

**SHEET INDEX**

SHEET	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT CONTROL PLAN
4	SEDIMENT CONTROL NOTES AND DETAILS
5	DRIVEWAY PROFILES AND TYPICAL SECTIONS
6	PRIVATE SEWER PROFILES
7	LANDSCAPE AND FOREST CONSERVATION PLAN
8	LANDSCAPE AND FOREST CONSERVATION PLAN

**ADDRESS CHART**

UNIT #	ADDRESS
1	3005 JOHN BERNARD DRIVE
2	3007 JOHN BERNARD DRIVE
3	3009 JOHN BERNARD DRIVE
4	3015 JOHN BERNARD DRIVE
5	3017 JOHN BERNARD DRIVE
6	3019 JOHN BERNARD DRIVE
7	3023 JOHN BERNARD DRIVE
8	3025 JOHN BERNARD DRIVE
9	3029 JOHN BERNARD DRIVE
10	3031 JOHN BERNARD DRIVE
11	3035 JOHN BERNARD DRIVE
12	3037 JOHN BERNARD DRIVE
13	3024 JOHN BERNARD DRIVE
14	3022 JOHN BERNARD DRIVE
15	3020 JOHN BERNARD DRIVE
16	3004 JOHN BERNARD DRIVE
17	3006 JOHN BERNARD DRIVE
18	3010 JOHN BERNARD DRIVE
19	3012 JOHN BERNARD DRIVE
20	3014 JOHN BERNARD DRIVE

**PERMIT INFORMATION CHART**

SUBDIVISION NAME: <b>Ellcott Meadows</b>	SECTION/AREA: 13.75 AC.	LOT/PARCEL NO. PARCEL # 99
AKA: BAGHERI PROPERTY		
PLAT: <b>10/24/06</b>	GRID: <b>185.00</b>	ZONING: RC-DEO
TAX MAP NO. 16	ELECT. DIST. 3RD	CENSUS TRACT 60600
WATER CODE K-01		

**OWNER/DEVELOPER**

BRANTLEY DEVELOPMENT GROUP, INC.  
8835-P COLUMBIA 100 PARKWAY  
COLUMBIA, MARYLAND 21045  
(410) 730-0810

**DEVELOPER'S CERTIFICATE**

I 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 PERSONS ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Developer: *[Signature]* 10/18/06 DATE  
Printed Name of Developer: **Roberta E. Liparini**

**ENGINEER'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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: *[Signature]* 10/18/06 DATE  
Printed Name of Engineer: **James M. [Signature]**

APPROVED: FOR PRIVATE SEWERAGE SYSTEM  
HOWARD COUNTY HEALTH DEPARTMENT

Signature: *[Signature]* 11/28/06 DATE  
Name: **Robert Walden**  
Title: **HOWARD COUNTY HEALTH OFFICER**

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Signature: *[Signature]* 10/30/06 DATE  
Title: **USDA - NATURAL RESOURCE CONSERVATION SERVICE**

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

Signature: *[Signature]* 10/30/06 DATE  
Title: **HOWARD COUNTY CONSERVATION DISTRICT**

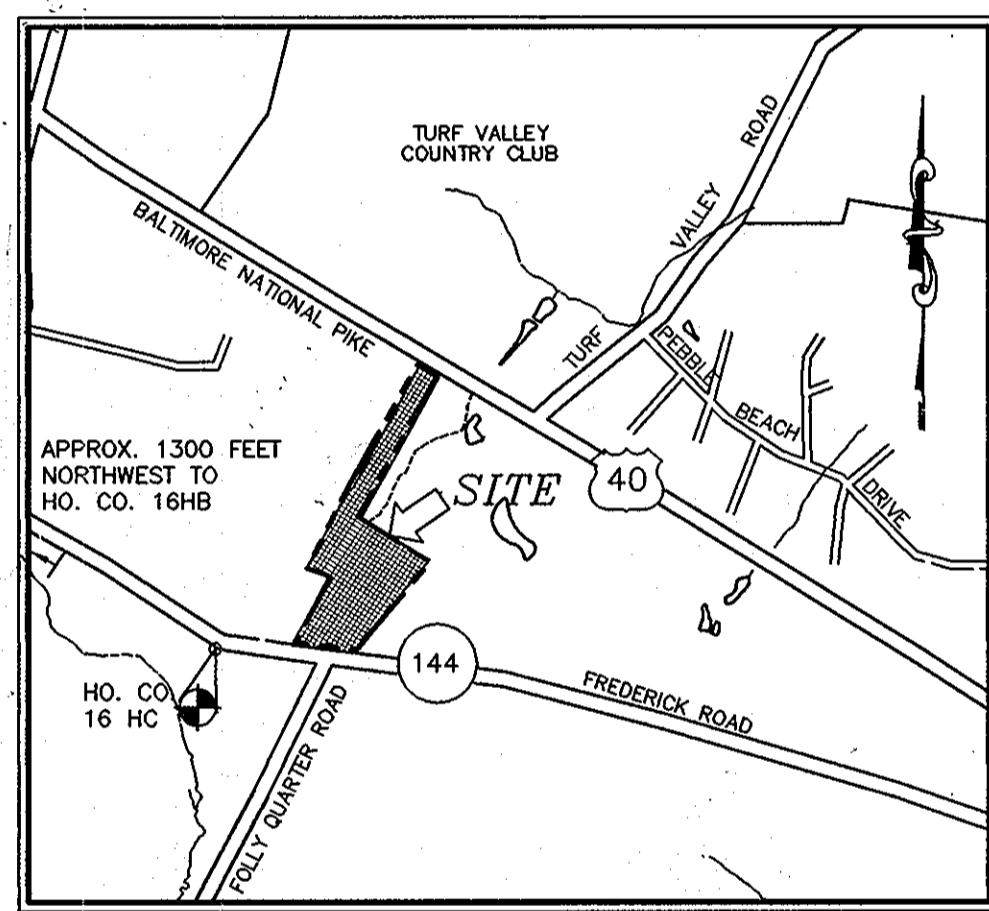
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* 11/5/06 DATE  
Title: **CHIEF, DEVELOPMENT ENGINEERING DIVISION**

Signature: *[Signature]* 11/30/06 DATE  
Title: **CHIEF, DIVISION OF LAND DEVELOPMENT**

Signature: *[Signature]* 11/1/06 DATE  
Title: **DIRECTOR**

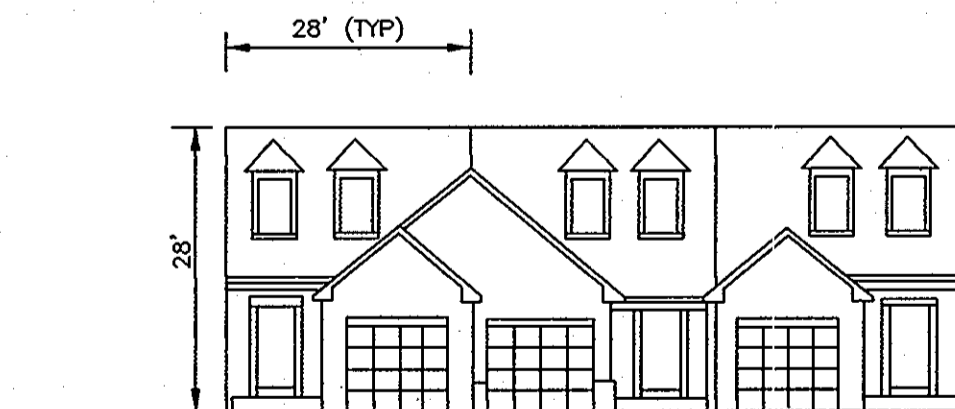
# SITE DEVELOPMENT PLAN ELLICOTT MEADOWS THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND



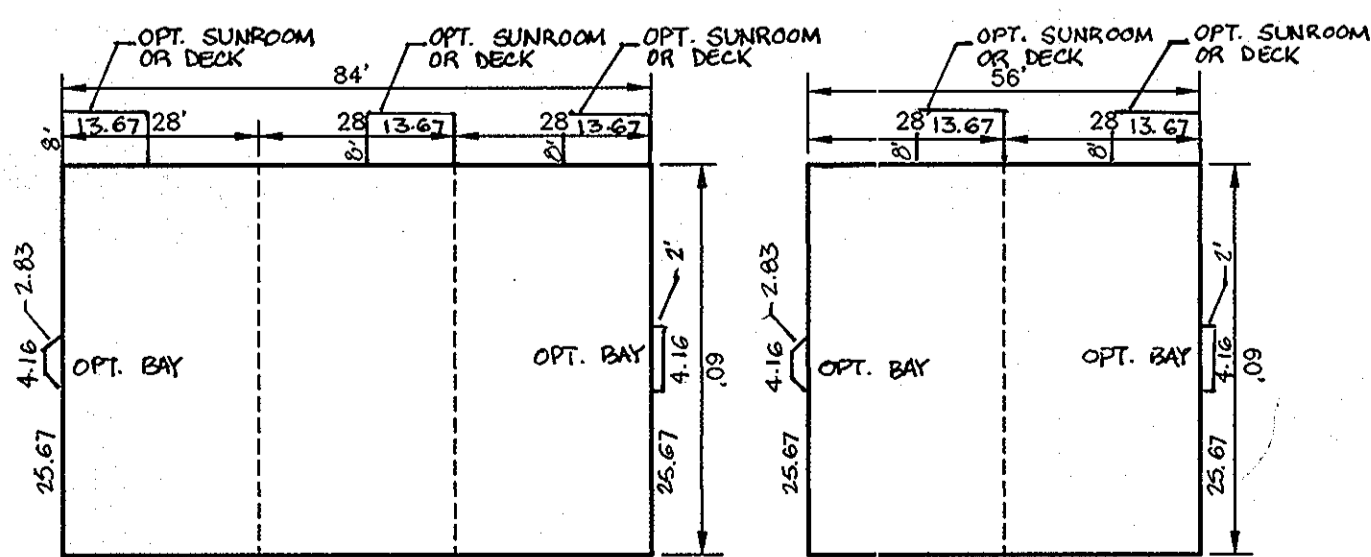
VICINITY MAP  
SCALE 1"=1000'

**PHASING CHART**

PHASE	APFO YEAR	NUMBER OF UNITS
1	2008	4
2	2009	16



**ELEVATIONS**



FOOT PRINTS  
(OUTSIDE LIMITS)

**LEGEND**

- TREE PROTECTIVE FENCING
- WETLANDS
- FOREST CONSERVATION EASEMENT
- 100-YEAR FLOODPLAIN EASEMENT
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER FENCE DIVERSION
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- EROSION CONTROL MATTING
- EXTERIOR LIGHT FIXTURE

## UNIVERSAL DESIGN REQUIREMENTS FOR AGE RESTRICTED ADULT HOUSING IN HOWARD COUNTY

- FOR MULTI-FAMILY APARTMENTS OR CONDO DEVELOPMENTS, AN ACCESSIBLE PATH BETWEEN PARKING, DWELLING UNITS AND COMMON AREAS THAT MEETS ADA STANDARDS.
- FOR SINGLE FAMILY DETACHED AND ATTACHED DEVELOPMENTS A "NO-STEP" ACCESS TO THE FRONT ENTRANCE TO THE COMMUNITY BUILDING AND ALL DWELLINGS. (A "NO-STEP" ENTRANCE IS DESIRABLE, BUT NOT REQUIRED AT OTHER ENTRANCES)
- 36" WIDE FRONT DOOR WITH EXTERIOR LIGHTING OF THE ENTRANCE.
- ALL INTERIOR DOORWAYS AT LEAST 32" WIDE (36" IS PREFERABLE).
- HALLWAYS AT LEAST 36" WIDE, (40"-42" IS PREFERABLE).
- COMPLETE LIVING AREA INCLUDING MASTER BEDROOM AND BATH ON THE FIRST FLOOR (OR ELEVATOR ACCESS IF MULTI-STORY RENTAL/CONDO APARTMENTS).
- LEVER HANDLES ON INTERIOR AND EXTERIOR DOORS.
- BLOCKING FOR GRAB BARS IN WALLS IN BATHROOM NEAR TOILET AND SHOWER.

