**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.orgFacebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 10/13/17 **ONSITE SEWAGE DISPOSAL SYSTEM**P 562301APPROVAL DATE: 12/7/17 **PERMIT: CONSTRUCTION**

A

PROPERTY ADDRESS: 14665 Red Lion DriveSUBDIVISION: Red Lion EstatesLOT: 16 TAX ID: 04-374649CONTRACTOR: South Carroll BackhoeEMAIL: scbackhoe@comcast.netCONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157PHONE: 410-596-3618PROPERTY OWNER: Salvatore and Estela Valenziano

EMAIL:

OWNER ADDRESS: 14661 Red Lion Drive, Woodbine, MD 21797

PHONE:

SEPTIC TANK SIZE (GALLONS): 1500TANK MANUFACTURER: Babylon

PUMP MODEL:

Pump Size

1/3PUMP TANK CAPACITY: 1000DISTRIBUTION SYSTEM: ☒ GRAVITY☐ PRESSURE DOSEDBEDROOMS: 4APPLICATION RATE: 1.2

| | | |
|-----------|--|--|
| TRENCHES: | LINEAR FEET REQUIRED: <u>139</u> | INLET DEPTH: <u>4</u> |
| | TRENCH WIDTH: <u>3</u> | MAXIMUM BOTTOM DEPTH: <u>8</u> |
| | MINIMUM SPACE BETWEEN TRENCHES: <u>10</u> | EFFECTIVE AREA BEGINNING DEPTH: <u>7</u> |
| LOCATION: | PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION. | |
| NOTES: | Wall Check indicates possibility that house sewer may be lower elevation than planned. Place D box and upper trench at upper SDA boundary, | |

ISSUED BY: Robert FreemonISSUE DATE: 10/13/17EXPIRATION DATE: 10/13/18

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 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

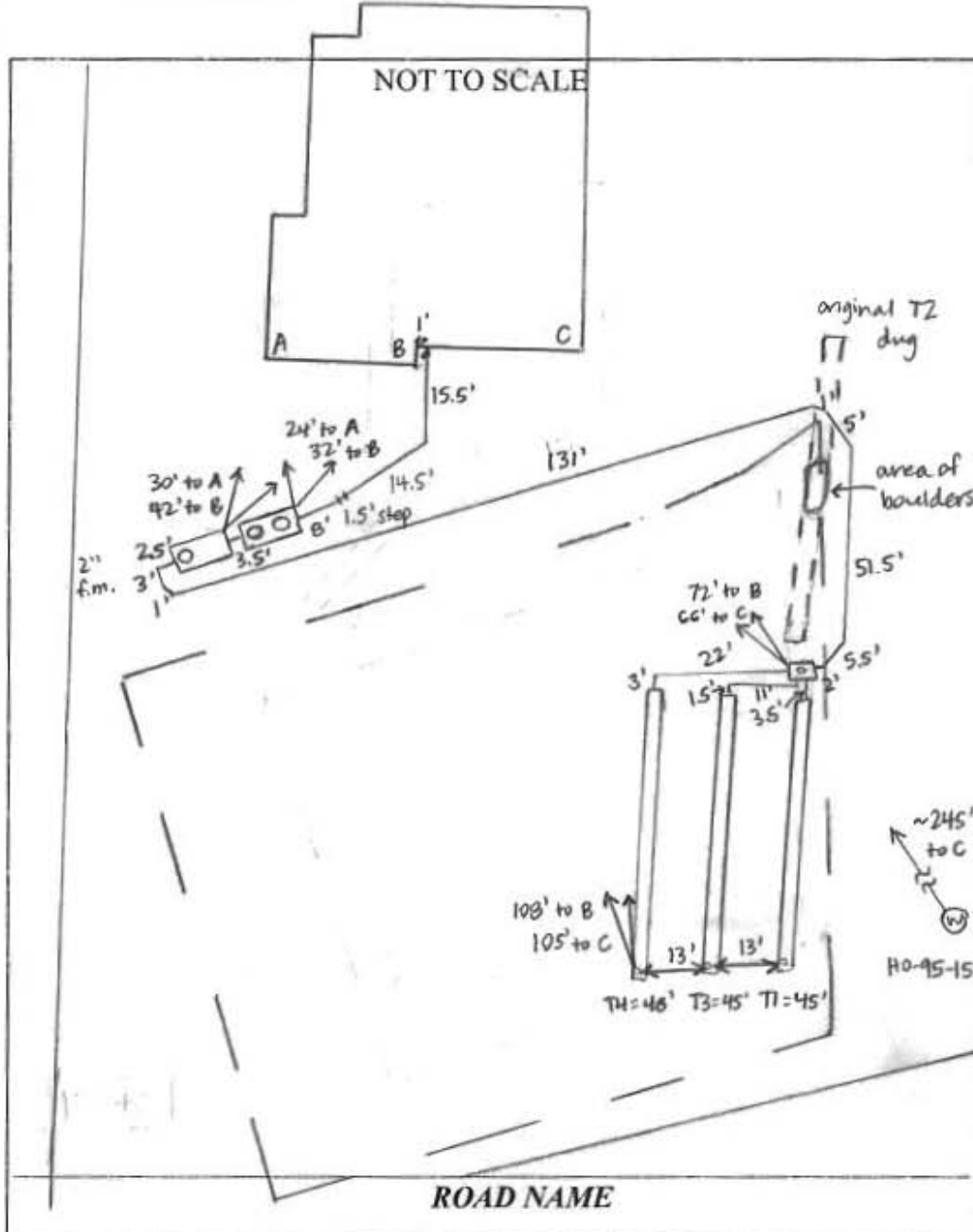
☒ ELECTRICAL PERMIT ISSUED E 17004212

NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

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' | 4' | 8' |
| NUMBER OF TRENCHES | | 3 |
| TOTAL LENGTH | | 138' |
| ABSORPTION AREA | | 414' + SIDEWALL |
| DISTRIBUTION BOX LEVEL | | YES |
| DISTRIBUTION BOX BAFFLE | | ELBOW |
| DISTRIBUTION BOX PORT | | YES |

| SEPTIC TANK DATA | |
|------------------------|--------------|
| SEPTIC TANK 1 LEVEL | YES |
| MANUFACTURER | BABYLON |
| CAPACITY | 1500 GAL |
| SEAM LOC | TOP |
| TANK LID DEPTH | 2' |
| BAFFLES | YES |
| BAFFLE FILTER | NO |
| MANHOLE LOC | FRONT + REAR |
| 6" PORT LOC | NONE |
| WATERTIGHT TEST | NO |
| SLOTTED | YES |
| DATE ON LID | 9-26-17 |
| PUMP/SEPTIC TANK LEVEL | YES |
| MANUFACTURER | BABYLON |
| CAPACITY | 1000 GAL |
| SEAM LOC | TOP |
| TANK LID DEPTH | 1.5-2' |
| BAFFLES | NO |
| BAFFLE FILTER | NO |
| MANHOLE LOC | REAR |
| 6" PORT LOC | NONE |
| WATERTIGHT TEST | NO |
| SLOTTED | NO |
| DATE ON LID | 9-15-17 |
| Pump: 1/2 hp | |

