

LAYOUT 11/7/05 INSP 4 _____
INSP 2 11/9/05 INSP 5 _____
INSP 3 _____ INSP 6 _____

ISSUE DATE: 10/21/2005 P 523534

APPROVAL DATE: 7/25/06 TAY ID 05-439043 A 518647

PERMIT
SANDMOUND SYSTEM
ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

INDEXED

Hatfields Equipment IS PERMITTED TO INSTALL ALTER

ADDRESS: PO Box 519, Annapolis Junction PHONE NUMBER: _____

SUBDIVISION: Linthicum Oaks LOT NUMBER: Second Tract

ADDRESS: 4070 Linthicum Road PROPERTY OWNER: Thomas Venezia

SEPTIC TANK CAPACITY (GALLONS): 1250 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): 1250 COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

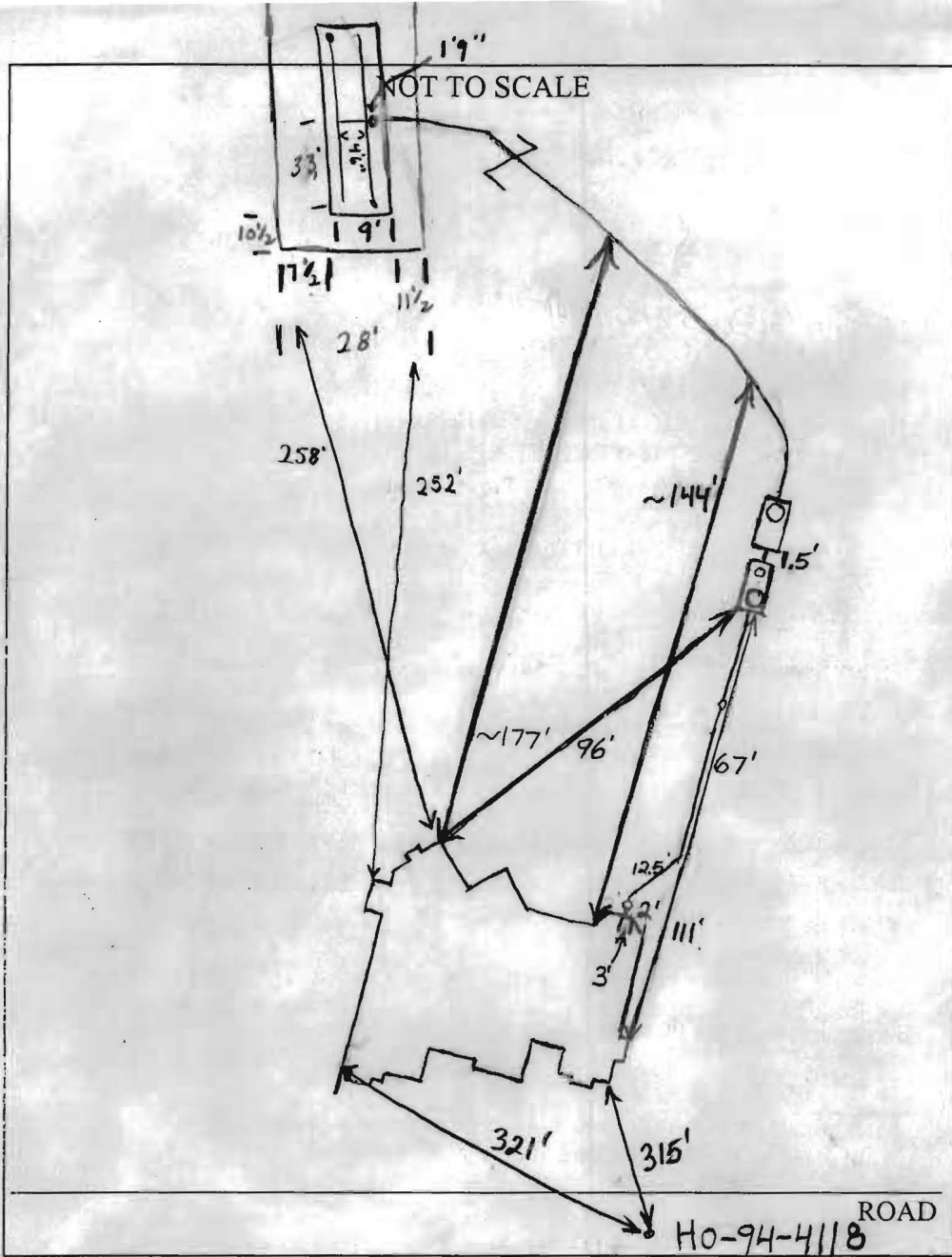
LOCATION:	Sand Mound to be installed. See Plans for Sand Mound approved on 7/6/05
NOTES:	All three(3) Sand Mound sites are to be staked. Heavy equipment is not allowed on or directly down hill of any of the three (3) Sand Mound sites. Recommend to be 15' from replacement mound sit if not 25' per MDE.

PLANS APPROVED: Kevin J. Bell DATE: 7/6/05

NOTES: PERMIT VOID AFTER 2 YEARS
CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
WATERTIGHT SEPTIC TANKS REQUIRED
ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT ALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM

1523534



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
NUMBER OF TRENCHES <u>Sand</u>		
TOTAL LENGTH <u>Mound</u>		
ABSORPTION AREA		
DISTRIBUTION BOX LEVEL		
DISTRIBUTION BOX BAFFLE		
DISTRIBUTION BOX PORT		

SEPTIC TANK DATA		
SEPTIC TANK 1 LEVEL	<u>Yes</u>	
CAPACITY	<u>1500</u>	GAL
SEAM LOC	<u>Top</u>	
TANK LID DEPTH	<u>0.5'-2'</u>	
BAFFLES	<u>Yes</u>	
BAFFLE FILTER	<u>Yes</u>	
MANHOLE LOC	<u>Front</u>	
6" PORT LOC	<u>Rear</u>	
WATERTIGHT TEST	<u>No</u>	
SEPTIC TANK 2 LEVEL	<u>Yes</u>	
CAPACITY	<u>1500</u>	GAL
SEAM LOC	<u>Top</u>	
TANK LID DEPTH	<u>1'-1.5'</u>	
BAFFLES	<u>Front Tee</u>	
BAFFLE FILTER	<u>None</u>	
MANHOLE LOC	<u>Rear</u>	
6" PORT LOC	<u>None</u>	
WATERTIGHT TEST	<u>No</u>	

