



G14000305

Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: _____

Permit No.: B17002137

Building Address: 12341 Point Ridge Drive
 City: Fulton State: MD Zip Code: 20759
 Suite/Apt. # _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: Highland Reserve aka Regan Property
 Section: _____ Area: _____ Lot: 8
 Tax Map: 34 Parcel: 200 Grid: 24
 Zoning: RR-DEO Map Coordinates: _____ Lot Size: 1.006 acres

Existing Use: Vacant
 Proposed Use: Single Family Dwelling
 Estimated Construction Cost: \$ 517,000

Description of Work: Eagles Nest - A Elevation - w/ Rear Gathering Room
3 car garage - Opt. Sunroom becomes guest suite w bath (same sf); Finished Basement
12R; 7BR; 6PB; 1HB; fireplace & Walkout
 Seeking Silver Level Certification of the NGBS-3rd party verification by Panda Alliance

Occupant or Tenant: _____
 Was tenant space previously occupied? Yes No
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Property Owner's Name: MB Highland Reserve
 Address: 1686 E. Gude Drive
 City: Rockville State: MD Zip Code: 20850
 Phone: _____ Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: Marc Quint - MB Highland Reserve LLC
 Address: 1686 E. Gude Drive
 City: Rockville State: MD Zip Code: 20850
 Phone: 301-762-9511 Fax: 301-610-9564
 Email: MQuint@mitchellbest.com

Contractor Company: MB Highland Reserve LLC
 Contact Person: Marc Quint
 Address: 1686 E. Gude Drive
 City: Rockville State: MD Zip Code: 20850
 License No.: 7316
 Phone: 301-762-9511 ext 318 Fax: _____
 Email: MQuint@mitchellbest.com

Engineer/Architect Company: _____
 Responsible Design Prof.: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories:	Depth	Width
Gross area, sq. ft./floor:	1 st floor: 60'	70'
	2 nd floor: 60'	70'
Area of construction (sq. ft.):	Basement: 60'	70'
Use group:	<input checked="" type="checkbox"/> Finished Basement	
	<input type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
Construction type:	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: <u>7</u>	
<input type="checkbox"/> Structural Steel	<u>Multi-family Dwelling</u>	
<input type="checkbox"/> Masonry	No. of efficiency units:	
<input type="checkbox"/> Wood Frame	No. of 1 BR units:	
<input type="checkbox"/> State Certified Modular	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure:	
	Dimensions:	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof:	
<input checked="" type="checkbox"/> Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Utilities	
<u>Water Supply</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
<u>Sewage Disposal</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Heating System</u>	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input checked="" type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
<u>Sprinkler System:</u>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number:	G14000305
Building Shell Permit Number:	

RECEIVED
MAY 26 2017
LICENSES & PERMITS DIVISION

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.

Marc Quint
 Applicant's Signature
 MQuint@mitchellbest.com
 Email Address
 Operations Mgr., Mitchell & Best Homes LLC
 Title/Company

Marc Quint
 Print Name
5/26/2017
 Date

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
PLEASE WRITE NEATLY & LEGIBLY
FOR OFFICE USE ONLY

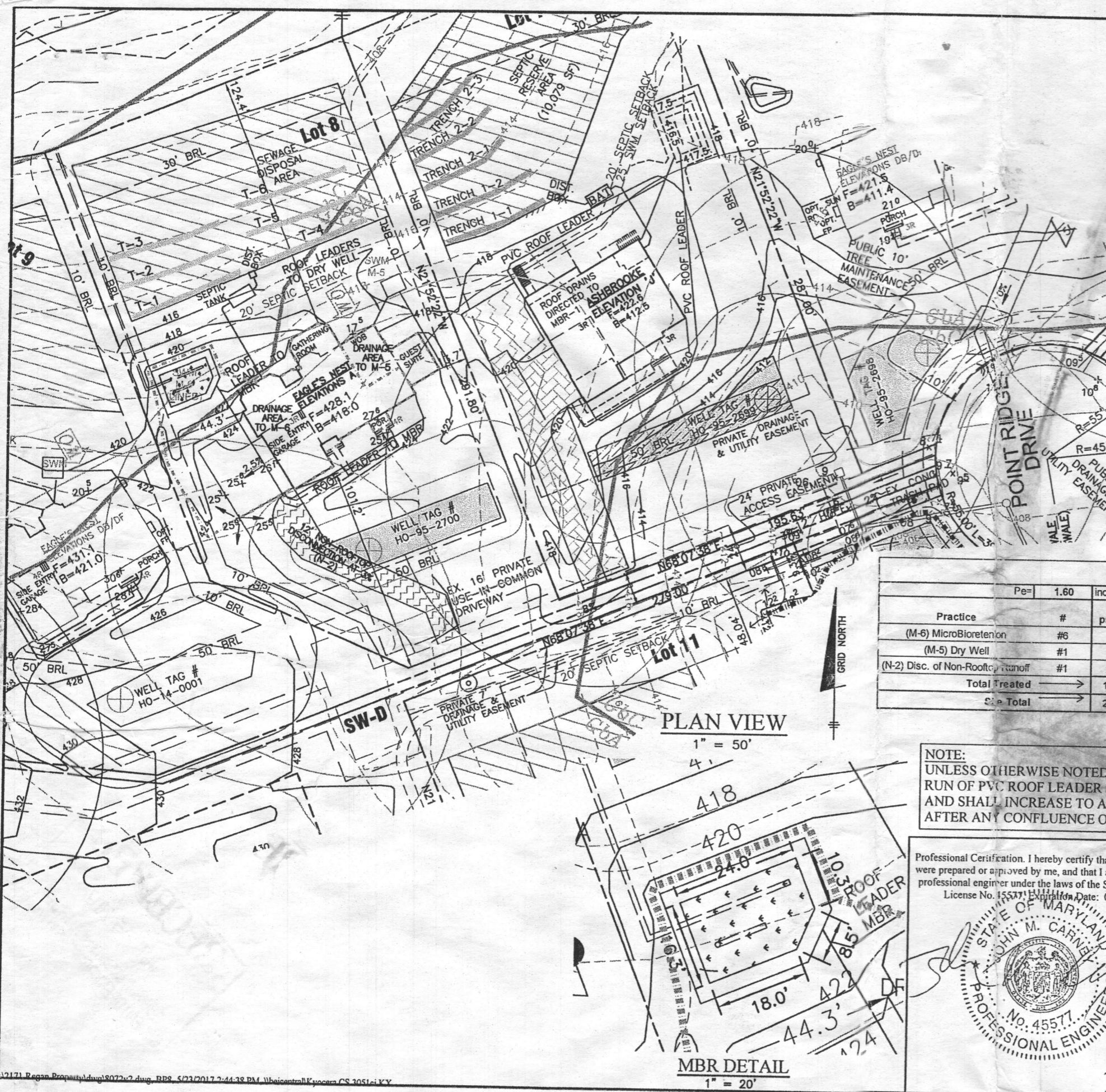
AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health		<u>[Signature]</u>

Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	\$ <u>100</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$ <u>50</u>
Add'l per Fee	\$
Total Fees	\$
Sub- Total Paid	\$
Balance Due	\$
Check #	<u>2014</u>

Distribution of Copies: White: Building Officials Green: PSZA,Zoning Yellow: PSZA,Engineering Pink: Health Gold: SHA



BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2700, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO-BIORETENTION FACILITY (MDE M-6), DRY WELL FACILITY (MDE M-5) AND ONE NON-ROOFTOP DISCONNECTION (MDE N-2). MICRO-BIORETENTION SHALL HAVE EITHER A 4" OR 6" ROOF LEADER DEPENDING ON ROOF-TOP AREA.

Approved Septic
Howard County Health
DBernard
Signature
6-7-17
Date
B17002137

ESD STORMWATER MANAGEMENT SUMMARY TABLE

Practice	#	DA to practice	Imp Area to practice	Qe= 0.43 inches			ESDv= 968		Rv= 0.27		Ownership
				Required	Provided	2% DA?	Required	Provided	Pe Provided	Required	
(M-6) MicroBioretention	#6	6,708	4,050	134	373	PASS	531	704	1.6		Private
(M-5) Dry Well	#1	782	782				99	160	2.6		Private
(N-2) Disc. of Non-Rooftop runoff	#1	2,924	1,430				107	107	1.0	160	Private
Total Treated							968	972	1.6	161	267
Site Total											

NOTE:
UNLESS OTHERWISE NOTED, THE FIRST RUN OF PVC ROOF LEADER SHALL BE 4" AND SHALL INCREASE TO AT LEAST 6" AFTER ANY CONFLUENCE OF 4" PIPES.

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. 15577, Expiration Date: 06-08-2018.



OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301-762-9511

BENCHMARK ENGINEERING, INC.
ENGINEERS LAND SURVEYORS PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 315
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

PROJECT: REGAN PROPERTY LOT 8

LOCATION: 12341 POINT RIDGE DRIVE
HIGHLAND, MD 20777
TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200
5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441

TITLE: BUILDING PERMIT PLAN

HOUSE TYPE: EAGLES NEST - ELEVATION 'A'

DATE: MAY, 2017

PROJECT NO.: 2171

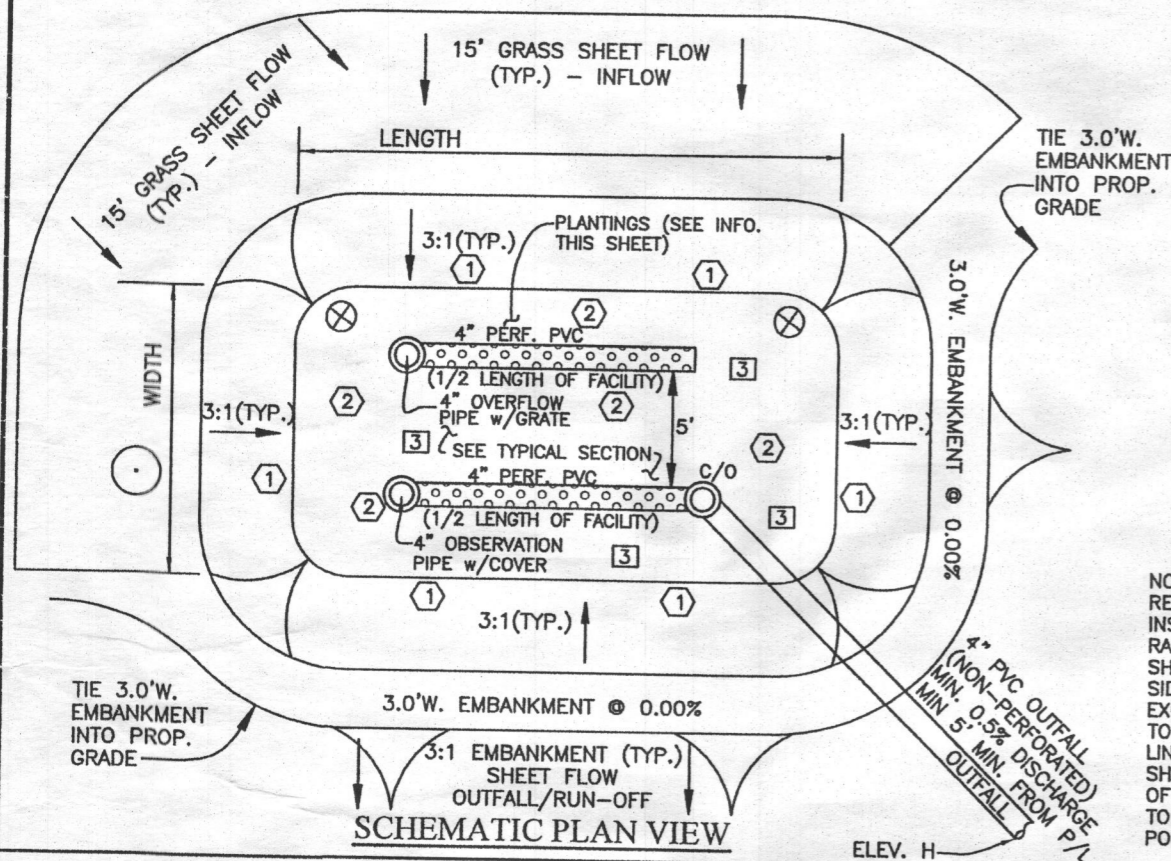
SCALE: AS SHOWN

DRAWING: 1 OF 3

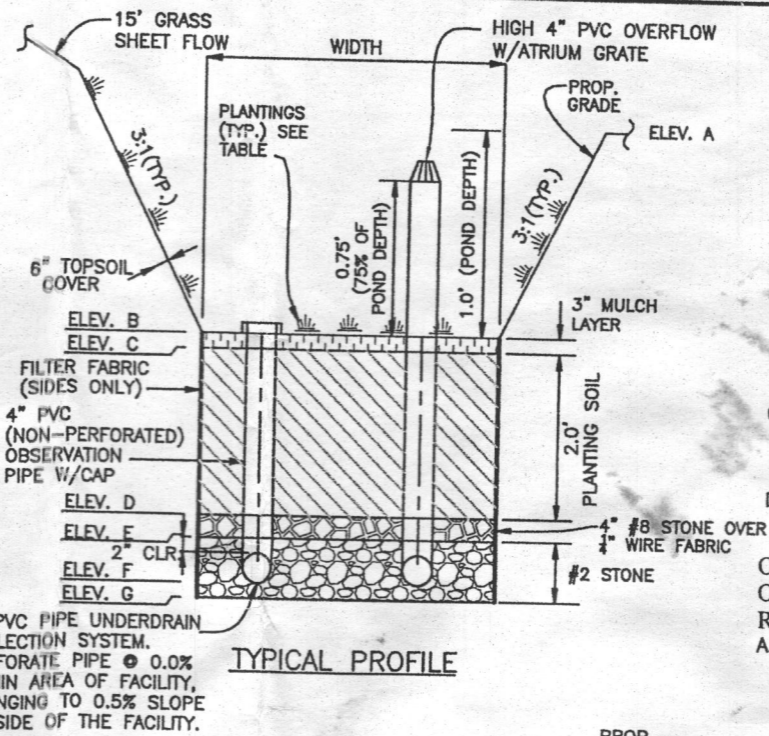
B17002137

ON-LOT BIORETENTION DIMENSIONS

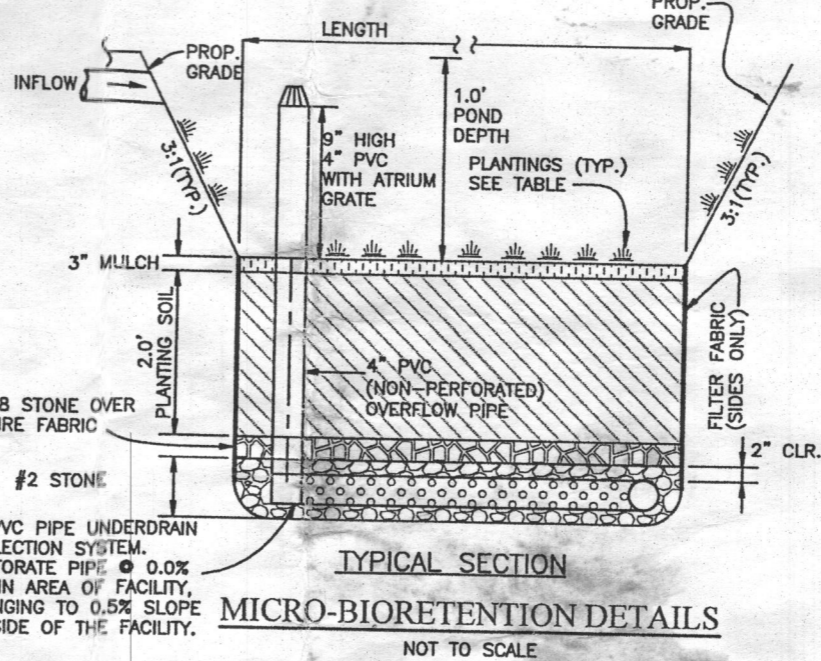
FACILITY	A	B	C	D	E	F	G	H	LENGTH	WIDTH	FILTER (A)	PLANTINGS			LINER
												1	2	3	
MBR-1	420.00	419.00	418.75	416.75	416.42	415.92	414.59	407.40	24.0	16.3	373	41	41	21	YES



NOTE: IMPERMEABLE LINER REQUIRED WHEN FACILITY IS INSTALLED IN THE 100' WELL RADIUS. THIS LINING SHOULD INCLUDE ENTIRE SIDES AND BOTTOM OF THE EXCAVATION AND EXTEND TO TOP OF EMBANKMENT. LINING ON SIDE SLOPES SHALL BE BELOW A MINIMUM OF 6" OF TOP SOIL. LINING TO BE CLAY OR 30 MIL POND LINER



4" PVC PIPE UNDERDRAIN COLLECTION SYSTEM. PERFORATE PIPE @ 0.0% WITHIN AREA OF FACILITY, CHANGING TO 0.5% SLOPE OUTSIDE OF THE FACILITY.



MICROBIORETENTION PLANTING SCHEDULE

(PLANTING SPECIES AND DENSITY CAN BE CHANGED OR SUBSTITUTED BY A LANDSCAPE ARCHITECT OR QUALIFIED DESIGNER)

- 1 IRIS FULVA (COPPER IRIS) (1 PER SY)
- 2 LOBELIA CARDINALIS (CARDINAL FLOWER) (1 PER SY)
- 3 RUDBECKIA SUBTOMENTOSA (SWEET CONEFLOWER) (1 PER 2 SY)
- ⊗ CALLUNA VULGARIS (HEATHER) (1 PER FACILITY)
- ACER GINNALA (ARMUR MAPLE) (1 PER FACILITY)

MICROBIORETENTION PLANTING DATA

1. PLANTINGS WITHIN THE PONDING AREA OF THE FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
2. PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
3. AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

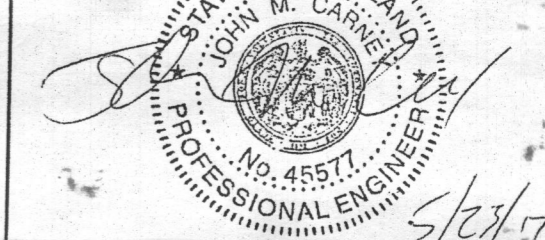
OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

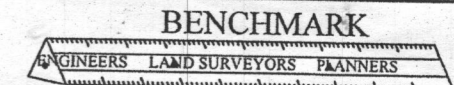
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

- MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

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. 45577, Expiration Date 06/08/2018.



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MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION

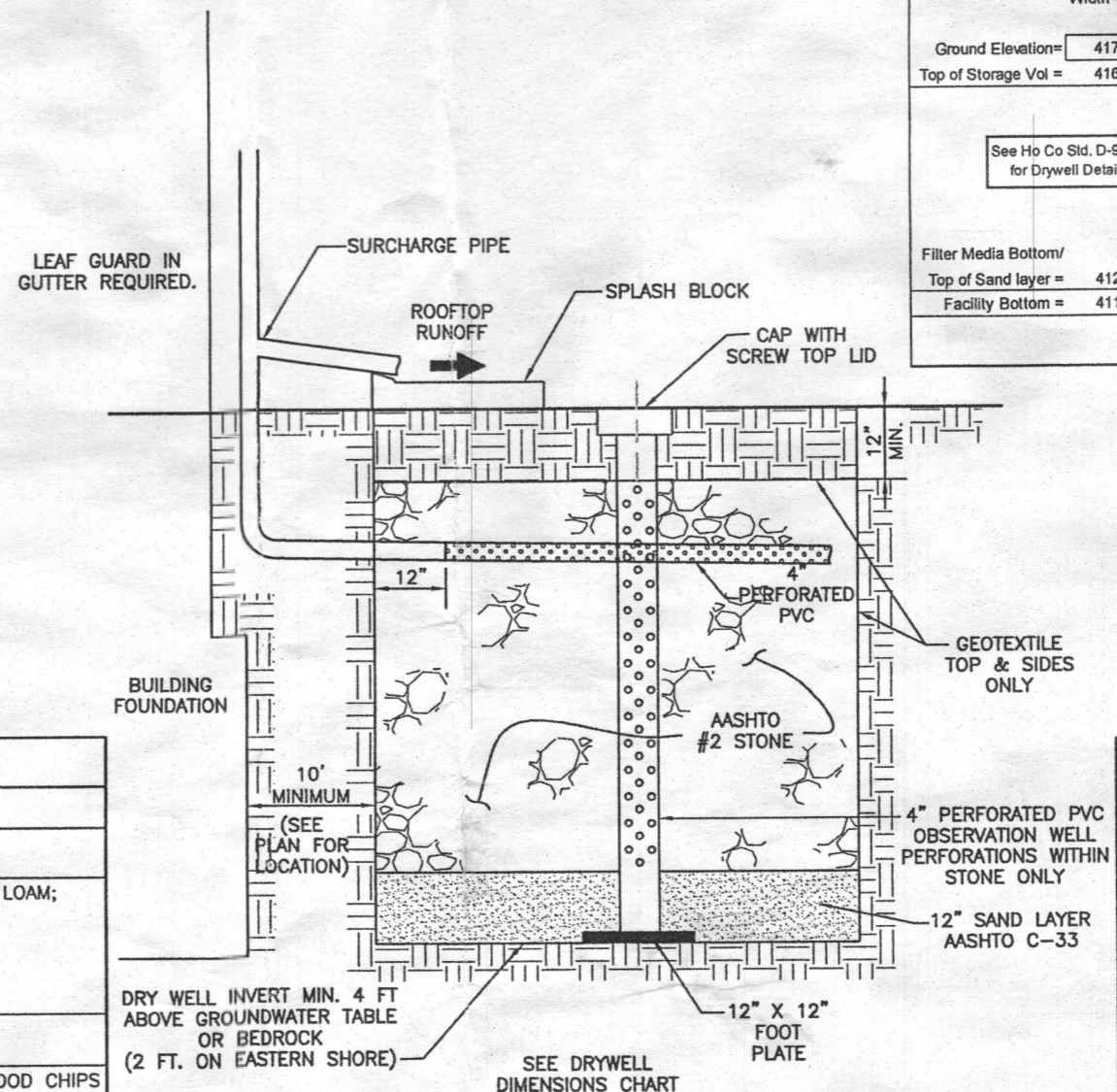
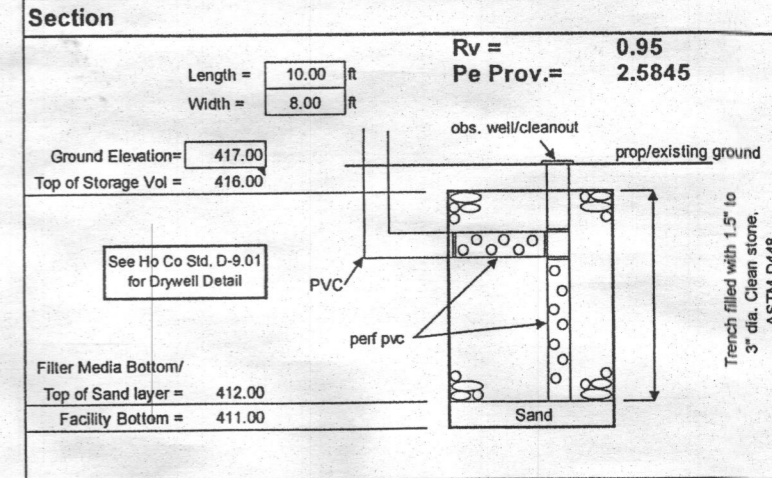
MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6 0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES. PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
IMPERVIOUS LINER	ASTM-D-4833 (THICKNESS) ASTM-D-412 (TENSILE STRENGTH 1,100 LB., ELONGATION 200%) ASTM-D-624 (TEAR RESISTANCE - 150 LB./IN) ASTM-D-471 (WATER ADSORPTION: +8 TO -2% MASS)	30 MIL. THICK	LINER TO BE ULTRAVIOLET RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM-D-4833 (PUNCTURE STRENGTH 125LB) ASTM-D-4632 (TENSILE STRENGTH 300 LB.)		

