

SITE DATA
 LOCATION: TAX MAP 41, GRID 6, PARCEL 220
 DEED REFERENCE: L-3563 F.341
 5TH ELECTION DISTRICT
 EXISTING ZONING: R-20
 PER THE COMPREHENSIVE ZONING PLAN DATED 2/02/04.
 GROSS AREA OF PARCEL: 1.0031 AC.
 AREA OF RIGHT OF WAY: 0.0000 AC.
 AREA OF FLOODPLAIN: N/A
 AREA OF STEEP SLOPES: N/A
 NET AREA OF PROJECT: 1.0031 AC
 NUMBER OF RESIDENTIAL LOTS PROPOSED: 2 LOTS
 AREA OF PROPOSED RESIDENTIAL LOTS: 43,892 SF (1.00 AC)
 AREA OF SMALLEST BUILDABLE LOT PROPOSED: 21,846 SF
 NUMBER OF PROPOSED OPEN SPACE LOTS: 0
 NUMBER OF NON-BUILDABLE BULK PARCELS: 0

GRADING DATA
 TOTAL DISTURBED AREA = 0.683 AC
 IMPERVIOUS COVER = 0.219 AC
 AREA TO BE STABILIZED = 0.464 AC

ENVIRONMENTAL CONCEPT PLAN

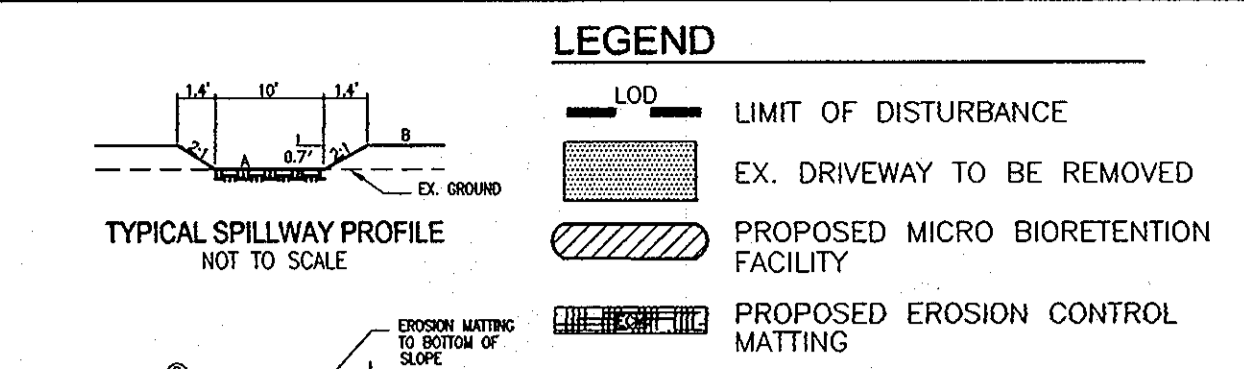
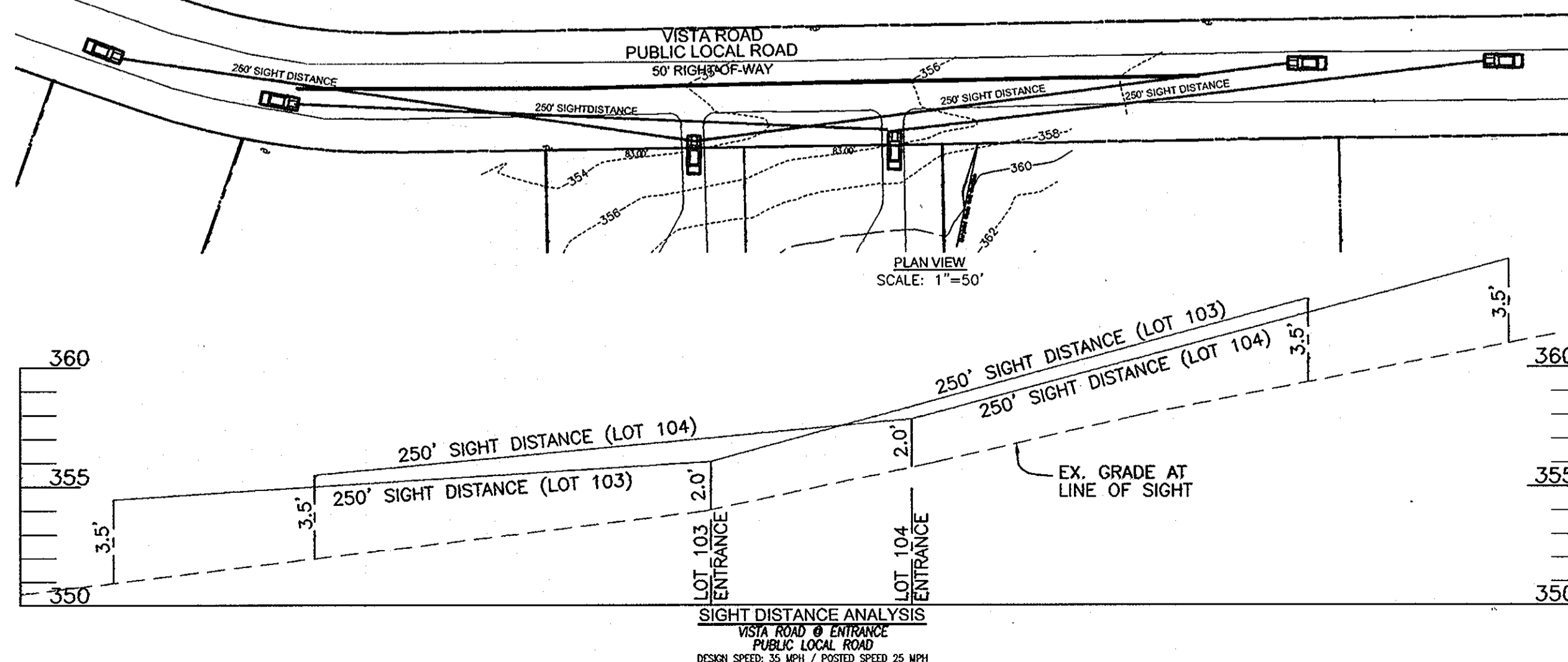
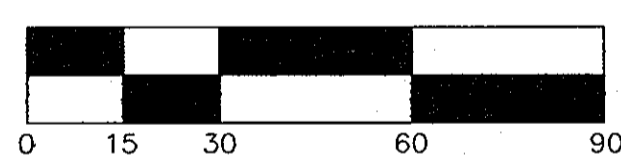
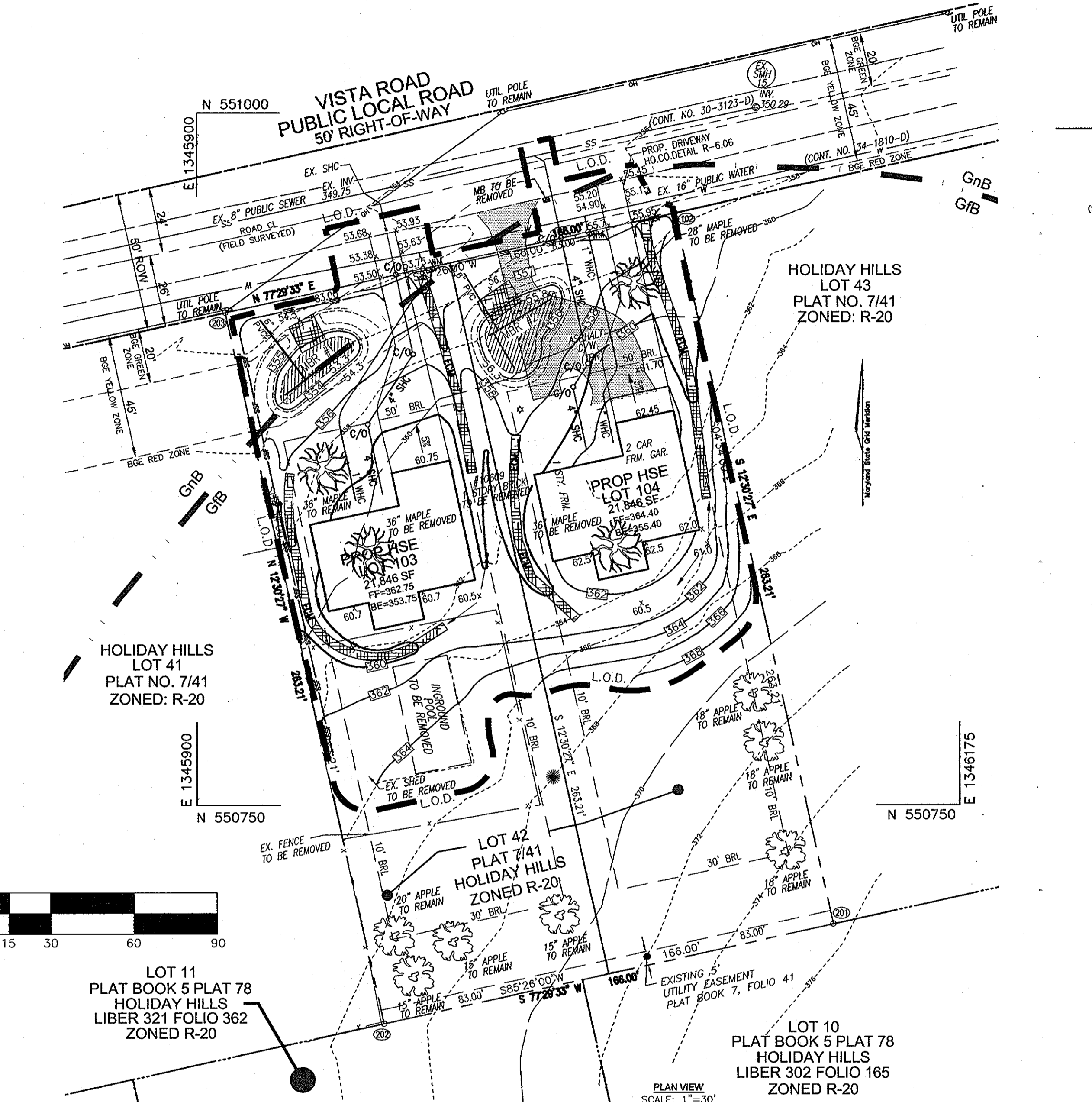
ECP-11-013 (F-10-111)

