

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

INDEXED

HOWARD COUNTY HEALTH DEPARTMENT

BUREAU OF ENVIRONMENTAL HEALTH

~~XX60353~~ 313-2640

P 58465C

A 49036

DISTRICT 3rd

DATE 5/16/97

DATE SYSTEM APPROVED 5/20/97

INSPECTOR DKS

Jack Fyock Septic Services

IS PERMITTED TO INSTALL X ALTER

ADDRESS 13775 Triadelphia Road, Glenelg, Maryland 21737 PHONE 988-9270

SUBDIVISION W. Friendship Estates LOT 77, Sec. II ROAD 3324 Velvet Valley Drive

PROPERTY OWNER Brian Calderwood & Tammy Murphy STEVE & COLEEN ROLLA

ADDRESS

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

180 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 240

BLDG. PERMIT SIGNED

AND RETURNED 3-10-99

Serial # Bro 116591

Interior Alluvator

TRENCHES - Trench to be 3 feet wide. Inlet 3 feet below original grade. Bottom maximum depth 5 feet below original grade. Effective area begins at 3 feet below original grade. 2 feet of stone below distribution pipe.

LOCATION - Begin trenches 160 feet up the right (325.00') lot line and 40 feet off that same lot line as seen when facing the lot from Velvet Valley Drive. Run trenches on contour toward the right lot line.

NOTES - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. OK 4/22/97 DKS

PLANS APPROVED BY Amy McMillen/Glen Savage

DATE 4/21/97

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, 90° ELBOWS NOT ACCEPTABLE.

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 TRENCH(ES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(ES)

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 35/40 PVC OR ABS

PERMIT VOID AFTER TWO YEARS

BLDG. PERMIT SIGNED

AND RETURNED 4/7/00

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 PVA OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET, MANHOLE TO GRADE REQUIRED.

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

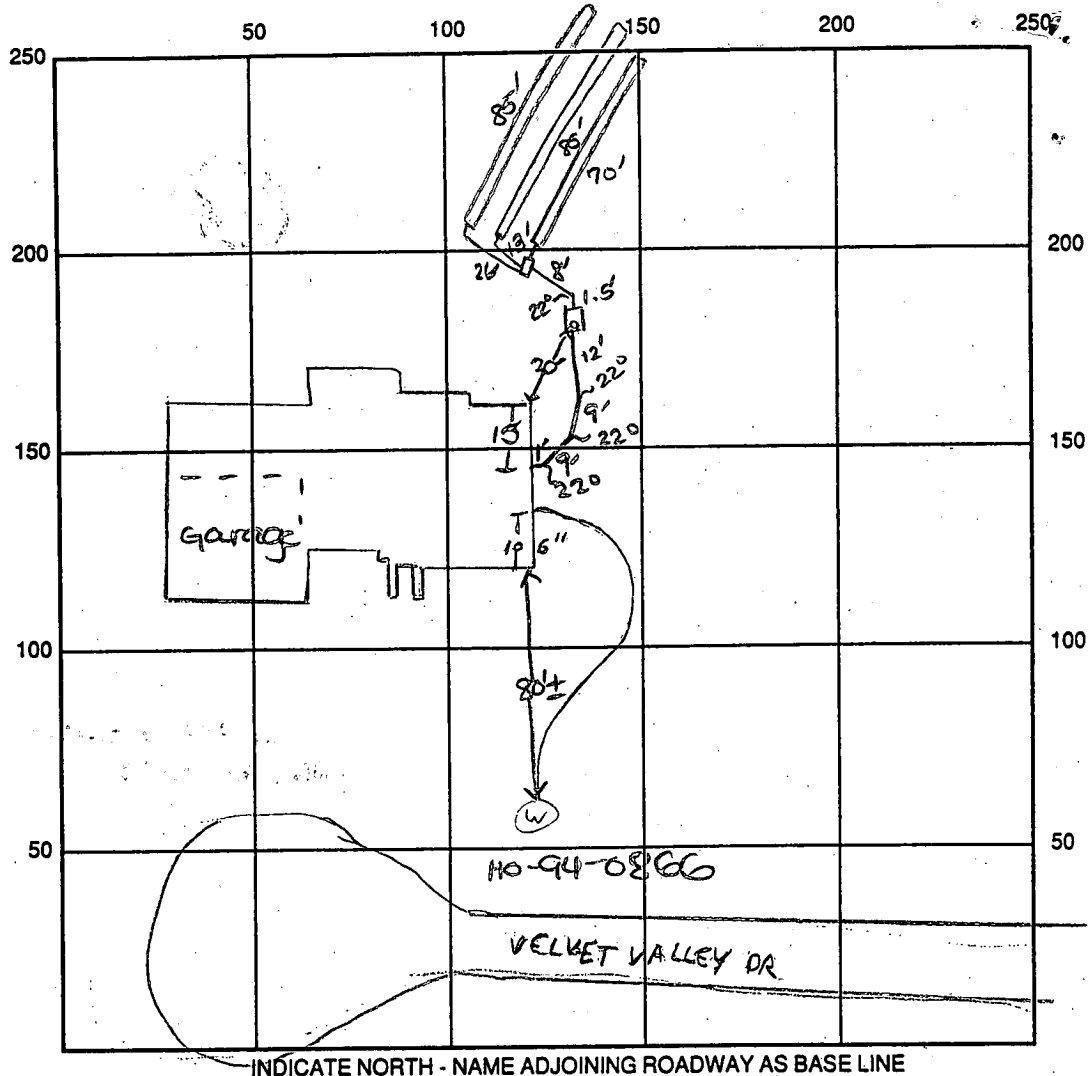
BLDG. PERMIT SIGNED

AND RETURNED B00123463

*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT 4/7/00

20'x14' Deck + Screened
Porch

A 49036



SEPTIC TANK LEVEL OK - 1250 gal CLEANOUTS one on s.t.

