



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: 4-25-14

ONSITE SEWAGE DISPOSAL SYSTEM

P 546331

INSTALLATION
APPROVAL DATE: 10/15/14

PERMIT CONSTRUCTION

A _____

PROPERTY ADDRESS: 15293 Sweetbay Street

SUBDIVISION: Belle Haven Estates

LOT: 24

TAX ID: 04-373898

CONTRACTOR: McKim Construction

EMAIL: _____

CONTRACTOR ADDRESS: 38979 Housholder Road, Lovettsville, VA 20180

PHONE: 540-338-3583

PROPERTY OWNER: Belle Haven Baker

EMAIL: _____

OWNER ADDRESS: 10751 Falls Road Ste. 405, Lutherville, MD 21093

PHONE: _____

BAT UNIT MODEL: HOOT BNR 600

BAT UNIT SIZE: 600GPD

PUMP CHAMBER CAPACITY (GALLONS): _____

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>132' / 100</u>	INLET DEPTH: <u>4 3</u>
	TRENCH WIDTH: <u>3 2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</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.	

ISSUED BY: Robert Bricker

ISSUE DATE: 4/25/14

EXPIRATION DATE: 4-25-15

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

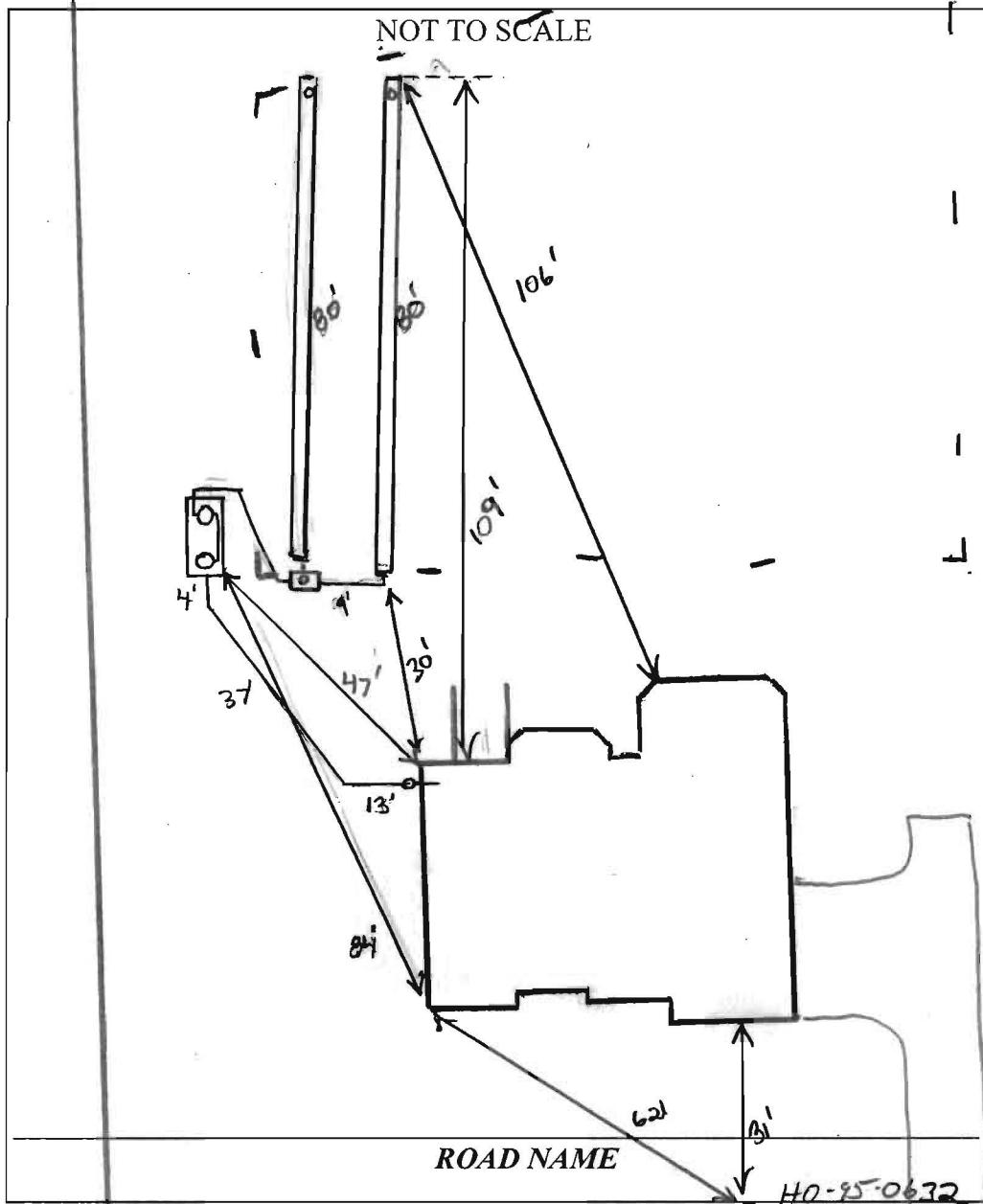
NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

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
2	3	8
NUMBER OF TRENCHES		
2		
TOTAL LENGTH		
160		
ABSORPTION AREA		
320'± SW		
DISTRIBUTION BOX LEVEL		
Yes		
DISTRIBUTION BOX BAFFLE		
Yes		
DISTRIBUTION BOX PORT		
Yes		

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	Yes
MANUFACTURER	Mayer Bros
CAPACITY	H600 GAL
SEAM LOC	Top
TANK LID DEPTH	2'
BAFFLES	Yes
BAFFLE FILTER	no
MANHOLE LOC	Front/Rear
6" PORT LOC	none
WATERTIGHT TEST	—
SLOTTED	Yes
DATE ON LID	N/A
PUMP/SEPTIC TANK LEVEL	—
MANUFACTURER	—
CAPACITY	— GAL
SEAM LOC	—
TANK LID DEPTH	—
BAFFLES	—
BAFFLE FILTER	—
MANHOLE LOC	—
6" PORT LOC	—
WATERTIGHT TEST	—
SLOTTED	—
DATE ON LID	—

PRE-CONSTRUCTION:

7/24/14 BAT tank location OK. No trench layout given (K)
 7/29/14 BAT unit set. Host rep on site installing BAT components.
 Elevation shot in field for trenches. Install Dbox close to plan, Keys
 @ top area of septic reserve. Install 2x 80' trenches on center as
 pointed out in field. OK to start trenches as you go. (K)

INSTALLATION: 7/30/14 Trenches installed per plan. Dbox set. Connections
 made to BAT unit. OK to cover work. Need BAT
 unit start-up prior to final approval (K) 10/15/14. Start up rec'd. SW

