

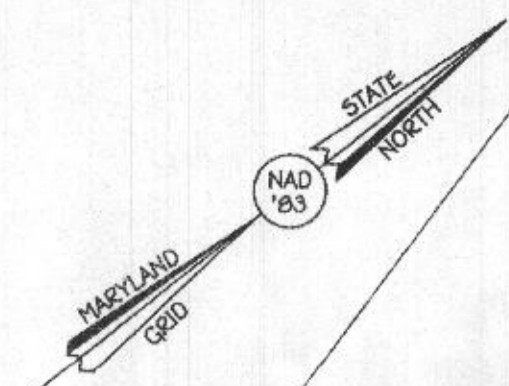


**GENERAL NOTES:**

- THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- SUBJECT PROPERTY IS SHOWN IN ZONE AE ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C0065D EFFECTIVE NOV. 6, 2013.
- THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 0.25'.
- NO TITLE REPORT FURNISHED, SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-92-2174) HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 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. 21351, EXPIRATION DATE 10/04/2022.
- BUILDING PERMIT #B-21021263.

**Legend**

- Existing 30' Private Ingress, Egress, Stormwater Management, Maintenance And Utility Easement Across And Through Lot 29 For The Use And Benefit Of Lot 55 (Plat No. 21650) (Liber 13328 At Folio 017)
- Existing Private Septic Easement (Plat No. 11657)
- Existing 25' & 55' Wide Private Use-In-Common Access Easement Across Lots 55, 56, 57 & 58 For The Use And Benefit Of Lots 55, 56, 57 & 58 (Plat Nos. 11656 And 11657 And L. 3450, F. 105)



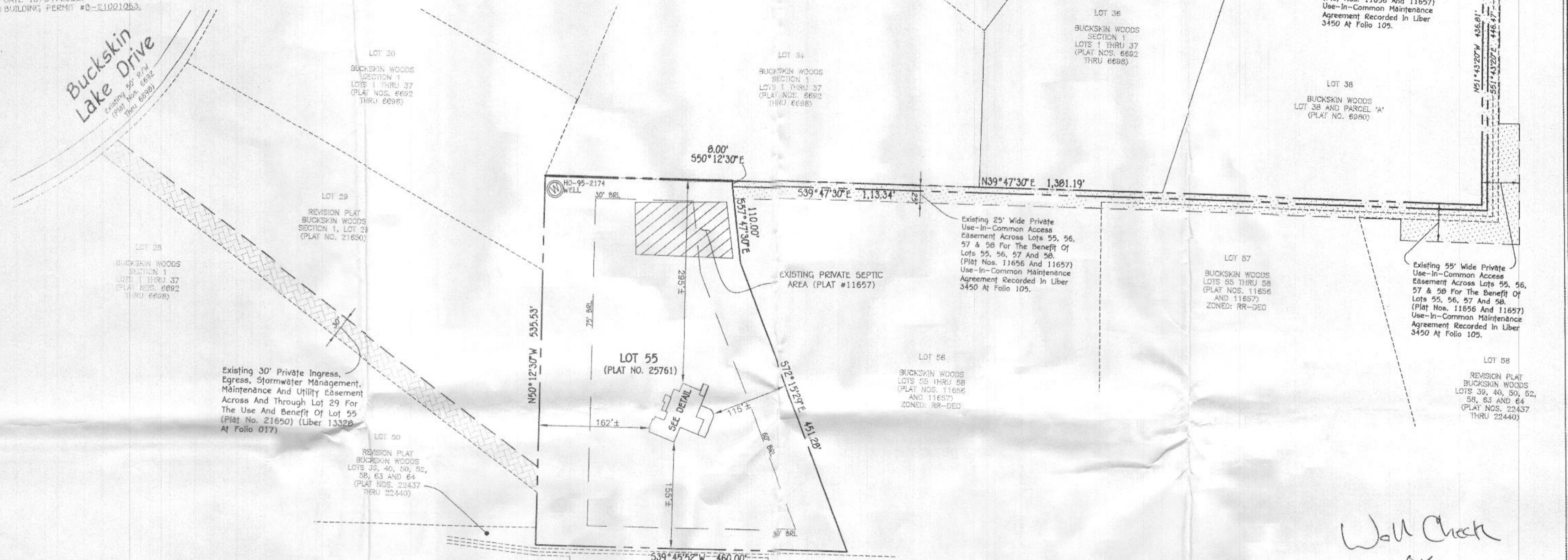
**Buckskin Lake Drive**

Existing 50' R/W (Plat Nos. 6692 Thru 6698) R=602.97 L=8.13

Existing 25' Wide Private Use-In-Common Access Easement Across Lots 55, 56, 57 & 58 For The Benefit Of Lots 55, 56, 57 And 58. (Plat Nos. 11656 And 11657) Use-In-Common Maintenance Agreement Recorded In Liber 3450 At Folio 105.

**Buckskin Lake Drive**

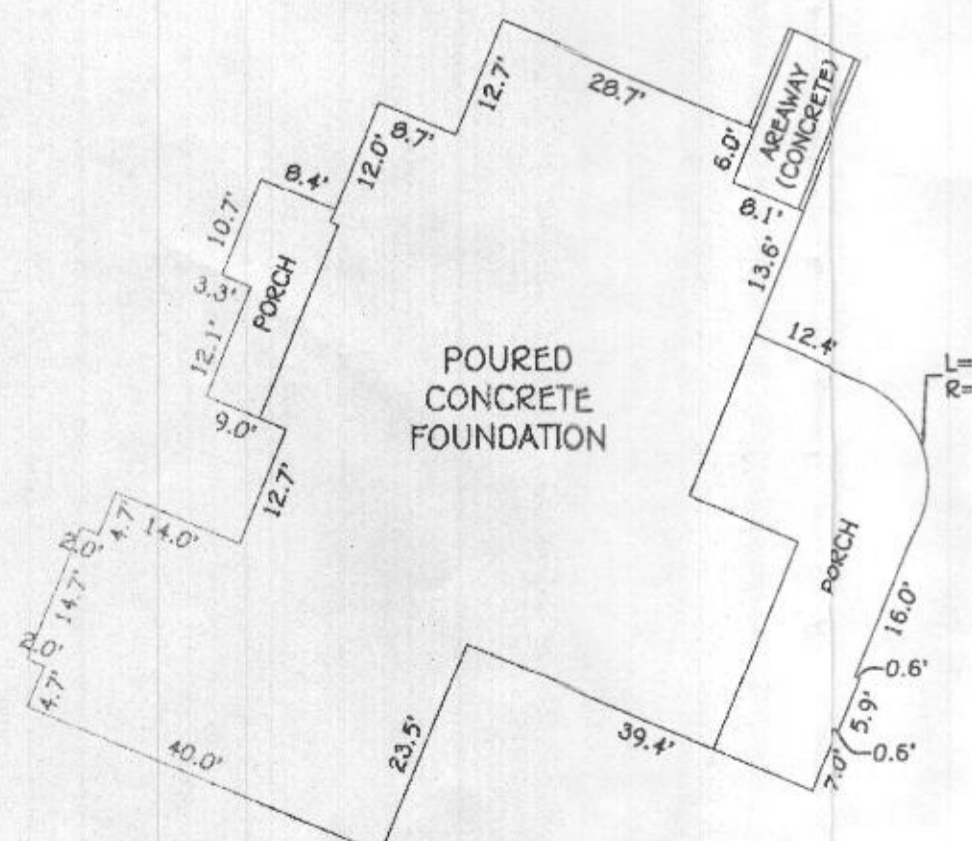
Existing 50' R/W (Plat Nos. 6692 Thru 6698)



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DETAIL SCALE: 1"=20'

Wall Check  
OK  
R/C 4/5/2022

**REVISED PLAT  
BUCKSKIN WOODS  
LOT 55  
4251 BUCKSKIN LAKE DRIVE**

ZONED: RC-DEO PLAT NO.: 25760  
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	<b>LOCATION DRAWING</b>
	FOUNDATION LOCATION: 10/8/21 FINAL LOCATION: _____ BOUNDARY SURVEY: _____
Mark L. Roper PROPERTY LINE SURVEYOR REG. #339	SCALE: 1"=100' DATE: 10/13/2021 DRAWN BY: MD CHECKED BY: MLR PROJECT No.: 81260-6021

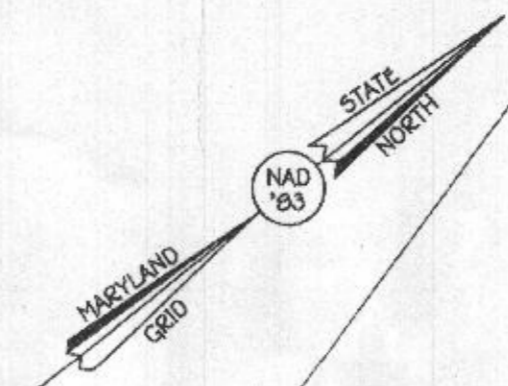
B.R.L. = BUILDING RESTRICTION LINE  
TOP OF FOUNDATION ELEVATION = 502.8'

**GENERAL NOTES:**

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE **AE** ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C00650 EFFECTIVE NOV. 6, 2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 0.25'.
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 5) THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2174) HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 6) 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. 21351, EXPIRATION DATE 10/04/2022.
- 7) BUILDING PERMIT #B-21001053.