DISTRIBUTION BOX LEVEL OK

DRAIN FIELD/TITLE DEPTH 5 FT. TRENCH WIDTH 3 FT. INLET DEPTH 3 FT.

EFFECTIVE GRAVEL DEPTH 2 FT. TOTAL LENGTH 170 @ 85 FT. → 240

NUMBER OF TRENCHES 3 ONE SIDEWALL BOTTOM AREA 720 SQ. FT.

DRYWALL INSIDE DIAMETER FT. EFFECTIVE DEPTH BELOW INLET FT.

ABSORBENT AREA SQ. FT.

REMARKS: 5/20/97 A.M. OK to continue work. DKS
5/20/97 P.M. FINAL INSP - OK to cover all work. DKS

DATE SYSTEM APPROVED 5/20/97 INSPECTOR [Signature]

APPLICATION

PERCOLATION TESTING

A 49034

P _____

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

DISTRICT _____

DATE 3/9/93

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 Brian Calderwood, Tammy Murphy

ADDRESS West Friendship New Town Company

ADDRESS C/o Land Design & Dev

ADDRESS 10805 Hickory Ridge Rd PHONE 740-2100

PROSPECTIVE BUYER N/A

PROPERTY LOCATION: SUBDIVISION West Friendship LOT NO B 77

ROAD AND DESCRIPTION Route 32 + Pufferhorn Rd 3324 Velvet Valley Drive

BLDG. PERMIT SIGNED

AND RETURNED 4-21-92
Serial # BM 105035

TAX MAP 15 PARCEL # 32442

SIZE OF LOT 1 + acres TYPE BLDG SFD - 4 Brms

(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.

Myard Reich
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING _____

HD-216

THIS IS NOT A PERMIT

O.K. Jr. + helper

LOT 77

COUNTY #

SOIL PROFILE

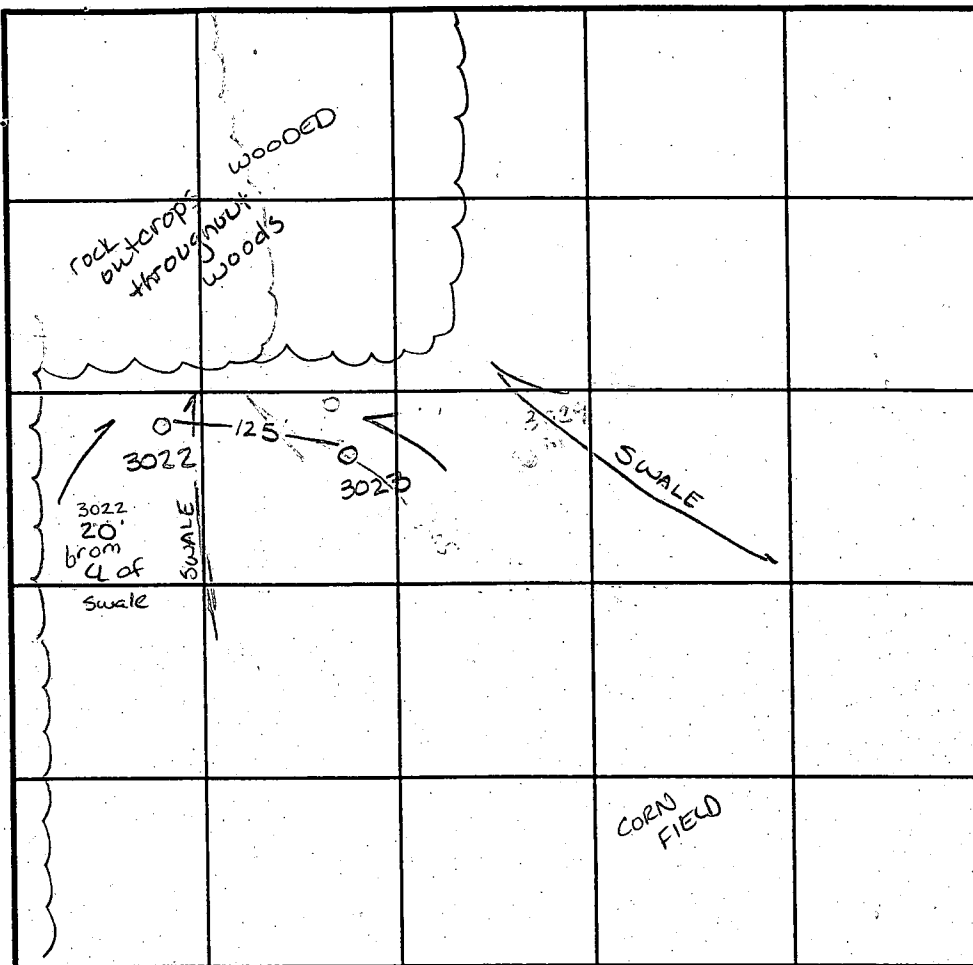
3023, 3022

0' bright orange red CSL

4' red & yellow spotted sil spots from parent rock

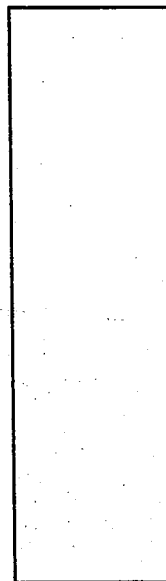
8' orange brn dark SIL

11'



SOIL PROFILE

0'



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
3-15-95	3023	4.5 VII'	2:03 ³⁰	2:05	2:05	2:07	2min
	3022	3.5 VII 0.5	2:10 ⁴⁵	2:12 ⁴⁵	2:12 ⁴⁵	2:15	2 1/4 min