PRE-CONSTRUCTION:

10/26/17 Met S. Carroll on site for layout, SDA corners + tank staked. Contour is slightly off from plan - laid out 3x46' trenches to fit in upper part of SDA. Put D-box closer to middle of easement. (SC)

INSTALLATION: 10/31/17 T1 + T3 dug, T3 left open for inspection + T1 open at ends 3' wide, 3.5' to stone. S. Carroll digging T2 hit two boulders ~5' depth 19' into T3 from start. Solid pipe 9' over that area + add 9' to T2 end. Soil looks good in trench after rocky area. (SC) [Correspondance: homeowner on site + does not want trench outside SDA. Okay to install 1x48' trench on contour below T1 + T3. Keep 12' CTC. (SC)] * Tanks set, line run from house to tanks. House connection made. 11/1/17. T4 dug + left open for inspection. 3' wide, 3.5' to stone. No rock > 50% in T4. 2" force main run from pump tank to D-box. Need pump + alarm test. (SC) 12/6/17 on site for pump + alarm. Not enough water in tank, junction box must be above grade. (SC) 12/7/17 Junction box now above grade, alarm sounds, pump pumps effluent to D-box. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 12/7/17



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Twitter: HowardCoHealthDep

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

MEMORANDUM

TO: Ronald Thompson
310 South Main Street
Mt. Airy, Maryland 21771

FROM: Robert Freemon *RF*
Well & Septic Program

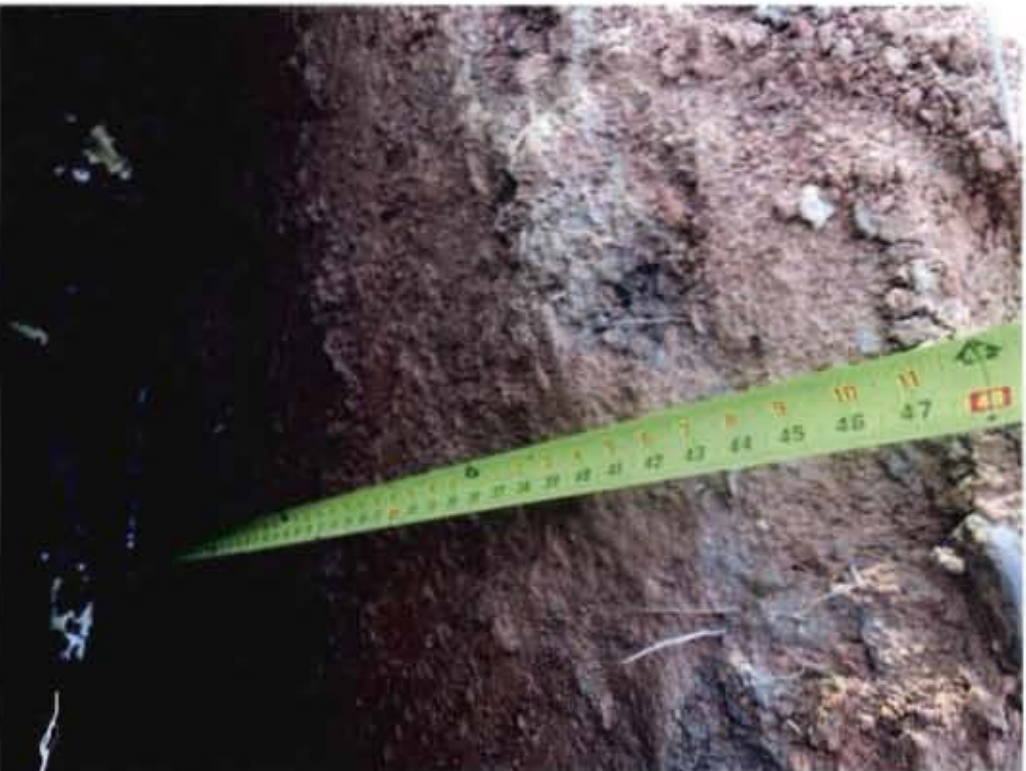
RE: Red Lion Inn. Estates Lot 16
14665 Red Lion Drive
Woodbine, MD 21797
"BAT Plan"

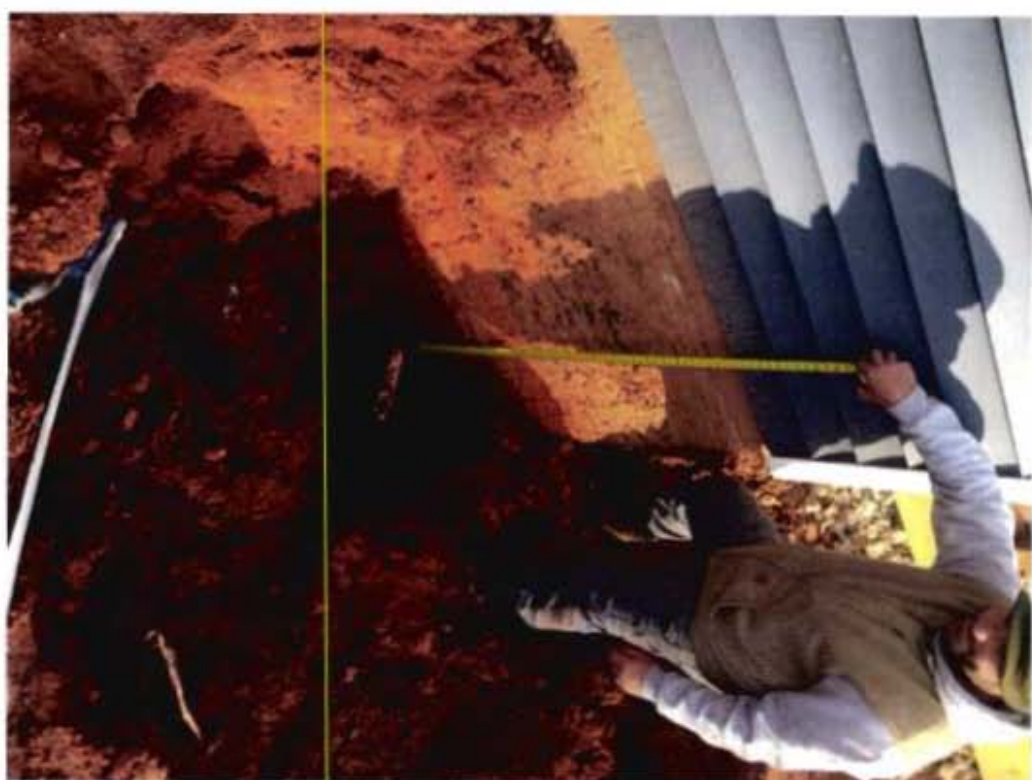
DATE: 10/25/16

Having looked at the BAT Plan I noticed the Septic Disposal Area is different from the latest signed Percolation Certification Plan of 2/22/08. If the decision is to adjust the Septic Disposal Area a Revised Percolation Certification Plan must be submitted and approved by the Health Dept.

