

### 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 vegetation growth. Soil of concern here low moisture content, low nutrient levels, low pH, moderate to high salinity, and/or unacceptably low gradation.

**Conditions Where Practice Applies**

- The practice is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and nutrients.
  - The original soil is vegetative contains material toxic to plant growth.
  - The soil is so acidic that treatment with lime is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for erosion 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 on test forms in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used on topsoil must meet the following:
  - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy silt 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 textural materials and shall contain less than 5% by volume of cinders, ashes, slag, coarse fragments, gravel, stones, roots, trash, or other materials larger than 1 1/2\"/>
  - 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 4-6 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedure:
    - Forest protection device only;
    - Retention area will be set as part of the review process;
    - Boundaries of retention area should be staked and flagged prior to installing device;
    - Root damage should be avoided;
    - Protection signage should be used;
    - Device should be maintained throughout construction.

### PERMANENT SEEDING NOTES

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

**SEEDING PREPARATION:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:

- 1) Preparer: Apply 2 tons per acre dolomitic limestone (92 lb/100 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/100 sq ft) before seeding. Water or clear into upper three inches of soil at the time of seeding, apply 400 lbs per acre 20-20-20 fertilizer (8 lbs/100 sq ft).
- 2) Acceptable: Apply 2 tons per acre dolomitic limestone (92 lb/100 sq ft) and apply 1000 lbs per acre 10-10-10 fertilizer (20 lbs/100 sq ft) before seeding. Water or clear into upper three inches of soil.

**SEEDING:** For the periods March 1 thru April 30, and August 1 thru October 31, seed with 60 lbs. per acre (1.4 lbs/100 sq ft) of Kentucky 31 Tall Fescue, for the period May 1 thru July 31, seed with 120 lbs/100 sq ft of Tall Fescue per acre and 2 lbs. per acre of clover for the period August 1 thru October 31, seed with 3 lbs/100 sq ft of Tall Fescue and 2 lbs/100 sq ft of clover for the period November 1 thru February 28, protect site by applying 2 tons per acre of well composted manure and seed on slope or position in the spring, or use seed.

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**MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of undisturbed erodible material immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal/acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal/acre (5 gal/1000 sq ft) for anchors.

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

### SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1886).

2. Sediment control structures are to be installed according to the provisions of this plan and are to be in place and functioning at all times during construction. For soil erosion and sediment control, and erosion threats, the design of the sediment control structures, including their location, type, material, and design, shall be approved by the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction.

3. All sediment control structures shall be installed within the time period specified above, in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division Manual, Storm Drainage 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage 7.

4. All sediment control structures shall be fenced and warning signs placed around structures to restrict access to structures and to prohibit access to structures. The Howard County Department of Inspections, Licenses and Permits, Sediment Control Division Manual, Storm Drainage 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage 7, shall be used for structure design and construction.

5. 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.

6. All sediment control structures shall be installed within the time period specified above, in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division Manual, Storm Drainage 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage 7.

7. SITE ANALYSIS:  
Total Area of Site: 0.38 Acres  
Area Disturbed: 0.38 Acres  
Area to be reseeded or planted: 0.38 Acres  
Area to be vegetatively stabilized: 0.38 Acres  
Total Area: 0.38 Acres  
Off-site Water/Storm Area Location: 218 LF  
Total Area: 218 LF

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County DEP Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required before installation of perimeter erosion and sediment controls, and before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may be authorized without the initial approval by the inspection agency in a memorandum.

