



Bureau of Environmental Health
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 Twitter: HowardCoHealthDep

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

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: _____

Subdivision: Simpson & Denault Properties Lot: 22

83.8 Initial system: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 7.5
 77 1st Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6
 76 2nd Replacement: Application rate: 0.8 Effective area beginning depth: 3 Bottom maximum depth: 6

Design Flow = 150 gallons per day per bedroom

Design flow + application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W+2}{W+1+2D} \times 100 = \text{Percent of length of standard trench where } W=\text{trench width and } D=\text{depth between effective area beginning depth and trench bottom.}$$

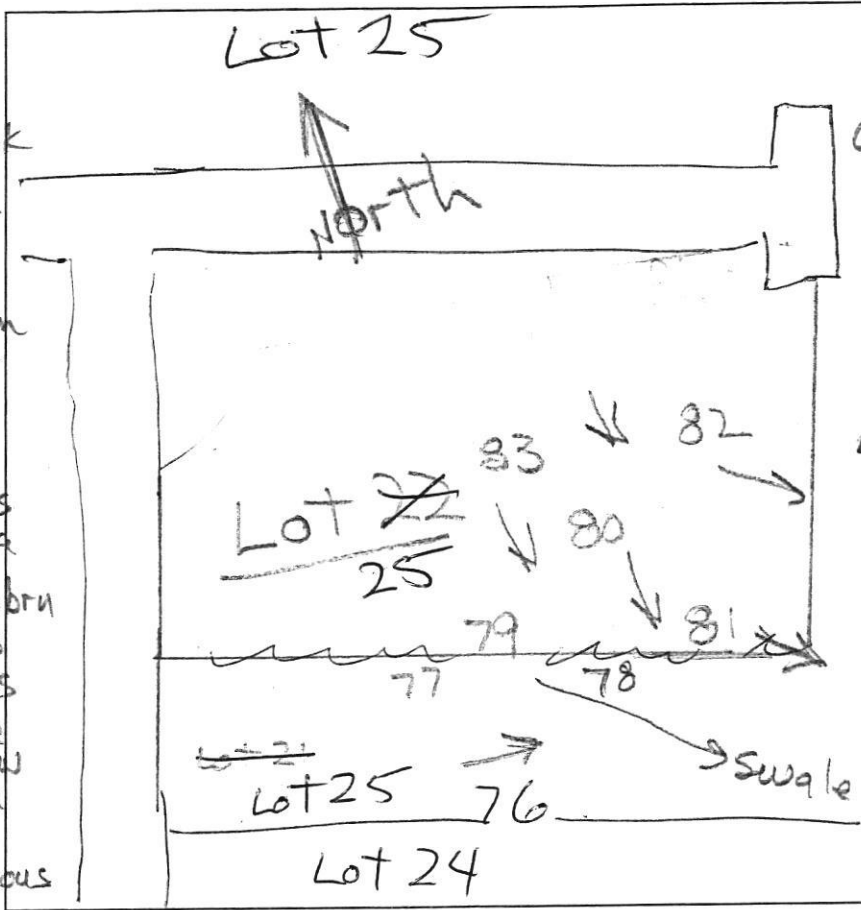
Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is 2D + W up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Install Initial Drainfield System in 4000 sqft. SDA. Avoid placing tank over center of swale.

Approved: R Bricker Date: 2/12/2018



79
 0.7' dk brn sl, 2 f sbk
 1.5' brn sl, 2 f sbk
 2.5' brn st sl
 3.8' 1 f sbk, common mica
 4.5' red brn chls
 8' red & brn chls
 11.5' 1 f sg, few mica
 13' yel-red & pale brn
 1 f mica
 13' wki thin plates
 13' red-yel & pale yellow
 1 f mica, many mica
 13' pale yellow
 vchls, micaceous

81
 0.5' dk brn sl, 1 f
 brn sl, 2 f sbk
 2' brn & lt brn
 fs, common mica
 thin platy
 4.5' yellow-red
 & pale yellow
 1 f thin platy
 many mica
 11' pale yellow
 chls, micaceous
 13' water

82
 0.6' dk brn sl, 2 f
 brn sl, 2 f sbk
 1.3' brn st sl, 1 f sbk
 2.8' yellow-red
 & lt brn sl
 many mica
 12.2' yel-red & pale brn
 1 f mica
 13' pale yellow
 1 f, many mica

80
 0.7' dk brn sl, 3 f
 to brn L, 2 f sbk
 many roots
 1.5' yel brn chsl
 1 f sbk, common mica
 many roots
 2' lt brn ls, 1 f sg
 micaceous
 10% channers
 11.5' yel-red & pale yellow
 1 f sg, micaceous
 10% channers
 13' pale yellow
 chls, micaceous
 thick platy