Babylon
2-comp

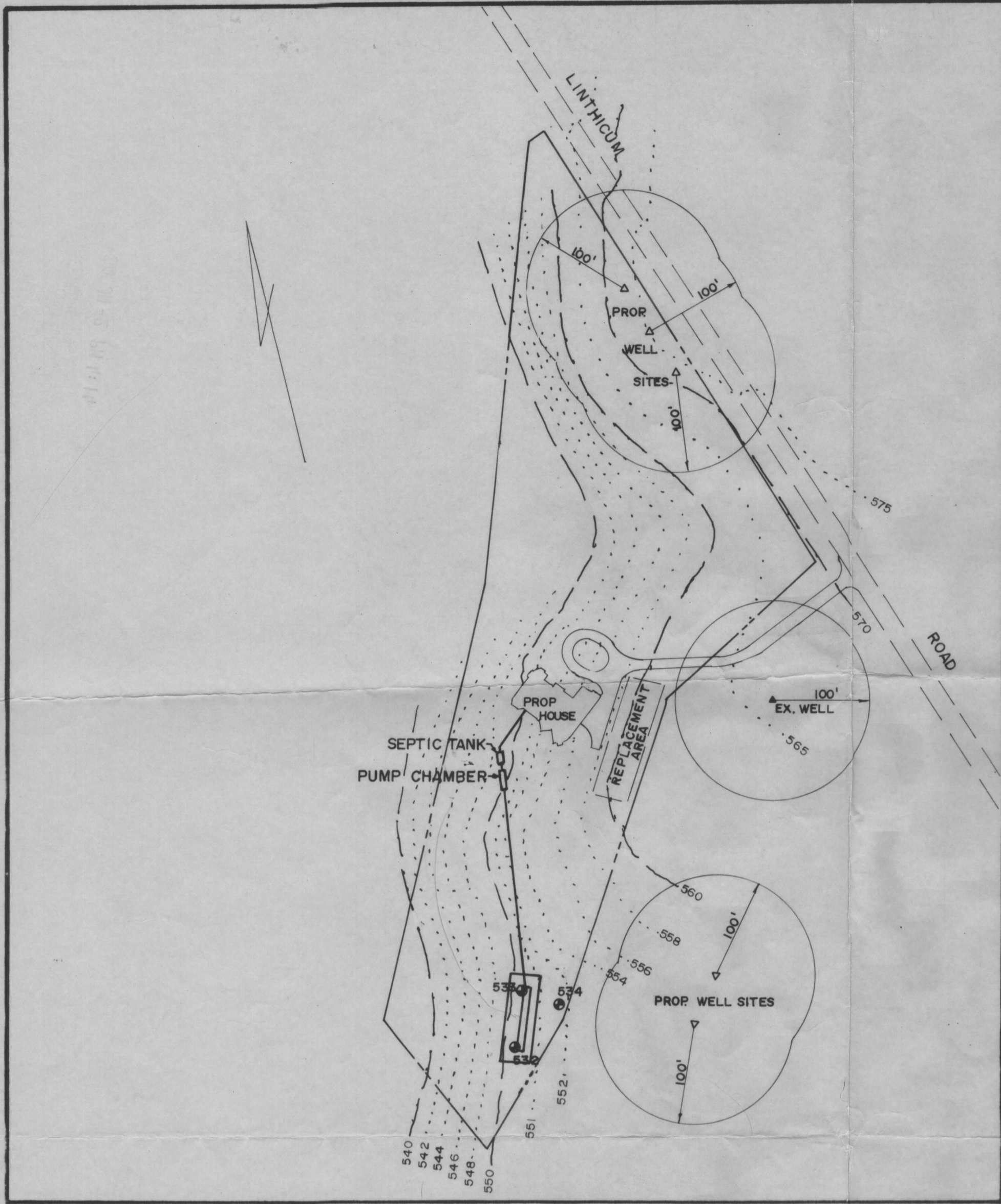
PRE-CONSTRUCTION 11/7/05 Mound site adjusted in field to better fit contour. Told installer it would be better to wait until next year.

INSTALLATION when dryer although mound soils meet installation criteria. Tanks set. Pump line installed. 11/9/05 Started plowing. 11/10/05 Sand already mounded. Watched Hatfield's cut bed and spread gravel per plan. Manifold and laterals installed, pump tested. 14" on lateral closest to House 17" on lateral furthest from House. OK to cover.

Retest again once covered. Larger pump may be needed 3/4 hp currently. Pump curve appears to be appropriate, but awfully close. 7/25/06 A one H.P. pump installed. Head at turnups was ~2.5'. Alarm working.

FINAL INSPECTOR B. Baker DATE OF APPROVAL 7/25/06

Driveway approved too close to repair bed site, although the bed can probably be adjusted.



SITE PLAN
SCALE: 1" = 100'

DESIGN CRITERIA

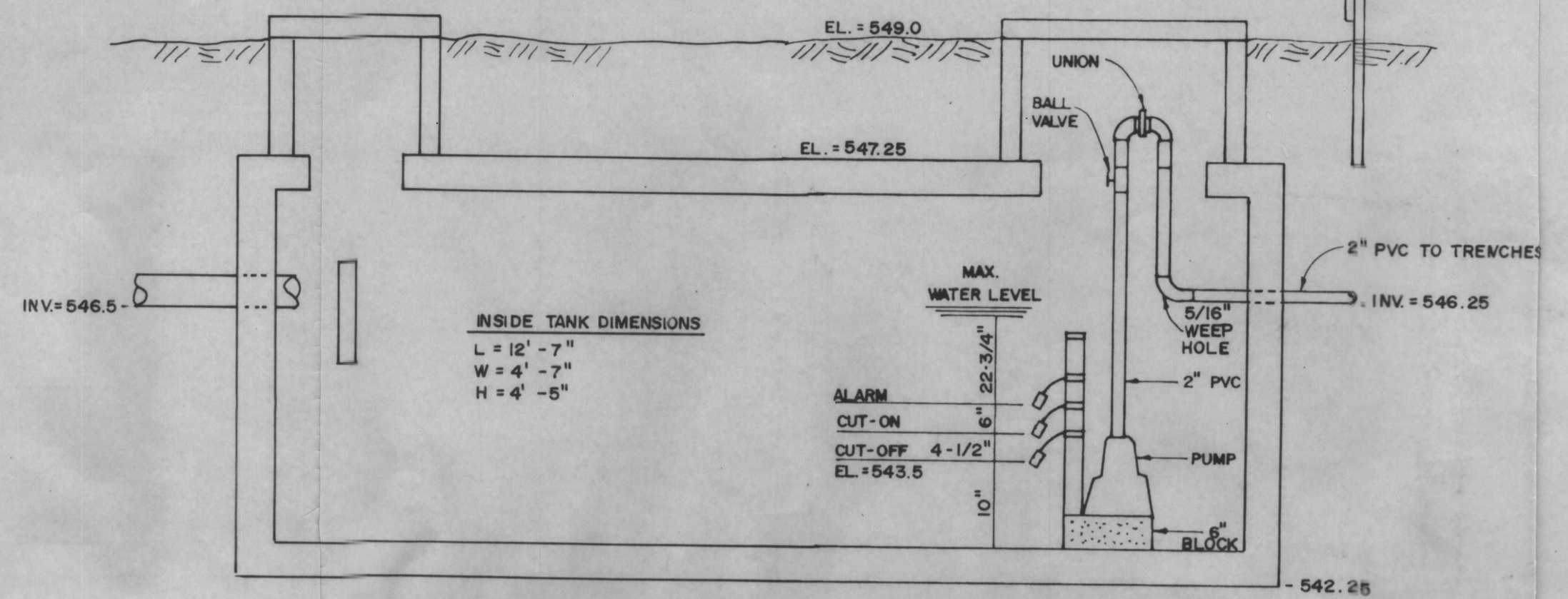
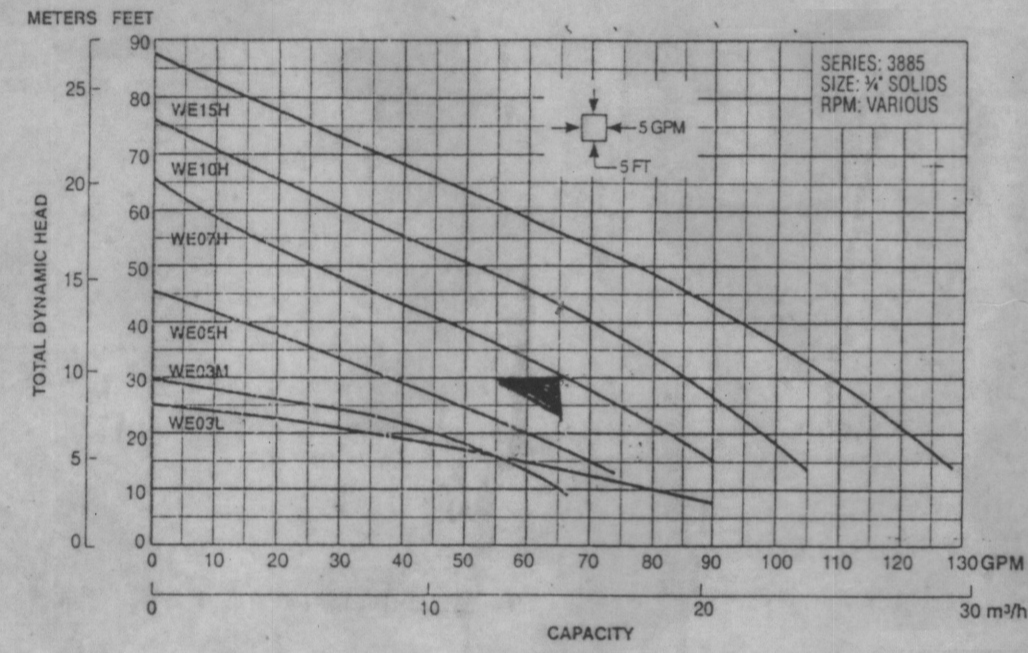
4 Bed Rooms x 150 = 600 GPD
 Loading Rate: 1.0 GPD/Sq Ft = 600 Sq Ft.
 Bed 9' x 70' = 630 Sq Ft.
 1 - 1,500 GAL. Compartmented Top Seam Septic Tank
 1 - 1,500 GAL. Top Seam Pump Chamber
 Pump Rate - 40 Perforations @ 1.63 GPM = 65 GPM
 Mound Width = 28' - 2"
 Mound Length = 91' - 4"