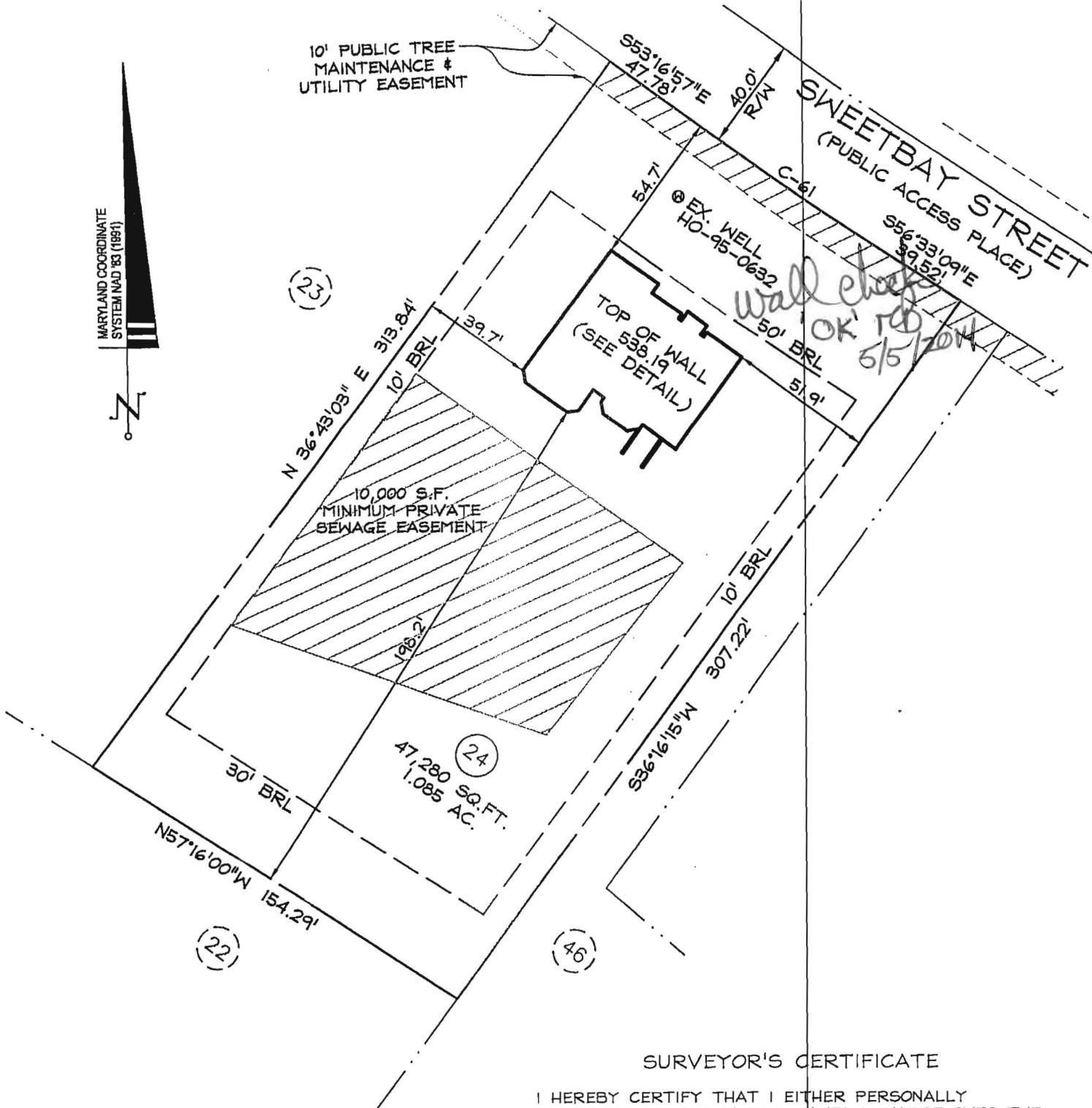
FINAL INSPECTOR

[Signature]

DATE OF APPROVAL

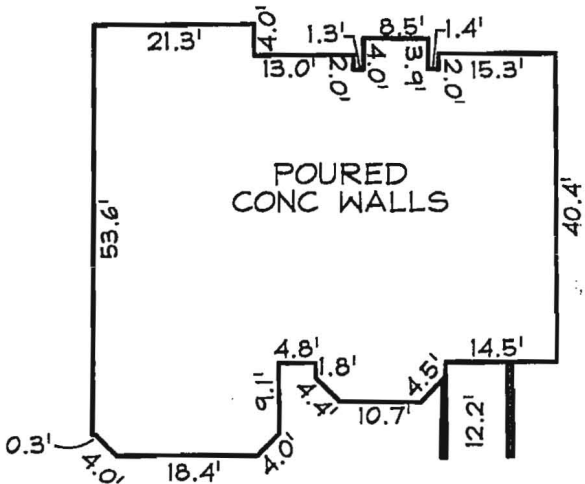
10/15/14

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TAN	CHD. BRG.	CHD. DIST.
C61	1127.27'	64.33'	03°16'11"	32.17'	S54°55'03"E	64.32'



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.



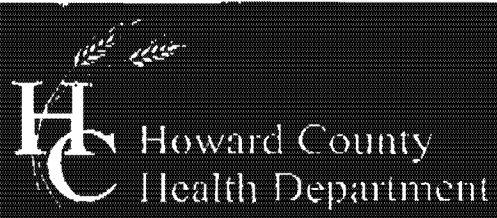
Robert B. Spaulding 4-23-14

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

Development Design Consultants

WALL CHECK SURVEY 15293 SWEETBAY STREET LOT 24 BELLE HAVEN ESTATES PLAT No. 19950 ELECTION DIST. No.4 HOWARD COUNTY, MD	
DDC JOB#:	06116.5
DATE:	04-22-2014
SCALE:	1"=50'
DRN. BY:	BKC
CHK. BY:	RBS

Bureau of Environmental Health **000065**

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

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

TDD 410-313-2323 | Toll Free 1-855-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

BA24

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 24th day of April 2014, among K. PUNNANIAN HUNTER 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 15293 SWEETBAY STREET, WOODRIDGE, MD 21797, in the 4th 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 15508 Folio 136. 107 24

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 as

15558 107 24

 20
40
88

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.

Steve Snyder
Owner V.P. K. Hovnanian Date 4/24/14
Hovnanian Homes of MD 1
OF MARYLAND LLC Steve Snyder

Paul Ruffalo 4/28/14
Howard County Health Department

Owner

Date

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name: K
Hovnanian Homes of MD 1
LLC
Reference/Control #: 85
LR - Agreement
Surcharge 40.00
SubTotal: 60.00
Total: 180.00
#2720503-9
04/28/2014 11:36
CC13-JE
#2720503 CC0503 -
Howard Co
Columbia/CC05.03.02 -
Register 02 404



MAYER BROS., INC.

