

6/29/89 AM

permit sent 4/3/89

03-313247

PERMIT

P 43946

SEWAGE DISPOSAL SYSTEM

A 38626

MARYLAND STATE DEPARTMENT OF HEALTH DISTRICT 3rd

HOWARD COUNTY

BUREAU OF ENVIRONMENTAL HEALTH

461-9933

INDEXED

DATE 4/07/89

DATE SYSTEM APPROVED 6/29/89

INSPECTOR M. Riskin

Walter W. King plumbing & Heating Contractors, Inc. IS PERMITTED TO INSTALL X ALTER

ADDRESS 5305 King's Court, Frederick, Maryland 21701 PHONE 662-6990

SUBDIVISION Willow Springs ROAD 1715 Willow Springs Dr LOT 3

PROPERTY OWNER Willow Springs Limited Partnership

ADDRESS _____

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%.

GARBAGE GRINDER? YES X NO _____

SEPTIC TANK CAPACITY 2000 GALLONS NUMBER OF BEDROOMS 4

TRENCHES - 220 sq. ft. per bedroom with garbage disposal. Trench to be 3 feet wide.

Inlet 3.5 feet below original grade. Bottom maximum depth 5 feet below original grade. Effective area begins at 3.5 feet below original grade.

1.5 feet of stone below distribution pipe.

LOCATION - Start the first trench 135 feet off the front lot line and 80 feet off the corner of the 120 feet lot line and 162 feet lot line along left side of lot as seen when facing the lot from Willow Springs Drive. Run trenches on contour toward the left and right side of lot.

NOTE - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. OK/CW

PLANS APPROVED BY Sid Abel DATE 2/14/89

COVER NO WORK UNTIL INSPECTED AND APPROVED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

NOTE: CLEANOUT REQUIRED EVERY 70 FEET OF SEWER LINE AND/OR AT 90° SWEEPS IN LINES FROM HOUSE TO DRAIN FIELDS

NOTE: ALL PARTS OF SEPTIC SYSTEMS (I.E. TANK, DISTRIBUTION BOX, TRENCHES) TO BE 100 FEET FROM WELL (UNLESS OTHERWISE SPECIFICALLY AUTHORIZED)

NOTE: IF DEEP TRENCHES ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCHES

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 40 PVC OR ABS

PERMIT VOID AFTER TWO YEARS

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA OR PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET, MANHOLE TO GRADE REQUIRED

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

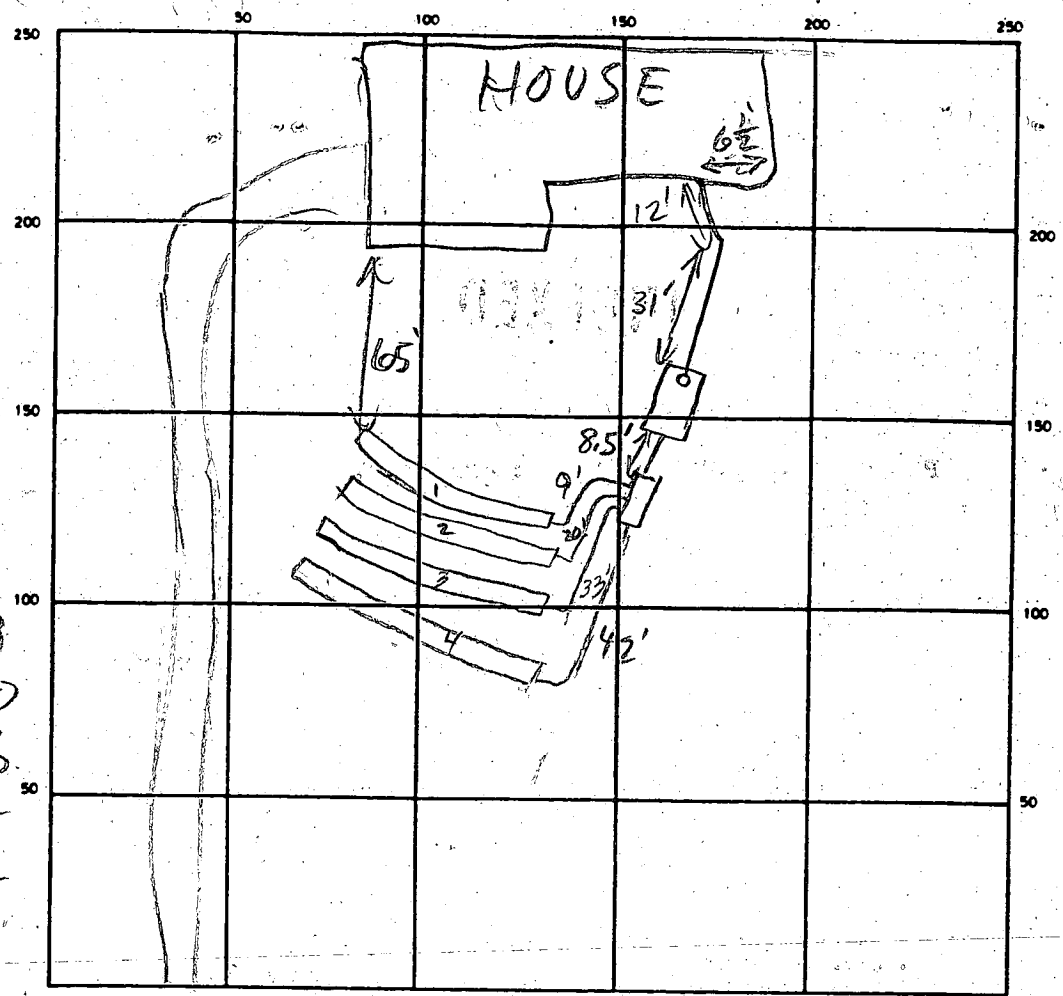
*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEMS.

