

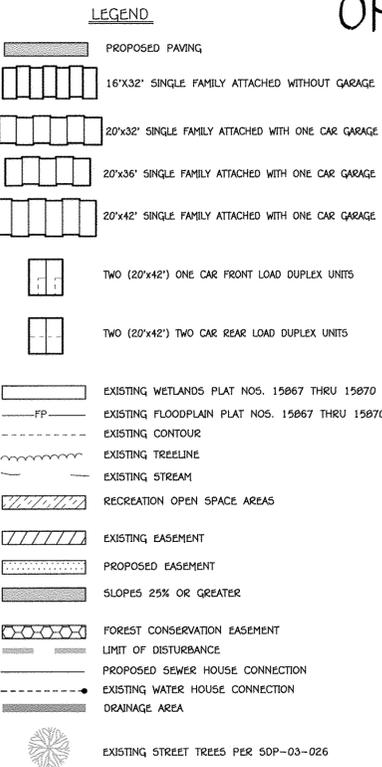
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STREET LIGHT CHART				
STREET NAME	STATION	OFFSET	FIXTURE/POLE TYPE	REMARKS
VOGEL ROAD	0+22	40'R	175 WHI METAL HALIDE TEAR DROP FIXTURE MOUNTED AT 20' ON A 23' BLACK FIBERGLASS POLE WITH SHROUD USING A 4" APP.	PRIVATE
ENOCH PRATT DRIVE	3+33	15'R	100-WATT "COLONIAL" SODIUM VAPOR POST TOP FIXTURE MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE.	PRIVATE
ENOCH PRATT DRIVE	2+39	15'L		PRIVATE

STREET SIGN CHART				
STREET NAME	STATION	OFFSET	POSTED SIGN	SIGN CODE
VOGEL ROAD	0+22	28'L	STOP	R1-1
VOGEL ROAD	0+22	13'R	SPEED LIMIT 25 MPH	R2-1
ENOCH PRATT DRIVE	0+32	16'L	STOP	R1-1
ENOCH PRATT DRIVE	0+32	16'R	STOP	R1-1
ENOCH PRATT DRIVE	1+06	14'R	SPEED LIMIT 25 MPH	R2-1
ENOCH PRATT DRIVE	1+48	13'L	SPEED LIMIT 25 MPH	R2-1

**SITE ANALYSIS DATA CHART**

A. TOTAL AREA OF THIS SUBMISSION = 5.49 AC.  
 B. LIMIT OF DISTURBED AREA = 4.42 AC.  
 C. PRESENT ZONING DESIGNATION: MXD-6  
 D. PER 02/02/04 COMPREHENSIVE ZONING PLAN, PB CASE NO. 391 AND THE COMP-LITE ZONING AMENDMENTS DATED 07/28/08  
 E. PROPOSED USE: SINGLE FAMILY ATTACHED TO A SINGLE FAMILY DUPLEX  
 F. TOTAL NUMBER OF UNITS ALLOWED: 160 UNITS  
 G. TOTAL NUMBER OF UNITS PROPOSED IN PART ONE: 55 UNITS  
 9 (2 UNIT) DUPLEXES = 18  
 2 (20'x42') ONE CAR FRONT LOAD DUPLEX UNITS  
 2 (20'x42') TWO CAR REAR LOAD DUPLEX UNITS  
 H. TOTAL PARKING SPACES REQUIRED: 127  
 SINGLE FAMILY ATTACHED PARKING REQUIRED: 74 SPACES (2 SPACES PER UNIT x 37 UNITS)  
 DUPLEX UNITS PARKING REQUIRED: 36 SPACES (2 SPACES PER UNIT x 18 UNITS)  
 I. TOTAL PARKING SPACES PROVIDED: 149 SPACES  
 6 TWO CAR REAR LOAD UNITS: 24 SPACES (2 GARAGE SPACES + 2 DRIVEWAY SPACES) UNITS 146-151  
 2 TWO CAR REAR LOAD UNITS: 6 SPACES (2 GARAGE SPACES + 1 DRIVEWAY SPACE) UNIT 145 & 152  
 10 SINGLE CAR FRONT LOAD UNITS: 20 SPACES (1 GARAGE SPACE + 1 DRIVEWAY SPACE) UNITS 153-162  
 OPEN SPACE LOT 164: 5 PARKING SPACES  
 OPEN SPACE LOT 38: 8 PARKING SPACES  
 25 SINGLE CAR GAR UNITS: 50 SPACES (1 GARAGE SPACE + 1 DRIVEWAY SPACE) UNITS 13-37  
 J. OPEN SPACE TABULATION: SEE INDIVIDUAL CHARTS, THIS SHEET  
 K. RECREATIONAL AREA TABULATION: SEE INDIVIDUAL CHARTS, THIS SHEET  
 L. BUILDING COVERAGE OF SITE: 0.94 AC. OR 17%  
 M. PREVIOUS HOWARD COUNTY FILES: F-03-21, S0P-03-026, 2B 1093M, F-12-014, ECP-11-052, WP-12-087, S-12-001, F.B. CASE NO. 391, F-12-070, WP-12-130, AND S0P-11-056FC & CONT. NO. 44-4074-D, CONT. NO. 14-4718-D, F-13-043, S0P-12-024, CONT. NO. 14-4792-D & F-13-102.  
 N. TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0.69 AC.  
 O. NET TRACT AREA = 4.80 AC.  
 (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA)  
 P. TOTAL AREA OF WETLANDS (INCLUDING BUFFERS) = 0.0 AC.

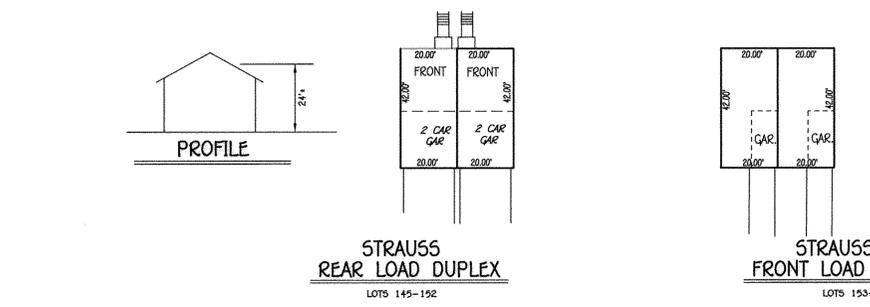
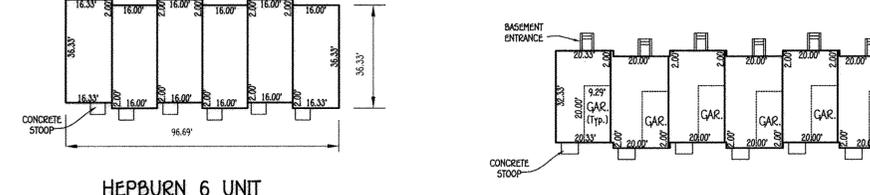
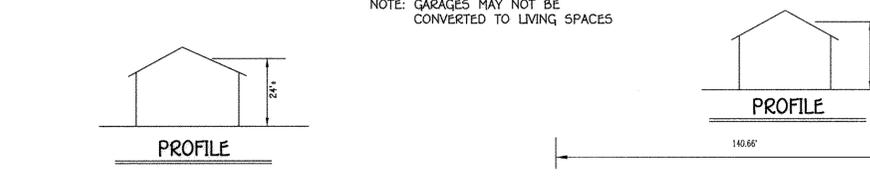
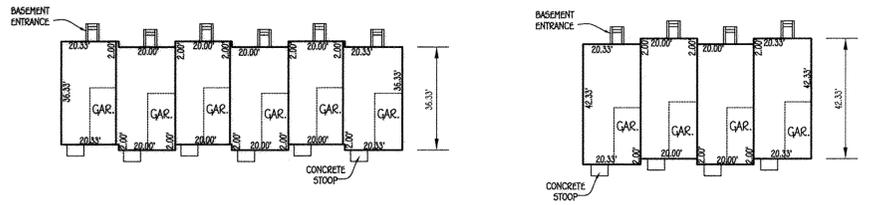
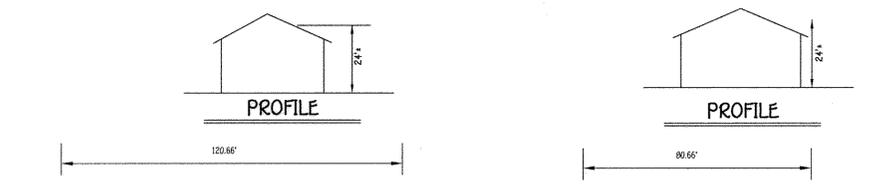


ROAD CLASSIFICATION CHART		
ROAD NAME	CLASSIFICATION	R/W WIDTH
VOGEL ROAD	PRIVATE ROAD	N/A
ENOCH PRATT DRIVE	PRIVATE ROAD	N/A