Precast Concrete Products
6264 Race Rd. Elkridge, MD 21075

Letter of Satisfaction Hoot System Installation

Address of Property: 15293 Sweetbay St.
Woodbine, MD 21797

Date of Final Inspection: 8/19/14

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,

H. Michael Day
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, PermaEntry Basement Entries,
Scapewell Window Wells, Custom Precast Products

BQ

Barrick Dispatch Barrick Sale
301-845-6343 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 #01056030**STATION B****DATE 07/29/14 TIME 10:41:57**

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

Load 1

JOB BELHAV : BELL HAVEN
P.O. # 30220 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 702C LICENSE
DRIVER: C.F. KERNS

3 AXLES**LOT 2324**

GROSS	SCALE A	68540 lb
TARE	IN (STORED)	25500 lb
NET		43040 lb
NET		21.52 t

	Loads	Tons
DAILY	2	44.35
TOTAL	4	88.88
TIME IN 10:41:57		TIME OUT 10:41:57

MAT'L 22 : MD# 2 (AASHTO#3)
HAUL ZONE J10

WEIGHMASTERSally Gardner**RECEIVED BY***AR 9/5***301-674-3324 ANDY****Have a Nice Day!**

BQ

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

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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 #01056025**STATION B****DATE 07/29/14 TIME 10:35:42**

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

Load 2

JOB BELHAV : BELL HAVEN
P.O. # 30279 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 702A LICENSE
DRIVER: C.F. KERNS

3 AXLES**LOT 33-24**

		SCALE B	
GROSS			69400 lb
TARE	IN	(STORED)	23740 lb
NET			45660 lb
NET			22.83 t

	Loads	Tons
DAILY	1	22.83
TOTAL	3	67.36
TIME IN 10:35:42		TIME OUT 10:35:42

MAT'L 22 : MD# 2 (AASHTO#3)
HAUL ZONE J10

WEIGHMASTER

Sally Gardner

RECEIVED BY

ANDY
301-674-3324 ANDY

Have a Nice Day!

BQ

Barrick Dispatch
301-845-6343

Barrick Sale
301-845-6341

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WOODSBORO, MARYLAND

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

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BILLING INQUIRIES
1-800-762-2294

TICKET #01056113

STATION B

DATE 07/29/14 TIME 12:53:46

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

TRUCK 673B LICENSE
DRIVER: COLSON TRUCKING

3 AXLES

JOB BELHAV : BELL HAVEN
P.O. # 30279 PROJECT #:
70- R 975- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

LOT 24

GROSS IN SCALE B 69480 lb
TARE IN (STORED) 27040 lb
NET 42440 lb
NET 21.22 t

	Loads	Tons
DAILY	4	89.28
TOTAL	6	133.81
TIME IN 12:53:46		TIME OUT 12:53:46

MAT'L 22 : MD# 2 (AASHTO#3)
HAUL ZONE J10

WEIGHMASTER

Sally Gardner

RECEIVED BY
LOT 24

301-674-3324 ANDY

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

TICKET #01056105

STATION B

DATE 07/29/14 TIME 12:41:40

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

Load 24

JOB BELHAV : BELL HAVEN
P.O. # 30279 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"TRUCK 513D LICENSE
DRIVER: HUBBLE

3 AXLES

LOT 38 24

GROSS
TARE IN
NET
NET
SCALE A-
(STORED)68960 1b
21540 1b
47420 1b
23.71 t

	Loads	Tons
DAILY	3	68.06
TOTAL	5	112.59
TIME IN 12:41:40		TIME OUT 12:41:40

MAT'L 22 : MD# 2 (AASHTO#3)
HAUL ZONE J10

WEIGHMASTER

Sally Gardner

RECEIVED BY

PAIS

301-674-3324 ANDY

Have a Nice Day!

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 #01056458**STATION B****DATE 07/30/14 TIME 12:05:25***Load H5*

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

JOB BELHAV : BELL HAVEN
P.O. # 30315 PROJECT #:
70- R 97S- R UNION CHAPEL RD-
L BRIDALWREATH CT. TO ADD "2803"

TRUCK 513D LICENSE
DRIVER: HUBBLE

3 AXLES**LOT ~~28~~ 29**

	SCALE A	
GROSS	67180 lb	
TARE IN (STORED)	21540 lb	
NET	45640 lb	
NET	22.82 t	

	Loads	Tons
DAILY	1	22.82
TOTAL	7	156.63
TIME IN 12:05:25		TIME OUT 12:05:25

MAT'L 22 : MD# 2 (AASHTO#3)
HAUL ZONE J10

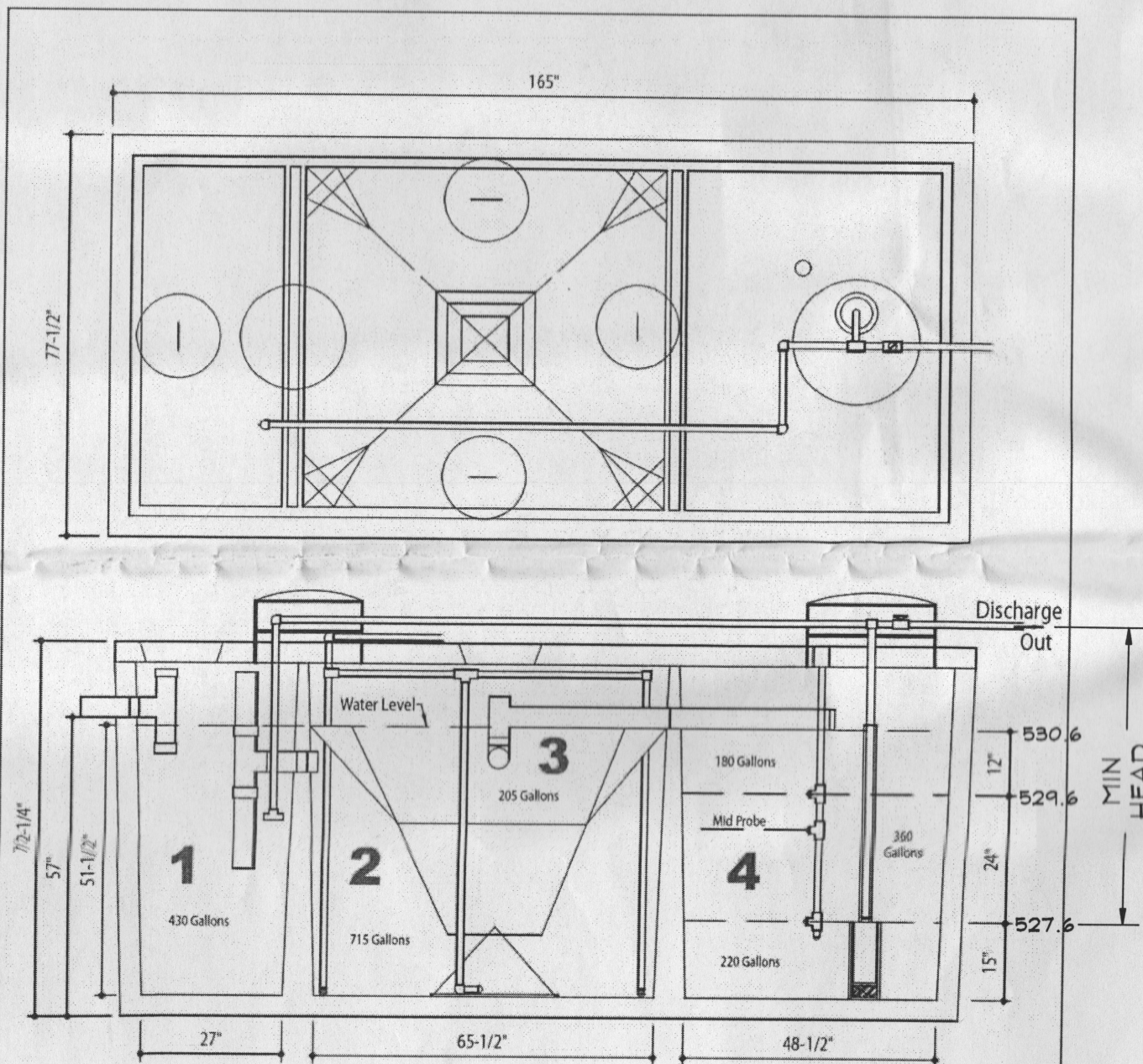
WEIGHMASTERSally Gardner**RECEIVED BY****LOT 24****Have a Nice Day!***301-674-3324**Andy*