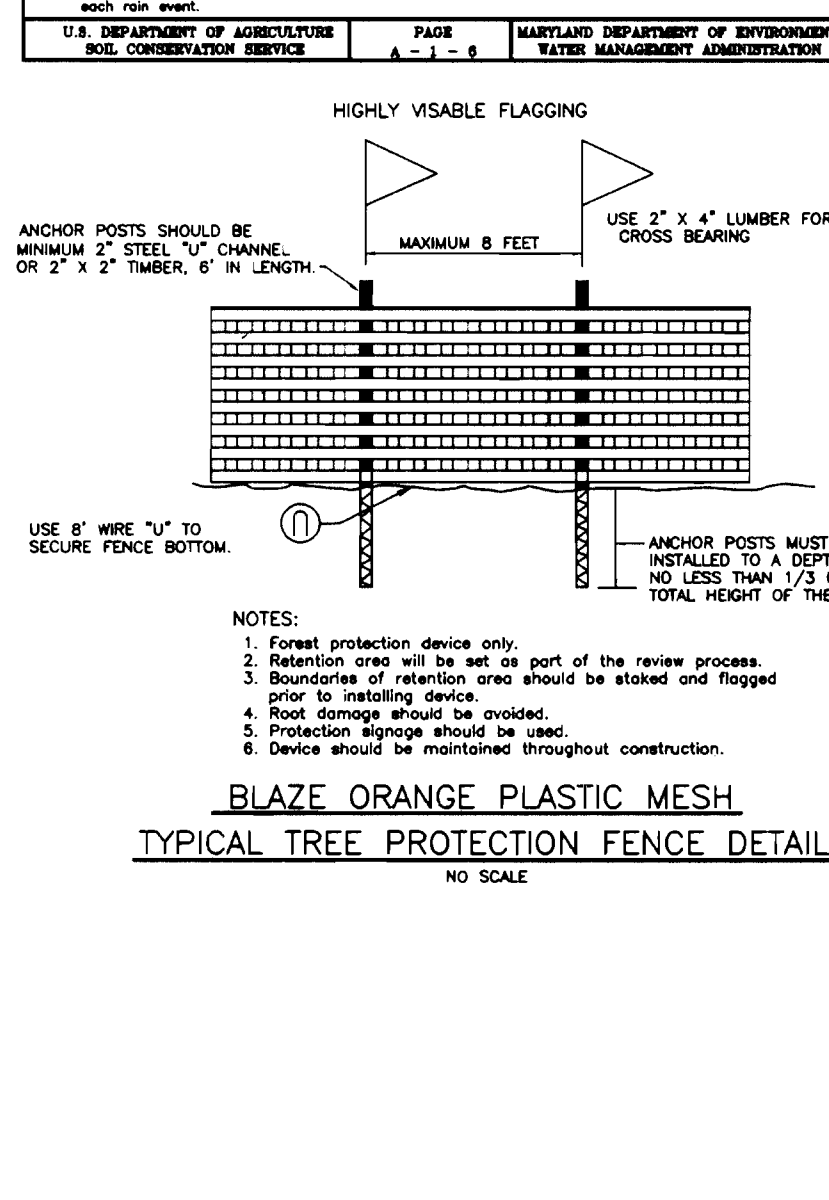
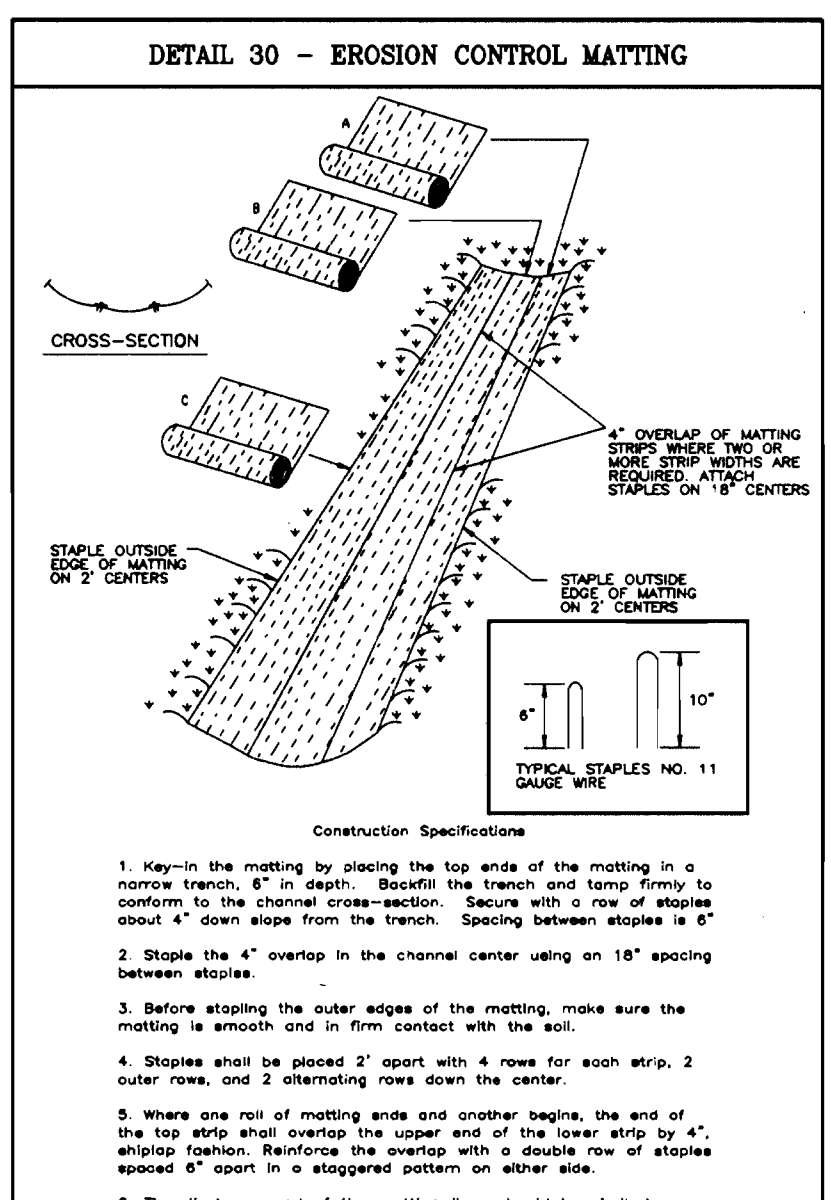
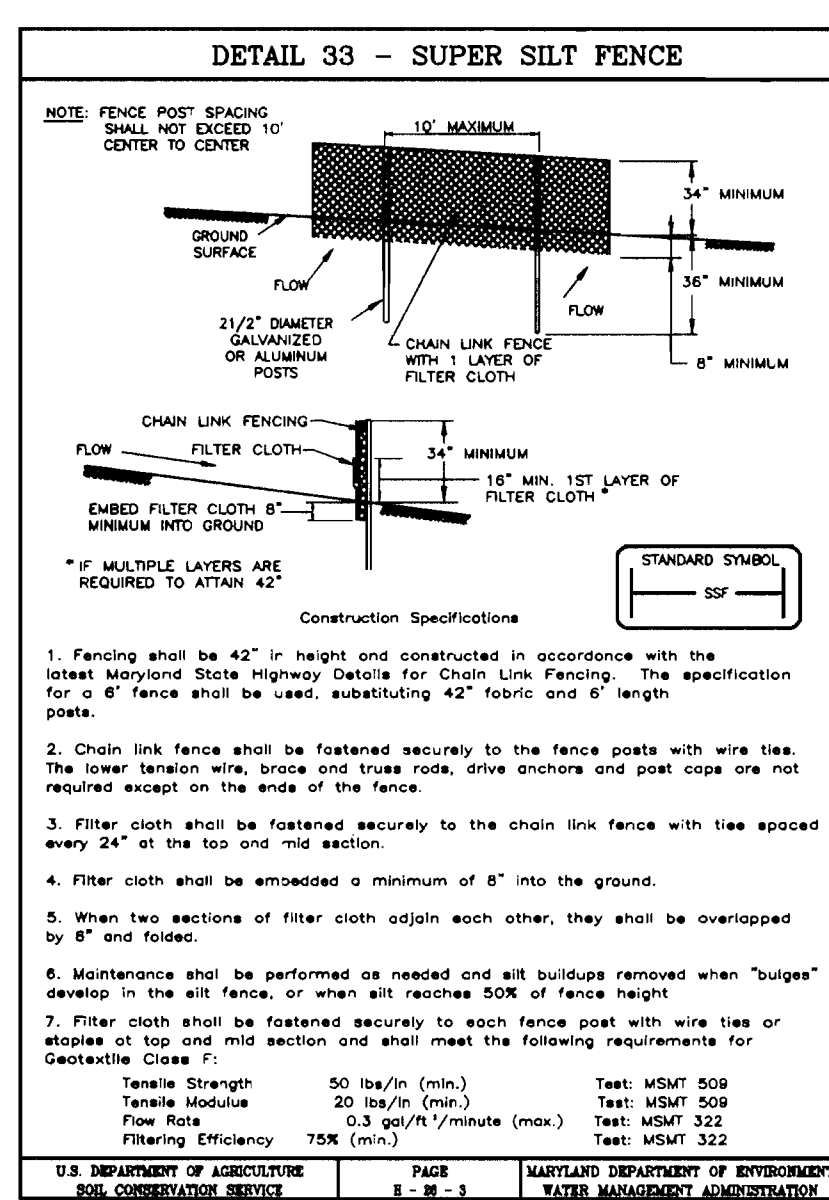
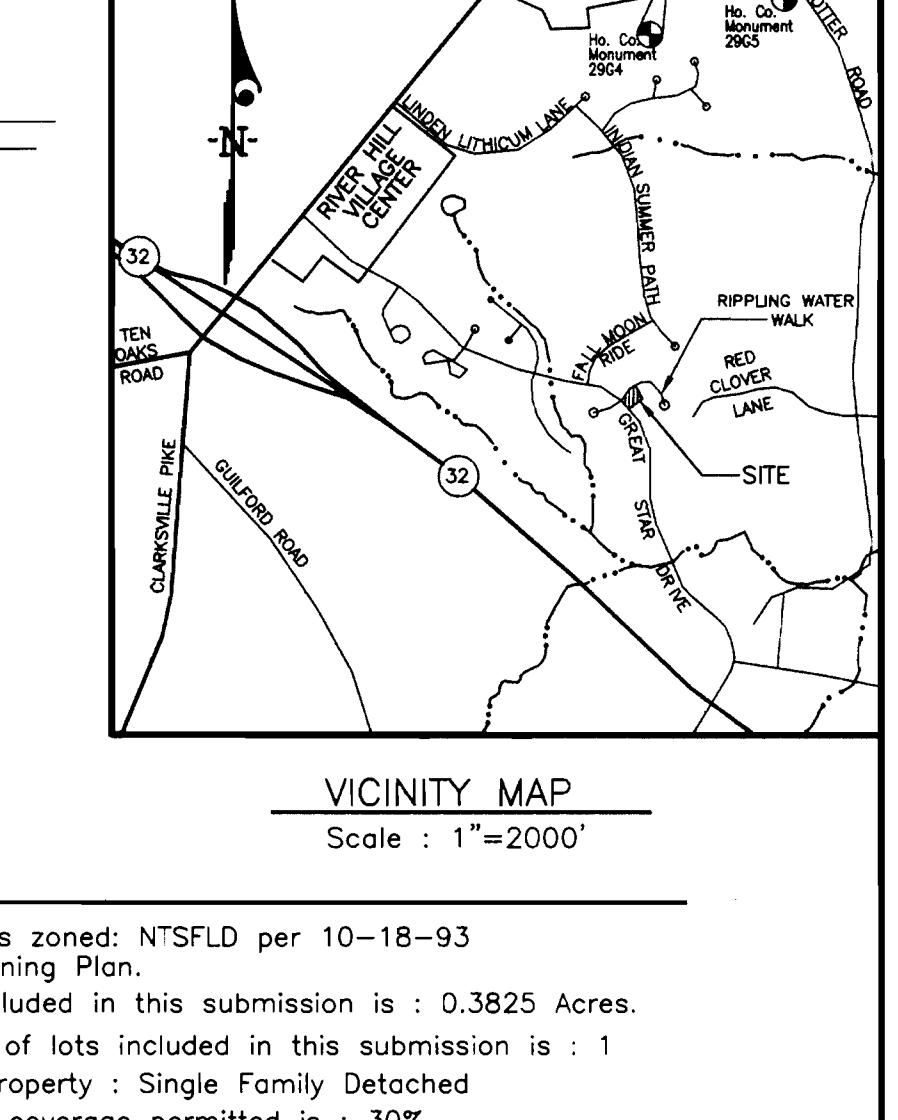
11. Structures for the construction of utilities shall be installed and stabilized within one working day, or as limited to three pipe lengths.

