL 'C' BRACING NEEDED: 9 x 1 = 9' MIN. BRACING PROVIDED: 16'-0"
1ST FLOOR - 30'-1" WALL '4' BRACING NEEDED: 4.5 x 1 = 4.5' MIN. BRACING PROVIDED: 12'-0"	1ST FLOOR - 14'-0" WALL 'D' PORTAL FRAMING PROVIDED: 6'-0" W/ 20" PANELS
1ST FLOOR - 30'-1" WALL '5' BRACING NEEDED: 4.5 x 1 = 4.5' MIN. BRACING PROVIDED: 12'-0"	1ST FLOOR - 27'-9" WALL 'E' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"
1ST FLOOR - 22'-6" WALL '6' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 7'-0"	1ST FLOOR - 27'-9" WALL 'F' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"
1ST FLOOR - 21'-3" WALL '7' PORTAL FRAMING PROVIDED: 6'-0" W/ 20" PANELS	1ST FLOOR - 27'-9" WALL 'G' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"
1ST FLOOR - 21'-3" WALL '8' BRACING NEEDED: 3.5 x 1 = 3.5' MIN. BRACING PROVIDED: 8'-0"	1ST FLOOR - 27'-9" WALL 'H' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"
1ST FLOOR - 35'-8" WALL '9' BRACING NEEDED: 6 x 1 = 6' MIN. BRACING PROVIDED: 12'-0"	1ST FLOOR - 27'-9" WALL 'J' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"
1ST FLOOR - 35'-8" WALL '10' BRACING NEEDED: 6 x 1 = 6' MIN. BRACING PROVIDED: 8'-0"	1ST FLOOR - 27'-9" WALL 'K' BRACING NEEDED: 9 x .95 = 8.55' BRACING PROVIDED: 16'-0"

BRACED WALL PANEL
WOOD STRUCTURAL PANEL (UNLESS OTHERWISE NOTED)

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PROJECT NUMBER	21-578
DATE	09/15/2021
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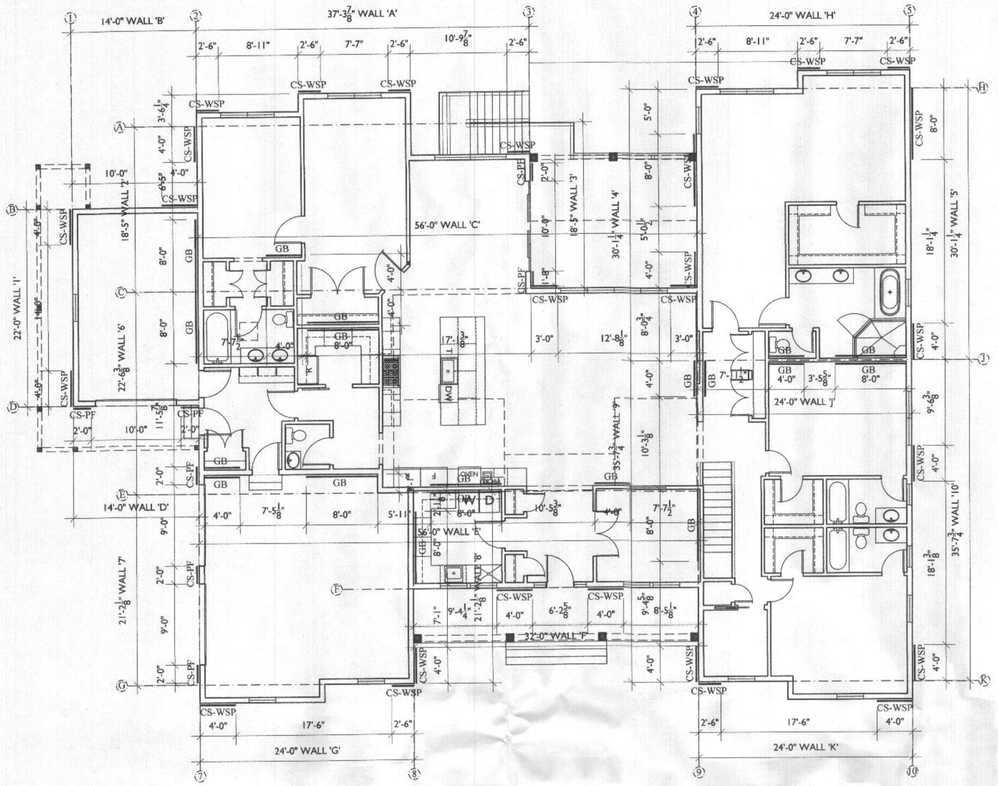
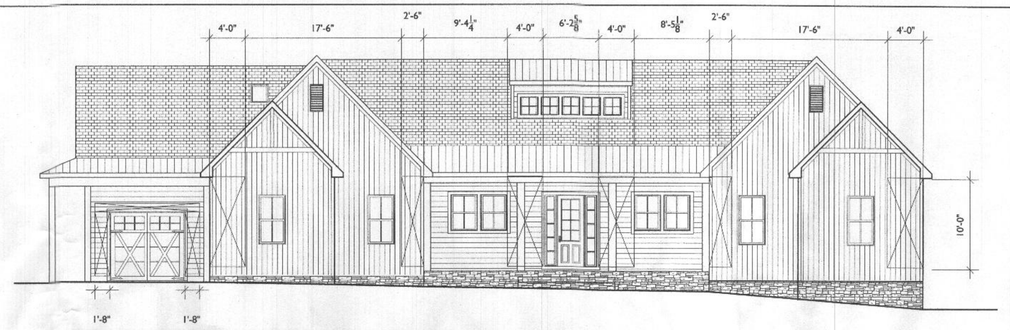
DRAWING TITLE
LATERAL BRACING NOTES + CALCS