A 38626

well
40-88-0408

226
133
660
6600
22000
292
12' H-Bend
31' Bend-T
8 1/2 T-B
9-1T-69
20-2T-70
33-3T-76
42-4T-87
302



WILLOW SPRINGS DR

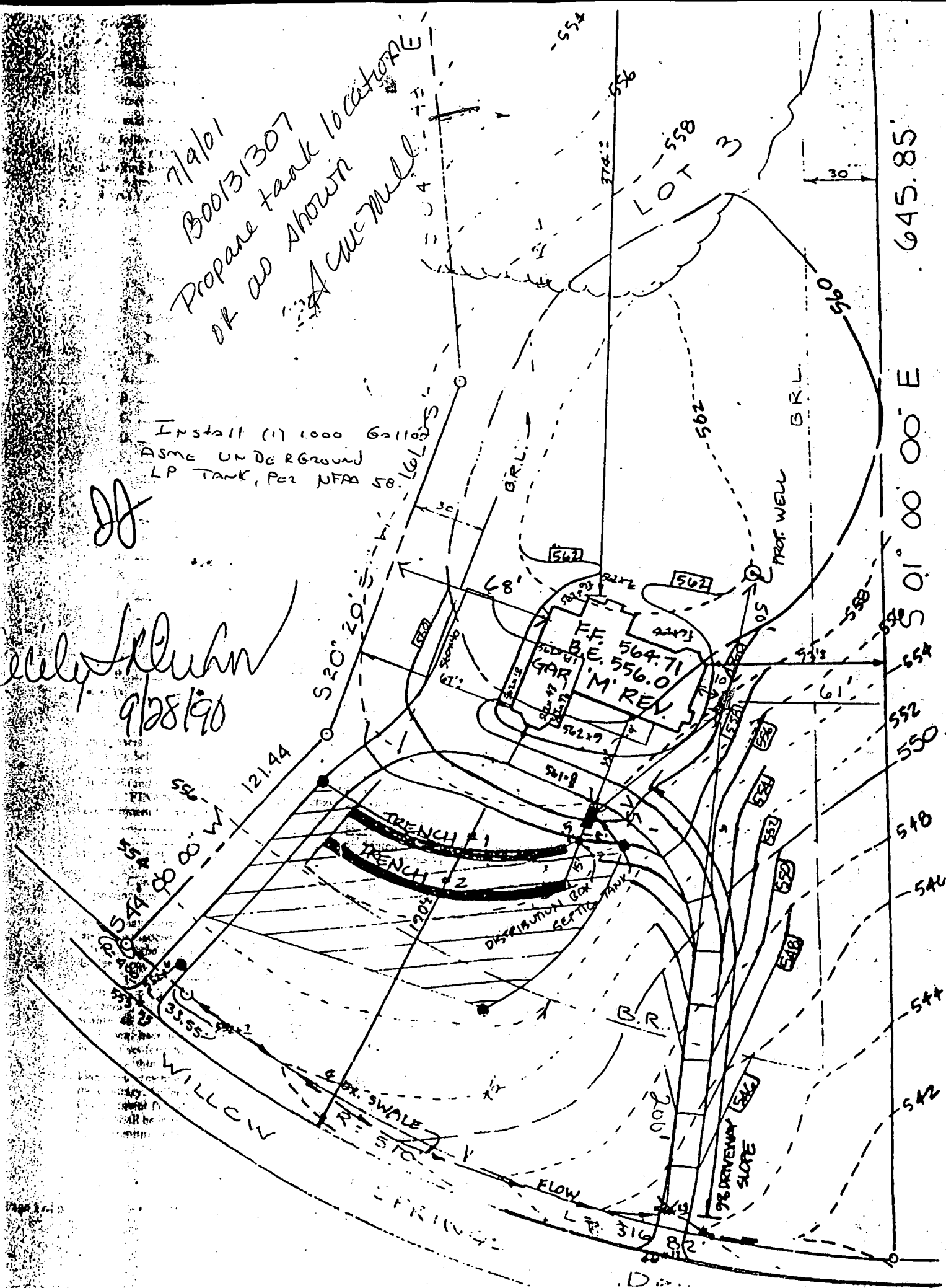
SEPTIC TANK LEVEL OK (2000 GAL) CLEANOUTS E.T. OK
DISTRIBUTION BOX LEVEL OK BAFLE IN
DRAIN FIELD/TILE FIELD DEPTH 5 FT TRENCH WIDTH 3 FT INLET DEPTH 3.5 FT
EFFECTIVE GRAVEL DEPTH 1.5 FT TOTAL LENGTH 269 276 302 FT
NUMBER OF TRENCHES 4 ONE SIDEWALL/BOTTOM AREA 906 SQ FT
DRYWELL INSIDE DIAMETER — FT EFFECTIVE DEPTH BELOW INLET — FT
ABSORBENT AREA — SQ FT