**GENERAL NOTES:**

- THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 02/02/04 COMPREHENSIVE ZONING PLAN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, AND MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410)-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:
  - MISS UTILITY 1-800-257-7777
  - C&P TELEPHONE COMPANY (410) 725-9976
  - HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900
  - A/T CABLE LOCATION DIVISION (410) 393-3500
  - BALTIMORE GAS & ELECTRIC (410) 685-0123
  - STATE HIGHWAY ADMINISTRATION (410) 531-5533
  - HOWARD COUNTY DEPT. OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION (410) 313-1880
- PROJECT BACKGROUND:
  - TAX MAP: 16
  - PARCEL: 99
  - ELECTION DISTRICT: 3RD.
  - DEED: 8224/361
  - ZONING: RC-DEO
  - DPZ FILE NOS. BA-98-51E, BA-02-47C
- SITE ANALYSIS DATA:
  - TOTAL PROJECT AREA: 13,826 AC±
  - AREA OF PLAN SUBMISSION: 13,826 AC±
  - LIMIT OF DISTURBANCE: 5.73 AC ±
  - PROPOSED USE: ELDERLY HOUSING
  - NUMBER OF UNITS ALLOWED PER BA-98-51E CONDITION NO. 3=25
  - NUMBER OF UNITS PROPOSED: 20 UNITS
  - NUMBER OF PARKING SPA. REQUIRED: 2 SPA./UNITS=40 SPA.
  - NUMBER OF PARKING SPA. PROVIDED:
  - OFF STREET: 2 PER UNIT(DRVWAY)=40 SPA.
  - ON STREET: 5 SPA.
  - TOTAL PARKING SPA. PROVIDED: 85
  - REQUIRED OPEN SPACE: 50% OF GROSS AREA=6.9 AC.
  - PROVIDED OPEN SPACE: 9.0 AC±
  - REC. OPEN SPACE REQUIRED: 400 SQ. FT. PER UNIT = 8,000 SQ.FT. TOTAL
  - REC. OPEN SPACE PROVIDED: 8,000 SQ.FT.
  - BUILDING COVERAGE ON SITE: 1.2 AC = 8.7%
  - IMPERVIOUS PAVED AREA ON SITE: 0.6 AC = 4.4%
- BOUNDARY AND TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN AND MONUMENTED SURVEY ON OR ABOUT JULY 1998 BY MILDENBERG, BOENDER & ASSOCIATES, INC.
- COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO.16HB & 16HC
  - STA. NO.16HB N 590,962.167 E 1,339,485.026 EL. 540.66
  - STA. NO. 16HC N 589,780.926 E 1,341,530.114 EL. 449.46
- FLOODPLAIN STUDY PREPARED BY MILDENBERG, BOENDER & ASSOCIATES, INC. DATED MARCH 2004.
- WETLANDS DELINEATION BY ECO-SCIENCE PROFESSIONALS, INC. DATED FEBRUARY 2005.
- FOREST STAND DELINEATION PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED NOVEMBER 4, 2004
- NOISE STUDY BY MARS GROUP DATED OCTOBER 2004.
- NO CEMETERY OR HISTORIC STRUCTURES EXIST ON SITE.
- NO DISTURBANCE CLEARING OR GRADING IS PERMITTED IN WETLAND, WETLAND AND STREAM BUFFERS, FLOODPLAIN, AND FOREST CONSERVATION EASEMENT.
- WATER TO BE PUBLIC. CONNECTION TO CONTRACT NO.W-44-3479
- SEWER TO BE PRIVATE.
  - PEAK AVERAGE DAILY FLOW: 72 GAL./CAPITA/DAY
  - 2 PEOPLE/DWELLING, 20 UNITS
  - TOTAL: 20x72x2=5,760 GAL./DAY.
- STORMWATER MANAGEMENT WILL BE PROVIDED BY ON-SITE CREDITS, INCLUDING GRASSED SWALES, SHEET FLOW TO BUFFER, AND NATURAL AREA CONSERVATION CREDITS.
- HOWARD COUNTY STANDARD R-3.01 MODIFIED COMBINATION CURB AND GUTTER WILL BE USED, UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- PER SECTION 128 OF THE ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- TRASH PICK-UP TO BE PROVIDED BY A PRIVATE CONTRACTOR. THERE WILL BE NO COMMUNITY TRASH DUMPSTERS FOR THIS PROJECT.
- TRANSPORTATION TO MEDICAL SERVICE, SHOPPING AREAS, RECREATIONAL AND OTHER COMMUNITY SERVICES WILL BE PROVIDED TO RESIDENTS THROUGH CONTRACT WITH AN OFF-SITE COMPANY.
- THIS PROJECT IS SUBJECT TO FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE AMENDED 1993 ZONING REGULATIONS EFFECTIVE BEFORE JULY 12, 1999, THE DATE OF THE DECISION AND ORDER FOR BA-98-51E.
- THE 65 dBA NOISE LINE DRAWN ON THIS PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992 AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 dBA NOISE EXPOSURE. THE 65 dBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- THIS PROJECT IS SUBJECT TO BA-98-51E APPROVED IN JULY 1999 AND UPDATED UNDER BA-02-47E AND EXTENDED ON JUNE 21, 2001, APRIL 29, 2003, AND MAY 2005. THIS PLAN IS SUBJECT TO THE FOLLOWING CONDITIONS:
  - THE SPECIAL EXCEPTION PLAN SHALL APPLY ONLY TO THE PROPOSED ELDERLY HOUSING DEVELOPMENT AS DESCRIBED IN THE PETITION AND PLAN SUBMITTED TO THE BOARD AND TESTIMONY PRESENTED BY THE PETITIONER, AND NOT TO ANY OTHER ACTIVITIES, USERS, OR STRUCTURES ON THE SUBJECT PROPERTY.
  - SPECIAL EXCEPTION PLAN AS APPROVED IS CONTINGENT UPON PUBLIC WATER BEING UTILIZED.
  - THE DEVELOPER IS LIMITED TO A MAXIMUM OF 25 DWELLING UNITS.
  - NO DUMPSTER WILL BE LOCATED ON SITE. TRASH WILL BE STORED WITHIN BUILDINGS UNTIL PICK-UP DAYS.
  - ANY EXTERIOR LIGHTING SHALL BE SHIELDED AND DIRECTED DOWNWARD AND INWARD SO THAT IT DOES NOT ILLUMINATE RESIDENTIAL PROPERTIES, DOES NOT SHINE DIRECTLY ONTO ANY ADJACENT PROPERTIES, AND DOES NOT PRODUCE GLARE THAT WOULD CAUSE A HAZARD FOR MOTOR VEHICLE OPERATORS IN THE VICINITY OF THE SITE. LIGHTING SHALL BE IN CONFORMANCE WITH SECTION 134 OF THE ZONING REGULATIONS.
  - A MINIMUM OF 50% OF THE AREA OF THE SITE SHALL BE OPEN SPACE OR OPEN AREA.
  - THE OPEN SPACE OR OPEN AREA SHALL PROVIDE RECREATION AREAS AND OTHER AMENITIES FOR THE RESIDENTS, AND SHALL BE PROTECTIVE OF NATURAL FEATURES.
  - TRANSPORTATION TO MEDICAL SERVICES, SHOPPING AREAS, RECREATIONAL AND OTHER COMMUNITY SERVICES SHALL BE AVAILABLE TO RESIDENTS ON SITE.
  - PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS.
- THIS PROJECT WILL UTILIZE THE ON-SITE SHARED SEPTIC SYSTEM ON THE ADJACENT HOMELAND DEVELOPMENT CURRENTLY UNDER CONSTRUCTION BY THE SAME DEVELOPER.
- WATER METERS WILL BE OUTSIDE OF BUILDINGS.
- STREET LIGHT SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS:
 

LOCATION	FIXTURE/POLE TYPE
STA.0+40 OFFSET 13' RIGHT (PUBLIC)	150-WATT HPS VAPOR "PREMIER" FIXTURE (CUTOFF) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING 12' ARM.(SAG)
STA.3+90 OFFSET 30' RIGHT (PRIVATE)	150-WATT HPS VAPOR "TRADITIONAIRE" POST TOP FIXTURE MOUNTED ON A 14" BLACK FIBERGLASS POLE
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING AND PRIVATE ROAD STREET TREES (28 SHADE TREES, 6 EVERGREENS, 33 STREET TREES, 100 SHRUBS) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$ 27,900.00.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAS BEEN FULFILLED BY RETENTION OF 3.08 ACRES. FINANCIAL SURETY FOR THE ON-SITE RETENTION OF 3.11 AC. (135,471.6 SQ.FT.) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$26,421.00.
- MDE TRACKING # 200563797
- THIS PROJECT HAS BEEN GRANTED FOUR (4) HOUSING UNIT ALLOCATIONS FOR THE YEAR 2008 (PHASE 1), AND SIXTEEN (16) HOUSING UNIT ALLOCATIONS FOR THE YEAR 2009.
- IN ACCORDANCE WITH ZONING SECTION 133.2.b(1), THE UNIT GARAGES SHALL BE USED FOR MOTOR VEHICLE PARKING.
- THIS PROJECT IS SUBJECT TO WP-06-003 AND WP-06-28 TO WAIVE SECTION 16.155(c)(1)(ii) TO ALLOW MASS GRADING OVER 5,000 SQ.FT. WITHOUT A SIGNED SITE DEVELOPMENT PLAN, DENIED ON SEPTEMBER 1, 2005.
- ALL UNITS SHALL MEET CRITERIA FOR UNIVERSAL DESIGN REQUIREMENTS FOR AGE-RESTRICTED ADULT HOUSING FOR HOWARD COUNTY.
- MITIGATED WETLAND AREA HAS BEEN ESTABLISHED UNDER BONNIE BRANCH OVERLOOK (F-00-95), TRACKING # 99-NI-0251/199984211, MITIGATED WETLANDS AREA = 20,000 SQ.FT.

date	NOV 2006	engineering	MMX	approval
project	89057	illustration	MMX	scale
				1"=100'

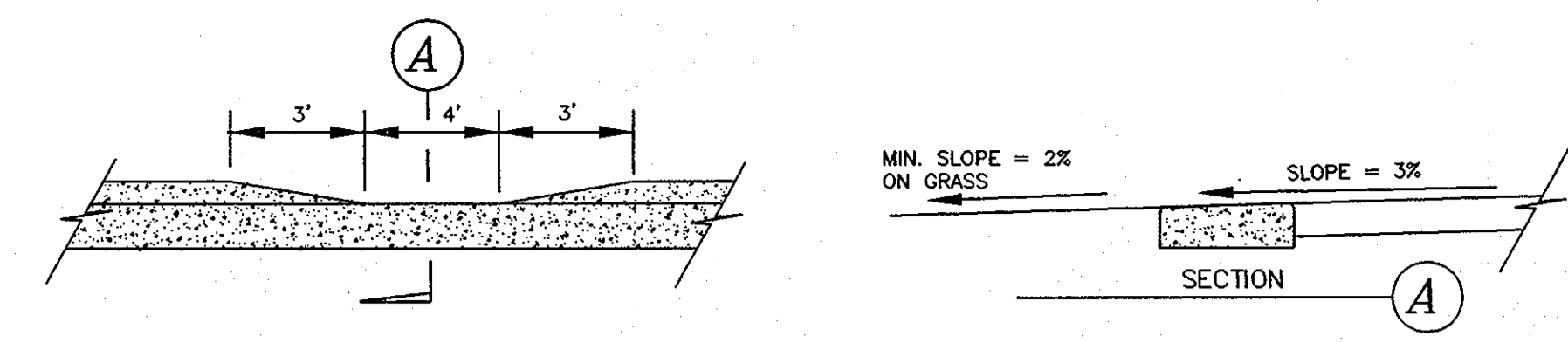
no.	1	description	2/25/12	date
		REVISE AND RE-APPROVE		

**ELLICOTT MEADOWS**  
 TAX MAP 16, PARCEL 99 GRID 22-23  
 HOWARD COUNTY, MARYLAND  
 THIRD ELECTION DISTRICT  
 COVER SHEET

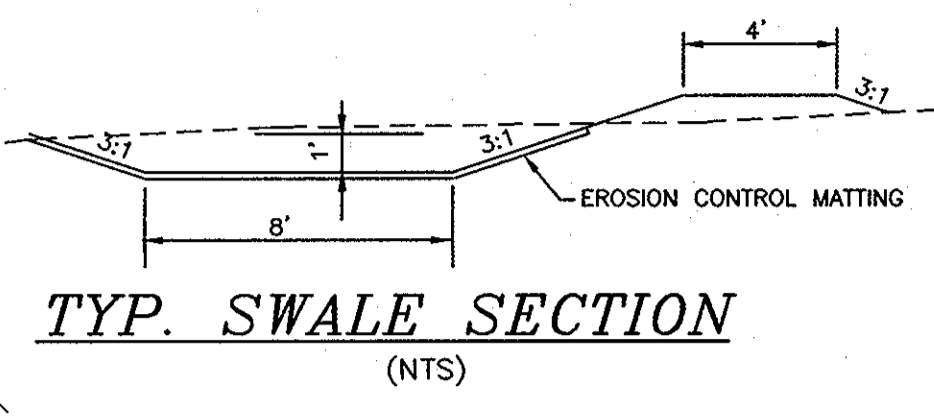
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Surveyors  
 Planners  
 Engineers  
 5072 Dorsy Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 997-0298 Wash. (301) 621-6521 Wash. (410) 997-0298 Fax.