SOIL TEST

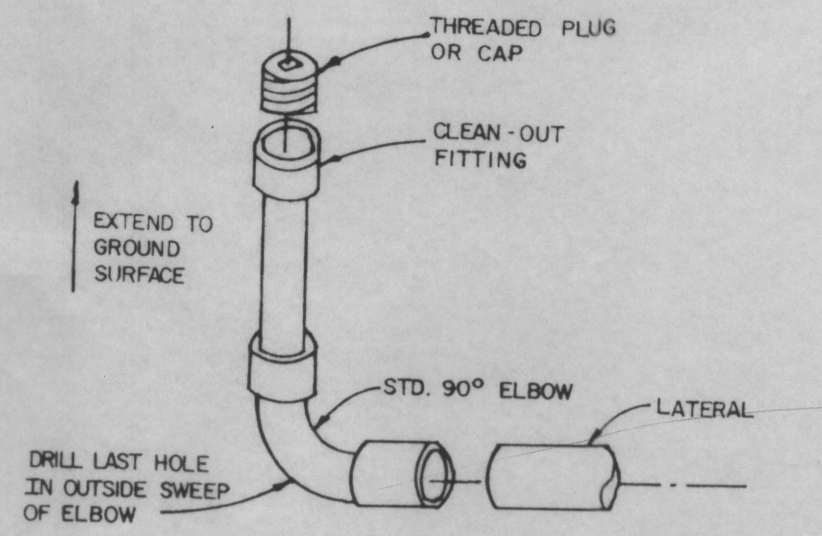
#532 - 40 min. /inch - ok to 6'
 #533 - 20 min. /inch - ok to 4'
 #534 - 24 min. /inch - ok to 5-1/2'

SPECIFICATIONS

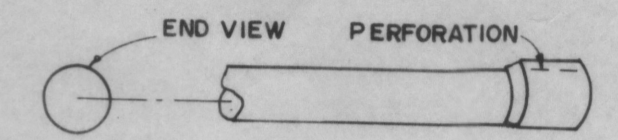
- Tank measurements and elevations are based on septic tanks and pump chambers as manufactured by Mayer Bros., Elkridge, Md. (410) 796-1434.
- All piping to be schedule 40 PVC of sizes shown.
- The force main from the pump chamber to the sand bed is to be installed with a continuous slope back to the chamber to assure complete drainage following each pump cycle.
- A submersible pump to remove 65 GPM against 30' TDH is to be provided. Pump to be a Goulds Model 3885-WE-10H - 1 hp or equal.
- A test of the pump system and distribution piping is required prior to covering the system.
- The High Water Alarm is to be on a separate circuit.
- Alarm to be located in the house.
- Stone bed to be 1/2" to 2 3/4" clean gravel. Crushed lime stone is not acceptable.



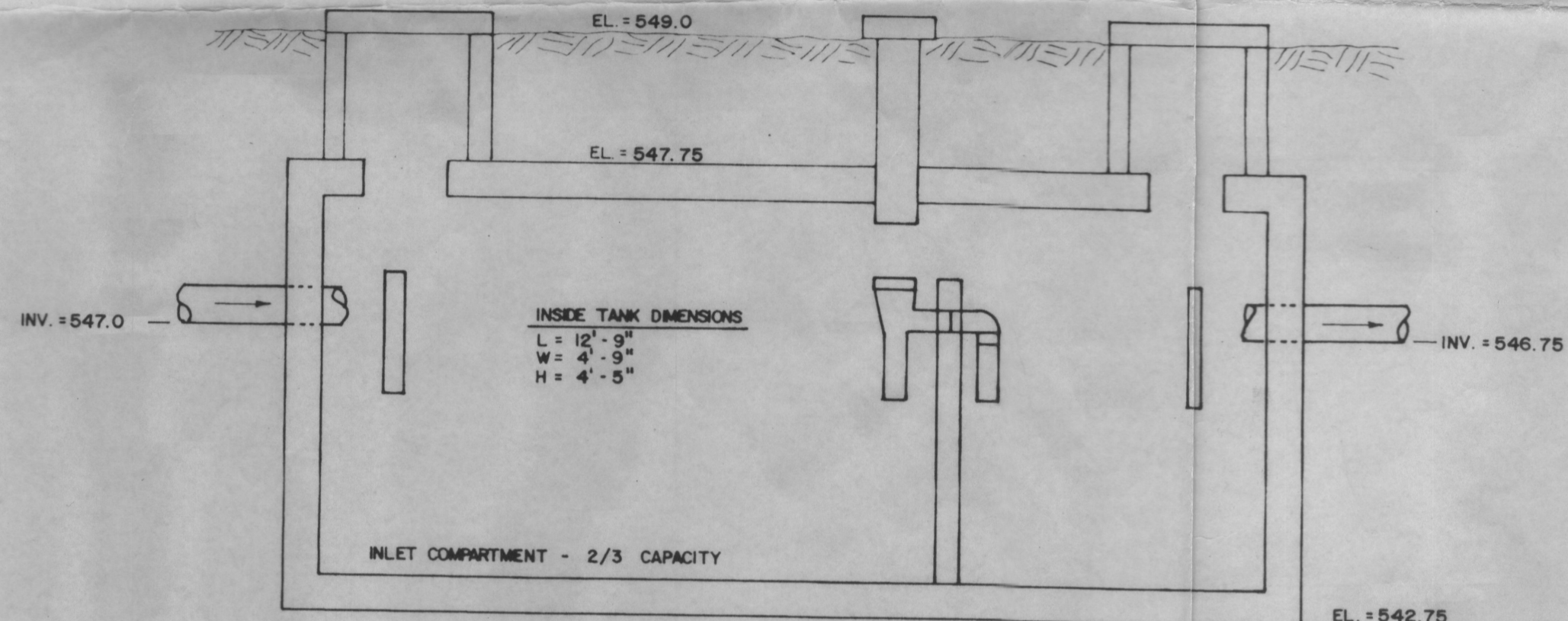
TOP SEAM 1500 GAL. PUMP CHAMBER
NOT TO SCALE



