

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: _____ ONSITE SEWAGE DISPOSAL SYSTEM P _____
APPROVAL DATE: _____ PERMIT: CONSTRUCTION A _____
PROPERTY ADDRESS: 11904 Caritas Way
SUBDIVISION: Cunningham Property LOT: 6 TAX ID: n/a
CONTRACTOR: _____ EMAIL: _____
CONTRACTOR ADDRESS: _____ PHONE: _____
PROPERTY OWNER: Gratia Plena EMAIL: _____
OWNER ADDRESS: 11140 Homewood Rd. Ellicott City, MD 21042 PHONE: 410-480-0023
SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Mayer Bros
PUMP MODEL: n/a PUMP SIZE n/a PUMP TANK CAPACITY: n/a

DISTRIBUTION SYSTEM: [X] GRAVITY [] PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

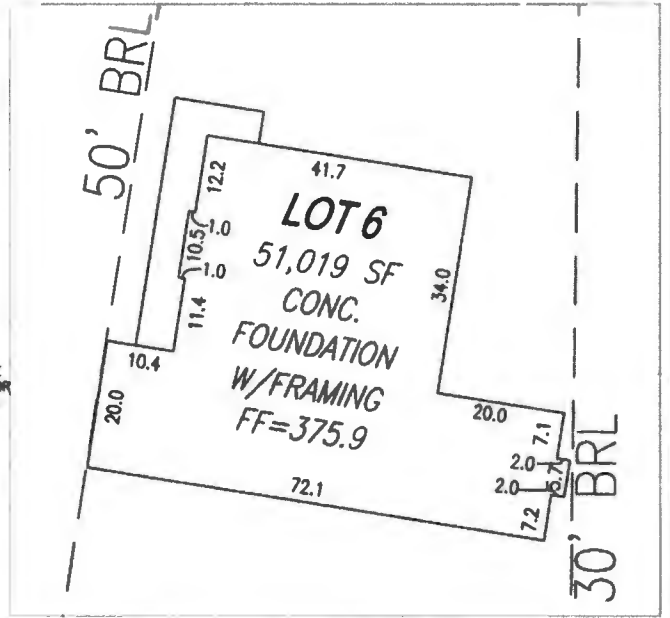
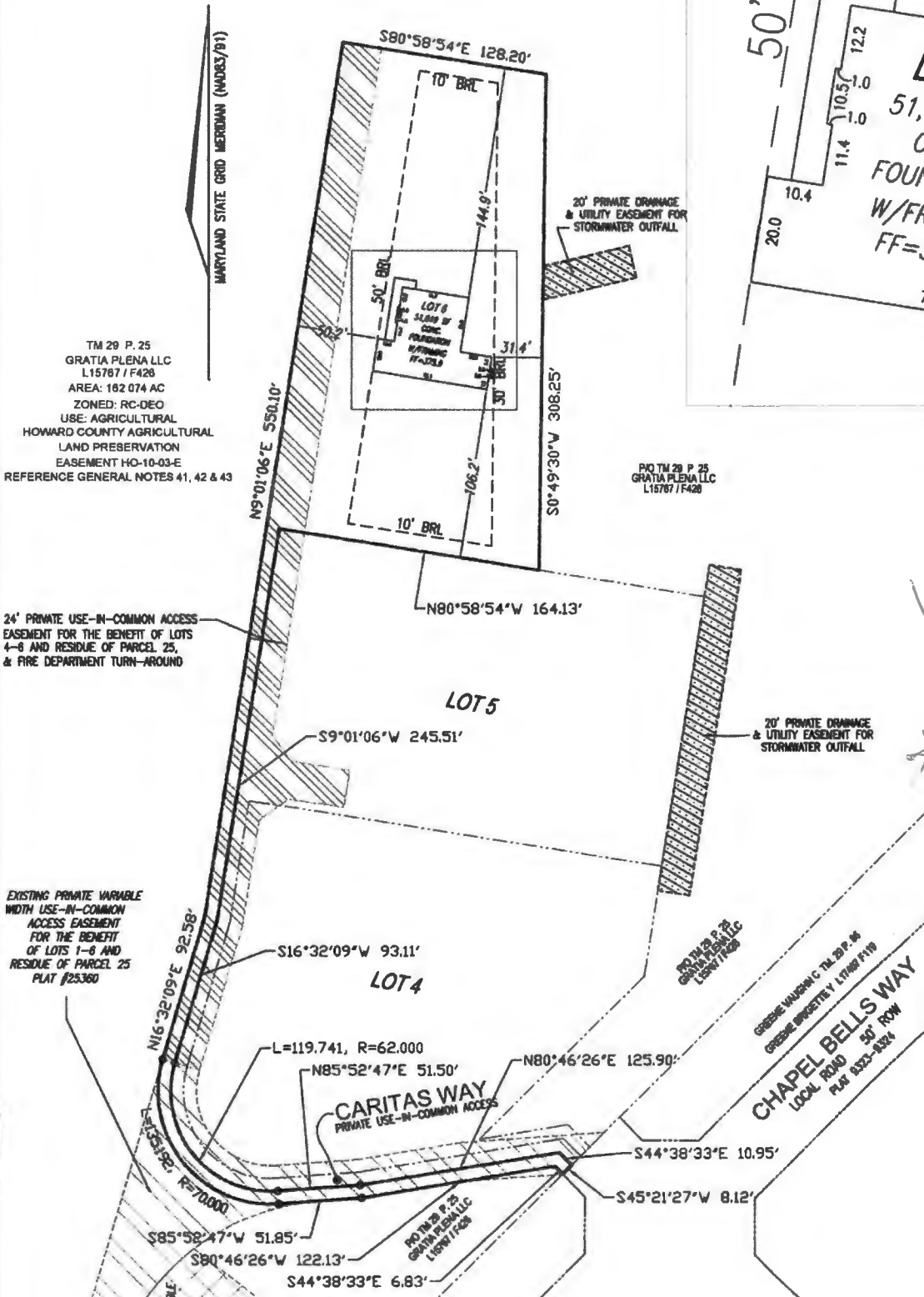
Table with 2 columns: Field Name, Value. Includes TRENCHES (Linear feet required: 238, Inlet depth: 4, Trench width: 3, Maximum bottom depth: 7, Minimum space between trenches: 10, Effective area beginning depth: 5), LOCATION (Per approved site plan...), NOTES (Be aware of the gas line crossing...)

ISSUED BY: Robert Freemon ISSUE DATE: _____ EXPIRATION DATE: _____

- 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
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.

