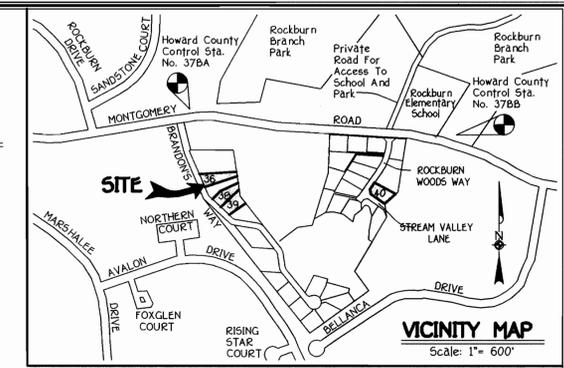


**BENCH MARKS**

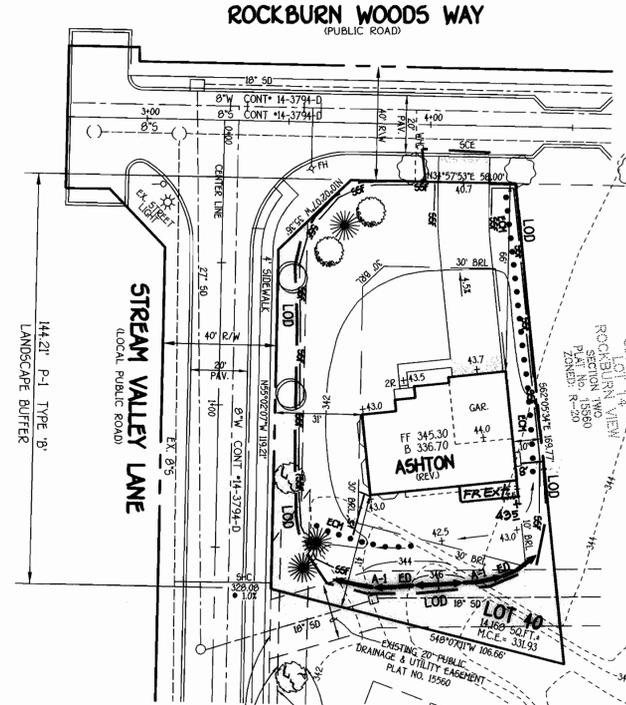
37 BA  
N.563785.618  
E.137634.172  
ELEV. 394.786