Recreational Open Space Tabulation				
	HO. CO. CLAMPA (PAR. "A", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z", "AA", "AB", "AC", "AD", "AE", "AF", "AG", "AH", "AI", "AJ", "AK", "AL", "AM", "AN", "AO", "AP", "AQ", "AR", "AS", "AT", "AU", "AV", "AW", "AX", "AY", "AZ", "BA", "BB", "BC", "BD", "BE", "BF", "BG", "BH", "BI", "BJ", "BK", "BL", "BM", "BN", "BO", "BP", "BQ", "BR", "BS", "BT", "BU", "BV", "BW", "BX", "BY", "BZ", "CA", "CB", "CC", "CD", "CE", "CF", "CG", "CH", "CI", "CJ", "CK", "CL", "CM", "CN", "CO", "CP", "CQ", "CR", "CS", "CT", "CU", "CV", "CW", "CX", "CY", "CZ", "DA", "DB", "DC", "DD", "DE", "DF", "DG", "DH", "DI", "DJ", "DK", "DL", "DM", "DN", "DO", "DP", "DQ", "DR", "DS", "DT", "DU", "DV", "DW", "DX", "DY", "DZ", "EA", "EB", "EC", "ED", "EE", "EF", "EG", "EH", "EI", "EJ", "EK", "EL", "EM", "EN", "EO", "EP", "EQ", "ER", "ES", "ET", "EU", "EV", "EW", "EX", "EY", "EZ", "FA", "FB", "FC", "FD", "FE", "FF", "FG", "FH", "FI", "FJ", "FK", "FL", "FM", "FN", "FO", "FP", "FQ", "FR", "FS", "FT", "FU", "FV", "FW", "FX", "FY", "FZ", "GA", "GB", "GC", "GD", "GE", "GF", "GG", "GH", "GI", "GJ", "GK", "GL", "GM", "GN", "GO", "GP", "GQ", "GR", "GS", "GT", "GU", "GV", "GW", "GX", "GY", "GZ", "HA", "HB", "HC", "HD", "HE", "HF", "HG", "HH", "HI", "HJ", "HK", "HL", "HM", "HN", "HO", "HP", "HQ", "HR", "HS", "HT", "HU", "HV", "HW", "HX", "HY", "HZ", "IA", "IB", "IC", "ID", "IE", "IF", "IG", "IH", "II", "IJ", "IK", "IL", "IM", "IN", "IO", "IP", "IQ", "IR", "IS", "IT", "IU", "IV", "IW", "IX", "IY", "IZ", "JA", "JB", "JC", "JD", "JE", "JF", "JG", "JH", "JI", "JJ", "JK", "JL", "JM", "JN", "JO", "JP", "JQ", "JR", "JS", "JT", "JU", "JV", "JW", "JX", "JY", "JZ", "KA", "KB", "KC", "KD", "KE", "KF", "KG", "KH", "KI", "KJ", "KL", "KM", "KN", "KO", "KP", "KQ", "KR", "KS", "KT", "KU", "KV", "KW", "KX", "KY", "KZ", "LA", "LB", "LC", "LD", "LE", "LF", "LG", "LH", "LI", "LJ", "LK", "LL", "LM", "LN", "LO", "LP", "LQ", "LR", "LS", "LT", "LU", "LV", "LW", "LX", "LY", "LZ", "MA", "MB", "MC", "MD", "ME", "MF", "MG", "MH", "MI", "MJ", "MK", "ML", "MM", "MN", "MO", "MP", "MQ", "MR", "MS", "MT", "MU", "MV", "MW", "MX", "MY", "MZ", "NA", "NB", "NC", "ND", "NE", "NF", "NG", "NH", "NI", "NJ", "NK", "NL", "NM", "NN", "NO", "NP", "NQ", "NR", "NS", "NT", "NU", "NV", "NW", "NX", "NY", "NZ", "OA", "OB", "OC", "OD", "OE", "OF", "OG", "OH", "OI", "OJ", "OK", "OL", "OM", "ON", "OO", "OP", "OQ", "OR", "OS", "OT", "OU", "OV", "OW", "OX", "OY", "OZ", "PA", "PB", "PC", "PD", "PE", "PF", "PG", "PH", "PI", "PJ", "PK", "PL", "PM", "PN", "PO", "PP", "PQ", "PR", "PS", "PT", "PU", "PV", "PW", "PX", "PY", "PZ", "QA", "QB", "QC", "QD", "QE", "QF", "QG", "QH", "QI", "QJ", "QK", "QL", "QM", "QN", "QO", "QP", "QQ", "QR", "QS", "QT", "QU", "QV", "QW", "QX", "QY", "QZ", "RA", "RB", "RC", "RD", "RE", "RF", "RG", "RH", "RI", "RJ", "RK", "RL", "RM", "RN", "RO", "RP", "RQ", "RR", "RS", "RT", "RU", "RV", "RW", "RX", "RY", "RZ", "SA", "SB", "SC", "SD", "SE", "SF", "SG", "SH", "SI", "SJ", "SK", "SL", "SM", "SN", "SO", "SP", "SQ", "SR", "SS", "ST", "SU", "SV", "SW", "SX", "SY", "SZ", "TA", "TB", "TC", "TD", "TE", "TF", "TG", "TH", "TI", "TJ", "TK", "TL", "TM", "TN", "TO", "TP", "TQ", "TR", "TS", "TT", "TU", "TV", "TW", "TX", "TY", "TZ", "UA", "UB", "UC", "UD", "UE", "UF", "UG", "UH", "UI", "UJ", "UK", "UL", "UM", "UN", "UO", "UP", "UQ", "UR", "US", "UT", "UU", "UV", "UW", "UX", "UY", "UZ", "VA", "VB", "VC", "VD", "VE", "VF", "VG", "VH", "VI", "VJ", "VK", "VL", "VM", "VN", "VO", "VP", "VQ", "VR", "VS", "VT", "VU", "VV", "VW", "VX", "VY", "VZ", "WA", "WB", "WC", "WD", "WE", "WF", "WG", "WH", "WI", "WJ", "WK", "WL", "WM", "WN", "WO", "WP", "WQ", "WR", "WS", "WT", "WU", "WV", "WW", "WX", "WY", "WZ", "XA", "XB", "XC", "XD", "XE", "XF", "XG", "XH", "XI", "XJ", "XK", "XL", "XM", "XN", "XO", "XP", "XQ", "XR", "XS", "XT", "XU", "XV", "XW", "XX", "XY", "XZ", "YA", "YB", "YC", "YD", "YE", "YF", "YG", "YH", "YI", "YJ", "YK", "YL", "YM", "YN", "YO", "YP", "YQ", "YR", "YS", "YT", "YU", "YV", "YW", "YX", "YZ", "ZA", "ZB", "ZC", "ZD", "ZE", "ZF", "ZG", "ZH", "ZI", "ZJ", "ZK", "ZL", "ZM", "ZN", "ZO", "ZP", "ZQ", "ZR", "ZS", "ZT", "ZU", "ZV", "ZW", "ZX", "ZY", "ZZ			
Gross Site Area	11,995 Acres	5,490 Acres	8,902 Acres	26,377 Acres
Total Open Space	4,194 Acres	1,922 Acres	3,116 Acres	9,232 Acres
Total Open Space (Including 37% of 160 Units)	4,980 Acres	2,317 Acres	3,662 Acres	10,959 Acres
Total Open Space (Including 37% of 160 Units and 10% of 160 Units)	5,180 Acres	2,417 Acres	3,862 Acres	11,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, and 5% of 160 Units)	5,380 Acres	2,517 Acres	4,062 Acres	11,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, and 2% of 160 Units)	5,580 Acres	2,617 Acres	4,262 Acres	12,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, and 1% of 160 Units)	5,780 Acres	2,717 Acres	4,462 Acres	12,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, and 0.5% of 160 Units)	5,980 Acres	2,817 Acres	4,662 Acres	13,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, and 0.2% of 160 Units)	6,180 Acres	2,917 Acres	4,862 Acres	13,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, and 0.1% of 160 Units)	6,380 Acres	3,017 Acres	5,062 Acres	14,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, and 0.05% of 160 Units)	6,580 Acres	3,117 Acres	5,262 Acres	14,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, and 0.02% of 160 Units)	6,780 Acres	3,217 Acres	5,462 Acres	15,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, and 0.01% of 160 Units)	6,980 Acres	3,317 Acres	5,662 Acres	15,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, and 0.005% of 160 Units)	7,180 Acres	3,417 Acres	5,862 Acres	16,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, and 0.002% of 160 Units)	7,380 Acres	3,517 Acres	6,062 Acres	16,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, and 0.001% of 160 Units)	7,580 Acres	3,617 Acres	6,262 Acres	17,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, and 0.0005% of 160 Units)	7,780 Acres	3,717 Acres	6,462 Acres	17,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, and 0.0002% of 160 Units)	7,980 Acres	3,817 Acres	6,662 Acres	18,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, and 0.0001% of 160 Units)	8,180 Acres	3,917 Acres	6,862 Acres	18,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, and 0.00005% of 160 Units)	8,380 Acres	4,017 Acres	7,062 Acres	19,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, and 0.00002% of 160 Units)	8,580 Acres	4,117 Acres	7,262 Acres	19,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, and 0.00001% of 160 Units)	8,780 Acres	4,217 Acres	7,462 Acres	20,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, and 0.000005% of 160 Units)	8,980 Acres	4,317 Acres	7,662 Acres	20,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, and 0.000002% of 160 Units)	9,180 Acres	4,417 Acres	7,862 Acres	21,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, and 0.000001% of 160 Units)	9,380 Acres	4,517 Acres	8,062 Acres	21,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, and 0.0000005% of 160 Units)	9,580 Acres	4,617 Acres	8,262 Acres	22,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, and 0.0000005% of 160 Units)	9,780 Acres	4,717 Acres	8,462 Acres	22,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, 0.0000005% of 160 Units, and 0.0000002% of 160 Units)	9,980 Acres	4,817 Acres	8,662 Acres	23,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, 0.0000005% of 160 Units, and 0.0000002% of 160 Units)	10,180 Acres	4,917 Acres	8,862 Acres	23,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, 0.0000005% of 160 Units, and 0.0000002% of 160 Units)	10,380 Acres	5,017 Acres	9,062 Acres	24,459 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 160 Units, 0.00002% of 160 Units, 0.00001% of 160 Units, 0.000005% of 160 Units, 0.000002% of 160 Units, 0.000001% of 160 Units, 0.0000005% of 160 Units, and 0.0000002% of 160 Units)	10,580 Acres	5,117 Acres	9,262 Acres	24,959 Acres
Total Open Space (Including 37% of 160 Units, 10% of 160 Units, 5% of 160 Units, 2% of 160 Units, 1% of 160 Units, 0.5% of 160 Units, 0.2% of 160 Units, 0.1% of 160 Units, 0.05% of 160 Units, 0.02% of 160 Units, 0.01% of 160 Units, 0.005% of 160 Units, 0.002% of 160 Units, 0.001% of 160 Units, 0.0005% of 160 Units, 0.0002% of 160 Units, 0.0001% of 160 Units, 0.00005% of 16				

PROPOSED ROAD ALIGNMENT LINE TABLE										
ROAD NAME	STATION	STATION	DIRECTION	LENGTH	DELTA	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH	
VOGEL ROAD	0+00	0+92.83	S40°09'16"E	92.83'						
VOGEL ROAD	0+92.83	1+59.45			86°45'44"	66.63'	44.00'	S83°32'08"E	60.44'	
VOGEL ROAD	1+59.45	2+37.16	N53°05'00"E	77.70'						
VOGEL ROAD	2+37.16	3+46.67			8°57'50"	109.52'	700.00'	N48°36'05"E	109.40'	
VOGEL ROAD	3+46.67	3+68.75			36°08'57"	22.08'	35.00'	N26°02'42"E	21.72'	
VOGEL ROAD	3+68.75	4+18.20	N07°58'13"E	49.44'						
ENOCH PRATT DRIVE	0+00	0+34.15	S63°19'27"E	34.15'						
ENOCH PRATT DRIVE	0+34.15	0+81.02			38°11'50"	46.87'	150.00'	S72°16'35"E	46.68'	
ENOCH PRATT DRIVE	0+81.02	1+67.23	S81°13'43"E	86.20'						
ENOCH PRATT DRIVE	1+67.23	3+45.92			38°11'50"	178.70'	150.00'	N64°38'35"E	168.31'	
ENOCH PRATT DRIVE	3+45.92	4+20.70	N30°30'54"E	74.78'						
ENOCH PRATT DRIVE	4+20.70	5+32.88			30°09'19"	112.19'	190.00'	N13°35'59"E	110.57'	
ENOCH PRATT DRIVE	5+32.88	6+09.46	N03°18'56"W	76.58'						

ADDRESS CHART				
LOT NO.	BLDG NO.	STREET ADDRESS	LOT NO.	STREET ADDRESS
1		8656 ENOCH PRATT DRIVE	28	8639 ENOCH PRATT DRIVE
2		8654 ENOCH PRATT DRIVE	29	8641 ENOCH PRATT DRIVE
3		8652 ENOCH PRATT DRIVE	30	8643 ENOCH PRATT DRIVE
4		8650 ENOCH PRATT DRIVE	31	8647 ENOCH PRATT DRIVE
5		8648 ENOCH PRATT DRIVE	32	8649 ENOCH PRATT DRIVE
6		8646 ENOCH PRATT DRIVE	33	8651 ENOCH PRATT DRIVE
7		8644 ENOCH PRATT DRIVE	34	8653 ENOCH PRATT DRIVE
8		8628 ENOCH PRATT DRIVE	35	8655 ENOCH PRATT DRIVE
9		8626 ENOCH PRATT DRIVE	36	8657 ENOCH PRATT DRIVE
10		8624 ENOCH PRATT DRIVE	37	8659 ENOCH PRATT DRIVE
11		8622 ENOCH PRATT DRIVE	145	3221 VOGEL ROAD
12		8620 ENOCH PRATT DRIVE	146	3223 VOGEL ROAD
13		8603 ENOCH PRATT DRIVE	147	3227 VOGEL ROAD
14		8605 ENOCH PRATT DRIVE	148	3229 VOGEL ROAD
15		8607 ENOCH PRATT DRIVE	149	3233 VOGEL ROAD
16		8609 ENOCH PRATT DRIVE	150	3235 VOGEL ROAD
17		8613 ENOCH PRATT DRIVE	151	3239 VOGEL ROAD
18		8615 ENOCH PRATT DRIVE	152	3241 VOGEL ROAD
19		8617 ENOCH PRATT DRIVE	153	3230 VOGEL ROAD
20		8619 ENOCH PRATT DRIVE	154	3228 VOGEL ROAD
21		8621 ENOCH PRATT DRIVE	155	3224 VOGEL ROAD
22		8623 ENOCH PRATT DRIVE	156	3222 VOGEL ROAD
23		8627 ENOCH PRATT DRIVE	157	3218 VOGEL ROAD
24		8629 ENOCH PRATT DRIVE	158	3216 VOGEL ROAD
25		8631 ENOCH PRATT DRIVE	159	3212 VOGEL ROAD
26		8633 ENOCH PRATT DRIVE	160	3210 VOGEL ROAD
27		8637 ENOCH PRATT DRIVE	161	3206 VOGEL ROAD
28		8639 ENOCH PRATT DRIVE	162	3204 VOGEL ROAD



NOTE: DPZ HAS DETERMINED THE DESIGN OF THE TOWNHOUSE GROUPING WILL MITIGATE THE VISUAL IMPACT OF ANY INCREASE TO THE LENGTH BEYOND 120'.



**AS-BUILT CERTIFICATION FOR PSWM**  
Note: There is no "AS BUILT" information provided on this sheet.  
*Charles J. Beaudin*  
CHARLES J. BEAUDIN, No. 19224  
Date: 9/13/13

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 5/24/12 & 5/16/13

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL, P.O.  
ELLICOTT CITY, MARYLAND 21042  
(410) 481-2855



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.  
*Frank J. Manlansan II*  
FRANK J. MANLANSAN II  
DATE: 9/22/13

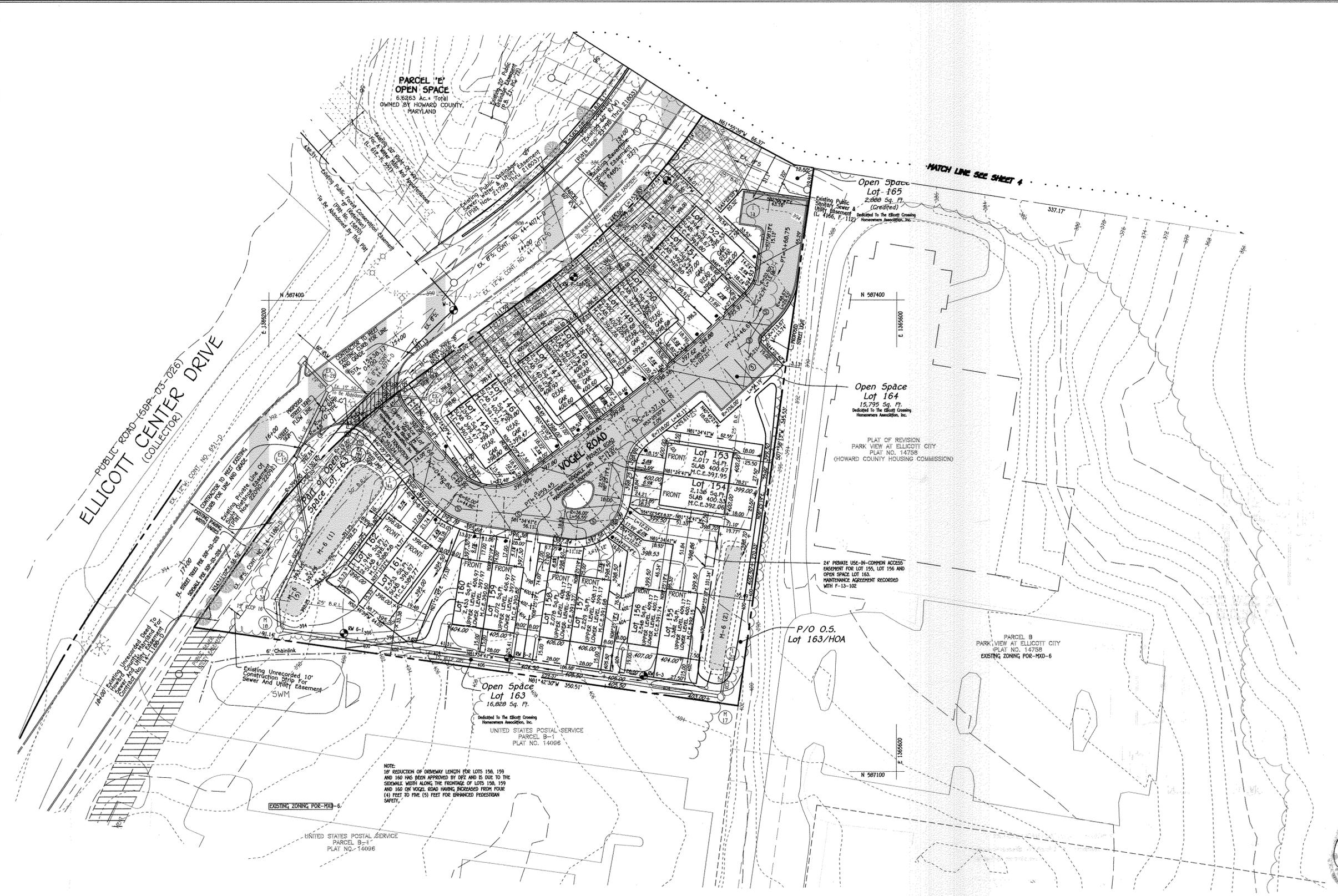
**OWNER**  
3330 ROGERS AVENUE, LLC  
SUITE 102  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, JR.

