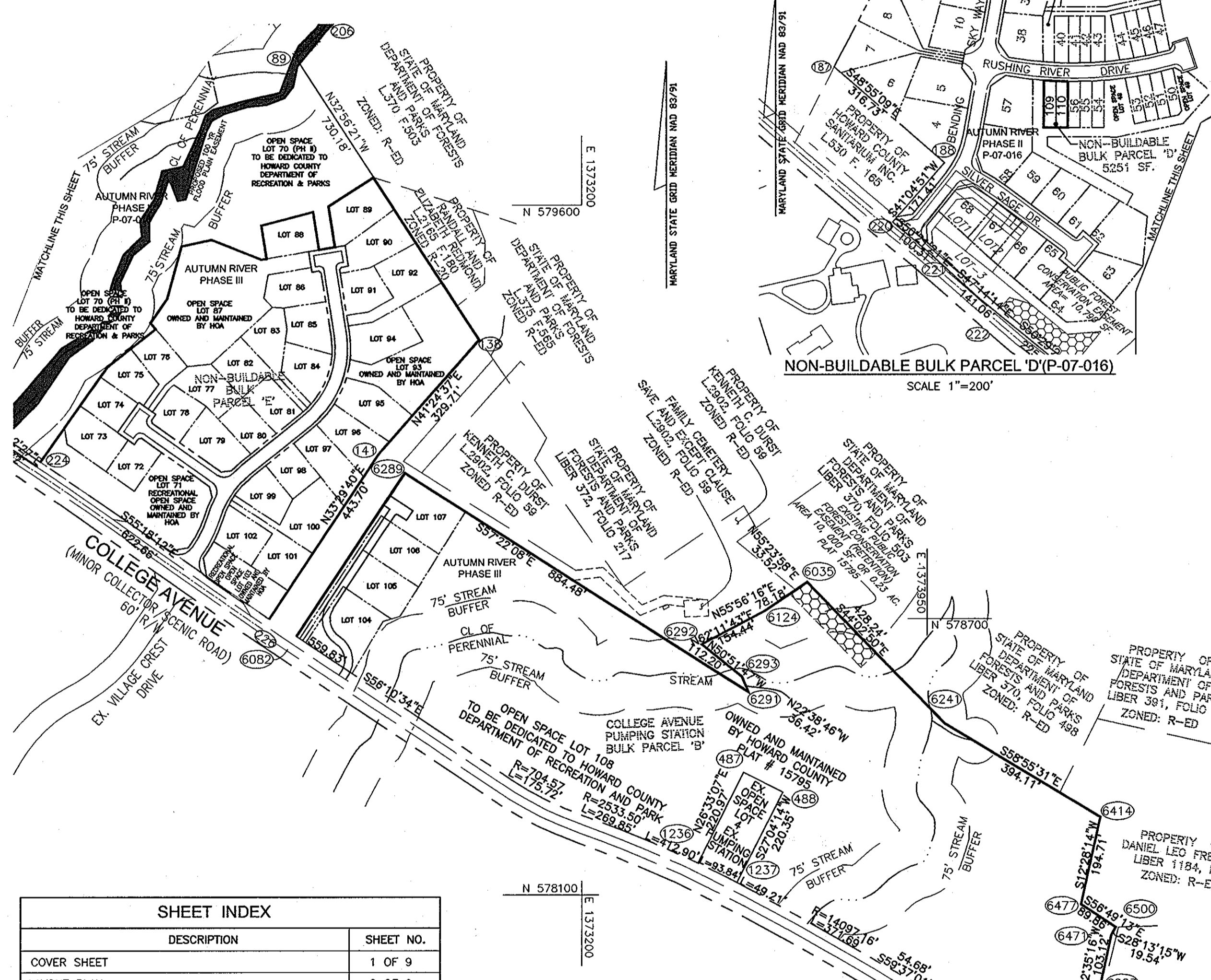


GENERAL NOTES

- 1. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
2. THE PROJECT BOUNDARY FOR AUTUMN RIVER (PHASE II & PHASE III) IS BASED ON PLAT# 14513 & 15794.
3. THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL PHOTOGRAPHIC SURVEY PREPARED BY WINGS AERIAL MAPPING COMPANY, INC. PHOTOGRAPHED MARCH 1995.
4. WATER AND SEWER FOR THIS PROJECT WILL BE PROVIDED THROUGH CONTRACT NO. 266-W. SEWER WILL BE CONNECTED TO CONTRACT NO. 680-S AND CONT. NO. 10-3898-D FROM NEW PUMPING STATION.
5. STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY MICRO POOL EXTENDED DETENTION FACILITY LOCATED IN OPEN SPACE LOT 87. A FACILITY IS HAZARD CLASS 'A' AND WILL BE OWNED AND MAINTAINED BY THE HOA.
6. STREAMS SHOWN ON-SITE ARE BASED ON A FIELD INVESTIGATION PREPARED BY CHESAPEAKE ENVIRONMENTAL DATED MARCH, 1995.
7. THE 100-YR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT SHOWN ON-SITE IS BASED ON A FLOODPLAIN STUDY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED OCT. 2007.
8. FOREST STAND DELINEATION PLAN PREPARED BY CHESAPEAKE ENVIRONMENTAL AND APPROVED ON 10, 1999 UNDER P-99-16, DATED JUNE 2004. (FOR LOTS 1, 2, 3 & BULK PARCEL 'A' AND FOR OPEN SPACE LOT 4 AND BULK PARCEL 'B')
9. FOREST CONSERVATION PLAN PREPARED BY CHESAPEAKE ENVIRONMENTAL AND APPROVED ON NOVEMBER 10, 1999 UNDER P-99-16. (FOR LOTS 1, 2, 3 & BULK PARCEL 'A' AND FOR OPEN SPACE LOT 4 AND BULK PARCEL 'B')
10. STREAM OR STREAM BUFFERS ARE LOCATED WITHIN OPEN SPACE LOT 4. WETLAND LOCATIONS DETERMINED BY CHESAPEAKE ENVIRONMENTAL IN MARCH, 1995 SHOWN ON S-98-16. (FOR OPEN SPACE LOT 4 AND BULK PARCEL 'B') SEE PLAT# 14513 & PLAT#15794.
11. AUTUMN RIVER PHASE I: EXISTING EASEMENT COMBINED WITH FUTURE PHASE.
AUTUMN RIVER PHASE II: 13.81 AC. RETENTION IN CREDITED EASEMENT
3.31 AC. RETENTION IN NON-CREDITED EASEMENT
AUTUMN RIVER PHASE III: 8.00 AC. RETENTION IN CREDITED EASEMENT
9.37 AC. RETENTION IN NON-CREDITED EASEMENT
TOTAL FOREST CONSERVATION FOR AUTUMN RIVER TO BE FULFILLED BY 13.81 AC. IN CREDITED EASEMENT & 3.31 AC. OF NON-CREDITED EASEMENT UNDER PHASE II & 8.00 AC. IN CREDITED EASEMENT & 9.37 AC. NON-CREDITED EASEMENT UNDER PHASE III.
FINANCIAL SURETY OBLIGATION OF \$ 120,312.72 FOR 13.81 AC, RETENTION IN CREDIT EASEMENT UNDER AUTUMN RIVER II (P-07-016) & FINANCIAL SURETY OBLIGATION OF \$ 69,696.00 FOR 8.00 AC RETENTION IN CREDITED EASEMENT UNDER AUTUMN RIVER III (THIS PLAN). THE FOREST CONSERVATION SURETY WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT UNDER FINAL PLAN.
12. A TRAFFIC IMPACT ANALYSIS WAS PREPARED BY THE TRAFFIC GROUP AND APPROVED ON FEBRUARY 8.
13. ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH.
14. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL (2006) SECTION 5.5.A. A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
15. SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
16. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
17. THE ACCOMMODATION OF AND ACCESS TO THE GRAVE SITE (OPEN SPACE 95) WAS APPROVED BY THE PLANNING BOARD ON JANUARY 27, 1999.
18. STREET TREES ARE PROVIDED FOR THIS SUBDIVISION IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
19. A NOISE STUDY IS NOT REQUIRED FOR THIS SUBDIVISION.
20. OPEN SPACE LOT 109 OWNED AND MAINTAINED BY HOWARD COUNTY, MARYLAND DEPARTMENT OF RECREATION AND PARKS.
21. EXISTING HOUSE AND SHED TO BE REMOVED FROM OPEN SPACE LOT 103 AND OPEN SPACE LOT 108. SEE PLAT #14513 & PLAT #15794.
22. THE PLANNING BOARD APPROVED THE AMENDED SKETCH PLAN (S-98-16). THE PLAN WAS SIGNED ON FEBRUARY 8, 1999 AND P.B. 325 WAS APPROVED ON JANUARY 14, 1999.
23. LOTS 75, 76, 77, 82, 83, 105, 106, 107 & 108 WILL UTILIZE A USE-IN-COMMON DRIVEWAY. HOWARD COUNTY STANDARD DETAIL NO. R-6.06 WILL BE UTILIZED FOR THE ENTRANCE AT THE INTERSECTION OF THE PUBLIC ROAD AND EACH USE-IN-COMMON DRIVEWAY.
24. REFUSE COLLECTION, SNOW REMOVAL, AND MAINTENANCE FOR LOTS 75, 76, 77, 82, 83, 92, 93 & 105, 106, 107 SHALL BE PROVIDED AT THE JUNCTION OF PRIVATE USE-IN-COMMON ACCESS EASEMENT AND THE RIGHT-OF-WAY OF PROPOSED ROAD.
25. COLLEGE AVENUE IS A SCENIC ROAD. 35' WIDE FOREST BUFFER WILL BE RETAINED WHERE IT CURRENTLY EXISTS AND A TYPE B LANDSCAPE BUFFER WILL BE ADDED IN AREAS WHERE A 35' FOREST DOES NOT CURRENTLY EXIST. SPECIES TYPICALLY OCCURRING IN THE EXISTING FORESTED AREA ALONG THE ROADWAY WILL BE USED FOR THE TYPE B LANDSCAPE BUFFER.
26. TREE PROTECTION FENCING WILL BE PROVIDED AT THE LIMITS OF DISTURBANCE WHERE GRADING IS ADJACENT TO ENVIRONMENTAL AREAS AND RETENTION FOREST CONSERVATION AREAS.
27. THIS SUBDIVISION COMPLIES WITH THE AMENDED 4TH EDITION OF THE SUBDIVISION AND ZONING REGULATIONS, BOTH AS AMENDED BY COUNCIL BILL 75-2003.
28. OPEN SPACE LOT 108 TO BE OWNED AND MAINTAINED BY THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS. OPEN SPACE LOTS 71, 87, 93, & 103 ARE TO BE OWNED AND MAINTAINED BY THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS. OPEN SPACE LOT 4 (PUMPING STATION) TO BE OWNED AND MAINTAINED BY DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY.
29. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED SQUARE TUBE POST (14 GAUGE-3' LONG). INTO A 2-1/2" GALVANIZED STEEL PERFORATED SQUARE TUBE SLEEVE (12 GAUGE-3' LONG). A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON THE TOP OF EACH POST.
30. TOTAL 35 UNITS ARE PROPOSED UNDER THIS PLAN. LOT 110 & LOT 111 HAVE BEEN CREATED BY RESUBDIVIDING OF NON-BUILDABLE BULK PARCEL A-2, WHICH WILL BE INDICATED ON PHASE II PLANS.
31. THE RELOCATION OF CABLE LINE VERTICALLY, AS SHOWN ON PROFILE, IS NECESSARY BY AT & PRIOR TO CONSTRUCTION.
32. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL WITH 62 PUBLIC STREET TREES, 45 SHADE TREES, 35 EVERGREEN TREES AND 395L OF FENCING PROVIDED WITH LANDSCAPE SURETY IN THE AMOUNT OF \$45,250.00 WITH THE DPW DEVELOPER'S AGREEMENT. (THE UNIT PRICES TO BE USED FOR ESTABLISHING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE ADOPTED COUNTY FEE SCHEDULE WHICH IS \$300.00 PER SHADE TREE, \$150.00 PER EVERGREEN/ORNAMENTAL TREE, \$30.00 PER SHRUB, \$10.00 PER LINEAR FEET OF FENCING AND \$20.00 PER LINEAR FEET OF WALL.) THIS LANDSCAPE PLAN IS CONCEPTUAL AND THAT DETAIL AND SURETY WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT UNDER FINAL PLAN.
33. NO UTILITY BOXES BE LOCATED WITHIN THE OPEN SPACE ACCESS STRIPE.
34. THE FIBER OPTIC DUCT LINE HAS BEEN FIELD LOCATED. LOCATIONS & ELEVATIONS ARE SHOWN IN PLANS & PROFILES. EXISTING FIBER OPTIC DUCT LINE TO BE RELOCATED BY AT & T BEFORE BEGIN CONSTRUCTION. THE EXISTING AMERICAN TELEPHONE & TELEGRAPH COMPANY OF BALTIMORE CITY EASEMENT AND RIGHT-OF-WAY IS SHOWN PER LIBER 167, FOLIO 502.
35. A WAIVER PETITION HAS BEEN SUBMITTED AND APPROVED, DATED AUGUST 7, 2008, TO WAIVE SECTION 4.3 OF HOWARD COUNTY DESIGN MANUAL REQUIRING GRAVITY SEWER SERVICE TO THE BASEMENT OR LOWEST FLOOR OF THE LOTS CREATED THROUGH THE SUBDIVISION. DUE TO THE ENVIRONMENTAL CONSTRAINTS ON THE SITE, THE DEPTH OF THE SEWER WAS REQUIRED TO BE IN EXCESS OF 20 FEET TO ALLOW FIRST FLOOR GRAVITY SEWER SERVICE TO LOTS 73 THROUGH 77. BASEMENT GRAVITY SEWER SERVICE TO THE REFERENCED LOTS WOULD REQUIRE THAT THE SEWER SYSTEM BE LOWERED TO A DEPTH OF 30 FEET.
A WAIVER REQUEST OF BASEMENT GRAVITY SEWER SERVICE TO LOTS 73 THROUGH 77 AND THE USE OF SEWER HOUSE CONNECTIONS ON A 1 PERCENT SLOPE WITH BASEMENT SEWER SERVICE TO BE PROVIDED BY PRIVATE ON-SITE PUMPS.
THE APPROVAL OF PRIVATE ON-SITE PUMPING UNITS IS UNDER THE CHARGE OF THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS. PERMIT WILL BE REQUIRED FROM THE DEPARTMENT OF INSPECTION, LICENSES BEFORE CONSTRUCTION.
36. THE PEDESTRIAN AND MAINTENANCE ACCESS FOR OPEN SPACE LOT 93 WILL ONLY OCCUR AT THE PUBLIC ROAD FRONTAGE.
MILESTONE CHART
THE PROJECT IS LOCATED IN THE WORTHINGTON ELEMENTARY SCHOOL DISTRICT, THE NORTH EAST SCHOOL REGION AND THE ELLICOTT MILLS MIDDLE SCHOOL DISTRICT AND HAS PASSED THE OPEN/CLOSED SCHOOLS TEST GIVEN ALL AREAS ARE OPEN. THE NEW ALLOCATION YEARS AND MILESTONE DATES FOR SUBMISSION OF THE PRELIMINARY PLANS BASED ON THE PHASING, IF THE MILESTONE DATES ARE NOT MET S-98-016 WILL BE VOIDED.
PHASE NO. TENTATIVE ALLOCATIONS YEAR ALLOCATION YEAR FINAL PLAN SUBMISSION MILESTONES
PHASE II 58 2009 BETWEEN JULY 1, 2006 AND JAN. 1, 2007
PHASE III 37 2010 BETWEEN JULY 1, 2007 AND NOV. 1, 2007

PRELIMINARY PLAN
AUTUMN RIVER
PHASE III

LOTS 72-86, 88-102, 104-107, 109 & 110
& OPEN SPACE LOT 71, 87, 93, 103, 108
RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION
BULK PARCEL 'B' AND AUTUMN RIVER PHASE II
NON-BUILDABLE BULK PARCELS 'D' & 'E'
HOWARD COUNTY, MARYLAND



SHEET INDEX table with columns for DESCRIPTION and SHEET NO. including Cover Sheet, Layout Plan, Road Profiles, Grading, Storm Drainage, and Landscape & Forest Conservation Plan.