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10/24/14	79	5.3' / 11.5'	11:49	12:02	12:30	28	P
10/24/14	80	3.7' / 11.5'	12:04	12:06	12:10	4	P
10/24/14	81	5' / 11'	12:17	12:20	12:24	4	P
10/24/14	82	4' / 12.2'	12:33	12:36	12:43	7	P
10/24/14	83	4.3' / 12'	12:48	12:57	12:58	7	P

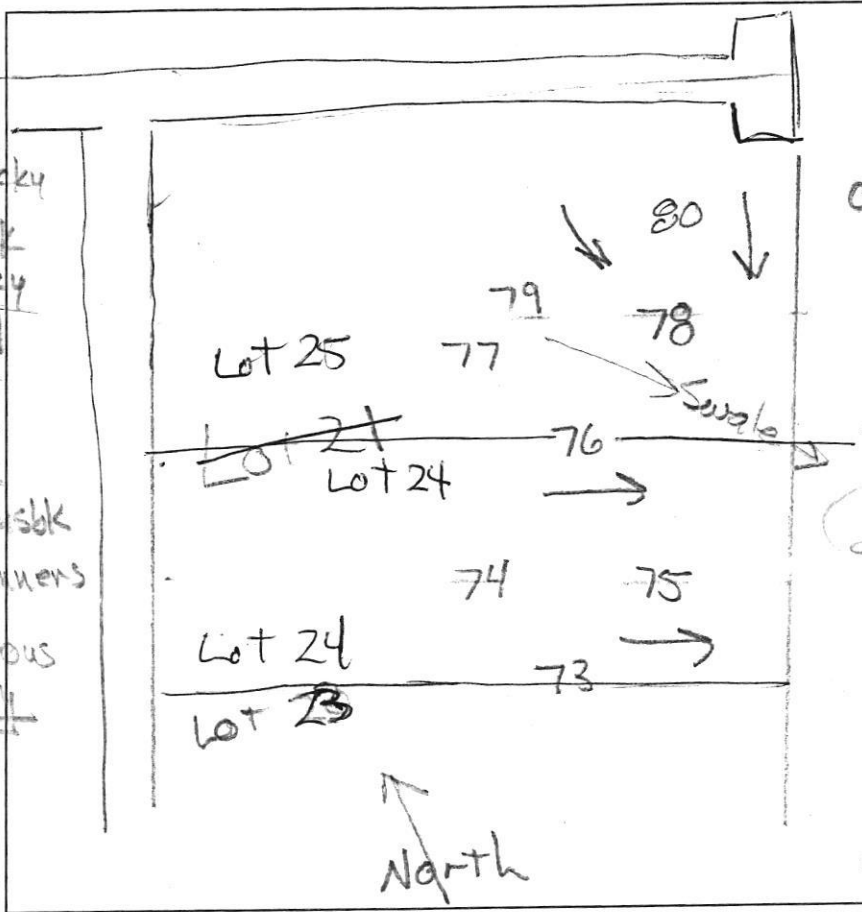
83
 0.4' brn sl, 1 f
 1 v f sbk
 2.2' yel-red & yel-brn
 sl, common mica
 thin platy
 5' red-yel & pale yellow
 1 f thin platy
 common mica
 12' pale yellow & pale brn 1 f
 13' grey-brn 1 f / 15' many mica

REMARKS _____
 SANITARIAN R Bricker BACKHOE Hotfield's (Connie) OTHERS Att
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

Lot 22

A/P

0.5' dk brn L, 2f sbk slightly sticky
 1.2' brn chl, 1f sbk slightly sticky
 2.8' yel-red st sl common mica
 3.3' yel-red chl 1f sbk many mica
 10' pale yellow chls, micaceous
 13' thick platy



0.8' dk brn L, 2f sbk few channers
 1.5' yel-red chl 1f sbk, many mica
 2.4' red sl 8m, many mica
 3' brn & pale brn
 4.5' sl, medium platy many mica
 8.2' yel-red & pale yellow fs, wk. medium plates many mica
 10' brn & pale brn chls, thin micaceous sand, few flags
 14' thick plates

0.6' dk. brn sl 2fg
 1.2' brn chl, 3msbk
 2.6' brn sl, 2msbk
 4' brn st sl 1msbk
 6' yel-red & pale brn sl, medium plates
 11.7' yel-red & pale yellow ls many mica
 13' pale brn vchls, micaceous water

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10/24/14	76	5' / 10'	10:28	10:30	10:36	6	P
10/24/14	77	5' / 10'	10:48	10:52	11:02	10	P
10/24/14	78	6.3' / 11.7'	11:08	11:20	11:46	26	P