**DEVELOPER**  
M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Joseph M. Long*  
Director - Department of Planning and Zoning  
*Kate Deluca*  
Chief, Division of Land Development  
*Chris Edwards*  
Chief, Development Engineering Division  
SUBDIVISION: ELLICOTT CROSSING  
SECTION/AREA: PART ONE  
LOT NOS.: 1-37, 145-162, 06, 38-41, 163-166  
PLAT NOS.: 22503-22505  
PARCEL NOS.: 852, 847  
ZONE: MXD-6  
TAX MAP: 24  
ELEC. DIST.: 2nd  
CENSUS TR.: 6029

REVISED  
HOUSE TYPES, ADDRESS CHART  
**ELLICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED  
TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 852, 847  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST 20, 2013  
SHEET 2 OF 16  
SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



- LEGEND**
- PROPOSED PAVING
  - 16'x32' SINGLE FAMILY ATTACHED WITHOUT GARAGE
  - 20'x32' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x36' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x42' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - TWO (20'x42') ONE CAR FRONT LOAD DUPLEX UNITS
  - TWO (20'x42') TWO CAR REAR LOAD DUPLEX UNITS
  - EXISTING WETLANDS PLAT NOS. 15867 THRU 15870
  - EXISTING FLOODPLAIN PLAT NOS. 15867 THRU 15870
  - EXISTING CONTOUR
  - EXISTING TREELINE
  - EXISTING STREAM
  - RECREATION OPEN SPACE AREAS
  - EXISTING EASEMENT
  - PROPOSED EASEMENT
  - SLOPES 25% OR GREATER
  - FOREST CONSERVATION EASEMENT
  - LIMIT OF DISTURBANCE
  - PROPOSED SEWER HOUSE CONNECTION
  - EXISTING SEWER HOUSE CONNECTION
  - DRAINAGE AREA
  - EXISTING STREET TREES PER 50P-03-026

**AS-BUILT CERTIFICATION FOR PSWM**

Note: There is no "AS BUILT" information provided on this sheet.

Signature: *Charles J. Ordo* Date: 11/17/14  
CHARLES J. ORDO, P.E. No. 196204



APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 5/24/12 & 5/16/13

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE: P.O. BOX 10272 BALTIMORE NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2295

12/17/2013	REVISE DRIVEWAY LOCATIONS AND ASSOCIATED GRADING FOR LOTS 155, 156, 160 AND 162. REMOVE PORTION OF ROOF LEADERS FOR LOTS 156 THRU 160. REVISE GRADING BIORETENTION FACILITY NO.5
4/8/2013	RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS. SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.  
*Frank J. Manulanski* 2/10/14  
FRANK J. MANULANSKI DATE

**OWNER**  
3330 ROGERS AVENUE, LLC  
SUITE 102  
5300 DORSEY HALL DRIVE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REIJWER, JR.

**DEVELOPER**  
M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REIJWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Paul K. Gangle* 2/5/14  
Director - Department of Planning and Zoning Date

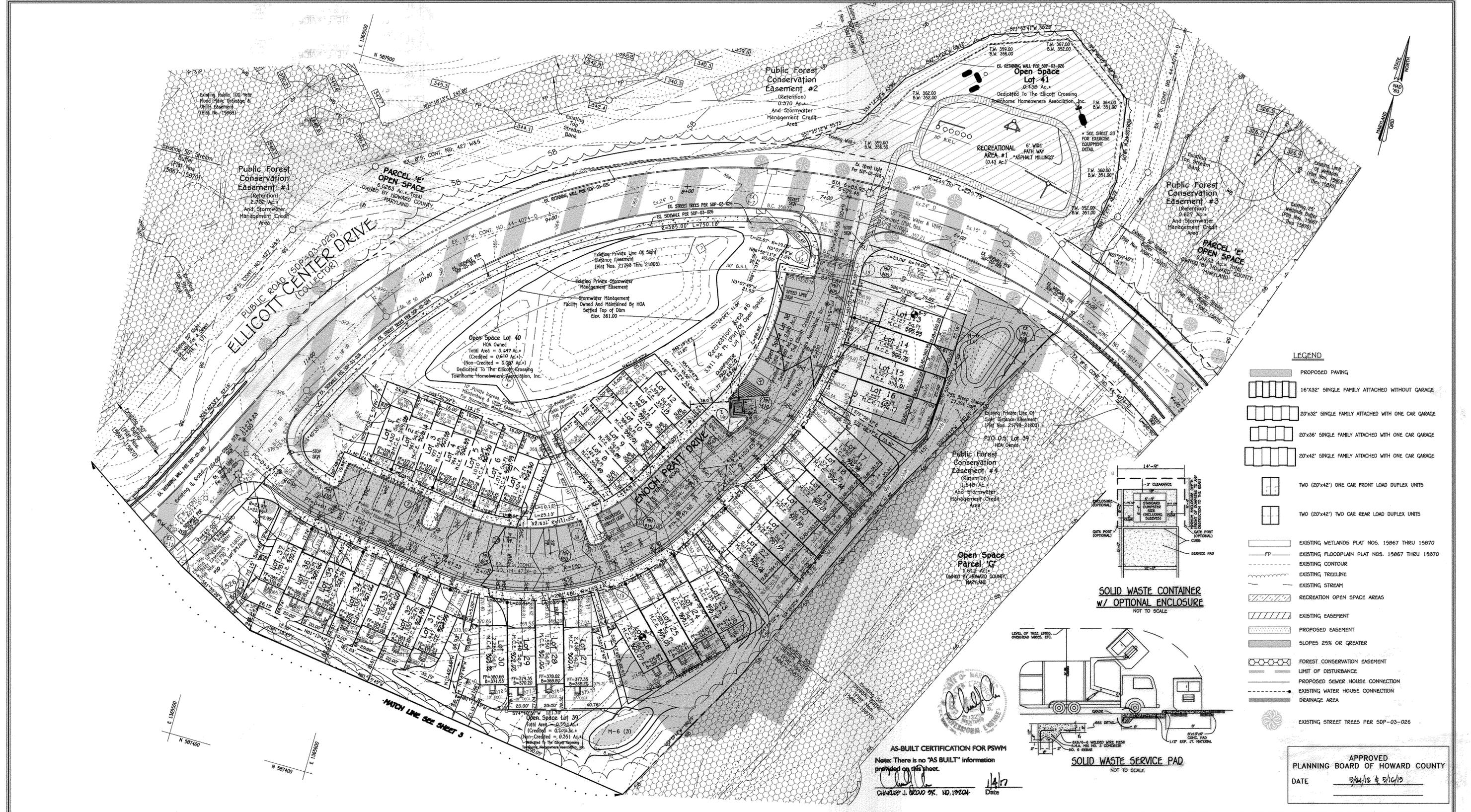
*W. J. Ordo* 2/25/14  
Chief, Division of Land Development Date

*Chad P. ...* 2-28-14  
Chief, Development Engineering Division Date

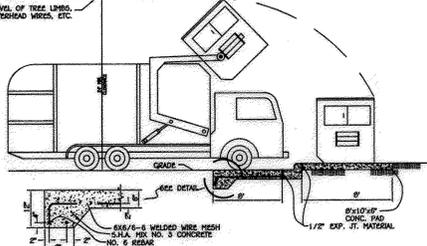
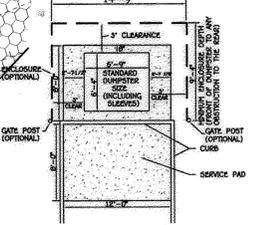
SUBDIVISION		SECTION/AREA		LOT NOS.	
ELICOTT CROSSING		PART ONE		1-37, 145-162, 05, 38-41, 163-166	
PLAT NOS.	PARCEL NOS.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
22503-22509	052, 047	MXD-6	24	2nd	6029

REVISED  
SITE DEVELOPMENT PLAN  
**ELICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED  
TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014  
SHEET 3 OF 16  
SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



- LEGEND**
- PROPOSED PAVING
  - 16'x32' SINGLE FAMILY ATTACHED WITHOUT GARAGE
  - 20'x32' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x36' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x42' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - TWO (20'x42') ONE CAR FRONT LOAD DUPLEX UNITS
  - TWO (20'x42') TWO CAR REAR LOAD DUPLEX UNITS
  - EXISTING WETLANDS PLAT NOS. 15067 THRU 15070
  - EXISTING FLOODPLAIN PLAT NOS. 15067 THRU 15070
  - EXISTING CONTOUR
  - EXISTING TREELINE
  - EXISTING STREAM
  - RECREATION OPEN SPACE AREAS
  - EXISTING EASEMENT
  - PROPOSED EASEMENT
  - SLOPES 25% OR GREATER
  - FOREST CONSERVATION EASEMENT
  - LIMIT OF DISTURBANCE
  - PROPOSED SEWER HOUSE CONNECTION
  - EXISTING WATER HOUSE CONNECTION
  - DRAINAGE AREA
  - EXISTING STREET TREES PER SDP-03-026



**AS-BUILT CERTIFICATION FOR PSWM**  
 Note: There is no "AS BUILT" information provided on this sheet.  
 CHARLES J. BELOFF, P.E. NO. 19204 Date 9/13/13

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE 9/24/13 & 9/16/13

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10274 BALTIMORE NATIONAL Pk.  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461 - 2895

12/17/2013	ADD DUMPSTER LOCATION AND DUMPSTER ENCLOSURE DETAIL.
4/9/2013	RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.  
 Frank J. Manalansan II 8-22-13 DATE

**OWNER**  
 3330 ROGERS AVENUE, LLC  
 SUITE 102  
 5300 DORSEY HALL DRIVE  
 ELICOTT CITY, MD 21042  
 443-367-0422  
 MR. DONALD R. REUWER, JR.

**DEVELOPER**  
 M & T DEVELOPERS, LLC  
 4515 MANOR LANE  
 ELICOTT CITY, MD 21042  
 443-367-0422  
 MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Frank A. Coyne 9/13/13  
 Director - Department of Planning and Zoning  
 Vets. Development 9/13/13  
 Chief, Division of Land Development  
 Chad Chubb 9-13-13  
 Chief, Development Engineering Division

SUBDIVISION SECTION/AREA LOT NOS.  
 ELICOTT CROSSING PART ONE 1-37, 145-162  
 PLAT NOS. PARCEL NOS. ZONE TAX MAP ELEC. DIST. CENSUS TR.  
 22503-22505 052, 047 MXD-6 24 2nd. 6029

REVISED  
 SITE DEVELOPMENT PLAN  
**ELICOTT CROSSING, PART ONE**  
 LOTS 1 THRU 37, 145 THRU 162, AND  
 OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
 SINGLE FAMILY ATTACHED

TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

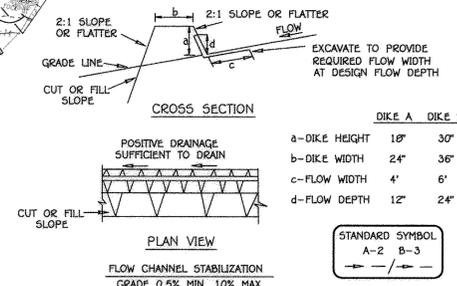
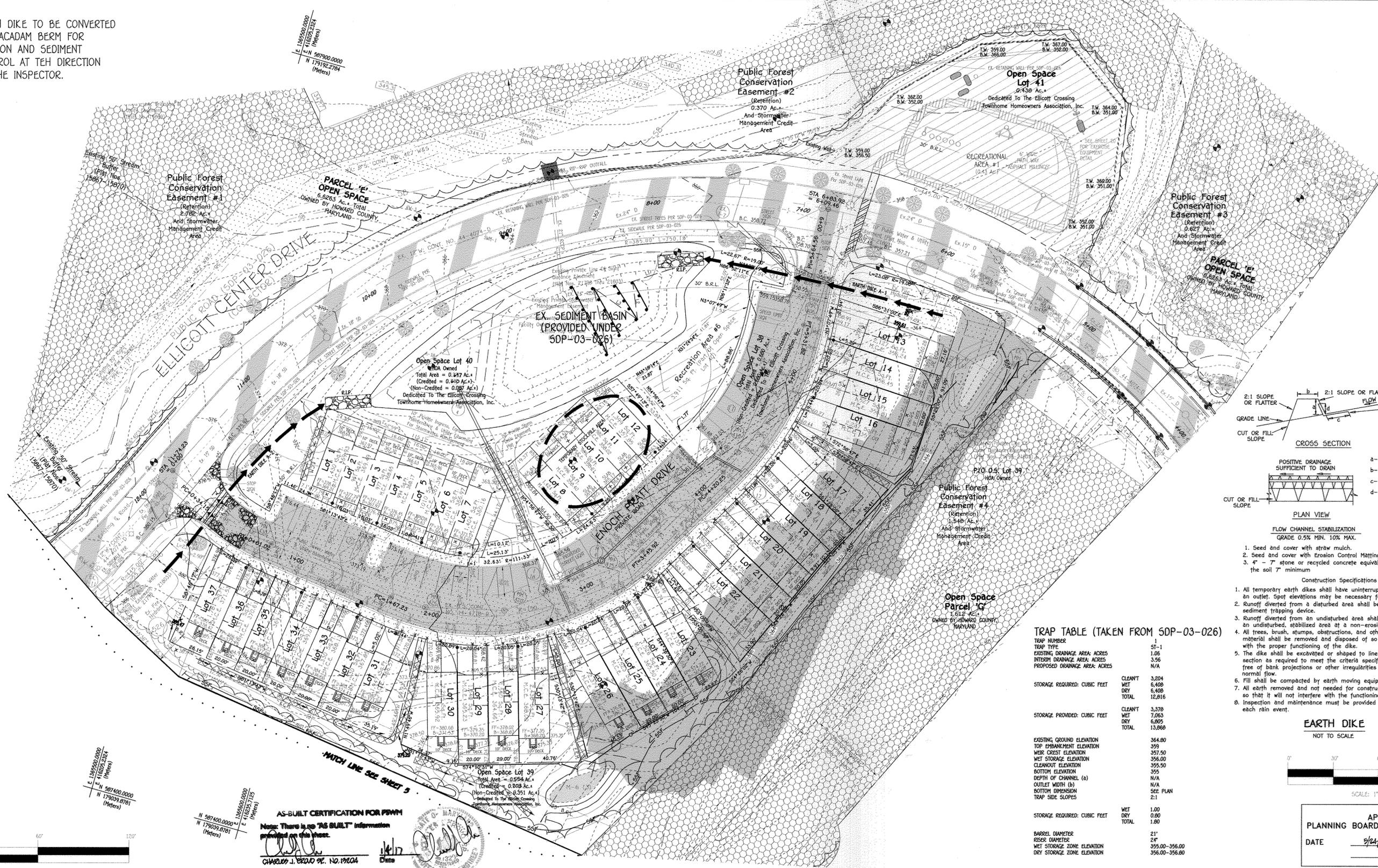
SCALE: 1" = 30' DATE: AUGUST 20, 2013

SHEET 4 OF 16  
 SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



NOTE:  
EARTH DIKE TO BE CONVERTED  
TO MACADAM BERM FOR  
EROSION AND SEDIMENT  
CONTROL AT THE DIRECTION  
OF THE INSPECTOR.



