



Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

RECEIPT DATE: 6-24-14 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 554520

INSTALLATION
APPROVAL DATE: 12/3/2014

PERMIT CONSTRUCTION

A _____

PROPERTY ADDRESS: 15275 Sweetbay Street

SUBDIVISION: Belle Haven Estates LOT: 26 TAX ID: 04-373928

CONTRACTOR: Ben Lewis Plumbing EMAIL: _____

CONTRACTOR ADDRESS: 23407 Frederick Road, Clarksburg, MD 20871 PHONE: 301-674-3324

PROPERTY OWNER: KHovnanian Homes EMAIL: _____

OWNER ADDRESS: 1802 Brightseat Road, Landover, MD 20785 PHONE: 301-683-6268

BAT UNIT MODEL: HOOT BNR 600 BAT UNIT SIZE: 600GPD

PUMP CHAMBER CAPACITY (GALLONS): 750GPD PUMP SIZE: _____

NUMBER OF BEDROOMS: 5 HOUSE SQ. FT. 6866 APPLICATION RATE: 0.8

DISTRIBUTION SYSTEM: GRAVITY FED ☒ LOW PRESSURE DOSED ☐

TRENCHES:	LINEAR FEET REQUIRED: <u>SEE BAT PLAN</u>	INLET DEPTH: <u>SEE BAT PLAN 3</u>
	TRENCH WIDTH: <u>SEE BAT PLAN 3</u>	MAXIMUM BOTTOM DEPTH: <u>8 5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>SEE BAT PLAN 11 1/2</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Set BAT unit per plan. Set distribution box in SDA immediately downhill of tank outlet. Install 2 x 66' trenches on contour in upper SDA. <u>2 x 76</u>	

ISSUED BY: Robert Bricker

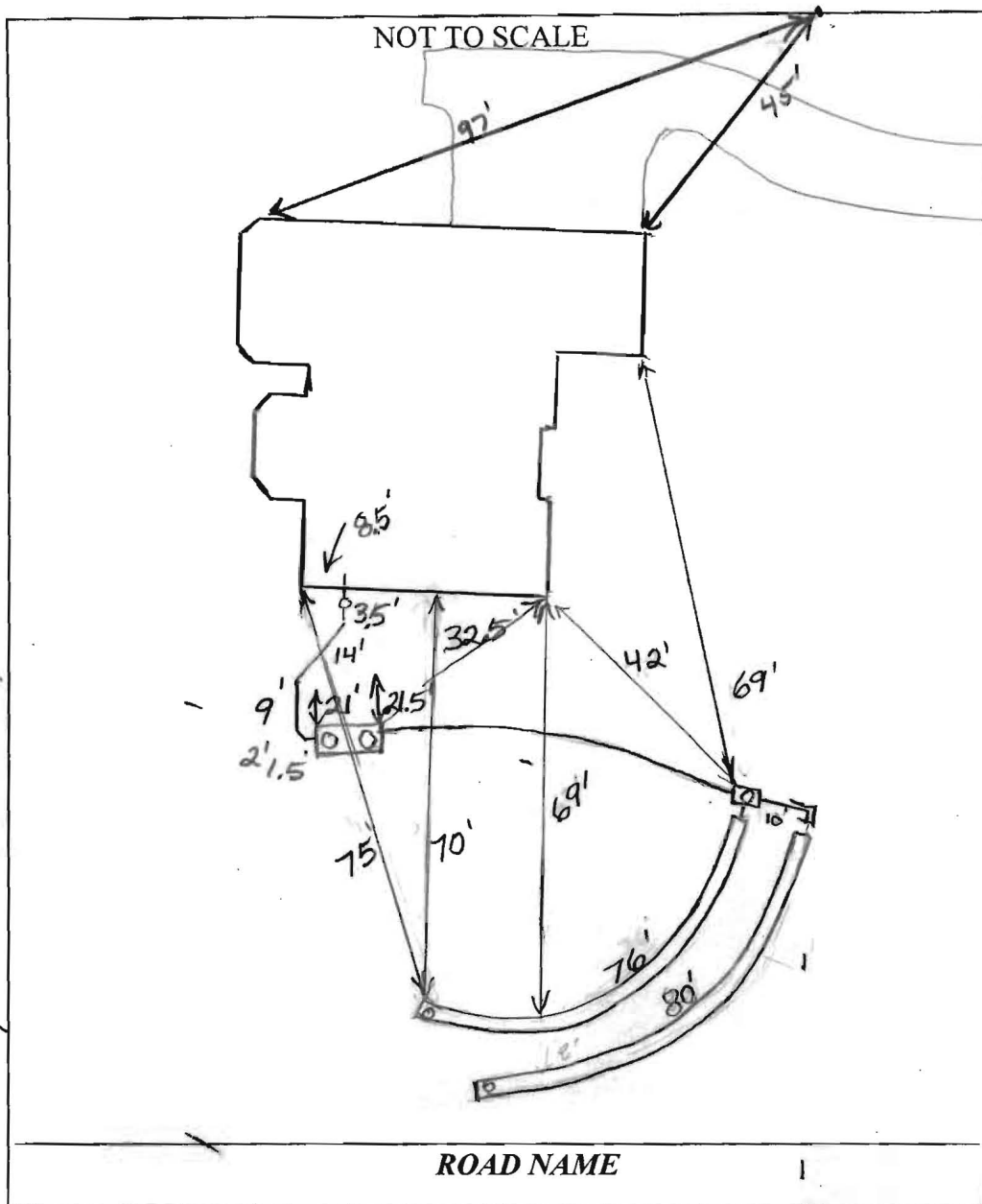
ISSUE DATE: 7-24-14 EXPIRATION DATE: 7-24-15

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION**
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING**
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.**
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED**
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL**
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS**
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM**

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

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3	5

NUMBER OF TRENCHES 2

TOTAL LENGTH 156'

ABSORPTION AREA 468 + Sidewall

DISTRIBUTION BOX LEVEL Yes

DISTRIBUTION BOX BAFFLE Yes

DISTRIBUTION BOX PORT Yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes

MANUFACTURER Mayer Bros, Hoot

CAPACITY ~2000 GAL

SEAM LOC Top

TANK LID DEPTH 3'

BAFFLES Front

BAFFLE FILTER N/A

MANHOLE LOC Front + Rear

6" PORT LOC None

WATERTIGHT TEST No

SLOTTED N/A

DATE ON LID Dry

PUMP/SEPTIC TANK LEVEL N/A

MANUFACTURER _____

CAPACITY _____ GAL

SEAM LOC _____

TANK LID DEPTH _____

BAFFLES _____

BAFFLE FILTER _____

MANHOLE LOC _____

6" PORT LOC _____

WATERTIGHT TEST _____

SLOTTED _____

DATE ON LID _____

PRE-CONSTRUCTION:

8/27/14 Contractor to set D-box @ start of upper trench. Install 2 x 76 trenches per approved site plan. Contour shot in field. Pretty close to plan. BAT unit location staked. (KW)

INSTALLATION: 9/8/14 Trenches installed per layout. D-box set and plumbed into system. BAT tank location staked 'OK'. SHC location moved slightly towards front of house. Should still be OK. (KW)

9/10/2014 Tank set. House and dist. box connections made. Need verification that Hoot unit is working correctly. (BB)

12/3/2014 Received BAT start-up approval notification from Mayer Brothers. (BB)

FINAL INSPECTOR

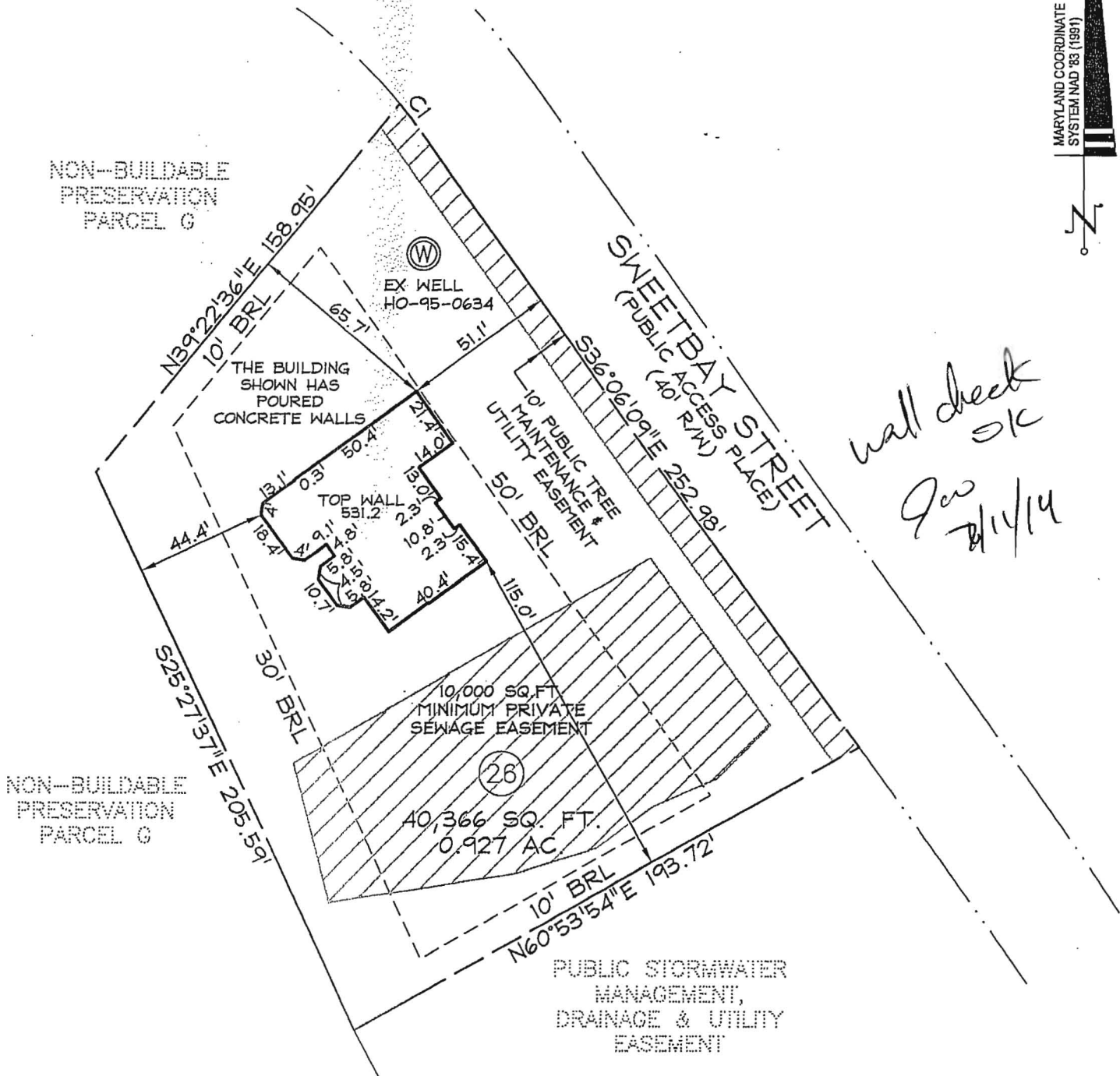
B. Baker

DATE OF APPROVAL

12/3/2014

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TAN	CHD. BRG.	CHD. DIST.
C1	180.00'	12.55'	3°59'40"	6.28'	N38°05'48"W	12.55'

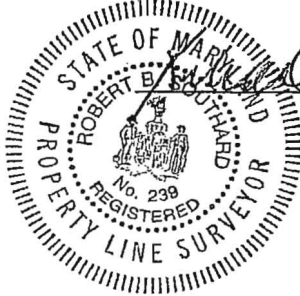
MARYLAND COORDINATE
SYSTEM NAD '83 (1991)



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I EITHER PERSONALLY PREPARED OR WAS IN RESPONSIBLE CHARGE OVER THE PREPARATION OF THIS DRAWING AND THE SURVEYING WORK REFLECTED IN IT, AND THAT IT IS IN COMPLIANCE WITH REQUIREMENTS SET FORTH IN REGULATION .12 OF CHAPTER 06, MINIMUM STANDARDS OF PRACTICE.

I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 239, EXPIRATION DATE 7/6/14.



Robert B. Smith 6-20-14



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

WALL CHECK SURVEY
#15275 SWEETBAY STREET
LOT 26
BELLE HAVEN ESTATES
PLAT NO. 19951

DDC JOB#: 06116.5
DATE: 06-17-2014
SCALE: 1"=50'
DRN. BY: RC
CHK. BY: RBS



MAYER BROS., INC.

Precast Concrete Products

6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction

Hoot System Installation

Address of Property: 15275 Sweetbay Street Lot # 26
Woodbine, MD - 21797

Date of Final Inspection: 10/8/14

Installer: Ben Lewis Plumbing Inc.

Hoot Technician/Inspector: Mike Sample

I hereby certify that the Hoot system installed at the property listed above has been installed according to proper Hoot installation practices. I have also verified the startup of the system and it is in proper working order.

Sincerely,

Name of Inspector
Mayer Bros., Inc.

