

Step 4 - Design Summary

Practice	Location	Area Treated	P ₁	P ₂	Volume (ESDV)
Sheetflow to Conservation Areas	Lot 1	1.64	1.0	0.180	0.03 Ac-ft
Sheetflow to Conservation Areas	Lot 2	1.67	1.0	0.180	0.02 Ac-ft

Total Provided = 0.050 Ac-ft
EDSV Required = 0.05 Ac-ft

GENERAL NOTES:

- OWNER: PASQUALE L. & JOSEPHINE A. TATA
DEED REFERENCE: LIBR 556 FOLIO 555
DATE: APRIL 26, 1971
GRANTOR: CHARLES W. SLAGLE
- TAX MAP: 13 GRID: G PARCEL: 15G
- NEAREST POTABLE WATER SUPPLY: MT. AIRY DISTANCE: 4.5 MILES ±
- 100-YEAR FLOODPLAIN SHOWN HEREON BASED ON A FLOODPLAIN STUDY BY VANMAR ASSOCIATES, NOVEMBER 2010.
- TOPOGRAPHY: FROM HOWARD COUNTY GIS, SUPPLEMENTED BY FIELD LOCATIONS BY VANMAR ASSOCIATES. CONTOUR INTERVAL IS 2 FEET. VERTICAL DATUM IS NAVD83.
- THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON.
- THE DISTING WELLS SHOWN ON THIS PLAN HAVE BEEN FIELD LOCATED BY VANMAR ASSOCIATES AND ACCURATELY SHOWN.
- SOIL TYPES: GLENUG (Gc, Gg) GLENVILLE (Gv) HOWARD COUNTY SOILS MAP GRID NO. 294.
- ZONING DISTRICT: RC-DEO
- ALL WELLS TO BE DRILLED PRIOR TO FINAL PLAN SIGNATURE. IT IS THE DEVELOPER'S RESPONSIBILITY TO SCHEDULE THE WELL DRILLING PRIOR TO THE FINAL PLAN SUBMISSION. IT WILL NOT BE CONSIDERED "GOVERNMENT DELAY" IF THE WELL DRILLING HOLDS UP THE HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAN.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA AS RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ANY CHANGES TO A PRIVATE SEPTIC AREA WILL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- STORMWATER MANAGEMENT WILL BE PROVIDED BY UTILIZING THE NONSTRUCTURAL PRACTICE, N-3 SHEETFLOW TO CONSERVATION AREAS. THIS CONSERVATION AREA CONSISTS OF THE AREA WITHIN THE STREAM BUFFER AND FLOODPLAIN EASEMENT, BEING 100' IN TOTAL WIDTH, THIS AREA QUALIFIES FOR 1/2 OF STORMWATER TREATMENT WHICH SATISFIES THE REQUIRED ESDV AND REPLACES THE RCN FOR WOODS IN GOOD CONDITION FOR THE PROPOSED LOTS. INFILTRATION BERMS WILL BE UTILIZED TO ENSURE SHEETFLOW INTO THE CONSERVATION AREAS.
- THIS PLAN IS EXEMPT FROM FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1.202(b)(viii) OF THE FOREST CONSERVATION MANUAL SINCE IT IS A MINOR SUBDIVISION CREATING ONE ADDITIONAL LOT WITH NO FURTHER SUBDIVISION POTENTIAL.
- PERMETER LANDSCAPING FOR LOTS 1 & 2 IS PROVIDED IN ACCORDANCE WITH SECTION 16.1.202(b)(viii) OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. LANDSCAPE SURETY IN THE AMOUNT OF \$6,000.00 FOR 20 TREES (\$300.00 EACH), \$5,000 PER LOT WILL BE POSTED WITH THE BUILDERS GRADING PERMIT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STRIPES OR OTHER BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
- FOR FLAG OR 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 AND NOT THE PIPESTEM LOT INDICATED THEREON.
- THERE ARE NO 30' SPECIMEN TREES ON THE SUBJECT PROPERTY.
- THERE ARE NO KNOWN WETLANDS LOCATED ON THIS SITE PER A WETLAND DELINEATION PERFORMED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. IN OCTOBER 2010.
- THERE ARE NO KNOWN CEMETERIES OR HISTORIC STRUCTURES ON THE SUBJECT PROPERTY.
- WAIVER PETITION WP-11-021 FOR A WAIVER FROM SECTION 16.1.202(b)(viii) WAS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING ON APRIL 4, 2011. SUBJECT TO THE FOLLOWING CONDITIONS:
1) COMPLIANCE WITH ALL COMMENTS GENERATED WITH REVIEW OF THE SUBDIVISION PLAN F-11-042.
2) COMPLIANCE WITH COMMENTS FROM DED DATED 1/31/11.
3) THE BUILDING SHALL MAINTAIN A MIN. 35' SETBACK FROM THE EDGE OF THE EXISTING 50' STREAM BANK BUFFER AS SHOWN ON THE WAIVER PLAN.
4) NO GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW STRUCTURES ARE PERMITTED WITHIN THE STREAM AND 50' STREAM BUFFER OFFSET FOR THE REQUIRED WATER LINE CONNECTIONS TO THE WELLS LOCATED ON THE NORTH SIDE OF THE PROPERTY.
- THE APPROVED WELL SITES FOR LOTS 1 & 2 ARE LOCATED ON THE NORTH SIDE OF THE FLOODPLAIN. INSTALLATION OF THE WATER LINE CONNECTING THE WELLS OF THE PROPOSED HOUSES SHALL BE INSTALLED BY A TRENCHING MACHINE. ANY DISTURBANCE CAUSED BY THE NECESSARY TRENCHING INSTALLATION OF THE WELL LINES IS CONSIDERED NECESSARY UNDER SECTION 16.1.116(C) AND SHALL BE MAINTAINED BY THE USE OF A TRENCHING MACHINE WITH NO RECORDING OF ANY AREA WITHIN THE BUFFER LIMITS.
- AN ENVIRONMENTAL CONCEPT PLAN EC-11-040 WAS APPROVED BY THE DEPARTMENT OF PLANNING & ZONING ON APRIL 7, 2011. NO FURTHER WAIVERS ARE REQUIRED.