37 BB  
N.563663.415  
E.137804.471  
ELEV. 373.822



**GENERAL NOTES:**

- SUBJECT PROPERTY ZONED R-20 PER 10/18/93 COMPREHENSIVE ZONING PLAN
  - AREA OF PLAN SUBMITTED: 1.348 AC.
  - TOTAL NUMBER OF LOTS: 4 (5P)
  - PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED DWELLING UNIT
  - TOPOGRAPHIC IS TAKEN FROM FINAL ROAD CONSTRUCTION, GRADING AND STORMWATER MANAGEMENT PLANS F-99-163, F-02-176 & F-03-16
  - BOUNDARY SURVEY PERFORMED BY: FISHER COLLINS AND CARTER, INC. ON OR ABOUT MARCH 1989.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL MONUMENT 37BA N 171842.2001 (METERS)
- HOWARD COUNTY MONUMENT 37BB N 171842.2001 (METERS) E 420027.5757 (METERS)
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
  - THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: 5-99-103, 5-97-06, P-10-1, P-98-16, F-99-163, F-02-109, F-01-169, F-02-188 & F-03-163. SEWER CONT. #10-1602 AND WAS CONT.#14-3794-D.
  - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
  - THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THE SITE DEVELOPMENT PLAN ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS: F-02-188 AND/OR APPROVED WATER AND SEWER PLANS: CONTRACT NO. 14-3987-D WATER CONT. NO. 10-1602 AND F99-103 FOR STORM WATER MANAGEMENT PLANS.
  - CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT PROPERTY LINE PRIOR TO CONSTRUCTION.
  - IN ACCORDANCE WITH SECTION 120 (A) AND (B) OF THE HOWARD COUNTY ZONING REGULATIONS PORCHES, FIREPLACES, CHIMNEYS, EXTERIOR STAIRWAYS, DECKS AND BAY WINDOWS NOT MORE THAN 18 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' INTO THE FRONT OR REAR YARD SETBACK.
  - ALL DOWNSPOUTS ARE TO DRAIN TO THE PUBLIC ROAD.
  - STORM WATER MANAGEMENT WILL BE PROVIDED BY EXISTING DETENTION POND LOCATED ON LOT 7 PRESENTLY OWNED BY THE HOMEOWNERS ASSOCIATION. WATER QUALITY IS PROVIDED BY RETENTION AND SHALLOW MARSH PER F-99-163.
  - THE FOREST CONSERVATION OBLIGATIONS FOR THIS SITE IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL HAVE BEEN MET UNDER F-99-163 AND F-02-109.
  - CONTRACTOR TO USE HOWARD COUNTY STANDARD DETAIL R6.6 RESIDENTIAL DRIVEWAY ENTRANCE. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY PERMIT FOR ANY NEW DWELLING TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    - WIDTH - 12 FEET SERVING MORE THAN ONE RESIDENCE.
    - SURFACE - 6 INCHES ON COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN).
    - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 - FOOT TURNING RADIUS.
    - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H2S LOADING).
    - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
    - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
    - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
  - STREET TREES AND PERIMETER LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED ROAD CONSTRUCTION DRAWING FOR F-99-163 AND F-02-109. SIDE PERIMETER STREET TREE PLANTINGS SHALL BE PROVIDED ON LOT 40 AS SHOWN ON THIS SITE PLAN. SURETY FOR 2 SHADE .: TREES AND 3 EVERGREEN TREES IN THE AMOUNT OF \$1050.00 SHALL BE POSTED WITH THE GRADING PERMIT APPLICATION FOR LOT 40.
  - THIS PLAN IS SUBJECT TO THE FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND ZONING REGULATIONS AS AMENDED UNDER COUNCIL BILL #50-2001.
  - THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
  - THE OPEN SPACE REQUIREMENTS FOR THIS SUBDIVISION HAVE BEEN SATISFIED UNDER F-02-018. DETAIL R6.05 AND R6.06.
  - GRAVITY SEWER SERVICE, FIRST FLOOR ONLY, BASEMENT SEWER SERVICE TO BE PROVIDED BY PRIVATE ON-SITE PUMP FOR LOTS 36,38 AND 39.
  - STOCK PILE TO BE USED AS FILL FOR LOTS 9 THRU 13 ON SDP-02-109.



**LANDSCAPE SCHEDULE**

QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
2		ACER SACCHARUM	GREEN MOUNTAIN SUGAR MAPLE	CAULPEX FULL CROWN 8/8
3		PINUS STROBUS	EASTERN WHITE PINE	6'-8' HGT.

**SCHEDULE A PERIMETER LANDSCAPE EDGE**

LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERMETER	NUMBER OF PLANTS REQUIRED
40	P-1	ADJACENT TO ROADWAY	B	144.27	2 3 5

**LEGEND**

SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL
	EXISTING CONTOUR 10' INTERVAL
	PROPOSED CONTOUR 2' INTERVAL
	PROPOSED CONTOUR 10' INTERVAL
	SPOT ELEVATION
	SSF-SSF SUPER SILT FENCE
	LOD LIMIT OF DISTURBANCE
	EROSION CONTROL MATTING
	EARTH DIKE
	EXISTING SHADE TREES
	PER F-99-163 & F-02-018.

