

**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: 8/5/12/14 **ONSITE SEWAGE DISPOSAL SYSTEM** P 546356

INSTALLATION APPROVAL DATE: \_\_\_\_\_ **PERMIT** A \_\_\_\_\_

**CONSTRUCTION**

PROPERTY ADDRESS: 15029 Double Bridges Court

SUBDIVISION: Meriwether Farm Section 1 LOT: 10 TAX ID: \_\_\_\_\_

CONTRACTOR: Ben Lewis Plumbing EMAIL: \_\_\_\_\_

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

PROPERTY OWNER: K Hovnanian Homes EMAIL: \_\_\_\_\_

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

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

PUMP CHAMBER CAPACITY (GALLONS): \_\_\_\_\_ PUMP SIZE: \_\_\_\_\_

NUMBER OF BEDROOMS: 4 HOUSE SQ. FT. \_\_\_\_\_ APPLICATION RATE: 0.8

DISTRIBUTION SYSTEM: GRAVITY FED  LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>155'</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>9</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>6'</u>
LOCATION:	<b>PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.</b>	
NOTES:	Set BAT unit and pump tank per plan. Set distribution box per plan. Install equal length trenches on contour.	

ISSUED BY: Jeff Williams ISSUE DATE: 8/13/14 EXPIRATION DATE: 8/13/15

- 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.**

NOT TO SCALE

See As-Built Drawing  
On Separate Sheet

ROAD NAME

PRE-CONSTRUCTION

10/1/2014 Layout done. (BB)

INSTALLATION:

10/7/2014 Tank set. Working on trenches. (BB)  
10/10/2014 System finished. Need BAT certification from  
Mayer Bros. inspector. (BB)

Received letter of satisfaction for the Root System Install.

Date of final inspection: 12/10/14 (A.O.)

FINAL INSPECTOR

Hank Oswald

DATE OF APPROVAL

12/19/14

TRENCH/DRAINFIELD DATA

WIDTH INLET BOTTOM

3 3.5' 8'

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 I LEVEL Yes

MANUFACTURER Mayer Bros

CAPACITY ~2,100 GAL

SEAM LOC Top

TANK LID DEPTH 05'-15'

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

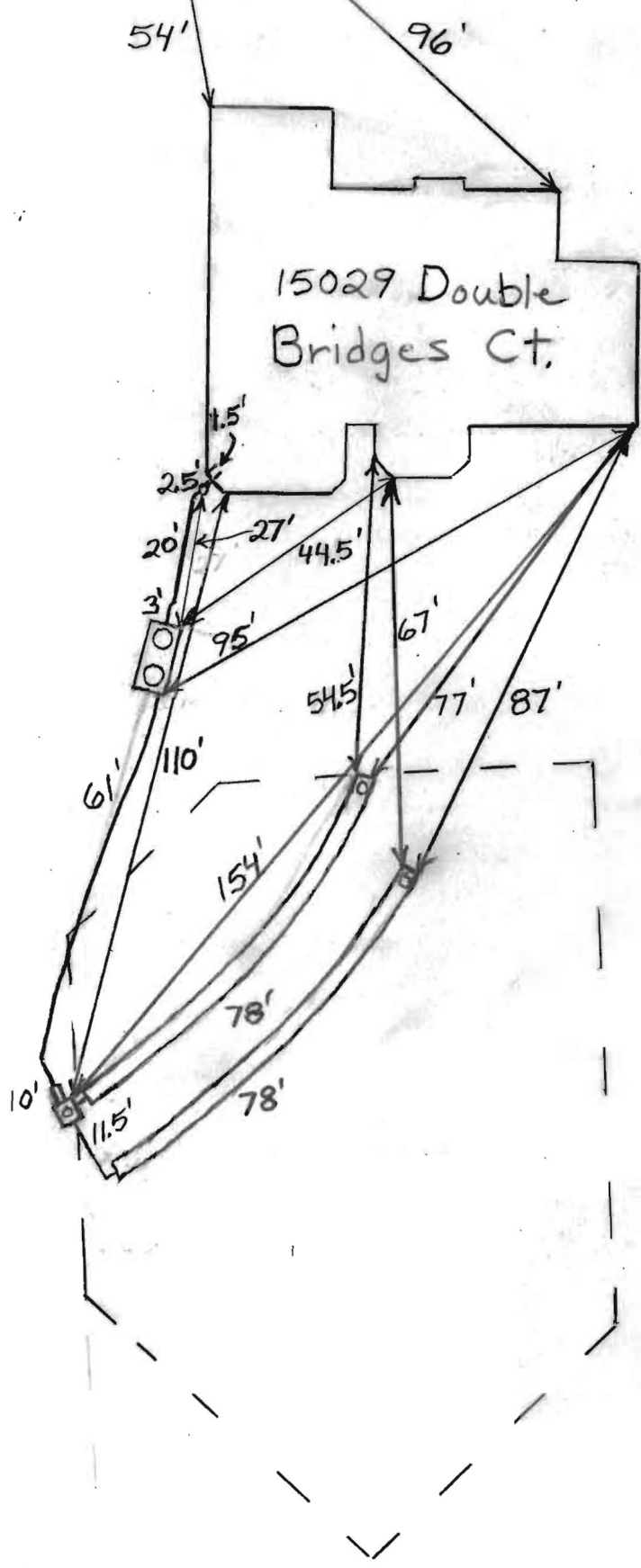
6" PORT LOC

WATERTIGHT TEST

SLOTTED

DATE ON LID

HO-95-1698





**MAYER BROS., INC.**

*Precast Concrete Products*

6264 Race Rd. Elkridge, MD 21075

## Letter of Satisfaction Hoot System Installation

Address of Property: 15029 Double Bridges Ct  
Glenn, MD. 21737

Date of Final Inspection: 12/10/14

Installer: Ben Lewis Plumbing

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 Sample  
Name of Inspector  
Mayer Bros., Inc.

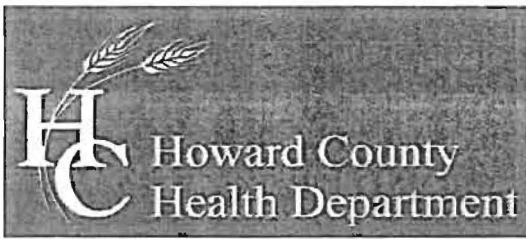
PH: 410-796-1434

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



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 12<sup>th</sup> day of May, 2014, among K. HANNANIAN HOMES 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 15029 Double Bridge Court, Glenwood 21738, lot 10, 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 15416 Folio 00473.

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

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.


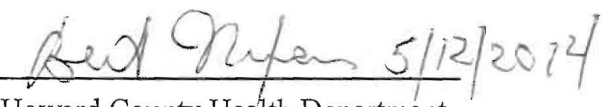
G. This agreement may be voided at any time at the discretion of the County.

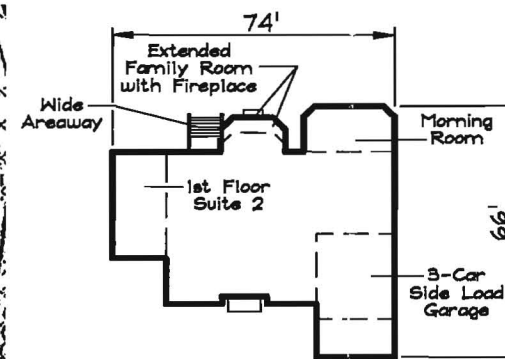
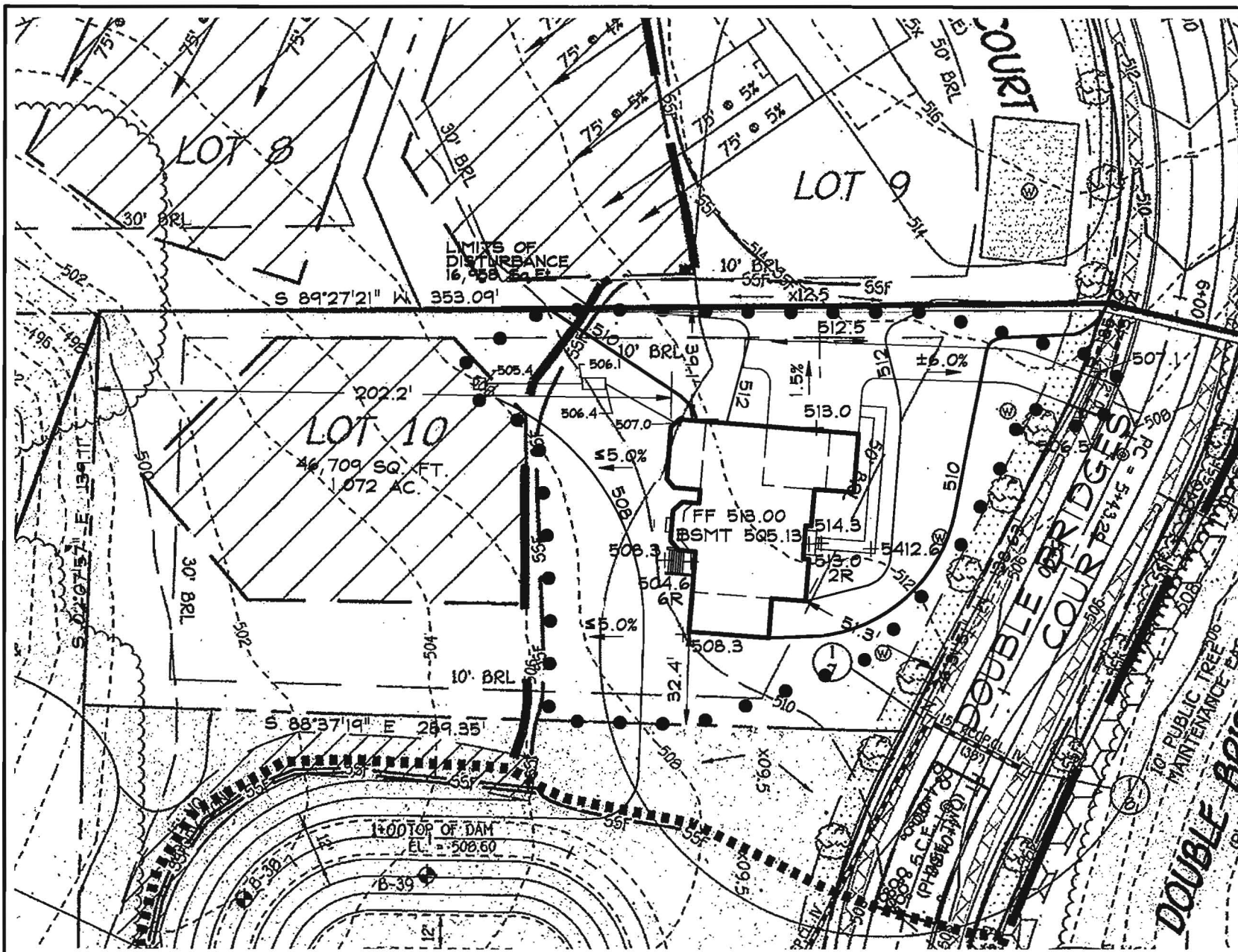
H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

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 <u>STEVE SNYDER</u> Date <u>5/12/14</u> VICE PRESIDENT K. HUMANITARIAN HOME OF MARYLAND LLC	_____ Owner _____ Date _____
 Howard County Health Department	



MANHATTAN  
ELEVATION 'C'  
BRICK AND STONE FRONT

**GENERAL NOTES**

1. BASE SQUARE FOOTAGE OF HOUSE: 4,140 sq. ft.  
NUMBER OF BEDROOMS: 5
2. BASE INFORMATION SHOWN ON THIS PLAN IS SHOWN PER THE APPROVED FINAL PLAN, F-08-139 PREPARED BY FISHER, COLLINS AND CARTER INC. AND DATED 12/17/08.
3. EJECTOR PUMP REQUIRED TO SEWER BASEMENT
4. DRIVEWAY CULVERT SHOWN PER THE APPROVED ROAD DRAWINGS, F-08-139.



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

**DDC JOB#:** 13085.1

**DATE:** 8/21/13

**SCALE:** 1" = 50'

**DES. BY:** BKC

**DRN. BY:** BKC

**CHK. BY:** BKC

**MERIWETHER FARM**  
4th ELECTION DISTRICT HOWARD COUNTY, MD  
TAX MAP 21, PARCEL 24

**LOT 10**  
15029 DOUBLE BRIDGES COURT  
GLENWOOD, MD 21738  
PLOT PLAN  
KHOV ELEVATION

**OWNER/BUILDER:** K.HOVNANIAN HOMES  
1802 Brightseat Road  
Landover, Maryland 20785  
(301)683-6268



**FT**Finksburg Dispatch  
410-833-4400Finksburg Sales  
410-833-4400Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

FINKSBURG, MARYLAND

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

**INSPECTOR'S COPY**FAX  
410-833-4909BILLING INQUIRIES  
1-800-762-2294**TICKET #00330003**

STATION FT

DATE 10/06/14 TIME 11:36:46

**CUSTOMER LEWBN**  
BEN LEWIS, INC.  
23407 FREDERICK RD  
CLARKSBURG, MD 20871**JOB MERFAR : MERIWEATHER FARMS**  
P.O. # 30984 PROJECT #:  
15029 DOUBLE BRIDGE CT GLENELG MD**TRUCK 459B LICENSE**  
DRIVER: GEORGE COWMAN - 5284

3 AXLES

ANDY 301-674-3324

GROSS	SCALE A	67860 lb
TARE	IN (STORED)	25960 lb
NET		41900 lb
NET		20.95 t


	Loads	Tons
DAILY	6	131.25
TOTAL	6	131.25
TIME IN	11:36:46	TIME OUT 11:36:46

**MAT'L 022W : #2 STONE-DOUBLE WASHED**  
**HAUL ZONE L-10**

WEIGHMASTER

\_\_\_\_\_  
Jim Cooke

RECEIVED BY

\_\_\_\_\_  


**FT**Finksburg Dispatch  
410-833-4400Finksburg Sales  
410-833-4400Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

FINKSBURG, MARYLAND

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

INSPECTOR'S COPY

FAX  
410-833-4909BILLING INQUIRIES  
1-800-762-2294

TICKET #00330002

STATION FT

DATE 10/06/14 TIME 11:34:34

**CUSTOMER LEWBEN**  
BEN LEWIS, INC.  
23407 FREDERICK RD  
CLARKSBURG, MD 20871**JOB HERFAR : MERIWEATHER FARMS**  
P.O. # 30984 PROJECT #:  
15029 DOUBLE BRIDGE CT GLENELG MD**TRUCK 459A LICENSE**  
DRIVER: GEORGE COWMAN - 5285

3 AXLES

ANDY 301-674-3324

GROSS	SCALE A	68760 lb
TARE	IN (STORED)	26740 lb
NET		42020 lb
NET		21.01 t

	Loads	Tons
DAILY	5	110.30
TOTAL	5	110.30
TIME IN	11:34:34	TIME OUT 11:34:34

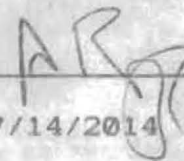
**MAT'L 022W : #2 STONE-DOUBLE WASHED**  
**HAUL ZONE L-10**

WEIGHMASTER \_\_\_\_\_

Jim Cooke

RECEIVED BY \_\_\_\_\_

TARE WEIGHT DUE 7/14/2014



**FT**Finksburg Dispatch  
410-833-4400Finksburg Sales  
410-833-4400Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

FINKSBURG, MARYLAND

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

INSPECTOR'S COPY

FAX  
410-833-4909BILLING INQUIRIES  
1-800-762-2294

TICKET #00329995

STATION FT

DATE 10/06/14 TIME 11:08:56

**CUSTOMER LEWBEN**  
BEN LEWIS, INC.  
23407 FREDERICK RD  
CLARKSBURG, MD 20871**JOB MERFAR : MERIWEATHER FARMS**  
P.O. # 30984 PROJECT #:  
15029 DOUBLE BRIDGE CT GLENELG MD**TRUCK 471A LICENSE**  
DRIVER: KRUG'S TRUCKING

3 AXLES

ANDY 301-674-3324

GROSS	SCALE A	69500 lb
TARE	IN (STORED)	25860 lb
NET		43640 lb
NET		21.82 t

	Loads	Tons
DAILY	4	89.29
TOTAL	4	89.29
TIME IN 11:08:56		TIME OUT 11:08:56

**MAT'L 0051 : WASHED #2 AASHTO 3**  
**HAUL ZONE L-10**

WEIGHMASTER \_\_\_\_\_

Jim Cooke

RECEIVED BY \_\_\_\_\_

*ARyz*

**FT**

Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

**INSPECTOR'S COPY**

Finksburg Dispatch  
 410-833-4400

Finksburg Sales  
 410-833-4400

FINKSBURG, MARYLAND

FAX  
 410-833-4909

BILLING INQUIRIES  
 1-800-762-2294

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

**TICKET #00329916**

STATION FT

DATE 10/06/14 TIME 06:32:01

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

**JOB MERFAR : MERIWEATHER FARMS**  
 P.O. # 30984 PROJECT #:  
 15029 DOUBLE BRIDGE CT GLENELG MD

**TRUCK 467B LICENSE** 3 AXLES  
 DRIVER: ALL LANDSCAPE SUPPLY 7027

ANDY 301-674-3324

GROSS	SCALE A	68820 lb
TARE	IN (STORED)	23140 lb
NET		45680 lb
NET		22.84 t

	Loads	Tons
DAILY	3	67.47
TOTAL	3	67.47
TIME IN 06:32:01		TIME OUT 06:32:01

**MAT'L 0051 : WASHED #2 AASHTO 3**  
**HAUL ZONE L-10**

WEIGHMASTER

\_\_\_\_\_  
 Jim Cooke

RECEIVED BY

\_\_\_\_\_  
*ATG*

PP 7007  
 PWB ASSOCIATES, LLC (07/13/09)

**FT**Finksburg Dispatch  
410-833-4400Finksburg Sales  
410-833-4400Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

FINKSBURG, MARYLAND

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

INSPECTOR'S COPY

FAX  
410-833-4909BILLING INQUIRIES  
1-800-762-2294

TICKET #00329915

STATION FT

DATE 10/06/14 TIME 06:28:20

**CUSTOMER LEW BEN**  
BEN LEWIS, INC.  
23407 FREDERICK RD  
CLARKSBURG, MD 20871**JOB MERFAR : MERIWEATHER FARMS**  
P.O. # 30984 PROJECT #:  
15029 DOUBLE BRIDGE CT GLENELG MD**TRUCK 448A LICENSE**  
DRIVER: K.D. CAPLE

3 AXLES

ANDY 301-674-3324

GROSS	SCALE A	69880 lb
TARE IN	(STORED)	24300 lb
NET		45580 lb
NET		22.79 t

	Loads	Tons
DAILY	2	44.63
TOTAL	2	44.63
TIME IN 06:28:20		TIME OUT 06:28:20

**MAT'L 0051 : WASHED #2 AASHTO 3**  
**HAUL ZONE L-10**

WEIGHMASTER

\_\_\_\_\_  
Jim Cooke

RECEIVED BY

\_\_\_\_\_  
*ARJ*

**FT**Finksburg Dispatch  
410-833-4400Finksburg Sales  
410-833-4400Land Sand & Gravel, Inc. T/A  
**S. W. Barrick & Sons**  
**Finksburg Terminal**

FINKSBURG, MARYLAND

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

INSPECTOR'S COPY

FAX  
410-833-4909BILLING INQUIRIES  
1-800-762-2294

TICKET #00329912

STATION FT

DATE 10/06/14 TIME 06:12:42

**CUSTOMER LEWBN**  
BEN LEWIS, INC.  
23407 FREDERICK RD  
CLARKSBURG, MD 20871**JOB MERFAR : MERIWEATHER FARMS**  
P.O. # 30984 PROJECT #:  
15029 DOUBLE BRIDGE CT GLENELG MD**TRUCK 471A LICENSE**  
DRIVER: KRUG'S TRUCKING

3 AXLES

ANDY 301-674-3324

GROSS	SCALE A	69540 lb
TARE	IN (STORED)	25860 lb
NET		43680 lb
NET		21.84 t

	Loads	Tons
DAILY	1	21.84
TOTAL	1	21.84
TIME IN 06:12:42		TIME OUT 06:12:42

**MAT'L 0051 : WASHED #2 AASHTO 3**  
**HAUL ZONE L-10**

WEIGHMASTER

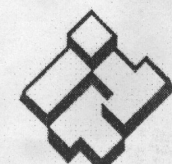
\_\_\_\_\_  
Jim Cooke

RECEIVED BY

\_\_\_\_\_  
*ARuggs*

**GENERAL NOTES**

- BASE SQUARE FOOTAGE OF HOUSE: 4,140 SQ. FT.
- NUMBER OF BEDROOMS: 4
- EJECTOR PUMP REQUIRED TO SEWER BASEMENT
- DRIVEWAY CULVERT SHOWN PER THE APPROVED ROAD DRAWINGS, F-08-139.
- 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.
- PLAT REFERENCE: #21339
- BASE INFORMATION SHOWN ON THIS PLAN IS SHOWN PER THE APPROVED FINAL PLAN, F-08-139 PREPARED BY FISHER, COLLINS AND CARTER INC. AND DATED 12/17/08.
- 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.
- THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEVELOPMENT 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.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TOTAL LIMIT OF DISTURBANCE: 22,350 SQ. FT. / 0.51 AC.
- STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED PER THE PREVIOUSLY APPROVED FINAL PLAN (F-08-139).
- 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.
- DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE CIVIL ENGINEER (DDC, INC.) MAY CAUSE THE WORK TO BE UNACCEPTABLE.
- THE DIMENSIONED DISTANCES SHALL GOVERN IF SCALED AND DIMENSIONED DISTANCES ON THIS PLAN ARE FOUND TO BE IN DISAGREEMENT.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM LOT AREA AND OWNERSHIP WIDTH AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- 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.
- 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.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 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.
- THE DEVELOPMENT OF THIS LOT DOES NOT REQUIRE AN ENVIRONMENTAL CONCEPT PLAN SINCE STORMWATER MANAGEMENT WAS PREVIOUSLY APPROVED UNDER F-08-139.



**ITT**

**GOULDS PUMPS**  
Wastewater

**PERFORMANCE RATINGS**

Total Head (ft. of water)	Gallons Per Minute	EP04	EP05
5	53	-	-
10	46	62	-
15	36	45	-
20	21	46	-
25	0	33	-
30	-	11	-

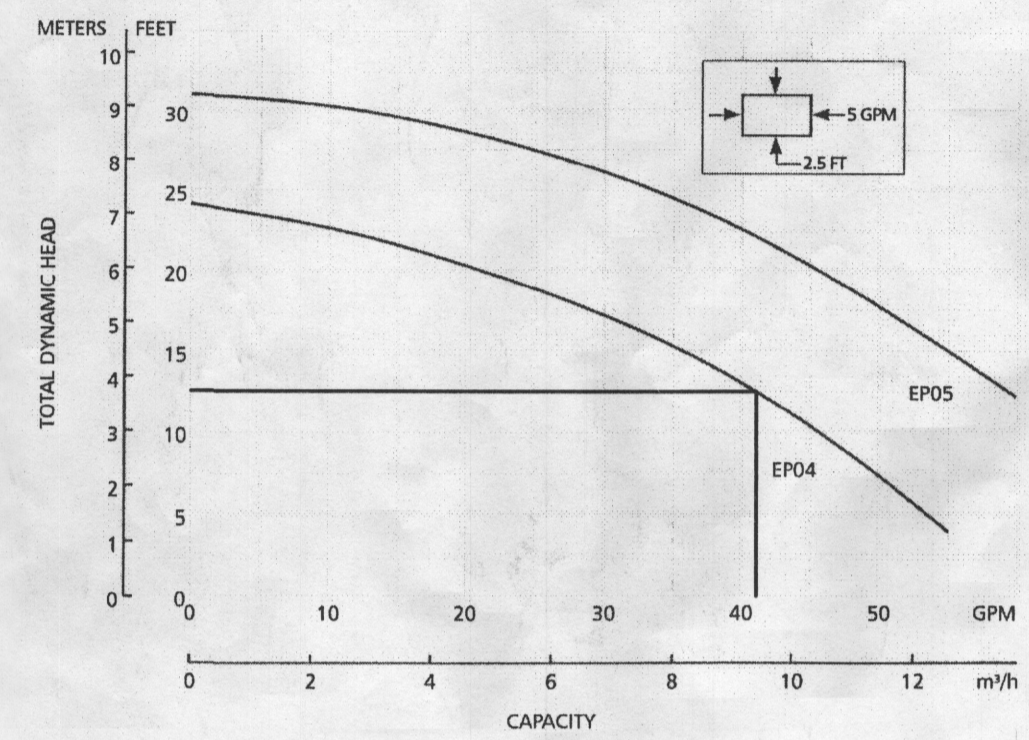
STATIC HEAD	5.0 (MIN)
FRICTION HEAD	7.5'
DISTAL END HEAD	0'
TOTAL DYNAMIC HEAD	12.5'
GALLONS PER MINUTE	41 GPM
DOSE	49.2 GAL
PUMP RUN TIME	1.2 MIN

**TOTAL DYNAMIC HEAD CALCULATIONS**

**STATIC HEAD**  
OFF FLOAT ELEVATION: 502.4'  
HIGH POINT OF THE SYSTEM: + 507.4'  
VERTICAL ELEVATION CHANGE: 5.0'

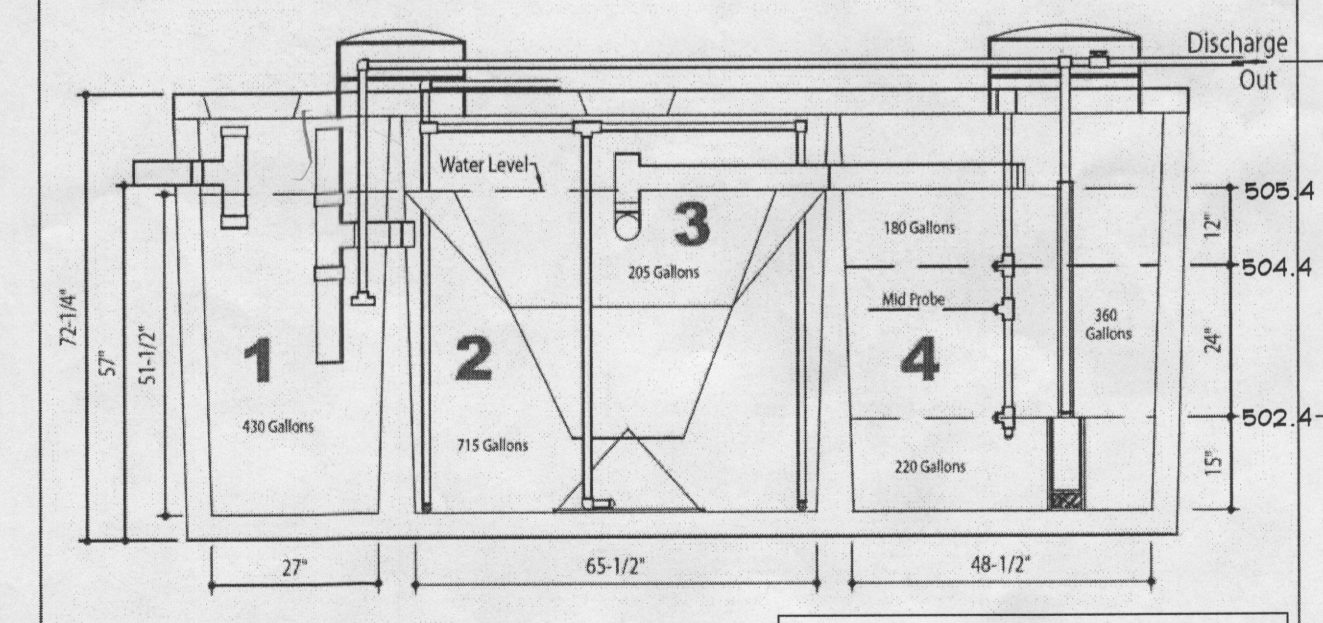
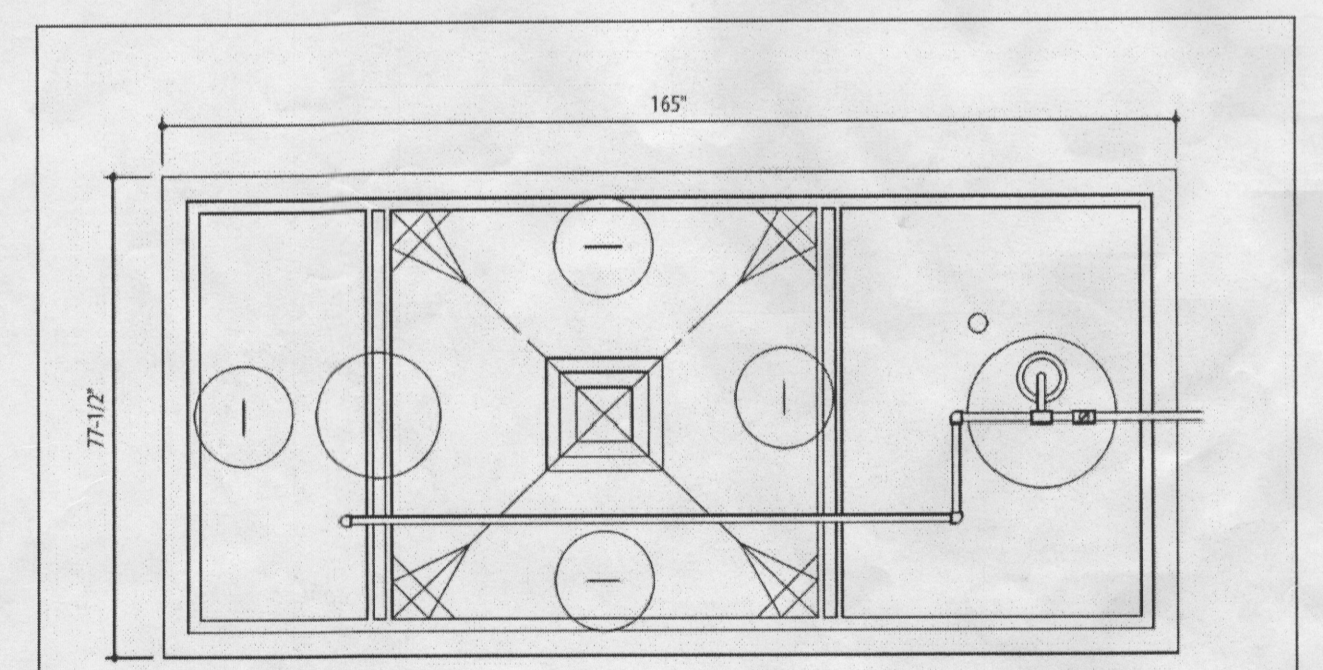
**FRICTION HEAD**  
FITTINGS: 13.8'  
LENGTH OF PVC PIPE: + 41.5'  
TOTAL LENGTH: 55.3'  
55.3/100 x 13.62 = 7.5' TOTAL FRICTION LOSS

**TOTAL HEAD**  
VERTICAL ELEVATION CHANGE: 5.0'  
TOTAL FRICTION LOSS: 7.5'  
SYSTEM PRESSURE REQUIREMENTS: + 0.0'  
TOTAL DYNAMIC HEAD: 12.5'



**SEPTIC SYSTEM/BEST AVAILABLE TECHNOLOGY (BAT) NOTES:**

- 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.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 10 FEET FROM THE TANK BASED ON THE MANUFACTURER'S SPECIFICATIONS.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- 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.
- ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.



**LOT 10 PUMP ELEVATIONS**

OFF	ON	ALARM
502.4	504.4	505.4

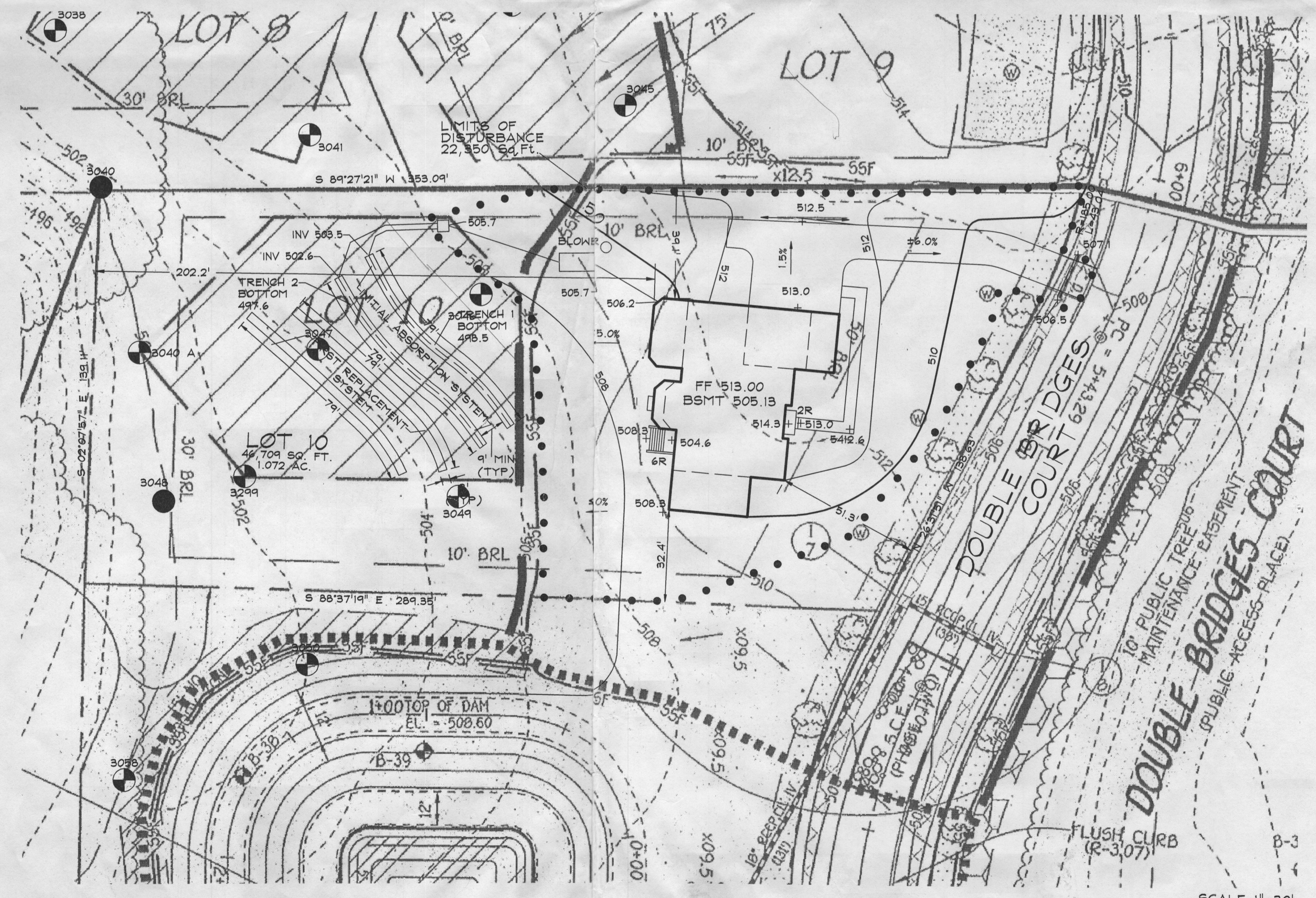
**DESIGN DATA & GENERAL NOTES**

- Concrete strength f'c=4000 psi @ 28 days. Density = 150 pcf.
- Cement - Portland Type I/II per ASTM C 150-92.
- Admixtures & plasticizers per ASTM C 260-86 & C 494-92.
- Reinforcing per ASTM A108. Min. 1/2" cover.

**Mayer Brothers, Inc.**  
6264 Race Road  
Elkridge, Maryland 21075  
Tel: 410.796.1434  
Fax: 410.796.1438  
www.mayerbrothers.com

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

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



**DRAWING LEGEND**

- 500 PROPOSED GRADE
- 502 EX. FAILED PERCOLATION TEST
- EX. PASSED PERCOLATION TEST
- PROPOSED LIMIT OF DISTURBANCE
- + 665.5 PROP. SPOT ELEV./FLOW ARROW
- SEPTIC RESERVE AREA
- WELL AREA

Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature] Date: 5/30/14

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. 27202, Expiration Date: 01/25/16

05/09/14  
DATE

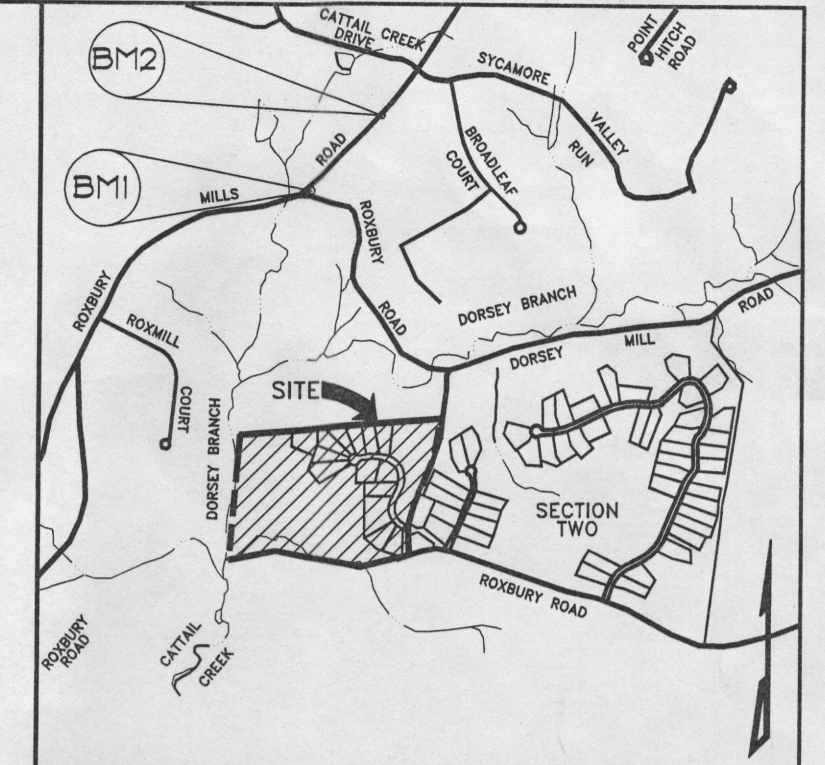
**PAUL G. CAVANAUGH**

**BENCHMARK**

**BENCHMARK #1**  
N. 582715.1745  
E. 1900496.020  
S.T.A. 21EA  
ELEV. 450.23

**BENCHMARK #2**  
N. 583055.329  
E. 1900668.477  
S.T.A. 21E2  
ELEV. 475.95

APC MAP COORDINATES  
MAP 4812 D01  
94°04'00", E 76°47'30"



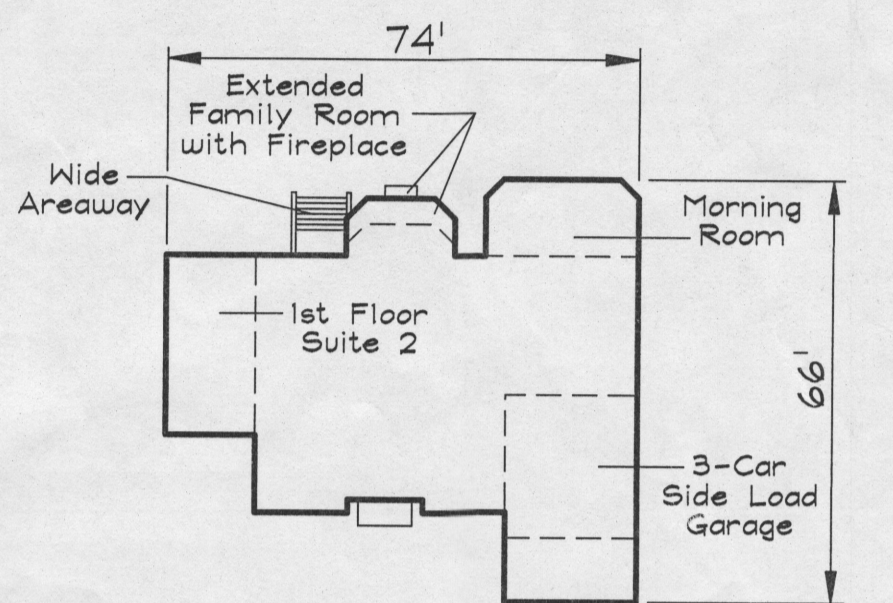
**VICINITY MAP**  
SCALE: 1"=2000'

**SEWAGE DISPOSAL SYSTEM DATA (4 BEDROOM):**

- INVERT @ FOUNDATION WALL: 506.6 (BASEMENT PUMP REQUIRED)
- 600 GPD BNR SYSTEM w/ 750 GALLON PUMP CHAMBER  
EX. GRADE OVER TANK: 510  
PROPOSED GRADE OVER TANK: 509.2  
INVERT: 505.7
- DISTRIBUTION BOX  
EX @ PROPOSED GRADE OVR TANK: 508.2  
INVERT: 505.7
- 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 48" OF RAVEL BELOW PIPE  
9' MIN SPACING BETWEEN TRENCH EDGES  
750 SF / 3' WIDTH = 250 LF x 163 = 158 LF MIN. TRENCH  
USE 2 - 79' LONG TRENCHES = 38 LF FOR INITIAL SYSTEM  
USE 2 - 79' LONG TRENCHES = 38 LF FOR FIRST REPLACEMENT SYSTEM

**LOT 10 INITIAL SYSTEM TRENCH SPECIFICATIONS**

	GROUND ELEVATION	INVERT ELEVATION	BOTTOM ELEVATION
TRENCH 1 (79')	506.5	505.5	498.5
TRENCH 2 (79')	505.6	502.6	497.6



MANHATTAN  
ELEVATION 'C'  
BRICK AND STONE FRONT

**DATA SOURCES:**

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 inc.**  
Development Design Consultants

**OWNER:**  
K. HOVANNIAN HOMES  
1802 BRIGHTSEAT ROAD  
LANDOVER, MD 20786  
(301)985-6225

**BUILDER:**  
K. HOVANNIAN HOMES  
1802 BRIGHTSEAT ROAD  
LANDOVER, MD 20786  
(301)985-6225

**SITE ADDRESS:**  
1923 DOUBLE BRIDGES COURT  
GLENWOOD, MD 21738

MERIWETHER FARM  
LOT 10

**SITE PLAN FOR  
BAT INSTALLATION**

4TH HOWARD COUNTY

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	F-08-139	DES. BY:	JHK	
TAX ACC. #	1404375173	DRN. BY:	JHK	
TAX MAP:	21	CHK. BY:	BKC/PGC	
BLOCK / GRID:	21	DATE:	05/09/14	
PARCEL #:	24	DDC JOB#:	13085.1	
ZONE / USE:	RC-DEO	SHEET NUMBER:		
DWG. SCALE:	1"=30'		1 of 1	