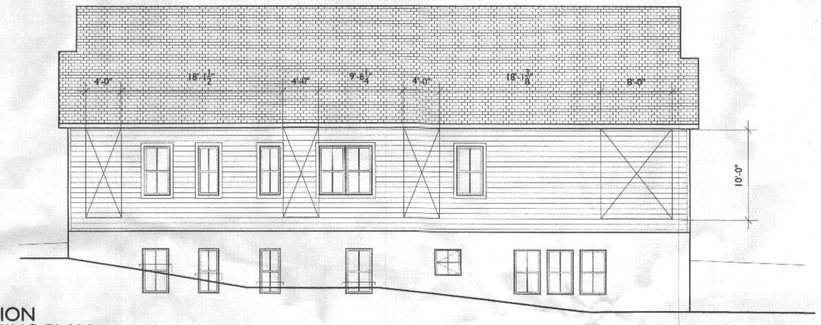
SHEET NUMBER
A-107



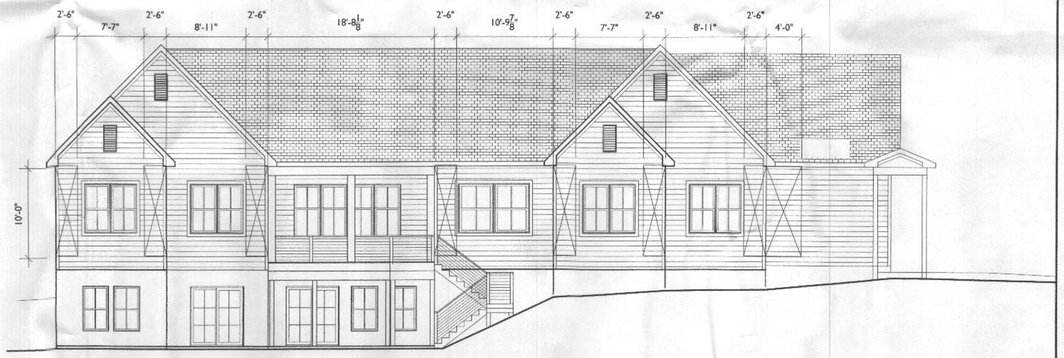
1 A108 LATERAL BRACING PLAN
SCALE: 1/8"=1'-0"



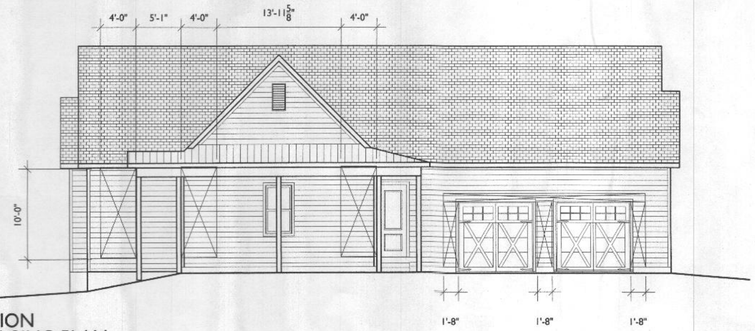
2 A108 FRONT ELEVATION LATERAL BRACING PLAN
SCALE: 1/8"=1'-0"



3 A108 RIGHT ELEVATION LATERAL BRACING PLAN
SCALE: 1/8"=1'-0"



4 A108 REAR ELEVATION LATERAL BRACING PLAN
SCALE: 1/8"=1'-0"



5 A108 LEFT ELEVATION LATERAL BRACING PLAN
SCALE: 1/8"=1'-0"

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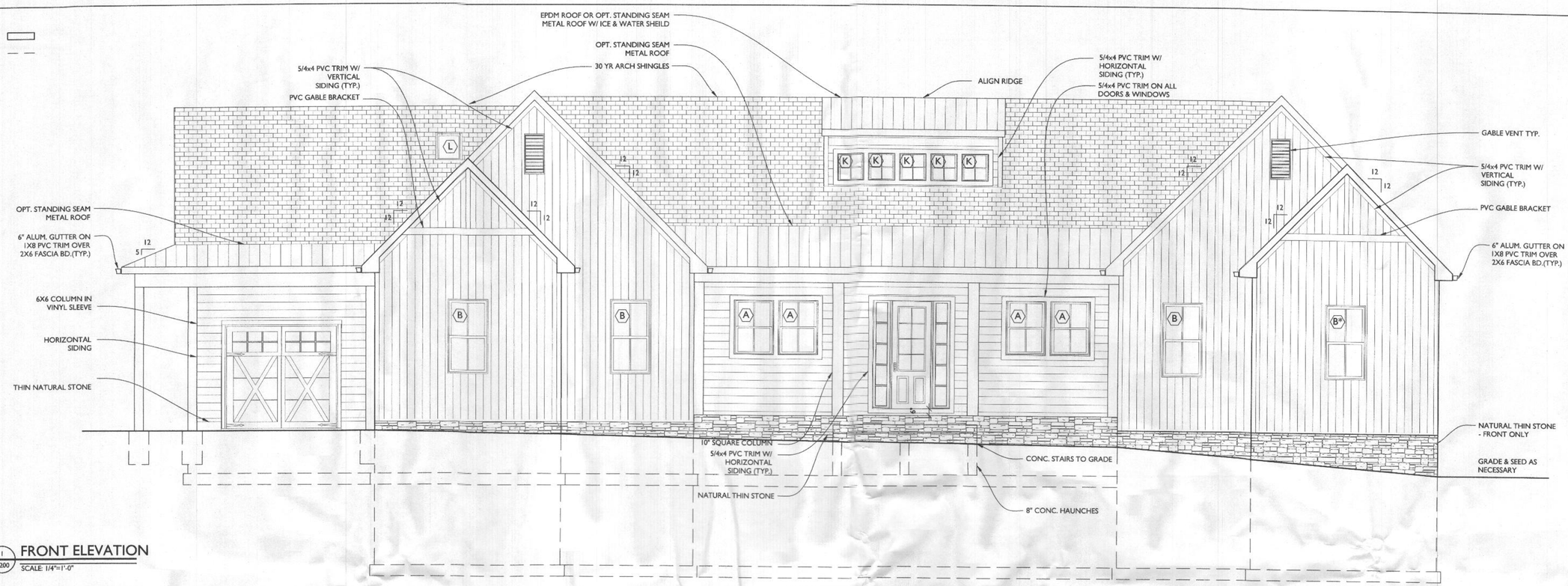
DRAWING TITLE
LATERAL BRACING ELEVATIONS