**ADDRESS CHART**

LOT	STREET ADDRESS
36	5809 BRANDON'S WAY
38	5813 BRANDON'S WAY
39	5815 BRANDON'S WAY
40	5829 ROCKBURN WOODS WAY

**SHEET INDEX**

SHEET NO.	DESCRIPTION
1	SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN
2	SEDIMENT/EROSION CONTROL NOTES & DETAILS

**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 YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Brian Boy  
12-02-02  
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 conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Earl D. Collins  
12-02-02  
Date

**DEVELOPER'S CERTIFICATE**

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

Brian Boy  
12-02-02  
Date

Reviewed for HOWARD SCD and meets Technical Requirements.

Jim Meyer  
12/12/02  
Date

John H. Hester  
12/12/02  
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

12/18/02  
Date

12/15/02  
Date

12/18/02  
Date

**SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN**

**SINGLE FAMILY DETACHED ROCKBURN VIEW**

LOTS 36, 38, 39 AND 40

TAX MAP No: 37 PARCEL: 563 & PART OF 669  
FIRST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: OCTOBER, 2002  
SHEET 1 OF 2

**OWNER/DEVELOPER**  
CORNERSTONE HOLDINGS, L.L.C.  
9691 NORFOLK AVENUE  
LAUREL, MARYLAND 20723  
410-792-2526

PROJECT	SECTION	LOTS NO.
ROCKBURN VIEW	2	LOTS 36, 38, 39 AND 40

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15545 15560	4	R-20	37	FIRST	6011.01

WATER CODE	SEWER CODE
D04	2153800



DESIGN BY: J.M.E.  
DRAWN BY: T.P.F.  
CHECKED BY: J.M.E.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 3072 BALTIMORE NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
410-461-2000

NO.	REVISION	DATE
1	Add 6.0' FR. Ext. lot 40	3-14-03

K:\Drawings\330610 Michael Project\Site Development Plans\SDP\330610 SDP Lot 36-40.dwg, 12/02/2002, 10:07:45 AM

**SDP 03-55**

# 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

## PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and the rate of runoff, thereby reducing sediment loads and runoff to downstream areas, and improving wildlife habitat and visual resources.

## CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is intended to provide a minimum standard for the establishment of vegetation on exposed soil for a one (1) year period. Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas being left idle between construction phases, earth cuts, etc. and for Permanent Seeding are lawns, dunes, cut and fill slopes and other areas at final grade, former stockpiles and staging areas, etc.

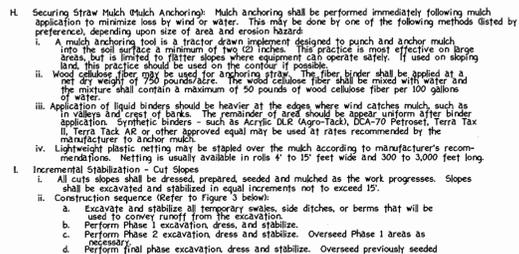
## EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeded preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

## SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation**
  - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
  - Perform all grading operations at right angles to the slope and shaping is not usually necessary for temporary seeding.
  - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendments (Fertilizer and Lime Specifications)**
  - Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
  - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer and lime may be substituted for fertilizer and lime if approved by the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
  - Lime materials shall be ground limestone hydrated or burnt lime may be substituted which contains at least 50% total oxides calcium oxide plus maximum oxide impurities shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
  - Incorporate lime and fertilizer into the top 3"-5" of soil by diking or other suitable means.
- Seeded Preparation**
  - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment. Disc harrows or chain plow or ripper mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughest condition. Sloped areas (greater than 1:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
  - Apply fertilizer and lime as prescribed on the plans.
  - In corporate lime and fertilizer into the top 3"-5" of soil by diking or other suitable means.
- Permanent Seeding**
  - Minimum soil conditions required for permanent vegetative establishment:
    - Soil pH shall be between 6.0 and 8.0.
    - Suitable sites shall be less than 500 parts per million (ppm).
    - The soil shall contain less than 40% clay, but enough fine grained material (50% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loess or other soil deposits are to be planted, then a sandy soil (50% silt plus clay) would be acceptable.
    - Soil shall contain 1.5% minimum organic matter by weight.
    - Soil must contain sufficient pore space to permit adequate root penetration.
    - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
  - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3" to 5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
  - Apply soil amendments as per soil test or be included on the plans.
  - Mix soil amendments into the top 3"-5" of topsoil by diking or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seeded preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 1:1) should be tracked by a dicer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3"-5" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