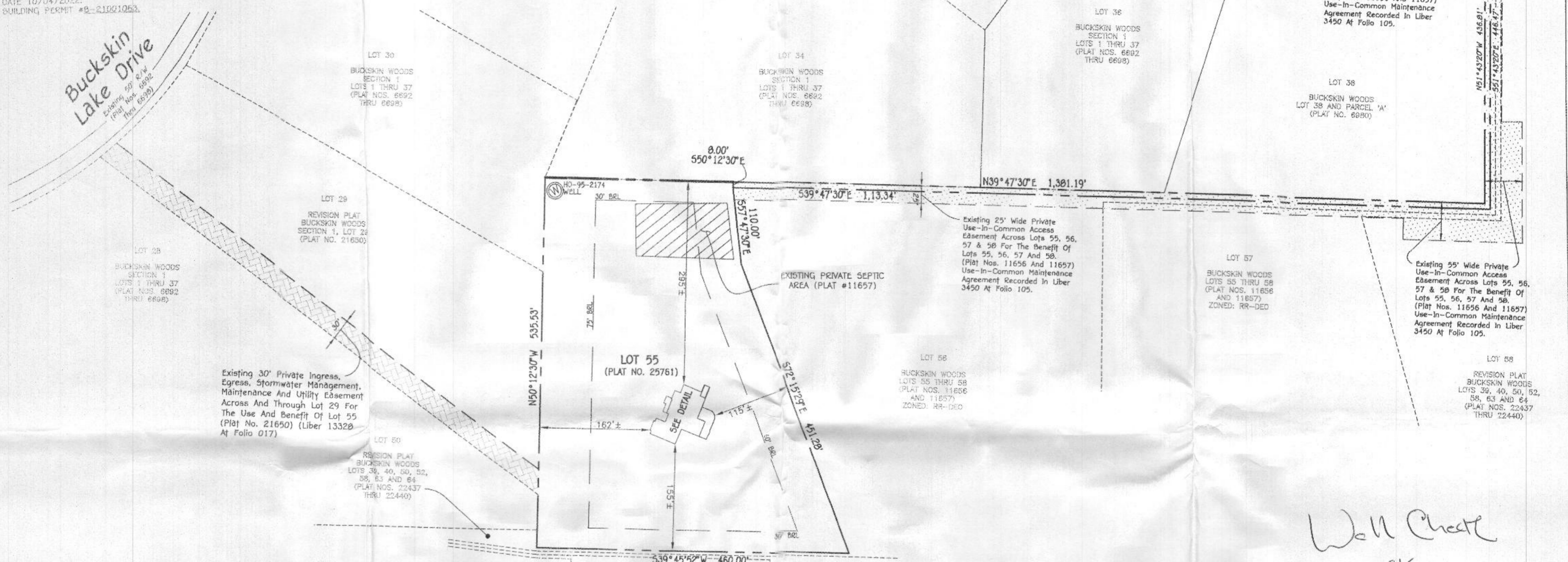
**Legend**

- Existing 30' Private Ingress, Egress, Stormwater Management, Maintenance And Utility Easement Across And Through Lot 29 For The Use And Benefit Of Lot 55 (Plat No. 21650) (Liber 13320 At Folio 017)
- Existing Private Septic Easement (Plat No. 11657)
- Existing 25' & 55' Wide Private Use-In-Common Access Easement Across Lots 55, 56, 57 & 58 For The Use And Benefit Of Lots 55, 56, 57 & 58 (Plat Nos. 11656 And 11657 And L. 3450, F. 105)



**Buckskin Lake Drive**  
Existing 50' R/W (Plat Nos. 6692 - 6698) R=682.97' L=8.13'

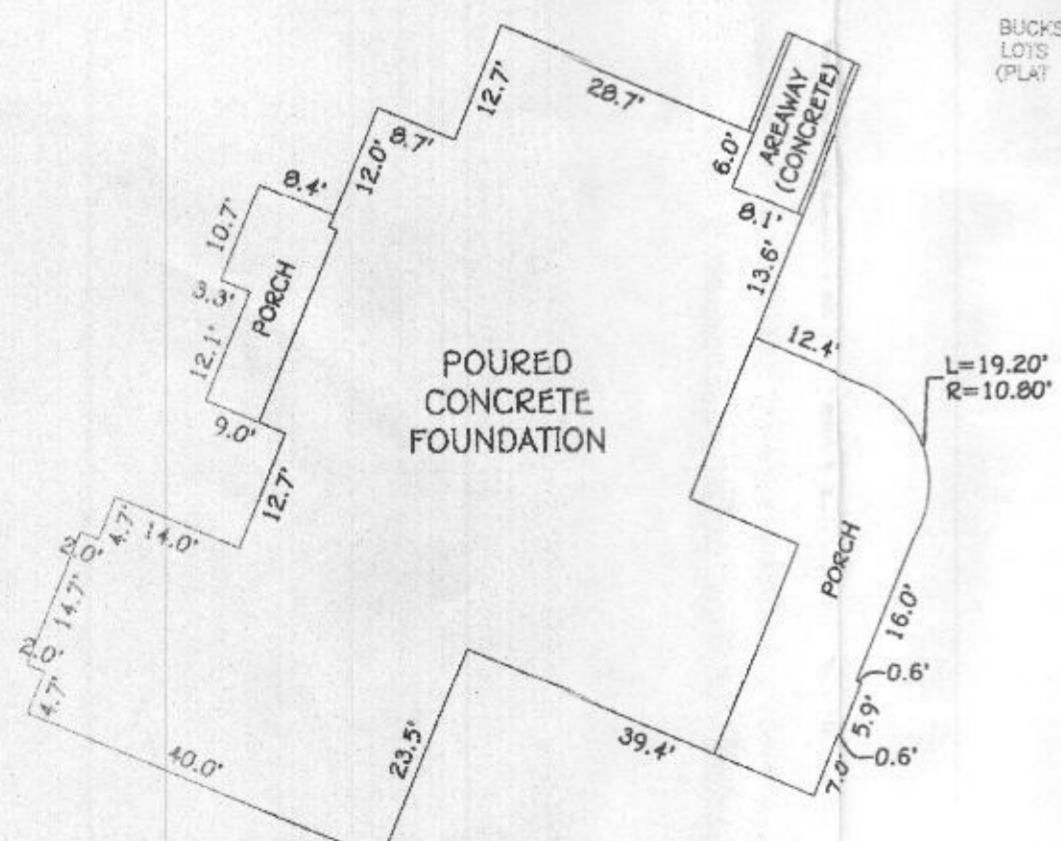
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**DETAIL**  
SCALE: 1" = 20'

Well Check  
OK  
R/C 4/5/2022

**REVISED PLAT**  
**BUCKSKIN WOODS**  
**LOT 55**  
4251 BUCKSKIN LAKE DRIVE

ZONED: RC-DEO PLAT NO.: 25760  
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	<p><b>LOCATION DRAWING</b></p>
	<p>FOUNDATION LOCATION: 10/8/21 FINAL LOCATION: BOUNDARY SURVEY:</p>
<p>SCALE: 1" = 100' DATE: 10/13/2021 DRAWN BY: MD CHECKED BY: MLR PROJECT No.: 61260-6001</p>	<p>REG. #339</p>

**GENERAL NOTES:**

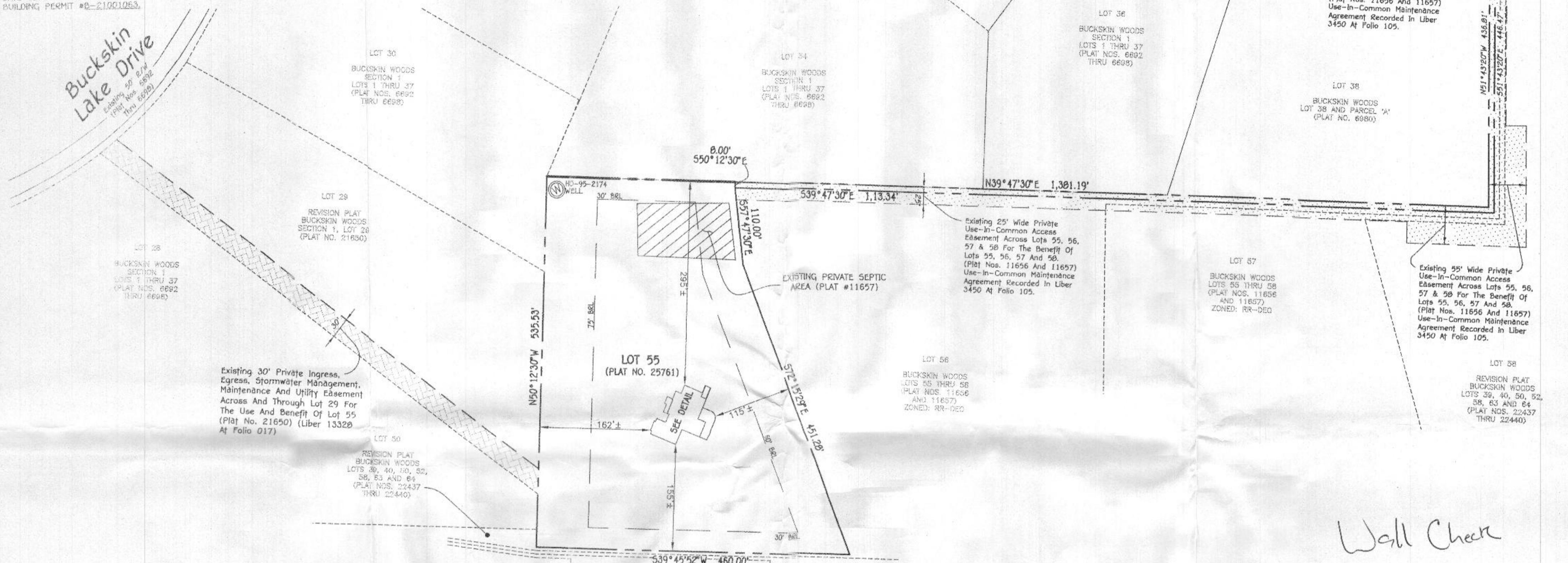
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- BUILDING PERMIT #B-21001063.