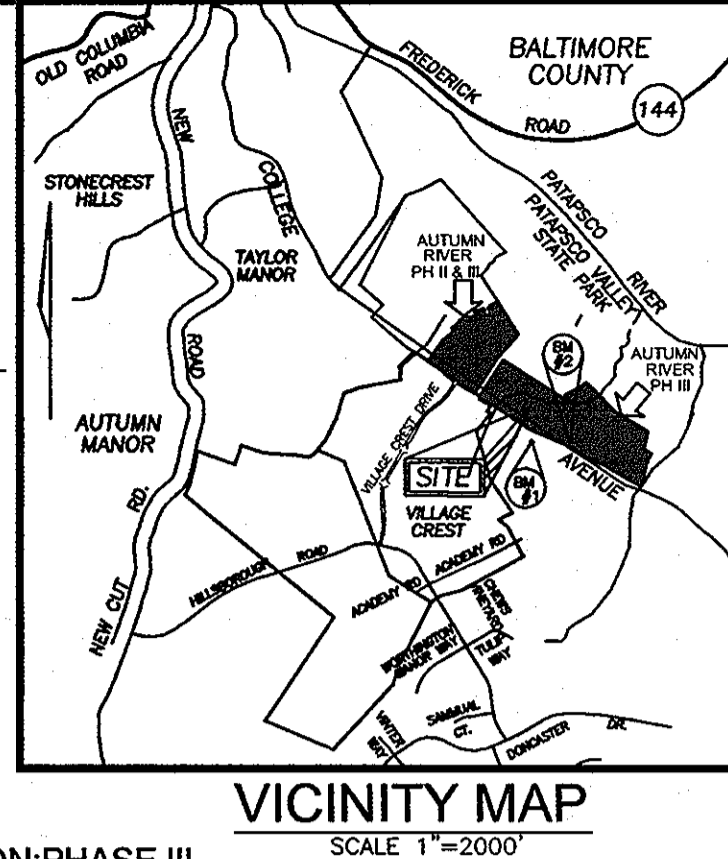
PLAN VIEW SCALE 1"=200'

AUTUMN RIVER DENSITY TABULATION - AUTUMN RIVER table showing PHASE, TOTAL SUBDIVISION AREA, PREVIOUSLY RECORDED PLATS, FLOODPLAIN, STEEP SLOPES, NET AREA, UNITS ALLOWED, UNITS PROPOSED, and TOTAL UNITS REMAINING.

COORDINATE TABLE with columns for POINT, NORTHING, and EASTING coordinates for various locations on the site.

LOT TABULATION table showing TOTAL NO. OF PROPOSED LOTS (35), TOTAL 35 DWELLING UNITS FOR THIS SUBMISSION, NO. OF SINGLE FAMILY DETACHED (33), NO. OF SINGLE FAMILY ATTACHED (2), NO. OF OPEN SPACE LOTS (06), and NO. OF EXISTING OPEN SPACE LOT (01).

BENCHMARKS
BENCHMARK NO. 1, COUNTY CONTROL #3044005R
3/4" REBAR 0.8' BELOW SURFACE
N. 578233.92, E. 1473142.33
ELEV. = 374.389
BENCHMARK NO. 2, COUNTY CONTROL #3044004R
3/4" REBAR 0.6' BELOW SURFACE
N. 578128.03, E. 1473460.71
ELEV. = 362.575
ADC MAP COORDINATES:
N: 517,000
E: 860,000
ADC MAP PAGE: 12 & 16
ADC MAP GRID: H-13



SITE ANALYSIS: GENERAL SITE DATA

PRESENT ZONING: R-ED
LOCATION EAST SIDE OF COLLEGE AVENUE, APPROX. 1.5 MILES SOUTH OF HISTORIC ELLICOTT CITY
ELECTION DISTRICT: 1ST
TAX MAP: 25
DEED REFERENCE:
PARCEL 172: LIBER 3883 AT FOLIO 725
PARCEL 279: LIBER 3883 AT FOLIO 735
APPLICABLE DPZ FILE REFERENCE: S-98-16, P-99-16, F-00-131 F-01-08, P.B. 325, P.B. 148, PLAT# 15794, & 15795 PLAT# 14513 TO 14515, P-07-016
PROPOSED USE OF SITE: SINGLE FAMILY DETACHED SINGLE FAMILY ATTACHED
PROPOSED WATER SYSTEM: PUBLIC
PROPOSED SEWER SYSTEM: PUBLIC

AREA TABULATION (PHASE III)

Table showing areas for FLOOD PLAIN (0.84 AC), ROAD RIGHT-OF-WAY (1.08 AC), OPEN SPACE (21.94 AC), BUILDABLE LOTS (8.15 AC), and OPEN SPACE LOTS (21.94 AC total).

APPROXIMATE LIMIT OF DISTURBANCE: 505285.53 SF (11,599 AC.)

OPEN SPACE TABULATION-PHASE III

AUTUMN RIVER PHASE I, II, III REQUIRED OPEN SPACE = 17.70 AC.
AUTUMN RIVER PHASE I (PLAT# 14513) = CREDITED OPEN SPACE PROVIDED=0.48 AC.
AUTUMN RIVER PHASE II=CREDITED OPEN SPACE PROVIDED= 24.94 AC.
PHASE II, LOT 70 (TRANSFER TO PHASE III) :-0.38 AC.*
PHASE II, LOT 70 (TRANSFER FROM PHASE III) :-0.16 AC.
AUTUMN RIVER PHASE III=CREDITED OPEN SPACE PROVIDED= 24.716 AC.
AUTUMN RIVER PHASE III = CREDITED OPEN SPACE REQUIRED = 0.0 AC.
AUTUMN RIVER PHASE III = CREDITED OPEN SPACE PROVIDED = 2.492 AC.
AUTUMN RIVER PHASE III = NON-CREDITED OPEN SPACE PROVIDED = 0.426 AC.
TOTAL CREDITED OPEN SPACE FOR AUTUMN RIVER = 27.49 AC.
*PH-II OPEN SPACE UTILIZED FOR OPEN SPACE PH-III FOR POND GRADING. (L-07-70 PH-II SHAPE MODIFIED)
RECREATIONAL FACILITIES SUCH AS BASKETBALL OR TENNIS COURTS, FENCES, SWIMMING POOLS, PLAYGROUND EQUIPMENT OR TOT LOTS, ETC. THAT ARE PERMANENTLY ATTACHED TO THE GROUND ARE CONSIDERED TO BE STRUCTURES AND ARE NOT PERMITTED WITHIN THE PROPOSED RECREATIONAL AREA ON LOTS 71 & 103.
AUTUMN RIVER PHASE I, II, III = RECREATION OPEN SPACE REQUIRED: 22,900 SF
TOTAL SINGLE FAMILY DETACHED UNITS = 78 x 250 SF/UNITS = 19,500 SF
TOTAL SINGLE FAMILY ATTACHED UNITS = 17 x 2010 SF/UNITS = 3,400 SF
TOTAL RECREATION OPEN SPACE REQUIRED = 22,900 SF
AUTUMN RIVER PHASE I RECREATION OPEN SPACE PROVIDED = 0 SF
AUTUMN RIVER PHASE II RECREATION OPEN SPACE PROVIDED = 11,000 SF.
AUTUMN RIVER PHASE III RECREATION OPEN SPACE PROVIDED = 11,900 SF.
TOTAL RECREATION OPEN SPACE PROVIDED = 22,900 SF.
TOTAL RECREATION OPEN SPACE FOR AUTUMN RIVER = 29,396.26 SF.

PARKING TABULATION-PHASE III

TOTAL NUMBER OF UNITS ALLOWED AND PROPOSED
ATTACHED UNITS:02 (LOTS 110 & 111)
REQUIRED AT 2.0 SPACES PER DU:04
PARKING SPACES REQUIRED: 2 SPACES PER UNIT=04 SPACES
0.3 SPACES PER UNIT FOR GUEST/OVERFLOW PARKING= 01 SPACE
TOTAL PARKING SPACES REQUIRED: = 05 SPACES
PARKING SPACES PROVIDED: UNIT= 2 GARAGE/1 DRIVEWAY= 03 SPACES
2 SPACES IN GARAGE= 04 SPACES (FOR 02 UNITS)
1 SPACE ON DRIVEWAY = 02 SPACES (FOR 02 UNITS)
PARKING ON SITE= 05 SPACES
TOTAL PARKING SPACES PROVIDED: = 06 SPACES
IN ACCORDANCE WITH ZONING SECTIONS 133.C.1.a AND 133.D.2.a IN THE GARAGES IN ATTACHED DWELLING UNITS MUST BE USED FOR PARKING ONLY.

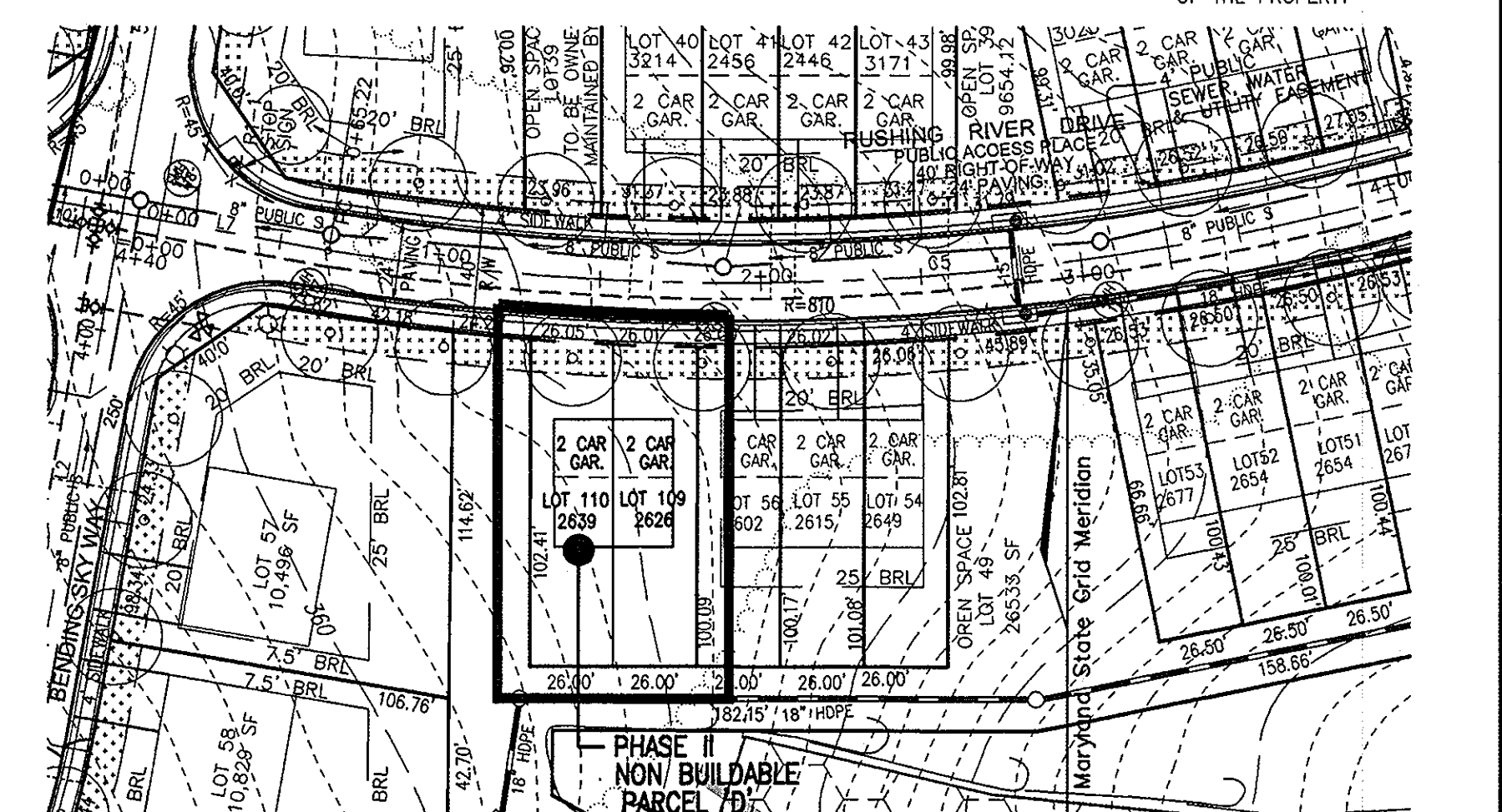
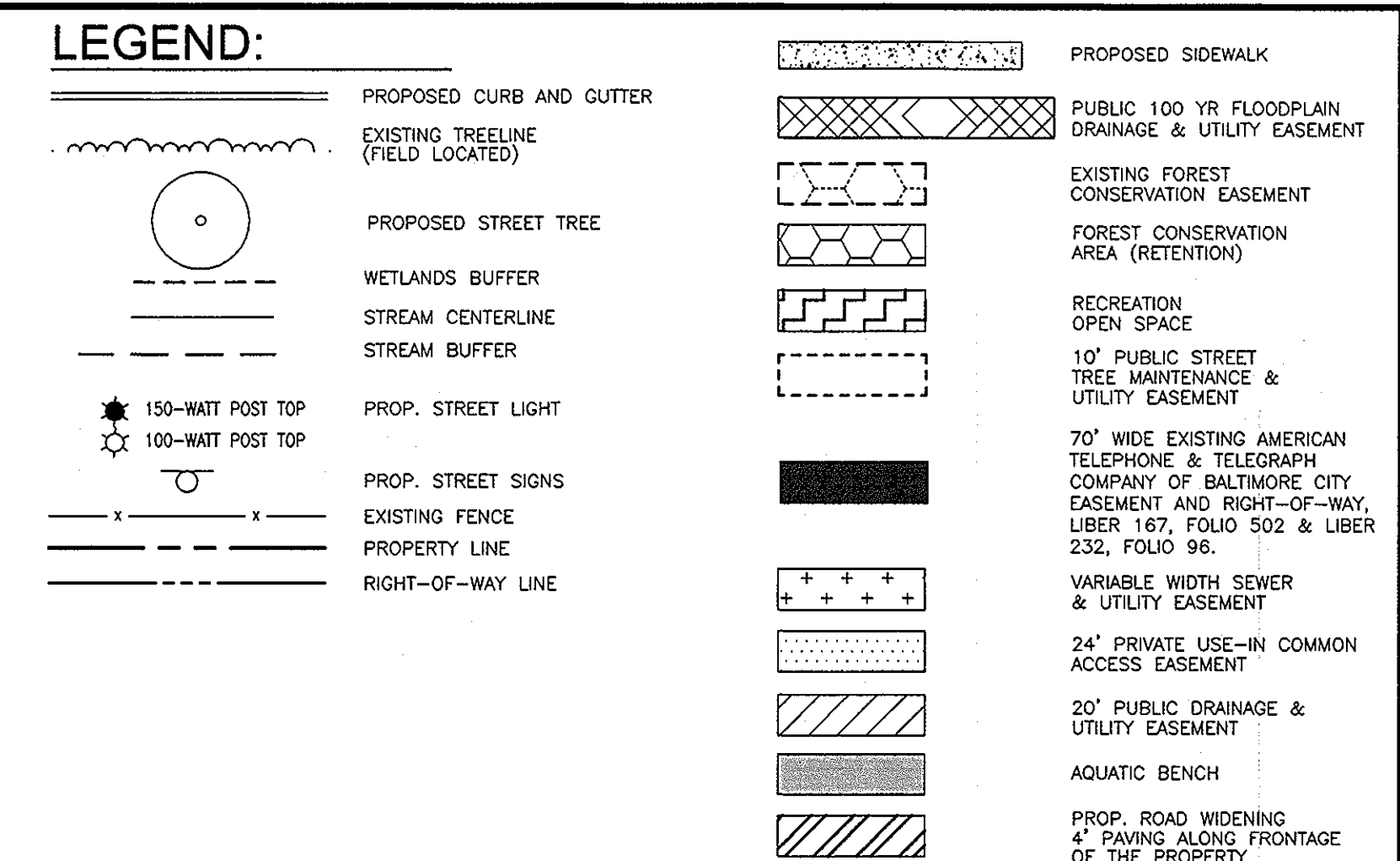
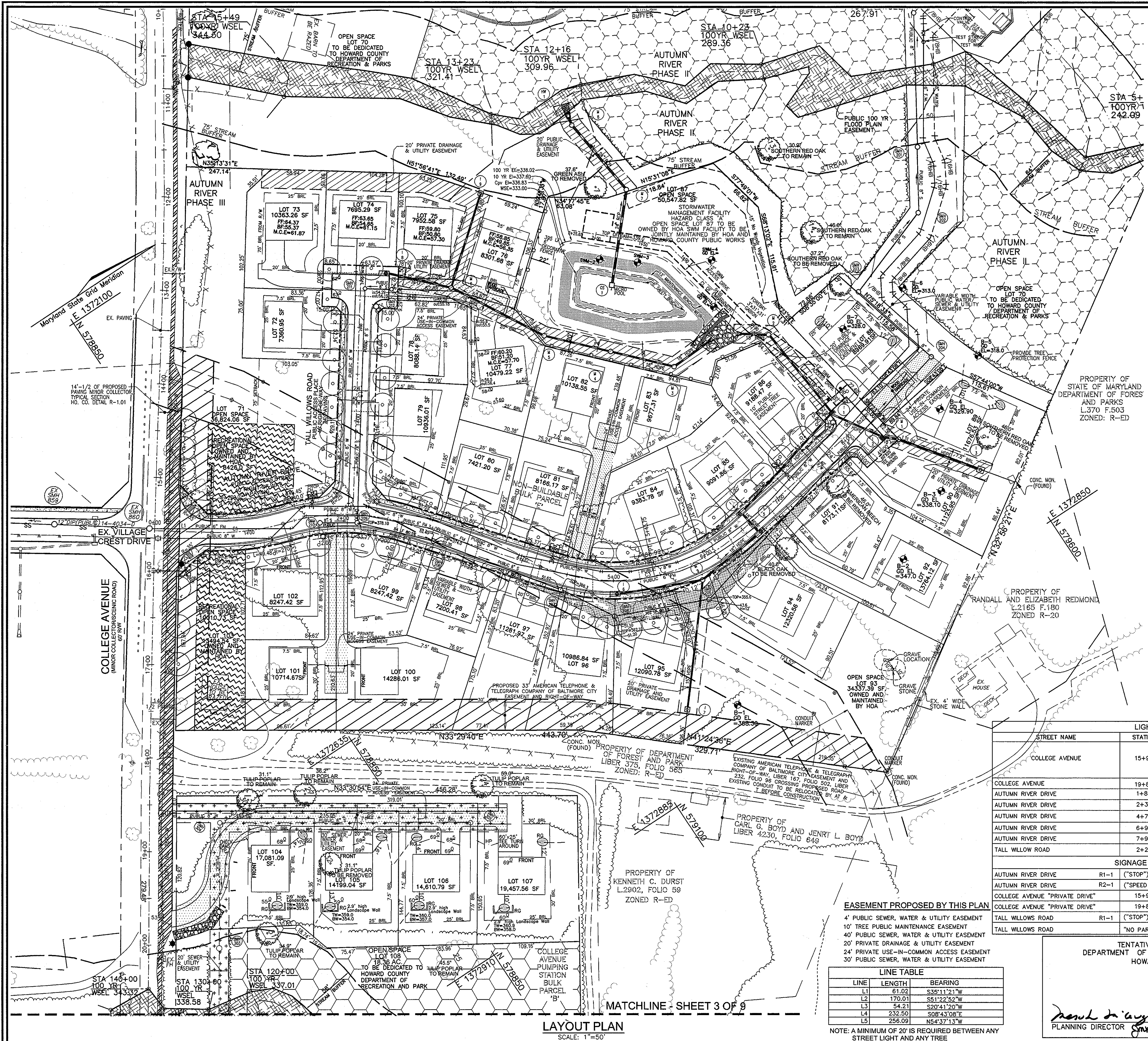
BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAIN

- 1) NO EXCESS FILL, CONSTRUCTION MATERIAL OR DEBRIS SHALL BE STOCKPILED OR STORED IN THE WETLANDS OR BUFFER.
2) PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLAND.
3) DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAR MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE.
4) PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS OR BUFFER.
5) REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS IN EXCESS OF NONTIDAL WETLANDS LOST UNDER THIS CONTRACT.
6) RECTIFY ANY NONTIDAL WETLANDS TEMPORARILY IMPACTED BY ANY
7) ALL STABILIZATION IN THE WETLAND AND BUFFER SHALL BE OF THE FOLLOWING RECOMMENDED SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (AONOLA SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE DIVISION. KENTUCKY 33 FESCUE SHALL NOT BE UTILIZED IN THE WETLAND OR BUFFER AREAS SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
8) AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS OF NONTIDAL WETLANDS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
9) TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM. USE 1 WATER IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
10) STORMWATER RUNOFF FROM IMPROVED SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
11) CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.

Table for REVISIONS with columns for NO., REVISION, and DATE.

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
COVER SHEET
LOTS 72-86, 88-102, 104-107, 109 & 110
OPENSPLACE LOTS 71, 87, 93, 103 & 108
RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B' AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E' HOWARD COUNTY, MARYLAND
S-98-16, P-99-16, F-00-131 F-01-08, P.B. 325, P.B. 148, PLAT# 15794 & 15795, TAX MAP #25 GRID 14 & 21 PLAT# 14513 TO 14515, P-07-016 PARCELS 172 & 279 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Robert H. Vogel Engineering, Inc. logo and contact information, including address (8407 Main Street, Ellicott City, MD 21043), phone (410.461.7666), fax (410.461.8961), and professional certification details.



PHASING PLAN
SCALE: 1"=50'

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD DIRECTION	CHORD LENGTH
C1	76.48	250.00	17°31'38"	38.54	N26°25'33"E	76.18
C2	129.11	220.00	33°37'26"	66.47	S33°01'55"W	127.26
C3	107.14	200.00	30°41'33"	54.89	N36°02'06"E	105.86

OWNERS / DEVELOPER
AUTUMN RIVER DEVELOPMENT CORPORATION
C/O LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DR STE 102
ELLCOTT CITY MD 21042-7819
ATTN: MR. DONALD R. REUWER
(443) 367-0422

LIGHT LOCATIONS

STREET NAME	STATION	OFFSET	FIXTURE/POLE TYPE
COLLEGE AVENUE	15+93	29' LEFT	150 WATT HPS VAPOR PREMIER POST-TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE
COLLEGE AVENUE	19+85	15' LEFT	100 WATT HPS VAPOR PREMIER POST-TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE
AUTUMN RIVER DRIVE	1+84	22' RIGHT	
AUTUMN RIVER DRIVE	2+35	16' LEFT	
AUTUMN RIVER DRIVE	4+75	23' LEFT	
AUTUMN RIVER DRIVE	6+90	20' RIGHT	
AUTUMN RIVER DRIVE	7+97	20' LEFT	
TALL WILLOW ROAD	2+26	17' RIGHT	

SIGNAGE LOCATION CHART

STREET NAME	STATION	TYPE
AUTUMN RIVER DRIVE	R1-1	("STOP") SIGN AT STA 0+50, LEFT
AUTUMN RIVER DRIVE	R2-1	("SPEED LIMIT 25") SIGN AT STA 14+25, RIGHT
COLLEGE AVENUE "PRIVATE DRIVE"	15+93	29' LEFT STREET NAME SIGN
COLLEGE AVENUE "PRIVATE DRIVE"	19+80	18' LEFT STOP SIGN
TALL WILLOW ROAD	R1-1	("STOP") SIGN AT STA 0+25, LEFT
TALL WILLOW ROAD		"NO PARKING IN TEE TURN-AROUND"

EASEMENT PROPOSED BY THIS PLAN

- 4' PUBLIC SEWER, WATER & UTILITY EASEMENT
- 10' TREE PUBLIC MAINTENANCE EASEMENT
- 40' PUBLIC SEWER, WATER & UTILITY EASEMENT
- 20' PRIVATE DRAINAGE & UTILITY EASEMENT
- 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT
- 30' PUBLIC SEWER, WATER & UTILITY EASEMENT

LINE TABLE

LINE	LENGTH	BEARING
L1	61.02	S35°11'21"W
L2	170.01	S51°22'52"W
L3	54.21	S20°41'20"W
L4	232.50	S08°43'08"E
L5	256.09	N54°37'13"W

NOTE: A MINIMUM OF 20' IS REQUIRED BETWEEN ANY STREET LIGHT AND ANY TREE

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

David L. Ayler
PLANNING DIRECTOR

9/4/05
DATE

LAYOUT PLAN
SCALE: 1"=50'

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
LAYOUT PLAN
LOTS 72-86, 88-102, 104-107, 109 & 110
OPENSOURCE LOTS 71, 87, 93, 103 & 108
RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B' AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E' HOWARD COUNTY, MARYLAND

S-98-16, P-99-16, P-00-131,F-01-08, P.B.325,P.B.148,PLAT#15794 & 15795,
TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-016 PARCELS 172 & 279
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

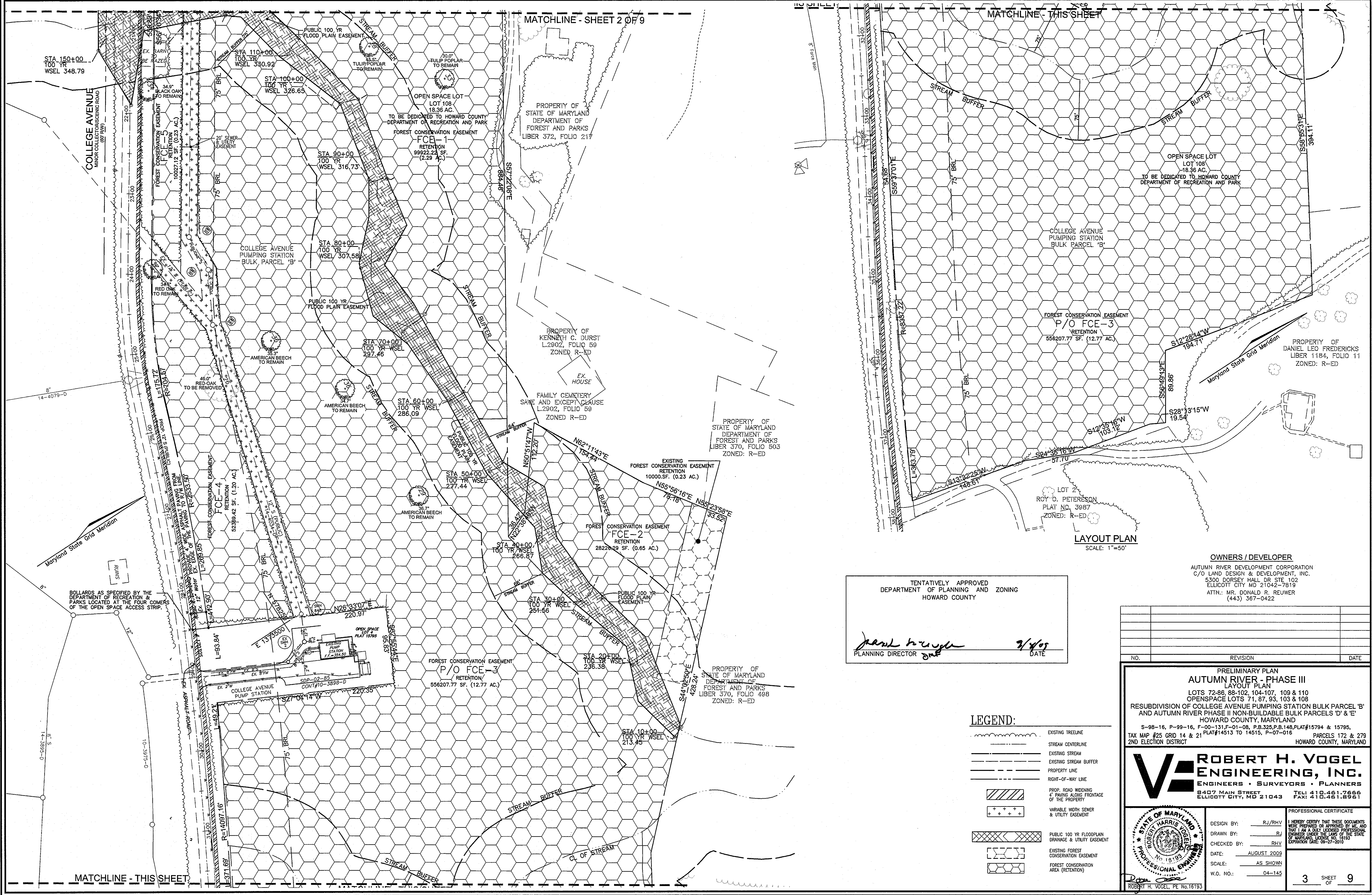
DESIGN BY: RJ/RHV
DRAWN BY: RJ
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 04-145

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18193, EXPIRATION DATE 09-27-2010

2 SHEET OF 9

MATCHLINE - SHEET 2 OF 9

MATCHLINE - THIS SHEET



BOLLARDS AS SPECIFIED BY THE DEPARTMENT OF RECREATION & PARKS LOCATED AT THE FOUR CORNERS OF THE OPEN SPACE ACCESS STRIP.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Paul H. Vogel
PLANNING DIRECTOR

2/4/09
DATE

LAYOUT PLAN
SCALE: 1"=50'

OWNERS / DEVELOPER
AUTUMN RIVER DEVELOPMENT CORPORATION
C/O LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DR STE 102
ELLCOTT CITY MD 21042-7819
ATTN: MR. DONALD R. REUWER
(443) 367-0422

LEGEND:

- EXISTING TREELINE
- STREAM CENTERLINE
- EXISTING STREAM
- EXISTING STREAM BUFFER
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- PROP. ROAD WIDENING
- VARIABLE WIDTH SEWER
- PUBLIC 100 YR FLOODPLAIN
- EXISTING FOREST CONSERVATION EASEMENT
- FOREST CONSERVATION AREA (RETENTION)