PH: 410-796-1434

FX: 410-796-1438

WBE
NPCA Certified Plant

mayerbro@connext.net
www.mayerbrosprecast.com

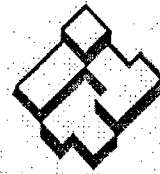
Grease Interceptors, Grease Solutions, Aerobic Treatment Units, Septic Tanks, Holding Tanks, Storm Water Structures, Hydroceptors,
Bench Barrier, Water Meter Vaults, Sectional Valve Vaults, Top Slabs, Curb Heads, Curb Bumpers, PermEntry Basement Entries,
Scapewel Window Wells, Custom Precast Products

GENERAL NOTES

1. BASE SQUARE FOOTAGE OF HOUSE: 4,144 SQ. FT.
2. EJECTOR PUMP NOT REQUIRED TO SEWER BASEMENT
3. DRIVEWAY CULVERT IS REQUIRED PER THE APPROVED ROAD DRAWINGS, F-07-38.
4. THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND PER COMP-LITE ZONING REGULATIONS DATED 7/28/06.
5. PLAT REFERENCE: #19948
6. BASE INFORMATION SHOWN ON THIS PLAN IS BASED ON PLANS PREPARED BY DMV, AND DATED 06/25/07. EXISTING TOPOGRAPHY BASED ON GRADING PLAN PREPARED BY DEMARIO DESIGN CONSULTANTS DATED 07/09/07 AND FIELD RUN TOPOGRAPHY PREPARED BY DDC INC IN JAN. 2012.
7. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DESIGN DETAILS. PRIOR TO STAKEOUT FOR CONSTRUCTION, IT SHALL BE THE OWNER/BUILDERS RESPONSIBILITY TO PROVIDE DDC, INC. WITH THE MOST RECENT SET OF BLUEPRINTS.
8. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410)313-1881 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
9. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
10. TOTAL LIMIT OF DISTURBANCE: 17,117 SQ. FT. / 0.39 AC.
11. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED PER THE PREVIOUSLY APPROVED FINAL PLAN (F-07-38).
12. ANY DAMAGE TO PUBLIC "RIGHT-OF-WAYS" OR PAVED PUBLIC ROADS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
13. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER (DDC, INC.) MAY CAUSE THE WORK TO BE UNACCEPTABLE.
14. THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN DISAGREEMENT.
15. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
16. THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
17. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
18. UPON BUILDING PERMIT REVIEW THE SEPTIC SYSTEMS OF ALL PROPOSED STRUCTURES AND OR EXISTING STRUCTURE EXPANSIONS SHALL BE RE-EVALUATED TO DETERMINE SUFFICIENT SYSTEM CAPACITY.
19. THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT WAS PREVIOUSLY APPROVED UNDER F-07-38.

SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) NOTES:

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
3. THE BLOWER MAY NOT BE LOCATED MORE THAN 10 FEET FROM THE TANK BASED ON THE MANUFACTURE'S SPECIFICATIONS.
4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
6. WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.



ITT

GOULDS PUMPS
Wastewater

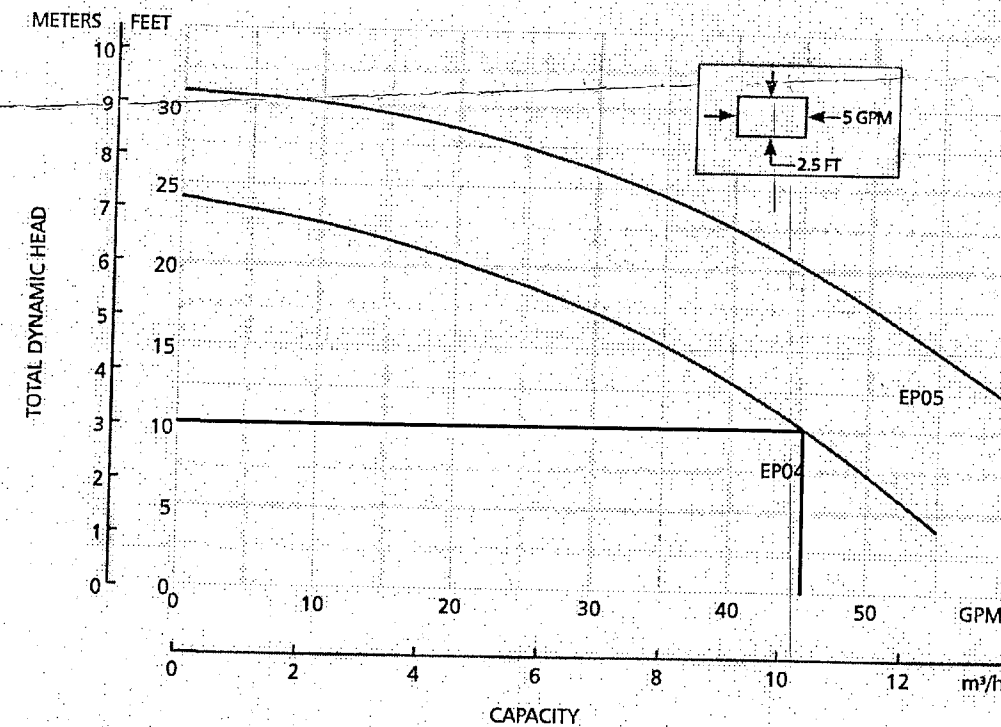
PERFORMANCE RATINGS

Total Head (ft. of water)	Gallons Per Minute	EP04	EP05
5	53	-	-
10	46	62	-
15	36	55	-
20	21	46	-
25	0	33	-
30	-	11	-

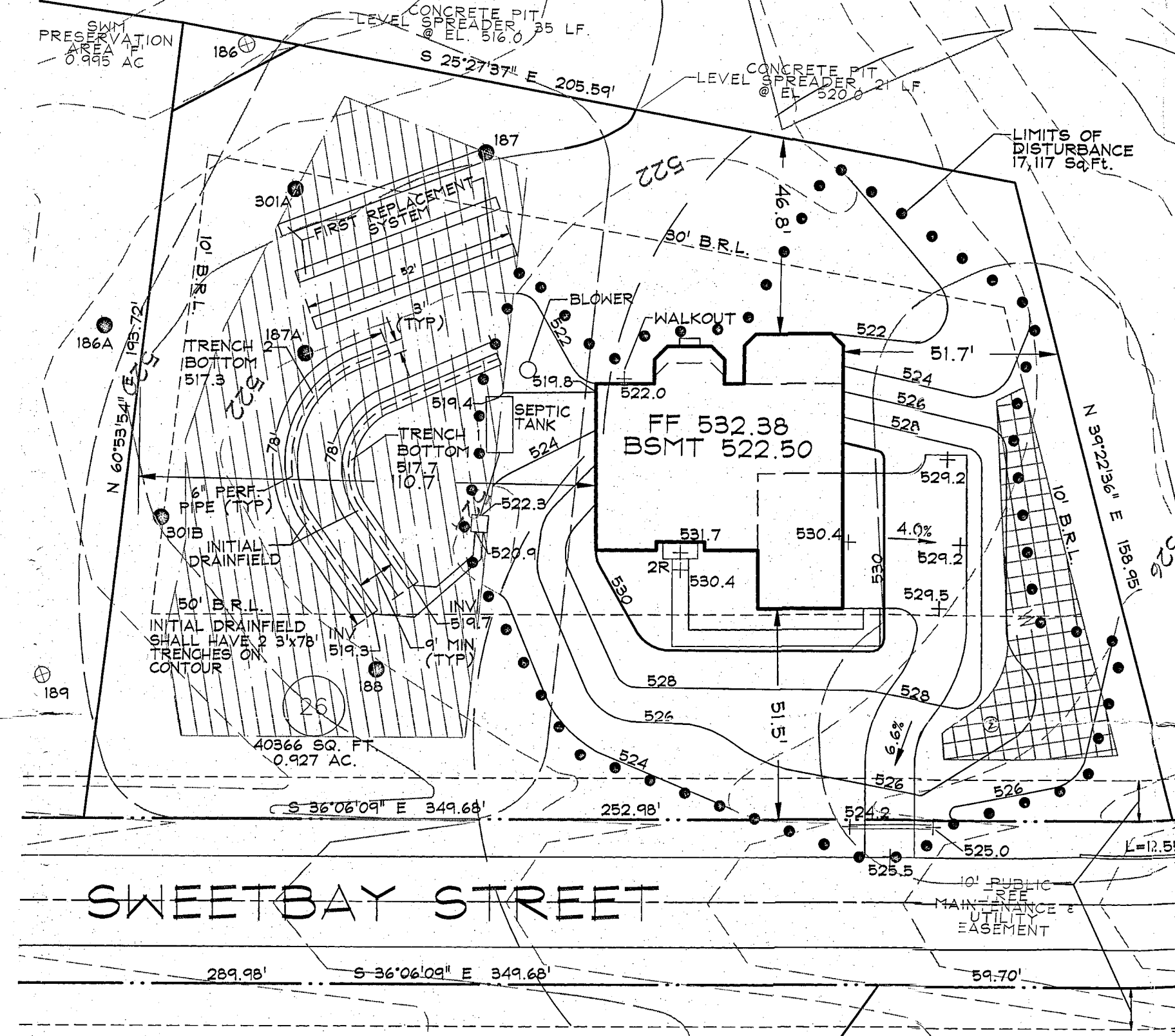
STATIC HEAD	6.2'
FRICTION HEAD	4.0'
DISTAL END HEAD	0'
TOTAL DYNAMIC HEAD	10.2'
GALLONS PER MINUTE	45 GPM

TOTAL DYNAMIC HEAD CALCULATIONS

STATIC HEAD	
OFF FLOAT ELEVATION:	516.1'
HIGH POINT OF THE SYSTEM:	+ 522.3'
VERTICAL ELEVATION CHANGE:	6.2'
FRICTION HEAD	
FITTINGS:	13.8'
LENGTH OF PVC PIPE:	+ 15.8'
TOTAL LENGTH:	29.6'
29.6/100 x 13.62 = 4.0' TOTAL FRICTION LOSS	
TOTAL HEAD	
VERTICAL ELEVATION CHANGE	6.2'
TOTAL FRICTION LOSS	4.0'
SYSTEM PRESSURE REQUIREMENTS	+ 0.0'
TOTAL DYNAMIC HEAD	10.2'

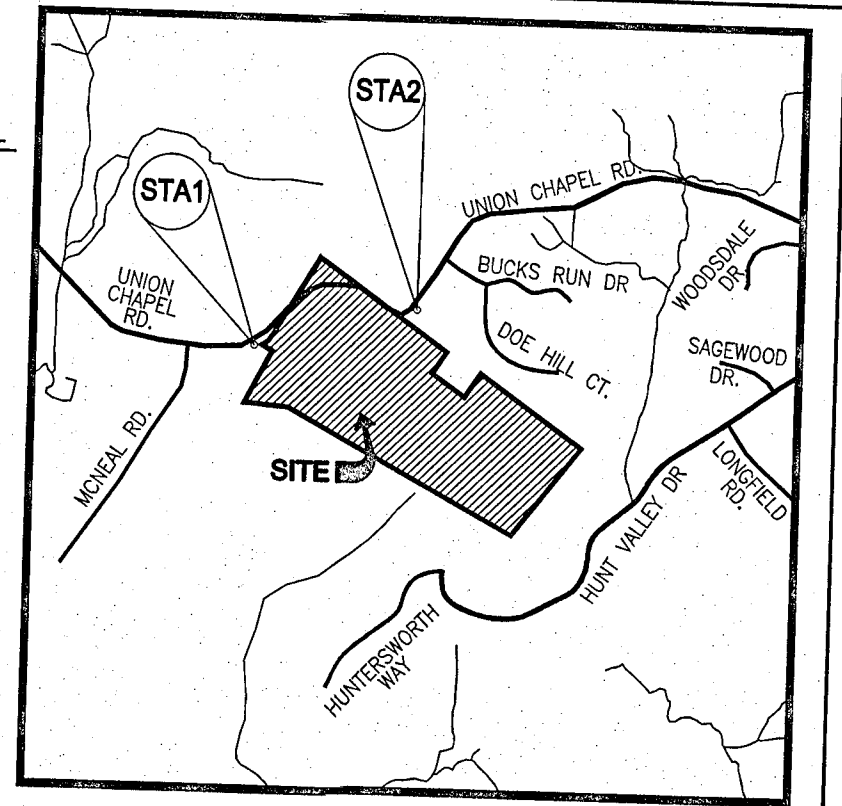


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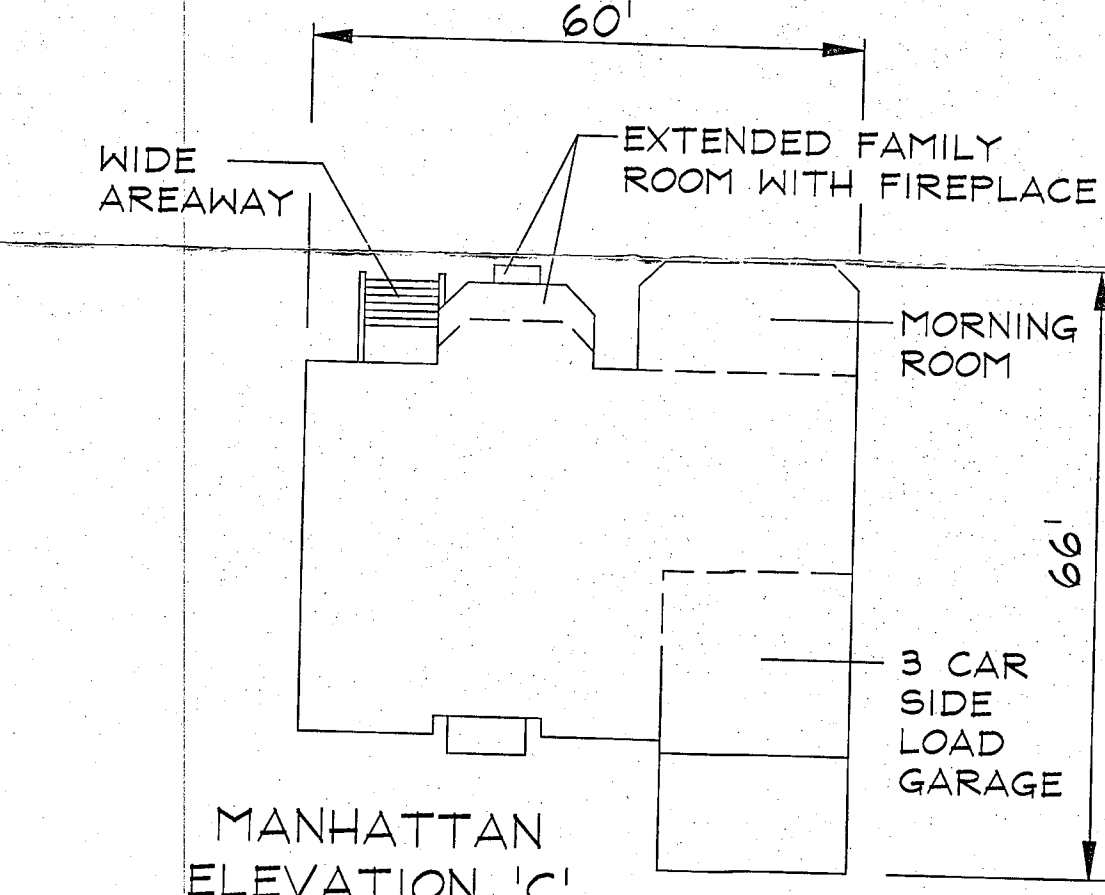
BENCHMARK