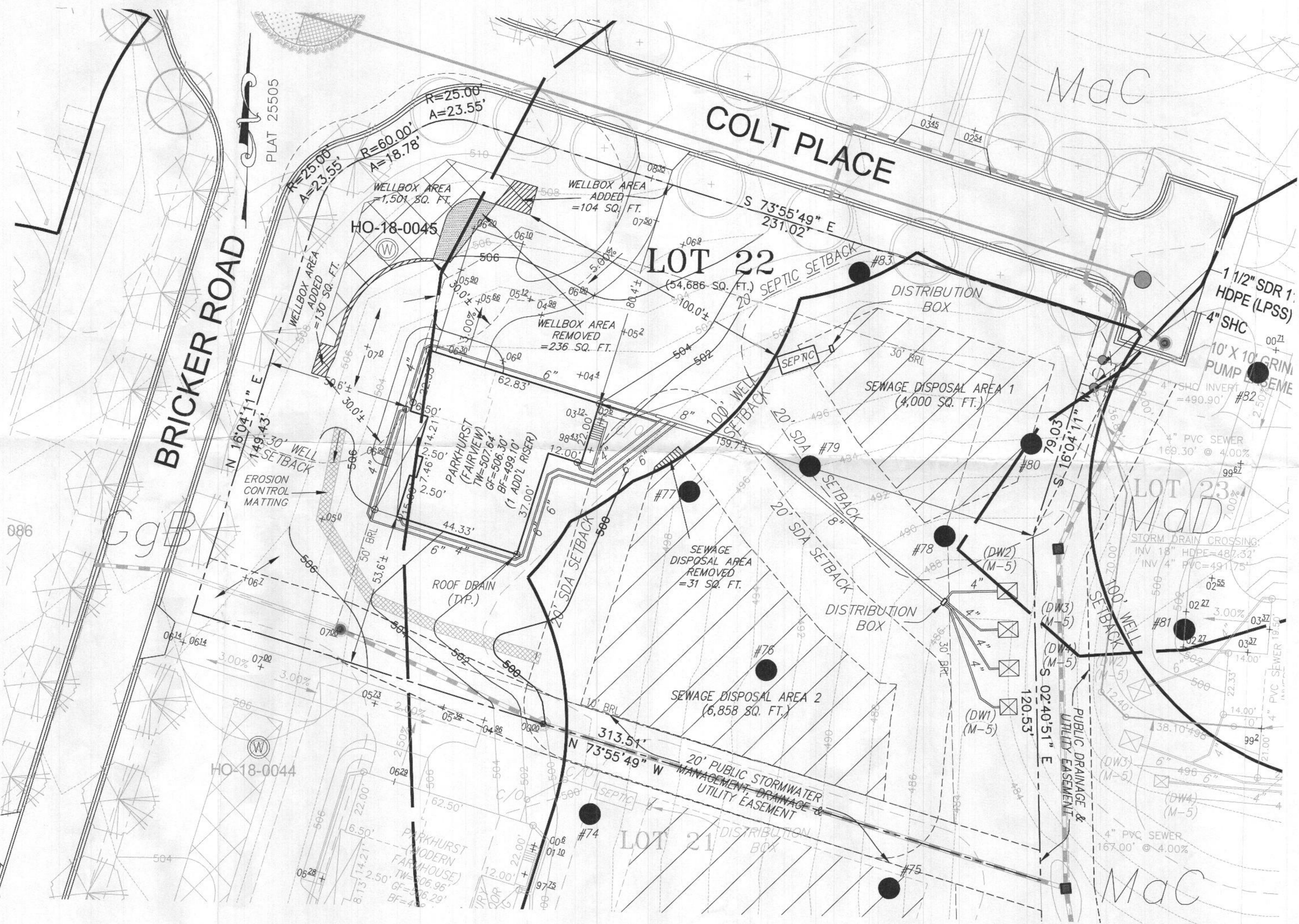
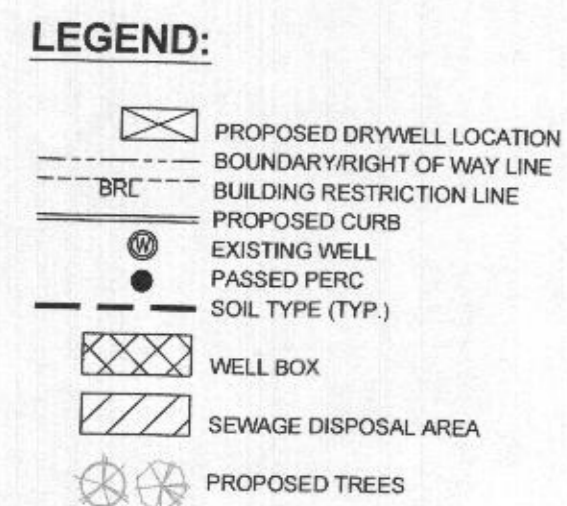
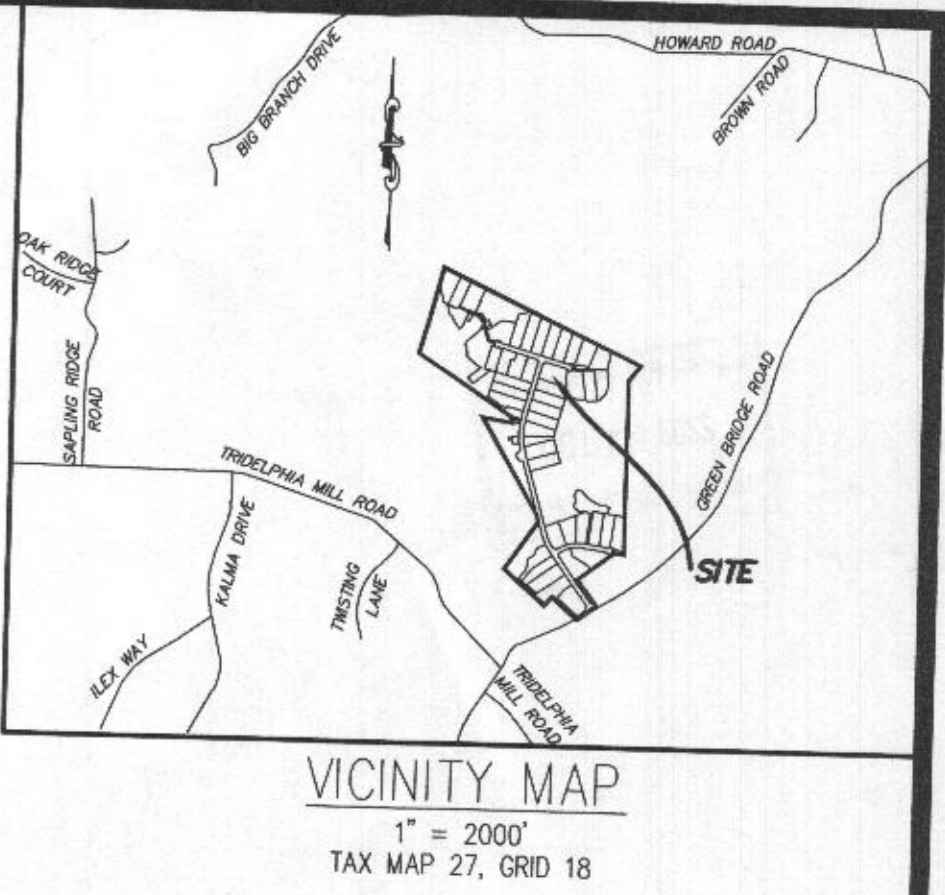
REMARKS _____
 SANITARIAN R Bricker BACKHOE Hotfield's (Dannie) OTHERS ART
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE S/W _____