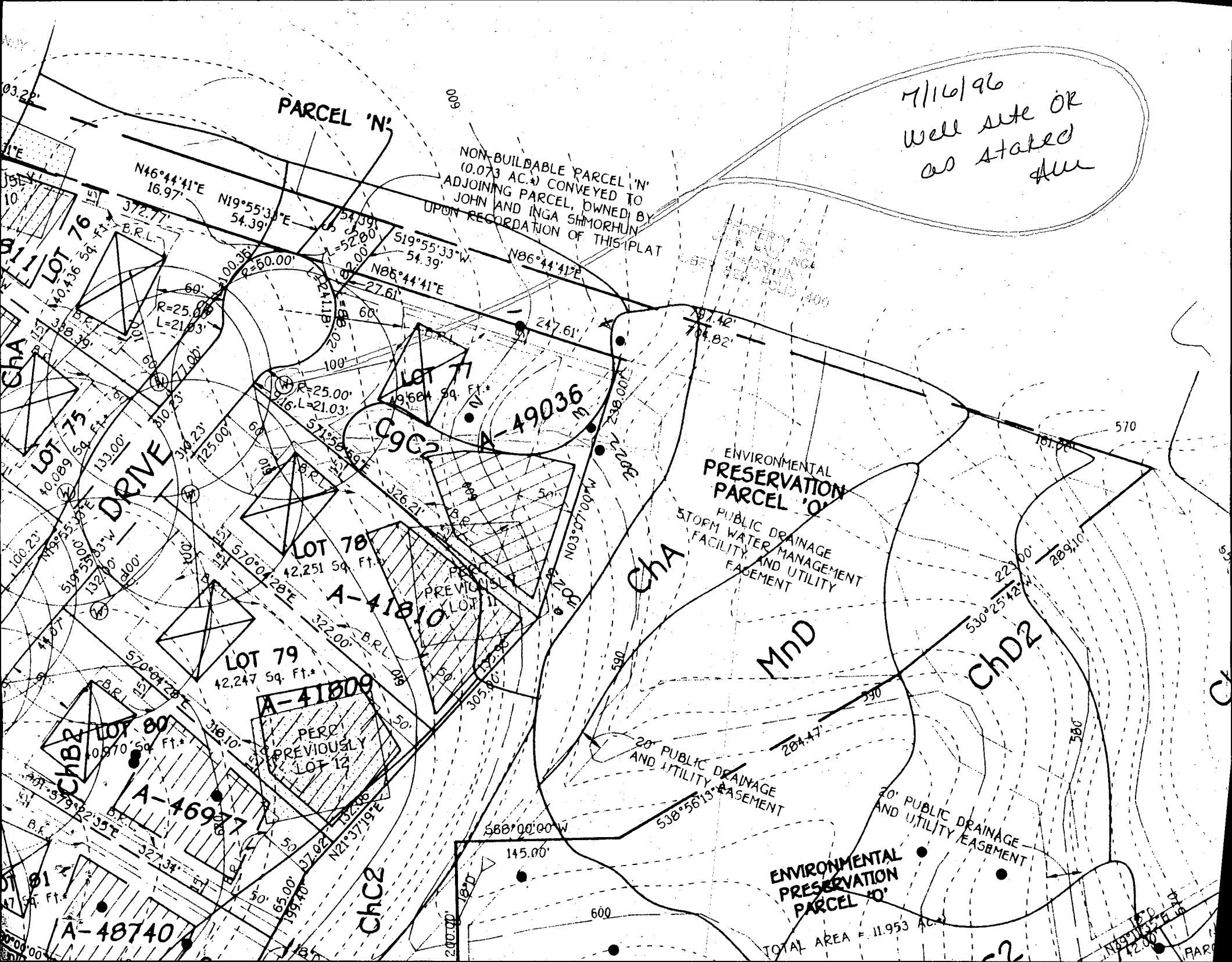
REMARKS _____

TYPE OF SOIL _____

TESTED BY Amy McMillen ALSO PRESENT Olan Ketterman

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____



7/16/96
Well site OR
as stated
AUC

NON-BUILDABLE PARCEL 'N'
(0.073 AC.) CONVEYED TO
ADJOINING PARCEL, OWNED BY
JOHN AND INGA SHMORHUN
UPON RECORDATION OF THIS PLAT

ENVIRONMENTAL
PRESERVATION
PARCEL 'O'
PUBLIC DRAINAGE
STORM WATER MANAGEMENT
FACILITY AND UTILITY
EASEMENT

ENVIRONMENTAL
PRESERVATION
PARCEL 'O'

TOTAL AREA = 11.953 AC.

PARCEL 'N'

