



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/hocohealth

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

RECEIPT DATE: 3-22-17 **ONSITE SEWAGE DISPOSAL SYSTEM** P Subst A
 APPROVAL DATE: 7/14/17 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 731 Woodbine Crossing Road
 SUBDIVISION: Woodbine Crossing LOT: 6 TAX ID: 04-374452
 CONTRACTOR: WTC Contractors EMAIL: _____
 CONTRACTOR ADDRESS: 3033 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-458-7024
 PROPERTY OWNER: LDG Inc. EMAIL: _____
 OWNER ADDRESS: 8601 Georgia Avenue, Silver Spring, MD 20110 PHONE: 301-585-7000
 SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: _____
 PUMP MODEL: 3885-WE05HH WE03L PUMP SIZE 1/2 1/3 hp PUMP TANK CAPACITY: 1250

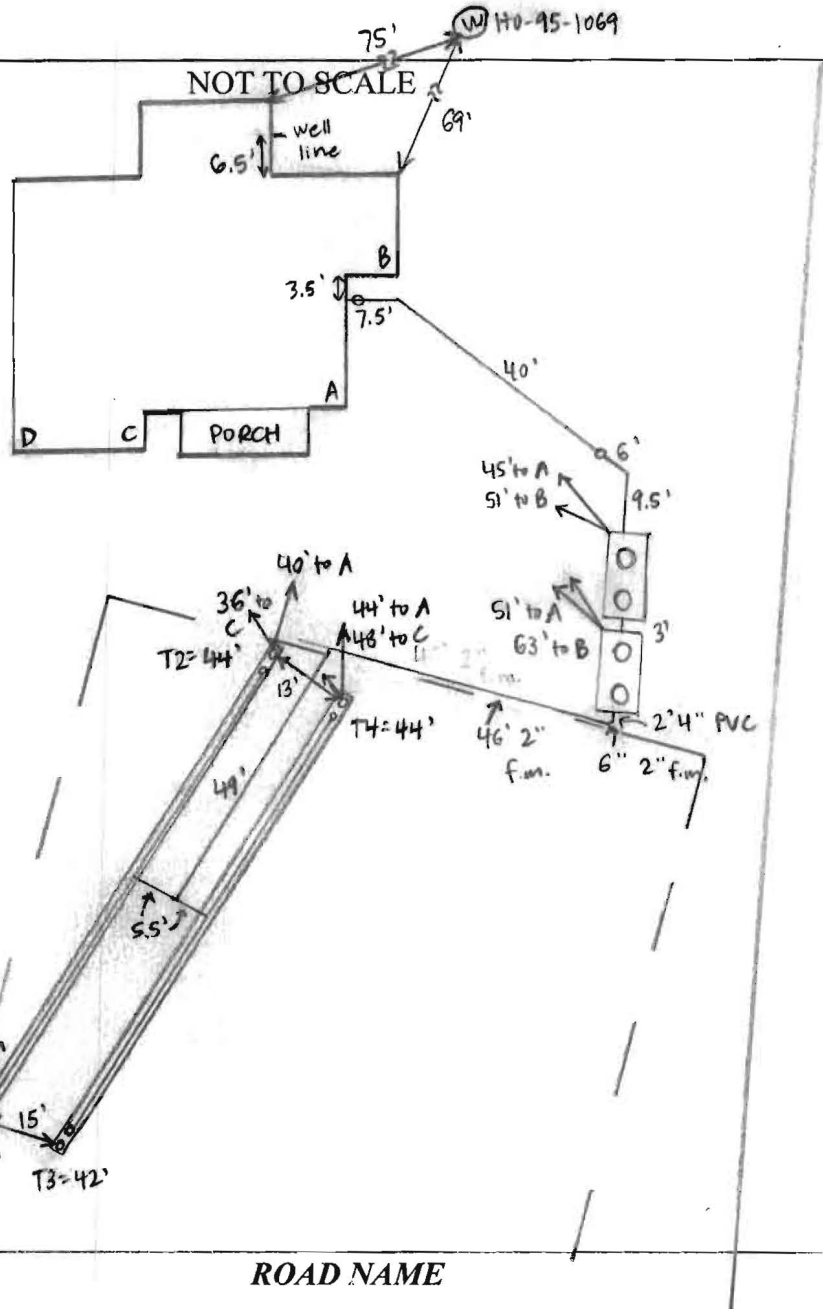
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.6

TRENCHES:	LINEAR FEET REQUIRED: <u>175</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>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Hank Oswald ISSUE DATE: 3-22-17 EXPIRATION DATE: 3-22-18

- 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 17000876
- 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'	3'
NUMBER OF TRENCHES		4
TOTAL LENGTH		179'
ABSORPTION AREA		537' + SIDEWALL
DISTRIBUTION BOX LEVEL		---
DISTRIBUTION BOX BAFFLE		---
DISTRIBUTION BOX PORT		---

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	1-2'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	3-26-17
PUMP/SEPTIC TANK LEVEL YES	
MANUFACTURER	BABYLON
CAPACITY	1250 GAL
SEAM LOC	TOP
TANK LID DEPTH	1-2'
BAFFLES	INLET
BAFFLE FILTER	NO
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	2-28-17
Pump: 1/3 hp	

PRE-CONSTRUCTION:

5/3/17 Met WTC on site for layout. Tank stake and all SDA stakes present except for SW corner. Trenches also staked. Shot ends of trenches and they were within a couple inches elevation. (SC)

INSTALLATION: 5/4/17 House connection made. Septic tank and pump tank set, 2" force main run to area of manifold. (SC) 5/8/17 WTC digging T1 + using laser to check depths. 3' wide, 8' to bottom. T2 + T4 dug and stone added - missing observation ports. On site while WTC dug T3. Added observation ports to T2 + T4. Holes for laterals drilled during site visit. Need pump + alarm test. (SC) 7/12/17 on site for pump + alarm. Alarm sounds when triggered. Measured lateral head heights - 4' + at T2, T3, T4 turnups, all filled with mud. NO water @ T1. Refill pump tank w/ water + repeat pump test. (SC)

7/13/17 Builder ran water into laterals earlier - standing water + mud @ T1 + T3. None in T2 + T4. Dug up center manifold pipe - no cracks. Dug up T1 + cut off elbow - clogged w/ mud. (SC) See Pg #2

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 7/14/17

SECTION I
PATAPSCO OVERLOOK
PLAT # 6718

EX. WELL

EX. WELL
HO-81-2085

EX. WELL
HO-95-1069

LOT 6
49,823 SQ. FT.
OR 1.1438 AC. ±

POURED CONC.
WALLS
TOP OF WALL
= 678.0
(SEE DETAIL)

LOT 5
WOODBINE CROSSING
PLAT No. 20055

LOT 7
WOODBINE CROSSING
PLAT No. 20055

PUBLIC 10' TREE MAINT.,
DRAINAGE & UTIL. ESMT.