Lot 21

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. 2138, EXPIRATION DATE 1/8/23.

SOILS LEGEND			
SOIL	NAME	CLASS	Kw
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	26
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	26
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	26

PURPOSE NOTE:
THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO REVISE WELLBOX FOR LOT 22 TO ALLOW FOR DRIVEWAY AND DRIVEWAY TAIL.



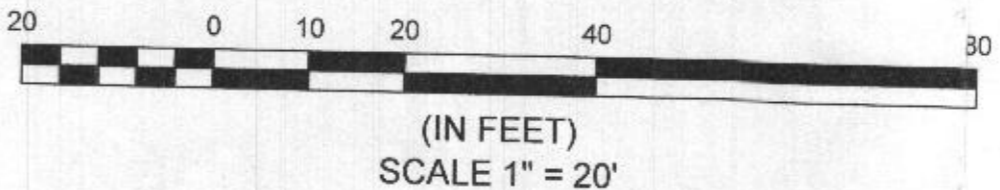
- GENERAL NOTES:**
- THIS AREA DESIGNATES A PRIVATE SEWERAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL 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 SEWERAGE AREA. RECORDATION OF MODIFIED SEWERAGE AREA SHALL NOT BE NECESSARY.
 - ANY CHANGES TO A PRIVATE SEWERAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY'S BOUNDARIES EXCEPT THAT WHICH ARE SHOWN.
 - HOUSE SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
 - EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
 - TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS AND A TOPOGRAPHIC SURVEY PREPARED BY BOHLER ENGINEERING ON 08/25/15 AND REVISED ON 09/03/15.
 - WELL SHOWN HEREON WAS LOCATED AND FIELD VERIFIED BY ESE CONSULTANTS, INC. ON 01/14/2021.