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



INSET
SCALE: 1"=30'

*Wall Check OK
House set exact per shown on OSDS Plan R12
11/9/2024*

SCALE: 1"=100'

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN; THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

Thomas M. Hoffmann Jr.
THOMAS M. HOFFMAN JR.,
PROPERTY LINE SURVEYOR
LICENSE NO. 267
EXP. DATE: JULY 28, 2024

12/21/23
DATE



SCALE 1"= 50'	DATE 12/15/2023
DRAWN BY J.T.F.	CHECKED BY T.M.H
PLAT NUMBER 26177-26179	JOB NUMBER 14-62

VOGEL ENGINEERING
+
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING
11904 CARITAS WAY
LOT 6
CUNNINGHAM PROPERTY
26177-26179
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2 TKT: 2038817

Cust#: CASH 5/23/2024
CASH 11:58:15AM
Job#: DELCON DELCON

TRK#: 920A - KELVIN SLAUGHTER -ICE

Zone#: HC04 - SAVAGE DELIVERY ZONE Gross: 68700
P.O.#: DO-IT PLUMBING Tare: 25460
Proj#: Net: 43240
Mat'l#: 0029-WASHED #2 STONE TONS: 21.62

	Loads	Tons
Job/Daily:	8	176.34
Job/Total:	132	2,768.57

MAT'L PRICE: 26.50/ton MAT'L AMT: 572.93
HAUL RATE: 6.86/ton HAUL AMT: 150.92
FUEL 15.0000 FEE AMT: 22.64
TAX RATE: 6.0000 % - MD SALES TAX: 34.38
TOTAL CHARGE: 780.87

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Natalia Platonova

We exercise No Control Over Delivery of Our Products & We Won't
be Held Liable for Any Damage to Person or Property.

Material Safety Data Information Available Upon Request.

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2 TKT: 2038817

Cust#: CASH 5/23/2024
CASH 11:58:15AM
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4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Natalia Platonova

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SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038626

Cust#: CASH

5/23/2024

CASH

9:34:13AM

Job#: DELCON DELCON

TRK#: 108A - COLEMAN ENTERPRISES (WJC)

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	68660
P.O.#: DO-IT PLUMBING	Tare:	23840
Proj#:	Net:	44820
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.41

	Loads	Tons
Job/Daily:	2	44.56
Job/Total:	126	2,636.79

MAT'L PRICE:	26.50/ton	MAT'L AMT:	593.87
HAUL RATE:	6.80/ton	HAUL AMT:	153.73
FUEL	15.0000	FEE AMT:	23.06
TAX RATE:	6.0000 % - MD	SALES TAX:	35.63
TOTAL CHARGE:			806.29

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Stacey Hawke

We exercise No Control Over Delivery of Our Products & We Won't
be Held Liable for Any Damage to Person or Property.

Material Safety Data Information Available Upon Request.

Have A Great Day. Please Drive Safely!

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038617

Cust#: CASH

5/23/2024

CASH

9:27:07AM

Job#: DELCON DELCON

TRK#: 126C - MEC TRUCKING- VAN

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	69920
P.O.#: DO-IT PLUMBING	Tare:	25620
Proj#:	Net:	44300
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.15

	Loads	Tons
Job/Daily:	1	22.15
Job/Total:	125	2,614.38

MAT'L PRICE:	26.50/ton	MAT'L AMT:	586.98
HAUL RATE:	6.80/ton	HAUL AMT:	151.95
FUEL	15.0000	FEE AMT:	22.79
TAX RATE:	6.0000 % - MD	SALES TAX:	35.22
		TOTAL CHARGE:	796.94

Directions:4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY**WEIGHMASTER:** Gail HarrisonWe exercise No Control Over Delivery of Our Products & We Won't
be Held Liable for Any Damage to Person or Property.*Material Safety Data Information Available Upon Request.*

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038719

Cust#: CASH
CASH

5/23/2024
10:42:20AM

Job#: DELCON DELCON

TRK#: 126C - MEC TRUCKING- VAN

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	69840
P.O.#: DO-IT PLUMBING	Tare:	25620
Proj#:	Net:	44220
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.11

	Loads	Tons
Job/Daily:	4	89.11
Job/Total:	128	2,681.34

MAT'L PRICE:	26.50/ton	MAT'L AMT:	585.92
HAUL RATE:	6.80/ton	HAUL AMT:	151.67
FUEL	15.0000	FEE AMT:	22.75
TAX RATE:	6.0000 % - MD	SALES TAX:	35.16
TOTAL CHARGE:			795.50

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Gail Harrison

We exercise No Control Over Delivery of Our Products & We Won't be Held Liable for Any Damage to Person or Property.

Material Safety Data Information Available Upon Request.

Have A Great Day. Please Drive Safely!

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038719

Cust#: CASH
CASH

5/23/2024
10:42:20AM

Job#: DELCON DELCON

TRK#: 126C - MEC TRUCKING- VAN

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	69840
P.O.#: DO-IT PLUMBING	Tare:	25620
Proj#:	Net:	44220
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.11

	Loads	Tons
Job/Daily:	4	89.11
Job/Total:	128	2,681.34

MAT'L PRICE:	26.50/ton	MAT'L AMT:	585.92
HAUL RATE:	6.80/ton	HAUL AMT:	151.67
FUEL	15.0000	FEE AMT:	22.75
TAX RATE:	6.0000 % - MD	SALES TAX:	35.16
TOTAL CHARGE:			795.50

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Gail Harrison

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Material Safety Data Information Available Upon Request.

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038786

Cust#: CASH

5/23/2024

CASH

11:36:05AM

Job#: DELCON DELCON

TRK#: 106A - R.KING TRUCKING

Zone#: HC04 - SAVAGE DELIVERY ZONE Gross: 69300
 P.O.#: DO-IT PLUMBING * Tare: 25040
 Proj#: Net: 44260
 Mat'l#: 0029-WASHED #2 STONE TONS: 22.13

* P. T.

	Loads	Tons
Job/Daily:	7	154.72
Job/Total:	131	2,746.95

MAT'L PRICE: 26.50/ton MAT'L AMT: 586.45
 HAUL RATE: 6.80/ton HAUL AMT: 151.81
 FUEL 15.0000 FEE AMT: 22.77
 TAX RATE: 6.0000 % - MD SALES TAX: 35.19
TOTAL CHARGE: 796.22

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Natalia Platonova

We exercise No Control Over Delivery of Our Products & We Won't
be Held Liable for Any Damage to Person or Property.