14665 Red Lion Drive well line installation

-sleeve extends from house to 20' past septic area per builder





Freemon, Robert

From: Freemon, Robert
Sent: Monday, November 28, 2016 10:44 AM
To: 'Ron Thompson'
Subject: RE: Red Lion Lot 16

All septic tanks need to be two compartment.

Robert Freemon
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
Well and Septic Program
Phone: 410-313-6357
Email: rfreemon@howardcountymd.gov
<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

From: Ron Thompson [<mailto:ron@vanmar.com>]
Sent: Friday, November 25, 2016 12:30 PM
To: Freemon, Robert
Subject: RE: Red Lion Lot 16

Spencer:

One question – it appears the regular tank section needs to be shown on the plans. For a 1250 gallon tank (4 bedroom), does it need to be a two compartment tank or is it a single tank? The details I have from Babylon Tank show it as a single compartment tank?

Thank you.

Ronald E. Thompson, PE
VANMAR ASSOCIATES
310 South Main Street
PO Box 328
Mount Airy, Maryland 21771
301-829-2890 (O)
443-421-2164 (C)
301-831-5603 (F)

From: Freemon, Robert [<mailto:rfreemon@howardcountymd.gov>]
Sent: Tuesday, November 22, 2016 10:45 AM
To: Ron Thompson <ron@vanmar.com>
Subject: RE: Red Lion Lot 16

Hey Ron,

If they wish to change the BAT unit to a regular septic tank you will need to red line the plan yourself or print off a new OSDS (See attachments). I can red line the Note but not the septic tank change. Let me know what you decide. If you have any questions let me know.

Robert Freemon
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
Well and Septic Program
Phone: 410-313-6357
Email: rfreemon@howardcountymd.gov
<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

From: Ron Thompson [<mailto:ron@vanmar.com>]
Sent: Monday, November 21, 2016 3:24 PM
To: Freemon, Robert
Subject: RE: Red Lion Lot 16

That will be fine. Also, will this site qualify for a regular septic tank instead of a BAT tank? I think the owners would like to not use a BAT tank. If they do, that can also be red lined.

Ronald E. Thompson, PE
VANMAR ASSOCIATES
310 South Main Street
PO Box 328
Mount Airy, Maryland 21771
301-829-2890 (O)
443-421-2164 (C)
301-831-5603 (F)

From: Freemon, Robert [<mailto:rfreemon@howardcountymd.gov>]
Sent: Monday, November 21, 2016 2:53 PM
To: Ron Thompson <ron@vanmar.com>
Cc: neil@mulloybuilders.com
Subject: Red Lion Lot 16

Hey Ron,
I would like to Red Line Note 17 on the Perc Cert and Note 10 on the BAT Plan to include: The property line closest to perc hole #59 must be staked prior to system installation "by a licensed surveyor". Would this be alright with you?

Robert Freemon
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
Well and Septic Program
Phone: 410-313-6357
Email: rfreemon@howardcountymd.gov
<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

LETTER OF TRANSMITTAL

☐ AGENCY ☐ CLIENT ☐ FILE ☐ BILLING ☐ CORESPONDANCE ☐ OTHER

VanMar Associates, Inc.

Engineers ~ Surveyors ~ Planners
310 South Main Street, P.O.Box 328, Mt. Airy, MD 21771
301-829-2890 301-831-5015 301-695-0600
410-549-2751 (FAX) 301-831-5603

TO :

Howard County Dept. of Environmental Health
8930 Stanford Boulevard
Columbia, Maryland 21045

Attn: Robert Freemon

DATE: March 15, 2017

PROJECT: RED LION INN ESTATES,
Lot 16

VanMar # B65594

ENCLOSED:

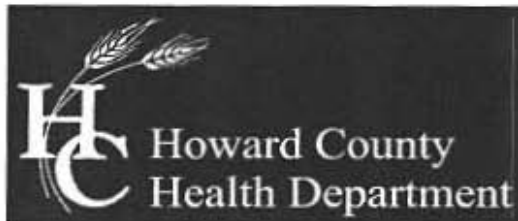
| COPIES | DATE | DESCRIPTION |
|--------|---------|--|
| | | |
| 3 | 3/15/17 | Revised Onsite Sewage Disposal System Design Plan, Lot 16 Red Lion Inn Estates |
| | | |
| | | |
| | | |

REMARKS: Hi Robert, revised to reflect your comments Submitted for review and approval. Thank you!

COPIES TO (ADDRESS): John & Rosa Horst, 2767 Thornbrook Road, Ellicott City, Maryland 21042

SUBMITTED BY: dkv

Geog.5594.Lot 16 BAT Plan.3.15.17



Bureau of Environmental Health

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Twitter: HowardCoHealthDep

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

MEMORANDUM

TO: Ronald Thompson
310 South Main Street
Mt. Airy, MD 21771

FROM: Robert Freeman *RF*
Well & Septic Program

RE: Red Lion Estates
Lot 16
Revised Perc Cert & BAT Plan

DATE: 11/7/16

Here are my comments for the Revised Perc Cert:

- All existing structures on the property must be shown on the plan. There is an existing shed on the property that is not being shown on the plan.
- The failed perc hole symbol in the legend needs to be removed as there are no failed percs on the plan.
- The greater than 25% slope symbol in the legend needs to be removed as there are no greater than 25% slopes on the plan.
- Add the note: The property line closest to Perc Hole #59 must be staked prior to system installation.

Here are my comments for the BAT Plan:

- All existing structures on the property must be shown on the plan. There is an existing shed on the property that is not being shown on the plan.
- Well Certification Statement needs to be added to the plan. The statement must include the tag number and a signature certifying it was field located and accurately shown.
- All perc holes must be labeled with their corresponding test number.
- Add the note: The property line closest to Perc Hole #59 must be staked prior to system installation.
- The cross-section of the pump chamber is not acceptable. We need to see a better pump tank cross-section from the tank manufacturer.
- The pump tank model being chosen must be shown on this plan.
- The Friction loss calculations are incorrect and must be corrected.
- The Ball Valve uses the Gate Valve coefficient in the friction loss calculations. If the gate valve is being installed then it must be labeled as a gate valve. If the Ball Valve is being installed then the Ball Valve coefficient must be used in the calculations.