PROJECT:	REGAN PROPERTY LOT 8	
LOCATION:	12341 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441	
TITLE:	BUILDING PERMIT & STORMWATER MANAGEMENT NOTES & DETAILS	
HOUSE TYPE:	EAGLES NEST - ELEVATION 'A'	
DATE:	MAY, 2017	PROJECT NO. 2171
SCALE:	NOT TO SCALE	DRAWING 2 OF 3

**OPERATION AND MAINTENANCE SCHEDULE FOR
PRIVATELY OWNED AND MAINTAINED
(M-5) DRY WELLS**

1. The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.
2. Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.
3. A log book shall be maintained to determine the rate at which the facility drains
4. When the facility becomes clogged so that it does not drain down within the 72 hour time period, corrective action shall be taken.
5. The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and maintenance criteria.
6. 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.

(M-5) Drywell #1	
Drainage Area =	
DA =	782 sf ok Check
Imp =	782 sf Impervious R_v = 0.95 Runoff Coefficient
I =	100% Percent Impervious HSG = B
PE _(target) =	1.6 Rainfall in Inches req.
ESD _v =	99 CF Storage Req'd Area(f) = 80 sq.ft.
d _(f) =	5.0 ft Filter Depth Actual_v = 160 CF Storage Prov'd
n =	40% Porosity Storage = 162% ok Check



DRY WELL DETAIL
NOT TO SCALE

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. 45571, Expiration Date: 06-08-2018.

5/23/17

OWNER/BUILDER:
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ROCKVILLE, MD 20850
301-762-9511

BENCHMARK
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ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
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HOUSE TYPE: EAGLES NEST - ELEVATION 'A'	
DATE: MAY, 2017	PROJECT NO. 2171
SCALE: NOT TO SCALE	DRAWING 3 OF 3

REGAN PROPERTY

LOT 8

5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

STORMWATER MANAGEMENT REPORT

Design Professional:

Benchmark Engineering, Inc.
8480 Baltimore National Pike
Suite 315
Ellicott City, MD 21043
410-465-6105

Builder:

MB Highland Reserve, LLC
1686 East Gude Drive
Rockville, Maryland 20850
301-762-9511

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. 45577,
Expiration Date: 06-08-2018



Date: May, 2017

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Introduction:

This report contains the stormwater management computations and drainage area maps for the new dwelling on Lot 8 of the Regan Property Subdivision. There are no floodplains, wetlands and streams located within the lot. The original subdivision (F-13-112) fully addressed ESD and Groundwater Recharge volumes for the entire parcel.

This report studies the requirements for a single lot within the subdivision and calculates the required control volume in accordance with the 2000 Maryland Stormwater Management Design Manuals; Volumes I and II, as amended by the Stormwater Act of 2007; and the Howard County Design Manual Volume I, Chapter 5 were utilized as the standard for the compilation of this report.

General Site Information:

Regan Property, Lot 8, is an approximately 1 acre in size. It is zoned RR-DEO per the comprehensive zoning plan. It is part of Parcel 200 on tax map 23, grid 24. The majority of the existing slopes onsite are between 5% and 15%. The soils present in the area of the proposed dwelling are class 'B'.

Impervious Cover Information:

In developed condition, the new impervious areas shall consist of the rooftop and non-rooftop (driveway) of the new dwelling.

Site Specific Information:

(1) - Justification for Type of System

Standard No. 1 Site designs shall minimize the generation of stormwater and maximize pervious areas for stormwater treatment. Pervious areas have been maximized.

Standard No. 2 Stormwater runoff generated from development and discharged directly into a jurisdictional wetland or waters of the State of Maryland shall be adequately treated. Stormwater Runoff shall be adequately treated, per the 2000 MDE Stormwater Design Manual. There is no direct runoff from this site to a wetland area.

Standard No. 3 Annual groundwater recharge rates shall be maintained by promoting infiltration through the use of structural and non-structural methods. At a minimum, the annual recharge from post development site conditions shall mimic the annual recharge from pre development site conditions. The recharge from the developed site conditions shall mimic the pre-developed site conditions via disconnection credits and sheet flow.

Standard No. 4 Water quality management shall be provided through the use of structural and/or non-structural practices.

Water quality management was provided through the use of disconnections where possible. If they were not possible the next alternative was Micro-Bioretenion (M-6) and Dry Well (M-5). Disconnection of non-rooftop runoff (N-2) may also be specified.

- Standard No. 5 *Structural BMP's used for new development shall be designed to remove 80% of the average annual post development total suspended solids load (TSS) and 40% of the average annual post development total phosphorous load (TP). It is presumed that a BMP complies with this performance standard if it is:*
- *sized to capture the prescribed water quality volume (WQv),*
 - *designed according to the specific performance criteria outlined in this manual,*
 - *constructed properly, and*
 - *maintained regularly.*
- There are no proposed structural BMP's.**
- Standard No. 6 *On the Eastern Shore (see Figure 2.4), the post development peak discharge rate shall not exceed the pre development peak discharge rate for the two-year frequency storm event. On the Western Shore, local authorities may require that the post development ten-year peak discharge rate not exceed the pre development peak discharge if the channel protection storage volume (CPv) is provided (see Standard No. 7). In addition, safe conveyance of the 100-year storm event through stormwater management practices shall be provided.*
- This site is not located on the Eastern Shore. It is understood that local authorities may require the post development ten-year peak discharge not exceed the pre development peak discharge.**
- Standard No. 7 *To protect stream channels from degradation, Cpv shall be provided by 12 to 24 hours of extended detention storage for the one-year storm event. CPv shall not be provided on the Eastern Shore unless the appropriate approval authority deems it necessary on a case by case basis.*
- CPv is not required because ESDv was fully provided. This site is not located on the Eastern Shore.**
- Standard No. 8 *Stormwater discharges to critical areas with sensitive resources [e.g., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs, Chesapeake Bay Critical Area (see Appendix D.4)] may be subject to additional performance criteria or may need to utilize or restrict certain BMP's.*
- The proposed development is not within any critical areas.**
- Standard No. 9 *All BMP's shall have an enforceable operation and maintenance agreement to ensure the system functions as designed.*
- There are no structural BMPs proposed.**
- Standard No. 10 *Every BMP shall have an acceptable form of water quality pretreatment.*
- There are no structural BMPs proposed.**

- Standard No. 11 *Redevelopment, defined as any construction, alteration or improvement exceeding five thousand square feet of land disturbance on sites where existing land use is commercial, industrial, institutional or multi-family residential, is governed by special stormwater sizing criteria depending on the amount of increase or decrease in impervious area created by the redevelopment.*
This is not a redevelopment project.
- Standard No. 12 *Certain Industrial sites are required to prepare and implement a stormwater pollution prevention plan....*
This site is not commercial or industrial.
- Standard No. 13 *Stormwater discharges from land uses or activities with higher potential for pollutant loading, defined as hotspots in Chapter 2, may require the use of specific structural BMPs and pollution prevention practices. In addition, stormwater from a hotspot land use may not be infiltrated without proper pretreatment.*
This site is not considered a hotspot.
- Standard No. 14 *In Maryland, local governments are usually responsible for most stormwater management review authority. Therefore, prior to design, applicants should always consult with their local reviewing agency to determine if they are subject to additional stormwater design requirements. In addition, certain earth disturbances may require NPDES construction general permit coverage from MDE (see Appendix D.7).*
If Howard County (this sites local government) requires additional design criteria, it shall be addressed.

(2) Drainage Easements

There are no existing or proposed drainage easements for this project.

(3) Methodology

The on-site drainage area and the included proposed impervious area were measured and the impervious area was treated to a Target Pe of 1.0" per the approved final SWM design (F-13-112). Disconnections were used as the first attempt to address the required ESDv. If disconnections could not provide the required treatment the next preferred treatment is micro-bioretenention.

(4) Water Quality Requirement/Analysis:

ESDv was based on percent impervious for the lot area and included non-rooftop disconnection credits. No rooftop disconnection credits or other disconnected imperviousness area were able to be deducted from the total impervious cover.

(5) Quantity Requirement/Analysis:

The Channel Protection Volume (CPv) has been fully addressed by the treatment of the runoff to the target Pe and target ESDv.

(6) Summary:

See Summary Tables.

(7) Hazard Classification:

There are no proposed public BMP's for this site. The BMP's are Disconnection of Non-rooftop Runoff, Drywells and Micro-bioretenion facilities. They are designed to address environmental site design volume requirements.

(8) Floodplain Information:

There is no 100-year floodplain on this lot.

(9) Affects of Development on Adjacent Properties:

The proposed stormwater management system should have no significant negative impact on the development of adjacent properties as some of the runoff from the development should filter into the ground via non-rooftop disconnections, dry wells or micro-bioretenion facilities prior to leaving the subject property.

(10) Affects of Development on the Natural and Traditional Character of the Waterway:

This subdivision is located in the Patuxent Watershed, Maryland Watershed designation 02-13-11-06. The site is within the watershed for the Middle Patuxent River. This watershed is not required to provide overbank protection or extreme flood volume per the design manual.

The streams are class I streams.

(11) Erosion Sedimentation Control Measures:

Sediment and erosion controls have been designed based on the 2011 Maryland Specifications for Soil Erosion and Sediment Control. Erosion control matting and super silt fence will be used to prevent runoff containing unacceptable levels of TSS from leaving the site and entering the adjacent wetlands during the construction. It will be the obligation of the contractor to install, inspect and maintain these practices.

(12) Cut/Fill and Soil Disposal

Soil for the construction of the house and SWM will be available on-site.

(13) Impact on Existing and Proposed Utilities:

There is no impact on any existing or proposed utilities

(14) Watershed and Stream Use Designations:

This project is located in the Middle Patuxent Watershed, Maryland. The stream use designation is class I.

Geotechnical Report:

Extensive percolation testing has been performed on this site, and some geotechnical exploration has been done for specific facility locations. Boring logs and boring locations have been included on the plan. No groundwater or rock was encounter such that would impede the construction of the proposed facilities.

Conclusions and Recommendations:

It is concluded that all stormwater management requirements as set forth in the 2000 Maryland Stormwater Design Manual, Volume I and II, as amended by the 2007 Stormwater Act and Howard County Design Manual Volume I Chapter 5 have been met. ESDv requirement is being met through the use of non-rooftop disconnection and micro-bioretenion. The Recharge Volume (Rev) and Channel Protection Volume (CPv) have been determined under final road plans (F-13-112) for the entire parcel to be a minimum 0.5' of stone chamber under each non-lined MBR.

Summary:

See Summary Tables on next page.

(5) Quantity Requirement/Analysis:

The Channel Protection Volume (CPv) has been fully addressed by the treatment of the runoff to the target Pe and target ESDv.

(6) Summary:

See Summary Tables.

(7) Hazard Classification:

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Summary:

See Summary Tables on next page.

Micro Scale Facility Design

Total Site

Step 1: Determine ESD Implementation Goals

A. Determine Pre-Developed Conditions

Soil Conditions for "Woods in Good Condition"

HSG	RCN	*Area (ft2)	Percent
A	38	0	0%
B	55	27639	100%
C	70	0	0%
D	77	0	0%
Target RCN	55	27639	

B. Determine Initial Target Pe Using Table 5.3

Soil Conditions Developed Condition

HSG	*Area (ft2)	*Impervious	Percent**	Target Pe
A				
B	27022	6,569	25%	1.6
C				
D	0			
Weighted Pe	27022	6569	25%	1.6

* Percent Impervious is rounded to the next higher increment of 5%

C. Determine Target Pe after RCN reduction Using Table 5.3

Pervious pavement area: sf

Soil Conditions Developed Condition

HSG	Area (ft2)	Impervious	Percent*	Target Pe
A				
B	27022	6569	25%	1.6
C				
D	0			
Weighted Pe	27022	6569	25%	1.6

* Percent Impervious is rounded to the next higher increment of 5%

D. Compute Qe

Qe = Runoff depth used to size ESD practices

$$Q_e = P_e * R_v$$

$$P_e = 1.6 \text{ inches}$$

$$I = 24\%$$

$$R_v = 0.05 + (0.009 * I)$$

$$R_v = 0.27$$

$$Q_e = 0.43 \text{ inches}$$

$$\text{Target } P_e = 1.6 \text{ inches}$$

$$Q_e = 0.43 \text{ inches}$$

$$\text{ESD}_v = 968 \text{ cubic feet}$$

Total Site Recharge Volume Calculations

Recharge Volume

Drainage Area = main site
 A = 0.63 Area in Acres

I = 24% Impervious

S = 26.00 %

Rv = 0.27

HSG	% Of Site	Soil Specific Recharge Factor (S)
A	0%	0.38
B	100%	0.26
C	0%	0.13
D	0%	0.06

Recharge Using Percent Volume Method

Rev = 0.0037 ac-ft OR 161 cf

Recharge Using Percent Area Method

Rev = 0.04 acres

Requirement may be met by either

- a) treating 161 cf using structural methods,
- b) treating 0.04 acres using non-structural methods, or
- c) a combination of both

Equations

2000 Maryland Stormwater Design Manual Volume II

$Rev = [(S) (Rv) (A)]/12$ (percent volume method)

$Rev = (S)(Ai)$ (percent area method)

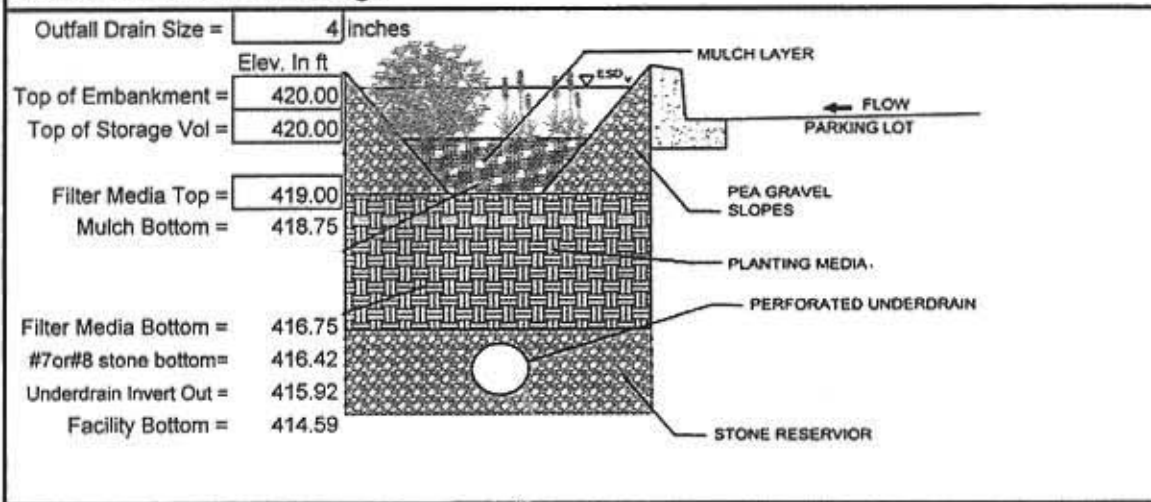
$S = (\text{soil } S)(\% \text{ soil}) + (\text{soil } S)(\% \text{ soil})$

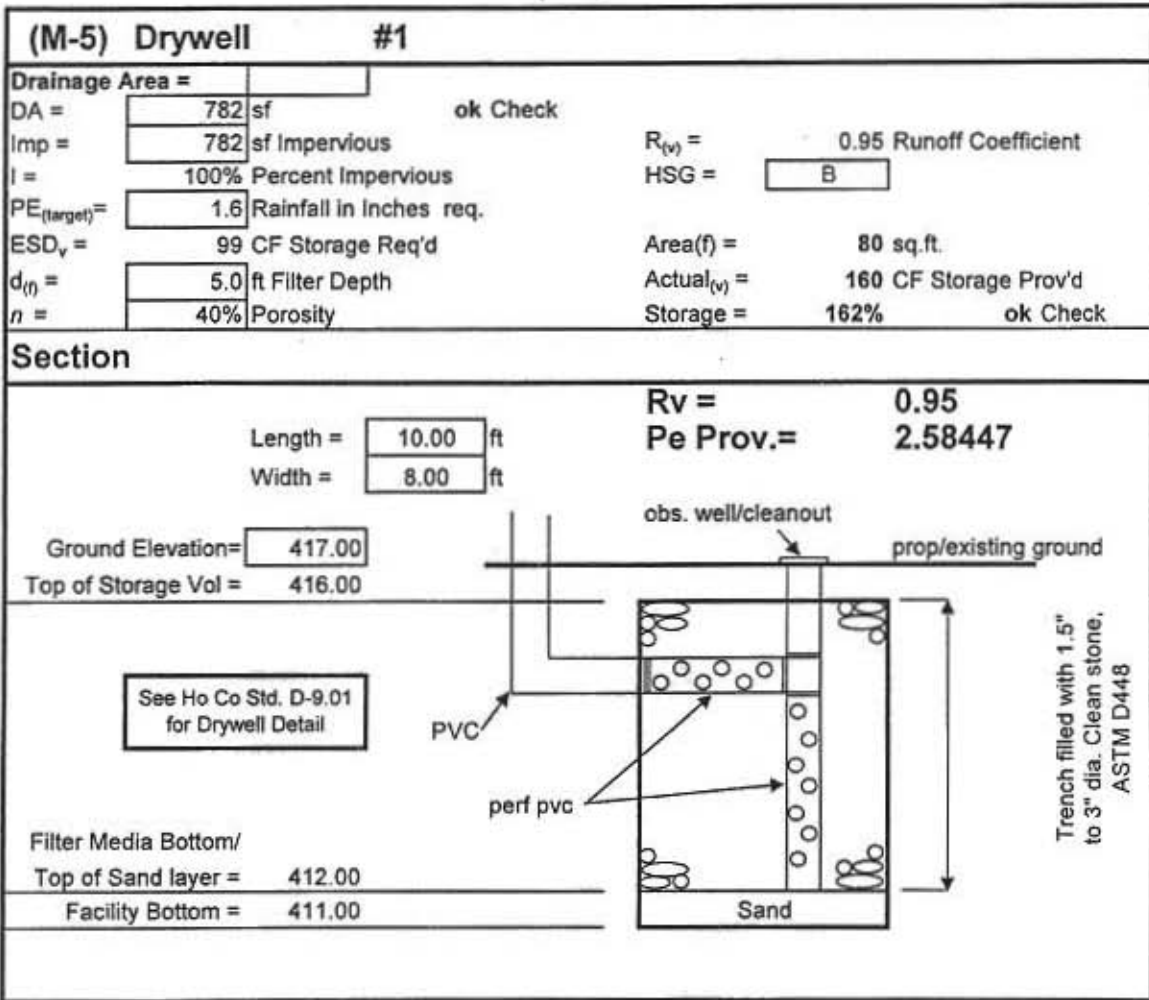
Date: 5/23/2017 Project: Regan Property Lot 7