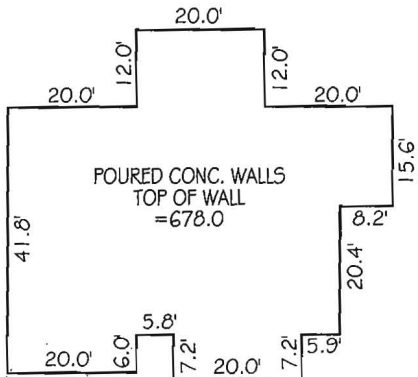
A=57.96' N82°22'53"E 79.46'
R=25.00'

WOODBINE CROSSING ROAD
50' RW

NOTES:

- 1) FOUNDATION AND FOOTINGS ARE IN PLACE AS SHOWN HEREON.
- 2) BUILDING TIES ARE ±0.5' UNLESS OTHERWISE NOTED.
- 3) TOP OF WALL = 678.0
- 4) SEPTIC AREA SHOWN IS TAKEN FROM THE REVISED PERC CERT PLAN.

*3/22/17 - wall check
okay. u.o.*



HOUSE DETAIL
SCALE: 1" = 30'

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. 21097, EXPIRATION DATE JULY 22, 2018, IN ACCORDANCE WITH COMAR 09.13.06.12.

Thomas L. Frazier, Jr.
THOMAS L. FRAZIER, JR.
PROF. LAND SURVEYOR
3/7/17
Date

For VanMar Associates, Inc.
Thomas L. Frazier, Jr., Prof. Land Surveyor

WALL CHECK DRAWING
LOT 6
WOODBINE CROSSING

PLAT No. 20055

731 WOODBINE CROSSING ROAD
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' MARCH, 2017

I CERTIFY THIS PLAT TO BE CORRECT AND THE RESULT OF AN ACTUAL FIELD SURVEY, BASED ON DATA FOUND AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND, AS REFERENCED HEREON.



VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners

310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
©Copyright, Latest Date Shown

REFERENCE

JOB NO.

PLAT NO. 20055

B4-5416



Bureau of Environmental Health

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 Twitter: HowardCoHealthDep

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

February 1, 2017

Vanmar Associates, INC.
 310 South Main Street
 Mount Airy, MD 21771
 Attn: Ron Thompson

Sent via email to: ron@vanmar.com

**RE: Septic Plan_Woodbine Crossing, Lot 6
 731 Woodbine Crossing Road
 Mount Airy, MD 21771**

Hi Ron:

The following comments pertain to the Septic Plan (LPD Design) for 731 Woodbine Crossing Road.

- 1.) The ground & pipe invert elevations on the charts do not match. You could keep the pipe invert elevations the same and change the # of perforations to arrive at 44 ft. of trench/lateral.

Low Pressure Dosing System										
	Ground. Elevation	Pipe Inv.Elv.	Trench Length	Pipe Length	Perf. Dia.	Head	Perf. F.R.	Perf. Spac	#of Orf	Lateral F.R.
L1	670	666	44	42.15	5/16	3	1.99	3.7	12	23.88
L2	670	666	44	42.15	5/16	3	1.99	3.7	12	23.88
L3	669	666	44	42.15	5/16	3	1.99	3.7	12	23.88
L4	669	666	44	42.15	5/16	3	1.99	3.7	12	23.88
										95.52 GPM

Calculations:

Trench Length = 3.7 ft. x 12 Orifices = 44 ft. (6 orifices x 3.7 = just 22.2 ft of lateral)
 Lateral Length = 44 - (3.7/2) = 42.15 ft.
 Trench Flow Rate = 23.88 + 23.88 + 23.88 + 23.88 = 95.52 gallons/minute

- 2.) Fitting Chart

4 Fittings	3inch	45 Degree Ell	4x6	24ft
1 Fittings	3inch	T	15x1	15ft

Total ft. of 3 inch Pipe = 39 ft. (Not 116.5 ft.)

- 3.) Friction Head = 110 ft. + 39 ft. = 139 ft. x 2.09 (chart# at 95.52) = 290.51/ 100 = 2.91ft
 Static Head=Pump Off to Upper Trench = 4.44 ft.
 Distal Head = 3 ft. TDH = 2.91+4.44+3=10 @ 57 GPM
 Runtime=195.4 gallons (min does volume)/57GPM=3.43 min
 Pump =WE05HH (Please Note: Point on graph was incorrect; it was graphed in meters instead of feet)

Should you have any questions, please don't hesitate to ask.