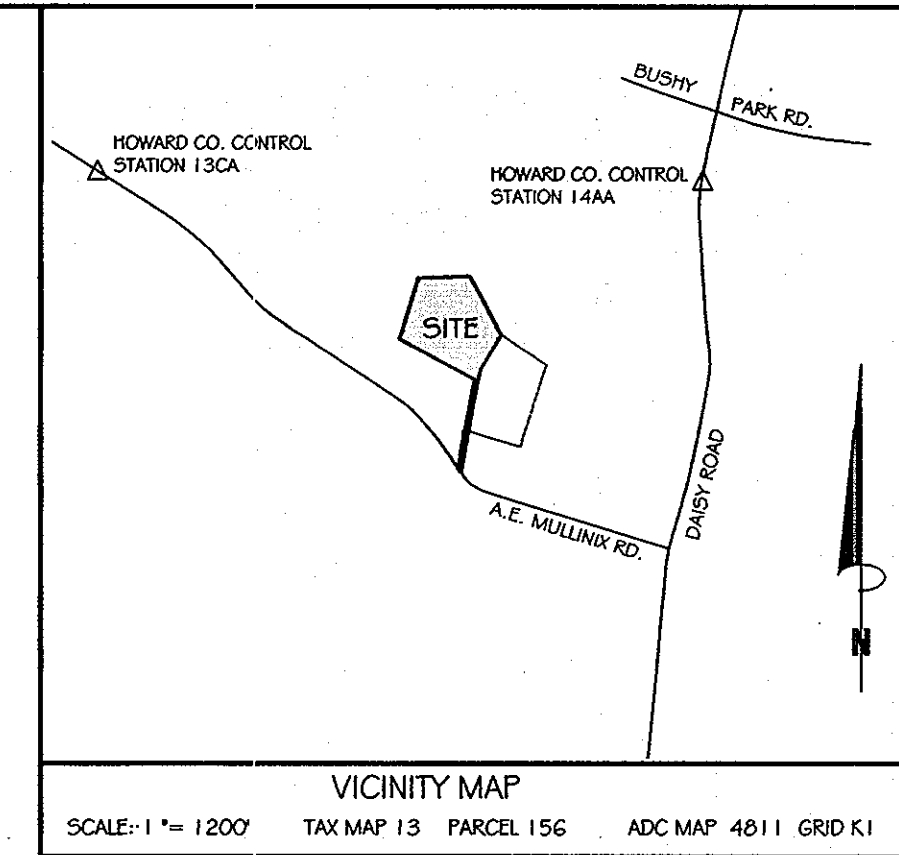
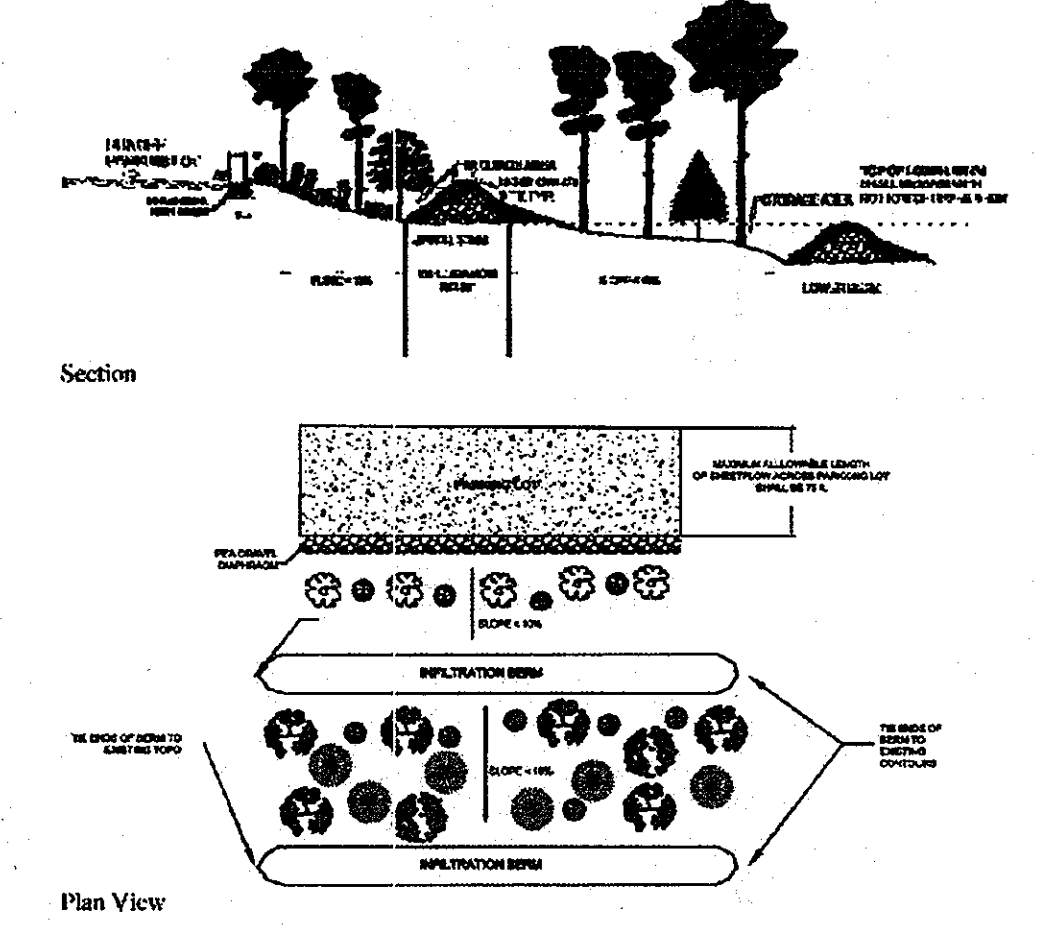