SHEET NUMBER
A-108

LINE TYPE KEY:

NEW WALL

ABOVE LINE



1 A200 FRONT ELEVATION

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

2 A200 RIGHT ELEVATION

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

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DRAWING TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

A-200

LINE TYPE KEY:

NEW WALL

ABOVE LINE

1 A201 REAR ELEVATION

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

2 A201 LEFT ELEVATION

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

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DRAWING TITLE

EXTERIOR ELEVATIONS CONTINUED

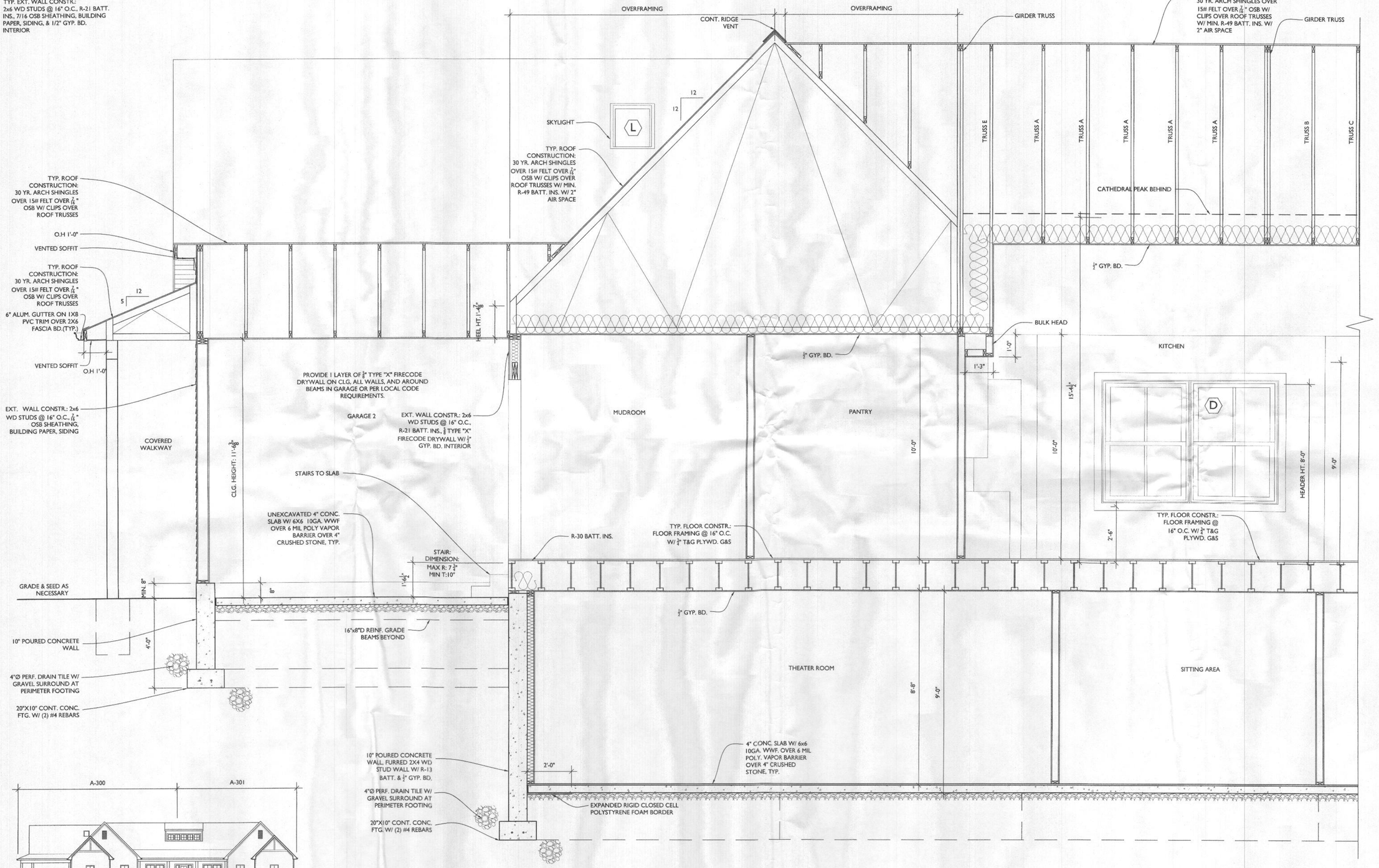
SHEET NUMBER

A-201

TYPICAL WALL CONSTRUCTION U.NO.

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

TYP. EXT. WALL CONSTR.: 2x6 WD STUDS @ 16" O.C., R-21 BATT. INS., 7/16 OSB SHEATHING, BUILDING PAPER, SIDING, & 1/2" GYP. BD. INTERIOR



1 / A300 BUILDING SECTION A KEY
SCALE: 1/16"=1'-0"

2 / A300 BUILDING SECTION
SCALE: 1/2"=1'-0"

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www.TransformingArchitecture.com

STAMP

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 10-22-2021.