Cha

MND

ChD2

ChC2

DRIVE

A-48740

A-46977

A-41809

A-41810

A-49036

LOT 76

LOT 75

LOT 78

LOT 79

LOT 80

LOT 77

C9C2

CHB2

PARC

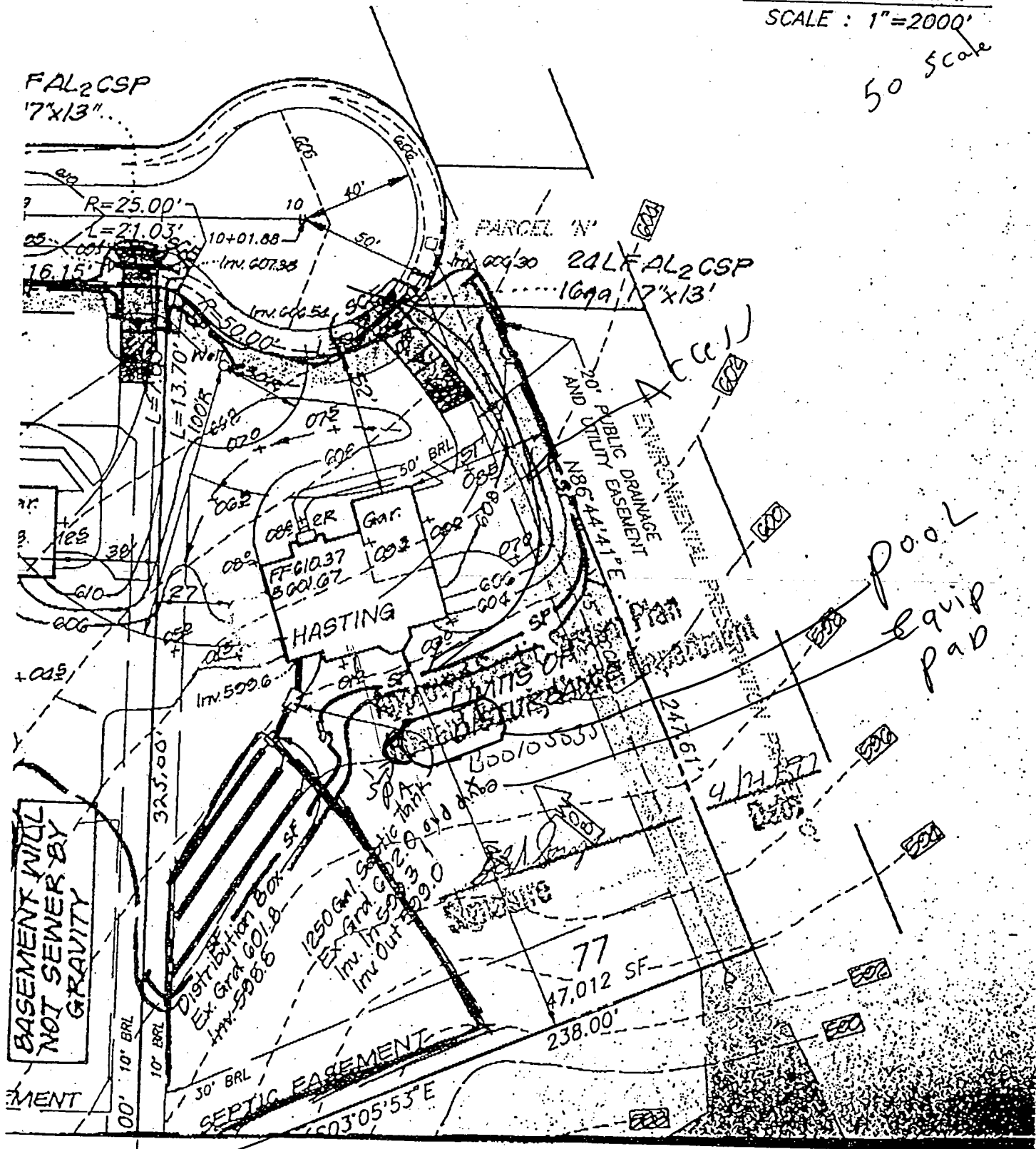
B 1 3038	SEQUENCE NO. (DP USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please print or type	STATE PERMIT NUMBER H0-94-0866 fill in this form completely.
Date Received (APA) 053196		B 3 LOCATION OF WELL	
OWNER INFORMATION Last Name: LAND First Name: DESIGN+DEVELOP Street or RFD: 10805 KICKORY RIDGE Town: COLUMBIA State: MD Zip: 21044		COUNTY: HOWARD SUBDIVISION: WEST FRIENDSHIP SECTION: 2 LOT: 77 NEAREST TOWN: WEST FRIENDSHIP MILES FROM TOWN (enter 0 if in town): 2 MI	
DRILLER INFORMATION Driller's Name: GARY W SHARP Firm Name: HARLEY DRILLING & PUMP SYSTEMS Address: Box 160 WALKERSVILLE, MD Signature: Gary W Sharp Date: 5-27-96		B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX) 	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.): 3 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 800		NEAR WHAT ROAD: MD 32 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH ☒ SOUTH ☐ DISTANCE FROM ROAD: 500 FT OR MI ☒	
USE FOR WATER (CIRCLE APPROPRIATE BOX) ☒ HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY) ☐ FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) ☐ INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT) ☐ PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL) ☐ TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME: HOWARD CO. COUNTY NO.: A49036 STATE SIGNATURE: _____ DATE ISSUED: 07/16/96 CO SIGNATURE: A. McNeel EXP. DATE: 7/16/97 NORTH GRID: 528000 EAST GRID: 0804000	
APPROXIMATE DEPTH OF WELL: 200 FEET APPROXIMATE DIAMETER OF WELL: 6 INCH NEAREST INCH		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: E: 8004 N: 5208	
METHOD OF DRILLING (circle one) BORED (or Augered) ☐ JETTED ☐ Jetted & DRIVEN ☐ AIR-ROTARY ☐ AIR-PERCUSSION ☒ ROTARY (Hydraulic Rotary) ☐ CABLE ☐ REVERSE-ROTARY ☐ DRIVE-POINT ☐ other: _____		DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) ☒ THIS WELL WILL NOT REPLACE AN EXISTING WELL ☐ THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED ☐ THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS ☐ THIS WELL WILL DEEPEMED AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE): _____		Not to be filled in by driller (OEP USE ONLY) APPROX. PERMIT NUMBER: GAP FORCE: AM WRITE INITIALS IN BOX PERMIT No.: H0-94-0866	
SPECIAL CONDITIONS NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =			

