

LAYOUT 9/10/10 INSP 4 10/26/10  
INSP 2 10/25/10 INSP 5 \_\_\_\_\_  
INSP 3 10/26/10 INSP 6 \_\_\_\_\_

ISSUE DATE: 8-24-10 **PERMIT - Repair** P S 33990  
APPROVAL DATE: 10/26/10 A repair

Tax ID # 1163094  
**ON-SITE SEWAGE DISPOSAL SYSTEM**  
**HOWARD COUNTY HEALTH DEPARTMENT**  
**BUREAU OF ENVIRONMENTAL HEALTH**

Robert Beall IS PERMITTED TO INSTALL  ALTER

ADDRESS: 8795 Veterans Hwy PHONE NUMBER: 410-987-5652  
Millersville 21108

SUBDIVISION: \_\_\_\_\_ LOT NUMBER: 3

ADDRESS: 5590 LANDING ROAD PROPERTY OWNER: FRED JOHNSON

SEPTIC TANK CAPACITY (GALLONS): 1,500 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): \_\_\_\_\_ COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 3 APPLICATION RATE: 0.8

SQUARE FOOTAGE OF HOUSE: 2,500 \* Failing System \*

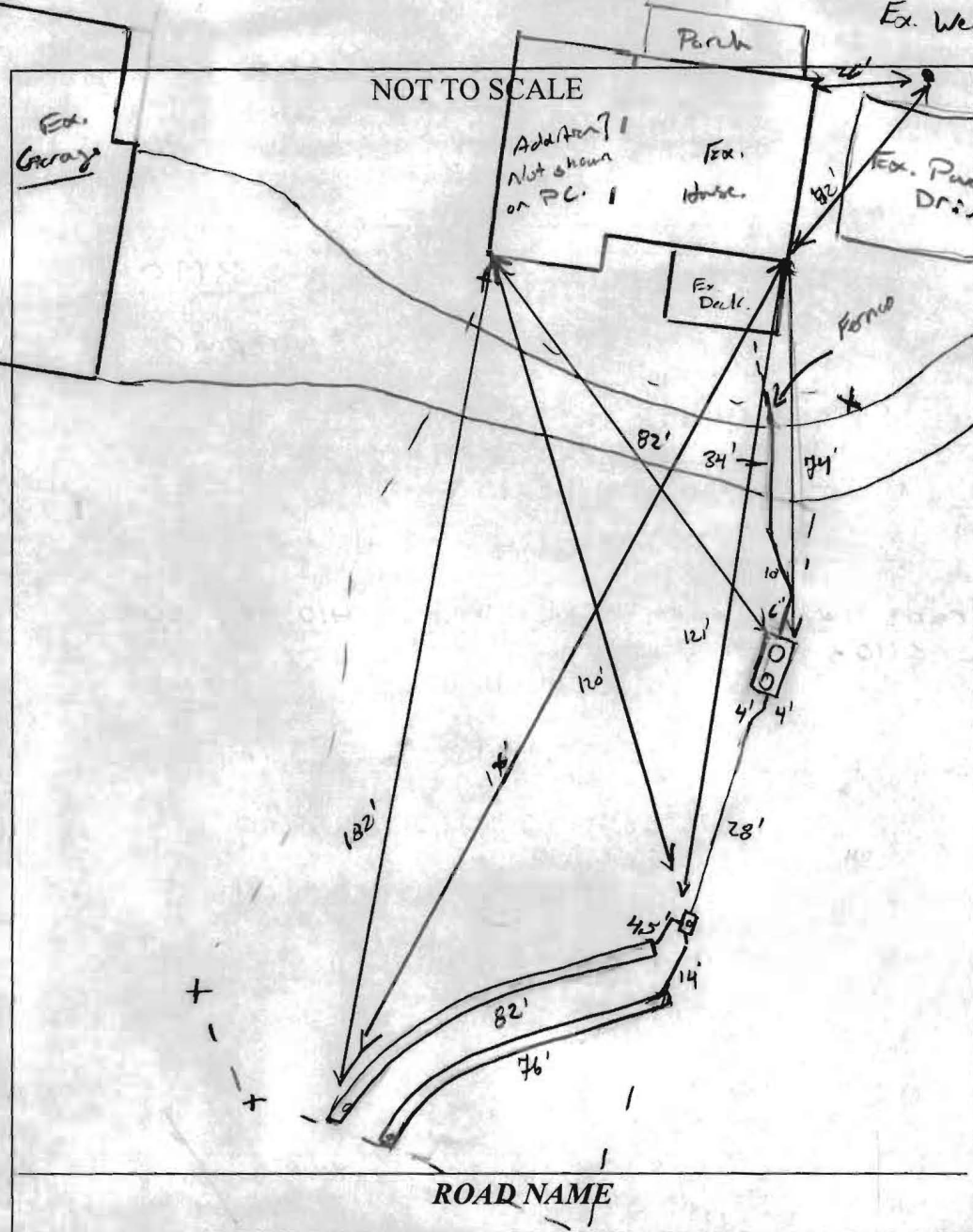
LINEAR FEET OF TRENCH REQUIRED: 160'