REMARKS 6/29/89 ALL WORK COMPLETE & OK TO COVER MR

DATE SYSTEM APPROVED 6/29/89 INSPECTOR M. Rifkin

Install (1) 1000 Gallon
ASME UN DERGROUND
LP TANK, Per NFPA 58. 161

9/28/90



APPLICATION

PERCOLATION TESTING

A 38626

P _____

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

DISTRICT 3

DATE 12-16-1986

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 WILLOW SPRINGS LIMITED PARTNERSHIP
16801 WESLEY CHAPEL ROAD
ADDRESS MONKTON, MARYLAND 21111 PHONE 347-8700 ²²

PROSPECTIVE BUYER _____
ADDRESS _____ PHONE _____

PROPERTY LOCATION:
SUBDIVISION WILLOW SPRINGS GOLF COURSE ^{Highlands} LOT NO. 3

ROAD AND DESCRIPTION N/S U.S. RTE TO N AT LIVE STOCK ROAD
1715 Willow Springs Dr.

TAX MAP 9 & 15 PARCEL # 151 & 11
SIZE OF LOT 3.0 AC.± TYPE BLDG S.F.D
(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. WILLOW SPRINGS INC Gen Partner
By [Signature]
(SIGNATURE OF APPLICANT)

APPROVED BY [Signature] FOR Standard Funds DATE 2-28-89

REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING 4-13-87 Perc Satisfactory - hold for subdivision plat. SAH