(M-6) Micro-Bioretention MBR-1

DA =	6,708 sf	ok Check	Drainage Area =	MBR-1
Imp =	4,050 sf Impervious		$R_{(v)}$ =	0.59 Runoff Coefficient
I =	60% Percent Impervious		$A_{(v-req'd)}$ =	134.2 SF (Eqn. 5.2)
$PE_{(target)}$ =	1.6 Rainfall in Inches req.		$A_{(v-prov'd)}$ =	373.0 SF ok
ESD_v =	530.7 CF Storage Req'd		$A_{(top)}$ =	639.0 SF
$d_{(f)}$ =	2.0 ft Filter Depth		$A_{(f)\%}$ =	5.6% ok Check
n =	40% Porosity		Ponded $_{(v)}$ =	506.0 CF Ponded Storage Prov'd
$d_{(s)}$ =	1.33 ft Stone Depth		Stone(v)	132.7 CF Stone Storage Req'd
			Additional Stone $_{(v)}$	198.4 CF Stone Storage Prov'd
			Total $ESD_{(v)}$	704.4 CF Volumetric Storage Prov'd

Micro-Bioretention Design





ESD Summary Chart

ESD STORMWATER MANAGEMENT SUMMARY TABLE

Practice	#	inches		inches		ESDv= Af (s.f.)	ESDv= 2% DA?	cf		Rv= 0.27	REV		Ownership		
		Pe= 1.60	Qe= Imp Area to practice	DA to practice	0.43			Af (s.f.)	Required		Provided	Pe Provided		Required	Provided
(M-6) MicroBioretention	#6		4,050	6,708	134	373	PASS	531	704	1.6			Private		
(M-5) Dry Well	#1		782	782				99	160	2.6		160	Private		
(N-2) Disc. of Non-Rooftop Runoff	#1		1,430	2,924					107	1.0		107	Private		
Total Treated	→		6,262	10,414	134	373		968	972	1.6	161	267			
Site Total	→		6,569	27,639											

MITCHELL & BEST HOMEBUILDERS

INDEX	
SHEET NO.	DESCRIPTION
SHEET D1	DETAIL SHEET - FIREPLACE DETAIL, STAIR DETAIL, TYP. FOOTING DETAIL
SHEET 1	BASEMENT PLAN
SHEET 1A	WALKOUT BASEMENT PLANS
SHEET 1B	BURIED BASEMENT PLANS W/ BRICK
SHEET 1C	BURIED BASEMENT PLANS W/ STONE
SHEET 2	FIRST FLOOR PLAN
SHEET 2A	FIRST FLOOR PLAN W/ STONE
SHEET 2C	FIRST FLOOR PLAN
SHEET 3	SECOND FLOOR PLAN
SHEET 4	OPT THIRD FLOOR PLAN
SHEET 5	FRONT ELEVATION
SHEET 6	SIDE ELEVATIONS
SHEET 7	REAR ELEVATION REAR ENTRY - FLAT WINDOW HEAD
SHEET 7A	OPT. WALKOUT BASEMENT ELEVATIONS
SHEET 8	MAIN SECTION - ROUND HEAD DORMER - CONC AREAWAY
SHEET 9	LAWN ROOM SECTION OPT. PORCH SECTIONS
SHEET 10	GARAGE SECTION - GARAGE DORMER WINDOW DETAILS
SHEET 11	FAMILY RM SECTION DINING AREA BAY
SHEET 12	ENT "A" - OPT 3RD FL SEC "A"
SHEET 13	SUN ROOM
SHEET 14	FRONT ENTRY GARAGE
SHEET 14A	FRONT ENTRY GARAGE W/ STONE
SHEET 15	OPT. GATHERING RM
SHEET 16	OPT. BRICK/STONE LEFT SIDE

INDEX	
SHEET NO.	DESCRIPTION
SHEET 17	OPT. B#1 FIREPLACE & FR FIREPLACE
SHEET 18	B#1 DETAIL
SHEET 19	LARGE GARAGE
SHEET 20	LARGE GARAGE W/ STONE
SHEET 21	LARGE GARAGE SECTION
SHEET 22	OPT COURTYARD GARAGE - PLANS
SHEET 23	OPT COURTYARD GARAGE - ELEVATIONS - SECTION
SHEET 24	OPT ELEVATOR
SHEET F-1	1ST FL FRAMING
SHEET F-2	2ND FL FRAMING
SHEET F-3	ROOF FRAMING
SHEET F-4	OPT. 3RD FL. ROOF FRAMING
SHEET E-1	B5MT ELECTRICAL
SHEET E-2	1ST FL ELECTRICAL
SHEET E-3	2ND FL ELECTRICAL
SHEET E-4	3RD FL ELECTRICAL
SHEET B-1	BEAM DATA SHEET
SHEET B-2	BEAM DATA SHEET
SHEET B-3	BEAM DATA SHEET
SHEET B-4	BEAM DATA SHEET

INDEX	
SHEET NO.	DESCRIPTION
SHEET RC	RESCHECK
SHEET SB.1	STRUCTURAL NOTES & SPECIFICATIONS
SHEET SB.1	1ST FL WALL BRACING PLAN
SHEET SB.2	1ST FL WALL BRACING PLAN
SHEET SB.1	2ND FL WALL BRACING PLAN
SHEET SB.2	2ND FL WALL BRACING PLAN
SHEET SB.1	OPTIONAL 3RD FL WALL BRACING PLAN
SHEET SB.1	FRONT WALL BRACING ELEVATIONS
SHEET SB.2	REAR WALL BRACING ELEVATIONS
SHEET SB.3	RIGHT SIDE WALL BRACING ELEVATIONS
SHEET SB.4	LEFT SIDE WALL BRACING ELEVATIONS
SHEET SB.1	DETAILS

REVISIONS	
DATE	DESCRIPTION
7-27-01	FAMILY ENTRANCE, CUBBIES, OPT. F.R.
8-8-01	AREAWAY WALLS
11-19-01	2ND FL GALLERY
1-4-02	KIT B#1 3RD FL
4-10-02	ALT. KIT, OPT. LAUN. RM DOOR, 2'-4" FAN. RM FIREPLACE, B#1 DETAIL, B#5 VANITY, FORSH ROOF COPPER ROOF TO METAL
6-28-02	REVISIONS FOR COUNTY PERMIT, REVISE COVER SHEET
1-8-03	DELETE OPT. #2 LAUN. RM ENTRY, REVISE PANTRY DOORS TO D.S. COFFERED CEIL. IN GALLERY, REVISE & DETAIL B#1 BATH

REVISIONS	
DATE	DESCRIPTION
5-14-03	DELETE B5MT. COL. @ OPT. BAR. INCREASE RM. SIZE, REVISE OPT. BAR. REVISE KIT. ISLAND, REVISE B#1 WINDOWS, MAKE LEFT ELEV. STD. FRAME, OPT. BRICK OR STONE, REVISE REAR ELEV. REVISE OPT. GATH. RM. GALLERY DOORS TO 8'-0", ARCHED OPG. ON 2ND FL., MISC. ELEC. REVISIONS
7-28-03	REVISE STONE/BRICK SILL TO BE OPTIONAL @ DIN. RM., ADD R/A DUCT TO OPT. SUN RM., ADD ARCHED TRANS. OVER GALLERY DOORS & REVISE CELL. REVISE 7'-0" DKS. TO 8'-0" @ PORCH ABOVE GALLERY, REVISE FRONT ENTRY GAR. RIGHT SIDE TO OPT. STONE/BRICK SILL, ADD DM FOR OPG. TO OPT. GAME RM. DELETE ALT. KIT., REVISE ELECTRICAL PLANS, REVISE ELEVATIONS AS REQ.
8-22-04	REVISE OPT. BRICK AREAWAY, OPT. BAR DETAIL, & OPT. FM RM. F.P. DETAIL.
8-22-06	PUT IN A SURFACE LIGHT, WITH A SWITCH, IN THE AREAWAY. PUT LIGHTS AND OUTLETS IN THE GATHER AND GAME RM.
12-22-06	REVISE WALL THICKNESS FOR FOUNDATION, 1ST & 2ND FLOORS, REVISE ALL PLANS, SECTIONS, DETAILS & OPTIONS PERTAINING TO WALL THICKNESS. REVISE WINDOWS IN FAMILY RM. FOR WINDBRACING.
4-22-08	REVISE WALL THICKNESS FOR 1ST, 2ND, AND BASEMENT PLANS. REVISE SECTIONS AND ELEVATIONS ACCORDING TO THE ABOVE CHANGES.
8-10-09	REVISE THE DORMERS WINDOWS OVER THE GARAGE TO DOUBLE HUNG AND CHANGED ALL PLANS AND ELEVATIONS TO MATCH CHANGES. LABEL ALL BEAMS AND REVISE FAMILY ENTRANCE TO HAVE OPTIONAL DESK.
8-9-09	REVISE SHEET 2A AND 2B TO HAVE A BRICK SILL, REVISE COLUMNS IN B5MT TO A 4" @ ADJ. ST. ON A 36" X 36" X 15' FTG AND A 3 1/2" @ ADJ. ST. ON A 32" X 32" X 16' FTG. REVISE COVER SHEET.
8-28-12	REVISED DRAWINGS TO COMPLY WITH IRC 2012 AS FOLLOWS: CHANGE ALL EXT. WOOD FRAME WALLS TO 2 X 6. UPGRADE INSULATION THRU REVISED RESCHECK. REVISE CORNICES TO ALUM. CLAD 2X6. ADDED OPT THIN SET STONE. COMBINED MODELS AS AF AND AS ON SAME DRAWING. ADDED B5MT FIRE ESCAPE LADDER, RELOCATED ELEC. PANEL, SHOWN DROPPED CEILING SHADDED AREA, ADDED HVAC REAR GARAGE. REVISE ENTRY DETAIL TO SHOW BRICK/STONE. REVISE FIRST FL FRAMING. REVISE SKIRT BOARD @ ELEV & SECT.
4-01-15	REVISED DRAWINGS TO REFLECT CHANGES TO OPTIONS. CHANGES AFFECT EXERCISE ROOM, WET BAR, MEDIA ROOM IN B5MT. REVISED STAIR FROM 1ST TO 2ND FL. REMOVING WINDER. REVISED 1ST FL. OPTIONS TO FIRE PLACE AND TRAY CEILING. REVISED 2ND FL. OPTIONS TO M. BEDROOM AND MASTER BATH.

MISCELLANEOUS NOTES	
SAFETY GLASS REQUIREMENTS (I.R.C. SEC R-308)	
1	ALL GLASS IN DOORS
2	ALL SIDE LIGHTS
3	SHOWER ENCLOSURE IN MASTER BATH
4	WINDOWS ABOVE TUB IN MASTER BATH

GENERAL NOTES

GROUND LOAD	WIND SPEED (mph)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				ICE/SNOW LOADS (PSF)	FLOOD HAZARD	AIR POLLUTION INDEX	MEAN ANNUAL TEMP
			Severe	Moderate to Severe	Slight to Moderate	Deer				
30	90	B	Severe	24	Moderate to Severe	Slight to Moderate	13	Yes	7-2-78	55

- All construction to be in conformance with I.R.C., one and two family dwelling code, 2012 edition & all HOWARD COUNTY additions and revisions thereto.
- Design live loads:
 - Sleeping room load .. 30 p.s.f.
 - Floor load 40 p.s.f.
 - Roof load 30 p.s.f.
 - Deck load 60 p.s.f.
 - Garage load 50 p.s.f.
- Soil bearing to be 2000 p.s.f. minimum.
- Design wind load 90 mph
- Bottom of all concrete footings to be 24" minimum below finished grade.
- Foundation walls shall comply to I.R.C. Sec. R-401. thru 404.
- Foundation drainage shall comply to I.R.C. Sec. R-405.
- Foundation waterproofing shall comply to I.R.C. Sec. R-406.
- Attached Garages shall comply to I.R.C. Sec. R-309.
- Concrete floors shall comply to I.R.C. Sec. R-506.
- All concrete to be 150 p.c.f. and conform to the latest A.C.I. 318 specifications. Porches, garages, slabs and steps exposed to weather, to be 3000 p.s.i. air entrained concrete. Foundation walls, exterior walls and other vertical concrete work to be 3000 p.s.i. air entrained concrete. All other concrete to be 3000 p.s.i.
- All c.m.u. used in basement and foundation walls shall be load bearing units conforming to A.S.T.M. C 90-70 for hollow units. At wood post and wood beam bearing locations on c.m.u. wall cells shall be filled solid with grout or mortar for top two course minimum.
- All c.m.u. walls shall have standard truss type DUR-O-WALL bed joint reinforcing at maximum 16" vertical spacing.
- All brick units used in exterior shall conform to A.S.T.M. C 62 or A.S.T.M. C 216

- All mortar shall be type "S" conforming to A.S.T.M. C 270-82.
- Stone and masonry veneer shall conform to I.R.C. Sec. R-703.7.
- Backfilling against basement walls shall not be performed until first floor framing is in place and top of reinforced c.m.u. walls are braced against overturning.
- Maximum allowable lateral pressure on basement walls 60 p.s.f.
- All reinforcing steel to be grade 60 and conform to A.S.T.M. Spec. A 615. Unless otherwise noted.
- Steel post cap plates to conform to A.S.T.M., Spec. A 36, Fy = 36,000 p.s.i. Bolts shall be A.S.T.M. A 307 or better.
- Steel columns in basement to be adjustable 3" I.D. S40 columns unless specified otherwise.
- All structural wood framing, including roof and floor sheathing, to be in accordance with the "National Design Specifications for Wood Construction", published by The National Forest Products Association. Framing lumber shall be of the following grades or better:

CLASSIFICATION	SIZE	BENDING "Fb"	MODULUS OF ELASTICITY "E"
POSTS #1 D.F.	1200	1200	1600000
HEADERS, BEAMS, ROOF HIPPS #1 S.P.	2X4	1850	1700000
	2X6	1650	1700000
	2X8	1500	1700000
	2X10	1300	1700000
	2X12	1250	1700000
RAFTERS, JOISTS AND STUDS #2 H.F.	2X4	1000	1500000
	2X6	1000	1500000
	2X8	1000	1500000
	2X10	1000	1500000
	2X12	1000	1500000
Gang-Lam Beams (Fv = 285 PSI)	all	2800	2000000

- All headers to be 2 - 2" x 12" unless specified otherwise.
- Provide double jock studs at each end of headers and beams, 5'-0" and longer, unless noted otherwise.
- Splices of the bottom and top portion of a double top plate must be staggered a minimum of 4'-0".

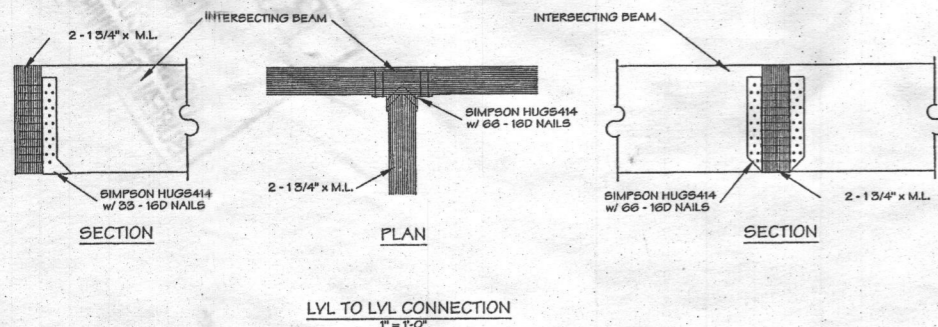
- All roof, floor and girder trusses to be designed by truss manufacturer to carry required loads and to be installed according to manufacturer's specifications.
- Contractor to provide architect with shop drawings for all roof and floor trusses. Shop drawings to be provided to architect for approval prior to ordering trusses.
- Provide solid blocking under all jack studs not bearing directly on joists or T.J.I.'s.
- In those cases where floor trusses are not centered directly over the studs, splices of the top plate shall occur only over the studs.
- Where installation of plumbing, heating or other pipes necessitates cutting of top plates, a metal tie not less than eighteen gauge, forty-five thousandths (0.045)" thickness and 1 1/2" wide shall be fastened to the plate across and to each side of the opening with not less than 16d nails.
- Double beams, double hip and valley rafters shall be nailed securely together to ensure that the two members act conjointly in resisting the applied load.
- Unless specified otherwise provide the following lintel over masonry openings:

BRICK UP TO	3'-0"	3 1/2" X 3 1/2" X 1/4"
5'-0"	3 1/2" X 4" X 1/4"	
8'-0"	3 1/2" X 5" X 5/16"	
9'-0"	3 1/2" X 6" X 5/16"	

STONE UP TO	3'-0"	6" X 4" X 5/16"
5'-0"	6" X 6" X 5/16"	
8'-0"	6" X 6" X 3/8"	
9'-0"	6" X 8" X 7/16"	

* Provide one angle per 4" of masonry thickness. All angles to have 4" bearing at each end.
- All untreated lumber to be minimum of 8" above finished grade. All lumber in contact with concrete or c.m.u. to be pressure treated.
- All prefab fireplaces to be U.L. rated and installed according to manufacturers specifications.
- Chimney and fireplace construction to be in accordance with I.R.C. Chapter 10 and fig. R-1001.1.

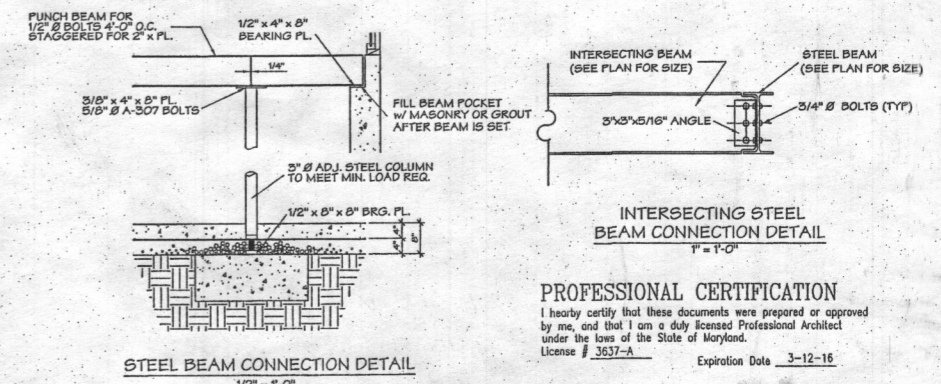
- Fireplace hearth to project 20" from front of facing and 12" to side of opening.
 - Firestopping shall be provided according to I.R.C. Sec. R - 602.8. The integrity of all firestopping shall be maintained.
 - Draftstopping shall be provided according to I.R.C. Sec. R - 302.12.
 - Provide radon mitigation according to I.R.C. - Appendix F.
 - Provide interconnected smoke detectors to protect all floors, bedrooms, and basement according to I.R.C. Sec. R-317.
 - Stairways shall comply with I.R.C. Sec. R-314. Minimum headroom to be 6'-8" clear at all points. Minimum tread to be 10". Maximum riser to be 7 3/4" as per Reg. No. 36-01 amendments.
 - Handrails & guardrails shall comply to I.R.C. Sec. R-315.
 - All exits shall comply to I.R.C. Sec. R-311.
 - Sleeping room windows shall comply with I.R.C. Sec. R-310. Maximum sill height 44" above finished floor. Minimum sill height shall be 18" when window is located more than 72" above finished grade or surface below.
 - All Glazing shall comply to I.R.C. Sec. R-308.
 - All Ceiling heights shall comply to I.R.C. Sec. R-305.
 - All exterior wall coverings shall comply to I.R.C. Sec. R-703.
 - All gas piping shall conform to N.F.P.A. 54 OR 2009 IFGC
 - Electrical wiring must conform to the latest National Electrical Code and County Requirements.
- Note: Builder shall provide roof framing plans signed and sealed by truss manufacturer and shop drawings for floor joists at framing inspection.
- Note: Trusses shall be braced per. manufactures recommendations.