- Seed Specifications**
  - All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to retesting by a recognized seed laboratory. All seed used shall have been tested within 6 months immediately preceding the date of sowing such material on this job.
  - Seeds shall be made available to the inspector to verify type and rate of seed used.
  - Inoculant - The inoculant for treating legume seed in the seed mixture shall be a pure culture of nitrogen fixing bacteria. An exception is if legumes or other plants are to be planted, then a sandy soil (50% silt plus clay) would be acceptable. Use four times the recommended rate when hydroseeding. It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° F. can weaken bacteria and make the inoculant less effective.
- Methods of Seeding**
  - Hydroseeding - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded or a backpack seeder.
    - If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen; P2O5 (phosphorous) 200 lbs/acre; K2O (potassium) 200 lbs/acre.
    - Lime - use only organic agricultural limestone, up to 3 tons per acre may be applied by hydroseeding. However, not more than 2 tons per acre may be applied by any other means. Do not use burnt or hydrated lime when hydroseeding.
    - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
  - Dry Seeding - This method uses conventional drop or broadcast spreaders.
    - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summary or Tables 20.0-1 and 20.0-2. The seed area shall then be rolled with a weighted roller to provide good seed to soil contact.
    - Where practical, seed shall be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
  - Backpack Seeding - Mechanized seeders that apply and cover seed with soil.
    - Cultivating seeders are required to bury the seed in such a fashion as to provide at least 1/4" of soil covering. Seeded must be firm after planting.
    - Where practical, seed shall be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Mulch Specifications**
  - Straw shall consist of thoroughly threshed wheat, rice or oat straw, reasonable bright in color, and shall not be musty, moldy, or excessively dusty and shall be free of noxious weed seeds as specified in the following sections.
  - Wood Cellulose Fiber Mulch (WCFF)
    - WCFF shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
    - WCFF shall be dried green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniform spread slurry.
    - WCFF, including dye, shall contain no germination or growth inhibiting factors.
    - WCFF materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry.
    - WCFF materials shall form a batter-like ground cover on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
    - WCFF material shall contain no elements or compounds that are toxic to plants that will be phytotoxic.
    - WCFF must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 6.0 to 8.5, ash content of 2% maximum, and water holding capacity of 20% minimum.
  - Note: Only sterile straw mulch should be used in areas where one species of grass is desired.
  - Hydro Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed. If this section is maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
  - When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the entire surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
  - Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.



- Securing Straw Mulch (Mach Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference, depending upon size of area and erosion hazard):
  - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping areas, this practice should be used for anchoring straw. The fiber binder shall be applied at a rate of 50 lbs. per acre. Synthetic binders such as Acrylic Urethane (Acro-Tack), DCA-70 Petro-Tack, Terra Tack, Terra Tack 48, or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
  - Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.
- Incremental Stabilization - Cut Slopes
  - Embankments shall be constructed in lifts as prescribed on the plans.
  - Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 10 feet. Final grading and permanent seed and mulch shall be applied to the top edge of the last lift.
  - At the end of each lift, temporary berms and pipe slope drains should be constructed along the top edge of the lift to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.
- Construction Sequence (Refer to Figure 3 below)
  - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
  - Perform Phase 1 excavation, dress, and stabilize.
  - Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as specified.
  - Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.

