

PERMIT NUMBER: B 21009968

DATE ACCEPTED:

**RESIDENTIAL BUILDING PERMIT APPLICATION**  
 HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS  
 3430 COURT HOUSE DRIVE, ELLICOTT CITY, MD 21043 - PHONE: (410) 313-2455 OPTION #4  
 www.howardcountymd.gov

**BUILDING SITE ADDRESS REQUIRED**

Street Address: **TBD Frederick Rd** Unit:

City: **Woodbine** State: **MD** Zip Code: **21797**

Subdivision/Village/Complex Name: **1002** SDP/WP/BA #:

Lot: Tax Map: **07 / Grid 010** Parcel: **0395** Grading Permit #:

**DESCRIPTION OF WORK REQUIRED**

Existing Use: **Vacant** Proposed Use: **Residential** Estimated Cost: **\$588,767.00**

Trade Work to Be Completed (Separate Permits Required):  Mechanical (HVACR)  Electrical  Plumbing  None

**2 Story Single Family House, attached 2 car garage, 4 bedroom, 2.5 bath, unfinished basement.**

**PROPERTY OWNER INFORMATION REQUIRED**

Owner(s) Name(s) (As it appears on tax records): **Ermo & Francelain Augustin** Primary Residence:  Yes  No

Owner's Street Address: **8471 Winding Trail**

City: **Laurel** State: **MD** Zip Code: **20724**

Phone: **(240) 264-7020** Email: **ermoaugustin@gmail.com**

**APPLICANT NAME REQUIRED - INDIVIDUAL WHO SIGNS THIS APPLICATION**

Business Name: **KCI Technologies, Inc.** Contact Name: **Frank White**

Street Address: **936 Ridgebrook Road**

City: **Sparks** State: **MD** Zip Code: **21152**

Phone: **(410) 316-0803** Email: **frank.white@kci.com**

**CONTRACTOR INFORMATION REQUIRED**

Business Name: **Keystone Custom Homes**

Licensee's Name: License #: **MHBR# 2937 (exp 12/01/2023)**

Street Address: **227 Granite Run Drive, Suite 100**

City: **Lancaster** State: **PA** Zip Code: **17601**

Phone: **(717) 719-1362** Email: **greinsmith@keystonecustomhome.com**

**ARCHITECT/ENGINEER INFORMATION INDIVIDUAL WHO SIGNED PLANS, IF APPLICABLE**

Business Name: **James F. Collins, P.E.** Name: **James F. Collins**

Street Address: **227 Granite Run Drive, Suite 100**

City: **Lancaster** State: **PA** Zip Code: **17601**

Phone: **(352) 250-3146** Email: **jcollins@keystonecustomhome.com**

**BUILDING CHARACTERISTICS REQUIRED**

Primary Structure:  SF Dwelling  SF Townhouse  SF Duplex  Mobile Home  Multi-Family Dwelling (MF\*) Condo:  Yes  No

Utilities:  Electric  Gas Water Supply:  Public  Private (Well) Sewage Disposal:  Public  Private (Septic)

Heating System:  Electric  Natural Gas  Propane  Other: Roadside Tree Project:  No  Yes: #

Sprinkler System:  NFPA 13  NFPA 13R  NFPA 13D  None Fire Alarm System:  Yes  No  Voice Evac

**ADDITIONAL RESIDENTIAL INFORMATION (PLEASE SELECT/COMPLETE ALL THAT APPLY)**

Model Name & Options: **Nottingham Manor**

# of Bedrooms (SF): **4** # of efficiency units (MF\*): # of 1 BR (MF\*): # of 2 BR (MF\*): # of 3 BR (MF\*):

# Rooms: **21** # Full Baths: **2** # Half Baths: **1** # Fireplaces: **1**

Garage/Carport Info:  Attached Garage  Detached Garage  Integral Garage  Carport  None

Basement/Foundation Info:  Slab on Grade  Post & Pier  Unfinished Basement  Finished Basement:  Full or  Partial

1<sup>st</sup> FI Width: **62** 1<sup>st</sup> FI Depth: **52** 2<sup>nd</sup> FI Width: **50** 2<sup>nd</sup> FI Depth: **52** Bsmt Width: **62** Bsmt Depth: **52**

Energy Method:  Prescriptive  Performance  UA Alternative  ERI Gross Area: **7,031** sq ft Occupiable Area: **4,236** sq ft

**AGREEMENT/ DISCLAIMER REQUIRED**

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES

APPLICANT'S ORIGINAL SIGNATURE: *[Signature]* DATE SIGNED: **12/23/2021**

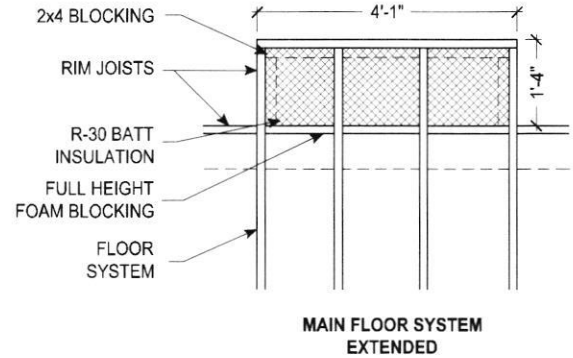
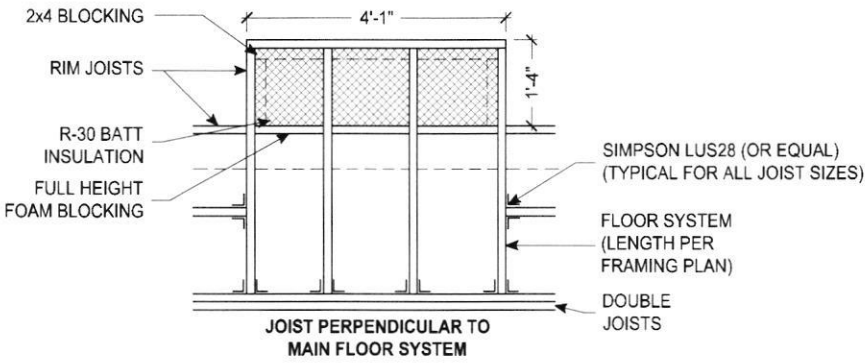
**FOR OFFICE USE ONLY** CHECKS PAYABLE TO: DIRECTOR OF FINANCE OF HOWARD COUNTY

AGENCIES REQUIRED/APPROVALS:

PR  DPZ  DED  Health *4-11-22*  SHA  CID

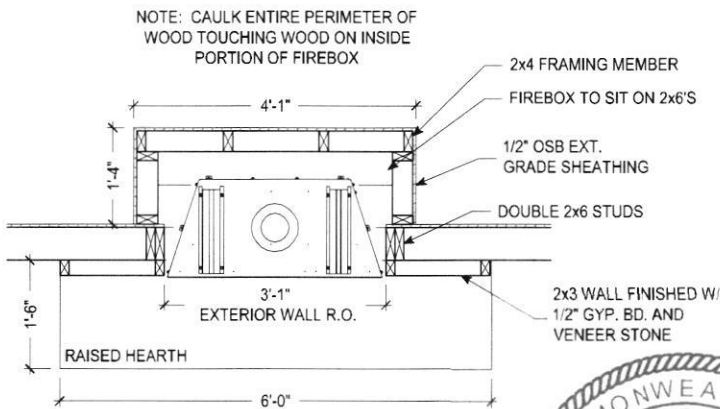
SUBMITTAL FEES: **180** PAYMENT: **600180** ACCEPTED BY: *[Signature]*

**GENERIC LAYOUT - PLEASE SEE SPECIFIC JOB  
PLAN FOR CORRECT JOIST LOCATIONS**



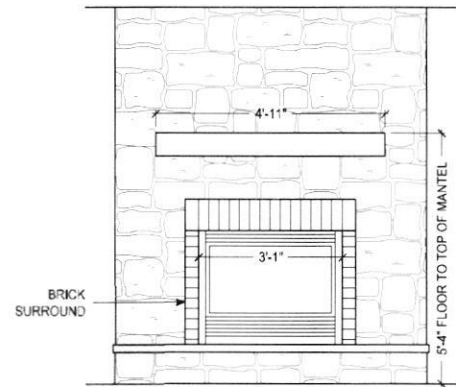
**FRAMING PLANS**

NOT TO SCALE



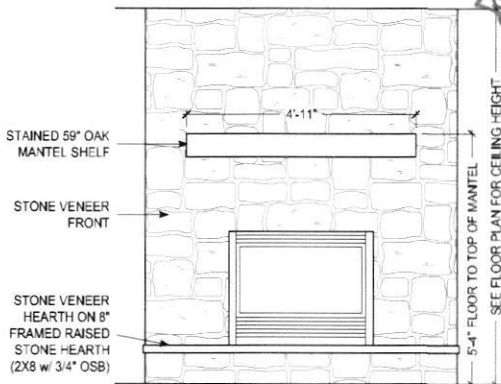
**PLAN VIEW**

NOT TO SCALE



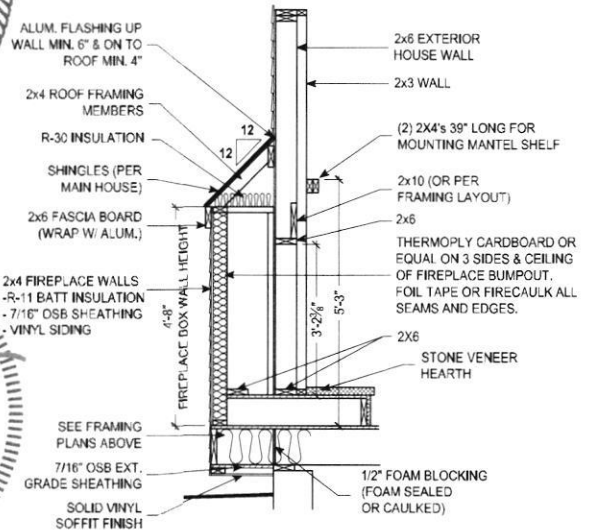
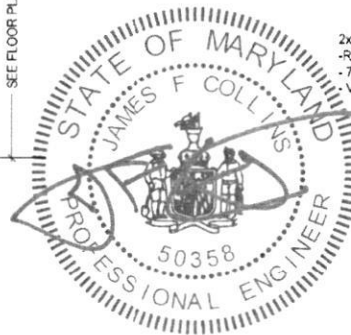
**BRICK SURROUND OPTION**

NOT TO SCALE



**FIREPLACE ELEVATION**

NOT TO SCALE



**FIREPLACE SECTION**

NOT TO SCALE

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**NOTE: FRAMING DIMENSIONS (EXCEPT HEARTH DIMENSIONS).**



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CUSTOM HOMES

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SHEET DESCRIPTION:

REAGAN FIREPLACE  
(STONE FP)

SCALE:  
AS NOTED

CREATED:  
03/14/06

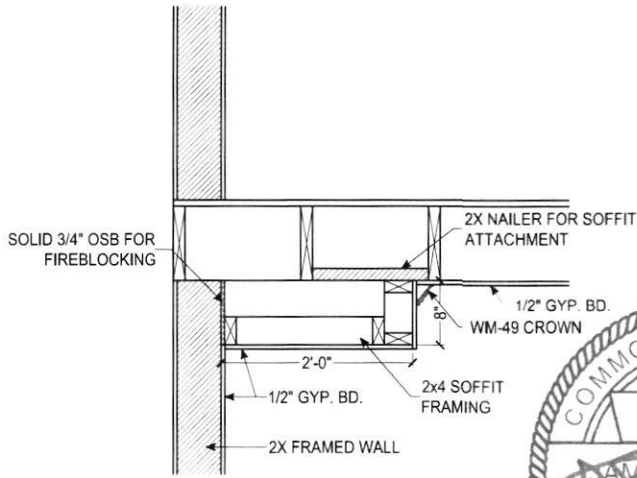
OP

P020

DATE MODIFIED:  
04/21/17

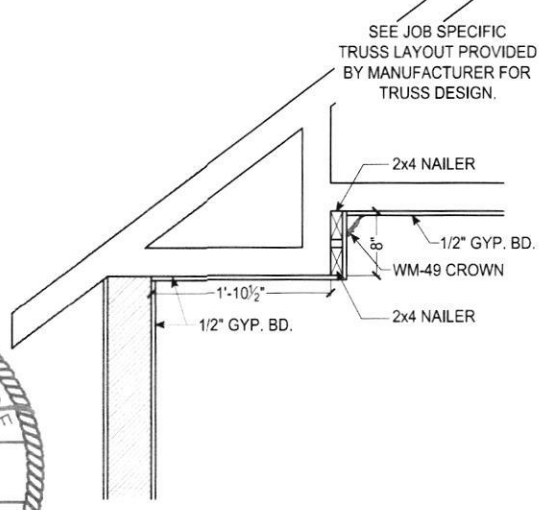
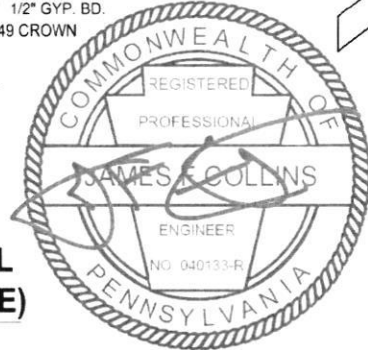
MODIFIED BY:  
EMW