HOLIDAY HILLS LOTS 103 & 104

A RESUBDIVISION LOT 42 SECOND ADDITION TO HOLIDAY HILLS SUBDIVISION PLAT BOOK 7, FOLIO 41

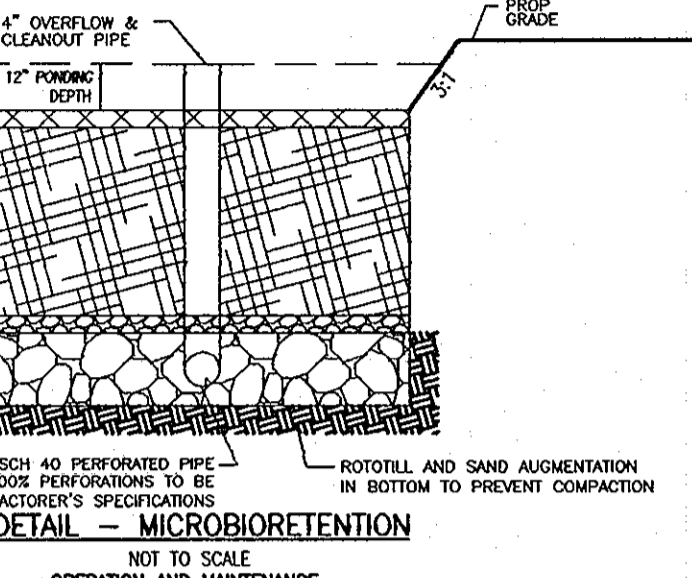
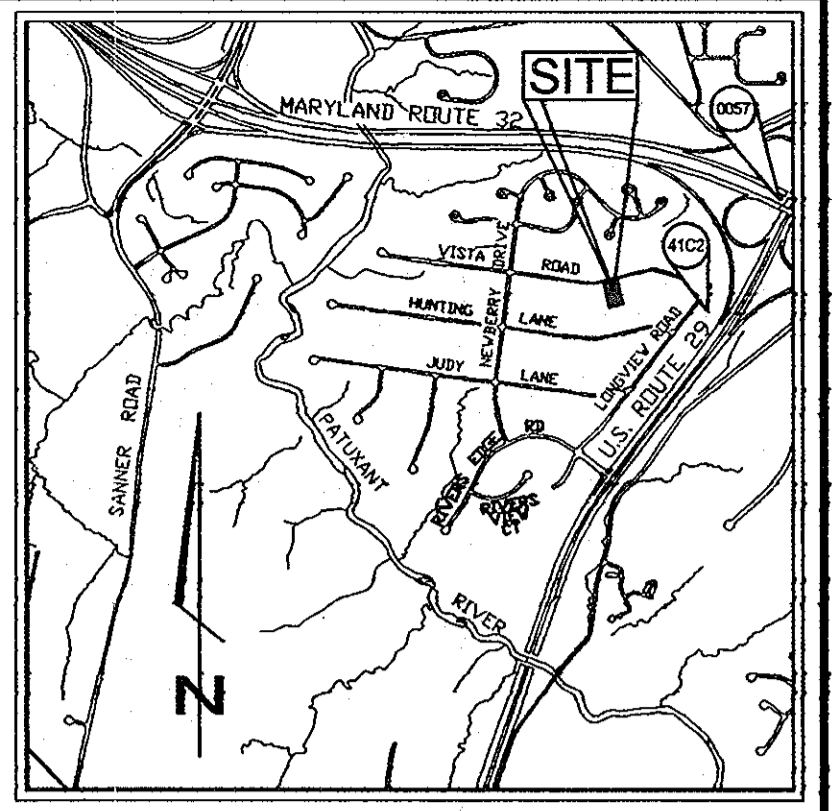
GENERAL NOTES

- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. IN FEBRUARY 2010.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC. IN FEBRUARY 2010.
- PUBLIC WATER AVAILABLE THROUGH CONTRACT 34-1810-D AND PUBLIC SEWER AVAILABLE THROUGH CONTRACT 30-3123-D. WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
- THIS PROJECT IS EXEMPT FROM CPV STORM WATER MANAGEMENT SINCE THE SITE P_e IS LESS THAN 1".
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- NO STREAMS EXIST ON SITE
- NO 100-YEAR FLOODPLAIN EXIST ON SITE.
- SUBJECT PROPERTY ZONED R-20 PER 2/02/04 COMPREHENSIVE ZONING PLAN, AND AMENDED BY THE COMPREHENSIVE LITE AMENDMENT DATED 07/28/06.
- PERIMETER LANDSCAPING PROVIDED USING EXISTING TREES AND ADDITION PROPOSED SHADE TREES AS SHOWN ON PLAN. SURETY TO BE PROVIDED IN CONJUNCTION WITH GRADING PERMIT AT SITE DEVELOPMENT PLAN STAGE.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003), DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT.
- "DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CLIP COATING.
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM 10' FOOT DEPTH TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- DPZ FILE NUMBERS: WP-10-151, ECP-11-013, F-10-111.
- THE EXISTING DWELLING/STRUCTURE AND IN-GROUND POOL LOCATED ON THIS SITE ARE TO BE REMOVED PRIOR TO RECORDATION OF THIS PLAT.
- THE FOREST CONSERVATION OBLIGATION WILL BE MET BY A FEE-IN-LIEU PAYMENT OF \$4573.80 MADE OUT TO HOWARD COUNTY FOREST CONSERVATION FUND FOR THE 0.14 ACRE FORESTATION REQUIREMENT FOR THIS PROJECT.
- STORM WATER MANAGEMENT ADDRESSED FOR SITE USING 2007 MARYLAND STORMWATER DESIGN MANUAL (CHAPTER 5).
 - CHANNEL PROTECTION VOLUME (CPV) IS NOT REQUIRED (P_e FOR ENTIRE SITE IS UNDER 1.0")
 - WATER QUALITY VOLUME (WQV) AND RECHARGE VOLUME (REV) TO BE PROVIDED BY MICRO BIORETENTION FACILITIES AND OPEN CHANNEL FLOW (WHEN IMPERVIOUS AREAS CAN NOT BE DIRECTED TO ONE OF THE MICRO BIORETENTION FACILITIES)
- THERE ARE NO WETLANDS OR SLEEP SLOPES LOCATED ON THIS SITE.
- SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT PLAN.
- REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION AND SITE PLAN STAGES. THEREFORE THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.
- REFERENCE WAIVER PETITION WP 10-151 APPROVED 09/13/2010
 - SECTION 16.1205(a) - TO ALLOW THE REMOVAL OF 2 SPECIMAN TREES AND REPLACE THEM WITH 4 ADDITIONAL PERIMETER TREES. (THE DEVELOPER SHALL PLANT A TOTAL OF 4 SHADE TREES AS REPLACEMENT FOR THE 2 SPECIMAN TREES WHICH ARE TO BE REMOVED. THESE TREES ARE IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPE PLANTINGS AND THE REQUIRED STREET TREES.
 - SECTION 16.132(a)(2)(i)(g) CONSTRUCTION OF ROAD IMPROVEMENTS, SECTION 16.134(b)(2) CONSTRUCTION OF SIDEWALKS AND SECTION 16.135(g) INSTALLATION OF STREET LIGHTING - (COMPLIANCE WITH THE ATTACHED COMMENTS FROM THE DEVELOPMENT ENGINEERING DIVISION PRIOR TO SUBMISSION OF THE ORIGINAL MYLAR RECORD PLAT TO THIS OFFICE FOR SIGNATURE APPROVAL AND RECORDATION. IN ACCORDANCE WITH THIS COMMENT SITE DEVELOPER WILL BE REQUIRED TO PAY A FEE IN LIEU (\$2368.00) OF PROVIDING SIDEWALK CONSTRUCTION AND ROAD IMPROVEMENTS (\$2324.00) ALONG THE FRONTAGE OF VISTA ROAD. NO STREET LIGHT SWILL BE REQUIRED.)
- A FOREST STAND DELINEATION WAS PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MAY 2010. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL SHALL BE COMPLIED WITH.