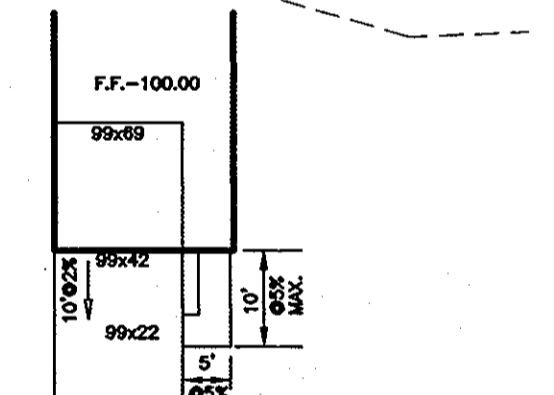
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD	DIRECTION
C1	51.10	45.00	65°04'01"	28.71	48.40	N30°25'44"W
C2	55.75	45.00	70°58'37"	32.08	52.25	S27°28'26"E
C3	45.09	125.00	20°40'11"	22.79	44.85	S18°20'58"W



**CURB CUT DETAIL**  
STATION 34+90.5 (OFFSET LEFT)  
(NTS)



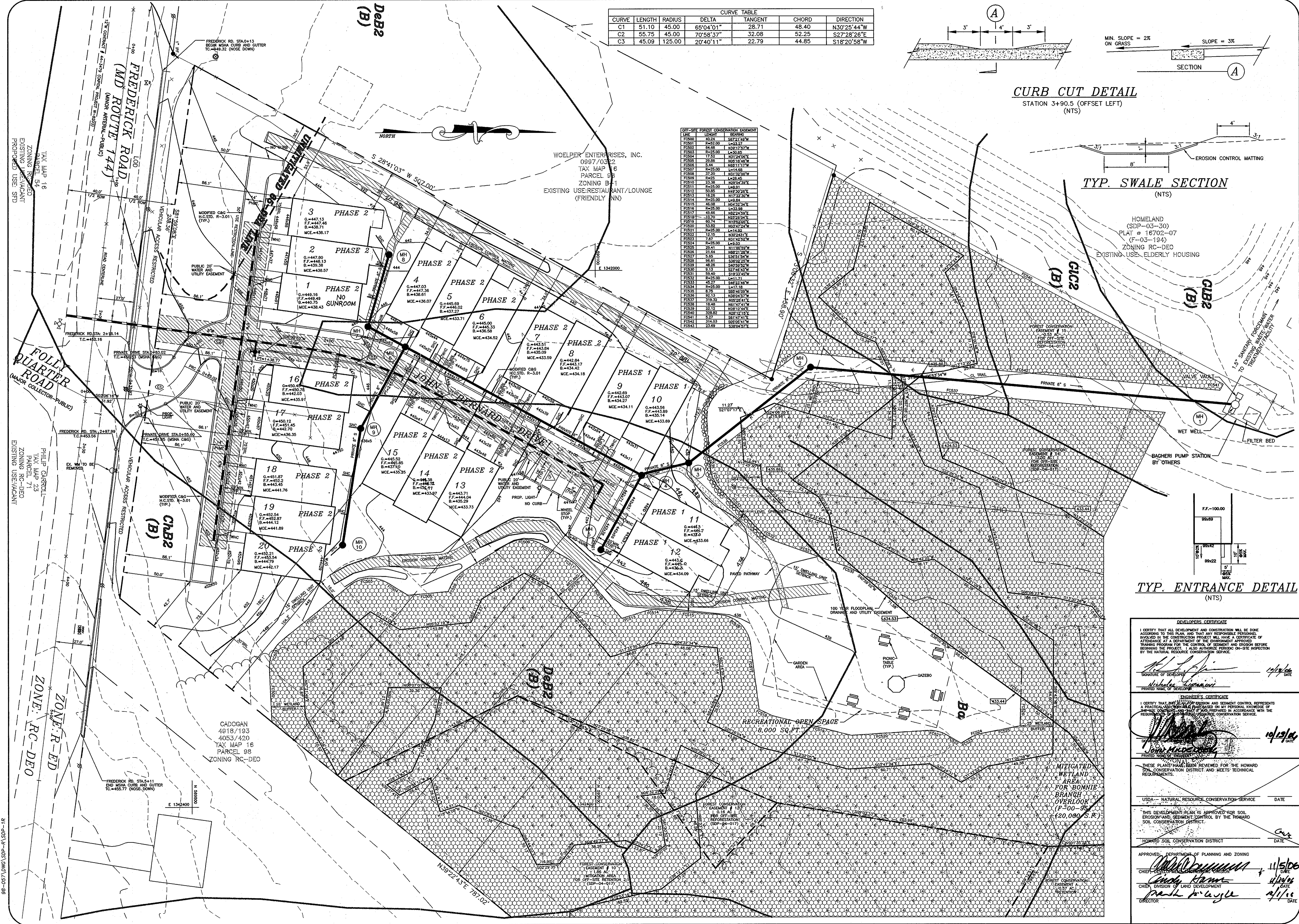
**TYP. SWALE SECTION**  
(NTS)  
HOMELAND (SDP-03-30)  
PLAT # 16702-07  
(F-03-194)  
ZONING RC-DEC  
EXISTING USE: ELDERLY HOUSING



**TYP. ENTRANCE DETAIL**  
(NTS)

OFF-SITE FOREST CONSERVATION EASEMENT

LINE	LENGTH	BEARING
FC000	40.24	S87°21'49"W
FC001	12.82	S43°32'00"E
FC002	64.26	N37°17'57"W
FC003	25.00	L=50.85
FC004	17.52	N37°23'07"E
FC005	29.86	N02°18'46"W
FC006	4.44	N88°11'11"E
FC007	25.00	L=14.66
FC008	37.00	N81°34'00"W
FC009	25.00	L=14.66
FC010	53.38	N29°04'39"E
FC011	25.00	L=14.66
FC012	50.85	N42°50'24"E
FC013	18.28	N11°33'30"E
FC014	25.00	L=14.66
FC015	25.00	L=14.66
FC016	25.00	L=14.66
FC017	48.86	N82°24'50"E
FC018	10.00	N02°03'47"E
FC019	60.74	N15°52'52"E
FC020	33.82	N03°17'47"W
FC021	25.00	L=14.66
FC022	25.00	L=14.66
FC023	7.87	N33°11'44"W
FC024	25.00	L=14.66
FC025	24.41	N11°02'32"W
FC026	21.64	N82°21'28"W
FC027	3.65	N35°11'44"W
FC028	98.61	S36°02'22"W
FC029	48.28	N05°29'24"W
FC030	51.33	S09°59'24"W
FC031	59.40	S12°33'42"W
FC032	25.00	L=14.66
FC033	45.27	S45°24'48"W
FC034	25.00	L=14.66
FC035	8.75	S82°46'00"W
FC036	11.18	N11°18'11"E
FC037	310.32	N30°58'57"E
FC038	18.48	N61°47'41"W
FC039	21.12	N02°12'47"E
FC040	328.82	N02°12'47"E
FC041	3.52	N03°47'41"E
FC042	314.03	S05°04'41"W
FC043	23.89	S36°04'50"E



**DEVELOPER'S CERTIFICATE**  
I 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 EROSION AND DISCHARGE BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

*Signature of Developer*  
11/14/06 DATE

**ENGINEER'S CERTIFICATE**  
I CERTIFY THAT THE EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT I AM PREPARED TO ACCEPT RESPONSIBILITY FOR THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

*Signature of Engineer*  
11/15/06 DATE

THESE PLANS/HAS BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

"THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT."

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED, DEPARTMENT OF PLANNING AND ZONING  
*Signature of Director*  
11/15/06 DATE  
11/15/06 DATE  
11/16/06 DATE  
DIRECTOR

Project	date	description	scale	revision
98-057	NOV 2006	Engineering	1"=30'	
MM	MM	MM	MM	MM

NO.	DATE	DESCRIPTION	BY	DATE
1	11/14/06	REVISE UNIT 14, E.F. ELEVATION	MM	
2	11/15/06	REVISE UNIT 14, E.F. ELEVATION	MM	

**ELLCOTT MEADOWS**  
TAX MAP 16, PARCEL 99 GRID 22-23  
THIRD ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
**SITE DEVELOPMENT PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21142  
(410) 997-0296 Fax: (410) 997-5521 Wash. (301) 621-5521







**HOWARD SOIL CONSERVATION DISTRICT**  
**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LEVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 1.4 LBS./1000 SQ.FT. OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOO. OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONE/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

**STANDARD 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, (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES 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 REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC.51), SOO (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC.52). TEMPORARY STABILIZATION WITH MULCH ALONE 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 PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE:	13.75 ACRES
AREA TO BE ROOFED OR PAVED:	5.73 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	8.02 ACRES
TOTAL CUT:	180 CU. YDS.
TOTAL FILL:	16,870 CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A

THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITY MEASUREMENTS.

- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL 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 CONTROLS, 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 CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

**STANDARD AND SPECIFICATIONS FOR TOPSOIL**

**DEFINITION**  
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, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

- CONDITIONS WHERE PRACTICE APPLIES**
- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 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 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLAN.