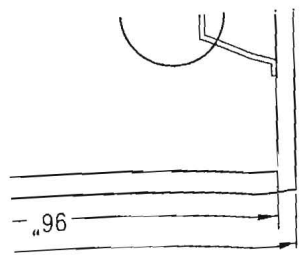
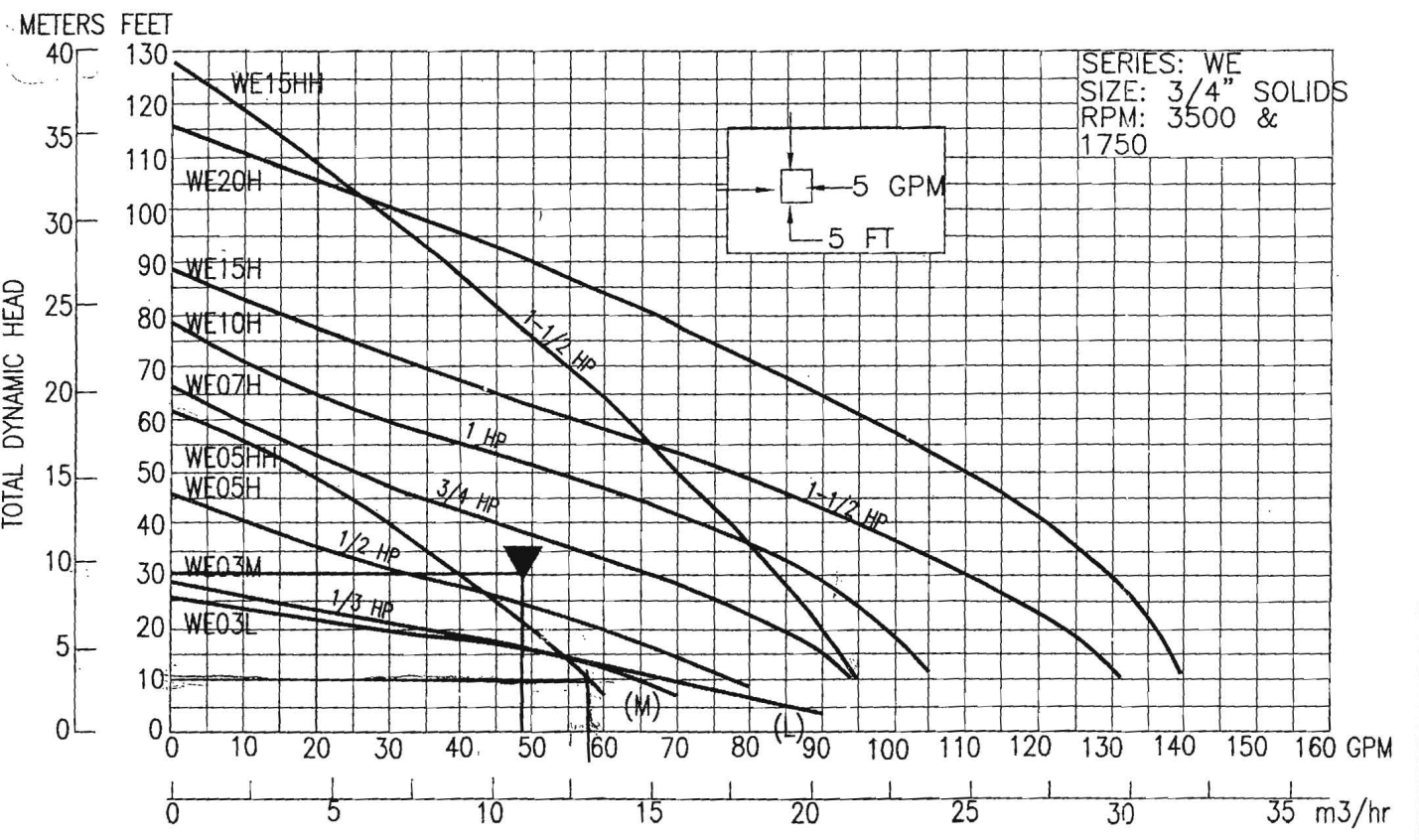
Respectfully,

Hank Oswald

Hank Oswald, L.E.H.S
 Bureau of Environmental Health
 Well & Septic Program

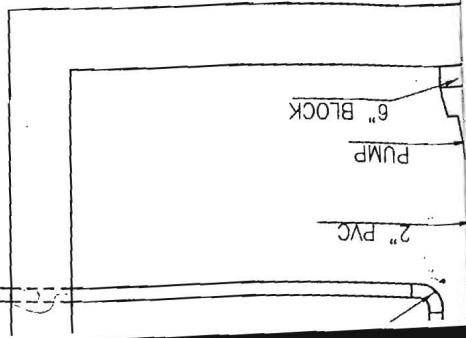
TRENCH DESIGN

GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH OF STONE FROM GROUND	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH BEGINS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING (FT)
670.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10
670.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10
669.0	665.5	665.0	4.0'	4.5'	661.0	665.0	4.0'	3.0'	10
669.0	665.5	665.0	4.0'	4.5'	661.0	665.0	4.0'	3.0'	10



INSIDE TANK DIMENSIONS
 H = 53" TO OUTLET
 W = 62"
 L = 114"

3" X 2" REDUCER
 INV = 663.15



Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, February 01, 2017 9:25 AM
To: ron@vanmar.com
Subject: Septic Plan_731 Woodbine Crossing Road
Attachments: Woodbine Crossing Lot 6_731 Woodbine Crossing Road.pdf

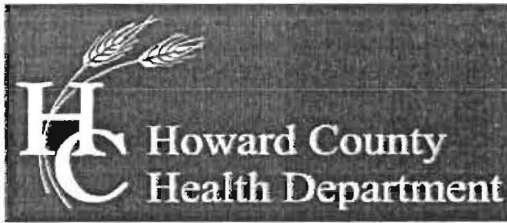
Hi Ron:

Please see attached letter regarding comments to the septic plan for 731 Woodbine Crossing Road.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
410.313.2648 (Fax)



Bureau of Environmental Health

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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 28 day of May, 2014, among LDG, Inc., 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 731 Woodbine Crossing, Woodbine, MD 21797 (Lot 6), 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 1988 Folio 258.

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

LETTER OF TRANSMITTAL

AGENCY CLIENT FILE ACCT. CORR. 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 Department of
Environmental Health
8930 Stanford Blvd
Columbia, Maryland 21045

Attn: Hank Oswald, L.E.H.S.