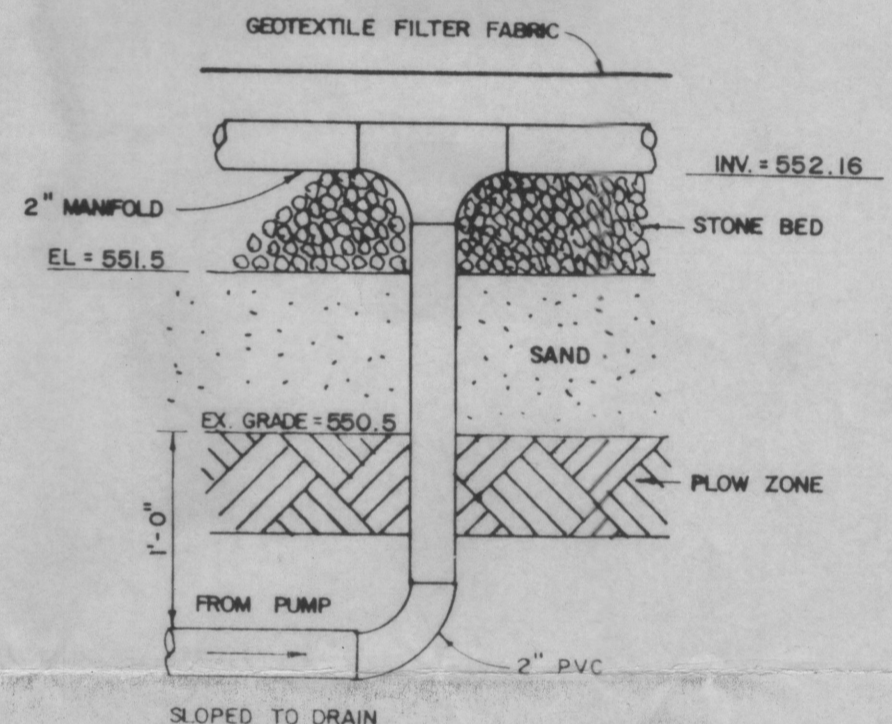
LATERAL END TURN-UP
USE ON LATERAL FARTHEST FROM PUMP
AND ON LATERAL DIAGONALLY ACROSS BED
NOT TO SCALE



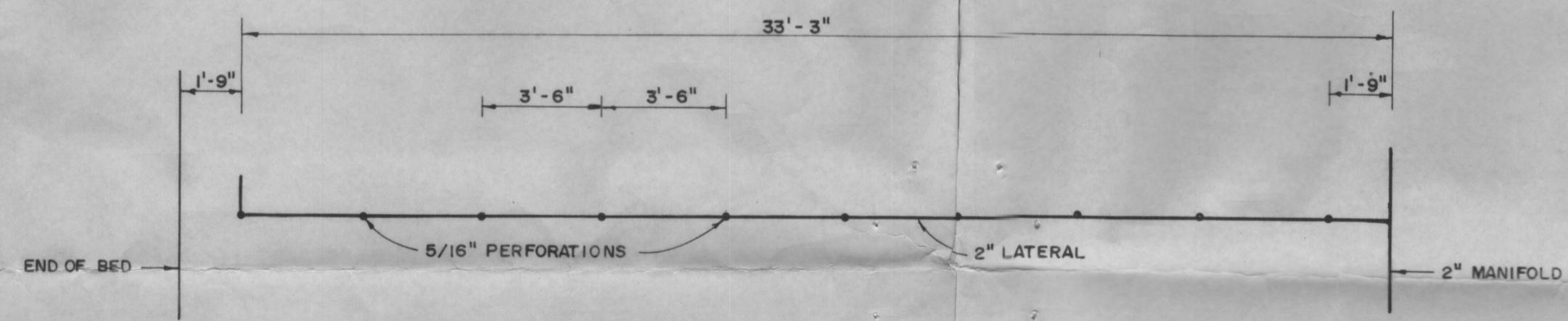
LATERAL END CAP
USE ON LATERALS NOT
EQUIPPED WITH TURN-UP
NOT TO SCALE



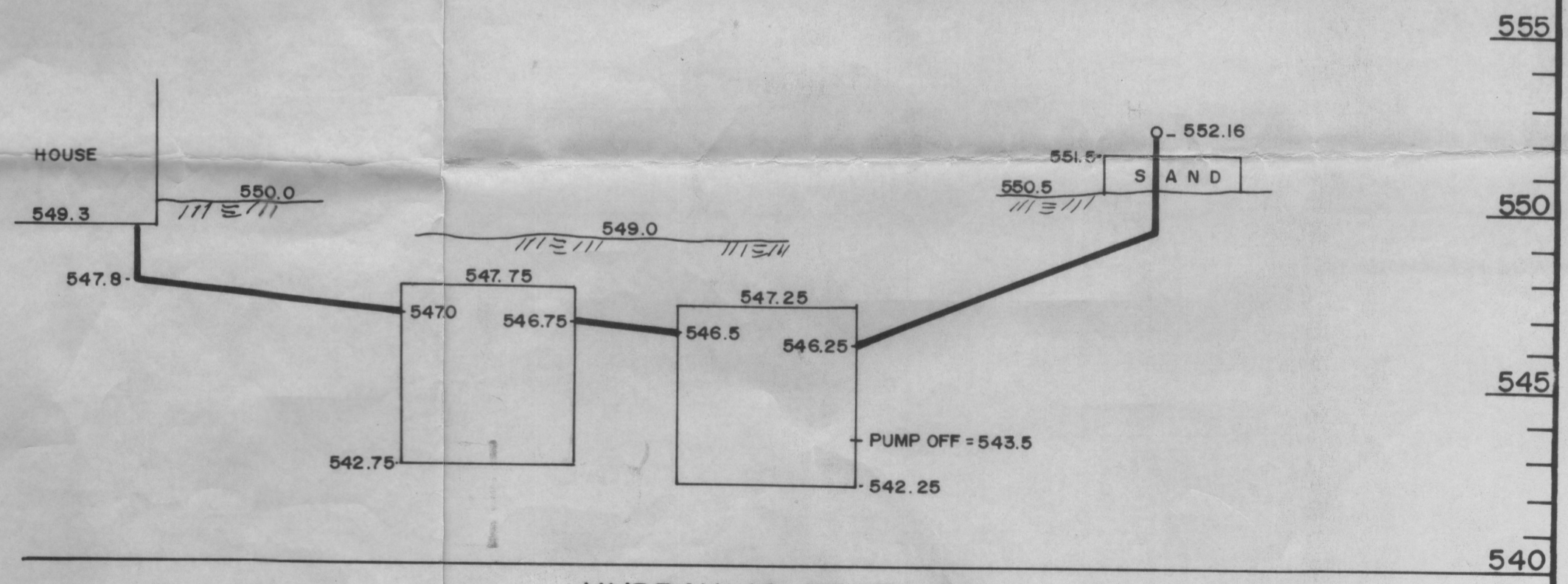
TOP SEAM 1500 GAL. SEPTIC TANK
NOT TO SCALE



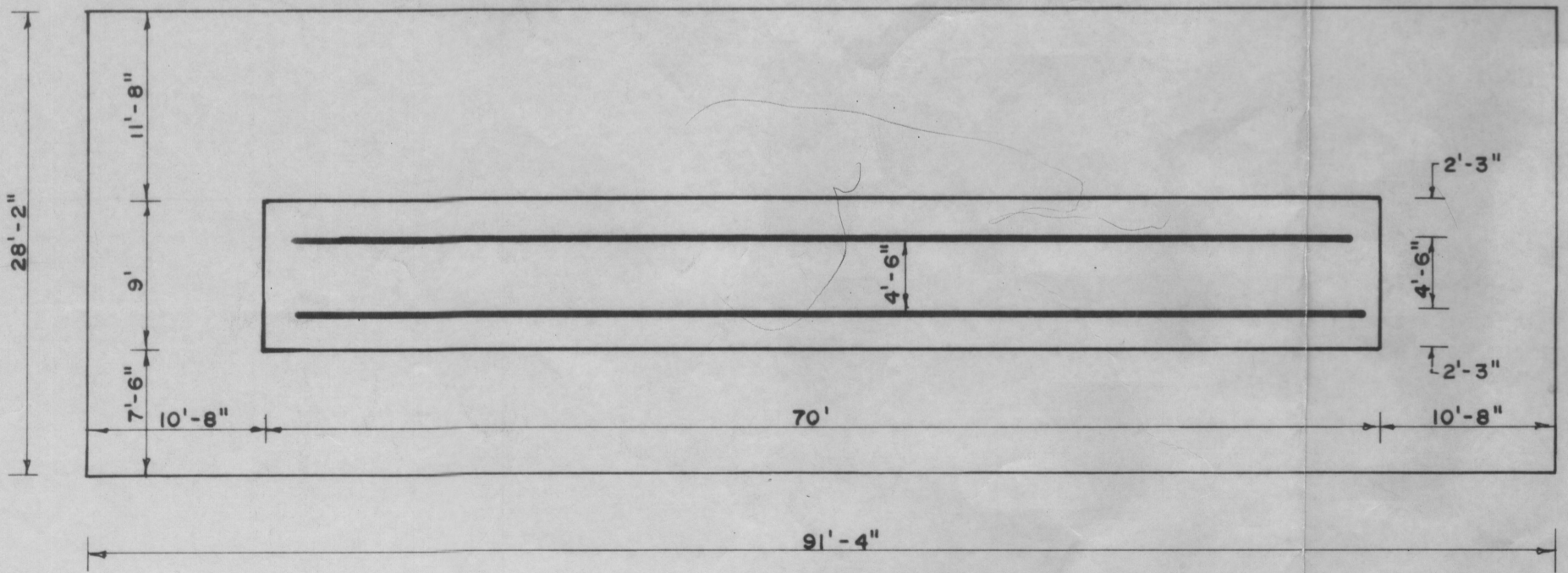
SUPPLY LINE - MANIFOLD DETAIL
NOT TO SCALE



