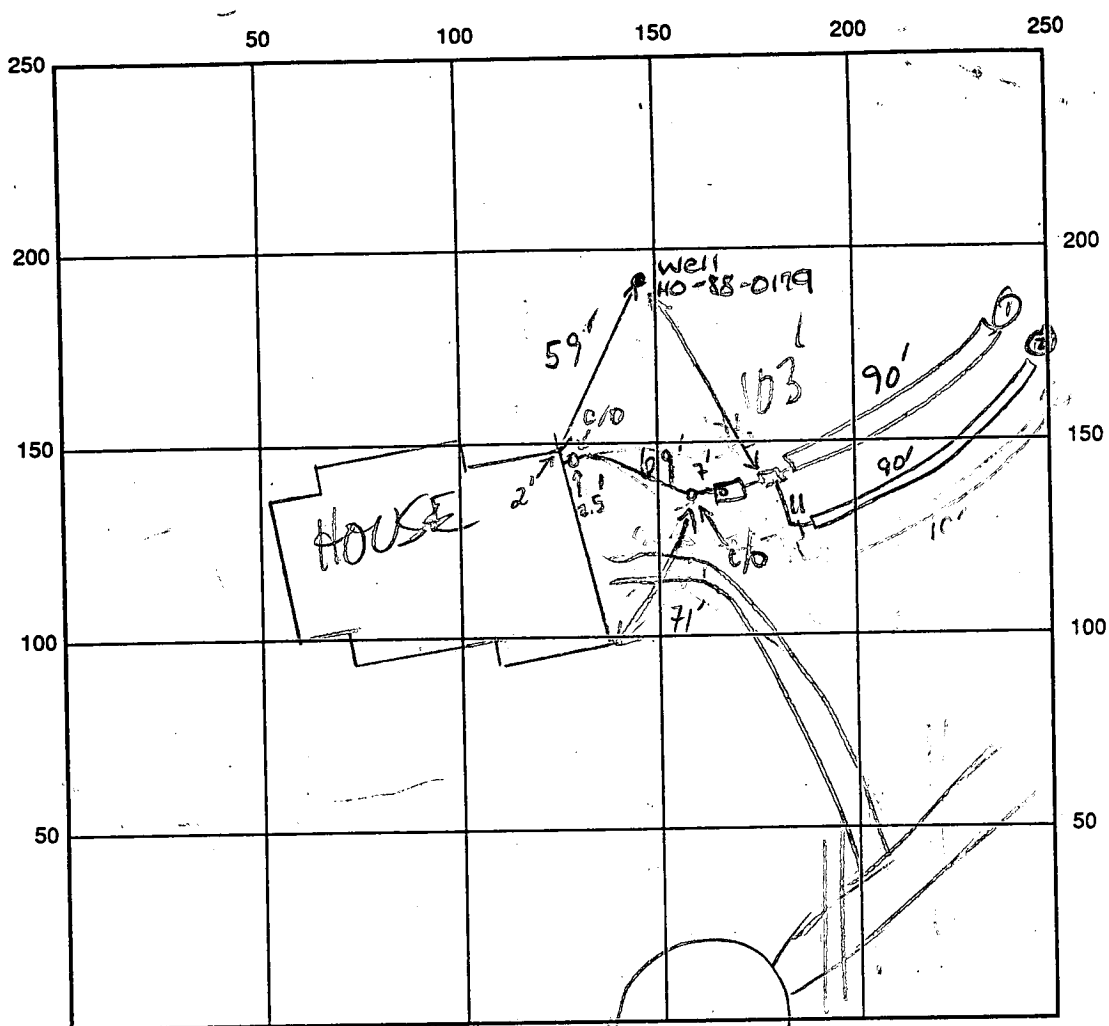


2'
2 1/2'
69
7



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

Isle of Mann Way

SEPTIC TANK LEVEL 1250 GAL - OK

CLEANOUTS OK - 2 IN LINE & S.T.

DISTRIBUTION BOX LEVEL OK - baffle in

DRAIN FIELD/TITLE DEPTH 8 FT.

TRENCH WIDTH 2 FT.

INLET DEPTH 4 FT.

EFFECTIVE GRAVEL DEPTH 4 FT.

TOTAL LENGTH ① 90'
② 90' FT. → 180'

NUMBER OF TRENCHES 2

ONE SIDEWALL/BOTTOM AREA 2 @ 360 SQ. FT.

DRYWALL INSIDE DIAMETER FT.

EFFECTIVE DEPTH BELOW INLET FT.

ABSORBENT AREA 720 SQ. FT.