C1 7964		SEQUENCE NO. (MDE 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 4 9036	
ST/CO USE ONLY DATE Received 090996		DATE WELL COMPLETED 082196		Depth of Well 22 100 26 (TO NEAREST FOOT)		PERMIT NO. FROM "PERMIT TO DRILL WELL" H0-94-0866	
OWNER LDD		last name		first name		TOWN W. FRIENDSHIP	
STREET OR RFD		SUBDIVISION W. FRIENDSHIP EST		SECTION 2		LOT 77	
WELL LOG Not required for driven wells		STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		GRROUTING RECORD yes no WELL HAS BEEN GROUTED (Circle Appropriate Box) ☒ Y ☐ N TYPE OF GROUTING MATERIAL (Circle one) CEMENT ☒ CM BENTONITE CLAY ☐ BC NO. OF BAGS 10 NO. OF POUNDS 940 GALLONS OF WATER 60 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft to 46 ft (enter 0 if from surface)		C 3 PUMPING TEST HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 15 METHOD USED TO MEASURE PUMPING RATE Submersible WATER LEVEL (distance from land surface) BEFORE PUMPING 28 ft WHEN PUMPING 30 ft TYPE OF PUMP USED (for test) ☐ A air ☐ P piston ☐ T turbine ☐ C centrifugal ☐ R rotary ☐ O other (describe below) ☐ J jet ☒ S submersible	
DESCRIPTION (Use additional sheets if needed)		FEET FROM TO		check if water bearing		C 2 C 2 DEPTH (nearest ft.) H0 47 100 SLOT SIZE 1 2 3 DIAMETER OF SCREEN 56 60 GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68	
Top soil 0 5 Brown shell 6 35 SAND STONE 36 100 SAND STONE 36 100 Blue rock 36 100 GOT water at 80						C 2 C 2 DEPTH (nearest ft.) H0 47 100 SLOT SIZE 1 2 3 DIAMETER OF SCREEN 56 60 GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68	
NUMBER OF UNSUCCESSFUL WELLS: 0		WELL HYDROFRACTURED yes no ☒ Y ☐ N		C 2 C 2 DEPTH (nearest ft.) H0 47 100 SLOT SIZE 1 2 3 DIAMETER OF SCREEN 56 60 GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68		PUMP INSTALLED DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES ☒ NO ☐ IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 C 2 C 2 DEPTH (nearest ft.) H0 47 100 SLOT SIZE 1 2 3 DIAMETER OF SCREEN 56 60 GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68	
CIRCLE APPROPRIATE LETTER A 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 26.04.04 "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.		TYPE: MWD/MSD/MGD DRILLERS LIC. NO. 043 DRILLERS SIGNATURE Wayne Haley LIC. NO. 350-062 SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)		LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL) WELL 100 + F2 PREFERRED CORNERS Lot # 77	

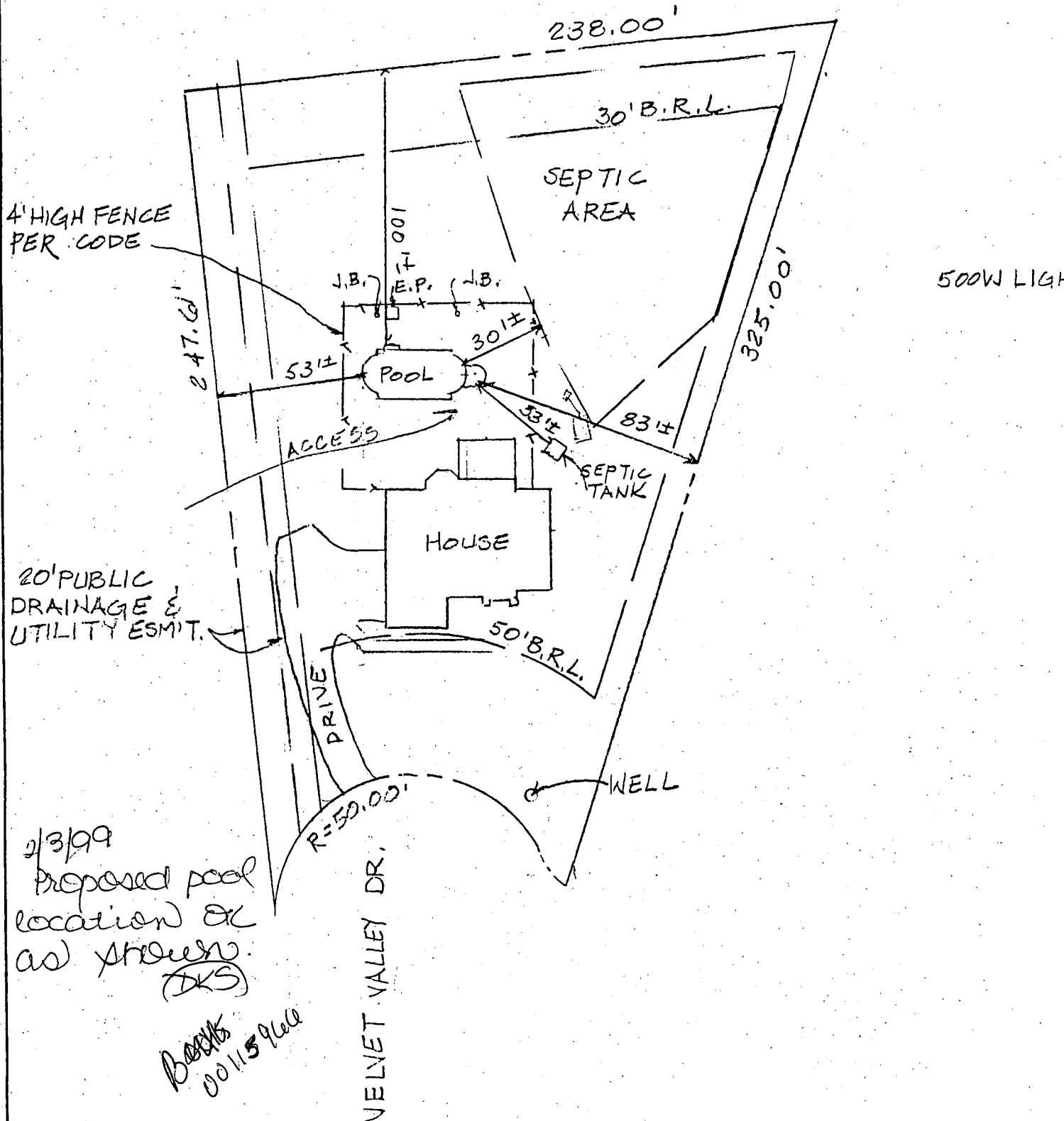
A hand-drawn map showing the location of the 323rd Signal Battalion. The map includes roads labeled 'PETERCORN ROAD', 'MD ROUTE 32', 'VALLEY ROAD', and 'IVORY ROAD'. A north arrow points upwards. Buildings are labeled 'FOX', 'E', 'G', and 'VALLEY'. Two circular markers indicate 'HO. CO. CONTROL NO. 3234001' and 'HO. CO. CONTROL STA. NO. 3234002'.