DATE: February 3, 2017

PROJECT: Woodbine Crossing, Lot 6

VMA#: B45416

ENCLOSED:

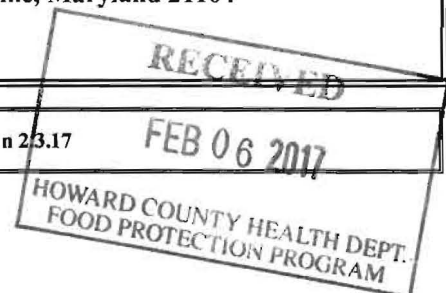
COPIES	DATE	DESCRIPTION
3	2/2/17	On Site Sewage Disposal System Design Plan Lot 6 Woodbine Crossing

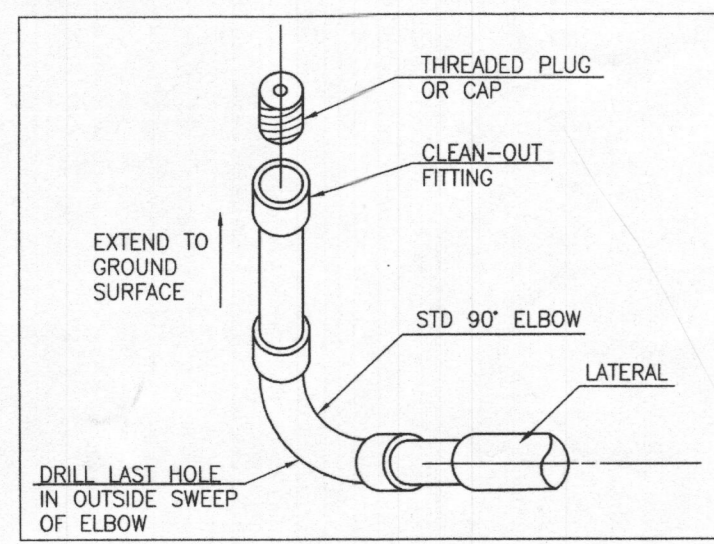
REMARKS: Hi Hank, the plan has been revised and submitted for your review and approval. Thank you!

COPIES TO (ADDRESS): Catonsville Homes, 11175 Stratfield Court, Marriottsville, Maryland 21104

