



**Howard County
Health Department**

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: 8-16-21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 570108

APPROVAL DATE: 10/07/2021 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 3008 Skye Meadow Way

SUBDIVISION: Rover Mill Estates LOT: 3 TAX ID: _____

CONTRACTOR: WTC Contractors EMAIL: _____

CONTRACTOR ADDRESS: 3033 Salem Bottom Rd, Westminister, MD 21157 PHONE: 410-458-7024

PROPERTY OWNER: Security Development LLC EMAIL: _____

OWNER ADDRESS: 8480 Baltimore National Pike, Ellicott City, MD 21043 PHONE: 410-465-4244

SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: Mayer Bros

PUMP MODEL: _____ PUMP SIZE: _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: ☒ GRAVITY ☐ PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>148</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</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: Dana Bernard ISSUE DATE: 8-18-21 EXPIRATION DATE: 8-16-22

- 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 DOWNGRADE 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 21002823
- 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.

NOT TO SCALE

SEE ATTACHED
AS BUILT

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH INLET BOTTOM

3' 3' 6'

NUMBER OF TRENCHES 2

TOTAL LENGTH 150 F

ABSORPTION AREA 450 SF + 15' SIDE WALK

DISTRIBUTION BOX LEVEL PUMP

DISTRIBUTION BOX BAFFLE

DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL

MANUFACTURER Babylon

CAPACITY 1500 GAL

SEAM LOC top

TANK LID DEPTH 2'

BAFFLES inlet + outlet

BAFFLE FILTER

MANHOLE LOC FRONT/BACK

6" PORT LOC

WATERTIGHT TEST -

SLOTTED yes

DATE ON LID 8-3-21

PUMP/SEPTIC TANK LEVEL

MANUFACTURER Babylon

CAPACITY 1500 GAL

SEAM LOC top

TANK LID DEPTH 2'

BAFFLES

BAFFLE FILTER

MANHOLE LOC FRONT/BACK

6" PORT LOC

WATERTIGHT TEST -

SLOTTED NO

DATE ON LID 7-4-21

PRE-CONSTRUCTION:

9/10/21 Laid out 2x74' trenches on contour, moved downhill to stay on contour in field. (S)

INSTALLATION: 9/14/21 SL constructed and tanks set. (S)

09/15/2021 FORCE MAIN COMPLETED, TRENCHES COMPLETE; D Box SET. (P)

10/07/2021 PUMP FUNCTIONS ALARM FUNCTIONS; WIRING ON SEPARATE BREAKERS MARKED IN PANEL (P)

FINAL INSPECTOR

DATE OF APPROVAL

10/07/2021 (P)

21:30



Howard County Health Department

Bureau of Environmental Health, Columbia, MD 21045 - 410-313-1771

SEWAGE DISPOSAL PERMIT NO. A-_____ P- 510108

RESIDENTIAL PERMIT ☐
(NUMBER OF BEDROOMS: _____)

COMMERCIAL PERMIT ☐
(DESIGN FLOW: _____ GPD)

PERMITEE:

LOCATION:

WTC Contractors
3008 Sky Meadows Way River Hill Estates Lot 13
****POST THIS CARD WHERE IT CAN BE SEEN FROM ROAD****