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**TRAY CEILING DETAIL  
(FLOOR JOISTS ABOVE)**

SCALE: 1/2"=1'-0"

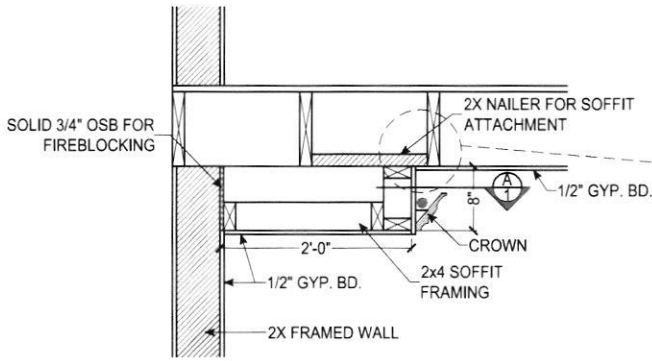


**TRAY CEILING DETAIL  
(ROOF TRUSSES ABOVE)**

SCALE: 1/2"=1'-0"

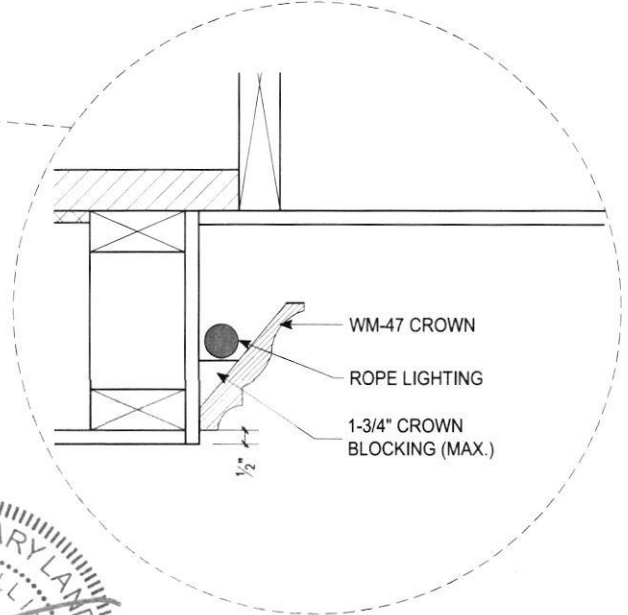
**TRAY CEILING w/ ROPE LIGHTING DETAIL**

\*DETAIL ONLY APPLICABLE WHEN OPT. ROPE LIGHTING WAS SELECTED IN ADDITION TO TRAY CEILING OPTION.



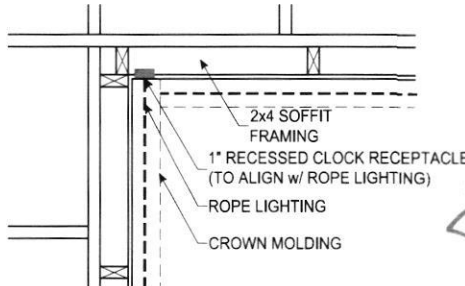
**TRAY CEILING SECTION**

SCALE: 1/2"=1'-0"



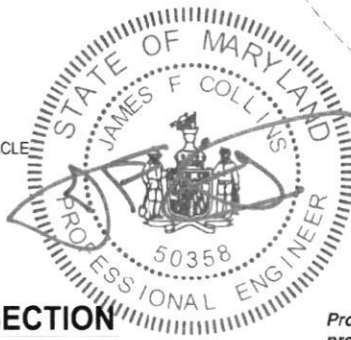
**CROWN MOLDING DETAIL**

NOT TO SCALE



**A-1 TRAY CEILING FRAMING SECTION**

SCALE: 1/2"=1'-0"



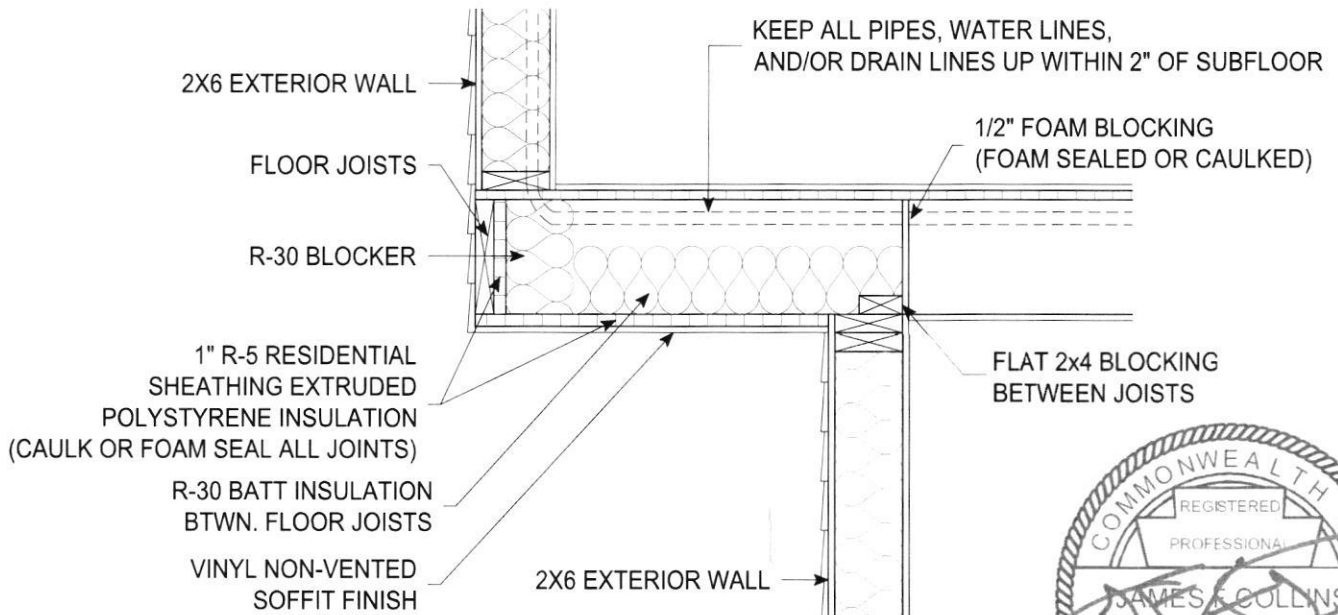
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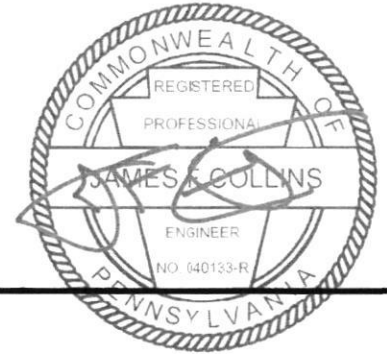
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SCALE: AS NOTED	CREATED: 10/12/06	OP	T005
DATE MODIFIED: 10/23/09	MODIFIED BY: EMW		
© COPYRIGHT 2015			

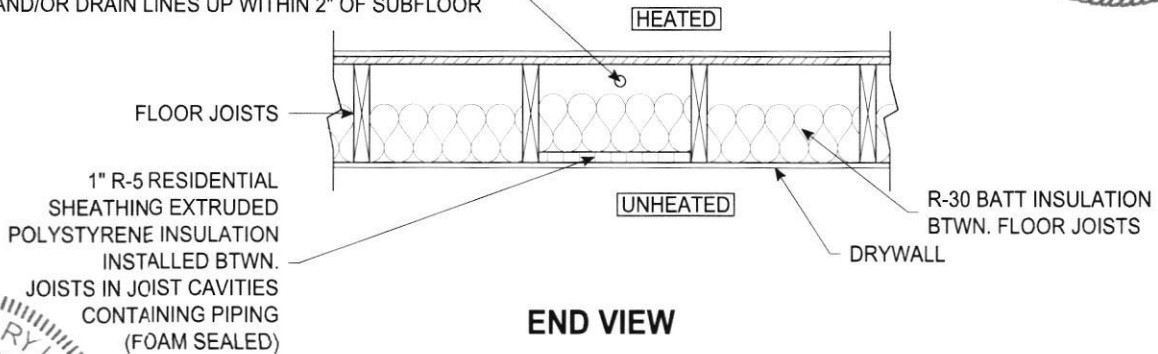


**OVERHANG SECTION**

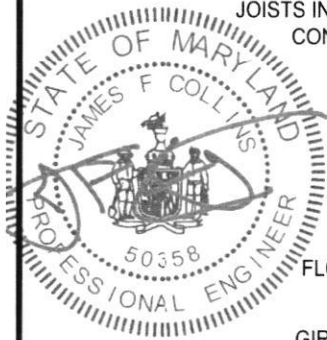
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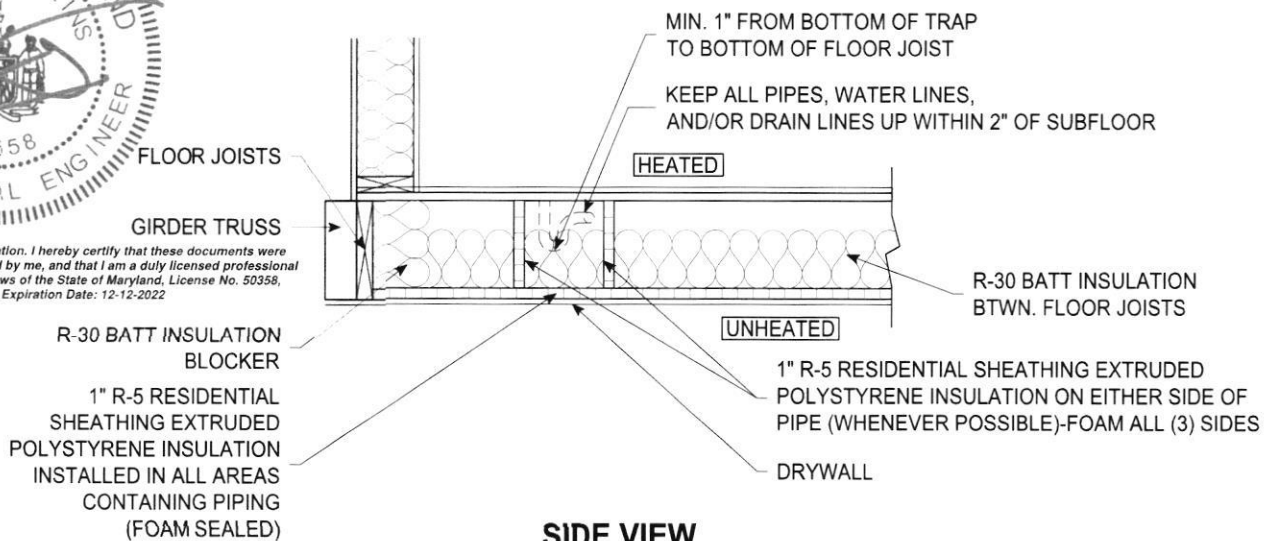
KEEP ALL PIPES, WATER LINES,  
AND/OR DRAIN LINES UP WITHIN 2" OF SUBFLOOR