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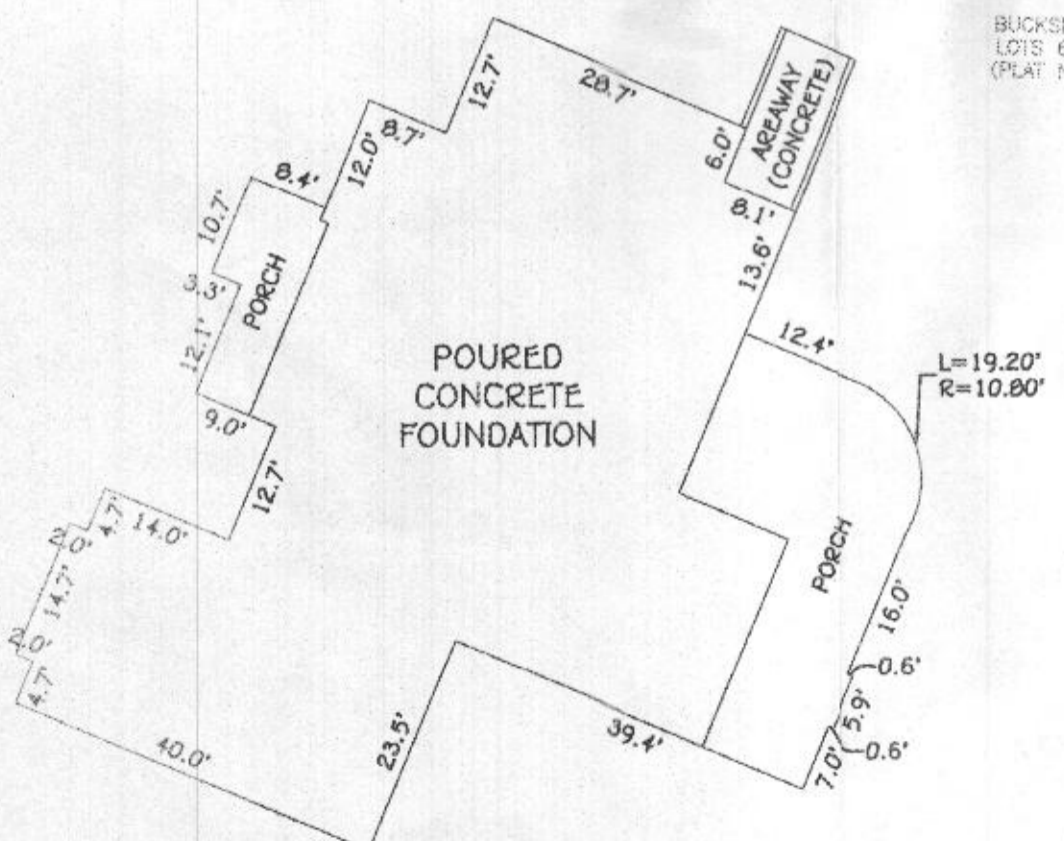


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Wall Check  
OK  
R/C 4/15/2022



DETAIL  
SCALE: 1"=20'

REVISED PLAT  
**BUCKSKIN WOODS**  
LOT 55  
4251 BUCKSKIN LAKE DRIVE

ZONED: RC-DEO PLAT NO.: 25760  
TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Mark L. Roesel 10/13/2021  
PROPERTY LINE SURVEYOR REG. #339 DATE

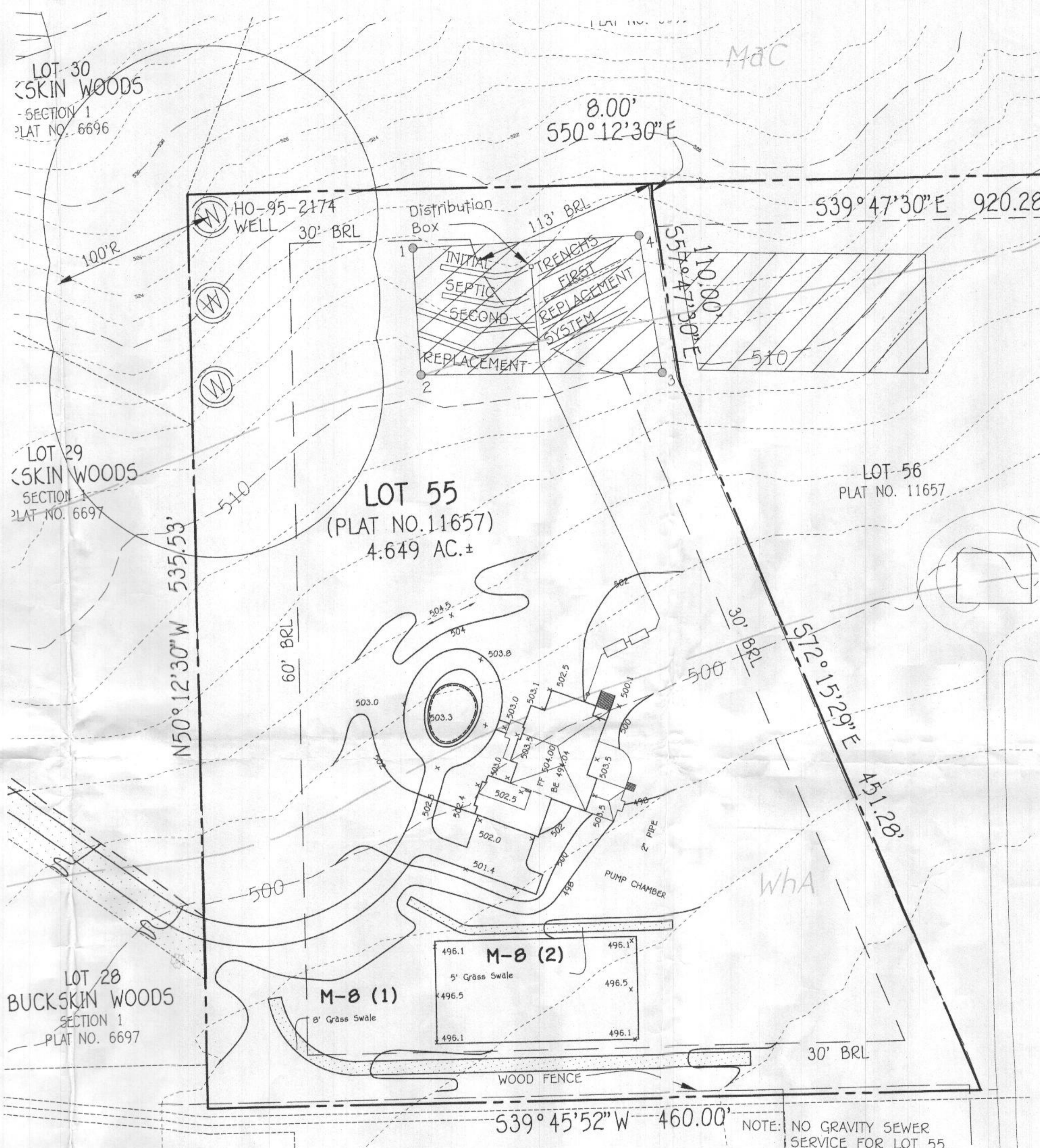
<b>LOCATION DRAWING</b>
FOUNDATION LOCATION: 10/10/21 FINAL LOCATION: BOUNDARY SURVEY:
SCALE: 1"=100' DATE: 10/13/2021 DRAWN BY: MD CHECKED BY: MLR PROJECT No. 61260-6001