PERC CERTIFICATION
I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD LOCATIONS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.
Michael Joe Boyce
PROFESSIONAL SURVEYOR FOR ESE CONSULTANTS, INC.
MD. LICENSE NO. 2138, EXPIRES 1/8/23
DATE: 10/19/22

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer: [Signature]
DATE: 10/3/22

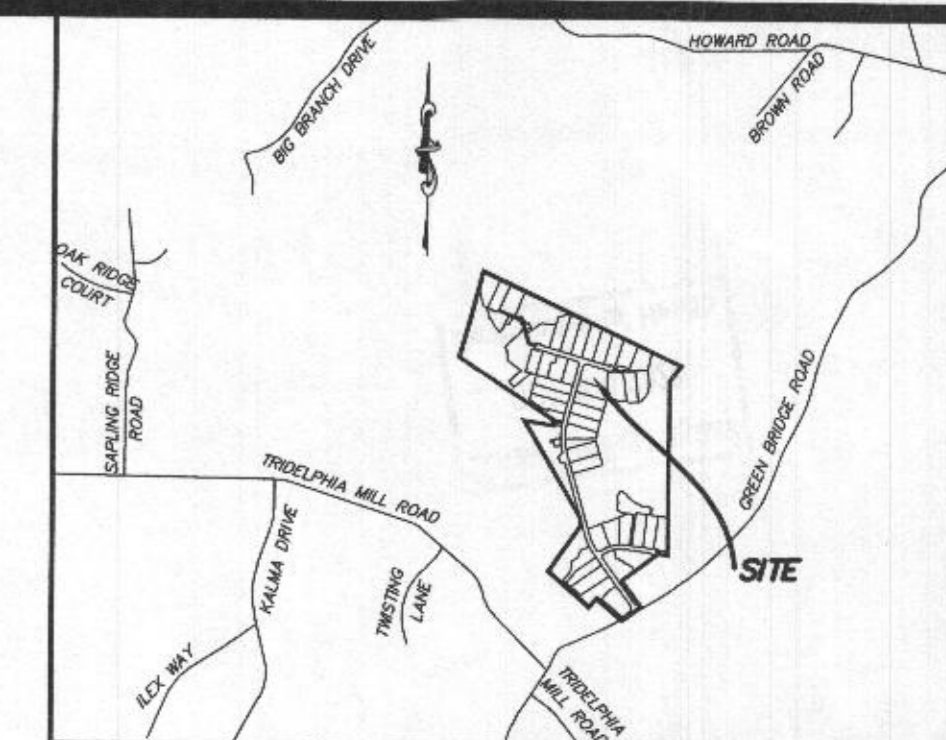
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6731 Columbia Gateway Drive • Suite 120 • Columbia, MD 21046
T: 410-872-9105



REVISED
PERCOLATION CERTIFICATION PLAN
WILLOWSHIRE
LOTS 1-45
BUILDABLE PRESERVATION PARCEL C,
NON-BUILDABLE PRESERVATION PARCELS A, B, D, E, F, G & L-P
NON-BUILDABLE PARCELS H-K
LOT 22
LIBER 18479, FOLIO 296
AS SHOWN ON PLAT NO. 25505
ZONED: RR-DEO
TAX MAP: 27, GRID: 18, PARCEL: 36
7013 COLT PLACE, DAYTON, MD 21036
5th ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: OCTOBER 2022

SOILS LEGEND			
SOIL	NAME	CLASS	Kw
GgB	GLENELG LOAM, 3 TO 9 PERCENT SLOPES	B	28
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	28