Figure S.12 Infiltration Berms

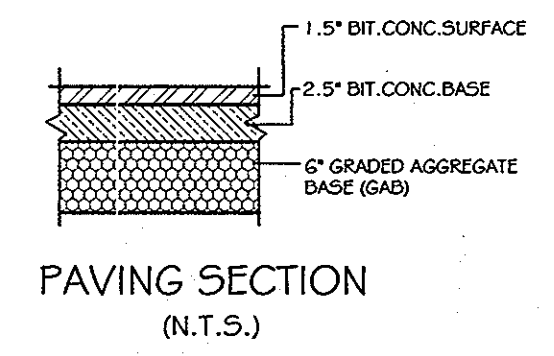


Construction Criteria:

- The following items should be addressed during construction of projects with infiltration berms:
- Erosion and Sediment Control:** Final grading for infiltration berms should not take place until the surrounding site is stabilized. If this cannot be accomplished, runoff from disturbed areas shall be diverted around proposed locations.
 - Soil Compaction:** Soils within storage areas shall not be compacted.
 - Soil Compaction:** Excavation should be conducted in dry conditions with equipment located outside of the practice to minimize bottom and sidewall compaction. Construction shall be performed with lightweight, wide-tracked equipment to minimize disturbance and compaction. Existing soils in the location of proposed berms should be identified to maximize infiltration.
 - Gravel and Soil Media:** See Appendix R.4.B for material specification for the gravel and planting soil media.
 - Landscape Installation:** The optimum planting time is during the Fall. Spring is also acceptable but may require watering.
 - Implementation with Other Practices:** When infiltration berms are incorporated into a system using other practices (e.g., Disconnection of Non-Roofing Runoff), the Construction Criteria for that practice shall also be considered.

Inspection:

- Regular inspections shall be made during the following stages of construction:
- During placement of gravel media, and soil.
 - Upon completion of final grading and establishment of permanent stabilization.



DECLARATION OF COVENANTS CHART

LOT	ADDRESS	FACILITIES
1	15950 A.E. MULLINIX RD.	INFILTRATION BERM (2)
2	15970 A.E. MULLINIX RD.	INFILTRATION BERM (1)

OWNERS
PASQUALE & JOSEPHINE TATA
15940 A.E. MULLINIX ROAD
WOODBINE, MD 21797
443-722-3389

APPROVED
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Neil S. ... 9/08/11
CHIEF, DIVISION OF LAND DEVELOPMENT
Chad ... 9-7-11
CHIEF, DEVELOPMENT ENGINEERING DIVISION

PERCOLATION TEST SITE: ⊕

EXISTING WELL: ●

PROPOSED HOUSE SITE: □

PROPOSED WELL SITE: ○

25% OR GREATER SLOPES (THERE ARE NO 25% SLOPES ON THE SUBJECT PROPERTY)

AVERAGE ENTRANCE SLOPES < 5%

PERCOLATION TEST SITE: ⊕

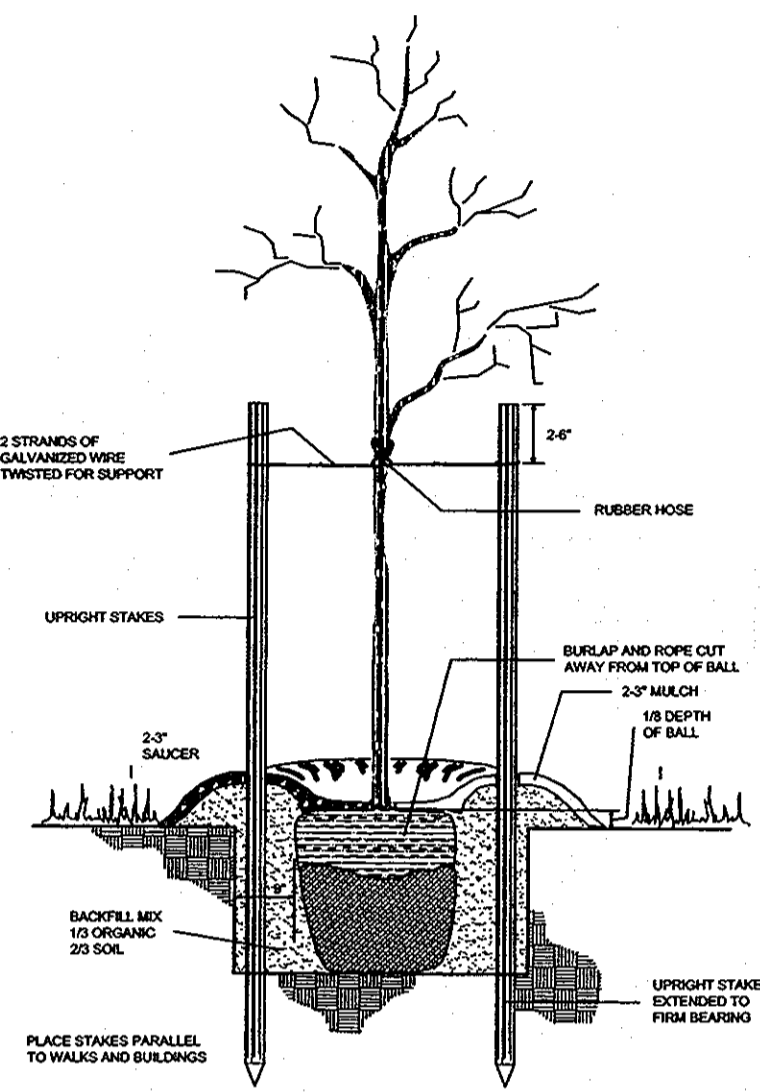
PUBLIC 100-YEAR FLOODPLAIN, DRAINAGE & UTILITY EASEMENT