TRAP TABLE (TAKEN FROM SDP-03-026)

TRAP NUMBER	TRAP TYPE	EXISTING DRAINAGE AREA: ACRES	PROPOSED DRAINAGE AREA: ACRES	STORAGE REQUIRED: CUBIC FEET	STORAGE PROVIDED: CUBIC FEET
1	ST-1	1.06	3.204	CLEAN 6,408	CLEAN 3,378
		3.36	6,408	WET 12,816	WET 7,063
		N/A	N/A	TOTAL 12,816	DRY 6,809
					TOTAL 13,660

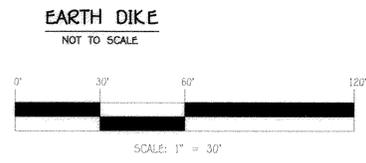
  

EXISTING GROUND ELEVATION	TOP EMBANKMENT ELEVATION	WEIR CREST ELEVATION	WET STORAGE ELEVATION	CLEANOUT ELEVATION	BOTTOM ELEVATION	DEPTH OF CHANNEL (a)	OUTLET WIDTH (b)	BOTTOM DIMENSION	TRAP SIDE SLOPES
364.80	359	357.50	356.00	355.50	355	N/A	N/A	SEE PLAN	2:1

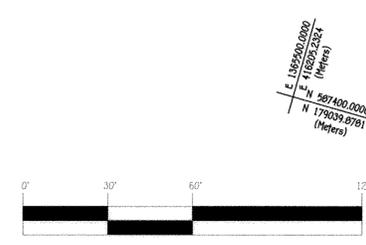
  

STORAGE REQUIRED: CUBIC FEET	WET	DRY	TOTAL
1.00	0.80	1.80	

1. Seed and cover with straw mulch.  
2. Seed and cover with Erosion Control Matting or line with sod.  
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.
- Construction Specifications
- All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1.
  - Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
  - Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
  - All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
  - The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
  - Fill shall be compacted by earth moving equipment.
  - All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.



APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 8/24/13 & 8/10/13



AS-BUILT CERTIFICATION FOR PSMW  
Note: There is no "AS BUILT" information provided on this sheet.  
CHARLES J. BRADY, P.E., NO. 19104  
Date: 8/22/13

**SURVEYOR'S CERTIFICATE**  
"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
Signature of Surveyor: Frank John Manalansan II  
Date: 8-22-13

**BUILDER/DEVELOPER'S CERTIFICATE**  
"I/we certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
Signature of Developer: Donald R. Reuwer, Jr.  
Date: 8-22-13

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
Signature: James R. Roberts  
Date: 8/22/13

**OWNER**  
3330 ROGERS AVENUE, LLC  
SUITE 102  
5300 DORSEY HALL DRIVE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, JR.

**DEVELOPER**  
M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Signature: James M. Langley  
Date: 9/10/13  
Director - Department of Planning and Zoning

Signature: [Signature]  
Date: 9/13/13  
Chief, Division of Land Development

Signature: [Signature]  
Date: 9-13-13  
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA	LOT NOS.
ELLICOTT CROSSING	PART ONE	1-37, 145-162
PLAT NOS.	PARCEL NOS.	ZONE
22508-22505	852, 847	MXD-6
TAX MAP	ELEC. DIST.	CENSUS TR.
24	2nd.	6029

REVISED  
SEDIMENT EROSION CONTROL PLAN  
ELLICOTT CROSSING, PART ONE  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED  
TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 852, 847  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: AUGUST 20, 2013  
SHEET 6 OF 16  
SDP-11-057

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALDPORE NATIONAL PKCE  
ELLICOTT CITY, MARYLAND 21042  
(410) 461-3995



4/8/2013 RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

**20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION**

Using vegetation to cover for barren soil to protect it from forces that cause erosion. PURPOSE: The establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

Vegetative stabilization applications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

**SECTION 2 - TEMPORARY SEEDING**

Vegetation - annual grasses or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

**A. Seed Mixture - Temporary Seeding**

- Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone from Figure 2 and enter them in the Temporary Seeding Summary below, along with application rates, seeding dates and seeding depths. If this summary is not put on the plans and completed, then Table 26 must be used on the plans.
- For sites having soil tests performed, the sites shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth	Fertilizer Rate (10-10-10)	Lime Rate
1	BARLEY OATS RYE	122 96 140	3/1 - 5/15 8/15 - 10/15	1" - 2" 1" - 2" 1" - 2"	600 lb/acre (100 lb/1000sq ft)	2 tons/acre (100 lb/1000sq ft)

**SECTION 3 - PERMANENT SEEDING**

Seeding grasses and legumes to establish ground cover for a minimum of one year on disturbed areas generally receiving low maintenance.

**A. Seed Mixture - Permanent Seeding**

- Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone from Figure 2 and enter them in the Permanent Seeding Summary below, along with application rates and seeding depths. If this summary is not put on the plans and completed, then Table 25 must be used on the plans. Additional planting specifications for exceptional sites such as abandoned, abandoned, or areas of special purpose such as wildlife or aesthetic treatment may be found in COM-2000 Technical Field Office Guide, Section 342 - Critical Area Planting. For special low maintenance areas, see Sections IV D and V Purposes.
- For sites having disturbed areas under 5 acres:
  - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 Vegetative Stabilization Methods and Materials.
  - For sites having disturbed areas under 5 acres:
    - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 Vegetative Stabilization Methods and Materials.
    - For sites having disturbed areas under 5 acres:
      - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 Vegetative Stabilization Methods and Materials.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN A GRADING PERMIT. (2 WEEKS)
- NOTIFY "MISC UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE. INSTALL ALL TREE PROTECTION FENCE FOR TREES TO BE UNDISTURBED AS INDICATED ON THE PLANS. (1 WEEK). THE CONTRACTOR SHALL VERIFY THAT TROP No. 1 AND CONTROLS PER SDP-03-026 HAVE BEEN COMPLETELY INSTALLED BEFORE PROCEEDING. REVISE THE EXISTING TRAP/BASIN TO ITS ORIGINAL DIMENSIONS AND VOLUMES. REPLACE THE EXISTING PIPE AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR IF NEEDED. (3 DAYS)
- INSTALL SUPER-SILT FENCE AND THEN INSTALL EARTH DIKES. (1 WEEK)
- CLEAR AND GRUB FOR THE REMAINDER OF THE SITE. (1 WEEK)
- GRADE SITE TO PROPOSED SUB-GRADE AND INSTALL THE STORM DRAIN SYSTEMS, WATER AND SEWER LINES. STABILIZE ALL SLOPES IMMEDIATELY UPON COMPLETION OF GRADING. DO NOT BLOCK INLETS AS STORM DRAIN SYSTEM WILL BE USED TO CONVEY SEDIMENT RUNOFF INTO THE BASIN. (9 WEEKS)
- BLOCK 1-14 AND 1-13. (1 DAY)
- CONSTRUCT CURB & GUTTER AND INSTALL ROAD BASE COURSE FOR SUBDIVISION ROADS. (2 WEEKS)
- CONSTRUCT TOWNHOUSES AND DRIVEWAYS.
- INSTALL FINISHED SURFACE COURSE, SIDEWALKS AND STREET TREES. (2 WEEKS)
- FORECASTS SHALL REMOVE ALL OLD AND NEW JUNK, TRASH, AND DEBRIS FROM FORESTS, FLOODPLAIN, STREAMS, WETLANDS AND THEIR BUFFERS.
- REMOVE THE EXISTING TRAP/BASIN UPON OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR AS WELL AS INLET BLOCKING. (3 DAYS)
- NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR FINAL INSPECTION OF THE COMPLETED PROJECT. AN "AS-BUILT" APPROVAL LETTER FOR EACH FENCE IS TO BE SUBMITTED TO THE COUNTY INSPECTOR BEFORE THE CLOSE OF THE PROJECT. (1 WEEK)

**SEDIMENT BASIN BAFFLES**

PLAN VIEWS C1028REVISED.DWG

D = DISTANCE BETWEEN INFLOW AND OUTFLOW  
A = AREA OF NORMAL POOL  
V<sub>0</sub> = EFFECTIVE WIDTH = A/D  
L<sub>0</sub> = TOTAL DISTANCE FROM THE INFLOW POINT AROUND THE BAFFLES TO THE RISER

FORMULA:  $\frac{L_0}{V_0} \geq 2$

PLAN VIEWS C1028REVISED.DWG

INFLOW POINT

RISER (OUTLET)

NORMAL POOL

BAFFLE DETAIL

INFLOW POINT

RISER (OUTLET)

BAFFLE DETAIL

**AS-BUILT CERTIFICATION FOR PSWM**

PLANNING BOARD OF HOWARD COUNTY

DATE: 8/24/13 & 9/16/13

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning: 9/10/13

Chief, Division of Land Development: 9/13/13

Chief, Development Engineering Division: 9-13-13

EROSION CONTROL MATTING

NOT TO SCALE

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".

2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.

3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.

4. STAPLES SHALL BE PLACED 2' APART IN 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.

5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIP-LAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.

6. THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.

**SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1895).
- ALL VEGETATIVE AND STRUCTURAL PROVISIONS ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 1 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1 CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOI (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL EXCESS OF 2 ACRES, APPROVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE	5.49	ACRES
AREA DISTURBED	4.42	ACRES
AREA TO BE ROOFED OR PAVED	1.67	ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.82	ACRES
TOTAL CUT	23,761	CU.YDS.
TOTAL FILL	1,395	CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION		CU.YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY OR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SOURCE OFFICE PARK - 1627 BALFOUR NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 441-2555

4/8/2013 8:42 AM  
AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING

SCALE: 1" = 30'

**SURVEYOR'S CERTIFICATE**

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Surveyor: Frank John Manalansan II  
Date: 8-22-13

**BUILDER/DEVELOPER'S CERTIFICATE**

"I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: Donald R. Reuver  
Date: 8-22-13

**OWNER**

3330 ROGERS AVENUE, LLC  
SUITE 102  
5300 DORSEY HALL DRIVE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. RUEVER, JR.

**DEVELOPER**

M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. RUEVER, III

**STANDARDS AND SPECIFICATIONS FOR TOPSOIL**

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation. PURPOSE: To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, nutrients toxic to plants, and/or unacceptable soil gradation.

**Conditions Where Practice Applies:**

- This practice is limited to areas having 2% or flatter slopes where:
  - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2% require special consideration and design for adequate stabilization. Areas having slopes steeper than 2% shall have the appropriate stabilization shown on the plans.

**Construction and Material Specifications**

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
  - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of stones, stones, silt, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
  - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
  - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

**Construction and Material Specifications**

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**Vegetative Stabilization - Section 1**

- Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of stones, stones, silt, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
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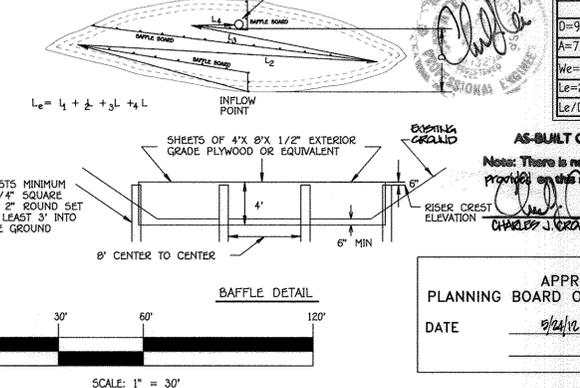
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**STANDARD STABILIZATION NOTE**

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.