GENERAL NOTES

1. BASE SQUARE FOOTAGE OF HOUSE: 2,072 SQ. FT.
2. EJECTOR PUMP REQUIRED TO SEWER BASEMENT
3. DRIVEWAY CULVERT IS NOT 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 DMK, AND DATED 06/25/07. EXISTING TOPOGRAPHY BASED ON GRADING PLAN PREPARED BY DENARIO 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 HOUSE PLANS.
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: 12,500 SQ. FT. / 0.29 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.



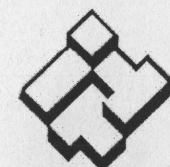
DESIGN DATA & GENERAL NOTES

- 1) Concrete strength f'c=4000 psi @ 28 days. Density = 150 pcf.
- 2) Cement Portland Type I/II per ASTM C 150-92.
- 3) Admixtures & plasticizers per ASTM C 360-86 & C 494-92.
- 4) Reinforcing per ASTM A 615. Min. 1/2" cover.

Mayer Brothers, Inc.
6364 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



ITT

GOULDS PUMPS
Wastewater

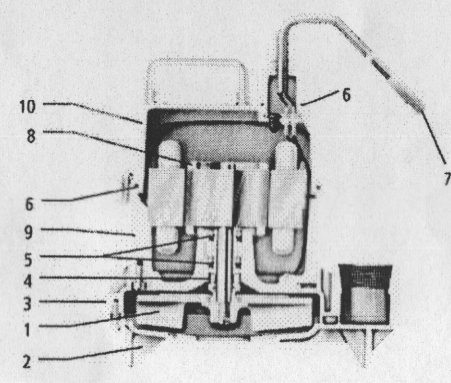
PERFORMANCE RATINGS

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

TOTAL HEAD	5.0' (MIN)
GALLONS PER MINUTE	53 GPM

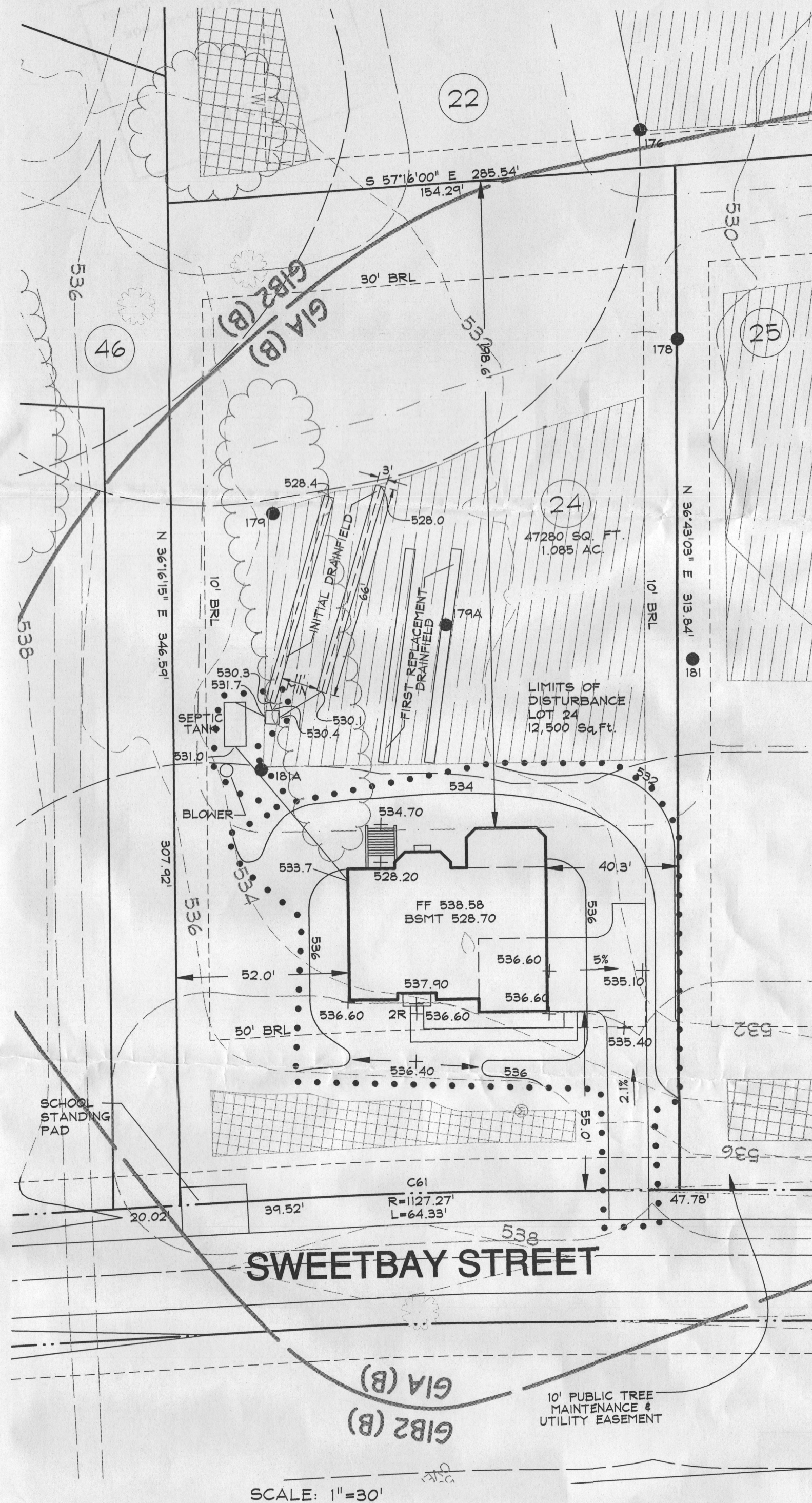
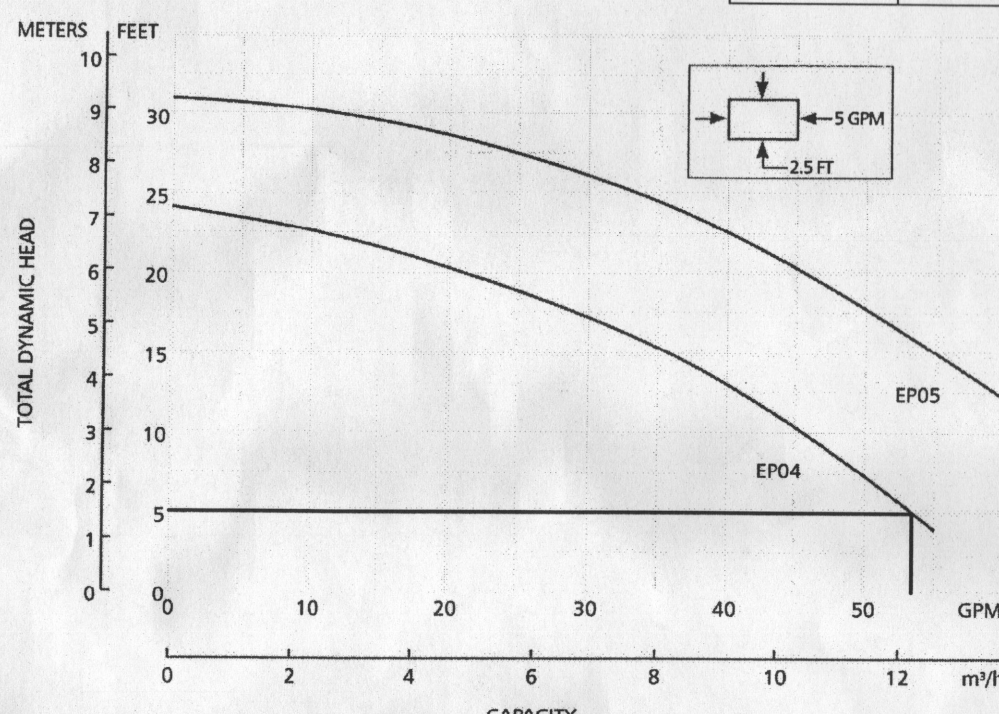
COMPONENTS