**END VIEW**



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**SIDE VIEW**

**OVERHANG SECTION (GARAGE)**

NOT TO SCALE



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CUSTOM HOMES

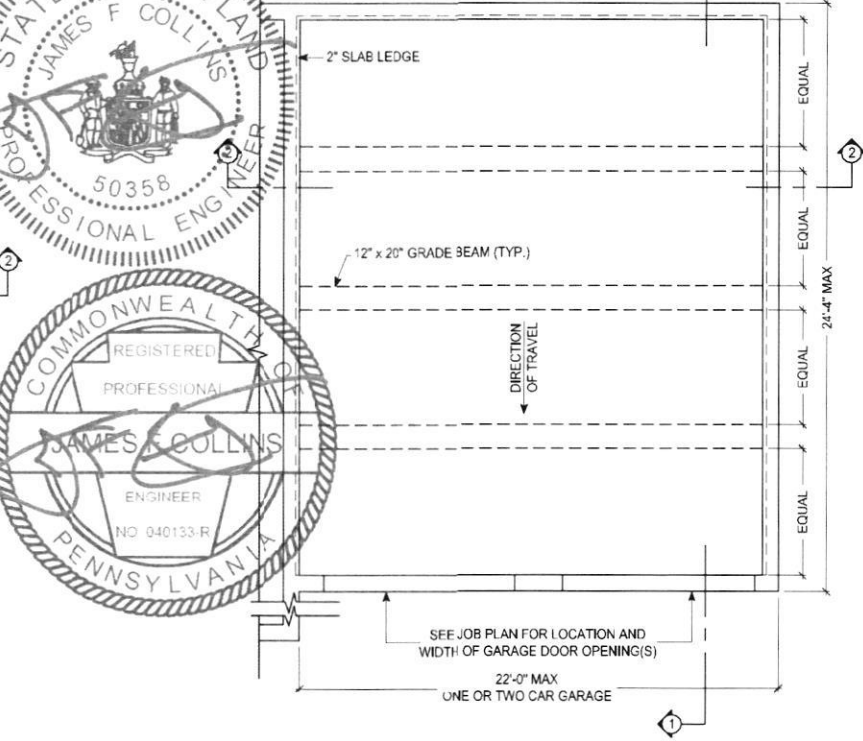
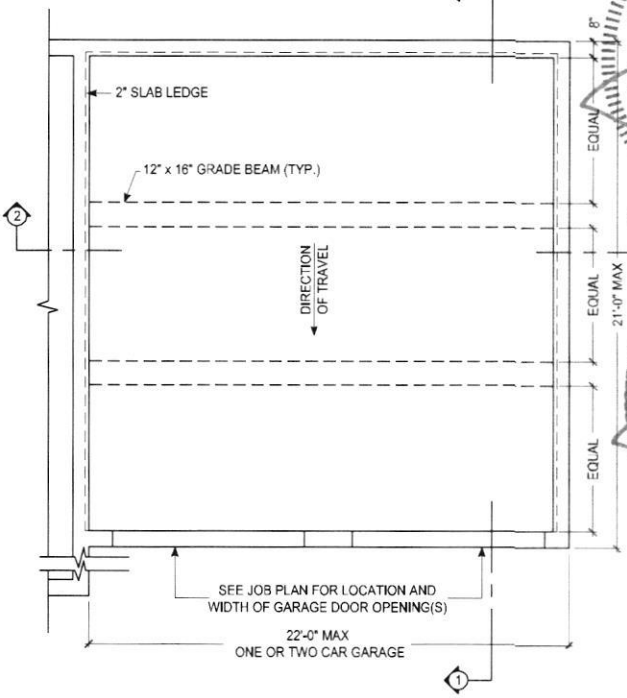
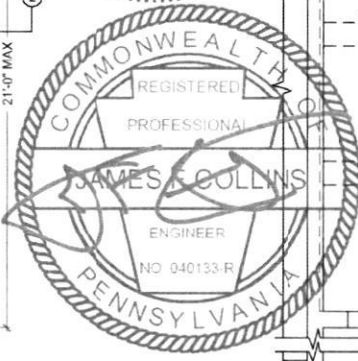
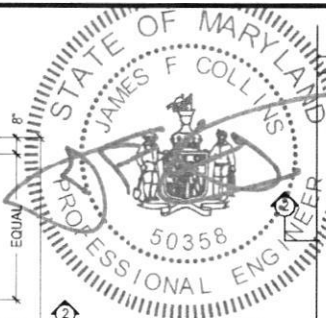
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SHEET DESCRIPTION:

OVERHANG OVER  
UNHEATED AREAS

SCALE: AS NOTED	CREATED: 08/06/04	ST	001
DATE MODIFIED: 06/13/13	MODIFIED BY: ELS		
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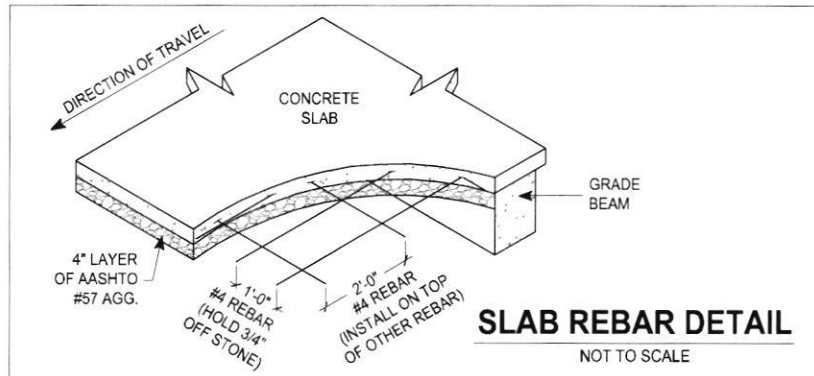
### REINFORCED GARAGE SLAB

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

**NOTES:**

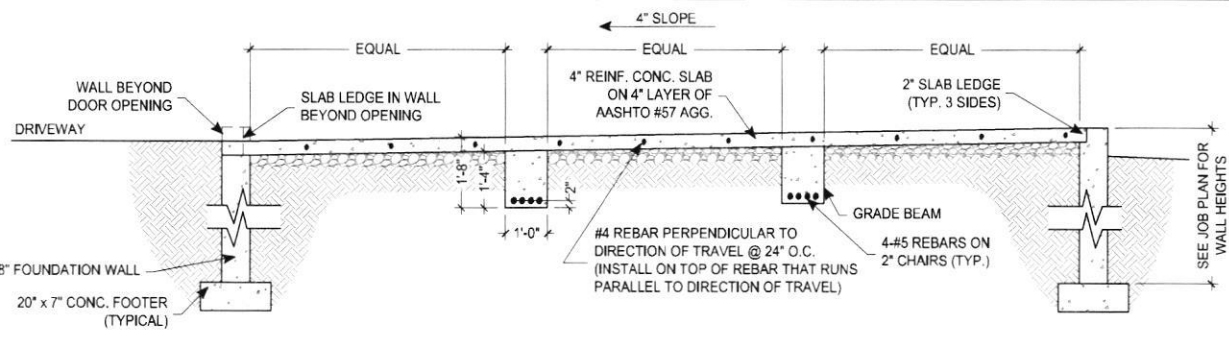
- 1. CONCRETE FOOTINGS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 2500 PSI, UNLESS OTHERWISE NOTED
- 2. ALL INTERIOR CONCRETE SLABS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3500 PSI.

\*IMPORTANT - SEE DETAILS BELOW FOR REBAR SPACING INSTRUCTIONS



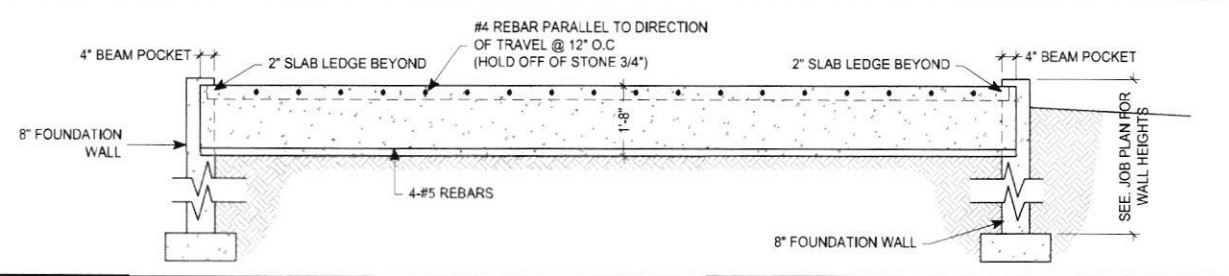
### SLAB REBAR DETAIL

NOT TO SCALE



### SECTION 1

NOT TO SCALE



### SECTION 2

NOT TO SCALE



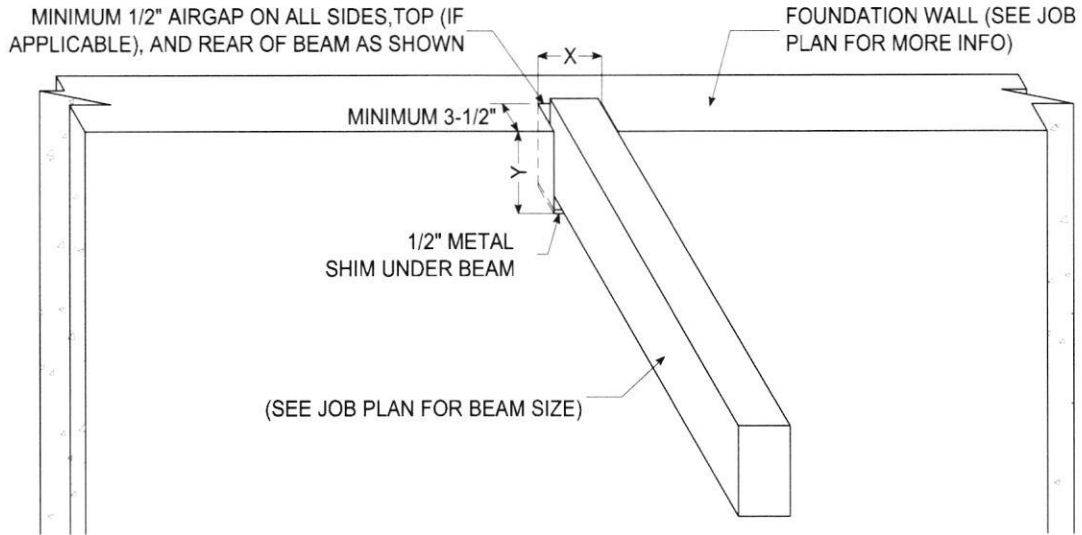
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CUSTOM HOMES

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SHEET DESCRIPTION:		GARAGE GRADE BEAMS	
SCALE:	AS NOTED	CREATED:	04/17/08
DATE MODIFIED:	02/07/17	MODIFIED BY:	EMW
		ST	032
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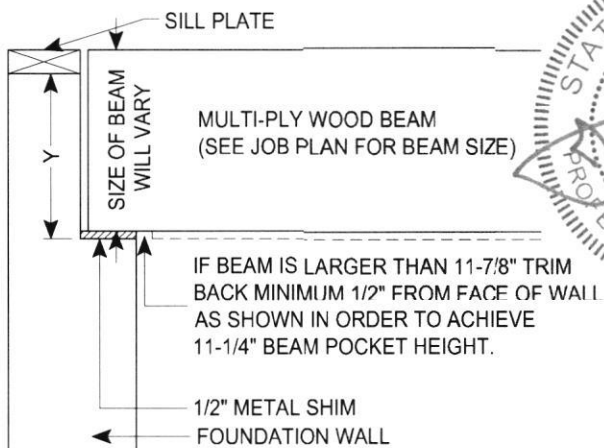
# BEAM AND BEAM POCKET TO BE BUILT PER 2018 IRC SECTION 317.1 NOTE 4

**\*NOTE\***  
BEAM NEEDS MINIMUM 3"  
BEARING ON FOUNDATION WALL



## BEAM POCKET DETAIL

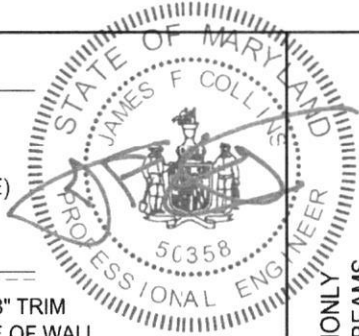
SCALE: 1/2" = 1'-0"



## WOOD BEAM POCKET SECTION

SCALE: 1" = 1'-0"

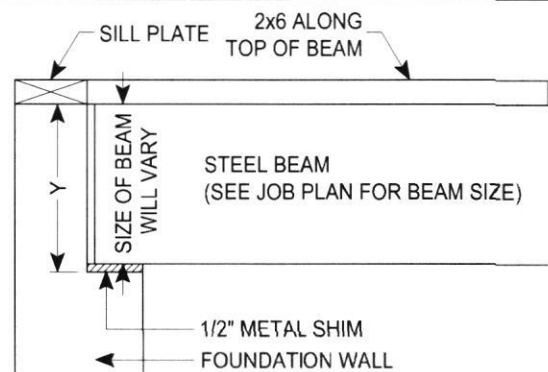
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MOST COMMONLY USED WOOD BEAMS

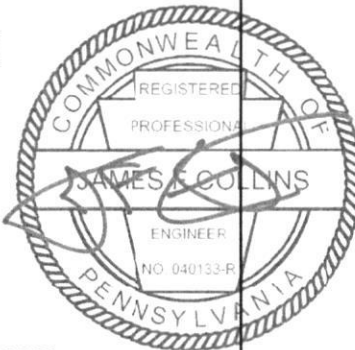
	X	Y
2-PLY: 3 1/2" x 11 7/8"	5 1/2"	10 7/8"
3-PLY: 5 1/4" x 11 7/8"	7 1/4"	10 7/8"
4-PLY: 7" x 11 7/8"	9"	10 7/8"
2-PLY: 3 1/2" x 14"	5 1/2"	13"
3-PLY: 5 1/4" x 14"	7 1/4"	13"
4-PLY: 7" x 14"	9"	13"
8" STEEL BEAM	8"	8 1/2"
10" STEEL BEAM	8"	10 1/2"

## BEAM SIZES & POCKET DIMENSIONS



## STEEL BEAM POCKET SECTION

SCALE: 1" = 1'-0"