PROJECT PHASE
PERMIT

PROJECT TITLE
THE STERKIS RESIDENCE

13429 Highland Rd
Highland, MD 20777

REVISIONS

SYMBOL	DATE	ISSUED FOR

PROJECT NUMBER	21-578
DATE	09/15/2021
SCALE	AS NOTED

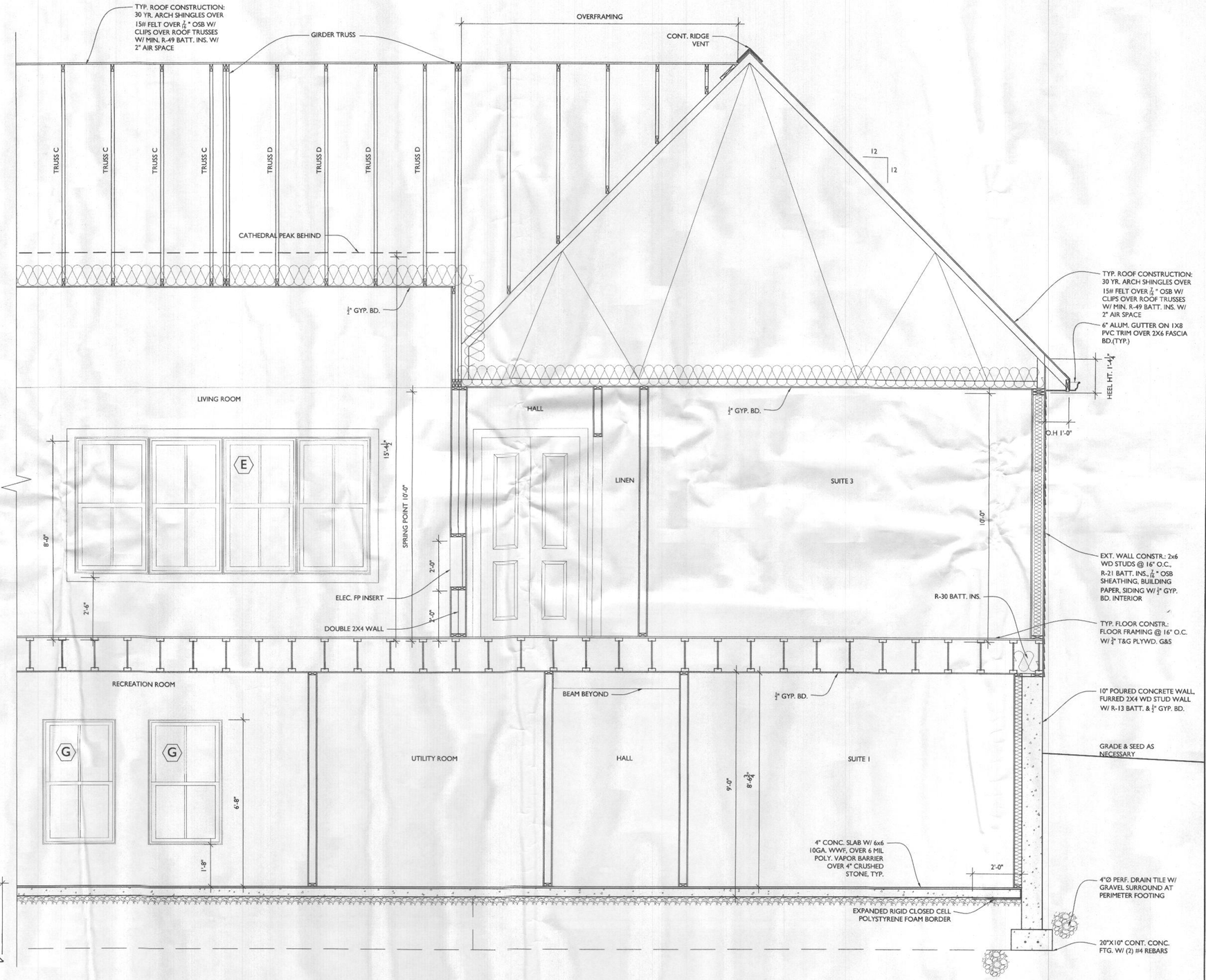
DRAWING TITLE
BUILDING SECTION A

SHEET NUMBER
A-300

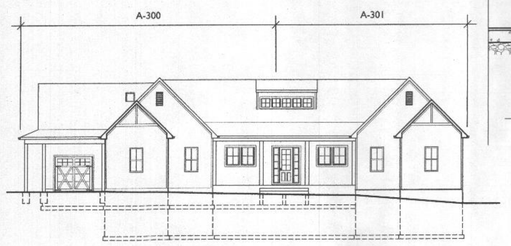
TYPICAL WALL CONSTRUCTION U.NO.

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

TYP. EXT. WALL CONSTR.: 2x6 WD STUDS @ 16" O.C., R-21 BATT. INS., 7/16 OSB SHEATHING, BUILDING PAPER, SIDING, & 1/2" GYP. BD. INTERIOR



2 A301 BUILDING SECTION A CONT.
SCALE: 1/2"=1'-0"



1 A300 BUILDING SECTION A KEY
SCALE: 1/16"=1'-0"

CAIRN custom homes

TRANSFORMING ARCHITECTURE
CUSTOM DESIGNS. FLAT FEES.