**CONSTRUCTION AND MATERIAL SPECIFICATIONS**

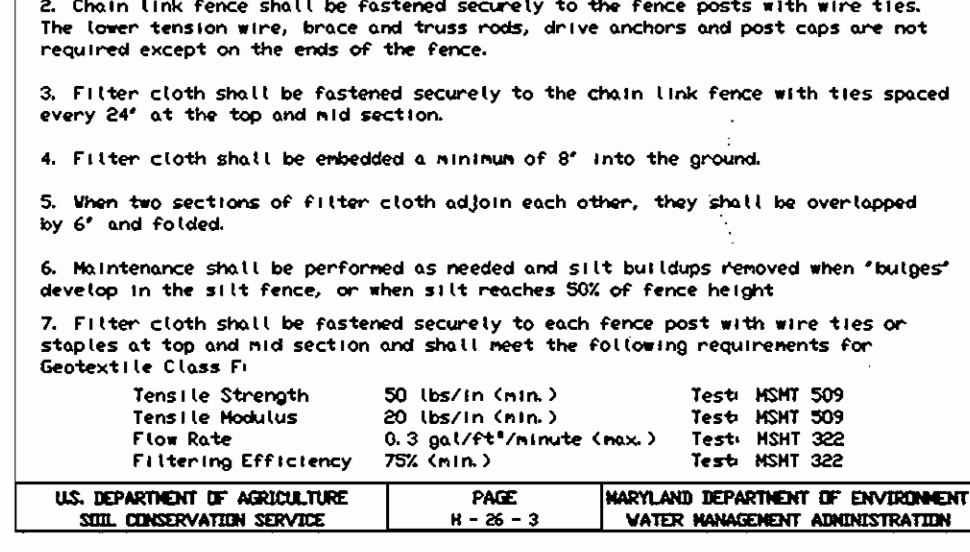
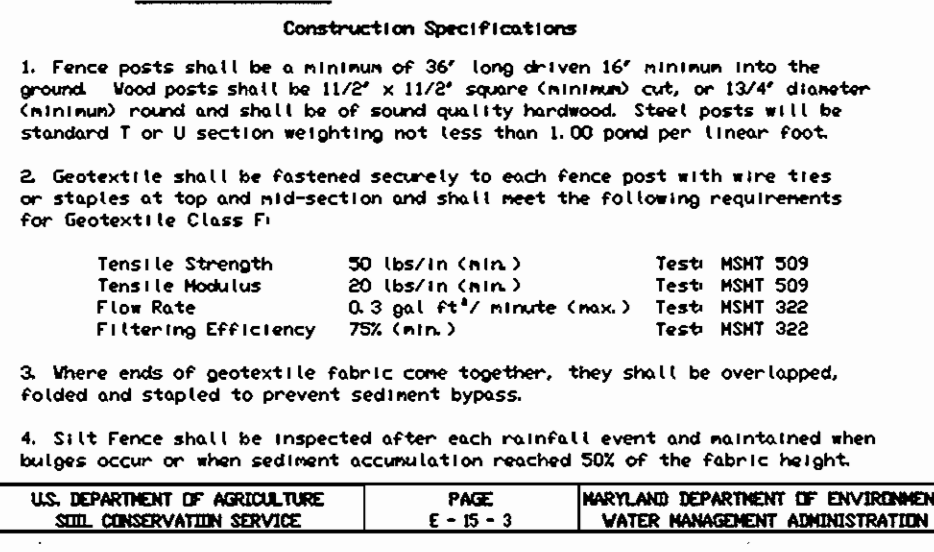
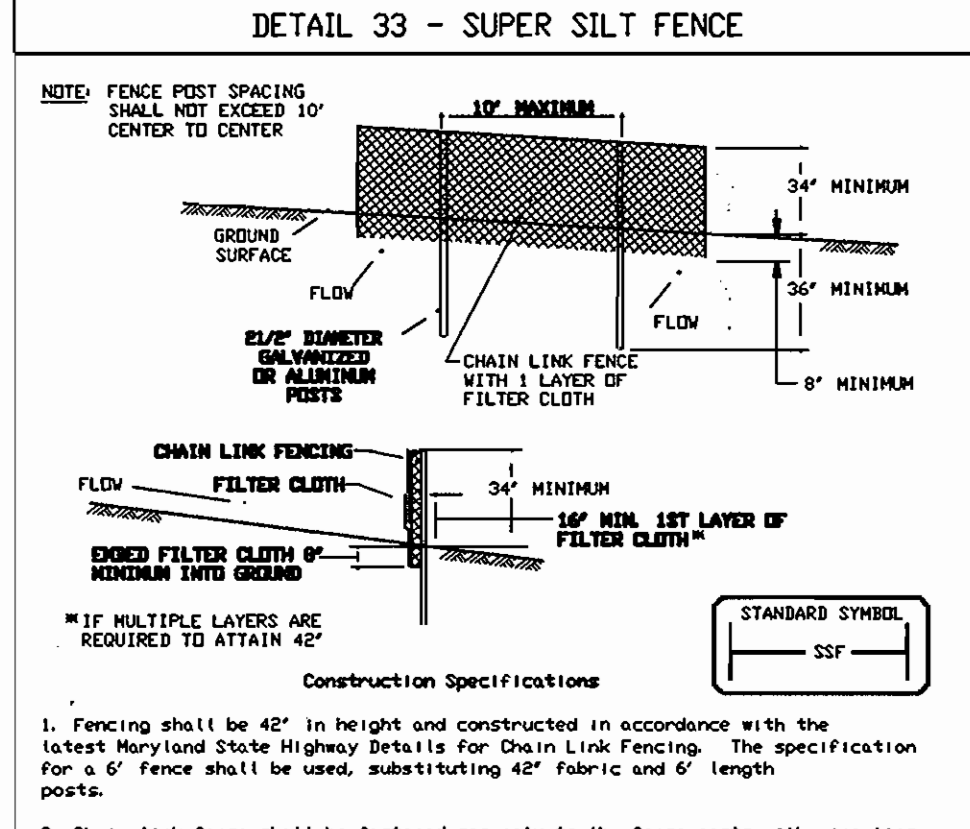
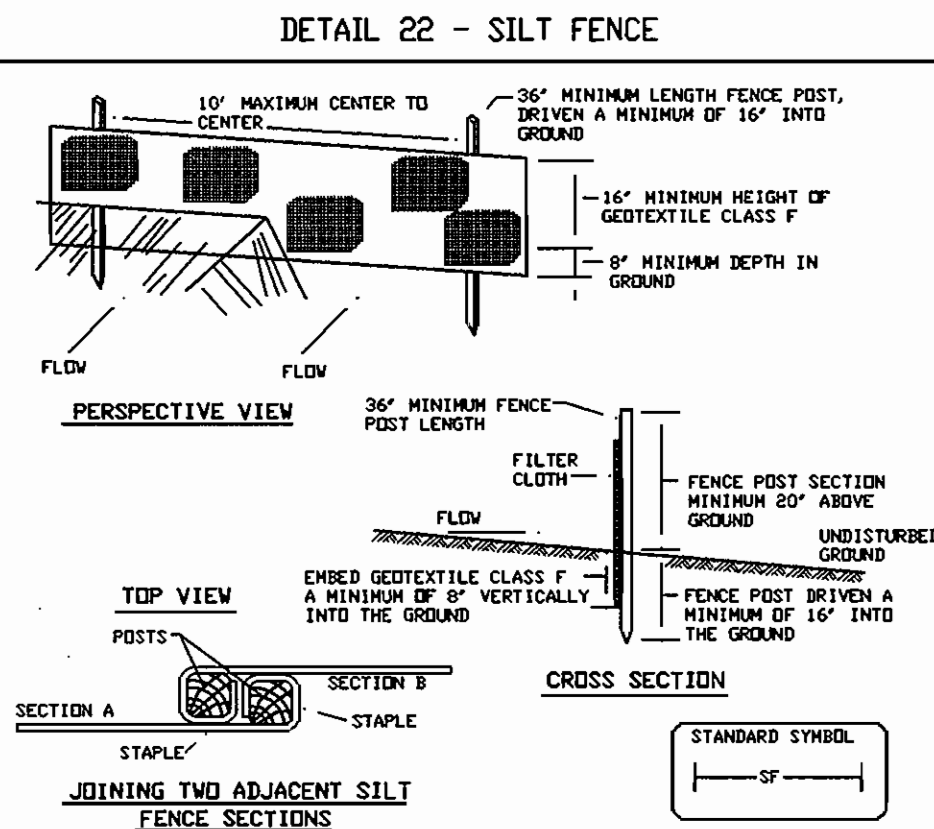
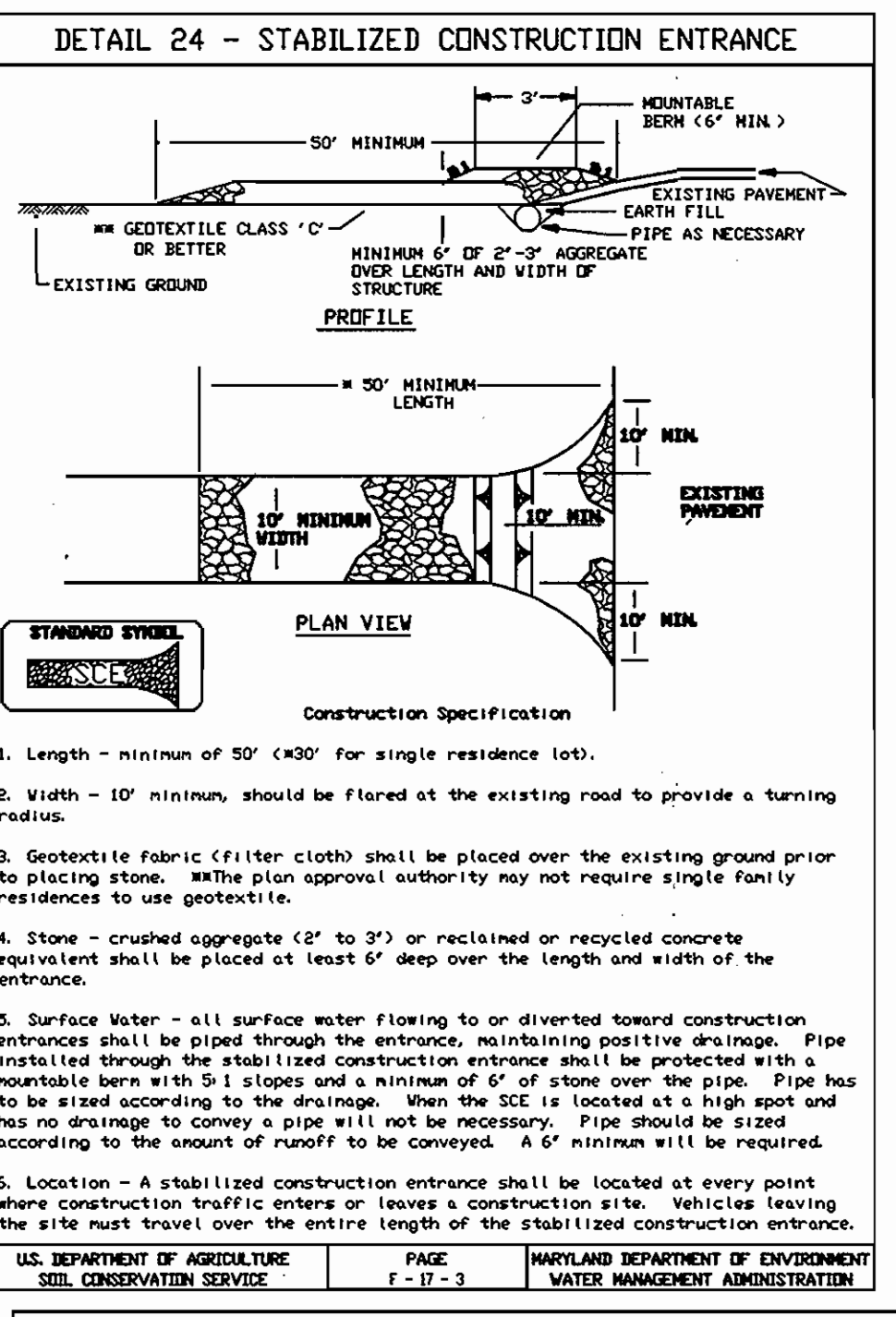
- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL 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 CINDERS, STONES, SLAG, 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-SOON GRASS, NUTSEDGE, 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.
- FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
  - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
    - PH FOR TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
    - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
    - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
    - NO SOO OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
  - NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- TOPSOIL APPLICATION
  - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
  - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4" - 8" HIGHER IN ELEVATION.
  - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
  - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
  - COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
    - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
    - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOROUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
    - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
  - COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF A LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

- EROSION AND SEDIMENT CONTROL NOTES**
- ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
  - ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
  - ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
  - EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
  - IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
  - THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
  - ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT (1 DAY)
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1 DAY)
- CONSTRUCT SILT FENCES, SUPER SILT FENCES AND SILT FENCE DIVERSION AS INDICATED (3 DAYS)
- CONSTRUCT SITE TO GRADES INDICATED (65 DAYS)
  - \* DELAY CONSTRUCTION OF GRASSED SWALES ALONG EASTERN AND WESTERN SIDES OF THE SITE.
- WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED, AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, CONSTRUCT THE GRASSED SWALES ALONG THE EASTERN AND WESTERN PERIMETERS OF THE SITE. THE AREA DISTURBED BY THIS CONSTRUCTION IS TO BE IMMEDIATELY STABILIZED BY EROSION CONTROL MATTING. (3 DAYS)
- WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (3 DAYS)



**DEVELOPERS CERTIFICATE**

I 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 PERIOD ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

*Signature* 10/10/06 DATE

**ENGINEER'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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

*Signature* 10/10/06 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*Signature* 10/30/06 DATE

USDA - NATURAL RESOURCE CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*Signature* 10/30/06 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Signature* 11/15/06 DATE

**OWNER/DEVELOPER**  
BRANTLY DEVELOPMENT GROUP, INC.  
8835-D COLUMBIA 100 PARKWAY  
COLUMBIA, MARYLAND 21045  
(410) 730-0810