12. The total amount of all fences = 57 LF

13. The total amount of super silt fence = 108 LF

14. The total amount of super diversion fence = 108 LF

\* It is the responsibility of the contractor to identify the spot/areas, line and notify the inspector of the site and it's grading permit number at the time of construction.

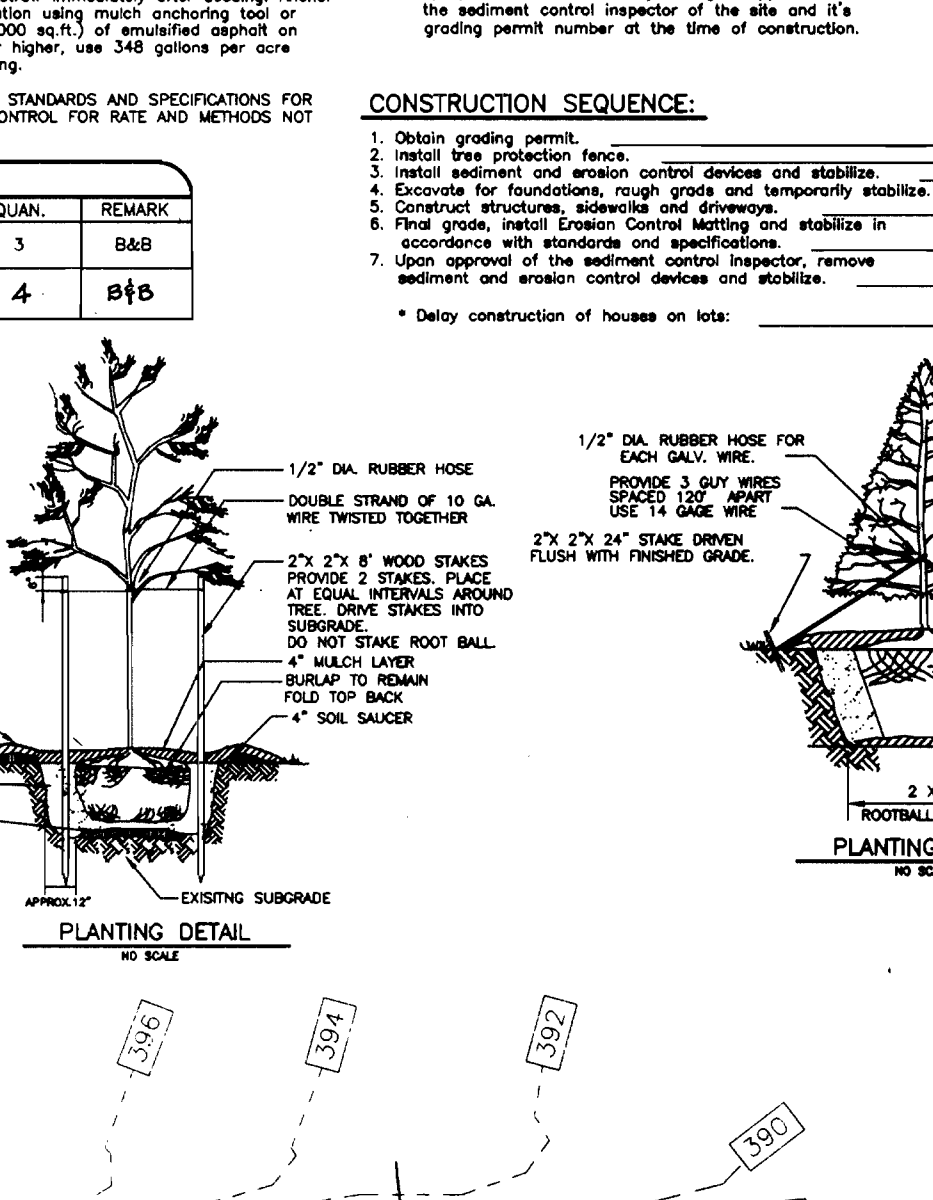


SCHEDULE A PERIMETER LANDSCAPE EDGE		LOT 16
Category	Adjacent to Roadways	D
Landscape Type	Frontage/Perimeter	156'
Number of Plants Required	Shade Trees (1/80)	3
	Evergreen Trees (1/40)	4
Number of Plants Provided	Shade Trees	3
	Evergreen Trees	5
Surety Amounts		\$1000