HUTCHINSON + ASSOCIATES ARCHITECTS

11820 PARKLAWN DR.
ROCKVILLE, MD. 20852

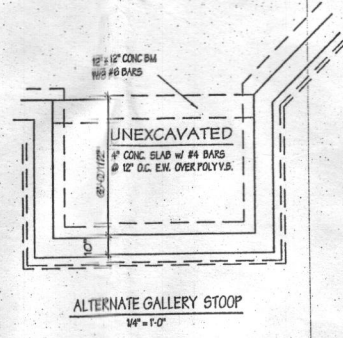
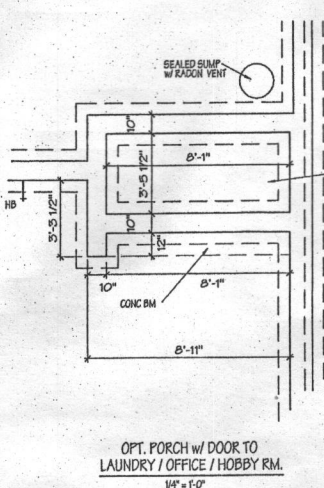
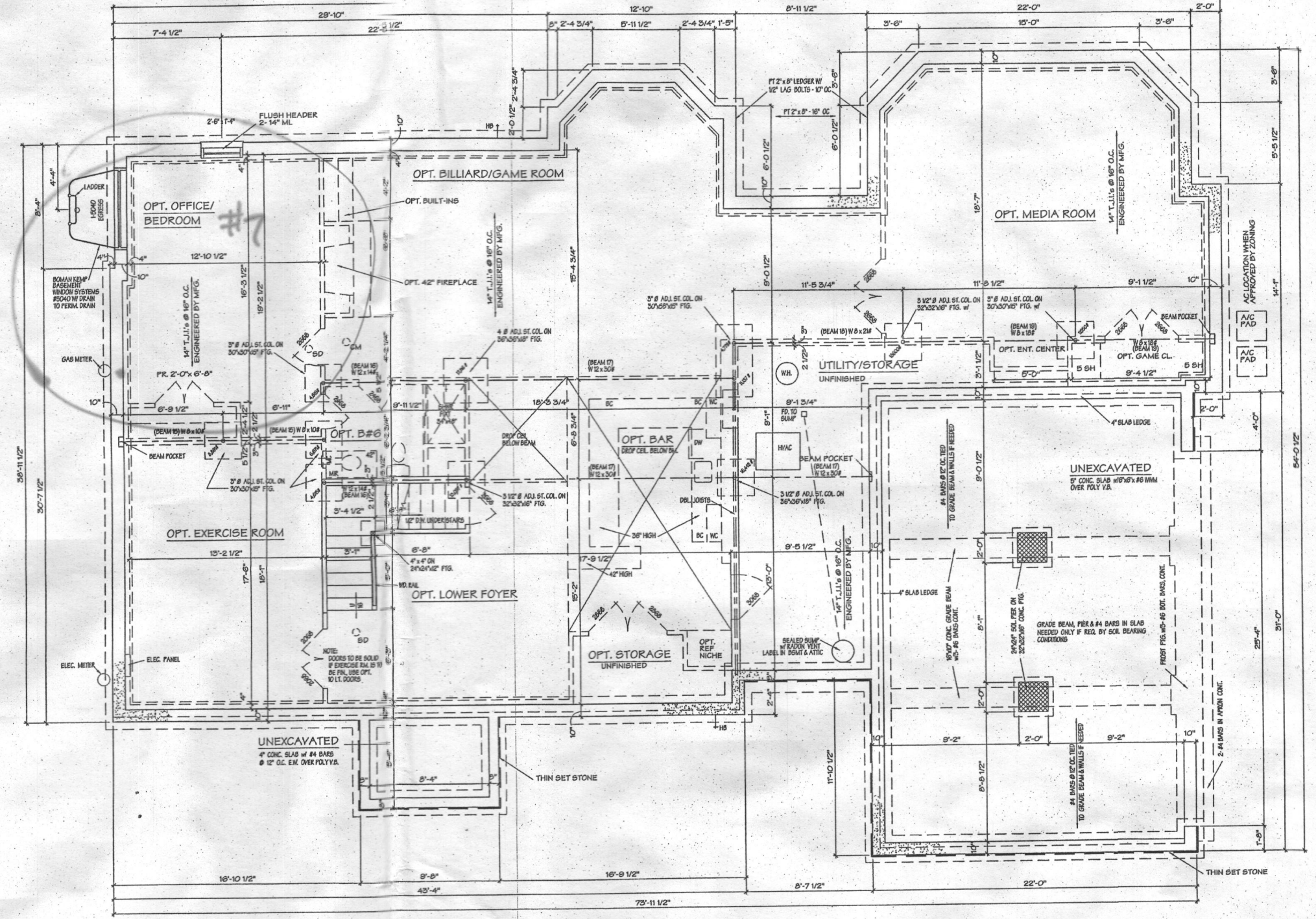
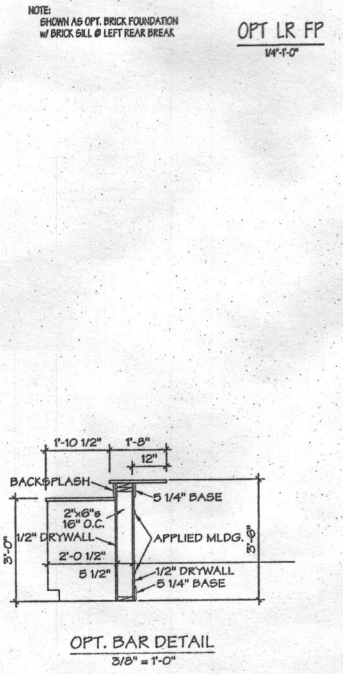
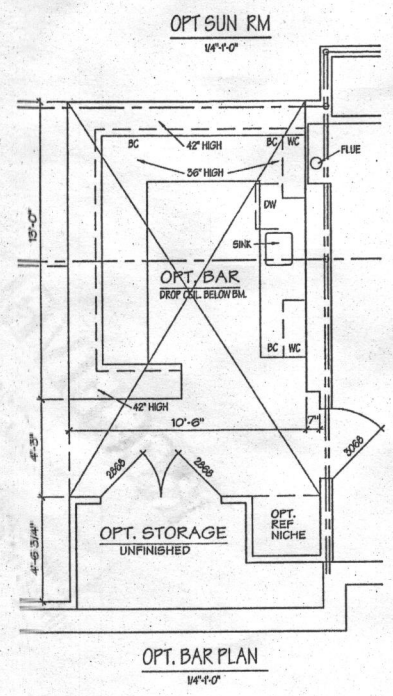
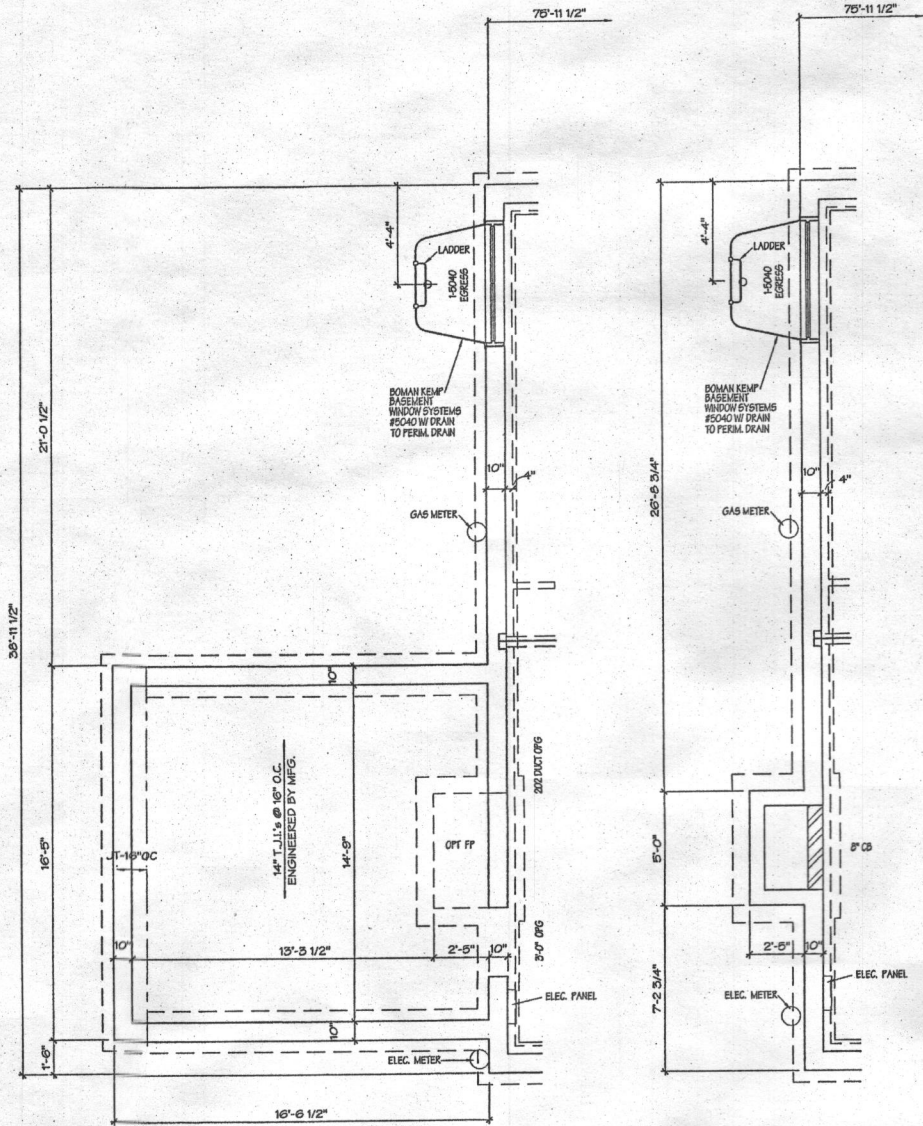
TEL. 301-770-9680 FAX. 301-770-9163



EAGLE'S NEST "AB" MODEL "A" WITH BRICK FACADE
 EAGLE'S NEST "AS" MODEL "A" WITH STONE FACADE
 EAGLE'S NEST "AF" MODEL "A" WITH SIDING FACADE

#B17002137

Basement Finishing



STANDARD MODEL
 2235 Sq. Ft.
 BASEMENT WITH OPTIONS
 2200 Sq. Ft.
 225 Sq. Ft.
 307 Sq. Ft.
 384 Sq. Ft.

- 4-1-15
- 2-8-13
- 5-24-12
- 6-22-14
- 5-25-04
- 7-29-03
- 5-14-03
- 6-28-02
- 1-8-03
- 6-22-06
- 12-22-06
- 4-22-08
- 8-10-09
- 9-0-09
- 4-1-10

EAGLE'S NEST AS

HUTCHINSON + ASSOCIATES L.L.C.
 11820 PARKLAWN DRIVE (S. 100)
 ROCKVILLE, MD. 20852
 PHONE: (301) 770-9680 FAX: (301) 770-0163

MITCHELL & BEST HOMEBUILDERS
 1886 E. GIDE DR.
 ROCKVILLE, MD 20850

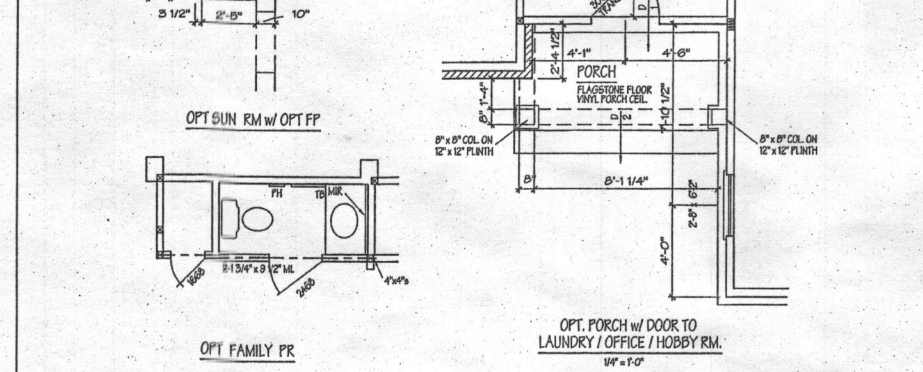
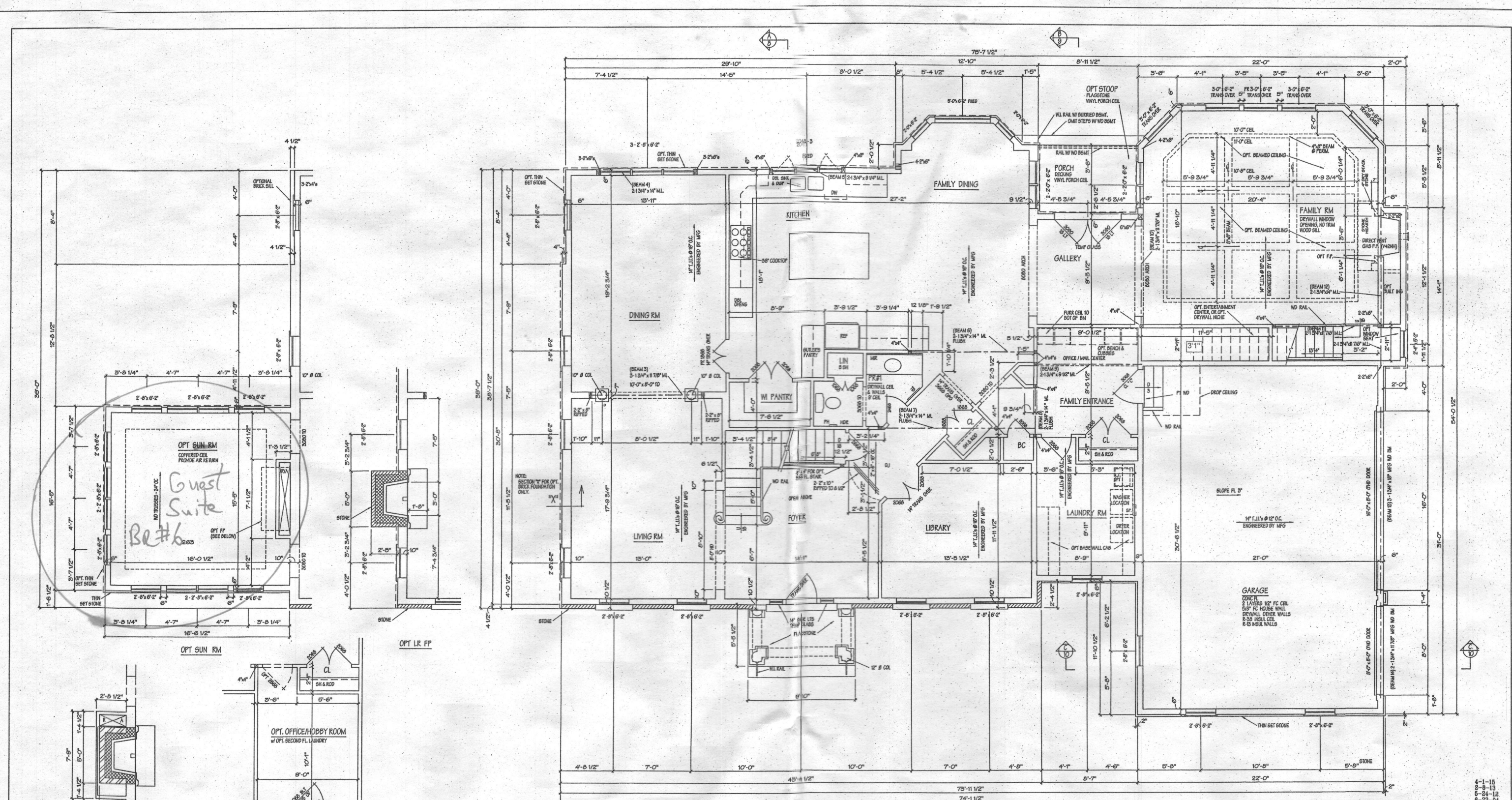
NOTE: All interior wall dimensions to be 3 1/2\"/>

NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.

Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES

DRAWN BY	DATE	LOT NO.	BLOCK	DWG. NO.
15	7-27-01			
CHECKED BY	DATE	SECTION	JOB NO.	1C
	8-6-01			
	11-19-01			
	1-4-02			
	4-10-02			

PROFESSIONAL CERTIFICATION I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Architect under the laws of the State of Maryland. License # 3637-A Expiration Date 3-12-16



FIRST FLOOR PLAN STONE
1/4"=1'-0"

- 4-1-15
- 5-2-13
- 6-24-12
- 6-22-04
- 5-25-04
- 7-28-03
- 6-14-03
- 6-26-02
- 1-8-08
- 6-22-08
- 12-22-08
- 4-22-08
- 8-10-09
- 9-9-09
- 4-1-10

EAGLE'S NEST AS REVISIONS

HUTCHINSON + ASSOCIATES L.L.C.
11820 PARKLAWN DRIVE (S. 100)
ROCKVILLE, MD. 20852
PHONE: (301) 770-9680 FAX: (301) 770-9103

MITCHELL & BEST HOMEBUILDERS
1686 E. GUDE DR.
ROCKVILLE, MD 20850

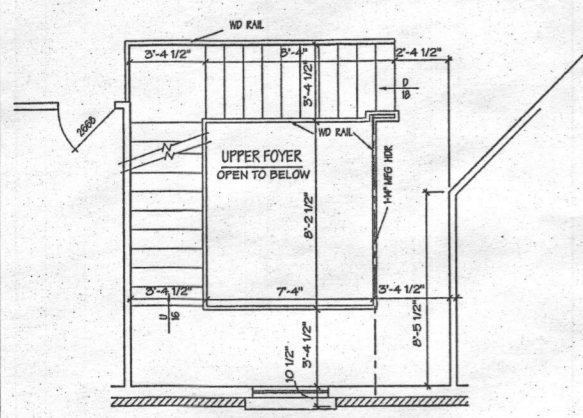
NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.

NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.

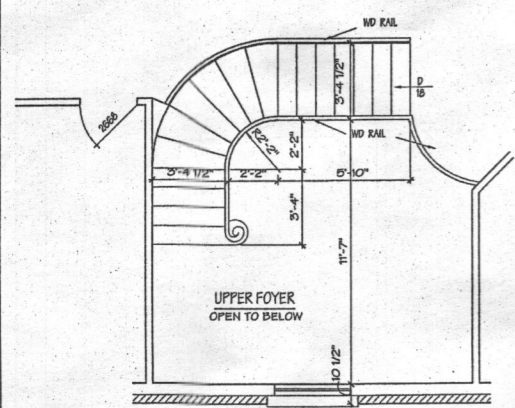
Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES

DRAWN BY	DATE	LOT NO.	BLOCK	DWG. NO.
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	8-6-01			
	11-19-01			
	1-4-02			
CHECKED BY	SECTION	JOB NO.		

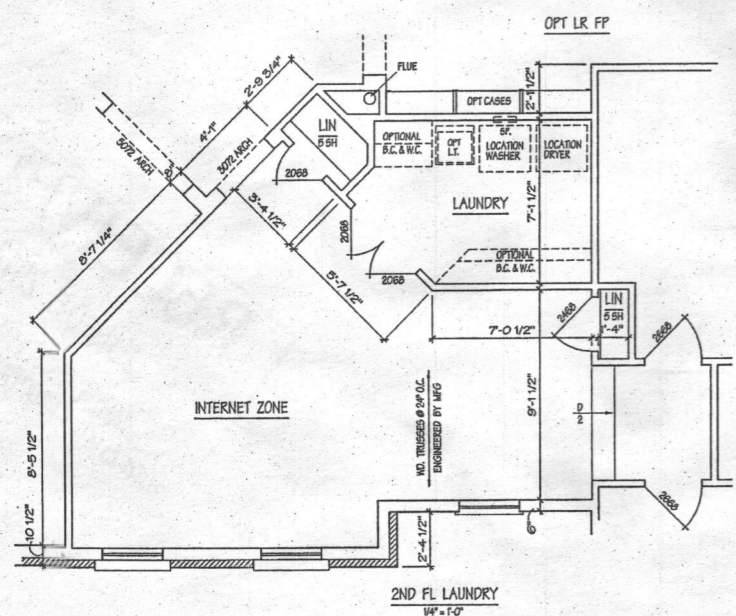
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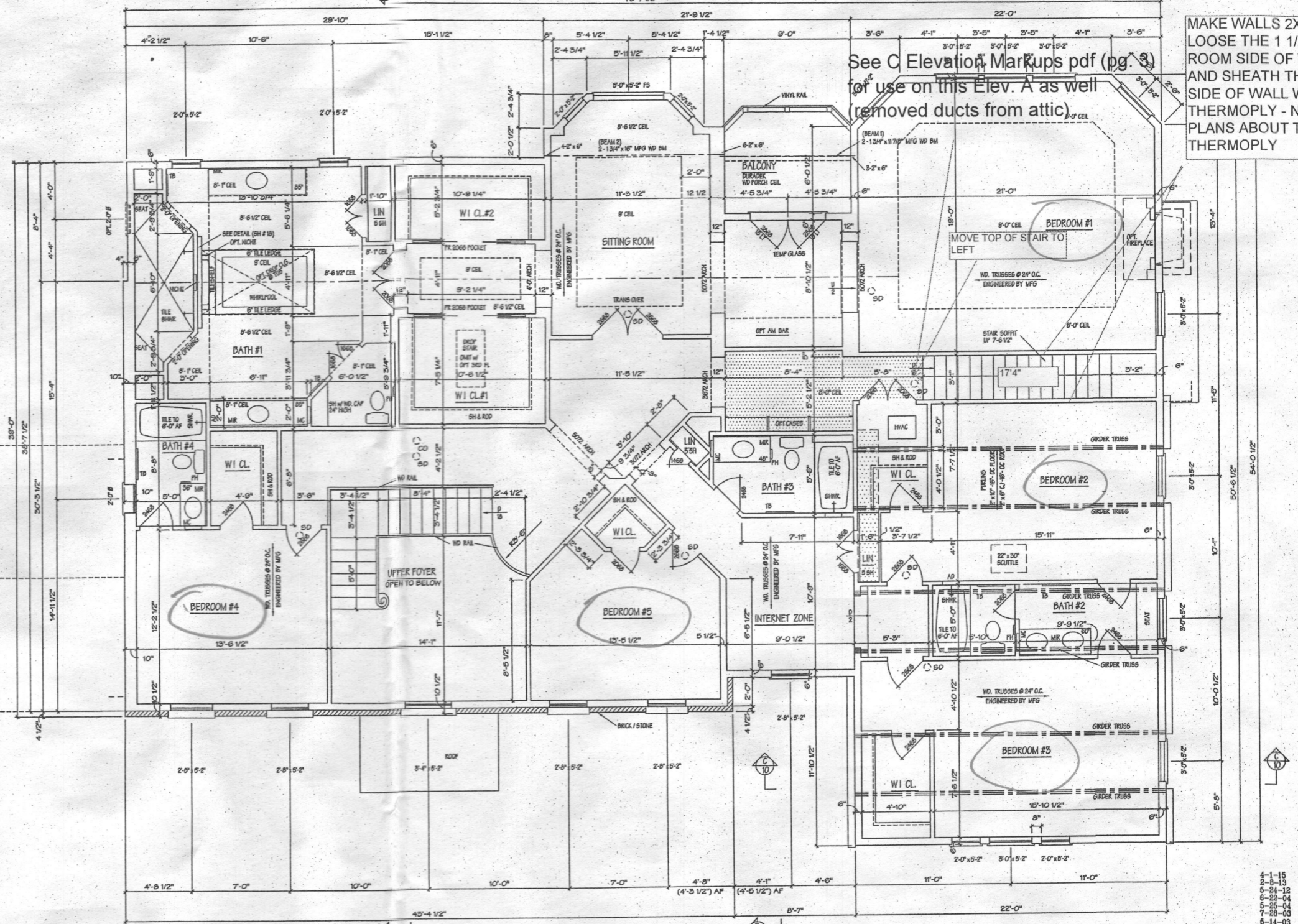
STAIRS FOR OPT 3RD FLOOR PLAN
1/4"=1'-0"



OPT L SHAPED STAIR
WITH RADIAL WINDERS



2ND FL LAUNDRY
1/4"=1'-0"



SECOND FLOOR PLAN AB/AS
1/4"=1'-0"

NOTE: 50 FT. TOTALS ARE APPROXIMATE
STANDARD MODEL
SND FL. 38054 FL.

