

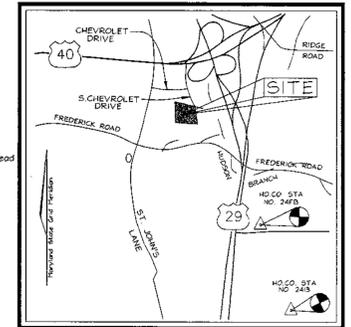
**GENERAL NOTES**

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications, if applicable.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor is to notify the following utilities or agencies at least five days before starting work on these drawings:
  - Miss Utility: 1-800-257-7777
  - Bell Atlantic Telephone Company: 1-888-586-4301
  - Howard County Bureau of Utilities: 313-2366
  - A&T Cable Location Division: 393-3553
  - B & E Co. Contractor Services: 850-4620
  - B & E Co. Underground Damage Control: 787-4620
  - State Highway Administration: 531-5533
- Site analysis:
  - Area of parcel: 5.1 Ac ±
  - Present zoning: B-2
  - Use of structure: Used car sales and display
  - Building area: 528sf
  - Building coverage on site: 0.012 Ac. or 0.2% of gross area
  - Paved parking lot/area: 0.82 Ac. or 16.1% of gross area
  - Area of landscape island: 0.03 Ac. = 1,316sf
  - Area of 15.0%-24.99% slopes on site: 8,600sf, see sheet 5 of 10
  - Area of 25.0%-50.0% slopes on site: 6,275sf, see sheet 5 of 10
- Project background:
  - Location: Ellicott City, Md.; Tax Map 24, Parcel 717
  - Zoning: B-2
  - Subdivision: N/A
  - Section/Area: N/A
  - Site Area: 5.11 Acres ±
  - DPZ references: SDP-98-136; WP-00-89; L.416 F.441
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to start of work.
- Any damage to public right-of-ways, paving, or existing utilities will be corrected at the contractor's expense.
- Existing utilities located from Reco Construction Plans, Field Surveys, Public Water and Sewer Extension Plans and available record drawings. Approximate location of existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- All overhead concrete for storm drain structures shall have a minimum of 28 days strength of 3,500 psi.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Estimates of earthwork quantities are provided solely for the purpose of calculating fees.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test prior to construction.
- All storm drain pipe bedding shall be Class 'C'.
- The existing topography is taken from field run survey with two foot contour intervals prepared by Mark & Vogel Associates, Inc. dated February, 1997. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 24FB and 2413 were used for this project.
- A noise study is not required for this project.
- All paving to be P-2 and P-3 paving per details, sheet 6 of 11, see detail sheet 2 of 11 for limits.
- All curb and gutter to be Howard County Standard concrete Detail 3.01 unless otherwise specified.
- Contractor responsible to construct all handicap parking and handicap access in accordance with current ADA requirements.
- Where drainage flows away from curb, contractor to reverse the gutter pan.
- All elevations are to flowline/bottom of curb unless otherwise noted.
- All dimensions are to face of curb unless otherwise noted.
- Public water available from along South Chevrolet Drive (8" Water) Contract #360-W; Public Sewer available along northern property line (8" Sewer) Contract #114-S.
- Stormwater Management method: Detention Facility of 2yr and 10yr storms for quantity control and a Stormceptor for water quality. The facility is to be privately owned and maintained.
- All exterior lighting shall conform to Zoning Regulations Section 134.
- Building to have Outside Water Meter setting at easement line.
- APFC traffic test prepared by The Traffic Group on March 6, 2000.
- Geotechnical report prepared by Herbst/Benson & Associates on March 20, 2000.
- 1" x 4" 4' S4C and Fire Hydrant to be installed by ADO.
- Wetlands delineated by Exploration Research, Inc. dated January 13, 2000. No clearing, grading or construction is permitted within the required 25' wetland buffer or wetland.
- Design Manual waiver for intersection at South Chevrolet Drive approved on July 20, 2000.
- Car carriers will not be allowed on-site. The public road shall not be used for the loading/unloading of cars/vehicles. All cars/vehicles for sale/storage on this site will be driven individually to the lot from Miller Chevrolet new car sales/service area, approximately 600 feet to the north along South Chevrolet Drive.
- The forest conservation obligations of this plan will be satisfied by off-site reforestation of 2.62 acres on Parcel 1030, Tax Map 24, Grid 0, located south of the Miller Branch Library and owned by The Miller Land Company. This reforestation area is described in a plat of forest conservation easement, Plat Number 14533 recorded on 11/21/00.
- WP-00-89 is a waiver of the Design Manual, Volume III, Section 2.6.2., Figure 2.18., which provides minimum radii for curb fillets at commercial entrances. We have asked that the minimum radii be reduced from 50' to 20'. The waiver was approved on July 20, 2000.

# SITE DEVELOPMENT PLAN MILLER CHEVROLET USED CARS

**LEGEND**

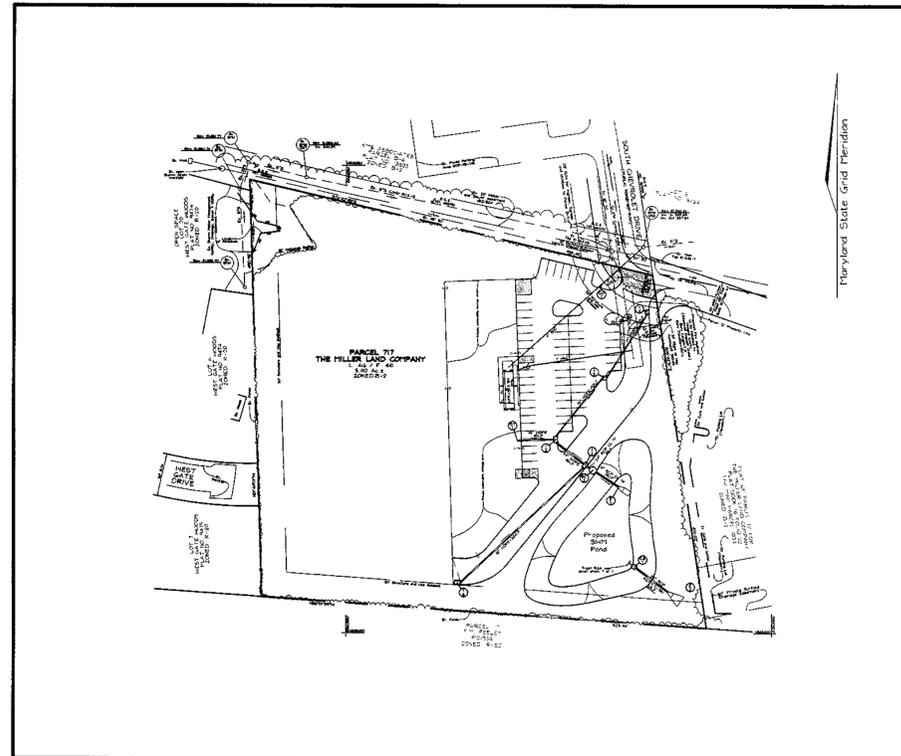
- Existing Contour: ---
- Proposed Contour: - - - -
- Existing Spot Elevation: +82.53
- Proposed Spot Elevation: +82.53
- Direction of Flow: →
- Existing Trees to Remain: [Tree Symbol]
- Light Poles: ○-○ Single Overhead, □-□ Double Overhead
- Display Area: [Hatched Box]
- Concrete: [Dotted Box]



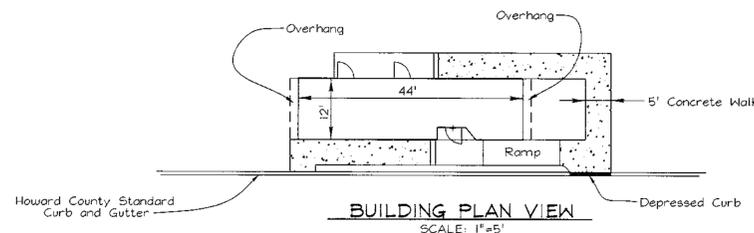
**BENCHMARKS**

- Howard County Station 24FB: N 582,651.511 E 1,364,254.552 Elev. 429.32
- Howard County Station 2413: N 580,648.321 E 1,364,973.072 Elev. 404.52

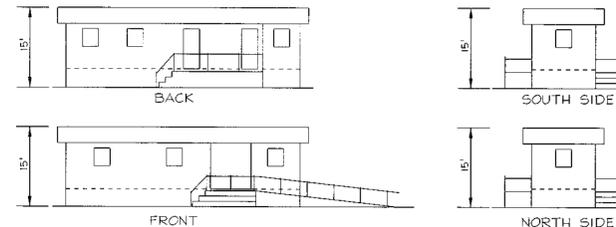
SHEET INDEX	
DESCRIPTION	SHEET NO.
Cover Sheet	1 of 12
Site Development Plan	2 of 12
Sediment and Erosion Control Plan	3 of 12
Sediment and Erosion Control Details	4 of 12
Storm Drain Drainage Area Map	5 of 12
Storm Drain, Water and Sewer Profiles and Miscellaneous Details	6 of 12
Stormwater Management Notes and Details	7 of 12
Landscape Plan	8 of 12
Forest Stand Delineation	9 of 12
Forest Conservation Plan	10 of 12
Forest Conservation Plan (Off-Site Reforestation)	11 of 12
Off-Site Forest Stand Delineation	12 of 12



LOCATION MAP  
SCALE: 1"=100'



BUILDING PLAN VIEW  
SCALE: 1"=5'



BUILDING ELEVATION  
SCALE: 1"=10'

**PARKING TABULATION**

	REQUIRED	PROPOSED
Vehicle Display: 6,179sf 1.0 spaces/1,000sf	7 spaces	22 spaces
Vehicle Sales Building: 528sf 2.0 spaces/1,000sf	2 spaces	2 spaces
Handicap spaces	1 space	1 space
Total spaces	10 spaces	25 spaces

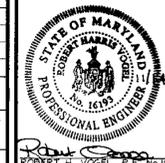
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF DEVELOPMENT ENGINEERING DIVISION      11/28/00  
 DATE  
  
 CHIEF DIVISION OF LAND DEVELOPMENT      11/29/00  
 DATE  
  
 DIRECTOR      11/29/00  
 DATE

**OWNER/DEVELOPER**

The Miller Land Company  
Paul Miller  
P.O. Box 307  
Ellicott City, MD 21043  
410.461.8335

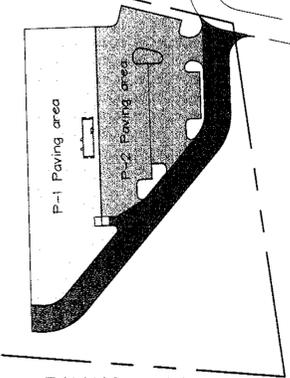
ADDRESS CHART					
LOT/PARCEL #	STREET ADDRESS				
717	3520 South Chevrolet Drive				
PROJECT NAME					
Miller Chevrolet Used Cars					
SECTION/AREA	PARCEL NUMBER				
N/A	717				
L/F NO.	BLOCK NO.	ZONE	TAX/ZONE ELECT.	DIST.	CENSUS TR.
416/441	11	B-2	24	2nd	6023.01
WATER CODE: F07		SEWER CODE: 1403200			