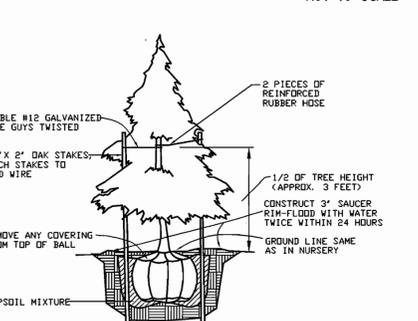
Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions into the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

## SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING, LICENSED AND PERMITS, SEDIMENT CONTROL, PRIOR TO THE START OF ANY CONSTRUCTION (031-1955).
- 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 THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES.
  - 14 CALENDAR DAYS FOR ALL DISTURBED AREAS IN EXCESS OF 2 ACRES.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 50), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 50). 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 THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR HAS OBTAINED FROM THE PERMITS SECTION APPROVAL FOR REMOVAL.
- 7) SITE ANALYSIS:
 

TOTAL AREA OF SITE	1,078 ACRES
AREA DISTURBED	0,435 ACRES
AREA TO BE ROOFED OR PAVED	0,187 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0,449 ACRES
TOTAL CUT	187 CU YDS.
TOTAL FILL	400 CU YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A CU YDS.
- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING, UTILITY PLACEMENT OR UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE OBTAINED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR CONSTRUCTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11) 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.

## EARTH DIKE NOT TO SCALE



## EVERGREEN PLANTING DETAIL NOT TO SCALE

Plants, related material and operations shall meet the detailed description as given on the plans and as described herein.

## PLANTING SPECIFICATIONS

All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plans and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, defoliating roots, sun scald injuries, diseases of the bark, stem, twigs, insect pest eggs, borers and all forms of insect infestations or objectionable deformations. Plant material that is weak or which has been cut back by larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be kept in cool storage until they are to be planted.

Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", 6th Edition, prepared by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all updates.

Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Contractors' attention is directed to the maintenance requirements found within the one year specifications including watering and establishment of seedling materials.

Contractor shall be responsible for notifying utility companies, utility contractors and Miss Utility a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or 48 inch orange safety fence at the dig line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season or completion of site construction.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plant list precedence.

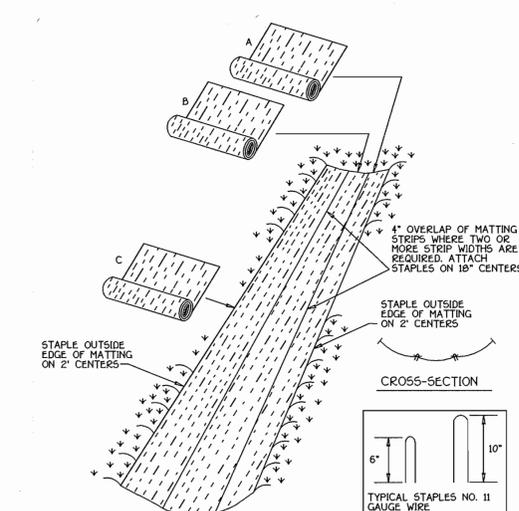
All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.

Positive drainage shall be maintained in planting beds 2 percent slope.

Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen grade fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.

Wood Contact: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated.

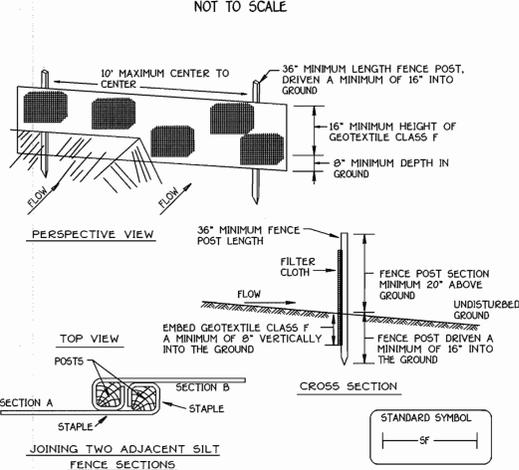
All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.



## STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between rows is 6".
  - Staple the 4" overlap in the channel center using an 18" spacing between staples.
  - Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
  - Staples shall be placed 2' apart with 4 rows for each strip, 2' outer rows, and 2' alternating rows down the center.
  - Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
  - The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow will enter from the edge of the matting then the area affected by the flow must be key-in.