SEAL. PERMIT SIGNED
AND RETURNED 3-13-89

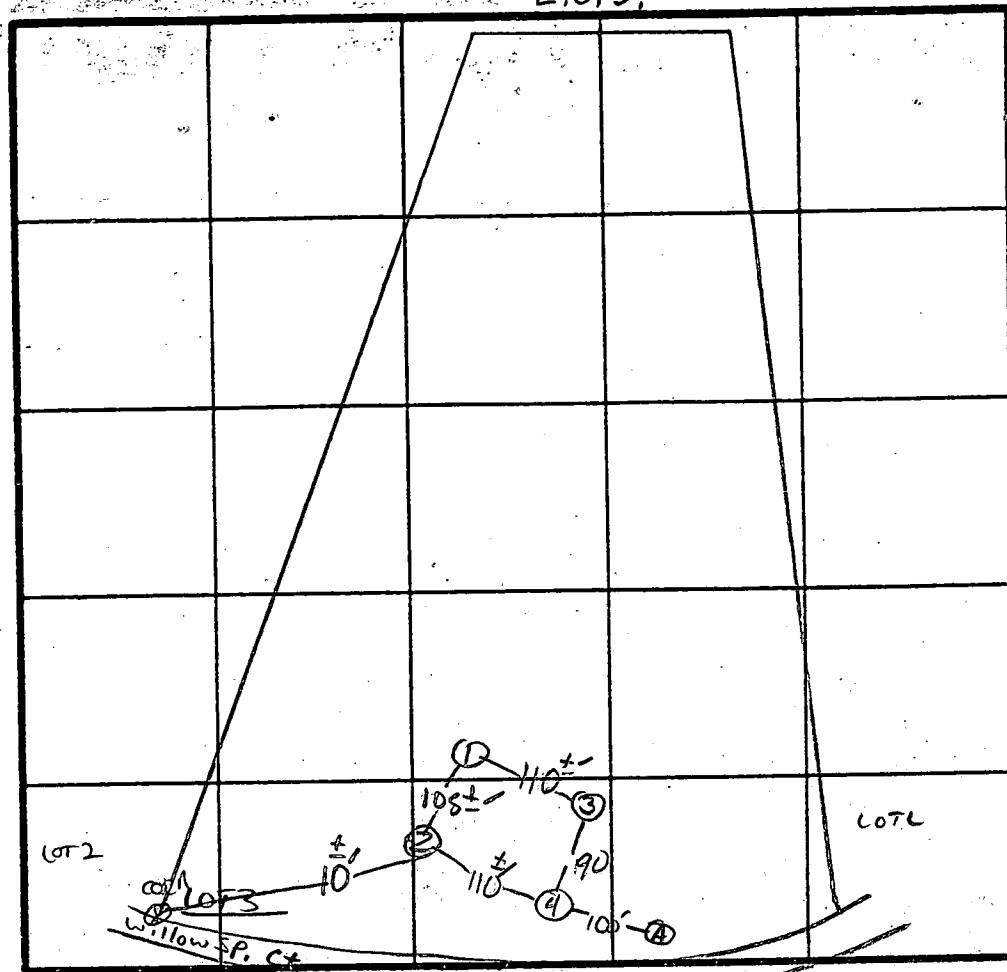
BP 23866 SAH

THIS IS NOT A PERMIT

① → ②
SOIL PROFILE

0'
11"
4-4.5'
13'

AP
RED BK
Silt loam
12-15% clay
15-20% frags
Yellow RED →
RED BK
SAND silt
loam
15-25%
FRAGS



\bar{X} PERC 5 MIN
180 #/BA
INLET 3.5'
BOTTOM 5.5'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