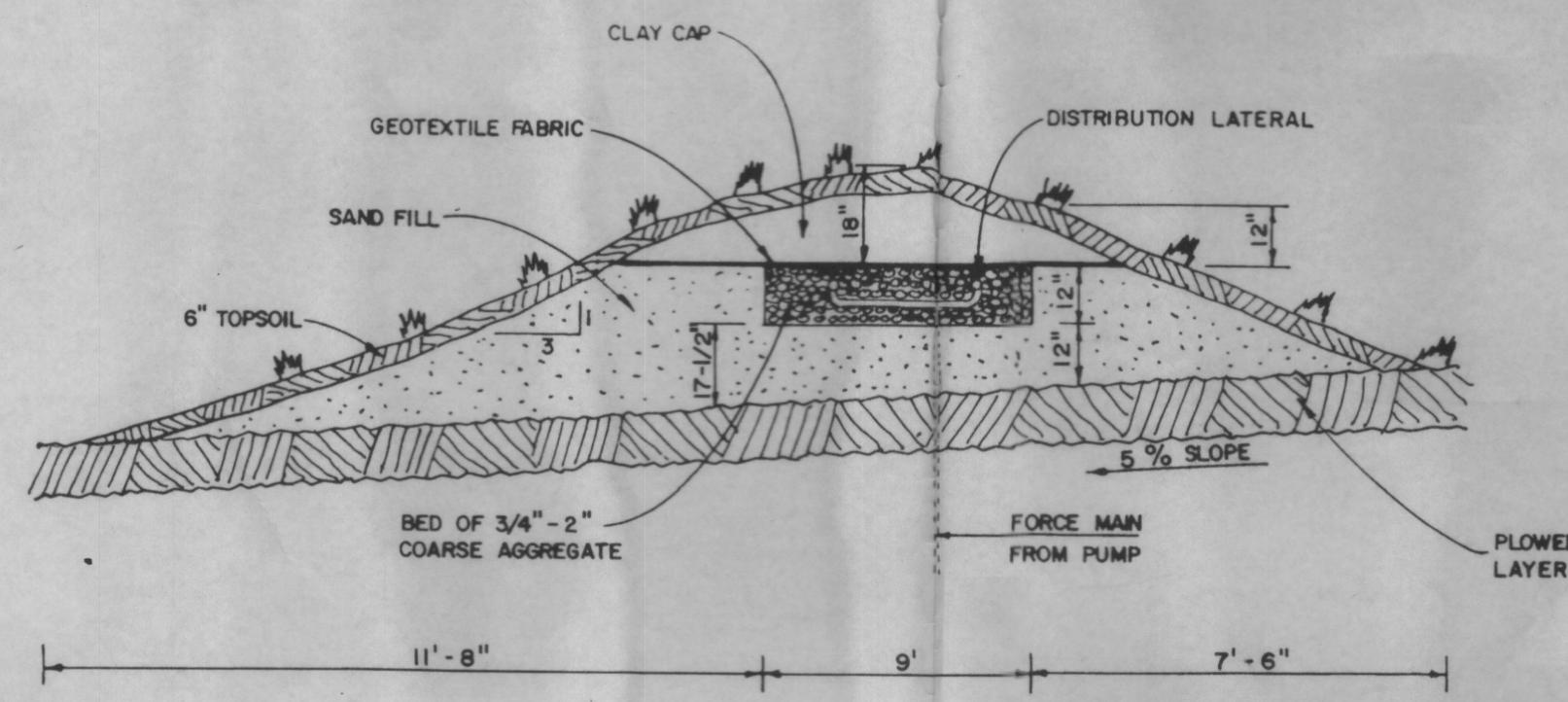
LATERAL DETAIL
SCALE: 1/4" = 1'



HYDRAULIC PROFILE
SCALE: V:1/4" = 1'
H: N.T.S.



MOUND LAYOUT
SCALE: 1" = 10'



MOUND DESIGN
NOT TO SCALE

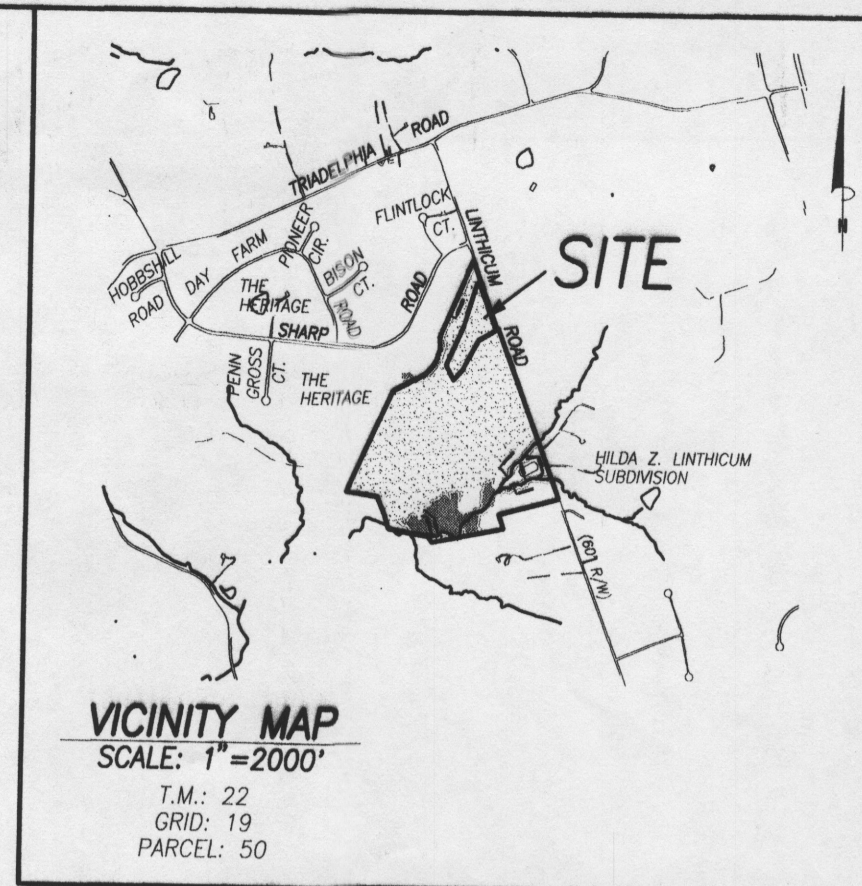
James A. Clise
 PROFESSIONAL ENGINEER
 STATE OF MARYLAND

Approved Septic System Plan
 Howard County Health Department
 Signature: [Signature] Date: [Date]

S/E ENGINEERING, INC.
 WESTMINSTER, MARYLAND

SCALE: AS SHOWN	APPROVED: JDC	DRWN: RSK
DATE: MARCH, 2005	JDC	DES: JDC
LINTHICUM OAKS - SECOND TRACT HOWARD COUNTY		
SANDMOUND		DRAWING NO. 1 OF 1