STATE OF MARYLAND PROFESSIONAL LAND SURVEYOR
No. 21087
10/25/11

SUPPLEMENTAL PLAN TOPOGRAPHY / GRADING / SOILS / SWM SCENIC ROAD EXHIBIT TATA SUBDIVISION

LOTS 1 AND 2
SITUATED ON A.E. MULLINIX ROAD
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' OCTOBER 2010 SHEET 1 OF 2

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
Fax (301) 831-5603 ©Copyright, Latest Date Shown
County File # F-11-042



PLANTING INSTALLATION DETAIL (N.T.S.)

SCHEDULE A PERIMETER LANDSCAPE EDGE					
CATEGORY	ADJACENT TO PERIMETER PROPERTIES				
	P1-A/322'	P2-A/412'	P3-A/315'	P4-A/537'	P5-A/409'
LANDSCAPE TYPE	N/A	N/A	N/A	N/A	N/A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	N/A	N/A	N/A	N/A	N/A
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES 322'	YES 380'	NO	YES 145'	YES 20'
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED					
SHADE TREES	0	1	0	0	0
EVERGREEN TREES	0	0	0	0	0
SHRUBS	0	0	0	0	0
NUMBER OF PLANTS PROVIDED					
SHADE TREES	0	1	0	0	0
EVERGREEN TREES	0	0	0	0	0
SHRUBS	0	0	0	0	0
OTHER TREES (2:1 SUBSTITUTION)	0	0	0	0	0
SHRUBS (10:1 SUBSTITUTION)	0	0	0	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)					

PLANTING SCHEDULE					
SYMBOL	QTY.	BOTANICAL NAME COMMON NAME	SIZE	CONDITION	SPACING
10	7	Acer rubrum 'October Glory' / October Glory Red Maple	2.5-3" CAL.	B&B	AS SHOWN
10	6	Quercus rubra / Northern Red Oak	2.5-3" CAL.	B&B	AS SHOWN
10	14	Thuja plicata / Giant Arborvitae 'Green Giant'	5' - 6' HT.	B&B	AS SHOWN