Item No.	Description
1	Impeller
2	Base
3	Pump Casing
4	Mechanical Seal
5	Ball Bearings
6	O-Rings
7	Power Cord
8	Oil Filled Motor
9	Motor Housing/ Stator Assembly
10	Motor Cover



LOT 24 PUMP ELEVATIONS

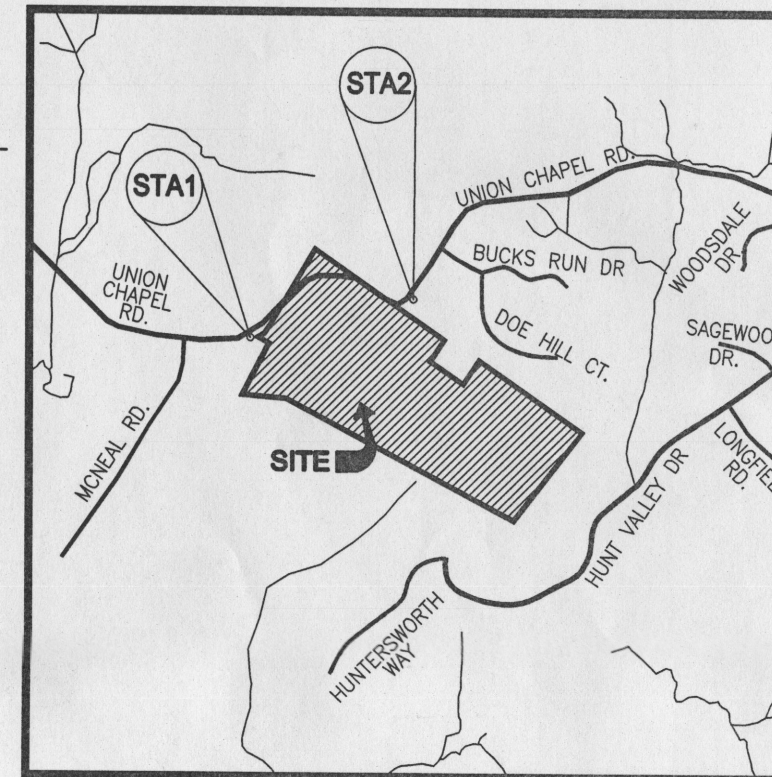
ON	OFF	ALARM
529.6	527.6	530.6



SCALE: 1"=30'

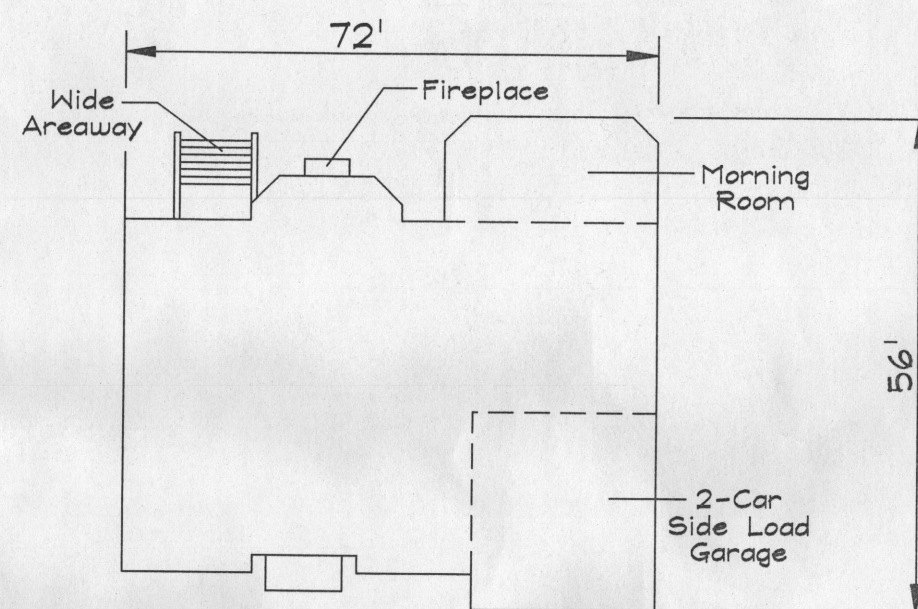
BENCHMARK

GEODETIC SURVEY CONTROL #1
N. 591488.42
E. 1297671.25
ELEV. 148A
538.43
GEODETIC SURVEY CONTROL #2
N. 591683.88
E. 1296121.80
ELEV. 148B
542.23
ADD MAP COORDINATES
4612/CA



VICINITY MAP

SCALE: 1" = 2000'



MANHATTAN
ELEVATION 'C'
BRICK & STONE FRONT

DATA SOURCES:

DRAWING LEGEND

- 500 PROPOSED GRADE
- 502 PROPOSED LIMIT OF DISTURBANCE
- 665.5 PROP. SPOT ELEV./FLOW ARROW
- PROPOSED 20' SEPTIC RESERVE
- 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
BAT Site Plan approved 5/5/2014
Date
Signature
Extra Copies

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. 27022, Expiration
Date: 01/23/16.