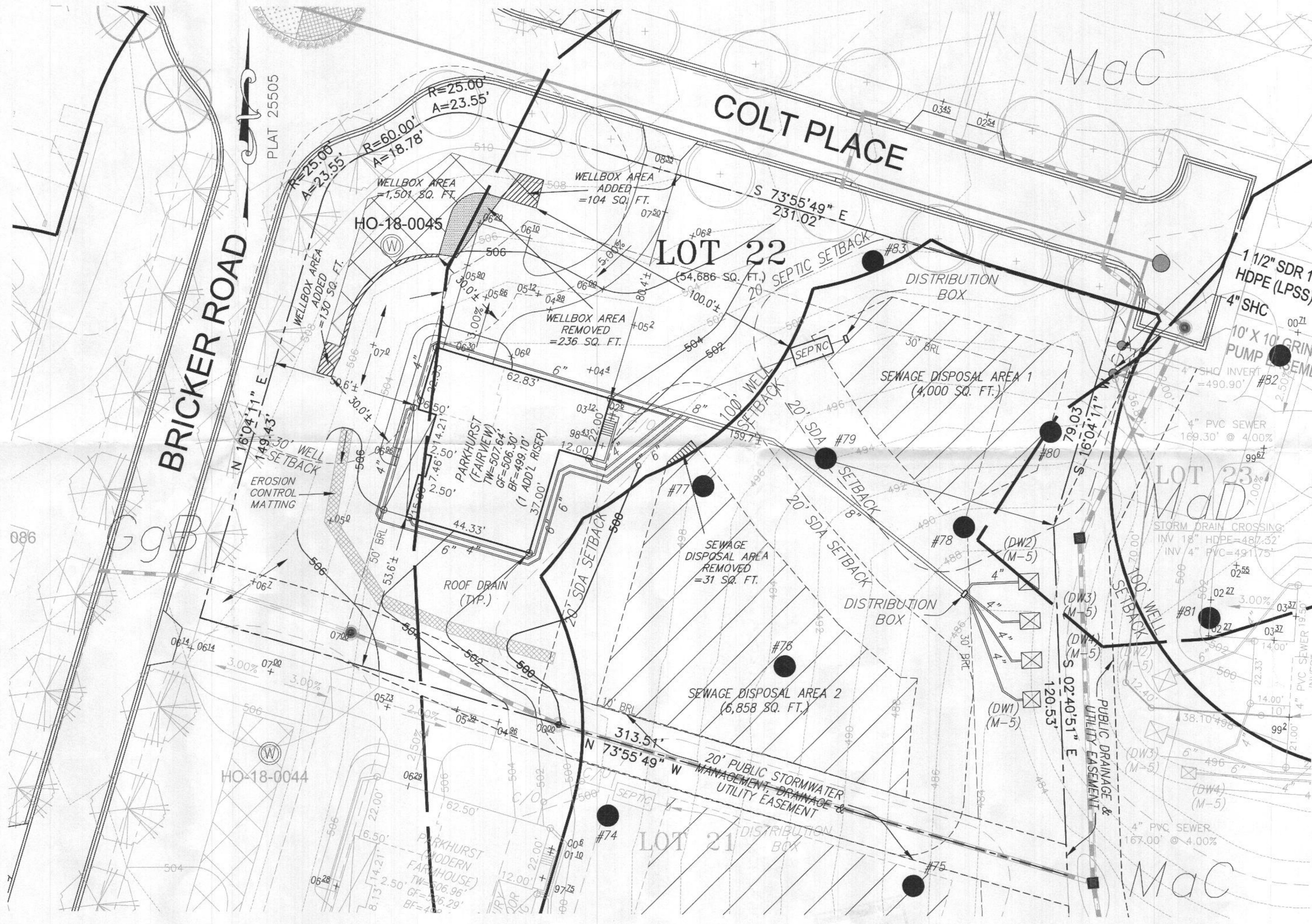
PURPOSE NOTE:
 THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO REVISE WELLBOX FOR LOT 22 TO ALLOW FOR DRIVEWAY AND DRIVEWAY TAIL.



VICINITY MAP
 1" = 2000'
 TAX MAP 27, GRID 18

LEGEND:

- PROPOSED DRYWELL LOCATION
- BOUNDARY/RIGHT OF WAY LINE
- BUILDING RESTRICTION LINE
- PROPOSED CURB
- EXISTING WELL
- PASSED PERC SOIL TYPE (TYP.)
- WELL BOX
- SEWAGE DISPOSAL AREA
- PROPOSED TREES



GENERAL NOTES:

1. THIS AREA DESIGNATES A PRIVATE SEWERAGE 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 SEWERAGE AREA. RECORDATION OF MODIFIED SEWERAGE AREA SHALL NOT BE NECESSARY.
2. ANY CHANGES TO A PRIVATE SEWERAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
3. THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
4. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY'S BOUNDARIES EXCEPT THAT WHICH ARE SHOWN.
5. HOUSE SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
6. EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
7. TOPOGRAPHY SHOWN HEREON IS FROM HOWARD COUNTY GIS AND A TOPOGRAPHIC SURVEY PREPARED BY BOHLER ENGINEERING ON 08/25/15 AND REVISED ON 09/03/15.
8. WELL SHOWN HEREON WAS LOCATED AND FIELD VERIFIED BY ESE CONSULTANTS, INC. ON 01/14/2021.

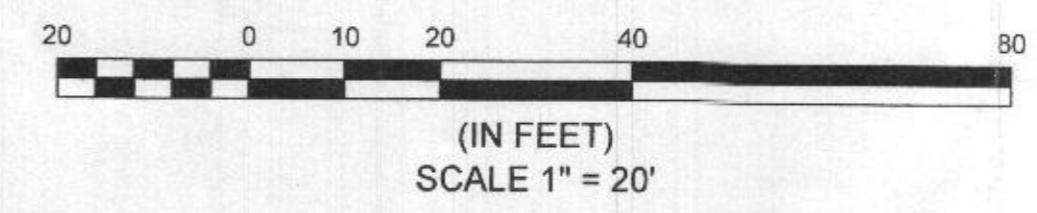


BUILDING SETBACKS (B.S.L.'s) SHOWN HEREON PER SITE DEVELOPMENT PLAN.
 SETBACK DISTANCES SHOWN HEREON AS "±" HAVE AN ACCURACY OF ±0.1' FOOT.