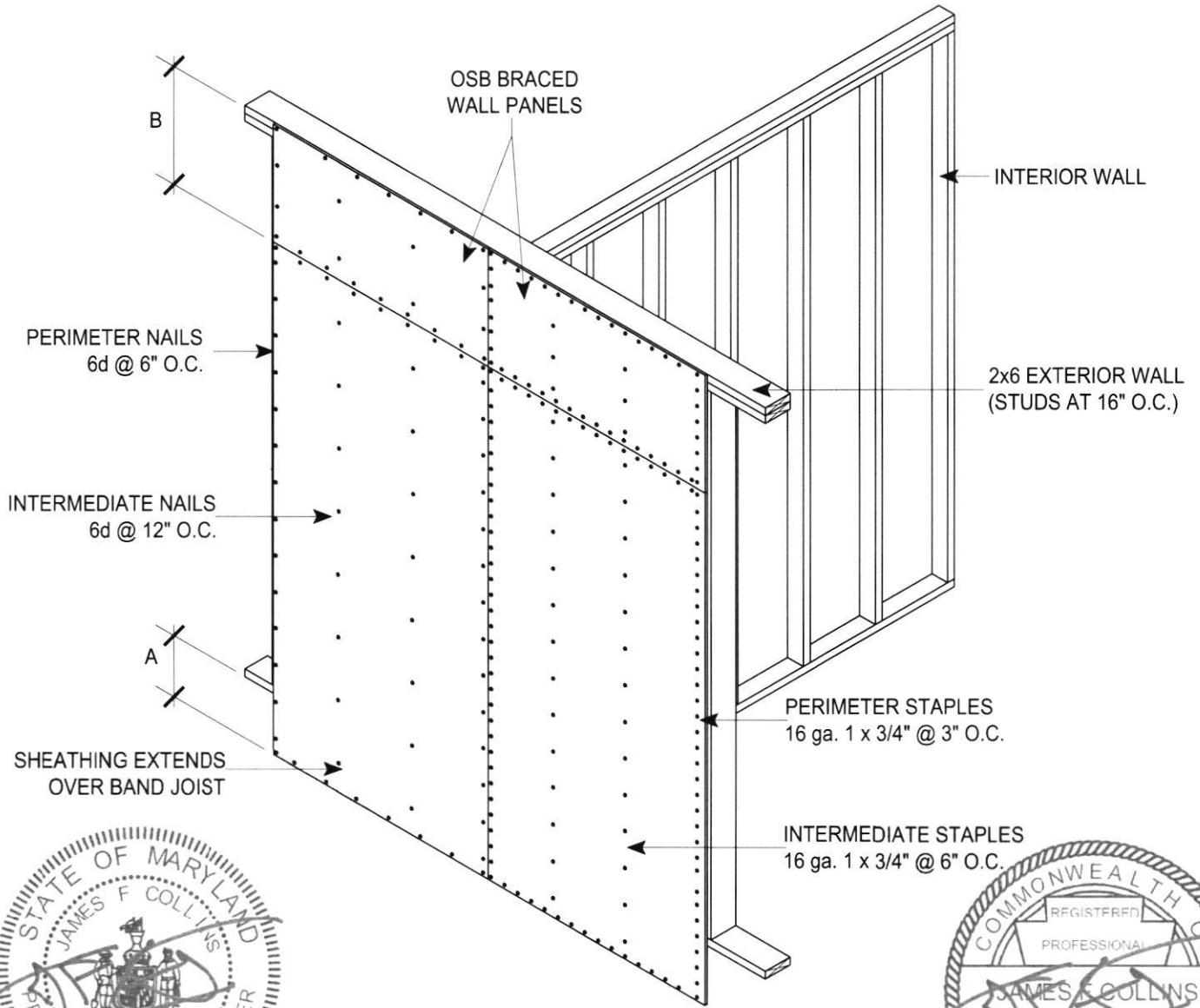


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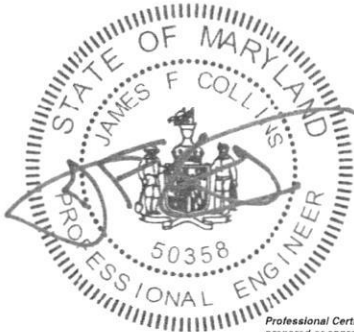
SHEET DESCRIPTION: CONCRETE WALL BEAM POCKETS

SCALE: AS NOTED	CREATED: 10/15/08	ST	033
DATE MODIFIED: 10/17/19	MODIFIED BY: E.WEAVER		

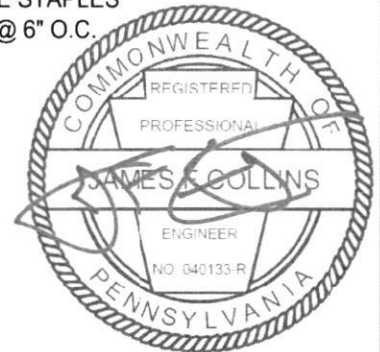
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**9' WALLS SHOWN  
STUDS @ 16" O.C.**



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	FIRST FLOOR	SECOND FLOOR (OR FIRST FLOOR WITH ROOF)
A	EXTEND TO BOTTOM OF BAND JOIST OR TOP OF FOUNDATION WALL	START AT TOP OF FIRST FLOOR BRACING (BAND JOIST OR FOUND. WALL IF ON FIRST FLOOR)
B	CONTINUE TO BOTTOM OF SECOND FLOOR WALL BRACING / SHEATHING	CONTINUE TO EAVE OR BOTTOM OF SHEATHING ON TRUSS (ON GABLE SIDE)

**BRACING METHOD #3 PER 2006 IRC 602.10.3(3)  
EXTERIOR OSB WALL SHEATHING ATTACHED  
@ 16" OR 24" O.C. STUDS, PER 2006 IRC WALL  
FASTENER SCHEDULE AS WELL AS CURRENT IRC OSB  
FASTENER SCHEDULE, AS FOLLOWS:  
6d NAILS @ 6" O.C. AT THE EDGES OF SHEET, AND  
12" O.C. @ INTERMEDIATE STUDS OR 16 ga. x 1 3/4"  
STAPLES @ 3" O.C. AT EDGES AND 6" O.C.  
@ INTERMEDIATE STUDS.**

**METHOD #3, 16" O.C.  
(CONTINUOUS SHEATHING-OSB)**

SCALE: 3/8" = 1'-0"

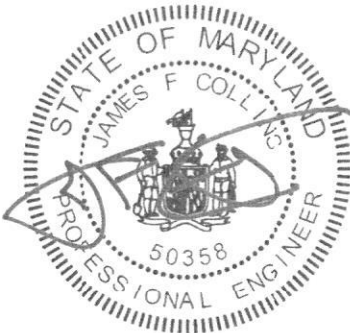
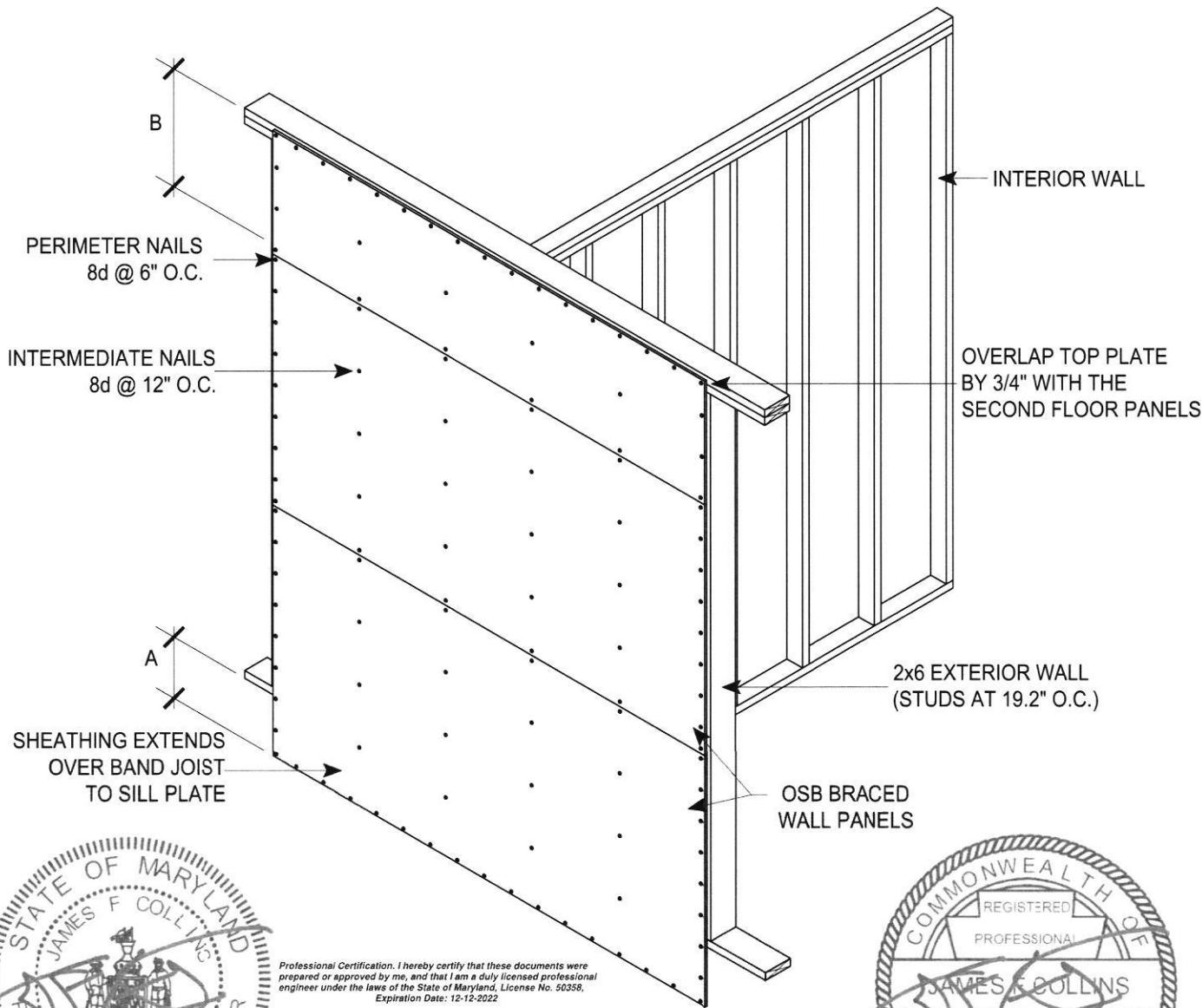


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SHEET DESCRIPTION: WALL BRACING METHOD 16" O.C.

SCALE: AS NOTED	CREATED: 1/29/10	ST	112
DATE MODIFIED: 10/17/19	MODIFIED BY: EMW		

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## 9' WALLS SHOWN STUDS @ 19.2" O.C.

	FIRST FLOOR	SECOND FLOOR (OR FIRST FLOOR WITH ROOF)
A	EXTEND TO BOTTOM OF BAND JOIST OR TOP OF FOUNDATION WALL	START AT TOP OF FIRST FLOOR BRACING (BAND JOIST OR FOUND. WALL IF ON FIRST FLOOR)
B	OVERLAP TOP PLATE BY 3/4" WITH THE 2nd FLOOR OSB PANELS	CONTINUE TO EAVE OR BOTTOM OF SHEATHING ON TRUSS (ON GABLE SIDE)

**BRACING METHOD #3 MEETS BOTH THE 2006 & 2018 IRC AS ADOPTED BY THE LOCAL JURISDICTION**  
**EXTERIOR OSB WALL SHEATHING ATTACHED @ 16" OR 24" O.C. STUDS, PER 2009 IRC BRACED WALL FASTENER SCHEDULE AS WELL AS CURRENT IRC OSB FASTENER SCHEDULE, AS FOLLOWS:**  
 8d NAILS @ 6" O.C. AT THE EDGES OF SHEET, AND 12" O.C. @ INTERMEDIATE STUDS OR 16 ga. x 1 3/4" STAPLES @ 3" O.C. AT EDGES AND 6" O.C. @ INTERMEDIATE STUDS.