TRENCHES:	Trenches to be 2 feet wide. Inlet 5 feet below original grade. Bottom maximum depth 8 feet below grade. Effective area begins at 6 feet below original grade. 3 feet of stone <b>below</b> distribution pipe.
LOCATION:	A Layout inspection is required for correct placement and verification of trench locations.
NOTES:	Manhole access needs to be installed on the tank. Install observation pipes at trench ends. Pump and collapse ex. dry well.

PLANS APPROVED: HS DATE: 8/24/2010

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

**NEITHER THE HOWARD COUNTY COUNCIL OR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM**



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	4'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		158'
ABSORPTION AREA		316 + SW
DISTRIBUTION BOX LEVEL		1
DISTRIBUTION BOX BAFFLE		Yes
DISTRIBUTION BOX PORT		Yes

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
MANUFACTURER	Raystar
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	2'
BAFFLES	Yes
BAFFLE FILTER	—
MANHOLE LOC	Front/Rear
6" PORT LOC	6" to grade
WATERTIGHT TEST	—
SLOTTED	Yes
DATE ON LID	?
PUMP/SEPTIC TANK LEVEL	N/A
MANUFACTURER	—
CAPACITY	— GAL
SEAM LOC	—
TANK LID DEPTH	—
BAFFLES	—
BAFFLE FILTER	—
MANHOLE LOC	—
6" PORT LOC	—
WATERTIGHT TEST	—
SLOTTED	—
DATE ON LID	—

**PRE-CONSTRUCTION:**

9/10/10 Since subdivision of this lot is already in progress, I explained to the contractor that a repair can be performed but if the subdivision ever goes thru, he should have the "new" SRA for the proposed subdivision staked and placed; be installed in that new SRA. Homeowner was contacted on-site via phone call and decided to do just this, contacted to call HD when SRA is staked. (KW)

**INSTALLATION:**

10/25/10 SRA area staked per signed pc for subdivision. Trenches laid out near bottom of Septic area. Tank to be set 100' from existing well. (KW) (am) 10/26/10 Tank set. D box set. Bottom trench complete. Top 80% dig and stored. OK to continue. (KW) 10/26/10 (pm) SRA made. Ex. Driv and S.R. pumped & collapsed. All plumbing made. OK to cover all work. (KW)

FINAL INSPECTOR J. Wolf DATE OF APPROVAL 10/26/10

7/2/90 9:11 AM  
7-20-90  
2 pm

File

7/2/90 P.C.O. c.r.d

# PERMIT

P 46096  
A 43461  
DISTRICT 2nd  
DATE 4/27/91  
DATE SYSTEM APPROVED 7/20/90  
INSPECTOR C.B.D.

## SEWAGE DISPOSAL SYSTEM MARYLAND STATE DEPARTMENT OF HEALTH

**HOWARD COUNTY**  
BUREAU OF ENVIRONMENTAL HEALTH  
461-9933

INDEXED

WATER LOG SANITATION IS PERMITTED TO INSTALL  ALTER

ADDRESS 7311 WASHINGTON BLVD. PHONE 799-1942

SUBDIVISION Davis Subdivision ROAD 5580 ~~5558~~ Landing Road LOT 1

PROPERTY OWNER Fred C. Johnson

ADDRESS \_\_\_\_\_

~~EXCESSIVE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 10%.~~ Inground Swimming Pool

~~DAMAGE GRINDER XXXXX XXXXXXXXXXXXXXXXXXXX~~  
SEPTIC TANK CAPACITY 1250 GALLONS ← about 7/20/90 NUMBER OF BEDROOMS 4  
Serial # 61181

TRENCHES - 200 sq. ft. per bedroom. Trench to be 3 feet wide. Inlet 3½ feet below original grade. Bottom maximum depth 5½ feet below original grade.