☐

STOP ALL CONSTRUCTION ON SEWAGE
DISPOSAL SYSTEM AND CONTACT HEALTH
DEPARTMENT BEFORE CONTINUING

Inspector _____

Date _____

☐

WORK IS SATISFACTORY, OK TO
CONTINUE

Inspector _____

Date _____

COMMENTS: _____

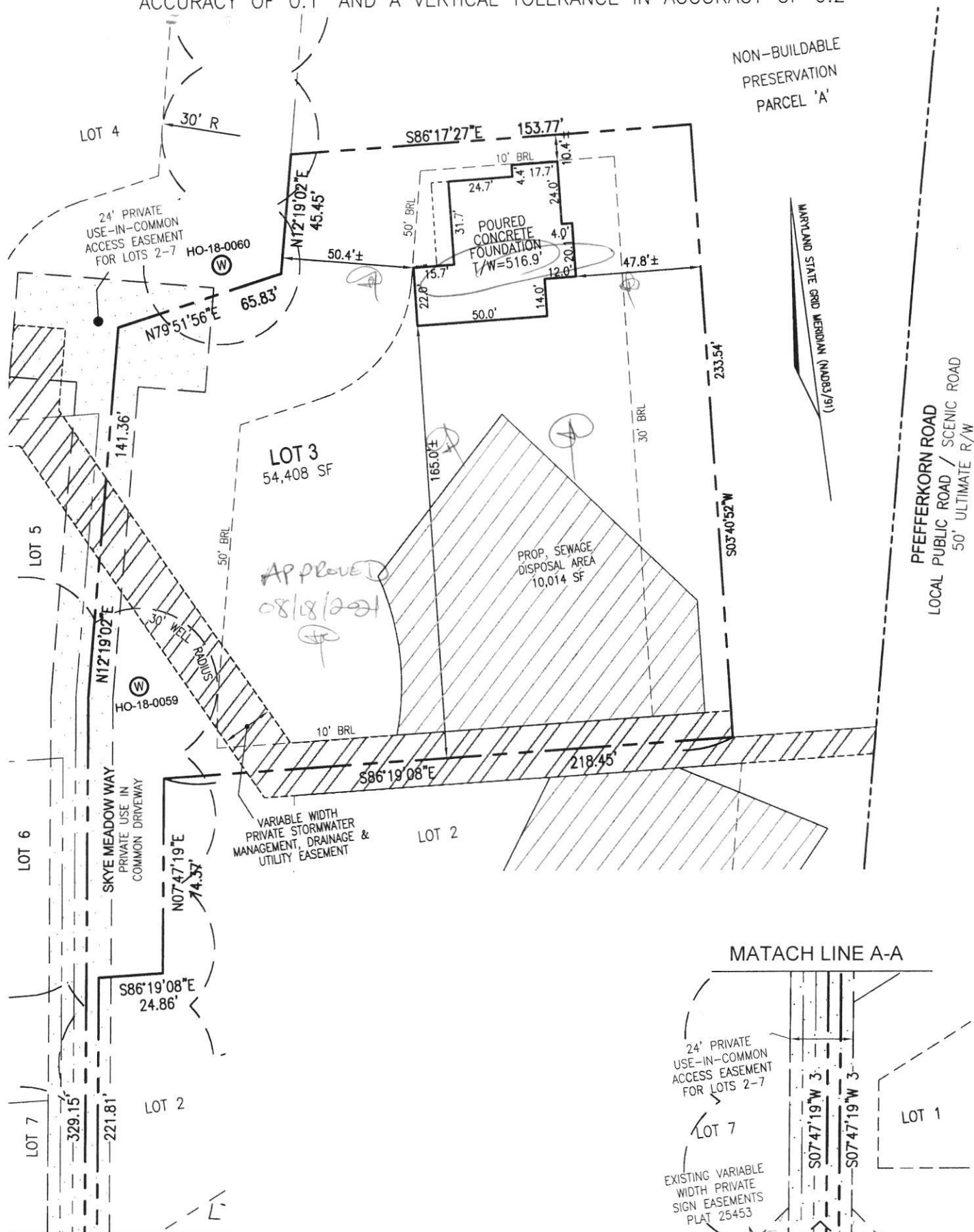
☐

FINAL INSPECTION MADE, OK TO
COVER ALL WORK

Inspector _____

Date _____

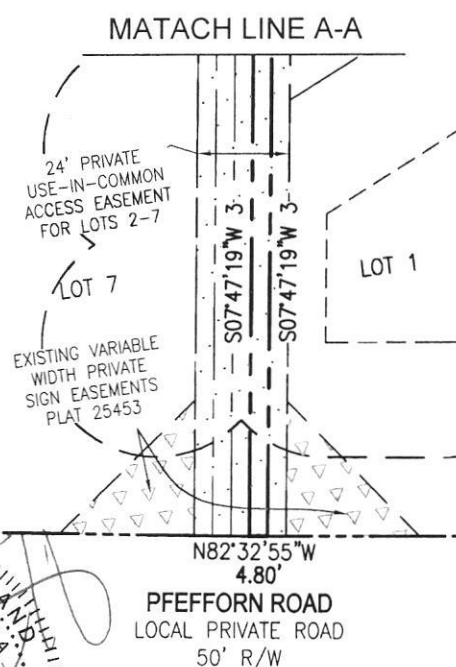
THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



MATACH LINE A-A

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 PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND.