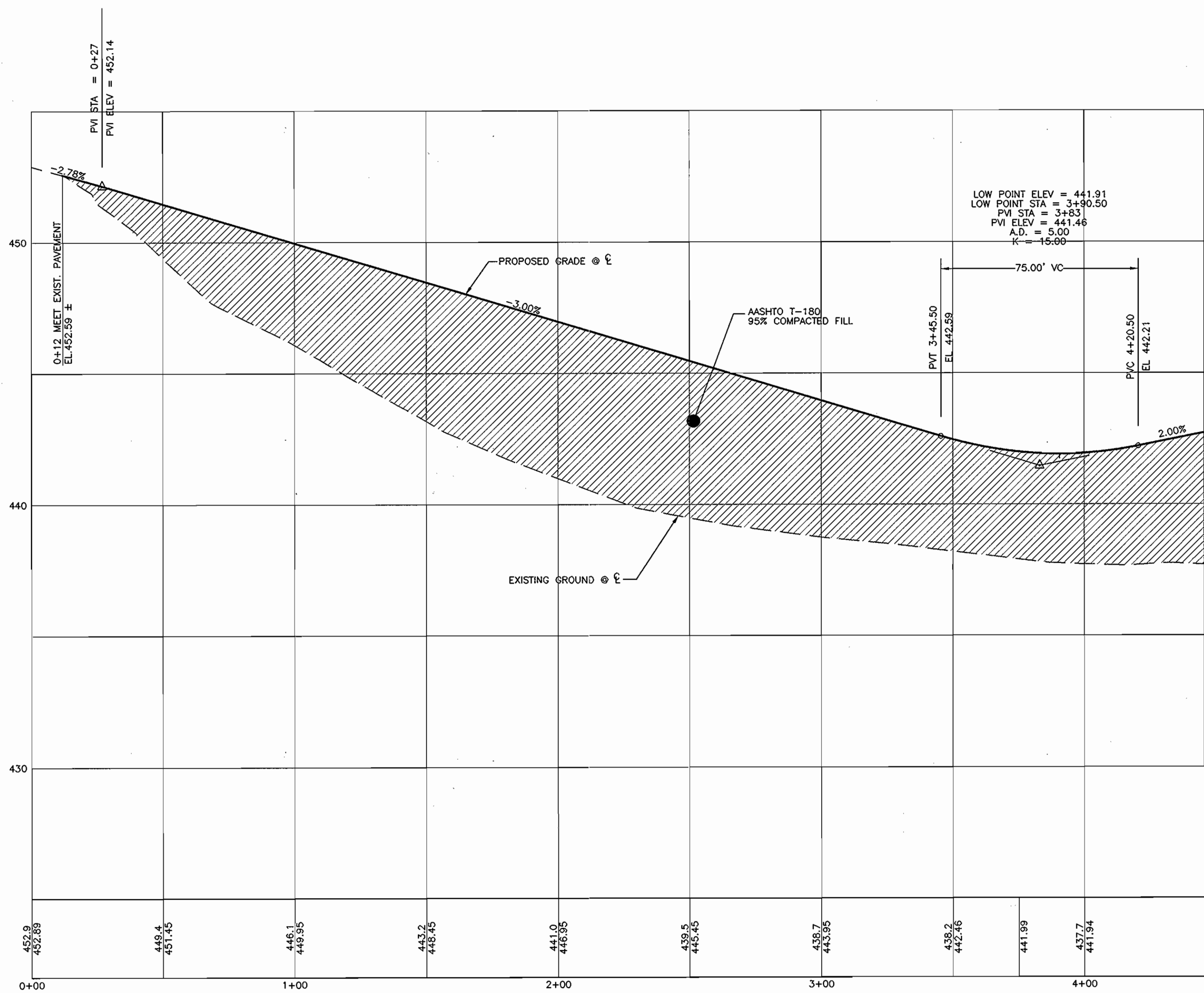
project: 98-057  
date: MARCH 2006  
illustration: MAM  
scale: MAM  
description: NTS  
revisions: [ ]

BAGHERI PROPERTY  
THIRD ELECTION DISTRICT  
TAX MAP 16, PARCEL 99  
HOWARD COUNTY, MARYLAND  
SEDIMENT CONTROL NOTES AND DETAILS

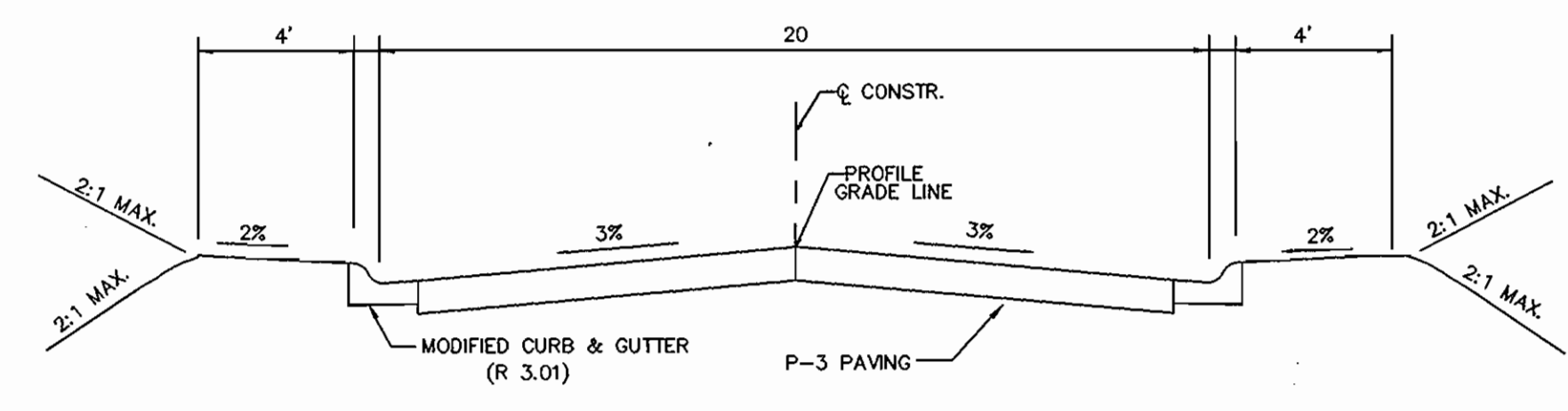
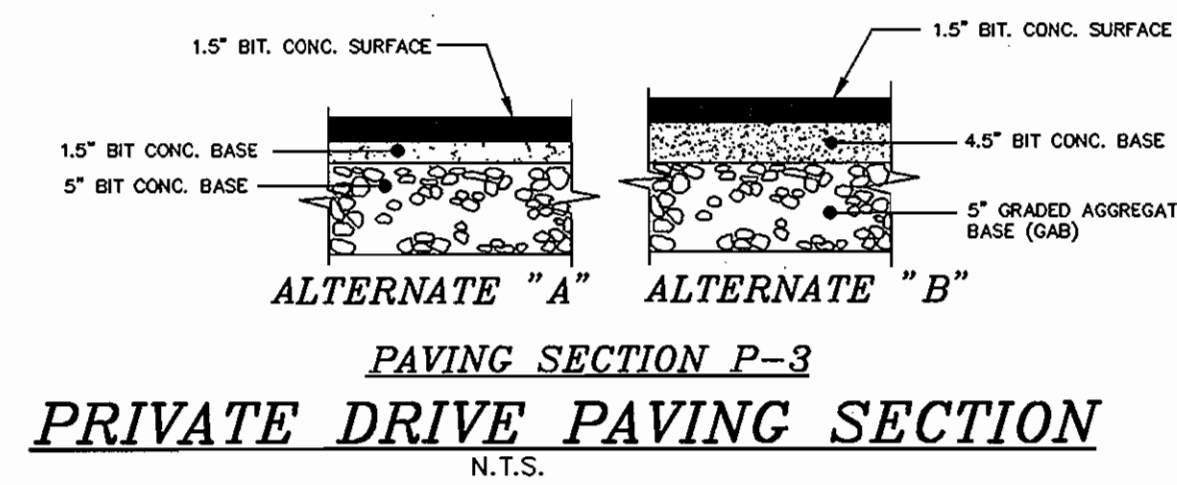
MILDENBERG, BOENDER & ASSOC., INC.  
Engineers Planners Surveyors  
5072 Dorsey Hill Drive, Suite 202, Elkocott City, Maryland, 21042  
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax

4 OF 8  
SDP-05-70

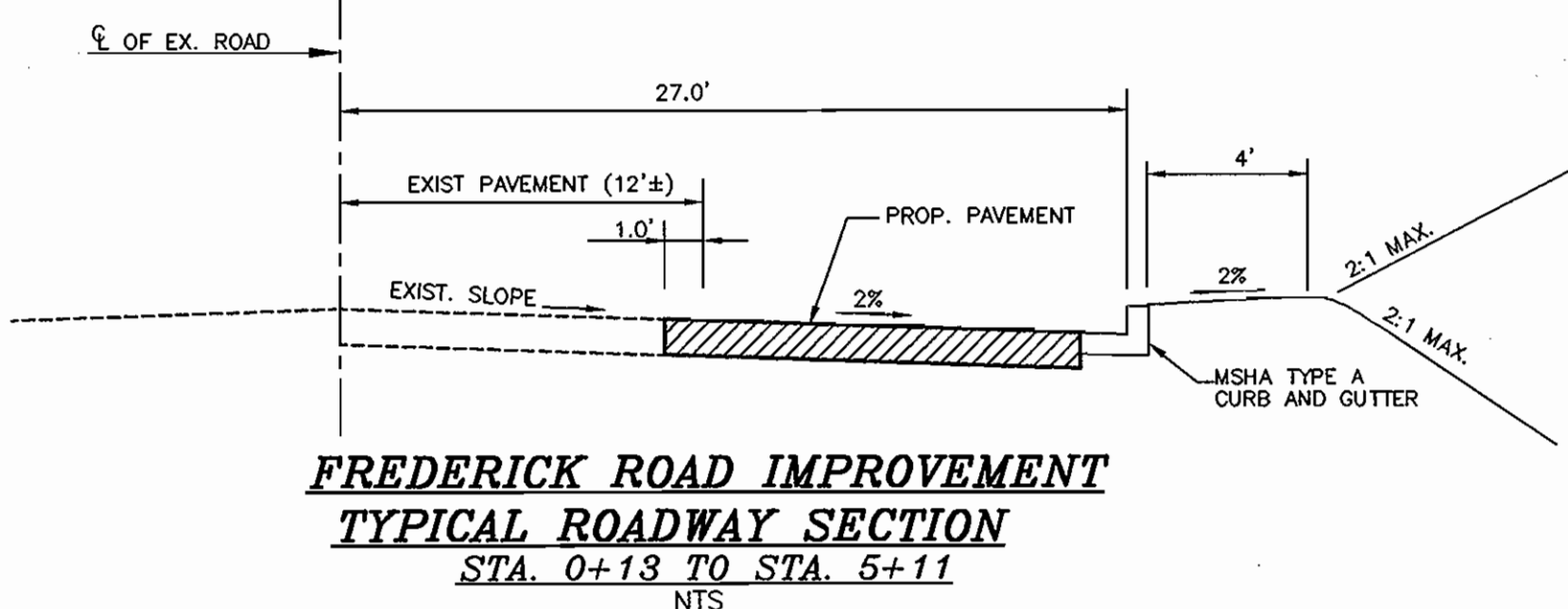
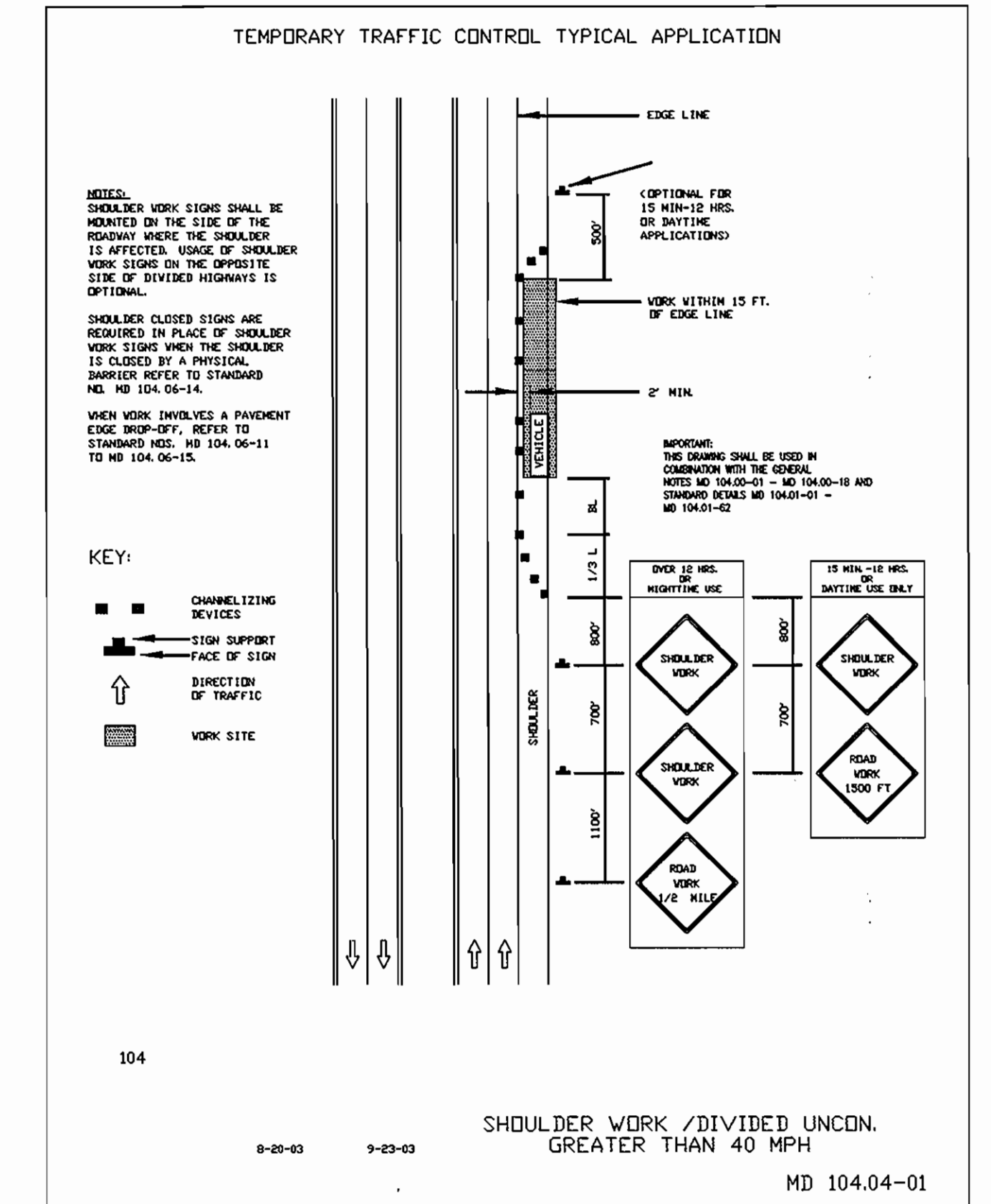