REMARKS: 5/6/94 #1 OK to stone trench ① and ②. OK to continue. DKS
5/6/94 #2 OK TO COVER MR

DATE SYSTEM APPROVED 5/6/94

INSPECTOR McRatkin

APPLICATION

PERCOLATION TESTING

A 37574

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
P.O. BOX 476 ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 461-9933

*9/2/86
perc OK'd
pending
perm approved
@*

P _____

DISTRICT 5

DATE 7/10/86

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER JAMES & EMILY SANDFORD Jim & Sara Mayfield

ADDRESS 4967 TEN OAKS RD., DAYTON, MD. 21036 PHONE 977-3653
537-544

PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____ *4/27/87 final lot 6 prelim*

PROPERTY LOCATION: _____ (LOT 14 ON PRELIM)

SUBDIVISION KOANDAH GARDENS ESTATES LOT NO. 5 *ON FINAL MR 2/21/89*

ROAD AND DESCRIPTION S EAST SIDE HIGHLAND RD., S WEST END OF ISLE OF MANNA WAY
13117 Isle of Manna Way - Highland, Mo.

TAX MAP 3A PARCEL # 378

SIZE OF LOT 5456 sq ft TYPE BLDG. SINGLE-FAMILY
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

C. Scott Sandberg for James M. Sandberg
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING _____

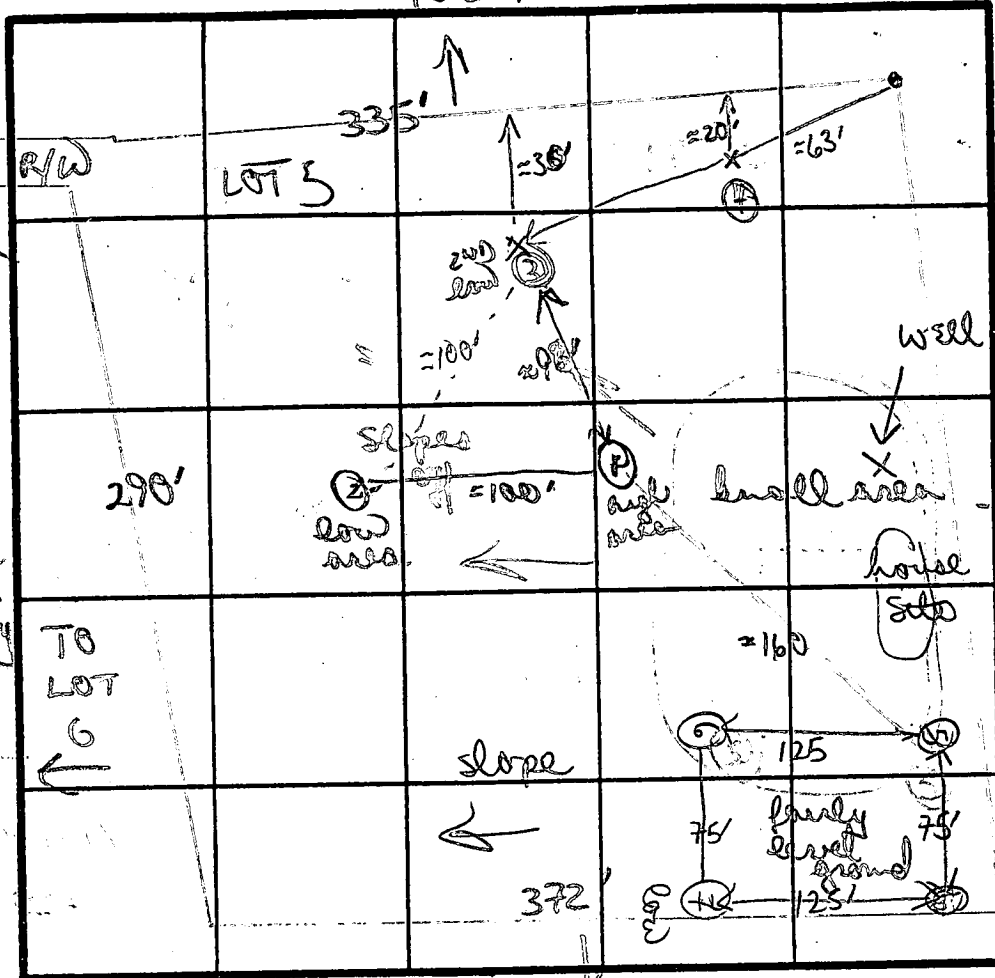
BLDG. PERMIT SIGNED
AND RETURNED 11/14/83
final # 51287
SFD-4Bms