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-95-2174 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 EXISTING WELL (HO-95-2174) ON BUCKSKIN WOODS LOT 55 (PLAT 11657) IS INSTALLED AT A LANDSCAPE POSITION THAT IS DOWNGRADE FROM APPROVED SEWAGE DISPOSAL AREAS ON LOTS 30 AND 31, RESPECTIVELY. WHEN THE RESIDENCE IS CONSTRUCTED ON LOT 55, THE HEALTH DEPARTMENT HIGHLY RECOMMENDS THAT A WATER SAMPLE IS OBTAINED AS SOON AS POSSIBLE FOR ANALYSES OF COLIFORM AND E.COLI BACTERIA. SHOULD THE WELL BE CONTAMINATED WITH BACTERIA, WELL DISINFECTION MUST BE CONDUCTED IN ACCORDANCE WITH CODE OF MARYLAND ANNOTATED REGULATIONS (COMAR, 26.04.04.24). IF THE DISINFECTION PROCEDURE PRESCRIBED BY COMAR ARE IMPLEMENTED AND BACTERIA CONTAMINATION PERSISTS, A REPLACEMENT WELL MUST BE INSTALLED AND THE EXISTING CONTAMINATED WELL MUST BE SEALED BY A LICENSED WELL DRILLER. USE AND OCCUPANCY SHALL NOT BE PERMITTED BY THE HEALTH DEPARTMENT UNTIL THE ORIGINAL WELL ABANDONMENT REPORT FOR THE CONTAMINATED WELL IS RECEIVED BY THE HEALTH DEPARTMENT. THE REPLACEMENT WELL YIELD AND CONSTRUCTION ARE APPROVED BY APPROVAL OF THE WELL COMPLETION REPORT, AND WATER ANALYSES FROM THE REPLACEMENT WELL ARE PROVEN TO BE FREE OF BACTERIA.
7. THE REPLACEMENT WELL IS DOWNGRADE OF SEVERAL APPROVED SEWAGE DISPOSAL AREAS (SDA) THOUGH SHALL NOT BE INSTALLED WITHIN 200 FEET OF A SEPTIC SYSTEM DISTRIBUTION TRENCH OR AN APPROVED SDA. THE WELL MUST BE INSTALLED AS STEEL CASING TO A DEPTH OF 50 FEET, OR 10 FEET INTO COMPETENT ROCK, WHICHEVER IS DEEPER.

**INITIAL SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
APPLICATION RATE = 1.2  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
(USE 3 TRENCHES AT 48.61 L.F.)  
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**1ST REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
APPLICATION RATE = 1.2  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
(USE 3 TRENCHES AT 48.61 L.F.)  
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**2ND REPLACEMENT SYSTEM**  
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
APPLICATION RATE = 1.2  
EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
TRENCH DEPTH = 6 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 3 FEET  
SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
(USE 2 TRENCHES AT 72.92 L.F.)  
TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'



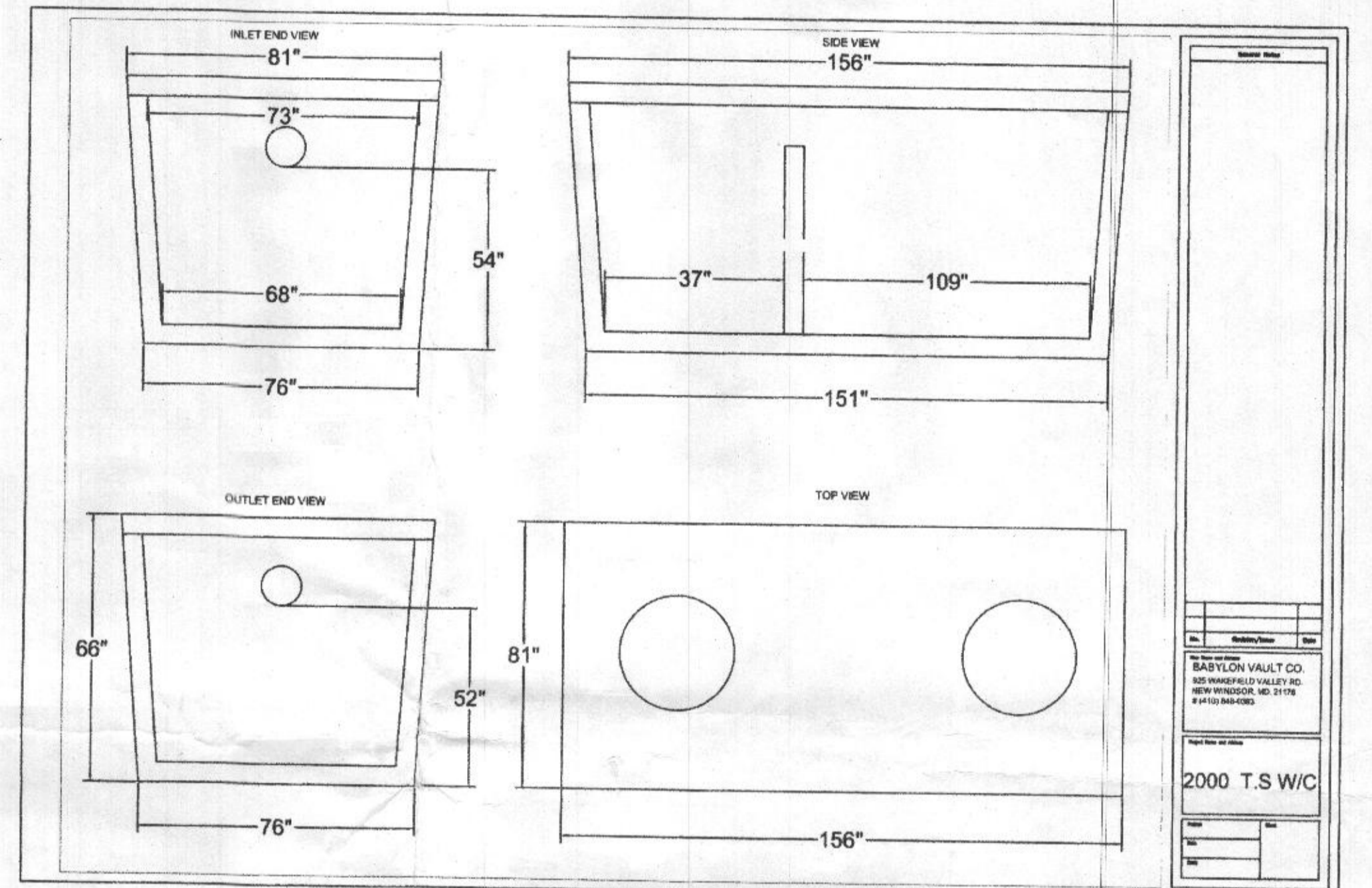
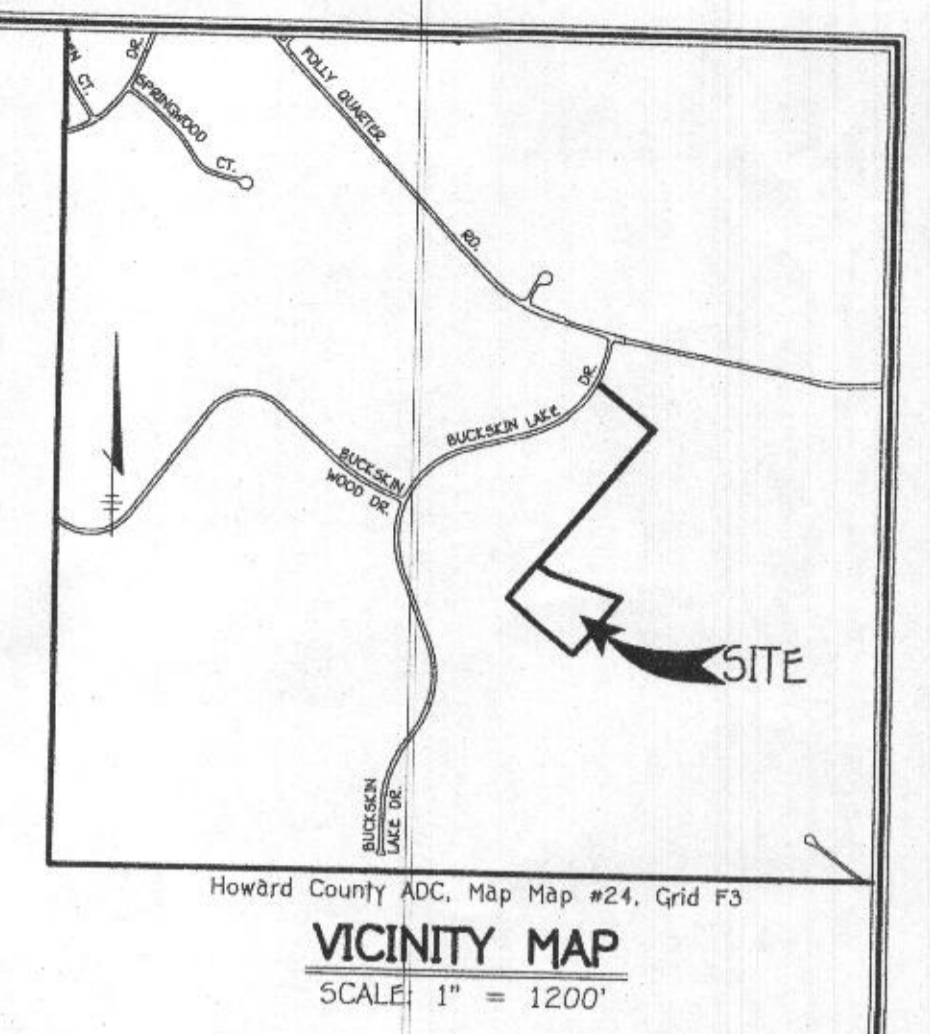
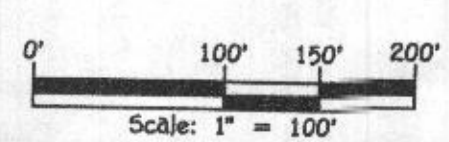
**LEGEND**