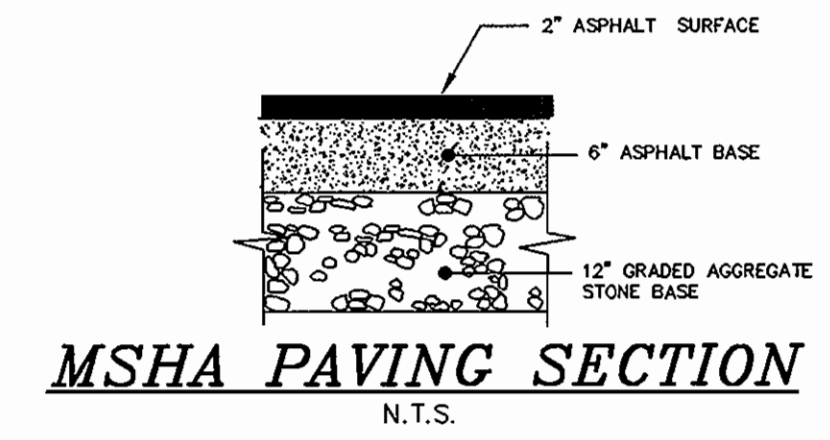
**JOHN BERNARD DRIVE PROFILE**  
 CLASSIFICATION: PRIVATE DRIVE  
 SCALE: HOR. 1"=30'  
 VER. 1"=3'



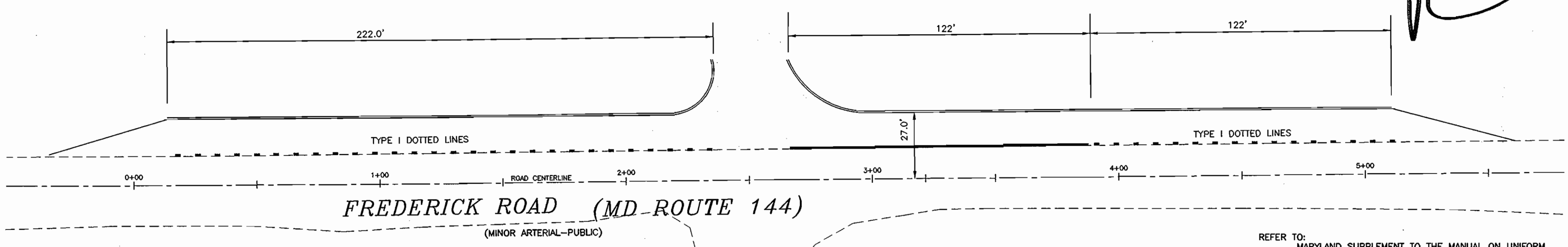
**JOHN BERNARD DRIVE TYP. SECTION**  
 STA. 0+00 TO STA. 4+45.5  
 SECTION NOT TO SCALE



**FREDERICK ROAD IMPROVEMENT**  
 TYPICAL ROADWAY SECTION  
 STA. 0+13 TO STA. 5+11  
 N.T.S.



**MSHA PAVING SECTION**  
 N.T.S.

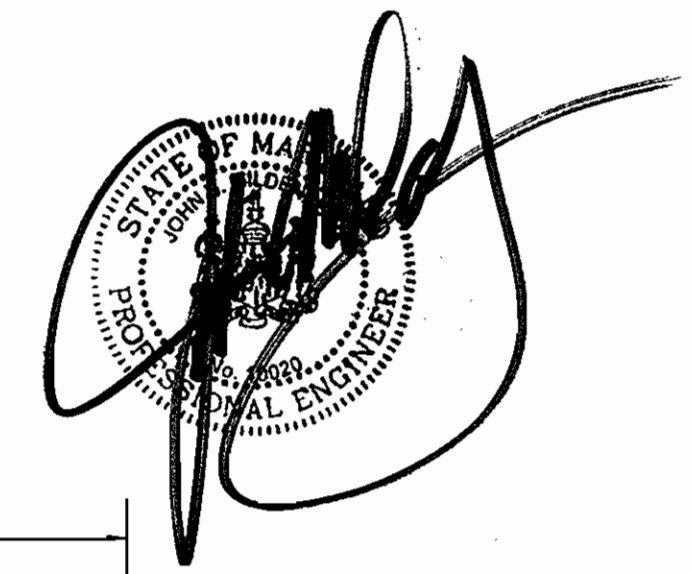


**FREDERICK ROAD (MD ROUTE 144)**  
 (MINOR ARTERIAL-PUBLIC)

**FREDERICK ROAD STRIPING PLAN**  
 STA. 0+13 TO STA. 5+11  
 SCALE: 1"=30'

**OWNER/DEVELOPER**  
 BRANTLY DEVELOPMENT GROUP, INC.  
 9835-P COLUMBIA 100 PARKWAY  
 COLUMBIA, MARYLAND 21045  
 (410) 730-0810

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11/6/06  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 11/6/06  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12/1/06  
 DIRECTOR



project	98-057	date	DEC. 2005
illustration	MMM	engineering	MMM
scale	1"=30'	approval	MMM

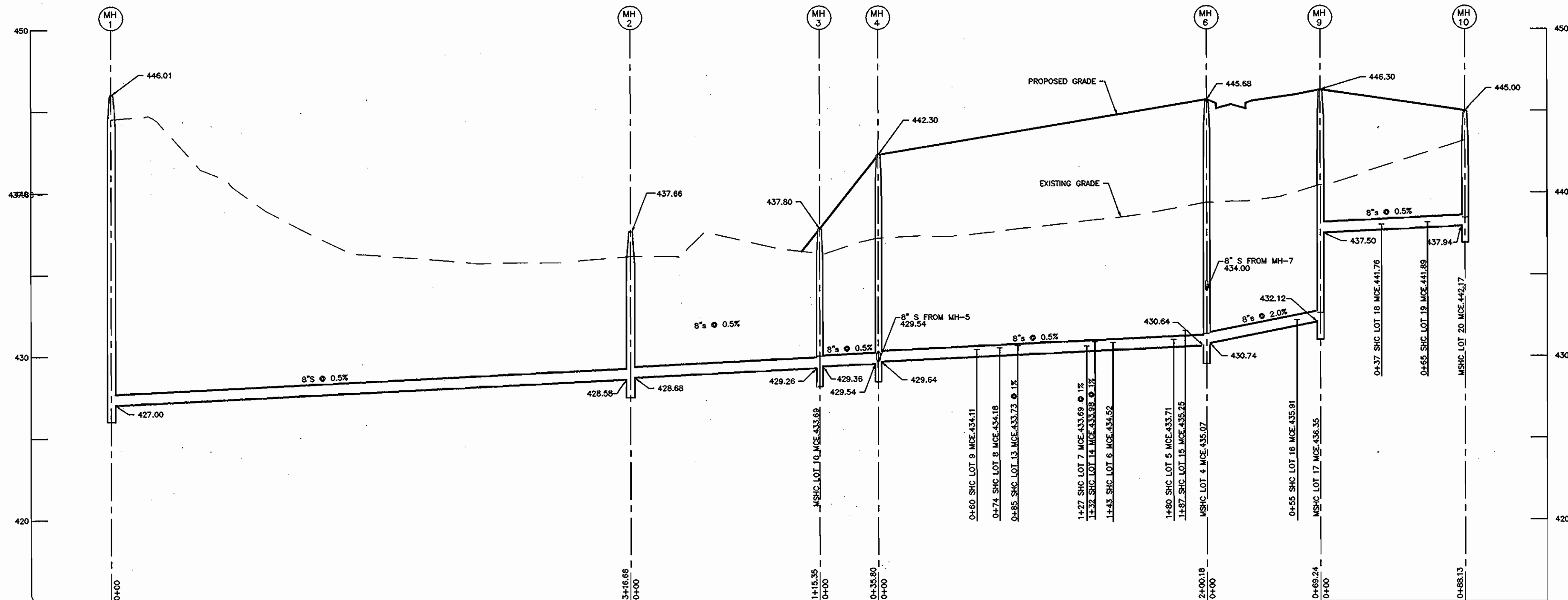
no.	description	revisions	date
-----	-------------	-----------	------

**ELLCOTT MEADOWS**  
 TAX MAP 16, PARCEL 99 GRID 22-23  
 HOWARD COUNTY MARYLAND  
 THIRD ELECTION DISTRICT  
**DRIVEWAY PROFILE AND TYP. SECTIONS**

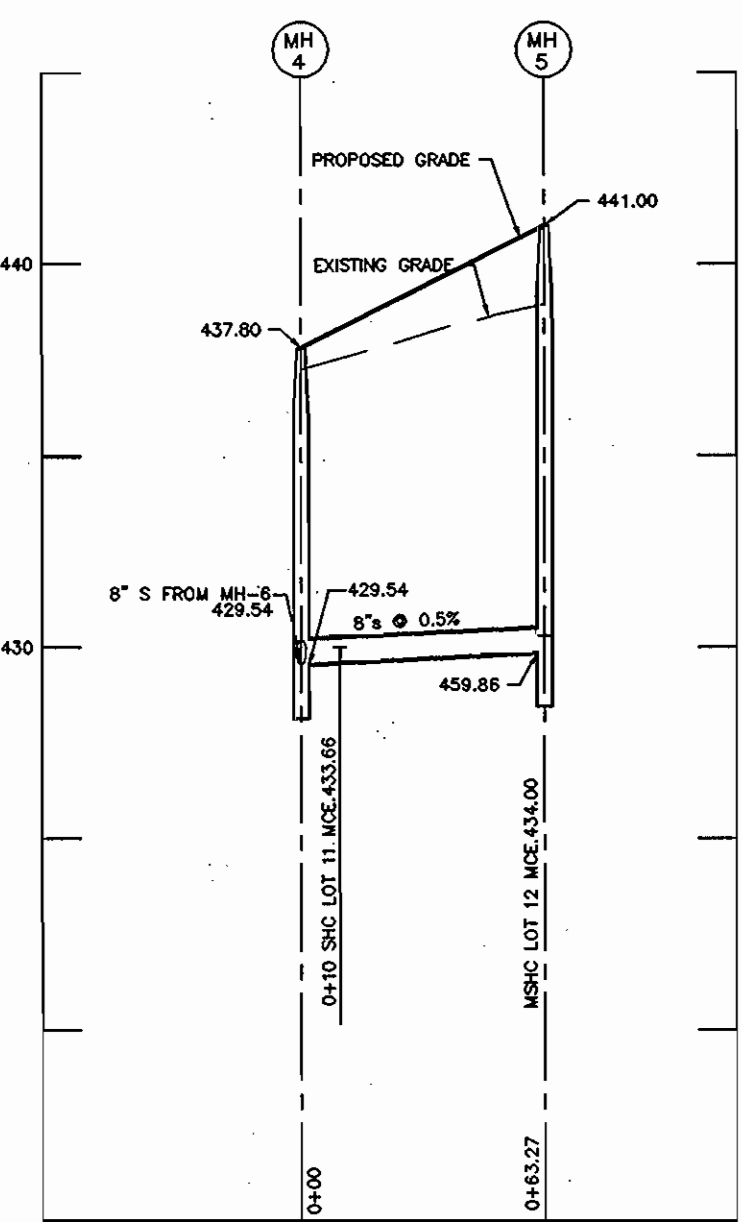
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042  
 (410) 997-0296 Balt. (301) 821-5551 Wash. (410) 997-0296 Fuz.