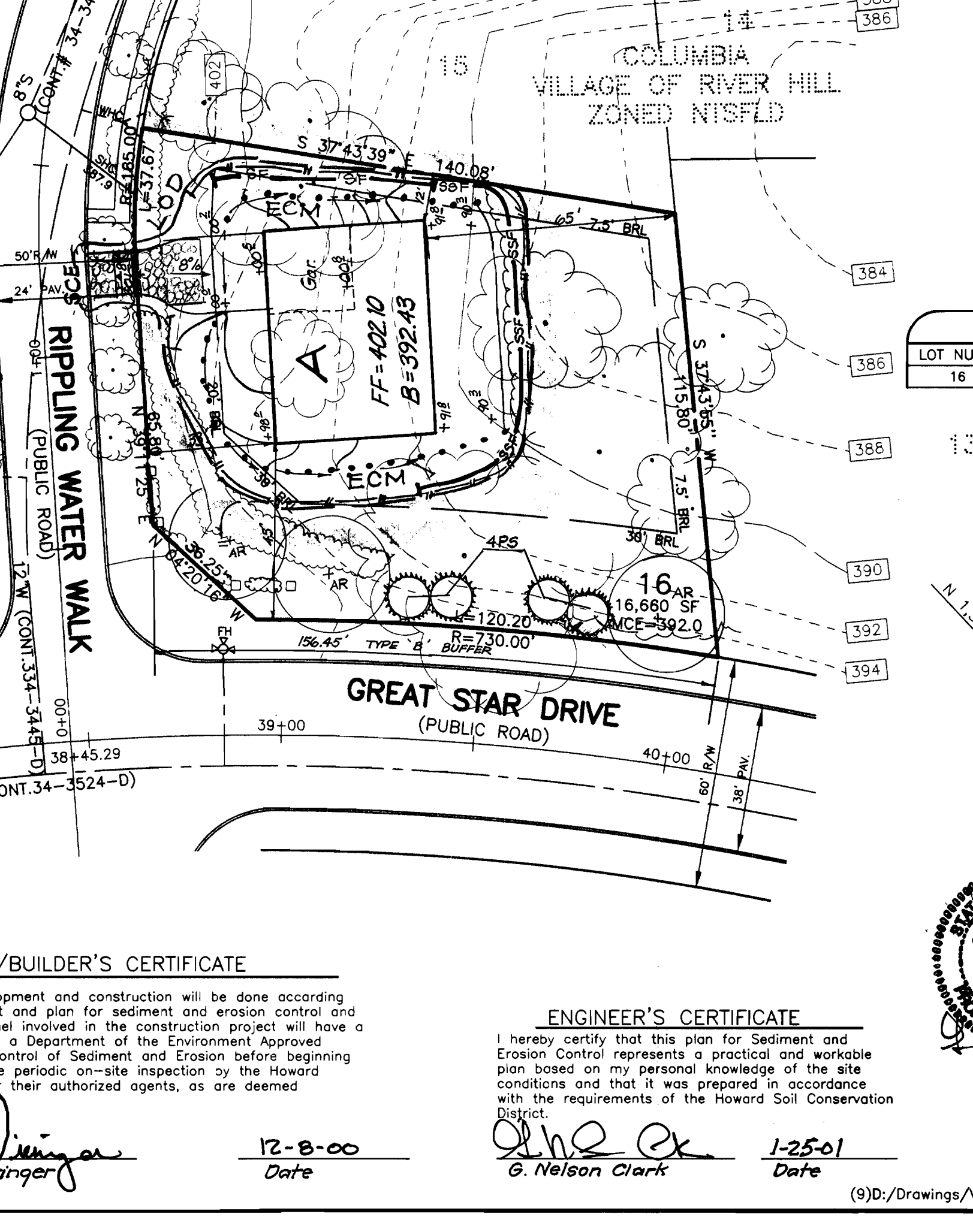
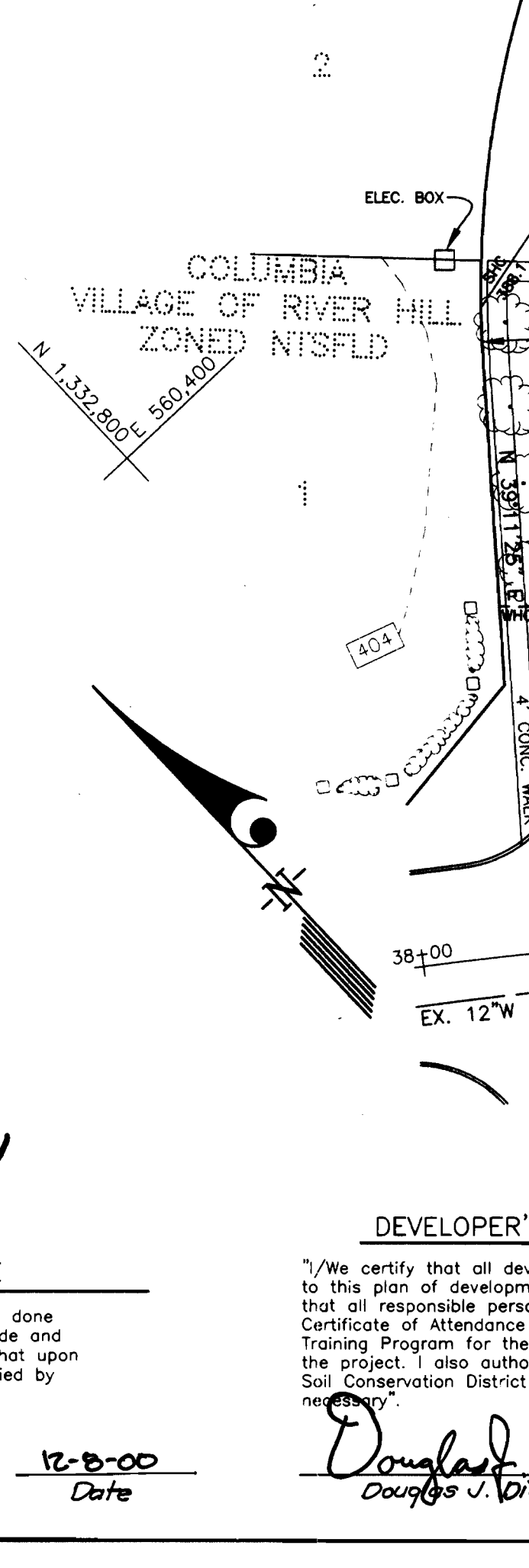
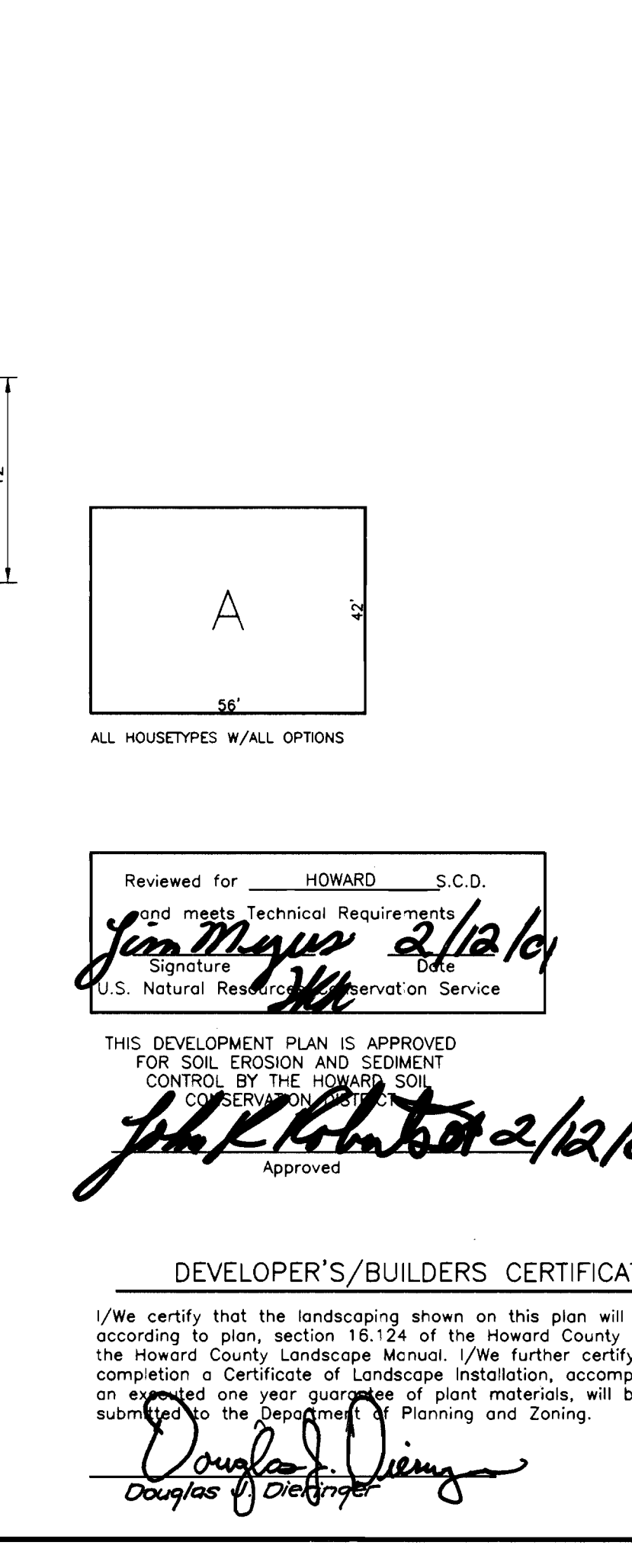