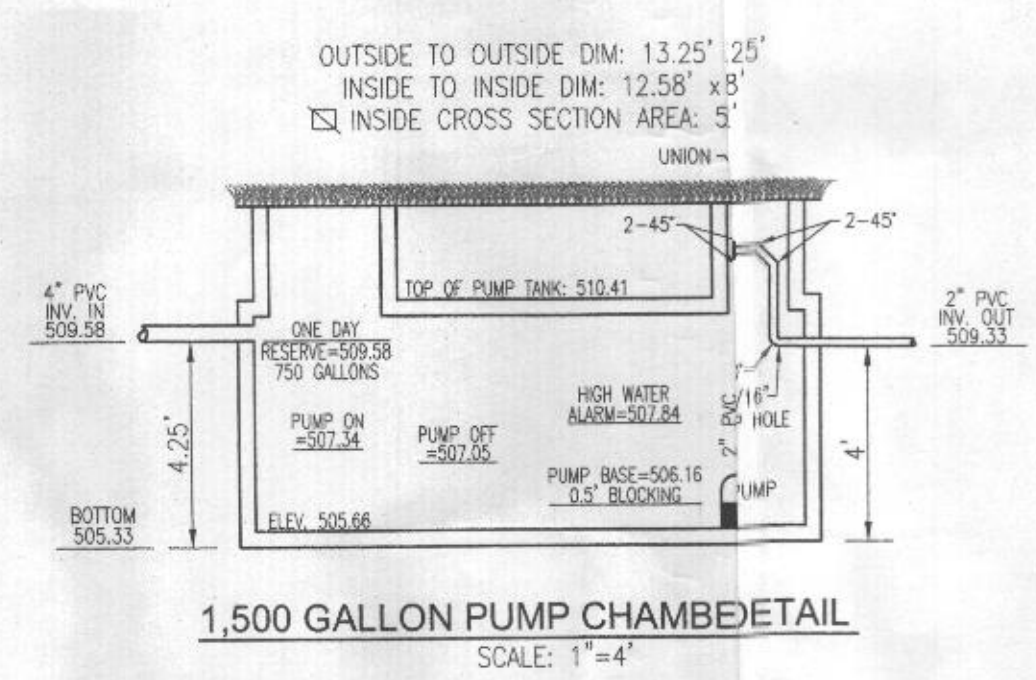
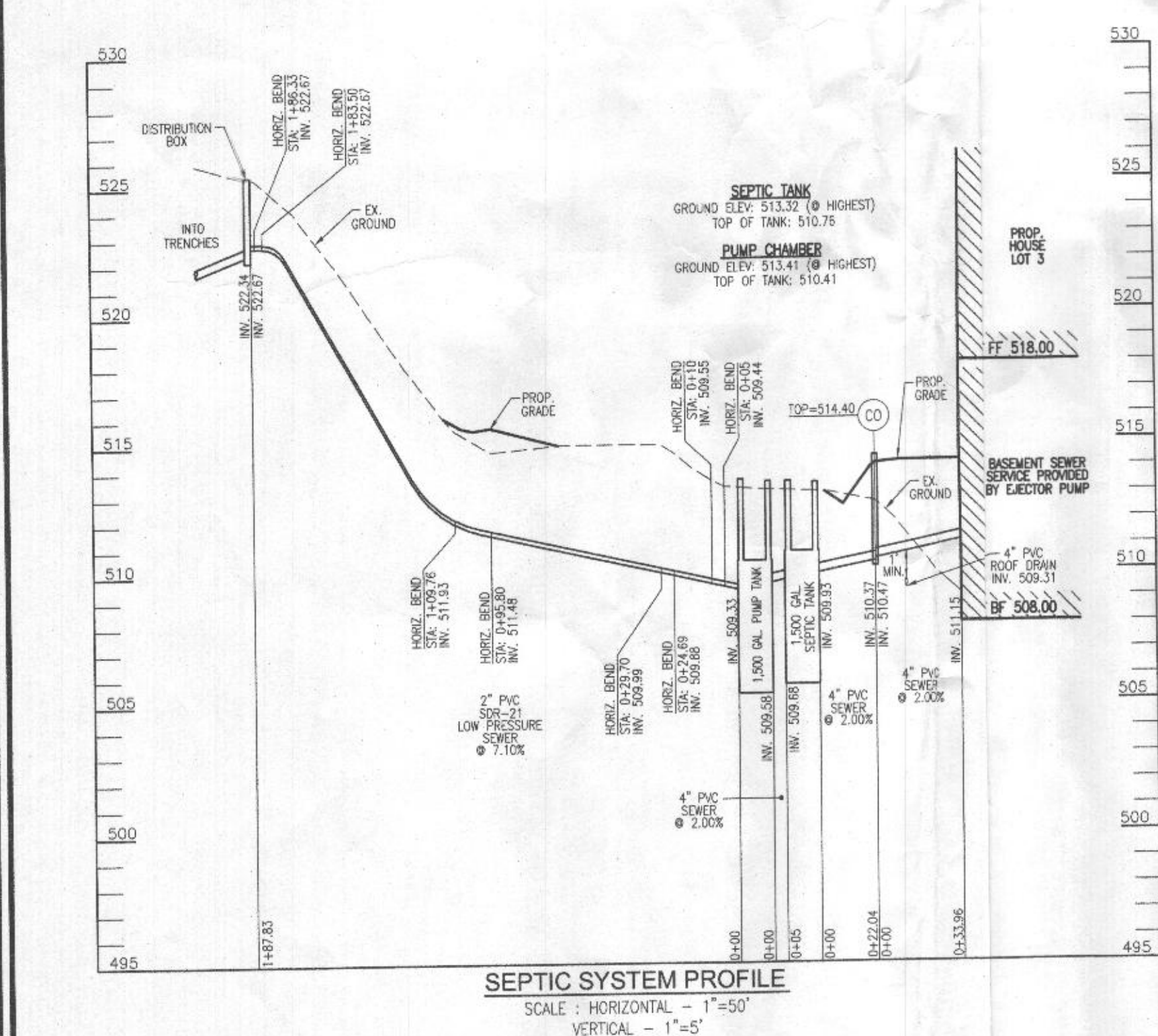
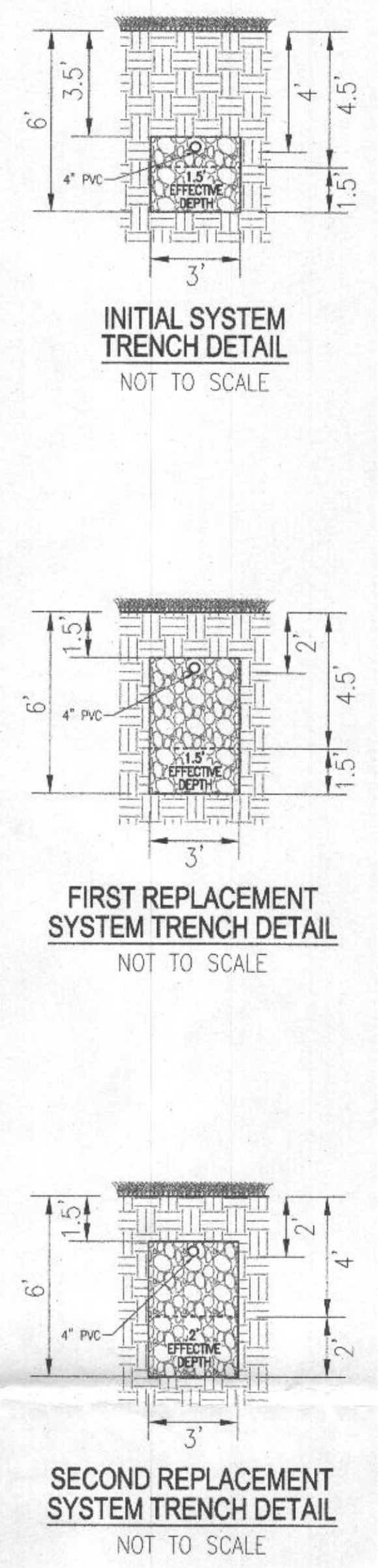
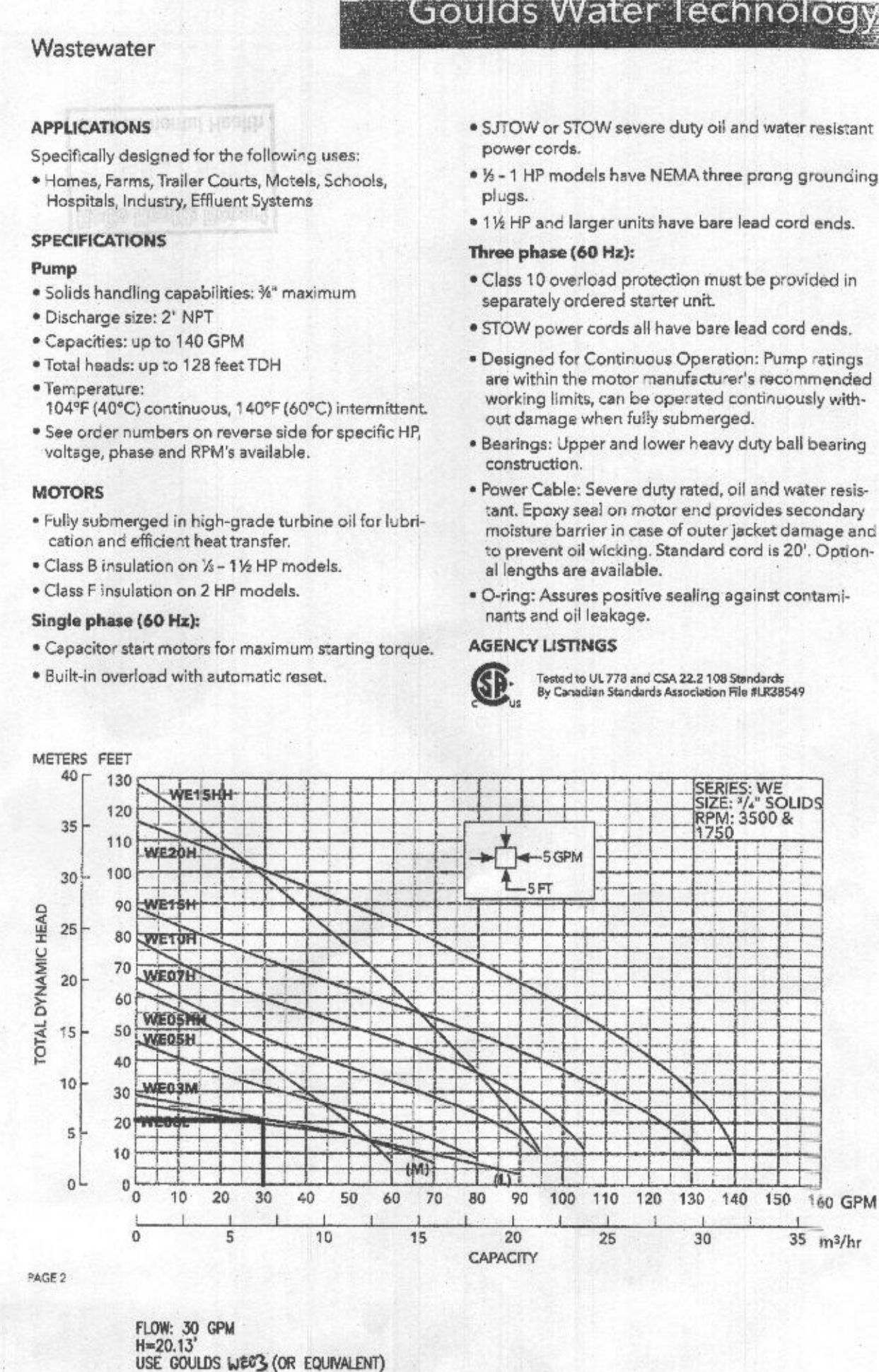