Effective area begins at 3½ feet below original grade. 2 feet of stone below distribution pipe.

LOCATION - Trenches to be 100' from existing water well and to be located with a distribution box 90' off new left (222.9') property line and 80' from front (196.5') property line. Run trenches on contour or from left to right of property when facing lot from Landing Road.

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

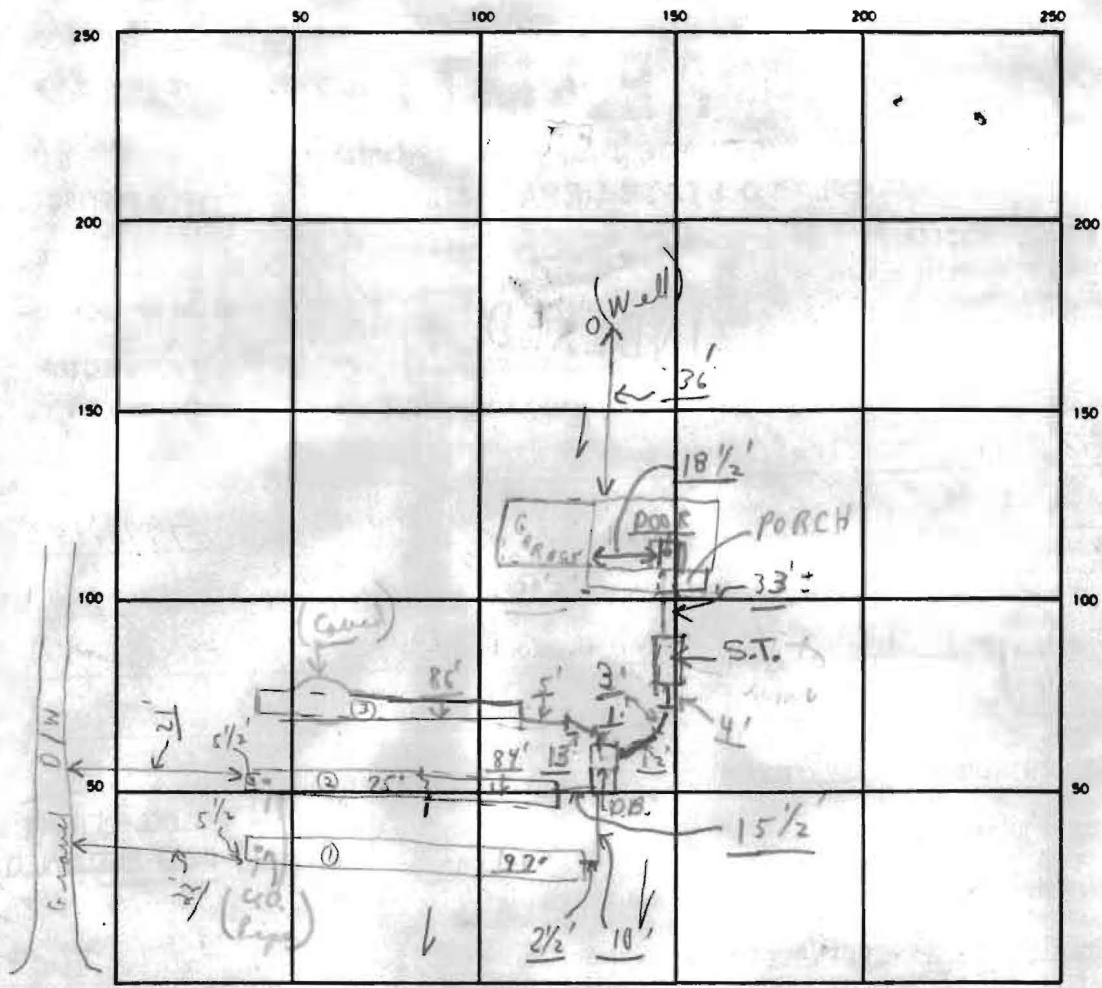
PLANS APPROVED BY Charles Streaker cm DATE 05/07/90

- 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 TRENCH(IES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(IES)
- 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 APROVAL ON THIS PERMIT**

\*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEMS.

43461



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

SEPTIC TANK LEVEL OK CLEANOUTS OK S.T. (Manhole) Type to be cemented

DISTRIBUTION BOX LEVEL OK (Baffle "asin")

DRAIN FIELD/TILE FIELD DEPTH 5 1/2 FT. TRENCH WIDTH 3 FT. INLET DEPTH 3 1/2 FT.