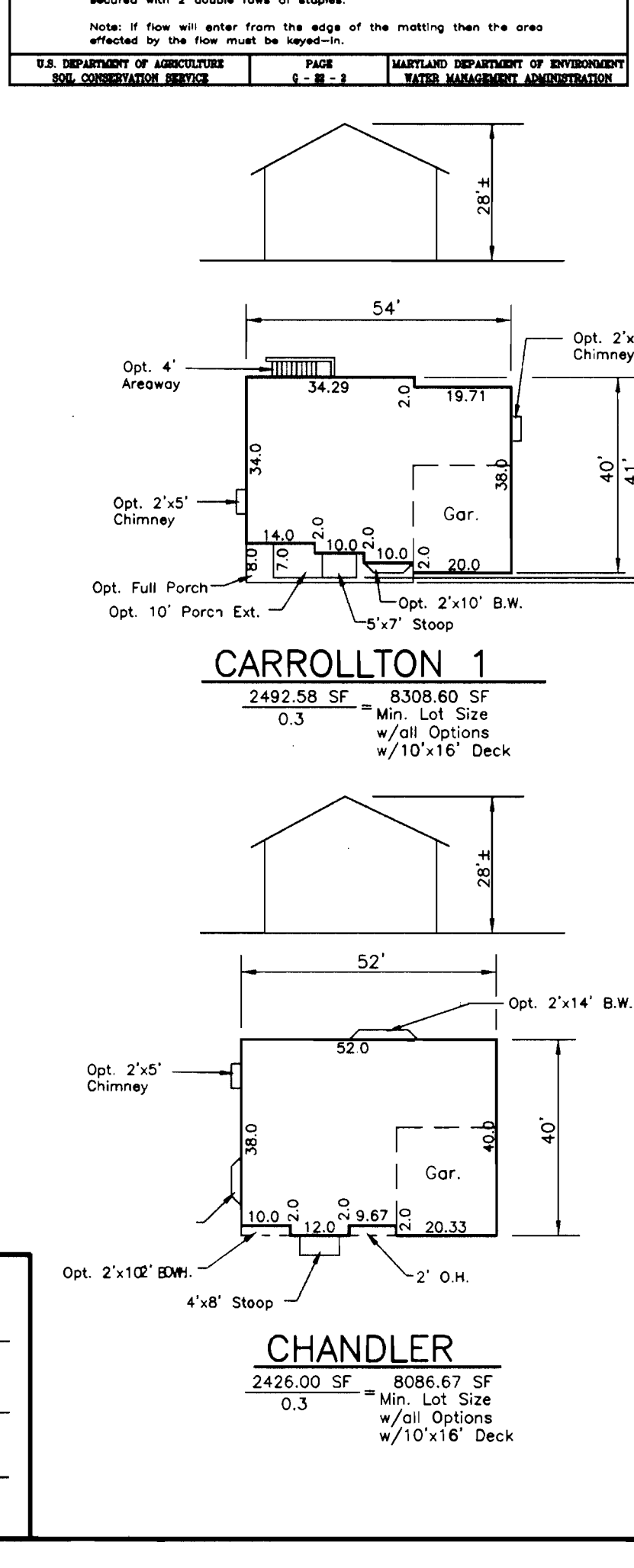
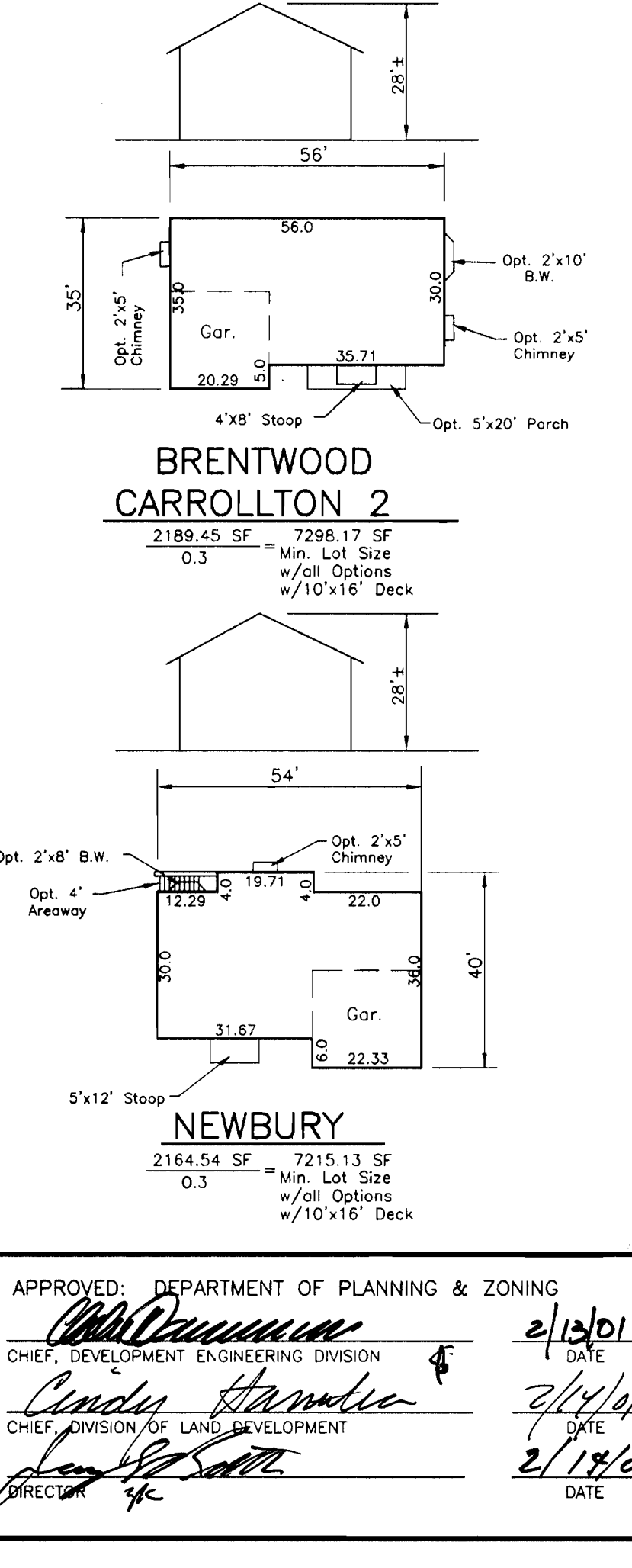
PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUAN.	REMARK
PS	ACER RUBRUM 'OCTOBER GLORY'	2 1/2\"-3\" CAL.	3	B&B
PS	PAULS STROBUS WHITE PINE	6-8'	4	B&B