### METHOD #3, 19.2" O.C. (CONTINUOUS SHEATHING-OSB)

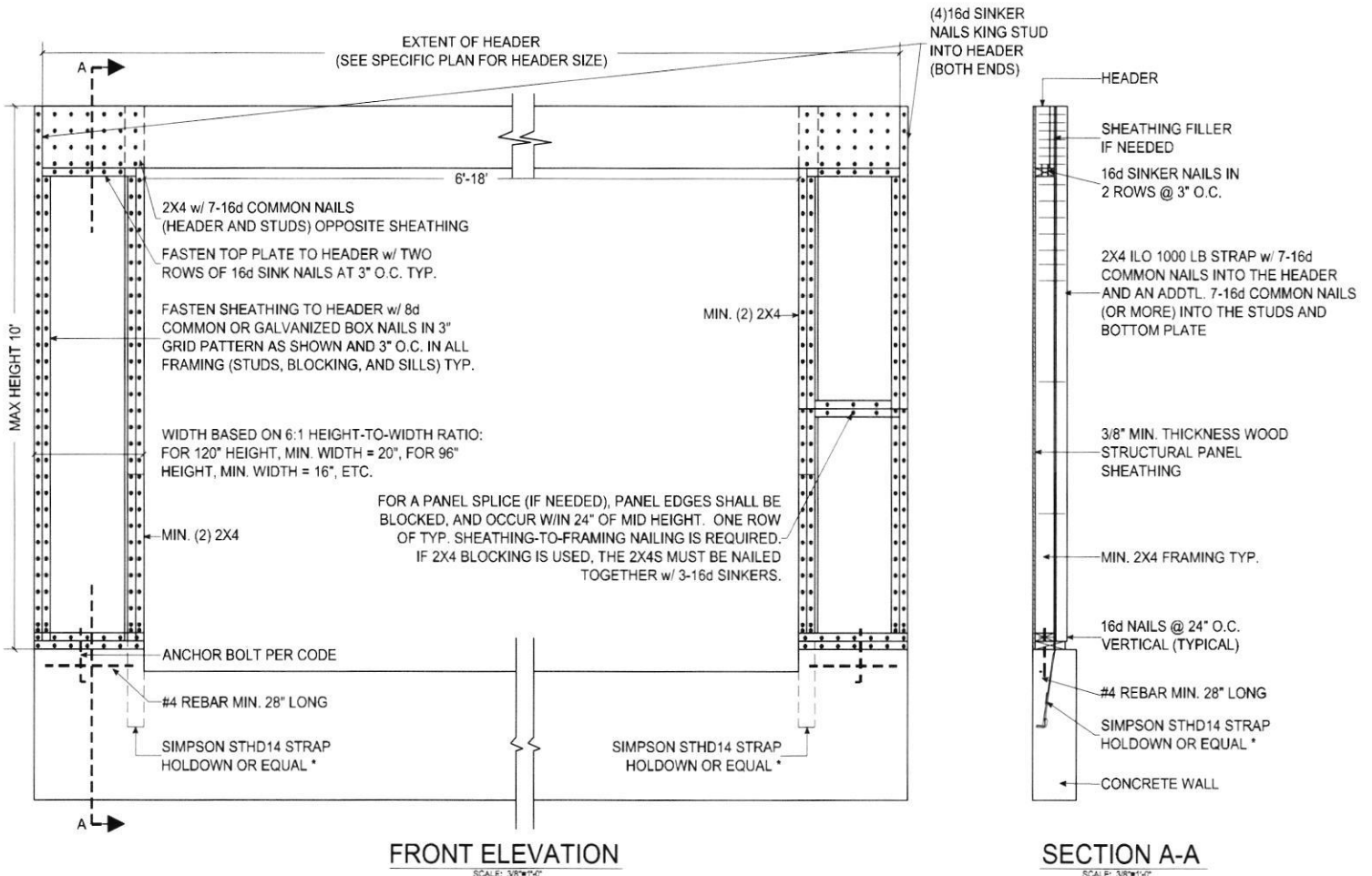
SCALE: 3/8" = 1'-0"



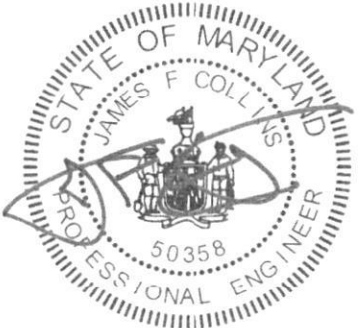
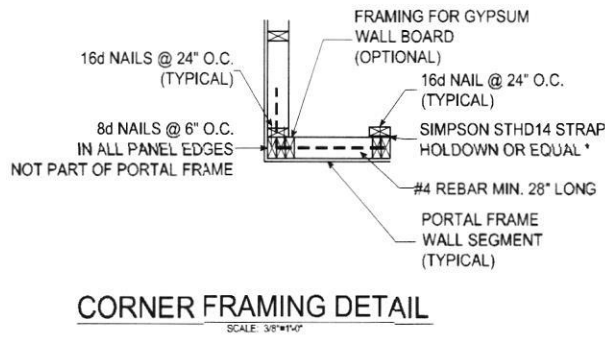
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SHEET DESCRIPTION: WALL BRACING METHOD 19.2" O.C.

SCALE: AS NOTED	CREATED: 1/29/10	ST	112
DATE MODIFIED: 10/17/19	MODIFIED BY: EMW		
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\*NOTE:  
 SIMPSON STHD14 STRAP HOLDOWN OR EQUAL  
 TO BE INSTALLED ON BOTH SIDES OF EACH  
 OVERHEAD GARAGE DOOR OPENING.

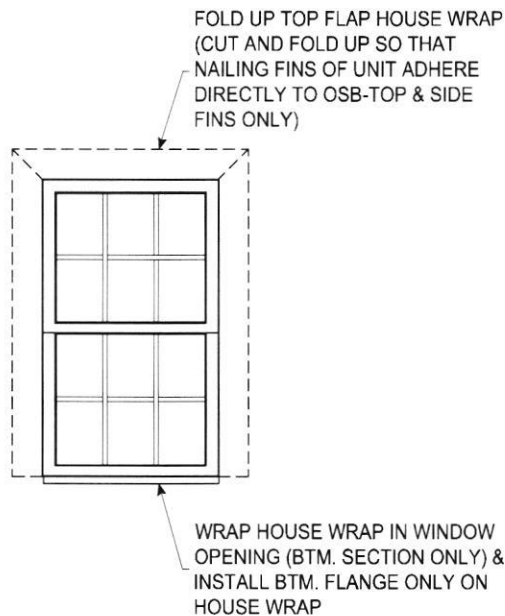


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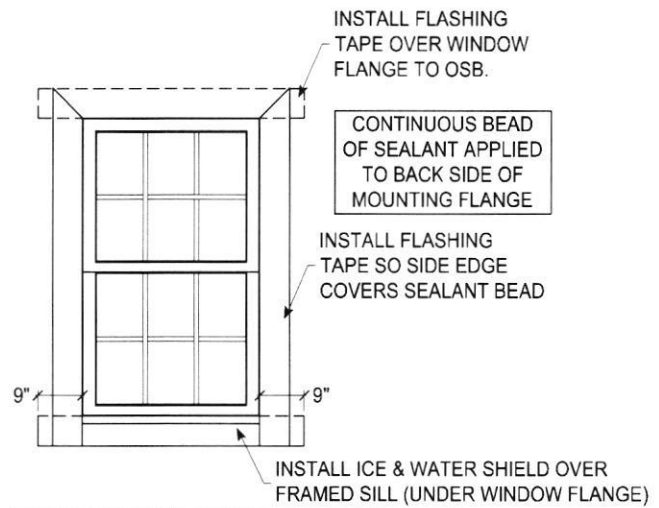
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SHEET DESCRIPTION:		NARROW GARAGE WALL STRAP BRACING DETAIL	
SCALE:	CREATED:	ST	113
AS NOTED	10/18/06		
DATE MODIFIED:	MODIFIED BY:	© COPYRIGHT 2015	
12/10/18	EMW		



NOTE: TAPE ALL 4 SIDES OF EVERY WINDOW IN A SHINGLE FASHION -STARTING WITH TAPE ACROSS THE BOTTOM FLANGE THEN UP THE SIDES AND FINALLY ACROSS THE TOP. TAPE ON TOP ONLY WILL BE DIRECTLY APPLIED FLANGE TO OSB, SIDES AND BOTTOM WILL BE APPLIED TO HOUSE WRAP.

**WINDOWS INSTALLED IN NON-MASONRY AREAS**



1. INSTALL BTM. PC. OF ICE & WATER SHIELD. WRAP OVER FRAMED WINDOW SILL.
2. INSTALL WINDOW (TOP & SIDE NAILING FIN'S TO ADHERE DIRECTLY TO OSB).
3. INSTALL SIDE PIECES OF FLASHING TAPE OVER WINDOW FLANGE (BY STONE MASON)
4. INSTALL TOP PC. OF FLASHING TAPE OVER WINDOW FLANGE (BY STONE MASON)

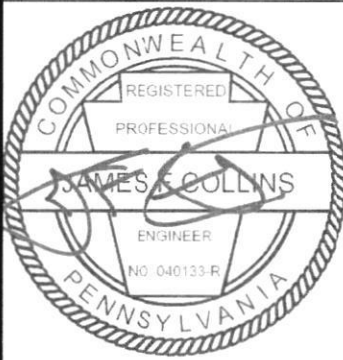
WHEN WINDOW GETS 2x4 ALUMINUM WRAP APPLY ICE & WATER SHIELD AROUND WINDOW A TOTAL OF 9" WIDE ON SIDES AND 12" ON BOTTOM BEFORE 2x4's ARE INSTALLED

IN STONE APPLICATION ONLY: WHEN WINDOW GETS 2x4 ALUMINUM WRAP PACK OUT THE SAME AS THE FRIEZE BOARDS

**WINDOWS INSTALLED IN MASONRY AREAS**

**GENERAL WINDOW NOTES FOR ALL APPLICATIONS (REFER TO MFG. INSTALLATION INSTRUCTIONS)**

- CONTINUOUS BEAD OF SEALANT APPLIED TO BACK SIDE OF MOUNTING FLANGE ON ALL (4) FLANGES
- SILICONE ALL:
  - HOUSE WRAP CUTS
  - UNUSED NAIL HOLES ON WINDOW FLANGE
  - NAIL HEADS
- WINDOWS SHOULD NOT SIT DIRECTLY ON FRAMING.
- SHIM UNDER BOTTOM CORNER OF EACH WINDOW AS WELL AS SEPARATION POINTS BETWEEN WINDOWS (DOUBLE OR TRIPLE APPLICATIONS)
- SHIMS MUST REMAIN IN PLACE AFTER WINDOW INSTALL
- TAPE WINDOW FLANGES PER MFG. SPECS (TUCK TAPE UNDER HOUSE WRAP 2 SIDES AND TOP
- TAPE TO BE APPLIED IN A TYPICAL SHINGLE FASHION - START AT THE BOTTOM AND OVERLAP WITH THE SIDE TAPE AND THEN APPLY THE TOP TAPE LAST



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 50358, Expiration Date: 12-12-2022

\*THIS DETAIL IS NOT APPLICABLE TO BASEMENT WINDOWS IN CONCRETE WALLS.



227 GRANITE RUN DRIVE, SUITE 100, LANCASTER, PA 17601  
 PHONE: (717) 464-9060 • FAX: (717) 735-2034 • KeystoneCustomHome.com

SHEET DESCRIPTION:		WINDOW INSTALLATION	
SCALE:	CREATED:	UD	005
AS NOTED	07/31/06		
DATE MODIFIED:	MODIFIED BY:	© COPYRIGHT 2015	
4/15/19	EMW		

POURED CONCRETE WALL REINFORCEMENT TYPES							
UNBALANCED FILL	WALL HEIGHT	WALL LENGTH	TYPE	#6 VERTICAL REINFORCEMENT	HORIZONTAL REINFORCEMENT	PLACE HORIZONTAL BARS	
	0' TO 5'	8'	ALL LENGTHS	A	NONE REQUIRED	1 #4 HORIZONTALLY	18" FROM TOP
		9'	ALL LENGTHS	A	NONE REQUIRED	1 #4 HORIZONTALLY	18" FROM TOP
	5' TO 6'	8'	33.5' AND UP	D	EVERY 60" VERTICALLY	3 #4 HORIZONTALLY	18", 36", & 54" FROM TOP
		9'	33.5' AND UP	D	EVERY 60" VERTICALLY	3 #4 HORIZONTALLY	18", 36", & 54" FROM TOP
	6' TO 7'	8'	26.5' AND UP	G	EVERY 40" VERTICALLY	3 #4 HORIZONTALLY	18", 36", & 54" FROM TOP
		9'	26.5' AND UP	G	EVERY 40" VERTICALLY	3 #4 HORIZONTALLY	18", 36", & 54" FROM TOP
	7' TO 8'	9'	23.5' AND UP	J	EVERY 30" VERTICALLY	3 #4 HORIZONTALLY	18", 36", & 54" FROM TOP
	8' TO 9'	10'	**SEE BELOW**	K	EVERY 30" VERTICALLY	4 #6 HORIZONTALLY	18", 36", 54", & 72" FROM TOP

**Requirements**  
 All concrete is 3,000 psi  
 All steel reinforcement is 60,000 psi  
 All vertical reinforcement has 1.5" of cover, measured from the inside face of the wall  
 All horizontal reinforcement is placed toward the basement exterior of the vertical reinforcement  
 One anchor bolt must be within 12" of each corner and then spaced at 72" on center.  
 Anchor bolts are not required in offset walls 12" or shorter.  
 One anchor bolt is required in offset walls over 12" but less than or equal to 24"  
 All floor joists are attached to the sill plate using (3) 8d nails

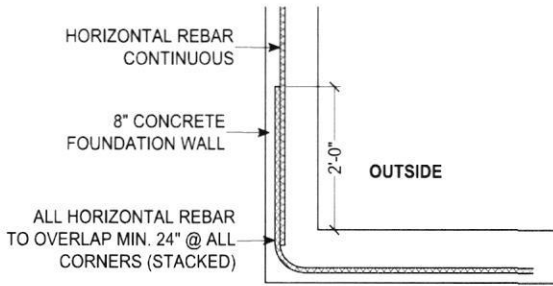
**\*\* 10' TALL BASEMENT WALLS REQUIRE 8"x24" 2,500psi REINFORCE CONCRETE FOOTERS WITH (3) #4 REBARS EQUALLY SPACED PLUS A #4 REBAR CROSS-TIE EVERY 2' O.C.**

**REINFORCEMENT CHART**

NOT TO SCALE

\*SEE DETAILS ST\_009 AND ST\_010 FOR REBAR REQUIREMENTS AT WINDOW AND DOOR OPENINGS.