7612 Browns Bridge Road
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www.TransformingArchitecture.com

STATE OF MARYLAND
ABBEY LYNN BITTLE
13662
REGISTERED ARCHITECT

STAMP

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PROJECT PHASE
PERMIT

PROJECT TITLE
THE STERKIS RESIDENCE

13429 Highland Rd
Highland, MD 20777

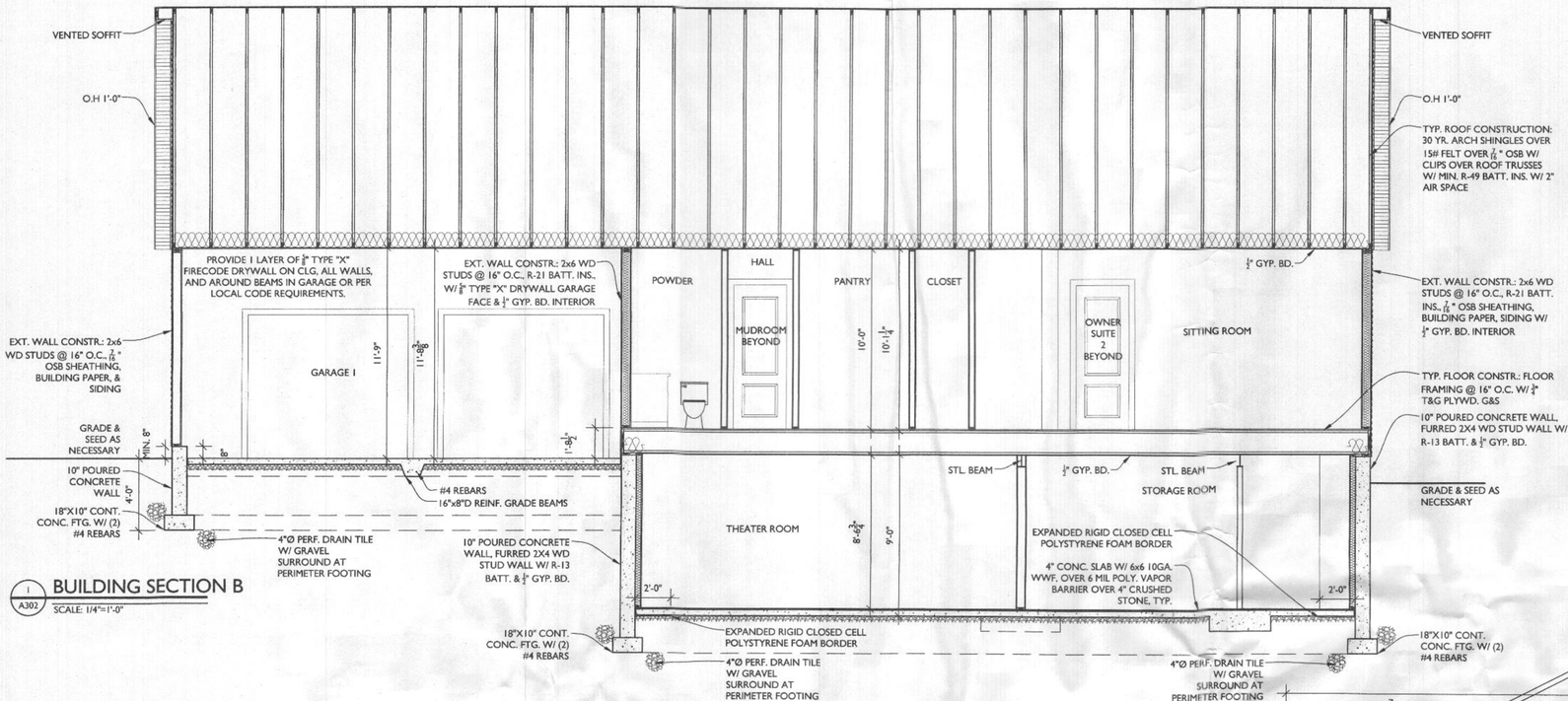
REVISIONS

SYMBOL	DATE	ISSUED FOR

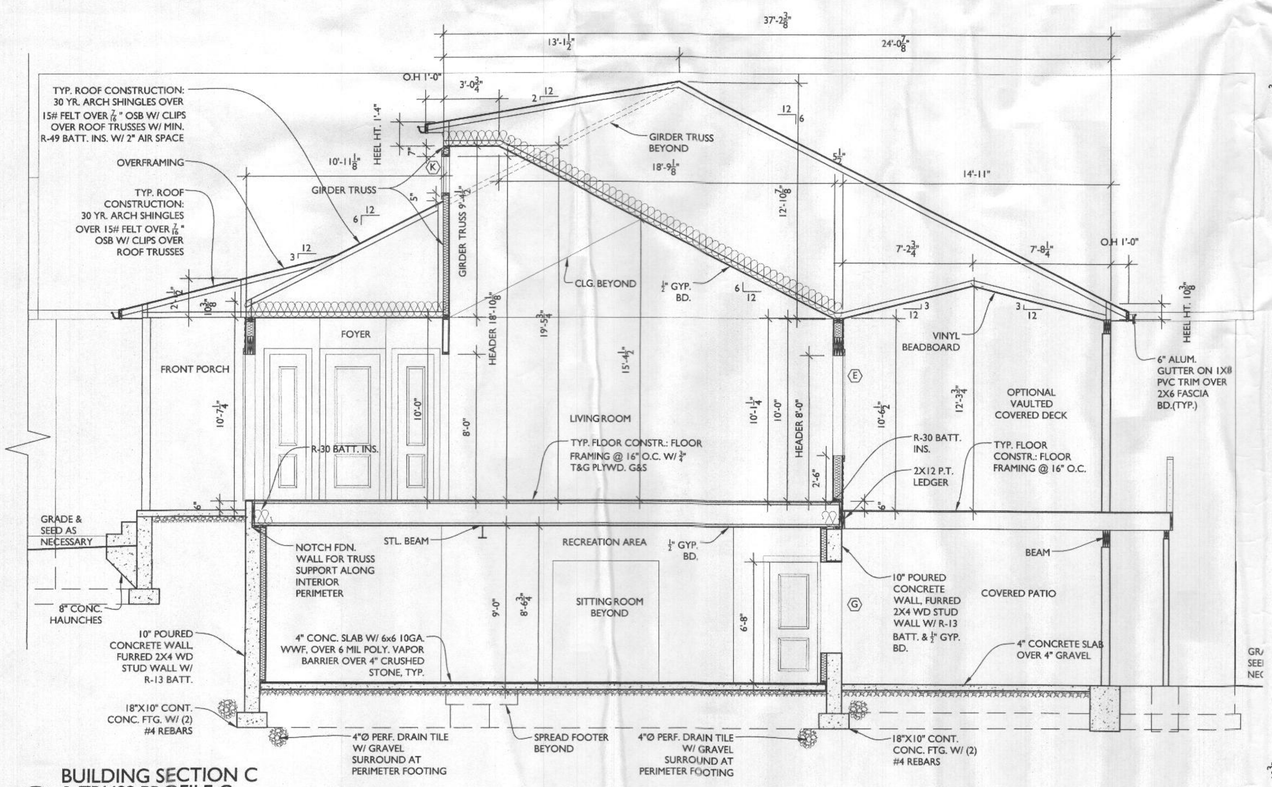
PROJECT NUMBER	21-578
DATE	09/15/2021
SCALE	AS NOTED

DRAWING TITLE
BUILDING SECTION A CONT.