EFFECTIVE GRAVEL DEPTH 2 FT. TOTAL LENGTH 262 FT. (1 92' + 2 84' + 3 86')

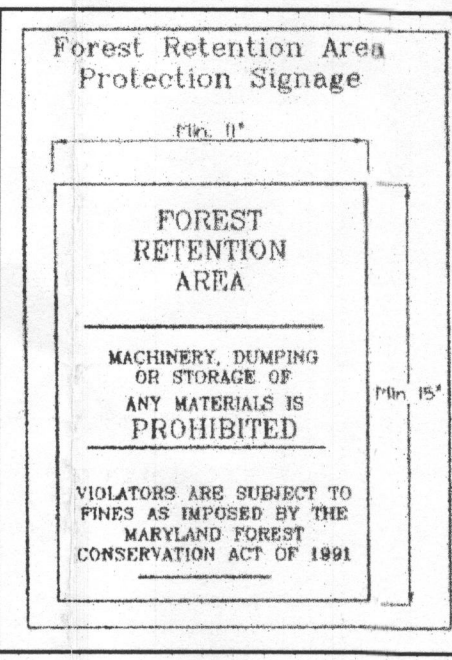
NUMBER OF TRENCHES 3 ONE 801 SQ. FT. / BOTTOM AREA

DRYWELL INSIDE DIAMETER \_\_\_\_\_ FT. EFFECTIVE DEPTH BELOW INLET \_\_\_\_\_ FT.

ABSORBENT AREA 801 SQ. FT.

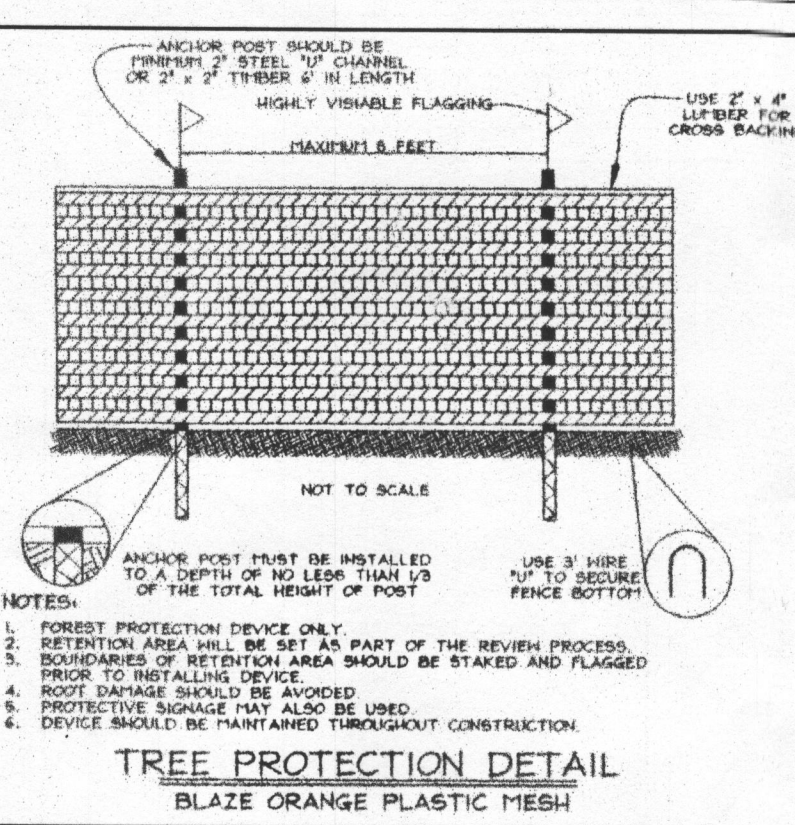
REMARKS P.M. 7/2/90 Partial - (1) trench closest to handing road needs paper, stones, & pipes at ends; (2) trench only partially dug. C.Bd - "HOLD FOR A CALL"; 7/20/90 P.M. - FINAL OK TO COVER AS FINISH. - TO CEMENT AT DIST. BOX AND PUT PAPER ON TRENCHES ETC. C.Bd. No work

7/20/90 No W.P.I. - Yet [C.Bd] 8/3 W.P.I. [C.Bd] 7/20/90 Inspector Charles Bryan Street Noted: slept into @ 2:30 P.M. waited on page 7.