\*DETAIL APPLICABLE ONLY TO 8" POURED CONCRETE FOUNDATION WALLS.



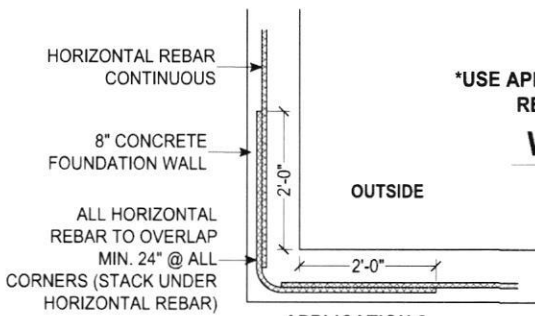
**APPLICATION 1**



**\*USE APPLICATION 1 OR 2 FOR ALL HORIZONTAL REBAR @ POURED WALL CORNERS**

**WALL CORNER PLAN**

NOT TO SCALE



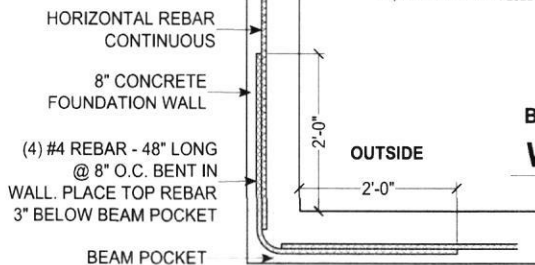
**APPLICATION 2**

*Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 50358, Expiration Date: 12-12-2022*

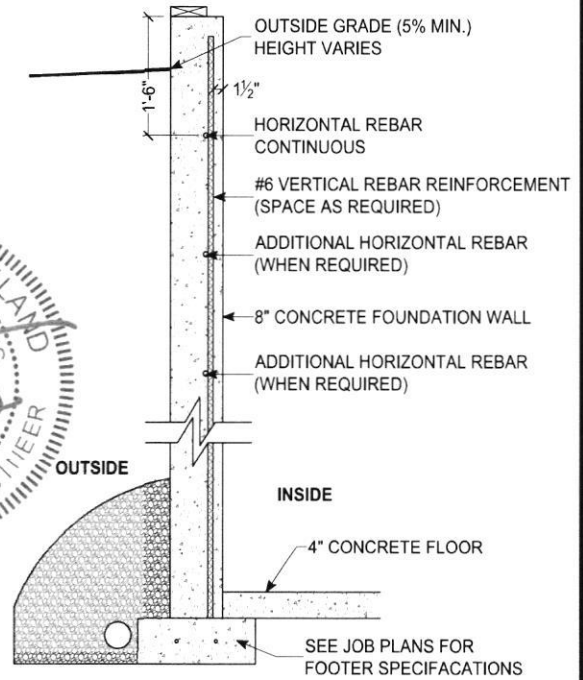


**APPLICATION 3 - LOAD BEARING CORNER BEAM POCKET WALL CORNER PLAN**

NOT TO SCALE



**APPLICATION 3**



**REINFORCEMENT SECTION**

NOT TO SCALE



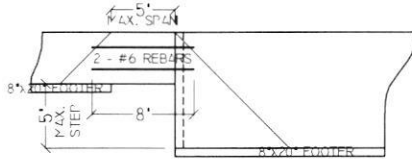
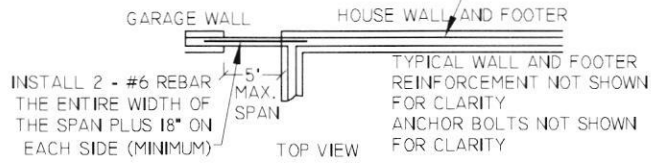
227 GRANITE RUN DRIVE, SUITE 100, LANCASTER, PA 17601  
 PHONE: (717) 464-9060 • FAX: (717) 735-2034 • KeystoneCustomHome.com

SHEET DESCRIPTION:		FOUNDATION WALL REINFORCEMENT DETAIL	
SCALE:	CREATED:	UD	025
AS NOTED	02/07/07		
DATE MODIFIED:	MODIFIED BY:	© COPYRIGHT 2020	
5/25/21	EMW		

# NON CONTINUOUS FOOTERS

Job Number  
**DETAIL**

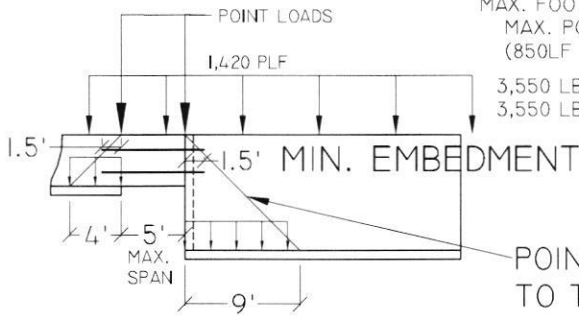
8" THICK POURED CONC. WALLS, OVER 8" X 20" CONC. FOOTERS



## GARAGE TO HOUSE CONNECTION

### CALCULATIONS:

(WORST CASE - MAX. LOADS)  
CONTINUOUS WALL LOADS  
ROOF 850 PLF  
TWO FLOORS 570 PLF  
MAX. FOOTER SPANS - 5 FT  
MAX. POINT LOADING  
(850LF + 570 LB) \* 5 FT / 2 = 3,550 LBS  
3,550 LBS OVER 4 FT = 888 PLF  
3,550 LBS OVER 9 FT = 395 PLF



POINT LOAD TRANSFERS DOWN TO THE FOOTER ON A 45° ANGLE

GARAGE MAX. FOOTER LOADS = ROOF + FLOORS + WALL LDS = (1420 + 888 + 400) PLF = 2708 PLF  
2708 LBS / 20 INCHES \* 12 INCHES/FT = 1625 PSF  
1625 PSF < 2000 PSF OKAY

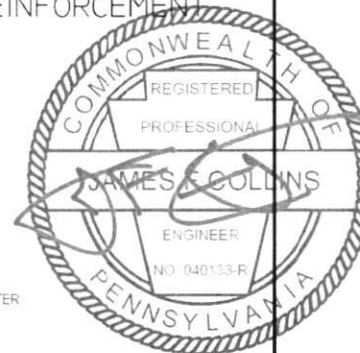
HOUSE MAX. FOOTER LOADS = (1420 + 395 + 900) PLF = 2715 PLF  
2715 LBS / 20 INCHES \* 12 INCHES/FT = 1629 PSF  
1629 PSF < 2000 PSF OKAY

STEEL REINFORCEMENT - 2 - #6 REBAR 0.75" DIAMETER  
AREA OF 1 BAR = (.75/2)<sup>2</sup> \* 3.14 = 0.442 SQ INCHES  
STEEL STRENGTH = 60,000 PSI  
EACH BAR CAN SUPPORT = 0.442 SQ IN \* 60000 = 26520 LBS

ACTUAL STEEL LOADS  
3550 LBS / 2 = 1775 LBS PER BAR  
1775 LBS < 26520 LBS OKAY

PLF = POUNDS PER LINEAL FOOT  
PSF = POUNDS PER SQUARE FOOT  
PSI = POUNDS PER SQUARE INCH  
WALL LOAD = DEAD WEIGH OF CONCRETE WALL

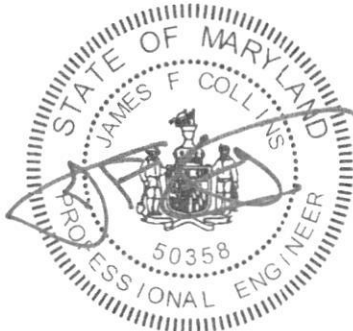
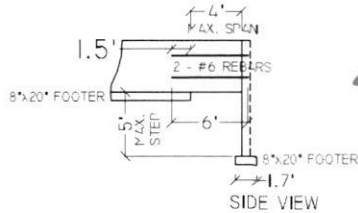
IN BOTH CASES PRESENTED THE FOOTER BEARING CAPACITY IS THE ULTIMATE LIMITING FACTOR AND NOT THE STEEL REINFORCEMENT.



## PORCH TO HOUSE CONNECTION

### CALCULATIONS:

(WORST CASE - MAX. LOADS)  
6' PORCH WALLS - 600 PLF  
MAX. FOOTER SPANS - 4 FT  
600 PLF \* 4 FT / 2 = 1200 LBS/CONNECTION  
ACTUAL STEEL LOADS  
1200 LBS / 2 = 600 LBS/BAR  
600 LBS < 26520 LBS OKAY  
TOTAL HOUSE WALL LOADS = ROOF + FLOORS + WALL LOADS WILL MAX OUT AT 2988 PLF WITH 6' PORCH WALLS AND A 4' SPAN WHICH EQUATES TO A FOOTER LOAD OF 1792 PSF  
1791 PSF < 2000 PSF OKAY



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 50358, Expiration Date: 12-12-2022

BUILT FOR:  
**NON-CONTINUOUS FOOTER SPANS**

Subdivision: ...  
Municipality: ...  
Tax Map No.: ...  
Bldg. Cover (40%): XX.X% X.XXX SQ.FT. Building Permit: XX  
Imp. Cover (60%): XX.X% X.XXX SQ.FT. County: Pennsylvania  
Scw - XXX Doc - XXX

Zoning: R - 2 w/ B.D.O.  
Lot Size: 6,250 sf



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DATE	HISTORY	REVISION BY	
00/00/00	xxxxxxxx	XXX	
00/00/00	xxxxxxxx	XXX	
00/00/00	xxxxxxxx	XXX	
00/00/00	xxxxxxxx	XXX	
03/03/14	NON-CONTINUOUS FOOTERSPBE		
TITLE	SCALE	DRAWN BY	CHKD / DATE
PLOT PLAN	1"=30'	PBE	CHKD / DATE
© 2015 Keystone Custom Homes, Inc.		MODEL	FILENAME
		XXX00	

04-322983 Approved (GLK) 14 Sept. 78

28542

P ~~27520~~

A 27520

# PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH\*

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 4th

**INDEXED**

DATE 7/25/78

*House next door.*

Mitchell-Wiley

IS PERMITTED TO INSTALL  ALTER

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

SUBDIVISION \_\_\_\_\_ ROAD 16489 Route 144 LOT 20

PROPERTY OWNER Jessie Miller

ADDRESS \_\_\_\_\_

SPECIFICATIONS 2 bedrooms

SEPTIC TANK CAPACITY 1000 GALLONS

DRAIN FIELD \_\_\_\_\_ DEPTH \_\_\_\_\_ FEET, BOTTOM AREA \_\_\_\_\_ SQ. FT.

DEEP TRENCH \_\_\_\_\_ DEPTH \_\_\_\_\_ FEET, BOTTOM AREA \_\_\_\_\_ SQ. FT.

SEEPAGE PITS \_\_\_\_\_ ABSORBENT SIDE-WALL AREA 166 SQ. FT. *per bedroom.*

INLET PIPE 5 FT. BELOW ORIGINAL GRADE. MAXIMUM DEPTH 13 FT. BELOW ORIGINAL GRADE

EFFECTIVE DEPTH AT \_\_\_\_\_ FT. BELOW ORIGINAL GRADE.

LOCATE DISPOSAL AREA 130 FT. FROM back LOT LINE AND 64 FT. FROM left LOT LINE AS SEEN WHEN FACING LOT FROM *the front.*

NOTE: *the front lot line is 465.48 ft. long & runs N, the left lot line is 290.41 ft. long and runs S.*

PLANS APPROVED BY Raymond Hodges DATE 3/7/78

COVER NO WORK UNTIL INSPECTED AND APPROVED.

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

NOTE: IF TRENCH IS USED CALL FOR INSPECTION BEFORE PLACING GRAVEL IN TRENCH.