SYMBOL	DESCRIPTION
--- (dashed line)	EXISTING CONTOUR 2' INTERVAL
- - - (long dashed line)	PROPOSED CONTOUR 2' INTERVAL
--- (solid line)	EXISTING TREES
• (dot)	SPOT ELEVATION
- - - (dashed line)	SILT FENCE
--- (solid line)	LIMITS OF DISTURBANCE
--- (solid line)	DEMOTES 15% - 24.9% SLOPES
--- (solid line)	DEMOTES SEWAGE DISPOSAL AREA

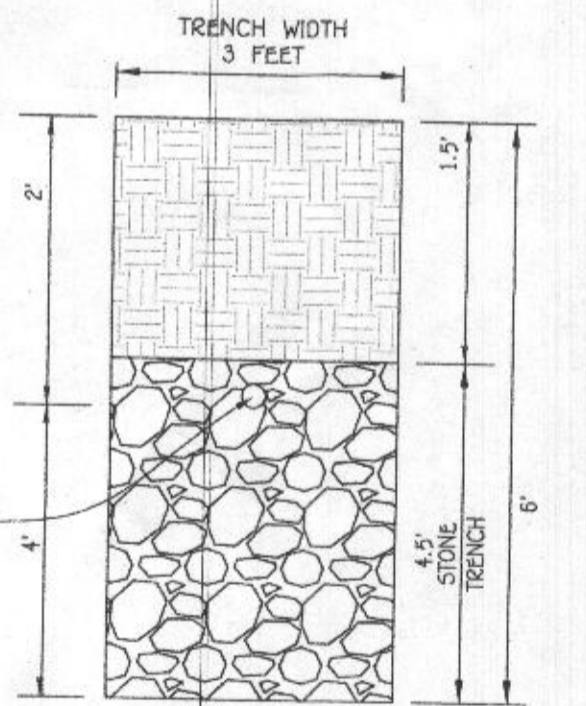
**PLAN**  
SCALE: 1" = 40'



**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. 20746, EXPIRATION DATE: 02/22/2023.  
*Michael Vitale*  
Signature of Professional Engineer  
10/4/22  
DATE



**TRENCH DATA:**  
TRENCH 1:  
EX. GROUND ABOVE = 515.8  
INV. IN = 513.8  
BOTTOM TRENCH = 509.8  
TRENCH 2:  
EX. GROUND ABOVE = 515  
INV. IN = 513  
BOTTOM TRENCH = 509.0  
TRENCH 3:  
EX. GROUND ABOVE = 514  
INV. IN = 512  
BOTTOM TRENCH = 508.0



Approved Septic System Plan  
Howard County Health Department  
*Michael Vitale*  
Signature  
10/26/2022  
Date

**SOILS LEGEND**

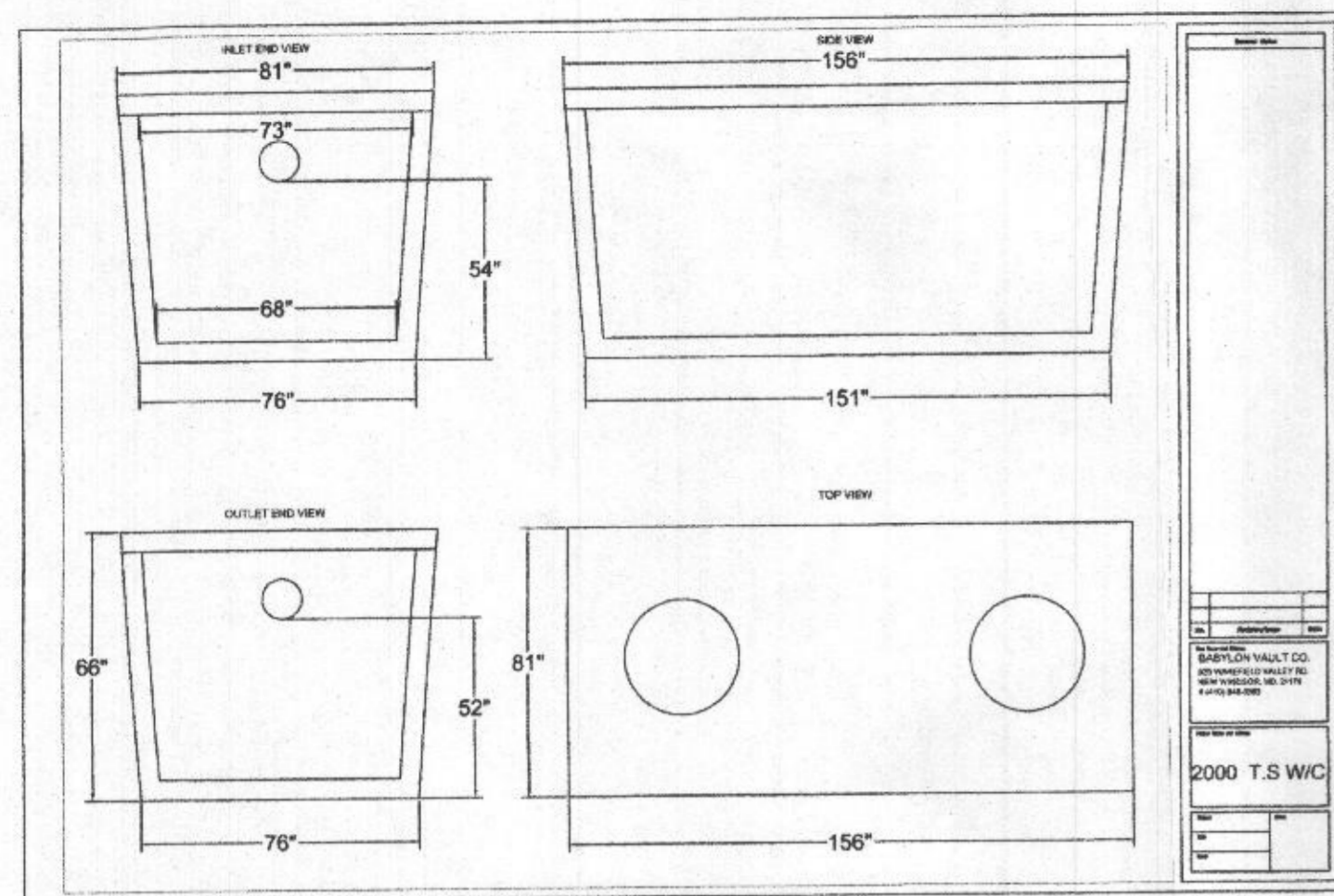
SOIL	NAME	CLASS	K' VALUE
BeB	Benevolat silt loam, 3 to 8 percent slopes	B	.43
GgB	Glenville loam, 3 to 8 percent slopes	B	.37
GoB	Glenville-Codorus silt loams, 0 to 8 percent slopes	C	.49
MaC	Manor loam, 8 to 15 percent slopes	B	.32
WhA	Wiltshire silt loam, 0 to 3 percent slopes	C	.37

**SEPTIC SYSTEM INSTALLATION SITE PLAN**  
**BUCKSKIN WOODS**  
LOT 55  
4251 BUCKSKIN LAKE DRIVE  
ZONED: RC-DEO  
TAX MAP NO.: 22  
5TH ELECTION DISTRICT  
SCALE: 1"=100'  
PLAT NO.: 11657  
GRID NO.: 22  
HOWARD COUNTY, MARYLAND  
DATE: OCTOBER 4, 2022  
SHEET 1 OF 2