Material Safety Data Information Available Upon Request.

Have A Great Day. Please Drive Safely!

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038786

Cust#: CASH

5/23/2024

CASH

11:36:05AM

Job#: DELCON DELCON

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Zone#: HC04 - SAVAGE DELIVERY ZONE Gross: 69300
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 TAX RATE: 6.0000 % - MD SALES TAX: 35.19
TOTAL CHARGE: 796.22

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Natalia Platonova

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Material Safety Data Information Available Upon Request.

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038708

Cust#: CASH
CASH

5/23/2024
10:32:52AM

Job#: DELCON DELCON

TRK#: 106A - R.KING TRUCKING

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	69920
P.O.#: DO-IT PLUMBING	* Tare:	25040
Proj#:	Net:	44880
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.44

* P. T.

	Loads	Tons
Job/Daily:	3	67.00
Job/Total:	127	2,659.23

MAT'L PRICE:	26.50/ton	MAT'L AMT:	594.66
HAUL RATE:	6.80/ton	HAUL AMT:	153.94
FUEL	15.0000	FEE AMT:	23.09
TAX RATE:	6.0000 % - MD	SALES TAX:	35.68
TOTAL CHARGE:			807.37

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Gail Harrison

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Material Safety Data Information Available Upon Request.

Have A Great Day. Please Drive Safely!

SAVAGE STONE, LLC

(301) 953-8973

8420 Washington Blvd. * Jessup, MD 20794

Scale:2

TKT: 2038708

Cust#: CASH
CASH

5/23/2024
10:32:52AM

Job#: DELCON DELCON

TRK#: 106A - R.KING TRUCKING

Zone#: HC04 - SAVAGE DELIVERY ZONE	Gross:	69920
P.O.#: DO-IT PLUMBING	* Tare:	25040
Proj#:	Net:	44880
Mat'l#: 0029-WASHED #2 STONE	TONS:	22.44

* P. T.

	Loads	Tons
Job/Daily:	3	67.00
Job/Total:	127	2,659.23

MAT'L PRICE:	26.50/ton	MAT'L AMT:	594.66
HAUL RATE:	6.80/ton	HAUL AMT:	153.94
FUEL	15.0000	FEE AMT:	23.09
TAX RATE:	6.0000 % - MD	SALES TAX:	35.68
TOTAL CHARGE:			807.37

Directions:

4979 SHEPPARD LANE (MARYLAND FARMS DWAYNE 410-300-6348
11904 CHARITTAS WAY

WEIGHMASTER: Gail Harrison

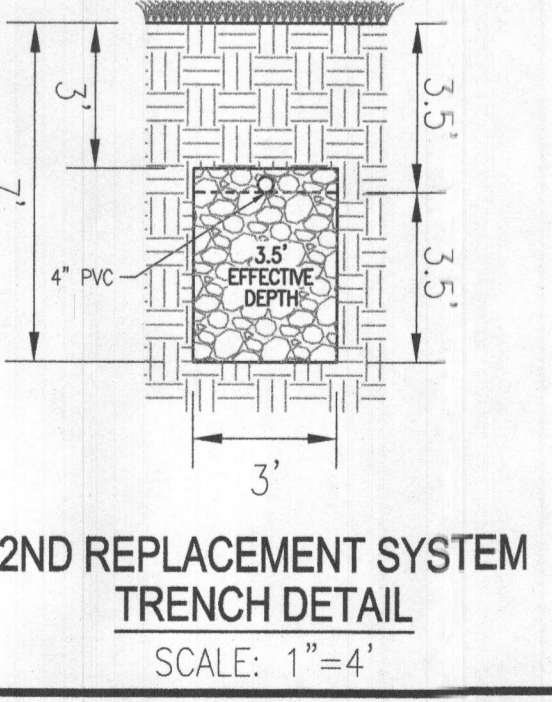
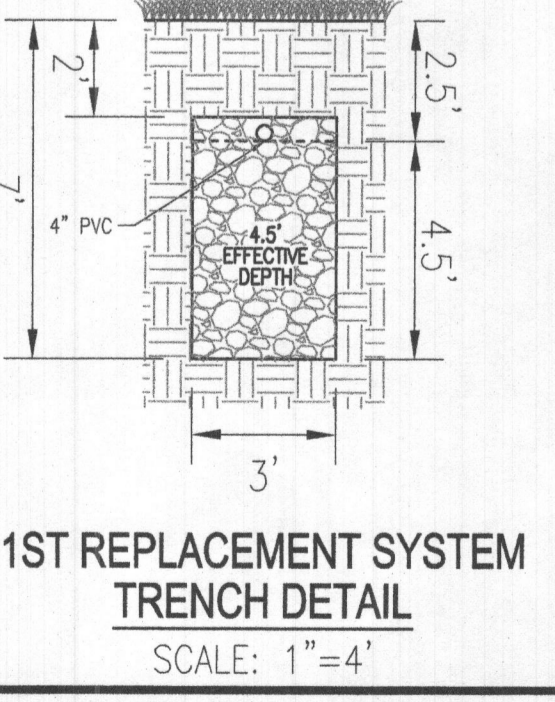
We exercise No Control Over Delivery of Our Products & We Won't
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Material Safety Data Information Available Upon Request.



WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN FOR LOT 6 (TAG #H0-20-0068) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