GEODETTIC SURVEY CONTROL #1	
N.	591450.42
E.	1297571.25
A.A.	142.3
ELEV.	535.43
GEODETTIC SURVEY CONTROL #2	
N.	591893.88
E.	1299121.80
B.M.	1409
ELEV.	542.23
ADP MAP COORDINATES	
4812C4	



VICINITY MAP

SCALE: 1" = 2000'



MANHATTAN
ELEVATION 'C'
BRICK AND STONE FRONT

DATA SOURCES:

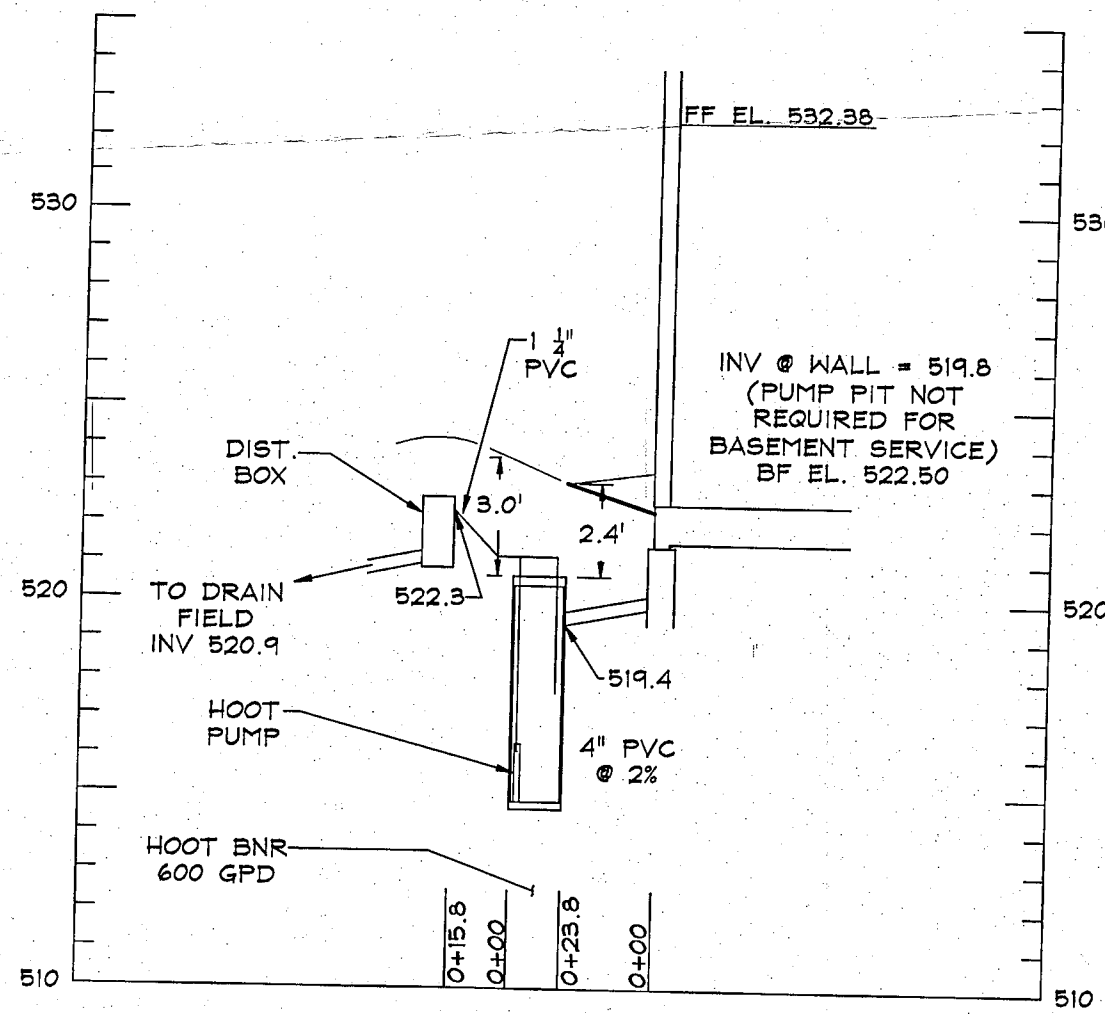
DRAWING LEGEND

- 500 PROPOSED GRADE
- 502 PROPOSED GRADE
- PROPOSED LIMIT OF DISTURBANCE
- + 665.5 PROP. SPOT ELEV./FLOW ARROW
- PROPOSED 20' SEPTIC RESERVE BUFFER
- EXISTING 30' WELL BUFFER
- EXISTING 100' WELL BUFFER
- BUILDING RESTRICTION LINE
- SEPTIC RESERVE AREA
- WELL AREA
- 174 PASSED PERCOLATION TEST
- 127 FAILED PERCOLATION TEST

LOT 26 INITIAL SYSTEM TRENCH SPECIFICATIONS			
	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
TRENCH 1 (78')	522.70	519.70	517.70
TRENCH 2 (78')	522.3	519.3	517.3

SEWAGE DISPOSAL SYSTEM DATA (4 BEDROOM):

1. INVERT @ FOUNDATION WALL: 519.8 (BASEMENT PUMP NOT REQUIRED)
2. 600 GPD BNR SYSTEM W/ 750 GALLON PUMP CHAMBER
EX. GRADE OVER TANK: 523.3
PROPOSED GRADE OVER TANK: 523.3
INVERT: 519.4
3. DISTRIBUTION BOX
EX. PROPOSED GRADE OVER TANK: 524.0
INVERT: 522.3
4. TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)
600 GPD / 0.8 GPD/SF (APP. RATE) = 750 SF
USE 3' WIDE TRENCH W/ 24" OF GRAVEL BELOW PIPE
9' MIN SPACING BETWEEN TRENCH EDGES
750 SF / 3' WIDE = 250 LF x 0.62 = 155 LF MIN. TRENCH
USE 2 - 78' LONG TRENCH = 156 LF FOR INITIAL SYSTEM
USE 3 - 52' LONG TRENCH = 156 LF FOR FIRST REPLACEMENT SYSTEM

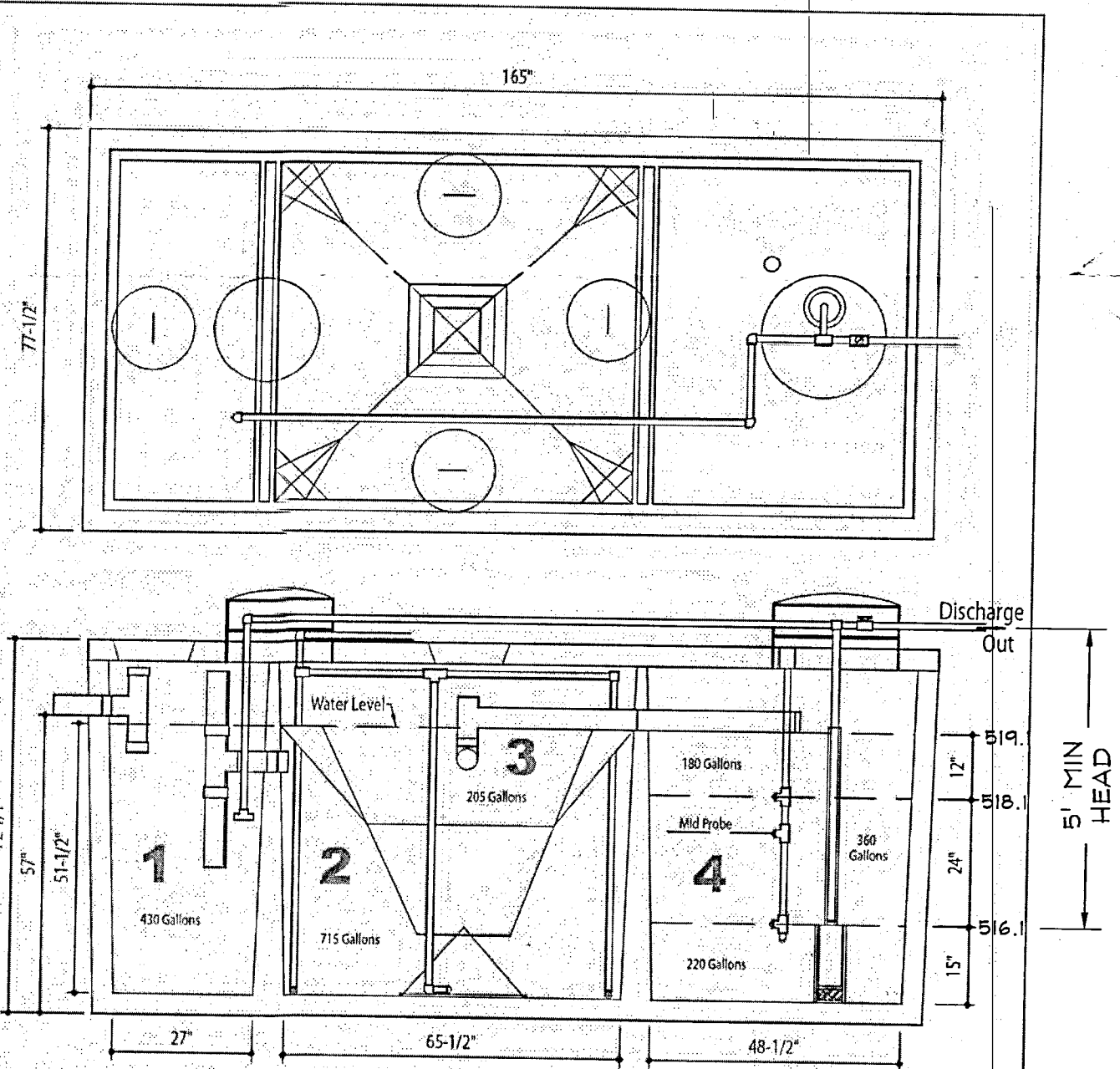


SEPTIC SYSTEM PROFILE

LOT 26

SCALE: HORIZ. 1"=50'

VERT. 1"=5'



LOT 26 PUMP ELEVATIONS

	OFF	ON	ALARM
	516.1	518.1	519.1

DESIGN DATA & GENERAL NOTES

- 1) Concrete strength (f'c) 4000 psi @ 28 days. Density = 150 pcf.
- 2) Cement - Portland Type (II) per ASTM C 150-92.
- 3) Admixtures & plasticizers per ASTM C 260-06 & C 494-02.
- 4) Reinforcing per ASTM A630, Min. 1/2" cover.

Mayer Brothers, Inc.
6704 Race Road
Elkridge, Maryland 21075
Tel. 410.796.1434
Fax. 410.796.1438
www.mayerbrothersinc.com

600 GPD BNR SYSTEM
H-600 ABNR
with 750 GALLON PUMP CHAMBER
Dwg. No. Hoot Form #1 No Scale March 19, 2009

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. 27220, Expiration Date: 01/28/16.

04/01/2014
DATE
PAUL G. CAVANAUGH, P.E.

DDC
Development Design Consultants

Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

OWNER:
K. HONANIAN HOMES
1826 Sweetbay St.
Lanham, Maryland 20785
(301) 683-8283

DEVELOPER:
LOT 26
1826 Sweetbay St.
Woodlands, Maryland 21707

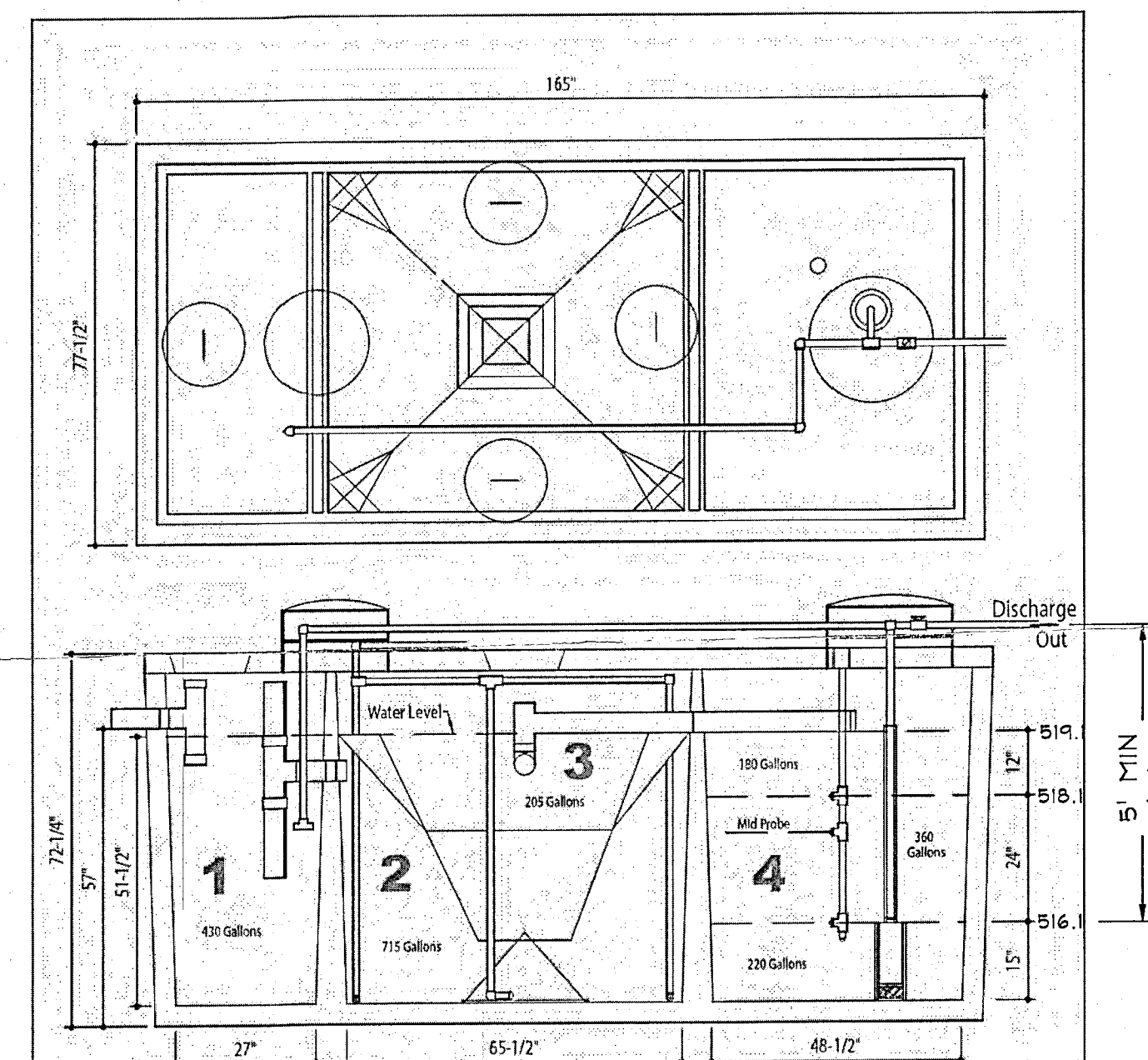
SITE PLAN FOR BAT INSTALLATION

3rd ELECTION DISTRICT		HOWARD COUNTY	
REVISIONS			
NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
CO. FILE #:	DES. BY: JHK		
TAX ACC. #:	DRN. BY: JHK		
TAX MAP: 14	CHK. BY: PGCB/KC		
BLOCK / GRID:	DATE: 04/01/14		
PARCEL #:	DDC JOB#: 08116.5		
ZONE / USE: RC-DEO	SHEET NUMBER:		
DWG. SCALE: 1"=30'	1 of 1		