MANHOLE LOCATION CHART		
MH #	NORTHING & EASTING	APPLICABLE HO.CO. STDS.
01	N 590259.8747 E 1342073.1521	5' STANDARD PRECAST MANHOLE (G-5.12) WATERTIGHT MANHOLE FRAME AND COVER (G-5.52)
02	N 590169.0811 E 1342144.2990	STANDARD PRECAST MANHOLE (G-5.11)
03	N 590134.3218 E 1342152.8559	STANDARD PRECAST MANHOLE (G-5.11)
04	N 590103.9532 E 1342208.3617	STANDARD PRECAST MANHOLE (G-5.11)
05	N 589958.7122 E 1342056.7756	TYPE "B" DROP MANHOLE (S-1.32)
06	N 589930.9647 E 1342041.5942	STANDARD PRECAST MANHOLE (G-5.11)
07	N 589946.6419 E 1341987.9786	STANDARD PRECAST MANHOLE (G-5.11)
08	N 589925.4795 E 1342117.5162	STANDARD PRECAST MANHOLE (G-5.11)
09	N 589911.8911 E 1342204.5901	STANDARD PRECAST MANHOLE (G-5.11)

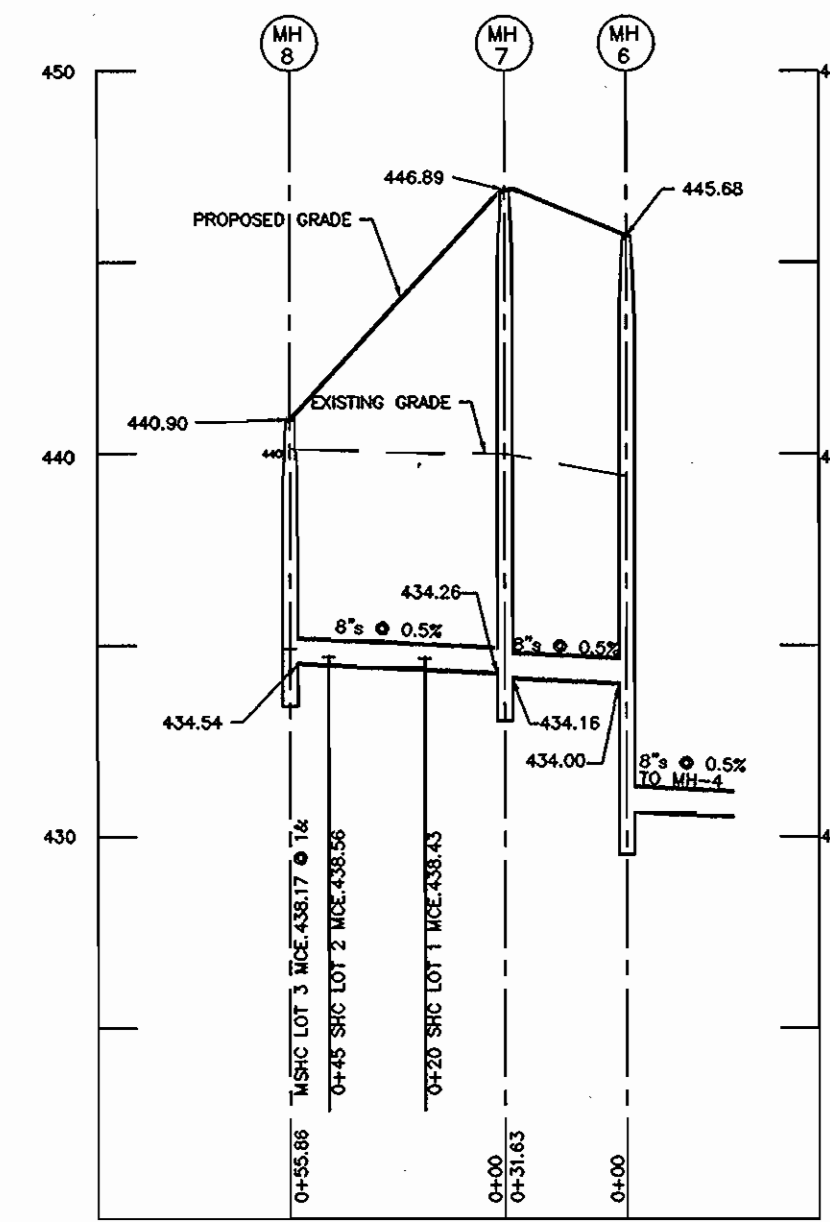
SEWER HOUSE CONNECTION TABULATION CHART			
LOT NO.	INV. 5' BEFORE EDGE OF UNIT	MCE	SLOPE
1	434.73	438.43	2%
2	434.86	438.56	2%
3	435.07	438.17	1%
4	431.37	435.07	2%
5	431.01	433.17	2%
6	430.82	434.52	2%
7	430.59	433.69	1%
8	430.49	434.18	2%
9	430.40	434.11	2%
10	429.99	433.69	2%
11	429.96	433.66	2%
12	430.30	434.09	2%
13	430.63	433.73	1%
14	430.87	433.97	1%
15	431.55	435.25	2%
16	433.21	435.91	2%
17	432.65	436.35	2%
18	438.06	441.76	2%
19	438.19	441.89	2%
20	438.47	442.17	2%



**PRIVATE SEWER PROFILE**  
MH-10 TO MH-1  
SCALE: H. 1"=50'  
V. 1"=5'



**PRIVATE SEWER PROFILE**  
MH-5 TO MH-4  
SCALE: H. 1"=50'  
V. 1"=5'



**PRIVATE SEWER PROFILE**  
MH-8 TO MH-6  
SCALE: H. 1"=50'  
V. 1"=5'

**OWNER/DEVELOPER**  
BRANTLY DEVELOPMENT GROUP, INC.  
8835-P COLUMBIA 100 PARKWAY  
COLUMBIA, MARYLAND 21045  
(410) 730-0810

DEVELOPER'S CERTIFICATE  
I 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 OF THE PROJECT. I ALSO AUTHORIZE PERSONNEL ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Developer: *Nicholas L. Brantly* 10/10/06  
Printed Name of Developer: Nicholas L. Brantly

ENGINEER'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 NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: *James M. Brantly* 10/10/06  
Printed Name of Engineer: James M. Brantly

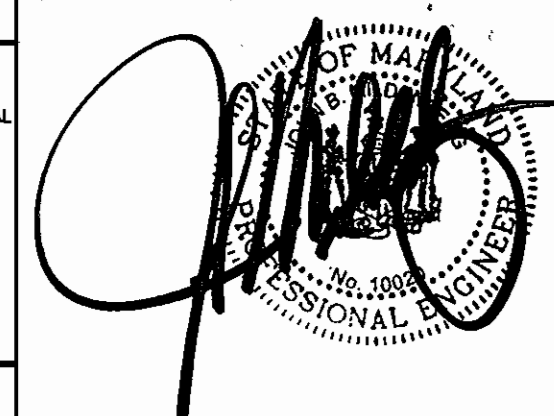
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE: \_\_\_\_\_

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Department of Planning and Zoning: *Carol F. Brantly* 11/20/06  
Chief, Division of Land Development: *David A. Taylor* 11/20/06



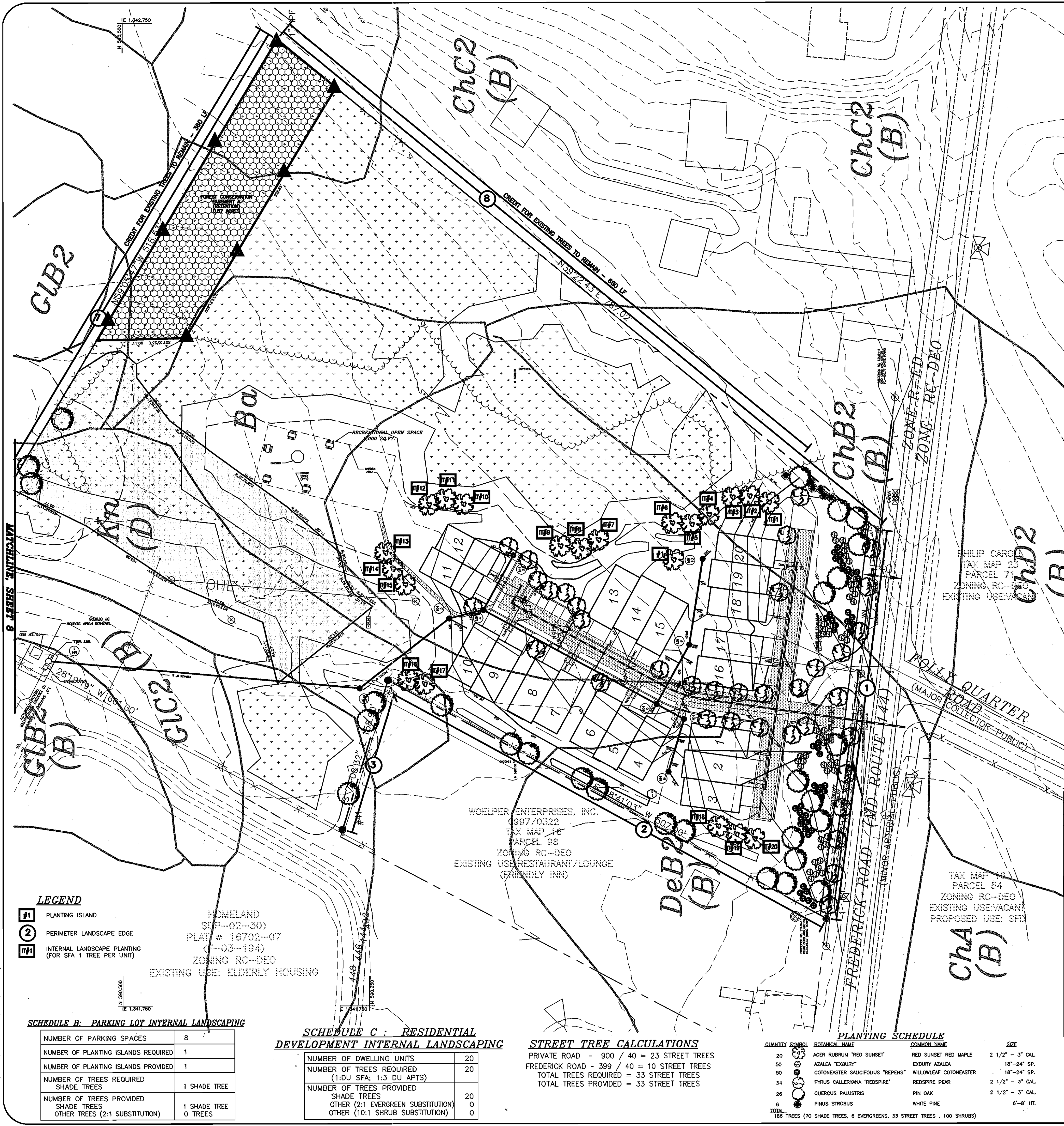
project	98-057	date	MARCH 06
illustration	MMM	engineering	MMM
scale	1"=50'	approval	MMM

no.	description	date

**ELLICOTT MEADOWS**  
TAX MAP 16, PARCEL 99 GRID 22-23  
THIRD ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
**PRIVATE SEWER PROFILES**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Balt. (301) 821-5521 Wash. (410) 997-0298 Fax.





**FOREST RETENTION AREA**  
 MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED  
 VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE CONSERVATION ACT OF 1991

**SIGNAGE DETAILS**  
 NOTE: SIGNS ARE PERMANENT AND TO BE MOUNTED ON DURABLE POSTS OR POLES (4"x4" PRESSURE TREATED LUMBER OR 2 1/2" DIAMETER GALVANIZED OR ALUMINUM POST, OR EQUIVALENT).

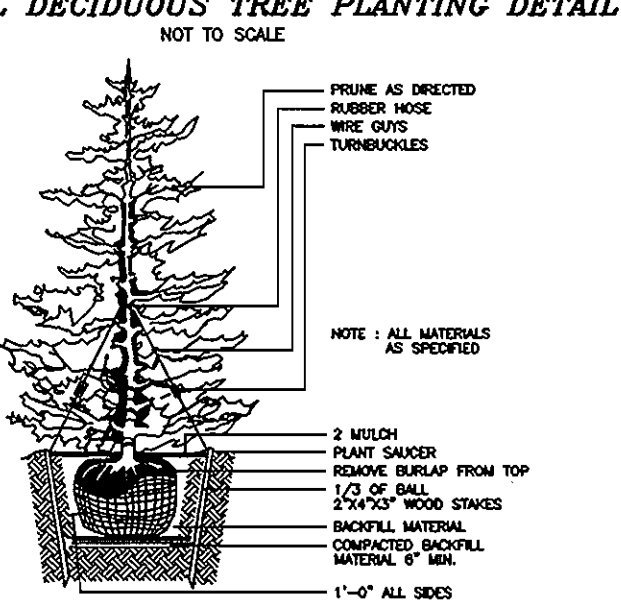
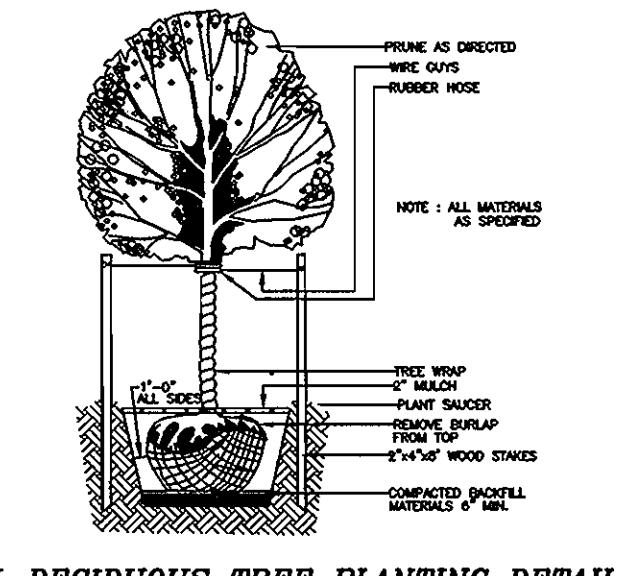
**FOREST PROTECTION**  
 1. ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY PROPOSED SEDIMENT CONTROL DEVICES AS DESCRIBED IN NOTE 5 ABOVE AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.  
 2. THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES.  
 3. ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.  
 4. ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS.  
 5. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINAGE OF MATERIALS THAT MAY BE HARMFUL TO TREES.  
 6. THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.  
 7. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.  
 8. THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS.  
 9. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

NOTE: THIS PLAN IS TO BE USED FOR LANDSCAPE & FOREST CONSERVATION PLAN PURPOSES ONLY.