PERC CERTIFICATION
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 Michael Joe Boyce
 PROFESSIONAL SURVEYOR FOR ESE CONSULTANTS, INC.
 MD LICENSE NO. 2138, EXPIRES 1/8/23
 DATE: 10/19/22

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer
 DATE: 10/31/22

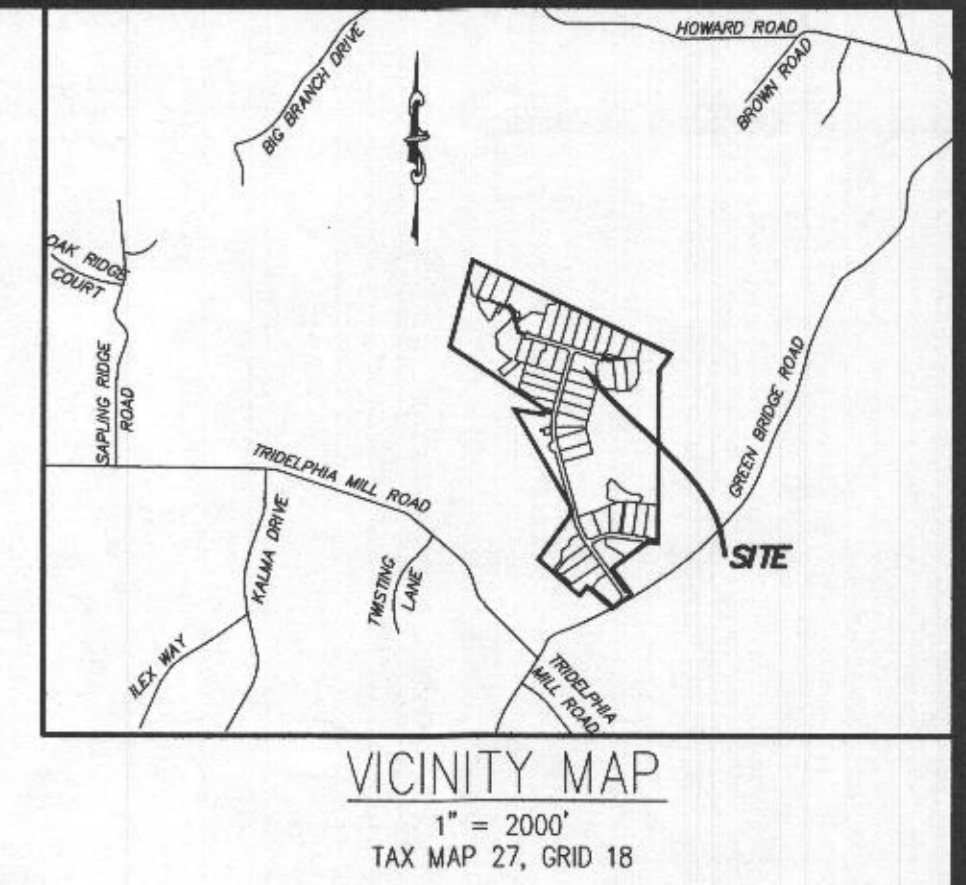
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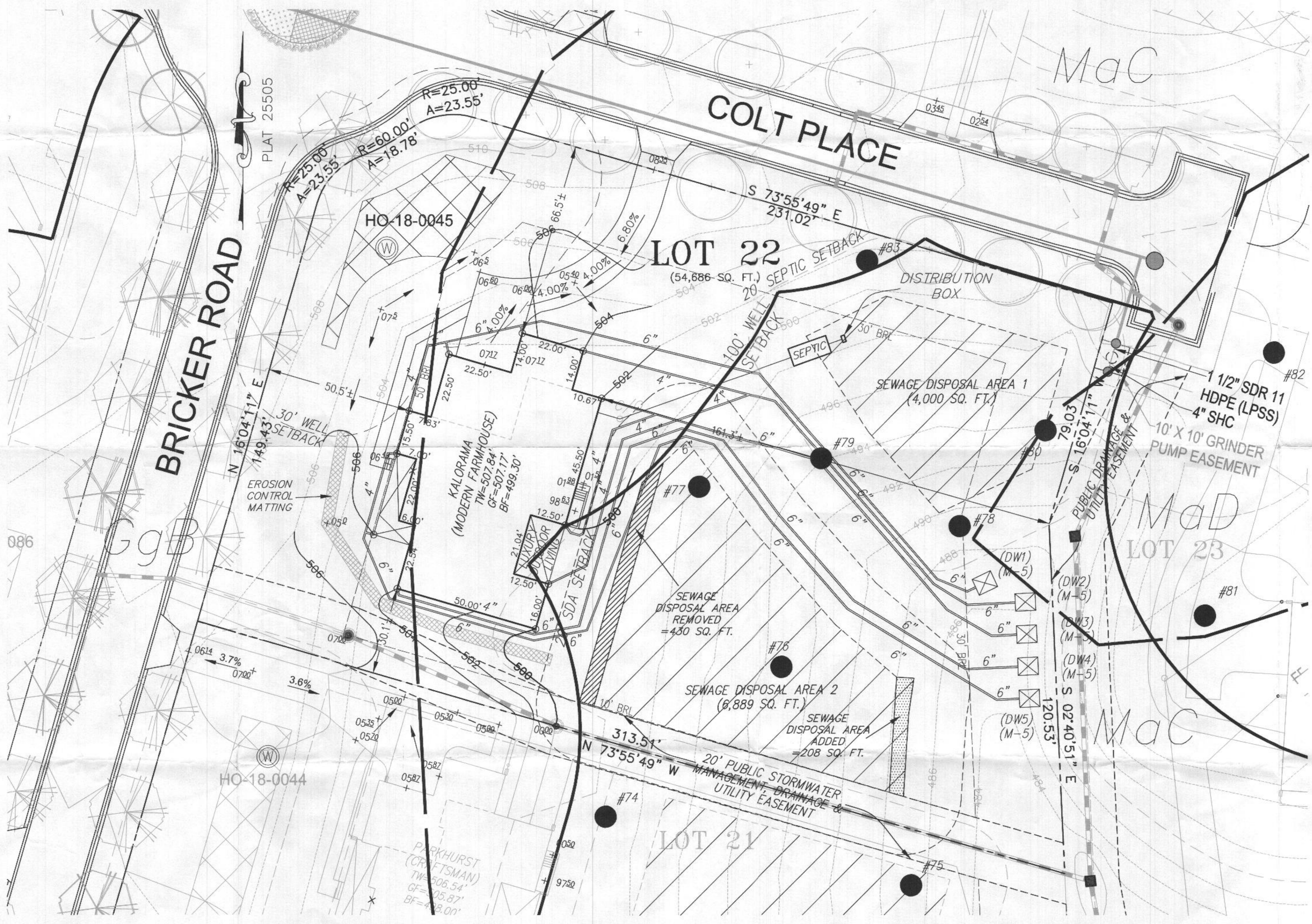
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 PERCOLATION CERTIFICATION PLAN
WILLOWSHIRE
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 NON-BUILDABLE PRESERVATION PARCELS A, B, D, E, F, G & L-P
 NON-BUILDABLE PARCELS H-K
LOT 22
 LIBER 18479, FOLIO 296
 AS SHOWN ON PLAT NO. 25505
 ZONED: RR-DEO
 TAX MAP: 27, GRID: 18, PARCEL: 36
 7013 COLT PLACE, DAYTON, MD 21036
 5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: OCTOBER 2022