- GENERAL NOTES
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 2. NUMBER OF BEDROOMS: 4
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 4. DRIVEWAY CULVERT IS REQUIRED PER THE APPROVED ROAD DRAWINGS, F-07-38.
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 6. PLAT REFERENCE: #19948
 7. BASE INFORMATION SHOWN ON THIS PLAN IS BASED ON PLANS PREPARED BY DDM, AND DATED 06/25/07. EXISTING TOPOGRAPHY BASED ON GRADING PLAN PREPARED BY DEMARIO DESIGN CONSULTANTS DATED 07/09/07 AND FIELD RUN TOPOGRAPHY PREPARED BY DDC INC IN JAN. 2012.
 8. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DESIGN DETAILS. THE CONTRACTOR FOR CONSTRUCTION OF IT SHALL BE THE OWNER/BUILDERS RESPONSIBILITY TO PROVIDE DDC, INC. WITH THE MOST RECENT SET OF HOUSE PLANS.
 9. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410)318-1881 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
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 18. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
 19. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 20. UPON BUILDING PERMIT REVIEW THE SEPTIC SYSTEMS OF ALL PROPOSED STRUCTURES AND OR EXISTING STRUCTURE EXPANSIONS SHALL BE RE-EVALUATED TO DETERMINE SUFFICIENT SYSTEM CAPACITY.
 21. THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT WAS PREVIOUSLY APPROVED UNDER F-07-38.

SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) NOTES:

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9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.



LOT 26 PUMP ELEVATIONS		
OFF	ON	ALARM
516.1	518.1	519.1

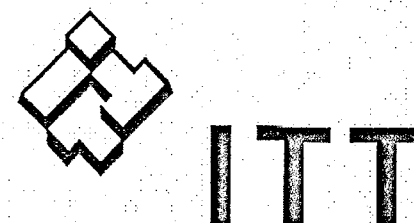
DESIGN DATA & GENERAL NOTES

- (1) Concrete strength (Frac 000 psi) at 28 days. Density = 150 pcf.
- (2) Cement - Portland Type I/II per ASTM C 150-92.
- (3) Admixtures & plasticizers per ASTM C 260-91 & C 494-93.
- (4) Reinforcing per ASTM A 615, Min. 1-1/2" cover.

Mayer Brothers, Inc.
6404 Race Road
Elkridge, Maryland 21075
Tel: 410.795.1434
Fax: 410.795.1435
www.mayerbrothersinc.com

600 GPD BNR SYSTEM
H-600 ABNR
with 750 GALLON PUMP CHAMBER

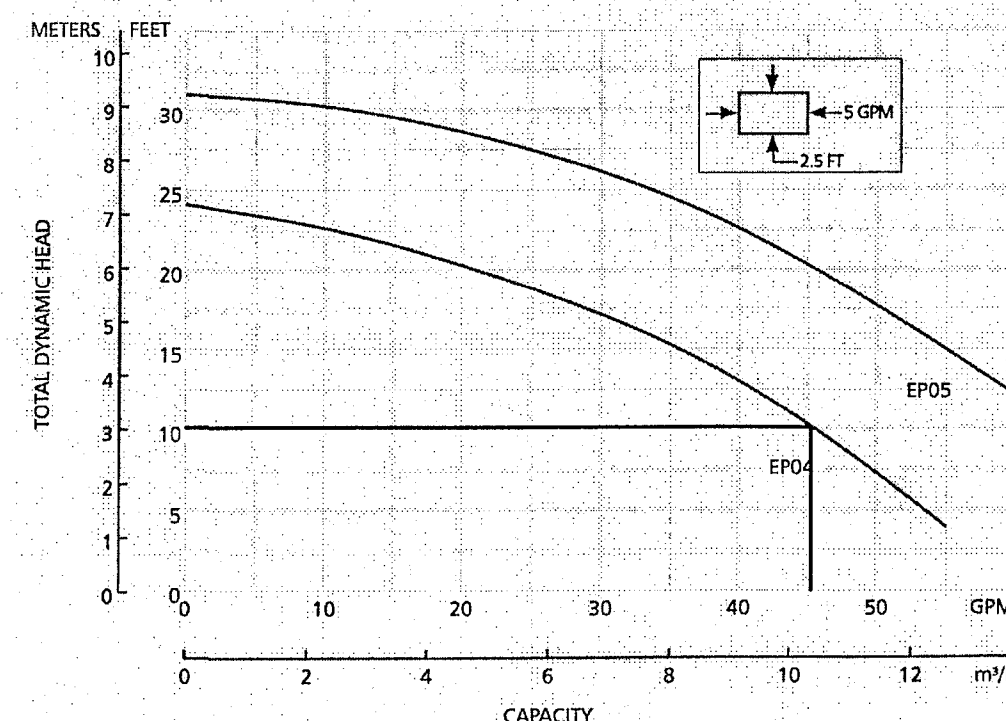
Dwg. No. Hoot Form #1 No Scale March 19, 2009



PERFORMANCE RATINGS

Total Head (ft. of water)	Gallons Per Minute
EP04	EP05
5	53
10	46
15	36
20	21
25	0
30	-

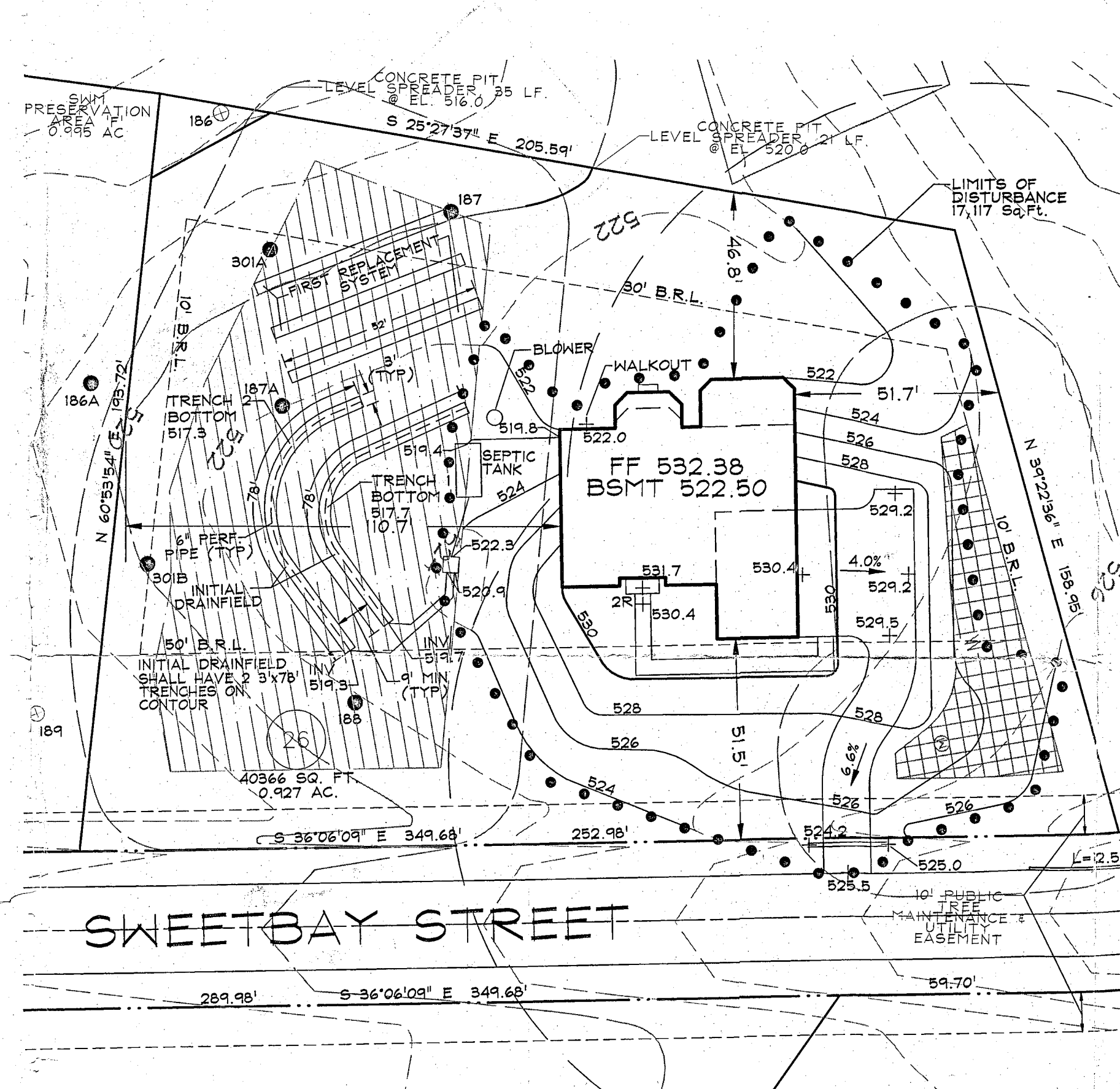
STATIC HEAD	6.2'
FRICTION HEAD	4.0'
DISTAL END HEAD	0'
TOTAL DYNAMIC HEAD	10.2'
GALLONS PER MINUTE	45 GPM



GOULDS PUMPS
Wastewater

TOTAL DYNAMIC HEAD CALCULATIONS

STATIC HEAD	
OFF FLOAT ELEVATION:	516.1'
HIGH POINT OF THE SYSTEM:	+ 522.3'
VERTICAL ELEVATION CHANGE:	6.2'
FRICTION HEAD	
FITTINGS:	13.8'
LENGTH OF PVC PIPE:	+ 15.8'
TOTAL LENGTH:	29.6'
29.6/100 x 13.62 = 4.0' TOTAL FRICTION LOSS	
TOTAL HEAD	
VERTICAL ELEVATION CHANGE	6.2'
TOTAL FRICTION LOSS	4.0'
SYSTEM PRESSURE REQUIREMENTS	+ 0.0'
TOTAL DYNAMIC HEAD	10.2'



LOT 26 INITIAL SYSTEM TRENCH SPECIFICATIONS			
	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
TRENCH 1 (78')	522.70	519.70	517.70
TRENCH 2 (78')	522.3	519.3	517.3

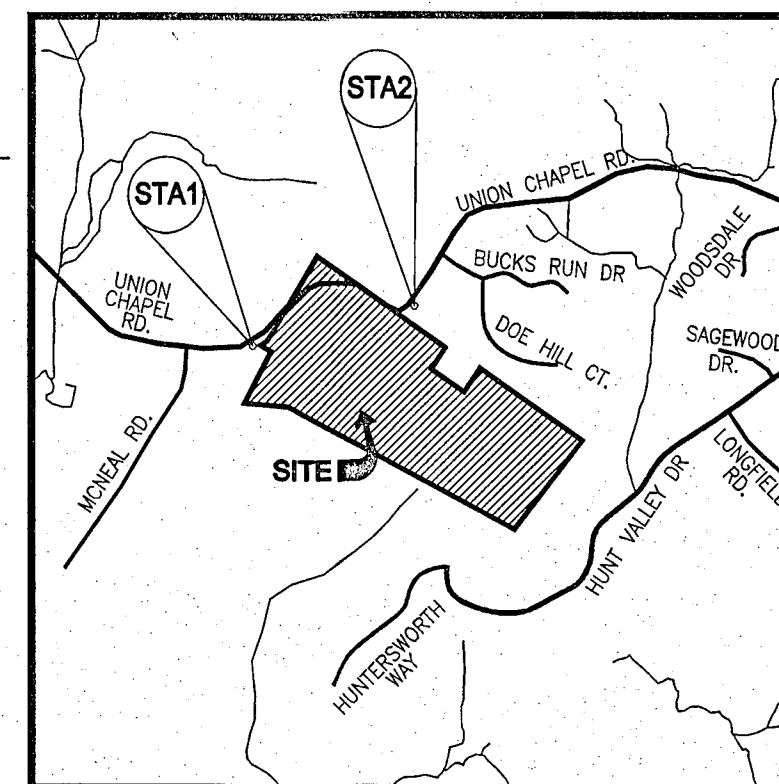
SEWAGE DISPOSAL SYSTEM DATA (4 BEDROOM):

1. INVERT @ FOUNDATION WALL: 519.8 (PUMP PIT NOT REQUIRED)
2. 600 GPD BNR SYSTEM W/ 750 GALLON PUMP CHAMBER
EX. GRADE OVER TANK: 523.3
PROPOSED GRADE OVER TANK: 523.3
INVERT: 519.4
3. DISTRIBUTION BOX
EX. PROPOSED GRADE OVER TANK: 524.0
INVERT: 522.3
4. TRENCH DESIGN (4 BDRM x 150 GPD/BDRM = 600 GPD)
600 GPD / 0.8 GPD/SF (APP. RATE) = 750 SF
USE 3' WIDE TRENCH W/ 24" OF GRAVEL BELOW PIPE
9' MIN SPACING BETWEEN TRENCH EDGES
750 SF / 3' WIDE = 250 LF x 0.62 = 155 LF MIN. TRENCH
USE 2 - 78' LONG TRENCH = 156 LF FOR INITIAL SYSTEM
USE 3 - 52' LONG TRENCH = 156 LF FOR FIRST REPLACEMENT SYSTEM