**NOTES:**

1. All plant materials shall be full and heavy, be well formed and symmetrical, conform to the most current specifications and be installed in accordance with HRD planting specifications.
2. Contractor shall verify location of all underground utilities prior to digging.
3. 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.



CONSTRUCTION SEQUENCE		NO. OF DAYS
1. Obtain grading permit.		7
2. Install tree protection fence.		7
3. Excavate for foundations, rough grade and temporarily stabilize.		14
4. Excavate for foundations, rough grade and temporarily stabilize.		14
5. Final grade, install Erosion Control Matting and stabilize in accordance with approved plan.		14
6. Upon approval of the sediment control inspector, remove all erosion control devices and stakes.		7
7. Delay construction of houses on lots.		N/A



ADDRESS CHART			
LOT NUMBER	STREET ADDRESS	LOT NUMBER	STREET ADDRESS
16	6700 RIPPING WATER WALK		

**SPECIAL NOTES:**

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-95-141 and/or approved Water and Sewer Plans Contract #34-3445-D.

**OWNER / DEVELOPER**  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
10725 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
VILLAGE OF RIVER HILL	4/3	16

PLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
12757	1	NTSFLD	35	5th	6055

WATER CODE	SEWER CODE
I-10	6653000

**CLARK · FINEFROCK & SACKETT, INC.**  
ENGINEERS · PLANNERS · SURVEYORS  
7135 MINTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

DESIGNED	SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN	SCALE
JME	LOT 16	1" = 30'

DRAWN	COLUMBIA VILLAGE OF RIVER HILL	DRAWING
KQL	SECTION 4 AREA 3	1 of 1

CHECKED	FIFTH (5th) ELECTION DISTRICT	JOB NO.
JME/DM	HOWARD COUNTY, MARYLAND	00-157

DATE	FOR: DOUGLAS HOMES	FILE NO.
12-8-00	P.O. BOX 628 ELLICOTT CITY, MARYLAND 21043	00-157-X

SDP-01-77