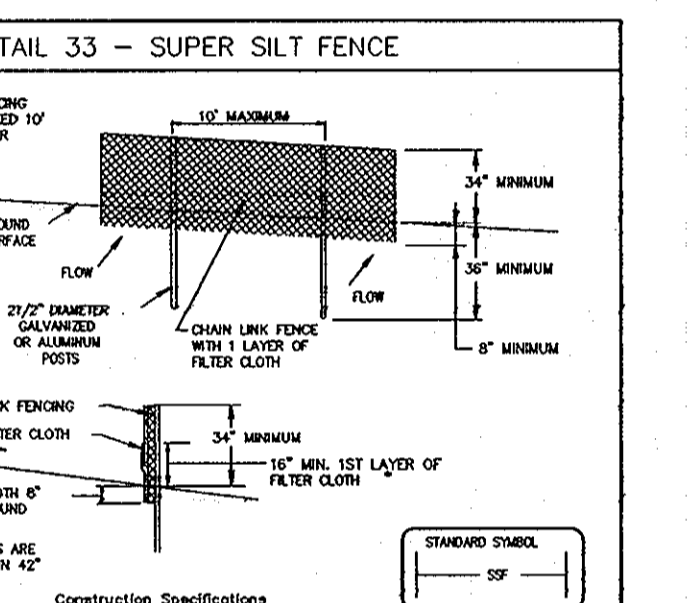
BENCHMARKS

HOWARD COUNTY BENCHMARK 41C2N	N 551,616.4187	E 1,348,104.2341
HOWARD COUNTY BENCHMARK 0057N	N 550,835.2139	E 1,347,017.6897



OPERATION AND MAINTENANCE

1. MAINTAIN THE SILT FENCE AT ALL TIMES. REMOVE ANY OBSTRUCTIONS TO FLOW.
2. SCHEDULE OF VISUAL INSPECTION SHALL BE TWICE A YEAR IN SPRING AND FALL. VISUAL INSPECTION SHALL BE CONDUCTED AT THE END OF EACH RAIN EVENT. VISUAL INSPECTION SHALL BE CONDUCTED AT THE END OF EACH RAIN EVENT. VISUAL INSPECTION SHALL BE CONDUCTED AT THE END OF EACH RAIN EVENT.
3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE EXCESSIVE MULCH WHICH WILL MINIMIZE DISTURBANCE AND PRESERVE NATURAL SHEETFLOW.
4. SOIL EROSION TO BE MONITORED AS AN AS NEARER WITH A MINIMUM OF 600' PER MONTH AND AFTER HEAVY RAIN EVENTS.



FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA	SOILS INFORMATION				EXISTING VEGETATION	STAND CHARACTERISTICS			FOREST AREA IN SOIL RW
			1. SOIL TYPES	2. TYPICAL WOODLAND FOREST SUITABILITY	3. HABITAT CODE FOR SOIL TYPE	4. HARDWOOD		1. SIZE (OA)	2. AGE (YRS)	3. COND.	
L-1	LAWN AND OPEN FIELD	1.00 AC	GnB	MED SPREAD	12	1	MAINTAINED LAWN	12-27'	30%	FAR	0.00 AC

OWNERS
 SD PROPERTIES
 3138 ROGERS AVENUE
 ELICOTT CITY, MARYLAND 21043
 (410-203-2460)

FOREST STAND TOTALS

STAND L-1	1.00 ACRES
TOTAL	1.00 ACRES (ENTIRE SITE)