THIS IS NOT A PERMIT

LOT 5

A37584

TO LOT 3



SOIL PROFILE

0'
 2'
 4'
 7'
 11'5"

gritty brown
 orange
 sandy clay
 loam
 changing
 to tan
 brown fine
 red clay
 silty sandy
 loam
 25% small
 hard rock
 clasts

② ③

red/orange
 clay loam

4'
 dark black
 brown silty
 (clay) mica
 loam

↓ some
 H₂O 210'
 m# 3

④

3-4" top
 soil
 dark brown
 gritty
 clay loam

dark brown
 black gritty
 silty sandy
 soils
 4' changing
 to brown
 powdery
 silty
 loam

↓
 12' D

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASELINE

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME	
			START	STOP	START	STOP		
8/29/86	①	3 1/2						
		7 1/2						
		11' D	NOT TESTED - WOULD BE CR - NOT USED					
	②	H ₂ O	AT 9'		}		} FAILED	
	③	H ₂ O	AT 11'					
	④	NOT USED BECAUSE H ₂ O IN OTHER AREA HOLES						
	⑤	4'5"	349	351	351	353	2MM	
		12' D	bottom (see profile)					
9/2/86	⑥	4'5"	1130	1138	1138	1155	17MIN	
		11' D	bottom (see profile)					

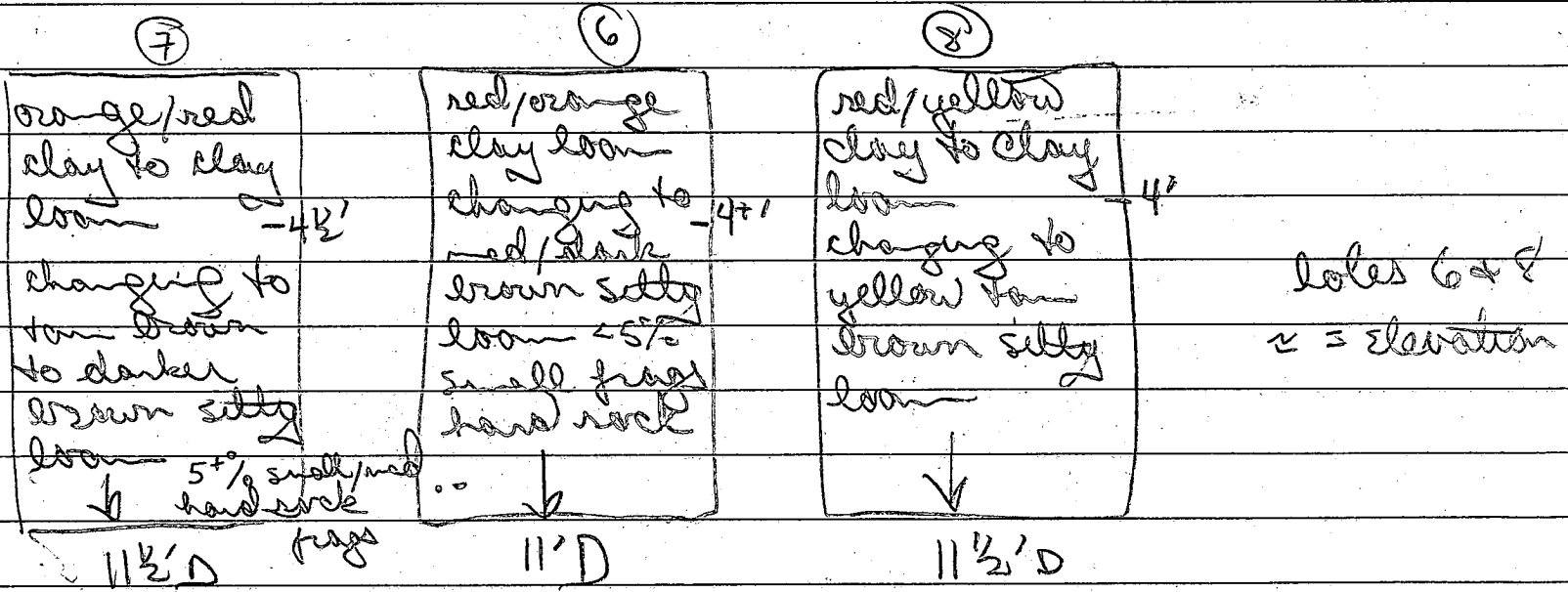
REMARKS: Pure field (22) H₂O in some test holes
 TYPE OF SOIL: NEW PURE FIELD SITUATION - SAMPLES FOR WELL + HOUSE SITE. SITES ARE LIMITED