NO.	REVISION	DATE

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
LAYOUT PLAN
LOTS 72-86, 88-102, 104-107, 109 & 110
OPENSOURCE LOTS 71, 87, 93, 103 & 108
RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B'
AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E'
HOWARD COUNTY, MARYLAND
S-98-16, P-99-16, F-00-131, F-01-08, P.B.325, P.B.148, PLAT#15794 & 15795,
TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-016 PARCELS 172 & 279
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLCOTT CITY, MD 21043 TEL: 410.481.7666 FAX: 410.481.8961

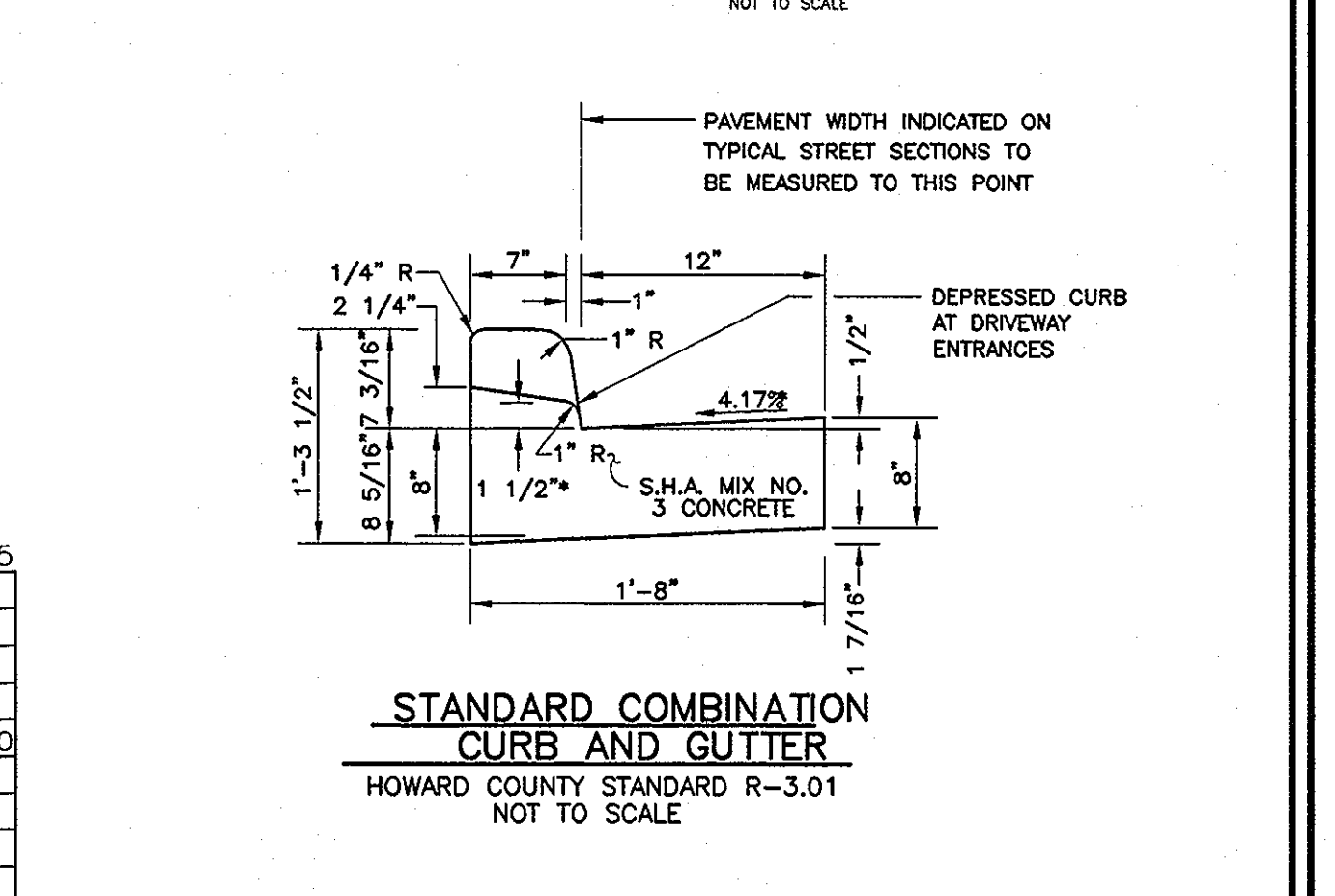
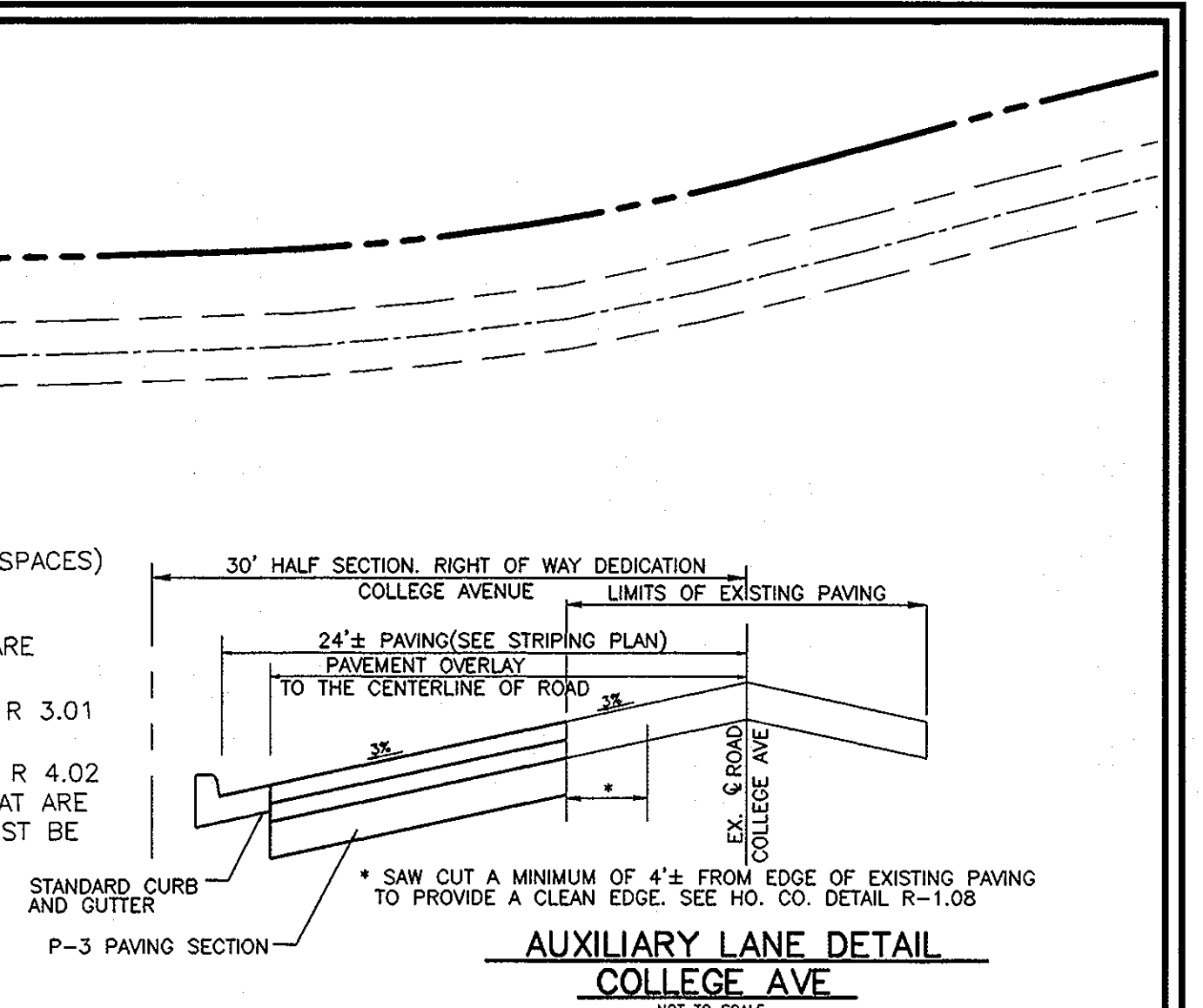
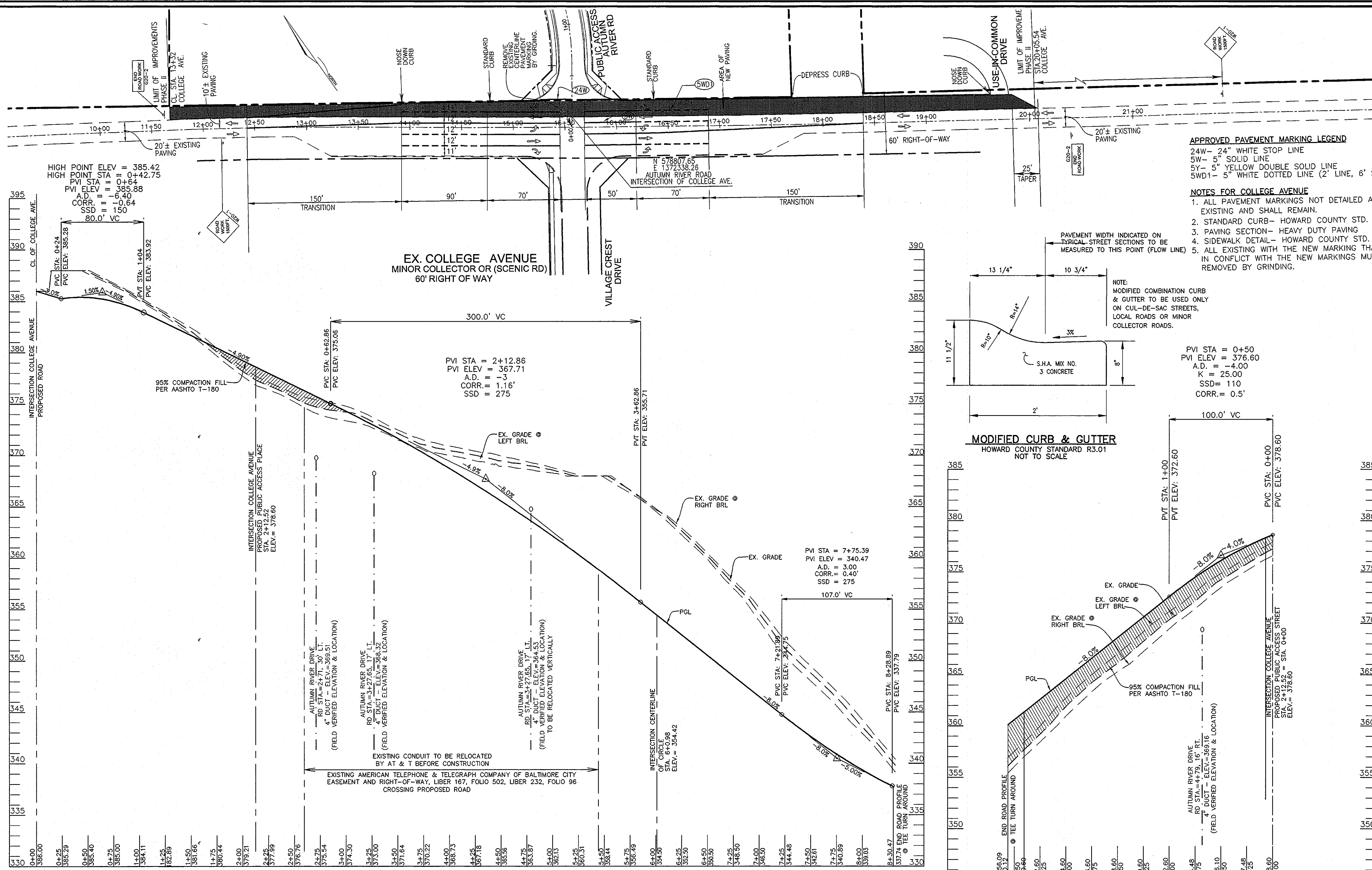
PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16193 EXPIRATION DATE: 09-27-2010

DESIGN BY: RJ/RHV
DRAWN BY: RJ
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 04-145