- NOTES:**
- 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 LANDSCAPING AND PRIVATE ROAD STREET TREES (28 SHADE TREES, 6 EVERGREENS, 33 STREET TREES, 100 SHRUBS) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$ 22,800.00.
  - FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
  - FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAS BEEN FULFILLED BY RETENTION OF 3.11 ACRES. FINANCIAL SURETY FOR THE ON-SITE RETENTION OF 3.11 ACRES (135,471.60 SQ. FT.) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$26,721.00
  - PROPOSED SEDIMENT CONTROL DEVICES WILL BE USED IN LIEU OF TREE PROTECTIVE FENCING, SINCE NO CONSTRUCTION IS PROPOSED IN THE VICINITY OF THE PROPOSED EASEMENT AREAS.

- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
    - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIFIC TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
    - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
    - MAKE ALL NECESSARY ADJUSTMENTS;
    - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
  - ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
  - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.



**FOREST CONSERVATION DATA**

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:  
 A. TOTAL TRACT AREA..... = 13.75  
 B. AREA WITHIN 100 YEAR FLOODPLAIN..... = 1.43  
 C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION..... = 0.00  
 D. NET TRACT AREA..... = 12.32

LAND USE CATEGORY:  
 ARA 0 MDR 0 IDA 1 HOR 1 MPD 0 CIA 0

E. AFFORESTATION THRESHOLD..... 15% X D = 1.85  
 F. CONSERVATION THRESHOLD..... 20% X D = 2.46

EXISTING FOREST COVER:  
 G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)..... = 5.60  
 H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD..... = 3.75  
 I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD..... = 3.14

BREAK EVEN POINT:  
 J. FOREST RETENTION ABOVE THE THRESHOLD WITH NO MITIGATION..... = 3.09  
 K. CLEARING PERMITTED WITHOUT MITIGATION..... = 2.51  
 PROPOSED FOREST CLEARING:  
 L. TOTAL AREA OF FOREST TO BE CLEARED..... = 2.51  
 M. TOTAL AREA OF FOREST TO BE RETAINED..... = 3.09

PLANTING REQUIREMENTS:  
 N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD..... = 0.63  
 P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD..... = 0.00  
 Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD..... = 0.63  
 R. TOTAL REFORESTATION REQUIRED..... = 0.00  
 S. TOTAL AFFORESTATION REQUIRED..... = 0.00  
 T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED..... = 0.00

**SCHEDULE A: PERIMETER LANDSCAPED EDGE**

CATEGORY	ADJACENT TO ROADWAYS			ADJACENT TO PERIMETER PROPERTIES		
	E (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)
LANDSCAPE TYPE	E (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)
LINEAR FEET OF PERIMETER	344.45 LF	507.00 LF	158.90 LF	920.62 LF	145.68 LF	1057.03 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	N/A	N/A	N/A	YES, 920 LF OF EX. TREES TO REMAIN	YES, 145.68 LF OF EX. TREES TO REMAIN	YES, 1057.03 LF OF EX. TREES TO REMAIN
NUMBER OF PLANTS REQUIRED	9 SHADE TREES 0 EVERGREEN TREES 100 SHRUBS	9 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	9 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 100 SHRUBS (10:1 SUBSTITUTION)	9 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS
CATEGORY	ADJACENT TO PERIMETER PROPERTIES			TOTAL		
LANDSCAPE TYPE	A (PERIMETER 7)			C (PERIMETER 8)		
LINEAR FEET OF PERIMETER	518.53 LF			787.02 LF		
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 380 LF OF EX. TREES TO REMAIN			YES, 680 LF OF EX. TREES TO REMAIN		
NUMBER OF PLANTS REQUIRED	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS			3 SHADE TREES 6 EVERGREEN TREES 0 SHRUBS		
NUMBER OF PLANTS PROVIDED	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS (2:1 SUBSTITUTION)			3 SHADE TREES 6 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS		
TOTAL	186 TREES (70 SHADE TREES, 6 EVERGREENS, 33 STREET TREES, 100 SHRUBS)					

QUALIFIED PROFESSIONAL  
 MASHID TRIMBA  
 3/7/06

**LEGEND**

- 1 PLANTING ISLAND
- 2 PERIMETER LANDSCAPE EDGE
- 101 INTERNAL LANDSCAPE PLANTING (FOR SFA 1 TREE PER UNIT)

HOVELAND  
 SEP-02-30)  
 PLAT # 18702-07  
 (7-03-184)  
 ZONING RC-DEO  
 EXISTING USE: ELDERLY HOUSING

**SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES	8
NUMBER OF PLANTING ISLANDS REQUIRED	1
NUMBER OF PLANTING ISLANDS PROVIDED	1
NUMBER OF TREES REQUIRED	1 SHADE TREE
NUMBER OF TREES PROVIDED	1 SHADE TREE
OTHER TREES (2:1 SUBSTITUTION)	0 TREES

**SCHEDULE C: RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING**

NUMBER OF DWELLING UNITS	20
NUMBER OF TREES REQUIRED (1:DU SFA; 1:3 DU APTS)	20
NUMBER OF TREES PROVIDED	20
SHADE TREES	20
OTHER (2:1 EVERGREEN SUBSTITUTION)	0
OTHER (10:1 SHRUB SUBSTITUTION)	0

**STREET TREE CALCULATIONS**

PRIVATE ROAD - 900 / 40 = 23 STREET TREES  
 FREDERICK ROAD - 399 / 40 = 10 STREET TREES  
 TOTAL TREES REQUIRED = 33 STREET TREES  
 TOTAL TREES PROVIDED = 33 STREET TREES

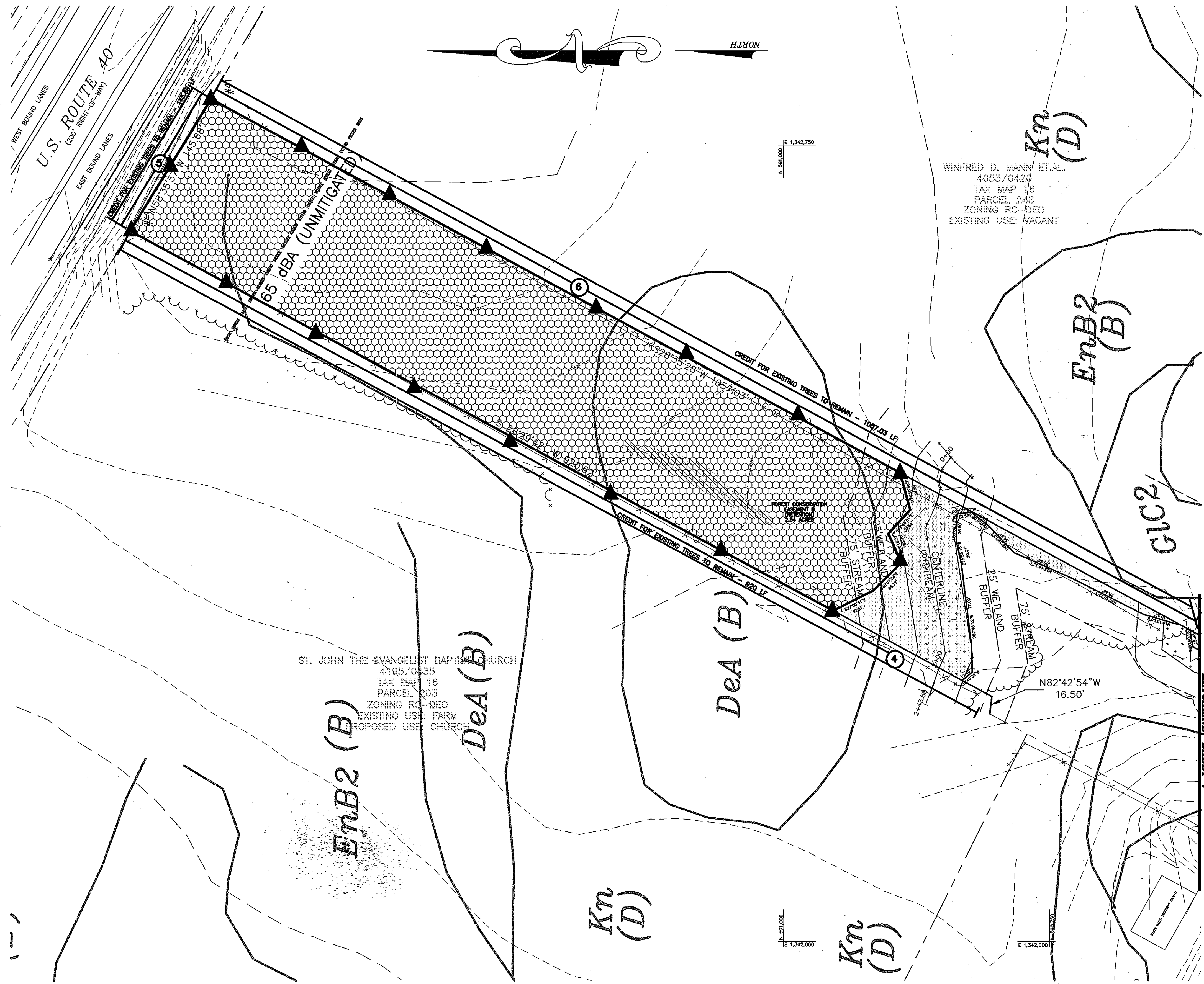
**PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
20	○	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
50	○	AZALEA 'EXBURY'	EXBURY AZALEA	18"-24" SP.
50	○	COTONEASTER SAUCIFOLIUS 'TREPENS'	WILLOWLEAF COTONEASTER	18"-24" SP.
34	○	PIRUS CALLERYANA 'REDSPIRE'	REDSPIRE PEAR	2 1/2" - 3" CAL.
26	○	QUERCUS PALUSTRIS	PIN OAK	2 1/2" - 3" CAL.
6	○	PINUS STROBUS	WHITE PINE	6'-8" HT.
TOTAL				186 TREES (70 SHADE TREES, 6 EVERGREENS, 33 STREET TREES, 100 SHRUBS)

OWNER/DEVELOPER  
 BRANTLY DEVELOPMENT GROUP, INC.  
 8835 - COLUMBIA 100 PARKWAY  
 COLUMBIA, MARYLAND 21045  
 (410) 730-0810

APPROVED DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR





NOTE : THIS PLAN IS TO BE USED FOR LANDSCAPE & FOREST CONSERVATION PLAN PURPOSES ONLY.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 11/5/06  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 11/16/06  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 11/16/06  
DIRECTOR

OWNER/DEVELOPER  
BRANTLY DEVELOPMENT GROUP, INC.  
8635-P COLUMBIA 100 PARKWAY  
COLUMBIA, MARYLAND 21045  
(410) 730-0810

QUALIFIED PROFESSIONAL  
MASHID TRINCA  
*[Signature]* 3/7/06

project	98057	date	MARCH 06
illustration	MMW/SD	engineering	SD
scale	1"=50'	approval	

no.	description	revisions	date

ELLICOTT MEADOWS  
TAX MAP 16 PARCEL 99 GRID 22-23  
THIRD ELECTION DISTRICT HOWARD COUNTY MARYLAND  
LANDSCAPE & FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042  
(410) 987-0296 Bldg. (301) 621-5521 Wash. (410) 987-0288 Fax.