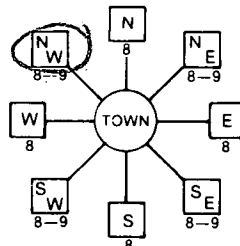
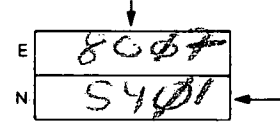
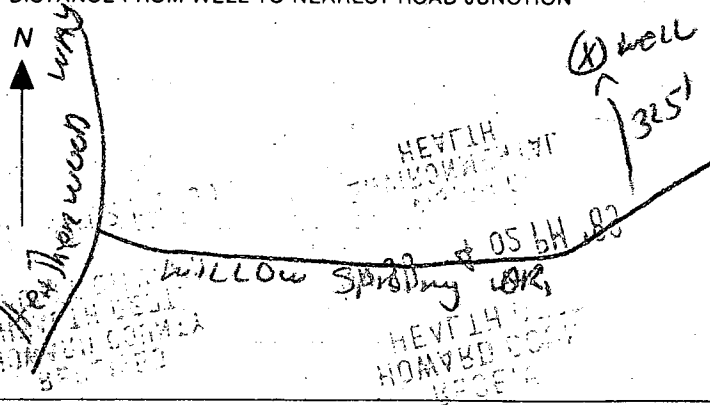
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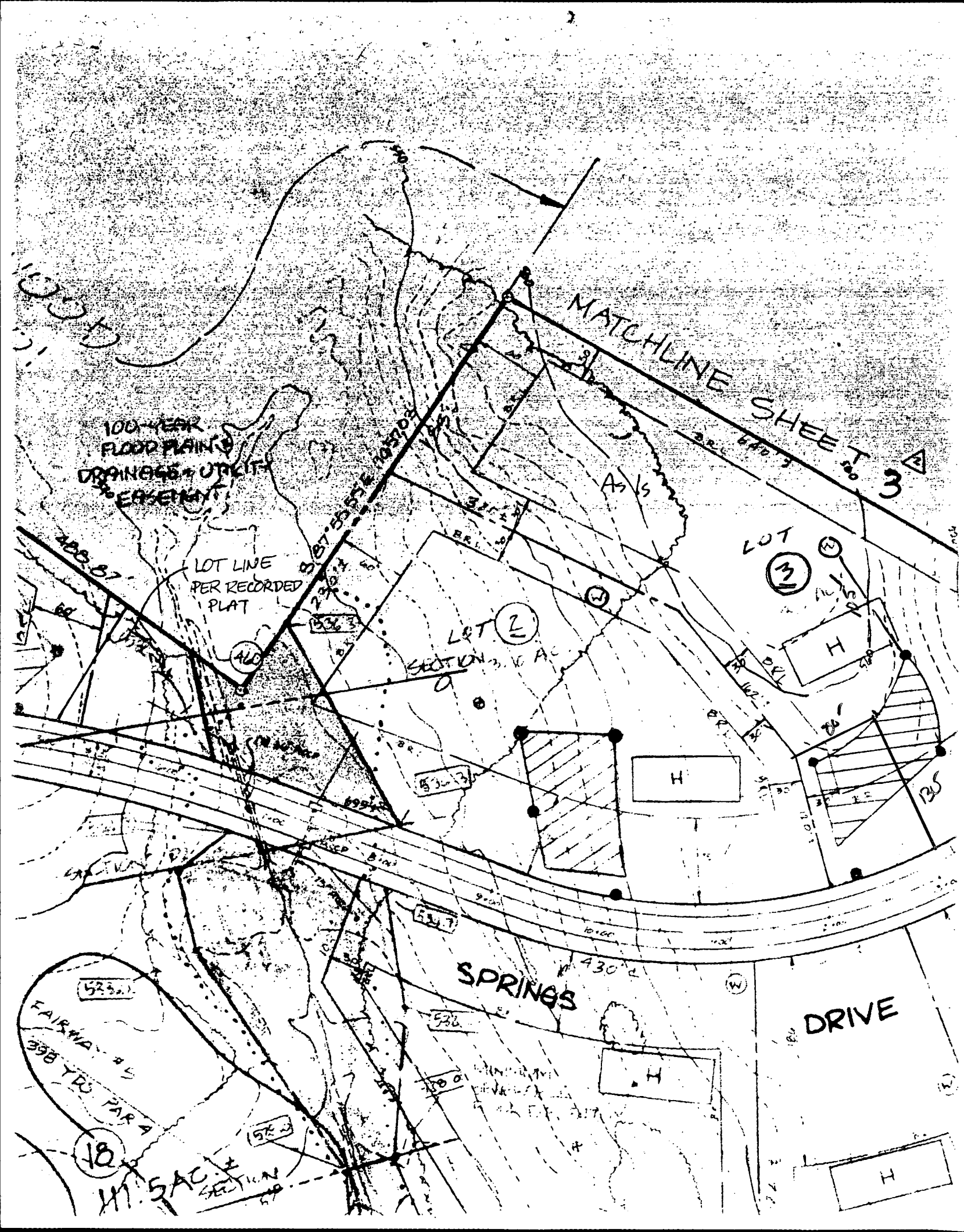
DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
4/13/87	1 S	4"	11:09	11:17	11:17	11:24	7 MIN
	1 M	8"	11:09	11:15	11:15	11:22	7 MIN
	1 V	13"	UNIFORM SOIL below 4"				
	2 V	13"	UNIFORM SOIL below 4.5"				
	3 S	4"	11:20	11:23	11:23	11:27	4 MIN
	3 V	10"	UNIFORM SOIL below 4" HARD BOTTOM				
	4 S	4.5"	11:24	11:28	11:28	11:35	7 MIN
	4 V	10.5"	UNIFORM SOIL below 4"				
4/13/87	A-	CLAY TO 7.5' ±					