3 SHEET OF 9

ROBERT H. VOGEL, PE No.16193

MATCHLINE - THIS SHEET

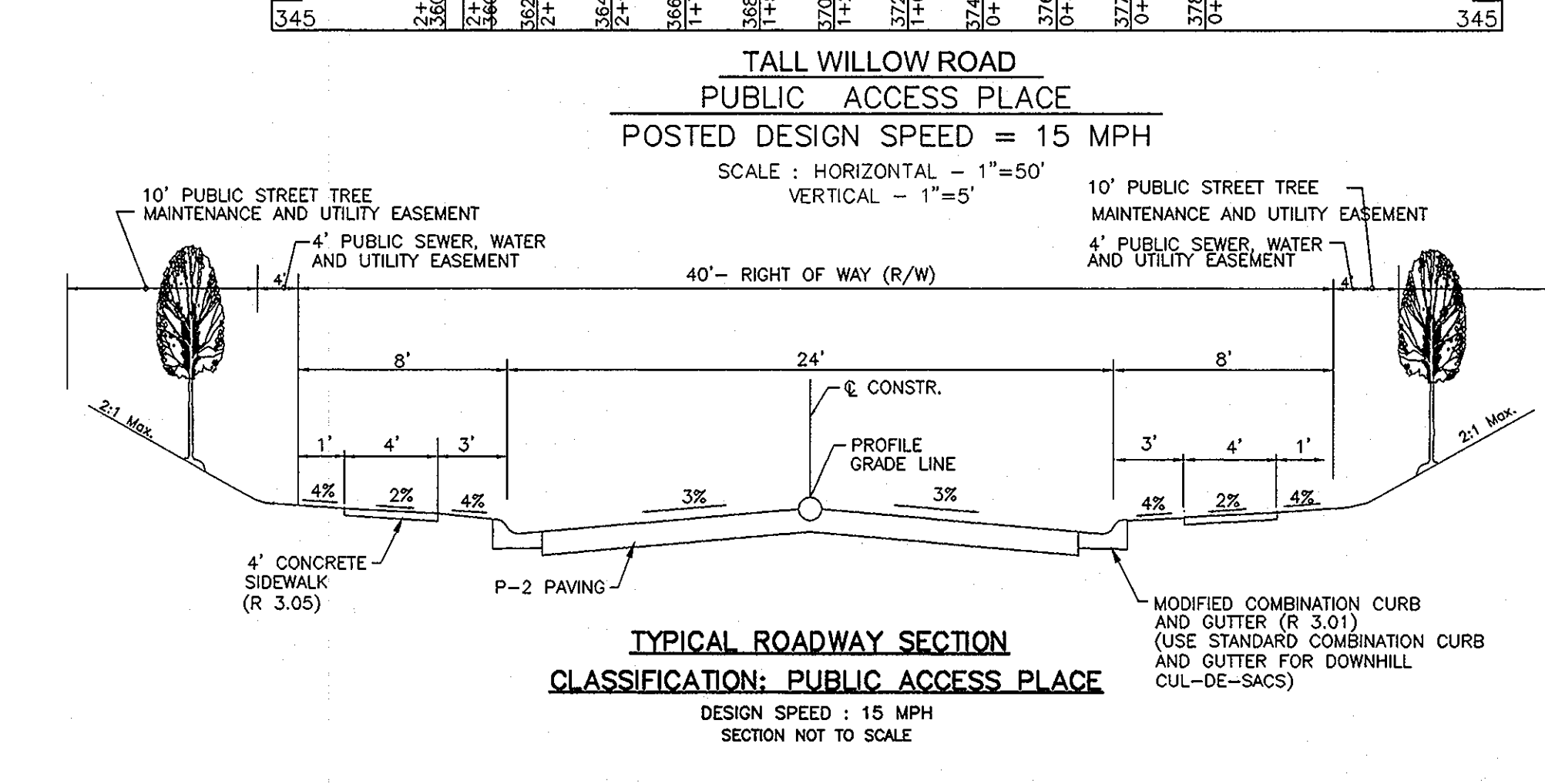
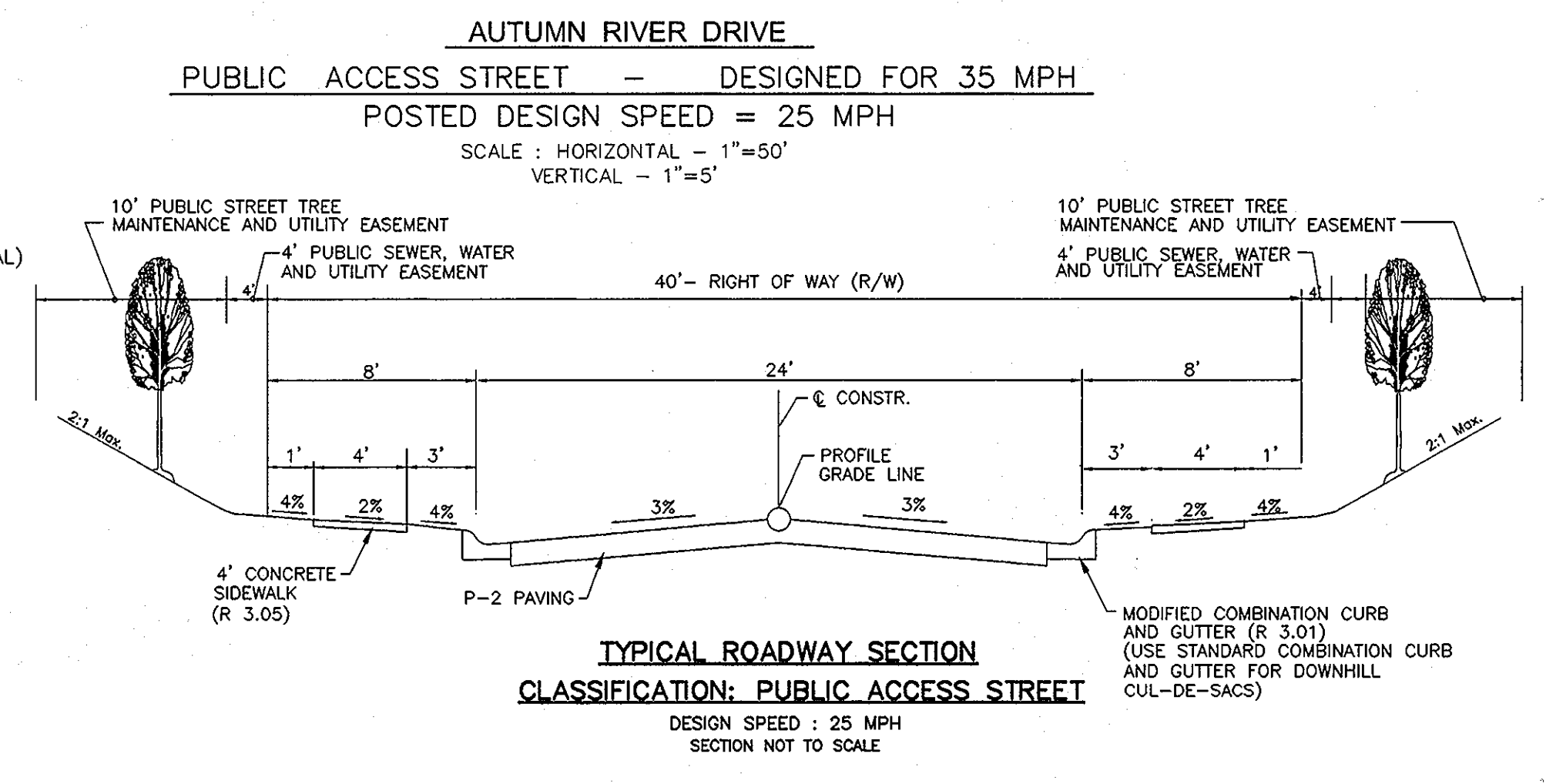
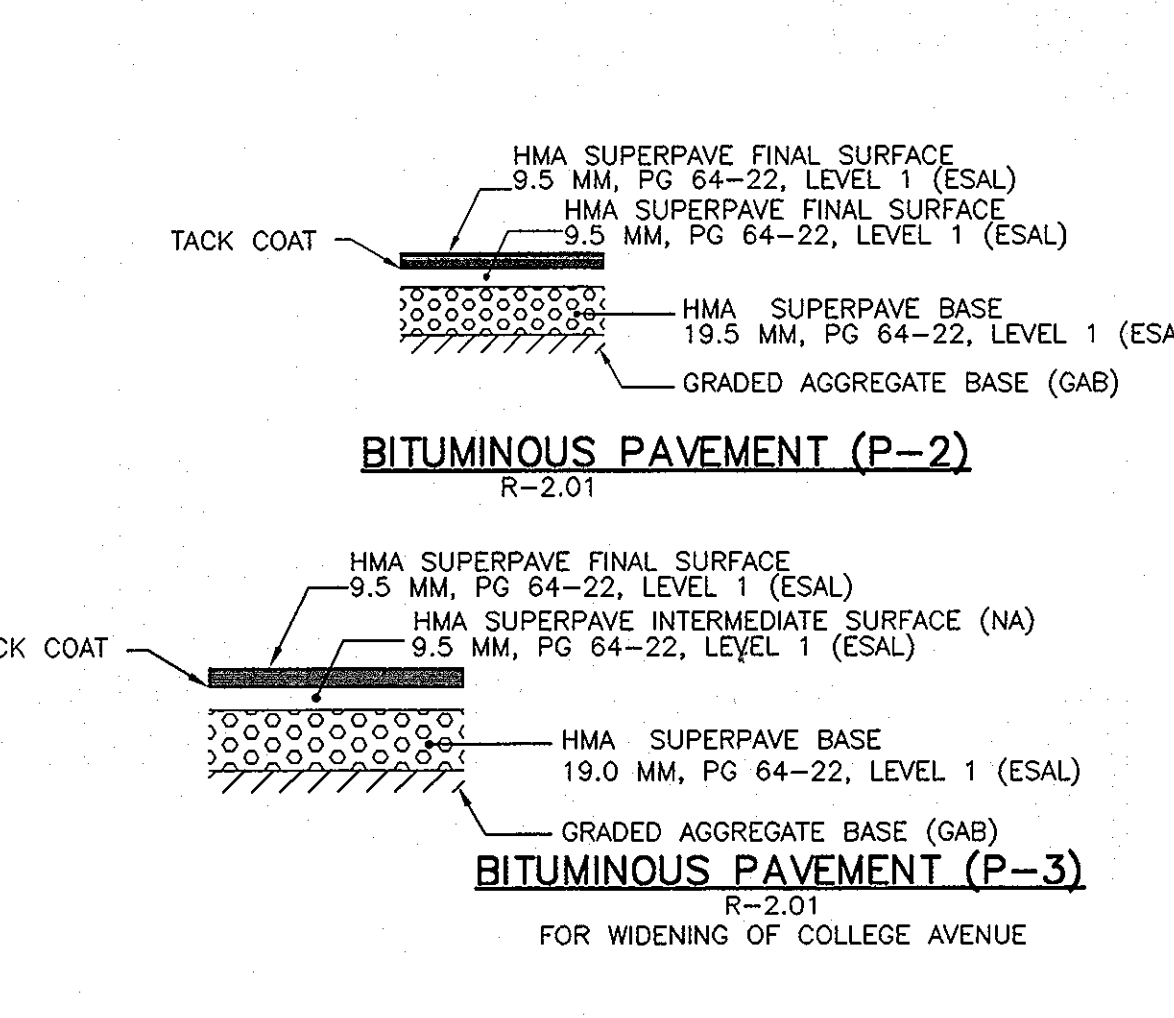


TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Frank D. Goggin
PLANNING DIRECTOR

2/8/09
DATE

OWNERS / DEVELOPER
AUTUMN RIVER DEVELOPMENT CORPORATION
C/O LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DR STE 102
ELLICOTT CITY MD 21042-7819
ATTN: MR. DONALD R. REUWER
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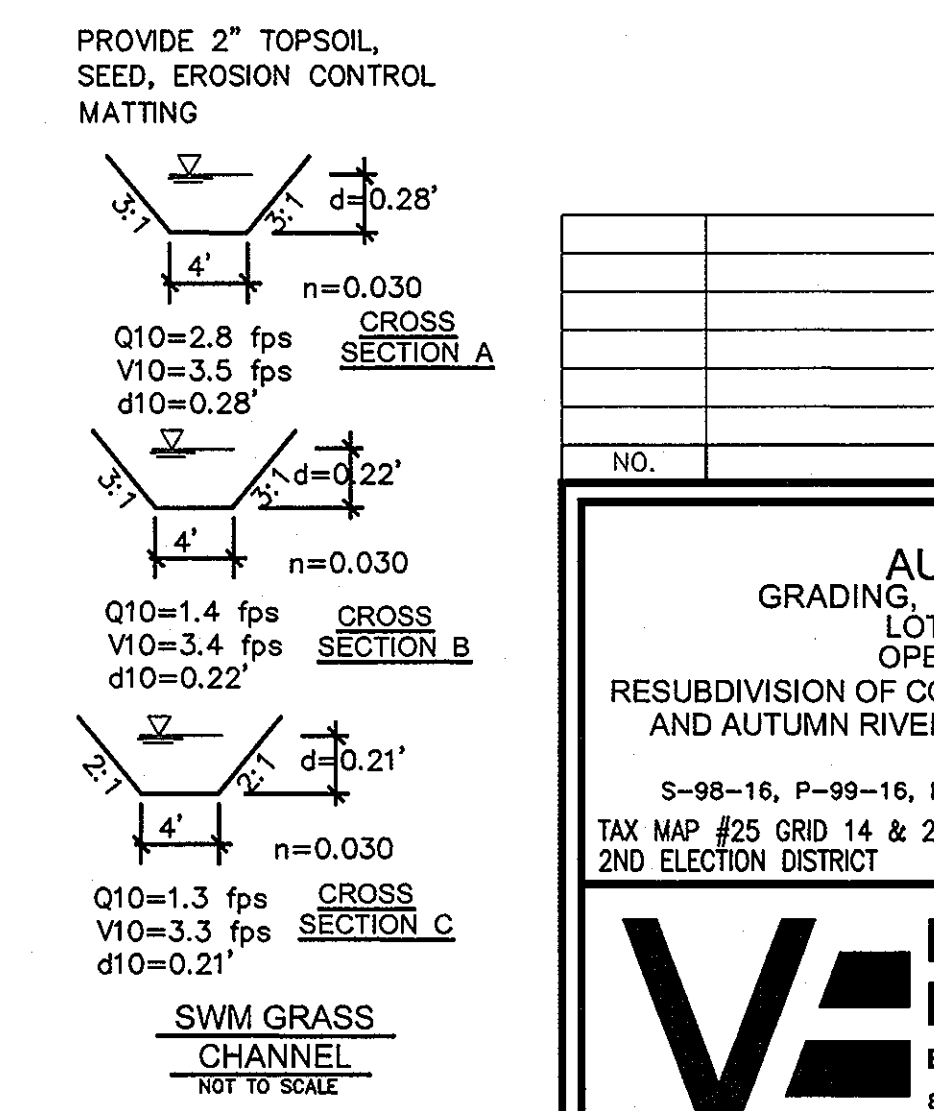
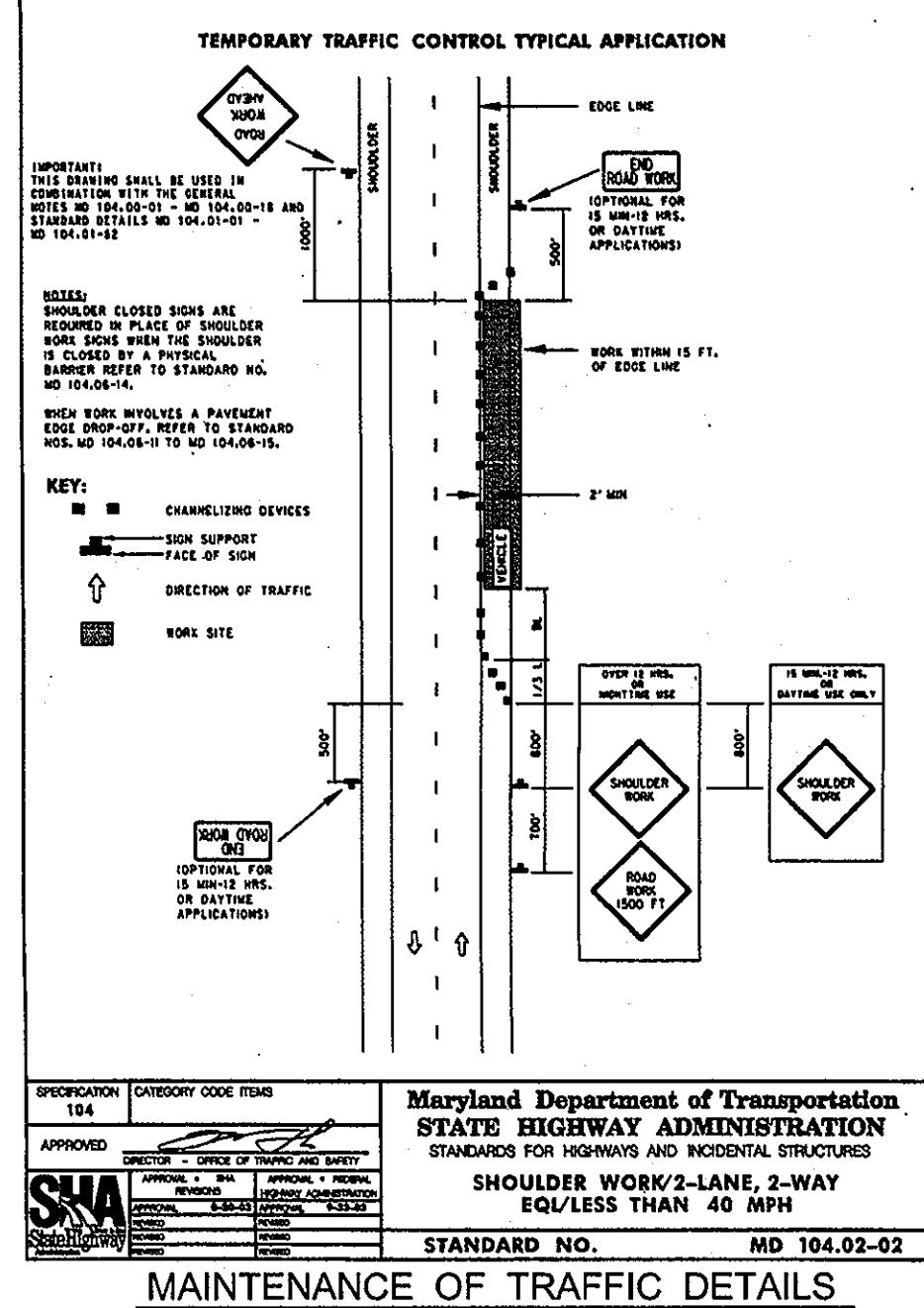
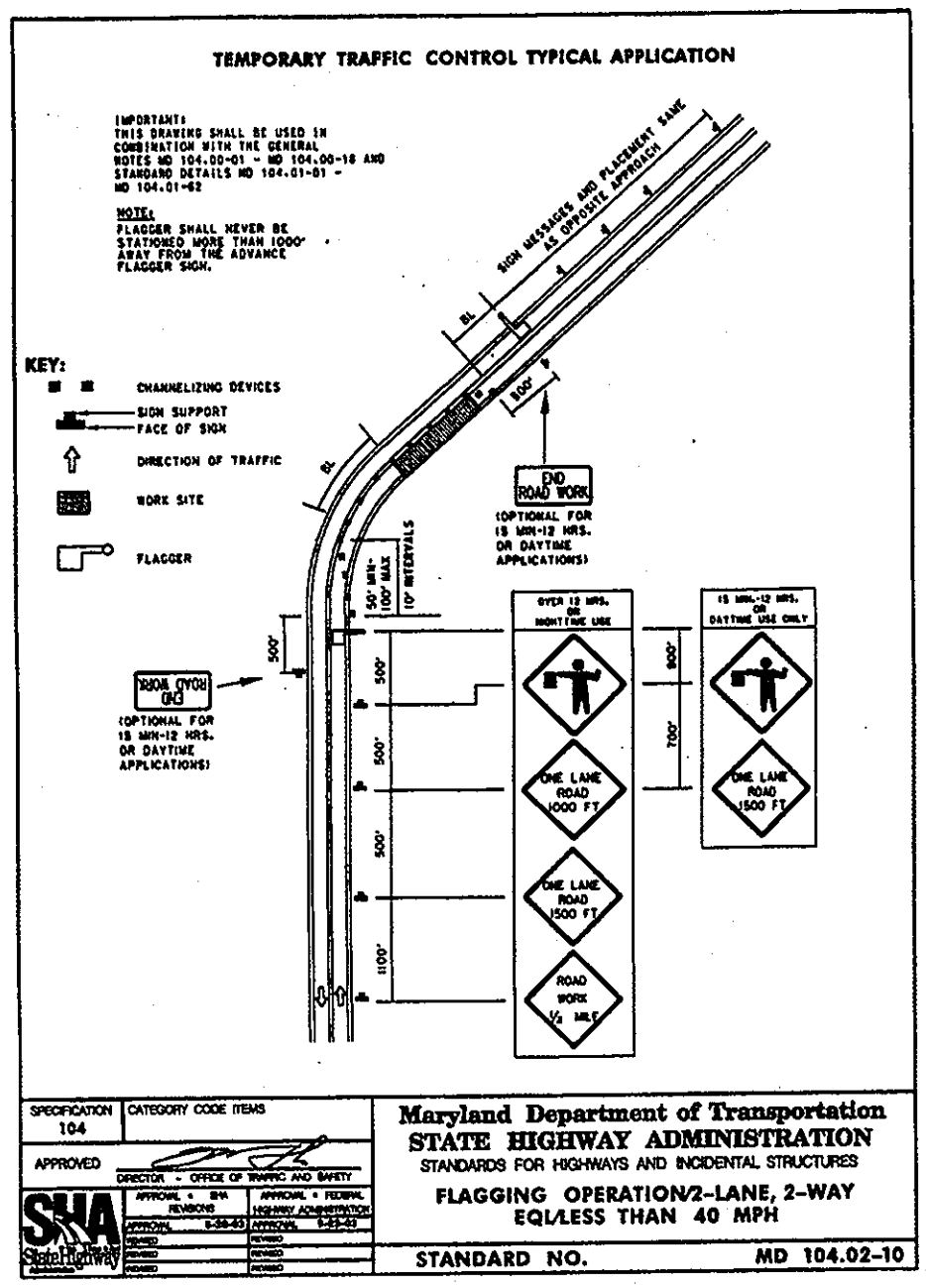
PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
ROAD PROFILES, PAVEMENT MARKING PLAN & IMPROVEMENTS
LOTS 72-86, 88-102, 104-107, 109 & 110
OPENSOURCE LOTS 71, 87, 93, 103 & 108
RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B'
AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E'
HOWARD COUNTY, MARYLAND
S-98-16, P-99-16, F-00-131, F-01-08, P.B.325, P.B.148, PLAT#15794 & 15795,
TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-016 PARCELS 172 & 279
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043 TEL: 410-461-7666
FAX: 410-461-8961