SCALE : 1"=2000'

50 scale



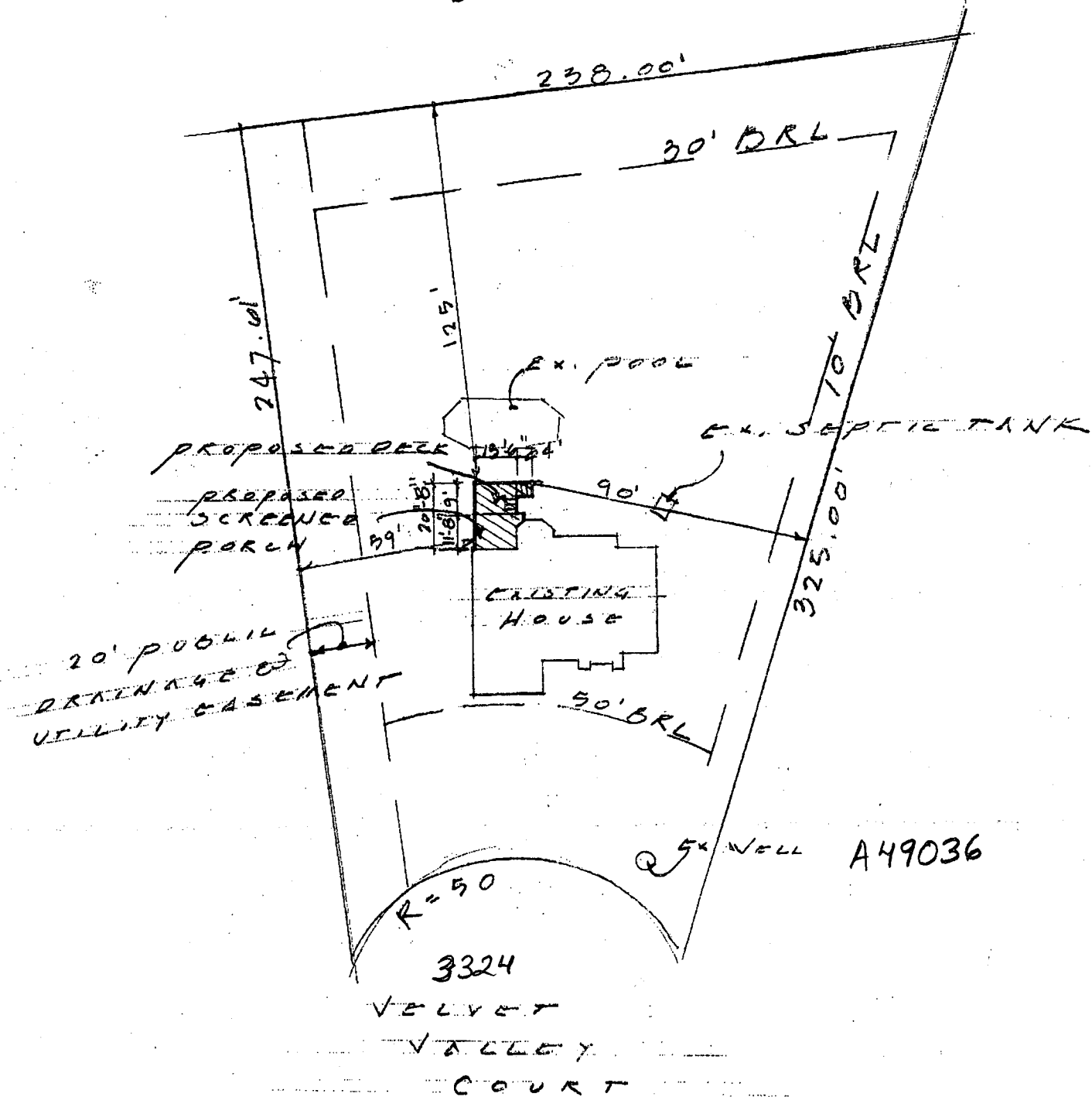
NOTE
1 HOURS OF GRADING ARE INCLUDED.
ANY ADDITIONAL HOURS ARE CHARGED DIRECT



SCALE: 1" = 50'