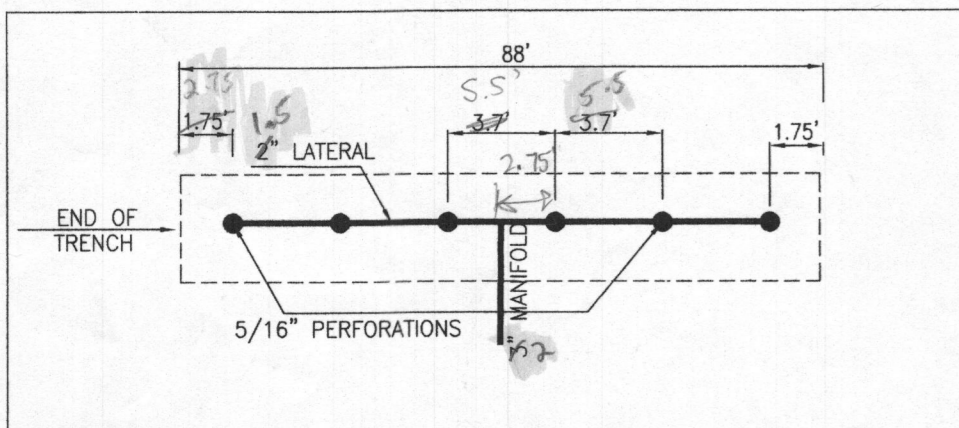
SUBMITTED BY: dkv

G:Eng.5416 hd revised Sewage plan 23.17

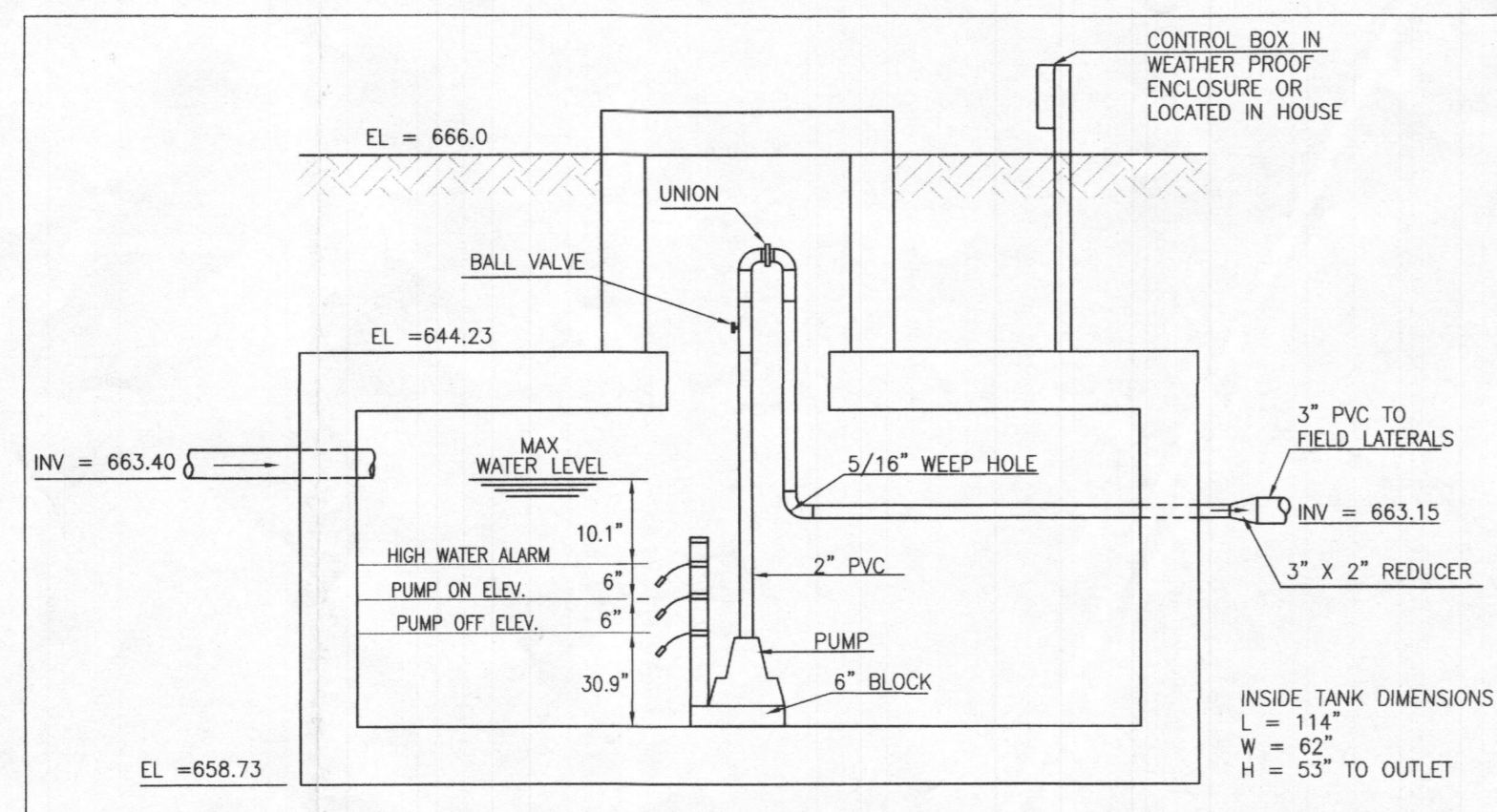




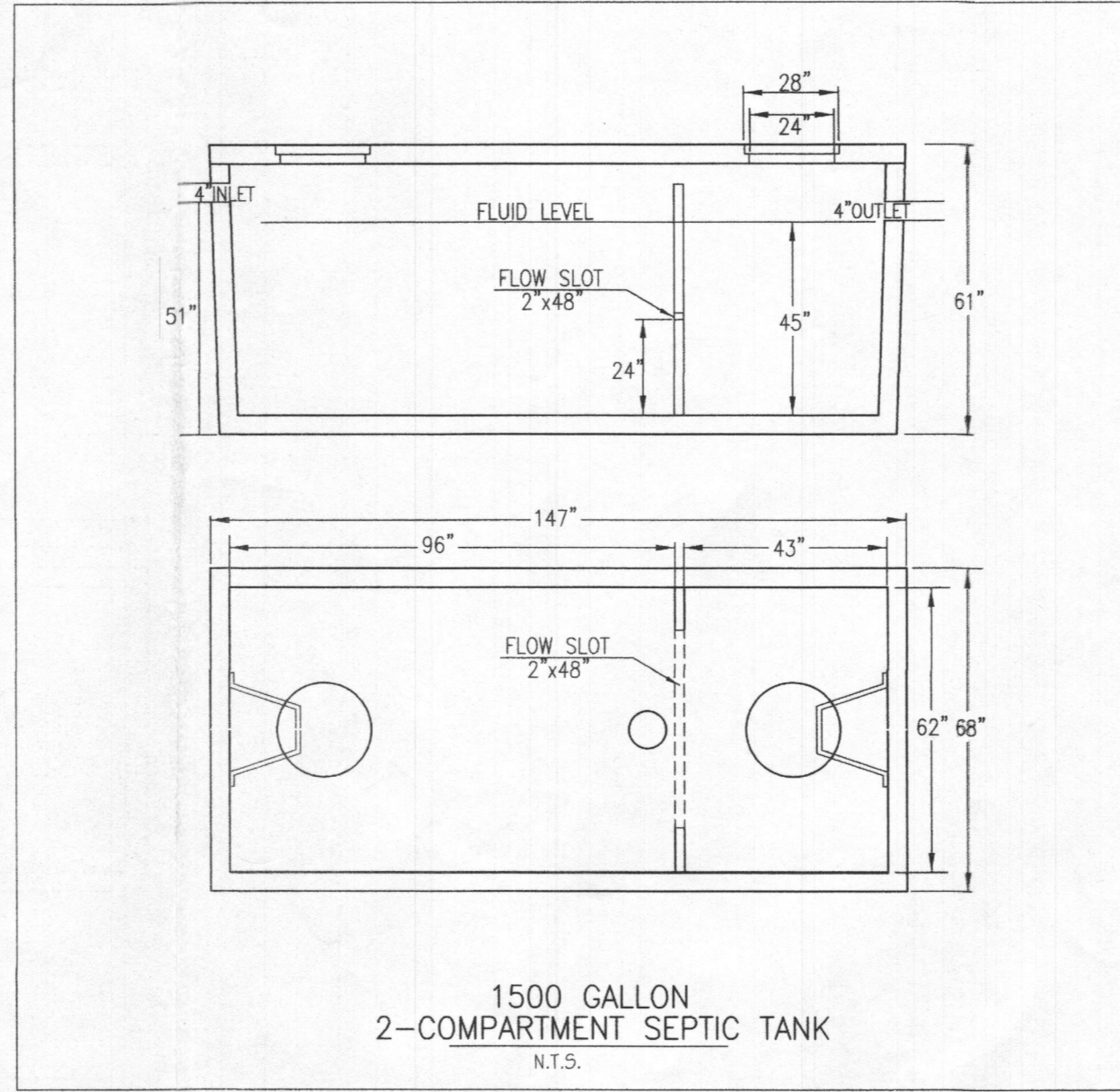
LATERAL END TURN-UP
USE ON LATERAL FARTHEST FROM PUMP AND ON LATERAL DIAGONALLY ACROSS BED NOT TO SCALE