DESIGN BY: PS  
 DRAWN BY: PS  
 CHECKED BY: RHY  
 DATE: Nov. 09, 2000  
 SCALE: As Shown  
 W.O. NO.: 99-080

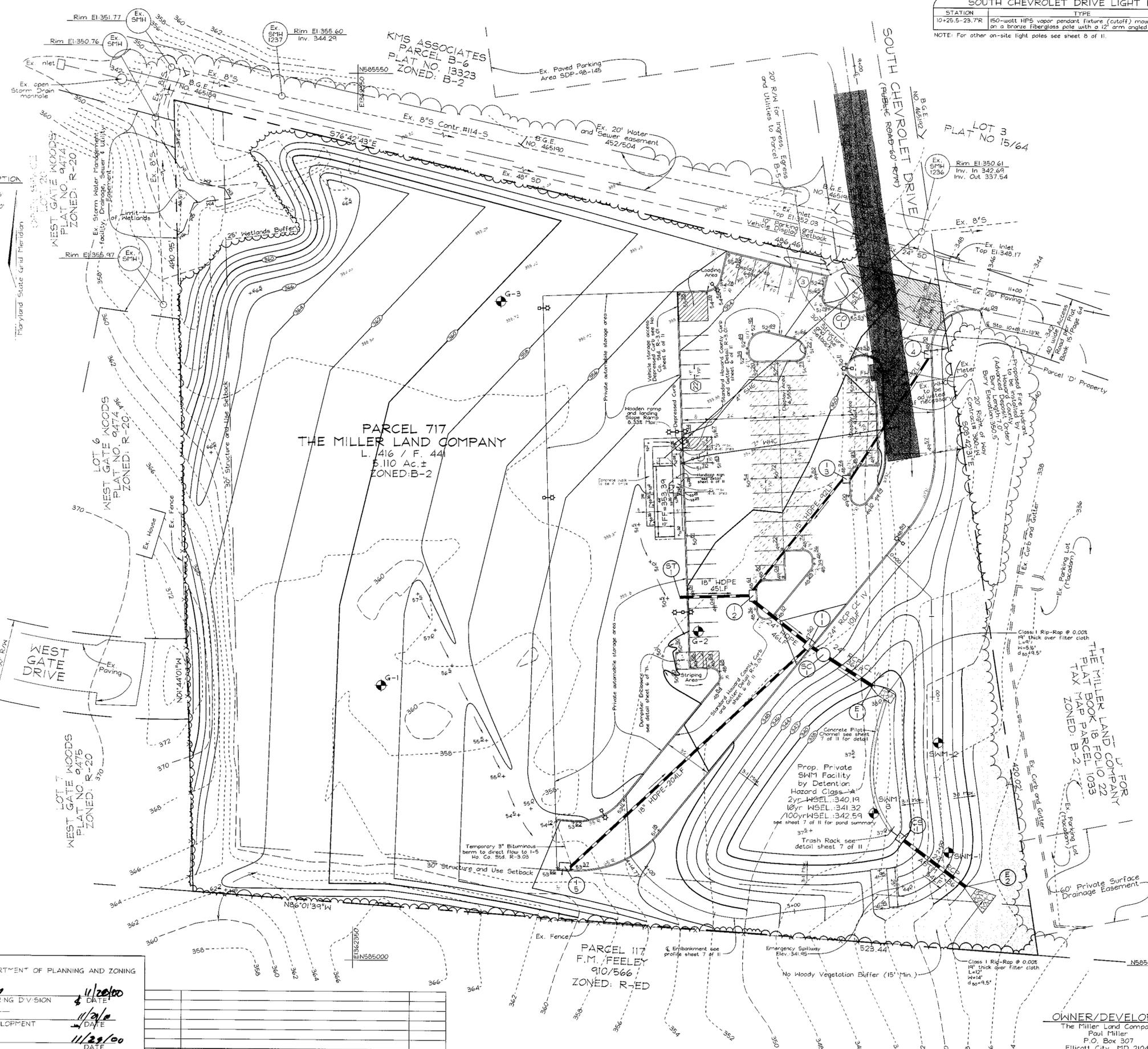
SOUTH CHEVROLET DRIVE LIGHT POLE	
STATION	TYPE
10+25.5-25.7R	150-watt HP5 vapor pendant fixture (cutoff) mounted at 30' on a bronze fiberglass pole with a 12' arm angled toward intersection

NOTE: For other on-site light poles see sheet 8 of 11.



**WETLANDS DESCRIPTION**

A	534'04" S E 4'22"
X2	576'54" 46' E 23'05"
M3	532'00" S E 7'39"
M2	532'74" 48' N 22'30"
X3	520'6" 22' N 8'09"
M6	540'8" 07' N 5'20"



THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*J. C. Crawford, Inc.* 11/20/00  
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Glenn L. Selig* 11/20/00  
 HOWARD SOIL CONSERVATION DISTRICT DATE

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Paul L. Miller* 11/9/00  
 SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATE**

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Robert H. Vogel* 11/14/00  
 SIGNATURE OF ENGINEER DATE  
 ROBERT H. VOGEL

**SITE DEVELOPMENT PLAN**  
**MILLER CHEVROLET USED CARS**

TAX MAP #24 GRID #11 PARCEL 717  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
 ENGINEERS SURVEYORS PLANNERS

3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
 Tel 410.461.5828 Fax 410.465.3966

DESIGN BY: PS	
DRAWN BY: PS	
CHECKED BY: RHV	
DATE: Nov. 03, 2000	
SCALE: 1"=30'	
W.O. NO.: 99-080	2 OF 12

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Dallmann* 11/20/00  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

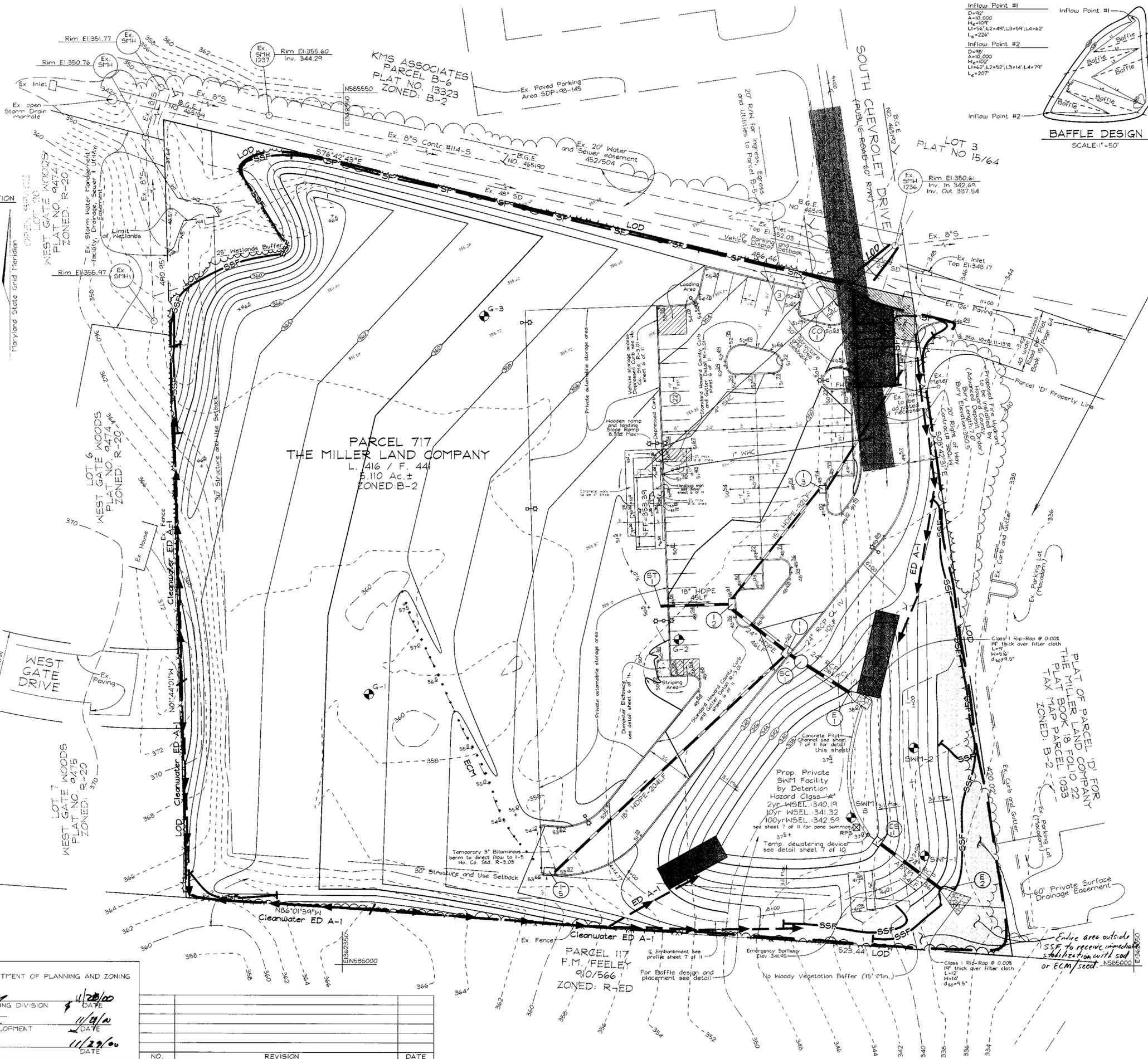
*Cindy Hamula* 11/20/00  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*David Kottler* 11/29/00  
 DIRECTOR DATE

NO.	REVISION	DATE

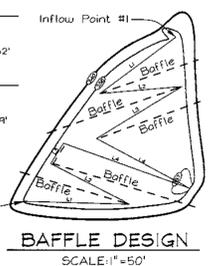
**LANDS DESCRIPTION**

N1 534°04'15"E 14.22'  
 N2 576°54'46"E 23.05'  
 N3 332°00'56"E 7.98'  
 N4 380°27'48"W 22.60'  
 N5 320°18'22"W 18.00'  
 N6 549°18'07"W 5.20'



**Inflow Point #1**  
 D=8"  
 A=10,000  
 N=100  
 L=56'L2+49'L3+59'L4+62'  
 L<sub>0</sub>=226'

**Inflow Point #2**  
 D=8"  
 A=10,000  
 N=100  
 L=52'L2+52'L3+14'L4+79'  
 L<sub>0</sub>=207'



**LEGEND**

Existing Contour ---  
 Proposed Contour ---  
 Spot Elevation +82.53  
 Direction of Flow →

Existing Trees to Remain [Symbol]

Light Poles [Symbol] Single Overhead [Symbol] Double Overhead

Stabilized Construction Entrance [Symbol]

Silt Fence [Symbol] SF [Symbol] SF

Super Silt Fence [Symbol] SSF [Symbol] SSF

Earth Dike [Symbol] ED A-1 [Symbol] ED A-1

Limit of Disturbance [Symbol] LOD

Erosion Control Matting [Symbol] ECM

Removable Pumping Station [Symbol] RPS

**SEDIMENT BASIN DATA**

Basin No. : 1  
 Proposed drainage area : 4.61 Ac.  
 Storage required : 16,596 Cf  
 Storage provided : 16,596 Cf  
 Wet storage required : 8,298 Cf  
 Dry storage required : 8,298 Cf  
 Wet storage elevation : 338.12  
 Dry storage elevation : 339.08  
 Bottom elevation : 337.00  
 Storage depth : 1.12'(wet), 0.96'(dry)  
 Top of embankment : 344.7 constructed; 344.0 settled  
 Cleanout elevation : 337.65

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*D.G. Watfield / es* 11/20/00  
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Shelley W. Alley* 11/20/00  
 HOWARD SOIL CONSERVATION DISTRICT DATE

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Paul E. Miller* 11/19/00  
 SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATE**

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Robert H. Vogel* 11/14/00  
 SIGNATURE OF ENGINEER DATE  
 ROBERT H. VOGEL

**SEDIMENT AND EROSION CONTROL PLAN**  
**MILLER CHEVROLET USED CARS**

TAX MAP #24 GRID #11 PARCEL 717  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VAVOGEL & ASSOCIATES**  
 ENGINEERS-SURVEYORS-PLANNERS

3591 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
 Tel 410.461.5828 Fax 410.465.3986