TESTED BY _____ ALSO PRESENT _____

EH-12-1079

LOT # 5 Sheet # 2

Hole #	Depth	Pre wet Start	END	Test Start	END	TIME
9/2/8/6	⑦	5' 5/8"	1125	1128	1128	4 MIN
		11 1/2' D	Bottom (see profile)			
	⑧	4' 5"	1202	1204	1204	5 MIN
		7 1/2' m	1139	1142	1142	3 MIN
		11 1/2' D	Bottom (see profile)			



Additional note: holes 5 & 8 on lot 5 will be used as high ^{common} holes for lot 4

Inlet 4'
 max depth 8 1/2' (back hoe max depth 12')
 180 A / BD rooms

C1 **0501** SEQUENCE NO. (DENV USE ONLY)
 1 2 3 4 5 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
 FILL IN THIS FORM COMPLETELY
 PLEASE PRINT OR TYPE

PERMIT NO. FROM "PERMIT TO DRILL WELL"
NO-88-0199
 28 29 30 31 32 33 34 35 36 37

COUNTY NUMBER **A# 37589**

DATE Received
 8 13

DATE WELL COMPLETED
030289
 15 20

Depth of Well
185
 22 26
 (TO NEAREST FOOT)

OWNER **SANBORN JAMES**
 STREET OR RFD **ISLE OF MANN WAY** TOWN **HIGHLAND**
 SUBDIVISION **KOANDAH GARDENS EST.** SECTION **1** LOT **5**

WELL LOG
 Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		Check if water bearing
	FROM	TO	
<i>Sand Stone</i>	0	33	
<i>Grny Mica</i>	33	185	<input checked="" type="checkbox"/>
<i>rock</i>			

GROUTING RECORD
 WELL HAS BEEN GROUTED YES NO
 (Circle Appropriate Box)
 TYPE OF GROUTING MATERIAL
 CEMENT BENTONITE CLAY
 NO. OF BAGS **8** NO. OF POUNDS **750**
 GALLONS OF WATER **48**
 DEPTH OF GROUT SEAL (to nearest foot)
 from **0** ft. to **34** ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below
 ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER
 MAIN CASING TYPE **ST** Nominal diameter top (main) casing (nearest inch) **6** Total depth of main casing (nearest foot) **40**

OTHER CASING (if used)
 diameter inch depth (feet) from to

SCREEN RECORD
 screen type or open hole insert appropriate code below
 ST STEEL BR BRASS HO OPEN HOLE
 PL PLASTIC OT OTHER

C2

EACH SCREEN	DEPTH (nearest ft.)	
	1	2
1	110	185
2		
3		

A CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. **238**
 DRILLERS SIGNATURE *James L. Murphy*
 (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

SLOT SIZE 1 _____ 2 _____ 3 _____
 DIAMETER OF SCREEN _____ (NEAREST INCH)

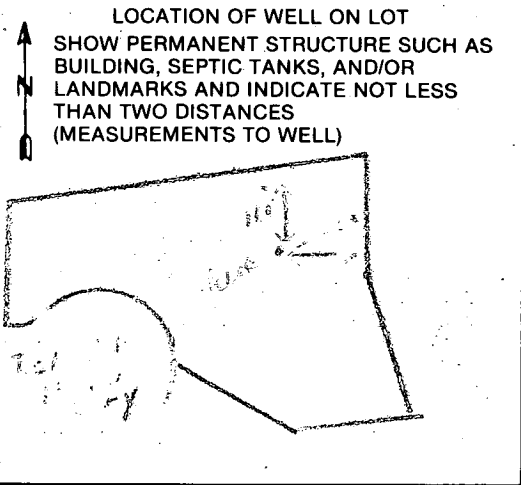
GRAVEL PACK _____ from _____ to _____
 IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)
 T (E.R.O.S.) WQ
 70 72 74 75 76
 TELESCOPE CASING LOG INDICATOR OTHER DATA

C3

PUMPING TEST
 HOURS PUMPED (nearest hour) **3**
 PUMPING RATE (gal. per min. to nearest gal.) **12**
 METHOD USED TO MEASURE PUMPING RATE **Bucket**
 WATER LEVEL (distance from land surface) BEFORE PUMPING **25**
 WHEN PUMPING **32**
 TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

PUMP INSTALLED
 DRILLER WILL INSTALL PUMP YES NO
 IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE
 TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX-SEE ABOVE:
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____
 PUMP HORSE POWER _____
 PUMP COLUMN LENGTH (nearest ft.) _____
 CASING HEIGHT (circle appropriate box and enter casing height)
 + above } LAND SURFACE
 - below } **2** (nearest foot)



6/3/94
2:00 WPI

HOWARD COUNTY HEALTH DEPARTMENT
Bureau of Environmental Health
3525-H Ellicott Mills Drive
Ellicott City, MD 21043
461-9933