- ### Forest Tree Protection and Management Notes
- Tree protection devices shall be installed prior to any grading or land clearing.
  - After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place a pre-construction meeting with the Howard County Inspector is required.
  - Provide maintenance to tree protection devices to maintain their integrity throughout the duration of the project.
  - Attachment of signs to tree protection devices to maintain their integrity throughout the duration of the project.
  - Any significant changes made to the Forest Conservation Plan shall be made with the prior approval of the Howard County Dept. Of Planning and Zoning.
  - No open burning within 100 feet of wooded areas is permitted.
  - Post construction phase.
    - Inspect existing trees around the perimeter of the site for signs of root or trunk damage and excessive soil compaction.
    - Remove dead or dying trees and evaluate for hazard tree removal.
    - All temporary forest protection devices will be removed after construction.
  - Following completion of construction, prior to use, the county inspector shall inspect the entire site for compliance with this Forest Conservation Plan.
    - A licensed Arborist or Forester should be retained for this service as needed.

- ### Soil Protection Zone Notes
- The Soil Protection Zone shall include all areas contained inside the Limit of Disturbance.
  - Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater.
  - No construction activity is permitted within the Soil Protection Zone.
  - If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning details, shown on this plan.
  - Root pruning shall occur prior to the beginning of construction.
  - Where the Soil Protection Zone must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another method approved by the ERI Forest Conservation Professional.
  - Prior to construction, the Limits of Disturbance shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal.
  - Tree maintenance and removal shall be undertaken by a qualified MID Tree Expert to ensure damage to surrounding trees is minimized.
  - Brush and limbs removed for construction shall be chipped and spread at the edge of the Soil Protection Zone to a depth to exceed 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.



LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
3	44,858 sq. ft.	5,556 sq. ft.	39,302 sq. ft.
4	61,233 sq. ft.	12,494 sq. ft.	48,739 sq. ft.