DESIGN BY: PS  
 DRAWN BY: PS  
 CHECKED BY: RHV  
 DATE: Nov. 09, 2000  
 SCALE: 1"=30'  
 S.W. NO.: 99-080

3 SHEET OF 12

**OWNER/DEVELOPER**  
 The Miller Land Company  
 Paul Miller  
 P.O. Box 307  
 Ellicott City, MD 21043  
 410.46.8335

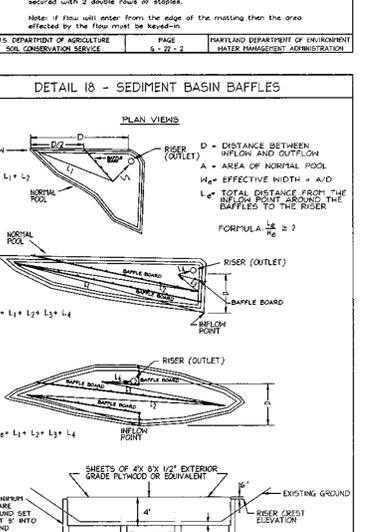
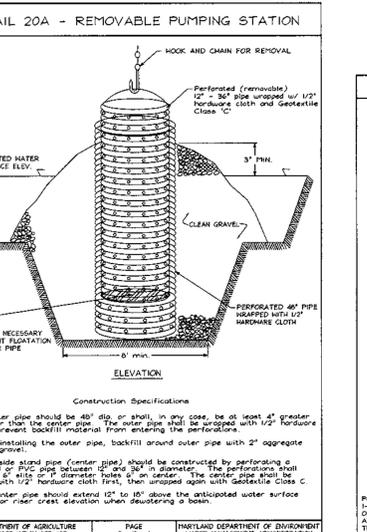
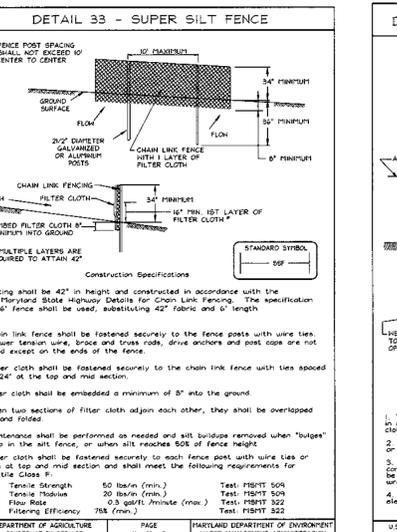
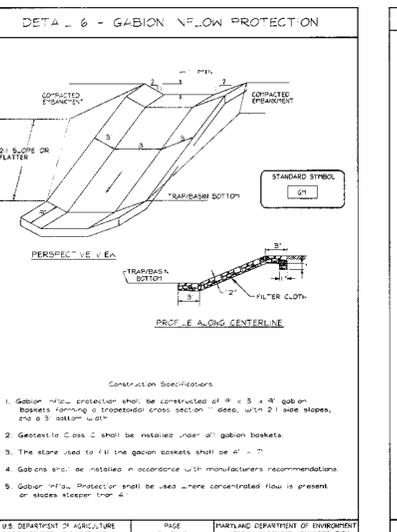
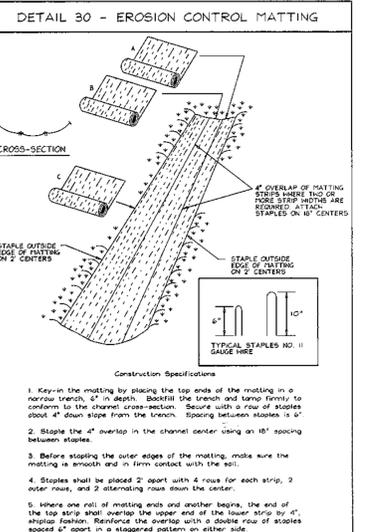
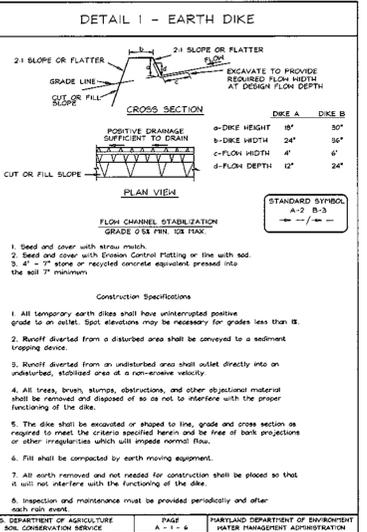
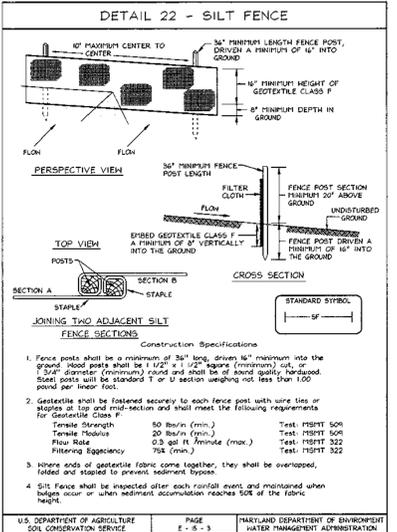
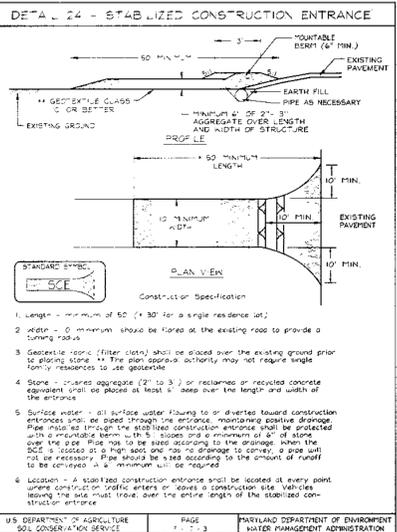
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Dammann* 11/20/00  
 CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Hamilton* 11/14/00  
 CHIEF DIVISION OF LAND DEVELOPMENT DATE

*Angela Smith* 11/29/00  
 DATE

NO.	REVISION	DATE



### 21.0 STANDARDS 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 vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, and 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 vegetable growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing 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 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-NRCS 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 a 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 and 1/2" in diameter.
  - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, 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 (200-800 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 over 5 acres:
      - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

### SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or redistribution, 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 for 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 7, 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, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall 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	5.11 Acres
Area Disturbed	4.96 Acres
Area to be roofed or paved	1.42 Acres
Area to be vegetatively stabilized	3.54 Acres
Total Cut	14348 CY
Total Fill	12736 CY

 Offsite waste/borrow area location:
  - Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
  - All sediment control structures 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 shall be back-filled and stabilized within one working day, whichever is shorter.
    - To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

### SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspections and Permits at (410)313-1800 at least 24 hours before starting any work.
- Install Stabilized Construction Entrance, Silt Fence, Super Silt Fence, Earth Dike, Erosion Control Matting, Inflow Protection, Sediment Basin and Blocking in Riser, with permission from Inspector before proceeding. (1 week)
- Clear and rough grade site; if fragmented rock is present at basin bottom, see notes sheet 7 of 10. (1 week)
- Construct Water, Sewer and Storm Drain, and install Inlet Protection. (4-8 weeks)
- Prepare Tractor location. (2 weeks)
- Fine grade site. (4 days)
- Install curb and gutter, paving and sidewalks. (2 days)
- Install Landscaping. (1 week)
- With permission of the Inspector, remove all Sediment Controls from the site. Remove blocking in Riser structure and dewatering device. Install permanent low flow device in Riser structure. Stabilize all disturbed areas immediately. (1 week)
- During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the Sediment Control measures on this plan.
- Following initial soil disturbance or redistribution permanent or temporary stabilization shall be completed within:
  - 7 calendar days for all perimeter Sediment Control Structures, Dikes, Slopes and all slopes greater than 3:1.
  - 14 calendar days for all other disturbed areas.

### TEMPORARY SEEDING NOTES

**SEEDBED PREPARATION:** Loosen three inches of soil by raking, discing or other acceptable means before seeding, if 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 November 15, seed with 2 1/2 bushel per acre of annual ryegrass (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 1 thru February 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 sod.

**MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

**REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

### PERMANENT SEEDING NOTES

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

**SEEDBED PREPARATION:** Loosen three inches of soil by raking, discing 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 acre dolomitic limestone (92 lbs./100 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Inflow or disc into upper three inches of soil. At the 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./100 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Inflow or disc 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 (14 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 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).

**MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

**MAINTENANCE:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 11/20/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 11/21/00  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 11/22/00  
DIRECTOR

**ENGINEER'S CERTIFICATE**

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*[Signature]* 11/14/00  
SIGNATURE OF ENGINEER  
ROBERT H. VOGEL

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*[Signature]* 11/9/00  
SIGNATURE OF DEVELOPER  
PAUL E. MILLER

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*[Signature]* 11/20/00  
USDA-NATURAL RESOURCES CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*[Signature]* 11/20/00  
HOWARD SOIL CONSERVATION DISTRICT

**OWNER/DEVELOPER**  
The Miller Land Company  
P.O. Box 307  
Ellicott City, MD 21043  
410.461.8335

### SEDIMENT AND EROSION CONTROL DETAILS MILLER CHEVROLET USED CARS

TAX MAP #24 GRID #11 PARCEL 717  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
ENGINEERS-SURVEYORS-PLANNERS  
3681 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
Tel 410.461.5828 Fax 410.465.5965

DESIGN BY: PS  
DRAWN BY: PS  
CHECKED BY: RHV  
DATE: Nov. 09, 2000  
SCALE: As Shown  
W.O. NO.: 99-080

4 SHEET OF 12

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
GIB2	Gleneta Loam, 3 to 8 percent slopes, moderately eroded	B
GIC2	Gleneta Loam, 8 to 15 percent slopes, moderately eroded	B
GID2	Gleneta Loam, 15 to 25 percent slopes, moderately eroded	B
GID3	Gleneta Loam, 15 to 25 percent slopes, severely eroded	B
GnB2	Glenville Silt Loam, 3 to 8 percent slopes, moderately eroded	C
MID2	Minor Loam, 15 to 25 percent slopes, moderately eroded	B

NOTE: This Plan is for Drainage Area and Soil Information purposes only.

LEGEND	
Existing Contour	---362---
Proposed Contour	---362---
Spot Elevation	+82.53
Direction of Flow	→
Existing Trees to Remain	(Symbol)
Light Poles	Overhead Double Overhead
Soils Divide	KeB2 KeB2
Proposed Drainage Divide	↑
15.0%-24.99% Slopes	(Symbol)
25.0%-50.0% Slopes	(Symbol)

**NET LANDS DESCRIPTION**

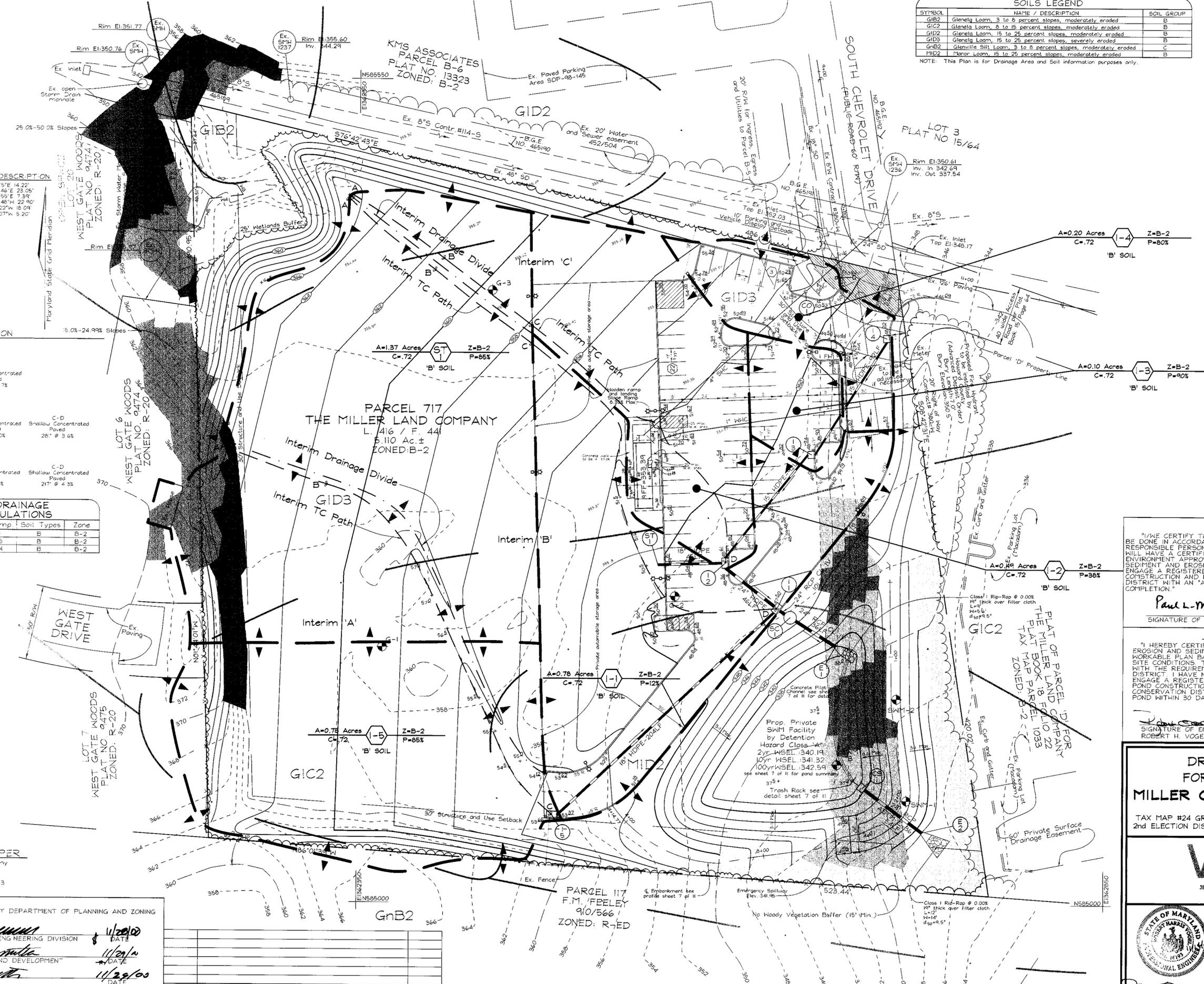
N1	534'04" 51°E 14.22'
N2	576'54" 46°E 23.05'
N3	532'00" 55°E 7.39'
N4	582'47" 48°W 22.90'
N5	520'16" 22°W 18.04'
N6	542'18" 07°W 5.20'

**TC PATH INFORMATION**

INTERIM	Area	RCV	TC	A-B	B-C	C-D	Sheet Flow	Grass
INTERIM 'A'	.16 Acres	.34	0.5	B-C			Shallow Concentrated	
INTERIM 'B'	.65 Acres	.4	0.4	B-C			Shallow Concentrated	
INTERIM 'C'	0.22 Acres	.4	0.4	B-C			Shallow Concentrated	

**INTERIM DRAINAGE AREA TABULATIONS**

No.	Area	C	% Imp.	Soil Types	Zone
Interim A	.16 Ac.	0.16	5	B	B-2
Interim B	.65 Ac.	0.34	25	B	B-2
Interim C	0.22 Ac.	0.22	44	B	B-2



**DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*Paul L. Mella* 11/9/00  
SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATE**

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*Robert H. Vogel* 11/14/00  
SIGNATURE OF ENGINEER DATE

**DRAINAGE AREA MAP FOR STORM DRAINAGE MILLER CHEVROLET USED CARS**

TAX MAP #24 GRID #11 PARCEL 717  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
ENGINEERS/SURVEYORS/PLANNERS

3991 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
Tel 410.461.5828 Fax 410.465.3965

DESIGN BY: PS  
DRAWN BY: PS  
CHECKED BY: RHY  
DATE: Nov. 09, 2000  
SCALE: 1"=30'  
W.O. NO.: 99-080

5 SHEET OF 12

**OWNER/DEVELOPER**  
The Miller Land Company  
Paul Miller  
P.O. Box 307  
Ellicott City, MD 21043  
410.46.6335

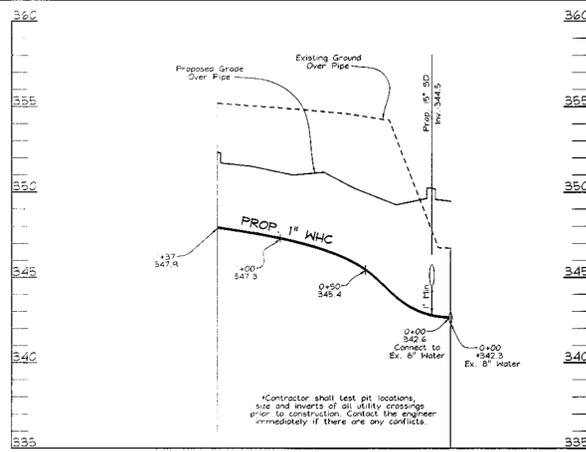
**APPROVED:** HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Cheryl Hemmick* 11/29/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

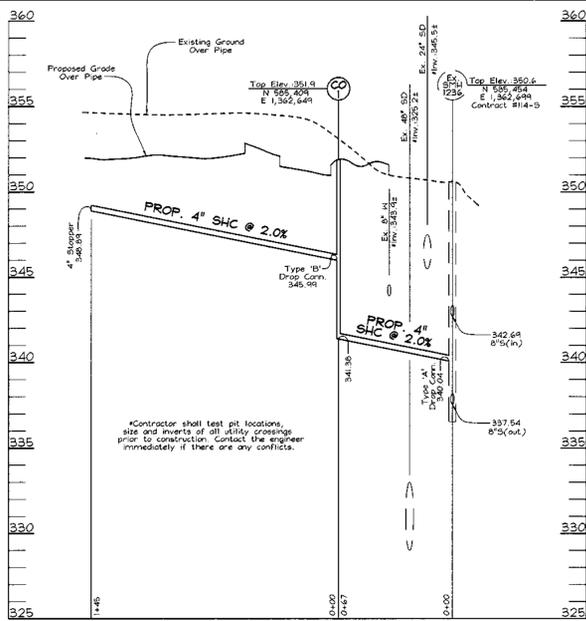
*Janice Hemmick* 11/29/00  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*James R. Smith* 11/29/00  
DIRECTOR DATE

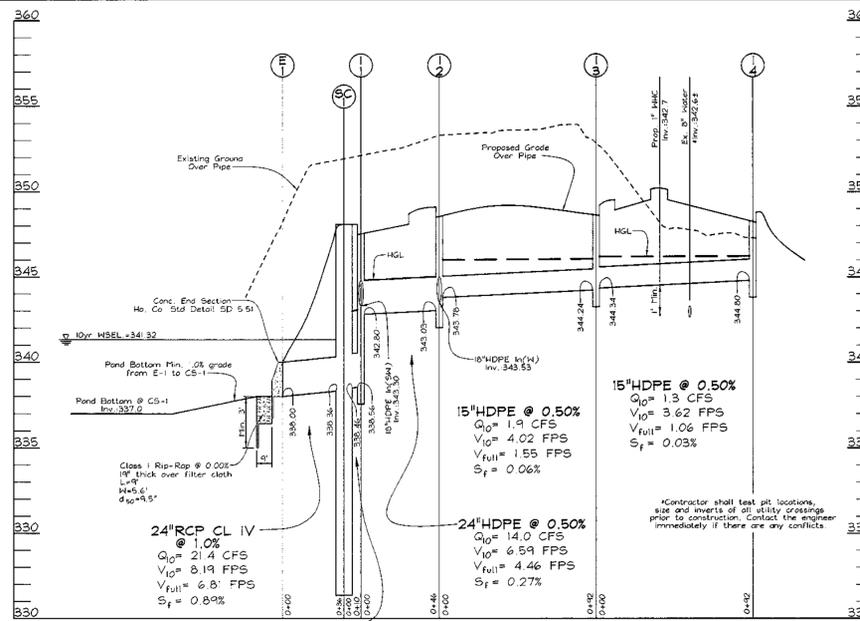
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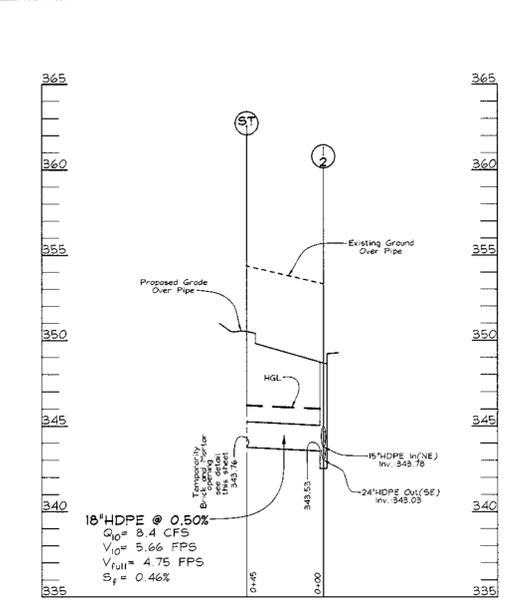
**WATER PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'



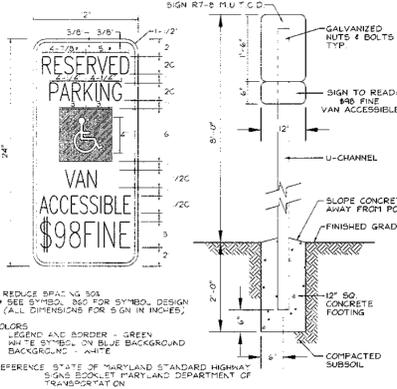
**SEWER PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'



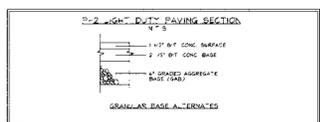
**STORM DRAIN PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'



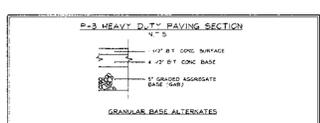
**STORM DRAIN PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'



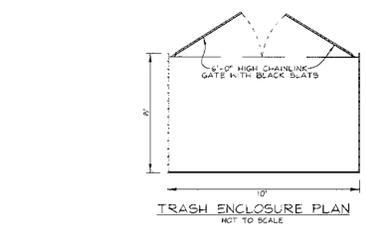
**HANDICAP PARKING SIGN**  
NOT TO SCALE



**STANDARD COMBINATION CURB AND GUTTER**  
HOWARD COUNTY STANDARD R-3.01  
NOT TO SCALE



**PAVING SECTION**  
NOT TO SCALE



**TRASH ENCLOSURE PLAN**  
NOT TO SCALE

**TRASH ENCLOSURE ELEVATION**  
NOT TO SCALE

**Precast Concrete Stormceptor® Order Request Form**

**CONTRACTOR INFORMATION**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

**OWNER INFORMATION**

Name: Paul Miller  
Phone: 410.461.8335  
Fax: \_\_\_\_\_

**PERVIOUS DRAINAGE AREA FOR THIS UNIT**

Stormceptor® Model	Insert Size	Top Elevation (ft)	SC-1
500	3600	338.10	
1200	4800	338.46	
1800	6000	338.82	
2400	7200	339.18	

**Stormceptor Model**  SC-1  
**Insert Size**  SINGLE  INLET  OSC  MULTIPLE  INLET  OSC  CUSTOM

**Manhole Number** \_\_\_\_\_  
**Top Elevation (ft)** \_\_\_\_\_  
**Inlet Pipe Invert (ft)** \_\_\_\_\_  
**Outlet Pipe Invert (ft)** \_\_\_\_\_  
**RCP CL IV** \_\_\_\_\_  
**Pipe Type** \_\_\_\_\_  
**Inlet Pipe Inside Diameter (ID)** \_\_\_\_\_  
**Inlet Pipe Outside Diameter (OD)** \_\_\_\_\_  
**Outlet Pipe Inside Diameter (ID)** \_\_\_\_\_  
**Outlet Pipe Outside Diameter (OD)** \_\_\_\_\_

**Project Name** Miller Chevrolet Used Cars  
**Approximate time frame of delivery (week)** \_\_\_\_\_  
**Delivery Address Street** 3520 South Chevrolet Drive  
**City** Ellicott City **State** Maryland **Zip Code** 21043  
**Designer Company** Vogel & Associates, Inc.  
**Designer Contact** Rob Vogel **Phone** 410.461.5828 **Fax** 410.465.3366

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR Hydro Conduit**  
ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)313-6389  
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399

**OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY STRUCTURE**

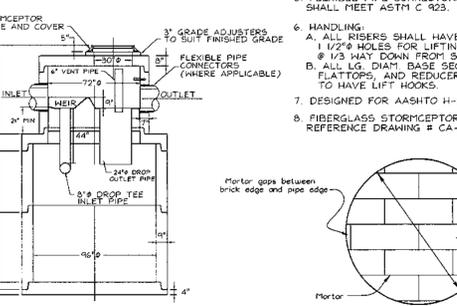
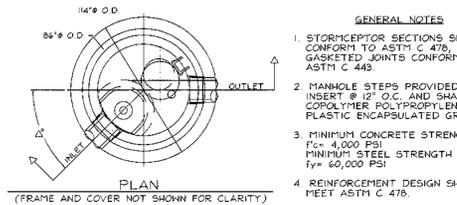
- The Stormceptor Water Quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum, utilizing the Stormceptor inspection/monitoring form. Inspections shall be done by using a clear Plexiglas tube ("hopper/judge") to extract a water column sample when the sediment depths exceed the level specified in table 4 of the Stormceptor Technical Manual; the unit must be cleaned. The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
- The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.
- The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.
- The owner shall retain and make the Stormceptor Inspection/Monitoring forms available to the Howard County officials upon their request.

**STORMCEPTOR ORDER INFORMATION**

STORMCEPTOR MODEL: 3600  
STRUCTURE: SC-1  
TOP ELEVATION: 348.10  
INLET PIPE INVERT: 338.46  
OUTLET PIPE INVERT: 338.82  
PIPE SIZE: 24" RCP

**NOTE:** SEE DRAINAGE AREA MAP FOR CONTRIBUTING IMPERVIOUS AREA TO STORMCEPTOR. AREAS: 2.33 Acres

**STC 3600 PRECAST CONCRETE STORMCEPTOR**



**SECTION**  
TEMPORARY BLOCKING DETAIL  
NOT TO SCALE

**PIPE SCHEDULE**

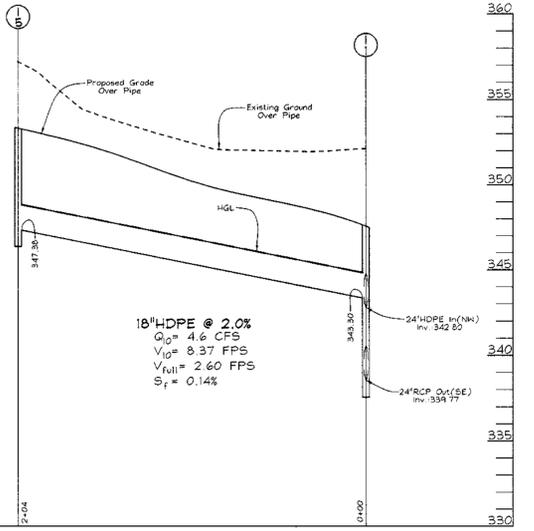
SIZE	TYPE	LENGTH
15"	HDPE	184 LF
18"	HDPE	249 LF
24"	HDPE	46 LF
24"	RCP CL IV	46 LF
24"	RCP ASTM C-361 CL B-25	54 LF

**STRUCTURE SCHEDULE**

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
1-1	Double Type 'S' Combination Inlet	N 585,197 E 1,362,631	348.10	343.30	339.77	SD 4.34
1-2	Double Type 'S' Combination Inlet	N 585,228 E 1,362,596	349.28	343.78	343.03	SD 4.34
1-3	Type 'S' Combination Inlet	N 585,300 E 1,362,654	349.39	344.34	344.24	SD 4.32
1-4	Type 'S' Combination Inlet	N 585,378 E 1,362,704	348.85	-	344.80	SD 4.32
1-5	Double Type 'S' Combination Inlet	N 585,059 E 1,362,481	354.11	-	347.38	SD 4.34
SC-1	Stormceptor STC 3600	N 585,192 E 1,362,640	348.10	338.46	338.82	STC 3600
E-1	Concrete End Section	N 585,172 E 1,362,670	341.43	-	339.43	SD 5.51
E-2	Concrete End Section	N 585,048 E 1,362,729	338.30	-	343.76	SD 5.51
ST-1	Stub	N 585,226 E 1,362,551	-	-	343.76	Note #3

**NOTES**

- Top elevations are to the center of the structure at top of curb for Single and Double Type 'S' Combination inlets.
- For top slab slopes see grading plan.
- See this sheet for Temporary Blocking Detail.