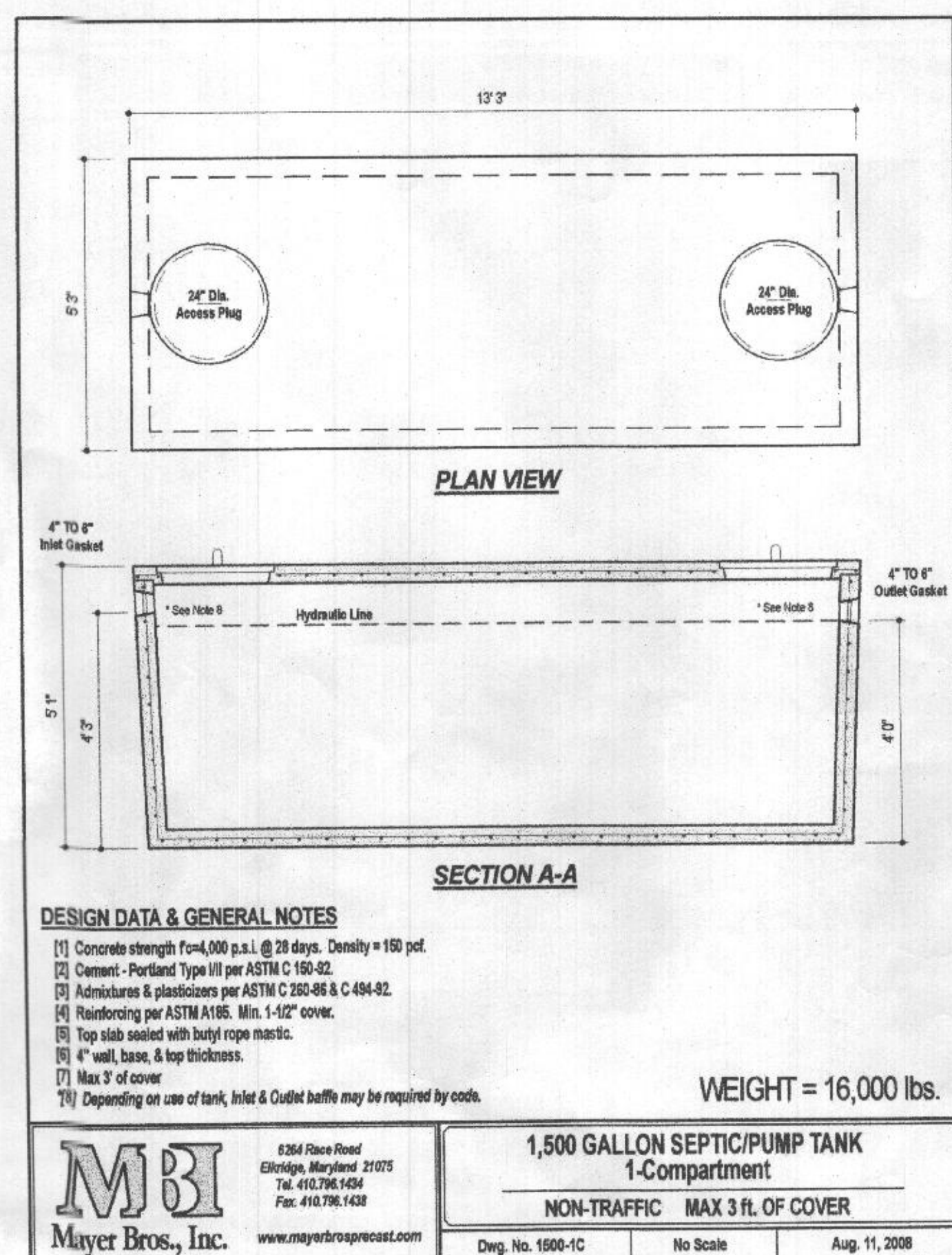
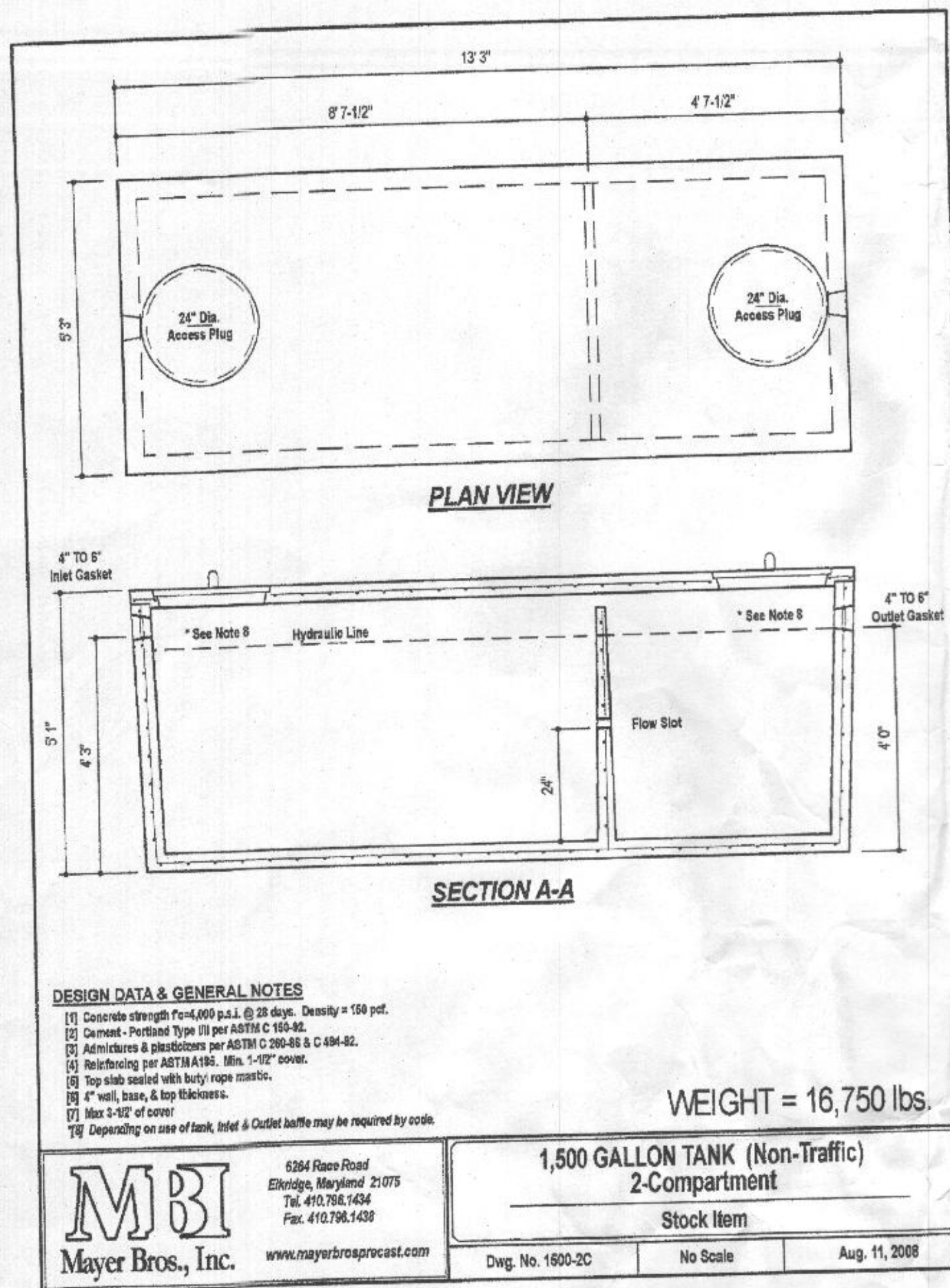
ERICK R. QUINTANILLA
PROFESSIONAL LAND SURVEYOR
LICENSE NO. 21408
EXP. DATE: JUNE 15, 2021