Copy Neil
Mullay in
Enam

Ron Thompson
301 829 2890
11/14 Tapped to Ron
about Calculations

Freemon, Robert

From: Freemon, Robert
Sent: Tuesday, October 25, 2016 3:30 PM
To: 'Ron Thompson'
Cc: 'neil@mulloybuilders.com'
Subject: Red Lion Inn Lot 16
Attachments: 14665 Red Lion Dr.pdf; Signed PC.pdf; Perc-Site Plan REQ.pdf; Plan Notes REQ.pdf; Well & Septic SETBACKS.pdf

Hi Ron,

Here are my comments for the BAT Plan for 14665 Red Lion Drive. I have CC'd the bulder as per his request. If you have any questions let me know. (See Attachments)

Robert Freemon
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
Well and Septic Program
Phone: 410-313-6357
Email: rfeemon@howardcountymd.gov

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: 6-20-07DPZ File No. WP-07-131**Department of Planning and Zoning**

☒ Transportation Planning
☒ Historic Preservation
☒ Public Service and Zoning Administration
☒ Research
☐ Address Coordinator

☒ Environmental and Community Planning (Ag Pres/Route 1)
☒ Development Engineering Division
☒ Other
☒ File

(F-07-089)

Agencies

☒ Soil Conservation District
☒ Department of Inspections, Licenses & Permits
☒ Department of Fire and Rescue Services
☒ State Highway Administration
☒ Health Department
☒ Public School System
☒ Recreation and Parks
☐ WSSC
☐ MD Aviation Administration

☐ Tax Assessment
☐ Verizon
☐ BGE
☐ Cable TV
☐ Police
☐ MTA
☐ Finance
☐ DPW, Real Estate Services
☐ DPW, Construction and Inspection
☐ DPW, Bureau of Utilities

RE: Red Lion Inn Estates Lots 15-18

ENCLOSED FOR YOUR →

____ Signature Approval

☒ Review & Comments

____ Files

THE ENCLOSED →

____ Original

____ Pre-Packaged Plan Set

Plans**# of Sheets****Supplemental Documents**

____ Sketch Plan
 ____ Prel Equiv Sketch Plan
 ____ Preliminary Plan
☒ Final Plat/Plat of Easement/RE Plat
 ____ Final Constr Plans (RDS)
 ____ Final Development Plan
 ____ Site Development Plan
 ____ Landscape Plan/Supplemental Plan
 ____ Grading Plan
 ____ House Type Revision/Walk-Thru Red-Line
 ____ Water and Sewer Plan

____ Wetlands Report
 ____ Soils/Topo Map/Drain Area Map
 ____ FSD/FCP/Worksheet and Application
 ____ Declaration of Intent (Forest Cons)
 ____ Drainage and/or Computation/Pond Safety Comps
 ____ Preliminary Road Profiles
 ____ APFO Roads Test/Mitigation Plan/Traffic Study
 ____ Noise Study
 ____ Sight Distance Analysis/Speed Flow Study
 ____ Floodplain Study
 ____ Stormwater Management Comps/Geo-Tech Report
 ____ Industrial Waste Survey (DPW)
 ____ Road Poster Form Letter
☒ Response Letter
 ____ Perc Plat
 ____ Scenic Road Exhibits
☒ Deeds
☒ Photographs
 ____ Retaining Wall Comps/Details
 ____ Poster/Community or HDC Meeting Information
 ____ Route 1 Details/Summary

Applications

☒ Waiver Petition Applic/Exhibit
 ____ Planning Board Application
 ____ ASDP/CSDP Application
 ____ DED Application/Checklist
 ____ DED Fee Receipt/Deeds/Cost Estimate

WAS: ☒ Received
 ____ Received and Revised
 ____ Tentatively Approved
 ____ Approved

Recorded

On

6-20-07

COMMENTS:

SRC/Comments Due By: 7-12-07

☒ ref Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

see attached request by consultantref 7/6/07DPZ STAFF INITIALS mpj

From: Robert Bricker
To: Shanaberger & Lane
Date: 7/2/2007 5:20:35 PM
Subject: Re: WP-07-131 Red Lion Inn Estates Lots 15 to 18

*Consultant
requests
clarification
of
No Comment*

My comments concern the proposal as presented, that the noise abatement is implemented through design and construction of the residences.

You are correct in your belief that the Health Department will not approve a proposal that alters the hydrology in and around the described septic easements. These are conflicting land uses. The Health Department responded negatively to the previous proposal to locate sound-deflecting fences on the areas of the subject property platted as septic easements. -Robert Bricker

>>> "Shanaberger & Lane" <home@shanlane.com> 7/2/2007 4:47 PM >>>
Robert,

Thank you for your comments regarding this waiver request. In the event that the Development Engineering Division continues requesting that the noise wall be built as originally approved, crossing part of the private septic easement for Lot 17, it is my belief that the Health Department would not approve such an arrangement. The noise wall would be a wood fence built with the bottom flush to the ground, and with stone-filled gabions beneath it. As such, the fence would impede the flow of surface water during and after precipitation, and the gabions would collect that surface water and direct it into the ground. I cannot imagine this being allowed in a private sewage easement. What would the Health Department's position be on this issue?

Attached are copies of your comments on the waiver position, and a pdf file of the originally-approved noise wall location across the private sewage easement.

Thank you.

G. Scott Shanaberger
Professional Land Surveyor
Shanaberger & Lane

----- Original Message -----

From: "Robert Bricker" <rbricker@howardcountymd.gov>
To: "Cindy Hamilton" <CHamilton@howardcountymd.gov>
Cc: <G Scott Shanaberger <home@shanlane.com>
Sent: Thursday, June 28, 2007 5:00 PM
Subject: WP-07-131 Red Lion Inn Estates Lots 15 to 18

Cindy,
Content of attached file follow:

6/28/2007

TO: Cindy Hamilton, Chief
Division of Land Development

FROM: Robert Bricker, Environmental Sanitarian
Well and Septic Program

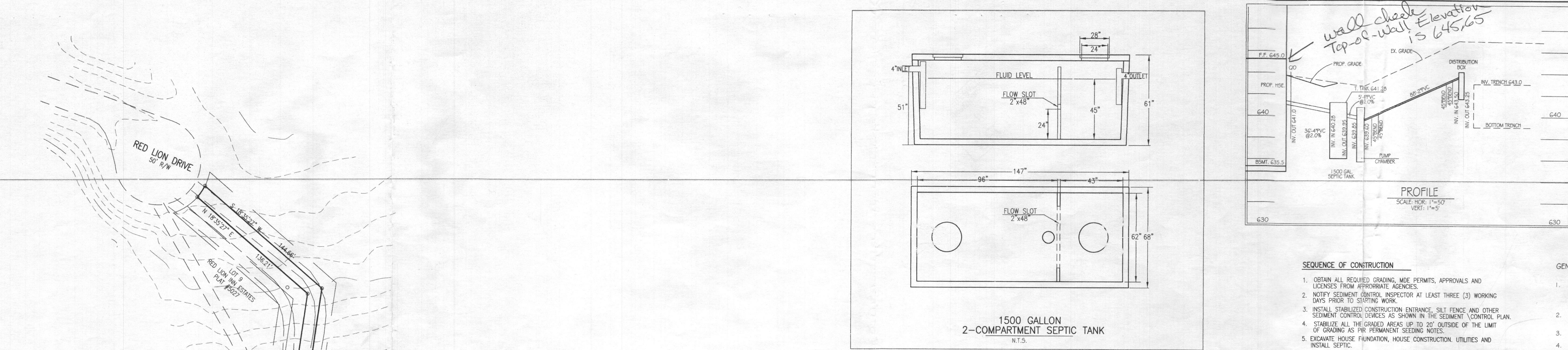
RE: File Number: WP-07-131 (reference F-07-089)
Title: Red Lion Inn Estates Lots 15 to 18