**STORM DRAIN PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'

**OWNER/DEVELOPER**  
The Miller Land Company  
Paul Miller  
P.O. Box 307  
Ellicott City, MD 21043  
410.461.8335

**STORM DRAIN, WATER AND SEWER PROFILES AND MISCELLANEOUS DETAILS**  
**MILLER CHEVROLET USED CARS**

TAX MAP #24 GRID #11  
2nd ELECTION DISTRICT

PARCEL 717  
HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
ENGINEERS SURVEYORS PLANNERS

3881 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
Tel 410.461.5828 Fax 410.465.3966

DESIGN BY: PS  
DRAWN BY: PS  
CHECKED BY: RHV  
DATE: Nov. 09, 2000  
SCALE: As Shown  
W.O. NO.: 99-080

6 SHEET OF 12

**OPERATION AND MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT DETENTION FACILITY**

**STORMWATER MANAGEMENT FACILITY**

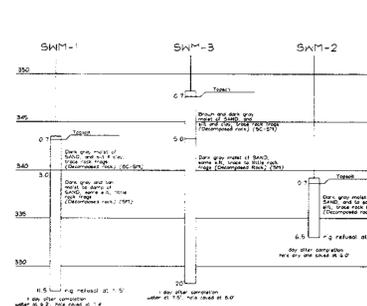
1. FACILITY SHALL BE INSPECTED ANNUALLY AFTER MAJOR STORMS. INSPECTION SHOULD BE PERFORMED DURING THE WINTER MONTHS. INSPECTION OF THE FACILITY SHOULD BE PERFORMED AT LEAST ANNUALLY. INSPECTION SHOULD BE PERFORMED DURING THE WINTER MONTHS. INSPECTION OF THE FACILITY SHOULD BE PERFORMED AT LEAST ANNUALLY. INSPECTION SHOULD BE PERFORMED DURING THE WINTER MONTHS.

**POND SUMMARY**

FLOW INFO	2 YEAR	10 YEAR	100 YEAR
FLOW INFO POND	13.92 C.F.S.	24.08 C.F.S.	36.75 C.F.S.
FLOW OUT OF POND	0.32 C.F.S.	3.81 C.F.S.	9.12 C.F.S.
W.S. ELEVATION	340.22	341.46	342.59
STORAGE VOLUME	0.62 AC FT	0.96 AC FT	1.41 AC FT

**OPERATION, MAINTENANCE AND INSPECTION**

INSPECTION OF THE POND(S) SHOULD BE PERFORMED AT LEAST ANNUALLY. INSPECTION SHOULD BE PERFORMED DURING THE WINTER MONTHS. INSPECTION OF THE FACILITY SHOULD BE PERFORMED AT LEAST ANNUALLY. INSPECTION SHOULD BE PERFORMED DURING THE WINTER MONTHS.



**S.W.M. BORING PROFILES**  
NOT TO SCALE

**MARYLAND 378 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS**

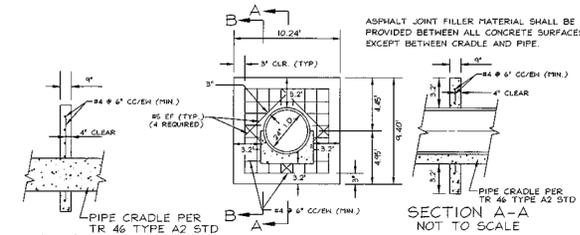
These specifications are applicable to all ponds within the scope of the Standard Practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

**Site Preparation**

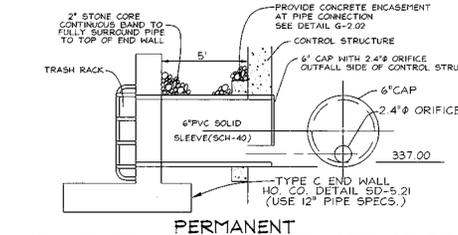
Area required for construction, embankment, and structure materials shall be cleared, graded and drained of trees. All trees, stumps or other debris shall be removed. Crown bars and sharp objects shall be removed to a depth of 12 inches. All areas shall be cleared and graded within 10 feet of the embankment.

**Excavation**

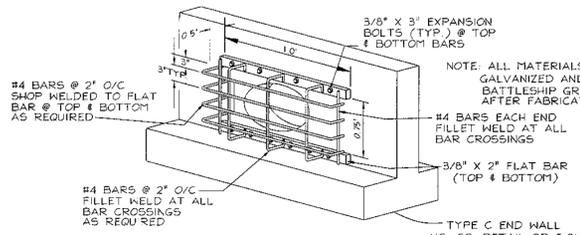
Excavation shall be done to the required depth and width. The bottom of the excavation shall be compacted to the required density. The sides of the excavation shall be sloped to the required angle. The bottom of the excavation shall be compacted to the required density. The sides of the excavation shall be sloped to the required angle.



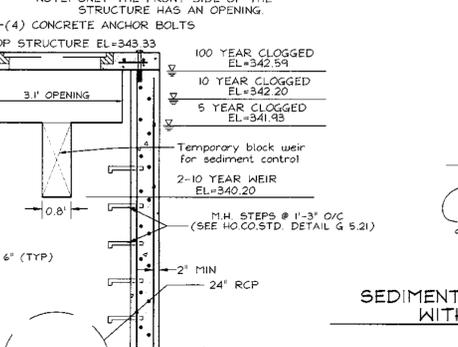
**CONCRETE ANTI-SEEP COLLAR DETAIL**  
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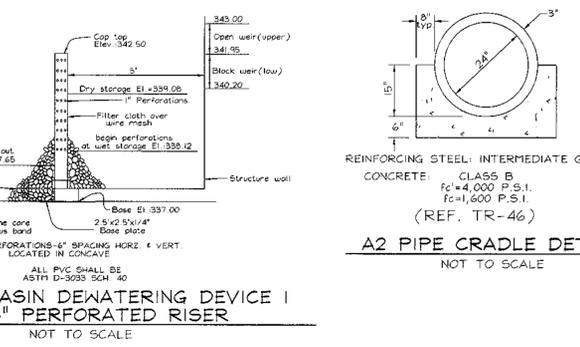
**PERMANENT ORIFICE DETAIL IN CONTROL STRUCTURE**  
NOT TO SCALE



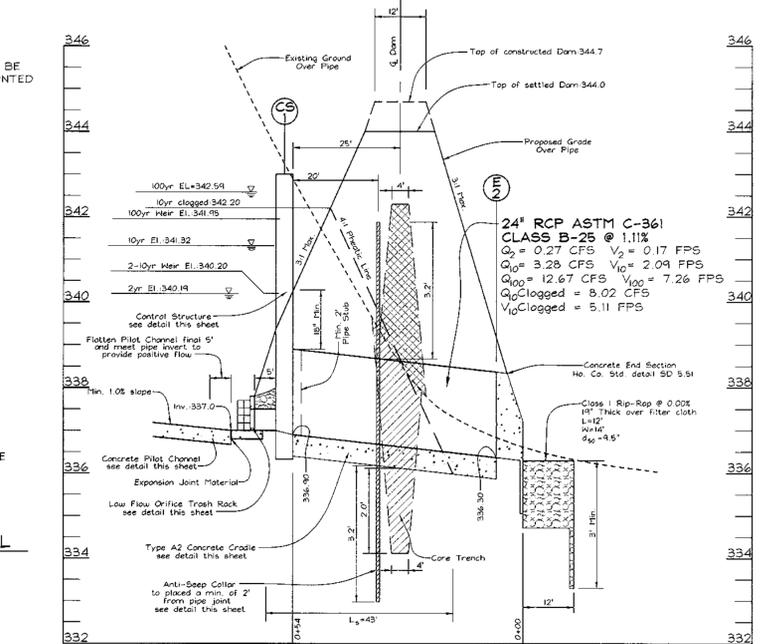
**LOW FLOW ORIFICE TRASH RACK DETAIL**  
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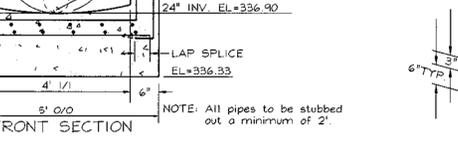
**SEDIMENT BASIN DEWATERING DEVICE I WITH 6\"/>**



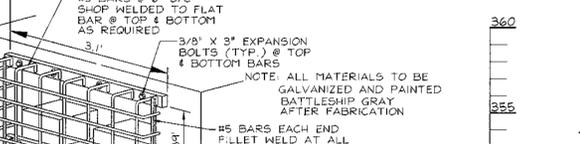
**A2 PIPE CRADLE DETAIL**  
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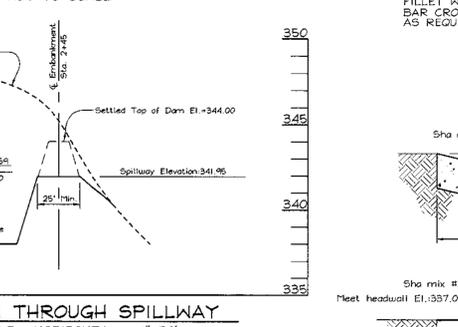
**SECTION THROUGH PRINCIPAL SPILLWAY**  
SCALE: HORIZONTAL - 1\"/>



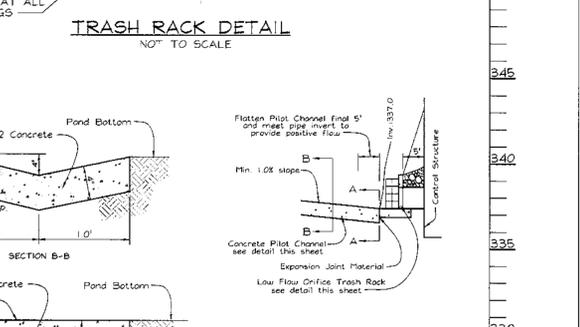
**PRECAST STRUCTURE CS-1 DETAIL**  
NOT TO SCALE



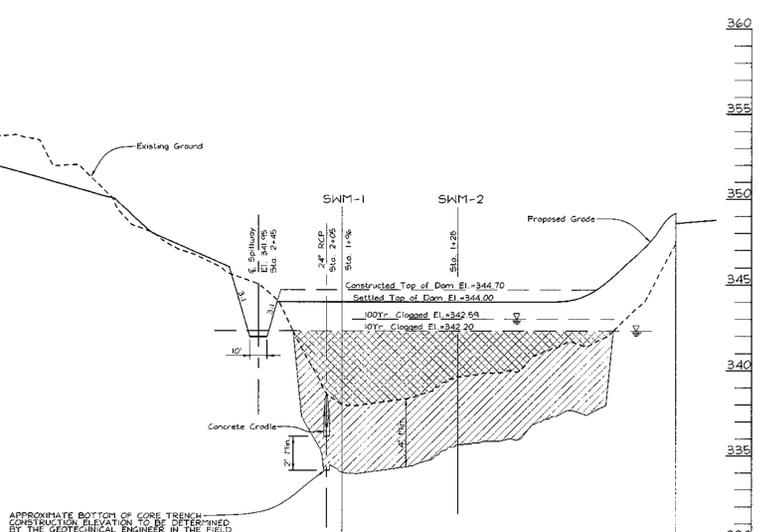
**TRASH RACK DETAIL**  
NOT TO SCALE



**SECTION THROUGH SPILLWAY**  
SCALE: HORIZONTAL - 1\"/>



**CONCRETE PILOT CHANNEL**  
NOT TO SCALE



**SECTION ALONG EMBANKMENT**  
SCALE: HORIZONTAL - 1\"/>

**Structure Basins**

Basins adjacent to pipes or structures shall be at all the type and quality conforming to that required for the adjoining fill material. The fill shall be placed in layers not exceeding 12 inches in thickness and compacted by hand tampers or other manually operated equipment. The material shall be placed in layers not exceeding 12 inches in thickness and compacted by hand tampers or other manually operated equipment.

**CONCRETE**

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 401, Class C.

**Reinforcing Steel**

Reinforcing steel shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 401, Class C.