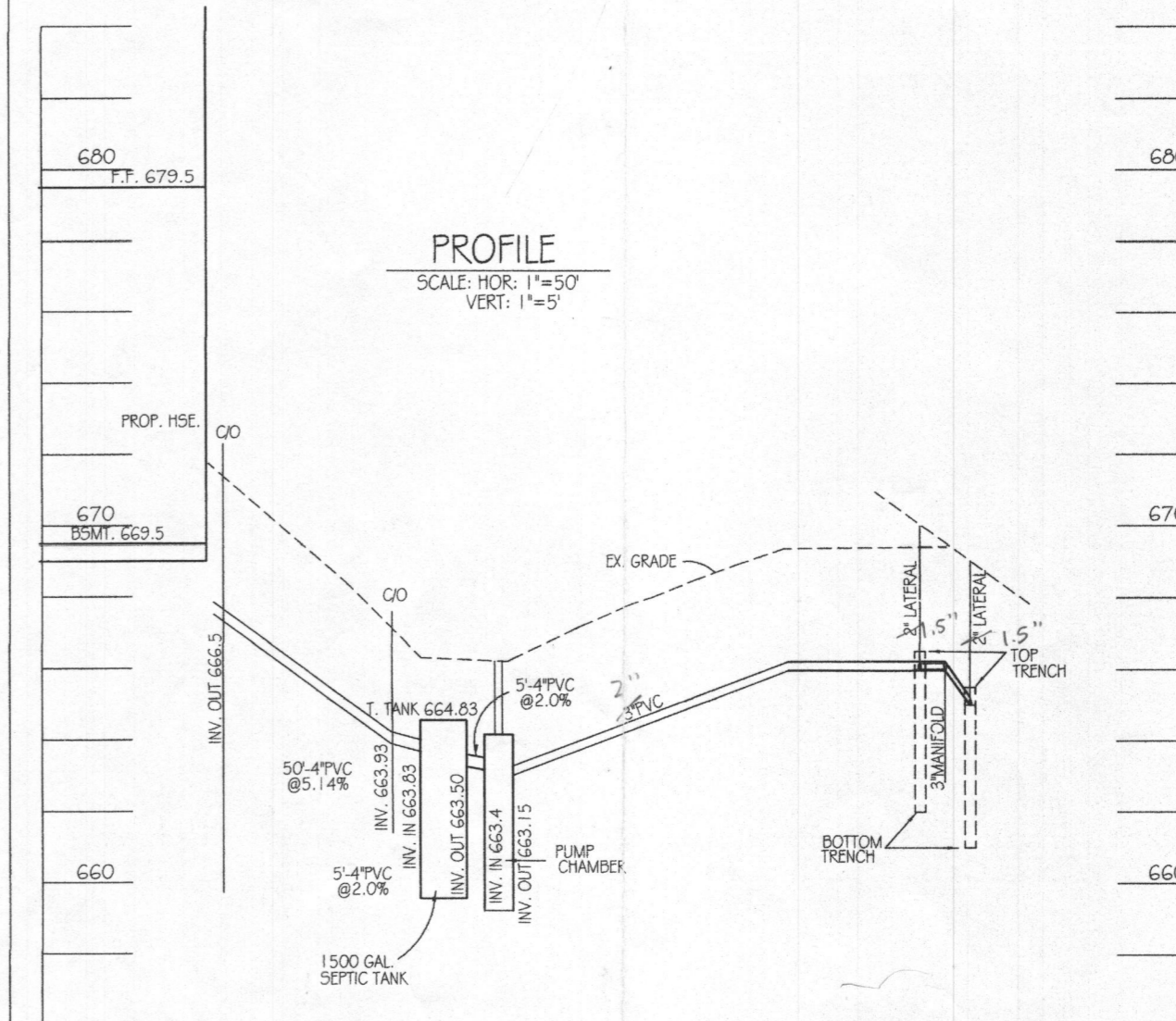
LATERAL DETAIL
NOT TO SCALE



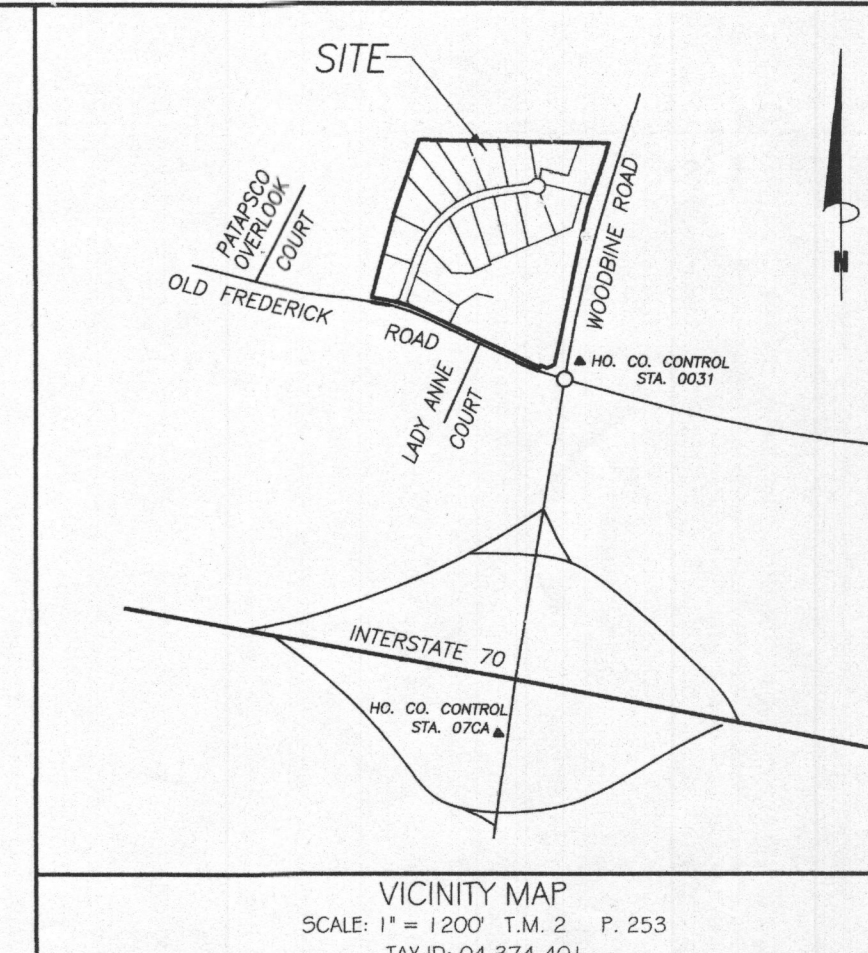
TOP SEAM 1250 GAL. PUMP CHAMBER
NOT TO SCALE



1500 GALLON 2-COMPARTMENT SEPTIC TANK
N.T.S.



PROFILE
SCALE: HORIZ. 1"=50' VERT. 1"=5'



VICINITY MAP
SCALE: 1" = 1200' T.M. 2 F. 253 TAX ID: 04-374-401

LOW PRESSURED DOSE SYSTEM SPECIFICATIONS

1. ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN.
2. A SUBMERSIBLE PUMP TO REMOVE 387 GPM AGAINST 10.5 TDH TO BE PROVIDED. PUMP TO BE A GOULDS MODEL 3885-1050-10 OR EQUAL.
3. A TEST OF THE PUMP SYSTEM AND DISTRIBUTION PIPING IS REQUIRED PRIOR TO COVERING THE SYSTEM.
4. THE HIGH WATER ALARM IS TO BE ON A SEPARATE CIRCUIT ALARM TO BE LOCATED IN THE HOUSE.