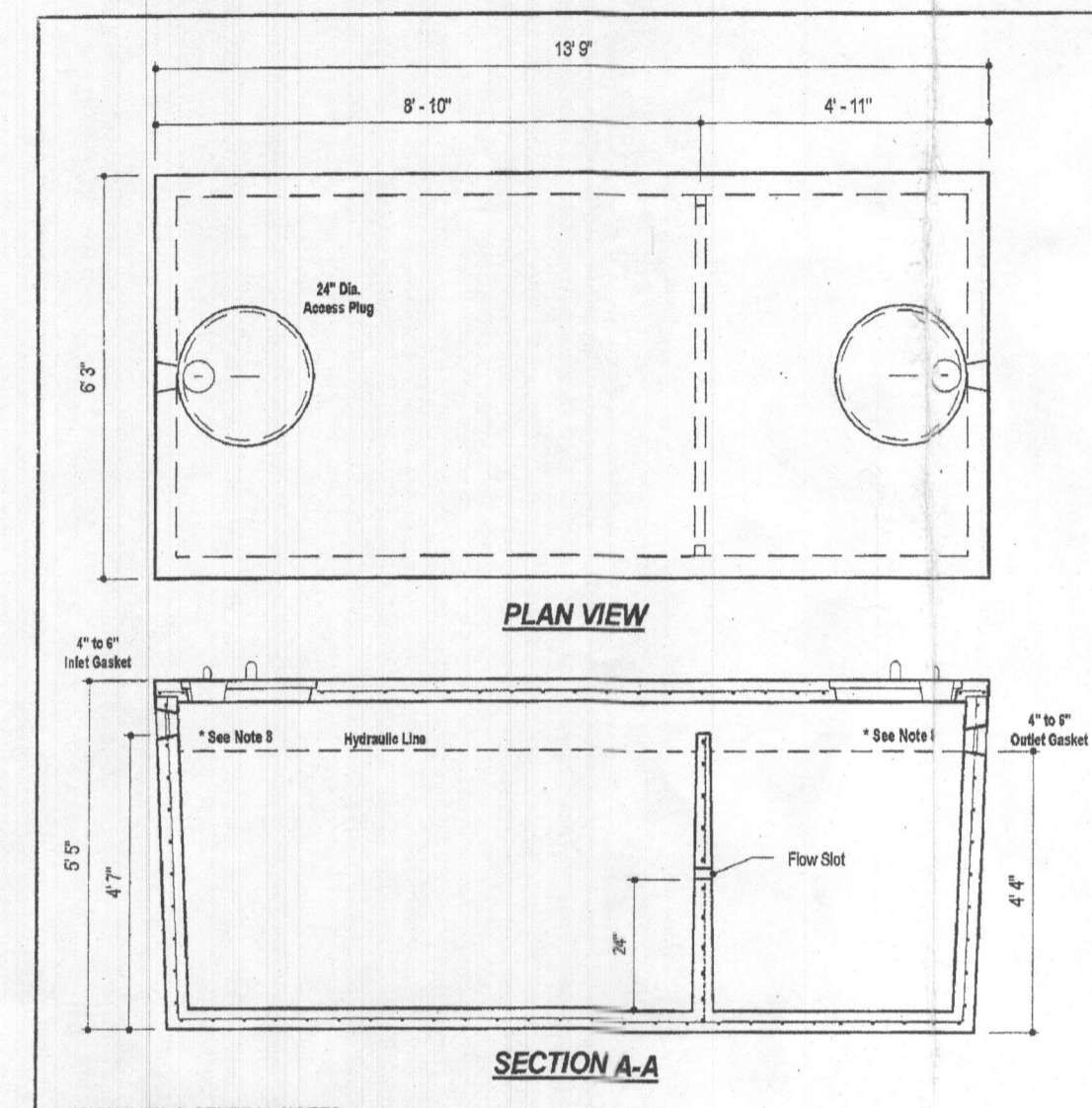
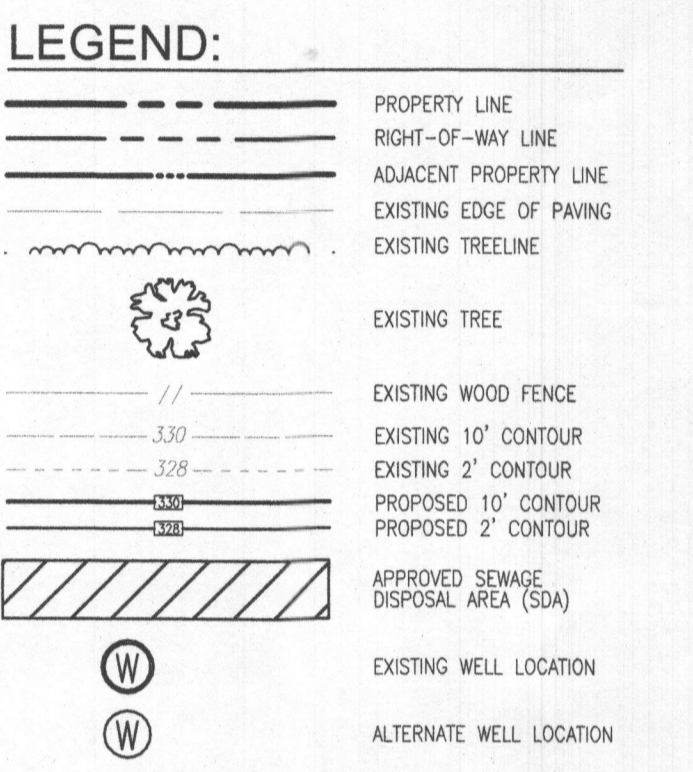
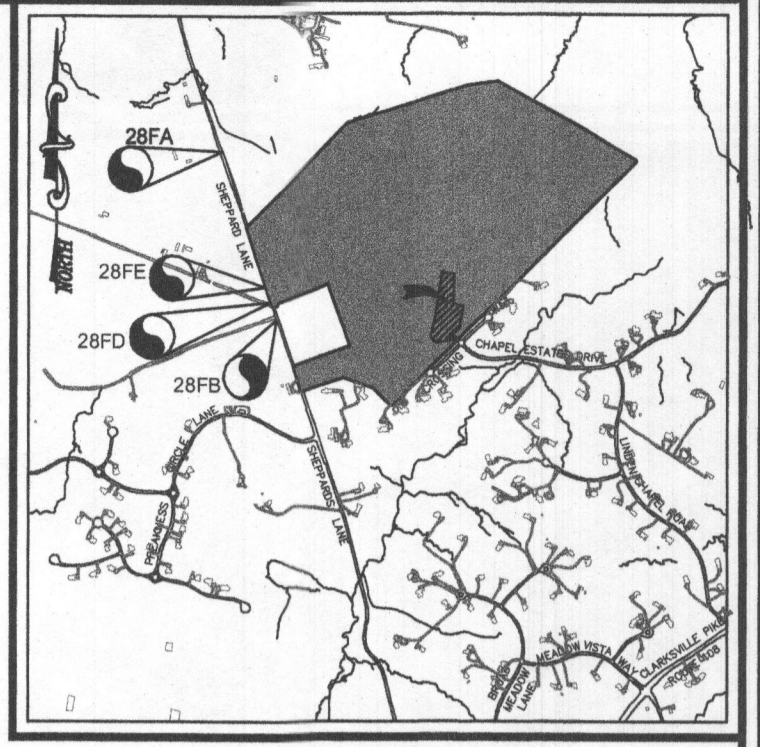
TRENCH	LENGTH	WIDTH	DEPTH	EXISTING GROUND
1	34'	36.70	364.60	371.60
2	34'	36.62	363.26	370.26
3	34'	36.13	363.13	370.13
4	34'	36.20	361.20	368.20
5	34'	36.19	361.19	368.19
6	34'	36.16	361.16	368.16
7	34'	36.29	359.39	366.39



THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

BENCHMARKS

HOWARD COUNTY MONUMENT	BENCHMARK 28FA	N 572,456.68	E 1,329,957.64	ELEV.: 348.21'
HOWARD COUNTY MONUMENT	BENCHMARK 28FB	N 570,710.84	E 1,329,524.63	ELEV.: 385.45'
HOWARD COUNTY MONUMENT	BENCHMARK 28FD	N 570,895.88	E 1,329,461.33	ELEV.: 381.91'
HOWARD COUNTY MONUMENT	BENCHMARK 28FE	N 571,047.81	E 1,329,404.44	ELEV.: 380.85'



DESIGN DATA & GENERAL NOTES

- Concrete strength F_{cm} 4000 p.s.i. @ 28 days. Density = 150 p.c.f.
- Concrete - Portland Type III per ASTM C 1500.
- Reinforcing steel per ASTM A 618. No. 5" rebar.
- Top slab covered with 2" topsoil.
- 2" thick 4" x 4" top slab.
- 2" thick 4" x 4" top slab.
- 2" depending on use of tank, inlet & outlet berms may be required by code.

2,000 GALLON SEPTIC TANK
 2-Compartment
 Stock Item (Approx. 19,900 lb)

Mayer Bros., Inc.
 6361 Flinn Road, Ellicott City, MD 21042
 Tel: 410.786.1424 Fax: 410.786.1428
 www.mayerbros.com

Dep. No. 3000-32 No Scale Aug 11, 2009

SYSTEM CALCULATIONS:

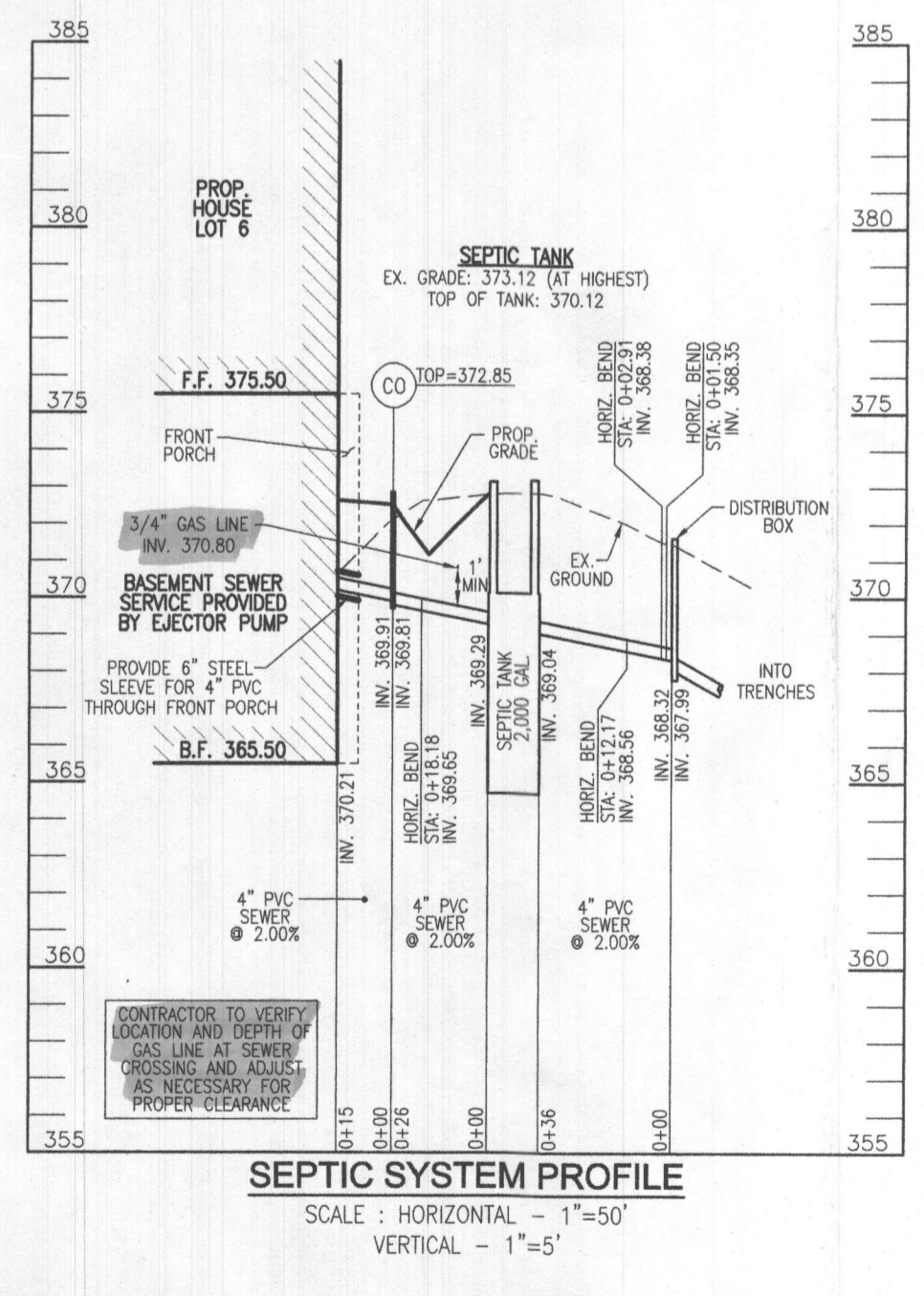
INITIAL SYSTEM:
 6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 3 (TRENCH WIDTH) x .43 (SIDEWALL REDUCTION) = 236 LINEAR FEET
 238 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
 (7 TRENCHES OF 34 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
 6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 3 (TRENCH WIDTH) x .38 (SIDEWALL REDUCTION) = 143 LINEAR FEET
 144 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
 (2 TRENCHES OF 72 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:
 6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 3 (TRENCH WIDTH) x .45 (SIDEWALL REDUCTION) = 169 LINEAR FEET
 170 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
 (2 TRENCHES OF 85 FEET IN LENGTH)

GENERAL 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 EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (H0-20-0068) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- 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.
- ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM HOWARD COUNTY GIS AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHICAL SURVEYS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MAY 2015.