APPLICATION FOR PITLESS ADAPTER, WELL PUMP AND PRESSURE TANK INSTALLATION

New Installation Replacement X Receipt # 0 -
Date 7/5/94
Name of Installer Krupp & Sons Inc. Telephone 301-662-1914
License Number 634
Certified Well Pump Installer Well Driller Registered Plumber X
Name of Property Owner SCOTT HOMES Telephone 208-8011
Subdivision KOANDAH GARDENS Lot # 5 Well Tag # HO-88-0179
Site Address 13117 Isle of Mann, Highland MD

Pump
1. Type
a. Deep well jet
b. Shallow well jet
c. Submersible X
2. Make Leo Jact
3. Model #
4. Capacity GPM
5. Pump exceeds well capacity Yes No X
6. If Yes, is low pressure cutoff switch installed? Yes No
7. What methods are used to protect the pump and electrical wiring from vibrations? Torque arrestors X Cable guards Other

Motor
1. Horsepower 1
2. RPM 3450
3. Voltage
a. 110
b. 220 X

Pitless Adapter
1. Make Martinson
2. Model # 50
3. Depth 4ft.

Tank
1. Capacity
2. Pressure relief valve? X

Piping
1. Type 1600s
2. Size 1"
3. NSF and/or BOCA Code approved X
4. Depth of supply line 480

Well data
1. Depth 185 ft.
2. Yield 12 GPM
3. Static water level 25 ft.
4. Will water supply be disinfected by installer? no

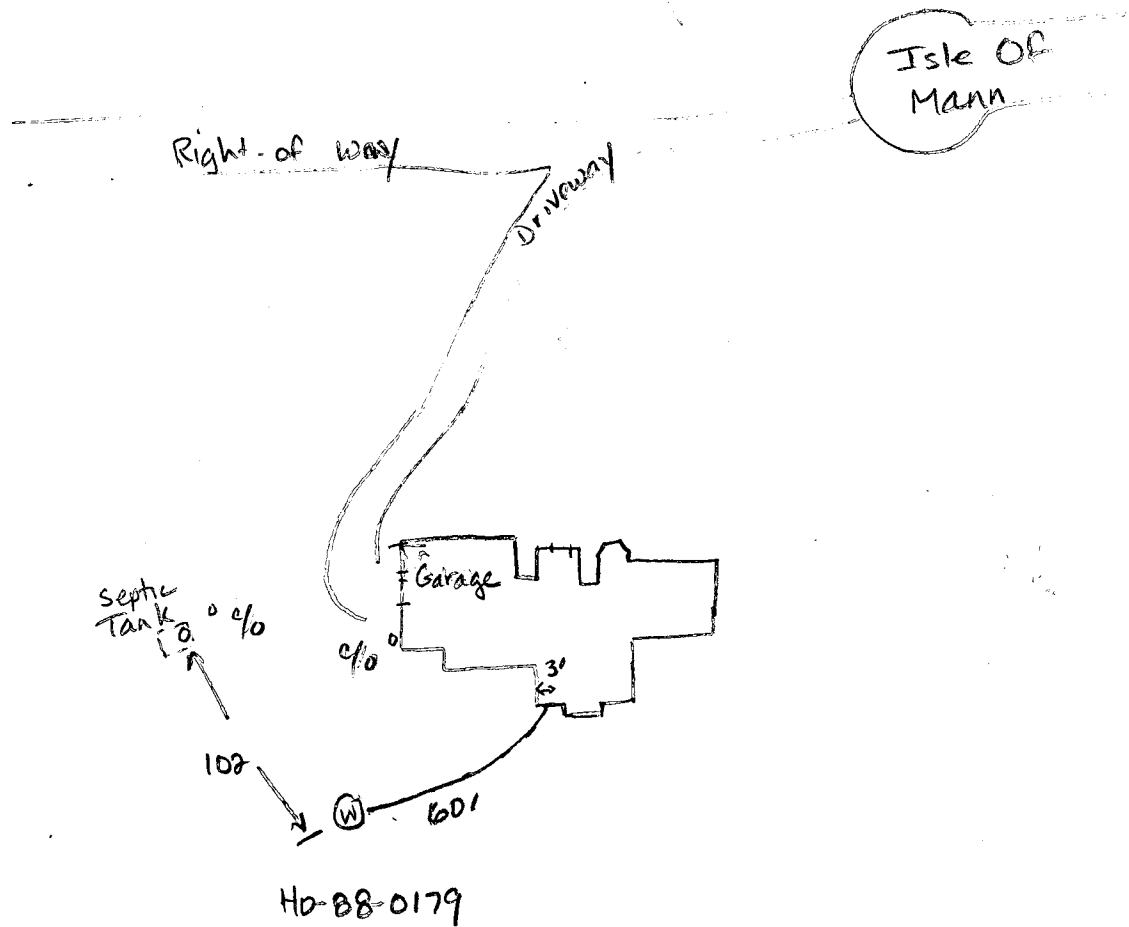
I understand that it is my responsibility to notify the Howard County Health Department when the installation is ready for inspection (otherwise this permit is null and void).