EAGLE'S NEST AB/AF/AS

- 4-1-15
- 2-9-13
- 5-24-12
- 6-22-04
- 6-25-04
- 7-28-03
- 5-14-03
- 6-28-02
- 1-9-03
- 8-22-02
- 12-22-02
- 4-22-02
- 8-10-09
- 9-9-09
- 4-1-10

HUTCHINSON + ASSOCIATES L.L.C.
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PHONE: (301) 770-9680 FAX: (301) 770-9163

MITCHELL & BEST HOMEBUILDERS
1686 E. GUDE DR.
ROCKVILLE, MD 20850

DRAWN BY	DATES	LOT NO.	BLOCK	DWG. NO.
DB	7-27-01 8-8-01 11-19-01 1-4-02 4-10-02			3
CHECKED BY	SECTION	JOB NO.		

NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.

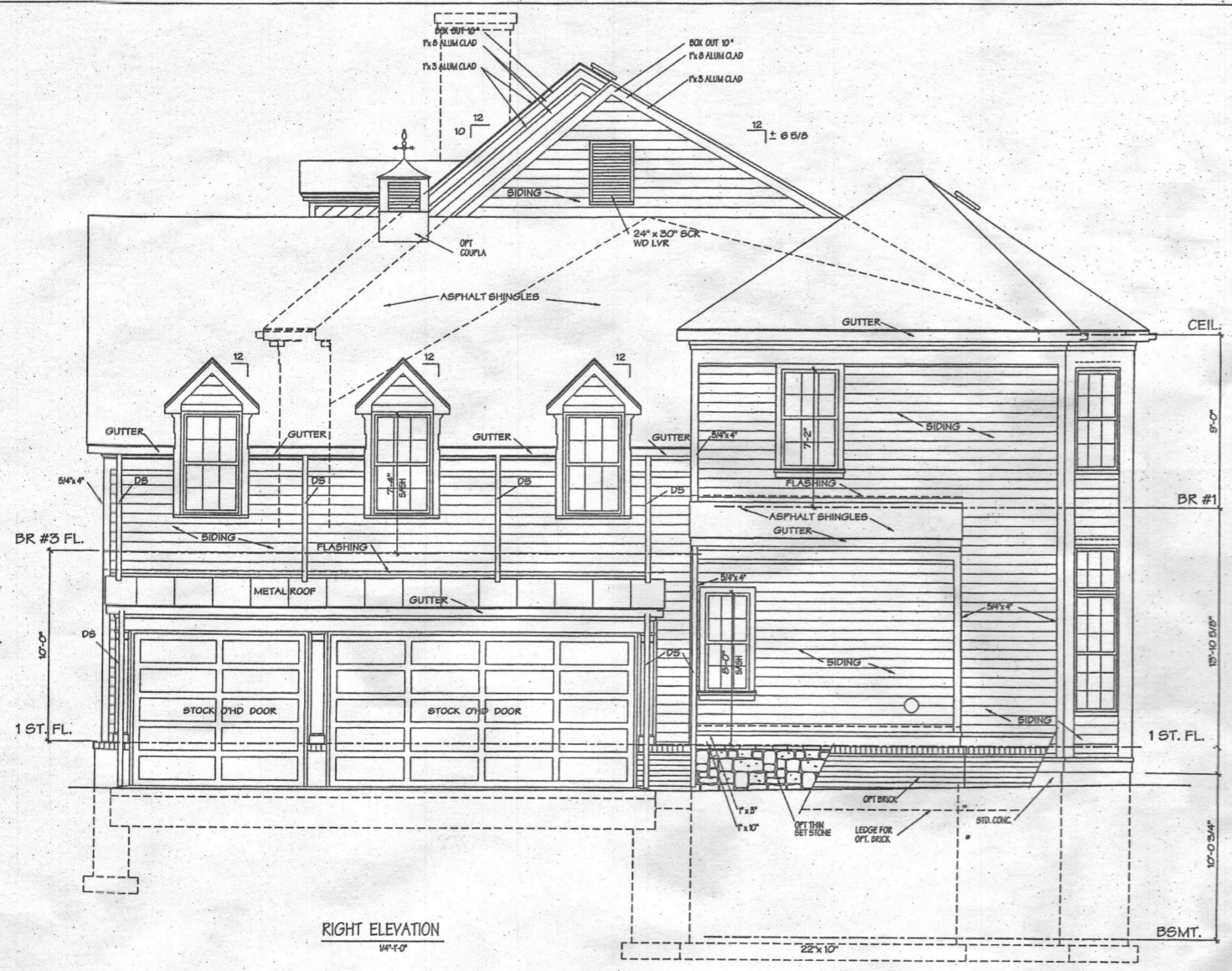
NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.

Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES

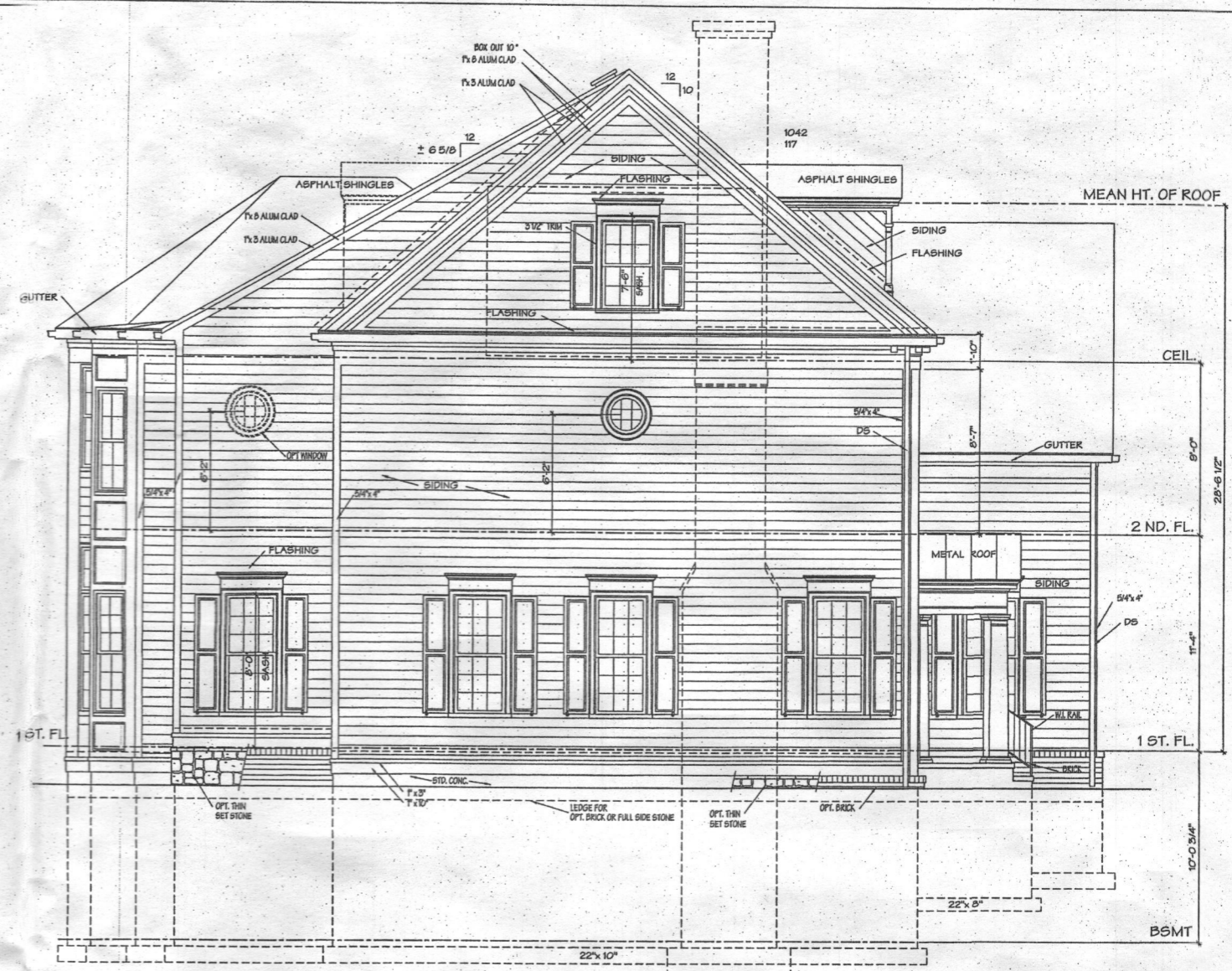
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MAKE WALLS 2X6 - LOOSE THE 1 1/2" ON ROOM SIDE OF WALLS AND SHEATH THE STAIR SIDE OF WALL WITH THERMOPLY - NOTE ON PLANS ABOUT THE THERMOPLY

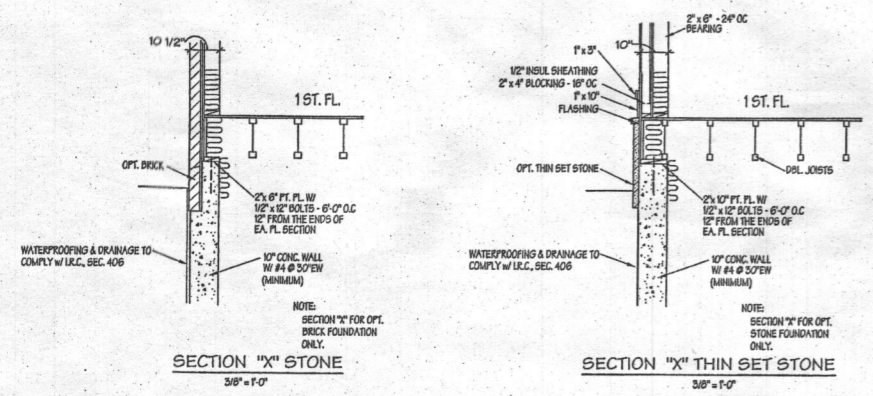
See C Elevation Markups pdf (pg. 3) for use on this Elev. A as well removed ducts from attic



RIGHT ELEVATION
W4'-0"

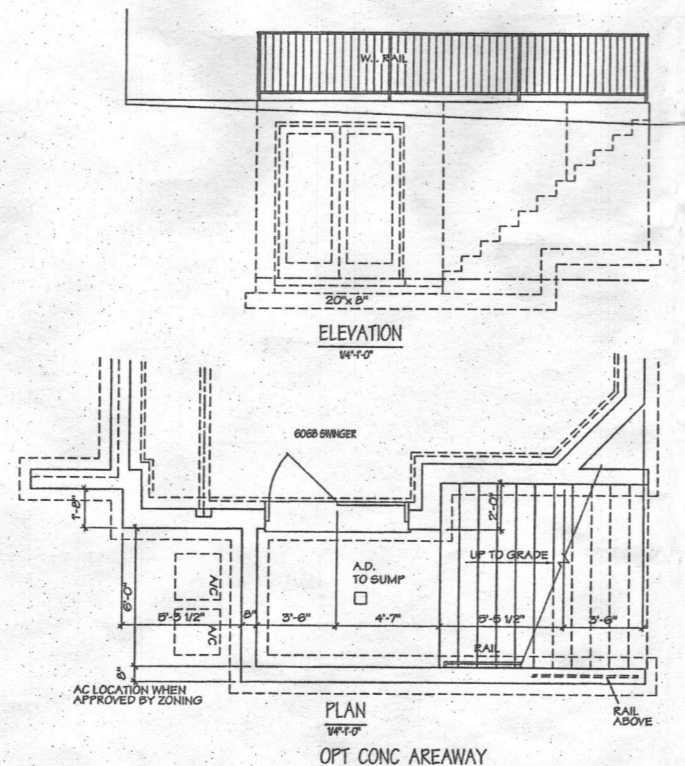


LEFT ELEVATION
W4'-0"



SECTION "X" STONE
3'-0" x 1'-0"

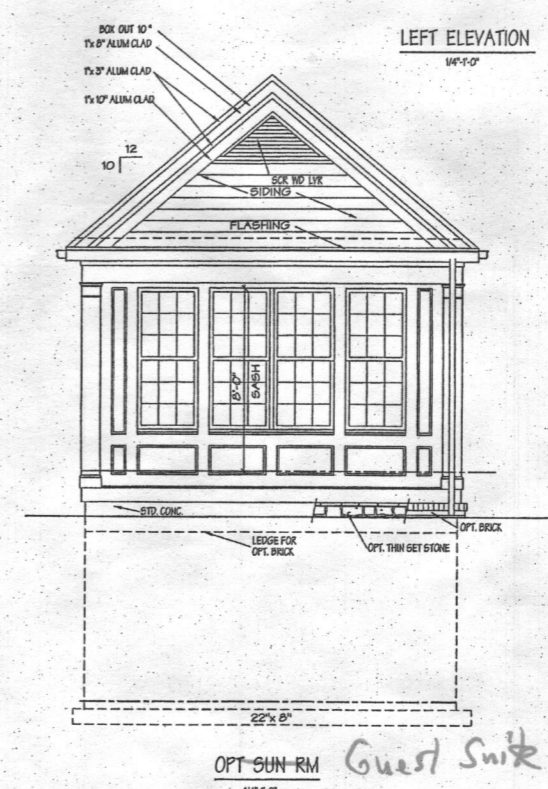
SECTION "X" THIN SET STONE
3'-0" x 1'-0"



ELEVATION
W4'-0"

PLAN
W4'-0"

OPT CONC AREAWAY



OPT SUN RM Guest Suite
W4'-0"

NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.

NOTE: All wall angles to be 90 or 45 degrees unless noted otherwise.

Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES

EAGLE'S NEST AB/AF/AS

HUTCHINSON + ASSOCIATES L.L.C.
11820 PARKLAWN DRIVE (S 100)
ROCKVILLE, MD. 20852
PHONE: (301) 770-9680 FAX: (301) 770-0163

MITCHELL & BEST HOMEBUILDERS
1686 E GUDE DR.
ROCKVILLE, MD 20850

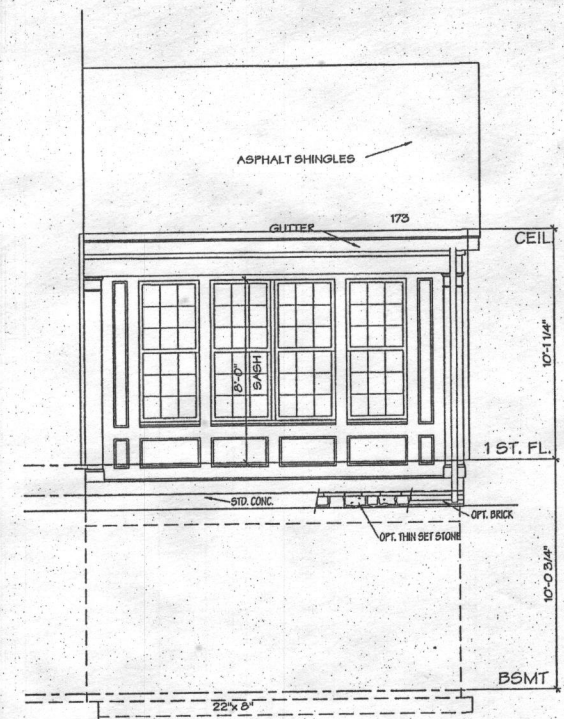
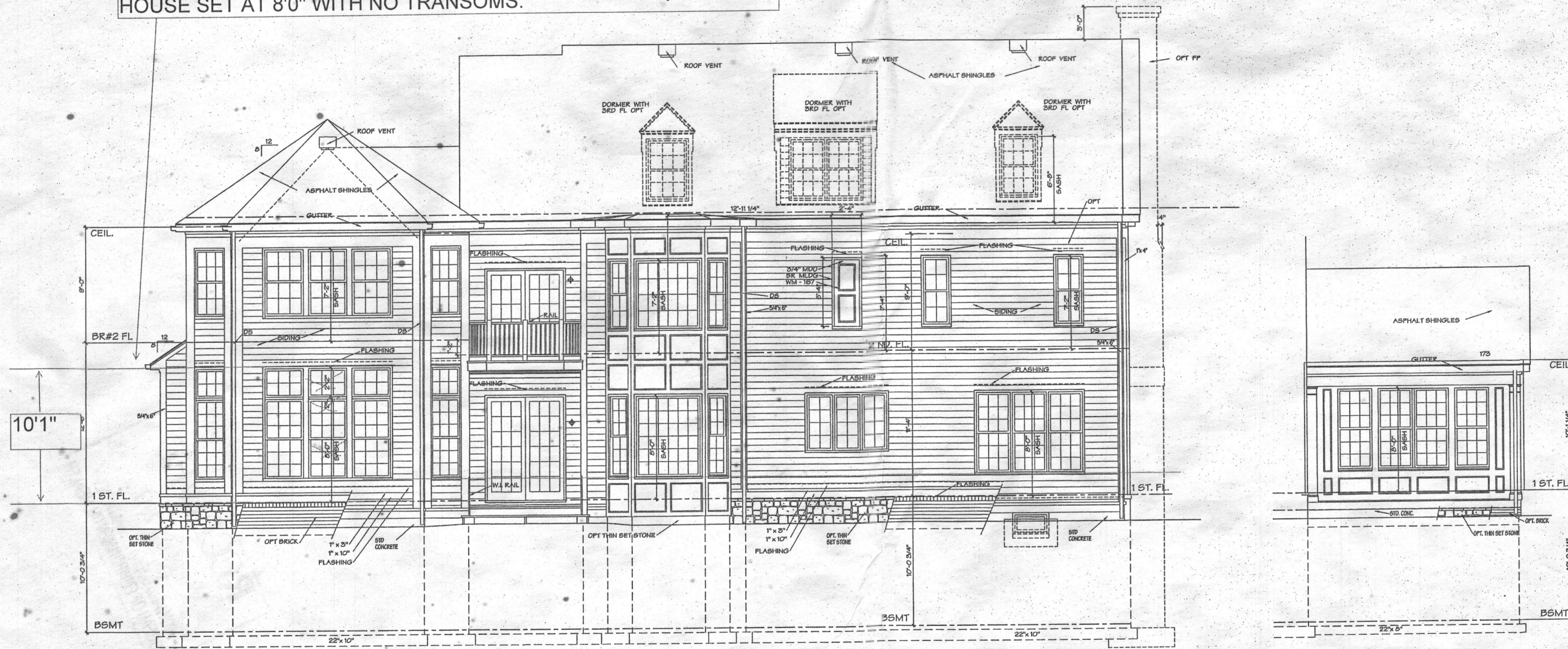
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DB	7-27-01			
	8-6-01			
CHECKED BY	11-19-01	SECTION	JOB NO.	6
	1-4-02			
	4-10-02			

REVISIONS 4-1-10

- 4-1-10
- 2-8-13
- 2-24-12
- 6-22-04
- 5-25-04
- 7-28-03
- 5-14-03
- 8-28-02
- 1-8-03
- 8-22-06
- 12-22-08
- 4-22-08
- 8-10-09
- 9-9-09
- 4-1-10

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PLEASE REVISE PLAN TO SHOW TOP OF THE 5 FAMILY ROOMS WITH TRANSOMS SET AT 10'1". THIS WILL ALLOW THE SILL OF THESE WINDOWS TO ALIGN WITH OTHER WINDOWS IN THE HOUSE SET AT 8'0" WITH NO TRANSOMS.



REAR ELEVATION
1440

OPT SUN-RM
1440
Guest Suite
EAGLE'S NEST AB/AF/AS

- 4-1-16
- 2-9-13
- 6-24-12
- 6-22-04
- 6-25-04
- 7-28-03
- 5-14-03
- 6-28-02
- 1-9-03
- 6-22-06
- 4-22-06
- 0-10-09
- 0-9-09
- 4-1-10

NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.

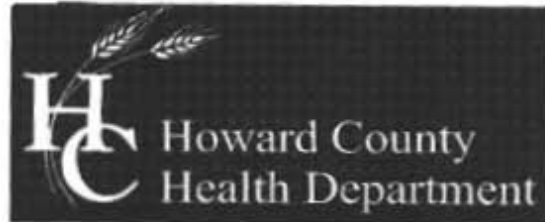
NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.

Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES

HUTCHINSON + ASSOCIATES L.L.C.
11820 PARKLAWN DRIVE (S. 100)
ROCKVILLE, MD. 20852
PHONE: (301) 770-9680 FAX: (301) 770-9163

MITCHELL & BEST HOMEBUILDERS
1686 E. GUDE DR.
ROCKVILLE, MD 20850

DRAWN BY	DATES	LOT NO.	BLOCK	DWG. NO.
DS	7-27-01 8-6-01 11-19-01			
CHECKED BY		SECTION	JOB NO.	
	1-4-02 4-10-02			7



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

Maura J. Rossman, M.D., Acting Health Officer

DATE: June 7, 2017

To Applicant: MB Browns Bridge Court LLC.

C/o Marc Quint, E-mail: MQuint@mitchellbest.com

RE: Building Permit # B17002137

Regan Property, Lot #8

12341 Point Ridge

Fulton, MD 20758

Mr. Quint,

Your building permit has been approved and the following items must be submitted for further review.

1. On August 27, 2014 a water sample was collected during a yield test. Results from the screening indicated elevated levels for **Gross Alpha** and higher than typical for **Gross Beta**. Given the elevated findings, installation of a water softener system and / or reverse osmosis system will likely be necessary. If you elect to install treatment upfront, only a post short and long term **Gross Alpha** and **Beta**, plus a post **Radium 226/228** will be needed to properly evaluate the effectiveness of the installed treatment. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. Also note this is in addition to other standard testing parameters (bacteria, nitrate, turbidity and sand) that will still be required to help secure Use and Occupancy. **This requirement will not interfere with building permit approval.**

If you have an additional questions don't hesitate to give me a call.

Respectfully,

Dana Bernard 

Dana Bernard, REHS/RS

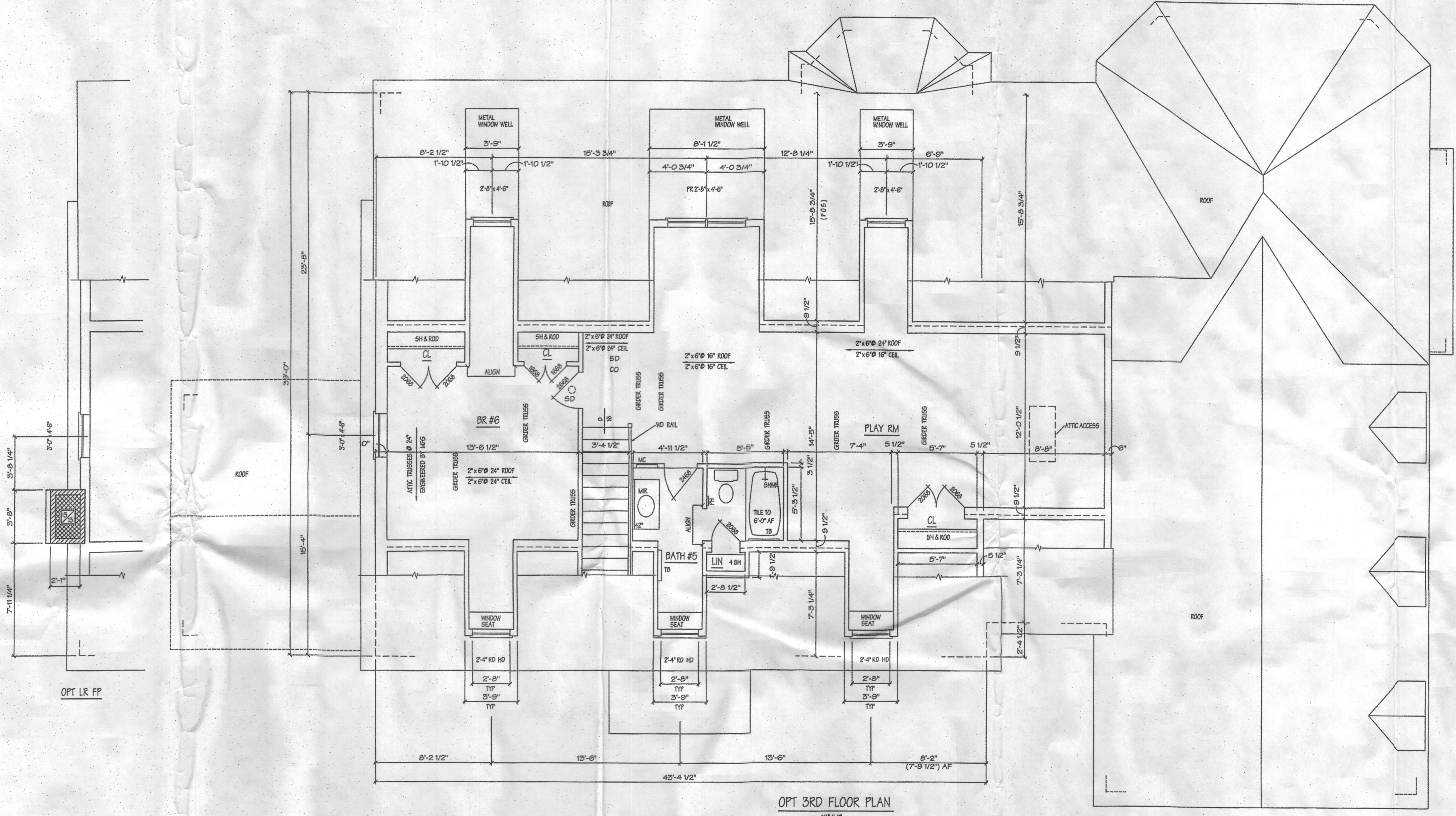
Environmental Sanitarian II

Bureau of Environmental Health

Phone (410) 313-2775

E-mail: DBernard@howardcountymd.gov

cc: Well & Septic program file



OPT 3RD FLOOR PLAN

1/4" = 1'-0"
 3/8" = 3'-0 5/8" Ft.

- 8-3-18
- 4-1-18
- 2-4-18
- 5-24-12
- 6-22-04
- 5-25-04
- 7-28-03
- 5-14-03
- 6-28-02
- 1-9-03
- 6-22-06
- 12-28-06
- 4-28-08
- 6-10-09
- 9-9-09
- REVISIONS 4-1-10

EAGLE'S NEST AB/AF/AS

NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.

NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.

Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

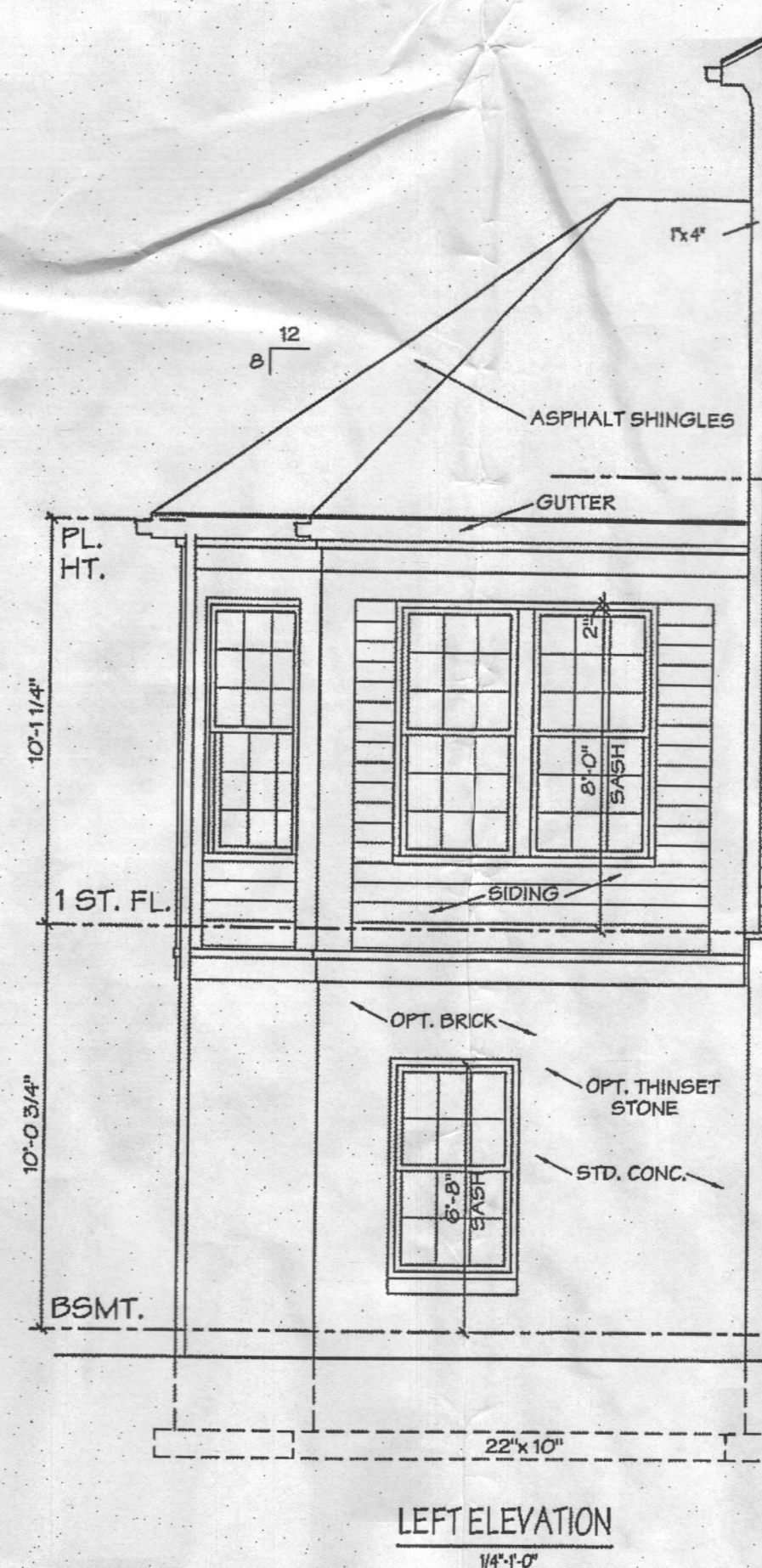
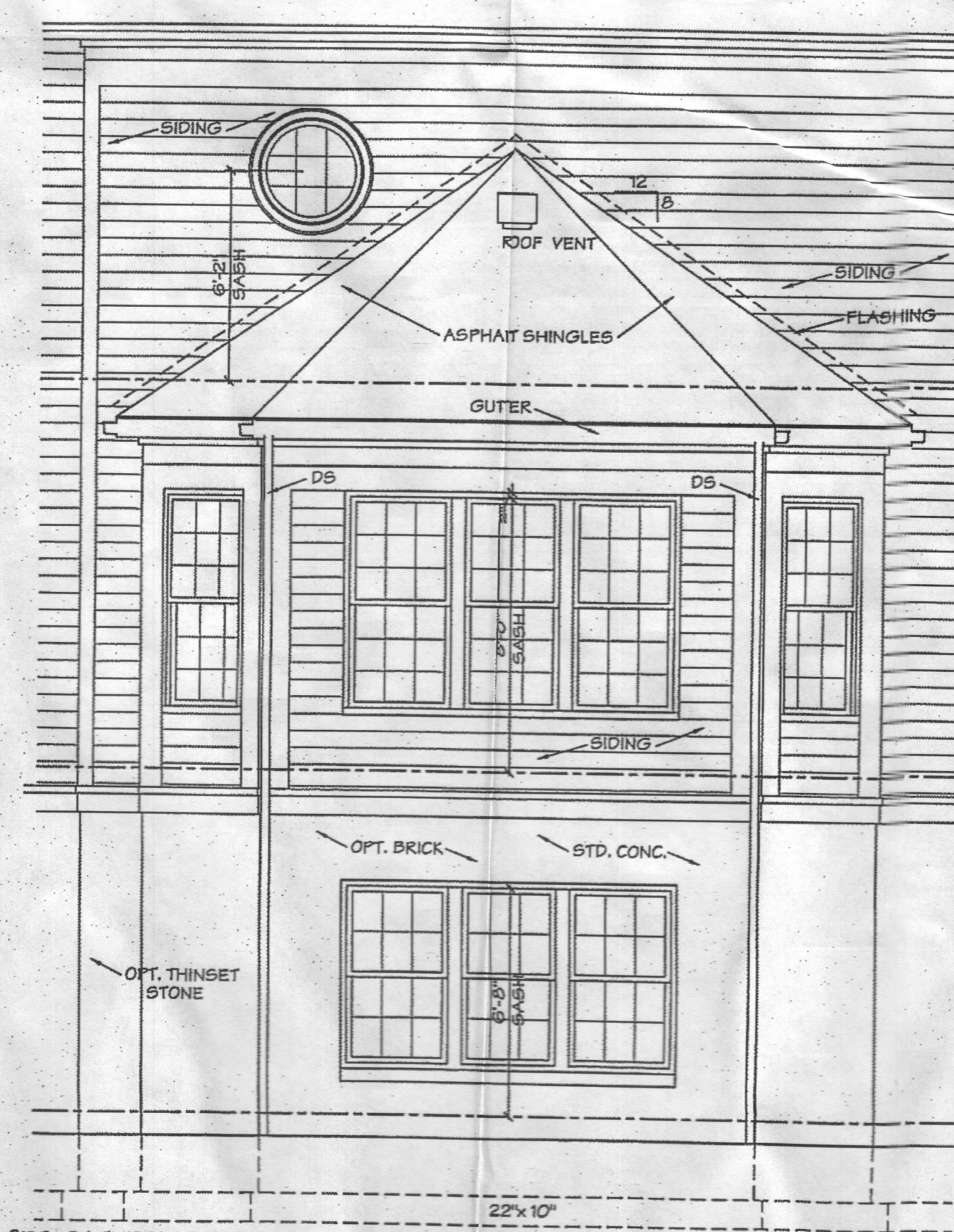
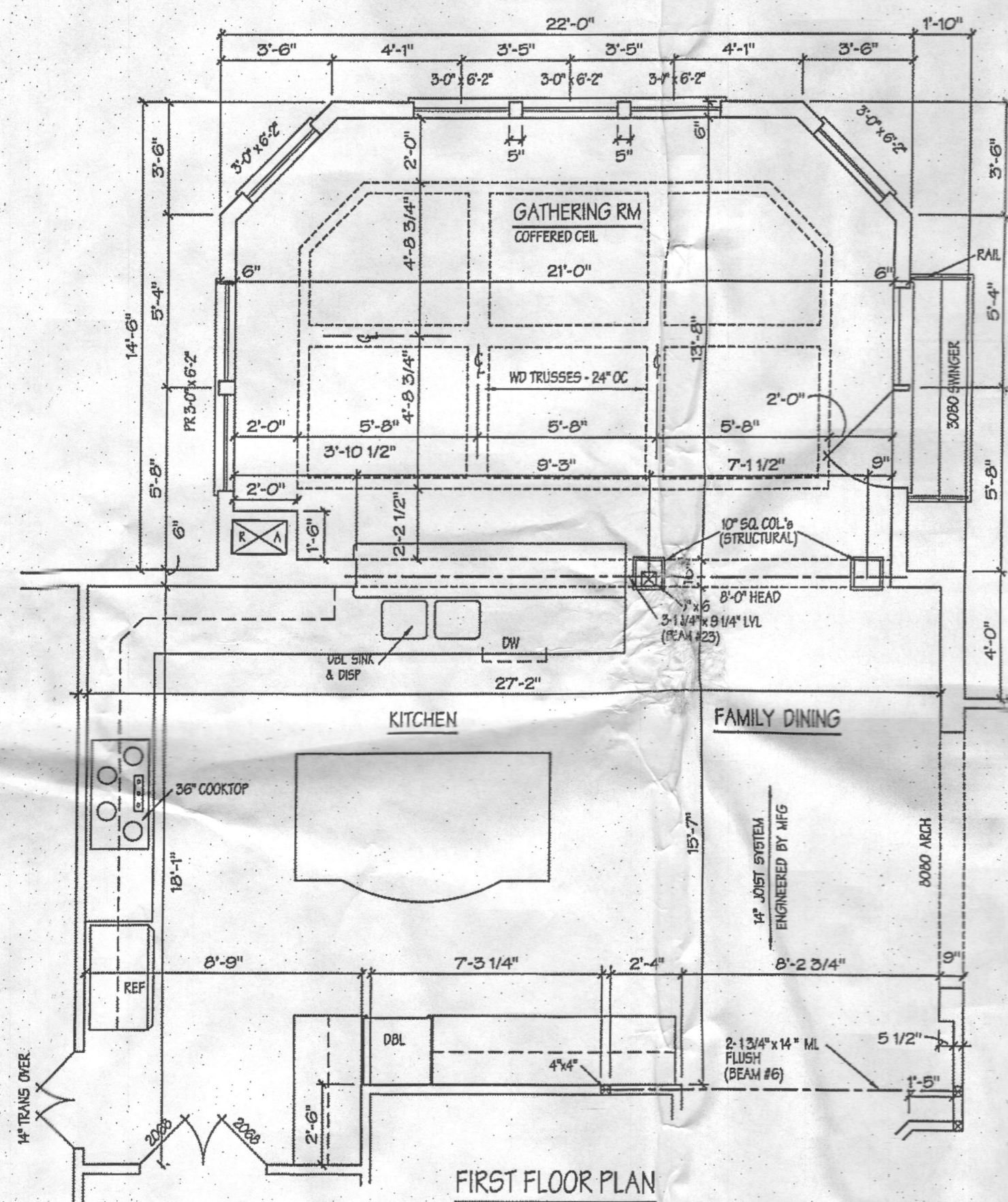
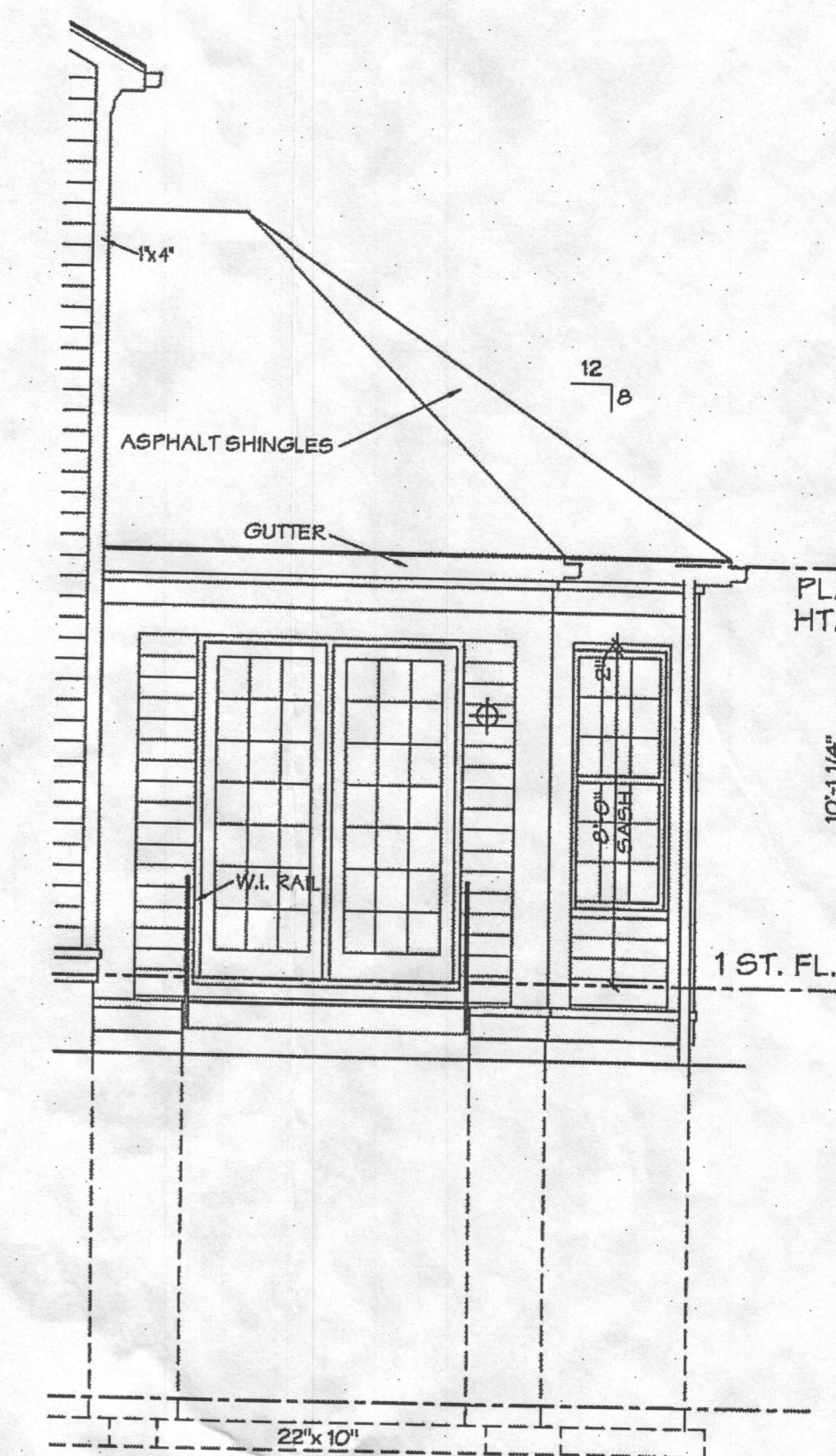
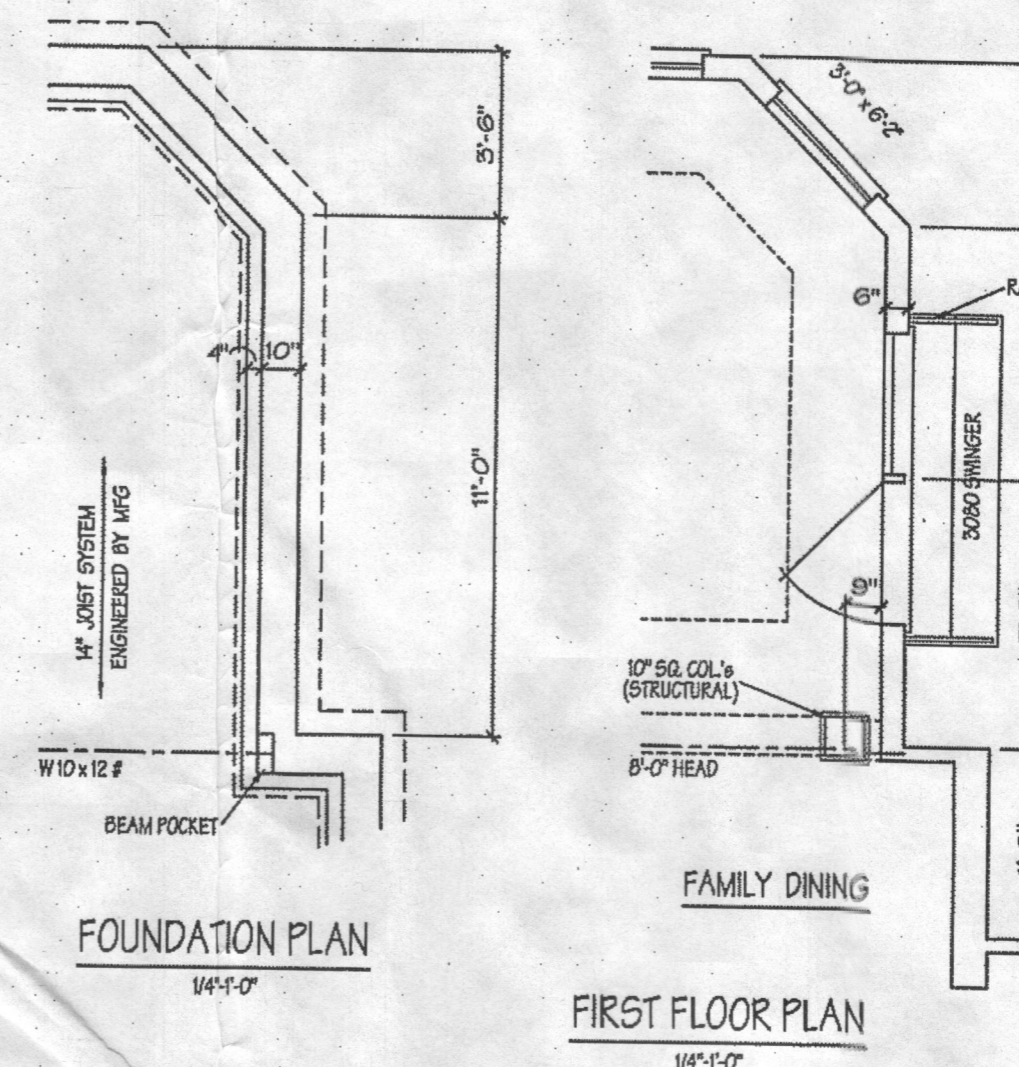
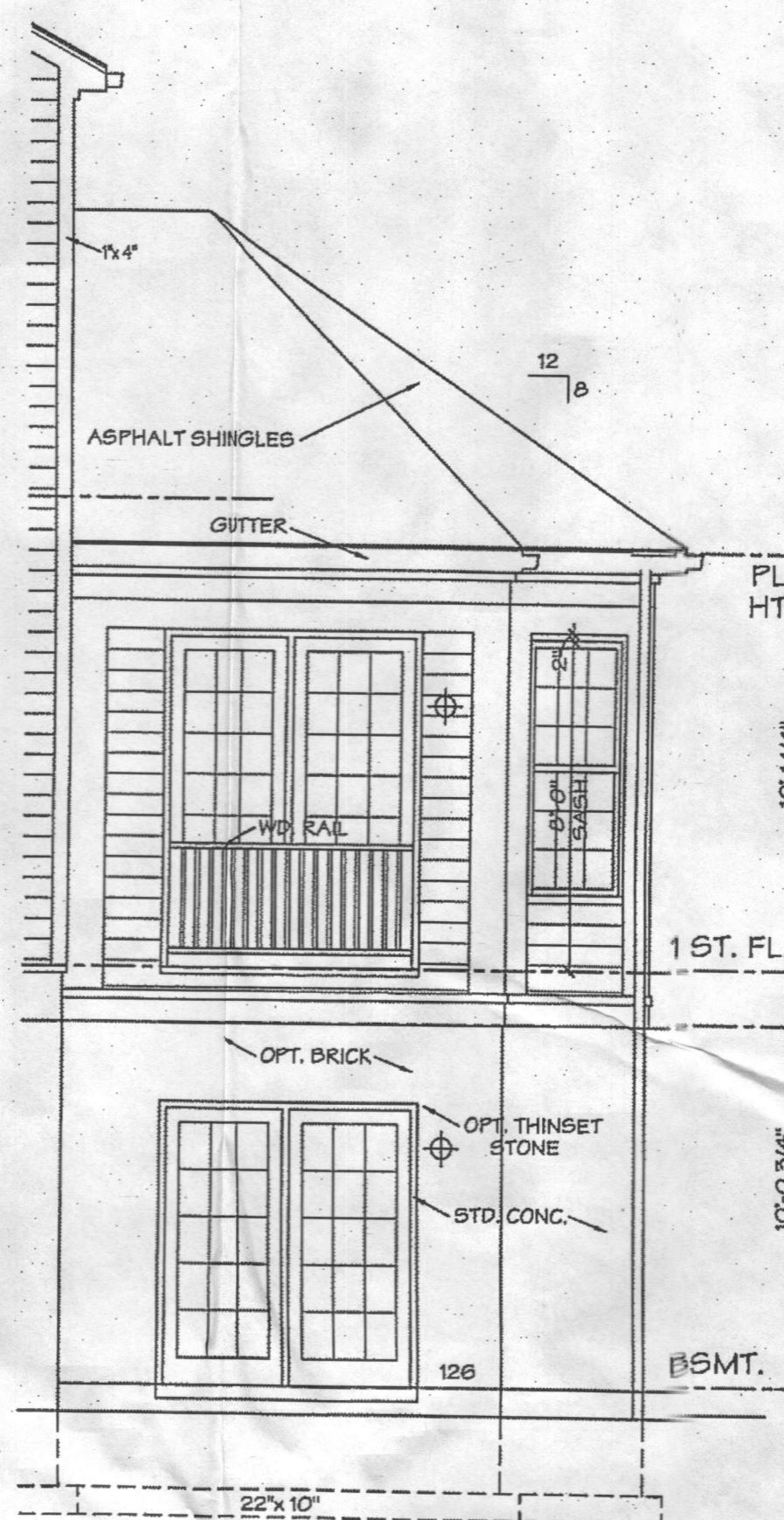
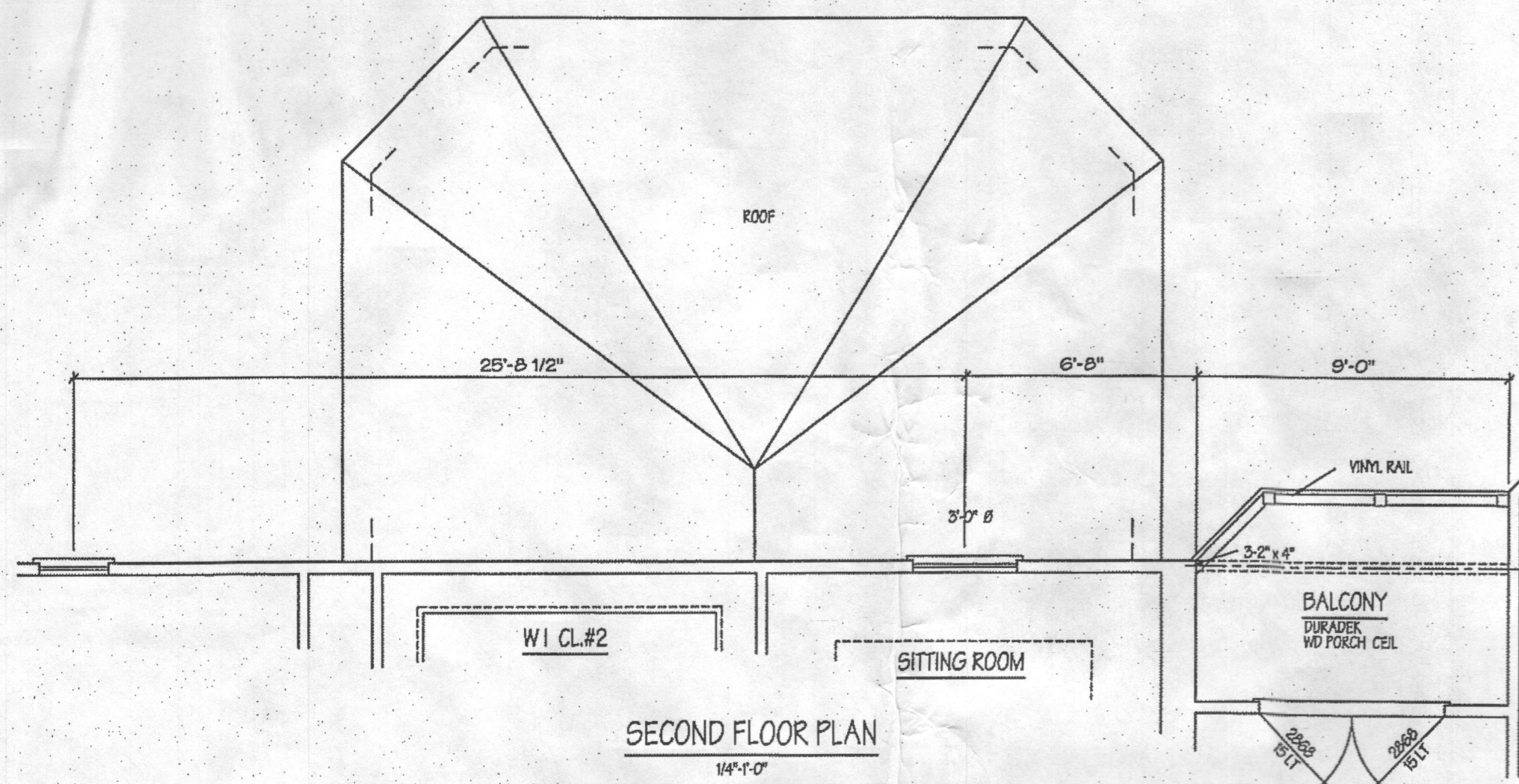
HUTCHINSON + ASSOCIATES L.L.C.
 11820 PARKLAWN DRIVE (S. 100)
 ROCKVILLE, MD. 20852
 PHONE: (301) 770-9680 FAX: (301) 770-9163