DEVELOPER'S/BUILDER'S CERTIFICATE

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

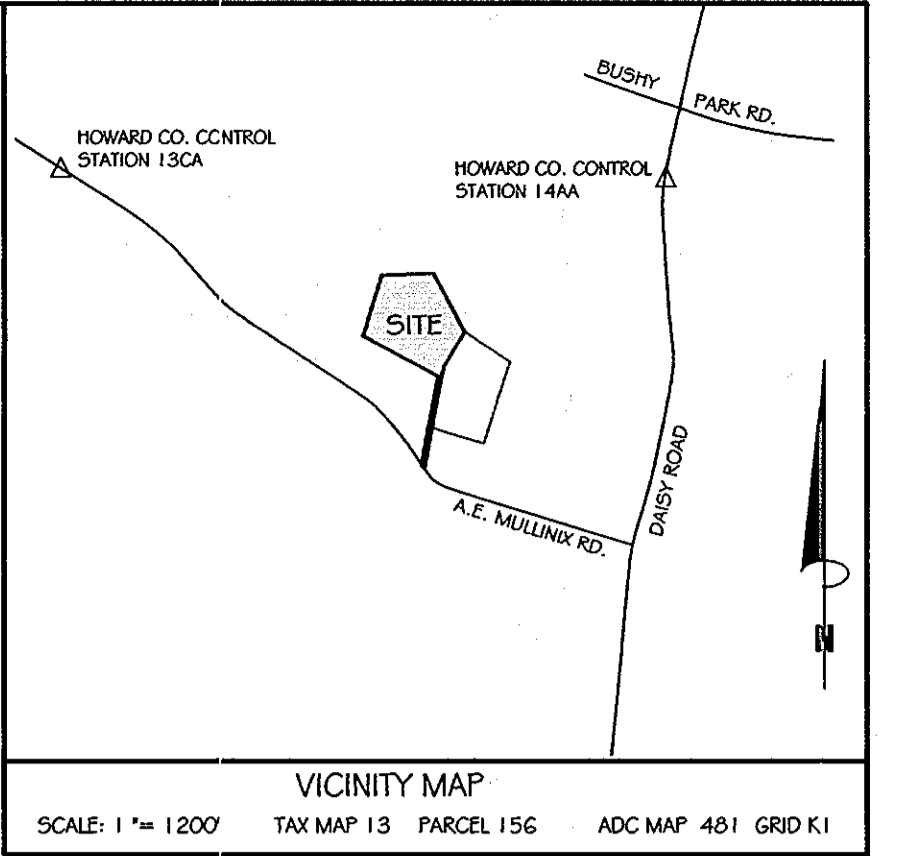