All information given above is true to the best of my knowledge.

Signature of Applicant: Keith E. Krupp

Date: 7/2/94

Note: A sticker indicating approval/status of the installation will be placed on the well casing at the time of the inspection.



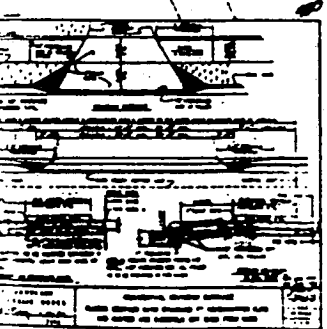
6-3-94

Well line trench between 4.0ft and 8.5ft deep.
 Pitless adaptor at 46 inches; House connection ok.
 No pump tank installed yet. JEN

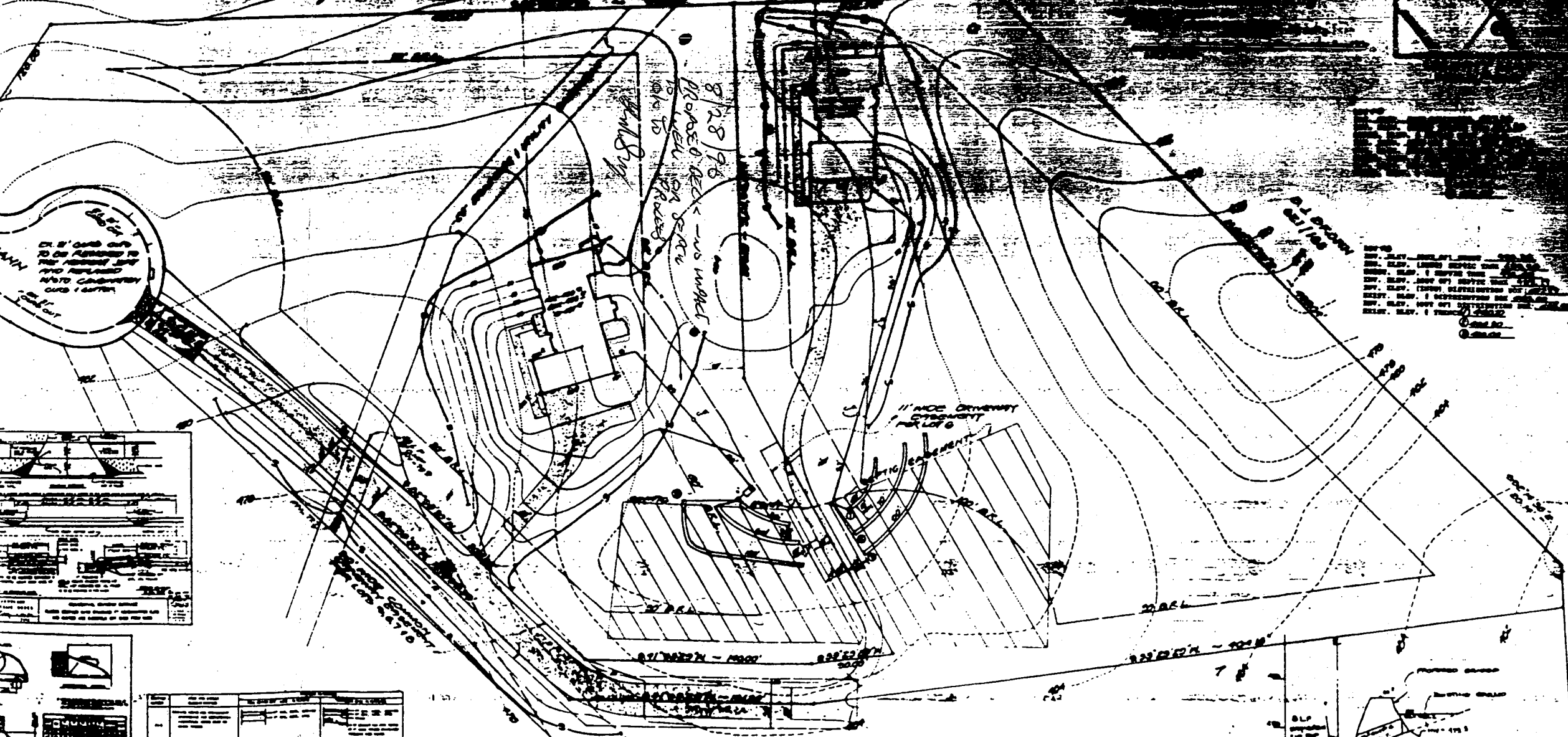
88-8-0179-1-1-95

ASST. CHIEF ENGINEER
CHIEF ENGINEER
SUPERVISOR
DRAWN BY
CHECKED BY

PLAN
CL. 8' GROUND TO
TO BE ADJUSTED TO
THE HIGHEST POINT
AND REPAIRED
WITH CONCRETE
AND 1" ASPHALT



NO.	DESCRIPTION	QUANTITY	UNIT
1	CONCRETE		
2	ASPHALT		
3	GRAVEL		
4	SAND		
5	BRICK		
6	CEMENT		
7	IRON		
8	STEEL		
9	WOOD		
10	PAINT		



8/28/98