MITCHELL & BEST HOMEBUILDERS
 1686 E. GUDE DR.
 ROCKVILLE, MD 20850

DRAWN BY	DATE	LOT NO.	BLOCK	DWG. NO.
DS	7-27-01			
CHECKED BY	DATE	SECTION	JOB NO.	
	11-18-01			4
	1-4-02			
	4-10-02			

PROFESSIONAL CERTIFICATION I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Architect under the laws of the State of Maryland. License # 3637-A Expiration Date 3-12-18

RECEIVED
 11/15/18
 11/15/18



OPT. GATHERING RM.
 STD. BURIED BSMT.

OPT GATHERING RM
 EAGLE'S NEST AB/AF/AS

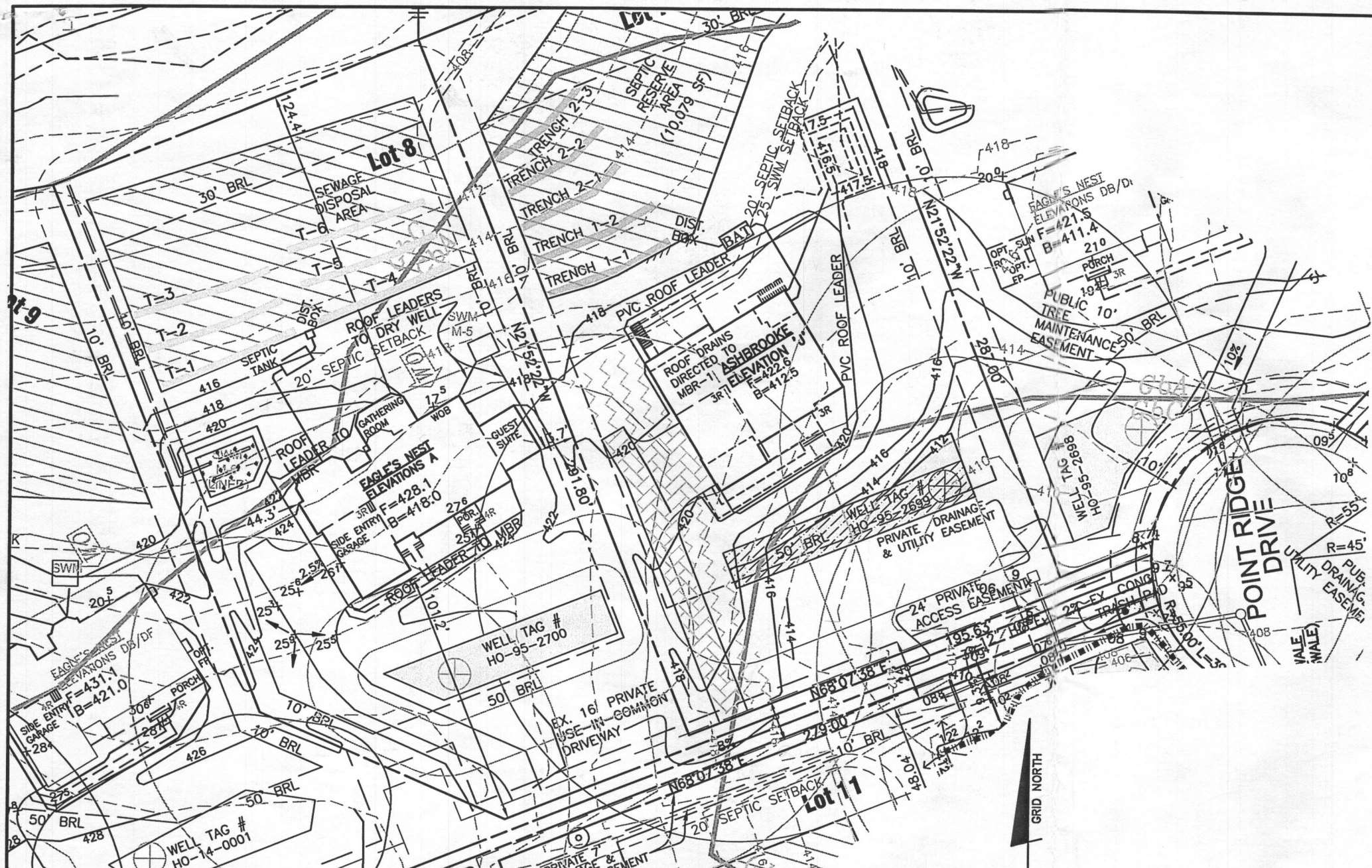
- 8-3-18
- 8-1-18
- 8-8-18
- 8-24-18
- 8-22-18
- 8-25-18
- 7-28-18
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- 8-28-18
- 1-5-18
- 8-22-18
- 12-22-18
- 4-22-18
- 8-10-18
- 8-9-18
- 4-1-18

NOTE: All interior wall dimensions to be 3 1/2" unless noted otherwise.
 NOTE: All wall angles to be 90 OR 45 degrees unless noted otherwise.
 Contractor to check and verify all dimensions and conditions in field prior to start of construction. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

HUTCHINSON + ASSOCIATES L.L.C. 11820 FARLAWN DRIVE (S. 100) ROCKVILLE, MD. 20852 PHONE: (301) 770-9680 FAX: (301) 770-9163				
MITCHELL & BEST HOMEBUILDERS 1688 E. GUDE DR. ROCKVILLE, MD 20850				
DRAWN BY DB	DATES 7-27-01 8-6-01 11-19-01 1-1-02 4-10-02	LOT NO.	BLOCK	DWG. NO.
CHECKED BY		SECTION	JOB NO.	15

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Architect under the laws of the State of Maryland. License # 3637-A Expiration Date 3-12-18



PLAN VIEW
1" = 50'

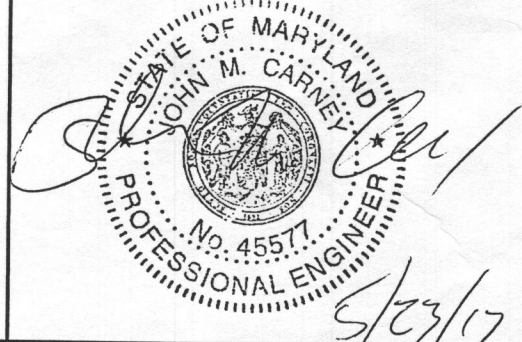
BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2700, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO-BIORETENTION FACILITY (MDE M-6), DRY WELL FACILITY (MDE M-5) AND ONE NON-ROOFTOP DISCONNECTION (MDE N-2).
10. MICRO-BIORETENTION SHALL HAVE EITHER A 4" OR 6" ROOF LEADER DEPENDING ON ROOF-TOP AREA.

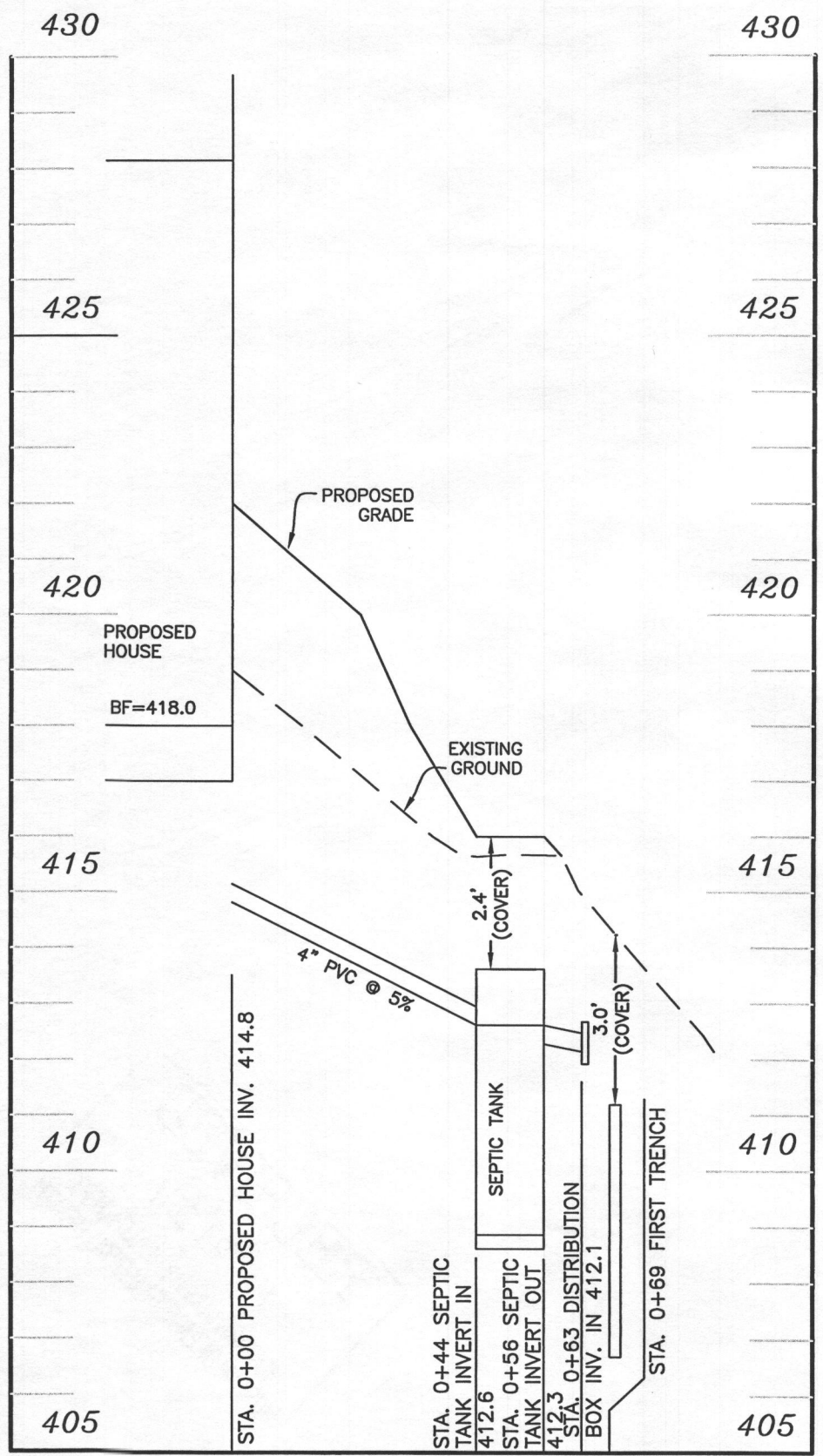
Approved Septic System Plan
Howard County Health Department
Dana Durand 6-7-17
Signature Date
B 170021 39

NOTE:
UNLESS OTHERWISE NOTED, THE FIRST RUN OF PVC ROOF LEADER SHALL BE 4" AND SHALL INCREASE TO AT LEAST 6" AFTER ANY CONFLUENCE OF 4" PIPES.