**SEDIMENTATION**

Sedimentation shall be provided to prevent the accumulation of sediment in the spillway or in the structure. The sediment shall be removed from the spillway or in the structure. The sediment shall be removed from the spillway or in the structure.

**CONSTRUCTION**

Construction shall be done in accordance with the requirements of the Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 401, Class C.

**OWNER/DEVELOPER**

The Miller Land Company  
P.O. Box 307  
Elliott City, MD 21043  
410.461.8335

APPROVED - HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* DATE: 11/29/00

*[Signature]* DATE: 11/29/00

*[Signature]* DATE: 11/29/00

**ENGINEERS CERTIFICATE**

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*[Signature]* DATE: 11/19/00

*[Signature]* DATE: 11/19/00

**DEVELOPER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A SITE CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF TRANSPORTATION APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*[Signature]* DATE: 11/19/00

*[Signature]* DATE: 11/19/00

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA-NATURAL RESOURCES CONSERVATION SERVICE

DATE: 11/20/00

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DATE: 11/20/00

**STORMWATER MANAGEMENT NOTES AND DETAILS**

**MILLER CHEVROLET USED CARS**

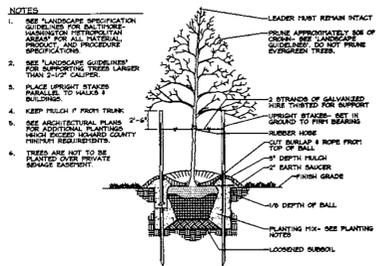
TAX MAP #24 GRID #11 PARCEL 717  
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VAVOGEL & ASSOCIATES**  
ENGINEERS/SURVEYORS/PLANNERS

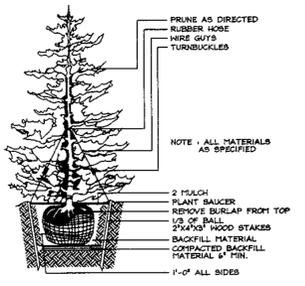
3681 Park Avenue, Suite 101 • Elliott City, Maryland 21043  
Tel 410.481.5828 Fax 410.465.3966

DESIGN BY: RHV  
DRAWN BY: PS  
CHECKED BY: RHV  
DATE: Nov. 09, 2000  
SCALE: 1"=30'  
W.C. NO.: 99-080

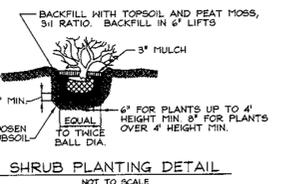
7 SHEET OF 12



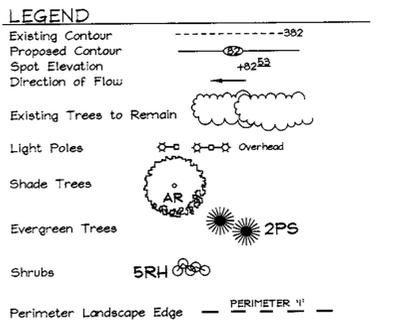
**TREE PLANTING AND STAKING**  
DECIDUOUS TREES UP TO 2-1/2" CALIPER  
NOT TO SCALE



**TYPICAL EVERGREEN TREE PLANTING DETAIL**  
NOT TO SCALE



**SHRUB PLANTING DETAIL**  
NOT TO SCALE



LANDSCAPE SCHEDULE				
KEY	QUAN.	BOTANICAL NAME	SIZE	REM
AR	21	Acer Rubrum 'October Glory' October Glory Red Maple	2 1/2"-3" Cal.	B & B
FP	12	Fraxinus pensylvanica 'Patmore' Patmore Green Ash	2 1/2"-3" Cal.	B & B
JC	7	Juniperus Chinensis 'Spartan' Spartan Juniper (subs Thuja o. 'Nigra' if required)	5 Gallon	Cont.
PS	114	Pinus sylvestris Scotch Pine (subs P. nigra/P. taeda if required)	6'-7' Ht.	B & B

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING, PERIMETER, AND STORMWATER FACILITY LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$24,750.00.
- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH MD LANDSCAPE CONTRACTORS ASSOCIATION PLANTING SPECIFICATIONS.
- SOILS TO BE TESTED AND AMENDED IN ACCORDANCE WITH MD LANDSCAPE CONTRACTORS ASSOCIATION SOIL PREPARATION SPECIFICATIONS. SCARIFY SIDES OF PLANTING PITS. WHERE SOILS ARE COMPACTED, DRILL THREE 1" HOLES IN THE BOTTOM OF EACH PIT FOR DRAINAGE.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.
- LIGHT POLES TO BE 30' BRONZE FIBERGLAS WITH 12' ARM. FIXTURE TO BE 250 WATT HPS CUTOFF. ALL EXTERIOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.

CATEGORY	SCHEDULE A PERIMETER LANDSCAPE EDGE					
	1	2	3	4	5	6
Perimeter/Frontage Designation	A	B	C	D	E	F
Linear Feet of Roadway	447	195	265	250	274	491
Linear Feet of Perimeter	-	-	-	-	-	-
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	Yes 60'	No	No	No	No	Yes 100'
Credit for Mail, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No	No
Number of Plants Required						
Shade Trees	1160	7	140	5	140	6
Evergreen Trees	-	-	1140	7	120	14
Number of Plants Provided						
Shade Trees	7	2	5	6	14	24
Evergreen Trees	-	-	-	-	-	46
Other Trees (2:1 Substitution)	-	-	-	-	-	-
Describe Plant Substitution Credits Below if needed	-	-	-	-	-	-

\* Existing Woods to Remain. Substitute two evergreens for one shade tree required for Perimeter 5 & 6.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of parking spaces	64
Number of trees & islands required	3
Number of trees & islands provided	-
Shade Trees	4
Other Trees (2:1 Substitution)	-

LINEAR FEET OF PERIMETER	SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING	
	54% LF B BUFFER	250 LF C BUFFER
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	YES, 44%	YES, 100%
NUMBER OF TREES REQUIRED	ADJ TO DRY- 7 SHADE TREES 8 EV. TREES	6 SHADE TREES 13 EV. TREES
NUMBER OF TREES PROVIDED*	7 SHADE TREES 8 EV. TREES 0 TREES	0 SHADE TREES 0 EV. TREES 0 TREES
OTHER TREES (2:1 SUBSTITUTION)	-	-

\* See Schedule A, Perimeters 3 & 4 for credit areas.

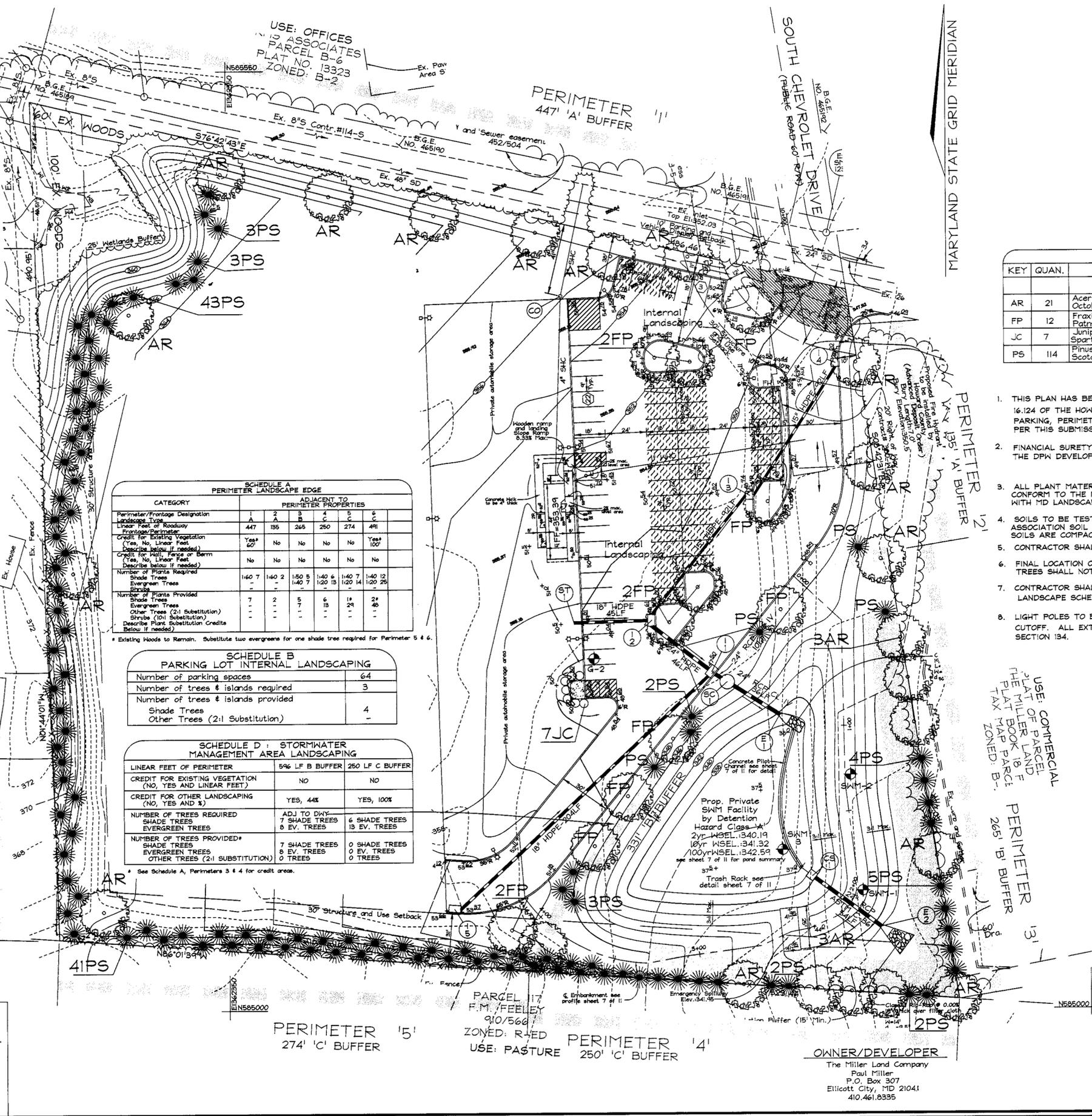
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chief Development Engineer* 11/29/00  
*Chief, Division of Land Development* 11/29/00  
*Director* 11/29/00

**DEVELOPER'S BUILDER'S CERTIFICATE**

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*Paul E. Miller* 11/19/00  
SIGNATURE OF DEVELOPER DATE



**LANDSCAPE PLAN**  
MILLER CHEVROLET USED CARS

TAX MAP #24 GRID #11  
2nd ELECTION DISTRICT

PARCEL 717  
HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES**  
ENGINEERS/SURVEYORS/PLANNERS  
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
Tel 410.461.5828 Fax 410.465.3968

DESIGN BY: MHM  
DRAWN BY: MHM  
CHECKED BY: JCO  
DATE: November 9, 2000  
SCALE: 1"=30'  
P.L.O. NO.: 99-080

8 SHEET OF 12



**WETLANDS DESCRIPTION**  
 H1 S34°04'15"E 14.22'  
 W2 S76°54'46"E 28.05'  
 N3 S32°00'55"E 7.34'  
 N4 S32°47'48"W 22.30'  
 W5 S20°16'22"W 18.09'  
 W6 S49°18'07"W 5.20'

**FOREST STAND TOTALS**

STAND F-1	1.20 ACRES
STAND F-2	3.78 ACRES
STAND F-3	0.13 ACRES
<b>TOTAL</b>	<b>5.11 ACRES</b>

**SUPPLEMENTAL INFORMATION**

GROSS SITE AREA	5.11 ACRES
ZONED	B-2
PROPOSED USE	COMMERCIAL DEVELOPMENT

**FOREST STAND ANALYSIS TABLE**

KEY	A. TYPE OF COMMUNITY	B. AREA	C. SOILS INFORMATION			D. EXISTING VEGETATION	E. STAND CHARACTERISTICS			F. FOREST AREA IN SENSITIVE ENVIRONMENT (Wetlands & Buffers)	HABITAT
			1. SOILS TYPES	2. TYPICAL FOREST COVER FOR SOILS TYPE	3. WOODLAND SUITABILITY INDEX		1. AGE (YRS)	2. AGE (YRS)	3. GENERAL CONDITION		
F-1	WOODS	1.20 Ac	MID2	MIXED UPLAND HARDWOODS MAINLY OAKS PER VA PINE	44	ROCK ELM, BLACK CHERRY, RAILWAY POPLAR, BLACK LOCUST, RED MAPLE, TULIP POPLAR, BYCAYORE, HICKORY	6-10'	30	FAIR	0.00 Ac	G
F-2	WOODS	3.78 Ac	GIB2 GIC2 GIB3 GIB2	UPLAND HARDWOODS MAINLY OAKS WATER TOL. HARDWOOD	30	RED MAPLE, BLACK CHERRY, BLACK LOCUST, ROCK ELM, SILVER MAPLE, RAILWAY POPLAR, TULIP POPLAR, BYCAYORE, BOX ELDER	8-12'	35	FAIR	0.02 Ac	G
F-3	WOODS	0.13 Ac	GIB2 GIB2	MIXED UPLAND HARDWOODS MAINLY OAKS	30	RED MAPLE, BOX ELDER SILVER MAPLE	6-8'	25	FAIR	0.08 Ac	G