SEPTIC SYSTEM PROFILE
LOT 26
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

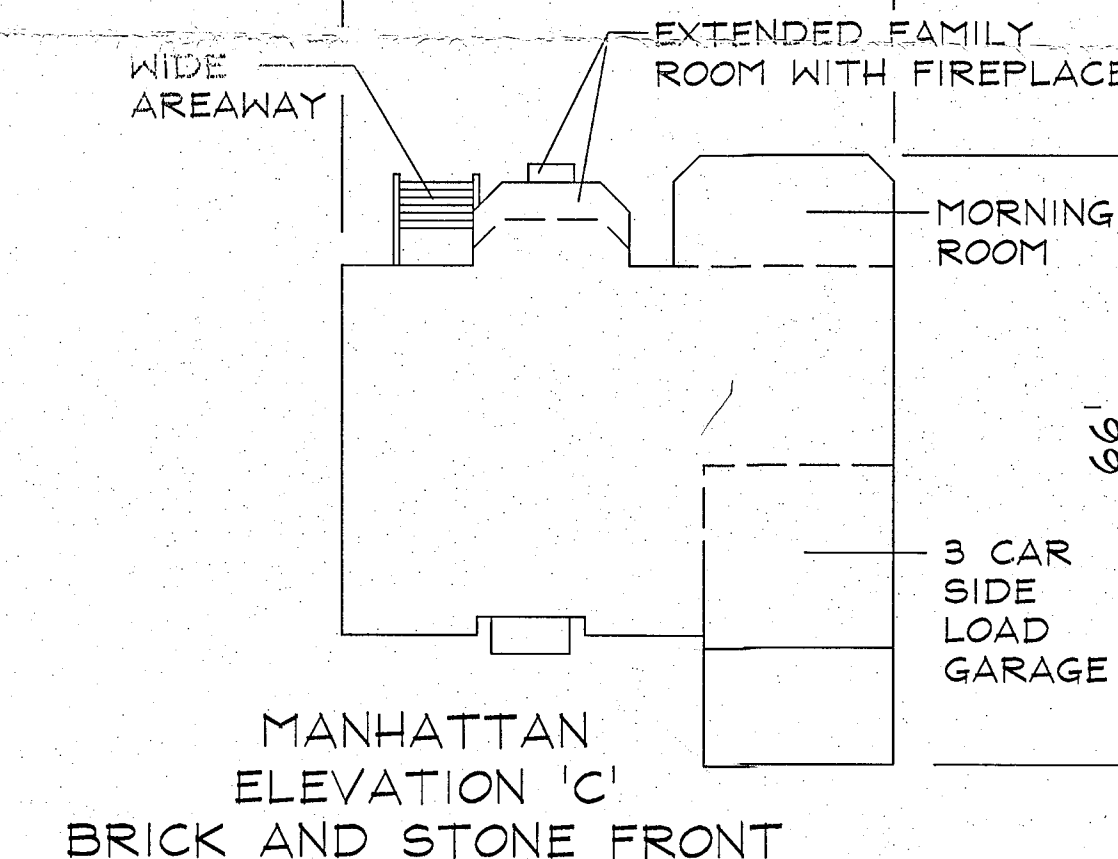
BENCHMARK

GEODETIC SURVEY CONTROL #1	
N.	691450.42
E.	129751.25
A.A. ELEV.	145A
	535.43
GEODETIC SURVEY CONTROL #2	
N.	691693.08
E.	1299121.80
B.M. ELEV.	145B
	542.23
ADC MAP COORDINATES	
	4612C4



VICINITY MAP

SCALE: 1" = 2000'



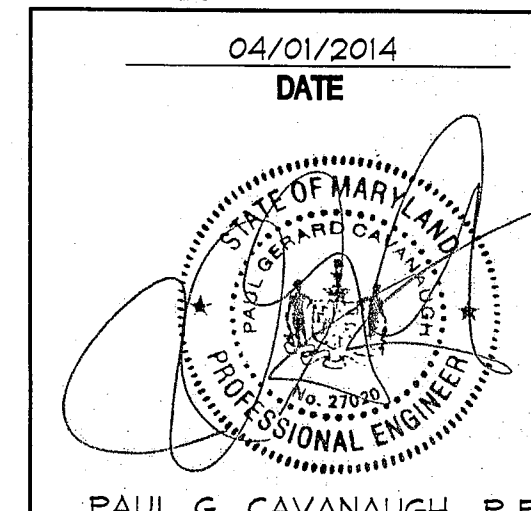
DATA SOURCES:

DRAWING LEGEND

- 500 PROPOSED GRADE
- 502 PROPOSED LIMIT OF DISTURBANCE
- + 665.5 PROP. SPOT ELEV./FLOW ARROW
- PROPOSED 20' SEPTIC RESERVE BUFFER
- EXISTING 30' WELL BUFFER
- EXISTING 100' WELL BUFFER
- BUILDING RESTRICTION LINE
- SEPTIC RESERVE AREA
- WELL AREA
- 174 PASSED PERCOLATION TEST
- 127 FAILED PERCOLATION TEST

Approved Septic System Plan
Howard County Health Department
Signature: [Signature] Date: 04/01/14

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. 27222, Expiration Date: 01/25/16.



Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

DDC
Development Design Consultants

OWNER:
K. HOVANNIAN HOMES
1802 Brightsleeve Road
Lanham, Maryland 20705
(301) 683-2255

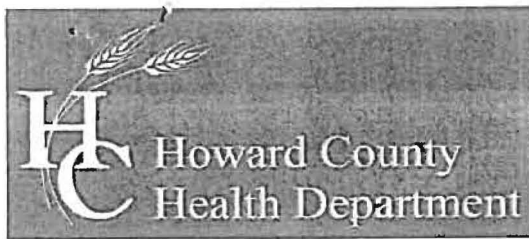
DEVELOPER:

SITE ADDRESS:
LOT 26
15275 Sweetbay St
Woodbine, Maryland 21797

BELLE HAVEN ESTATES
LOT 26
SITE PLAN FOR
BAT INSTALLATION

3rd ELECTION DISTRICT HOWARD COUNTY

REVISIONS	
NO.	DESCRIPTION OF CHANGES
CO. FILE #:	DES. BY: JHK
TAX ACC. #:	DRN. BY: JHK
TAX MAP: 14	CHK. BY: PGC/KC
BLOCK / GRID:	DATE: 04/01/14
PARCEL #: 66	DDC JOB#: 08116.5
ZONE / USE: RC-DEO	SHEET NUMBER:
DWG. SCALE: 1"=30'	1 of 1



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
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

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 23rd day of June 2014, among KHANNAWAT POWER OF MARYLAND LLC, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 19275 SWEETBAY STREET, WOODBINE MD. 21797, in the 04 Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland in Liber 15596 Folio 451. 107 26 64/373928

WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective January 1, 2013.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.
- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement a

long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

Owner

Date

Ben Rifon 6/24/2014
Howard County Health Department

Owner

Date

Steve Snyder 6-23-14
Steve Snyder
VP. Killebrew House of Maryland
Z LLC

RECEIVED

JUN 24 2014

HOWARD COUNTY HEALTH DEPT
BUREAU OF ENVIRONMENTAL HEALTH

13275 Sweetbay Street

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

=====

LR - Agreement Recording Fee		
1x	20.00	20.00

Grantor/Grantee Name: Khovnanian Homes
of Maryland
Reference/Control #: 209

LR - Agreement Surcharge		
1x	40.00	40.00

LR - Agreement Recording Fee		
1x	20.00	20.00

Grantor/Grantee Name: Khovnanian Homes
of Maryland
Reference/Control #: 210

LR - Agreement Surcharge		
1x	40.00	40.00

LR - Agreement Recording Fee		
1x	20.00	20.00

Grantor/Grantee Name: Khovnanian Homes
of Maryland
Reference/Control #: 211

LR - Agreement Surcharge		
1x	40.00	40.00

LR - Agreement Recording Fee		
1x	20.00	20.00

Grantor/Grantee Name: Khovnanian Homes
of Maryland
Reference/Control #: 212

LR - Agreement Surcharge		
1x	40.00	40.00

LR - Agreement Recording Fee		
1x	20.00	20.00

Grantor/Grantee Name: Khovnanian Homes
of Maryland
Reference/Control #: 213

LR - Agreement Surcharge		
1x	40.00	40.00

=====

SubTotal:	300.00
Total:	300.00

=====

REV-Check-BOA	60.00
Number : 00016427	
REV-Check-BOA	60.00
Number : 00016426	
REV-Check-BOA	60.00
Number : 0016425	
REV-Check-BOA	60.00
Number : 00016424	
REV-Check-BOA	60.00
Number : 00045404	

06/24/2014 14:24 CC13-DS
#2959610 /1246/109
~ Thank you for visiting us today ~

BQ

Barrick Dispatch 301-845-6343
Barrick Sale 301-845-6341

We are an Equal Opportunity Employer
S.W. Barrick & Sons
WOODSBORO, MARYLAND

Mailing Address:
P.O. Box 1504
Laurel, Maryland 20725

INSPECTOR'S COPY

BILLING INQUIRIES
1-800-762-2294

TICKET #01066591

STATION B

DATE 09/08/14 TIME 10:10:06

CUSTOMER LEW BEN
BEN LEWIS INC.
23407 FREDERICK RD
CLARKSBURG, MD 20871

JOB BELHAV : BELL HAVEN
P.O. # 30686 PROJECT #:
70- R 975- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 568C LICENSE
DRIVER: MILLERS TRUCKING

3 AXLES

LOT 26

GROSS	SCALE A	69020 lb
TARE	IN (STORED)	23180 lb
NET		45840 lb
NET		22.92 t

	Loads	Tons
DAILY	1	22.92
TOTAL	7	141.95
TIME IN	10:10:06	TIME OUT 10:10:06

MAT'L 22W : DBL WSHED MD#2 STONE
HAUL ZONE H09

WEIGHMASTER

Amanda Jacobs

RECEIVED BY

LOT 26

301-674-3324

Have a Nice Day!

BQ

We are an Equal Opportunity Employer

S.W. Barrick & Sons

WOODSBORO, MARYLAND

Mailing Address:
P.O. Box 1504
Laurel, Maryland 20725

INSPECTOR'S COPY

BILLING INQUIRIES
1-800-762-2294

Barrick Dispatch
301-845-6343

Barrick Sale
301-845-6341

TICKET #01066516

STATION B

DATE 09/08/14 TIME 10:44:10

CUSTOMER LEWEN
BEN LEWIS INC.
23407 FREDERICK RD
CLARKSBURG, MD 20871

JOB BELHAV : BELL HAVEN
P.O. # 30686 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 716A LICENSE
DRIVER: HNS TRUCKING INC

0 AXLES

LOT 2

GROSS	SCALE A	68940 lb
TARE	IN (STORED)	24880 lb
NET		44060 lb
NET		22.03 t

	Loads	Tons
DAILY	2	44.95
TOTAL	8	163.98
TIME IN 10:44:10		TIME OUT 10:44:10

MAT'L 22W : DBL WSHED MD#2 STONE
HAUL ZONE H09

WEIGHMASTER

Asanda Jacobs

RECEIVED BY

LOT 26

301-674-3324

Have a Nice Day!

BQ

We are an Equal Opportunity Employer
S.W. Barrick & Sons
WOODSBORO, MARYLAND

INSPECTOR'S COPY

Barrick Dispatch
301-845-6343

Barrick Sale
301-845-6341

Mailing Address:
P.O. Box 1504
Laurel, Maryland 20725

BILLING INQUIRIES
1-800-762-2294

TICKET #01066661

STATION B

DATE 09/08/14 TIME 12:02:20

CUSTOMER LEW BEN
BEN LEWIS INC.
23407 FREDERICK RD
CLARKSBURG, MD 20871

JOB BELHAV : BELL HAVEN
P.O. # 30686 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 548A LICENSE
DRIVER: DEESE TRUCKING

3 AXLES LOT 2

GROSS SCALE A 69440 lb
TARE IN (STORED) 24880 lb
NET 44560 lb
NET 22.28 t

DAILY

Loads

3

Tons

67.23

TOTAL

9

186.26

TIME IN 12:02:20

TIME OUT 12:02:20

MAT'L 22W : DBL WSHED MD#2 STONE
HAUL ZONE H09

WEIGHMASTER

Amanda Jacobs

RECEIVED BY

LOT 26

301-674-3324

Have a Nice Day!

AR 8/8
Last / Load

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Thursday, April 10, 2014 12:09 PM
To: 'cwillett@khov.com'; Brian Collins
Subject: Belle Haven lots 15 and 26

I have reviewed the BAT plans and floor plans for the above referenced lots. Both floor plans indicate 4 bedrooms on the 2nd floor. Both have a full bath in the basement, which along with the door and window in the den make that room a bedroom. Both show a first floor in which it is unclear whether the full bath option was chosen on that floor. If so, the home office becomes a bedroom.

Both BAT plans look good except they are designed for 4 bedrooms. We could keep the floorplans as-is and the BAT plans could be redesigned for 6 bedrooms, or one or both of the rooms could be altered to meet the bedroom exemption in our code. If both are altered to get down to 4 bedrooms, the BAT plans are approvable. If one is altered, the BAT plans would need to be revised for 5 bedrooms.

If the floorplans are altered, a formal revision to the permit would need to be submitted to DILP with copies of the revision on office or letter size paper for them to scan into Acella and send to the Health Dept.

Below is the bedroom definition from Section 3.8 of the Howard County Code. Thanks.

- (1) Except as provided in paragraph (2) of this subsection, a bedroom is any space in the conditioned area of a dwelling unit or accessory structure that:
 - (i) Is 90 square feet or greater in size;
 - (ii) May be used as a private sleeping area; and
 - (iii) Has at least one window and one interior door.
- (2) If a home office, library, or similar room is proposed, it may not be a bedroom if there is no closet; and
 - (i) The room contains permanently built-in bookcases around the perimeter of the room, desks, and other features that encumber the room;
 - (ii) A minimum 4 foot-wide opening, without doors, into another room;
 - (iii) A half wall (4 foot maximum height) between the room and another room; or
 - (iv) The room is a first floor room or basement area that does not have direct access to full bathrooms or "roughed in" plumbing that would provide direct access to future full bathroom facilities.