**STANDARD STABILIZATION NOTE**

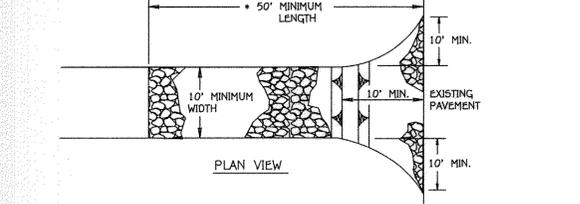
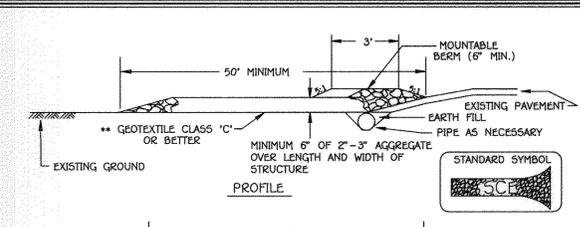
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**STABILIZED CONSTRUCTION ENTRANCE**

NOT TO SCALE

CROSS-SECTION

STAPLE OUTSIDE EDGE OF MATTING ON 2" CENTERS

STAPLE OUTSIDE EDGE OF MATTING ON 2" CENTERS

4" OVERLAP OF MATTING STRIPS WITH TWO MORE STRIP WIDTHS ARE STAPLED, ATTACH STAPLES ON 18" CENTERS

Slope	Slope (maximum)	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 2:1	1,200 feet	1,500 feet
20 - 35%	5:1 - 3:1	100 feet	1,000 feet
35 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

**DESIGN CRITERIA**

Tensile Strength: 50 lbs/ft (min.) Test: MSMT 509  
 Tensile Modulus: 200 lbs/in. (min.) Test: MSMT 509  
 Flow Rate: 0.3 gal/ft (min/ft) (max.) Test: MSMT 322  
 Filtering Efficiency: 75% (min.) Test: MSMT 322

**DESIGN CRITERIA**

Tensile Strength: 50 lbs/ft (min.) Test: MSMT 509  
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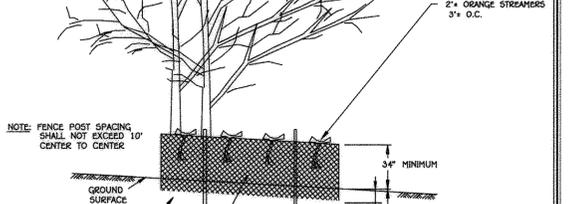
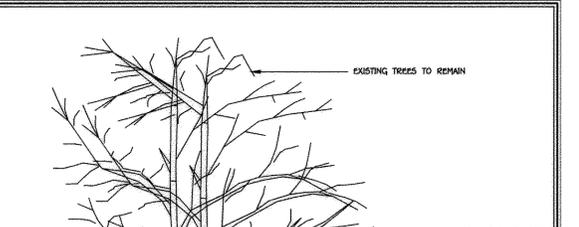
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**SUPER SILT FENCE, TREE PROTECTION FENCE**

NOT TO SCALE

CROSS-SECTION

STAPLE OUTSIDE EDGE OF MATTING ON 2" CENTERS

STAPLE OUTSIDE EDGE OF MATTING ON 2" CENTERS

4" OVERLAP OF MATTING STRIPS WITH TWO MORE STRIP WIDTHS ARE STAPLED, ATTACH STAPLES ON 18" CENTERS

**SUPER SILT FENCE, TREE PROTECTION FENCE**

NOT TO SCALE

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THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

SHEET 7 OF 16 SDP-11-057



- LEGEND**
- PROPOSED PAVING
  - 16'x32' SINGLE FAMILY ATTACHED WITHOUT GARAGE
  - 20'x32' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x36' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - 20'x42' SINGLE FAMILY ATTACHED WITH ONE CAR GARAGE
  - TWO (20'x42') ONE CAR FRONT LOAD DUPLEX UNITS
  - TWO (20'x42') TWO CAR REAR LOAD DUPLEX UNITS
  - EXISTING WETLANDS PLAT NOS. 15067 THRU 15070
  - EXISTING FLOODPLAIN PLAT NOS. 15067 THRU 15070
  - EXISTING CONTOUR
  - EXISTING TREELINE
  - EXISTING STREAM
  - RECREATION OPEN SPACE AREAS
  - EXISTING EASEMENT
  - PROPOSED EASEMENT
  - SLOPES 25% OR GREATER
  - PERMEABLE PAVING
  - FOREST CONSERVATION EASEMENT
  - PROPOSED SEWER HOUSE CONNECTION
  - EXISTING WATER HOUSE CONNECTION
  - DRAINAGE AREA LINES



**AS-BUILT CERTIFICATION FOR PSM**  
 Note: There is no "AS-BUILT" information provided on this sheet.  
 Charles J. Croft, P.E. No. 19204 Date 1/17

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE 5/24/12 & 5/16/13

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 441-2000



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.  
 Frank J. Manalansan II 7/17/14  
 DATE

**OWNER**  
 3330 ROGERS AVENUE, LLC  
 SUITE 102  
 5300 DORSEY HALL DRIVE  
 ELICOTT CITY, MD 21042  
 443-367-0422  
 MR. DONALD R. REUWER, JR.

**DEVELOPER**  
 H & T DEVELOPERS, LLC  
 4515 MANOR LANE  
 ELICOTT CITY, MD 21042  
 443-367-0422  
 MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Michael J. Rowell* 5/5/14  
 Director - Department of Planning and Zoning Date

*V. J. Shandera* 3/28/14  
 Chief, Division of Land Development Date

*Chief Edwards* 2-28-14  
 Chief, Development Engineering Division Date

SUBDIVISION		SECTION/AREA		LOT NOS.	
ELICOTT CROSSING		PART ONE		1-37, 145-162	
PLAT NOS.	PARCEL NOS.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
22503-22505	052, 047	MXD-6	24	2nd.	6029

REVISED  
 STORM DRAIN DRAINAGE AREA MAP  
**ELICOTT CROSSING, PART ONE**  
 LOTS 1 THRU 37, 145 THRU 162, AND  
 OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
 SINGLE FAMILY ATTACHED

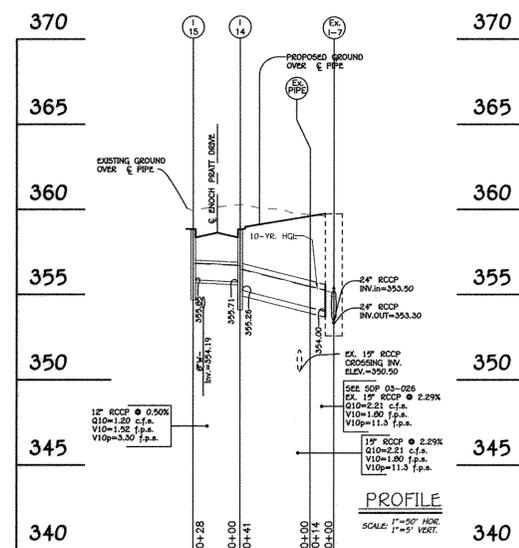
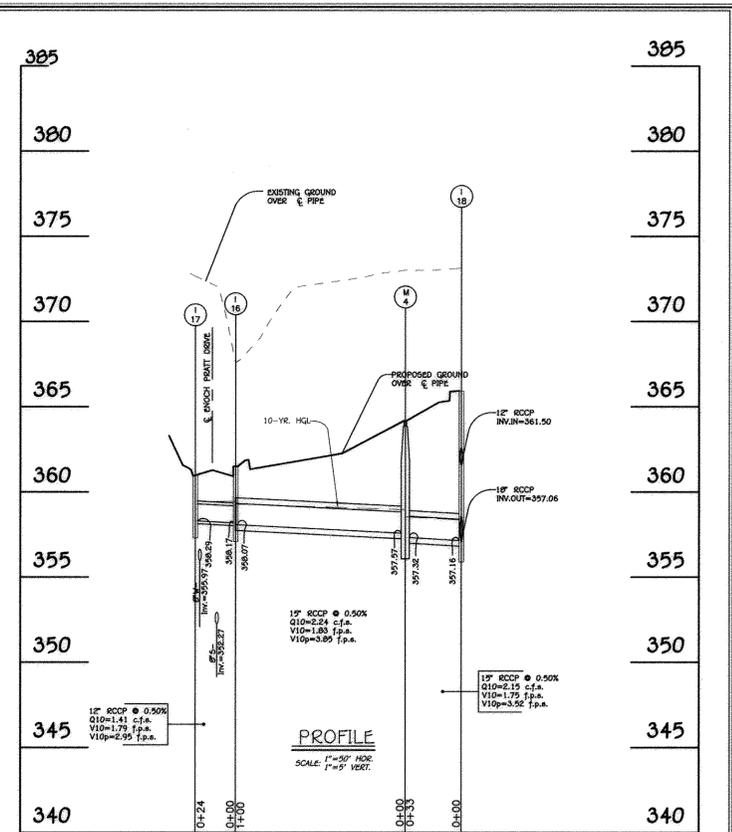
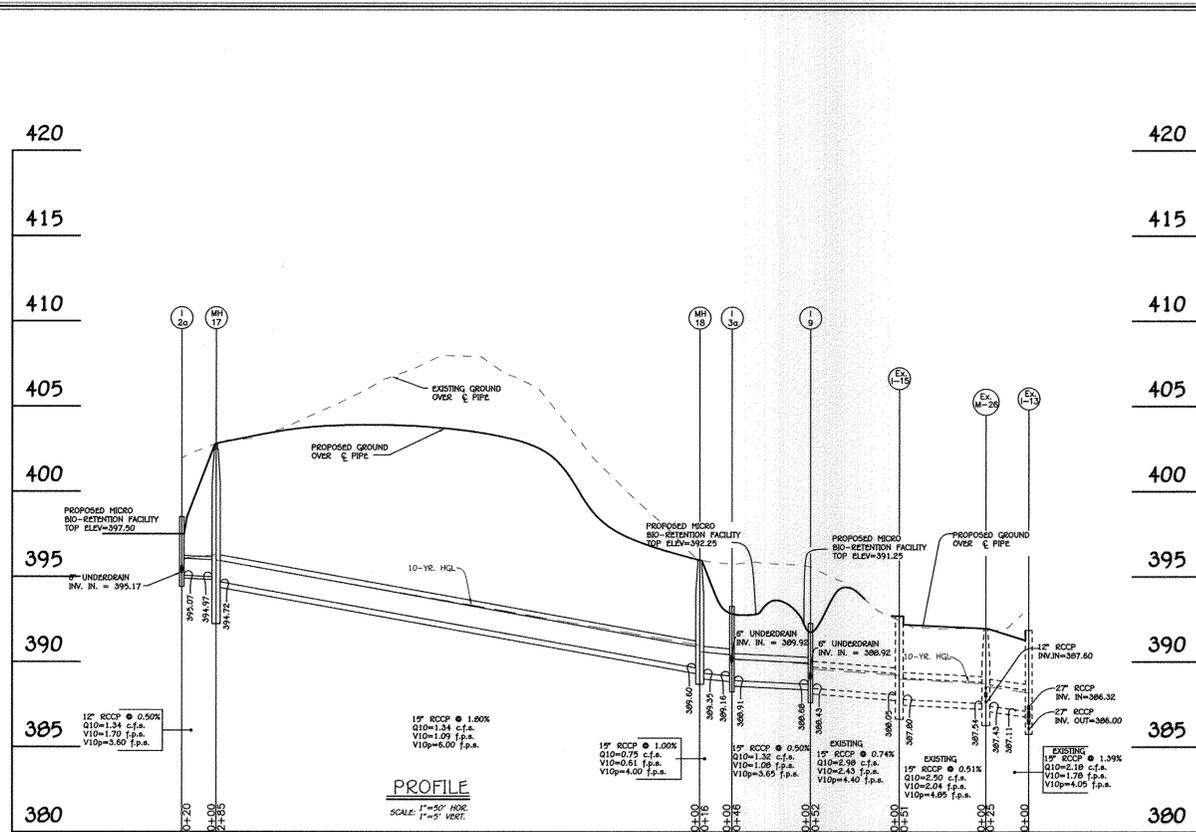
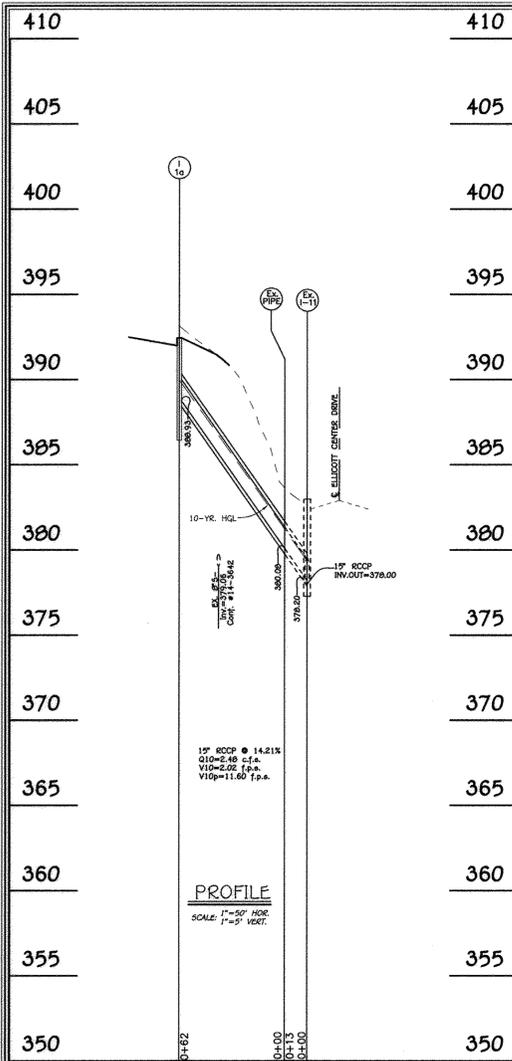
TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 30' DATE: FEBRUARY 10, 2014

SHEET 8 OF 16  
 SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET





4/8/2013	RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING
----------	---



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/19.

*Frank J. Marulawan II* 8-22-13  
DATE

**OWNER**  
3330 ROGERS AVENUE, LLC  
SUITE 102  
5300 DORSEY HALL DRIVE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, JR.