03/07/2014
DATE
PAUL G. CAVANAUGH, P.E.

DDC inc.
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. HOVANNIAN HOMES
1802 Brightwood Road
Landover, Maryland 20785
(301) 683-8268
DEVELOPER:

SITE ADDRESS:
LOT 24
15293 Sweetbay St.
Woodbine, Maryland 21797

**BELLE HAVEN ESTATES
LOT 24**

**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: PGC/BKC

BLOCK / GRID: DATE: 03/10/14

PARCEL #: 66 DDC JOB#: 06116.5

ZONE / USE: RC-DEO SHEET NUMBER:

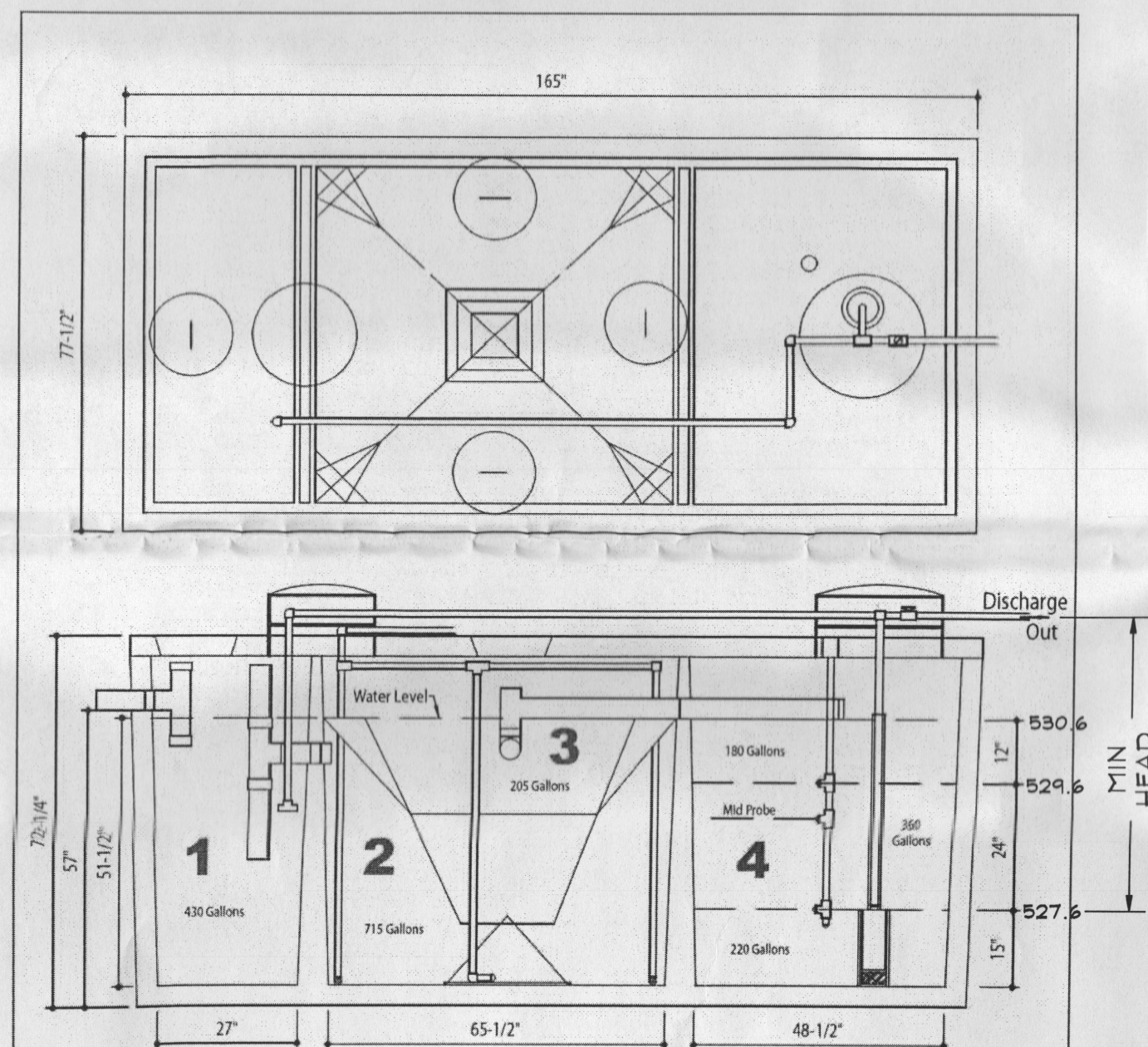
DWG. SCALE: 1"=30' 1 of 1

GENERAL NOTES

1. BASE SQUARE FOOTAGE OF HOUSE: 2,072 SQ.FT.
NUMBER OF BEDROOMS: 4
2. EJECTOR PUMP REQUIRED TO SEWER BASEMENT
DRIVEWAY CULVERT IS NOT REQUIRED PER THE APPROVED ROAD
DRAWINGS, F-07-38.
3. THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2/2/04
COMPREHENSIVE ZONING PLAN AND PER COM-LITE ZONING REGULATIONS
DATED 7/28/06.
4. PLAT REFERENCE: #19948
5. BASE INFORMATION SHOWN ON THIS PLAN IS BASED ON PLANS
PREPARED BY DMW, 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.
6. 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 HOUSE PLANS.
7. 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.
8. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT
LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK
BEING DONE.
9. TOTAL LIMIT OF DISTURBANCE: 12,500 SQ. FT. / 0.29 AC.
10. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED PER THE
PREVIOUSLY APPROVED FINAL PLAN (F-07-38).
11. 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.
12. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR
WRITTEN CONSENT OF THE CIVIL ENGINEER (DDC, INC.) MAY CAUSE THE
WORK TO BE UNACCEPTABLE.
13. THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND
DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN
DISAGREEMENT.
14. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND
OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF
THE ENVIRONMENT.
15. 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.
16. 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.
17. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED
PERCOLATION CERTIFICATION PLAN.
18. UPON BUILDING PERMIT 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 MANUFACTURER'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.