PROPOSED REPAIR - NO IMPACT
TO WELL OR PAVEMENT

NO. 10
NO. 11
NO. 12
NO. 13
NO. 14
NO. 15
NO. 16
NO. 17
NO. 18
NO. 19
NO. 20
NO. 21
NO. 22
NO. 23
NO. 24
NO. 25
NO. 26
NO. 27
NO. 28
NO. 29
NO. 30
NO. 31
NO. 32
NO. 33
NO. 34
NO. 35
NO. 36
NO. 37
NO. 38
NO. 39
NO. 40
NO. 41
NO. 42
NO. 43
NO. 44
NO. 45
NO. 46
NO. 47
NO. 48
NO. 49
NO. 50
NO. 51
NO. 52
NO. 53
NO. 54
NO. 55
NO. 56
NO. 57
NO. 58
NO. 59
NO. 60
NO. 61
NO. 62
NO. 63
NO. 64
NO. 65
NO. 66
NO. 67
NO. 68
NO. 69
NO. 70
NO. 71
NO. 72
NO. 73
NO. 74
NO. 75
NO. 76
NO. 77
NO. 78
NO. 79
NO. 80
NO. 81
NO. 82
NO. 83
NO. 84
NO. 85
NO. 86
NO. 87
NO. 88
NO. 89
NO. 90
NO. 91
NO. 92
NO. 93
NO. 94
NO. 95
NO. 96
NO. 97
NO. 98
NO. 99
NO. 100

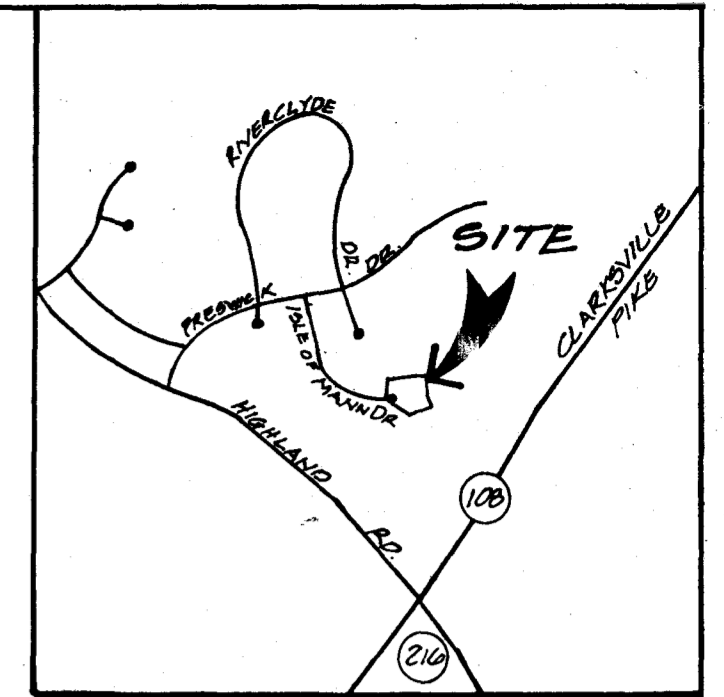
ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT COPY OF THE ORIGINAL DRAWING.