**DEVELOPER**  
M & T DEVELOPERS, LLC  
4515 HANCOX LANE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Frank P. Lygdon* 9/10/13  
Director - Department of Planning and Zoning Date

*Kurt Schaefer* 9/13/13  
Chief, Division of Land Development Date

*Chad Schmitt* 9-17-13  
Chief, Development Engineering Division Date

SUBDIVISION	SECTION/AREA	LOT NOS.
ELLICOTT CROSSING	PART ONE	1-37, 145-162, 38-41, 163-166
PLAT NOS.	PARCEL NOS.	ZONE
2703-22505	852, 847	MXD-6
TAX MAP	ELEC. DIST.	CENSUS TR.
24	2nd.	6029

REVISED  
**STORM DRAIN PROFILES**  
**ELLICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED

TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 852, 847  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST 20, 2013

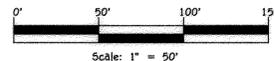
SHEET 10 OF 16  
SDP-11-057



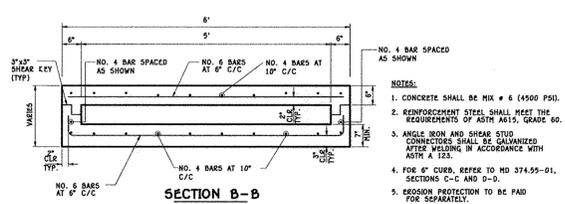
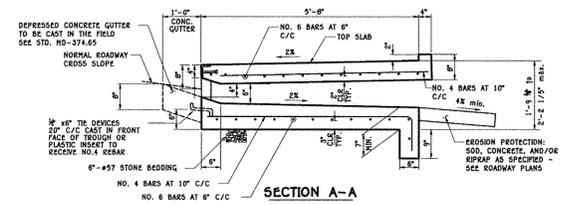
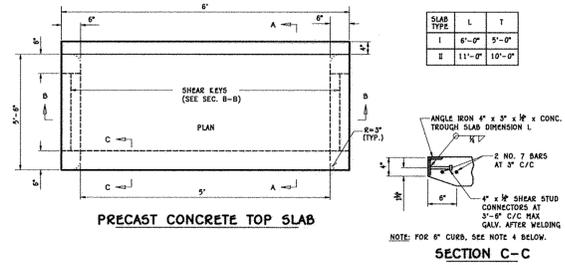
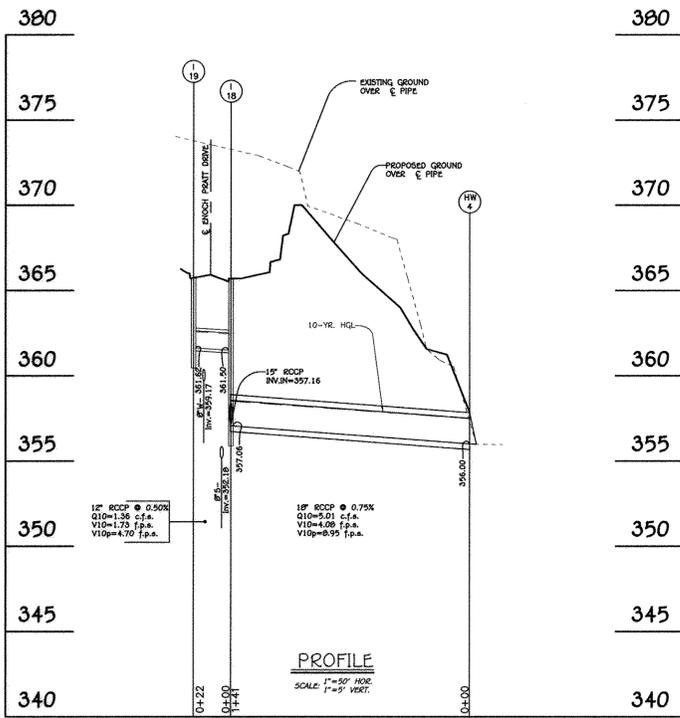
**AS-BUILT CERTIFICATION FOR PSWM**  
Note: There is no "AS-BUILT" information provided on this sheet.

*Charles J. Braxton* 1/1/13  
Date

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE 9/22/13 by 9/10/13



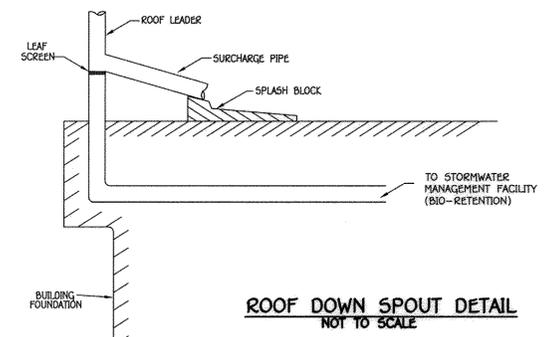
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



**SHA FLOW THRU INLET**

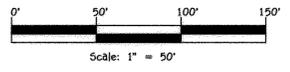
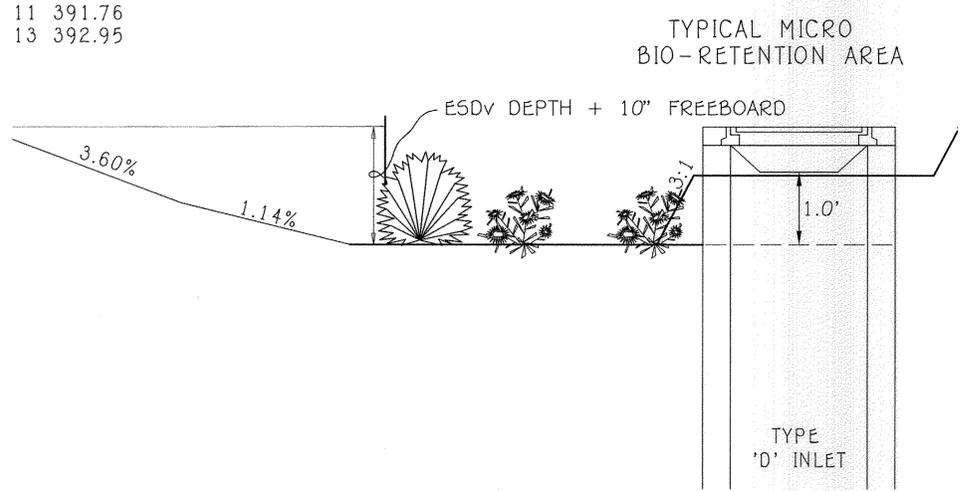
11 391.76  
13 392.95

STRUCTURE SCHEDULE								
STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	ROAD NAME	ROAD STA.	OFFSET	TYPE	REMARKS
I-1a	392.45	-----	388.93	VOGEL ROAD	4+18.20	25' L.	A-5 INLET	OPEN SPACE 164
I-2a	398.50	395.17(6" PVC)	395.07	N 507.164 E 1,365,404	-----	-----	'D' INLET	OPEN SPACE 163
I-3a	393.25	389.16(M-10), 389.92(8" PVC)	388.91	N 507.210 E 1,365,206	-----	-----	'D' INLET	OPEN SPACE 163
I-4a	394.00	-----	393.15	VOGEL ROAD	0+73.92	12' R.	FLOW THRU INLET	OPEN SPACE 164
I-9	392.25	388.68(I-30), 388.92(8" PVC)	388.43	N 507.263 E 1,365,232	-----	-----	'D' INLET	OPEN SPACE 163
I-14	358.83	355.71	355.26	ENOCH PRATT DRIVE	5+61.74	12' R.	A-10 INLET	OPEN SPACE 38
I-15	358.83	-----	355.85	ENOCH PRATT DRIVE	5+61.74	12' L.	A-10 INLET	OPEN SPACE 38
I-16	361.53	358.17	358.07	ENOCH PRATT DRIVE	4+22.46	12' L.	A-5 INLET	OPEN SPACE 38
I-17	360.97	-----	358.29	ENOCH PRATT DRIVE	4+29.06	12' R.	'S' INLET	OPEN SPACE 38
I-18	365.92	361.50(I-19), 357.16(M-4)	357.06	ENOCH PRATT DRIVE	2+83.83	12' L.	A-5 INLET	OPEN SPACE 38
I-19	365.33	-----	361.62	ENOCH PRATT DRIVE	2+85.30	12' R.	'S' INLET	OPEN SPACE 38
M-4	366.77	357.57	357.32	ENOCH PRATT DRIVE	3+20.05	12.5' L.	STD. MANHOLE	OPEN SPACE 38
M-17	402.00	394.97	394.72	N 507.153 E 1,365,474	-----	-----	STD. MANHOLE	OPEN SPACE 163
M-18	394.84	389.60	389.35	N 507.194 E 1,365,209	-----	-----	STD. MANHOLE	OPEN SPACE 163
EX. M-26	391.83	387.54 (EX. I-15) 387.60 (EX. I-14)	387.43	ELLCOTT CENTER DRIVE	15+54.33	0.81' L.	STD. MANHOLE	PARCEL 'I'
HW-4	358.25	-----	356.00	N 507.716 E 1,365,664	-----	-----	TYPE 'C' HEADWALL	OPEN SPACE 40
EX. I-11	383.08	378.20	378.00	ELLCOTT CENTER DRIVE	12+54.95	16' L.	A-10 INLET	PARCEL 'I'
EX. I-15	392.68	388.05	387.54	ELLCOTT CENTER DRIVE	16+03.58	16' L.	A-5 INLET	PARCEL 'I'



PIPE SCHEDULE		
SIZE	CLASS	LENGTH
12"	RCCP	247'
15"	RCCP	663'
18"	RCCP	141'
6"	Schedule 40 PVC	608'
6"	Perforated Schedule 40 PVC	133'

NOTE: RCCP, CL. IV MAY BE SUBSTITUTED WITH HDPE PIPE MATERIAL.



**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
(410) 461-2895



**PROFESSIONAL CERTIFICATION**  
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. 61476, EXPIRATION DATE: 7/14/19.  
*Charles J. Orozco, P.E.* 8-22-13  
DATE

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3330 ROGERS AVENUE, LLC  
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443-367-0422  
MR. DONALD R. RUEWER, JR.

**DEVELOPER**  
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443-367-0422  
MR. DONALD R. RUEWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Frank A. Cuyler* 2/20/10  
Director - Department of Planning and Zoning Date  
*Keith Schuchman* 9/13/13  
Chief, Division of Land Development Date  
*Chad Schuchman* 9-13-13  
Chief, Development Engineering Division Date

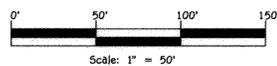
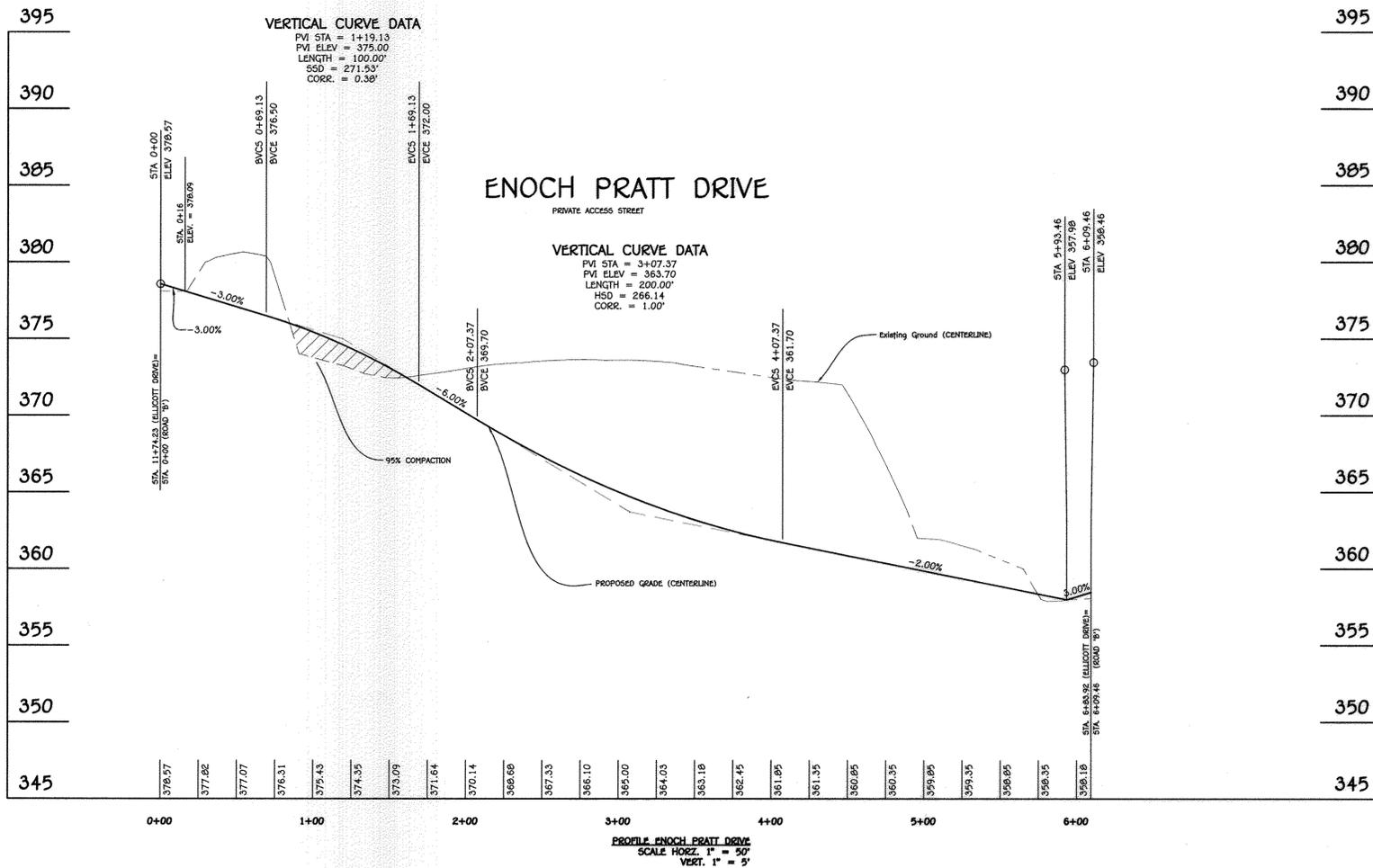
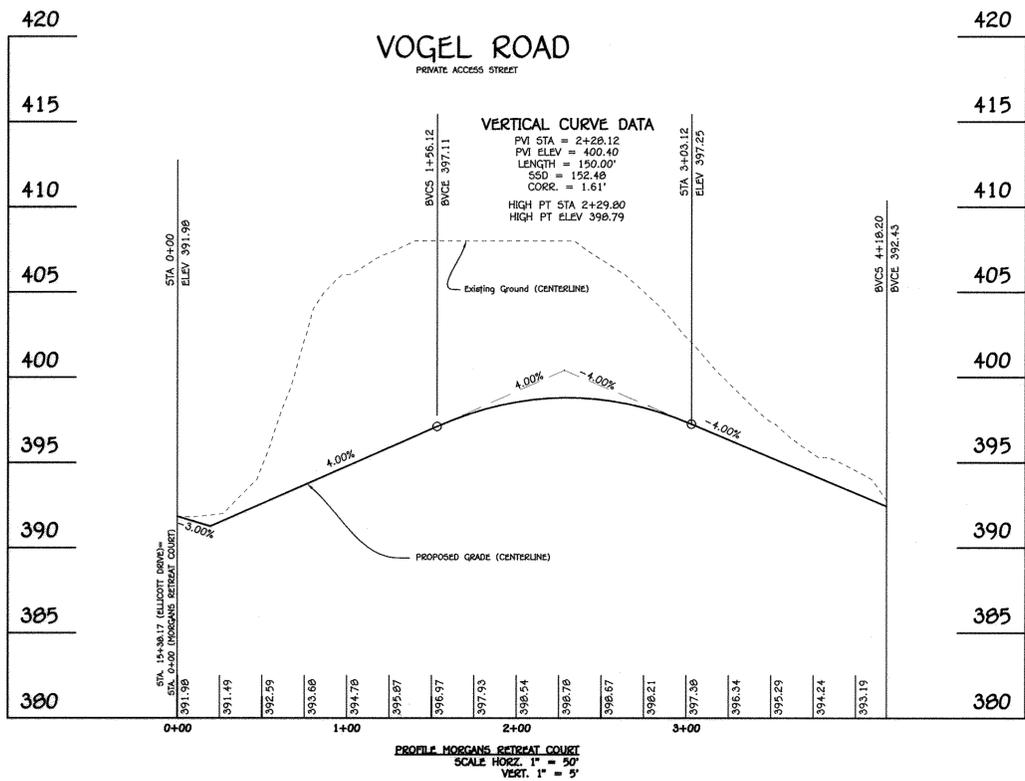
SUBDIVISION SECTION/AREA LOT NOS.  
ELLCOTT CROSSING PART ONE 1-37, 145-162  
PLAT NOS. PARCEL NOS. ZONE TAX MAP ELEC. DIST. CENSUS TR.  
22509-22505 052, 047 MXD-6 24 2nd. 6029