OWNER:
 LINTHICUM OAKS, L.L.C.
 C/O TRACY D. GRIFFIN
 4231 LINTHICUM ROAD
 DAYTON, MARYLAND 21036
 (410) 531-3137



SEPTIC ELEVATIONS

PROPOSED HOUSE:
 F.F. ELEV. = 559.3
 BSMT. ELEV. = 549.3
 GAR. ELEV. = 558.6
 INV. OUT = 547.8

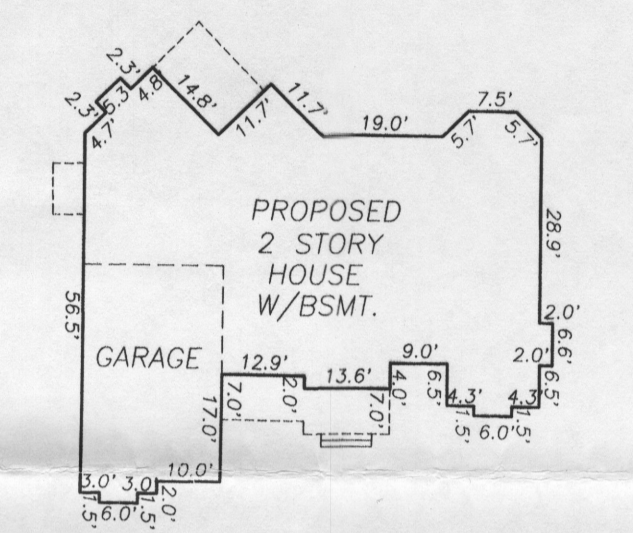
PROPOSED SEPTIC TANK:
 EX GRD. ELEV. = 549.0
 PROP. GRD. ELEV. = 549.0
 INV. IN = 547.0
 INV. OUT = 546.7

PROPOSED SEPTIC TANK W/PUMP:
 EX GRD. ELEV. = 549.0
 PROP. GRD. ELEV. = 549.0
 INV. IN = 546.5
 INV. OUT = 546.25

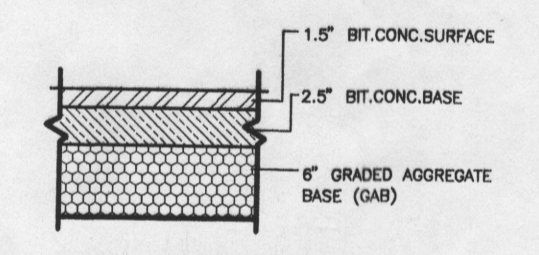
PROPOSED SAND MOUND:
 EX GRD. ELEV. = 550.5

NOTES:

- TOPOGRAPHY IS AERIAL FROM HOWARD COUNTY, MARYLAND.
- ACTUAL LENGTH AND NUMBER OF TRENCHES FOR SEWERAGE ARE TO BE DETERMINED AT THE TIME OF SEPTIC SYSTEM PERMIT ISSUANCE.
- PROPOSED HOUSE IS 4 BEDROOM.
- LIMIT OF DISTURBANCE: (LOD) 27,727 Sq. Ft.
- THE EXISTING WELL(S) SHOWN ON THIS PLAN HAS BEEN FIELD LOCATED BY VANMAR ASSOCIATES, INC. PROFESSIONAL LAND SURVEYORS AND ACCURATELY SHOWN.



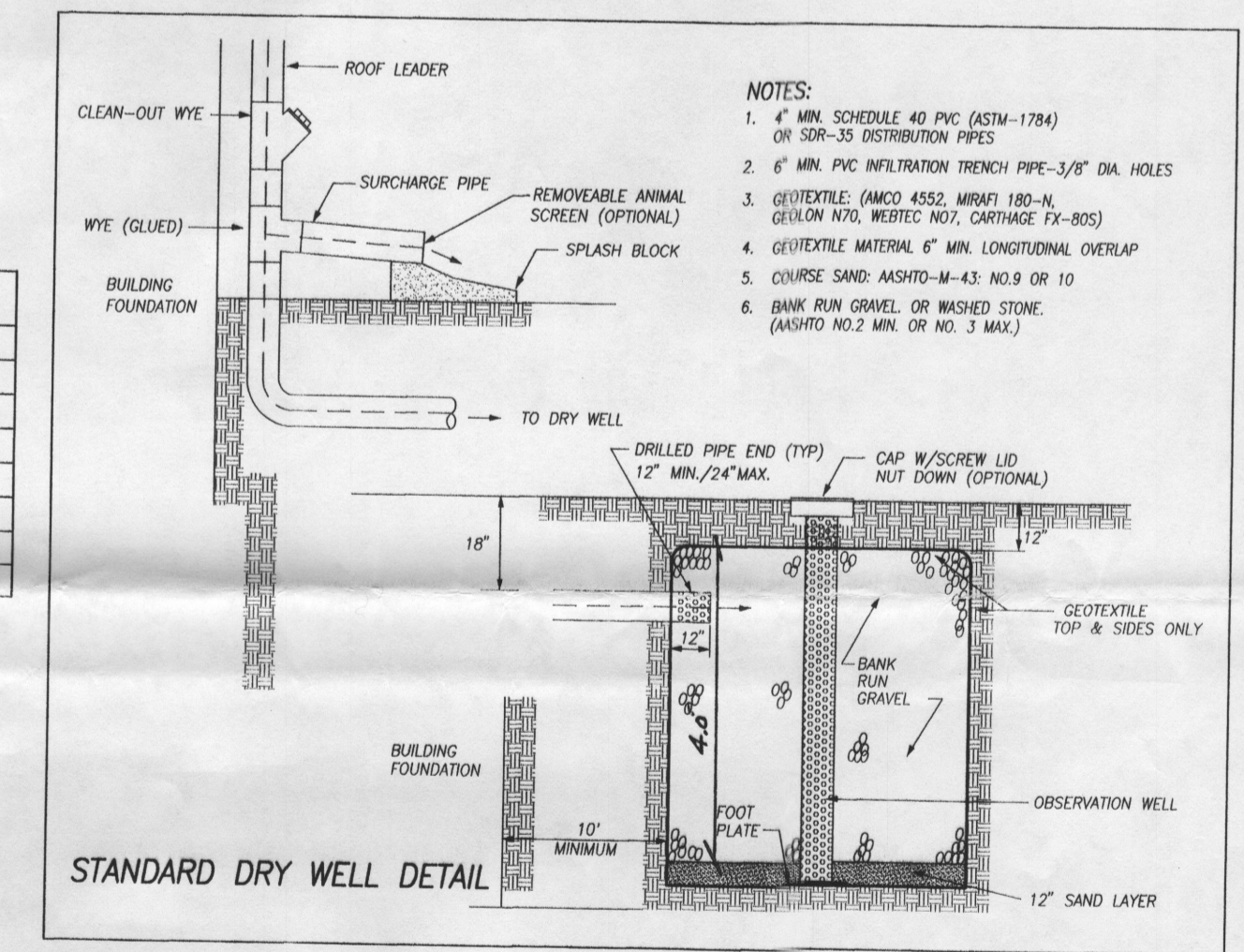
HOUSE DETAIL
 1"=30'



DRY WELL DATA

DOWN SPOUT (ROOF DRAIN)	DRYWELL No.	DRY WELL SIZE (4' DEPTH)	TOP OF OBSERVATION WELL	INVERT IN DRY WELL
1	1	5.0' X 5.0'	ELEV. = 549.0'	ELEV. = 547.17'
2	2	5.0' X 5.0'	ELEV. = 556.2'	ELEV. = 554.37'
3	3	4.0' X 5.0'	ELEV. = 557.0'	ELEV. = 555.17'
4	4	4.0' X 5.5'	ELEV. = 557.4'	ELEV. = 555.57'
5	5	5.0' X 5.5'	ELEV. = 556.7'	ELEV. = 554.87'
6	6	6.0' X 5.5'	ELEV. = 555.0'	ELEV. = 553.17'
7	7	5.0' X 5.5'	ELEV. = 548.4'	ELEV. = 546.57'

FOR CONSTRUCTION OF DRYWELLS REFER TO COUNTY DETAILS



- NOTES:
- 4" MIN. SCHEDULE 40 PVC (ASTM-1784) OR 3/4" DIA. DISTRIBUTION PIPES
 - 6" MIN. PVC INFILTRATION TRENCH PIPE-3/8" DIA. HOLES
 - GEOTEXTILE (AMCO 4552, MANTO 180-N, GELION N70, WETEC M07, CARTRIDGE FX-805)
 - GEOTEXTILE MATERIAL 6" MIN. LONGITUDINAL OVERLAP
 - COURSE SAND: AASHTO-M-43 NO.9 OR 10
 - BANK RUN GRAVEL OR WASHED STONE (ASTM D 2151 OR NO. 5 MAX.)