SCALE 1"= 50'	DATE 5/18/2021
DRAWN BY J.A.P.	CHECKED BY E.R.Q.
PLAT NUMBER 25453-25454	JOB NUMBER 16-38

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
3008 SKYE MEADOW WAY
LOT 3
ROVER MILL ESTATES
PLAT NO. 25453
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



NO. BEDROOMS = 5
 DESIGN FLOW = 5(150 GPD) = 750 GPD
 DOSE: 1/6 DESIGN FLOW = 125 GPD
 125 GALLONS/7.48 FT³/GAL. = 16.71 FT³
 16.71 FT³/57.62 SF = 0.29'
 ONE DAY RESERVE: 750 GALLONS/7.48 FT³/GAL. = 100.27 FT³
 100.27 FT³/57.62 SF = 1.74 FT

TDH (FRICTION + STATIC)
 FRICTION FITTINGS: UNION: 1x2 = 2
 45° ELBOW (H+V): 12x8 = 96
 90° ELBOW: 1x7 = 7
 FITTING EQ. LENGTH: 105.0 LF
 PIPE LENGTH: 187.8 LF
 TOTAL LENGTH: 292.8 LF

FRICTION LOSS (30 GPM): (1.54)/(292.8/100) = 4.51'
 STATIC: 522.67-507.05 (PUMP OFF) = 15.62'
 TDH: 15.62+4.51 = 20.13'
 USE GOULDS WE203 (OR EQUIVALENT)

OWNER
 SECURITY DEVELOPMENT, LLC
 8480 BALTIMORE NATIONAL PIKE, SUITE 415
 ELLICOTT CITY, MD 21043
 (410) 465-4244

BUILDER
 CATONVILLE HOMES
 11175 STRATFIELD COURT
 MARRIOTTVILLE, MD 21104
 (410) 468-7800

NO. _____

REVISION _____

DATE _____

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

ROVER MILL ESTATES - LOT 3
 3008 SKYE MEADOW WAY
 WEST FRIENDSHIP, MD 21794

PARCEL: 169
 TAX MAP: 15 GRID: 14
 3RD ELECTION DISTRICT

ZONED: RR-DEO
 L 19032 / F. 480
 HOWARD COUNTY, MARYLAND

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: _____ RHY

DRAWN BY: _____ JMR

CHECKED BY: _____ RHY

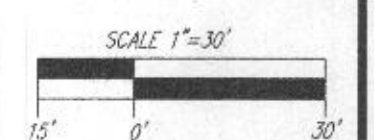
DATE: _____ JANUARY 2021

SCALE: _____ AS SHOWN

W.O. NO.: _____ 15-36

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. 18193, EXPIRATION DATE 09-27-2022

ROBERT H. VOGEL, PE No.18193



GENERAL NOTES:

1. THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM FIELD RUN SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED OCTOBER 2017. INFORMATION IS SUPPLEMENTED WITH HOWARD COUNTY GIS DATA.
2. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
3. 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 USING ALL REASONABLE EFFORTS.
4. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
5. 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.
6. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.

SYSTEM CALCULATIONS:

INITIAL SYSTEM:

5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .71 (SIDEWALL REDUCTION) = 148 LINEAR FEET
148 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 74 FEET IN LENGTH)

FIRST REPLACEMENT SYSTEM:

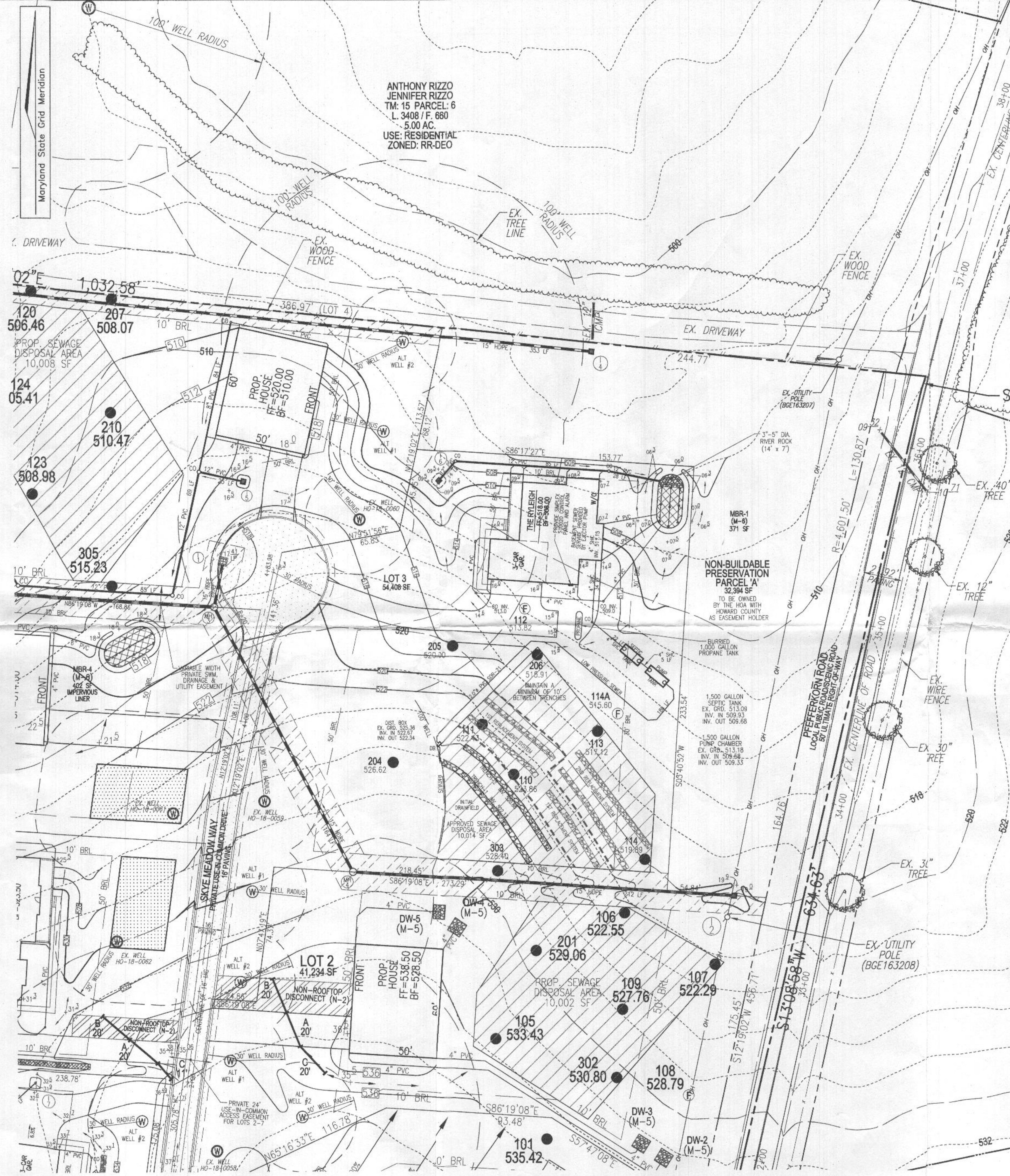
5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .71 (SIDEWALL REDUCTION) = 148 LINEAR FEET
150 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(3 TRENCHES OF 50 FEET IN LENGTH)

SECOND REPLACEMENT SYSTEM:

5 BEDROOMS AT 750gpd / 1.2 ABSORPTION RATE = 625 SQ. FT.
625 SQ. FT. / 3 (TRENCH WIDTH) x .63 (SIDEWALL REDUCTION) = 131 LINEAR FEET
132 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(2 TRENCHES OF 66 FEET IN LENGTH)

INITIAL SYSTEM TRENCH INFO.

TRENCH	TRENCH LENGTH	TRENCH WIDTH	TRENCH DEPTH	TRENCH AREA	TRENCH VOLUME
1	74'	52.13'	52.13'	52.13'	52.13'
2	74'	52.08'	51.88'	51.88'	51.88'

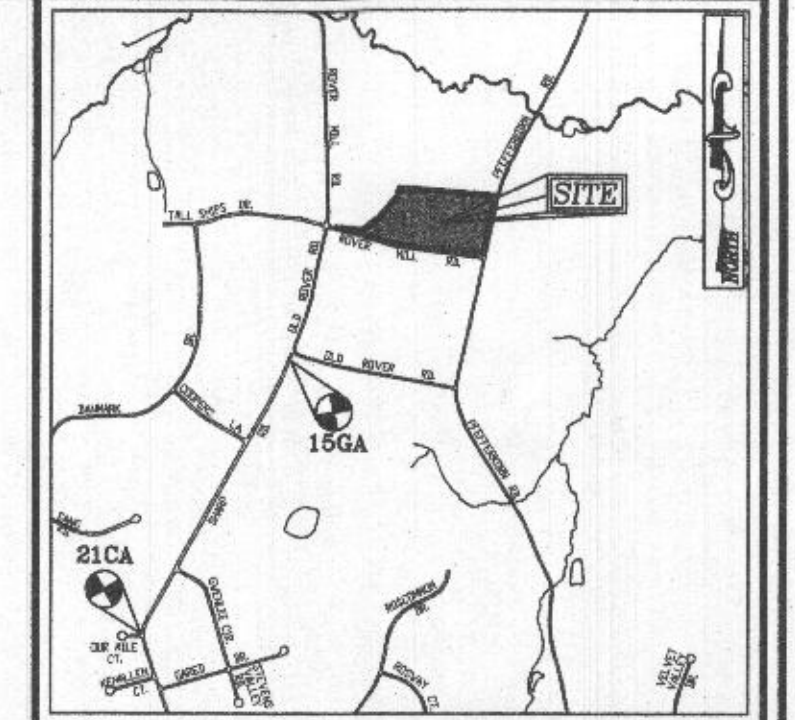


WELL LOCATION CERTIFICATION:

THE EXISTING WELL SHOWN ON THIS PLAN (HO-18-0059) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.

OSDS PLAN VIEW

SCALE: 1"=30'



VICINITY MAP

SCALE: 1"=2000'
ADC MAP; PAGE: 17; BLOCK: D4 & E4

BENCHMARKS

HOWARD COUNTY BENCHMARK 15GA (CONC. MON.)
N 591743.48 E 1312790.80 ELEV. 567.64
LOCATION: NEAR NORTH END OF SHARP ROAD
(CUL. DE SAC)
HOWARD COUNTY BENCHMARK 21CA (CONC. MON.)
N 58897.36 E 131235.79 ELEV. 612.60
LOCATION: CORNER OF SHARP RD. & OUR MILE CT.