AS-BUILT CERTIFICATION FOR PSWM  
Note: There is no "AS BUILT" information provided on this sheet.  
*Charles J. Orozco* 9/13/13  
CHARLES J. OROZCO, P.E. NO. 19204 Date

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE 5/24/12 & 5/16/13

REVISED  
**STORM DRAIN PROFILES**  
**ELLCOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 38 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED  
TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST 20, 2013  
SHEET 11 OF 16  
SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



AS-BUILT CERTIFICATION FOR PSWM  
Note: There is no "AS BUILT" information provided on this sheet.  
Date: 8/13/13  
Charles J. Cravo, No. 13204

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 8/24/13 & 5/16/13

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLICOTT CITY, MARYLAND 21042  
(410) 461-2055

4/8/2013	RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING
----------	---



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/13.  
Frank J. Marulaban II 8-23-13  
DATE

**OWNER**  
3330 ROGERS AVENUE, LLC  
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443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning: 2/14/13  
Chief, Division of Land Development: 9/13/13  
Chief, Development Engineering Division: 9-13-13

SUBDIVISION	SECTION/AREA	LOT NOS.
ELLICOTT CROSSING	PART ONE	1-37, 145-162, 05, 38-41, 163-166
PLAT NOS.	PARCEL NOS.	ZONE
22503-22505	052, 047	MXD-6
TAX MAP	ELEC. DIST.	CENSUS TR.
24	2nd.	6029

REVISED ROAD PROFILES

**ELLICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND OPEN SPACE LOTS 38 THRU 41, 163 THRU 166 SINGLE FAMILY ATTACHED

TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST 20, 2013

SHEET 12 OF 16  
SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

# Infiltration and Filter System Construction Specifications

# OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6)

Infiltration and filter systems either take advantage of existing permeable soils or create a permeable medium such as sand for infiltration, and in some instances where permeability is great, these facilities may be used for top soil. The most common systems include infiltration trenches, infiltration basins, and filters, and organic filters.

When properly planted, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment buffers will trap sediments that are bound with phosphorus and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide structure to permeable soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

- Design Constraints:**
- > Plants buffer areas of at least 20 feet will cause sediments to settle out before reaching the facility, thereby reducing the possibility of clogging.
  - > Determine areas that will be saturated with water and water table depth so that appropriate plants may be selected (hydrology will be similar to bioretention facilities, see Figure A.5 and Table A.4 for planting material guidance).
  - > Plants known to send down deep taproots should be avoided in systems where filter fabric is used as part of facility design.
  - > Test soil conditions to determine if soil amendments are necessary.
  - > Plants should be located so that access is possible for structure maintenance.
  - > Stabilize heavy flow areas with erosion control mats or sod.
  - > Temporarily divert flows from seeded areas until vegetation is established.
  - > See Table A.5 for additional design considerations.

**Bio-retention Soil Bed Characteristics**

The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and sustain a robust vegetative cover crop. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through absorption and microbial activity within the soil profile. Therefore, soils must balance their chemical and physical properties to support biotic communities above and below ground.

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam-sand mix (should contain a minimum 35 to 60% sand, by volume). The clay content for these soils should be less than 25% by volume (Environmental Quality Resources (EQ), 1996; Engineering Technology Inc. and Sustainable, Inc. (ETSI), 1993). Soils should fall within the M, S, or SC classifications of the Unified Soil Classification System (USCS). A permeability of at least 1.0 feet per day (0.27 in/hr) is required to conservative value of 0.5 feet per day is used for design. The soil should be free of stones, stumps, roots, or other woody material over 1" in diameter. Branch or seeds from noxious weeds (e.g. Johnson Grass, Mugwort, Nutsedge, and Canada Thistle or other noxious weeds as specified under COM96 15.08.01.05) should not be present in the soil. Placement of the planting soil should be in 12 to 18 inch that are loosely compacted (tamped lightly with a backhoe bucket or troweled by dozer tracks). The specific characteristics are presented in Table A.3.

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Phosphorus	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Potassium (potash - K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	10 to 25 %
Silt	30 to 55 %
Sand	35 to 60 %

**Mulch Layer**

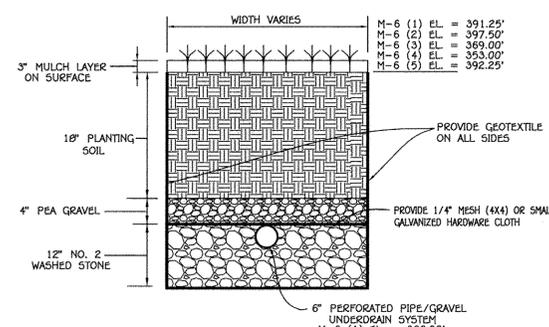
The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain soil moisture and avoids surface sealing which reduces permeability. Mulch helps prevent erosion, and provides a microenvironment for soil biota at the mulch-soil interface. It also serves as a pretreatment filter, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood chips or chips. The mulch layer should be well aged (stockpiled or stored for at least 12 months), uniform in color, and free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a minimum depth of three inches. Grass clippings should not be used as a mulch material.

**Planting Guidance**

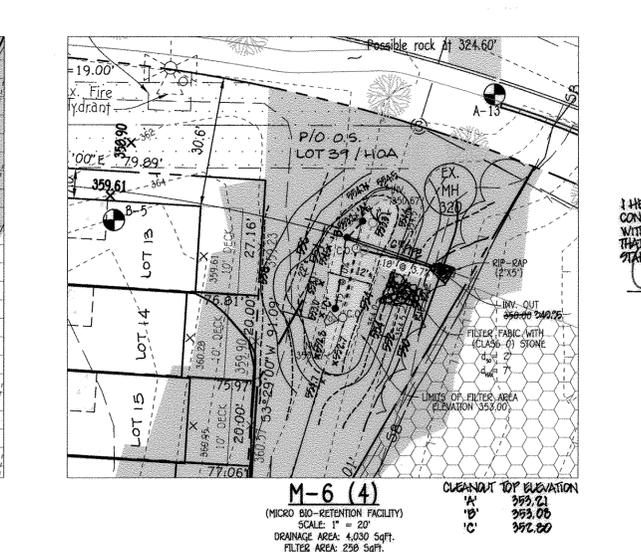
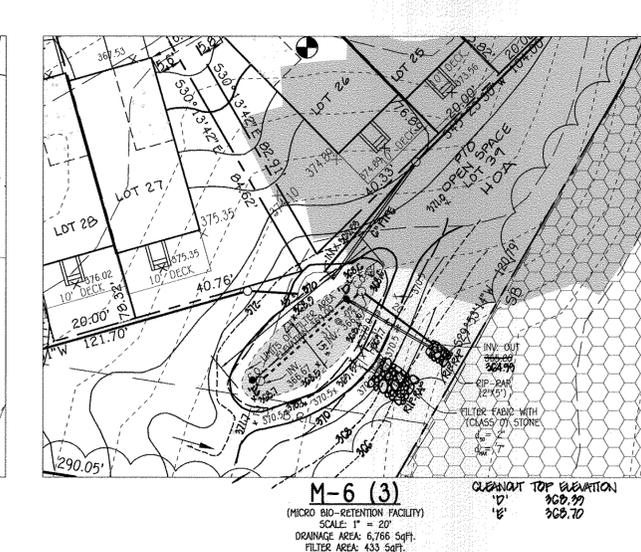
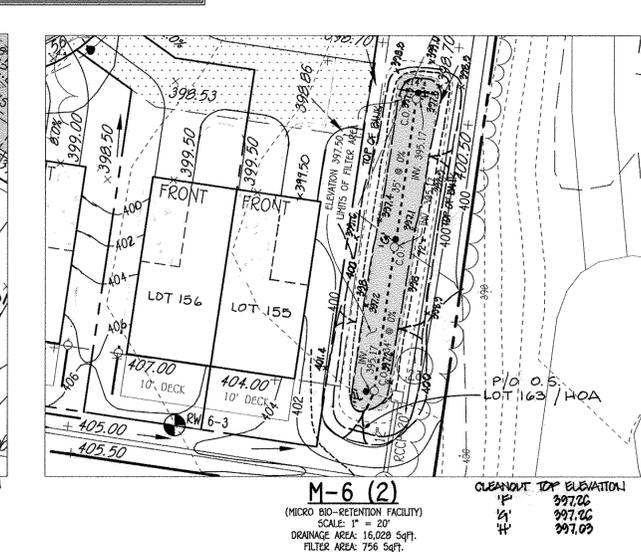
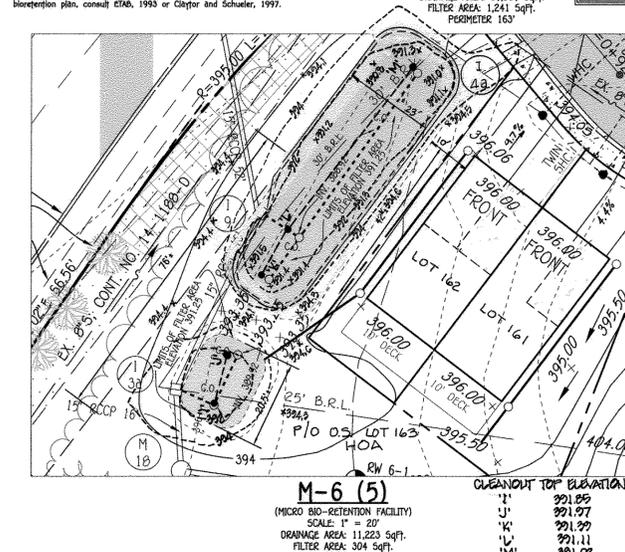
Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-species ecosystem. The community should be dominated by trees, but have a distinct community of understory trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand wind stresses from insects, drought, temperature, wind, and exposure.

The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by water. The outer edge is the highest elevation and generally supports plants adapted to drier conditions. A variety of appropriate plant materials for bioretention facilities are included in Table A.4. The layout of plant material should be flexible, but should follow the general principles described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layout, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult CTM, 1993 or Clayton and Schuster, 1997.



TYPICAL SECTION - BIO-RETENTION FACILITY (M-6)

Drainage Area	Name	Maximum Spacing (ft)
DRAINAGE AREA M-6 (1)	MIXED GRASSES	2 FT.
DRAINAGE AREA M-6 (2)	MIXED PERENNIALS	2 FT.
DRAINAGE AREA M-6 (3)	MIXED PERENNIALS	2 FT.
DRAINAGE AREA M-6 (4)	MIXED PERENNIALS	2 FT.
DRAINAGE AREA M-6 (5)	MIXED PERENNIALS	2 FT.



Revision	Description
12/6/2019	REVISE DRIVEWAY LOCATIONS AND ASSOCIATED GRADING FOR LOTS 155 & 162. REMOVE PORTION OF ZOD LEASES FOR LOTS 156 & 157. REVISE GRADING BIORETENTION FACILITY NO. 1
4/9/2013	RED LINE REPLACEMENT SHEETS 1 TO 9 AND 14 TO 16 TO REMOVE AGE RESTRICTED CONDO BLDGS, SHOW LOTS 145 TO 162 AND UPDATE LANDSCAPING

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 01476, EXPIRATION DATE: 7/14/16.

*Frank H. Manalapan II* 8-22-13  
DATE

**OWNER**  
3330 ROGERS AVENUE, LLC  
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5300 DORNEY HALL DRIVE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, JR.