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER.

NOTE: ALL PIPE FROM HOUSE TO DISPOSAL AREA MUST BE CAST IRON.

PERMIT VOID AFTER THREE YEARS.

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA ACCEPTED.

BLDG. PERMIT SIGNED AND RETURNED 7/27/81

*Serial # 45707 Garage and Storage Area*

A 27520

\*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

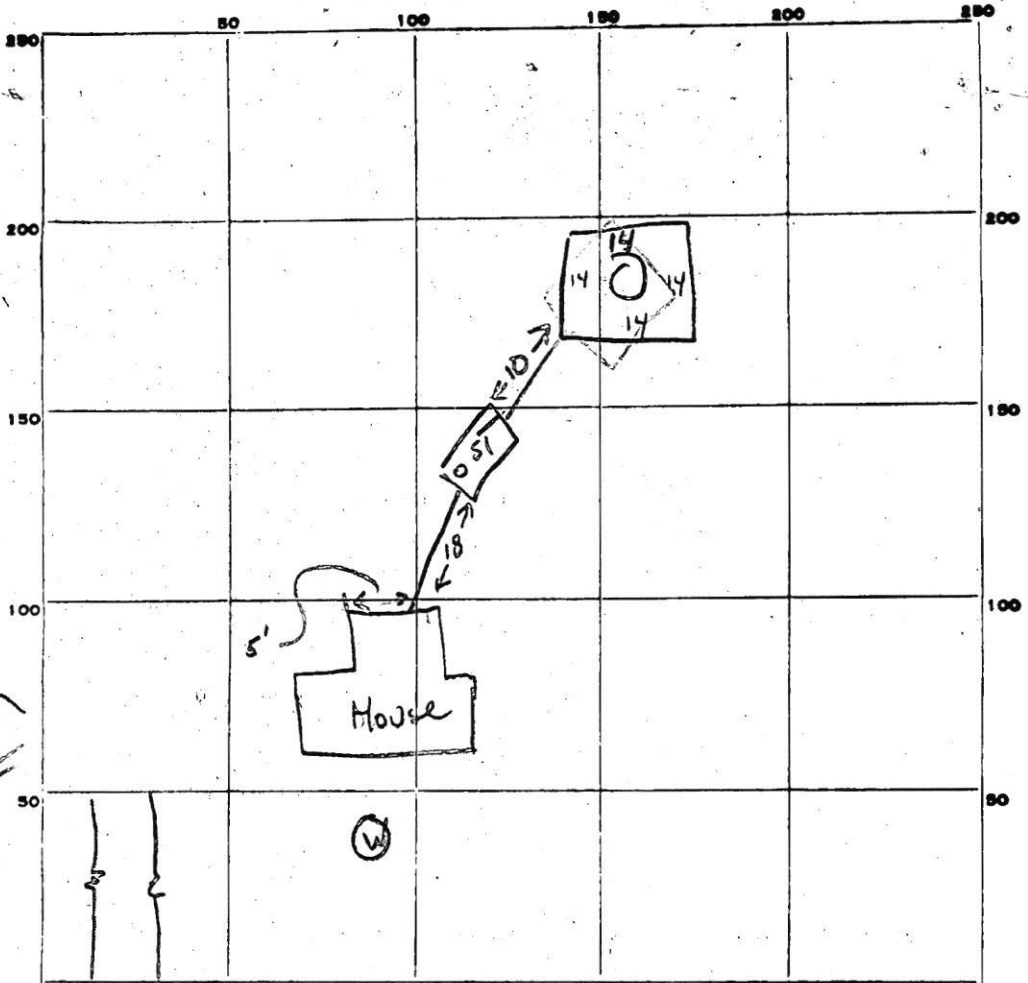
BLDG. PERMIT SIGNED AND RETURNED 7/17/91

*Serial # 38965 - Addition*

28  
27  
5

166  
7.3 BR  
498

2 Bedroom



INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.

PERMIT CARD  RT 144

SEPTIC TANK, LEVEL  1000 CLEANOUTS  ST  OW  terracotta

DISTRIBUTION BOX, LEVEL Na

TILE FIELD, DEPTH Na FT. TRENCH WIDTH \_\_\_\_\_ FT.

GRAVEL DEPTH \_\_\_\_\_ IN. TOTAL LENGTH \_\_\_\_\_ FT.

NUMBER OF TRENCHES \_\_\_\_\_ TOTAL BOTTOM AREA \_\_\_\_\_

SEEPAGE PITS, INSIDE DIAMETER perimeter 56 FT. DEPTH BELOW INLET 8 FT.

ABSORBENT AREA ±448 SQ. FT.

REMARKS 14 Sept 78 - 50 ft<sup>2</sup> short based on calculation for 3 Bedroom. Inlet at 4 1/2'. FINAL OK (GLK)

DATE SYSTEM APPROVED 14 Sept 78 INSPECTOR George J Keller

RECORDED  
Liber 0680  
Folio 015

~~2/8/78~~ 2/10/78  
9:30 a.m.

# APPLICATION

A 27520

P \_\_\_\_\_

## SEWAGE DISPOSAL TESTING

STATE OF MARYLAND - DEPARTMENT OF HEALTH AND MENTAL HYGIENE

HOWARD COUNTY HEALTH DEPARTMENT  
ENVIRONMENTAL HEALTH SERVICES  
P. O. BOX 476, ELLICOTT CITY, MARYLAND 21043  
TELEPHONE: 465-5000, EXT. 356

DISTRICT 4th

DATE 2/3/78

*specs on other page*

144

TO: THE COUNTY HEALTH OFFICER  
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER JESSE  
Jessie Miller 489-4816 286-3450

ADDRESS 16333 Frederick Rd. Woodbine, Md. PHONE Allen Mitchell  
442-2920

PROPERTY LOCATION: \_\_\_\_\_  
SUBDIVISION Stanley Miller property (BUT NOT PART OF STANLEY MILLER SUB DIVISION) LOT NO. 20

ROAD AND DESCRIPTION Route 144  
16489 Route 144

SIZE OF LOT 1 acre TYPE BLDG. 3 or 4 bedrooms  
NUMBER OF BEDROOMS \_\_\_\_\_

IF NOT SINGLE RESIDENCE DESCRIBE \_\_\_\_\_

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE.

SIGNATURE OF APPLICANT \_\_\_\_\_  
BLDG. PERMIT SIGNED AND RETURNED 5/10/78  
Serial No 357114

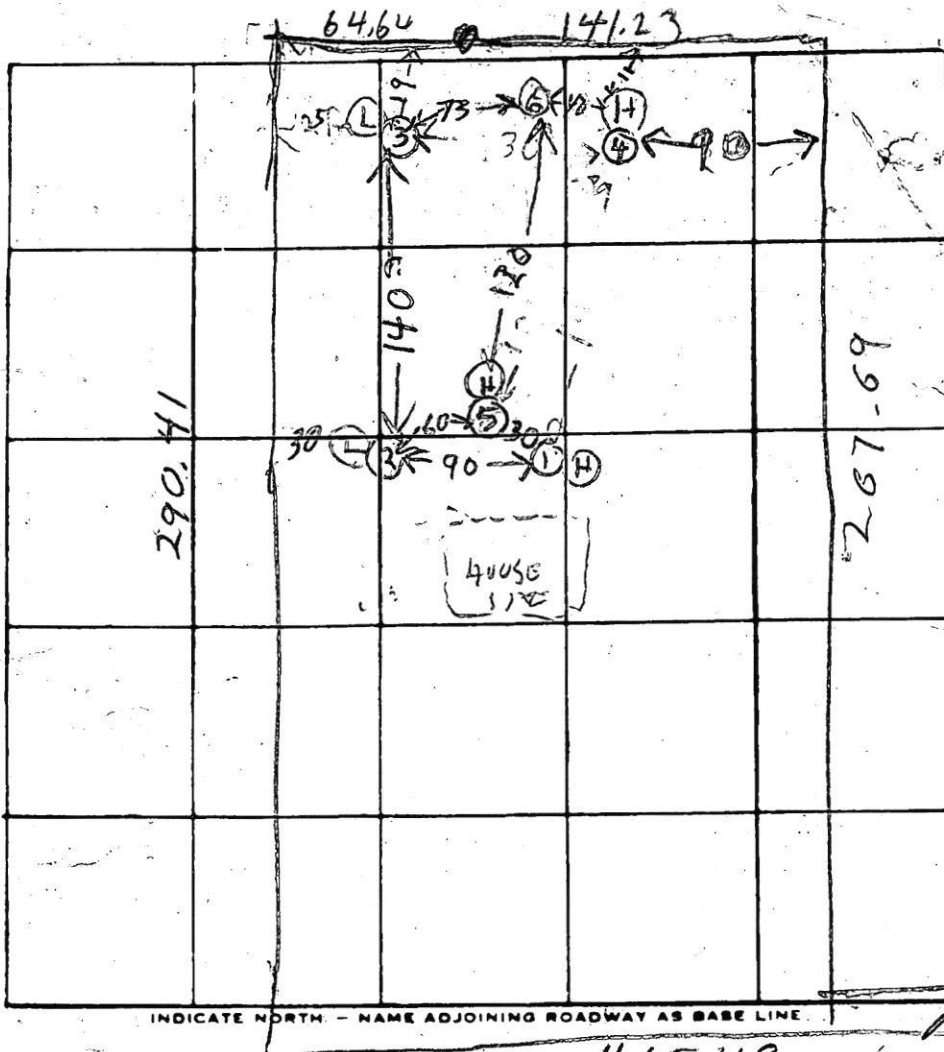
APPROVED BY Raymond Hodges FOR DRY WELL DATE 3/7/78  
(KIND OF SYSTEM)

REJECTED BY \_\_\_\_\_ FOR \_\_\_\_\_ DATE \_\_\_\_\_  
(KIND OF SYSTEM)

HOLD PENDING FURTHER TESTS \_\_\_\_\_ DATE \_\_\_\_\_

REASONS FOR REJECTION OR HOLDING 2/8/78 DIG MORE R.H. 2/10/78 OK Hold  
for Certified Holder R.H.

# THIS IS NOT A PERMIT



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

R/W FOR 1844 →

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
2/8/78	1S	6'	1054	1058	1058	1104	6
2/8/78	1D	13 1/2	1103	1117	1117	1200	little pers
	2S	6	1104	1111	1111	1118	7
	2D	12 1/2	1110	1126	1126	1150	24
	3D	12 1/2	1121	1132	1132	1144	10
	3S	6 1/2	1124	1144	1144	1148	59
	4S	6 1/2	1154	1156	1156	1206	10
	4D	13	1147	1206	1206	1244	38
	5D	13 1/2	1249	103	103	124	21
2/8/78	5S	5 1/2	1250	1256	1256	103	7

REMARKS: ~~2/8/78~~ Holes were dug yesterday for this lot some of them are partly result of thawing & dropping into hole RH

TYPE OF SOIL: \_\_\_\_\_  
 TESTED BY: Raymond G. Dodge ALSO PRESENT: Jesse Miller Allen Mitchell Barbara

A 27520  
 Jesse Miller Lot  
 Lot 20 Rt 144

2/10/78	6S	5/2	1028	1045	1048	1044	29
2/10/78	6D	1.15	1030	1051	1051	1014	23
?	3M	7	1038	1106	1106	1139	33
	3ED	15 1/2	TOP 8 FT CLAY 15 FT BOT 7 1/2 FT POROUS SOIL				
2/10/78	3MD	8 1/2	1149	1158	1158	1206	8
	3						

Leslie R. Hodges

Jesse Miller &  
 Allen Mitchell present

10 14

Note: The lot shown hereon complies with minimum ownership width and lot area as required by the Maryland State Department of Health.