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WETLANDS
- EXISTING WETLAND BUFFER
- PUBLIC 100-YEAR FLOODPLAIN, DRAINAGE & UTILITY EASEMENT
- PUBLIC FOREST CONSERVATION EASEMENT (AFFORESTATION)
- EXISTING METAL FENCE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- APPROVED SEWAGE DISPOSAL AREA
- APPROVED WELL AREA
- EXISTING WELL LOCATION
- ALTERNATE WELL LOCATION
- PASSED PERC. TEST
- FAILED PERC. TEST

Approved Septic System Plan

Howard County Health Department

Signature: *Dana Bernal* Date: *1-22-24*

Signature: *5B Room* Date: *1-22-24*

OWNER

SECURITY DEVELOPMENT, LLC
8480 BALTIMORE NATIONAL PIKE, SUITE 415
ELLICOTT CITY, MD 21043
(410) 465-4244

BUILDER

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11175 STRATFIELD COURT
MARROTTSVILLE, MD 21104
(410) 489-7800

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

ROVER MILL ESTATES - LOT 3

3008 SKYE MEADOW WAY
WEST FRIENDSHIP, MD 21194

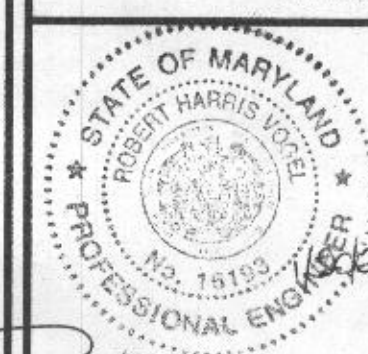
PARCEL: 169
TAX MAP: 15 GRID: 14
3RD ELECTION DISTRICT

ZONED: RR-DEO
L 19082 / F. 490
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP

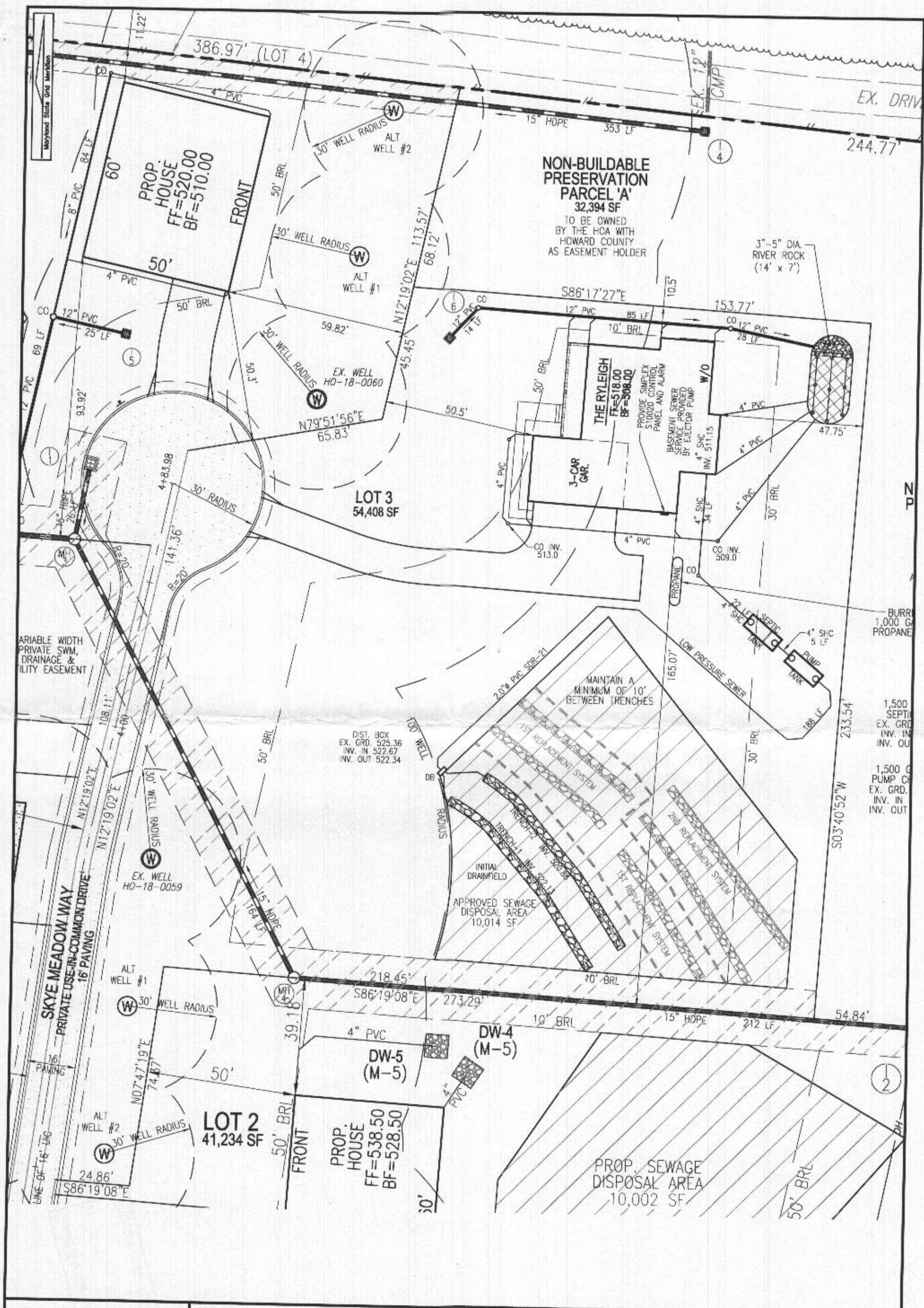
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com



DESIGN BY: *RHV*
DRAWN BY: *JMR*
CHECKED BY: *RHV*
DATE: *JANUARY 2021*
SCALE: *AS SHOWN*
W.O. NO.: *15-36*

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 09-27-2022.