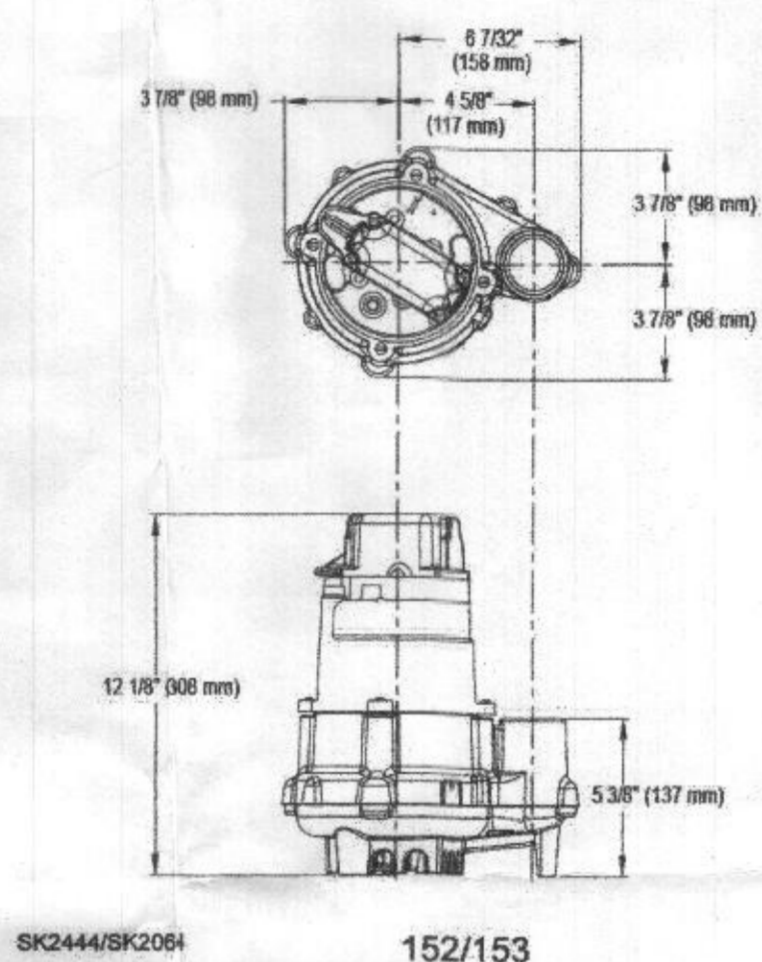
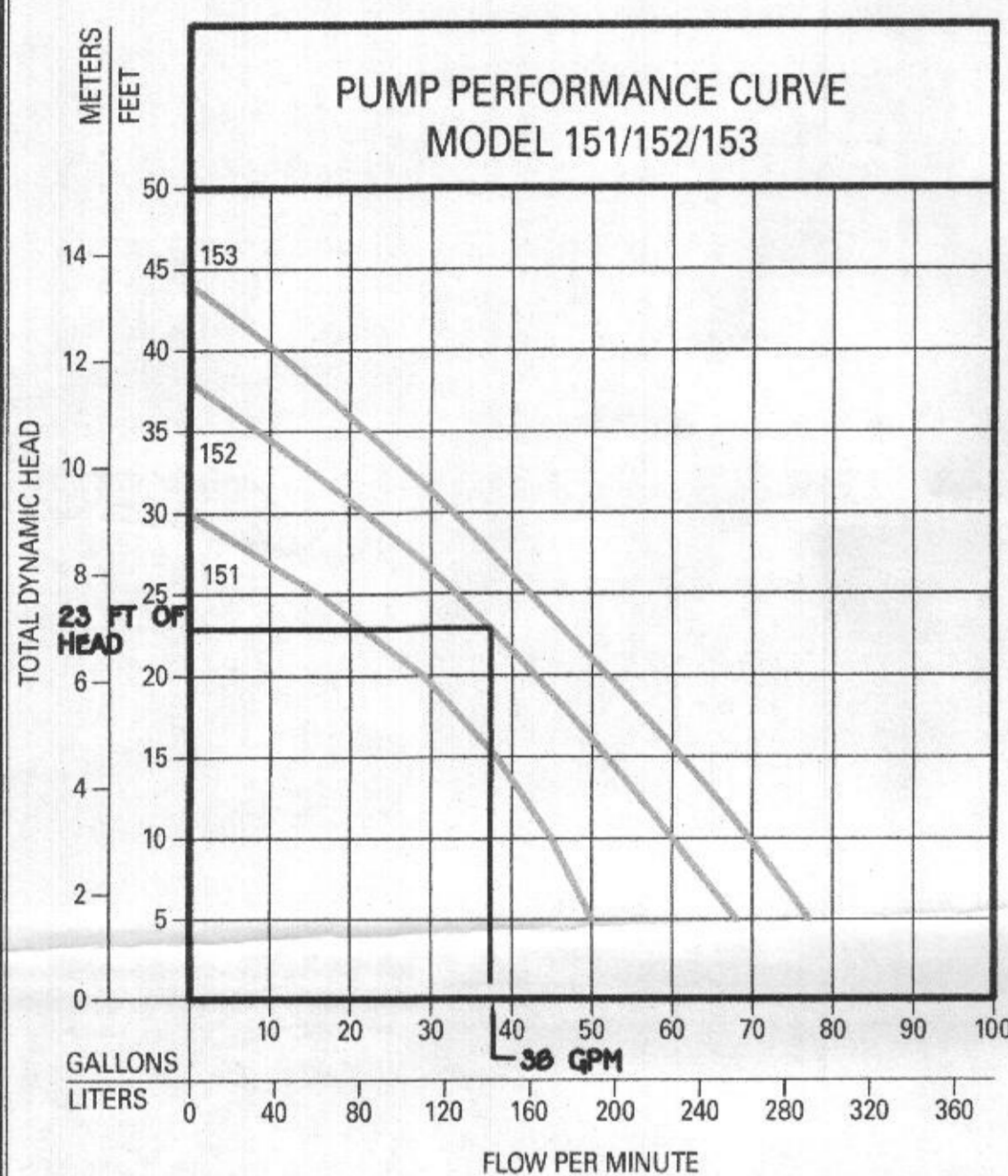
**ADDRESS**  
4251 BUCKSKIN LAKE DRIVE

**OWNER**  
JEFFREY O RANDOLPH  
YOLANA YOUNG  
7713 LONGBOTTOM RD  
ELKRIEGER MD 21075

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CORPORAL SQUARE OFFICE PARK - 15272 BALDORNE INDUSTRIAL PARK  
ELKROTT CITY, MARYLAND 21042  
(410) 461-2885



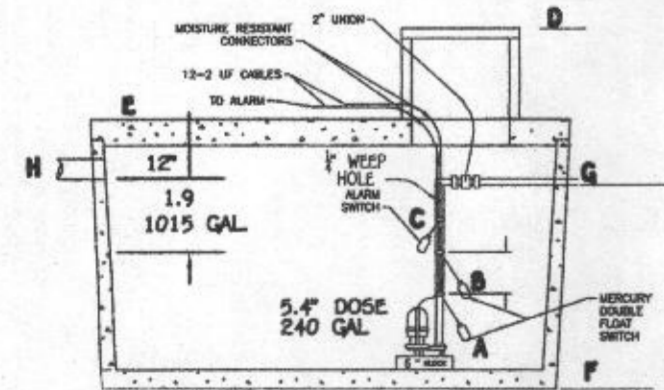
**PUMP TANK DETAIL**  
NOT TO SCALE



152/153

NOTE: SEPTIC SYSTEM ALARM WILL BE ON A CIRCUIT SEPARATE FROM ANY OTHER SEPTIC SYSTEM COMPONENTS OR ALARMS.

**PUMP ALARMS / INFORMATION**  
 A PUMP OFF : 496.09  
 B PUMP ON : 496.54  
 C HIGH WATER ALARM : 497.04  
 D TOP OF ACCESS COVER : 500.69  
 E TOP OF TANK : 499.19  
 F BOTTOM OF TANK : 493.69  
 G DISCHARGE OUT OF TANK : 497.94  
 H INVERT INTO TANK : 498.19



1015 + 311 = 1326 CU FT EMERGENCY STORAGE

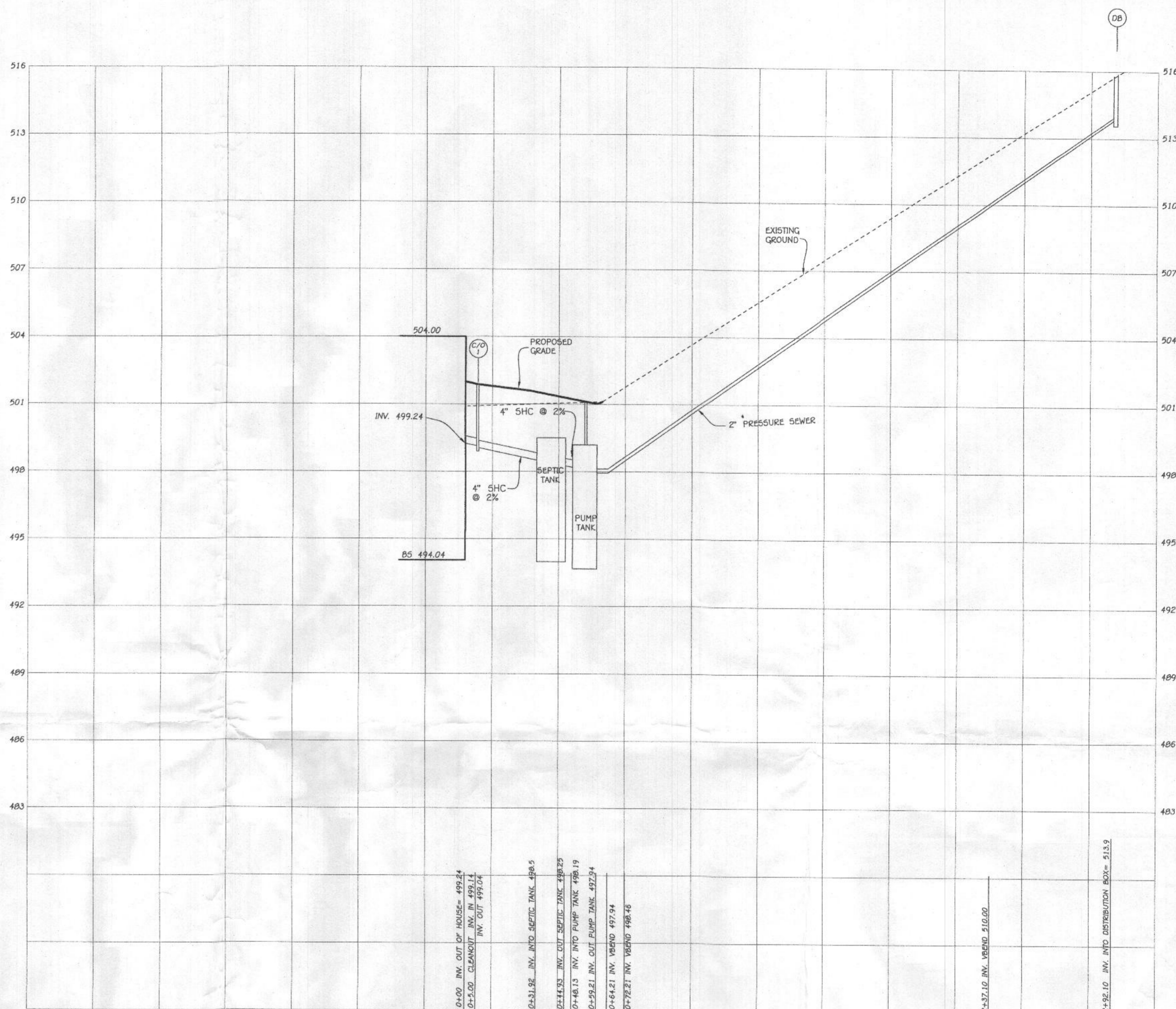
NOTE: THIS DETAIL IS TO BE USED FOR FLOAT CONFIGURATION ONLY - SEE DETAIL ABOVE FOR TANK DIMENSIONS AND ACTUAL LOCATION OF ACCESS COVER.