NOTE:
 PROVIDE 6" STEEL SLEEVE FOR 4" PVC SEWER THROUGH THE FRONT PORCH

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: 5/15/2023

OWNER:
 GRATIA PLENA, LLC
 11140 HOMWOOD ROAD
 ELLICOTT CITY, MD 21042
 (443) 677-4612

DEVELOPER:
 TRINITY HOMES MARYLAND, LLC
 3675 PARK AVENUE, SUITE 301
 ELLICOTT CITY, MD 21043
 (410) 480-0023

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

CUNNINGHAM PROPERTY - LOT 6
 11904 CARITAS WAY
 ELLICOTT CITY, MD 21042

5TH ELECTION DISTRICT
 TAX MAP: 29 PARCEL: 25
 DPZ REFS: H0-10-0068, EDP-16-030, ZONED: RC-DEO
 ECP-17-050, GP-17-038, SDP-18-004 & F-19-040

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: APRIL 2023
 SCALE: AS SHOWN
 W.O. NO.: 14-62

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. 16193, EXPIRATION DATE: 08-27-2024

4/25/23
 ROBERT H. VOGEL, PE No. 16193

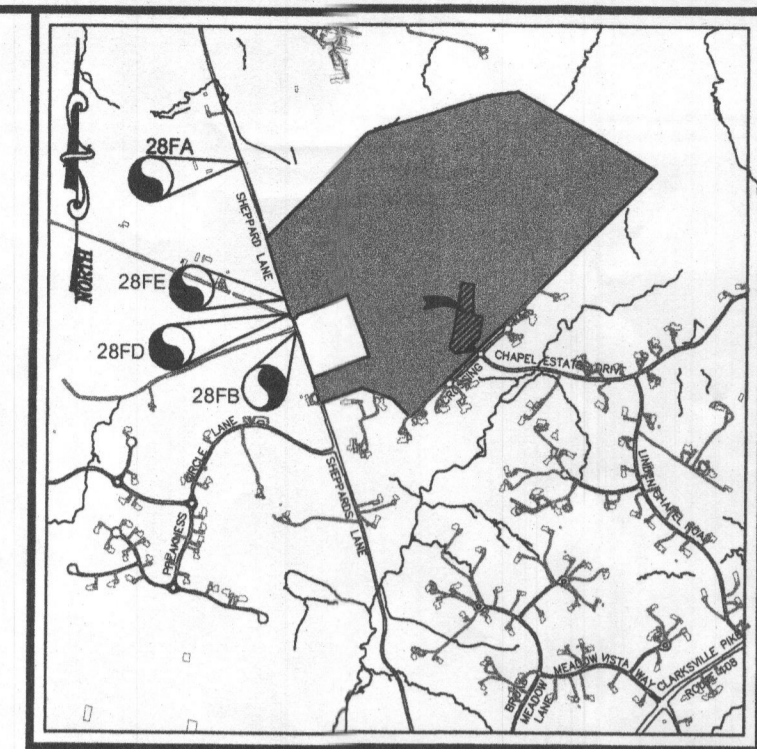
1 SHEET OF 1



THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. REORDINATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

BENCHMARKS

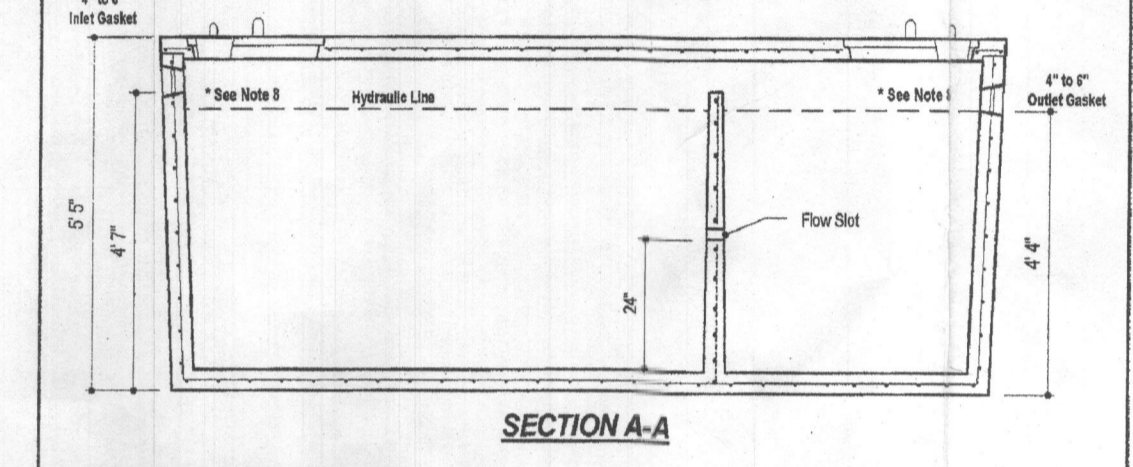
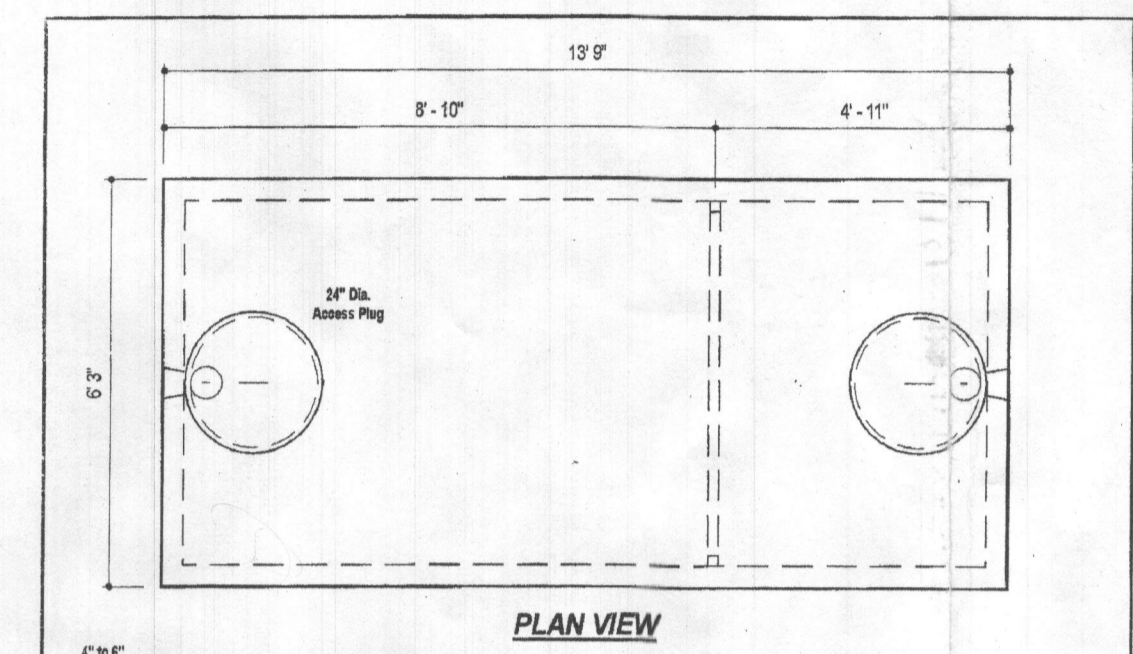
HOWARD COUNTY MONUMENT	BENCHMARK 28FA	N 572,456.68	E 1,328,957.64	ELEV.: 348.21'
HOWARD COUNTY MONUMENT	BENCHMARK 28FB	N 570,710.84	E 1,329,524.63	ELEV.: 385.45'
HOWARD COUNTY MONUMENT	BENCHMARK 28FD	N 570,895.88	E 1,329,461.33	ELEV.: 381.91'
HOWARD COUNTY MONUMENT	BENCHMARK 28FE	N 571,047.81	E 1,329,404.44	ELEV.: 380.85'