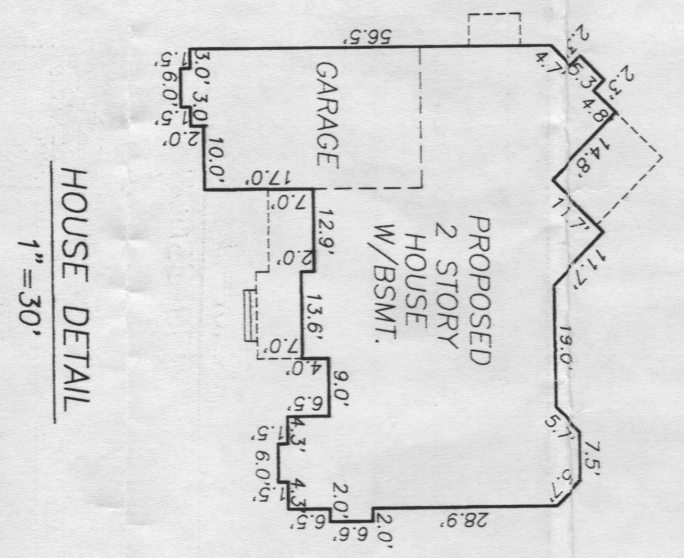
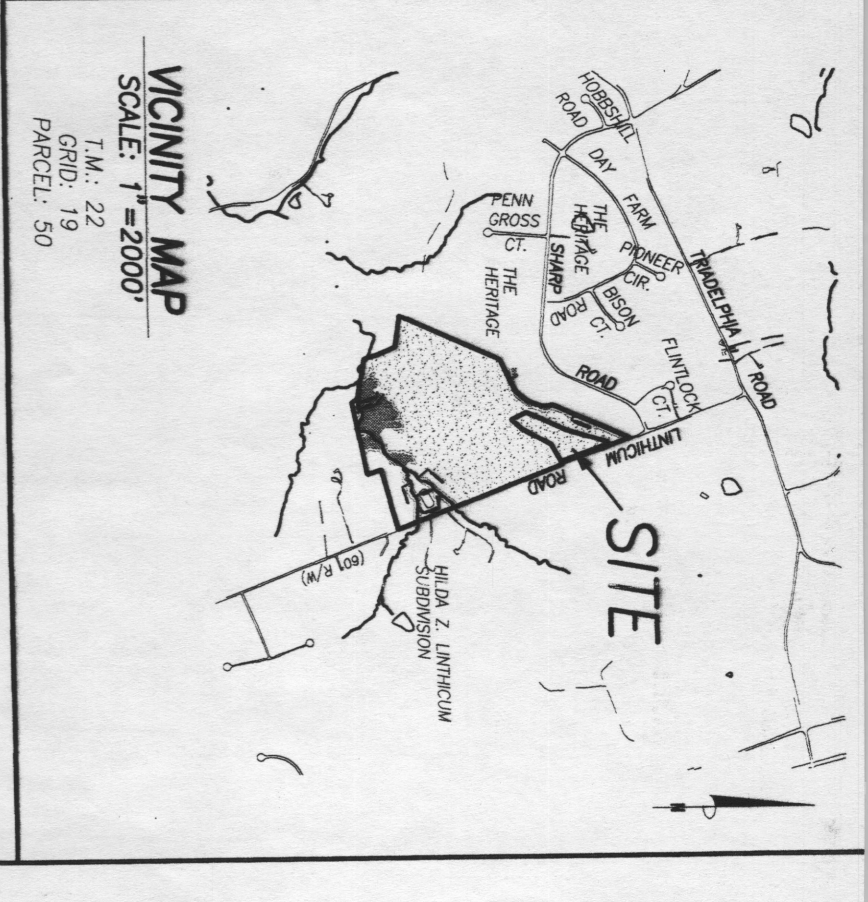
DATE: 5/20/05

REVISIONS:
 Septic Tanks, Septic Line

PLOT PLAN
LINTHICUM OAKS, L.L.C.
 PROPERTY
 SECOND TRACT
 Liber 7907 at Folio 277
 SITUATED ON THE WEST SIDE OF LINTHICUM ROAD
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1"=50' JANUARY, 2004

VANMAR ASSOCIATES, INC.
 Engineers Surveyors Planners
 310 South Main Street P.O. Box 328
 Mount Airy, Maryland 21771
 (301) 829-2890 (301)831-5015 (410) 549-2751

OWNER:
 LINTHICUM OAKS, L.L.C.
 C/O TRACY D. GRIFFIN
 4231 LINTHICUM ROAD
 DARTON, MARYLAND 21036
 (410) 531-3137



DRYING STRUT (ROOF DRAW)	DRY WELL NO.	DRY WELL SIZE (4\"/>			
1	1	5.0' X 5.0'	OBSERVATION WELL	ELEV. = 547.17	INVERT IN 6\"/>
2	2	5.0' X 5.0'	ELEV. = 548.0	ELEV. = 547.17	
3	3	5.0' X 5.5'	ELEV. = 548.2	ELEV. = 548.37	
4	4	4.0' X 5.5'	ELEV. = 557.0	ELEV. = 555.17	
5	5	5.0' X 5.5'	ELEV. = 557.4	ELEV. = 554.87	
6	6	6.0' X 5.5'	ELEV. = 556.7	ELEV. = 553.17	
7	7	5.0' X 5.5'	ELEV. = 548.4	ELEV. = 546.57	

- NOTES:
1. TOPOGRAPHY IS AERIAL FROM HOWARD COUNTY, MARYLAND.
 2. ACTUAL LENGTH AND NUMBER OF TRENCHES FOR PROPOSED SEPTIC SYSTEM PERMIT ISSUANCE.
 3. PROPOSED HOUSE IS A BEDROOM.
 4. LIMIT OF DISTURBANCE: (LOD) 27,227 SQ. FT.
 5. THE EXISTING WELLS SHOWN ON THIS PLAN HAS BEEN FIELD LOCATED BY VANMAR ASSOCIATES, INC. PROFESSIONAL LAND SURVEYORS AND ACCURATELY SHOWN.