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. 45577, Expiration Date: 06-08-2018.



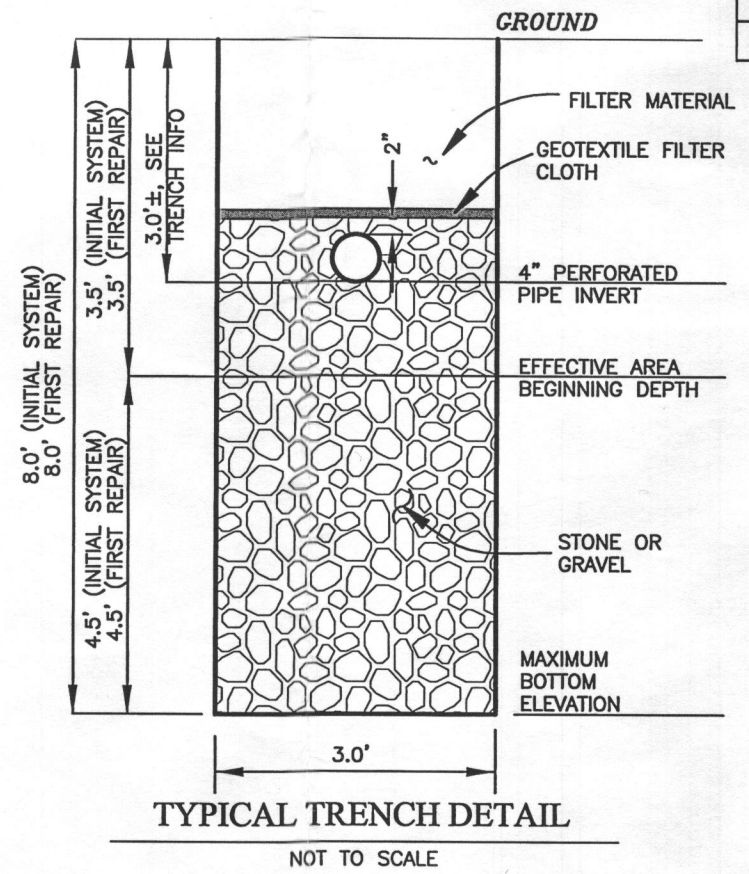
OWNER/BUILDER:		BENCHMARK ENGINEERS LAND SURVEYORS PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLCOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVLENGINEERING.COM	
PROJECT:		REGAN PROPERTY LOT 8	
LOCATION:		12341 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441	
TITLE:		SEPTIC PERMIT PLAN	
HOUSE TYPE:		EAGLES NEST - ELEVATION 'A'	
DATE:	MAY, 2017	PROJECT NO.	2171
SCALE:	AS SHOWN	DRAWING	1 OF 3



SEWER PROFILE - LOT 8
SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

TRENCH INFORMATION

INITIAL SYSTEM		FUTURE FIRST REPAIR	
TRENCH T-1		TRENCH T-4	
TRENCH LENGTH	57 LF	TRENCH LENGTH	57 LF
GROUND ELEVATION	414.7	GROUND ELEVATION	414.7
INVERT ELEVATION	411.2	INVERT ELEVATION	411.2
MAX. BOTTOM ELEV.	406.7	MAX. BOTTOM ELEV.	406.7
TRENCH T-2		TRENCH T-5	
TRENCH LENGTH	57 LF	TRENCH LENGTH	57 LF
GROUND ELEVATION	413.3	GROUND ELEVATION	413.0
INVERT ELEVATION	409.8	INVERT ELEVATION	409.5
MAX. BOTTOM ELEV.	405.3	MAX. BOTTOM ELEV.	405.0
TRENCH T-3		TRENCH T-6	
TRENCH LENGTH	57 LF	TRENCH LENGTH	57 LF
GROUND ELEVATION	411.9	GROUND ELEVATION	411.5
INVERT ELEVATION	408.4	INVERT ELEVATION	408.0
MAX. BOTTOM ELEV.	403.9	MAX. BOTTOM ELEV.	403.5



INITIAL SYSTEM		
Number of Bedrooms	7	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.5	ft
Bottom Max Depth	8	ft
Design Flow	1050	gpd
Drainage Field square footage	1312.5	sf
Sidewall reduction credit	0.38	
Trench width	3	
Effective Area Depth	4.5	
Linear Length of trench Required	168	lf

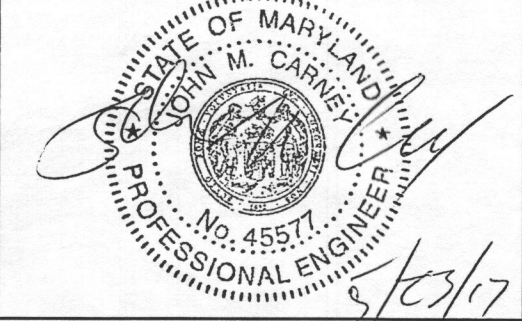
1st REPLACEMENT SYSTEM		
Number of Bedrooms	7	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.5	ft
Bottom Max Depth	8	ft
Design Flow	1050	gpd
Drainage Field square footage	1312.5	sf
Sidewall reduction credit	0.38	
Trench width	3	
Effective Area Depth	4.5	
Linear Length of trench Required	168	lf

THIS PLAN IS FOR SEPTIC DESIGN ONLY

SEE MANUFACTURERS SPECIFICATIONS FOR DETAILS. WWW.MAYERPRECAST.COM EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER:

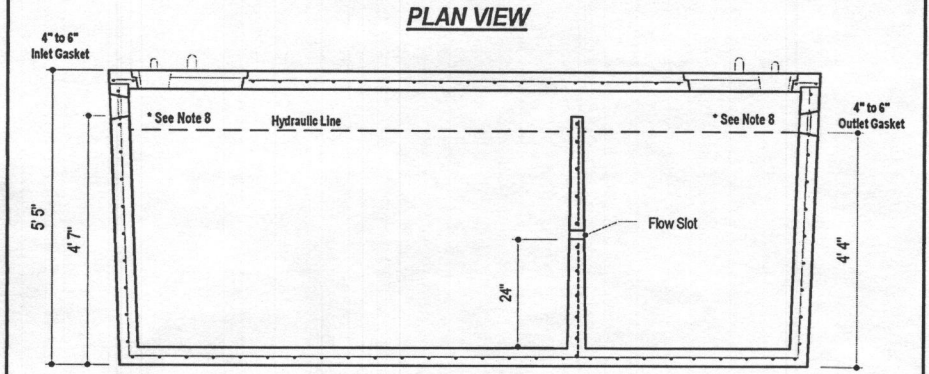
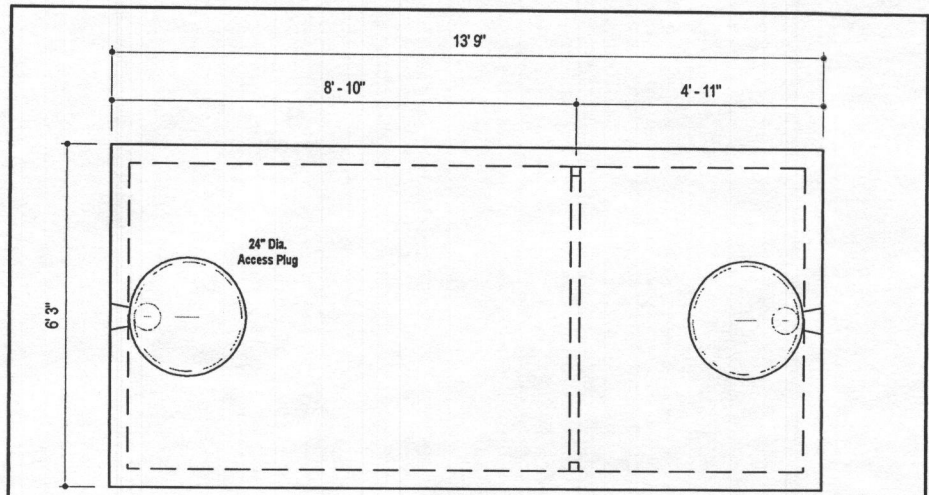
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OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301-762-9511

BENCHMARK
ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 315
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CMILENGINEERING.COM

PROJECT:	REGAN PROPERTY LOT 8	
LOCATION:	12341 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441	
TITLE:	SEPTIC PERMIT PLAN	
HOUSE TYPE:	EAGLES NEST - ELEVATION 'A'	
DATE:	MAY, 2017	PROJECT NO. 2171
SCALE:	AS SHOWN	DRAWING 2 OF 3



- DESIGN DATA & GENERAL NOTES**
- [1] Concrete strength $f_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
 - [2] Cement - Portland Type III per ASTM C 150-92.
 - [3] Admixtures & plasticizers per ASTM C 260-98 & C 494-92.
 - [4] Reinforcing per ASTM A185. Min. 1-1/2" cover.
 - [5] Top slab sealed with butyl rope mastic.
 - [6] 4" wall, 4" base, & 6" top thickness.
 - [7] Max 3" of cover
 - [8] Depending on use of tank, Inlet & Outlet baffles may be required by code.

MBI
Mayer Bros., Inc. www.mayerbrosprecast.com

6264 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438

**2,000 GALLON SEPTIC TANK
2-Compartment**

Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C No Scale Aug 11, 2008

OWNER/BUILDER:

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1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301-762-9511

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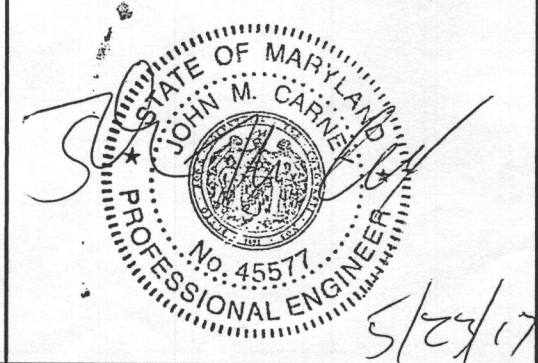
PROJECT:		REGAN PROPERTY LOT 8	
LOCATION:		12341 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441	
TITLE:		SEPTIC PERMIT PLAN	
HOUSE TYPE:		EAGLES NEST - ELEVATION 'A'	
DATE:	MAY, 2017	PROJECT NO.	2171
SCALE:	AS SHOWN	DRAWING	<u>3</u> OF <u>3</u>

**THIS PLAN IS FOR
SEPTIC DESIGN ONLY**

SEE MANUFACTURES
SPECIFICATIONS FOR
DETAILS.
WWW.MAYERPRECAST.COM
EQUIVALENT FROM OTHER
MANUFACTURERS CAN BE
SUBSTITUTED.

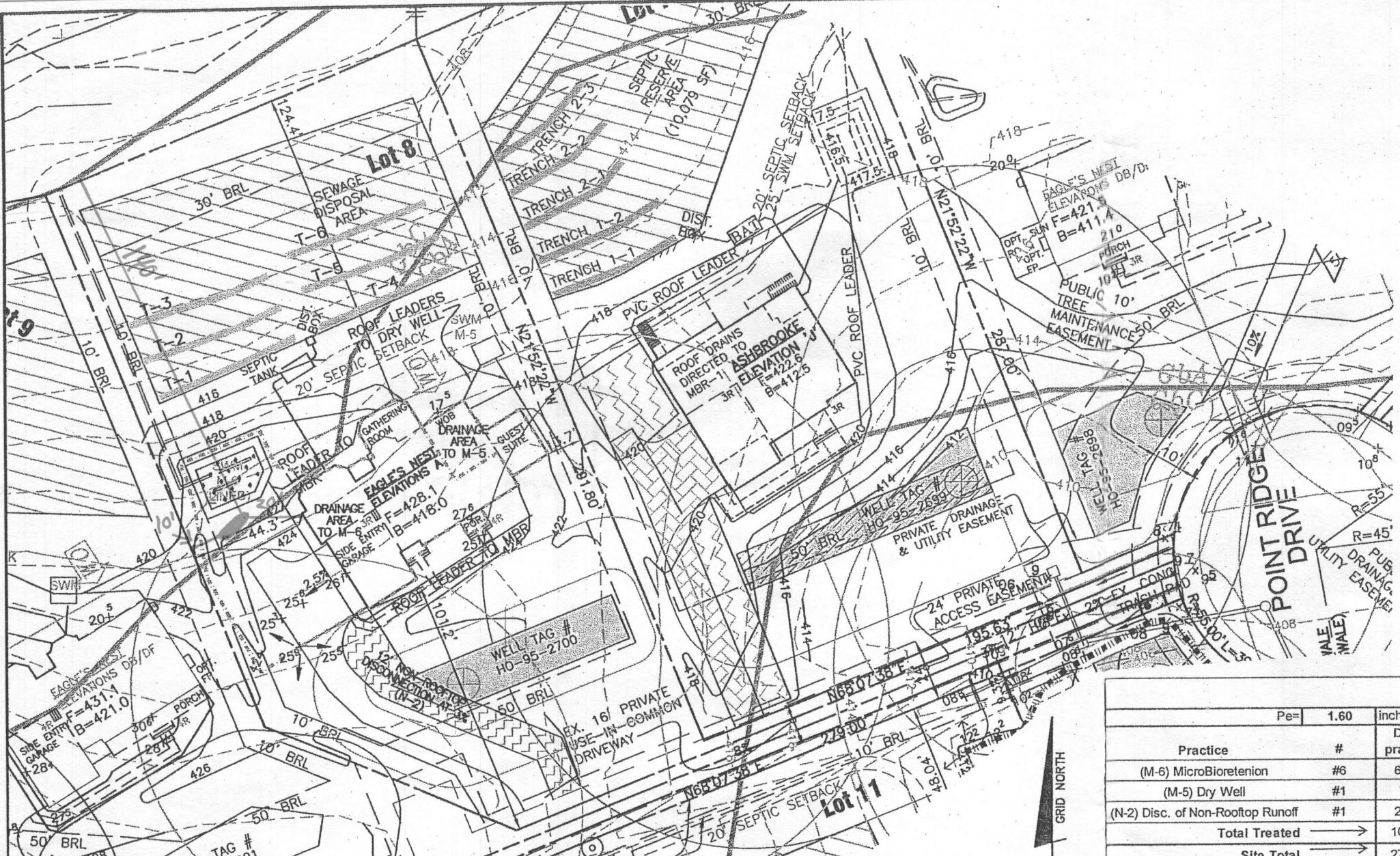
SIGNATURE AND SEAL ARE FOR SEPTIC
PROFILE AND CALCULATIONS ONLY, TANK
AND DETAILS WERE NOT DESIGNED OR
REVIEWED BY THE ENGINEER:

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. 45577, Expiration Date: 06-08-2018.



BUILDING PERMIT PLAN NOTES:

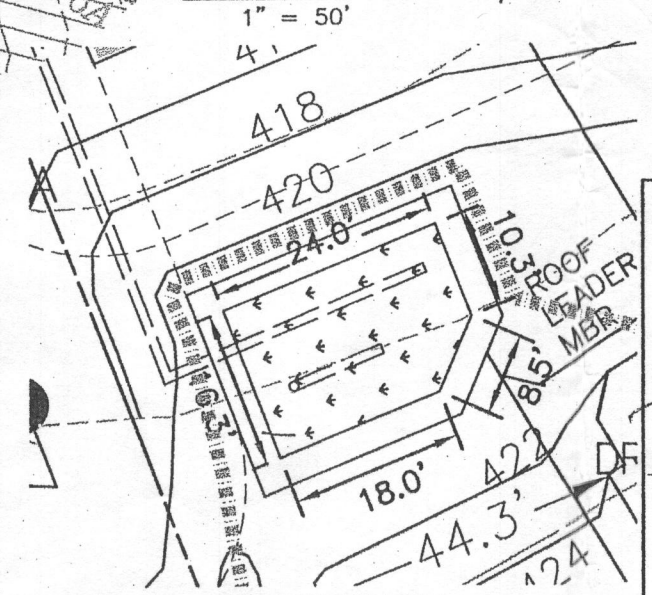
1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2700, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO-BIORETENTION FACILITY (MDE M-6), DRY WELL FACILITY (MDE M-5) AND ONE NON-ROOFTOP DISCONNECTION (MDE N-2).
10. MICRO-BIORETENTION SHALL HAVE EITHER A 4" OR 6" ROOF LEADER DEPENDING ON ROOF-TOP AREA.



ESD STORMWATER MANAGEMENT SUMMARY TABLE

Practice	#	Pe= 1.60 inches DA to practice	Qe= 0.43 inches Imp Area to practice	ESDv= 968 cf			Rv= 0.27		Ownership		
				Required	Provided	2% DA?	Required	Provided			
(M-6) MicroBioretention	#6	6,708	4,050	134	373	PASS	531	704	1.6	Private	
(M-5) Dry Well	#1	782	782				99	160	2.6	Private	
(N-2) Disc. of Non-Rooftop Runoff	#1	2,924	1,430					107	1.0	Private	
Total Treated				134	373		968	972	1.6	161	267
Site Total		27,639	6,569								

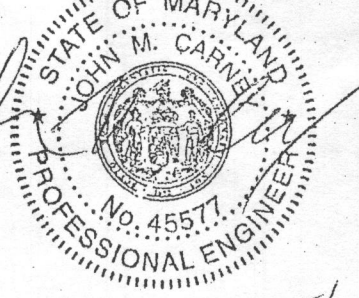
PLAN VIEW



MBR DETAIL
1" = 20'

NOTE:
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ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM

PROJECT: REGAN PROPERTY
Highland Reserve LOT 8

LOCATION: 12341 POINT RIDGE DRIVE
HIGHLAND, MD 20777
TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200
5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597441

TITLE: BUILDING PERMIT PLAN

HOUSE TYPE: EAGLES NEST - ELEVATION 'A'

DATE: MAY, 2017 PROJECT NO. 2171

SCALE: AS SHOWN DRAWING 1 OF 3

Approved for UPT
R-RA 8/15/17



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: 7/28/2017 JUL 31 PM 3:48

G14000305

Health

Permit No.: B/700288

Building Address: 12341 Point Ridge Drive
City: Fulton State: MD Zip Code: 20759
Suite/Apt. # _____ SDP/WP/BA #: _____
Census Tract: _____ Subdivision: Highland Reserve aka Ragan Property
Section: _____ Area: _____ Lot: 8
Tax Map: 34 Parcel: 200 Grid: 24
Zoning: RR-DEO Map Coordinates: _____ Lot Size: 1.006 acres

Existing Use: Vacant
Proposed Use: Install Propane Tank
Estimated Construction Cost: \$ 3500.00
Description of Work: Install 1000 Gallon Propane Tank in ground. 1 tank only.

Occupant or Tenant: _____
Was tenant space previously occupied? Yes No
Contact Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories:	<u>Depth</u>	<u>Width</u>
Gross area, sq. ft./floor:	1 st floor: <u>60'</u>	<u>70'</u>
	2 nd floor: <u>60'</u>	<u>70'</u>
Area of construction (sq. ft.):	Basement: <u>60'</u>	<u>70'</u>
	<input checked="" type="checkbox"/> Finished Basement	
Use group:	<input type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
<u>Construction type:</u>	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: <u>7</u>	
<input type="checkbox"/> Structural Steel	<u>Multi-family Dwelling</u>	
<input type="checkbox"/> Masonry	No. of efficiency units:	
<input type="checkbox"/> Wood Frame	No. of 1 BR units:	
<input type="checkbox"/> State Certified Modular	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure:	
	Dimensions:	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof:	
Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Property Owner's Name: MB Highland Reserve
Address: 1686 E. Gude Drive
City: Rockville State: MD Zip Code: 20850
Phone: _____ Fax: _____
Email: _____

Applicant's Name & Mailing Address, (if other than stated herein)
Applicant's Name: Marc Quint - MB Highland Reserve LLC
Address: 1686 E. Gude Drive
City: Rockville State: MD Zip Code: 20850
Phone: 301-762-9511 Fax: 301-610-9564
Email: MQuint@mitchellbest.com

Contractor Company: National Propane Buyers Co-op
Contact Person: David Jaray
Address: 22318 Clarksburg Rd.
City: Boysds State: MD Zip Code: 20841
License No.: 67631
Phone: 301-515-0098 Fax: _____
Email: NPBS@NPBCgas.net

Engineer/Architect Company: _____
Responsible Design Prof.: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Utilities	
<u>Water Supply</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
<u>Sewage Disposal</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Heating System</u>	
<input type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input checked="" type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
<u>Sprinkler System:</u>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number:	<u>G14000305</u>
Building Shell Permit Number:	

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.

MQuint@mitchellbest.com
Email Address
Operations Mgr., Mitchell & Best Homes LLC
Title/Company

Marc Quint
Print Name
7/28/2017
Date

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
PLEASE WRITE NEATLY & LEGIBLY
-FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
<input checked="" type="checkbox"/> Building Officials		
<input checked="" type="checkbox"/> PSZA (Zoning)		
<input checked="" type="checkbox"/> PSZA (Engineering)		
<input checked="" type="checkbox"/> Health	<u>8/15/17</u>	<i>[Signature]</i>

DPZ SETBACK INFORMATION
Front:
Rear:
Side:
Side St.:
All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:
SDP/Red-line approval date:

Filing Fee	\$ <u>110.00</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$
Sub- Total Paid	\$
Balance Due	\$
Check	# <u>002139</u>