**DEVELOPER**  
M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Frank P. Uygul* 7/10/10  
Director - Department of Planning and Zoning

*Ketisha Lewis* 9/3/13  
Chief, Division of Land Development

*Frank Schmitt* 9/13/13  
Chief, Development Engineering Division

APPROVED: ELICOTT CROSSING  
1-37, 145-162, 163-166  
22503-22505 052, 047 MXD-6 24 2nd. CENSUS TR. 6029

REVISIONS

STORMWATER MANAGEMENT NOTES AND DETAILS

**ELICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND  
OPEN SPACE LOTS 30 THRU 41, 163 THRU 166  
SINGLE FAMILY ATTACHED

TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST 20, 2013

SHEET 13 OF 16

**BORING LOG**

Client: Transworld Crane Company  
Project: Howard County Gov't Office Complex, Ellicott City, MD  
Boring No.: 2-2 (1 of 12) Date: 7-26-02

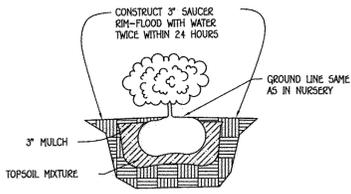
Depth (ft)	Remarks	Soil Type	Moisture (%)	Specific Gravity	Unit Weight (pcf)
371.9	1.5' to 2.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
368.7	2.0' to 2.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
366.2	2.5' to 3.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
363.7	3.0' to 3.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
361.2	3.5' to 4.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
358.7	4.0' to 4.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
356.2	4.5' to 5.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
353.7	5.0' to 5.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
351.2	5.5' to 6.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
348.7	6.0' to 6.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
346.2	6.5' to 7.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
343.7	7.0' to 7.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
341.2	7.5' to 8.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
338.7	8.0' to 8.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
336.2	8.5' to 9.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
333.7	9.0' to 9.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
331.2	9.5' to 10.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
328.7	10.0' to 10.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
326.2	10.5' to 11.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
323.7	11.0' to 11.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
321.2	11.5' to 12.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
318.7	12.0' to 12.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
316.2	12.5' to 13.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
313.7	13.0' to 13.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
311.2	13.5' to 14.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
308.7	14.0' to 14.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
306.2	14.5' to 15.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
303.7	15.0' to 15.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
301.2	15.5' to 16.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
298.7	16.0' to 16.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
296.2	16.5' to 17.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
293.7	17.0' to 17.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
291.2	17.5' to 18.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
288.7	18.0' to 18.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
286.2	18.5' to 19.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
283.7	19.0' to 19.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
281.2	19.5' to 20.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
278.7	20.0' to 20.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
276.2	20.5' to 21.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
273.7	21.0' to 21.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
271.2	21.5' to 22.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
268.7	22.0' to 22.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
266.2	22.5' to 23.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
263.7	23.0' to 23.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
261.2	23.5' to 24.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
258.7	24.0' to 24.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
256.2	24.5' to 25.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
253.7	25.0' to 25.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
251.2	25.5' to 26.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
248.7	26.0' to 26.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
246.2	26.5' to 27.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
243.7	27.0' to 27.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
241.2	27.5' to 28.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
238.7	28.0' to 28.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
236.2	28.5' to 29.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
233.7	29.0' to 29.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
231.2	29.5' to 30.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
228.7	30.0' to 30.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
226.2	30.5' to 31.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
223.7	31.0' to 31.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
221.2	31.5' to 32.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
218.7	32.0' to 32.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
216.2	32.5' to 33.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
213.7	33.0' to 33.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
211.2	33.5' to 34.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
208.7	34.0' to 34.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
206.2	34.5' to 35.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
203.7	35.0' to 35.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
201.2	35.5' to 36.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
198.7	36.0' to 36.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
196.2	36.5' to 37.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
193.7	37.0' to 37.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
191.2	37.5' to 38.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
188.7	38.0' to 38.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
186.2	38.5' to 39.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
183.7	39.0' to 39.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
181.2	39.5' to 40.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
178.7	40.0' to 40.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
176.2	40.5' to 41.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
173.7	41.0' to 41.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
171.2	41.5' to 42.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
168.7	42.0' to 42.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
166.2	42.5' to 43.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
163.7	43.0' to 43.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
161.2	43.5' to 44.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
158.7	44.0' to 44.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
156.2	44.5' to 45.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
153.7	45.0' to 45.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
151.2	45.5' to 46.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
148.7	46.0' to 46.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
146.2	46.5' to 47.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
143.7	47.0' to 47.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
141.2	47.5' to 48.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
138.7	48.0' to 48.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
136.2	48.5' to 49.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
133.7	49.0' to 49.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
131.2	49.5' to 50.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
128.7	50.0' to 50.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
126.2	50.5' to 51.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
123.7	51.0' to 51.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
121.2	51.5' to 52.0' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
118.7	52.0' to 52.5' Sand, clean to medium (SM)	SM	18.0	2.65	118.0
116.2	52.				





**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

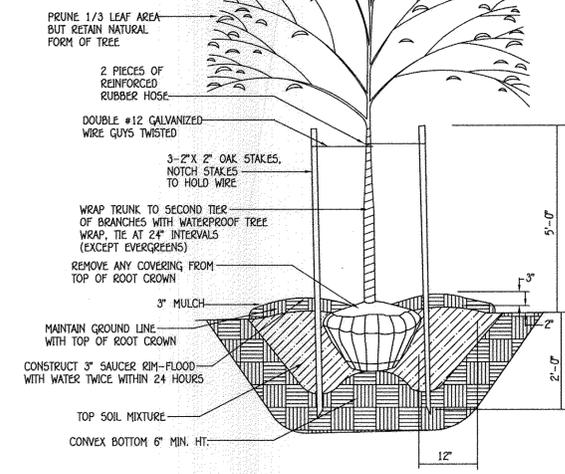
PERIMETER	P-1	P-2	P-3	P-4	P-5	P-6	B-5	B-6
CATEGORY	ADJACENT TO ROADWAY	RES. TO NON-RES.	PARKING TO ROADWAY	RES. TO NON-RES.	ADJACENT TO ROADWAY	RES. TO NON-RES.	APT./SFA TO PARKING	APT./SFA TO PARKING
LANDSCAPE TYPE	B	C	E	C	B	C	E	E
LINEAR FEET OR ROADWAY FRONTAGE/PERIMETER	461'	295'	50'	350'	722'	448'	337'	130'
CREDIT FOR EXISTING VEGETATION (YES, NO LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	-	-	-	-	318' D-2 FROM SCHEDULE 'D'	100% (F.C.E.) RETENTION	-	-
CREDIT FOR WALL, FENCE OR BERM (YES, NO LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	-	-	-	-	-	-	-	-
NUMBER OF PLANTS REQUIRED								
SHADE TREES	9	7	2	9	-	8	4	3
EVERGREEN TREES	12	15	13	17	10	17	-	25
SHRUBS	-	-	-	-	-	-	33	-
NUMBER OF PLANTS PROVIDED								
SHADE TREES	9	7	2	9	-	8	4	3
EVERGREEN TREES	12	15	-	17	10	17	-	25
SHRUBS	-	-	13	-	-	-	33	-



**SHRUB PLANTING DETAIL**

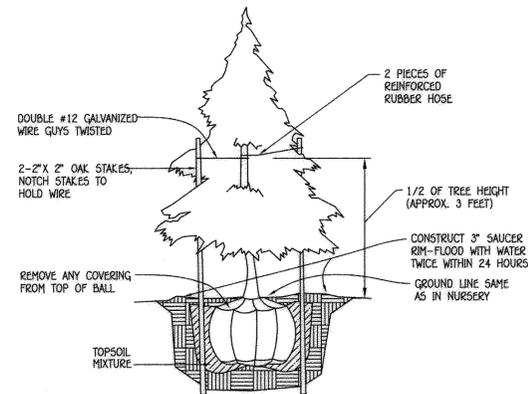
NOTE: CONTRACTOR TO REGRADE, SOO OR HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED AS A RESULT OF THEIR WORK.

SPRAY WITH WILT-PROOF ACCORDING TO MANUFACTURERS STANDARDS



**TREE PLANTING DETAIL**

NOT TO SCALE



**EVERGREEN PLANTING DETAIL**

NOT TO SCALE

**PLANTING SPECIFICATIONS**

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIMPAIRED, BONOURED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (A&N) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DISEASE, DETERIORATING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DAMAGE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR UNDESIRABLE DEVELOPMENTS. PLANT MATERIAL THAT IS MARKED OR MARKED HAS BEEN CUT BACK FROM LARGER SIZES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA" (DESIGNATED "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE FUTURE CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, LATEST EDITION, INCLUDING ALL REVISIONS.

CONTRACTOR SHALL BE RESPONSIBLE TO QUANTIFY ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR MAY MAKE THESE ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED BY THE TEMPORARY INSTALLATION OF 4 FOOT HIGH SHOWN FENCE OR BLAZE ORANGE SAFETY FENCE AT THE DEEP LINE.

CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE. ALL PLANTING IS TO BE COMPLETED WITHIN THE GROWING SEASON OF COMPLETION OF SITE CONSTRUCTION.

800 SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE.

ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSTING DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE.

PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-BOTTED COM OR HORSE MANURE, ADD 3 LBS. OF STANFORD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART PERLITE OR OTHER APPROVED ORGANIC MATERIAL, ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER FOR CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS IMPORTANCE TO THE SPECIFIC GRASS TYPE TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FIRM GRADED AND SEEDED.

THIS PLAN IS INTENDED FOR LANDSCAPE USE ONLY. SEE OTHER PLAN SHEETS FOR MORE INFORMATION ON GRADING, SEWERAGE CONTROL, LAYOUT, ETC.

**LANDSCAPE DEVELOPER'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 Code and the Howard County 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.

Name: Konald Green Date: 8-22-13

This plan has been prepared in accordance with the provision of Section 16.124 of the Howard County Code and Landscape Manual. Financial surety for the required landscaping will be posted as part of the developer's agreement.

PERIMETER, UNIT, PARKING, AND STORM WATER MANAGEMENT LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL AND AS SHOWN ON THE RED-LINE REVISION LANDSCAPE REPLACEMENT SHEETS AND AS APPROVED BY THE HOWARD COUNTY PLANNING BOARD. SURETY WILL NOT BE REQUIRED FOR ADDITIONAL PLANTINGS, HOWEVER, ALL LANDSCAPING AS SHOWN ON SHEETS 14 AND 15 MUST BE INSTALLED PRIOR TO RELEASE OF PREVIOUSLY INDICATED SURETY OF \$49,530.

\* PREVIOUSLY INDICATED SURETY OF \$49,530 PROVIDED WITH THE DEVELOPER'S AGREEMENT FOR THIS SITE PLAN, SDP-11-057.



**AS-BUILT CERTIFICATION FOR PSWM**

Note: There is no "AS BUILT" information provided on this sheet.

Charles J. Crandall 1/4/13  
Charles J. Crandall, P.S., No. 19004

**SCHEDULE B  
PARKING LOT  
INTERNAL LANDSCAPING**

	SINGLE FAMILY ATTACHED DUPLEX	SINGLE FAMILY ATTACHED
NUMBER OF PARKING SPACES	5	41
NUMBER OF TREES REQUIRED (1:10)	1	4
NUMBER OF TREES PROVIDED	1	4
SHADE TREES	-	-
OTHER TREES (2:1 SUBSTITUTE)	-	-

**SCHEDULE C  
RESIDENTIAL DEVELOPMENT  
INTERNAL LANDSCAPING**

	SINGLE FAMILY ATTACHED DUPLEX	SINGLE FAMILY ATTACHED
NUMBER OF DWELLING UNITS	10	37
NUMBER OF TREES REQUIRED (1:10 SFA) (1:3 DU APTS)	10	37
NUMBER OF TREES PROVIDED	10	37
SHADE TREES	-	-
OTHER TREES (2:1 SUBSTITUTE)	-	-

WHERE POSSIBLE UNIT TREE PLANTINGS HAVE BEEN LOCATED ON OPEN SPACE AREAS AND SHALL BE THE RESPONSIBILITY OF THE H.O.A. FOR MAINTENANCE AND UPKEEP.

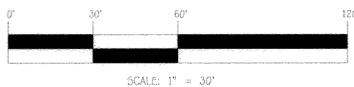
**LANDSCAPING PLANT LIST (SCHEDULE A, B, C & D)**

SYMBOL	QUANTITY	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
☉	55	ACER RUBRUM 'ARMSTRONG' RED MAPLE	2 1/2"-3" CAL.	SCHEDULE C REQUIREMENT
☉	17	PRUNUS SARGENTII SARGENT CHERRY	2 1/2"-3" CAL.	SCHEDULE B & D REQUIREMENT
☉	42	FAGUS GRANDIFOLIA AMERICAN BEECH	2 1/2"-3" CAL.	SCHEDULE A REQUIREMENT
☉	96	ILEX OPACA AMERICAN HOLLY	5'-6" HT.	SCHEDULE A REQUIREMENT
☉	71	ABELIA X GRANDIFLORA GLOSSY ABELIA	2 1/2"-3" HT.	SCHEDULE A REQUIREMENT

**NOTE:**  
THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 114 SHADE TREES, 96 EVERGREEN TREES AND 71 SHRUBS HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$49,530.

**SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER	D-1 : 355' TYPE 'B'	D-2 : 310' TYPE 'C'
NUMBER OF TREES REQUIRED:		
SHADE TREES	8	8
EVERGREEN TREES	9	16
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	YES 4 STREET TREES FROM SDP-03-026
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO
NUMBER OF TREES PROVIDED:		
SHADE TREES	8	4
EVERGREEN TREES	9	16



APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE: 8/21/13



**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/18.  
Frank J. Mammalanni II 8-22-13  
FRANK J. MAMMALANNI II

**OWNER**

3330 ROGERS AVENUE, LLC  
SUITE 102  
5300 DORSEY HALL DRIVE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, JR.

**DEVELOPER**

M & T DEVELOPERS, LLC  
4515 MANOR LANE  
ELLICOTT CITY, MD 21042  
443-367-0422  
MR. DONALD R. REUWER, III

APPROVED: DEPARTMENT OF PLANNING AND ZONING

David L. Weger 9/10/13  
Director - Department of Planning and Zoning

Karl S. Leach 9/13/13  
Chief, Division of Land Development

Chad Edwards 9/13/13  
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA PART ONE	LOT NOS. 1-37, 145-162, 38-41, 163-166
ELLICOTT CROSSING		
PLAT NOS. 22503-22505	PARCEL NOS. 052, 047	ZONE MKD-6
	TAX MAP 24	ELEC. DIST. 2nd
		CENSUS TR. 6029

**REVISED  
LANDSCAPE NOTES AND DETAILS**

**ELLICOTT CROSSING, PART ONE**  
LOTS 1 THRU 37, 145 THRU 162, AND OPEN SPACE LOTS 38 THRU 41, 163 THRU 166 SINGLE FAMILY ATTACHED

TAX MAP No.: 24 GRID No.: 6 PARCEL Nos.: 052, 047  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST 20, 2013

SHEET 16 OF 16

SDP-11-057

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET