

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: 6/18/14 **ONSITE SEWAGE DISPOSAL SYSTEM** P 554512-B

INSTALLATION
 APPROVAL DATE: 7-22-14 (KMD) **PERMIT** A _____
CONSTRUCTION

PROPERTY ADDRESS: 11270 Independence Way

SUBDIVISION: Homewood Crossing LOT: 61 TAX ID: _____

CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: kevin@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

PROPERTY OWNER: Toll MD V LP EMAIL: _____

OWNER ADDRESS: 7164 Columbia Gateway Drive, MD 21045 PHONE: 410-872-9105

BAT UNIT MODEL: ECOPOD E609CA BAT UNIT SIZE: 600GPD

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

NUMBER OF BEDROOMS: 4 HOUSE SQ. FT. +3900 APPLICATION RATE: 0.8

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>SEE BAT PLAN 196'</u>	INLET DEPTH: <u>SEE BAT PLAN 4'</u>
	TRENCH WIDTH: <u>SEE BAT PLAN 3'</u>	MAXIMUM BOTTOM DEPTH: <u>SEE BAT PLAN 6'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>SEE BAT PLAN</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>SEE BAT PLAN</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. <u>4x50'</u>	

ISSUED BY: Jeff Williams ISSUE DATE: 7/2/2014 EXPIRATION DATE: _____
 (KMD)

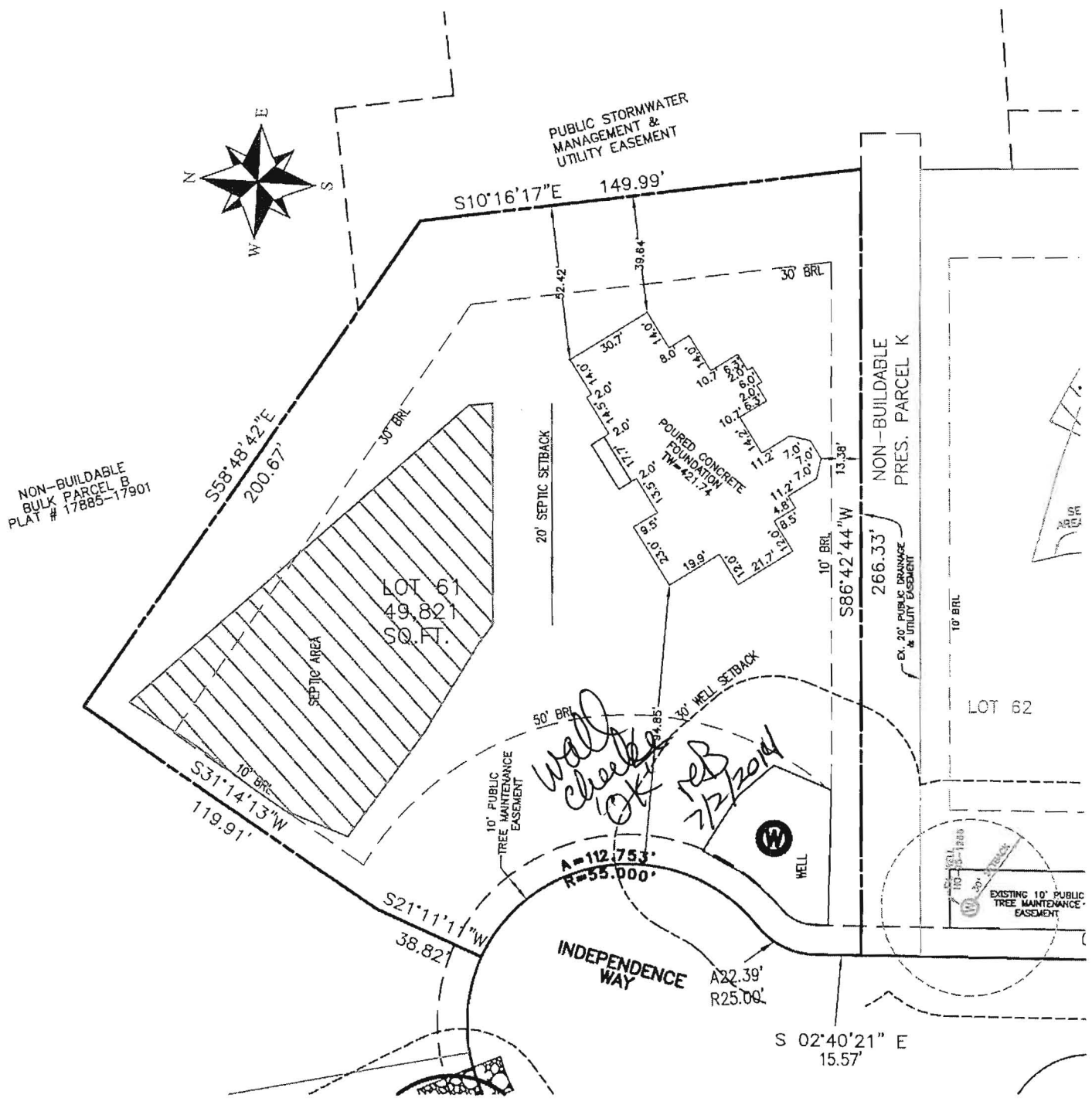
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- 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.

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/15.



ADDRESS: 11270 INDEPENDENCE WAY
ELLCOTT CITY MD., 21043

SURVEYOR'S NOTE

I HEREBY CERTIFY THAT THE POSITION OF THE EXISTING IMPROVEMENTS SHOWN HEREON HAVE BEEN CAREFULLY ESTABLISHED BY ACCEPTED LAND SURVEYING PRACTICES AND THAT, UNLESS SHOWN, THERE ARE NO VISIBLE ENCROACHMENTS EITHER WAY ACROSS THE PROPERTY LINES. THE PLANS IS OF BENEFIT TO A CONSUMER ONLY INsofar AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING, OR REFINANCING. THE PLAN IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS. THE PLAN DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR REFINANCING. THIS DRAWING WAS PREPARED W/O THE BENEFIT OF A TITLE REPORT.

Michael Joe Boyce
SIGNATURE: MICHAEL JOE BOYCE 21328 09/15/14
MD. LIC NO. DATE

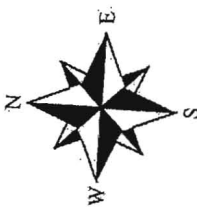
WALL CHECK
LOT 61
HOMWOOD CROSSING
LIBER 9808, FOLIO 204
PLAT No. 18244
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



ESE Land Planning
Engineering
Land Surveying

ESE Consultants Inc.
7164 Columbia Gateway Dr.
Suite 203
Columbia, MD 21046
TEL: 410-872-9105
FAX: 410-872-4870

DATE: 4/14/14 SCALE: 1"=50' FILE: LOT 61 WC
CHK'D: MJB JOB#: 1214 DRAWN: RWA



PUBLIC STORMWATER
MANAGEMENT &
UTILITY EASEMENT

S10°16'17"E 149.99'

NON-BUILDABLE
BULK PARCEL B
PLAT # 17885-17901

S58°48'42"E
200.67'

LOT 61
49,821
SQ. FT.

S31°14'13"W
119.91'

S21°11'1"W
38.82'

INDEPENDENCE
WAY

S 02°40'21" E
15.57'

NON-BUILDABLE
PRES. PARCEL K

LOT 62

20' SEPTIC SETBACK

10' PUBLIC
TREE MAINTENANCE
EASEMENT

20' WELL SETBACK

10' BRL
S86°42'44"W
266.33'

EX. 20' PUBLIC STORMWATER
& UTILITY EASEMENT

EXISTING 10' PUBLIC
TREE MAINTENANCE
EASEMENT

A=112,753'
R=55,000'

A22.39'
R25.00'

WELL

*wall check ok
JW
7/1/14*

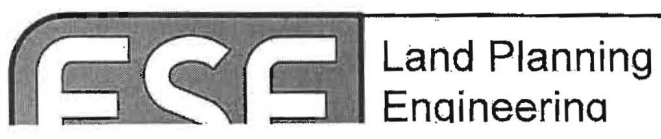
ADDRESS: 11270 INDEPENDENCE WAY
ELLCOTT CITY MD., 21043

SURVEYOR'S NOTE

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SIGNATURE: *[Signature]* MICHAEL JOE BOYCE 21328 MD. LIC NO. DATE: *07/15/14*

WALL CHECK
LOT 61
HOMWOOD CROSSING
LIBER 9808, FOLIO 204
PLAT No. 18244
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



ESE Consultants Inc.
7164 Columbia Gateway Dr.
Suite 203
Columbia MD 21046

Williams, Jeffrey

From: Williams, Jeffrey
Sent: Friday, June 27, 2014 1:28 PM
To: 'Michael Boyce'
Cc: 'David Erat'
Subject: Homewood lot 61

The BAT plan for Homewood lot 61 has been approved. It looks like we need a wall check and O&M agreement for septic permit issuance.

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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Williams, Jeffrey

From: Williams, Jeffrey
Sent: Tuesday, June 10, 2014 2:45 PM
To: 'Michael Boyce'
Subject: BAT plans

Hi Mike. I have approved the BAT plan for Edgewood lot 3.

Homewood lot 61 I would like the tank and d-box to be moved up close to the front end of the trenches (the upper middle of the area) if possible. The tank will have to be 100' from the well box, which might put it into the septic area, but there is not a trench in that part anyway so it's ok.

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

7164 Columbia Gateway Drive, Suite 230
 Columbia, MD 21046
 (410) 872-9105 ♦ FAX (410) 872-4870

To	Howard County Health Department	Date	June 11, 2014
Address	8930 Stanford Boulevard Columbia, Maryland 21045	Project	Homewood Crossing
		Project #	1214
Attention	Jeff Williams	Phone #	410-872-9105

WE ARE SENDING YOU: Attached
 Under separate cover

VIA: US Mail Courier/Delivery Overnight Carrier Interoffice Mail Pick-up

THE FOLLOWING ITEMS:
 Shop drawings Prints Plans Disk Specifications Samples
 Copy of letter Change order Other _____

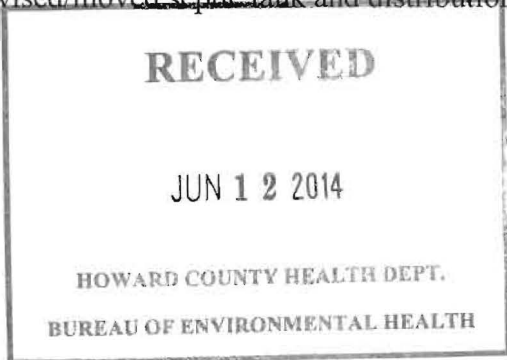
COPIES	DATE	NO.	DESCRIPTION
2	06-11-2014		Plot Plan/Bat System Lot 61

THESE ARE TRANSMITTED:

<input checked="" type="checkbox"/> For approval	<input type="checkbox"/> Approved as submitted	<input type="checkbox"/> Resubmit _____ copies for 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 type="checkbox"/> For review and comment	<input type="checkbox"/> _____	
<input type="checkbox"/> FOR BIDS DUE _____	<input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US	

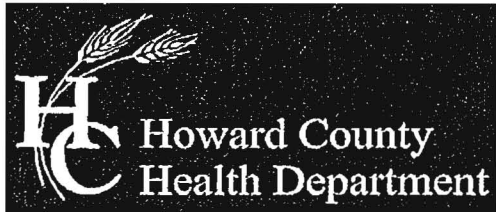
REMARKS

Revised/moved septic tank and distribution box per your comments in email.



SIGNED _____
 MICHAEL J. BOYCE
 ESE CONSULTANTS, INC.

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



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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

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

www.hchealth.org

Facebook: www.facebook.com/hccohealth

Twitter: HowardCoHealthDep

000153

RECEIVED JUN 23 2014 BY:

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 10th day of June 2014, among TOLL MD V, 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 11270 Independence Way, 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 5463 Folio 266.

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:

20
40
12

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.

TOLL MDV
[Signature] 6.10.14
Owner owner Date

Owner Date

Richard J. Davis 6/10/14
Howard County Health Department

LR - Agreement
Recording Fee 22.00
Grantor/Grantee Name:
1011 md v
Reference/Control #: 153
LR - Agreement
Surcharge 42.00
SubTotal: 64.00
Total: 86.00
06/11/2014 11:57
#2002124 C00503 -
Howard Co
Columbia/CC05-03-01 -
Register 01

11270 Independence way

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: toll md v
Reference/Control #: 152

LR - Agreement Surcharge
1x 40.00 40.00

SubTotal: 60.00
Total: 60.00

REV-Check-BOA 60.00
Number : 9430671

06/11/2014 11:56 CC13-TR
#2902128 /396/109

Thank you for visiting us today~

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21328, EXPIRATION DATE 1/8/15.

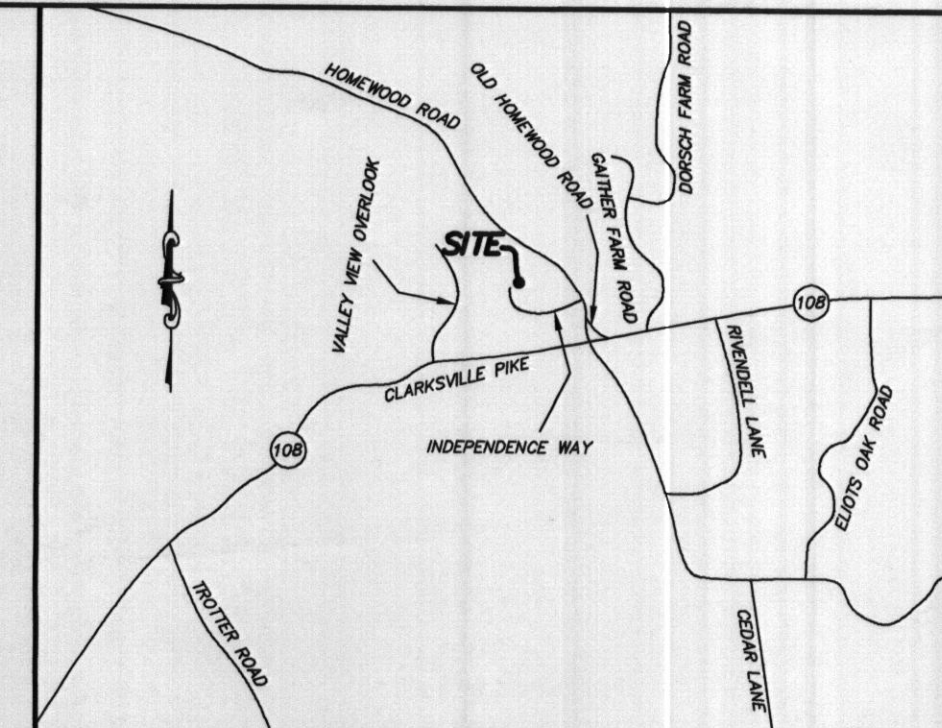
HOUSE OPTIONS:

TYPE: HAMPTON (GEORGIAN)
 FINISHED LOWER LEVEL
 WALK-OUT BASEMENT
 EXPANDED FAMILY ROOM
 CONSERVATORY ELITE ADDITION
 ADDITION 1' TO BASEMENT HEIGHT WALLS
 FIRST FLOOR BEDROOM IN LIEU OF STUDY
 ADDITIONAL POWDER ROOM - FIRST FLOOR
 ADDITIONAL ONE CAR FRONT ENTRY GARAGE
 NAPLES SUNROOM ADDITION
 BRICK SIDES AND REAR
 REDUCE THREE CAR SIDE ENTRY GARAGE TO TWO CAR SIDE ENTRY GARAGE

OPTION No. 013
 OPTION No. 017
 OPTION No. 023
 OPTION No. 039
 OPTION No. 070
 OPTION No. 075
 OPTION No. 377
 OPTION No. 506
 OPTION No. 529
 OPTION No. 673

LEGEND:

PERC TEST LOCATION
 FAILED PERC TEST LOCATION
 WELL LOCATION
 LIMITS OF DISTURBANCE
 TW TOP OF WALL
 GF GARAGE FLOOR
 BF BASEMENT FLOOR
 BRL BUILDING RESTRICTION LINE

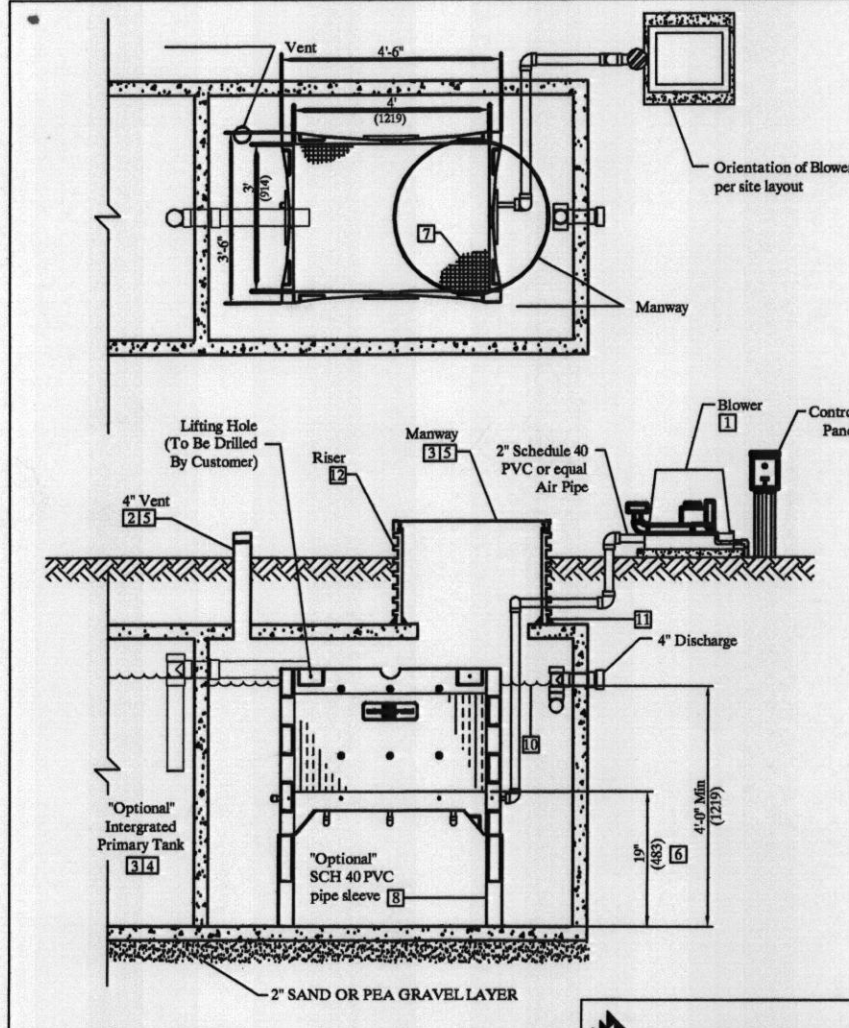


VICINITY MAP
 1" = 1000'

- GENERAL NOTES:**
- 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: PLAT No. 18244.
 - THE EXISTING TOPOGRAPHY WITHIN THE AREA OF PROPOSED WORK IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY ESE. DATED 5/10/11.
 - SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND DESIGN DETAILS. PRIOR TO TAKEOUT FOR CONSTRUCTION, IT SHALL BE THE OWNER/BUILDERS RESPONSIBILITY TO PROVIDE ESE CONSULTANTS INC. WITH THE MOST RECENT SET OF HOUSE PLANS.
 - THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410-313-1861) 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: 34,196 SQ. FT. / 0.79 AC. ±
 - STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY PREVIOUSLY APPROVED PLAN F-05-069.
 - 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 (ESE) 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.
 - THESE AREAS DESIGNATE A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS UNTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED 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. CHANGES TO SEPTIC AREA WERE MADE AND APPROVED PER "PERC CERT REVISION PLAN" DATED 04/26/2012 BY ESE CONSULTANTS INC.
 - UPON BUILDING PERMIT REVIEW THE SEPTIC SYSTEMS FOR 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-05-069.
 - A STANDARD SEDIMENT CONTROL PLAN MAY BE USED FOR DEVELOPMENT OF THIS LOT. REFERENCE PLAN F-05-069.
 - EXISTING WELL(S) SHOWN ON THIS PLAN IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-1236 HAS BEEN FIELD LOCATED BY ESE CONSULTANTS - PROFESSIONAL LAND SURVEYOR(S), AND IS ACCURATELY SHOWN.
 - BUILDING SETBACKS (B.R.L.'S) SHOWN HEREON PER SITE DEVELOPMENT PLAN SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.
 - CULVERT FOR DRIVEWAY PER F-05-069.

NOTES:

- Blower piping to ECOPOD not to exceed 100 FT total length in the piping system. For distances greater than 100 FT, consult factory. Blower must be located above flood levels on a solid base.
- Vent to be located above finish grade or higher to avoid infiltration. Cap on vent must be secured with a stainless steel screw.
- All other tanks w/ from ECOPOD must conform to applicable country, state, province, and local plumbing and electrical codes.
- The primary tank/ compartment volume must be 1 to 2 times the rated ECOPOD GPD. Primary and Reactor tank volumes are listed in the ECOPOD Design Manual. The primary tank may be integrated with the reactor tank or stand alone in a separate tank.
- All manways, pump out ports, and vents must be secured to prevent accidental or unauthorized access.
- ECOPOD media is recommended to be atleast 19" from bottom of tank. Distances not 19" need factory approval.
- ECOPOD media EV19PVC224
- Tanks with higher inlets, install SCH 40 PVC pipe over legs to elevate reactor to correct height.
- Air supply line should be secured with non-corrosive clamps where required to prevent vibration damage.
- Effluent discharge level must be at a height no more, or no less than 2" above vertical tube PVC media.
- Use epoxy, or use another approved method or substance, to create strong connection & watertight seal (TYP.)
- Risers must conform to country, state, province, and local acceptable codes. Fiberglass riser shown.



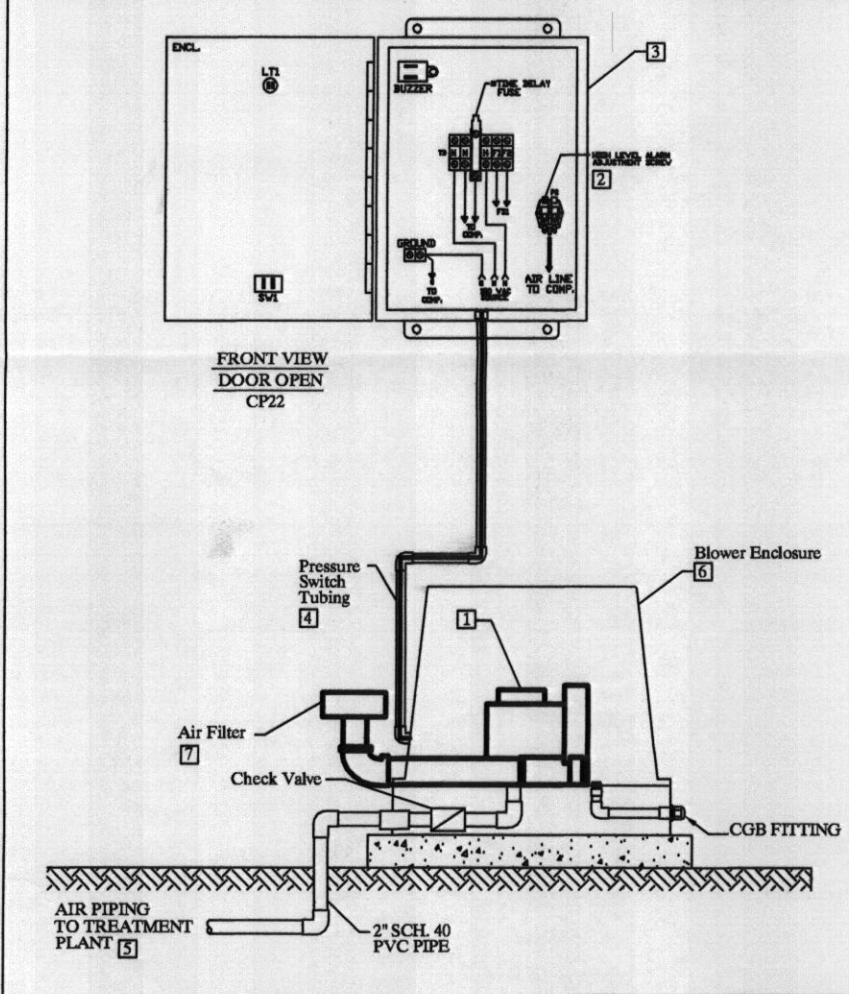
600 GPD TREATMENT UNIT			
Discharge From Tank	4'-0"		
Reactor Volume	840 Gallons		
Recommended Distance Under Reactor Box	19"		

E60NCA REACTOR IN CONCRETE TANK
 DWG. NO. E60NCA REACTOR IN CONCRETE TANK
 REV. 3 PAGE 1 OF 3

Delta Environmental
 Pentair Water
 NOT TO SCALE

NOTES:

- Blower Model Delta 06
- Setting High Level Pressure Switch Bring plant to operating water level with compressor turned on. Using properly sized screw driver, turn high level alarm adjustment screw clockwise until alarm occurs. Once alarm occurs, turn the screw counter-clockwise until alarm stops. Setting Low Level Pressure Switch Factory set
- All of Delta's control panels are manufactured to UL508A requirements. All enclosures are NEMA rated.
- Pressure switch tubing is used for high and low level pressure detection.
- All piping from the blower to the ECOPOD to be 2" sch 40 PVC pipe.
- All blowers are housed in a polyethylene enclosure supplied with necessary piping for installation.
- Inlet Filters must be mounted on outside of enclosure. Filters not mounted on outside could contribute to blower malfunction and void manufacturer's warranty.
- Filter elements must be non-paper type.



E60NCA BLOWER/CP DETAIL
 DWG. NO. E60NCA BLOWER/CP DETAIL
 REV. 3 PAGE 2 OF 3

Delta Environmental
 Pentair Water
 NOT TO SCALE

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 COVER.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 100 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 THE 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.

SEWAGE DISPOSAL SYSTEM DATA (6 BDRM):

PROPOSED INVERT AT FOUNDATION WALL: 416.3'
 1. ECO ECOPOD SYSTEM
 EX. GRADE OVER TANK: 415.1'
 PROPOSED GRADE OVER TANK: 415.1'
 INVERT IN: 411.8' INVERT OUT: 411.5'

2. DISTRIBUTION BOX
 EXISTING GRADE OVER TANK: 415.1'
 PROPOSED GRADE OVER TANK: 415.1'
 INVERT IN: 411.4' INVERT OUT: 411.1'

3. TRENCH DESIGN (5 BDRM x 150 GPD/BDRM = 750 GPD)
 750 GPD ± 0.8 APP. RATE = 937.50 SF
 USE 3" WIDE TRENCH WITH 24" GRAVEL BELOW PIPE
 9' MIN. SPACING BETWEEN TRENCH EDGES
 937.50 SF ± 3' WIDTH = 312.50 LF x 0.62 = 193.75 LF MIN. TRENCH
 USE 4 49' LONG TRENCHES = 196 LF

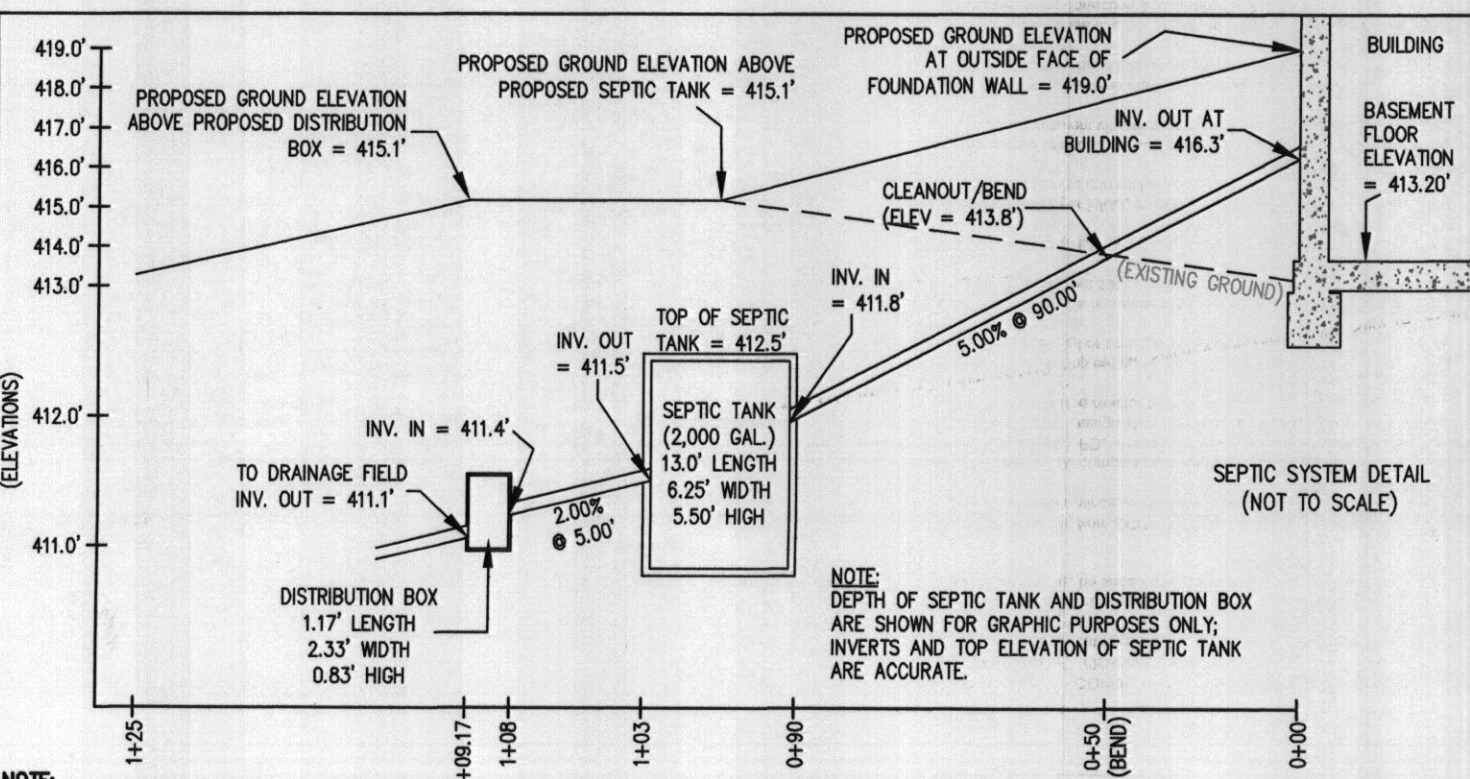
TRENCH DATA:

BOTTOM MAX. DEPTH (6')
TRENCH 1 (T1):
 GROUND ABOVE = 414.8'
 INV. IN = 410.8'
 BOTTOM TRENCH = 408.8'

TRENCH 2 (T2):
 GROUND ABOVE = 413.3'
 INV. IN = 409.3'
 BOTTOM TRENCH = 407.3'

TRENCH 3 (T3):
 GROUND ABOVE = 413.3'
 INV. IN = 409.3'
 BOTTOM TRENCH = 407.3'

TRENCH 4 (T4):
 GROUND ABOVE = 412.0'
 INV. IN = 408.0'
 BOTTOM TRENCH = 406.0'



NOTE:
 *BASEMENT NOT SERVICED VIA GRAVITY SEWER (DISTANCE FROM OUTSIDE FACE OF FOUNDATION WALL)

APPROVED: FOR HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE
 DIRECTOR
 DATE
 PROFESSIONAL ENGINEER
 DATE

LOT PLAN FOR BAT INSTALLATION
 LOT 61
HOMWOOD CROSSING
 LIBER 9808, FOLIO 204
 PLAT No. 18244
 TAX No. 05-443245
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 ADDRESS: 11270 INDEPENDENCE WAY
 ELLICOTT CITY, MARYLAND

ESE Land Planning
 Engineering
 Land Surveying

ESE Consultants Inc.
 7164 Columbia Gateway Dr.
 Suite 203
 Columbia, MD 21046
 TEL: 410-872-9105
 FAX: 410-872-4870

DATE: 06/11/14 SCALE: 1"=40' FILE: PP LOT 61_rev1
 CHK'D: M.J.B. JOB NO: 1214 DRAWN: R.C.K.