1 UNION @ 2 EQUIVALENT FEET = 2 LF  
 3 1/8 HB @ 4 EQUIVALENT FEET = 12 LF  
 TOTAL LINEAR FEET OF 2" SCH. 40 PVC = 247 LF

**DYNAMIC HEAD**  
 391 LF X 2.05 FT PER 100 LF OF 2" PIPE = 5.0 FT OF FRICTION HEAD  
 VERTICAL FROM PUMP OFF TO HIGH POINT IN PUMP CHAMBER = 2.03 FT OF FRICTION HEAD  
 HIGH POINT IN PUMP CHAMBER TO HIGHEST ELEV OF SYSTEM = 20.3 FT (PUMP OUT IS THE HIGHEST POINT)  
 TOTAL DYNAMIC HEAD = 23.03 FT

1/6 DESIGN FLOW (1050/6=175) PLUS VOLUME OF 2" PIPE (62 GALLONS)  
 USE 237 GALLON DOSE (125 GALLON MINIMUM)  
 (RUN TIME = 6.3 MN (36 GPM X 6.3 = 240 GALLON DOSE))

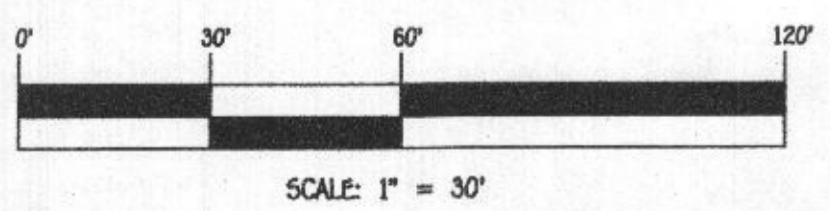
PUMP NEEDS TO HANDLE 36 GPM AT 23.03 FT OF HEAD  
 USE 0.4 HP (ZOELLER MODEL 152 PUMP)



**SEPTIC PROFILE**  
SCALE: 1"=30'

FFE 504.00  
 BSE 494.04  
 INV. OUT OF HOUSE = 499.24  
 PROP. GROUND AT CLEANOUT # 1 = 501.90  
 INV. INTO CLEANOUT = 499.14  
 INV. OUT OF CLEANOUT = 499.04  
 EX. GROUND AT SEPTIC TANK = 501.60  
 PROP. GRADE ABOVE SEPTIC TANK = 501.60  
 TOP OF SEPTIC TANK = 499.50  
 INV. INTO SEPTIC TANK = 498.50  
 INV. OUT OF SEPTIC TANK = 498.25  
 EX. GROUND AT PUMP TANK = 501.2  
 PROP. GRADE ABOVE PUMP TANK = 501.1  
 TOP OF PUMP TANK = 499.19  
 INV. INTO PUMP TANK = 498.19  
 INV. OUT OF PUMP TANK = 497.94  
 EX. GROUND AT DISTRIBUTION BOX = 515.8  
 INV. INTO DISTRIBUTION BOX = 513.9  
 INV. OUT OF DISTRIBUTION BOX = 513.8

Approved Septic System Plan  
 Howard County Health Department  
 Signature: [Signature] Date: 10/26/2022



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 SALTPORE NATIONAL PIKE  
 ELLETTT CITY, MARYLAND 21042  
 (410) 461-2855

**OWNER**  
 JEFFREY O RANDOLPH  
 YOLANA YOUNG  
 7713 LONGBOTTOM RD  
 ELKRIEDE MD 21075



**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. 20748, EXPIRATION DATE: 02/22/2023.

Signature: [Signature] DATE: 10/26/22

**SEPTIC SYSTEM  
 INSTALLATION SITE PLAN  
 BUCKSKIN WOODS  
 LOT 55  
 4251 BUCKSKIN LAKE DRIVE**

ZONED: RC-DEO PLAT NO.: 11657  
 TAX MAP NO.: 22 GRID NO.: 22 PARCEL NO.: 535  
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1"=100' DATE: OCTOBER 4, 2022  
 SHEET 2 OF 2

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-95-2174 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 EXISTING WELL (HO-95-2174) ON BUCKSKIN WOODS LOT 55 (PLAT 11657) IS INSTALLED AT A LANDSCAPE POSITION THAT IS DOWNGRADE FROM APPROVED SEWAGE DISPOSAL AREAS ON LOTS 30 AND 31, RESPECTIVELY. WHEN THE RESIDENCE IS CONSTRUCTED ON LOT 55, THE HEALTH DEPARTMENT HIGHLY RECOMMENDS THAT A WATER SAMPLE IS OBTAINED AS SOON AS POSSIBLE FOR ANALYSES OF COLIFORM AND E.COLI BACTERIA. SHOULD THE WELL BE CONTAMINATED WITH BACTERIA, WELL DISINFECTION MUST BE CONDUCTED IN ACCORDANCE WITH CODE OF MARYLAND ANNOTATED REGULATIONS (COMAR, 26.04.04.24). IF THE DISINFECTION PROCEDURE PRESCRIBED BY COMAR ARE IMPLEMENTED AND BACTERIA CONTAMINATION PERSISTS, A REPLACEMENT WELL MUST BE INSTALLED AND THE EXISTING CONTAMINATED WELL MUST BE SEALED BY A LICENSED WELL DRILLER. USE AND OCCUPANCY SHALL NOT BE PERMITTED BY THE HEALTH DEPARTMENT UNTIL THE ORIGINAL WELL ABANDONMENT REPORT FOR THE CONTAMINATED WELL IS RECEIVED BY THE HEALTH DEPARTMENT, THE REPLACEMENT WELL YIELD AND CONSTRUCTION ARE APPROVED BY APPROVAL OF THE WELL COMPLETION REPORT, AND WATER ANALYSES FROM THE REPLACEMENT WELL ARE PROVEN TO BE FREE OF BACTERIA.
7. THE REPLACEMENT WELL IS DOWNGRADE OF SEVERAL APPROVED SEWAGE DISPOSAL AREAS (SDA) THOUGH SHALL NOT BE INSTALLED WITHIN 200 FEET OF A SEPTIC SYSTEM DISTRIBUTION TRENCH OR AN APPROVED SDA. THE WELL MUST BE INSTALLED AS STEEL CASING TO A DEPTH OF 50 FEET, OR 10 FEET INTO COMPETENT ROCK, WHICHEVER IS DEEPER.