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 CHIEF DEVELOPMENT ENGINEERING DIVISION  
 DATE: 11/29/00  
 DIRECTOR

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	K VALUE
GIB2	Glenns Loom, 3 to 6 percent slopes, moderately eroded	32
GIC2	Glenns Loom, 8 to 15 percent slopes, moderately eroded	32
GIB3	Glenns Loom, 15 to 25 percent slopes, moderately eroded	32
GIB2	Glenns Loom, 15 to 25 percent slopes, severely eroded	32
GIB2	Glenns Loom, 3 to 6 percent slopes, moderately eroded	32
MID2	Minor Loom, 15 to 25 percent slopes, moderately eroded	37

- LEGEND**
- SOILS DIVISION LINE
  - SOIL TYPE (SEE TABLE THIS SHEET)
  - EXISTING CONTOUR
  - EXISTING TREELINE
  - PROPERTY LINE
  - EXISTING TREE
  - AREA OF 15 TO 24.9 PERCENT SLOPES
  - AREA OF 25 PERCENT OR GREATER SLOPES
  - STAND DELINEATION LINE

- NOTES**
- THE PROPERTY OUTLINE IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY VOGEL AND ASSOCIATES, INC. IN FEBRUARY, 1997.
  - THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY VOGEL AND ASSOCIATES IN FEBRUARY, 1997.
  - THERE IS NO 100 YEAR FLOODPLAIN ON SITE
  - THERE ARE WETLANDS ON SITE
  - THERE ARE NO HISTORIC SITES ON THE SUBJECT PARCEL
  - SEE COVER SHEET FOR SITE VICINITY MAP

**FOREST CONSERVATION WORKSHEET**

**NET TRACT AREA:**  
 A. TOTAL TRACT AREA: 5.11 AC  
 B. AREA WITHIN 100 YEAR FLOODPLAIN: 0.00 AC  
 C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION: 0.00 AC  
 D. NET TRACT AREA: 5.11 AC

**LAND USE CATEGORY (FROM TABLE 3.2.1, PAGE 40, MANUAL)**  
 INPUT THE NUMBER 1\* UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY.  
 ARA MDR IDA HDR MPD CIA  
 0 0 0 0 0 1

**E. AFFOREST THRESHOLD:** 15% X D = 0.77 AC  
**F. CONSERVATION THRESHOLD:** 15% X D = 0.77 AC

**EXISTING FOREST COVER:**  
 G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN) = 5.11 AC  
 H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD = 4.34 AC  
 I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 4.34 AC

**BREAK EVEN POINT:** (0.2 X 4.34) + (0.77) = 1.64 AC  
 J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION = 0.87 AC  
 K. CLEARING PERMITTED WITHOUT MITIGATION = 3.47 AC

**PROPOSED FOREST CLEARING:**  
 L. TOTAL AREA OF FOREST TO BE CLEARED = 5.11 AC  
 M. TOTAL AREA OF FOREST TO BE RETAINED = 0.00 AC

**PLANTING REQUIREMENTS:**  
 N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD = 1.06 AC  
 O. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD = 1.54 AC  
 P. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD = 0.00 AC  
 R. TOTAL REFORESTATION REQUIRED = +2.60 AC  
 S. TOTAL AFFORESTATION REQUIRED = +0.00 AC  
 T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED = +2.60 AC ( 114,127.2 Sqr Ft )  
 (SEE SHEET 11 FOR OFF-SITE REFORESTATION EASEMENT AND INFORMATION)

**OWNER/DEVELOPER**  
 The Miller Land Company  
 Paul Miller  
 P.O. Box 307  
 Ellicott City, MD 21041  
 410.461.8335

**FOREST STAND DELINEATION PLAN  
 MILLER CHEVROLET USED CARS**

TAX MAP #24 GRID #11 PARCEL 717  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

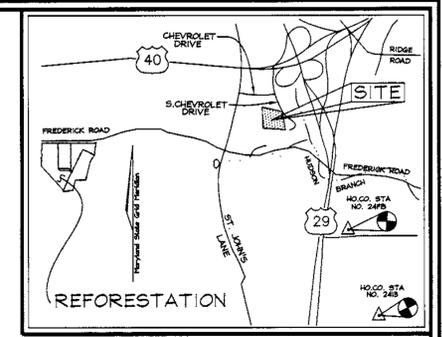
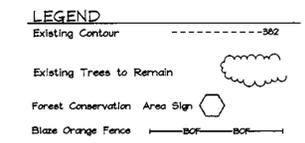
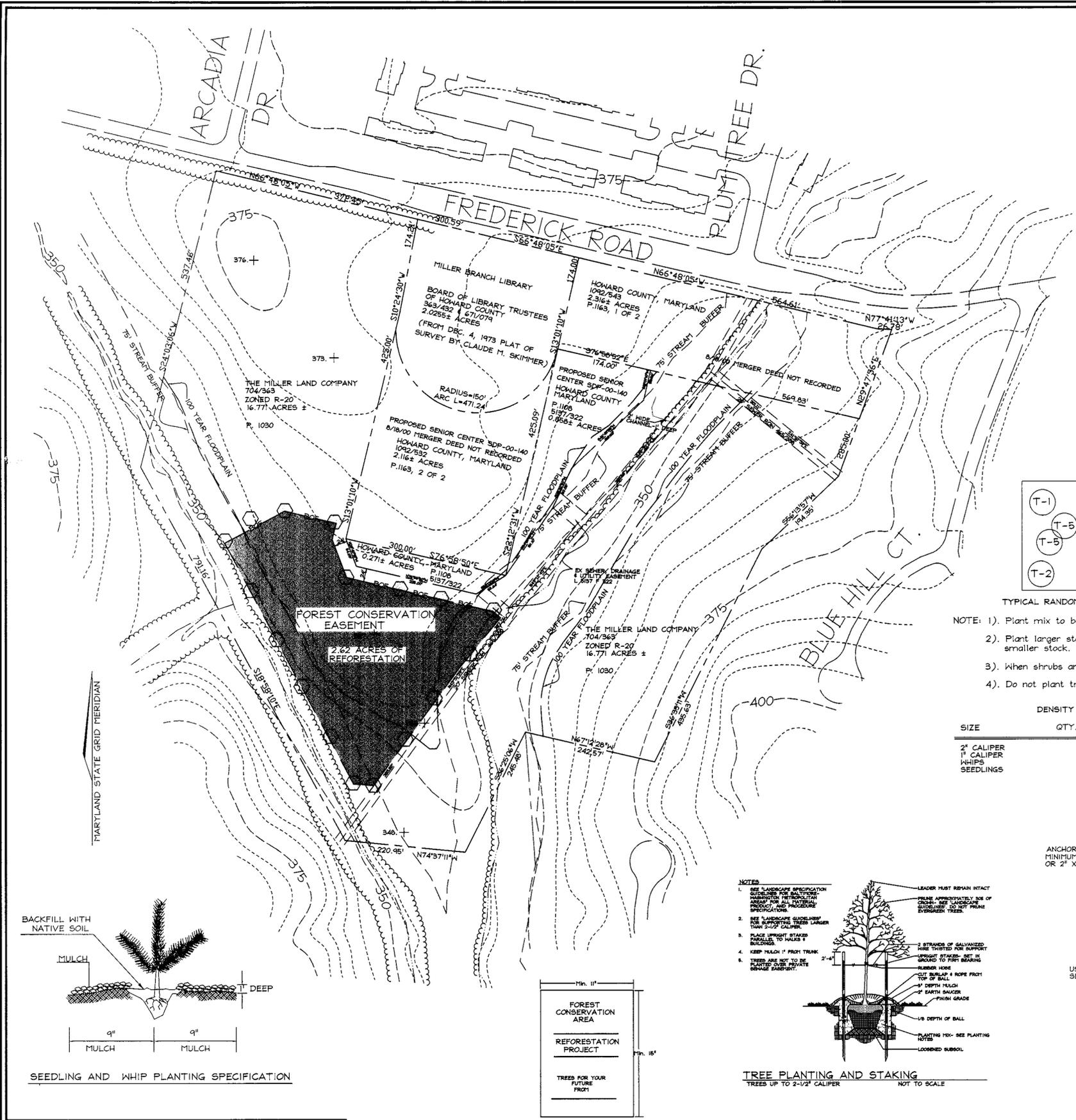


DESIGN BY: MHM  
 DRAWN BY: PS/MHM  
 CHECKED BY: JCO  
 DATE: June 29, 2000  
 SCALE: 1"=30'  
 W.O. NO.: 99-080

STATE OF MARYLAND  
 MARY H. MCKENNA, PLA No. 2095

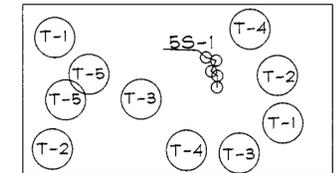
9 SHEET OF 12





- GENERAL NOTES**
- BOUNDARY AND EASEMENT INFORMATION PROVIDED BY OTHERS.
  - TOPOGRAPHY BASED ON HOWARD COUNTY 200 SCALE AERIAL PHOTOGRAPHY.
  - FOREST CONSERVATION EASEMENT IN THE AMOUNT OF 2.62 ACRES, SATISFIES THE REFORESTATION OBLIGATION OF SDP-98-136.
  - FOR ENVIRONMENTAL INVESTIGATIONS AND REPORTS SUCH AS WETLAND DELINEATIONS AND FLOOD PLAN STUDIES, SEE SDP-00-140.
  - FOREST STAND DELINEATION PREPARED BY VOGEL ASSOCIATES ON AUGUST 30, 2000.
  - SURETY IN THE AMOUNT OF \$34,258.16 HAS BEEN POSTED FOR THE FOREST CONSERVATION EASEMENT AS A PART OF THE DEVELOPER'S AGREEMENT.
  - THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

FOREST CONS. EASEMENT #1 PLANT SCHEDULE			
QUAN.	BOTANICAL NAME	SIZE	ACRES
62	Acer Rubrum Red Maple	1" Cal.	0.31
350	Acer Rubrum Red Maple	Seedlings	0.50
350	Juglans nigra Black Walnut	Seedlings	0.50
350	Prunus serotina Black Cherry	Seedlings	0.50
350	Quercus palustris Pin Oak	Seedlings	0.50
217	Sassafras albidum Sassafras	Seedlings	0.31

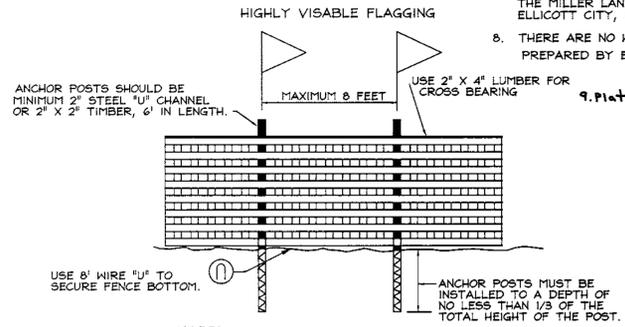


- TYPICAL RANDOM PLANT SPACING DETAIL & CHART**
- NOTE: 1). Plant mix to be 1/3 pioneer & 2/3 mid to late successional species  
 2). Plant larger stock and evergreens around perimeter to protect interior smaller stock.  
 3). When shrubs are specified, plant them in clusters  
 4). Do not plant trees in a grid pattern.