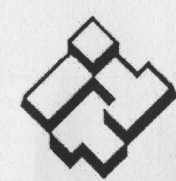
DESIGN DATA & GENERAL NOTES

- (1) Concrete strength f'c=4000 p.s.i. @ 28 days. Density = 150 p.c.f.
- (2) Cement - Portland Type III per ASTM C 150-92.
- (3) Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
- (4) Reinforcing per ASTM A108. Min. 1 1/2" cover.

Mayer Brothers, Inc.
6204 Race Road
Elkridge, Maryland 21075
Tel: 410.796.1434
Fax: 410.796.1438
www.mayerbrosgreencast.com

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

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



ITT

GOULDS PUMPS
Wastewater

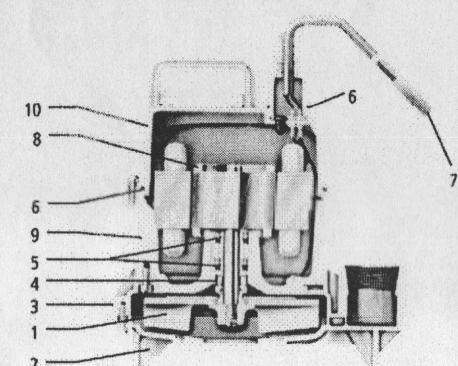
PERFORMANCE RATINGS

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

TOTAL HEAD	5.0' (MIN)
GALLONS PER MINUTE	55 GPM

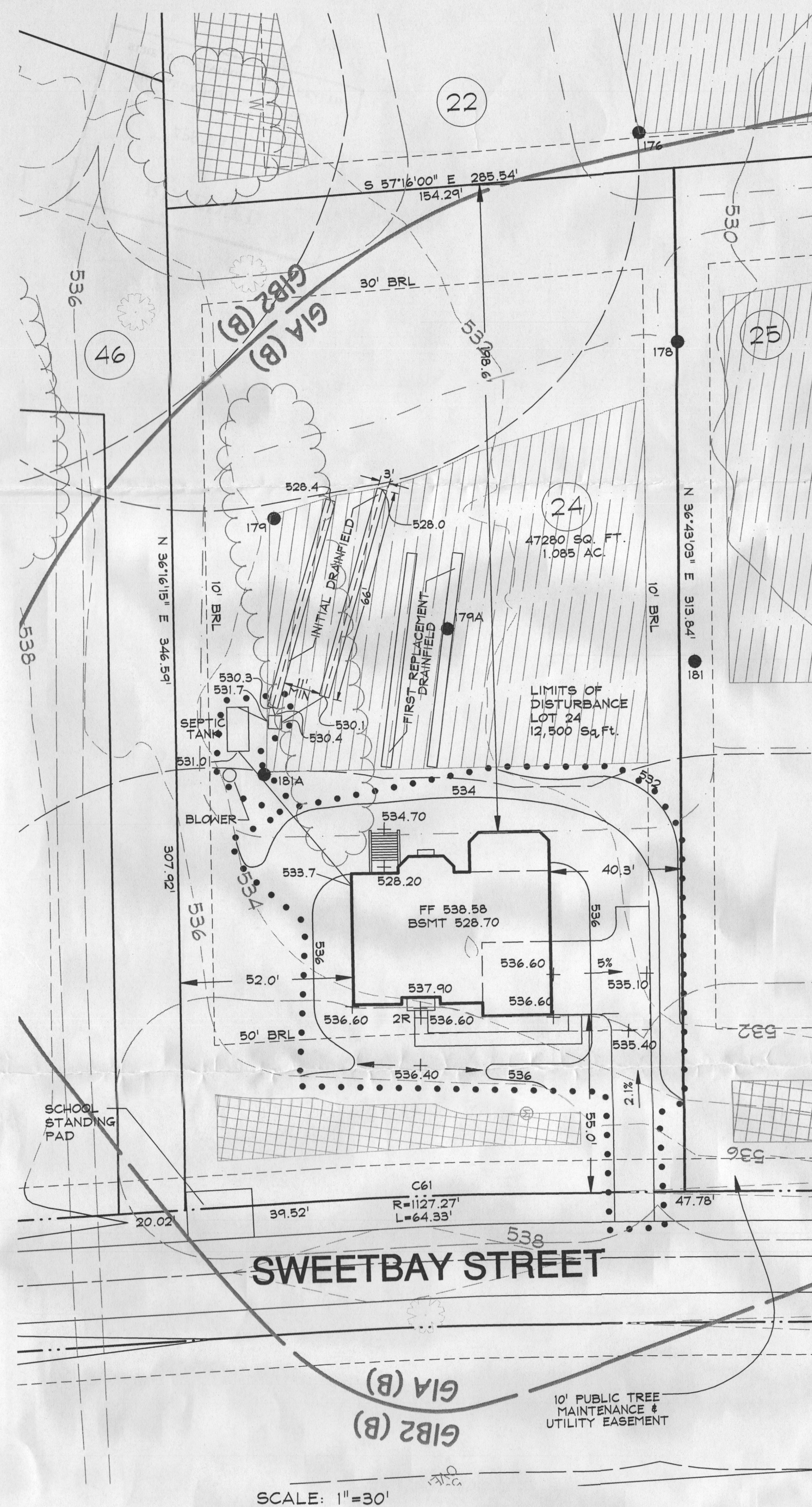
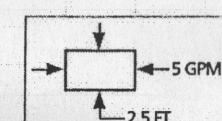
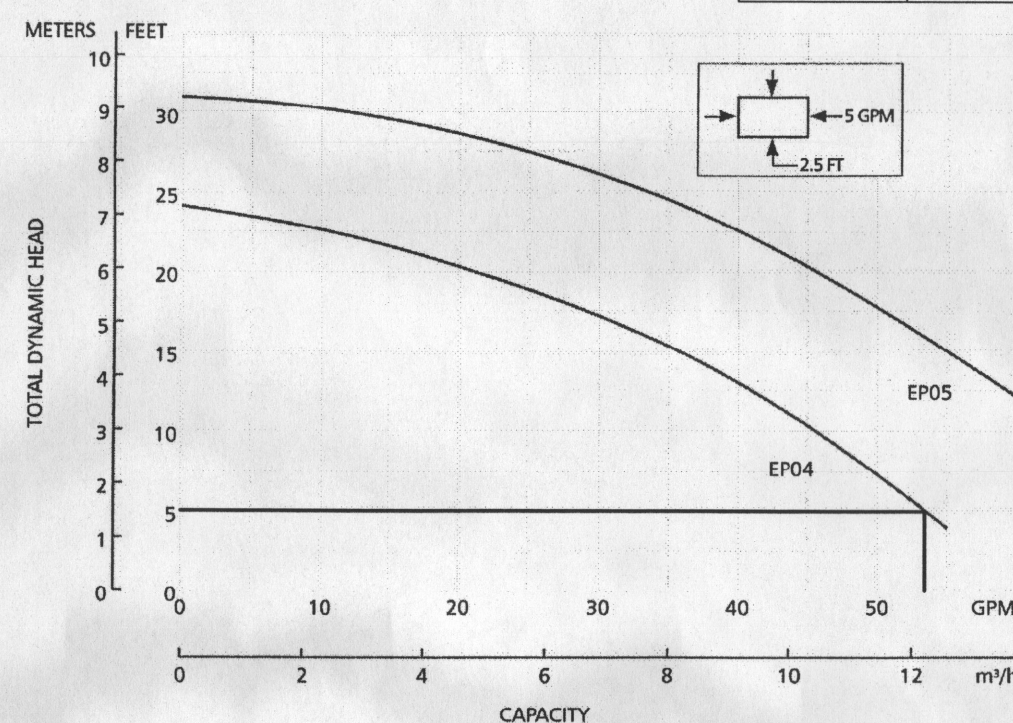
COMPONENTS