1 SHEET OF 2



SCALE	1"=30'
DRAWN BY	JMR
CHECKED BY	RHV
DATE	01/20/21
W. O. #	15-36
SHEET#	1 OF 4

PLOT PLAN

ROVER MILL ESTATES

LOT 3

3008 SKYE MEADOW WAY

PARCEL: 169

TAX MAP: 15 GRID: 14

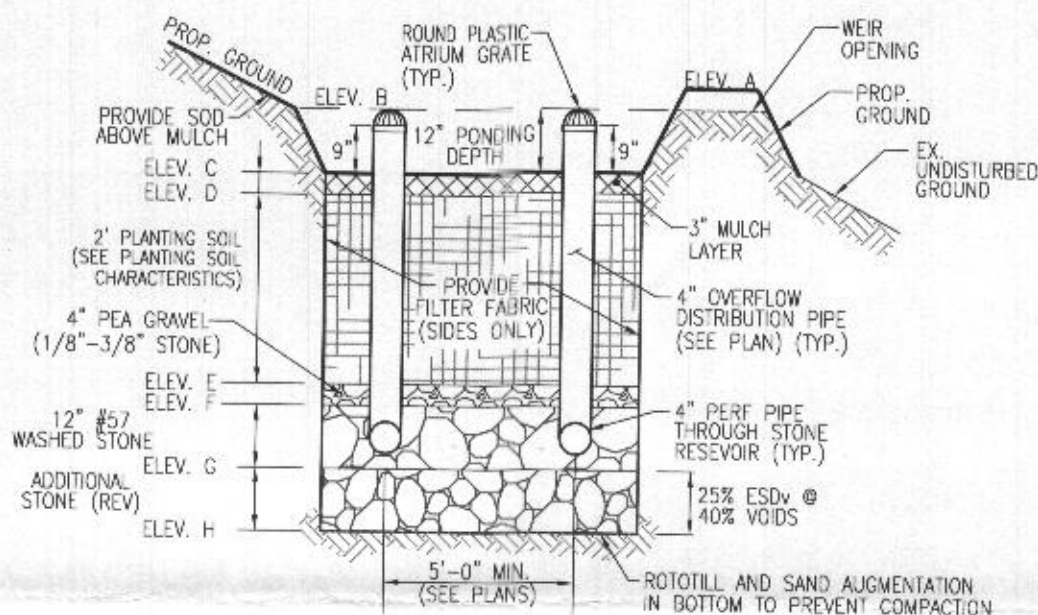
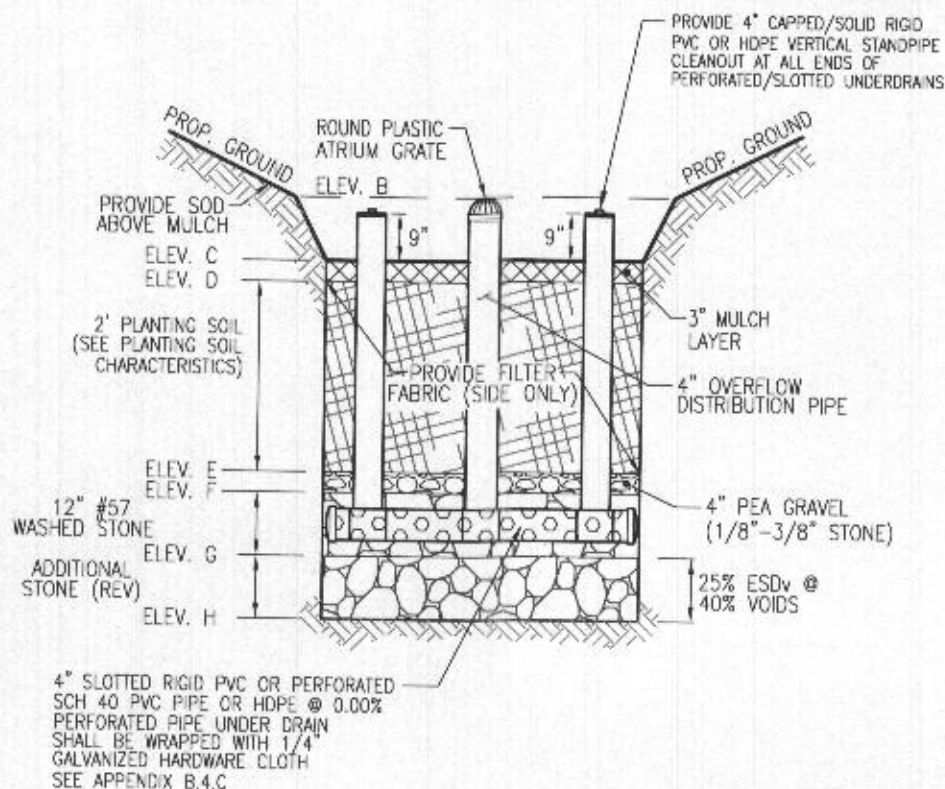
3RD ELECTION DISTRICT

REF: F-19-056

ZONED: RR-DEO

L. 19082 / F. 490

HOWARD COUNTY, MARYLAND



MICRO-BIORETENTION (MBR-1)

W/ WEIR ONLY
NOT TO SCALE

MICRO-BIORETENTION FACILITY ELEVATIONS (M-6)										
FACILITY	A	B	C	D	E	F	G	H	WEIR ELEV.	UNDERDRAIN INVERT
MBR-1	506.30	506.00	505.00	504.75	502.75	502.42	501.42	500.59	506.00	501.75
										371 SF

OPERATION AND MAINTENANCE SCHEDULE FOR (M-6) MICROBIORETENTION AREAS

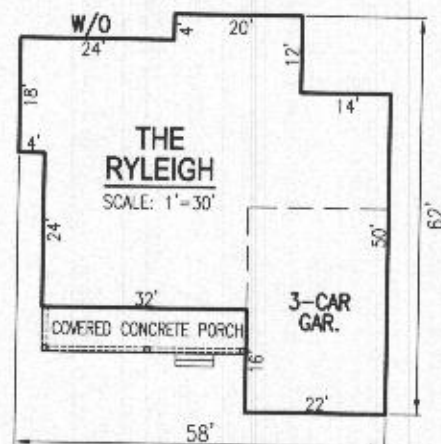
1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOL. II, TABLE A.4.1 AND 2.
2. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

MICROBIORETENTION NOTES:

1. ONLY THE SIDES OF MICROBIORETENTION ARE TO BE WRAPPED IN FILTER FABRIC. FILTER FABRIC BETWEEN LAYER OR AT THE BOTTOM OF THE MICROBIORETENTION WILL CAUSE THE MBR TO FAIL, AND THEREFORE SHALL NOT BE INSTALLED.
2. WRAP THE PERFORATED MBR UNDERDRAIN PIPE WITH 1/4" MESH (4x4) OR SMALLER GALVANIZED HARDWARE CLOTH.
3. PROVIDE 5' MINIMUM SPACING BETWEEN UNDER DRAIN AND PERFORATED PIPE THROUGH STONE RESERVOIR OR SPACE PIPE EQUALLY ACROSS BOTTOM FOR SMALL BIOS. (SEE PLANS)

MBR-1

D.A.=20,589 SF IMP=5,145 I=25
 $R_v = 0.05 + (0.009)(25) = .28$
 $ESD_v = (20,589)(1.0)(0.28)/12 = 480 \text{ CF (MIN.)}$
 AREA ABOVE MULCH=(480 CF)(0.75)=360 SF (MIN.)
 AREA PROVIDED 371 SF
 $ESD_v \text{ PROVIDED } 371 \text{ SF} / .75 = 495 \text{ CF}$



PLOT PLAN ROVER MILL ESTATES LOT 3 3008 SKYE MEADOW WAY

SCALE 1"=30'
 DRAWN BY JMR
 CHECKED BY RHV
 DATE 01/20/21
 W. O. # 15-36
 SHEET# 3 OF 4

PARCEL: 169
 TAX MAP: 15 GRID: 14
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