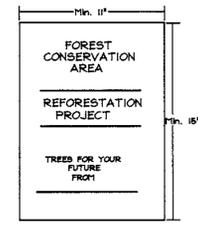
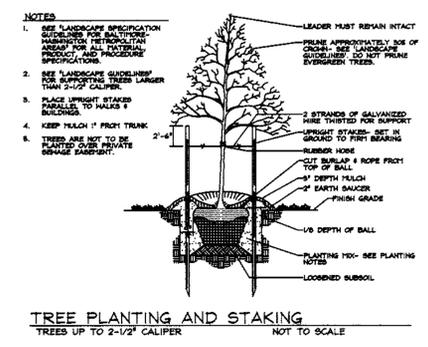
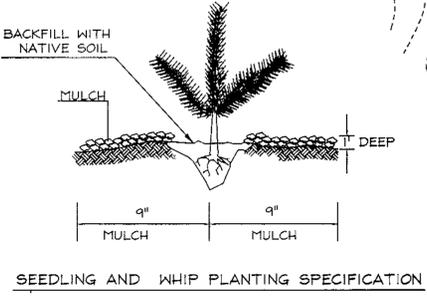
**DENSITY CHART**

SIZE	QTY. PER ACRE	AVERAGE SPACING
2" CALIPER	100	20'x20'
1" CALIPER	200	15'x15'
WHIPS	350	11'x11'
SEEDLINGS	700	8'x8'

- NOTES:**
- RANDOMLY SPACE SEEDLINGS / WHIPS SO THAT NO MORE THAN 5 OF ANY PARTICULAR SPECIES ARE PLANTED IN SUCCESSION. PLANT 1" CAL TREES AROUND PERIMETER OF REFORESTATION AREA.
  - ALL PROPOSED PLANT MATERIAL TO BE NATIVE PLANT SPECIES. NO ORNAMENTAL CULTIVARS TO BE USED.
  - REFORESTATION MANAGEMENT RECORDS SHOULD BE KEPT FOR HOWARD COUNTY REVIEW.
  - YEAR 1: INSPECT TREES FOR HEALTH AND VIGOR AT: A. BEGINNING OF GROWING SEASON; B. MIDSUMMER AND C. FALL. ADJUST WATERING, PEST CONTROL, WEEDING AND FEEDING AS NEEDED. AFTER ONE-YEAR REPLACE ANY TREES THAT DID NOT SURVIVE DURING THE NEXT PLANTING SEASON.
  - YEAR 2: INSPECT TREES FOR HEALTH AND VIGOR IN APRIL & OCTOBER. ADJUST WATERING, PEST CONTROL, WEEDING AND FEEDING AS NEEDED. REPLACE ANY TREES THAT DID NOT SURVIVE YEAR 2 DURING THE NEXT PLANTING SEASON UP TO 50% OF ORIGINAL INSTALLATION.
  - CONTRACTOR TO FOLLOW ALL STATE AND COUNTY GUIDELINES FOR AFFORESTATION & REFORESTATION.
  - OFF-SITE PROPERTY INFORMATION:  
TAX MAP #24, GRID 10, PARCEL 1030  
1.704 F363, 16.771± ACRES,  
THE MILLER LAND COMPANY, PO BOX 307  
ELLCOTT CITY, MARYLAND 21041
  - THERE ARE NO WETLANDS LOCATED WITHIN THE FOREST CONSERVATION EASEMENT PER DELINEATION PREPARED BY EXPLORATION RESEARCH, INC. DATED 10/24/2000.



- BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL**
- NO SCALE
- NOTES:
- Reforestation protection device only.
  - Boundaries of planting area should be staked and flagged prior to installing device.
  - Protection signage should be used.
  - Device should be maintained throughout construction.



- Note:**
- Bottom of signs to be higher than top of tree protection fence.
  - Signs to be placed 50' - 100' feet apart maximum. Conditions on site affecting visibility may warrant placing signs closer apart.
  - Attachment of signs to trees is prohibited.

**FOREST CONSERVATION AREA SIGN**

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chris Deanna* 11/20/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Carla Hamilton* 11/29/00  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Paul Miller* 11/25/00  
DIRECTOR DATE

**OWNER/DEVELOPER**

The Miller Land Company  
Paul Miller  
P.O. Box 307  
Ellicott City, MD 21041  
410.461.8335

**FOREST CONSERVATION PLAN (OFF-SITE REFORESTATION)**  
**MILLER CHEVROLET USED CARS**  
 TAX MAP #24 GRID #11 PARCEL 717 (OFF-SITE TM#24 G10 P1030)  
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

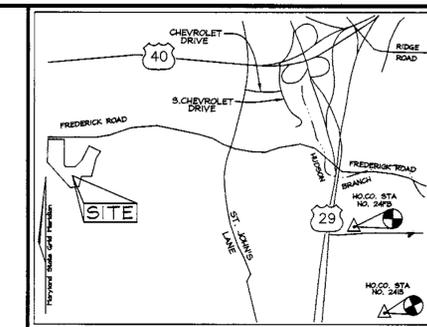
**VOGEL & ASSOCIATES**  
 ENGINEERS SURVEYORS PLANNERS  
 3891 Park Avenue, Suite 101 • Ellicott City, Maryland 21043  
 Tel: 410.461.5828 Fax: 410.465.3996

DESIGN BY: MMH  
 DRAWN BY: MMH  
 CHECKED BY: JCO  
 DATE: November 9, 2000  
 SCALE: 1"=100'  
 W.O. NO.: 99-080

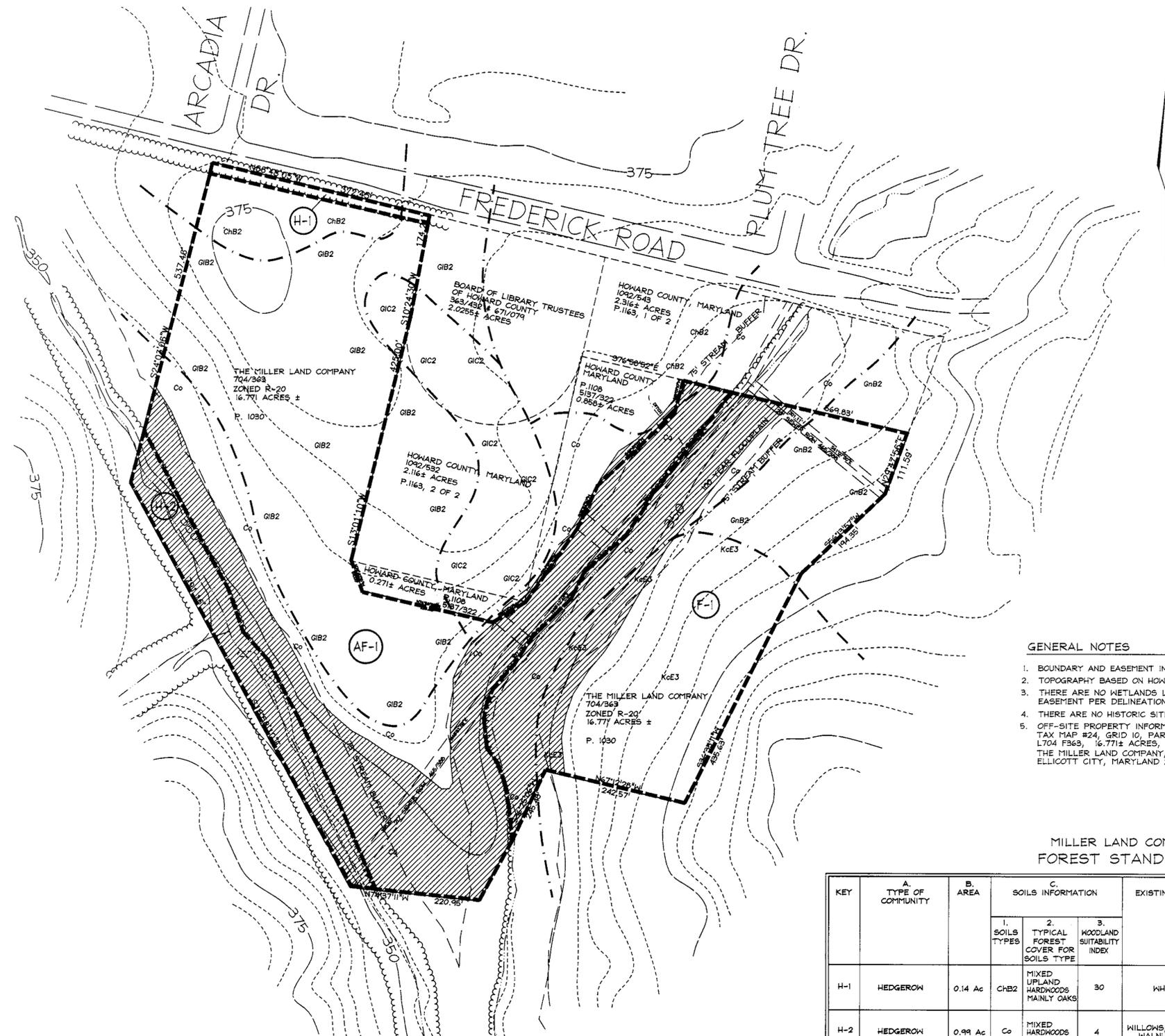
11 SHEET OF 12

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	"K" FAC
Co	CODORUS SILT LOAM	.49
ChB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	.32
GIB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	.32
GIC2	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	.32
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	.32
KcE3	KELLY CLAY LOAM, 15 TO 30 PERCENT SLOPES, SEVERELY ERODED	.32

NOTE: HOWARD SOIL SURVEY, MAP NUMBER 16



VICINITY MAP  
SCALE: 1"=2000'



**LEGEND**

- SOILS DIVISION LINE
- ChB2 SOIL TYPE (SEE TABLE THIS SHEET)
- EXISTING CONTOUR
- EXISTING TREELINE
- PROPERTY EVIDENCE
- PROPERTY LINE
- EXISTING TREE
- 100 YEAR FLOODPLAIN
- STAND DELINEATION LINE

**FOREST STAND TOTALS**

STAND F-1	5.50 ACRES
STAND H-1	0.14 ACRES
STAND H-2	0.99 ACRES
STAND AF-1	10.14 ACRES
<b>TOTAL</b>	<b>16.77 ACRES</b>

**SUPPLEMENTAL INFORMATION**

GROSS SITE AREA	16.77 ACRES
100 YEAR FLOODPLAIN	6.03 ACRES
NET AREA	10.74 ACRES
ZONED	RESIDENTIAL
PROPOSED USE	FOREST CONSERVATION

- GENERAL NOTES**
- BOUNDARY AND EASEMENT INFORMATION PROVIDED BY OTHERS.
  - TOPOGRAPHY BASED ON HOWARD COUNTY 200 SCALE AERIAL PHOTOGRAPHY.
  - THERE ARE NO WETLANDS LOCATED WITHIN THE FOREST CONSERVATION EASEMENT PER DELINEATION PREPARED BY EXPLORATION RESEARCH, INC. DATED 10/24/2000.
  - THERE ARE NO HISTORIC SITES ON THE SUBJECT PARCEL.
  - OFF-SITE PROPERTY INFORMATION:  
TAX MAP #24, GRID 10, PARCEL 1030  
L704 F363, 16.771± ACRES,  
THE MILLER LAND COMPANY, PO BOX 307  
ELLICOTT CITY, MARYLAND 21043

**OWNER/DEVELOPER**  
Paul Miller  
P.O. Box 307  
Ellicott City, MD 21041  
410.461.8335

MILLER LAND COMPANY PROPERTY  
FOREST STAND ANALYSIS TABLE

KEY	A. TYPE OF COMMUNITY	B. AREA	C. SOILS INFORMATION			D. EXISTING VEGETATION	E. STAND CHARACTERISTICS			F. FOREST AREA IN SEN. ENV. 100 YR FP	G. HABITAT
			1. SOILS TYPES	2. TYPICAL FOREST COVER FOR SOILS TYPE	3. WOODLAND SUITABILITY INDEX		1. SIZE (DIA.)	2. AGE (YRS)	3. GENERAL CONDITION		
H-1	HEDGEROW	0.14 Ac	ChB2	MIXED UPLAND HARDWOODS MAINLY OAKS	30	WHITE PINES	20"	40	FAIR TO GOOD	0.00 Ac	G
H-2	HEDGEROW	0.99 Ac	Co	MIXED HARDWOODS MAINLY OAKS	4	WILLOWS, SILVER MAPLES WALNUT, MULBERRY	6"-12"	30	GOOD	0.99 Ac	G
F-1	WOODS	5.50 Ac	GnB2 Co KcE3	MIXED WATER TOLERANT HARDWOODS MAINLY OAKS	12 34 4	WALNUT, TULIP POPLAR, BLACK LOCUST, SILVER MAPLE, RED OAK, MULBERRY, CATALPA, CHERRY	8"-24"	60	GOOD	1.81 Ac	G
AF-1	ABANDONED FIELD	10.14 Ac	GIB2 Co GIC2 ChB2	MIXED HARDWOODS MAINLY OAKS	30 4 30 30	SQUASH, TEAR THUMB, JIMSON WEED, CHICORY	N/A	N/A	N/A	3.23 Ac	N/A

**MILLER LAND COMPANY PROPERTY**  
OFF-SITE FOREST STAND DELINEATION

TAX MAP #24 GRID: 10 2nd ELECTION DISTRICT  
PARCEL: 1030 DEED REF.: L.704/F.363 HOWARD COUNTY, MARYLAND

**VOGEL & ASSOCIATES, INC.**  
ENGINEERS - SURVEYORS - PLANNERS

3691 PARK AVENUE, SUITE 101 TELEPHONE: (410) 461-5828  
ELLICOTT CITY, MARYLAND 21043 FAX: (410) 465-3968

DESIGN BY: M.H.M.  
DRAWN BY: M.D.M.  
CHECKED BY: M.H.M.  
DATE: NOV. 09, 2000  
SCALE: 1"=100'  
W.O. NO.: 99-080

MARY H. MCKENNA RLA #2039

12 SHEET OF 12

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*John D. ...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 11/27/00

*Andy Hamilton*  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 11/29/00

*Frank ...*  
DIRECTOR DATE: 11/29/00