RT. 32 WEST

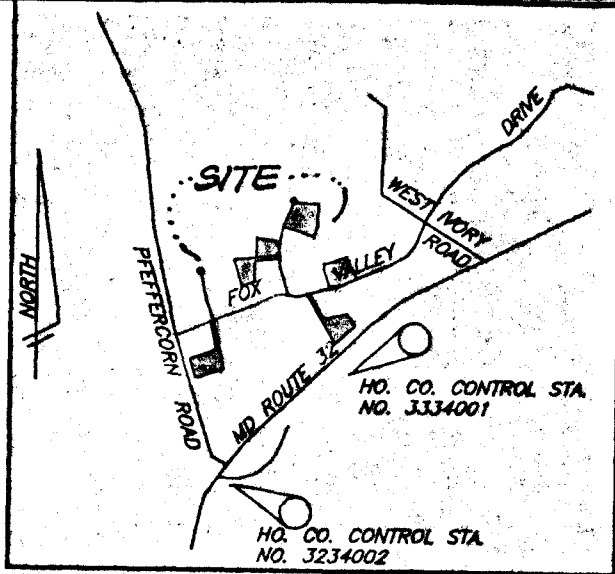
Boo123463



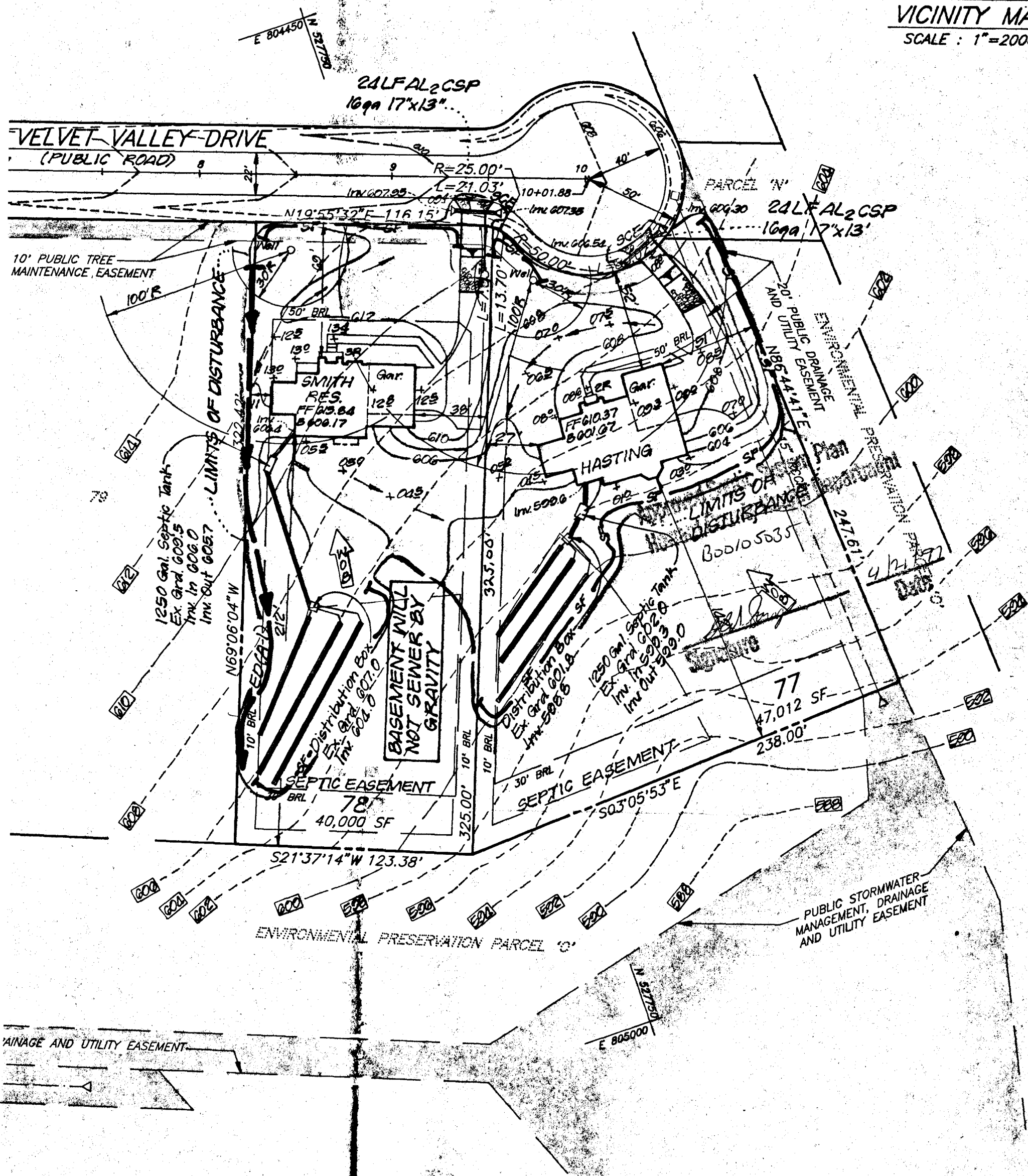
ROLLA RES.

LEGEND

CONTOUR INTERVAL 2 FT.
EXISTING CONTOUR 340
PROPOSED CONTOUR 340
DIRECTION OF DRAINAGE
WALK OUT BASEMENT
EXISTING STORM DRAIN 15" RCP
MINIMUM CELLAR ELEVATION MCE=445.7
LIMIT OF DISTURBANCE
EXISTING TREES TO REMAIN



VICINITY MAP
SCALE: 1"=2000'



GENERAL NOTES

- Existing Topography was taken from Road Construction Plans prepared by Fisher, Collins, and Carter, Inc. on June 26, 1995
- Length of trenches to be determined at time of permit issuance.
- Reference: Plat No. 12451 thru 12455

BUILDER'S CERTIFICATE

and construction will be done according to the plan for sediment and erosion control and approved in the construction project will have a Department of the Environment Approved of Sediment and Erosion before beginning periodic on-site inspection by the Howard County authorized agents, as are deemed