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov

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LETTER OF TRANSMITTAL

K. Hovnanian Homes of MD, LLC
1802 Brightseat Rd. • Landover, MD 20785
301-772-8900 • 301-772-8925 Fax

TO Howard County Health Department
8930 STANFORD Blvd.
Columbia, MD 21045

DATE <u>4/2/14</u>	JOB NO.
ATTENTION	
RE: <u>Belleharbour lot (26)</u>	
<u>15275 SWEETBAY STREET</u>	
<u>WOODBINE, MD.</u>	

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change Order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
3			SITE PLAN FOR BAT INSTALLATION DATED 4/1/14
3			SEPTIC SPECIFICATIONS WORKSHEET
2			FLOOR PLANS (AS RECENTLY REQUESTED BY H.O.)

THESE ARE TRANSMITTED as checked below:

- | | | |
|--|---|---|
| <input type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted | <input type="checkbox"/> Resubmit _____ copies of approval |
| <input type="checkbox"/> For your use | <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Submit _____ copies for distribution |
| <input type="checkbox"/> As requested | <input type="checkbox"/> Returned for corrections | <input type="checkbox"/> Return _____ corrected prints |
| <input checked="" type="checkbox"/> For review and comment - | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> FOR BIDS USE _____ 20 _____ | <input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US | |

REMARKS

BAT plans submitted in conjunction with pending building permit application
B14000816.

COPY TO _____

SIGNED: 

If enclosures are not as noted, kindly notify us at once.

Full bath on 1st fl?

BAT plan needs
~~details~~ for 5 or 6 bd

RECEIVED

APR 02 2014

**HOWARD COUNTY HEALTH DEPT.
BUREAU OF ENVIRONMENTAL HEALTH**



Chester Willett

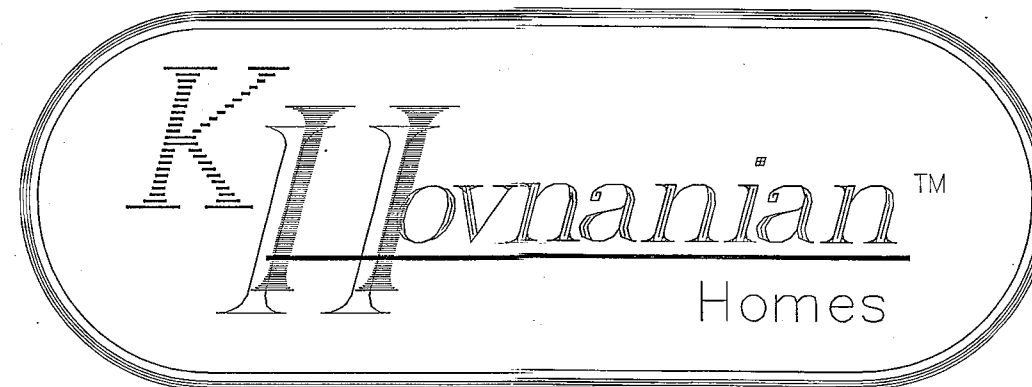
Permits Manager

K. Hovnanian Homes of Maryland, LLC

1802 Brightseat Road
Landover, MD 20785

Direct: 301.683.6268
Fax: 301.683.6371
Cell: 240.375.4515
cwillett@khov.com
khov.com

MID ATLANTIC
AREA



Belleview lot (26)
15275 Sweetbay Street

MANHATTAN

REVISION DATE: 6-20-2013

INDEX

SHEET	DRAWING
1A	TITLE SHEET
PG-1B	2012 IECC CODE COMPLIANCE NOTES
PG-1C	PG COUNTY DETAILS
1D	RES-CHECK
2A	ELEVATION "A" - STD. 8' SECOND FLOOR
2B	ELEVATION "A" W/ BRICK & STONE - STD. 8' SECOND FLOOR
2C	ELEVATION "A" - STD. 9' SECOND FLOOR
2D	ELEVATION "A" W/ BRICK & STONE - STD. 9' SECOND FLOOR
2E	ELEVATION "B" - STD. 8' SECOND FLOOR
2F	ELEVATION "B" W/ BRICK & STONE - STD. 8' SECOND FLOOR
2G	ELEVATION "B" - STD. 9' SECOND FLOOR
2H	ELEVATION "B" W/ BRICK & STONE - STD. 9' SECOND FLOOR
2J	ELEVATION "B" PARTIAL PLANS
2K	ELEVATION "C" - STD. 8' SECOND FLOOR
2L	ELEVATION "C" W/ BRICK & STONE - STD. 8' SECOND FLOOR
2M	ELEVATION "C" - STD. 9' SECOND FLOOR
2N	ELEVATION "C" W/ BRICK & STONE - STD. 9' SECOND FLOOR
2P	ELEVATION "C" PARTIAL PLANS
2Q	ELEVATION "D" - STD. 8' SECOND FLOOR
2R	ELEVATION "D" W/ BRICK & STONE - STD. 8' SECOND FLOOR
2S	ELEVATION "D" - STD. 9' SECOND FLOOR
2T	ELEVATION "D" W/ BRICK & STONE - STD. 9' SECOND FLOOR
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6B	OPT. 3-CAR SIDE LOAD GARAGE
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7C	BUILDING SECTIONS "B-B"
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8C	SECOND FLOOR ELECTRICAL PLAN
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8E	OPT. ALT. FIRST FLOOR SUITE W/ BATH ELECTRICAL PLANS
9A	PORCH PORCH DETAILS

2012 IECC & IRC BUILDING CODE

DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION
9-8-2010	PRELIMINARY PLANS	5-28-2012	MISC. REVISIONS	3-29-2013	AR-2013-37		
2-17-2011	MISC. REVISIONS	6-19-2012	DTO COMMENTS	4-22-2013	AR-2013-42		
4-8-2011	ADDED OPT. AREAWAYS TO BASEMENT PLANS	6-25-2012	ADDITIONAL DTO COMMENTS	6-20-2013	AR-2013-107		
8-30-2011	AR-CPD-11-192	7-23-2012	ADDED BRICK/STONE LOCATIONS TO SIDE LOAD GARAGE ELEV				
11-17-2011	PROTOTYPE REVISIONS	9-5-2012	CPR-AR-12-259				
11-21-2011	AR-CPD-11-278	11-7-2012	CPD-AR-12-372				
1-6-2012	AR-CPD-12-5	2-22-2013	AR-2013-04				
3-26-2012	PLAN REDESIGN / ADDED ELEVATION D / ADDED OPTIONS	3-13-2013	REVISED PG COUNTY NOTES SHEET				
4-23-2012	OPT. BEDROOM SUITE SHOWER REVISIONS	3-15-2013	PROTOTYPE REVISIONS				

KV198_6039

SEE SHEET 9A FOR
PORTICO PORCH DETAILS.

BRICK SURROUND

1x6 SPF FREEZE BOARD

TRAPPED W/ ALUM TRIM ON EX4 BLOCKED OUT ON INT4

BRICK RACK

TOP OF PLATE

TOP OF WINDOW

BRICK JACK ARCH

WINDOW HEAD W/ KEY

BRICK SURROUND

W/ CONC. KEY

8" POST TRAPPED W/ TRIM ON EX4 BRICK ROMLOCK ON INT4

TOP OF SECOND FLOOR

BRICK SOLDIER COURSE

TOP OF WINDOW

BRICK ARCHED WINDOW

HEAD W/ KEY W/ 1x6 PAINTED SYMABOND ABOVE WINDOW BEHIND ABOVE

BRICK SURROUND

BRICK QUOINS

BRICK FRONT

BRICK SILL

TOP OF FIRST FLOOR

9'-1 1/8"

7'-0 3/8"

1'-2 3/4"

8'-1 1/8"

1'-2 3/4"



2x6 SPF RAKE WRAPPED W/
ALUM. & BUILT OUT 12" W/
2x4'S W/ VENTED SOFFIT

1x6 SPF SUB-RAKE
TRAPPED W/ ALUM. TRIM
ON 2x4 BLOCKING

BRICK JACK ARCH
WINDOW HEAD W/ KEY

1x8 SPF FRIEZE BOARD WRAPPED
W/ ALUM. TRIM ON 2x4 BLOCKED
OUT BRICK RACK

— BRICK ROWLOCK
— BRICK SOLDIER COURSE
TOP OF SECOND FLOOR

TOP OF PLATE

— BRICK FRONT

BRICK JACK ARCH
GARAGE DOOR HEAD π / KEY

— BRICK QUOINS

TOP OF FIRST FLOOR

MANHATTAN:
ELEVATION "C" W/ FULL BRICK
(SHOWN W/ OPT. 9' SECOND FLOOR)

SEE SHEET 9A FOR
PORTICO PORCH DETAILS.

BRICK SURROUND

2x6 SPF FREEZE BOARD
WRAPPED W/ ALUM. TRIM
ON 2x4 BLOCK OUT
BRICK RACK

TOP OF PLATE

8'-1 1/8"

7'-0 3/8"

TOP OF WINDOW

BRICK JACK ARCH
WINDOW HEAD W/ KEY

STONE SURROUND
W/ KEY

STONE FRONT

8" POST WRAPPED W/ TRIM

BRICK ROWLOCK

TOP OF SECOND FLOOR

BRICK SOLDIER COURSE

1'-2 3/4"

TOP OF WINDOW

BRICK ARCHED WINDOW
HEAD W/ KEY W/ 1x10
PAINTED SYNBARD ABOVE
WINDOW BEHIND BRICK

BRICK SURROUND

BRICK QUOINS

BRICK FRONT

BRICK SILL

8'-1 1/8"

8'-0 3/8"

TOP OF FIRST FLOOR

1'-2 3/4"



2x6 SPF RAKE WRAPPED W/
ALUM. & BUILT OUT 12" W/
2x4'S W/ VENTED SOFFIT

WRAPPED W/ ALUM. TRIM
ON 2x4 BLOCKING

BRICK JACK ARCH
WINDOW HEAD T/ KEY

2x6 SPF FRIEZE BOARD WRAPPED
W/ ALUM TRIM ON 2x4 BLOCKED
OUT BRICK RACK
TOP OF RAISED HEEL

BRICK ROWLOCK
BRICK SOLDIER COURSE
TOP OF SECOND FLOOR
TOP OF PLATE

— BRICK FRONT

GARAGE DOOR HEAD W/ KEY

— BRICK QUODS

MANHATTAN:
ELEVATION "C" W/ BRICK & STONE
(SHOWN W/ OPT. 9' SECOND FLOOR).

NOTES:

1. ALL INTERIOR & EXTERIOR WALLS
ARE SHOWN @ 3 1/2" UNLESS
OTHERWISE NOTED.

SCALE:

1/8" = 1'-0" @ 11 x 17
1/4" = 1'-0" @ 24 X 35

SHEET NUMBER
2N

SCALE
AS NOTED

DRAWN BY

DATE
6-20-2013

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MODEL	MANHATTAN	SET #
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OPT. BEDROOM #6
I/O HOME OFFICE

OPT. FULL BATH I/O POWDER RM.
(N/A W/ FIRST FLOOR SUITE OPTIONS)

OPT. OPEN OAK FLARED STAIR

FIRST FLOOR PLAN
ELEVATION "A"

NOTE:
OPT. 2-CAR & 3-CAR SIDE LOAD GARAGE
SEE SHEETS 6A & 6B FOR DETAILS.

NOTE:
OPT. 3RD CAR GARAGE.
SEE SHEETS 6C FOR DETAILS.

SCALE:
1/8" = 1'-0" @ 11 x 17
1/4" = 1'-0" @ 24 x 36

NOTES:

1. ALL INTERIOR & EXTERIOR WALLS ARE SHOWN @ 3 1/2" UNLESS OTHERWISE NOTED.

SHEET NUMBER
4A

SCALE
AS NOTED

DRAWN BY

DATE
6-20-2013

REV. BY	DATE	REV. #	REMARKS
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REV. BY	DATE	REV. #	REMARKS
GD	6-20-13	2013-107	

MODEL
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NOTES:

1. ALL INTERIOR & EXTERIOR WALLS
ARE SHOWN @ 3 1/2" UNLESS
OTHERWISE NOTED.

SCALE:

1/8" = 1'-0" @ 11 x 17
1/4" = 1'-0" @ 24 x 36

SHEET NUMBER
2P

SCALE
AS NOTED

DRAWN BY

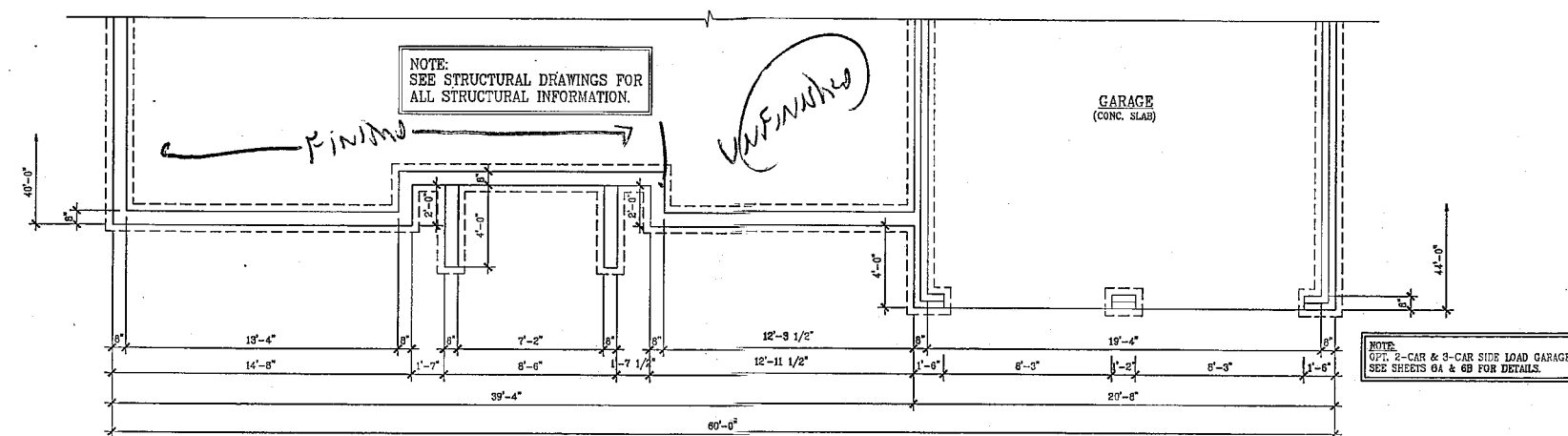
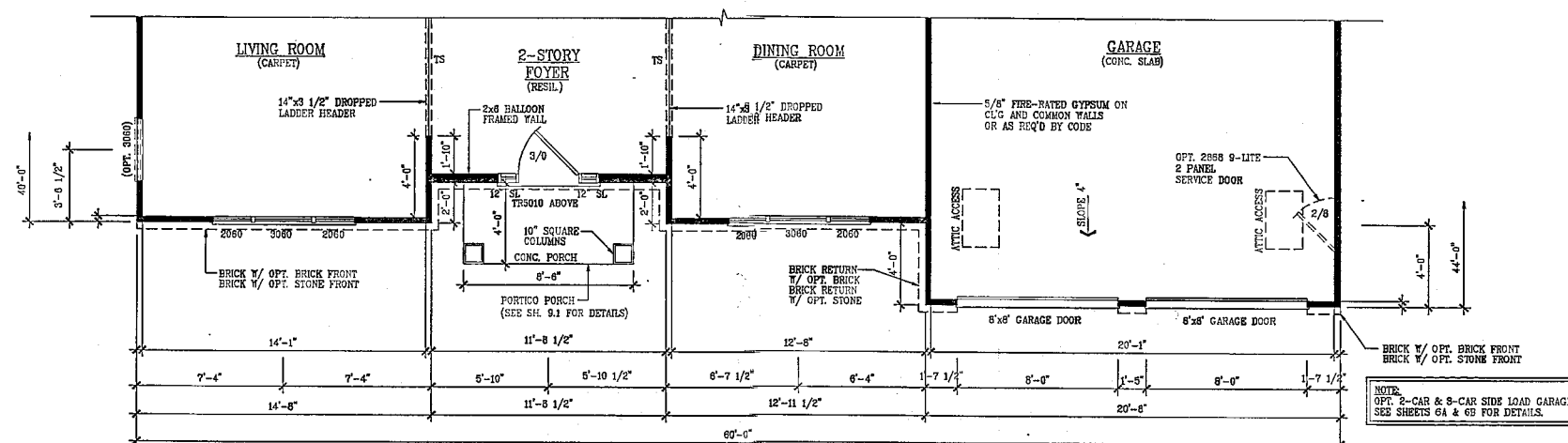
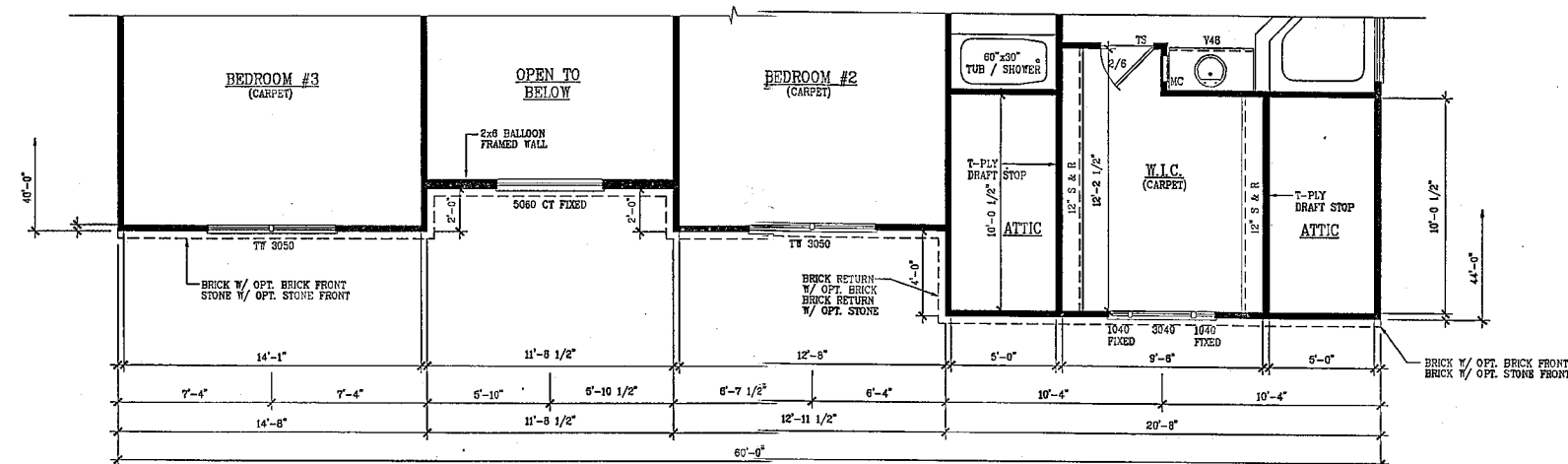
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6-20-2013

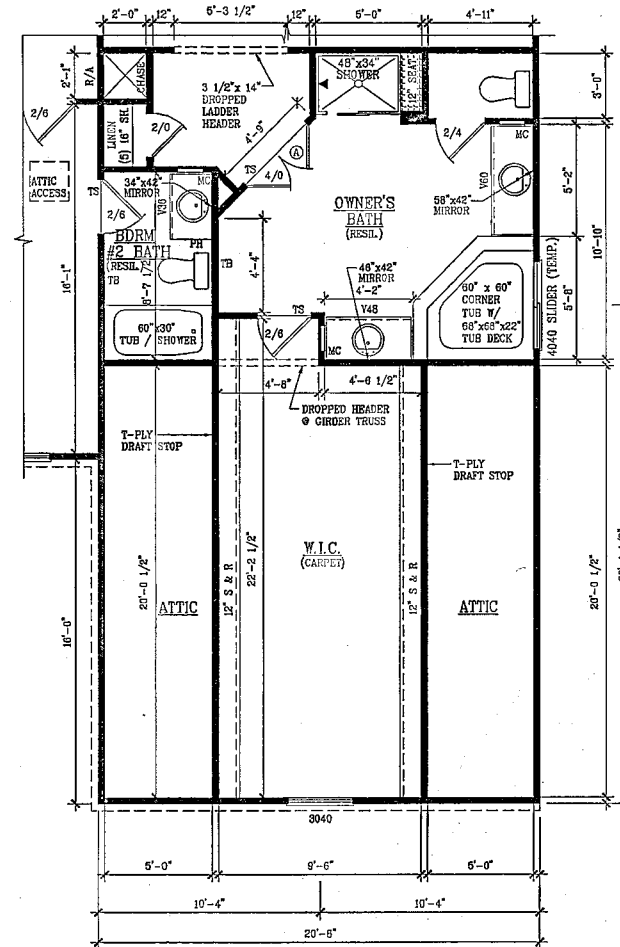
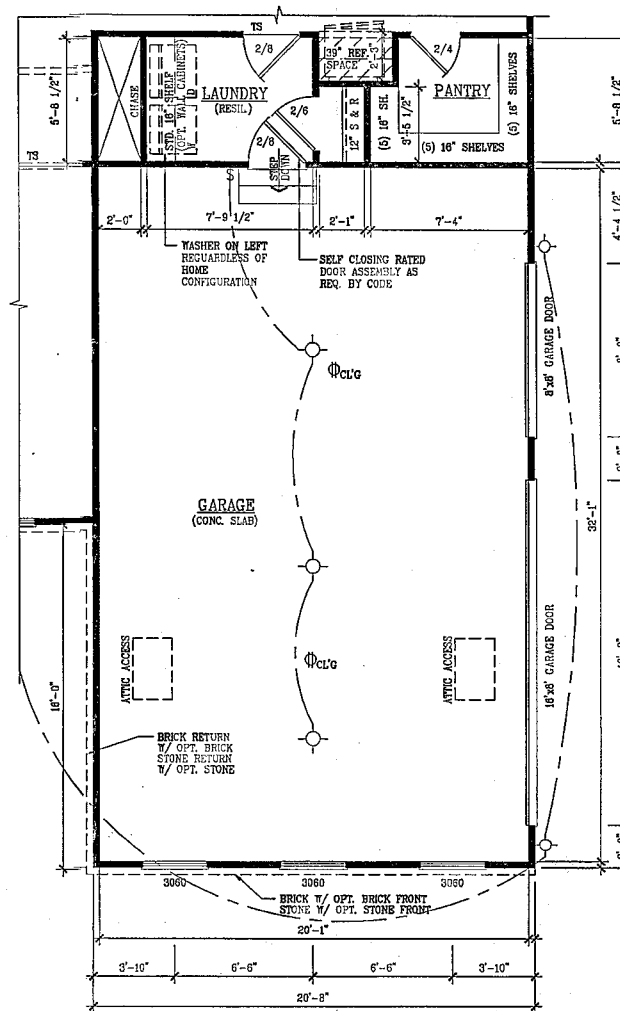
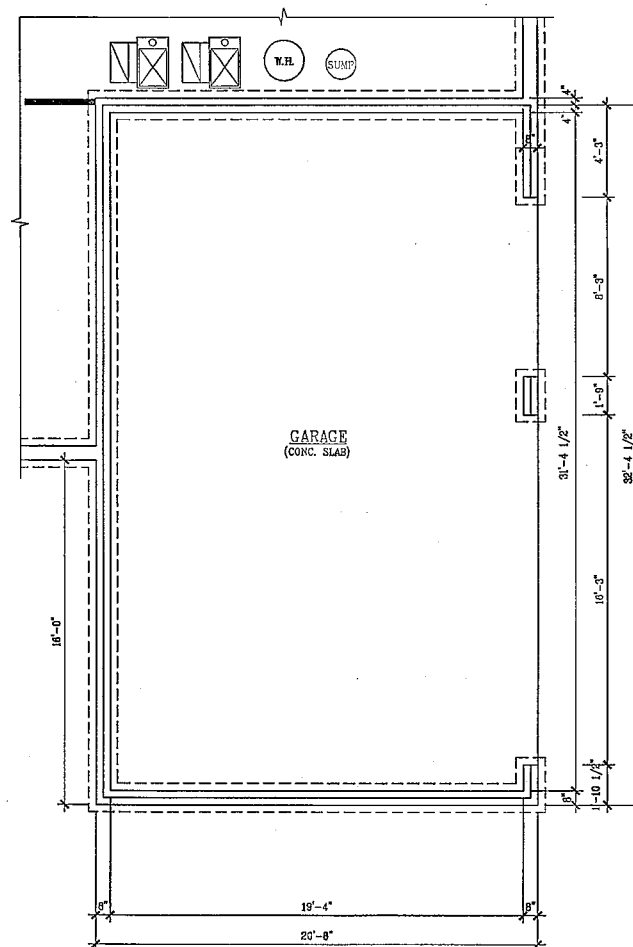
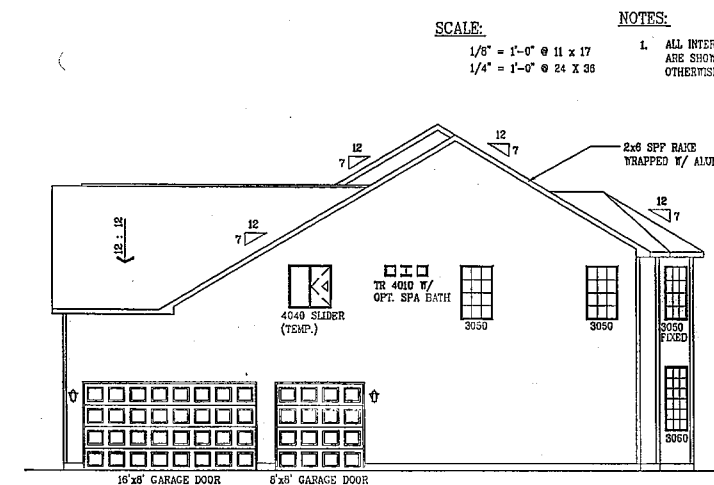
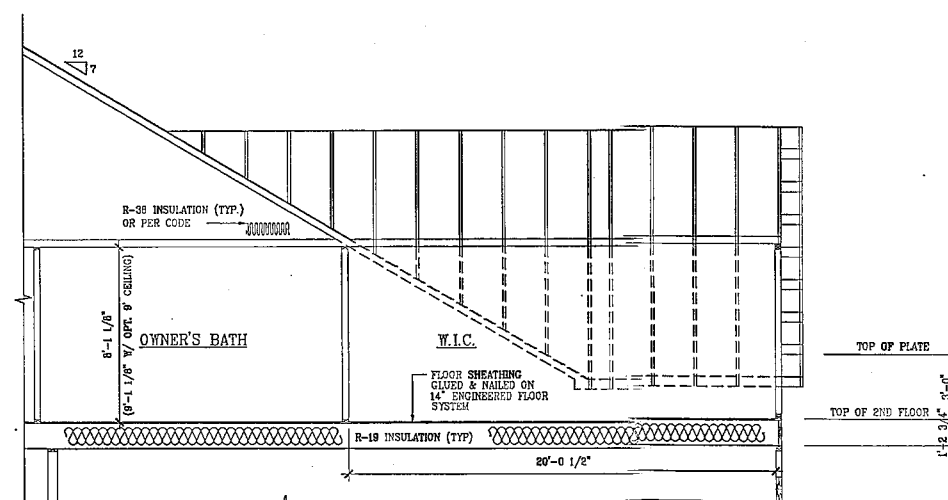
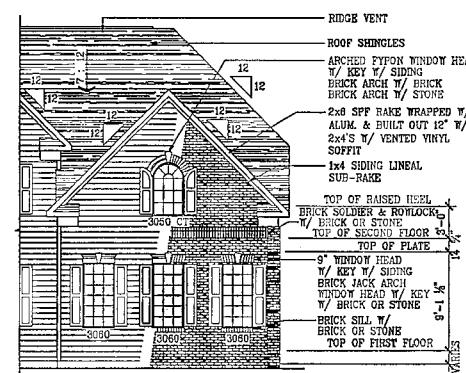
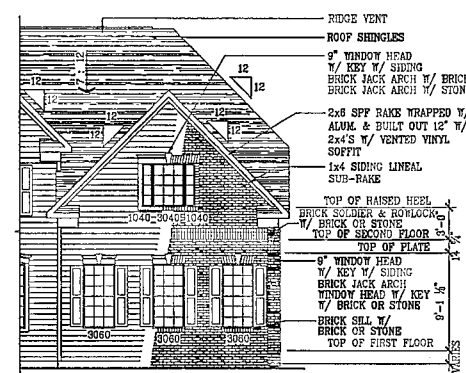
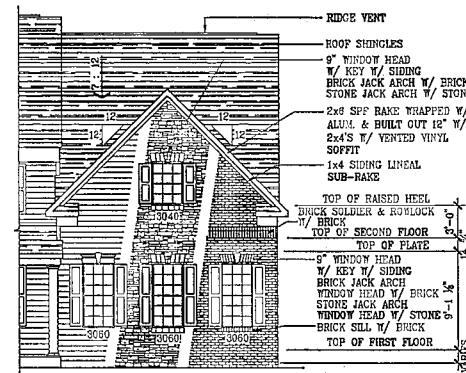
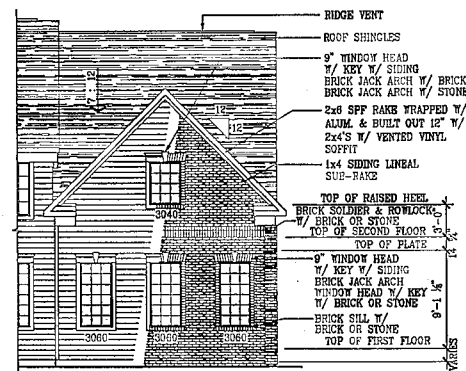
REV. BY	DATE	REV. #	REMARKS
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REV. BY	DATE	REV. #	REMARKS
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MANHATTAN
MODEL