GENERAL NOTES

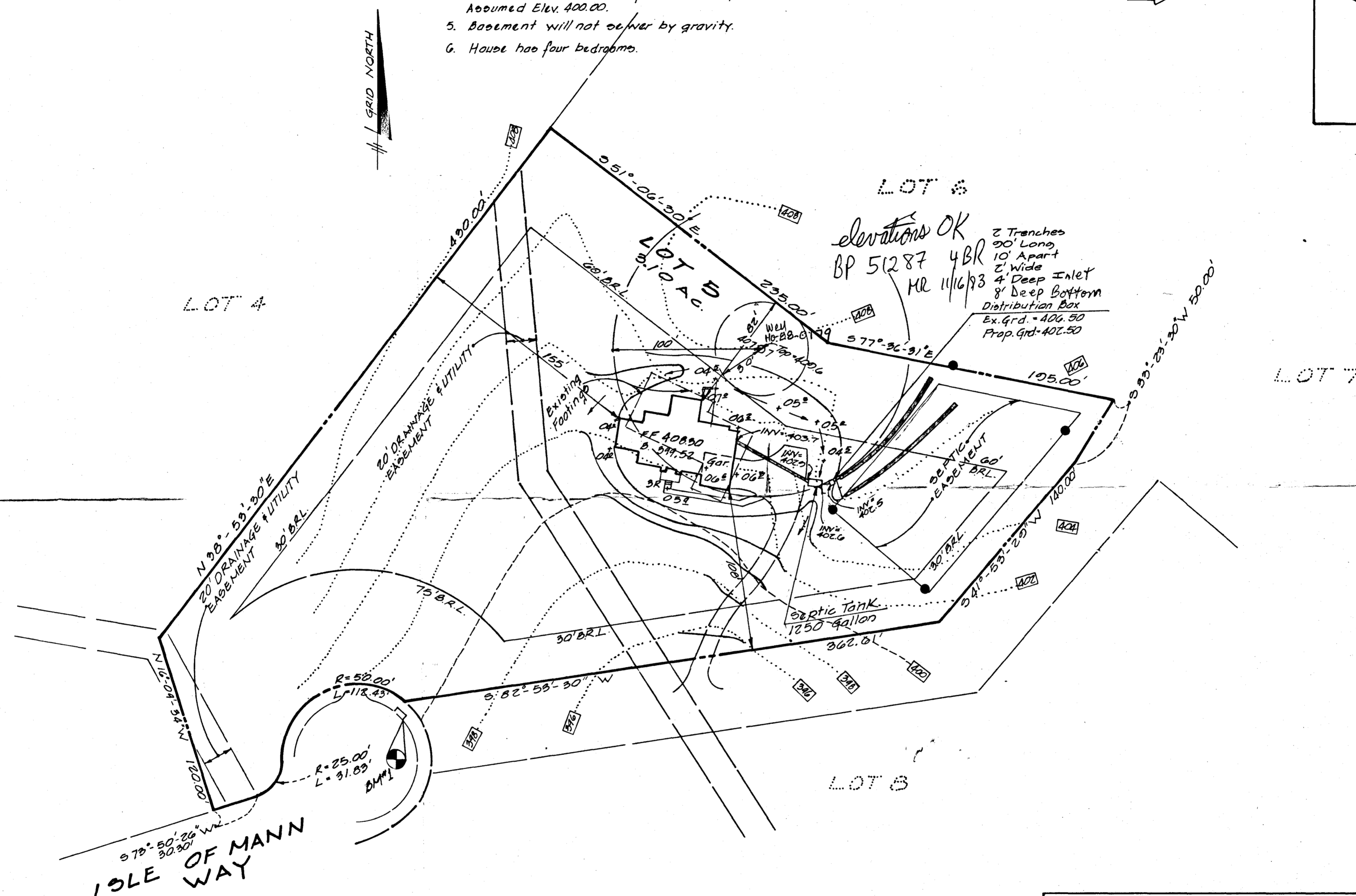
- Existing topography was field run by CLARK-FINEFROCK & SACKETT, INC. on
- Reference record plot number 5956
- Length of trenches to be determined at time of permit issuance
- Bench Mark "1" (B.M. "1") Rt. front corner of Inlet Assumed Elev. 400.00
- Basement will not sewer by gravity.
- House has four bedrooms.


LEGEND

- Contour Interval 2 Ft.
- Existing Contour
- Proposed Contour
- Spot Elevation
- Direction of Drainage
- Existing Trees to be Saved
- Walkout Basement



VICINITY MAP
Scale 1" = 2000'



 CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA MD 21045 • (410) 481-7500 BALTO • (301) 621-8100 WASH			
DESIGNED JME	SITE DEVELOPMENT PLAN LOT 5 KOANDAH GARDENS ESTATES SECTION ONE 5 TH ELECTION DISTRICT HOWARD COUNTY MARYLAND	SCALE 1" = 50'	
DRAWN C.A.F		DRAWING 1 of 1	
CHECKED JME		JOB NO. 03-108	
DATE Oct. 25, 1993		FOR: SCOTT DEVELOPMENT P.O. Box 8607 Gaithersburg, Md. 20898-0607	FILE NO. 03-108X