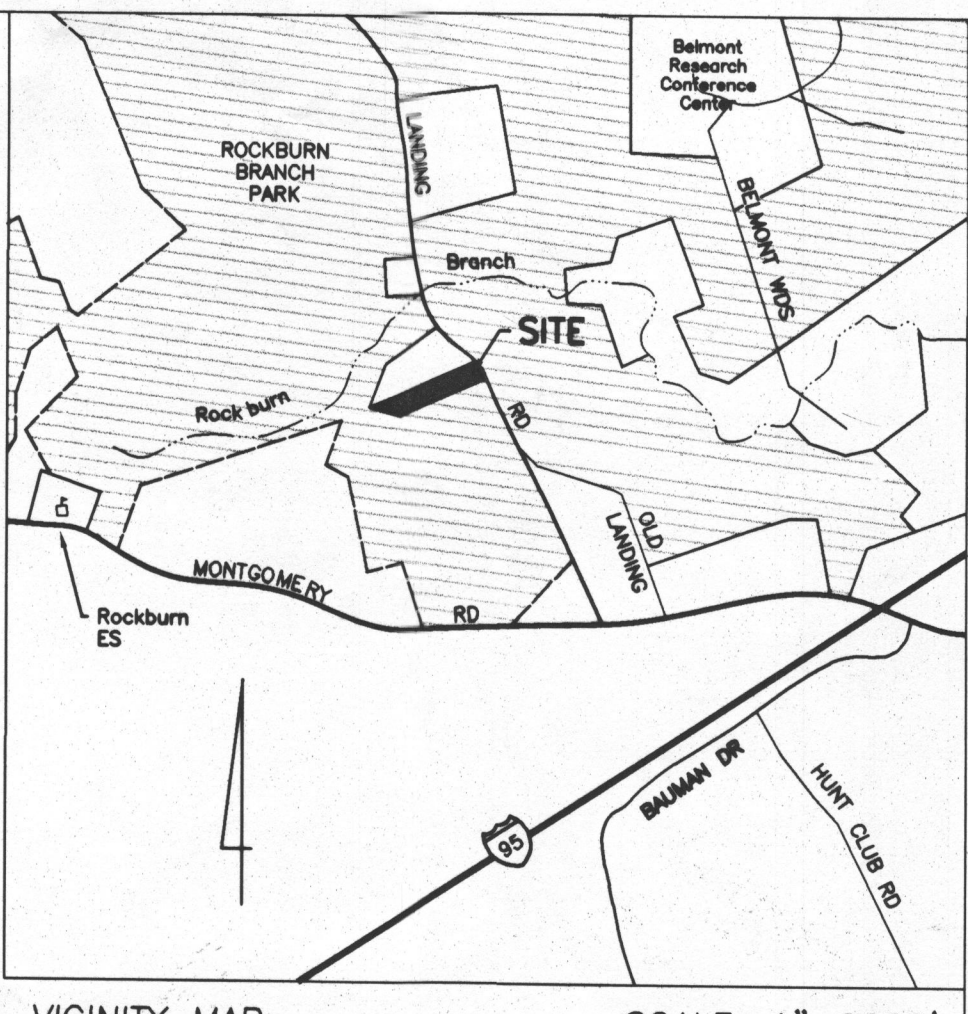
### LANDSCAPE SCHEDULE A LOT 4

LANDSCAPE TYPE	A
LINEAR FEET OF PERIMETER	2071.0' FLAGSTEM / LOT
NON FLAGSTEM	1031.0'
CREDIT FOR EXISTING VEGETATION	4
NUMBER OF TREES REQUIRED	15
SHADE TREES	10
EVERGREEN TREES	5
TOTAL NUMBER OF TREES PROVIDED/EXISTING	17
SHADE TREES EXISTING	4
SHADE TREES PROVIDED	13
EVERGREEN TREES	0
PERIMETER 1	448.36'
PERIMETER 2	204.29'
PERIMETER 3	58.00'
PERIMETER 4	245.00'

NOTE: PLANTING IS NOT POSSIBLE THROUGHOUT ENTIRE PIPESTEM BECAUSE OF AN EXISTING DRIVEWAY.

### LANDSCAPING PLANT LIST

QTY	KEY	NAME	SIZE
13	⊙	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.



VICINITY MAP SCALE: 1"=2000'

- ### GENERAL NOTES
- TAX MAP: 31 PARCEL: 237
  - SUBJECT PROPERTY ZONED: R-20 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN.
  - THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED JANUARY 2004, BY LANDSIGN, INC.
  - MARYLAND STATE GRID SYSTEM COORDINATE VALUES BASED ON HOWARD COUNTY TRAVERSE POINTS 2745001 & 2846001.
  - PREVIOUS PLAT SUBJECT TO WP 89-97, SECTION WAVED - 16.113.F.7, WAYER APPROVED MARCH 9, 1989. WP 89-97 ALLOWS DIRECT DRIVEWAY ACCESS TO A MINOR COLLECTOR ROAD (LANDING ROAD).
  - ⊙ DENOTES AN IRON PIPE OR IRON BAR
  - DENOTES A CONCRETE MONUMENT
  - BRL DENOTES A BUILDING RESTRICTION LINE
  - SURVEY WORK AND DOCUMENTS ARE TO BE PERFORMED IN CONFORMANCE WITH SUBTITLE 13, BOARD OF PROFESSIONAL LAND SURVEYORS, 09.13.06 STATE OF MARYLAND MINIMUM STANDARDS OF PROFESSIONAL PRACTICE.
  - NO BURIAL GROUNDS OR CEETERIES EXIST ON-SITE.
  - NO HISTORIC DISTRICTS ARE ON OR ADJACENT TO THIS SITE. SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
  - AN ENVIRONMENTAL STUDY WAS PERFORMED IN JANUARY, 2005 BY MCARTHY AND ASSOC. THERE ARE NO WETLANDS ON THE SITE.
  - DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    - WIDTH - 12' (14' SERVING MORE THAN 1 RESIDENCE-18' PROV).
    - SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN).
    - GEOMETRY - MAX. 15:1 GRADE, MAX. 10' X GRADE CHANGE AND MIN. 45' TURNING RADIUS.
    - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (±25 LOADING).
    - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
    - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
  - FOR THE FLAG OF PIPESTEM LOTS, REFUSE COLLECTION, SHOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE.
  - LANDSCAPING FOR LOT 4 IS PROVIDED BY ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN ON FILE WITH THIS PLAT IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. SHADE TREES ON LOT 4 IN THE AMOUNT OF \$ IS DEFERRED UNTIL GRADING PERMIT APPLICATION AFTER SITE DEVELOPMENT PLAN APPROVAL. LOTS 1 AND 3 ARE EXEMPT SINCE THEY HAVE EXISTING RESIDENCES WHICH ARE TO REMAIN.
  - FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL SHALL BE FULFILLED BY THE PLACEMENT OF 1.13 ACRES OF EXISTING FOREST INTO A RETENTION EASEMENT WHICH MEETS THE BREAK EVEN POINT FOR THIS SITE.
  - THERE ARE EXISTING DWELLINGS LOCATED ON LOTS 1 AND 3 (PREVIOUS LOT 2) TO REMAIN (JOE DAVIS SUBDIVISION 89-193). NO NEW BUILDINGS, EXTENSIONS, OR ADDITIONS TO THE EXISTING DWELLINGS ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
  - A USE-IN-COMMON MAINTENANCE AGREEMENT FOR LOTS 1, 3, AND 4 SHALL BE REQUIRED SIMULTANEOUSLY WITH THIS PLAT IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MD.