REMARKS HOLES DIFF THAN FLAT / Shallow Syst

TYPE OF SOIL CHESTER

TESTED BY S. Abel ALSO PRESENT O. Ketterman

B 1 7920 <small>(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)</small>	SEQUENCE NO. (DP USE ONLY) 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00	STATE OF MARYLAND PERMIT TO DRILL WELL please print or type	STATE PERMIT NUMBER 10-88-0408 <small>fill in this form completely</small>
Date Received (APA) 01/31/89 OWNER INFORMATION 15 Last Name: WILLOW Owner: SP First Name: LIA, TED 36 Street or RFD: 16801 Westley CH RD 57 Town: MONTICOM 70 State: MD Zip: 21111		B 3 LOCATION OF WELL 8 COUNTY: HAWARD 23 SUBDIVISION: WILLOW HIGHLANDS SECTION: 44 46 LOT: 3 50 52 NEAREST TOWN: LESTER FRIENDSHIP MILES FROM TOWN (enter 0 if in town): 1 73 76 77 78 MI	
DRILLER INFORMATION Driller's Name: RALPH MAYNE 77 License No. 80: 273 Firm Name: RALPH MAYNE (WELL DRILLING) Address: 9120 Brown Church Rd. Mt Airy Signature: Ralph Mayne Date: 1/24/89		B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  NEAR WHAT ROAD: Willow Spring Dr. ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH 34 325 37 DISTANCE FROM ROAD ENTER FT or MI: 44	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.): 5 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME: Howard COUNTY NO.: A-38626 STATE SIGNATURE: _____ INSERT S DATE ISSUED: 02/14/89 CO SIGNATURE: Sidney Abel EXP. DATE: 08-13-89 NORTH GRID: 541000 EAST GRID: 0807000	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY) <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT) <input type="checkbox"/> PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL) <input type="checkbox"/> TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. well 2. 3. WRITE THE BOX NUMBER FROM THE MAP HERE 	
APPROXIMATE DEPTH OF WELL: 150 FEET APPROXIMATE DIAMETER OF WELL: 6" NEAREST INCH		METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30. AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37. CABLE REVERSE-ROTARY Drive-POINT other:	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY <input type="checkbox"/> THIS WELL WILL DEEPEMED AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE):		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 	
Not to be filled in by driller (OEP USE ONLY) APPROP. PERMIT NUMBER: _____ GAP _____ FORCE: SA WRITE INITIALS IN BOX PERMIT NO.: 10-88-0408 SPECIAL CONDITIONS:			



C 1 2272		SEQUENCE NO. (DENV USE ONLY)		STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE PRINT OR TYPE		THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.	
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)						COUNTY NUMBER A 38626	
DATE Received		DATE WELL COMPLETED		Depth of Well		PERMIT NO. FROM "PERMIT TO DRILL WELL"	
<div><div></div><div></div><div></div><div></div><div></div><div></div></div>		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>	
OWNER Wellness Springs LTD		last name Wellness first name Spring		TOWN W. Friendship			
STREET OR RFD		SUBDIVISION Wellness Highlands		SECTION		LOT 3	
WELL LOG Not required for driven wells		GROUTING RECORD		C 3		PUMPING TEST	
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		WELL HAS BEEN GROUTED (Circle Appropriate Box)		yes Y no N		HOURS PUMPED (nearest hour) 2	
DESCRIPTION (Use additional sheets if needed)		TYPE OF GROUTING MATERIAL		CEMENT CM BENTONITE CLAY BC		PUMPING RATE (gal. per min. to nearest gal.) 10	
FEET FROM TO		NO. OF BAGS 6 NO. OF POUNDS 600		GALLONS OF WATER 36		METHOD USED TO MEASURE PUMPING RATE Bucket	
Top Soil 0 2		DEPTH OF GROUT SEAL (to nearest foot)		from 0 ft. to 19 ft.		WATER LEVEL (distance from land surface)	
Sandy 2 11		Casing types insert appropriate code below		STEEL ST CONCRETE CO		BEFORE PUMPING 21	
Sand Stone 11 15		MAIN CASING TYPE		PLASTIC PL OTHER OT		WHEN PUMPING 25	
MICKA 15 20		Nominal diameter top (main) casing (nearest inch)		Total depth of main casing (nearest foot)		TYPE OF PUMP USED (for test)	
Sand Stone 20 25 ✓		54		21		A air P piston T turbine	
MICKA 25 90		60		66		C centrifugal R rotary O other (describe below)	
Sand Stone 90 95 ✓		63		70		J jet S submersible	
MICKA 95 125		OTHER CASING (if used)		diameter inch depth (feet)		PUMP INSTALLED	
		screen type or open hole		STEEL ST BRASS BR OPEN HOLE HO		DRILLER WILL INSTALL PUMP YES NO	
		insert appropriate code below		PLASTIC PL OTHER OT		IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE TYPE OF PUMP INSTALLED	
		C 2		DEPTH (nearest ft.)		CAPACITY: GALLONS PER MINUTE (to nearest gallon)	
		1 2		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21		PUMP HORSE POWER	
		EACH SCREEN		23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51		PUMP COLUMN LENGTH (nearest ft.)	
CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED		SLOT SIZE 1 2 3		DIAMETER OF SCREEN (NEAREST INCH)		CASING HEIGHT (circle appropriate box and enter casing height)	
E ELECTRIC LOG OBTAINED		GRAVEL PACK		IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68		LAND SURFACE (nearest foot)	
P TEST WELL CONVERTED TO PRODUCTION WELL		TELESCOPE CASING		LOG INDICATOR		LOCATION OF WELL ON LOT	
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. 273		DRILLERS SIGNATURE Walter Mayne		SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)	
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)		OTHER DATA				A N D R E A D	