VICINITY MAP
SCALE: 1"=2000'
ADC MAP COORDINATES: 25-05

LEGEND:

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJACENT PROPERTY LINE
	EXISTING EDGE OF PAVING
	EXISTING TREE
	EXISTING WOOD FENCE
	EXISTING 10' CONTOUR
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	APPROVED SEWAGE DISPOSAL AREA (SDA)
	EXISTING WELL LOCATION
	ALTERNATE WELL LOCATION



DESIGN DATA & GENERAL NOTES

- 1) Concrete strength F_{cm} 4,000 p.s.i., 28 Day. Density = 150 pcf.
- 2) Concrete - Portland Type I/II per ASTM C 150.
- 3) Reinforcing steel per ASTM A 618 - 60,000 & C 484-02.
- 4) Reinforcing per ASTM A 618 - 60,000 & C 484-02.
- 5) Top soil issues with high water table.
- 6) 1/2" x 1/2" x 4" x 4" top soil.
- 7) See 1/2" x 4" x 4" top soil.
- 8) Depending on use of tank, inlet & outlet bells may be required by code.

2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item (Approx. 19,900 lbs)
Aug 11, 2008

SYSTEM CALCULATIONS:

INITIAL SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .83 (SIDEWALL REDUCTION) = 236 LINEAR FEET
238 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(7 TRENCHES OF 34 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .38 (SIDEWALL REDUCTION) = 143 LINEAR FEET
144 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(2 TRENCHES OF 72 FEET IN LENGTH)

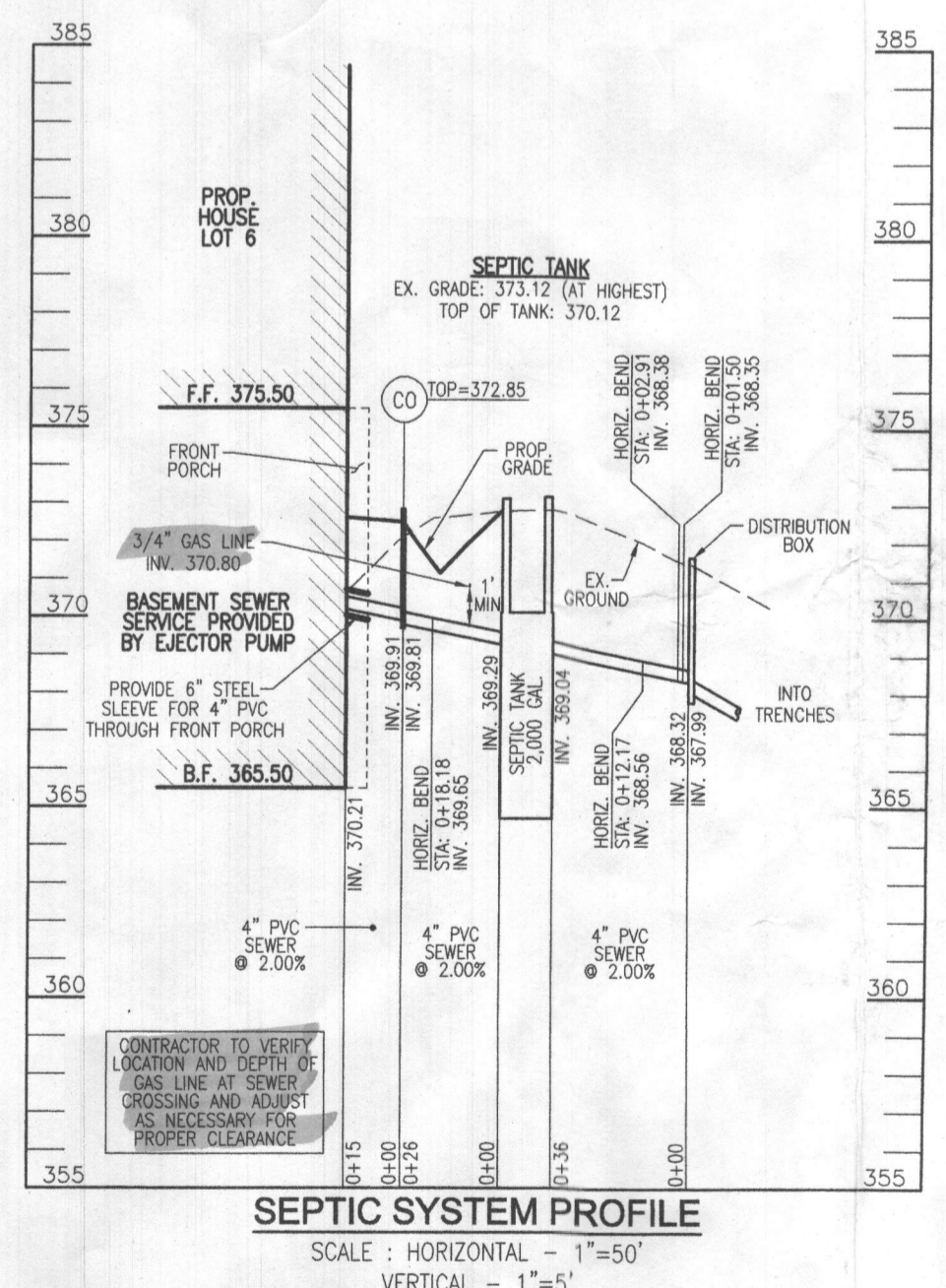
SECOND REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .45 (SIDEWALL REDUCTION) = 169 LINEAR FEET
170 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 85 FEET IN LENGTH)

- GENERAL NOTES:**
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 4. THE WELL (HO-20-0068) 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. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 7. THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM HOWARD COUNTY GIS AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHICAL SURVEYS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MAY 2015.