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Mac	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.28
Mdc	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.28

PURPOSE NOTE:
THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO REVISE THE SEWAGE DISPOSAL AREA (SDA) FOR LOT 22 TO ALLOW FOR HOUSE.



- LEGEND:**
- PROPOSED DRYWELL LOCATION
 - BOUNDARY/RIGHT OF WAY LINE
 - BUILDING RESTRICTION LINE
 - PROPOSED CURB
 - EXISTING WELL
 - PASSED PERC
 - SOIL TYPE (TYP.)
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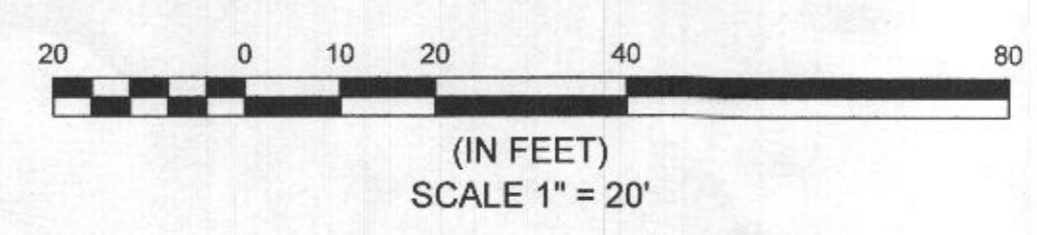


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Michael Joe Boyce
PROFESSIONAL SURVEYOR FOR ESE CONSULTANTS, INC.
MD LICENSE NO. 21328, EXPIRES 1/8/23
DATE: 09/03/21

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer
DATE: 10/1/21

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5th ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: AUGUST 2021