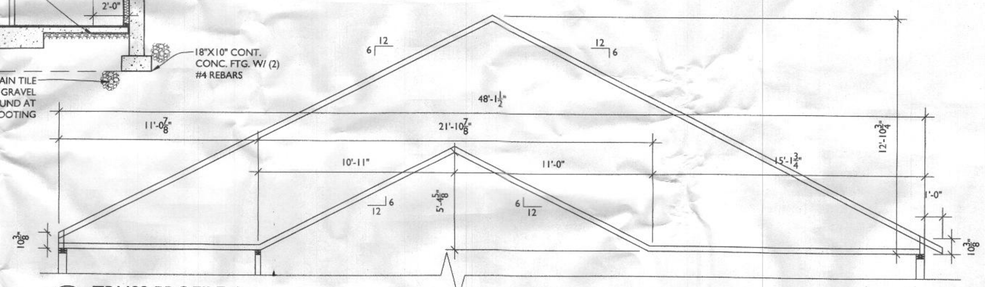
SHEET NUMBER
A-301



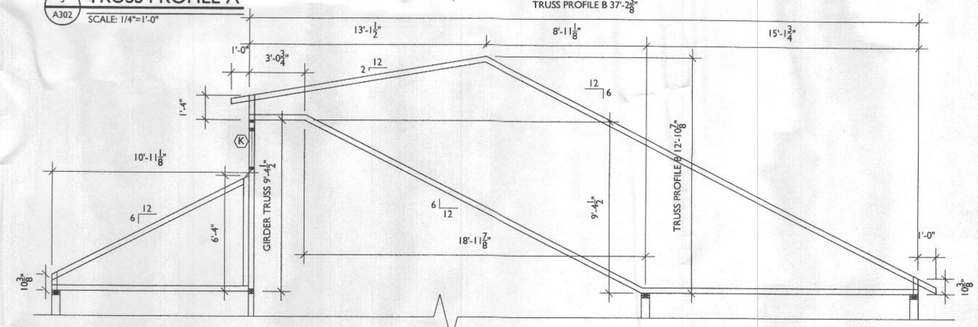
1 A302 **BUILDING SECTION B**
SCALE: 1/4"=1'-0"



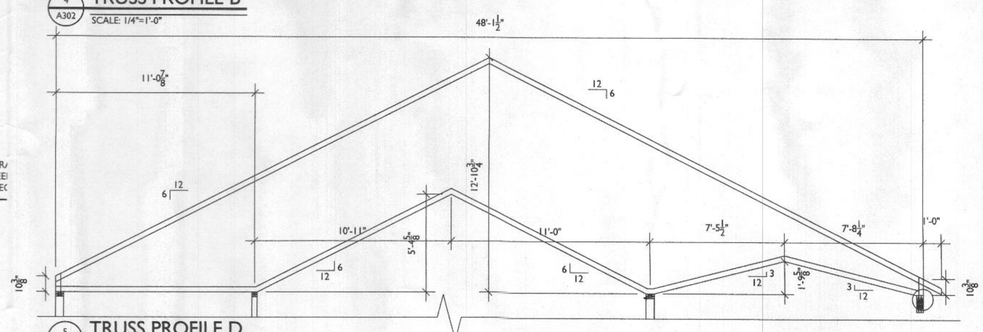
2 A302 **BUILDING SECTION C & TRUSS PROFILE C**
SCALE: 1/4"=1'-0"



3 A302 **TRUSS PROFILE A**
SCALE: 1/4"=1'-0"



4 A302 **TRUSS PROFILE B**
SCALE: 1/4"=1'-0"



5 A302 **TRUSS PROFILE D**
SCALE: 1/4"=1'-0"

TYPICAL WALL CONSTRUCTION U.NO.

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

TYP. EXT. WALL CONSTR.: 2x6 WD STUDS @ 16" O.C., R-21 BATT. INS., 7/16 OSB SHEATHING, BUILDING PAPER, SIDING, & 1/2" GYP. BD. INTERIOR