DESIGN BY: RJ/RJ
DRAWN BY: RHV
CHECKED BY: RHV
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 04-145

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4 SHEET OF 9



- LEGEND:**
- 329 --- EXISTING CONTOUR
 - 406 --- PROPOSED CONTOUR
 - --- EXISTING CURB AND GUTTER
 - --- PROPOSED CURB AND GUTTER
 - --- EXISTING TREELINE
 - --- EXISTING FENCE
 - --- PROPERTY LINE
 - --- RIGHT-OF-WAY LINE
 - --- PROPOSED SIDEWALK
 - --- MODERATE SLOPES (1% - 24.99%)
 - --- STEEP SLOPE (>25%)
 - --- PUBLIC 100 YR FLOODPLAIN DRAINAGE & UTILITY EASEMENT
 - --- SILT FENCE
 - --- SUPER SILT FENCE
 - --- LIMIT OF DISTURBANCE
 - --- CURB INLET PROTECTION
 - --- AT GRADE INLET PROTECTION
 - --- WETLANDS BUFFER
 - --- STREAM CENTERLINE
 - --- STREAM BUFFER
 - --- PROP. STREET LIGHT
 - --- PROP. STREET SIGNS
 - --- EXISTING FOREST CONSERVATION EASEMENT
 - --- FOREST CONSERVATION AREA (RETENTION)
 - --- RECREATION OPEN SPACE
 - --- 10' PUBLIC STREET TREE MAINTENANCE & UTILITY EASEMENT
 - --- 70' WIDE EXISTING AMERICAN TELEPHONE & TELEGRAPH COMPANY OF BALTIMORE CITY EASEMENT AND RIGHT-OF-WAY, LIBER 167, FOLIO 502 & LIBER 232, FOLIO 96
 - --- VARIABLE WIDTH SEWER & UTILITY EASEMENT
 - --- 24' PRIVATE USE-IN COMMON ACCESS EASEMENT
 - --- 20' PUBLIC DRAINAGE & UTILITY EASEMENT
 - --- PROP. ROAD WIDENING 4' PAVING ALONG FRONTAGE OF THE PROPERTY
 - --- AQUATIC BENCH

OWNERS / DEVELOPER
 AUTUMN RIVER DEVELOPMENT CORPORATION
 C/O LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DR STE 102
 ELLICOTT CITY MD 21042-7819
 ATTN: MR. DONALD R. REUSER
 (443) 367-0422

NO.	REVISION	DATE

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
 GRADING, SEDIMENT CONTROL PLAN & MOT DETAILS
 LOTS 72-86, 88-102, 104-107, 109 & 110
 OPENSOURCE LOTS 71, 87, 93, 103 & 108
 RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B'
 AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E'
 HOWARD COUNTY, MARYLAND
 S-98-16, P-99-16, F-00-131, F-01-08, P.B.325, P.B.148, PLAT#15794 & 15795,
 TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-016 PARCELS 172 & 279
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961

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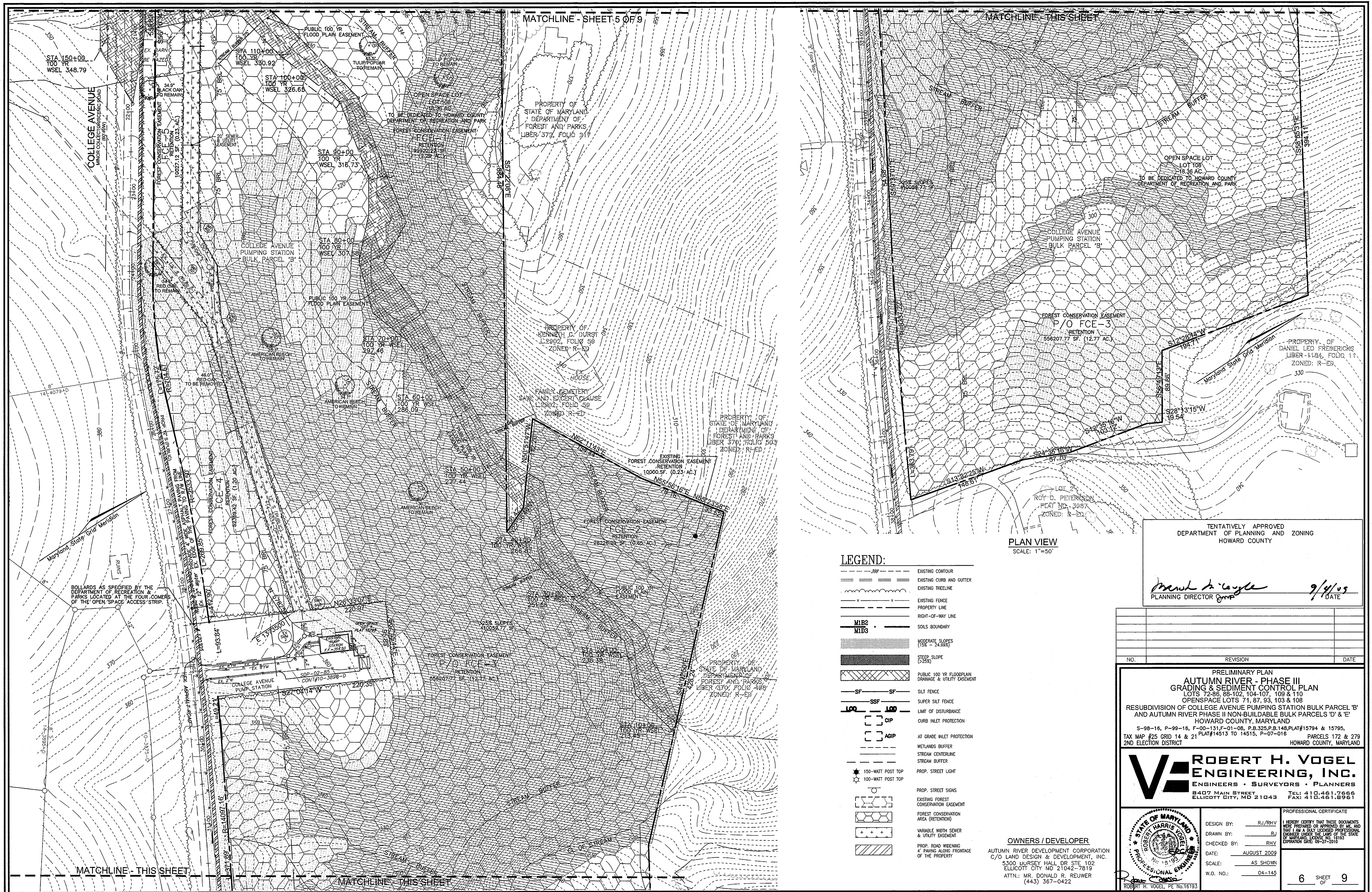
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5 SHEET OF 9

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Robert H. Vogel
 PLANNING DIRECTOR
 7/4/09 DATE

MATCHLINE SHEET 6 OF 9
 PLAN VIEW
 SCALE: 1"=50'



MATCHLINE - SHEET 5 OF 9

MATCHLINE - THIS SHEET

MATCHLINE - THIS SHEET

MATCHLINE - THIS SHEET

LEGEND:

- EXISTING CONTOUR
- EXISTING CURB AND GUTTER
- EXISTING TREELINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- MODERATE SLOPES (1% - 24.99%)
- STEEP SLOPE (>25%)
- PUBLIC 100 YR FLOODPLAIN DRAINAGE & UTILITY EASEMENT
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- CURB INLET PROTECTION
- AT GRADE INLET PROTECTION
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PLAN VIEW
SCALE: 1"=50'

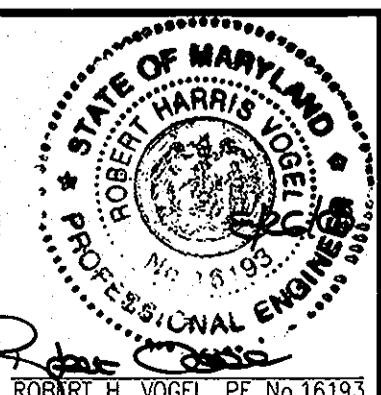
TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Mark A. Gayle 9/4/09
PLANNING DIRECTOR DATE

NO.	REVISION	DATE

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
GRADING & SEDIMENT CONTROL PLAN
LOTS 72-86, 88-102, 104-107, 109 & 110
OPENSOURCE LOTS 71, 87, 93, 103 & 108
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HOWARD COUNTY, MARYLAND
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2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

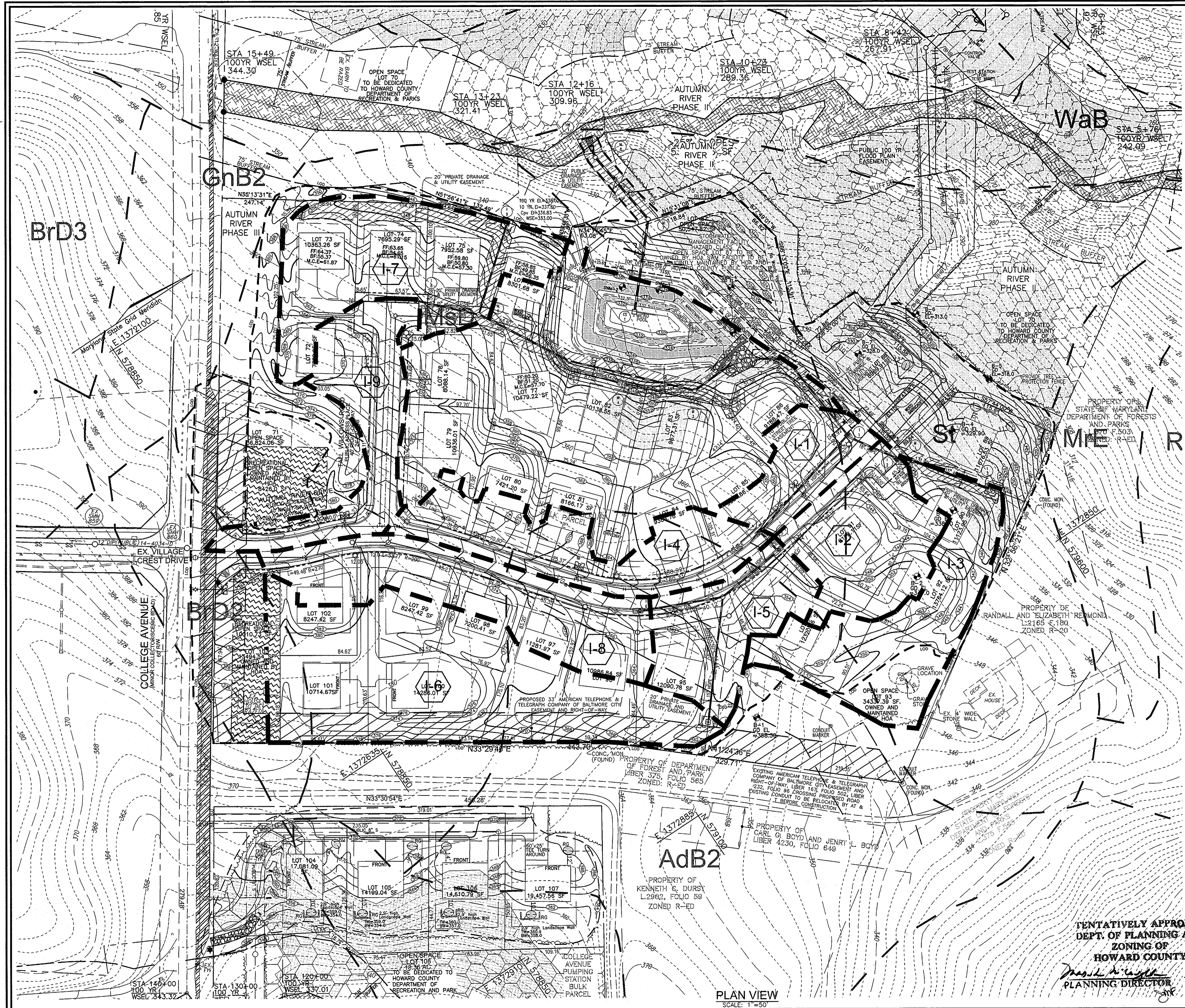
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELlicott CITY, MD 21043 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND
THAT I AM A FULLY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2010