LOW PRESSURE DOSE SYSTEM DESIGN CRITERIA

DOSE VOLUME

1. MINIMUM DOSE = (5 X LATERAL PIPE VOLUME) + (FORCE MAIN 4 MANIFOLD) = (5 X 30.4) + 4.2 = 157.2 GALLONS
2. 195.4 GALLONS IS MORE THAN 1/3 DESIGN FLOW (5 BEDS X 150 GALLONS/5 = 125 GALLONS) USE 195.4 GALLONS DOSE (4-1 MIN. RUN TIME X 47.5 GPM FLOW)
3. RUNTIME = 195.4 GALLONS / 47.5 GPM = 4.13 MIN.

PIPE VOLUMES

1. 110 LF 6" PIPE X 30.4 GALLONS PER 100 LF = 42.2 GALLONS
2. 176 LF 1/2" PIPE X 17.4 GALLONS PER 100 LF = 30.6 GALLONS

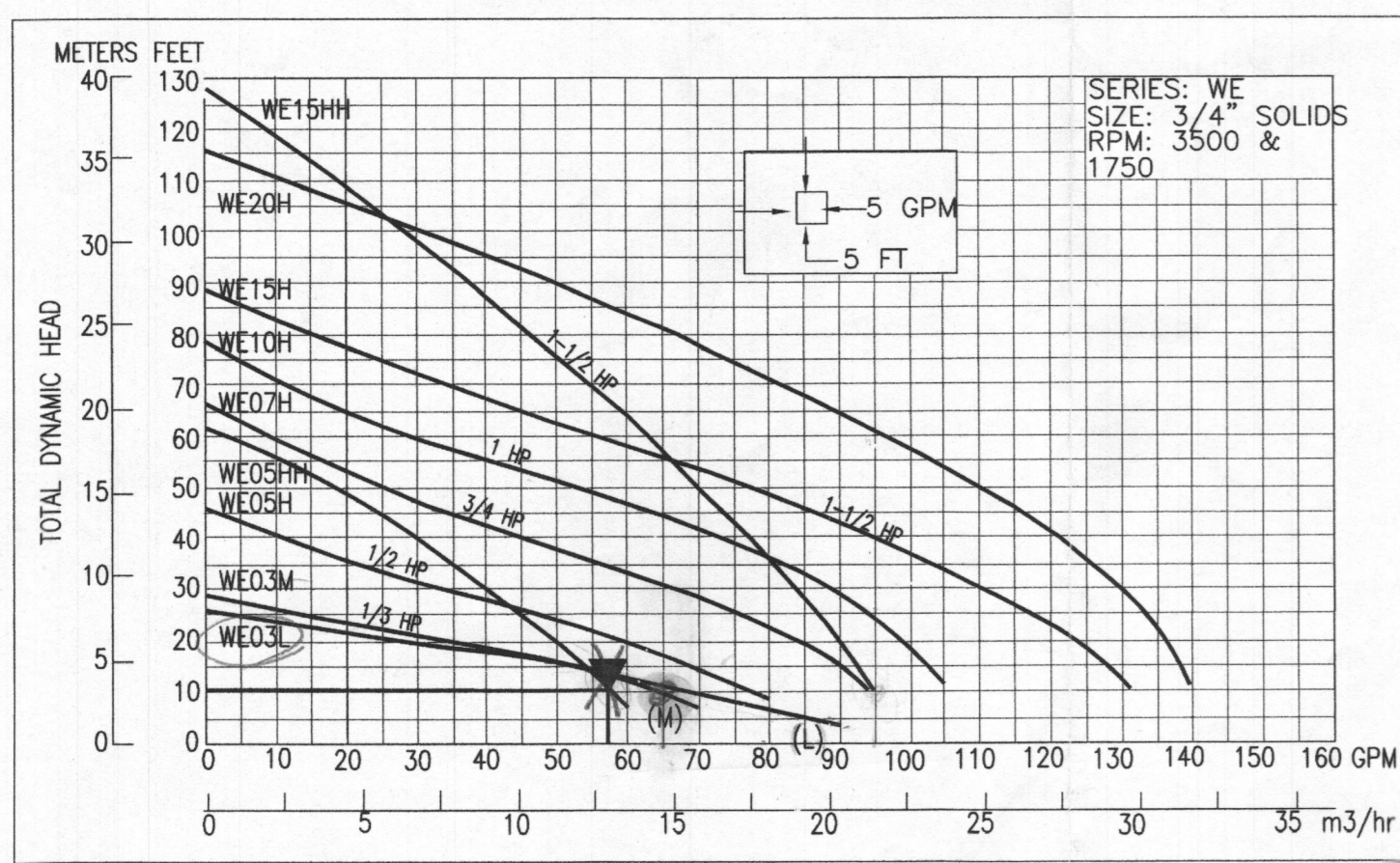
FRICTION LOSS IN 3" PIPE FITTINGS

- 1 - 90° TEE X 1.5 FT PER FITTING = 15 EQUIVALENT FT OF PIPE
- 4 - 45° X 6 FT PER FITTING = 24 EQUIVALENT FT OF PIPE
- TOTAL EQUIVALENT FEET OF PIPE = 39 FEET
- TOTAL LINEAR FEET OF 3" PVC = 110 LF + 39 LF = 149 LF