CAIRN custom homes

TRANSFORMING ARCHITECTURE
CUSTOM DESIGNS, FLAT FEES

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STATE OF MARYLAND
JAMES LYNN RISNER
13662
REGISTERED ARCHITECT

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PROJECT PHASE

PERMIT

PROJECT TITLE

THE STERKIS RESIDENCE

13429 Highland Rd
Highland, MD 20777

REVISIONS

SYMBOL	DATE	ISSUED FOR

PROJECT NUMBER	21-578
DATE	09/15/2021
SCALE	AS NOTED

DRAWING TITLE

BUILDING SECTION B + C + TRUSS PROFILE

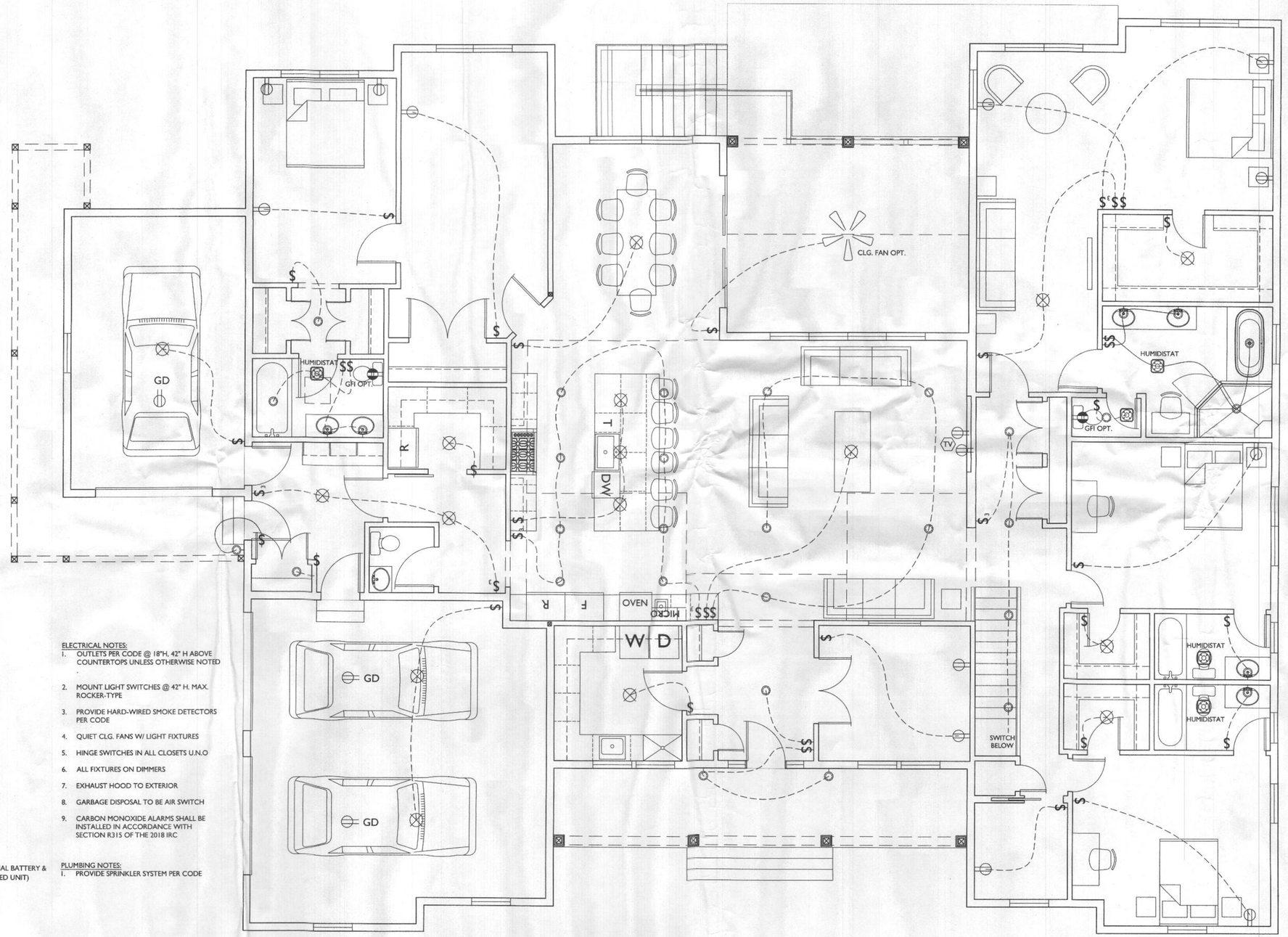
SHEET NUMBER

A-302

LINE TYPE KEY:

NEW WALL

ABOVE LINE



ELECTRICAL LEGEND

- $ SWITCH
- OUTLET
- GFI OUTLET
- RECESSED LED CLG. LIGHT
- LED WALL MOUNT FIXTURE
- LED CLG. FIXTURE
- EXHAUST FAN WITH HUMIDISTAT
- CLG. FAN W/ LIGHT
- TV CABLE TV
- SD HARDWIRED SMOKE DETECTOR W/INTERNAL BATTERY & CARBON MONOXIDE DETECTOR (COMBINED UNIT)
- 2-HEAD FLOOD
- † HOSE BIB

ELECTRICAL NOTES:

1. OUTLETS PER CODE @ 18"H, 42" H ABOVE COUNTERTOPS UNLESS OTHERWISE NOTED .
2. MOUNT LIGHT SWITCHES @ 42" H. MAX. ROCKER-TYPE
3. PROVIDE HARD-WIRED SMOKE DETECTORS PER CODE
4. QUIET CLG. FANS W/ LIGHT FIXTURES
5. HINGE SWITCHES IN ALL CLOSETS U.N.O
6. ALL FIXTURES ON DIMMERS
7. EXHAUST HOOD TO EXTERIOR
8. GARBAGE DISPOSAL TO BE AIR SWITCH
9. CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R315 OF THE 2018 IRC

PLUMBING NOTES:

1. PROVIDE SPRINKLER SYSTEM PER CODE

1 E-100 FIRST FLOOR ELECTRICAL LAYOUT

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

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STATE OF MARYLAND · KARIN LYNN BRIGHT · 13662 · ARCHITECT

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PROJECT PHASE

PERMIT

PROJECT TITLE

THE STERKIS RESIDENCE

13429 Highland Rd
Highland, MD 20777

REVISIONS

SYMBOL	DATE	ISSUED FOR

PROJECT NUMBER	21-578
DATE	09/15/2021
SCALE	AS NOTED

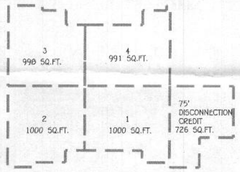
DRAWING TITLE

FIRST FLOOR ELECTRICAL LAYOUT

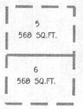
SHEET NUMBER

E-100

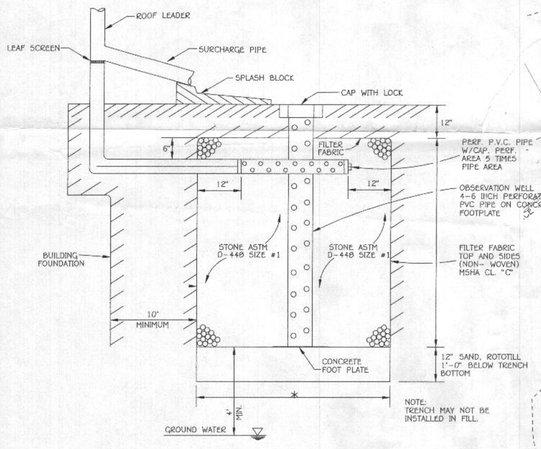
INDEX OF SHEETS



DRY WELL DRAINAGE AREAS - HOUSE



DRY WELL DRAINAGE AREAS - GARAGE



DRY WELL DETAIL

NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR DRYWELLS (M-5)

A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
F. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

DRY WELL CHART

PARCEL	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	AREA OF STORAGE	AREA OF TREATMENT	*L W D	REMARKS
101	1000 SQ.FT.	95 CF	100%	100%	8' x 6' x 5'	1
101	1000 SQ.FT.	95 CF	100%	100%	8' x 6' x 5'	2
101	998 SQ.FT.	95 CF	100%	100%	8' x 6' x 5'	3
101	991 SQ.FT.	95 CF	100%	100%	8' x 6' x 5'	4
101	568 SQ.FT.	54 CF	100%	100%	6' x 6' x 4'	5
101	568 SQ.FT.	54 CF	100%	100%	6 x 6' x 5'	6

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 07/14/21.