DESIGN BY: RJ/RHV
DRAWN BY: RJ
CHECKED BY: RHY
DATE: AUGUST 2009
SCALE: AS SHOWN
W.O. NO.: 04-145

OWNERS / DEVELOPER
AUTUMN RIVER DEVELOPMENT CORPORATION
C/O LAND DESIGN & DEVELOPMENT, INC.
5300 JURSEY HALL DR STE 102
ELlicott CITY MD 21042-7819
ATTN: MR. DONALD R. REUWER
(443) 367-0422



SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
AB2	ALDINO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
AD2	ALDINO SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	C
BrB2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
BrD2	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	C
BrD3	BRANDYWINE LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC2	LEGORE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
LgC3	LEGORE SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	C
MfE	MONTALTO LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MfD	MONTALTO LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	C
MfF	MONTALTO AND RELAY VERY STONY SILT LOAMS, 3 TO 25 PERCENT SLOPES	C
NwC2	NESHAMINY SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
RcC2	WATCHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	B
St	STONY LAND	B
WbB	WATCHUNG SILT LOAM, 3 TO 8 PERCENT SLOPES	D

DRAINAGE AREA TABULATIONS					
NO.	AREA	% IMP.	SOIL TYPE	ZONE	
I-1	0.296 AC.	0.49	35%	B	R-ED
I-2	0.557 AC.	0.49	18%	B, D	R-ED
I-3	0.672 AC.	0.40	49%	B, D	R-ED
I-4	0.609 AC.	0.60	47%	B, D	R-ED
I-5	1.15 AC.	0.57	23%	B, C	R-ED
I-6	1.36 AC.	0.43	49%	B, C	R-ED
I-7	0.52 AC.	0.57	26%	B	R-ED
I-8	0.675 AC.	0.43	30%	B	R-ED
I-9	0.453 AC.	0.43	11%	B	R-ED

LEGEND:

	EXISTING CONTOUR		150-WATT POST TOP		PROP. STREET LIGHT
	PROPOSED CONTOUR		100-WATT POST TOP		PROP. STREET SIGN
	PROPOSED STORM DRAIN		EXISTING FENCE		EXISTING FENCE
	PROPOSED STORM DRAIN INLET		PROPERTY LINE		PROPERTY LINE
	EXISTING TREELINE (FIELD LOCATED)		RIGHT-OF-WAY LINE		RIGHT-OF-WAY LINE
	WETLANDS BUFFER		MfB2		MfD3
	STREAM CENTERLINE		MODERATE SLOPES (1% - 24.99%)		STEEP SLOPE (>25%)
	STREAM BUFFER		PUBLIC 100 YR FLOODPLAIN DRAINAGE & UTILITY EASEMENT		EXISTING FOREST CONSERVATION EASEMENT
			FOREST CONSERVATION AREA (RETENTION)		RECREATION OPEN SPACE
			10' PUBLIC STREET TREE MAINTENANCE & UTILITY EASEMENT		DRAINAGE AREA DIVIDE
			20' PUBLIC DRAINAGE & UTILITY EASEMENT		PROP. ROAD WIDENING 4' PAVING ALONG FRONTAGE OF THE PROPERTY

OWNERS / DEVELOPER
 AUTUMN RIVER DEVELOPMENT CORPORATION
 C/O LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DR. STE. 102
 ELLICOTT CITY, MD 21042-7119
 ATTN.: MR. DONALD R. REUWER
 (443) 367-0422

NO.	REVISION	DATE

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
STORM DRAIN DRAINAGE AREA MAP
 LOTS 72-86, 88-102, 104-107, 109 & 110
 OPENSOURCE LOTS 71, 87, 93, 103 & 108
 RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B'
 AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E'
 HOWARD COUNTY, MARYLAND
 S-98-16, P-99-16, F-00-131F-01-08, P.B.325,P.B.148,PLAT#15794 & 15795,
 TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-018
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
ENGINEERING, INC.
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 8407 MAIN STREET TEL: 410.461.7666
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PROFESSIONAL CERTIFICATE
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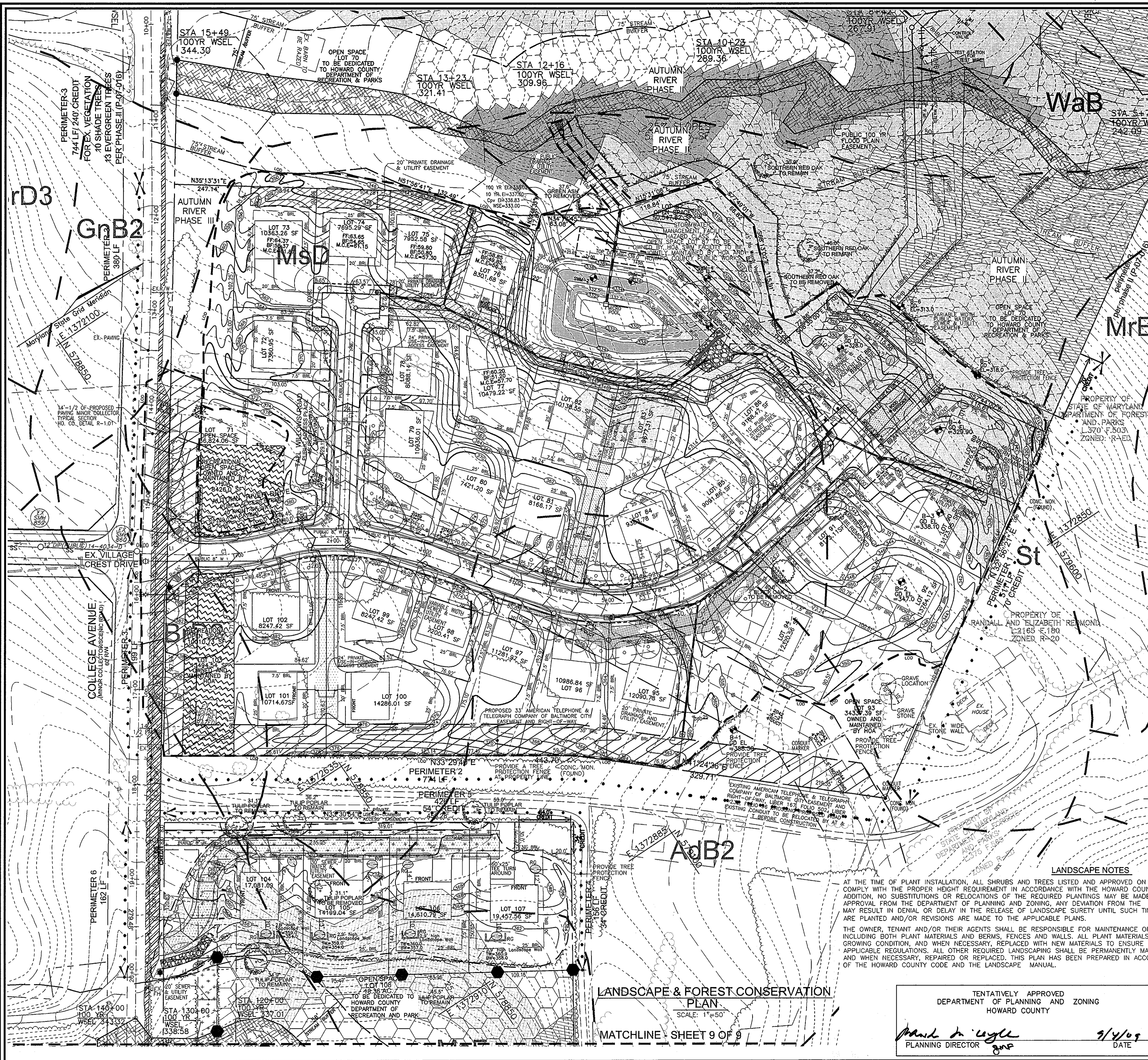
STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 ROBERT H. VOGEL, PE No. 16193

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 16193 EXPIRATION DATE 06-27-2016

7 SHEET OF 9

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY
 Planning Director
 2/2/09
 DATE

PLAN VIEW
 SCALE: 1"=50'



EXISTING SHADE TREES				
TREE ID#	SCIENTIFIC NAME	COMMON NAME	DBH	VIGOR
1	FAGUS GRANDIFOLIA	AMERICAN BEECH	46.0	GOOD
2	QUERCUS NIGRA	BLACK OAK	40.0	EXCELLENT
7	FRAXINUS PENNSYLVANICA	GREEN ASH	37.6	GOOD
8	QUERCUS FALCATA	SOUTHERN RED OAK	37.2	FAIR
9	QUERCUS FALCATA	SOUTHERN RED OAK	51.3	FAIR
13	QUERCUS FALCATA	SOUTHERN RED OAK	30.9	GOOD
14	QUERCUS FALCATA	SOUTHERN RED OAK	32.4	GOOD
24	LIRODENDRON TULIPIFERA	TULIP POPLAR	53.0	EXCELLENT
25	LIRODENDRON TULIPIFERA	TULIP POPLAR	51.0	EXCELLENT
26	QUERCUS FALCATA	SOUTHERN RED OAK	46.0	EXCELLENT
27	LIRODENDRON TULIPIFERA	TULIP POPLAR	36.2	EXCELLENT
28	LIRODENDRON TULIPIFERA	TULIP POPLAR	45.5	POOR
29	FAGUS GRANDIFOLIA	AMERICAN BEECH	36.7	GOOD
30	LIRODENDRON TULIPIFERA	TULIP POPLAR	31.1	GOOD
31	LIRODENDRON TULIPIFERA	TULIP POPLAR	34.9	GOOD
32	LIRODENDRON TULIPIFERA	TULIP POPLAR	31.3	POOR
33	LIRODENDRON TULIPIFERA	TULIP POPLAR	30.0	GOOD
34	QUERCUS NIGRA	BLACK OAK	33.4	GOOD
35	FAGUS GRANDIFOLIA	AMERICAN BEECH	35.3	GOOD
36	FAGUS GRANDIFOLIA	AMERICAN BEECH	34.7	POOR
37	QUERCUS FALCATA	SOUTHERN RED OAK	34.8	GOOD

LEGEND	
	FOREST CONSERVATION (RETENTION)
	PUBLIC 100 YR FLOODPLAIN EASEMENT
	40' WIDE BG & E WREZONE
	FOREST CONSERVATION EASEMENT SIGN
	TREE PROTECTION FENCE
	SPECIMEN TREE TREE PROTECTION FENCE NO. 03, DETAIL L-9-02
	RECREATION OPEN SPACE
	LANDSCAPE PERIMETER
	VARIABLE WIDTH SEWER & UTILITY EASEMENT
	24' PRIVATE USE - COMMON ACCESS EASEMENT
	20' PRIVATE DRAINAGE & UTILITY EASEMENT
	EX. FOREST CONSERVATION
	AQUATIC BENCH
	PROP. ROAD WIDENING 4' PAVING ALONG FRONTAGE OF THE PROPERTY

SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING-TYPE 'B' BUFFER	
CATEGORY	SWMF 1
LINEAR FEET OF PERIMETER	784'
CREDIT FOR EXISTING VEGETATION (YES, NO, AND LINEAR FEET)	YES* 282'
CREDIT FOR FENCE (YES, NO, AND %)	YES* 395'
NUMBER OF TREES REQUIRED	107'
SHADE TREES	02
EVERGREEN TREES	03
NUMBER OF TREES PROVIDED	02
SHADE TREES	03
SHRUBS	-

STREET TREE CALCULATIONS			
STREET NAME	LINEAR FEET	NO. REQUIRED	NO. PROVIDED
AUTUMN RIVER DRIVE	1650/40	41	41
TALL WILLOWS ROAD	584/40	15	15
COLLEGE AVE-RD IMPROV.	103/40	06	06

PUBLIC ACCESS PLACE STREET TREE SCHEDULE			
KEY QUAN.	BOTANICAL NAME	SIZE	REM.
56	ACER RUBRUM 'AUTUMN FLAME'	2 1/2"-3" CAL.	B & B
06	AMUR MAPLE (SHADE TREES-ACER GINNALA GROWTH HEIGHT=20')	2 1/2"-3" CAL.	B & B

*EXISTING WOODS TO REMAIN

SCHEDULE A: PERIMETER LANDSCAPE EDGE							
CATEGORY	ADJACENT TO PERIMETER PROPERTIES						
	1	2	3	4	5	6	TOTAL
PERIMETER/FRONTAGE DESIGNATION							
LANDSCAPE TYPE							
LINEAR FEET OF ROADWAY, PERIMETER/FRONTAGE	511'	760'	579'	156'	426'	162'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	YES* 70'	NO	NO	YES* 34'	YES* 54'	YES* 66'	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	-	-	-	-	-	-	
NUMBER OF PLANTS REQUIRED (LF REMAINING)	441	760	579	122	372	96	43
SHADE TREES	1:60	7	13	14	1:60	2	2
EVERGREEN TREES	1:20	29	29	29	1:20	5	32
NUMBER OF PLANTS PROVIDED	7	13	14	2	6	4	43
SHADE TREES	-	-	-	-	-	-	-
EVERGREEN TREES	-	-	-	-	-	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-	-	-
SHRUBS (10:1 SUBSTITUTION)	-	-	-	-	-	-	-
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)							

RECOMMENDATION: PROVIDE LARGER THAN MINIMUM MATERIAL SIZE IN AREAS WHERE THE SIDE OR REAR OF THE HOUSE FACE THE ROAD.

NOTES

1. THE DECORATIVE FENCE AROUND THE STORMWATER MANAGEMENT FACILITY WILL BE DESIGNED IN DETAIL WITH ELEVATIONS TO BE PROVIDED UNDER FUTURE FINAL PLAN STAGE.
2. HOWARD COUNTY RESERVES THE RIGHT TO REQUIRED STORMWATER MANAGEMENT LANDSCAPING IN LIEU OF THE FENCE AT THE RATE OF 1 TREE PER 60 LINEAR FEET OR ONE SHRUB OR VINE PER 10 LINEAR FEET AS STATED ON PAGE 24 OF THE LANDSCAPE MANUAL.
3. THE LOCATION AND SPECIMENS FOR PERIMETER LANDSCAPING WILL BE PROVIDED WITH THE FINAL ROAD CONSTRUCTION PLANS. THIS LANDSCAPE PLAN IS CONCEPTUAL AND THAT DETAIL AND SURETY WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT UNDER FINAL PLAN.
4. NO LANDSCAPING TO BE INSTALLED WITHIN ANY PUBLIC EASEMENT FOR WATER, SEWER OR STORM DRAIN.