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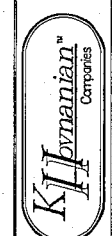
SCALE:
 $1/8" = 1'-0" @ 11 \times 17$
 $1/4" = 1'-0" @ 24 \times 36$

NOTES:

1. ALL INTERIOR & EXTERIOR WALLS ARE SHOWN @ 8 1/2" UNLESS OTHERWISE NOTED.

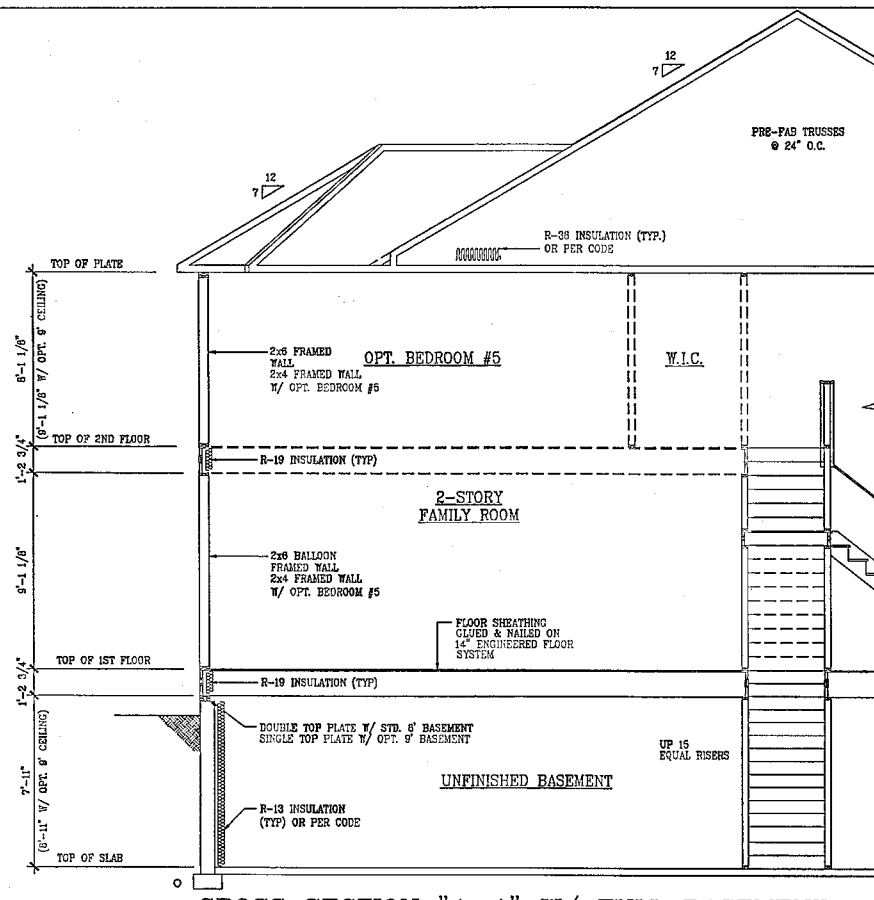
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MODEL
MANHATTAN
ET #

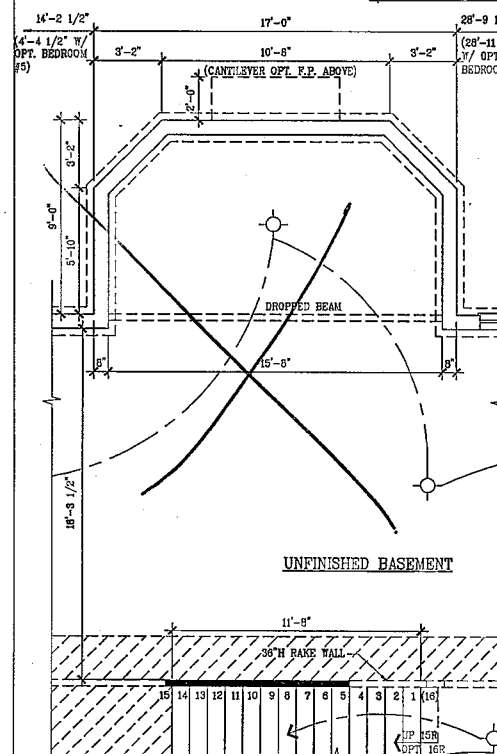


OPT. 3-CAR SIDE LOAD GARAGE

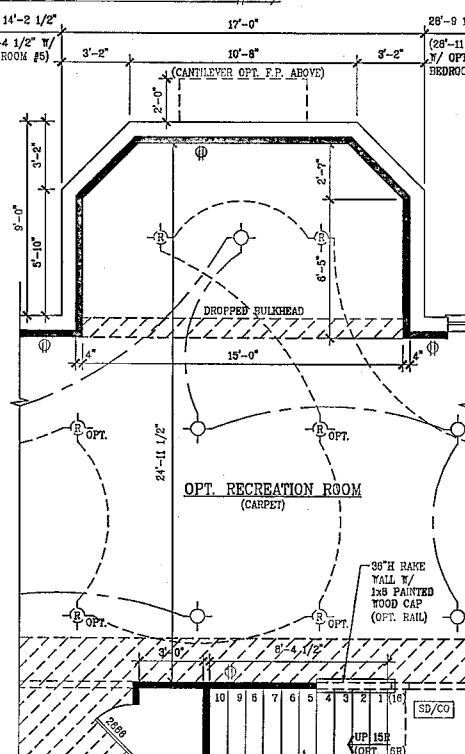
MANHATTAN
KV198_6039



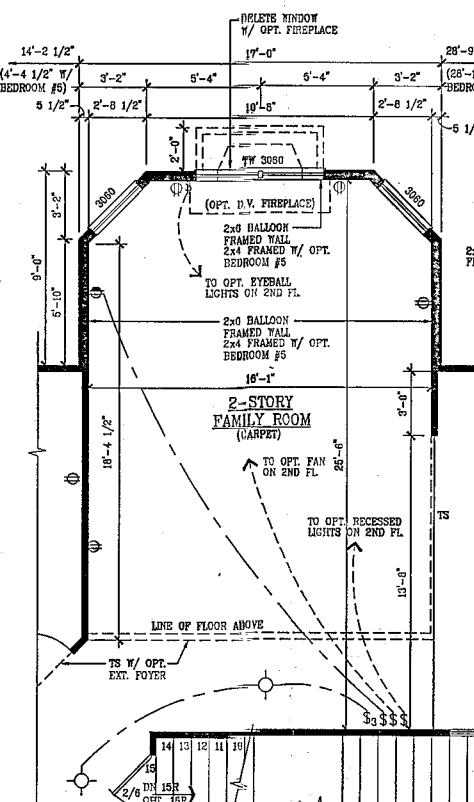
CROSS SECTION "A-A" W/ FULL BASEMENT
(SHOWN W/ OPT. BEDROOM #5)



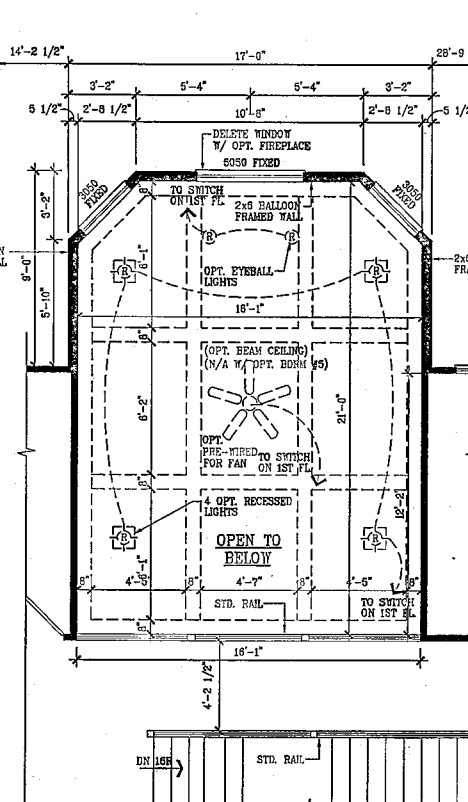
FOUNDATION - STD. BASEMENT



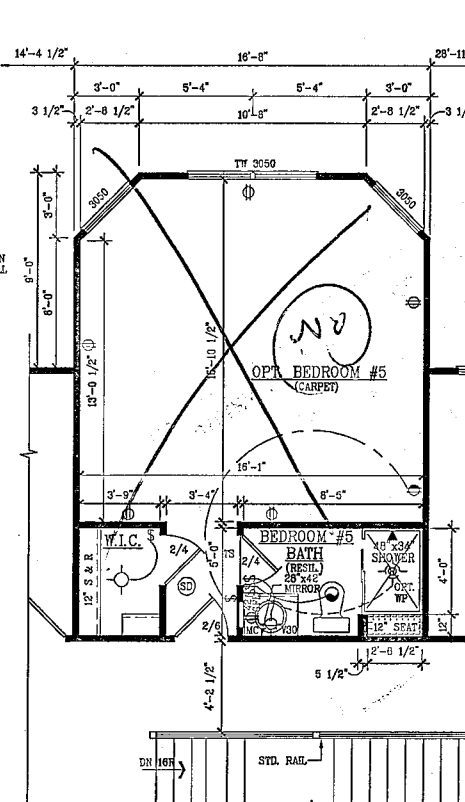
OPT. FINISHED LOWER LEVEL



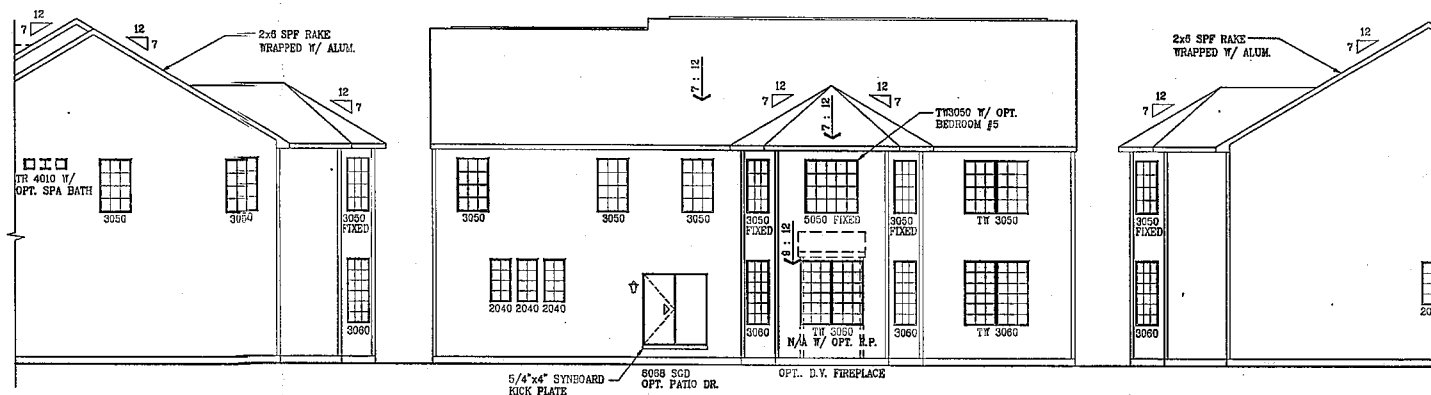
FIRST FLOOR PLAN



SECOND FLOOR PLAN
OPT. 4' FAMILY ROOM EXT.



SECOND FLOOR PLAN
W/ OPT. BEDROOM #5
W/ 4' FAMILY ROOM EXT.



RIGHT SIDE ELEVATION
SCALE: 1/8"=1'-0" @ 11 X 17
SCALE: 1/8"=1'-0" @ 24 X 36

REAR ELEVATION
SCALE: 1/8"=1'-0" @ 11 X 17
SCALE: 1/8"=1'-0" @ 24 X 36

LEFT SIDE ELEVATION
SCALE: 1/8"=1'-0" @ 11 X 17
SCALE: 1/8"=1'-0" @ 24 X 36

SCALE:
1/8" = 1'-0" @ 11 X 17
1/4" = 1'-0" @ 24 X 36

NOTES:
1. ALL INTERIOR & EXTERIOR WALLS
ARE SHOWN @ 3 1/2" UNLESS
OTHERWISE NOTED.

SHEET NUMBER
6F

SCALE
AS NOTED

DRAWN BY

DATE
6-20-2013

REV#	DATE	REMARKS

REV#	DATE	REMARKS

REV#	DATE	REMARKS

REV#	DATE	REMARKS

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