FRANK J. MANALANSAN — DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

STORMWATER MANAGEMENT PRACTICES

LOT	ADDRESS	DRYWELLS (M-5) Y/N, NUMBER	ROOFTOP DISCONNECTION (N-1) Y/N, NUMBER	NON-ROOFTOP DISCONNECTION (N-2) Y/N, NUMBER	MICRO-BIO (M-6) Y/N, NUMBER	IMPERVIOUS REMOVAL Y/N, NUMBER
N\A	13429 HIGHLAND RD	Y-6	Y-1	Y-1	N	Y-1

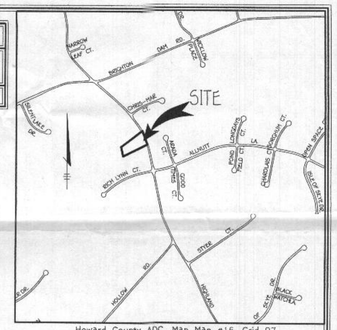
LEGEND

SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL
	PROPOSED CONTOUR 2' INTERVAL
	EXISTING TREES
	PROPOSED TREE LINE
*457.70	SPOT ELEVATION
SSF SSF	SUPER SILT FENCE
SF SF	SILT FENCE
	NON-ROOFTOP IMP. DISCONNECTION CREDIT FLOW PATH
	PROPOSED IMP. AREA REMOVAL FOR SWM CREDIT
	EX. IMP. DESIGNATED TO BE NON-ROOFTOP IMP. AREA DISCONNECTION SWM CREDIT
LOD	LIMITS OF DISTURBANCE
	DENOTES SEWAGE DISPOSAL AREA
	DRAINAGE DIVIDE
SCE	STABILIZED CONSTRUCTION ENTRANCE (SCE)

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:

HOWARD SOIL CONSERVATION DISTRICT — DATE

GUTTER DRAIN FILTER DETAIL
NOT TO SCALE



Howard County ADC, Map Map #16, Grid D7

VICINITY MAP

SCALE: 1" = 1200'

GENERAL NOTES

1. SUBJECT PROPERTY ZONED: RR-DEO
2. TOTAL AREA OF PROPERTY: 87,120 SQ.FT. OR 2 Ac±
3. ONE SINGLE FAMILY HOUSE IS PROPOSED FOR THIS LOT.
4. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT REVIEW.
5. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
6. CONTRACTOR/BUILDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
7. TOPOGRAPHIC INFORMATION IS BASED ON DIGITAL HOWARD COUNTY AERIAL ALONG WITH FIELD RUN TOPOGRAPHY BY FISHER, COLLINS & CARTER, INC., FEBRUARY, 2021.
8. NO WETLANDS CURRENTLY EXIST ON THE PROPERTY.
9. DRIVEWAY CULVERTS SHALL BE CONSTRUCTED AT THE PLOT PLAN.
10. STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. WE ARE PROVIDING STORM WATER MANAGEMENT BY THE USE OF 6 DRYWELLS (M-5), DISCONNECTION OF ROOFTOP CREDIT, NON-ROOFTOP CREDIT AND IMPERVIOUS AREA REMOVAL. ALL ARE TO BE MAINTAINED BY THE HOMEOWNER.
11. WATER WILL BE PROVIDED BY PRIVATE ON-SITE WELL. SEWER WILL BE PROVIDED BY PRIVATE SEPTIC SYSTEM.
12. SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY.
13. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
14. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
15. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
16. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS.

SOILS LEGEND

SOIL	NAME	CLASS	'K' VALUE
GgB	Glenelg loam, 3 to 8 percent slopes	B	.37

STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL.
2. CREDITS ARE GIVEN FOR DISCONNECTION OF IMPERVIOUS COVERS.
3. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE LESS THAN 1000 SQ. FT.
4. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE FIGURE 5.2 OF THE MANUAL AND THE DETAIL SHOWN ON THIS SHEET.
5. FINAL GRADING IS SHOWN ON THIS SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN.
6. DISCONNECTION OF NON-ROOFTOP IMPERVIOUS:
   DRIVEWAY SHALL REMAIN OPEN SECTION ALONG NORTH (DOWNSTREAM) SIDE. DISCONNECTION FLOW PATH AREA SHALL REMAIN CONTINUOUS DOWNSTREAM FLOW TOWARD NORTH AND REMAIN PERVIOUS.
7. REMOVAL OF EXISTING IMPERVIOUS FOR SWM CREDIT:
   THESE AREAS SHALL CONSIST OF THE EXISTING IMPERVIOUS REMOVED WHERE THEY WILL BE REPLACED BY PERVIOUS LAND USE.
8. DISCONNECTION OF ROOFTOP IMPERVIOUS:
   THE DISCONNECTION FLOW PATH SHALL MAINTAIN MINIMUM SHEET FLOW, 75' LENGTH AND FLATTER THAN 5% LONGITUDINAL SLOPE. IN THE EVENT THAT A PATIO OR OTHER OUTDOOR USE SURFACE IS INSTALLED, THE DISCONNECTION FLOW PATH SHALL BE MANIPULATED SO THAT A MINIMUM CONTIGUOUS PORTION OF THE FLOW PATH MEETS THE AFOREMENTIONED REQUIREMENTS.

DAILY STABILIZATION NOTE

ALL DISTURBED AREAS NOT DIRECTED TO A SEDIMENT CONTROL DEVICE SHALL BE STABILIZED AT THE END OF EACH WORKDAY. THE CONTRACTOR SHALL NOT DISTURB AN AREA GREATER THAN THAT WHICH CAN BE STABILIZED AT THE END OF EACH WORKDAY IN SUCH AREAS.

OWNER/BUILDER
CAIRN CUSTOM HOMES LLC
C/O STEVEN APPLER
10548 GORMAN RD
LAUREL MD 20723
410-818-7382

SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN
13429 HIGHLAND RD

ZONED RR-DEO
TAX MAP No. 34 GRID No. 15 PARCEL No. 101
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE 1"=30" DATE: MAY 27, 2021
SHEET: OF 2