FOREST CONSERVATION WORKSHEET 2.2

NET TRACT AREA
 A. TOTAL TRACT AREA = 1.00
 B. DEDUCTIONS = 0.05
 C. NET TRACT AREA = 0.95

LAND USE CATEGORY
 PERMIT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY
 AREA MDR IDA HDR MPD CIA
 0 0 0 1 0 0 0

D. AFFORESTATION THRESHOLD (NET TRACT AREA X 15%) = 0.14
 E. CONSERVATION THRESHOLD (NET TRACT AREA X 20%) = 0.19
 EXISTING FOREST COVER
 F. EXISTING FOREST COVER WITHIN THE NET TRACT AREA = 0.00
 G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 0.00
 BREAK EVEN POINT
 H. BREAK EVEN POINT = 0.00
 I. FOREST CLEARING PERMITTED WITHOUT MITIGATION = 0.00
 PROPOSED FOREST CLEARING
 J. TOTAL AREA OF FOREST TO BE CLEARED = 0.00
 K. TOTAL AREA OF FOREST TO BE RETAINED = 0.00
 PLANTING REQUIREMENTS
 L. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD = 0.00
 M. REFORESTATION FOR CLEARING BELOW THE CONSERVATION THRESHOLD = 0.00
 N. CREDIT FOR RETENTION ABOVE THE CONSERVATION THRESHOLD = 0.00
 P. TOTAL REFORESTATION REQUIRED = 0.00
 Q. TOTAL AFFORESTATION REQUIRED = 0.14
 R. TOTAL PLANTING REQUIREMENT = 0.14

SWM NARRATIVE

THE STORMWATER MANAGEMENT ON THIS SITE WAS DESIGN TO PRESERVE THE NATURAL RESOURCES OF THIS SITE TO THE MAXIMUM EXTENT POSSIBLE. MICRO BIORETENTION FACILITIES HAVE BEEN USED TO PROVIDE WATER QUALITY AND BLEND IN WITH THE SURROUNDINGS. IMPERVIOUS AREAS WERE MINIMIZED BY NARROWING DRIVEWAYS AND NATURAL SHEETFLOW PATTERNS HAVE BEEN MAINTAINED TO MIMICK THE EXISTING CONDITIONS. SEDIMENT CONTROL FOR THESE LOTS WILL BE ACHIEVED BY USING SUPER SILT FENCE WHICH WILL MINIMIZE DISTURBANCE AND PRESERVE NATURAL SHEETFLOW.

COORDINATE TABLE

NUMBER	NORTHING	EASTING
102	550963.9756	1346072.3252
201	550707.0123	1346129.3282
202	550671.0619	1345967.2678
203	550928.0253	1345910.2649

SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	TYPE
GnB	GLENVILLE-BAILE SILT LOAM 0 TO 8 PERCENT SLOPES	C
GfB	GLADSTONE-URBAN LAND COMPLEX 0 TO 8 PERCENT SLOPES	B

STORMWATER MANAGEMENT CALCULATIONS

DRAINAGE AREA	METHOD	VOL. REQUIRED	VOL. PROVIDED
MBR #1	M-6	243 CF	299 CF
MBR #2	M-6	272 CF	294 CF

M-6 IS A MICRO BIORETENTION FACILITY. SEE DETAIL THIS SHEET.

FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA	SOILS INFORMATION				EXISTING VEGETATION	STAND CHARACTERISTICS			FOREST AREA IN SOIL RW
			1. SOIL TYPES	2. TYPICAL WOODLAND FOREST SUITABILITY	3. HABITAT CODE FOR SOIL TYPE	4. HARDWOOD		1. SIZE (OA)	2. AGE (YRS)	3. COND.	
L-1	LAWN AND OPEN FIELD	1.00 AC	GnB	MED SPREAD	12	1	MAINTAINED LAWN	12-27'	30%	FAR	0.00 AC

ENVIRONMENTAL CONCEPT PLAN

F-10-111

HOLIDAY HILLS LOTS 103 & 104

A RESUBDIVISION OF LOT 42 OF HOLIDAY HILLS, PLAT BOOK 7, FOLIO 41
 DPZ FILES: WP-10-151, ECP-11-013, F-10-111
 PARCEL 220
 5TH ELECTION DISTRICT

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

PROFESSIONAL CERTIFICATION

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 EXPIRES DATE: 09-27-2012.

DESIGN BY: RHV
 DRAWN BY: JTD
 CHECKED BY: RHV
 DATE: OCTOBER, 2010
 SCALE: AS SHOWN
 W.O. NO.: 09-42

1 SHEET OF 1

K:\Projects\10-42\ENGR\10-42\ENVIRONMENTAL PLAN\10-42\10-27-2010 01:16:48 PM