6/29/89

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 X
Replacement _____

Receipt # 44217
Date 5/11/89

Name of Installer W.W.King Plbg. & Htg. Contr., Inc.

Telephone 1-301-662-6990

License Number 2217

Certified Well Pump Installer _____ Well Driller _____ Registered Plumber X

Name of Property Owner Pulte Homes Corp.

Telephone 1-301-921-8707

Subdivision Willow Springs

Lot # 3

Well Tag # HO - 88 - 0408

Site Address 1715 Willow Springs Dr.

Pump

1. Type

- a. Deep well jet _____
b. Shallow well jet _____
c. Submersible X

2. Make Goulds

3. Model # 7EH05422

4. Capacity 7 GPM

5. Pump exceeds well capacity Yes _____ No _____

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 _____ Cable guards X Other _____

Motor

1. Horsepower 1/2

2. RPM _____

3. Voltage _____

a. 110 _____

b. 220 X

Pitless Adapter

1. Make Martinson

2. Model # BP-10X

3. Depth 42" min

60" max

Tank

1. Capacity 80

2. Pressure relief valve? yes

Piping

1. Type plastic 160#

2. Size 1"

3. NSF and/or BOCA Code approved X

4. Depth of supply line 42" min

60" max

Well data

1. Depth 125 ft.

2. Yield 10 GPM

3. Static water level _____ ft.

4. Will water supply be disinfected by installer? yes

WELL CAP

SEVERELY

DAMAGED

REPLACEMENT

REQUESTED

CALL IN WHEN COMPLETED

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: Walter W. King

Date: 5-8-89

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

SEPTIC SYSTEM DATA

INV. E HOUSE 554.23 ✓

SEPTIC TANK

EX. GRADE 557.7 ✓
FIN. GRADE 557.7 ✓
INV. IN 553.9 ✓
INV. OUT 553.6 ✓

DISTRIBUTION BOX

EX. GRADE 557.0 ✓
FIN. GRADE 557.0 ✓
INV. IN 553.55 ✓
INV. OUT 553.55 ✓

TRENCHES

(LENGTH AND NUMBER TO BE DETERMINED BY HOWARD COUNTY HEALTH DEPARTMENT)