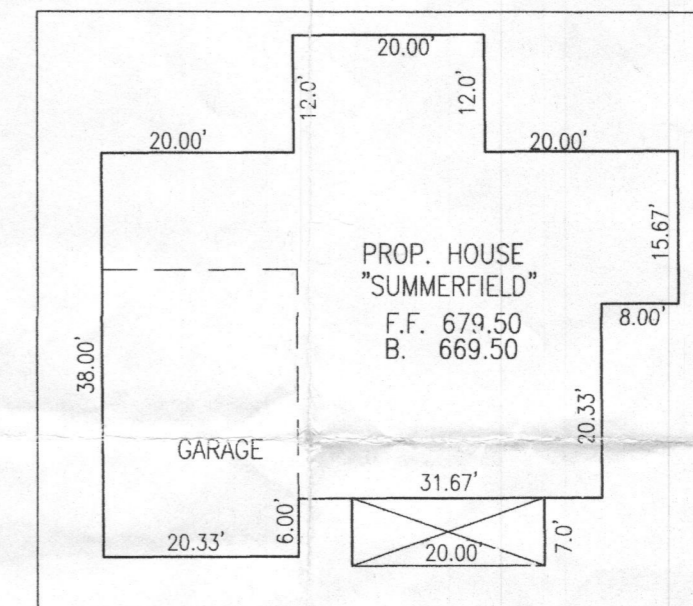
FRICTION HEAD = 110' + 39' = 149' x 2.09 = 311.141 / 100 = 3.11'
STATIC HEAD = PUMP OFF TO UPPER TRENCH = 4.44'
DISTAL HEAD = 3.00'
TOTAL DYNAMIC HEAD (TDH) = 10.5 @ 57 GPM

TRENCH	GROUND ELEV.	PIPE INVERT ELEV.	TRENCH LENGTH (FT)	2" LATERAL PIPE LENGTH (FT)	PERFORATION DIAMETER (IN)	HEAD (FT)	PERFORMANCE FLOW RATE (GPM)	PERFORATION SPACING (FT)	NUMBER OF ORIFICES	LATERAL FLOW RATE (GPM)
T-L1	670.0	666.0	44.0'	42.15'	5/16	3	1.99	37.5	12	23.88
T-L2	670.0	666.0	44.0'	42.15'	5/16	3	1.99	37.5	12	23.88
T-L3	669.0	666.0	44.0'	42.15'	5/16	3	1.99	37.5	12	23.88
T-L4	669.0	666.0	44.0'	42.15'	5/16	3	1.99	37.5	12	23.88
										TRENCH FLOW RATE 95.52 GPM

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH OF STONE FROM GROUND	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH BEGINS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING (FT)
T-L1	670.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10
T-L2	670.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10
T-L3	669.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10
T-L4	669.0	666.5	666.0	4.0'	4.5'	662.0	666.0	4.0'	3.0'	10



HYDRAULIC GRAPH



HOUSE DETAIL
SCALE: 1"=20'

- 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) = 23,800 SQ.FT.
 5. THERE ARE NO STREAMS, PONDS, FLOODPLAINS OR WETLANDS ON THIS LOT.
 6. STORM WATER MANAGEMENT FOR THIS LOT IS PROVIDED BY EXISTING WOODBINE CROSSING STORM WATER MANAGEMENT FACILITIES FOR AND CONSTRUCTED BY THE DEVELOPER UNDER PLAN F-07-11.3.
 7. DRIVEWAY CULVERT DESIGNED BY DEVELOPER UNDER PLAN F-07-10.3.

- SEPTIC SYSTEM TRENCH DESIGN**
- INITIAL NUMBER OF BEDROOMS = 5
APPLICATION RATE = 0.6 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 0.6 GPD/sq.ft. = 1250 sq.ft.
1250 sq.ft. / 3 ft. WIDE TRENCH = 417 LF TRENCH
417 LF TRENCH X 0.42 REDUCTION CREDIT = 175 LF TRENCH
TRENCH 1 (T1) EX. GRD=670.0 - INV. TRENCH=666.0 - B. TRENCH=662.0
TRENCH 2 (T2) EX. GRD=669.0 - INV. TRENCH=665.0 - B. TRENCH=661.0

- 1st REPLACEMENT**
- APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 0.8 GPD/sq.ft. = 938 sq.ft.
938 sq.ft. / 3 ft. WIDE TRENCH = 313 LF TRENCH
313 LF TRENCH X 0.42 REDUCTION CREDIT = 131 LF TRENCH
TRENCH 1 EX. GRD=667.5 - INV. TRENCH=663.5 - B. TRENCH=659.5
TRENCH 2 EX. GRD=666.0 - INV. TRENCH=662.0 - B. TRENCH=661.0

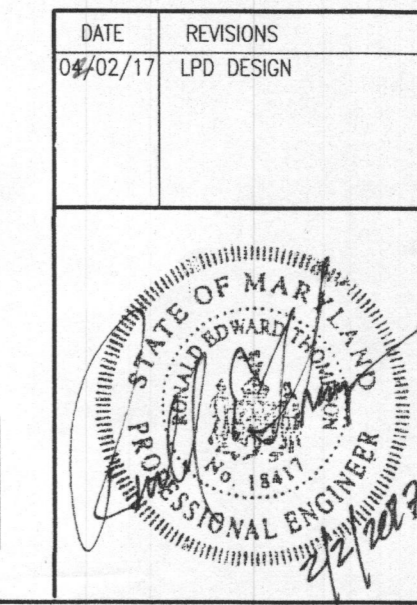
- 2nd REPLACEMENT**
- APPLICATION RATE = 0.8 GPD / sq.ft.
DESIGN FLOW: 150 GPD X 5 BEDROOMS = 750 GPD
750 GPD / 0.8 GPD/sq.ft. = 938 sq.ft.
938 sq.ft. / 3 ft. WIDE TRENCH = 313 LF TRENCH
313 LF TRENCH X 0.50 REDUCTION CREDIT = 156.5 LF TRENCH
TRENCH 1 EX. GRD=664.5 - INV. TRENCH=660.5 - B. TRENCH=656.5
TRENCH 2 EX. GRD=663.0 - INV. TRENCH=659.0 - B. TRENCH=655.0

- 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-95-1069) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRAIDENT OF ANY WELLS AND OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan
Howard County Health Department
Name: *W. E. O. 31*
Signature: _____ Date: 2/16/17
Revised 4/2/17
W. E. O. 31

OWNER:
LDG INC.
1175 STRATFIELD CT
SILVER SPRING, MD. 20910
301-585-7000

DEVELOPER:
CATONVILLE HOMES
1175 STRATFIELD CT
MARIOTTVILLE, MD. 21104
410-442-2211



ON SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

LOT 6
WOODBINE CROSSING
PLAT No. 20055
731 WOODBINE CROSSING ROAD
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' JANUARY, 2017

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
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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. 18412, Expiration Date: 9-18-17.