The Howard County Health Department has reviewed the above referenced submittal. We understand that the alternative to a sound-deflecting wall or fence proposed by the property owner will have no impact on existing or proposed wells and septic systems including the septic easements.

We have NO COMMENT regarding the waiver requested by the property owner as it relates to the subdivision proposed on Final Plat F-07-089.

RCB
CC: G, Scott Shanaberger, Shanaberger & Lane
file

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.476 / Virus Database: 269.9.12/878 - Release Date: 6/28/2007
5:57 PM



SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES.
2. NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES AS SHOWN IN THE SEDIMENT CONTROL PLAN.
4. STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES.
5. EXCAVATE HOUSE FOUNDATION, HOUSE CONSTRUCTION, UTILITIES AND INSTALL SEPTIC.
6. ANY AREAS THAT CAN BE TEMPORARILY SEEDING DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES.
7. INSTALL DRIVEWAY.
8. STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES.
9. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR HOUSE CONSTRUCTION.
10. NOTIFY INSPECTOR FOR FINAL INSPECTION.

GENERAL NOTES:

1. TOPOGRAPHY & PLANIMETRIC FEATURES SHOWN HEREON TAKEN FROM COPYRIGHTED GIS DATA FROM HOWARD COUNTY, SUPPLEMENTED WITH FIELD LOCATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
2. THE EXISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES OR TAKEN FROM AVAILABLE RECORDS AND ACCURATELY SHOWN.
3. ZONING DISTRICT: RC-DEO
4. LIMIT OF DISTURBANCE (LOD) = 23,500 SQ. FT.
5. THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
6. STORM WATER MANAGEMENT FOR THIS LOT IS PROVIDED BY N-1 ROOFTOP DISCONNECTION AND N-2 NON ROOFTOP DISCONNECTION.

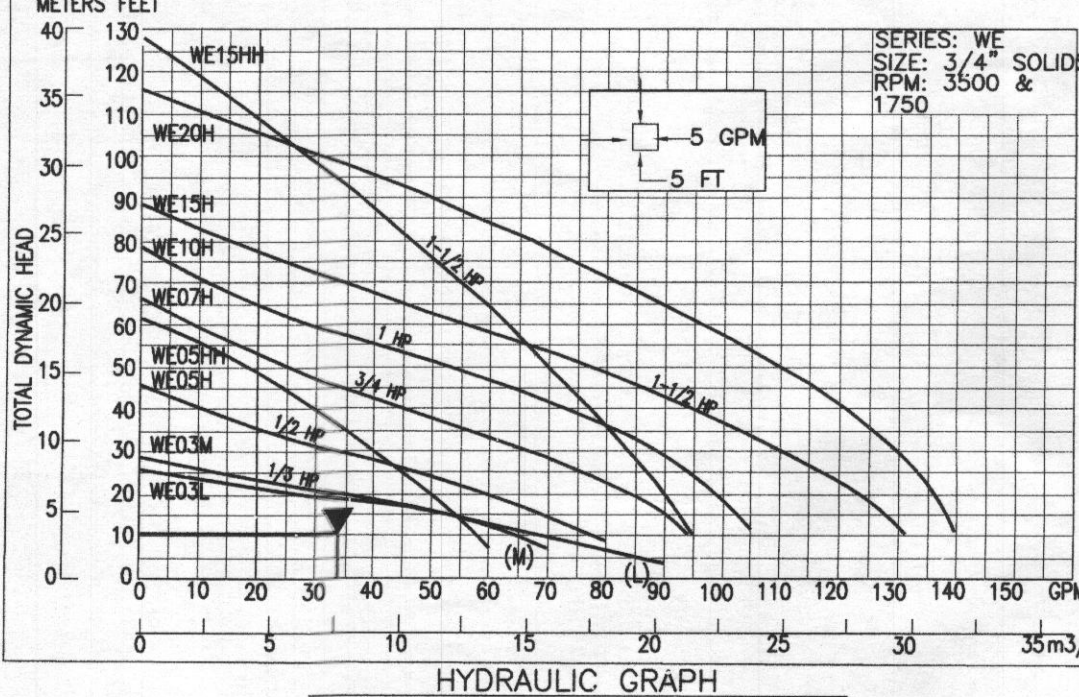
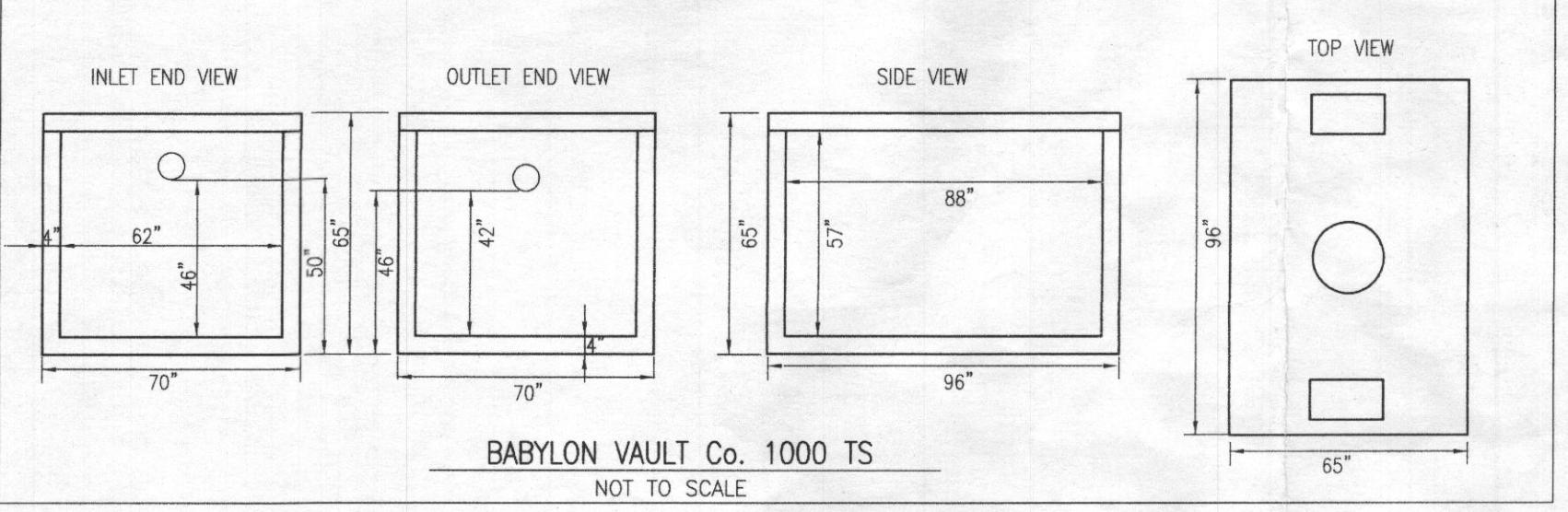
SEPTIC SYSTEM TRENCH DESIGN

INITIAL NUMBER OF BEDROOMS = 4
 APPLICATION RATE = 1.2 GPD / sq. ft.
 DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
 600 GPD / 1.2 GPD/sq. ft. = 500 sq. ft.
 500 sq. ft. / 3 ft. WIDE TRENCH = 167 LF TRENCH
 167 LF TRENCH X 0.83 REDUCTION CREDIT = 139 LF TRENCH
 TRENCH 1 (T1) EX. GRD=647.0 - INV. TRENCH=643.0 - B. TRENCH=639.0
 TRENCH 2 (T2) EX. GRD=646.5 - INV. TRENCH=642.5 - B. TRENCH=638.5

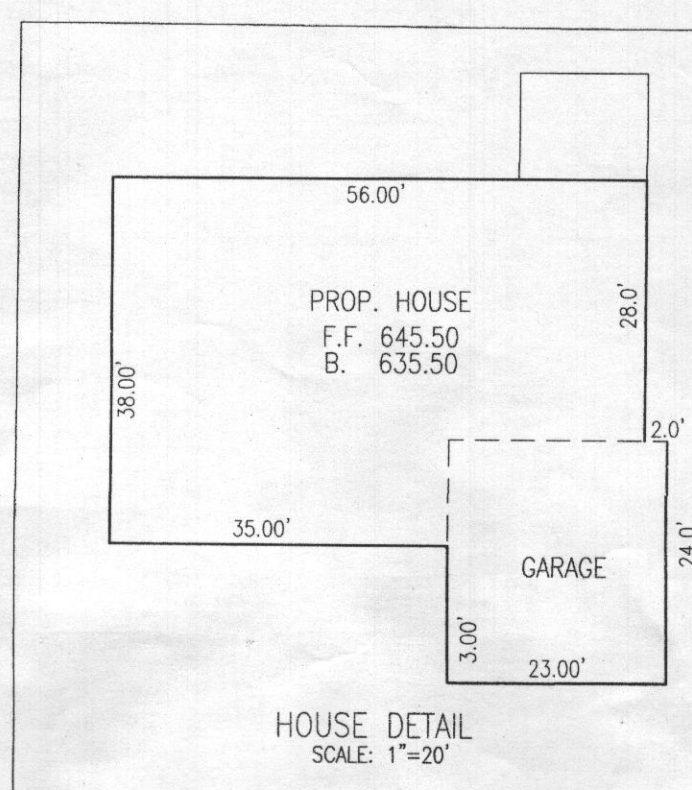
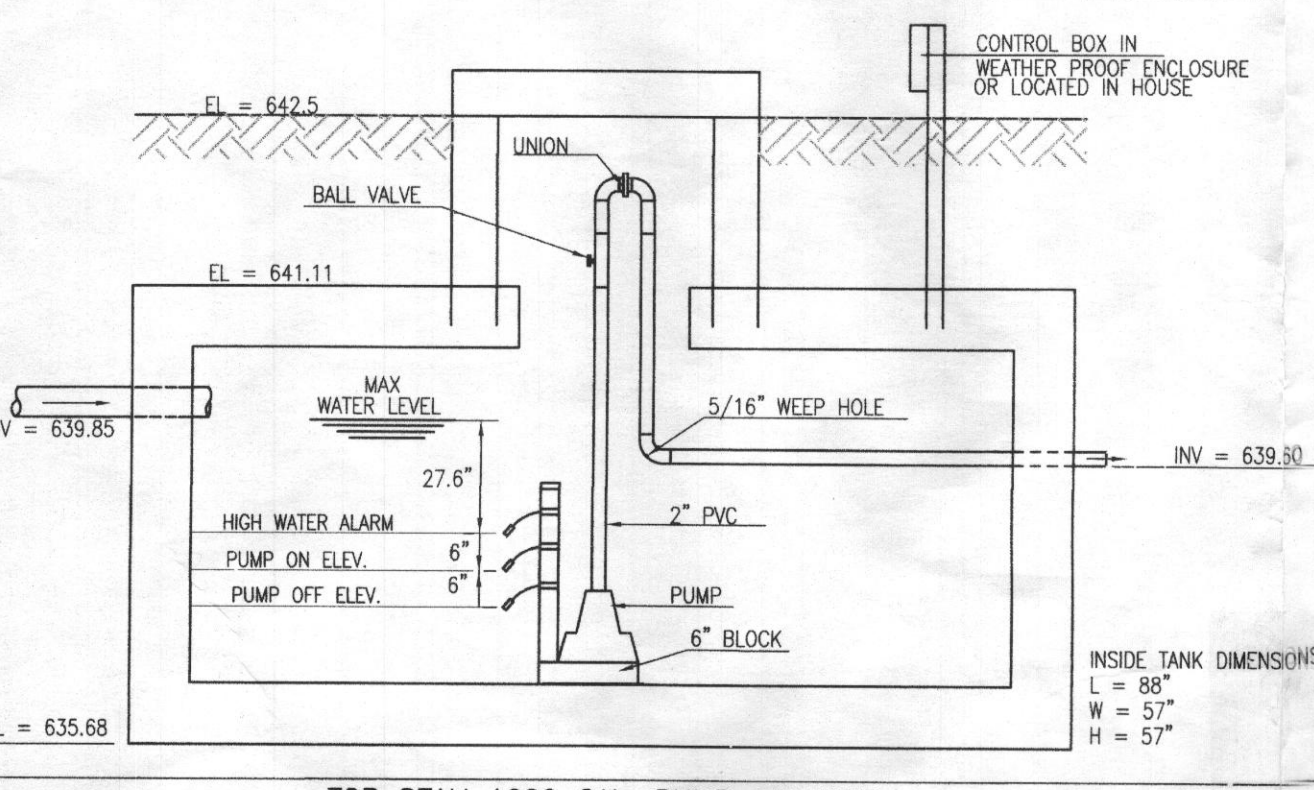
1st & 2nd REPLACEMENT
 APPLICATION RATE = 1.2 GPD / sq. ft.
 DESIGN FLOW: 150 GPD X 4 BEDROOMS = 600 GPD
 600 GPD / 1.2 GPD/sq. ft. = 500 sq. ft.
 500 sq. ft. / 3 ft. WIDE TRENCH = 167 LF TRENCH
 167 LF TRENCH X 0.83 REDUCTION CREDIT = 139 LF TRENCH

SITE PLAN 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. MAXIMUM COVER OVER THE TANK IS 3 FEET. GREATER DEPTH WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL (TAG #HO-95-1534) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
6. THE PROPERTY LINE CLOSEST TO PERC. HOLE #59 MUST BE STAKED PRIOR TO SYSTEM INSTALLATION BY A LICENSED SURVEYOR.



| TOTAL DESIGN HEAD (TDH) COMPUTATION | | | |
|-------------------------------------|--|--|-------|
| STATIC HEAD (643.50-635.68) | | | 7.82 |
| FRICTION HEAD | | | 2.45 |
| PIPE 1.88x(91'+39.5')/100 | | | |
| FITTINGS: 4-45° 4x4" = 16 | | | |
| DISCONNECT: = 3 | | | |
| 1-90° 3x7" = 21 | | | |
| BALL VALVE: 1x0.5 = 0.5 | | | |
| TOTAL DESIGN HEAD (TDH) | | | 10.27 |



WELL CERTIFICATION
 I HEREBY CERTIFY THAT THE EXISTING WELL TAG NO. HO-95-1534 HAS BEEN FIELD LOCATED AND ACCURATELY SHOWN HEREON.

RONALD E. THOMPSON, P.E.
 3/15/2017
 DATE

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. 18417, Expiration Date: 9-18-17.

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 3/20/17

OWNER:
 SALVATORE & ESTELA VALENZIANO
 146C1 RED LION DRIVE
 WOODBINE, MD. 21797

DEVELOPER:
 JOHN & ROSA HORST
 2767 THORNBROOK ROAD
 ELLICOTT CITY, MD. 21042
 443-464-4483

DEVELOPER'S CERTIFICATE:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER: [Signature] DATE: 3/15/2017

ENGINEER'S CERTIFICATE:
 "I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT AND THE 2011 MARYLAND STANDARDS & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

ENGINEER: [Signature] DATE: 3/15/2017

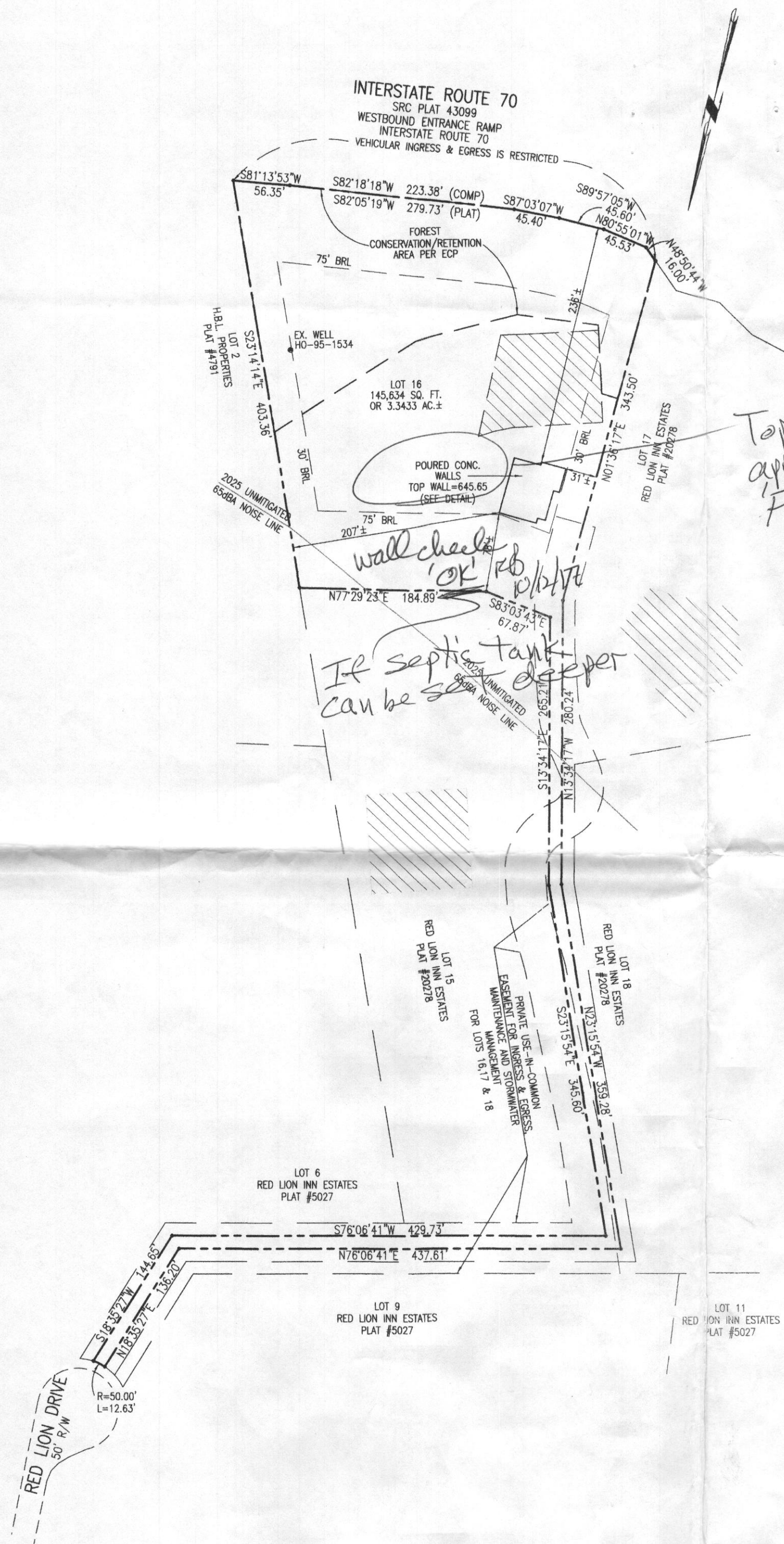
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE:

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

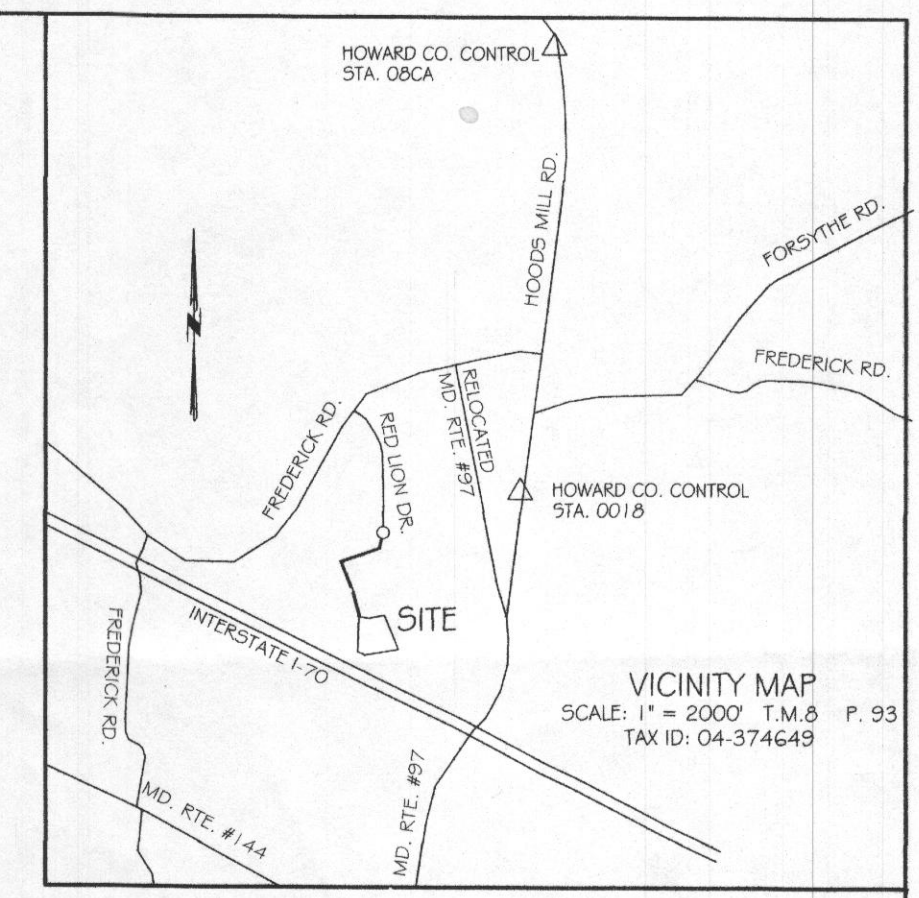
LOT 16
 RED LION INN ESTATES
 PLAT No. 20278
 TAX ID: 04-37449
 146C5 RED LION DRIVE
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1" = 50' OCTOBER, 2016

VANMAR ASSOCIATES, INC.
 Engineers Surveyors Planners
 310 South Main Street Mount Airy, Maryland 21771
 (301) 829-2890 (301) 831-5015 (410) 549-2751
 Fax (301) 831-5603 ©Copyright, Latest Date Shown



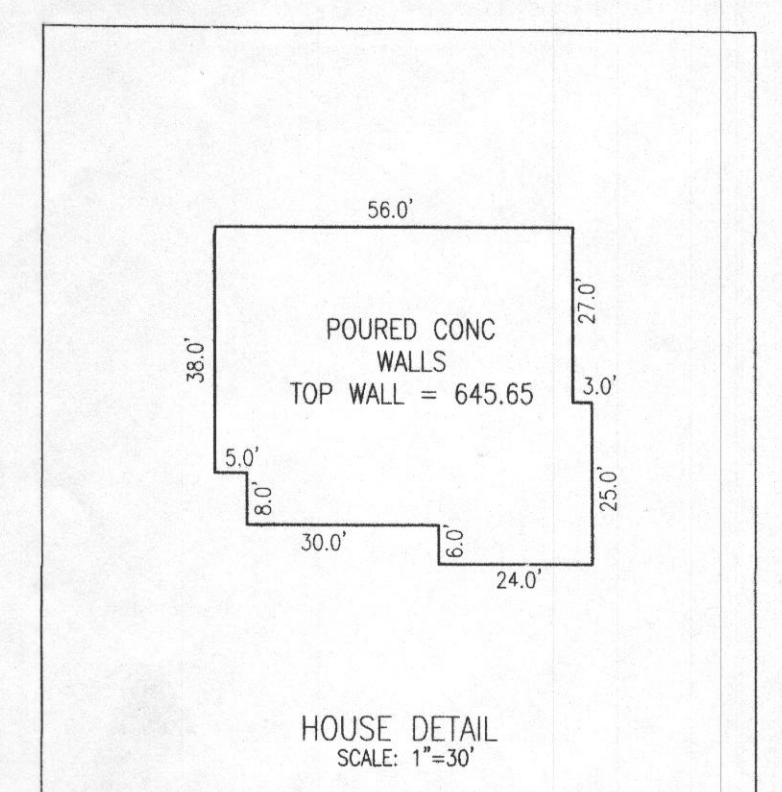
Top of Wall elevation approx. equal to FF Elevation on Plot Plan and OSDS Plan

wall check OK RB PL/AT
If septic tank can be set deeper



GENERAL NOTES:

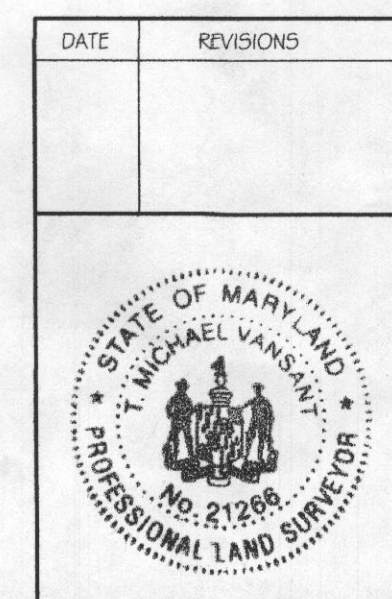
1. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1534) HAS BEEN FIELD LOCATED BY VANMAR ASSOCIATES AND ACCURATELY SHOWN.
2. FOOTINGS AND FOUNDATION ARE IN PLACE AS SHOWN HEREON.
3. TOP OF WALL = 645.65



OWNER / DEVELOPER:
JOHN & ROSA HORST
14661 RED LION DRIVE
WOODBINE, MARYLAND 21797
443-464-4483

PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THIS DOCUMENT WAS 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. 21266, EXPIRATION DATE SEPTEMBER 9, 2017, IN ACCORDANCE WITH COMAR 09.13.06.12.

T. Michael VanSant 5/11/2017
For VanMar Associates, Inc. Date
T. Michael VanSant, Prof. Land Surveyor



WALL CHECK DRAWING
LOT 16
RED LION INN ESTATES
PLAT No. 20278
TAX ID: 04-374649
14665 RED LION DRIVE
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 100' MAY, 2017

VANMAR ASSOCIATES, INC.
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