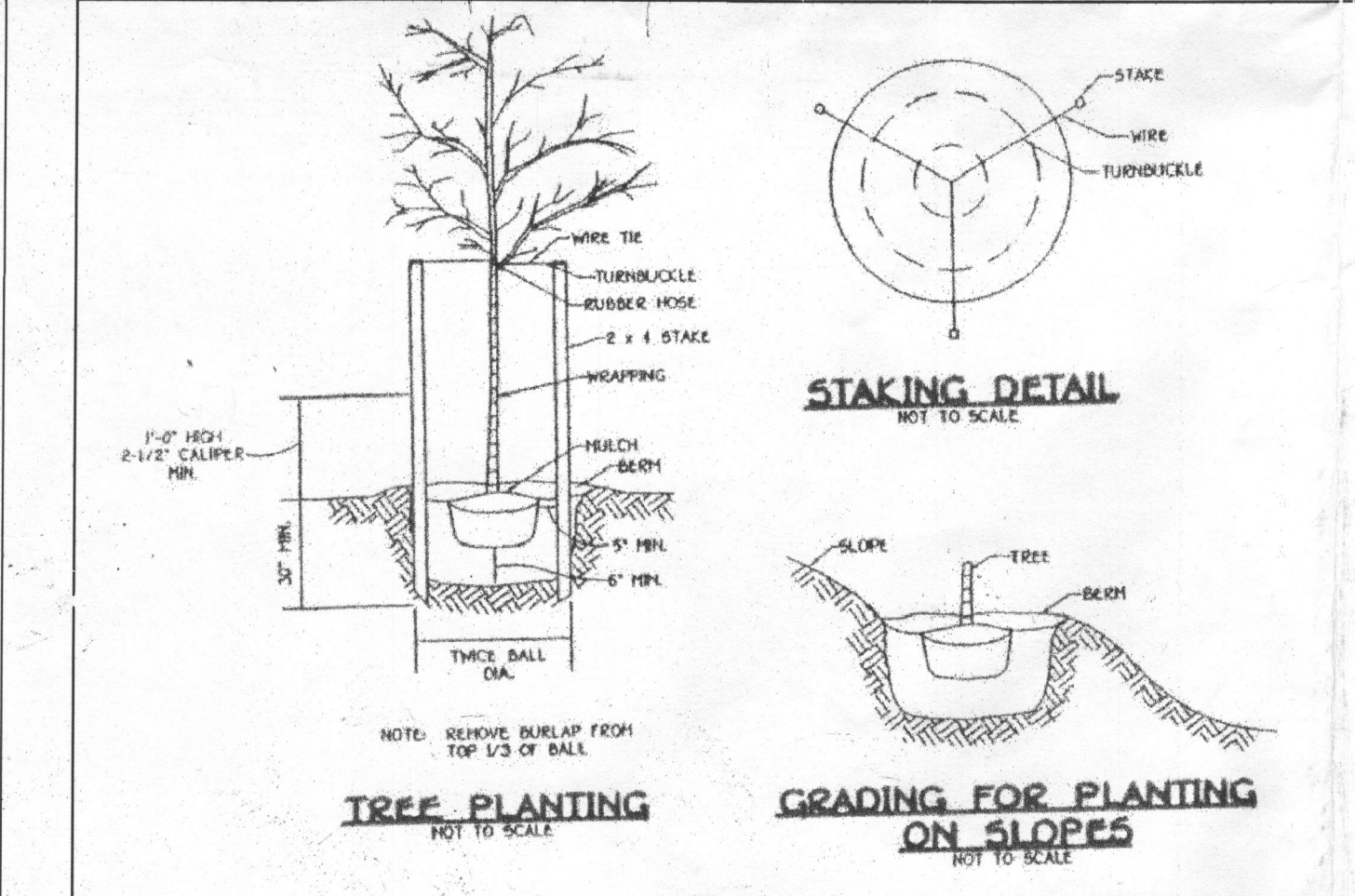
- ### LEGEND
- FOREST CONSERVATION EASEMENT
  - STEEP SLOPES 15% TO 25%
  - SEVERE SLOPES 25% OR GREATER
  - FOREST RETENTION AREA PROTECTION SIGNAGE

RETENTION FOREST CONSERVATION EASEMENT AREA: 1.21 ACRES or 52,501 SQ. FT.

NOTE\*  
OPEN SPACE LOT TO BE DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS

### CURVE DATA

No	Rad	Delta	Arc	Tan	Chord
1	970.00'	09°47'32"	165.76'	83.08'	S 43° 43' 03" E 165.56'
2	970.00'	01°30'53"	25.64'	12.82'	S 38° 03' 51" E 25.64'
3	970.00'	01°30'21"	25.50'	12.75'	S 36° 32' 51" E 25.49'



### FOREST CONSERVATION WORKSHEET

BASIC SITE DATA

GROSS SITE AREA	4.80
AREA WITHIN THE 100 YEAR FLOOD PLAIN	0.00
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL	N/A
NET TRACT AREA	4.80
LAND USE CATEGORY	MDR

INFORMATION FOR CALCULATIONS

NET TRACT AREA	4.80
REFORESTATION THRESHOLD (25% X 4.80)	1.20
AFFORESTATION MINIMUM (20% X 4.80)	0.96
EXISTING FOREST ON NET TRACT AREA (FOREST TO BE CLEARED)	1.13
FOREST AREAS TO BE RETAINED	1.13

NOTE\* EXISTING FOREST EXCEEDS AFFORESTATION MINIMUM AND NO CLEARING OF EXISTING FOREST RESOURCES IS PROPOSED, NO REFORESTATION IS REQUIRED. NO FURTHER CALCULATIONS ARE NEEDED

### FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA ACRES	SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX	HABITAT VALUE	EXISTING VEGETATION (TYPE AND APPROX %)	SIZE AVG.	AGE	GENERAL CONDITIONS ENVIRONMENTS	FOREST AREA IN SENSITIVE	EX WOODS
F-1	UPLAND HARDWOODS	1.13	BaB2 BaC2 SfC2 SfD2	MIXED UPLAND HARDWOODS	65-74 65-74 N/A N/A	GOOD GOOD GOOD GOOD	WHITE PINE 8-12 SCATTERED OAK, CHERRY, ASPEN 1%	15-24 3-12	10-30	GOOD		NOTE* NO FOREST RESOURCES WILL BE DISTURBED
L-1	LAWN	3.67	BaB2 BaC2 SfC2 SfD2 SfD2 EVC	MIXED UPLAND HARDWOODS	65-74 65-74 N/A N/A N/A N/A	GOOD GOOD GOOD FAIR POOR		N/A	N/A	N/A	STEEP SLOPES	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

DATE	REVISIONS
4-28-05	REV. PER HOWARD CO. COMMENTS



**Landesign**  
ENGINEERS \* SURVEYORS \* PLANNERS  
2905 MITCHELLVILLE ROAD SUITE NO. 111  
BOWIE, MARYLAND 20716  
(301) 249-8802

OWNER/DEVELOPER  
Fred Johnson  
5590 Landing Road  
Elkridge, Maryland 21075  
Phone 410-799-2126  
Fax 410-799-0282

SUPPLEMENTAL PLANS- TOPOGRAPHY, PERIMETER LANDSCAPING, HOUSE LOCATION SIMPLIFIED FOREST STAND DELINEATION PLAN, AND FOREST CONSERVATION PLAN

A RESUBDIVISION OF LOT 2 JOE DAVIS SUBDIVISION 89-193  
**HILLTOP ACRES**  
Tax Map 31 Parcel 237  
1st Election District  
Howard County, Maryland

DEVELOPER'S / BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THIS PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF CERTIFICATION OF LANDSCAPE INSTALLATION WE WILL SUBMIT AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *[Signature]* DATE: 4-29-05

DATE: JAN, 2005	SCALE: 1"=50'
DESIGN BY: JF	DRAWN BY: GN
CHECKED BY: JF	SHEET NO: 1 of 1
PERMIT NO:	JOB NO.: 03-057