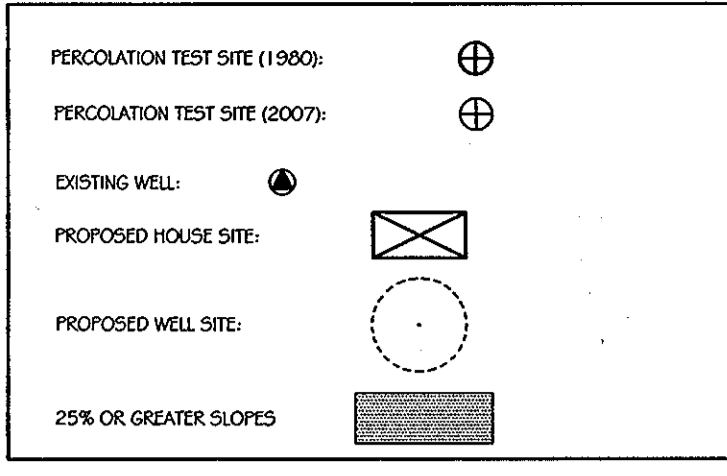
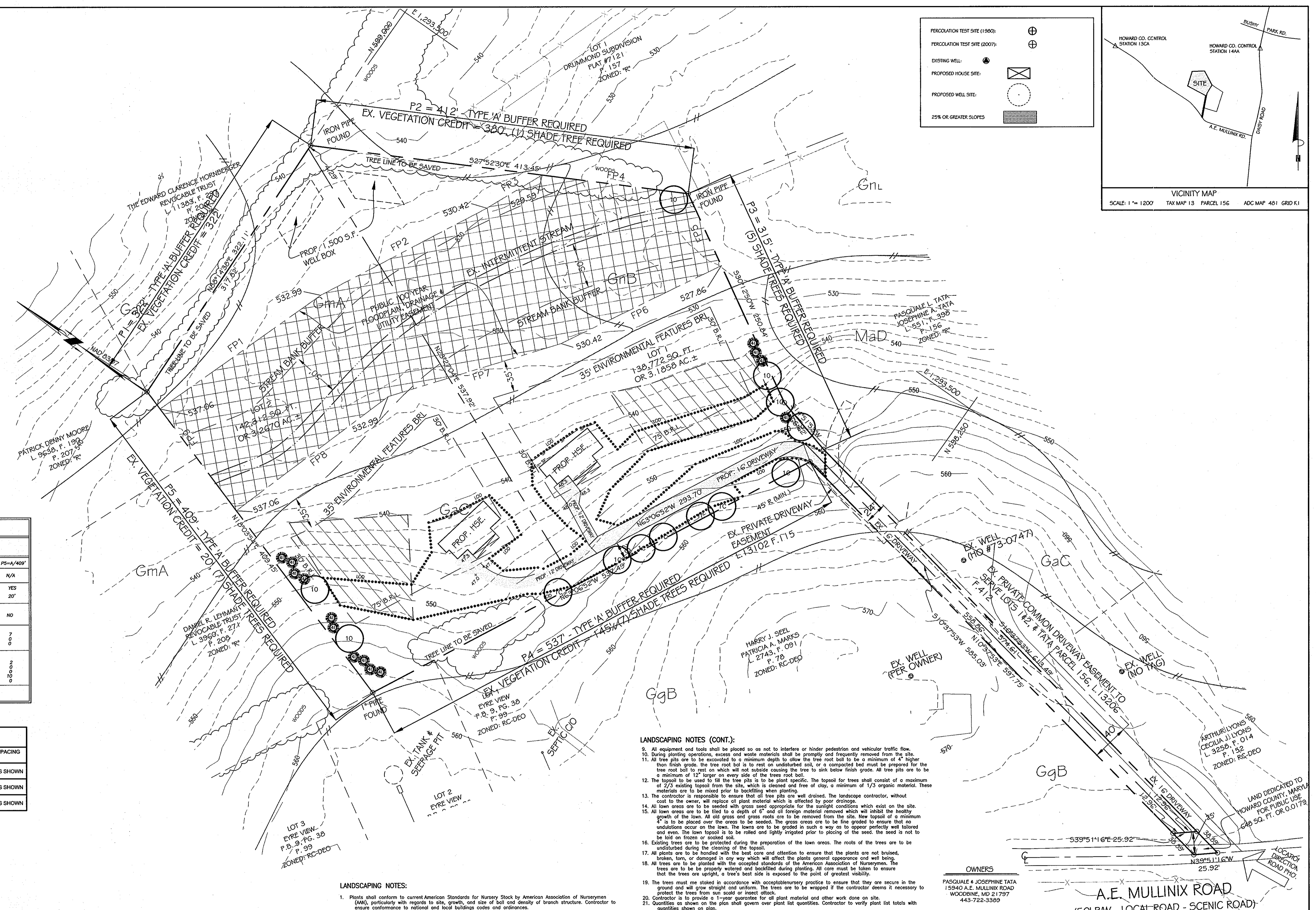
Josephine Tata 9-1-11
OWNER/DEVELOPER DATE