MD. ROUTE 144

N05°10'31"W 1002'

S21°27'42"W  
260.00'

N64°51'12"W 267.69'

LOT 20  
1.36 AC. ±

S21°27'42"W 141.23'

S32°46'12"W  
64.64'

145' S64°51'12"E

290.41'

N21°27'42"E 465.40'

I certify the measurements for the sewage disposal area and the sewage disposal area for this property is as designated

Walter Park 2/23/1978  
Walter Park Md. Reg #5533 Date

Approved: For private water and private sewerage systems, Howard County Health Department

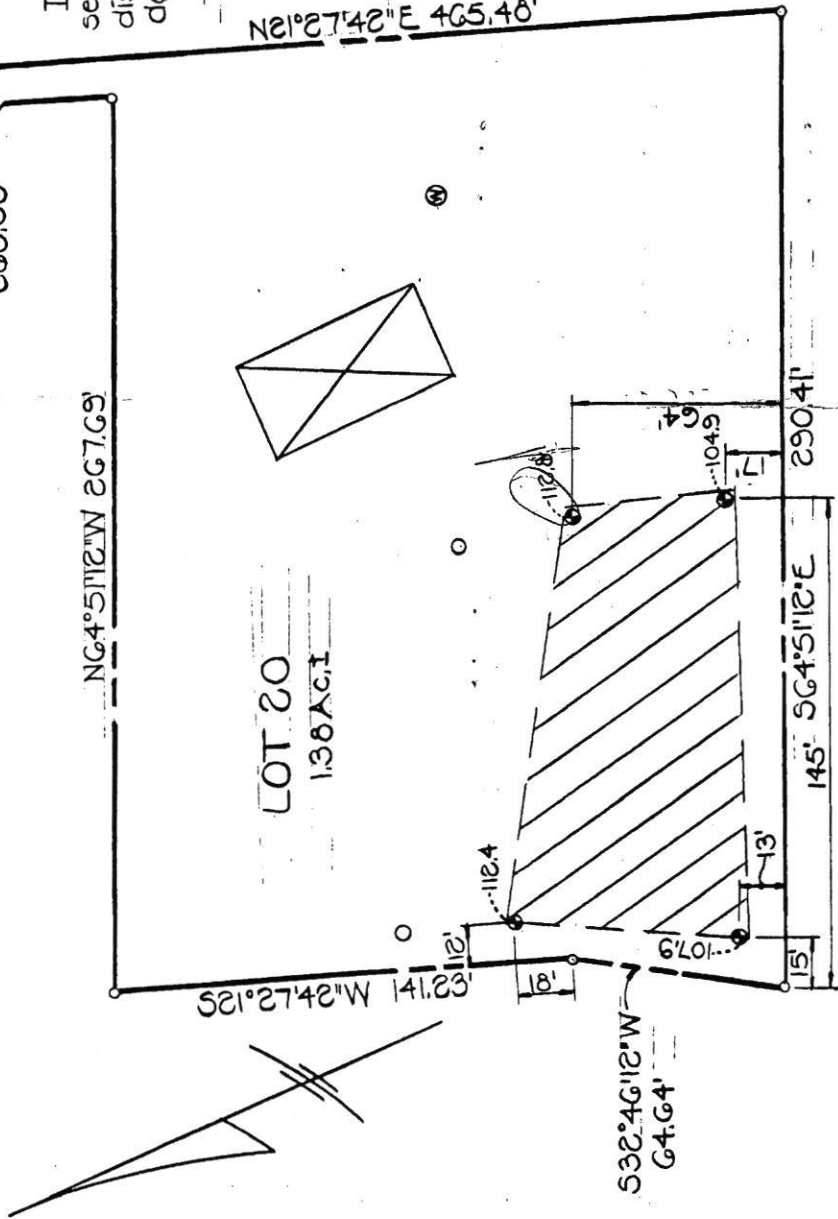
Walter Park 2-1-78  
County Health Officer Date

- ⊙ Denotes field located perc holes
- Denotes bad holes
- 104.9 - Denotes field elevations



PROPERTY OF  
STANLEY MILLER  
4<sup>TH</sup> ELECTION DISTRICT HOWARD CO., MD.  
FEB. 24, 1978 SCALE: 1"=50'

CROVO & ASSOC., INC.  
CIVIL ENGINEERING &  
LAND SURVEYING  
8669 OAK ROAD  
BALTO., MD. 21234





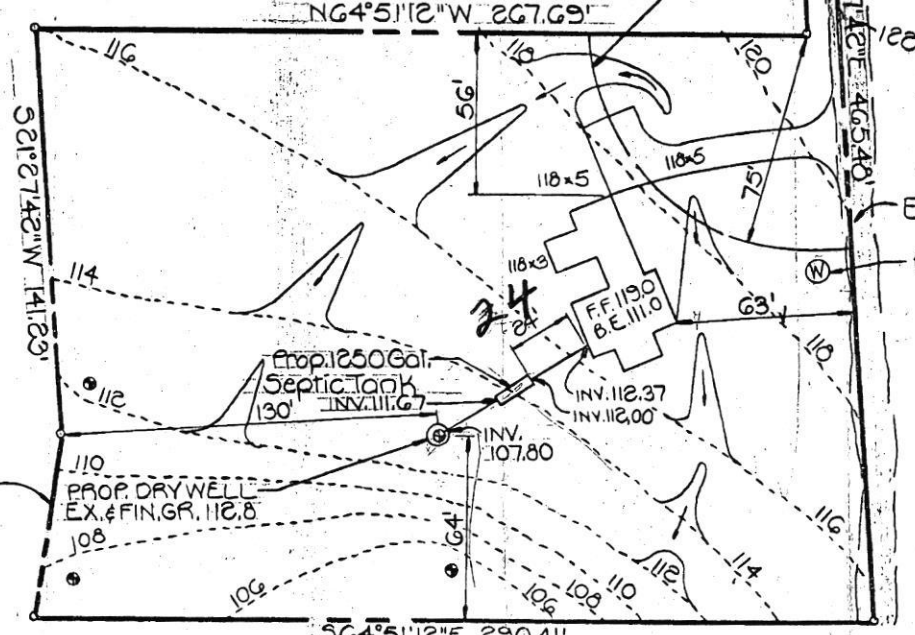
MD. ROUTE 144

NG5°10'31"W 10.02'

To Md. Rte. 97

S21°27'42"W 260.00'

Building Restriction Line  
NG4°51'12"W 267.69'



Ex. Gravel Driveway  
Prop. Well

S32°46'12"W  
64.64'

S64°51'12"E 290.41'

5/21/78 PLANS OK  
R/H

PLAN TO ACCOMPANY APPLICATION  
FOR BUILDING PERMIT  
LOT 20

PROPERTY OF  
STANLEY MILLER

4<sup>TH</sup> ELECTION DISTRICT HOWARD CO., MD.  
MARCH 14, 1978 SCALE 1"=50'

CROYO & ASSOCIATES, INC.  
CIVIL ENGINEERING &  
LAND SURVEYING  
8669 OAK ROAD  
BALTIMORE, MARYLAND 21234

C 1 3249 SEQUENCE NO. (WRA USE ONLY)

STATE OF MARYLAND WATER RESOURCES ADMINISTRATION TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401 WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY

COUNTY NUMBER

THIS NUMBER IS TO BE PUNCHED IN COLUMNS 3-6 ON ALL CARDS

DATE RECEIVED (WRA USE ONLY)

4/10/78 DATE WELL COMPLETED

DEPTH OF WELL

185 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL"

70-73-2610

DRILLERS IDENTIFICATION NO.

42

OWNER: MILLER, STANLEY (JESSIE MILLER OWNER) STREET OR RFD: 116333 FREDERICK ROAD POST OFFICE: WOODBINE, MD. 21797

WELL DESCRIPTION

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY) FEET FROM TO CHECK IF WATER BEARING

Table with 3 columns: Description, Feet From, Feet To. Rows include TOP SOIL, SHALEY, SHALE, BROWN SLATE, BLUE SLATE, BROWN SLATE, BLUE SLATE.

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX) YES [X] NO [ ]

TYPE OF GROUTING MATERIAL (CIRCLE BOX) CEMENT [X] BENTONITE CLAY [ ]

NO. OF BAGS 18 NO. OF POUNDS 1800

GALLONS OF WATER 90

DEPTH OF GROUT SEAL (TO NEAREST FOOT)

FROM 0 FT. TO 40 FT.

CASING RECORD

CASING TYPES: INSERT APPROPRIATE CODE BELOW. ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER.

MAIN CASING TYPE: ST NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH): 6 TOTAL DEPTH OF MAIN CASING (NEAREST FOOT): 86

OTHER CASING (IF USED)

Table with 2 columns: Diameter (inch), Depth (feet) from to. Rows for each casing type.

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE: INSERT APPROPRIATE CODE BELOW. ST STEEL, BR BRASS, HO OPEN HOLE, PL PLASTIC, OT OTHER.

C 2 (SEQ. NO.)

DEPTH (NEAREST WHOLE FOOT) FROM TO

Table with 3 columns: Screen No., From, To. Rows 1, 2, 3.

DIAMETER OF SCREEN 56 (NEAREST INCH) FROM TO

GRAVEL PACK IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX 68 [X] F

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER). TELESCOPE CASING 70 [ ] LOG INDICATOR 72 [ ] OTHER DATA AVAILABLE 74 75 76 [ ]

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR) 2

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) 30

METHOD USED TO MEASURE PUMPING RATE Bucket

WATER LEVEL: (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING 40 (NEAREST FOOT)

WHEN PUMPING 185 (NEAREST FOOT)

TYPE OF PUMP USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)

[X] AIR, [ ] PISTON, [ ] TURBINE, [ ] CENTRIFUGAL, [ ] ROTARY, [ ] OTHER, [ ] JET, [ ] SUBMERSIBLE

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX - SEE ABOVE: A, C, J, P, R, S, T, O)

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX) YES [X] NO [ ]

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (NEAREST FOOT) 43 47

CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)

[X] ABOVE, [ ] BELOW LAND SURFACE (NEAREST FOOT) 49 50 51

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).

CIRCLE APPROPRIATE BOXES

- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL"...

DRILLERS NAME: L.F. EASTERDAY SIGNATURE: L.F. Easterday

MD. ROUTE 144

NG5°10'31"W 10.02'

To Md. Pt.

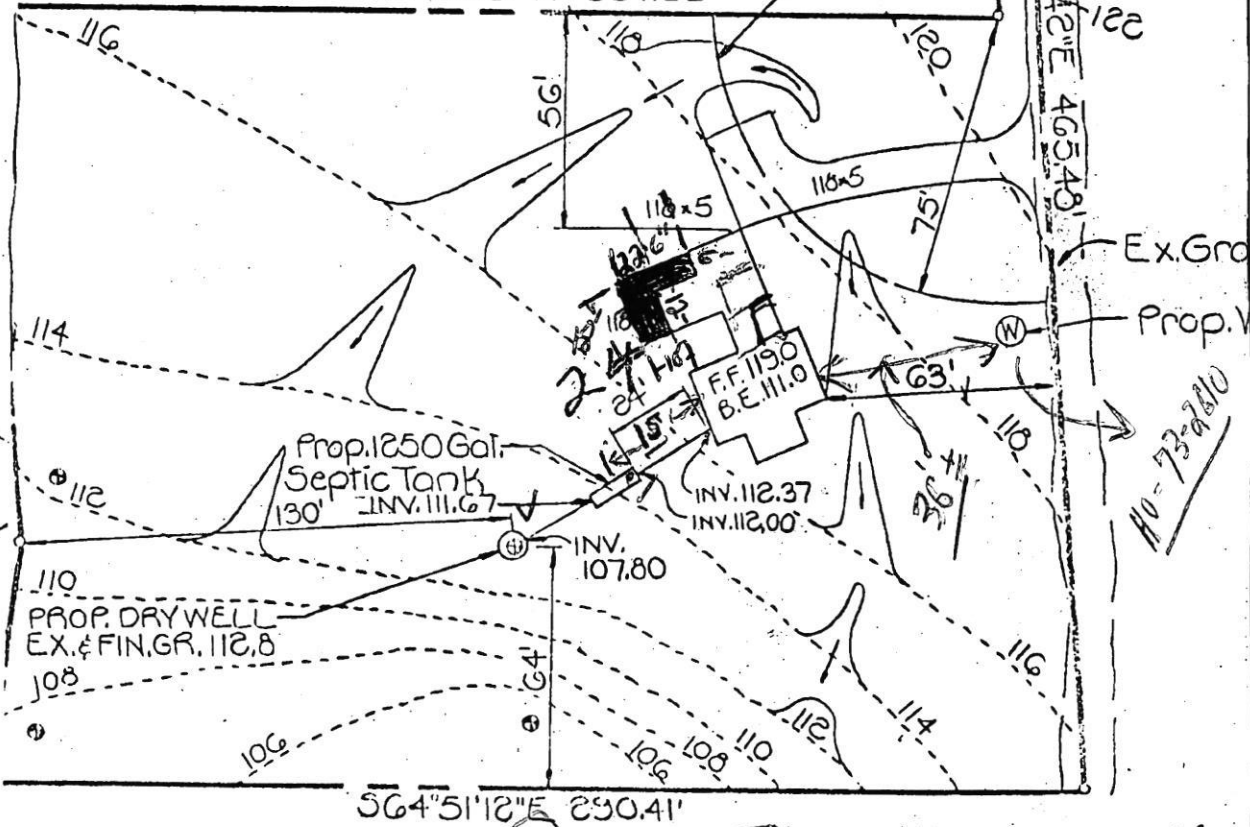
PERMIT 2666569  
7/19/91  
NO COPY RETAINED,  
CW

S21°27'42"W 260.00'

127

N21°27'42"E 465.49'

Building Restriction Line  
NG4°51'12"W 267.69'



= Addition  
B.P. 38965

Wells and Septic  
A.K.  
OK  
7/19/91  
C.R.D.

5/9/79

CIATES, INC.

Released  
7/19/91

PLAN TO ACCOMPA  
FOR BUILDING  
LOT 20  
PROPERTY  
STANLEY M