J. Chris Ogle
 J. CHRIS OGLE
 RNR QUALIFIED PROFESSIONAL

LANDSCAPE NOTES

AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING, ANY DEVIATION FROM THE 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 THE APPLICABLE PLANS.

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 MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

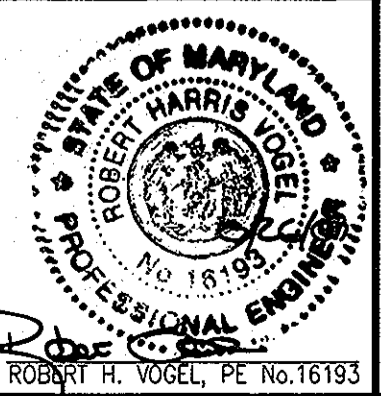
LANDSCAPE & FOREST CONSERVATION PLAN
 SCALE: 1"=50'
 MATCHLINE SHEET 9 OF 9

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

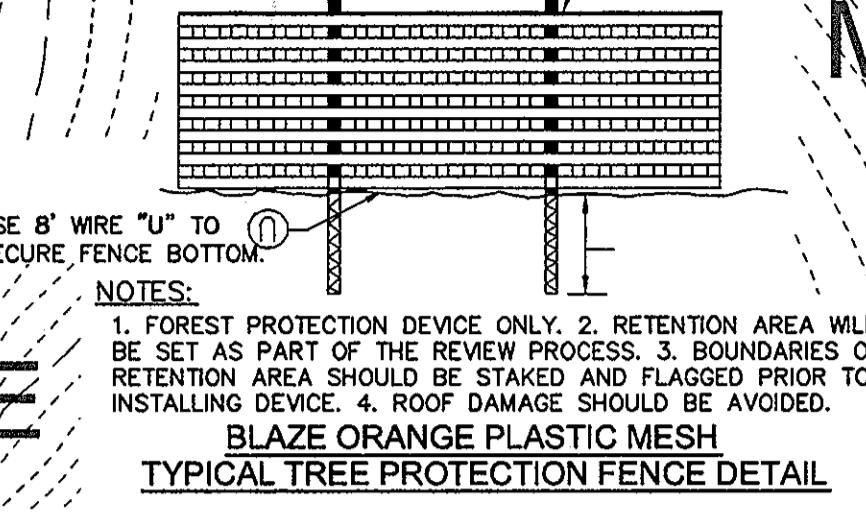
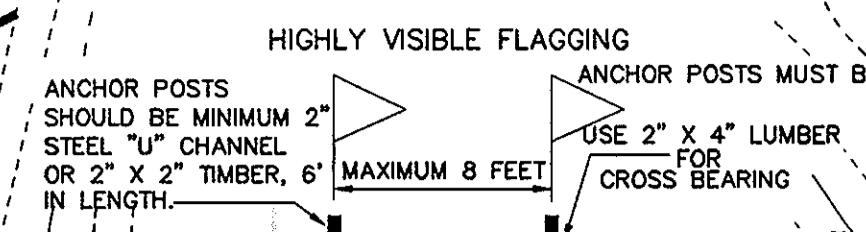
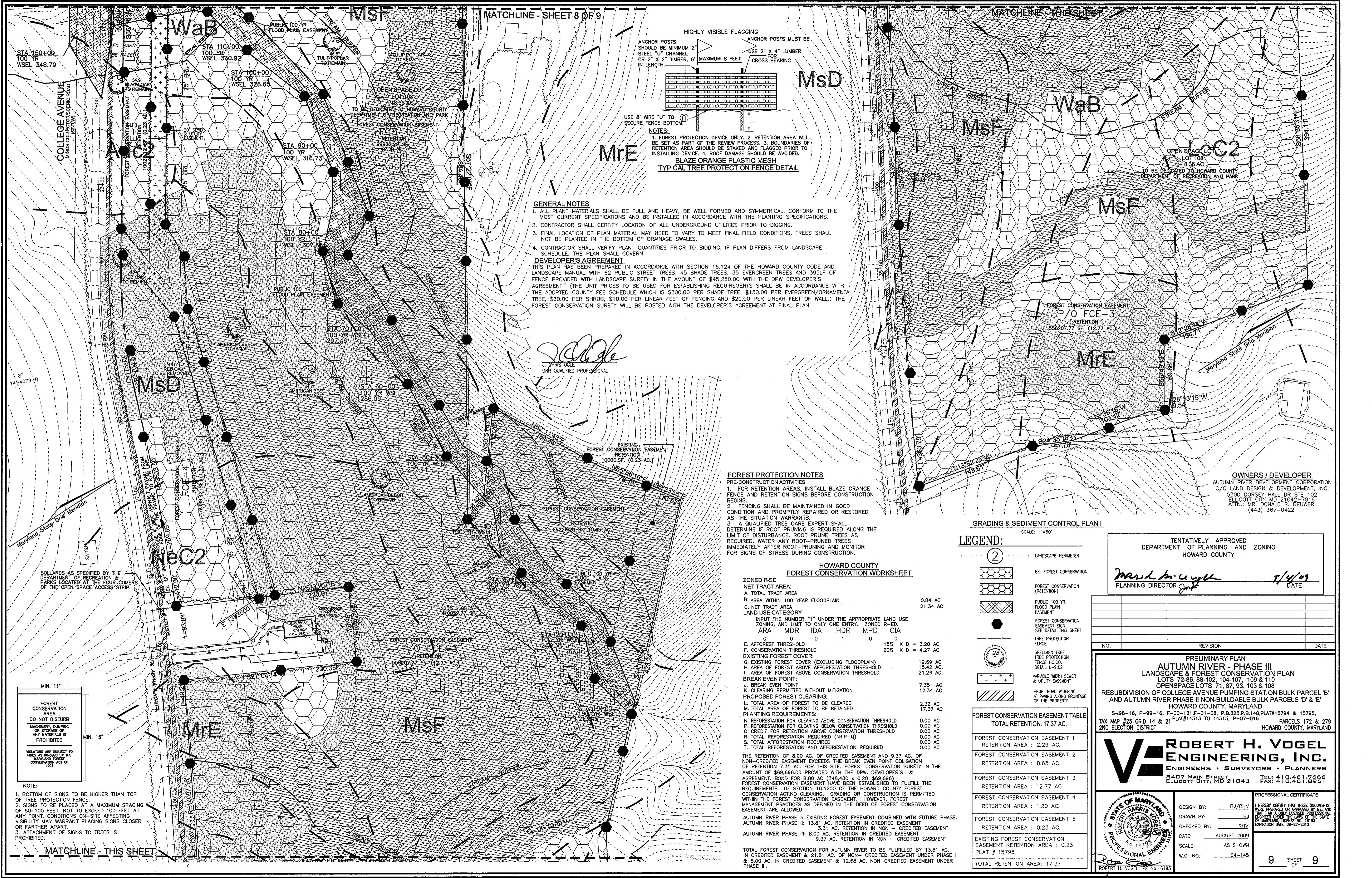
Paul A. Uygell
 PLANNING DIRECTOR
 DATE: 9/4/09

OWNERS / DEVELOPER
 AUTUMN RIVER DEVELOPMENT CORPORATION
 C/O LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DR STE 102
 ELLICOTT CITY MD 21042-7819
 ATTN: MR. DONALD R. REUWER
 (443) 367-0422

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961



DESIGN BY:		PROFESSIONAL CERTIFICATE	
DESIGN BY:	RJ/RHV	DESIGN BY:	RJ/RHV
DRAWN BY:	RJ	DATE:	AUGUST 2009
CHECKED BY:	RHV	SCALE:	AS SHOWN
DATE:	AUGUST 2009	W.O. NO.:	04-145
SCALE:	AS SHOWN		
W.O. NO.:	04-145		
		8	9



GENERAL NOTES

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH THE PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL CERTIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FLOOR CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

DEVELOPER'S AGREEMENT

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL WITH 62 PUBLIC STREET TREES, 45 SHADE TREES, 35 EVERGREEN TREES AND 395LF OF FENCE PROVIDED WITH LANDSCAPE SURETY IN THE AMOUNT OF \$45,250.00 WITH THE DPW DEVELOPER'S AGREEMENT. (THE UNIT PRICES TO BE USED FOR ESTABLISHING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE ADOPTED COUNTY FEE SCHEDULE WHICH IS \$300.00 PER SHADE TREE, \$150.00 PER EVERGREEN/ORNAMENTAL TREE, \$30.00 PER SHRUB, \$10.00 PER LINEAR FEET OF FENCING AND \$20.00 PER LINEAR FEET OF WALL.) THE FOREST CONSERVATION SURETY WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT AT FINAL PLAN.

J. Harris Ogle
 J. HARRIS OGLE
 DMR QUALIFIED PROFESSIONAL

FOREST PROTECTION NOTES

PRE-CONSTRUCTION ACTIVITIES

1. FOR RETENTION AREAS, INSTALL BLAZE ORANGE FENCE AND RETENTION SIGNS BEFORE CONSTRUCTION BEGINS.
2. FENCING SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED OR RESTORED AS THE SITUATION WARRANTS.
3. A QUALIFIED TREE CARE EXPERT SHALL DETERMINE IF ROOT PRUNING IS REQUIRED ALONG THE LIMIT OF DISTURBANCE. ROOT PRUNE TREES AS REQUIRED. WATER ANY ROOT-PRUNED TREES IMMEDIATELY AFTER ROOT-PRUNING AND MONITOR FOR SIGNS OF STRESS DURING CONSTRUCTION.

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

ZONED R-ED

NET TRACT AREA:

A. TOTAL TRACT AREA	
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.84 AC
C. NET TRACT AREA	21.34 AC

LAND USE CATEGORY

INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY. ZONED R-ED.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	0	1	0

E. AFFOREST THRESHOLD

F. CONSERVATION THRESHOLD	15% X D = 3.20 AC
G. EXISTING FOREST COVER	20% X D = 4.27 AC

H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD: 19.69 AC

I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD: 15.42 AC

J. BREAK EVEN POINT: 21.26 AC

K. BREAK EVEN POINT WITH MITIGATION: 7.35 AC

L. TOTAL AREA OF FOREST TO BE CLEARED: 12.34 AC

M. TOTAL AREA OF FOREST TO BE RETAINED: 17.37 AC

PROPOSED FOREST CLEARING:

N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	0.00 AC
O. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	0.00 AC
P. TOTAL REFORESTATION REQUIRED (N+P-Q)	0.00 AC
Q. TOTAL AFFORESTATION REQUIRED	0.00 AC
R. TOTAL REFORESTATION AND AFFORESTATION REQUIRED	0.00 AC

THE RETENTION OF 8.00 AC. OF CREDITED EASEMENT AND 9.37 AC. OF NON-CREDITED EASEMENT EXCEEDS THE BREAK EVEN POINT OBLIGATION OF RETENTION 7.35 AC. FOR THIS SITE. FOREST CONSERVATION SURETY IN THE AMOUNT OF \$69,696.00 PROVIDED WITH THE DPW, DEVELOPER'S & AGREEMENT, BOND FOR 8.00 AC. (\$48,480 x 0.20=\$89,696)

FOREST CONSERVATION EASEMENT HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

AUTUMN RIVER PHASE I: EXISTING FOREST EASEMENT COMBINED WITH FUTURE PHASE. AUTUMN RIVER PHASE II: 13.81 AC. RETENTION IN CREDITED EASEMENT 3.31 AC. RETENTION IN NON - CREDITED EASEMENT 10.50 AC.

AUTUMN RIVER PHASE III: 8.00 AC. RETENTION IN CREDITED EASEMENT 9.37 AC. RETENTION IN NON - CREDITED EASEMENT 8.00 AC.

TOTAL FOREST CONSERVATION FOR AUTUMN RIVER TO BE FULFILLED BY 13.81 AC. IN CREDITED EASEMENT & 21.81 AC. OF NON- CREDITED EASEMENT UNDER PHASE II & 8.00 AC. IN CREDITED EASEMENT & 12.68 AC. NON-CREDITED EASEMENT UNDER PHASE III.

GRADING & SEDIMENT CONTROL PLAN I

SCALE: 1"=50'

LEGEND:

- ② LANDSCAPE PERIMETER
- EX. FOREST CONSERVATION
- FOREST CONSERVATION (RETENTION)
- PUBLIC 100 YR. FLOOD PLAIN EASEMENT
- FOREST CONSERVATION EASEMENT SIGN SEE DETAIL THIS SHEET
- TREE PROTECTION FENCE
- SPECIMEN TREE TREE PROTECTION FENCE HO.CO. DETAIL L-9-02
- VARIABLE WIDTH SEWER & UTILITY EASEMENT
- PROP. ROAD WIDENING 4' PAVING ALONG FRONTAGE OF THE PROPERTY

FOREST CONSERVATION EASEMENT TABLE

TOTAL RETENTION: 17.37 AC.

FOREST CONSERVATION EASEMENT 1	RETENTION AREA : 2.29 AC.
FOREST CONSERVATION EASEMENT 2	RETENTION AREA : 0.65 AC.
FOREST CONSERVATION EASEMENT 3	RETENTION AREA : 12.77 AC.
FOREST CONSERVATION EASEMENT 4	RETENTION AREA : 1.20 AC.
FOREST CONSERVATION EASEMENT 5	RETENTION AREA : 0.23 AC.

EXISTING FOREST CONSERVATION EASEMENT RETENTION AREA : 0.23 PLAT # 15795

TOTAL RETENTION AREA: 17.37

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

M. H. Ogle
 PLANNING DIRECTOR

7/4/09
 DATE

NO.	REVISION	DATE

PRELIMINARY PLAN
AUTUMN RIVER - PHASE III
 LANDSCAPE & FOREST CONSERVATION PLAN
 LOTS 72-86, 88-102, 104-107, 109 & 110
 OPENSOURCE LOTS 71, 87, 93, 103 & 108
 RESUBDIVISION OF COLLEGE AVENUE PUMPING STATION BULK PARCEL 'B'
 AND AUTUMN RIVER PHASE II NON-BUILDABLE BULK PARCELS 'D' & 'E'
 HOWARD COUNTY, MARYLAND

5-98-16, P-99-16, F-00-131.F-01-08, P.B.325,P.B.148,PLAT#15794 & 15795,
 TAX MAP #25 GRID 14 & 21 PLAT#14513 TO 14515, P-07-016 PARCELS 172 & 279
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
 ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET TEL: 410.481.2666
 ELLICOTT CITY, MD 21043 FAX: 410.481.3961

PROFESSIONAL CERTIFICATE

DESIGN BY: RJ/RHV
 DRAWN BY: BJ
 CHECKED BY: RHV
 DATE: AUGUST 2009
 SCALE: AS SHOWN
 W.O. NO.: 04-145

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly Licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. MY LICENSE NO. IS 1183 EXPIRATION DATE: 09-27-2010

9 SHEET OF 9

MIN. 11"

MIN. 15"

FOREST CONSERVATION AREA DO NOT DISTURB

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1981

NOTE:

1. BOTTOM OF SIGNS TO BE HIGHER THAN TOP OF TREE PROTECTION FENCE.
2. SIGNS TO BE PLACED AT A MAXIMUM SPACING OF 50-100 FEET. NOT TO EXCEED 100 FEET AT ANY POINT. CONDITIONS ON-SITE AFFECTING VISIBILITY MAY WARRANT PLACING SIGNS CLOSER OR FARTHER APART.
3. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.

MATCHLINE - THIS SHEET