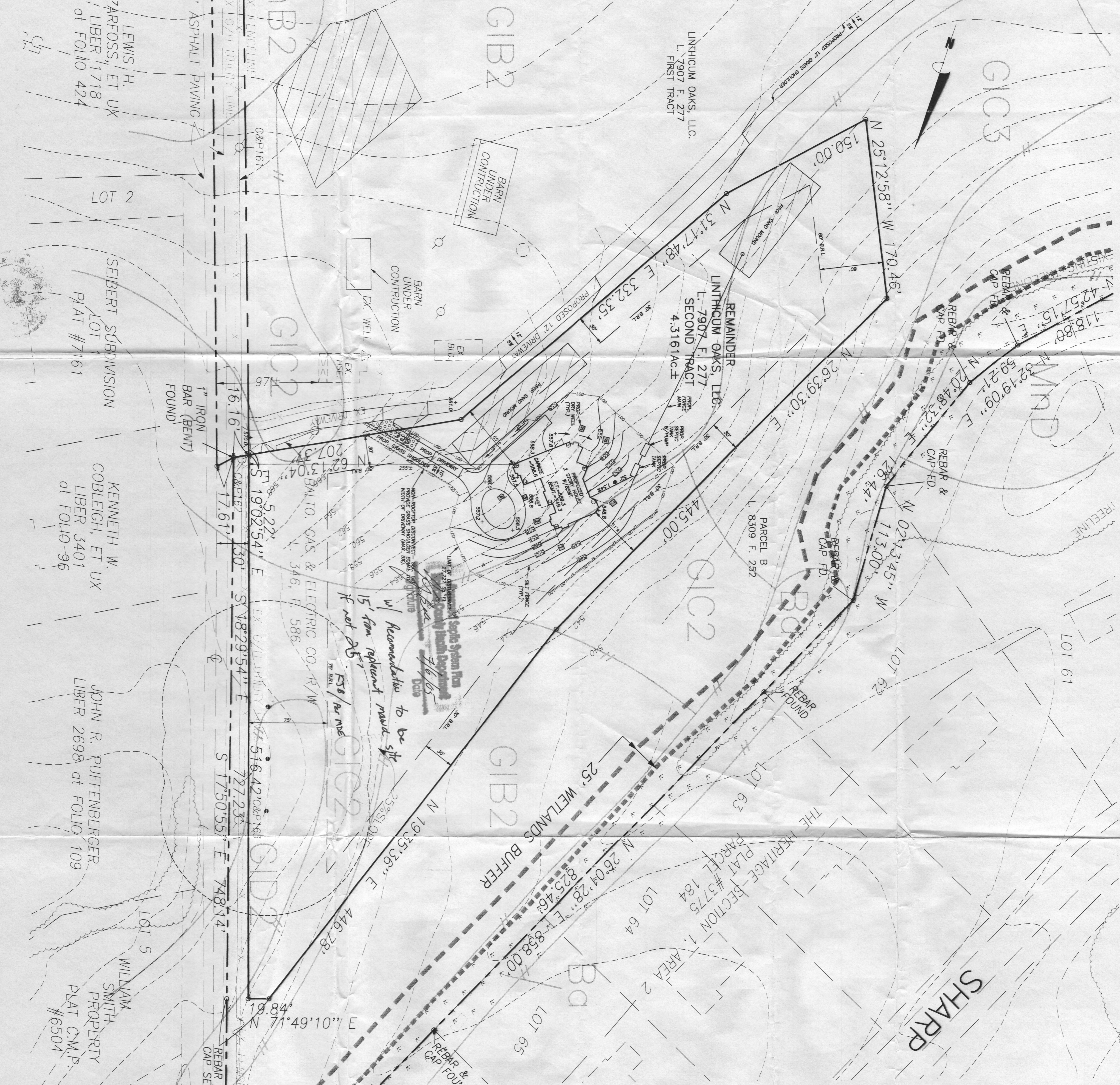
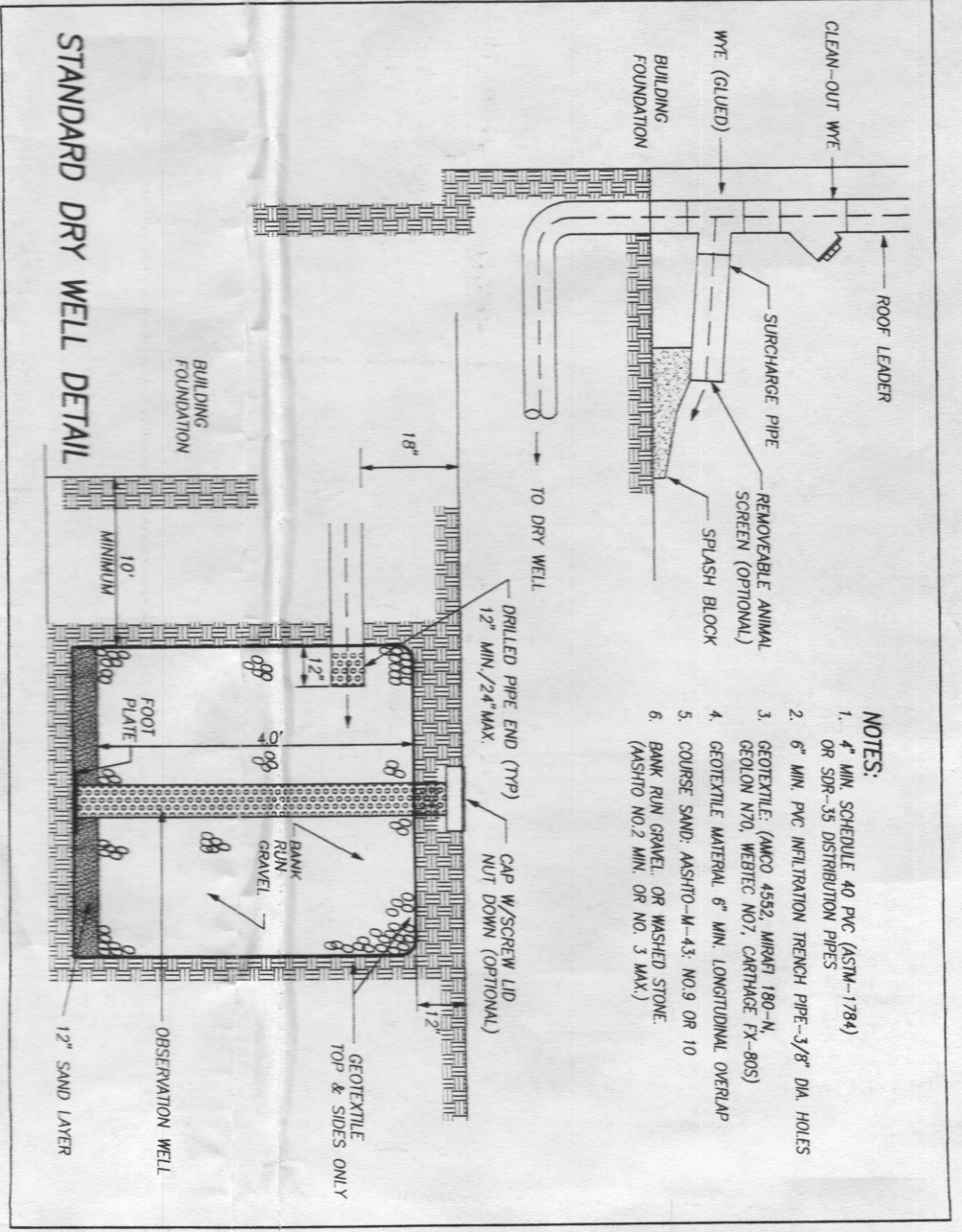
SEPTIC ELEVATIONS

PROPOSED HOUSE:
 EX. GND. ELEV. = 549.3
 FIN. FLOOR ELEV. = 549.3
 GAR. ELEV. = 558.6
 INV. OUT = 547.8

PROPOSED SEPTIC TANK:
 EX. GND. ELEV. = 549.0
 INV. IN = 547.0
 INV. OUT = 546.7

PROPOSED SEPTIC TANK W/PUMP:
 EX. GND. ELEV. = 549.0
 PROP. GND. ELEV. = 549.0
 INV. IN = 546.5
 INV. OUT = 546.25

PROPOSED SAND WOUND:
 EX. GND. ELEV. = 550.5



DATE: 5/20/05
 6/18/05

REVISIONS:
 Septic Tanks, Septic Line
 Replacement, Sand mound

PLAT PLAN
 LINTHICUM OAKS, L.L.C.
 SECOND TRACT
 Liber 7907 at Folio 277
 SITUATED ON THE WEST SIDE OF LINTHICUM ROAD
 FIFTH ELECTION DISTRICT
 HENRIETTA, MARYLAND
 SCALE: 1" = 50'
 JANUARY, 2004

VANMAR ASSOCIATES, INC.
 ENGINEERS & SURVEYORS
 510 South Main Street, 1751 Box 328
 P.O. Box 328
 (301) 529-2888 (301) 951-5018 (410) 548-2791