3-31-97
DATE

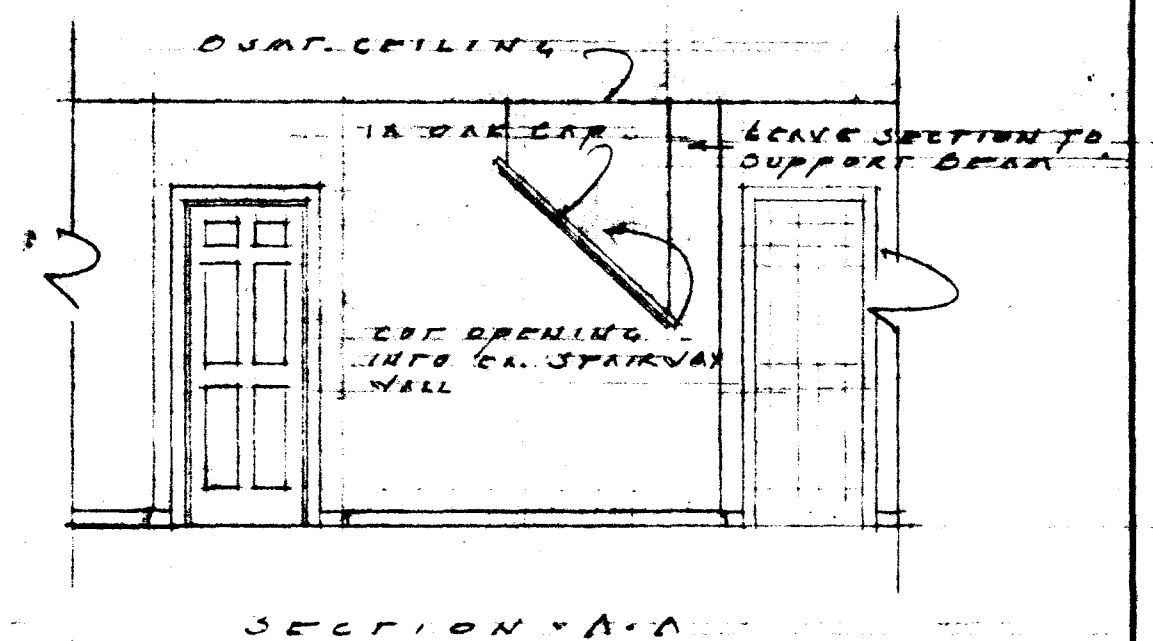
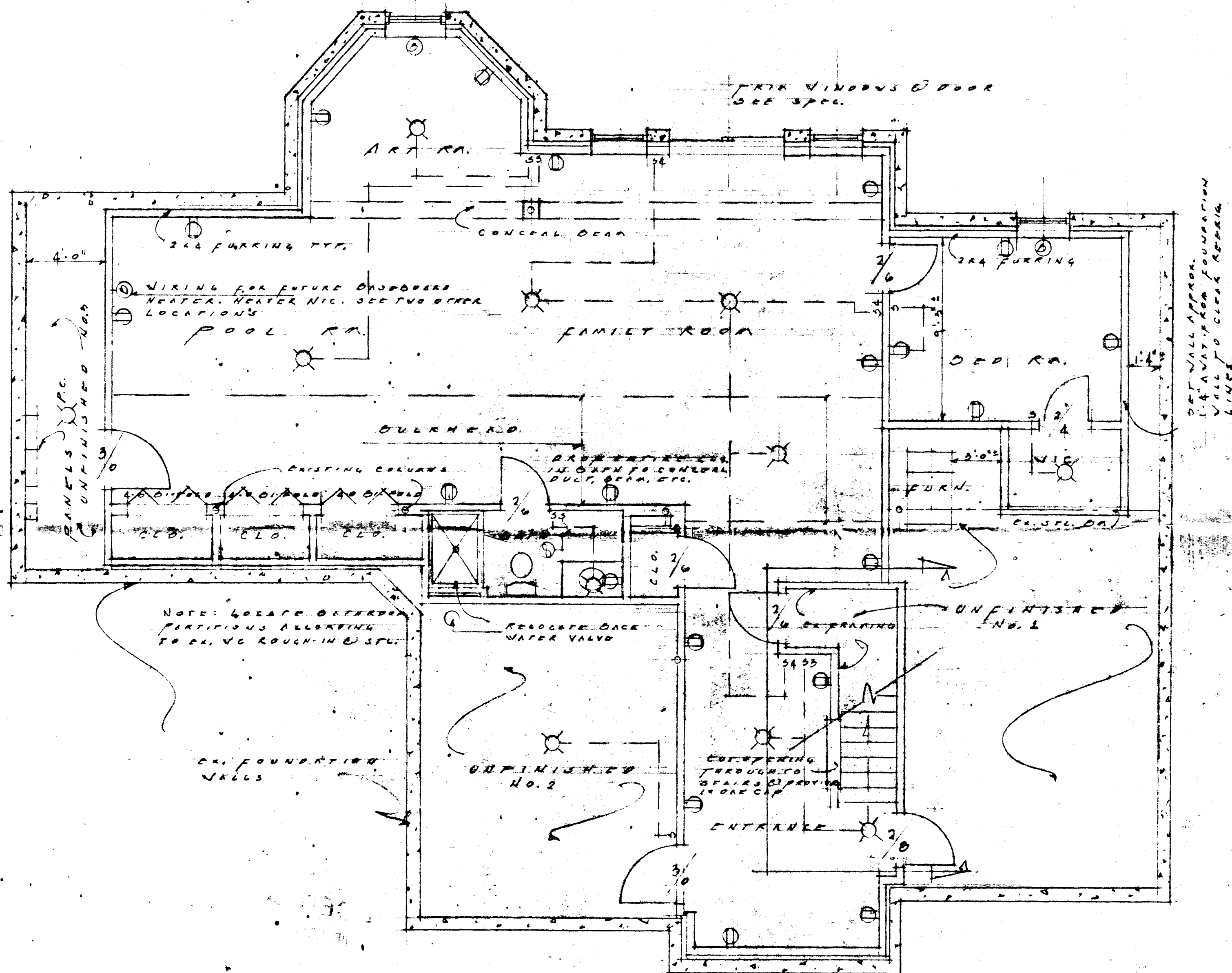
ENGINEER'S CERTIFICATE

I certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site and that it was prepared in accordance with the standards of the Howard Spill Conservation

3-31-97
DATE



 CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.		
DESIGNED JME	SEDIMENT AND EROSION CONTROL PLAN LOTS 69, 71, 77, 78, 83, 90 & 99 WEST FRIENDSHIP SECTION 2 THIRD (3rd) ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: GREENFIELD HOMES 1818 Liberty Road Eldersburg, Maryland 21784	SCALE 1"=50'
DRAWN PS		DRAWING 1 OF 2
CHECKED D.A.B.		JOB NO. 97-059
DATE 3-31-97		FILE NO. 97-059x



SECTION A-A

3/10/99 spoke to Mary @ Knudsen Builders - I advised her that I would approve the BP w/ the caution that the septic system has been installed to serve 4, not 5, bedrooms. OK to proceed. (DKS)

PROPOSED DISEASE IMPROVEMENTS		
SCALE	APPROVED BY	DRAWN BY
DATE		REVISED
ROBERT KNUDSEN BUILDERS, INC.		
		DRAWING NUMBER