Item No.	Description
1	Impeller
2	Base
3	Pump Casing
4	Mechanical Seal
5	Ball Bearings
6	O-Rings
7	Power Cord
8	Oil Filled Motor
9	Motor Housing/ Stator Assembly
10	Motor Cover



LOT 24 PUMP ELEVATIONS

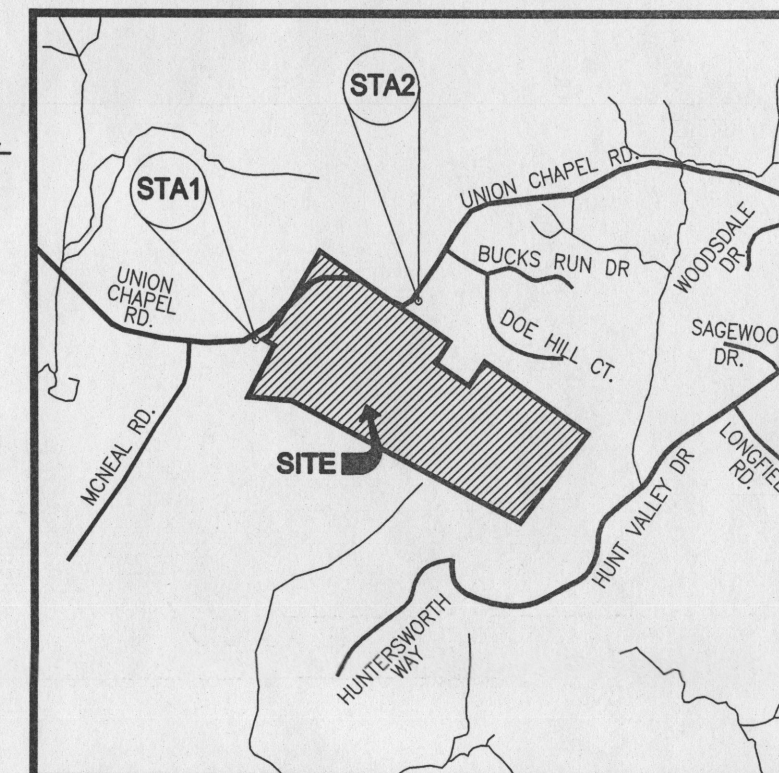
ON	OFF	ALARM
529.6	527.6	530.6



SCALE: 1"=30'

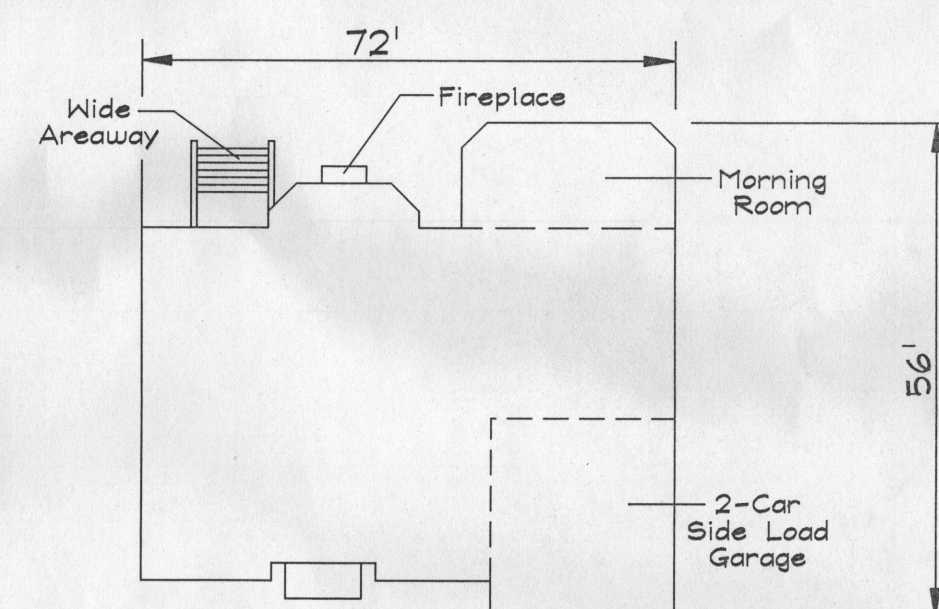
BENCHMARK

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E.	1297571.23		
A.A.	146A		
ELEV.	535.43		
GEODETIC SURVEY CONTROL #2			
N.	591693.88		
E.	1299121.80		
B.M.	140B		
ELEV.	542.23		
ADC MAP COORDINATES 4812/C4			



VICINITY MAP

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MANHATTAN
ELEVATION 'C'
BRICK & STONE FRONT

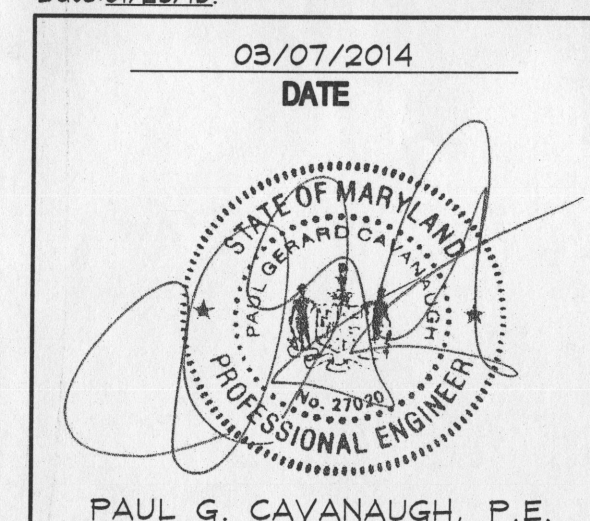
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- 127 FAILED PERCOLATION TEST

Approved Septic System Plan
Howard County Health Department
BAT Site Plan
approved
Blisker
signature 3 of 3
Extra Copies

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. 27622, Expiration
Date: 01/25/16.



DDC Inc.
Development Design Consultants

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DWG. SCALE: 1"=30' 1 of 1