## EROSION CONTROL MATTING NOT TO SCALE



## CONSTRUCTION SPECIFICATIONS

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 100 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:
 

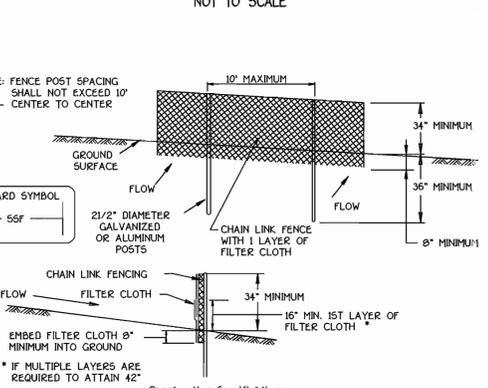
Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal ft <sup>2</sup> /minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

## DESIGN CRITERIA

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 101	Unlimited	Unlimited
10 - 20%	101 - 24	200 feet	1,500 feet
20 - 33%	25 - 31	100 feet	1,000 feet
33 - 50%	31 - 24	100 feet	500 feet
50% +	21 +	50 feet	250 feet

## SILT FENCE NOT TO SCALE

## STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



## CONSTRUCTION SPECIFICATIONS

- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid sections.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
 

Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal ft <sup>2</sup> /minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

## DESIGN CRITERIA

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 101	Unlimited	Unlimited
10 - 20%	101 - 24	200 feet	1,500 feet
20 - 33%	25 - 31	100 feet	1,000 feet
33 - 50%	31 - 24	100 feet	500 feet
50% +	21 +	50 feet	250 feet

## SUPER SILT FENCE NOT TO SCALE

## SEDIMENT, EROSION CONTROL NOTES & DETAILS

### SINGLE FAMILY DETACHED ROCKBURN VIEW

LOTS 36, 38, 39 AND 40

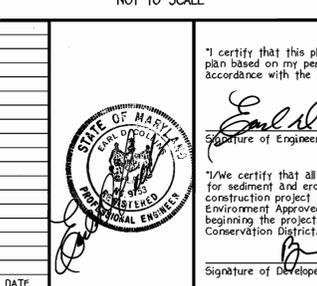
TAX MAP No: 37 PARCEL: 563 & PART OF 669  
FIRST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: OCTOBER, 2002

SHEET 2 OF 2

## SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT 7 DAYS
- INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN 7 DAYS
- CLEAR AND GRUB TO LIMITS OF DISTURBANCE 4 DAYS
- INSTALL TEMPORARY SEEDING 2 DAYS
- CONSTRUCT BUILDINGS 60 DAYS
- FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE 14 DAYS
- REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR. 7 DAYS

## TREE PLANTING DETAIL NOT TO SCALE



## 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 Howard Soil Conservation District."

Signature of Engineer: *Earl D. Collins* Date: 12-2-02

## DEVELOPER'S CERTIFICATE

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

Signature of Developer: *Debra Boy* Date: 12-02-02

## APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *John S. Smith* Date: 12/18/02

Chief, Development Engineering Division: *John S. Smith* Date: 12/18/02

PROJECT: ROCKBURN VIEW SECTION: 2 LOTS NO. 36, 38, 39 AND 40

PLAT: 15545 15546 BLOCK NO. 4 ZONE R-20 TAX/ZONE 37 ELEC. DIST. FIRST CENSUS TR. 601.01

WATER CODE D04 SEWER CODE 2153000

## OWNER/DEVELOPER

CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVENUE LAUREL, MARYLAND 20723 410-792-2526

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL Pkwy. ELKTON CITY, MARYLAND 2042 (410) 461-2899

STATE OF MARYLAND PROFESSIONAL ENGINEER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

SEDIMENT, EROSION CONTROL NOTES & DETAILS