Approved Septic System Plan
Howard County Health Department
5/15/2023
Signature: [Signature] Date: 5/15/2023

OWNER: GRATIA PLENA LLC, 11140 HOMEWOOD ROAD, ELLICOTT CITY, MD 21042 (410) 577-4612

DEVELOPER: TRINITY HOMES MARY LAND, LLC, 3675 PARK AVENUE, SUITE 301, ELLICOTT CITY, MD 21043 (410) 480-0023



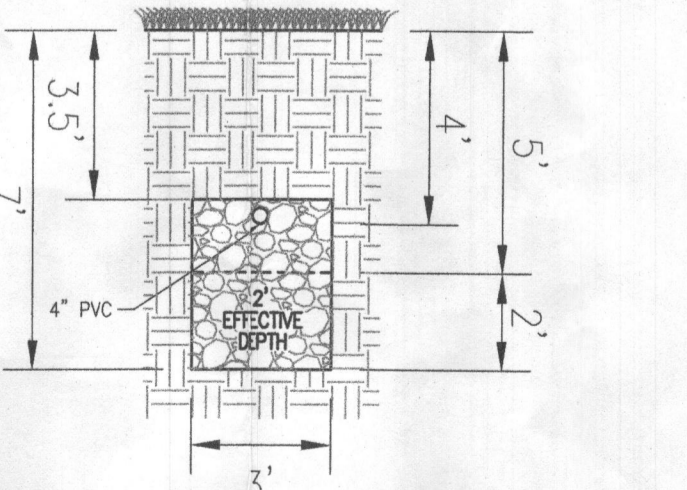
SEPTIC SYSTEM PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

NOTE:
PROVIDE 6" STEEL SLEEVE FOR 4" PVC SEWER THROUGH THE FRONT PORCH

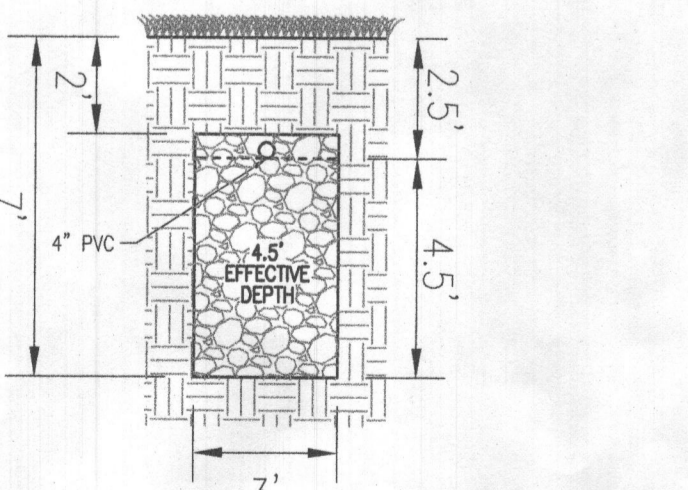
WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN FOR LOT 6 (TAG #HO-20-0068) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

INITIAL SYSTEM TRENCH INFO.

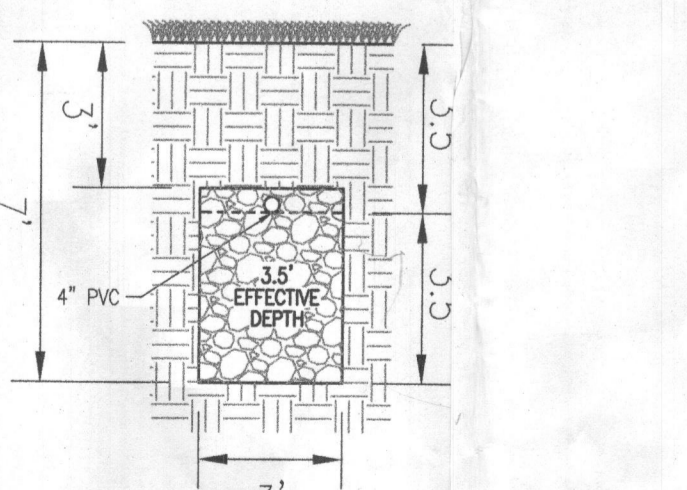
TRENCH	TRENCH LENGTH	TRENCH WIDTH	TRENCH DEPTH	EXISTING GROUND
1	34'	366.26	363.26	370.26
2	34'	366.13	363.13	370.13
3	34'	364.20	361.20	368.20
4	34'	364.19	361.19	368.19
5	34'	364.16	361.16	368.16
6	34'	362.39	359.39	366.39



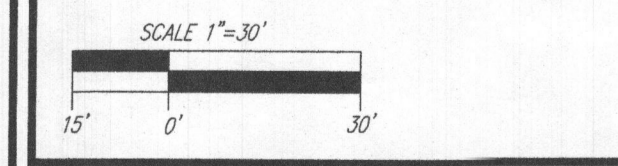
INITIAL SYSTEM TRENCH DETAIL
SCALE: 1"=4'



1ST REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'



2ND REPLACEMENT SYSTEM TRENCH DETAIL
SCALE: 1"=4'



ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

CUNNINGHAM PROPERTY - LOT 6
11904 CARITAS WAY
ELLICOTT CITY, MD 21042

5TH ELECTION DISTRICT
TAX MAP: 29 PARCEL: 25
DPZ REF: HO-10-03E, EOP-16-03O, ZONED: RC-DEO
EOP-17-05O, GP-17-03B, SDP-18-004 & F-19-04O

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE
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. 16193
EXPIRATION DATE: 08-27-2024

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: APRIL 2023
SCALE: AS SHOWN
W.O. NO.: 14-62

4/25/23
ROBERT H. VOGEL, PE No. 16193

1 SHEET OF 1