**INITIAL SYSTEM**

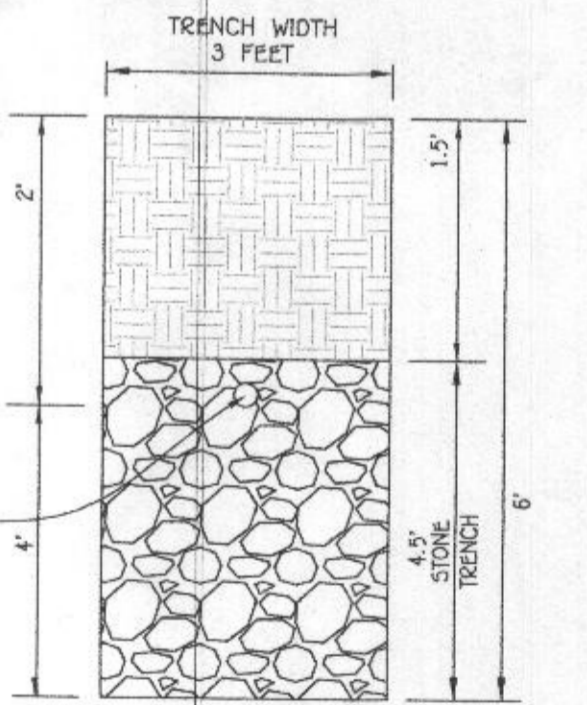
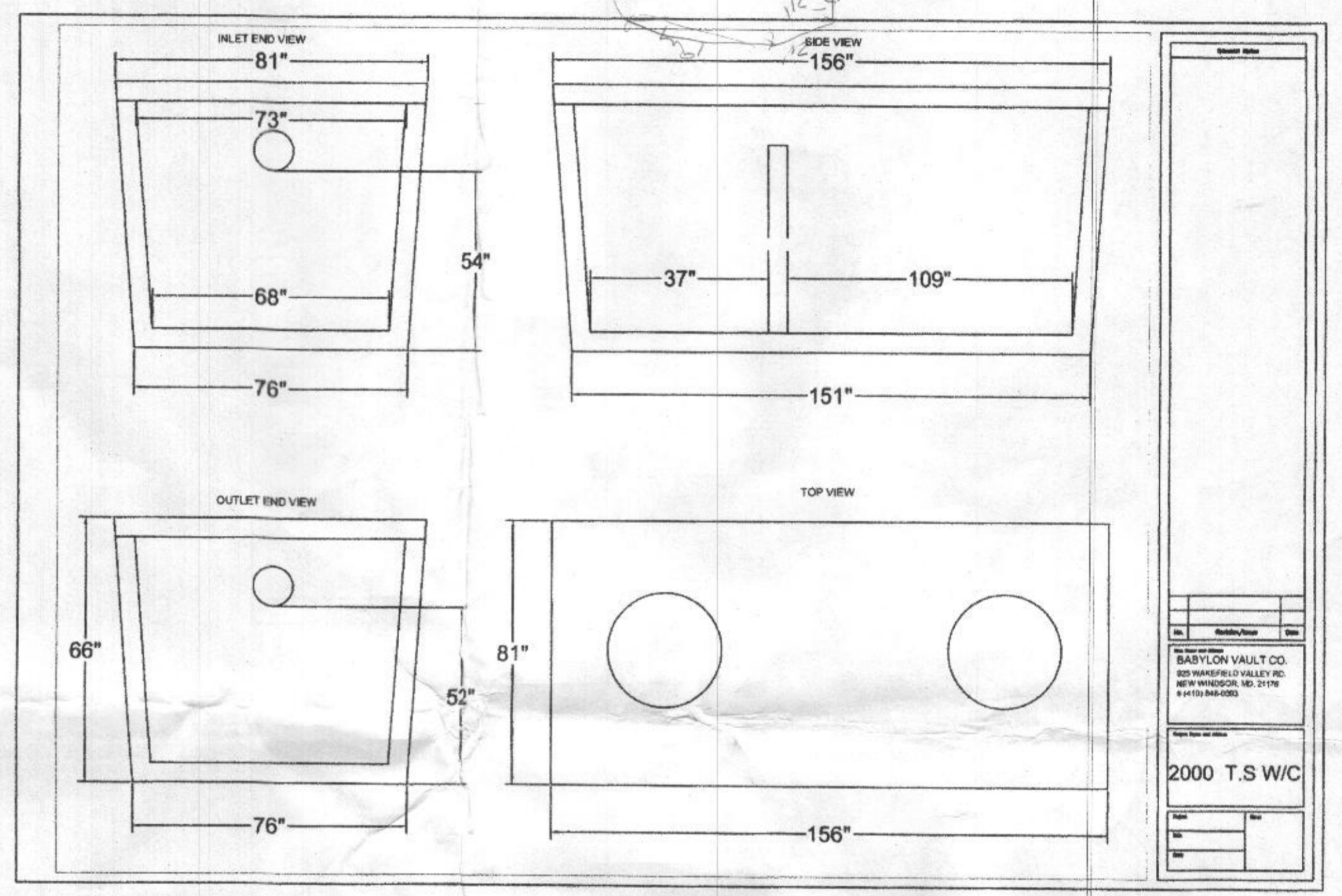
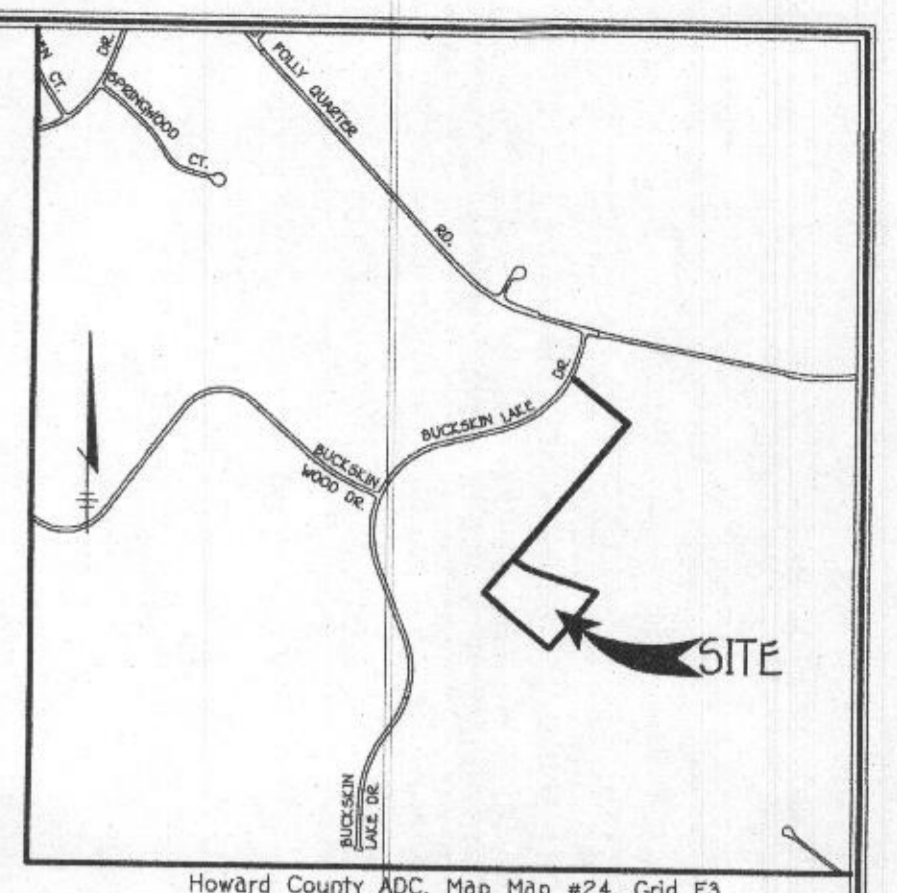
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
 LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
 TRENCH DEPTH = 6 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
 TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
 (USE 3 TRENCHES AT 48.61 LF.)  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**1ST REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
 LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
 TRENCH DEPTH = 6 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
 TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
 (USE 3 TRENCHES AT 48.61 LF.)  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'

**2ND REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 7 BEDROOMS  
 LOADING RATE = 7 BEDROOMS X 150 GPD/BEDROOM = 1050 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 3 FEET  
 TRENCH DEPTH = 6 FEET  
 TRENCH WIDTH (W) = 3 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 1050 GPD / 1.2 = 875 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3)) = 0.5$   
 TRENCH LENGTH = 291.67 SF x 0.5 = 145.83 FEET  
 (USE 2 TRENCHES AT 72.92 LF.)  
 TRENCH SPACING = 2D+W = ((2x3) + 3) = 9' USE 10'



Approved Septic System Plan  
 Howard County Health Department  
*Signature* 10/24/22  
 Date

**LEGEND**

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
- - - -	PROPOSED CONTOUR 2' INTERVAL
~	EXISTING TREES
▲	SPOT ELEVATION
-S-	SILT FENCE
---	LIMITS OF DISTURBANCE
○	DNOTES 15% - 24.9% SLOPES
□	DNOTES SEWAGE DISPOSAL AREA

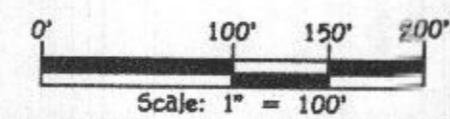
**PLAN**  
 SCALE: 1" = 40'

**SOILS LEGEND**

SOIL	NAME	CLASS	'K' VALUE
BeB	Benevolia silt loam, 3 to 8 percent slopes	B	.43
GgB	Gleniel loam, 3 to 8 percent slopes	B	.37
GgB	Glenville-Codorus silt loams, 0 to 8 percent slopes	C	.49
M&C	Manor loam, 8 to 15 percent slopes	B	.32
W&A	Wiltshire silt loam, 0 to 3 percent slopes	C	.37



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*Michael J. Vitale* 10/24/22  
 Signature Of Professional Engineer DATE



**ADDRESS**  
 4251 BUCKSKIN LAKE DRIVE

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