	TRENCH #1	TRENCH #2
EX. GRADE	557.0 ✓	556.5 ✓
FIN. GRADE	557.0 ✓	556.5 ✓
INV. IN	553.5 ✓	553.0 ✓

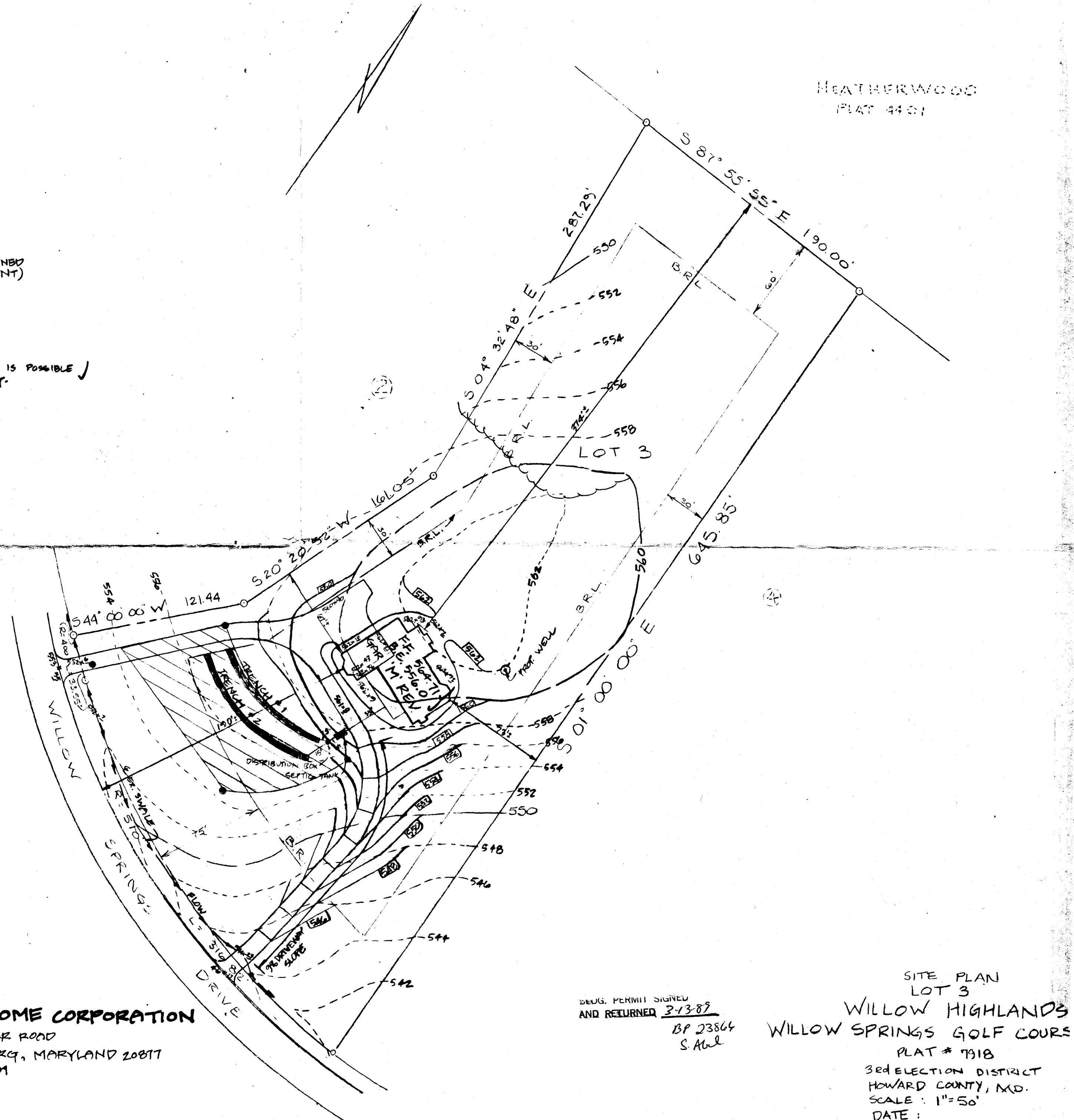
NOTE: GRAVITY SEWER SERVICE TO BASEMENT FLOOR IS POSSIBLE ✓
IF SEWER CONNECTION IS RUN THROUGH FOOTING.

REVISIONS

DATE	REVISION REQUESTED BY	REVISION MADE BY	REVISION
2/24/89	PULTE HOMES	SHANABERGER & LANE	RELOCATE HOUSE & ADD DRIVEWAY
2/28/89	PULTE	SAL	9% DRIVEWAY SLOPE

SHANABERGER & LANE
726 TOWN & COUNTRY BLD.
JITE 107
LLKOTT CITY, MD 21043
(301) 461-9563

OWNER: PULTE HOME CORPORATION
9050 GAITHER ROAD
GAITHERSBURG, MARYLAND 20877
(301) 921-8701



FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 88-0907
Location of property (road) Willow Springs Dr.
Subdivision Willow Highlands Lot 3 Block Plat Sec.
Well Driller R. McNamee Owner Willow Springs LTD

Depth of well 125 ^{ft}
Distance of measuring point (M.P.) above ground 2 ^{ft}
Static water level (S.W.L.) below M.P. 21 ^{ft}

I. High rate pumping -- reservoir drawdown

Time pump started 11:15 Pumping rate 10 GPM
Total time 15 min to reach pumping water level 25 ft ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

[illegible]