APPROVED

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

K. J. Sidorowicz 9/08/11
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad 9-7-11
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



- LANDSCAPING NOTES (CONT.):
9. All equipment and tools shall be placed so as not to interfere or hinder pedestrian and vehicular traffic flow. During planting operations, excess and waste materials shall be promptly and frequently removed from the site.
 10. All tree pits are to be excavated to a minimum depth to allow the tree root ball to be a minimum of 4" higher than finish grade. The tree root ball is to rest on undisturbed soil, or a compacted bed must be prepared for the tree root ball to rest on which will not subside causing the tree to sink below finish grade. All tree pits are to be a minimum of 12" larger on every side of the tree root ball.
 11. The topsoil to be used to fill the tree pits is to be plant specific. The topsoil for trees shall consist of a maximum of 2/3 existing topsoil from the site, which is cleaned and free of clay, a minimum of 1/3 organic material. These materials are to be mixed prior to backfilling when planting.
 12. The contractor is responsible to ensure that all tree pits are well drained. The landscape contractor, without cost to the owner, will replace all plant material which is affected by poor drainage.
 13. All lawn areas are to be seeded with grass seed appropriate for the sunlight conditions which exist on the site.
 14. All lawn areas are to be tilled to a depth of 6" and all foreign material removed which will inhibit the healthy growth of the lawn. All old grass and grass roots are to be removed from the site. New topsoil of a minimum 4" is to be placed over the areas to be seeded. The grass areas are to be fine graded to ensure that no undulations occur on the lawn. The lawn is to be graded in such a way as to appear perfectly well watered and even. The lawn topsoil is to be rolled and lightly irrigated prior to seeding. The seed is not to be laid on frozen or soaked soil.
 15. Existing trees are to be protected during the preparation of the lawn areas. The roots of the trees are to be undisturbed during the cleaning of the topsoil.
 16. All plants are to be handled with the best care and attention to ensure that the plants are not bruised, broken, torn, or damaged in any way which will affect the plants general appearance and well being.
 17. All trees are to be planted with the accepted standards of the American Association of Nurserymen. The trees are to be properly wrapped and banded during planting. All care must be taken to ensure that the trees are upright, a tree's best side is exposed to the point of greatest visibility.
 18. The trees must be staked in accordance with arboriculture practice to ensure that they are secure in the ground and will grow straight and uniform. The trees are to be wrapped if the contractor deems it necessary to protect the trees from sun scorch or insect attack.
 19. Contractor is to provide a 1-year guarantee for all plant material and other work done on site.
 20. Quantities shown on the plan shall govern over plant list quantities. Contractor to verify plant list totals with quantities shown on plan.
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 22. Not plant within 20' of a property line abutting and agricultural use.
 23. Plant material source: Within 100 mile radius of Maryland if possible.
 24. Vendor Associates, Inc. is not responsible for the contractor's utilization of men, materials, equipment, or safety measures in performance of any work for this construction. The contractor assumes all responsibility for performing the work correctly and in conformance with all code requirements.
 25. Should the contractor discover discrepancies between the plans and field conditions, the work shall be stopped immediately and the engineer notified immediately to resolve the situation. Should the contractor make field corrections or adjustments without notifying the engineer, then the contractor assumes all responsibility for those changes.
 26. It is the intent of these plans and specifications to provide 100% completed work and this shall be the project scope. It shall be distinctly understood that failure to notify the engineer of discrepancies found on these plans and specifications in performance of any work for this construction, the contractor assumes all responsibility for performing the work correctly and in conformance with all code requirements.
 27. At the time of installation, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and specifications.
 28. The owner, tenant and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant material shall be maintained in good growing condition, and when necessary, replaced with new material to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition and when necessary, repaired or replaced.
 29. Perimeter landscaping for Lot 1 & 2 is provided in accordance with Section 16.124 of the Howard County Code and Landscape Manual. Landscape surety in the amount of \$6,000.00 for 20 shade trees (at \$300.00 each, \$3,000 per lot) will be posted with the builder's grading permit.

- LANDSCAPING NOTES:
1. Plants shall conform to current American Standards for Nursery Stock by American Association of Nurserymen (ANSI), particularly with regards to site, growth, and size of ball and density of branch structure. Contractor to ensure conformance to national and local building codes and ordinances.
 2. All plants (B&B or container) shall be properly identified by weatherproof labels securely attached hereto before delivery to the project site. Labels shall identify plants by name, species, and size. Labels shall not be removed until the final inspection by the owners representative.
 3. Any material and/or work may be rejected by the owners representative if it does not meet the requirements of the specifications. The contractor shall remove all rejected materials from the site.
 4. The contractor shall furnish all plants in quantities and sizes to complete the work as specified in plant schedule. The landscape contractor shall be responsible to verify all plant quantities on the plans prior to commencement of work. Quantities in the plant schedule are for the contractors convenience only and do not constitute the final count.
 5. Substitutions in plant species or size shall not be permitted except with the written approval of the owners representative.
 6. Plants shall be located as shown on the drawings and by staking or as designated in the field by the owners representative. Tree locations to be field adjusted as required to maintain 10' minimum clearance from all utilities, street lights, and driveways. All locations are to be approved by the owners representative before excavation. The contractor shall note that in the case of a discrepancy between the scaled and figured dimensions shown on these plans, the figured dimension shall govern.
 7. The location of existing utilities shown hereon are approximate only. Contractor shall excavate to verify the existence, location, and depth of any utilities (constructed and existing) and shall notify the engineer of any discrepancies prior to the beginning of all work, excavation, grading, landscaping, etc.
 8. Contractor shall locate and mark all underground utility lines and irrigation systems prior to excavating plant beds or pits. All utility easement areas where no planting shall take place shall also be marked on the site prior to locating and digging the tree pits. If utility lines are encountered in excavation of tree pits, other locations for the trees shall be selected by the owners representative. Such changes shall be made by the contractor without additional compensation. No changes of location shall be made without the approval of the owners representative. Any utility (whether shown or not) damaged due to construction shall be repaired immediately. The contractor shall be responsible for removing or replacing any existing fences, driveways, etc., damaged or removed by the contractor during construction. All offsite disturbed areas shall be returned to their original condition.

DATE	REVISIONS
3/20/11	PER COMMENTS
5/13/2011	PER COMMENTS
8/22/2011	SIGNATURE BLOCK



OWNERS
PASQUALE & JOSEPHINE TATA
15540 A.E. MULLINIX ROAD
WOODDINE, MD 21797
443-722-3389

SUPPLEMENTAL PLAN LANDSCAPE
TATA SUBDIVISION
LOTS 1 AND 2

SITUATED ON A. E. MULLINIX ROAD
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' OCTOBER, 2010 SHEET 2 OF 2

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